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BMC FootPrints Service Core 11.6

Reference Guide

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Chapter 1: Welcome to BMC FootPrints Service Core

Welcome to BMC FootPrints Service Core

BMC FootPrints Service Core is a 100% web-based Service Desk and customer support tool that is so easy to use and administer, you can get into live production in just a few days. Users and administrators require only a browser to take full advantage of BMC FootPrints Service Core capabilities. BMC FootPrints Service Core puts control in the hands of the Service Desk or Support manager—without high costs, additional programming, or complex administration.

BMC FootPrints Service Core is extremely flexible, scalable, and customizable. This proven, award-winning Service desk tool eliminates expensive training, consulting, database programming, and staff additions to manage support automation software from your list of challenges.

BMC FootPrints Service Core can be used for multiple, simultaneous workspaces, can support multiple languages for users and groups, and you can leverage BMC FootPrints Service Core capabilities across multiple locations and corporate functions to expand the reach of your issue management and related communication.

In This Chapter...

- What's New in BMC FootPrints Service Core 11.6.09
- What's New in BMC FootPrints Service Core 11.6.08
- What's New in BMC FootPrints Service Core 11.6.07
- What's New in BMC FootPrints Service Core 11.6.06
- What's New in BMC FootPrints Service Core 11.6.05
- What's New in BMC FootPrints Service Core 11.6.04
- What's New in BMC FootPrints Service Core 11.6.03
- What's New in BMC FootPrints Service Core 11.6.02
- What's New in BMC FootPrints Service Core 11.6.01
- What's New in BMC FootPrints Service Core 11.6
- Features and Benefits
- Versions and Add-ons
- Hardware and Software Requirements (System Requirements PDF on our Support Web page)
- Technical Support

The following topics, links, and PDFs may be useful to newer users:

- Getting Started Quickly
- FootPrints Service Core Web Page
- User Guides (PDFs within the in-product help -- also available on our Support Web page)
- FootPrints Service Core User Group

What's New in BMC FootPrints Service Core 11.6.09

Several issues have been corrected in this release. For details, refer to the Release Notes on our Support Web site.

What's New in BMC FootPrints Service Core 11.6.08

Several issues have been corrected in this release. For details, refer to the Release Notes on our Support Web site.

What's New in BMC FootPrints Service Core 11.6.07

Several issues have been corrected in this release. For details, refer to the Release Notes on our Support Web site.

What's New in BMC FootPrints Service Core 11.6.06

Several issues have been corrected in this release. For details, refer to the Release Notes on our Support Web site.

What's New in BMC FootPrints Service Core 11.6.05

Several issues have been corrected in this release. For details, refer to the Release Notes on our Support Web site.

What's New in BMC FootPrints Service Core 11.6.04

Several issues have been corrected in this release. For details, refer to the Release Notes on our Support Web site.

What's New in BMC FootPrints Service Core 11.6.03

Several issues have been corrected in this release. For details, refer to the Release Notes on our Support Web site.

What's New in BMC FootPrints Service Core 11.6.02

Several issues have been corrected in this release. For details, refer to the Release Notes on our Support Web site.

What's New in BMC FootPrints Service Core 11.6.01

Several issues have been corrected in this release. For details, refer to the Release Notes on our Support Web site.

What's New in BMC FootPrints Service Core Version 11.6

The following features have been added or enhanced for BMC FootPrints Service Core Version 11.6.

- Added access to the Alignability Process Model and the related workflow processes
  See Viewing the Alignability Process Model
- Enhancements to archiving and purging performance
- Enhancements to the Social Media feature
  See
- Upgraded to Java Developers Kit 1.6.45

For details on what's new in BMC FootPrints Service Core 11.6, refer to the following PDFs on our Support Web site:

- Release Notes
- What's New

BMC FootPrints Service Core Features and Benefits

BMC FootPrints Asset Core

- View asset attributes from within the BMC FootPrints Service Core Issue
- Remotely manage the asset from within BMC FootPrints Service Core
  - Remote control
  - View file system
  - View registry
  - View events
  - View processes
  - Transfer files
  - Run audit
  - Ping
  - Reboot
  - Shutdown
  - Wake Up

Migration

  - Save time when migrating data
  - Avoid loss of configurations by easily packing up configuration files
- Feature Highlights
  - Back end script to pack up configuration files when migrating

Navigation

  - Improve productivity with quick access to the Issues you find most important
- Feature Highlights
  - Resize columns from the homepage
  - Reorder columns with drag and drop functionality
  - Single click to filter any column on the homepage

Performance

  - Increase Agent and customer productivity with faster performance

For details on the features and benefits of BMC FootPrints Service Core version 11.6, see our Web page.

Different Uses for BMC FootPrints Service Core

While many people purchase BMC FootPrints Service Core to solve one specific functional need, such as tracking internal service desk activities, documenting the external support center and CRM, or development/bug tracking, it can actually be used for a large variety of business functions and departments, supporting both internal and external customers.

Some of the departments or business functions that can benefit from using BMC FootPrints Service Core for Issue management include:

- Asset requisitioning
- Change and release management
- Configuration management
- Corporate service desk
- Customer survey
- Facilities management
- HIPAA management
- Human resources management
- Incident/Problem management
- Issue tracking
- IT outsourcing
- Resource management
- Sales tracking
- Service catalog
- Software change management
- SOX financial control management
- SOX IT change management
- Training management

The primary feature that makes BMC FootPrints Service Core so flexible is that it is Workspace-based. Each Workspace is a separate sub-database within the system that can have its own fields, forms, users, and settings. It is this feature that enables you to create different areas within the system for different departments to use.

BMC FootPrints Versions and Add-ons

BMC FootPrints Service Core Versions and Add-ons

The following versions of BMC FootPrints Service Core are available:

- **BMC FootPrints Service Core**—The web-based service desk and customer problem management solution for Windows, UNIX, and Linux servers.
- **BMC FootPrints Asset Core**—With BMC FootPrints Asset Core, you can track all hardware and software assets. BMC FootPrints Asset Core allows Agents to incorporate asset data into issues by performing lookups in the asset management database. Asset data is fully integrated with **FootPrints** Issue management. Agents can get automatic snapshots of users' configurations, including platform, hardware, and software information and save the information as part of the Issue record.
- **BMC FootPrints Service Core Base Starter Pack**—The web-based service desk and customer problem management solution for Windows/SQLExpress or Windows/SQL Server only. This is the same great BMC

FootPrints Service Core customers have always used, but geared towards smaller business. Base Starter Pack customers can purchase Change Manager and Mobile. Limitations include:

- a maximum of fifteen named agents
- Windows/SQL Express or Windows/SQL Server only
- no concurrent licenses
- no ability to add CMDB or SQL Link
- a maximum of three workspaces plus one survey workspace.

- **BMC FootPrints Service Core Hosting Service**—All the power of BMC FootPrints Service Core, hosted by BMC Software, Inc.

The following add-on modules are also available for integration with BMC FootPrints Service Core:

- BMC FootPrints Configuration Manager with Service Catalog—ITIL compliant add-on module that provides complete configuration management functionality. Import assets and define your entire configuration. Configuration management data can be imported to Issues. Also features reporting.

NOTE

The Extended Starter Pack is required to purchase the BMC FootPrints Configuration Manager module. Please contact your salesperson for more information about obtaining the Extended Starter Pack.

- **BMC FootPrints Mobile**—The BMC FootPrints Mobile add-on module combines real-time, dynamic access to via a web browser on supported mobile devices, with synchronization functionality for calendar, task and contact synchronization. (BMC FootPrints Sync is included as part of BMC FootPrints Mobile.) This module allows agents to manage their assignments, search the knowledge base, etc., on the go and without the need of a PC.
- **BMC FootPrints Service Core Integration with Microsoft System Center Configuration Manager/SMS**—Allows service desks agents to dynamically access PC asset data while they're working on an Issue from within BMC FootPrints Service Core.
- **BMC FootPrints Service Core Dynamic Address Book Link**—Gives access to multiple LDAP-based and SQL-based address books.
- **BMC FootPrints Service Core Telephony**—An integrated, hosted contact center service that works with your BMC FootPrints Service Core software, offering call centers and service desks advanced, skills-based call routing that automatically transfers incoming customer requests to the right service desk agent or customer service representative. BMC FootPrints Service Core Telephony is an integration, not an add-on.
- **BMC FootPrints Change Manager** —Enables organizations to develop their own approval process for Issues, with no programming. In BMC FootPrints Change Manager, approvers are designated for specific Workspaces. When an Issue meets approval criteria, the approvers are notified that an Issue awaits approval. The approvers then give or withhold approval. When an Issue is approved or rejected, it is moved to another stage in the process.
- **BMC FootPrints Service Core CRM Bridge**—Integration with some of the most widely-used sales automation tools. This integration helps organizations tie their web-based customer support tracking and automation with their web-based CRM sales tracking process to give sales and customer support teams direct access to the latest customer support interactions at any time. From within the sales automation tool, sales representatives can see active support issues for their customers in BMC FootPrints Service Core. From within BMC FootPrints Service Core, sales representatives can access their customer Address Books that are stored in the sales automation tool.

- BMC FootPrints Service Core Integration with Sales/CRM powered by SalesNet®

NOTE

Live eSupport and the LANSurveyor integration are no longer supported.

PerlEx Modules, Packages, and Extensions

ActivePerl Enterprise Edition is the up-to-date, quality-assured perl binary distribution from ActiveState. Current releases, and other professional tools for open source language developers are available at:

http://www.ActiveState.com

Documentation

List of Available Documents

The following table lists BMC FootPrints Service Core user documentation, available on our Support Web site.

Document	Description
Administrators's Guide	Provides a means for administrators to get BMC FootPrints Service Core to production quickly. All of the immediate actions of implementation are covered in detail.
User Guide	Covers the basic functionality of BMC FootPrints Service Core for Agents, including Issue creation and Report generation.
Reference Manual	Documents every aspect and detail of BMC FootPrints Service Core.
Change Management Guide	Provides best practices for BMC FootPrints Change Manager as well as the details of configuration and implementation.
Configuration Manager Guide	Provides best practices for BMC FootPrints Configuration Manager, including Service Catalog, as well as the details of configuration and implementation.
Mobile Guide	Describes configuration and implementation for BMC FootPrints Mobile.

Online Help

To access the online Help, click the Help link in the top right corner of the BMC FootPrints Service Core header. A new browser window opens containing complete documentation on **BMC FootPrints Service Core**. This includes:

- Table of contents, Index, and Search tabs for navigation.
- A glossary defining common terms used in **BMC FootPrints Service Core**.

In addition to the **Help** link in the top right corner of the BMC FootPrints Service Core header, context-sensitive help links are available throughout the BMC FootPrints Service Core system. If you see the Help link anywhere else in BMC FootPrints Service Core, it links to context-sensitive help. Click the link to view information that is specific to the current page.

The online help works as expected in Internet Explorer, Chrome, and FireFox browsers. The online help may show some unexpected behavior in rare instances when used with these or other browsers.

Technical Support

If you have questions about BMC FootPrints Service Core and for technical support, see the Customer Support website at http://support.numarasoftware.com. You can access product documents, search the Knowledge Base for help with an issue, and access online support.

For your local Customer Support number, see the BMC Support Contacts web page at http://www.bmc.com/support/support-contacts/. If you do not have access to the web and you are in the United States or Canada, contact Customer Support at 800 537 1813.

If you are partner supported, find their contact information here: http://www.bmc.com/partners/locate-partner/.

To Search our BMC FootPrints Service Core User Community for answers or to post questions, see our web page at: https://communities.bmc.com/community/bmcdn/service_core.

Chapter 2: Key Concepts

Workspaces

BMC FootPrints Service Core stores and tracks information in Workspaces. A Workspace is a separate sub-database within the system which can have its own custom fields, options, and users. There is no limit to the number of Workspaces that you can create in BMC FootPrints Service Core. You may choose to keep all of your data in a single Workspace or you can create multiple Workspaces. For example, one Workspace can be used for Service Desk activity while a second Workspace can be used for internal bug tracking.

New Workspaces can only be created by System Administrators. An unlimited number of Workspaces can be created with the Extended Starter Pack. The Base Starter Pack is limited in the number of workspaces you can create.

NOTE

The Base Starter Pack comes with a limit of three Workspaces, plus one Workspace for Customer Surveys. Archive Workspaces count as one of the three Workspaces. The Extended Starter Pack unlocks the ability to create unlimited Workspaces. Please contact your salesperson for more information about obtaining the Extended Starter Pack.

Issues

Issues

A BMC FootPrints Service Core Workspace comprises a set of related Issues. “Issue” is the default name given to a BMC FootPrints Service Core record. Each Issue is a numbered record in the BMC FootPrints Service Core Workspace database around which all Service Desk and problem tracking activity centers.

All Issues have some built-in content in the form of required fields (i.e., mandatory data required for the database), as follows:

- **Title**—a short description of the Issue
- **Priority**—the urgency of the Issue
- **Status**—the current state of the Issue; Open and Closed are required status options, but administrators can create as many categories of status (e.g., Pending approval), as they wish.
- **Description**—a description of the Issue, usually containing much more detail and history than the Title.
- **Assignee**—the person or persons assigned to track or resolve the Issue.

Not all organizations use the term "Issue" as the label for a record of this type. Administrators can customize BMC FootPrints Service Core to apply whatever label is appropriate in your local culture. Administrators can change the name "Issues" to "Tickets", for example, so that wherever the word "Issues" appears by default in BMC FootPrints Service Core, the word "Tickets" is displayed.

NOTE

During installation, the administrator is given the chance to change the default term “Issue” to another name, such as “Entry,” “Call,” or “Ticket.” For consistency, this manual always refers to BMC FootPrints Service Core records as “Issues.”

Types of Issues

BMC FootPrints Service Core provides a number of different types of Issues:

1. **Issue**—An Issue is normally used to log any event or problem. The name for this may differ (Ticket, Entry, etc.) depending on how your system is configured. An Issue can be opened, assigned, worked on, and closed by internal Agent users and Administrators. BMC FootPrints Service Core can automatically send notification email whenever an Issue is worked.
2. **Request**—A Request is a preliminary Issue that is submitted by a Customer. BMC FootPrints Service Core Agents can then “take” the Request and turn it into a regular Issue, or Requests can be automatically assigned to one or more Agents. (Administrators can read the section on Auto Assign in the WebHelp or Reference Manual for more information). Your Administrator can tell you how Requests are handled in your organization.
3. **Quick Issue**—Quick Issues are templates that contain pre-filled information for standard types of Customer problems and requests. For example, a Quick Issue template for "Password Reset" would start out pre-filled with a description of the problem, the problem categories pre-filled with "Network" and "Password Reset", and perhaps a Status of "Closed". The Agent only needs to fill in the user's contact information to submit the Issue. The Workspace Administrator can create an unlimited number of templates.
4. **Master Issue/Subtask**—Sometimes an Issue needs to be broken up into separate subtasks to be completed by different users. When a subtask is created for an Issue, the originating Issue automatically becomes a Master Issue of that subtask. Multiple subtasks can be created for an Issue.
5. **Master Quick Issue**—Quick Issue templates can also be defined to create Master Issues and related subtasks automatically, for example, to define the New Hire process.
6. **Global Issue/GlobalLink**—Global Issues are used to designate important or frequently reported Issues that will affect many users. Global Issues can be broadcast to all Agents, are displayed on the Agent BMC FootPrints Service Core Homepage, and can optionally be displayed for Customers to subscribe to. Whenever a new Issue is reported with the same problem as an existing Global Issue, the Agent (or, optionally, the Customer) can link the Issue to the known Global Issue (called GlobalLinks). Global Issues can be closed simultaneously with their GlobalLinks.
7. **Solution**—Solutions are a special type of record in BMC FootPrints Service Core that make up the Knowledge Base. They are used to describe solutions to common problems, frequently asked questions, document procedures, etc. A Solution can be created from scratch or spun off from an Issue. Solutions can be public or internal and they can be configured to require an approval process before they are published.

NOTE

Issues and Requests can also be submitted and updated via email. Please refer to the section on submission via email for more information.

Master Issues and Subtasks

Sometimes an Issue must be divided into subtasks to be completed by different users. The BMC FootPrints Service Core Master Issue/Subtasks facility allows you to create parent–child relationships between Issues for complex processes.

When a subtask is created for an Issue, the originating Issue automatically becomes a Master Issue of that subtask. Multiple subtasks can be created for an Issue. As an example, numerous tasks must be accomplished when a new hire is performed. BMC FootPrints Service Core users often create a Master Issue for new hires. Each task that must be performed for a new hire, such as acquiring a telephone or adding the new hire as a user to the network, is created as a subtask.

Subtasks can be created manually by an Agent or automatically by a Master Quick Issue Template.

Creating a subtask of an Issue automatically makes the originating Issue a Master Issue, with a parent–child relationship existing between the Master Issue and the subtask.

Master Issues and subtasks have a special relationship. When a Master Issue is opened and subtasks are created, the Master Issue remains opened until all of the subtasks have been closed. When the last subtask is closed, the Master Issue can either be closed automatically or BMC FootPrints Service Core can automatically send an email to all individuals who are assigned to the Master Issue informing them that the subtasks have been closed. It then becomes the responsibility of someone assigned to the Master Issue to close it. The default is to automatically change the status to Closed.

Global Issues

Global Issues are used to designate important or frequently reported Issues that affect many users. For example, a "System Down" failure that will be reported by many users can be made into a Global Issue. Global Issues can be broadcast to all Agents, are displayed on the Agent's BMC FootPrints Service Core Homepage, and can be displayed for customers to subscribe to it. Whenever a new Issue is reported with the same problem, the Agent (and, optionally, the customer) can link the Issue to the known Global Issue. Global Issues can be closed simultaneously with their associated GlobalLinks. This feature can save time for Agents by preventing duplicate work and can make it easier to communicate pervasive problems to all users.

Global Issues have two parts to them:

- **Global Issue**—This is the originating problem. It is broadcast to all Agents when it is created, is available on the Homepage for setting up a link, and can optionally be broadcast to customers so that they can link to it. Agents can be restricted from creating Global Issues via their role assignment.
- **GlobalLinks**—These are Issues linked to a Global Issue because they describe the same or a similar problem, but are reported by different users. Issues can be made GlobalLinks by Agents from the BMC FootPrints Service Core home page or the Issue Details page. Customers can link to a Global Issue, allowing them to create their own GlobalLink automatically.

NOTE

The name of this feature depends on the name given to records in BMC FootPrints Service Core for the system/workspace. For example, if the name "Ticket" has been defined for records in the current workspace, the Global Issue is referred to as a "Global Ticket" throughout the workspace. However, GlobalLinks are always referred to as "GlobalLinks". For consistency, all help files refer to the feature as "Global Issue".

Quick Issues

Quick Issues are templates that contain pre-filled information for frequently reported customer Issues, such as Password Reset, Service Request, etc. For example, a Quick Issue template for Password Reset would include a description of the problem, the problem categories pre-filled with Network and Password Reset, and perhaps a status of Closed. The Agent only needs to fill in the user's contact information to submit the Issue. The Workspace Administrator can create an unlimited number of templates, which are available to all Agents and customers from the BMC FootPrints Service Core Toolbar. (Customers cannot access Master Issues.)

The Quick Issue Templates page is also where you create and edit Master Issues and Subtasks.

Quick Issues are considered advanced BMC FootPrints Service Core features. Refer to Creating Quick Issue Templates and subsequent topics in that section for details on configuring Quick Issues.

NOTE

The name of this feature depends on the name given to records in BMC FootPrints Service Core for the system/workspace. For example, if the name "Call" has been defined for records in the current workspace, the feature is called "Quick Call" throughout the workspace (on the toolbar, in the Administration pages, etc.). For consistency, all help files refer to the feature as "Quick Issue".

Linked Issues

When Issues are "linked", it means that an association has been created between the Issues. The association is displayed whenever the Issue is displayed in BMC FootPrints Service Core. Associations of this type denote that there are similarities between the Issues that the person who established the link wants everyone to see. Linked Issues can be set up so that changes made to one Issue are propagated to the other Issue or Issues.

In the case of Global Issues, links are called "GlobalLinks". These are Issues linked to the Global Issue because they describe the same or similar problem, but are reported by different users.

Issues linked to a Master Issue are called "Subtasks". These are Issues linked to the Master Issue because they describe a subset of activities to be performed in resolving the Master Issue.

Requests

A request is an Issue that is submitted by a customer, either through the BMC FootPrints Service Core interface (using the Customer Self-service interface) or via email.

There are three options for handling new Requests:

1. The Requests go into the Request “bin”. From there, an Agent or Administrator may assign new Requests to one or more Agents to work on them. The assigned Requests appear in each assigned Agent's assignments list on the Homepage.
2. Agents can “take” Requests from the Request bin and assign themselves to the Requests.
3. New Requests can automatically be converted into Open Issues and assigned to internal users based on the value in a drop-down field. This feature must be configured by the Workspace Administrator. Refer to the section on Auto Assignment in the Administrator's Guide for more information.

Customers can follow progress on Requests that they have submitted as they are worked. In addition, BMC FootPrints Service Core can automatically send email to the customer who submitted the Request when changes are made to the Request.

Contact your BMC FootPrints Service Core Administrator for more information on how your organization handles Requests.

User Types and Roles

Agents and Customers

BMC FootPrints Service Core supports different levels of user privileges for users with different needs. An “Agent” user account is intended for specified internal users, such as service desk agents, customer service representatives, or engineers. A “Customer” account is intended for employee end-users or external customers, allowing those users to submit and track their own requests and to search the knowledge base.

BMC FootPrints Service Core comes with a number of built-in user types, called “roles”. Custom roles can also be created by the Administrator to define permissions for different groups of users.

Here is a breakdown of the built-in roles:

- **Agent roles**:
    - **Agent**—A standard, full-strength user. This user type commonly includes: service desk agent, call center agent, developer, engineer, manager, and Workspace member. Agents can use all of

the basic functions of BMC FootPrints Service Core, including creating, viewing, and editing Issues and running queries.

- **Workspace Administrator**—In addition to agent privileges, a Workspace administrator administers an existing Workspace, including adding custom fields, setting options, and adding users.
- **System Administrator**—In addition to agent and Workspace administrator privileges, the system administrator has control of the BMC FootPrints Service Core system, including administration of any Workspace, adding new Workspaces, and managing licenses.

- **Customer roles**:
  - **Read KB**—View and search the Knowledge Base.
  - **Read KB/Requests**—View and search the Knowledge Base and check the statuses on Requests (entered by an internal user or via email).
  - **Read/Submit**—In addition to the functionality described above, can submit requests via a BMC FootPrints Service Core web interface.
  - **Read/Submit/Edit**—In addition to the functionality described above, these users have limited edit privileges of their own requests.

More about Customers

Customer users have a number of components:

- **User Account**—This is the ID and password of the customer. Users can have unique IDs and passwords or they can share a generic ID and password. This record is kept in a database.
- **Contact Record**—The contact information for the user is kept in the BMC FootPrints Service Core Address Book or dynamically read from an LDAP or other External Database/SQL source. The data kept depends on the fields that exist in the Address Book.
- **Primary Key**—The customer account and contact records are linked via the Primary Key field. This is a field in the Address Book, such as User ID or Email Address, that uniquely identifies the user.
- **Role**—The permission level for the user. Built-in and custom roles are available.

Supervisors

BMC FootPrints Service Core utilizes the concept of "Supervisors". Agents can be designated as assigned to specific supervisors, which makes it easier to designate where emails go when, for example, there is an Issue Escalation.

Permissions

"Permissions" refers to the level of restriction applied to any user, whether it is an Agent, Administrator, or Customer. As an example, Agents can be restricted from submitting Solutions to the Knowledge Base; therefore, such Agents would not have "permission" to submit Solutions to the Knowledge Base.

Configuration of Permissions

Permissions are configured by Administrators. Workspace Administrators can configure permissions on a Workspace level, allowing a specified role (e.g., Agents) to perform or not perform certain actions. System Administrators can configure permissions on either a Workspace level or system-wide. For example, Customers could be restricted from

submitting their own Requests in a specific Workspace, allowing them to submit Requests to other Workspaces, or they could be restricted from submitting Requests to any Workspace.

Permissions can also be set on the field level. That is, users can be prevented from entering data into designated fields without the appropriate permissions. Field level permissions are set by either a Workspace Administrator for a specific Workspace or system-wide by a System Administrator. With field level permissions, there are two ways in which users are prevented from accessing the field to enter data. In the first instance, the field may be visible to the user, but the user would be prevented from entering data into the field without permissions. In the second instance, the field may be invisible to specified roles.

Permission Assignment

Permissions are assigned by role. That is, Administrators determine which permissions a specific role is allowed. The Administrator then can determine which individuals are assigned that role. Because Administrators can create new roles, the affect of permissions can be limited to a small group or even an individual. For example, if an Administrator wants only a single person or a small number of people to be able to add Solutions to the Knowledge Base, the Administrator could restrict all Agents from adding to the Knowledge Base, then create a new Agent role, assign the appropriate users to the new role, and allow the new role to add Solutions to the Knowledge Base.

Field Permissions

"Permission" refers to the level of restriction applied to any user, whether it is an Agent, Administrator, or Customer. For example, Agents can be restricted from submitting Solutions to the Knowledge Base; therefore, such Agents would not have "permission" to submit Solutions to the Knowledge Base. Field permissions restrict which fields are accessible to users. Field permissions, like regular permissions, are defined by role. For example, Issues can sometimes become exceptionally lengthy and cluttered in terms of the number of fields that are displayed, but not all users need to see all fields. Field permissions can be used to "clean up" the Issues page.

As another example, field permissions can be used to keep some fields hidden until such time as they become relevant, such as fields created for system test being hidden until a certain status is reached.

For details on configuring field permissions, refer to Field Permissions Overview.

How Roles and Teams Work Together

Roles and teams are two user elements in BMC FootPrints Service Core that work together:

- **Team**—Users are organized in teams for assignment purposes.
- **Role**—Users are granted permissions on what they can do within their team and within the BMC FootPrints Service Core Workspace via a user role.

For example, while the "Level 1 Support Team" may be made up of five users, one of those users might be the team leader and the other four are support technicians. All five users share the same "Level 1 Support Team", but the team leader can be assigned the "Team Leader" role and the other members can be assigned the "Technician" role. This distinction is illustrated in the following table:

User	Team	Role
Jill Smith	Level 1 Support Team	Leader
Linda Thompson	Level 1 Support Team	Technician
Bill Jones	Level 1 Support Team	Technician
Jose Gomez	Level 1 Support Team	Technician
Brian Patel	Level 1 Support Team	Technician

In this example, when someone assigns an Issue to the Level 1 Support Team, all five members receive an email notification and the Issue appears in the Team Assignment queue. Although the Technician role may not allow those users to take the Issue, the Team Leader role allows Jill to assign the Issue to one of the Technicians on the team. In addition, the Technicians may be restricted to only viewing Issues for their own team, while Jill could view the Issues for all teams in the Workspace.

Teams can be organized for different functions, departments, groups, etc. Roles can be configured to give as much or as little access as desired for a group of users.

Other Aspects of Roles and Teams

- **One Role, Many Teams**—While a user can be a member of multiple teams, a user can only have one user role within a Workspace. Therefore, within a Workspace, a user has the same permissions regardless of the team to which he or she belongs.
- **Team leaders**—Team leaders can be designated for a Team. This makes a convenient method for designating where an email should go when an Issue Escalation occurs.
- **Customers**—Customers cannot belong to teams because they cannot be assigned to Issues. Customers are organized by "organizational unit". (The organization unit is an optional property of a contact in the Address Book. Examples of an organizational unit include "Department", "Business Unit", or "Company". If an organizational unit is specified, the contacts in the Address Book are grouped by organizational unit.) Customers can, however, be assigned to a customized role in order to create a special set of permissions.
- **Same Name for Role and Team**—While the ability to configure roles and teams separately gives you more flexibility, you can choose to give all of the users in a team the same permissions. In that case, you might, optionally, give the role and the team the same name.
- **Optional**—If the functionality provided in roles and teams is not needed by your organization, you do not need to configure these features at all. Users can be assigned individually without teams and can inherit the permissions of the built-in roles.

Customer Self-service

Customers in BMC FootPrints Service Core have access to many self–service features. Depending on their permission level, Customers can submit Requests, track the status of their Requests, search the Knowledge Base for Solutions to their problems, etc. This user type is appropriate for both employee Customers and external Customers of your organization.

With respect to security for self-service Customers, BMC FootPrints Service Core can authenticate against multiple login methods. This allows, for example, new customers to be validated against the Windows password file, while Agents are validated against the company's master /Active-Directory/LDAP contact book.

Fields

Fields

A "field" is a section of a web form that can accept input. Fields generally accept either text or numbers. In addition, fields can accept a mouse click that selects an option from a list or a mouse click that checks or unchecks a box.

Field Types

The following Workspace field types are supported:

- **Character** (single or multiple line)—This type of field can contain any type of data, such as alpha, numeric, or special characters. Single-line character fields accept one line of data, while multiple-line character fields accept an unlimited number of lines of data. There is no effective limit on the amount of text in a field.
- **Integer**—Accepts integers.
- **Real Number**—Accepts integers or decimal numbers. You will be asked to include Total Digits and Total Decimal Places for the real number when configuring the field. Total Digits is the total number of digits in the number and Total Decimal Places is the number of digits to the right of the decimal. If an unacceptable value is entered into a real number field, such as a value that includes alphabetical characters, has too many digits after the decimal place, or is too wide for the field as it has been configured, BMC FootPrints Service Core generates a warning before you can leave the page.

  When creating a new real number field, MS SQL versions of BMC FootPrints Service Core asks for the total digits and total decimal places on the Form Designer page. This is necessary since SQL Server real numbers default to four decimal places, which might not be what you want displayed if you are entering currency information.
- **Date**—Accepts valid dates (format based on system or user preference).
- **Date-Time**—The user can select both a date and a time for this field type. Can optionally be linked to the Calendar. A default link to the calendar(s) can be changed at the time of Issue creation by the Agent. In addition, the field can be configured as a link to the personal calendar or personal and Workspace calendars by default or by clicking the radio button for either linking to the personal calendar or linking to the personal and Workspace calendars when the Issue is created. To select the current date-time, click the checkbox provided with the field.
- **Drop-down**—Offers a pre-defined drop-down list of choices from which the user chooses one of the options.
- **Multi-select**—Allows the user to select multiple choices from a pre-defined list.
- **Checkbox**—Offers a checkbox for users to select in the Issue form. In searches, reports and on the Details screen, the values "On" and "Off" are displayed, or alternate values can be defined. Mandatory/optional permissions do not apply to checkboxes; this field can be checked or left unchecked by the user.
- **Web site**—Accepts URL addresses (of the form http://*server.name.com*). Appears as a hypertext link on the Details page of an Issue.
- **FTP**—Accepts fully-qualified FTP addresses (of the form ftp://ftp.*sitename*.com). Appears as a hypertext link on the Details page of an Issue.
- **Email Address**—Accepts Email addresses. Appear as a hypertext link on the Details page of an Issue.

Built-in Fields

Built-in fields are fields that are included in the BMC FootPrints Service Core Workspace templates at installation. Some built-in fields cannot be removed, but their labels can be changed. For example, "Title" can be changed to "Incident", but the field itself must remain on the Issue form and must be filled out in order for an Issue to be submitted, i.e., accepted by the system. Built-in fields are:

- Title
- Description

- Status
- Priority
- Assignees
- Submitter
- Last update date/time
- Submitted date/time

To see which Workspace templates contain which built-in fields, refer to Chapter 12: Sample Workspace Templates.

Mandatory and Optional Fields

Mandatory fields are fields that must be populated in order for the Issue to be successfully submitted.

Optional fields are fields that may or may not be populated when an Issue is submitted. If all mandatory fields are populated but one or more optional fields are not populated when an Issue is submitted, the submission should be successful.

Field Dependency

"Field dependency" refers to a configuration in which the data entered in one field changes the options in the next field. For example, if you have a drop-down field labeled Problem Type and you select Printer from its drop-down list, the next field would offer options that are specific to printer problems. If, instead of Printer, you had select Network, then the next field only displays options related to network problems. BMC FootPrints Service Core has a facility for creating field dependencies, so that users can be lead through a series of fields, each of which contains options that are specific to the choice made in the previous field.

Multiple dependencies can be configured per Workspace and multi-level dependency groups can be created to funnel the user to categories and sub-categories.

There are two kinds of field dependencies supported in BMC FootPrints Service Core:

- **Pop-up window containing dependent fields**—For this type of field dependency, a drop-down menu is designated as a “decision field”. A different pop-up window is displayed depending on which option is selected in the decision field (drop-down menu). Each of the pop-up windows is configured with your choice of fields. For example, assume that there is a field called Resource. The options for Resource are Hardware and Software. If the user selects Hardware from the menu, a pop-up window is displayed with a drop-down menu field called Asset, a multi-line character field called Description, etc. The drop-down menu might contain a list of hardware assets, such as Printer or Edge router, and the Description field is for describing the problem, and so on. If, however, the user selects Software, a pop-up window is displayed with a drop-down menu field called Application which lists the applications, such as Excel or Visio, and a second field called Server, which lists DNS names.
- **Dynamic drop-down dependency groups**—A drop-down menu is designated as a decision field for this type of field dependency as well. However, in this case, a pop-up window is not the dependent factor. Instead, there is a set of subsequent drop-down menus on the same page. The choices that are displayed in each of those drop-downs depend on the choice made in the preceding drop-down field. An example of this would be a drop-down menu field called Software that lists software products. The next field is called Release. The user selects a software title in the Software field. The values in the Release drop-down change depending on which software product was selected in the decision field. The next drop-down menu field might be called Known Problems. This contains a list of known problems that are based on the specific software product and release. If a different software product is selected, different release numbers are displayed and, depending on the release selected, different known problems are displayed.

This type of field dependency is very useful in setting up multi-level groups of dependencies that drill-down and refine the information being submitted.

Workspace Schema

The Workspace Schema is a display of the order of the fields in a workspace. The Workspace Schema is useful when you are attempting to import data to BMC FootPrints Service Core or export data from BMC FootPrints Service Core. The Workspace Schema can be used to check that the tables of data match up.

InstaCalc Fields

BMC FootPrints Service Core allows you to create simple mathematical formulas using Workspace fields. The formulas allow multiplication, division, addition, and subtraction as well as the use of the unary minus and parentheses. Formulas follow the standard order of operations.

Address Book

Address Book

The BMC FootPrints Service Core Address Book is a database of contact information for your end users, whether they are employees, remote users, or customers. The contact data can be kept in BMC FootPrints Service Core or can be dynamically read from an outside source, such as Microsoft Exchange, Active Directory, or other LDAP source. The LDAP option is only available in the demo or if you purchased the Dynamic Address Book Link add-on module. When the Dynamic Address Book Link is used, individual contacts cannot be added to the BMC FootPrints Service Core Address Book directly. If you wish to add someone to the Address Book when using the Dynamic Address Book Link, you must add the contact to the LDAP source. Supported contact databases include Microsoft Exchange 5.x/2000, Netscape iPlanet, Lotus Notes, and Novell Directory Services.

NOTE

BMC FootPrints Service Core supports Secure LDAP (LDAPS). For additional information on LDAPS support, contact 800 537 1813 (USA and Canada).

Address Book data can also be imported from an outside source, such as a SQL database.

When an Issue is created in BMC FootPrints Service Core, it can be linked to a contact, so that the information about the end user is available to technical users looking at the Issue.

A BMC FootPrints Service Core Address Book is made up of fields, just like an Issue. When a Workspace is built, the fields in the Address Book are dependent on the Workspace template that was selected. Administrators can modify the fields in the Address Book as appropriate.

The Address Book contains two additional properties:

- **Primary Key**—The primary key is a unique identifier for each contact in the Address Book. If the customer self-service feature is used, the primary key is the ID that customers use to log into BMC FootPrints Service Core, along with a password. This field should be both present and unique to all contacts. "User ID" is the recommended field and also the default for all templates.
- **Organizational Unit**—The organization unit is an optional property used to organize contacts in the Address Book. Examples include "Department", "Business Unit", or "Company". If organizational unit is used, the contacts in the Address Book are grouped by the field.

Contacts

"Contact" is the default name given to a record in the BMC FootPrints Service Core Address Book. Normally this contains a customer's name, email address, phone number, etc., but a contact can be any record in the Address Book containing any number and variety of fields.

Contact data can be added to the database in a variety of ways. Contacts can be typed in directly, one-by-one, or imported from another source. In addition, BMC FootPrints Service Core allows you to dynamically link to any LDAP source and populate the Address Book from that source. This has the advantage of allowing you to maintain only the one LDAP resource. Any changes made to the LDAP resource are reflected dynamically when contact information is accessed in BMC FootPrints Service Core.

Master Contact Record

The Master Contact Record provides an easy way to organize contacts with a common factor, such as "company", with contacts that share the same factor inheriting properties from the master company record. Upon adding or editing a contact who is a member of an organization for which a master contact record exists, the Agent may pre-load the master contact record information into the contact.

For details on configuring the Master Contact Record, refer to Master Contact Record Setup.

For details on using the Master Contact Record, refer to Master Contact Record Actions.

Resolving Issues

Knowledge Base

The Knowledge Base is a place to record, organize and manage important information for a BMC FootPrints Service Core Workspace database. This can include, but is not limited to: solutions to common problems, answers to Frequently Asked Questions, patches, and documents. By using the BMC FootPrints Service Core Knowledge Base feature, you can turn the past experiences of individual customers and agents into a database of Solutions for all Workspace members. This can assist Agents in finding quicker resolutions to recurring problems and in empowering customers to find the answers to their questions without submitting a request.

Records in the Knowledge Base are called "Solutions". Solutions can be developed specifically for the Knowledge Base or can be Issues that were resolved and contain a solution to a problem. Users may be required to obtain an "approval" before a Solution that they submitted is accepted into the Knowledge Base. Approvals are described in more detail below.

Internal Knowledge Base

Solutions can be designated to go into the internal Knowledge Base. The internal Knowledge Base is only available to internal BMC FootPrints Service Core users, i.e., it is not accessible by anyone in a customer role. Internal users can also be configured in roles to restrict access to the Knowledge Base.

Public Knowledge Base

Solutions can be designated to go into the public Knowledge Base. The public Knowledge Base is accessible by all internal users as well as any customer with permissions.

External Resources

In addition to the BMC FootPrints Service Core Knowledge Base, which comprises Issues that are designated as Solutions, BMC FootPrints Service Core can provide links to external Knowledge Bases. Links are pre-configured for the following external Knowledge Bases:

- Adobe
- Apple
- Google Groups
- Hewlett-Packard
- Microsoft Technet

Administrators can add external Knowledge Bases to BMC FootPrints Service Core.

Approvals

By default, Agents in BMC FootPrints Service Core can submit Solutions to both the public and internal Knowledge Bases. Using role permissions, Administrators can limit designated users from submitting Solutions to the Knowledge Bases, and/or can require designated users to receive approval before their Solutions are published. This allows the Administrator to have better control over which information is published to Customers and to review Solutions before Customers see them.

When Agents are required to receive approval before publishing Solutions, one or more users must be designated as approvers. These users (usually Administrators) receive email when a Solution is submitted for approval and can approve, edit, or reject the Solution.

Once approvals are configured for at least one user role, the approval process is in place automatically.

Frequently Asked Questions

In BMC FootPrints Service Core, Frequently Asked Questions (FAQs) are categories that are available to Agents and Customers (who have appropriate permissions) when searching the Knowledge Base. These categories are created and maintained by the Workspace Administrator. The categories are defined by advanced search criteria, such as problem type, platform, software version, etc., and named and saved by the Administrator. Each time a category is accessed, it returns the latest Solutions that match the criteria defined for that category.

The BMC FootPrints Service Core idea of a FAQ page is not like other FAQ pages with their question and answer format. Instead, a BMC FootPrints Service Core FAQ is more of a pre-defined search category within the Knowledge Base that displays all of the Solutions that were found during the search. It is a time-saving device that helps organize the Solutions in the database for the user. A BMC FootPrints Service Core FAQ can also contain hierarchies of categories.

Resolving Issues

Issue resolution can be accomplished in a number of ways. The first and most obvious is by Agents directly working on an Issue. In a normal workflow, an Issue may be created or received as a Request from a Customer, an Agent is assigned when the Issue is created, and the Agent resolves and closes the Issue.

Other ways in which Issues can be resolved outside the normal workflow described above are with:

- The Knowledge Base

- Frequently Asked Questions (FAQ)
- Real-time Resolution Tools

Licenses

There are three categories of **FootPrints Service Core** license: fixed, concurrent, and Customer:

- **Fixed**—The user is assigned a single license and logs into BMC FootPrints Service Core with his own unique ID and password. Only one user can use this type of license at a time because it is assigned to a specific user. A fixed license is always available to the user to whom it is assigned.
- **Concurrent**—A concurrent license is sometimes referred to as a "floating" license. A concurrent license can be shared by an unlimited number of people, but only one such user can be logged into BMC FootPrints Service Core under an instance of a concurrent license at one time. Each user sharing a concurrent license has his or her own unique ID and password, but can only log in if a concurrent license is free. To further clarify, if five concurrent licenses are purchased and twenty-five people are sharing those licenses, only five of the twenty-five can be logged in at one time. If a sixth person tries to log in, a message is displayed to the sixth person stating that there are no available licenses. If one of the five users logs out of BMC FootPrints Service Core, a license is freed and a new person can then log in. Concurrent user access is logged, including successful logins and denials due to lack of license availability. This allows the administrator to gauge usage of concurrent licenses over a period of time.
- **Customer**—A Customer license permits an unlimited number of customers to be created and have access to the system.

Licensing and User Roles

As stated above, you must have a Customer license to enable incoming email for external users.

Workspace Administrators and Agent users can use a fixed or a concurrent license.

System Administrators must have a fixed license.

Asset Management

Asset management is an add-on module to BMC FootPrints Service Core. Asset management enables the auto-discovery of PC assets, network management, and software deployment using any combination of the following:

- **BMC FootPrints Asset Core**—Complete, up-to-the-minute PC hardware and software identification.
- **BMC FootPrints Service Core Integration with Microsoft System Center Configuration Manager/SMS**—Allows service desk agents to dynamically access PC asset data, acquired with Microsoft System Center Configuration Manager/SMS, while they're working on an Issue from within BMC FootPrints Service Core.

Note
Microsoft System Center Configuration Manager/SMS is only available for systems running the Windows OS.

BMC FootPrints Asset Core

With BMC FootPrints Asset Core, you can track all hardware and software assets. BMC FootPrints Asset Core allows Agents to incorporate asset data into Issues by performing lookups in the asset management database. Asset data is fully integrated with BMC FootPrints Service Core Issue management. Agents can get automatic snapshots of users'

configurations, including platform, hardware, and software information and save the information as part of the Issue record.

For details on configuring BMC FootPrints Asset Core, see Configuring the BMC FootPrints Asset Core Integration in the Administrator's Guide.

Integration with Microsoft System Center Configuration Manager/SMS Inventory

If your organization uses Microsoft System Center Configuration Manager/SMS for tracking PC-based inventory, you can take advantage of Microsoft System Center Configuration Manager/SMS inventory data from within BMC FootPrints Service Core. BMC FootPrints Service Core with Microsoft System Center Configuration Manager/SMS integration allows service desk agents to dynamically access PC asset data for a user directly from within an Issue in BMC FootPrints Service Core. This automated process saves time, helps Agents solve users' Issues quickly, and ensures data accuracy.

When creating or editing an issue from within BMC FootPrints Service Core, you can directly view hardware, software, and network information that is contained in the Microsoft System Center Configuration Manager/SMS inventory database for a particular machine or user. The data can then be imported into the BMC FootPrints Service Core Issue. This information becomes part of the Issue's history and is searchable from the BMC FootPrints Service Core Advanced Search and Reporting tools.

BMC FootPrints Service Core with Microsoft System Center Configuration Manager/SMS integration can be enabled on a per Workspace basis.

For details on configuring BMC FootPrints Service Core integration with Microsoft System Center Configuration Manager/SMS, refer to Microsoft System Center Configuration Manager/SMS.

Authentication and Different Authentication Methods

Authentication is the process of identifying an individual, usually based on a username and password. In security systems, authentication is distinct from authorization, which is the process of giving individuals access to system objects based on their identity. Authentication merely ensures that the individual is who he or she claims to be, but says nothing about the access rights of the individual.

BMC FootPrints Service Core supports several modes of user/password authentication. Administrators have the option of using BMC FootPrints Service Core internal encryption techniques, in which BMC FootPrints Service Core maintains its own database of users and passwords, BMC FootPrints Service Core can let the web server perform the authentication, or BMC FootPrints Service Core can authenticate by interfacing with either an LDAP directory server or the Windows user list on Windows, and UNIX/Linux user list on UNIX systems.

BMC FootPrints Service Core supports the following methods of password verification:

- BMC FootPrints Service Core authentication (default)
- LDAP authentication
- Windows 2003/2008 authentication (Windows 2003/2008 only)
- UNIX authentication (UNIX only)
- Web server authentication

Each BMC FootPrints Service Core user may be assigned either a primary or secondary authentication method. Only the assigned method is attempted when a user tries to authenticate. If the secondary authentication method selected is None, all FootPrints users are authenticated against the primary authentication method.

If BMC FootPrints Service Core authentication is used, any user attempting to access BMC FootPrints Service Core must have a unique BMC FootPrints Service Core ID and password. If an external authentication method is enabled (Windows, UNIX, or LDAP), then authentication is based on the users' network IDs and passwords, but a user ID must still be created within BMC FootPrints Service Core for each agent.

Searching and Reporting

BMC FootPrints Service Core contains a number of options for querying the database. From simple keyword searches to multi-level metrics with color charts, virtually any data can be reported on in BMC FootPrints Service Core to analyze activity, trends and statistics with no programming via the BMC FootPrints Service Core web interface. Assess how your team's resources are being allocated, review activity and capacity levels, and produce time tracking and billing information for charge-backs and billing. Use report data to justify staff changes, manage the types of problems assigned to each member, and use staff resources in the most effective manner.

Topics in this chapter include:

- **Searching**
  - About Searching—Introduction to search topics.
  - Quick Search —Available from anywhere in BMC FootPrints Service Core from the top frame. Search by keyword or Issue number.
  - Built-in Queues—Homepage queues available in BMC FootPrints Service Core.
  - Advanced Search—Complex search on all fields and criteria.
  - Saved Searches—Save advanced search criteria to create queues available from the BMC FootPrints Service Core Homepage.
  - Cross Workspace Searching—Search for issues that match criteria for multiple Workspaces
- **Reports**
  - About Reporting—Introduction to reporting topics.
  - Single Issue Report—Available from the Details page of an Issue. Displays a printable page.
  - Quick Report—Create a report of Issues displayed on the Homepage using the Quick Action dialog.
  - Custom Reports—Create custom reports with custom criteria and formatting options, including graphics and multi-level metrics.
  - Saving and Printing Report Data—Information on saving and printing report data from the browser.
  - Saved Reports—Access saved custom report templates.
  - Shared Reports—Report templates that are shared by different users.
  - Administrator Flashboard—Displays up-to-the-minute graphical representation of Service Desk and Workspace activity.
  - Cross-Workspace Reporting—Custom reports across multiple workspaces.
  - Time Tracking Reports—Generate time tracking and billing reports.
  - Metric Reports—Generate statistical data and metrics about the Workspace.

- Report Templates—Create single-issue report templates for printing out Purchase Orders, Work Orders, RMAs, etc.
- Auto-Run Reports—Schedule custom reports to be generated and emailed automatically on certain days/times.

Searches

When BMC FootPrints Service Core conducts a search, it means that the user supplies some criteria (a keyword, an Issue number, a date range, etc.) and BMC FootPrints Service Core assembles and displays all of the records that meet the search criteria. Searches can be conducted on specific fields (for example, search the Problem Type field for all records that contain the word "Printer" in that field) or on all fields (for example, the user supplies keywords such as "wireless data" and BMC FootPrints Service Core searches all of the fields in all of the records for those words). Searches can also be conducted on a date or range of dates (e.g., all Issues that were opened between April 1, 2016 and April 30, 2016).

BMC FootPrints Service Core contains a number of search facilities that allow you to search and locate specific Issues in the database and create custom queues for the Homepage:

- **Quick Search**—Available from any page in BMC FootPrints Service Core. Search by entering a keyword, title, or Issue number.
- **Built-in Queues**—These are lists on the BMC FootPrints Service Core Homepage that, when selected, assemble and display records according to predetermined criteria. For example, the user might click on the My Assignments queue, which would then display all of the Issues assigned to the user.
- **Advanced Search**—Complex search on all fields and criteria.
- **Saved Searches**—Save advanced search criteria to create queues available from the BMC FootPrints Service Core Homepage.
- **Cross-Workspace Searching**—Search for Issues across multiple Workspaces.

NOTE

Search results can be further refined by using Filtering. Refer to topic titled Below the Toolbar for details on Filtering.

Reports

Reports quantify and format information stored in the database. When the user requests a report, it means nothing more than deciding which field data to retrieve and how the output should look. BMC FootPrints Service Core provides the information in the requested format. For example, if you want to determine how many Issues were in an active state (i.e., not yet closed) on a specific date and how many of those particular Issues were then closed one month later, you can specify those criteria and request a Report. BMC FootPrints Service Core connects to the database, counts these items for you, and generates a Report that displays the data in the format you requested.

Types of Reports

The following Report types can be obtained from BMC FootPrints Service Core:

- **Single Issue Report**—Create a report on a single Issue.
- **Quick Report**—Create a report on a set of Issues displayed on the Homepage.
- **Custom Reports**—Create custom reports with custom criteria and formatting options, including graphics and multi-level metrics.

- **Saved Reports**—Access saved custom report templates.
- **Shared Reports**—Access report templates that are shared by different users.
- **Workspace Flashboard**—Display an up-to-the-minute, customizable, graphical representation of Service Desk and Workspace activity.
- **Personal Flashboard**—Display an up-to-the-minute, customizable, graphical representation of the individual's activity and the activity of Teams to which the Agent belongs for the current Workspace.
- **Metrics**—Generate reports for statistical and historical analysis.
- **Cross-Workspace Reporting**—Create custom reports across multiple Workspaces.
- **Time-tracking Reports**—Generate time-tracking and billing reports.
- **Report Templates**—Create single-Issue report templates for printing out Purchase Orders, Work Orders, Return Merchandise Authorization forms (RMAs), etc.
- **Change Manager Reports**—Only available with the BMC FootPrints Change Manager Add-on module, provides data about Issues that match the Change Management criteria.

Executive Dashboard

Executive Dashboard provides business intelligence regarding the performance of your service desk. Agents with access to Executive Dashboard can set the types of data they wish to display and observe that data, seeing it change dynamically as the Executive Dashboard is refreshed. Executive Dashboard can provide information such as:

- Is my service desk keeping up with the work?
  - Am I resolving as many Issues as are being created?
  - Am I diminishing my carry-over or just adding to it?
- How do I look this period compare to the same previous period?

The Executive Dashboard allows you to view trending, showing data changes over time in a single view rather than compiling different reports from those same time periods. In addition, multiple, disparate reports can be viewed at the same time in the same place. Complex searches, with a number of filtering options, can be configured as reports and viewed as graphs.

Users who only want to view the Executive Dashboard can set the Executive Dashboard as their homepage so that, when they log into BMC FootPrints Service Core, they are immediately presented with the Executive Dashboard reports they have chosen and don't need to understand anything more about navigating BMC FootPrints Service Core.

Some specific types of Executive Dashboard report are built in to BMC FootPrints Service Core:

- **Service Level Agreement (SLA) report**—SLAs may include agreements regarding "thresholds". That is, they may require a specific amount of "up time" for a customer. The SLA report allows you to specify the thresholds and see how agents are doing in maintaining them. For example, if the minimum threshold is 93% up time, the report might show a line that is green when safely above the threshold, yellow when the threshold is being approached, and red when the threshold is breached.
- **Resolution Rate Report**—A First Contact Resolution Rate and a Resolution Rate report are combined so that you can watch the convergence of those two types of information in one place. The periods to be observed (per day, week, month, quarter, and year) are configurable.

- **Watchlist Report**—You can watch a problem type or other field and track how many of those problems were created during a specific period (day, week, month, quarter, or year). If you use saved searches to track this type of information, the Executive Dashboard allows you to create a Watchlist that replaces those searches and see everything at a glance because multiple fields can be watched in one Watchlist.
- **Activity Report**—A line graph tells you how many Issues were active for a specific period so that you can observe the activity at various points. For example, if you tracked activity during the month, you might see how many Issues were created on each day, how many were closed on each day, etc. This enables you to see where activity spikes for different statuses.
- **Statistics Report**—This is similar to an Activity Report, and can show, for example, your totals and carryover for a period: how many Issues were created, closed, active etc.

Time-tracking

Time-tracking is used to track the time Agents spend working on Issues. Time can be tracked automatically by the system or manually by the Agent. Agents can be assigned hourly billing rates to be used in calculating the monetary amounts spent on Issues in addition to time spent. Time can be tracked for any Agent when creating Issues and when editing Issues. The total time counted over all sessions is accumulated and stored for the Issue. If this feature is not needed, it can be disabled for the Workspace.

This data can be used to create time-tracking reports, which can be used for billing, or to track any time-related information, such as how long one or more users spent on certain kinds of Issues. A BMC FootPrints Service Core time-tracking report returns totals and averages of all time-tracking data included in the report and individual time-tracking information for each Issue reported. In addition to returning specific data for billing purposes, the time-tracking report can be used to return averages and totals for a specific internal user, Customer, status or priority type, etc.

BMC FootPrints Service Core Calendar

BMC FootPrints Service Core Calendar

The BMC FootPrints Service Core Calendar is a web-based calendaring system that is fully integrated with BMC FootPrints Service Core Issue tracking and customer problem management. Agents and Administrators can track personal and Workspace-wide appointments, schedule meetings, jobs, and more. Calendar appointments can be linked to BMC FootPrints Service Core Issues. Recurring appointments can be created that automatically create new Issues at the next recurrence. Appointments can be synchronized with Microsoft Outlook via email or, if you have the BMC FootPrints Mobile add-on module, with a number of supported Personal Information Managers (PIMs). Work schedules can be defined for the Workspace and for individual Agents, including regular work hours, holidays, vacations and sick leave, which can reduce conflicts when scheduling work. Agents can set their BMC FootPrints Service Core interface to their local time zone so that all appointments and other times appear in local time rather than the time on the server.

There are three options for the BMC FootPrints Service Core calendar system:

- **Workspace**—The Workspace Calendar can be used to track appointments for all Agents and Teams for a BMC FootPrints Service Core Workspace. Each Workspace has its own calendar.
- **Personal**—Each Agent/Administrator in BMC FootPrints Service Core has a Personal Calendar. This is a place to add both personal appointments and work-related appointments. The Personal Calendar remains constant throughout all Workspaces for a user.

- **Availability**—Each Agent/Administrator can have an availability schedule defined for them, minimizing conflicts when work appointments are scheduled. Availability can be linked to date/time fields in an Issue.

Workspace Work Schedule

A work schedule can be defined for a Workspace and for individual Agents. Regular working hours, days off, and holidays can be defined in the work schedule by the Workspace Administrator. Escalation rules can be configured to follow the Calendar. Holidays and exceptions to the regular schedule are defined in the work schedule. When generating a time-tracking Report, work schedule time can be figured into the Report so that only time during work hours is calculated. For example, if your organization usually works an eight hour day, Monday through Friday, you can define your Workspace Work Schedule as eight hours, Monday through Friday. You can then run a report showing how long it took to close Issues. By setting the Report to account for the eight hour work day and five day work week, the Report will only count the time spent during the defined days and hours (a maximum of 40 hours per week). If an Issue took from 9AM Monday morning until 9AM Wednesday morning to close, the Report will show that as 16 hours. If, on the other hand, the Report did not account for the Workspace Work Schedule, the same Issue would be reported as taking 48 hours to close.

The BMC FootPrints Service Core Workspace Work Schedule also allows the administrator to establish a second shift in the work schedule. This provides greater flexibility in work hours and reporting.

Synchronizing Appointments

With BMC FootPrints Mobile, appointments in the BMC FootPrints Service Core calendar can be synchronized with external calendars and vice-versa. This means that, from within BMC FootPrints Service Core, you can create an appointment on the BMC FootPrints Service Core calendar and have that appointment show up on your external calendar (Outlook, Lotus Notes, etc.) You can also create an appointment in your external calendar and have it show up in your BMC FootPrints Service Core calendar. This requires installation of a small client.

Automated Workflow

This section covers tasks and rules that can be configured by Workspace Administrators to occur automatically based on many different criteria. The options include:

- Escalation—Configure automated Escalation and Business Rules.
- Service Level Management—Configure service level agreements.
- Auto Assign—Configure default assignment and auto assignment rules.
- Quick Issues—Manage Quick Issue Templates.
- Auto Run Reports—Schedule saved reports to be emailed automatically.
- Customer Survey—Create a customer satisfaction survey to be sent to customers when their Issues are closed.
- Submission Tracking—Track how Issues are submitted.
- Issue Workflow—Configure options for cross-workspace copying and subtasks.
- Change Management—Configure the Change Manager approval processes and phases.
- Social Media -- Configure the Workspace so that Agents can broadcast Issues to social media.

Workflow Functions

Workflow refers to tasks and business rules that can be configured by Workspace Administrators to occur automatically based on many different criteria. Workflow functions are the mechanisms that are built into BMC FootPrints Service Core for configuring those tasks and business rules to occur automatically.

Escalation

BMC FootPrints Service Core escalation enables you to automate business processes throughout the system with no programming, using the same web-based interface used for searches, reports, creating Issues, etc. This feature can perform simple escalations that send email when an Issue has been unresolved for a certain amount of time as well as observe more complex rules based on multiple criteria that enact multiple actions, such as changing status, assignment, etc.

Some of the common uses of the BMC FootPrints Service Core escalation feature are:

- **Time-based escalation**—Escalate overdue Issues to another user or priority.
- **Service Level Agreements**—Alert Agents to the fact that a service level agreement threshold is being reached.
- **Reminders**—Send follow-up reminders to Agents.
- **Automatic Assignment**—Create auto-assignment rules based on a combination of multiple criteria.
- **Custom Email Notifications**—Create custom email notifications to be sent to Agents and Customers at any stage in the workflow.
- **External Programs**—Launch a batch job in another system or application.
- **Multi-workspace workflow**—Automate the escalation of an Issue from one workspace to another.
- **Approvals**—Use in conjunction with statuses and roles to define a custom approval process.

An escalation rule automatically escalates Issues based on your criteria on a workspace-wide basis. Rules can be defined for which Issues should be automatically escalated and for defining what should occur when Issues meet those criteria. For example, your organization may have a rule that states that "all priority 1 Issues must be closed within 24 hours." The BMC FootPrints Service Core automatic escalation feature can be configured to send an email automatically to alert the Administrator when a priority 1 Issue is still open after 24 hours.

The order of escalation rules on the escalation page determines which rules take precedence. For details on configuring escalation, refer to Managing Escalations.

Service Level Management

The Service Level Management feature is designed to help the Service Desk meet service levels for customers based on their service contracts. Service levels can be defined based on the problem or incident type using a Workspace field, or can be based on who the customer is using an Address Book field.

Resolution time

An unlimited number of service levels can be defined and response time (how quickly a response of some kind must be made to an Issue), contract information, and associated escalation rules can be defined for each level.

Due dates and times are automatically generated based on the resolution time. Service Level Metric reports can be generated including percentage of issues that exceeded the resolution time for a particular time period.

In sum, the Service Level Management feature can provide the basis for a series of automated workflow rules that ensure the standard of service provided to customers.

For details on Service Level Management, refer to Creating a Service Level Field.

Change Manager Overview

Solving business problems often results in procedural changes. However, changes just as often occur when companies proactively seek business benefits by reducing costs and/or improving services. The goal of the change management process is to ensure that standardized methods and procedures are used for efficient and prompt handling of all changes, thus minimizing the impact of change-related incidents upon service quality, and consequently improving the day-to-day operations of the organization. Changes range from small solutions, i.e., upgrading memory or software on a single machine, to large projects, such as an organization–wide system upgrade. The ITIL (Information Technology Infrastructure Library) standard for service and support defines change management as a process that ensures that standardized methods and procedures are used for efficient and prompt handling of all changes to minimize the impact of change-related incidents on service quality. Consequently, change management aims to improve the day-to-day operation of the organization.

The BMC FootPrints Change Manager add-on module enables organizations to develop their own approval process for Issues with no programming. In BMC FootPrints Change Manager, approvers are designated for specific workspaces. When an Issue meets approval criteria, the approvers are notified that an Issue awaits approval. The approvers then give or withhold approval. When an Issue meets approval criteria, it is moved to another stage in the process. Note that meeting "approval criteria" may mean that the Issue is rejected rather than approved.

Workspace administrators can designate different approvers for different stages in the approval process. For example, a proposal for a software change may require an approval in principle for the change from product management, an approval for the design from the development organization, an approval for the actual software build from software development, then a testing approval from quality assurance, and so on. The BMC FootPrints Change Manager feature allows the workspace administrator to create an orderly and efficient method for getting those approvals and ensuring that nothing falls through the cracks or waits too long for review.

NOTES

BMC FootPrints Change Manager is an add-on module that incurs an additional cost. The BMC FootPrints Change Manager feature is related to but not to be confused with Change Manager as defined by the IT Infrastructure Library. The BMC FootPrints Change Manager feature provides the ability to manage changes via a voting/approval process.

BMC FootPrints Change Manager is implemented with customized statuses, fields, teams, roles, and escalation rules. The fields and statuses are built into the Change Manager template, a feature of the Workspace wizard for building Change Manager workspaces. The included Change Manager template is a workflow recommendation from BMC, and can be customized as easily as any BMC FootPrints Service Core Workspace to reflect the specific needs of the organization.

BMC FootPrints Change Manager provides features that include the following:

- Customizable criteria for automatically setting off an approval process (including all built-in and custom fields)
- Customizable rules for meeting an approval (i.e. requiring one, a majority, or all to approve)
- Customizable actions upon approval or disapproval, including the start of another approval phase, change of status, re-assignment, etc.
- Customizable email notifications for various stages of approval
- BMC FootPrints Change Manager Audit Trail
- Customizable Permissions for access to approval information

- Built-in homepage listing “My Approvals”
- Built-in BMC FootPrints Change Manager reports
- Approval via email
- Optional anonymous approvals

For details on configuring BMC FootPrints Change Manager, refer to Configuring BMC FootPrints Change Manager.

For details on using BMC FootPrints Change Manager, refer to Using BMC FootPrints Change Manager.

Configuration Management Concept

The Information Technology Infrastructure (ITIL) standards include two main categories for organizing best practices that are further divided into five sub-categories each. One of these requirements is BMC FootPrints Configuration Manager, which is a sub-category of the Services Support category.

Configuration management deals with tracking individual “configuration items" (CIs) throughout an enterprise. Configuration management involves relating assets or CIs and establishing dependencies and hierarchies. It also involves designating certain services as CIs, such as Email, Internet, etc., and then determining upon which CIs each service is dependent. This process is very important for identifying the impact of any changes that would be made within an organization.

Configuration management is a discipline that originates from the IT Infrastructure Library (ITIL). It is part of the Service Transition discipline, which looks to control the transition of new and updated IT services into the organization. The purpose of BMC FootPrints Configuration Manager is to record and manage the components in an IT infrastructure that support the services that IT provides. It is intended to establish a single source of truth to manage critical system information, and serves as a foundation for successful IT Service Management through its ability to maximize efficiencies, bridge IT and business silos, ensure configuration compliance, and speed up problem solving via integration with the service desk.

BMC FootPrints Service Core Service Catalog

Service Catalog is the heart of ITIL v3. A Service Catalog is a document that provides a brief overview, in business terms, of all the business and infrastructure services offered by the IT provider, which may also include service charges. BMC FootPrints Service Core Service Catalog (SC) enables IT organizations to offer a menu of services customized to their business customers; this allows IT to demonstrate its value to the business, and provide transparency of service costs. Items in the Service Catalog might include new equipment (laptop, Blackberry, etc.), critical business services such as email, or services required for a new hire. An entry in the SC would include a description of service, costs, service level agreement, etc. in a customer-friendly interface.

The BMC Service Catalog builds on existing functionality in BMC FootPrints Service Core (Configuration Manager, workspaces, quick issue templates, self-service, and change management) to provide its Service Catalog solution. Because of its great flexibility, the BMC Service Catalog can be used in any type of organization or department – IT, HR, Pro Services/Training, Facilities, External Customer Support, etc.

Broadcast Message

A broadcast message is a message displayed in a pop-up window to all logged in BMC FootPrints Service Core internal users (i.e., not customers). Only system administrators can create broadcast messages.

Customer Surveys

When this feature is enabled, a customer satisfaction survey can be automatically emailed to customers when their Issues are closed. The email, with the survey attached, is sent to the customer according to the rules specified under Administration | Workspace | Automated Workflow | Customer Surveys.

IMPORTANT

Check local laws governing automated surveys before enabling the feature.

Preventive Maintenance

The Preventive Maintenance feature enables BMC FootPrints Service Core users to provide proactive service management via Quick Issue Templates that automatically create new issues on a recurring basis. These templates can be used for periodic server maintenance, ensuring password changes on strategic accounts every X days, regular auditing of systems for SOX compliance, or any other regularly scheduled maintenance event.

BMC FootPrints Service Core Web Services

BMC FootPrints Service Core Web Services is a way for users to access the database over the Internet and perform specific functions. The specific functions are:

- Search the database (using queries for Issue, Address Book, History data, etc.). This search can be more complex than the built-in searching functions of the BMC FootPrints Service Core interface, since users can build combinations of AND and OR queries.
- Retrieve the details of an Issue.
- Create an Issue.
- Edit an Issue.
- Create dynamic or static link between Issues.
- Create a new contact in the Address Book.
- Edit an existing contact in the Address Book
- Create a new or edit an existing contact in the Address Book.

The functionality is limited in that the programmatic interface to BMC FootPrints Service Core cannot be used to alter the database structure. For instance, the user (or program) could not remove a database column.

BMC FootPrints Service Core Mobile

The BMC FootPrints Mobile add-on module combines real-time, dynamic access to BMC FootPrints Sync via a web browser on certain mobile devices, with BMC FootPrints Sync functionality for calendar, task and contact synchronization BMC FootPrints Sync is included as part of BMC FootPrints Mobile). This module allows Agents to manage their assignments, search the knowledge base, etc. on the go and without the need of a PC.

Access to BMC FootPrints Service Core via mobile is, just as with a full-size computer, via web browser.

The BMC FootPrints Sync module enables Agents to:

- Synchronize appointments made in **BMC FootPrints Service Core** to their PIM (Personal Information Manager) and synchronize appointments made on their PIM to BMC FootPrints Service Core.

- Make tasks in the PIM from BMC FootPrints Service Core Issues that are assigned to them and update the status fields of Issues in BMC FootPrints Service Core based on a field in the PIM.
- Synchronize their BMC FootPrints Service Core Address Book to their PIM (i.e., write the contacts in the BMC FootPrints Service Core Address Book to their PIM).

BMC FootPrints Sync is part of the BMC FootPrints Mobile add-on module and requires installation of a client. BMC FootPrints Sync supports Microsoft Outlook, Lotus Notes, Palm Desktop/Hotsync, Pocket PC (through Outlook), Blackberry/RIM, and Outlook Express.

NOTE

Refer to BMC FootPrints Sync for details on installing and configuring the BMC FootPrints Sync client.

Chapter 3: Navigating the Interface

The Homepage

The New Homepage

Experienced BMC FootPrints Service Core agents who have only recently upgraded to a 9.5 or newer release will notice immediately how radically different the homepage looks. All of the existing BMC FootPrints Service Core features and functions are still there, but they have been streamlined and the page has become less complicated in order to make it easier for you to navigate. The goal was to make life easier for you, and once you become accustomed to the new interface, it will be. For new agents, the new look of BMC FootPrints Service Core will make it easier to adjust to using the software.

Of special note, the term “Project” has been changed throughout BMC FootPrints Service Core to “Workspace”. Consequently, a cross-project report is now called a "cross-Workspace report”.

Where Things Went

The home page has been shifted around to emphasize buttons, links, and data that is most important and to mute other information. This results in the eye being drawn to what is most important and limits the clutter caused by superfluous information. Here’s a quick description of where everything is now:

- **BMC FootPrints Service Core Toolbar**—The toolbar is no longer a row of buttons down the left side of the page. It is now a band across the upper portion of the page, separating the top of the page from the BMC FootPrints Service Core Dashboard components and all the material below the dashboard. By default, the toolbar does not have as many buttons visible, though the administrator can add more buttons to it. The Homepage, New Issue, Reports, and (for those with administrative privileges) Administration buttons are still there. If you click them, you get the main page for those functions. If you mouse over them, a menu is displayed for additional functions relevant to them. There is also a More button now. Mouse over the More button to display additional functions, as follows:
    - Address Book
    - Workspace Calendar
    - Personal Calendar
    - CMDB (if your organization used the Configuration Management Database module)
    - Knowledge Base
    - Instant Talk (optional)
    - Remote Control (optional)
    - **My Preferences**—If you are looking for the My Preferences button, it is now a link at the top right of the page and is called simply “Preferences”.
    - **Quick Issue Templates, Global Issues, and Adding to the Knowledge Base**—Quick Issue Templates, Global Issue, and adding to the Knowledge Base are now on the menu under New Issue, and Quick Issues are called “Quick Templates”.
- **Reports**—All Reports, including the Flashboards, are listed under Reports.

- **Search**—All of the Search functions are at the top of the page where the Quick Search was and remains located. The three radio buttons for “Title”, “Keyword”, and “Number” searching have been replaced with a drop-down that defaults to “Title” searches and also includes a “Keyword” option. Typing a numeric value into the Quick Search automatically pulls up the corresponding Issue with that number, so the "Number" option has been removed. To perform a string search on a numeric value, you must surround your numeric value with double quotes. Advanced Searches are performed by clicking the Advanced link. Hover over the Advanced link with the mouse for access to Saved Searches and Cross Workspace Searches.
- **Calendar**—The Calendars (Personal and Workspace) are under the menu for the More button. Visit either calendar or the Create/Edit Issue page for access to the Availability Calendar.
- **Help**—Help is now a link in the top right corner of the page. This is the button for the main help page. Context-sensitive help remains on all other pages.
- **Logout**—The log out function was in the BMC FootPrints Service Core toolbar in the left frame. It is now called “Sign out” and is a link in the top right section of the page.
- **Project drop-down field**—The Project drop-down field, used to change projects, is now the “Workspace” drop-down. It is no longer in the upper right corner of the page, but on the upper right side. If you look there you will see the words “You are now in the X workspace”, where X is the name of the current workspace. Click on the name of the workspace and the drop-down is displayed.
- **List of Issues**—The list of issues is in the same place that it was before. Some changes have been made to give you more access to the information you need without having the overhead of loading other pages. You will see the Priority, Title, and column that is sorted highlighted while other information is muted. Alongside the Title are the first few words of the most recent Description so you can easily see the latest information for your assignments. Clicking [more…] will reveal even more of the most recent Description and reveal links for “Descriptions”, “Details”, and “Edit”. Click the “Descriptions” link to reveal the full list of all Descriptions if you need this level of detail. If more detail is needed, you can click the “Details” link to launch the full Details page. At any time during this process you can click the Title of the Issue to launch the new Quick Edit page to quickly update your Priority, Status, Description, or other selected fields without having to leave the page. If you need to edit more information, access to the full Edit page is available as a link once [more…] is clicked, from the Quick Edit page, and by clicking the Issue number on the homepage for 1-click access.

- The new Quick Edit feature means that, without leaving the homepage, you can quickly make an update to the Title, Priority, or Description fields, which are the most common updates that occur. If you work in an environment that requires consistent updating of other fields, your administrator can add other fields to this form. If you work in an environment that requires extensive updating of fields and use of other functions with each update like Time Tracking, the Quick Edit feature may be disabled by your administrator.
  - **Quick Action Dialog**—The Quick Action Dialog checkbox, which was located above the list of issues on the right side of the page is still above the list of issues, but it was moved to the left side of the page for greater visibility.
  - **Priority**—Formerly, all priority values were displayed in the priority column of the list of issues. In the new interface, only important priorities are displayed so as to make them more visible.
  - **Multi-window mode**—You may have noticed that the Incident Details and Edit pages are opening in a new window. In the past this was optional, but is now the standard approach in BMC FootPrints Service Core. With the way the new homepage has been designed, you should have to visit these pages less often than before. The separate windows also let you multitask more efficiently.

The BMC FootPrints Service Core Homepage

After successful login, the BMC FootPrints Service Core Homepage is displayed. The Homepage is the starting point of your BMC FootPrints Service Core Workspace. You can return to the home page at any time by clicking the “Home" button on the toolbar.

The homepage is displayed in two logical areas divided by the toolbar. **Above the toolbar**, from left to right, are:

- the **BMC FootPrints Service Core logo**
- the **Quick Search** field, for searching for Issues
- the **greeting**, which displays the user’s name
- the **Sign-out** link, for logging out of BMC FootPrints Service Core
- the **Preferences** link, for setting individual user preferences
- the **Help** link, for displaying the full online help documentation
- below the Sign-out, Preferences, and Help links, the **Workspace drop-down** for changing the Workspace.

Below the toolbar are:

- the **dashboard components** for listing items of interest, and, below that
- the **Actions** drop-down for taking actions quickly
- the **Display** drop-downs for displaying Issues that meet specified search criteria, and below that
- the list of Issues

The **BMC FootPrints Service Core toolbar** displays the following options:

- **Home** for displaying the home page
- **New Issues** for opening a new Issue
- **Reports** for accessing reporting functions
- **Administration** (only visible to those with administrator privileges) for accessing administration functions
- **More** for additional functions

Above the Toolbar

Quick Search

The Quick Search is located at the top of BMC FootPrints Service Core pages. It is available from any BMC FootPrints Service Core screen (in the Address Book, the Quick Search searches the Address Book only).

To use Quick Search, enter the search string in the Quick Search field, select the field to search from the drop-down (using the drop-down arrow), and the click the SEARCH button. A list of all Issues that match your search criteria is displayed. More complex searches are covered in the chapter on Searching and Reporting.

Sign-out

The Sign-out is located at the top of BMC FootPrints Service Core pages. Click the Sign-out link to log out of BMC FootPrints Service Core.

Preferences

The Preferences option allows Agents, administrators, and customers (if they have been configured with access to preferences) to customize their Homepage and set other personal preferences. Users can change their email addresses, passwords, security options, Homepage list preferences, and more.

NOTE
Customers do not have access to all of the preferences available to Agents and administrators.

To change preferences, click the Preferences link.

Tabs are displayed for:

- **Personal Info**—Change your display name, email address, default Workspace, password, and more.
- **Issue Page**—Options for creating and editing Issues.
- **Homepage**—Define the list of Issues and columns displayed on your homepage.
- **Dashboard**—Define the dashboard components that appear at the top of the main frame on your homepage.
- **Misc. Preferences**—Other personal preferences.

NOTE
Most options apply to BMC FootPrints Service Core system-wide, with the exception of Homepage and the security option to Require Password for Issues, which are chosen on a per-Workspace basis. If a user belongs to multiple Workspaces, it is possible to display different list preferences for each Workspace.

Personal Info

These options apply to all Workspaces to which you belong. After configuring options, scroll to the bottom of the page, enter your password, and click SAVE.

- **Name**—Change your display name (does not affect user ID). Replace the current name in the text box.
- **Primary Email address**—Change your email address for BMC FootPrints Service Core email notification. To change your email address, replace the current address in the text box. The option must be checked to receive email.
- **Pager Email Address** (optional)—Optionally enter separate email address for notification via pager. Can be used for escalation notification. Check this option to receive regular notification email at this address.
- **Wireless Email Address** (optional)—Optionally enter separate email address for notification via wireless device. Can be used for escalation notification. Check this option to receive regular notification email at this address.
- **Change Password**—Change your BMC FootPrints Service Core password. Password must be entered twice.
- **Default Workspace**—If you are a member of more than one Workspace, change the default Workspace that is displayed when logging in to BMC FootPrints Service Core. To change the default Workspace, select from the drop-down box.
- **Your Local Time Zone**—By default, BMC FootPrints Service Core displays all dates and times in the time zone where the BMC FootPrints Service Core server resides. If you select a time zone from the drop-down list, all dates and times are displayed adjusted to be accurate for that time zone (does not affect how data is stored).
- **Date Format**—This option determines how dates are represented throughout BMC FootPrints Service Core. The options are:

- **American**—MM/DD/YYYY
- **European**—DD/MM/YYYY
- **ISO**—YYYY/MM/DD
- **Revert to the system default**—The default format set by the System Administrator is used.

- **Preferred Language**—If the current BMC FootPrints Service Core installation supports multiple languages, select a language for display.
- **U.S. Government Section 508 Compliance/Visually Impaired Enhancement**—This feature enables BMC FootPrints Service Core to be better accessed by visually impaired users. If enabled, BMC FootPrints Service Core is optimized to be used with the "JAWS" browser and other similar browsers. If you enable or disable this feature, you must refresh the browser.

NOTE

This feature should only be enabled if you are visually impaired and using a browser like JAWS.

- **Delete Cookie**—If you elected to have **BMC FootPrints Service Core** remember your ID and password (on the Login page), an option to delete the login cookie appears here. Check the box to delete the cookie. Deleting the cookie means that you must enter your user name and password every time you log in to BMC FootPrints Service Core.

NOTE

If you just changed your password, your old password is still active until after you apply the changes. Consequently, even though you changed your password on the Preferences page, you must enter the old password to apply the changes. After successfully changing your preferences, your new password becomes active.

Issue Page

These options apply to all Workspaces to which you belong. After configuring options, scroll to the bottom of the page, enter your password, and click SAVE.

- **Interface Style**—Select between Tabs and Expand/Collapse
  - **Tabs**—Selecting Tabs causes sections to be displayed as tabs on Create, Edit, and Details Issue pages. If you select Tabs, you can select which section tab is displayed when each of the three page types (Create Issue, Edit Issue, and Details) is displayed. Select the tab to display from the drop-down box.
  - **Expand/Collapse**—Selecting Expand/Collapse causes sections to be displayed as expandable/collapsible sections on Create and Edit Issue pages. Agents can click the plus or minus sign beside the section heading to expand or collapse the section, respectively. If you select Expand/Collapse, you can select which sections are displayed in the expanded mode for each of the three page types (Create Issue, Edit Issue, and Details). Checking the box beside the section name means the section is expanded when you access the selected page.
- **Automatic Spell Check**—Optionally enable automatic spell check on the Create Issue and Edit Issue pages. The spell check occurs after you submit an Issue or an update to an Issue.
- **Rich Text Mode Editor**—The Description field can include controls for formatting the text, including font type, size, color, bulleted and numbered lists, and tables. This feature is compatible with the following browsers: Internet Explorer 5.5+, Firefox 2.0+, and Safari 3.0+. If disabled, a plain text box is used instead.

NOTE

The Rich Text Mode Editor feature may be disabled by the administrator in some Workspaces.

- **Flip-Thru Description Viewer**—If enabled, when the user views the Issue Description field, only one description is displayed at a time. Arrow buttons allow the user to "flip through" multiple descriptions for the Issue. An additional control above the Description field allows the user to display all of the descriptions at once in a new window.
- **Display Complete Description on Edit**—If enabled, a display field that cannot be edited is included just before the Description field that allows the Agent to scroll through previously entered descriptions without opening a separate View Current Description window.
- **Edit Most Recent Description**—If enabled, the last description of an Issue appears on the edit page in a separate box for editing purposes. This option is only available to administrators or other users with the correct role permission.
- **Prefill New Issues With My Contact Information**—If enabled, the Contact Information section of the Issue is always pre–populated with the Address Book record of the Agent entering Issue data. The Agent must have a corresponding record in the Address Book for this to work. Otherwise, the fields remain empty.
- **Open attachments from a new window**—If enabled, a new window is opened when you click on a file attachment to download it. The default is "Disable".
- **Behavior after Issue create/edit**—The three options in this drop-down are: Close window and/or refresh homepage, Display Issue details, and Display confirmation page only. Close window and/or refresh homepage closes the Issue page window. Display Issue details displays the Issue details page in a new window. Display confirmation page only displays a View Issue button and a Close Window button. Clicking the View Issue button displays the Issue details page. On a heavily used system (one with many agents and Issues) the Display confirmation page only option provides the best performance, while the other two options are about equal in terms of their affect on system performance.
- **Quick Descriptions/Signatures**—If you select the link, a window is displayed that allows you to create pre-defined text with which to populate the Description field in the Create Issue and Edit Issue pages. This can be used to create a personal signature, or to have common answers readily available. To use a quick description when completing a Create Issue or Edit Issue page, select the name of the quick description from a drop-down list located in the Description field title bar. Additional information for creating, editing, and deleting quick descriptions is below.
- **Require Password for Issues**—Require a password to save changes to an Issue. This is enabled on a per-Workspace basis, i.e., to enable this in another Workspace, change Workspaces, then return to the Preferences page and enable it.

Create a Quick Description/Signature

To create a quick description:

1. Select Preferences and then click the Quick Description/Signatures link in the Issues tab on the Preferences page. A pop-up is displayed.
2. Enter a name for the quick description/signature in the Create section, then enter your password and click GO. A multi-character field is displayed.
3. Enter the content for the quick description/signature into the multi-character field and click GO.
4. The description is saved and the Quick Description pop-up is displayed to allow you to create, edit, or delete additional quick descriptions/signatures.

Once a quick description or signature has been created, a drop-down box appears on the Create Issue and Edit Issue pages in the Description field title bar. The drop-down box contains the name(s) of the quick description(s) in the Workspace. If the Agent selects a name from the drop-down, the Description field is populated with the pre-defined text. The Agent can still enter additional text in the Description field.

Edit a Quick Description/Signature

To edit a quick description:

1. Select Preferences and then click the Quick Description/Signatures link in the Issues section on the Preferences page. A Quick Descriptions pop-up is displayed.
2. Click on the name of the quick description or signature in the Edit section, then enter your password and click **GO**. A multi-character field is displayed.
3. Make the changes you want to the text in the multi-character field. You can delete, add, or alter text as you see fit. When you are done making changes, click **GO**.
4. The content is saved and the Quick Description pop-up is displayed to allow you to create, edit, or delete additional quick descriptions/signatures.

Deleting a Quick Description/Signature

To delete a quick description/signature, which removes the quick description or signature from the drop-down box on the Create Issue and Edit Issue pages:

1. Select Preferences and then click the Quick Description/Signatures link in the Issues section on the Preferences page. A Quick Descriptions pop-up is displayed.
2. In the Edit, Re-order or Delete Quick Descriptions section, select the name of the quick description/signature, then click Delete. Enter your password, then click **GO**.

   The quick description/signature is deleted and the Quick Descriptions pop-up is displayed to allow you to create, edit, or delete additional quick descriptions or signatures.

Homepage

This tab is used to define the list of Issues displayed on the home page. By default, My Assignments is chosen. The My Assignments selection lists your most recent open assignments and is the recommended choice for most users. It is the fastest to display and allows you to be continuously updated on your assignments. However, the user can choose instead to display any built-in or custom list.

NOTE

The options chosen below are, in effect, on a per-Workspace basis. To change your preferences in another Workspace, change to that Workspace and re-configure the List Preferences.

The options are:

- **Lists Available on Homepage**—The lists that are displayed in the drop-down in the main window of the Homepage. One or more lists can be highlighted by holding down the CTRL key while clicking on the list. The choices are:
  - **My Assignments**—The most recent active Issues assigned to you. Shown by default.
  - **My Assignments and Requests**—Active Issues assigned to you and unassigned Requests from customers.
  - **My Team's Assignments**—Active Issues for your Team (only displayed if you belong to a Team).
  - **My Assignments in All Workspaces**—Active Issues assigned to you in all Workspaces (only displayed if you belong to multiple Workspaces).

- **My Active Approvals**—Lists all Issues for which the Agent is an approver, the Agent may or may not have yet voted, and voting has not been completed. (Applies to Change Manager approvers only.)
- **My Active Approvals and Assignments**—Lists all Issues for which the Agent is an approver, the Agent may or may not have yet voted, and voting has not been completed, as well as the Agent's assignments in the current Workspace. (Applies to Change Manager approvers only.)
- **My Vote Required**—Lists all Issues for which the Agent is an approver, the Agent has not yet voted, and voting has not been completed. (Applies to Change Manager approvers only.)
- **My Vote Required and Assignments**— Lists all Issues for which the Agent is an approver, the Agent has not yet voted, and voting has not been completed, as well as the Agent's assignments in the current Workspace. (Applies to Change Manager approvers only.)
- **All Issues**—All Issues in the Workspace database (only available if you have rights to see all Issues in the Workspace).
- **Global Issues**—All active Global Issues for the Workspace.
- **Deleted Issues**—Deleted Issues (administrators only).
- **Requests**—Requests submitted by customers (see below).
- **Saved Searches**—Displays personal and shared custom searches.
- **Knowledge Base**—Displays Solutions from the Knowledge Base.

- **Default List**—The default list of Issues generated automatically on the Homepage when logging into BMC FootPrints Service Core is specified here. Select from one of the items selected in the Lists Available on Homepage.

NOTE

Whichever list you choose as the default, you can always view a different list by choosing another option from the drop-down box on the Homepage.

Auto-Refresh Interval—Normally, the default Homepage list refreshes each time you click Workspace Home or perform any action that brings you back to the Homepage. Optionally, you can set your preferences to automatically refresh the Homepage list at intervals of 15, 30, or 60 minutes. If you configure BMC FootPrints Service Core to refresh every 30 minutes and then go to lunch, when you come back the list is refreshed, with no user intervention required.

Maximum Issues per Screen—The maximum number of Issues that display at one time on the Homepage.

Default Sorting—Sort list by a designated field (including Workspace and Address Book fields) and choose a field for secondary sorting (where there is a match in the primary sorting column, the secondary sorting column determines the order in which the Issues are displayed). Select descending (highest to lowest) or ascending (from lowest to highest) order.

Homepage columns—Select which columns to display and in what order. For example, to display the Issue Type field:

- For Type of Field, choose FootPrints fields.
- Highlight Issue Type under Available Fields.
- Click Add Field. Issue Type is displayed in the Displayed Fields box.
- To change the order of fields to be displayed, highlight a field in the Displayed Fields box and click the up or down arrow to move it.

- To delete a field, highlight the field in the Displayed Fields box and click Delete.

Title Column Options—These options affect the display of the Titles, Descriptions, and Quick Links in the Title column. The options work together to achieve different results, as follows:

Title Column Format	Quick Links Display	Result
Include Collapsed Description in Title	Always Include Quick Links	A collapsed (shortened) version of the Description is included in the Title column and Quick Links are displayed. Clicking the "more..." link in the Title column displays an expanded version of the Description.
Include Collapsed Description in Title	Only Include Quick Links with Expanded Description	A collapsed (shortened) version of the Description is included in the Title column and Quick Links are not displayed. Clicking the “more…” link in the Title column expands the Description and displays the Quick Links.
Include Expanded Description in Title	Always Include Quick Links	An expanded version of the Description is included in the Title column and Quick Links are displayed. Clicking the "less..." link collapses the Description
Include Expanded Description in Title	Only Include Quick Links with Expanded Description	An expanded version of the Description is included in the Title column and Quick Links are displayed. Clicking the "less..." link collapses the Description and the Quick Links are not displayed.
Do not Include Description in Title	Always Include Quick Links	Quick Links are displayed in the Title column but the Description is not. Neither the "more..." nor the "less..." links are displayed with this configuration.

NOTE

Certain columns are displayed automatically on the Homepage, including Issue number and the Quick Action Checkbox dialog. Title is also mandatory, but the placement can be selected in the Fields Displayed dialog box. In addition, by default, My Vote Required is displayed in the Homepage List for those who are designated as approvers to the Change Manager feature. The My Vote Required listing cannot be removed from the list.

Dashboard

The Dashboard components contain lists of specific information. By default, Workspace Totals and Global Issues are displayed. Dashboard components can be displayed in as many as four columns. Users can also make custom components for display on the homepage. The Workspace Totals component displays the number of Issues the Workspace contains in different categories. The Global Issues component displays the Title fields of active Global Issues, which are also links to those Issues. Buttons that are displayed to the upper right of the components on the homepage allow you to refresh, collapse, expand, and remove the component.

The Dashboard tab of the Preferences page is where you specify which dashboard components are displayed on your homepage in the Workspace. Users can specify different sets of dashboard components for each of their Workspaces. By default, Workspace Totals and Global Issues are displayed. Dashboard components can be displayed in as many as four columns. Users can also make custom components for display on the homepage. Note that, while the dashboard is loading, the user can continue to work in BMC FootPrints Service Core.

The components that can be added to the dashboard for display on the homepage are:

- **Chart**—When you select this component, you then select which chart to display from a drop-down field. Options are Received vs. Closed and Active Issues. If you select Received vs. Closed you must select the time period for which BMC FootPrints Service Core will account and whether to display your Issues only or

the entire Workspace's Issues. The component then displays the Issues that were received and the Issues that were closed during the designated period for the designated agent(s).

- **Currently Logged In Users**—Lists the number and IDs of users logged into the current Workspace. When specifying this component, you will be asked to set the number of records to display on the first page of the list.
- **Custom Defined**—Enter custom code to display anything you want in the dashboard component. This can be HTML, JavaScript, etc.
- **Global Issues**—Lists the Global Issues. Links in the Global Issues component can be clicked to access the Issue and create a linked Issue. When specifying this component, you will be asked to set the number of records to display on the first page of the list.
- **Most Recent Solutions**—Displays the most recent solutions in the Knowledge Base. You must designate how much of the solution Title field is displayed.
- **My Assignments**—Lists the Issue number and Title of the user's active assigned Issues. The list entries are linked to the Issue. Clicking on a list entry displays the Issue. When specifying this component, you will be asked to set the number of records to display on the first page of the list.
- **Pending Approvals** (if you are a Change Manager approver)—Lists Change Manager Issues for which you are an approver and which still require a vote. When specifying this component, you will be asked to set the number of records to display on the first page of the list.
- **Pending KB Approvals** (if you are a Knowledge Base approver)—Lists submitted Knowledge Base solutions for which you are an approver and have not yet been approved. When specifying this component, you will be asked to set the number of records to display on the first page of the list.
- **RSS Feed**—Lists entries from your selected RSS feed. When specifying this component, you will be asked to set the number of records to display on the first page of the list and the URL for the RSS feed.
- **Requests**—Lists customer requests.
- **Saved Search**—Lists saved searches.
- **Today's Appointments**—Lists your appointments for the day.
- **Workspace Totals**—Lists the number of Issues broken down by status. Click on the status to display the Issues in the main frame.

Add a BMC FootPrints Service Core Dashboard Component

To add a dashboard component to your homepage:

1. In the Available Components field, click the dashboard component to be displayed. Only one component can be selected at a time. Fields are displayed for any additional settings you need to enter.
2. Enter any additional settings.
3. Click the Add Component button. The dashboard component is displayed as an icon in the Current Dashboard area. Mouse over displayed dashboard components to see what is included in the current dashboard.
4. Enter your password in the Apply Changes field at the bottom of the page and click SAVE. If you skip this step, the changes are not made.

Edit a BMC FootPrints Service Core Dashboard Component

1. In the Current Dashboard area, click the dashboard component to be edited. Only one component can be selected at a time. The following buttons are displayed:

- Complete Edit
- Delete Component
- Cancel Edit

2. Change settings as needed.
3. Click the Complete Edit button to save the edits or click the Cancel Edit button to leave the dashboard component settings unchanged.
4. Enter your password in the Apply Changes field at the bottom of the page and click SAVE. If you skip this step, the changes are not made.

Delete a BMC FootPrints Service Core Dashboard Component

To delete a dashboard component from your homepage, from the Preferences page:

1. In the Current Dashboard area, click the dashboard component to be deleted. Only one component can be selected at a time. The following buttons are displayed:
   - Complete Edit
   - Delete Component
   - Cancel Edit
2. Click the Delete Component button.
3. Enter your password in the Password field and click SAVE.

You can delete all of the dashboard components at once by clicking the Delete All button next to the Current Dashboard area. The deletion is not saved until you enter your password in the Password field and click the SAVE button. You can also delete a dashboard component directly from your homepage by clicking the X in the upper right corner of the displayed component. If you delete the component using the X, it is not redisplayed the next time you log into BMC FootPrints Service Core.

Moving BMC FootPrints Service Core Dashboard Components on the Homepage

Dashboard components can be moved around the homepage using drag-and-drop.

Miscellaneous Preferences

The options below are configured for the entire system. After configuring options, enter your password and click GO.

- **Sync Settings**—Displays a pop-up window for configuring the two-way calendar synchronization feature. Refer to the BMC FootPrints Mobile for complete details on using the BMC FootPrints Service Core two-way synchronization with external calendars feature.
- **Administrative Error Alerts** (Administrators only)—Option to receive a pop-up window when system errors occur. The log is still viewable by selecting Administration | System | Logs, regardless of which option selected here.
- **Instant Talk**—Select whether to allow customers to initiate an Instant Talk session with you. If you choose to not allow them to initiate Instant Talk sessions with you, you'll still be able to initiate Instant Talk sessions with them and with other Agents.

NOTE

This option only applies if Instant Talk is enabled.

- **BMC FootPrints Asset Core Authentication**—This selection is only displayed when BMC FootPrints Asset Core is enabled for the system. This selection is used to enter credentials for authenticating the user to the

BMC FootPrints Asset Core. Select the Edit button to enter your BMC FootPrints Asset Core user name and password. Select the Clear button to clear the user name and password fields entirely (leaving no credentials for authentication). These values must match your BMC FootPrints Asset Core (not BMC FootPrints Service Core) login. If "guest credentials" are defined for agents and an agent has credentials defined in Preferences, only the credentials in Preferences are applied. If authentication through these credentials fails, the system does not apply the guest credentials as an alternative. The login name can take one of three forms:

- User ID login, for example: jsmith
- Domain/login , for example: widgetdomain/jsmith
- Internet style login, for example: jsmith@widgetdomain.com

- **Java Installation**—This selection is only displayed when BMC FootPrints Asset Core is enabled for the system. Integration with BMC FootPrints Asset Core requires a local installation of the Java runtime. Typically this is done automatically upon first use of an integrated BMC FootPrints Asset Core feature. If your Java installation should become corrupt or put of date, you can manually correct it by selecting the **Update My Java Installation** button provided here. Contact your BMC FootPrints Asset Core administrator if you need additional clarification.

The BMC FootPrints Service Core Toolbar

The BMC FootPrints Service Core toolbar has options for:

- **Home**—Displays the BMC FootPrints Service Core home page.
- **New Issue**—Click to display a New Issue page. Mouse over the button to display other options, as follows:
  - **New Global**—Create a new global Issue.
  - **Add to KB**—Add an existing Issue to the Knowledge Base.
  - **Quick Issues**—Select a Quick Issue from the list of Quick Issues.
- **Reports**
  - **My Reports**—Displays a page for running, editing, or deleting saved custom or metric reports.
  - **New Report**—Create a detailed report from the database.
  - **Metrics**—Report on statistical and historical data.
  - **Cross Workspace**—Report on data from multiple Workspaces.
  - **Time Tracking**—Create/view time tracking report.
  - **Change Manager**—Create/view change management report.
  - **Workspace Flashboard**—The Workspace Flashboard is only available to Workspace and System Administrators and reflects activity for the current Workspace.
  - **Personal Flashboard**— The Personal Flashboard is available to any Agent and reflects the individual's activity and the activity of Teams to which the Agent belongs for the current Workspace.
- **Administration** (Administrators only)—A complete list of options can be found in the chapters on Administration in the BMC FootPrints Service Core Reference Manual.
- **More**
  - **Tools**

- **APM**—Display the Alignability Process Model page (in a separate tab).
- **Address Book**—Display this Workspace's Address Book (opens in separate window).
- **Workspace Calendar**—View appointments and jobs for the whole Workspace.
- **Personal Calendar**—View your own appointments and jobs.
- **CMDB**—View the Configuration Management Database (with appropriate permissions). The Configuration Manager is an add-on module that is purchased separately for BMC FootPrints Service Core.
- **Search Assets** (optional)—If this option is enabled, access the Asset Management database.

- **Support**
  - **Knowledge Base**—Use this link to browse the Knowledge Base or, with appropriate permissions, create a new Solution to a common problem for the Knowledge Base or (for administrators only) create and edit Frequently Asked Question categories.
  - **Instant Talk**—Chat online one-on-one with another user.

The options on the Toolbar may differ, depending on your role. In addition, up to three custom buttons may be configured on the BMC FootPrints Service Core toolbar. If you see more buttons on the main toolbar, your administrator may have configured them.

Below the Toolbar

Resorting the Homepage

The list displayed on the homepage can be resorted by column. Note that most column headings on the homepage, or any search results page, are hypertext links. One way to sort the list is to click on a column heading. The list is automatically sorted by that column. For example, if you click on the Status column, the list is sorted immediately into alphabetical order by status. In addition, you can:

1. Hover the cursor over the column heading. A down arrow is displayed to the right of the column name.
2. Click the down arrow to the right of the column name. A menu is displayed.
3. Click on Sort Ascending or Sort Descending in the menu to sort the column in ascending (from lowest to highest) or descending (highest to lowest) order.

NOTE

The homepage cannot be sorted by Assignee, Issue Type, Time of Last Edit, Time Submitted, or multi-line character fields. All other fields, including custom fields, can be sorted. To view Issue data that is sorted by assignee, please use the reports feature.

Filtering Columns

Columns can be filtered to display only the Issues that meet the specified filter criteria. For example, the agent can filter the list of Issues on the homepage according to the Status field, requesting that only Issues with a status of Open or Testing be displayed.

Column Types That Can Be Filtered

The following column types can be filtered:

- **Single-line character, web site and FTP file/site, email address fields**—Columns populated by strings (text) can be filtered by entering a string. Issues containing the string are displayed in the column.
- **Drop-down and multi-select fields**—Columns populated by drop-down and multi-select field data can be filtered by selecting field options as criteria. The agent selects from a list of available choices (the choices available in the field are displayed as checkboxes and the agent selects the criteria for filtering by clicking on the checkboxes). There is also an entry for "No data". When the filter is applied, only the Issues containing the selected checkbox items in that field are displayed. If "No data" is selected, only Issues that contain no data in the field are displayed. Agents can select one, more than one, or all checkboxes as filter criteria. Some additional considerations are:
    - **For cross Workspace searches**, all of the possible entries from all Workspaces for the field are displayed.
    - **For multi-select fields**, if any of the fields being filtered on were selected on an Issue, that Issue will show up on the query results.
    - **For Submitted By fields**, only agents are displayed, but not customers. For example, if the filter criteria were "Smith", only Issues with the name "Smith" are displayed, and only if "Smith" is an agent.
- **Checkbox fields**—Columns populated by checkboxes can be filtered based on two choices. The default options are On and Off, but the filter displays the names given the checkboxes (for example, they may have been named "True" and "False"). Issues where neither was selected are included in the results for Off. The column can be filtered for one or the other option, but not for both.
- **Number fields**—Filtering on number fields applies to Integer and Real Number field types. The column can be filtered for greater than (>), less than (<), or equals (=).
- **Date/Date Time fields**—The column can be filtered for dates/date times before, on, or after a specified date/date time. In other words, the agent can specify a date/date time and display all Issues with an earlier date/date time in the field (before), the same date/date time (on), or a later date/date time (after).
- **Assignees field**—Filtering is similar to filtering for a multi-select field. The list of available options for the Assignees is the same as the list in the “Advanced Search” |”Assigned To” list box plus an extra option for “Not Assigned". The agent can select one or more agents/teams from the list. Some additional rules are:
    - If the agent picks more than one agent/team from the list, the results include Issues that have any of those assignees assigned to it.
    - If the option to filter by is a team, the result include only Issues that have that team directly listed in its Assignees list box.
    - If the option to filter by is a member, the result include all Issues that have that member directly listed in its Assignees list box no matter which team the member belongs to.
    - When selecting to filter by “Not Assigned”, the result include all Issues not assigned to anybody.

Column Types That Cannot Be Filtered

The following column types cannot be filtered:

- Multi-line Character fields
- Issue Type

- Closed by
- Last Updated (Time Since)
- Popularity
- Time of Last Edit
- Time Submitted
- Composite Title

Filtering Search Results

Filtering can also be applied to search results. For example, if the current search displays only open Issues on the homepage and the agent sets up a filter to show only high priority Issues, the ultimate result shall list open Issues of high priority. If the filter criterion contradicts the search criteria, the filter shall still be applied. In these cases the search could result in no matches. For example, if the search is displaying open Issues and the filter is set to display only closed Issues, the result is no matches. If the agent performs a new search, the filtering is cleared.

Filter results cannot be cleared without leaving the homepage. If the agent clicks on the Refresh button, both search and filter results are refreshed, but both the search and filter are still in effect.

Filtering is not persistent. When a different search is run or the agent logs out of BMC FootPrints Service Core, the filtering is cleared.

Filtering Multiple Columns

To include multiple columns when filtering, apply them one at a time or save them all at once by setting the filter criteria on each column and then clicking Apply Filter on the last one set. All filter settings are pending until Apply Filter is clicked from a filter menu.

To Filter a Column

To filter a column:

1. Hover the cursor over the column heading. A down arrow is displayed to the right of the column name.
2. Click the down arrow to the right of the column name. A menu is displayed.
3. Click Filter.
4. Enter the filtering criteria. This may require entering a string, clicking a checkbox or checkboxes, entering a date, etc. Refer to the section of this document titled Column Types That Can Be Filtered (above) for details. Long lists of options can be scrolled up and down.
5. Click Apply Filter. The column is filtered according to the criteria you specified and only the Issues matching the criteria are displayed.

NOTE

The homepage cannot be filtered by the title field.

The Filter Icon

After a filter has been applied, a filter icon is displayed in the bar above the Issue list. Hover the mouse over the icon to display a description of applied filters or to select the Clear Filter option.

Clearing Filters

To clear a filter, either:

- Hover the mouse over the Filter icon and then click the Clear Filter option (this clears all filters at once) or
- Clear or unselect the filter criteria for each filter individually from each filter menu. This is useful for clearing the values from only some filtered columns.

Persistence

Filtering is not persistent. If the browser window is refreshed, another search is run, or a different page is displayed, the filtering is removed if the original page is displayed again.

Removed Column

If a column is removed from the page, the page is refreshed and the order of the Issues in the columns is restored to the default, non-filtered order.

Reordering Columns

You can change the order of columns by dragging and dropping the column heading to the right or left. Column reordering persists if an agent logs off and back on or takes some other action. Reordering is reflected in the Preferences page.

Resizing Columns

You can use the mouse to resize columns. To do so, hover the cursor over the line that separates column headings. When the resize symbol is displayed, hold down the left mouse button and drag the resize symbol to the right or left to change the column size. Resizing a column causes the other columns to be resized proportionally, i.e., the increase or decrease is divided among the other columns equally. For performance reasons, multi-line character fields will not instantly redisplay the homepage list with the resized column. The column resizing will take effect on the next refresh of the homepage. Column resizing persists if an agent logs off and back on or takes some other action.

Resizing Restrictions

The following restrictions apply to resizing columns:

- The Status and Priority columns can be sized to no less than 50 pixels wide unless another field is added.
- The Title column can be sized to no less than 250 pixels wide.
- Other columns can be sized down to fit just the first letter of the field name plus "..." (where "..." indicates that the full field name is not displayed) plus the sorting icon.

Display Drop-down

Above the home page list is the display drop-down box. This list contains built-in and custom lists and searches. Agents can customize this list via the **Preferences** link on the BMC FootPrints Service Core. By selecting an option, the homepage list changes to the queue selected automatically. To refresh the current list, click **Refresh**.

The Display drop-down choices include (some of the choices are only displayed if you are an administrator, a member of a team, a member of multiple Workspaces, a Change Manager approver, etc.):

- **My Assignments**—The most recent active Issues assigned to you. Shown by default.
- **My Assignments in All Workspaces—**Active Issues assigned to you in all Workspaces (only displayed if you belong to multiple Workspaces).
- **My Assignments and Requests**—Active Issues assigned to you and unassigned requests from Customers.

- **Team Assignments**—Active Issues for your Team (only displayed if you belong to a Team).
- **My Active Approvals**—Lists all Issues for which the Agent is an approver, the Agent may or may not have yet voted, and voting has not been completed. (Applies to Change Manager approvers only.)
- **My Active Approvals and Assignments**—Lists all Issues for which the Agent is an approver, the Agent may or may not have yet voted, and voting has not been completed, as well as the Agent's assignments in the current Workspace. (Applies to Change Manager approvers only.)
- **My Vote Required—Displays Change Manager** Issues **on which the Agent's vote is required.**
- **My Vote Required and Assignments**—Displays Change Manager Issues on which the Agent's vote is required as well as Issues to which the Agent is assigned.
- **All Issues**—All Issues in the Workspace database (only available if you have rights to see all Issues in the Workspace).
- **Global Issues**—All active Global Issues for the Workspace.
- **Deleted Issues**—Deleted Issues (Administrators only).
- **Requests**—Requests submitted by Customers (see below).
- **Saved Searches**—Displays the Issues for Personal and Shared custom searches.
- **Knowledge Base**—Displays Solutions from the Knowledge Base. Select Internal Solutions (available to agents only), Solutions (available to agents and customers), or Solutions in All Workspaces, which are solutions available to agents and customers in all Workspaces.

For example, if you choose "Requests", a list of all Customer Requests is displayed. To return to the original view, click "Workspace Home" on the BMC FootPrints Service Core Toolbar, or choose "My Assignments" as your view. Both of these have the same effect: They return you to your original Home page.

If the current list has many Issues, Next and Previous buttons appear in the top right hand corner of the frame. Use these to page through the complete list.

Viewing Issues

To view the details of an Issue, click the word "more" in the Subject column of the Issues, then click "Details". In the same way, you can click "Descriptions" to view only the Descriptions for that Issue, or click "Edit" to view the full Edit page of the Issue.

The Details, Create Issue, and Edit Issue pages can be displayed with expandable/collapsible sections or tabs. The type of display is specified by the user from the Preferences page.

The Details page gives you all of the information on an Issue, including Submit Date, Priority, Status, Description, Contact Information, Issue Information, Assignees, etc. If you don't see all data, use the scroll bar to display the full Issue.

There are also buttons that allow you to work with this Issue. They are:

- **Edit**—Update the Issue (only available if you have Edit permissions to this Issue).
- **Details**—Display details of Issue (default).
- **Link**—Create a static or dynamic link between Issues.
- **Take**—Take the Issue (only available if you have Taking permissions).

- **Copy/Move**—This icon will open a second toolbar with options to copy the Issue within the current Workspace, or copy or move the Issue to another Workspace
- **Subtask**—This icon will open a second toolbar with options to create a subtask of the Issue, or make this Issue a subtask of an existing Issue.
- **New Global Link**—Turn the Issue into a Global Issue or GlobalLink.
- **Delete**—Delete the Issue from the Workspace (only available if you have Delete permissions for the Issue).
- **Report**—Display a report of this Issue (opens in separate window for printing).
- **Add to KB**—Create a Solution for the Knowledge Base with the details from this Issue (won't affect original Issue).

These options are discussed in more detail in Working with Issues and subsequent sections.

Quick Action Checkbox Dialog

The Quick Action Checkbox dialog, available on the Homepage, allows users to perform an action on one or more Issues. This provides a quick means to update or report on an Issue or to make a change that affects many Issues simultaneously. Some of the functions are only available to administrators, while others are available to Agents and administrators.

To perform a Quick Action on Issues from the Homepage:

1. In the main frame, check the box for each of the Issues you wish to change, or check the All box at the top of the column to select all of the Issues displayed on the current page.
2. Select the action from the drop-down list.
3. Click **GO**.
4. Different options are available depending on the action selected. See below for more details.

The Following Options are Available to All Internal Users

- **Report**—Display the details of the Issues in a separate window. If custom templates have been created, a drop-down is displayed that lists the available templates (Work Order, RMA, etc.) The Summary report displays all Issues in one window. Custom templates display each Issue in a separate window for printing purposes.
- **Close**—Close the Issues selected. Only Issues to which you have close rights are Closed. When Close is selected:
  1. A special Close Issues page is displayed.
  2. You can enter final notes in the Description box. They are appended to all Issues selected.
  3. Check the boxes to send email to the Assignees, Customer Contacts, and CCs for the selected Issues.
  4. Click **GO**. The Issues are closed and updated and emails are sent.

The Following Options are Available Only to Administrators

- **Delete**—Delete all Issues selected. A confirmation message appears. Click OK to proceed.
- **Status**—Change the status of the Issues selected.
- **Priority**—Change the priority of the Issues selected.

- **Assign**—Re-assign the Issues selected.

When Status, Priority, or Assign is selected:

1. A special Change Issues page is displayed.
2. Select the new priority, status, or assignees for the Issues.
3. If re-assigning an Issue, you can unassign the current assignees of the Issues selected by checking the Remove Previous Assignees checkbox.
4. You can optionally enter notes in the Description box. The notes are appended to all Issues selected.
5. Check the boxes to send email to the Assignees, Customer Contacts, and CCs for the selected Issues.
6. Click **GO**. The Issues are updated and emails are sent.

The Following Option is Only Available If You Have "Taking" Rights

- **Taking**—Take the Issues and assign them to yourself.

When Taking is selected:

1. A special Take Issues page is displayed.
2. You can unassign the current assignees of the Issues selected by checking the Remove Previous Assignees checkbox.
3. You can optionally enter notes in the Description box. The notes are appended to all selected Issues.
4. Check the boxes to send email to the Assignees, Customer Contacts, and CCs for the Issues selected.
5. Click **GO**. You are now assigned to the selected Issues.

The Address Book Homepage

The Address Book Homepage

If you selected Address Book from the BMC FootPrints Service Core toolbar, the Address Book Homepage is spawned in its own window. The Address Book homepage is the starting point of your Address Book activities.

The Address Book homepage displays the alphabet across the top of the page a summary list of your contacts. For administrators only, Quick Action checkboxes are located down the right side of the main frame. The Quick Action checkboxes allow an administrator to quickly delete one or more contacts from the list.

The Address Book Alphabet Index

Click an alphabet character to display contacts whose last name begins with that character.

The Address Book Summary List of Contacts

The main frame displays a list of the contacts associated with your Workspace. The listing includes the contacts' first and last names, email addresses, and user IDs.

In addition to displaying information about each contact, you can view, edit, or perform tasks on each of the contacts listed. You can also create an Issue from a contact's detailed view.

- To view a contact, click the contact's last name link. The Detail View page is displayed, showing the contact's complete contact record.
- To edit a contact, click the contact's last name link and, when the Detail View page is displayed, click the Edit Contact icon above the details.

The Address Book Quick Search

The top of the page contains a quick search facility for searching the Address Book for a contact.

To use Quick Search:

1. Select a search field with the down arrow, which displays a drop-down box.

2. Enter characters in the text box. The search engine will search for those characters in the field you specified in the first step and display all records that contain them in that field.

Address Book Toolbar

The Address Book Toolbar in the left frame of your home page has links to all of your Address Book tasks. It remains on the left of every page of the Address Book interface.

The options in the Toolbar are:

- **Address Home**—Go to your Address Book Homepage.
- **Create Contact**—Create a new contact in the Address Book.
- **Contact Search**—Perform detailed search of the Address Book based on our choice of first or last name.
- **Report**—Displays a brief reporting page in the main frame.
- **Administration (administrators only)**—Displays the Address Book Administration page in the main frame. A complete discussion of Address Book administration can be found in Address Book Administration.
- **Help**—Access online help for BMC FootPrints Service Core.
- **Close**—Close the Address Book interface.

The options on the Toolbar will be slightly different depending on your user level. This manual discusses all of the Toolbar options.

The Address Book Main Frame

The main frame displays a list of the contacts associated with your Workspace. The listing includes the contacts' first and last names, email addresses, and user IDs.

In addition to displaying information about each contact, you can view, edit, or perform tasks on each of the contacts listed. You can also create an Issue from a contact's detailed view.

- **To view a contact**, click the contact's last name link. The Detail View page is displayed, showing the contact's complete contact record.
- **To edit a contact**, click the contact's last name link and, when the Detail View page is displayed, click the **Edit Contact** icon above the details.
- **(For administrators only) To delete one or more contacts quickly**, select the check box next to the user name, then next to **Delete**, click **Go**.

Chapter 4: Implementation and Design

Recommended Approach

About BMC FootPrints Implementation and Design

Setting up a BMC FootPrints Service Core workspace is easy enough to do, but you still must make quite a few decisions ahead of time and then follow a logical approach to setting the workspace up so setup goes smoothly.

BMC has some recommendations for setting up BMC FootPrints Service Core workspaces. These are explained in greater detail in the following topics:

- Plan
- Install
- Set up with Workspace Setup Wizard
- Populate the Address Book
- Perform Global Administration
- Perform High-level Workspace Administration
- Configure Fields
- Configure Users and Customers
- Email Management
- Create Workflow Functions
- Set Up Reporting
- Set Up the Knowledge Base

Plan

For many organizations, **BMC FootPrints Service Core** is the first tool used to track issues. In these cases, we recommend some activities that can be done before installing BMC FootPrints Service Core. This is especially important if you anticipate a complex configuration BMC can provide help with any of these steps.

- **Establish Responsibilities**—Get buy in from those in your organization who will use BMC FootPrints Service Core. Include these same users when conducting your initial assessment and developing your organizational policy.
- **Conduct Initial Assessment**— Use the process you are currently using as a starting point for creating the workflow that BMC FootPrints Service Core will manage automatically. This applies whether you are replacing an existing tracking tool or BMC FootPrints Service Core is your first tool.
- **Develop Organizational Policy**—Decide how BMC FootPrints Service Core will be used, who will use it, and what business rules it should enforce.
- **Provide Training**— We encourage all BMC FootPrints Service Core administrators to attend the Administrator Course provided by BMC to maximize their understanding of the product more quickly. It also gives them the opportunity to meet with other BMC FootPrints Service Core users and exchange ideas.

Extensive documentation and online help are available for your agent users and customers so that you can easily bring new users on board.

Install

In this step, you identify system administrator(s) for **BMC FootPrints Service Core** and technical staff that can support the administrator and install the product.

No programming is required to set up **BMC FootPrints Service Core,** but if you will be using LDAP, accessing an external database dynamically using the **BMC FootPrints Service Core** Dynamic SQL Link to manage your Address Book data, or loading a large amount of data into the **BMC FootPrints Service Core** Address Book, some understanding of these activities is required.

NOTE

The Extended Starter Pack is required to utilize the SQL Link. Please contact your salesperson for details on obtaining the Extended Starter Pack.

NOTE

After installation, running the Workspace Wizard gets you up and running quickly and enables you to start entering Issues immediately. However, there are a number of system level administrative tasks that you should complete early in the configuration process which are described in the Perform Global Administration topic.

Setup with Workspace Setup Wizard

Before you run the Workspace Wizard, make sure to gather all the information you need as specified in the **BMC FootPrints Service Core Administrator's Guide** and the **BMC FootPrints Service Core Reference Manual**. Once you have this information, installation should take no more than an hour.

Run the Workspace Wizard

The Workspace Setup Wizard provides a broad range of templates for getting started with **BMC FootPrints Service Core**. To configure these templates to better suit your workflow, use the information gathered from the Initial Assessment. Keep in mind that you can always go back and make adjustments to the workspace you're creating. If you are configuring LDAP as your address book, refer to the instructions in the **BMC FootPrints Service Core Getting Started Guide for Administrators**. Finally, you will be able configure some basic system options.

Step 1. Select a template that best reflects your business process.

Step 2. Modify the values of the built-in fields, including Status and Priority.

Step 3. Modify the other template fields: change permissions, add fields, and delete fields.

Step 4. Configure the fields you will need for your customer users. If you are using LDAP, Dynamic SQL Address Book, or importing data from an external database, you must complete those tasks as well.

Step 5. Set up incoming and outgoing email for the workspace, including default rules for notifying customers and agents when Issues are created or edited.

Step 6. Configure basic system options, i.e., enable/disable cookies, define the term you would like to use for records (the default is "Issue"), define the date format, and change the logo.

Continue with Populate the Address Book.

Populate the Address Book

A **BMC FootPrints Service Core** Address Book can be populated with user contact data in a variety of ways:

- **By Agents**—Contact information can be entered manually by Agents and Administrators in Address Book, or on the "Create Issue" screen.
- **By Customers**—Customers can enter their own contact information the first time they submit a Request to the system via the Customer Self-Service web interface.
- **Imported**—Contacts can be imported from a comma-delimited file (see Import Address Book Contact Data).
- **Dynamically**—Contact data can be retrieved dynamically from an external database that is either LDAP–compliant or SQL–based using the BMC FootPrints Service Core Dynamic LDAP Address Book Link or the BMC FootPrints Service Core Dynamic SQL Address Book link (available as add–on modules).

The BMC FootPrints Service Core Dynamic Address Book Link feature retrieves contact data dynamically from any LDAP-compliant contact database for the Address Book (such as Active Directory. LDAP is the standard Internet directory protocol. Examples of an LDAP-compliant database include Microsoft Active Directory, Sun ONE Directory Server, and Novell Directory Services.

The BMC FootPrints Service Core Dynamic SQL Address Book Link feature retrieves contact data dynamically from supported contact databases for the Address Book via ODBC or via Perl DBI. BMC FootPrints Service Core harnesses the power of ODBC by providing access to existing ODBC-compliant contact data without requiring that the records be loaded into a separate BMC FootPrints Service Core Address Book. The supported ODBC-compliant databases include Oracle, SQL Server, Access, MySQL, DB2, PostgreSQL and Sybase. These are potentially all available on Windows installations, so long as an appropriate driver and System DSN are configured on the machine. For Unix installations, the appropriate DBD must be built on the BMC FootPrints Service Core server to access that particular database type.

Import Address Book Contact Data

You will need to perform the following tasks:

- Create the Address Book Data File in **BMC FootPrints Service Core**
- Load External Data into the Address Book

Create Dynamic Address Book Link

- Select an LDAP Directory or Dynamic SQL Address Book to be used instead of the default Address Book.
- If you are using the Dynamic SQL Address Book Link, configure the DSN if on Windows or install an appropriate DBD if on Unix. Instructions are available in the online help and the **BMC FootPrints Service Core Reference Manual**.
- If you are using the Dynamic LDAP Address Book Link, configure the link based on the Active Directory structure that has been set up for your system.
- Perform LDAP Address Book Field Mapping or Dynamic SQL field mapping.
- Set up additional fields that will be used in your workspace.

Once you have completed the steps in Create the Address Book Data File and Load External Data into the Address Book, continue with Perform Global Administration.

Perform Global Administration

If you ran the Workspace Setup Wizard, many of the basic options were configured on the System Administration page to change the look and feel of BMC FootPrints Service Core as part of Step 6. If you want to make additional changes, you can access these features under Administration | System in the BMC FootPrints Service Core Toolbar. Select from the options listed below:

- Configure system-wide settings.
- Configure multiple language support.
- Change the display colors. This task can also be done per workspace.
- Select the date format.
- Rename BMC FootPrints Service Core fields (Title, Status, Priority, etc.). This task can also be done per workspace.
- Create an archive workspace to save old data.

Perform High-level Workspace Administration

Workspace Administrators can set options on a per workspace basis. You can create custom workspace fields, add users to a workspace, etc. Running the Workspace Setup Wizard configures most of the quick start features but you can make additional customizations by selecting Administration | Workspace from the **BMC FootPrints Service Core** Toolbar. This topic lists some of the options you might want to configure soon after installation.

Basic Workspace Options

Most of these basic workspace options were configured if you ran the Workspace Setup Wizard during installation. You can change values for options already configured or set up additional options.

- Configure workspace appearance
- Define the Priority field
- Enable and define time-tracking
- Configure workspace and agent schedules for availability
- Configure email:
  - Validate email addresses
  - Define Mail Preferences for incoming and outgoing email, including basic notification rules and templates
- Configure the CRM Bridge add–on module
- Configure Address Books:
  - Disable the Address Book
  - Hide Address Book Fields
- Miscellaneous:
  - Create a Splash Screen for agents and/or customers
  - Enable/disable Global Issues
  - Define Subtask Closure Procedure

Saved Searches

Custom searches can be defined to create queues for different service levels, problem types, overdue issues, etc. If shared with the other members in the workspace, these searches are available from the homepage “Display” option.

Continue with Configure Fields.htm.

Configure Fields

If you created a workspace from a template, you can begin entering Issues without additional customization of the form. However, you might want to modify some of the field attributes, or to add or delete fields. How much customization you do at this point determines how long it will take to implement your new workspace. Basic field additions, deletions, or changes can be done quickly.

Defining values for drop-down or multi-select fields is a bit more complicated than creating simple fields. If you want your drop-down or multi-select field to have many selections, and to be used for dependency groups, we recommend creating the list in a separate text file and then importing the selections. Setting up dependency groups can take an hour or more to specify and implement.

Another consideration is whether to implement field-level permissions and which fields to restrict or permit. Field-level permissions involve user roles as well, so you must also consider the user roles you will create.

You can use the following options to customize the workspace form:

- Manage the Workspace fields that appear in the Issue Information section of the Issue form.
- Add or delete values in the Status field that appear between Open and Close.
- Create dependencies between Workspace fields.
- Define drop-down choices for the Title field.
- Rename built-in fields such as Title, Status, Priority, etc.
- Change the language of Workspace and Address Book field labels.
- Configure the Dynamic Field Mapper to populate fields from an outside source (requires the Dynamic SQL Link add-on module).

Configure Users and Customers

Agents and customers can be added to **BMC FootPrints Service Core** in two ways:

- Individually, per workspace, through Workspace administration.
- At the system administration level, from a load file. This is especially useful if you have a large number of users to add. Instructions on loading users are found in the **BMC FootPrints Reference Manual** or the online help.

If your environment is set up to allow it, customers also can auto-add themselves to **BMC FootPrints Service Core**.

Adding Agents

You can configure agents, teams, and work schedules.

- Add new Agents to this Workspace.
- Modify built–in roles and/or create new ones for agents to reflect their allowed access and configure field-level permissions per role.

- Assign roles to the Agents (if not using the default).
- Define Teams based on business function.
- Group Agents into Teams.
- Configure Agent work schedules.

Adding Customers

Customers can have their own individual account for **BMC FootPrints Service Core**, or share a login (which is especially useful for Knowledge Base access).

There are some restrictions, depending on the method of authentication that you are using. For more information, refer to the **BMC FootPrints Service Core Reference Manual**, the online help, or BMC Support (if you have a problem).

You can do any of the following:

- Enable Customer Service Portal options if you are configuring a workspace for external customer support or wish to use the Customer Service Portal interface.
- Add new Customers to a workspace.
- Define workspace-wide options for Customers.
- Modify built-in roles and/or create new ones for customers to reflect their allowed access.
- Assign roles to Customers, or define the Customer Service Portal Toolbar if you are using the Customer Service Portal interface.
- Configure Auto-add customers.
- Configure forgotten password functions.

User Preferences

Agents (and Customers if the preference is available to the role) can define preferences for how the system behaves for them as individuals. Options include:

- Defining notification email addresses.
- Defining homepage searches and columns.
- Selecting local time zone and language.
- Configuring defaults for the Issue form.

Email Management

Much of the initial email configuration is performed during installation. The network administrator must create the email account that **BMC FootPrints Service Core** uses for receiving requests and sending notifications.

Configure Incoming Email

If you want to change the defaults set at installation, you can:

- Configure Incoming Email for Windows or UNIX.

- Enable/Disable Email Notification.
- Send Introduction/Help Email.
- Configure Email for additional workspaces.

Configure Outgoing Email Management

Outgoing mail rules can be defined for each workspace. Templates are configured to optimize what information is sent to each group that receives email notifications from BMC FootPrints Service Core. Default settings can be used until you wish to customize them.

- Customize the Contents of Mail grid for all recipient groups.
- Create custom Email templates per status.
- Define when to Send Mail.
- Set up Email Filters to catch unwanted mail.

Create Workflow Functions

Automating your workflow takes the longest time to implement because you must determine how to best make BMC FootPrints Service Core reflect your business rules. It also relies on most of the preceding features, so most of the other features must be set up before workflow can be automated. Workflow rules can be configured now or at a later time.

Calendar and Scheduling

- Create a Workspace Work Schedule.
- Define schedules for Agents.
- Set Workspace Calendar preferences.
- If BMC FootPrints Syncis enabled, instruct your Agents to download the BMC FootPrints Sync client or, if you have software deployment, download the client and install it for your Agents.

Quick Issues

- Create Quick Issue Templates for recurring issues.
- Create Master Quick Issue templates and subtasks.

Auto Assign

- Set up Default Assignment rules for the workspace.
- Create Auto Assignment rules based on drop down field choices.

Service Level Management

- Configure global SLA parameters.
- Define SLAs and create Escalation processes to support the SLAs.

- Configure the Emails that will be sent as notification of escalations.

Issue Workflow

- Select actions for Dynamic Issue Linking.
- Specify procedures for subtasks.

Escalations

- Define additional escalation rules for your desired workflow.

Customer Surveys

- Create a Customer Survey workspace for tracking user feedback.
- Enable the survey feature in the support workspace.

Continue with Set Up Reporting.

Set Up Reporting

The report wizard helps you create custom reports for either one-time use or as templates to be run again and again. Custom reports can include graphical data and text data. These saved reports can be scheduled to run at specific times, and the report contents can be emailed to anyone.

Saved reports should capture information needed by your organization to do its job effectively and efficiently.

The types of report templates often generated from BMC FootPrints Service Core include:

- Number of closed Issues by Agent for specified time
- Number of open Issues by Agent for specified time
- Sum of various types of problems for a specified period
- Average time to close an Issue
- Personal and Workspace Flashboards

Continue with Set Up the Knowledge Base.

Set Up the Knowledge Base

The Knowledge Base is a place to record, organize, and manage important information for a BMC FootPrints Service Core Workspace. The primary component of a Knowledge Base is a Solution. If you have existing web-based knowledge base information, you can link to it or you can upload Solutions into the Workspace. This can be set up now or implemented at a later time.

The tasks to perform when implementing the Knowledge Base include:

- Upload existing solutions
- Link to an existing Knowledge Base web site
- Create Knowledge Base Role Permissions for Agents
- Exclude Fields from Solutions

- Create/select approvers
- Create solutions

Additional Tasks

Asset Management (BMC FootPrints Asset Core)

BMC FootPrints Asset Core requires the purchase of one or more of the following:

- BMC FootPrints Asset Core
- Integration with Microsoft System Center Configuration Manager Inventory

The first decision you need to make with respect to Asset Management is whether to purchase a BMC FootPrints Asset Core module and which one to purchase.

BMC FootPrints Change Manager

Change Manager is an add-on module for BMC FootPrints Service Core and must be purchased in addition to the **BMC FootPrints Service Core** product.

When setting up a change management process and phases in BMC FootPrints Service Core, you should plan ahead by deciding:

- The criteria for automatically setting off an approval process (including all built-in and custom fields).
- Who approves the various phases of the process.
- Whether to grant super-approver status and to whom. A “super-approver” can vote on a Change Manager Issue and also can override all of the voting and approve or disapprove the Issue immediately on his or her own authority).
- The rules for approval (i.e., whether an Issue is approved or rejected based on one vote, a majority vote, or a unanimous vote).
- What to do when the Issue is approved or rejected (place the Issue in a particular phase of the process, change the Issue status, re-assign the Issue, etc.).
- The email notifications to be sent at various stages of approval.
- Who has permission to access approval information.
- Whether to allow anonymous approvals.

Import Issue Data

You can import data from another system into a **BMC FootPrints Service Core** workspace under Administration | System | Workspaces. The data fields must be in the order of the workspace’s schema and the import file must be in comma-delimited format (.CSV).

Chapter 5: Installing and Upgrading BMC FootPrints Service Core

Prerequisites

Hardware and Software Requirements

Before installing BMC FootPrints Service Core, check that your hardware and software platforms meet the minimum requirements for various platforms and purposes listed in the BMC FootPrints Service Core System Requirements PDF on our Support Web site.

About Licenses

There are three categories of BMC FootPrints Service Core license: fixed, concurrent, and customer, as described in the Key Concepts chapter in the online help and Reference Manual.

The first time you login to BMC FootPrints Service Core, after you have performed the installation, a 9–character license code is displayed on the screen. Click the link for the "licensing page". This opens a second window that brings you to the BMC automatic licensing page.

NOTE

The Extended Starter Pack is required to add concurrent licenses, or to add more than fifteen named (fixed) licenses. Please contact your salesperson for details on obtaining the Extended Starter Pack.

Evaluation Licenses

You may have downloaded a demonstration version of the BMC FootPrints Service Core software, which comes with an evaluation license. The BMC FootPrints Service Core Installation Wizard automatically installs the software, creates the necessary aliases in IIS, and creates the database, tables and permissions. After installation, the software can be auto–licensed with a 30 day, full function evaluation license. The evaluation license provides for 5 internal users, Unlimited Customer (end user) access, and the Dynamic Address Book link feature.

Permanent Licenses

If you have purchased BMC FootPrints Service Core, you should obtain a permanent license and input it when the prompts request your license. To obtain your permanent license, email nu-support.footprints@bmc.com.

Customer Licenses

A customer license is unlimited. That is, a single customer ID and password can be shared by an unlimited number of people (each person is uniquely identified by their email address or other unique key). Alternatively, each customer can have his or her own ID and password. In either case, an unlimited number of customers are covered by the customer license.

Installing BMC FootPrints Service Core

Information Needed for Installation

- Your email address
- SMTP email server name for email notification (DNS name or IP address)
- If installing the version for Microsoft SQL database, please have the following information:
    - Name of Microsoft SQL Server machine
    - Microsoft SQL Server Administrator account password (blank password by default)
- The BMC FootPrints Service Core Installation Wizard automatically installs the software, creates the necessary aliases in IIS, and creates the database, tables and permissions. After installation, the software can be auto-licensed for 30 days with all functionality.

NOTE FOR MICROSOFT SQL SERVER USERS

Microsoft SQL Server can be installed such that column names are case sensitive; this causes BMC FootPrints Service Core to fail. If you have installed Microsoft SQL Server with case sensitive column names, you will need to reinstall it without case sensitive column names before installing BMC FootPrints Service Core.

NOTE FOR MICROSOFT SQL EXPRESS 2005 USERS

Microsoft SQL Express 2005 requires Windows Installer 3.1 or later, MDAC 2.8 SP1 or later, and .Net Framework 2.0 or later.

NOTE FOR BASE STARTER PACK USERS

The Extended Starter Pack is required to purchase the SQL Link. Please contact your salesperson for details on obtaining the Extended Starter Pack.

NOTE

BMC FootPrints Service Core must be installed from the server and not through a terminal services session. Installing BMC FootPrints Service Core through a terminal server session will result in a "Page Not Found" error when attempting to access BMC FootPrints Service Core.

BMC FootPrints Service Core Version 11.6 for Unix and Linux Functions Under FastCGI

FastCGI is now the preferred method enabling PerlEx/Fast CGI in BMC FootPrints Service Core. Directions can be found in this Knowledge Base article: PerlEx/FastCGI implementation instructions. Please contact BMC Support if you need help with this installation.

Installation Instructions

NOTE ON MICROSOFT XP

Because neither Microsoft XP nor Vista are designed to be used as servers, we do not recommend them as platforms for the BMC FootPrints Service Core server. Microsoft XP and Vista are supported, however, as a client platforms for connecting to BMC FootPrints Service Core for all users via the browser.

1. The BMC FootPrints Service Core software contains installation files for many different platforms. Select the appropriate file to install BMC FootPrints Service Core from the following list, then double click the file to begin setup:

- fpsc64ORACLE1160.exe

- fpsc64SQL1160.exe
- fpsc64SQLExpress1160.exe
- fpsc64up1160ORACLE.exe
- fpsc64up1160SQL.exe
- fpscORACLE1160.exe
- fpscSQL1160.exe
- fpscSQLExpress1160.exe
- fpscup1160ORACLE.exe
- fpscup1160SQL.exe

NOTE

For UNIX/Linux versions, please read the README for installation instructions.

2. Follow the prompts and enter the information required:
   - **Name**—Your name.
   - **Company**—Your company.
   - **Email server**—Enter the full DNS name or IP address for your SMTP mail server.
   - **User ID**—Enter a User ID. You will be given a password.

NOTE

Make sure to keep a written copy of your BMC FootPrints Service Core user ID and password. You need these to log in to BMC FootPrints Service Core the first time.

   - **Email address**—Your email address.
   - **Workspace name**—The name of your first BMC FootPrints Service Core Workspace
   - **Address Book name**—The name of your first BMC FootPrints Service Core Address Book.
   - **By default, BMC FootPrints Service Core is installed to c:\FootprintsServiceCore.** You can optionally browse for a different directory.

NOTE

The install path cannot contain any spaces.

   - **When you are asked if you would like BMC FootPrints Service Core to setup the web server, answer Yes**. This creates 5 virtual directories in IIS for BMC FootPrints Service Core.
   - **If installing the Microsoft SQL Server database version**:
     - **What is the name of the Microsoft SQL Server you are using?**—Specify the machine name of the Microsoft SQL Server machine.
     - **Microsoft SQL Server Administrator ID**—This is “sa” by default (please consult your Microsoft SQL Server administrator).
     - **Microsoft SQL Server Administrator Password**—This is blank by default (please consult your Microsoft SQL Server administrator).
     - The Installation Wizard now tests the connection to Microsoft SQL Server. If the connection fails, you will be prompted to enter the information again.
   - **Program Folder**—This defaults to BMC FootPrints Service Core.

NOTE

If you are updating an existing installation of BMC FootPrints Service Core that has Asset Management enabled using BMC FootPrints Asset Core, you may be warned during the install that the integration will be disabled as part of the update. Depending on your version of BMC FootPrints Asset Core you will either need to update to a more recent version of BMC FootPrints Asset Core or reconfigure the integration under **Administration > System > Asset Management**. Refer to BMC FootPrints Asset Core **System Administration Setup** for details on configuring the most recent release of BMC FootPrints Asset Core.

3. When setup is complete, you must reboot the server.
4. If you decide to not have BMC FootPrints Service Core automatically configure IIS for you, you will have to configure IIS on your own. **Complete the FootPrints installation before doing so**. The next steps provide instructions for adding the Perl extension to IIS are below.
5. To add the Perl extension to IIS:

   a. Based on the platform you are running:

      - **On Windows 2003/2008 Server**, go to **Start | Programs | Administrative Tools | Internet Services Manager**.

   b. In the Management Console, highlight your Default Web Site. In the right pane, there should be five BMC FootPrints Service Core virtual directories listed: FootPrints, help, MRcgi, tmp, and MRimg.
   In order to run properly, BMC FootPrints Service Core requires the following directory aliases to be made in your web server. different IIS versions have different interfaces for entering this information.

Directory	Alias	IIS 6 Permissions
c:\FootprintsServiceCore\cgi	MRcgi	scripts and executables
c:\FootprintsServiceCore\html	footprints	scripts and executables
c:\FootprintsServiceCore\html\help	help	read
c:\FootprintsServiceCore\html\tmp	tmp	read
c:\FootprintsServiceCore\html\MRimg	MRimg	read

   c. Highlight MRcgi, right-click the mouse, and select **Properties**.

   d. On the Virtual Directory tab, click the **Configuration** button. If you don't have this button, click the **Create** button first.

   e. In the App Mappings tab, click the **Add** button.

   f. For Executable, enter: c:\FootprintsServiceCore\bin\perl\bin\perl.exe "%s" "%s".
   where c:\FootprintsServiceCore is the BMC FootPrints Service Core installation path. For example, if BMC FootPrints Service Core is installed to D:\FootPrintsServiceCore, the Perl executable path should be: D:\FootPrintsServiceCore\bin\perl\bin\perl.exe "%s" "%s".

   g. For Extension, enter: .pl

   h. Click **OK**, then click **Apply**, and then **OK** on the App Mappings tab.

   i. Click **OK** on the MRcgi Properties.

   j. Close IIS and save any changes.

6. To access BMC FootPrints Service Core, point your web browser to:
   http://mywebservername/footprints/

   where myservername is the URL for the server on which BMC FootPrints Service Core is installed.
   To run it locally, the machine name can be used, e.g., http://*mymachine*/FootPrints/.

7. Login to BMC FootPrints Service Core with the user ID and password created during installation, then click **Login** or press **Enter**.
8. To start using BMC FootPrints Service Core, you must obtain a license.
   The first time you log in, a 9-character license code is displayed on the screen. Click the link to connect to the licensing page.

This opens a second window that brings you to the BMC automatic licensing page.

Note: If you have purchased BMC FootPrints Service Core, you should obtain a permanent license and input it on this screen, instead of following the evaluation license process above. Email Support for your permanent license.

9. Fill in the short form on this screen, and click **Get License**.
   You will immediately receive a 54-character license string via email. You must enter a valid email address to receive the license.
10. Enter the 54-character license string in the **License String** field on the BMC FootPrints Service Core screen and click **GO**.
    Pasting the license string directly from the email (rather than typing it) ensures accuracy. This provides you with a 30-day evaluation license for 5 internal users, Unlimited Customer (end user) access and the Dynamic Address Book link feature.
11. The Workspace Setup Wizard is displayed.
    The Workspace Setup Wizard guides you through setting up the most popular features of BMC FootPrints Service Core. You can exit the Wizard at any time, which takes you to the BMC FootPrints Service Core Homepage. To configure options at a later time, visit the Workspace and System Administration pages by selecting **Administration** from the BMC FootPrints Service Core Toolbar.
12. Once the Wizard is complete, you are on the BMC FootPrints Service Core Homepage.
    The BMC FootPrints Service Core Help appears in a second window. Follow this guide to learn about how to use BMC FootPrints Service Core and to configure it with additional fields, users, and settings.

Application Pools

If questions arise regarding Application Pools when configuring Virtual Directories, email Support for assistance.

Uninstalling BMC FootPrints Service Core

BMC FootPrints Service Core can be uninstalled from the Add/Remove programs option in the Control Panel. If you need to manually uninstall BMC FootPrints Service Core, please follow these instructions:

1. Remove the five BMC FootPrints Service Core virtual directories from IIS
   a. On the server where BMC FootPrints Service Core is installed, open the Internet Services Manager by selecting Start | Programs | Administrative Tools | Internet Services Manager from the Start menu.
   b. In the left pane, select SERVERNAME | Default Web Site, where SERVERNAME is name of the web server.
   c. Delete the following five (5) BMC FootPrints Service Core virtual directories: MRcgi, footprints, help, tmp, and MRimg. To delete a virtual directory, highlight the name, right-click and select “Delete”.
2. Stop the BMC FootPrints Service Core Services.
   a. On the server where BMC FootPrints Service Core is installed, open a command prompt by selecting Start | Programs | Accessories | Command Prompt, and change to the BMC FootPrints Service Core directory using the following command:

      cd c:\FootprintsServiceCore\bin

      where BMC FootPrints Service Core is installed to c:\FootprintsServiceCore. Change the path accordingly if BMC FootPrints Service Core is installed to a different directory.

   b. Stop the scheduler service using the following command:

      FPschedule –u

   c. Stop the backup scheduling service:

FPwatch -u

3. Uninstall BMC FootPrints Service Core.
   a. Select Start | Programs | Control Panel | Add/Remove Programs, and choose BMC FootPrints Service Core.
   b. Follow the prompts to uninstall BMC FootPrints Service Core.
4. Delete the BMC FootPrints Service Core folder (c:\FootprintsServiceCore if installed to the default location.)

Upgrading BMC FootPrints Service Core

Preparing for Upgrade

The information below will help guide you through your upgrade to version 11.6.

Upgrade key: An upgrade key is required to do your upgrade. It can be found on the main upgrade page.

Backing up your current BMC FootPrints Service Core

Always back up your current BMC FootPrints Service Core product(s) before you upgrade to a new version.

1. Back up the BMC FootPrints Service Core application directory on the web server (i.e., C:\FootPrints or wherever you installed BMC FootPrints Service Core) to tape or another disk.
2. Back up the BMC FootPrints Service Core database (Microsoft SQL Server, Postgres, etc.)

IMPORTANT NOTE

BMC FootPrints Service Core recommends that you back up these directories on a daily or weekly basis.

- Any changes you have made directly to the BMC FootPrints Service Core Perl code will not be saved when you have performed the upgrade. It is your responsibility to back up these changes and then re-integrate them in the BMC FootPrints Service Core 11.6 code. You cannot simply copy the saved files back into the BMC FootPrints Service Core directory, as BMC Software has made changes to these files for the new release as well. You must manually re-integrate your changes into the latest Perl files. BMC FootPrints Service Core takes no responsibility for modifications to the Perl code that have been made by the customer.
- Modifications made through MRlocalDefs variables provided by BMC FootPrints Service Core should continue to work in release 11.6 with no additional modifications, unless you have been notified otherwise. However, BMC Software does not guarantee these variables will work in this release as they are not officially supported.
- Users must not access BMC FootPrints Service Core while it is being upgraded. Make sure that no one is logged in to BMC FootPrints Service Core while you are performing the upgrade. We recommend that you temporarily pause the web server.

Upgrading

To Upgrade:

Windows

1. For All Windows versions, be sure to download the correct version of the upgrade for your platform and database.

2. To install the upgrade, double-click the upgrade file and then follow the on-screen instructions.

Unix and Linux

1. For Unix and Linux versions, you must run the “update.pl” script.

   Read the README.update file in your release first to see what exact steps are needed.

   For example:

   - To upgrade the Solaris MySQL version:
     - fpscinstSUNMYSQL1160.tar.Z – Solaris version
   - To update:
     - uncompress fpscinstSUNMYSQL1160.tar.Z
     - tar xvf fpscinstSUNMYSQL1160.tar
     - cd fpscinstSUNMYSQL
     - ./update.pl
   - To upgrade the Linux MySQL version
     - fpscinstLINUXMYSQL1160.tar.Z – Linux version
   - To update:
     - tar xzvf fpscinstLINUXMYSQL1160.tar.Z
     - cd fpscinstLINUXMYSQL
     - ./update.pl

Configuring after Upgrade

Modifying a Preexisting CMDB to Use Financial Asset Management Fields in Version 11.6

See our Knowledge Base article for detailed information.

Field Headers Display

Because certain Field Headers are anticipated to behave differently between versions 10 and 11, if the upgrade to v11.6 detects that a given installation of BMC FootPrints Service Core was using Field Headers, the following broadcast message is sent to all administrators of that BMC FootPrints Service Core instance the first time they log in to v11.6. The message alerts them to the fact that Field Headers were detected and it is possible the Field Headers in their workspace are not behaving as they did previously:

```
"During the upgrade, BMC FootPrints Service Core detected the use of “HTML/Text
Field Headers” in one or more Workspaces. Prior to the upgrade it was possible for
the content of these Field Headers to span the entire width of the form, but after
the upgrade any such Field Headers will conform to only span the width of the
Field that the header was associated with. This could cause Field Header text to
```

```
wrap across several lines, for example, rather than appearing as one long line
spanning several fields."
```

To Revert to the Pre-upgrade Display for Field Headers:

If you preferred the pre-upgrade handling of the Field Header content and want the display to revert to the pre-upgrade state, then it is recommended that you follow these steps:

1. Inspect your **Issue form** immediately to find the **Field Headers** you would like to modify.
2. From **Administration | Workspace**, visit the new **Form Designer**.
3. Find and edit the **Field** that contained the **Field Header**.
4. From the **field properties** panel, copy the content of the **Field Header** that was migrated to the field's **Help Text And Instructions**, then remove the content and save the Field with a blank header.
5. Drag and drop the new **Custom HTML field type** onto the form where the desired content should appear.
6. Paste the previously copied content into the properties panel of the newly added **Custom HTML field**.
7. Adjust the column width and text mode of the **Custom HTML field** until the desired appearance is achieved.

Chapter 6: Create a Workspace with the Workspace Setup Wizard

Workspace Wizard - Introduction

After you license BMC FootPrints Service Core and log in for the first time, the Workspace Setup Wizard is displayed. The Workspace Setup Wizard is intended to help you through setting up some of the most popular features of BMC FootPrints Service Core for use in Service Desk, customer service, sales, development, or any other issue tracking needs. While there are many configuration options in BMC FootPrints Service Core, the Wizard helps you get up and running as quickly as possible with the basic features.

You can navigate through the Wizard using the Next and Back buttons. You can skip any step that you do not want to complete. To exit the Wizard and launch BMC FootPrints Service Core, select Cancel. You can set up the workspace at a later time through the administration pages by selecting Administration from the BMC FootPrints Service Core Toolbar.

The Workspace Setup Wizard is also available for creating additional workspaces from the System Administration Workspace Management page.

The workspace templates are described below.

1. For a list of information needed to complete the Wizard fully, click the Information Needed for the Workspace Setup Wizard link.
2. On the first page of the Wizard, you can select a workspace type.
   - **Select Workspace Type**—The drop-down below contains a list of pre-built templates for your first workspace. Select a workspace type and click View Details to see a preview of the fields that are included in the template. If you do not want to use a template, select I Will Make My Own Fields Later. In any case, fields can be added, edited, or changed later from the administration pages.
   - **Select Workspace Name**—This is the display name for the workspace.

     Available templates are:

     - **Corporate Service Desk**—This is intended for a typical corporate service desk that supports hardware, software, network, and other IT issues for employees of the company.
     - **Customer Support**—This template is intended for use by a customer service department that supports outside customers on the company's products and services.
     - **IT Service Management**—This is intended for incorporating a CMDB in the Workspace. The IT Service Management template actually creates four separate workspaces: the Incident Workspace, for tracking Incidents, the Problem Workspace, for tracking Problems, the Change and Release Management Workspace, which will provide change management, and the Service Portfolio Workspace, which creates a workspace for building a Service Catalog. The Workspace Wizard follows a different set of steps for the IT Service Management Workspace than it does for other workspaces. If you select the IT Service Management workspace template, go to Workspace Wizard for IT Service Management once you complete this page.
     - **Asset Requisitioning**—This template is designed for purchasing.
     - **Change and Release Management**—This template can be used to track change requests for any number of categories. It is based on the ITIL standard. The Change Management template is only available if the Change Management Add-on module is purchased.

- **Survey**—This template is used for responses to your customer surveys. This template takes you through a slightly different series of steps than the other templates.
- **SOX Financial Control Management—**This template is designed to track process controls that relate to financial procedures and processes. The template was created in response to Sarbanes-Oxley requirements.
- **SOX IT Change Management**—This template is designed to ensure that changes made to financial data comply with Sarbanes-Oxley requirements. The Issue page that is created with this template contains sections that are Status-dependent, meaning that the sections of the Issue expand or collapse depending on the value in the Status field. (Available to Change Management users only.)
- **IT Outsourcing**—This template is designed to keep track of IT issues for an IT Outsourcer who provides Third-Party technical support and services for another organization.
- **HIPAA Patient Management**—The HIPAA Patient Management template was created to help medical facilities track and manage patient personal, insurance, and payment information, as well as visits, services rendered, and future appointments.
- **Facilities Management**—This template helps track maintenance and other facilities requests.
- **Human Resources Management** - This template is used to track individual employee change requests.
- **Service Desk**—This is an ITIL-compatible (Information Technology Infrastructure Library) workspace template for tracking Incidents and Service Requests.
- **Problem Management**—This is an ITIL-compatible workspace template for Incident and Problem Management.
- **Service Portfolio**—This is an ITIL-compatible workspace template for proposing and approving Services for the Service Catalog.
- **Issue Tracking**—This is a generalized template for tracking any kind of issues or workspaces that need to be tracked.
- **Resource Management**—This template is designed to help an IT department track and manage both hardware and software that it might loan or otherwise install.
- **Sales Tracking**—This template is designed to help a sales team track leads, quotes, and perform contact management.
- **Software Change Management**—This template can be used for development and quality assurance teams to track feature requests, bugs, and other issues regarding a company's software products. (Available to Change Management users only.)
- **Training**—This template is useful for an IT department that trains its employees, as well as for other training organizations uses

NOTE

These templates contain some fields that have sample choices in them, such as Product (Product 1, Product 2, etc.) and Version Number (Version 1.0, 2.0, etc.). They are intended for evaluation purposes only. To use these fields in your environment, you should edit them to include your actual product names, etc. This can be done at any time from within BMC FootPrints Service Core by selecting Administration | Workspace | Form Designer (for workspace or issue-based fields) or Administration | Address Book | Field Maintenance (for contact fields) from the BMC FootPrints Service Core Toolbar. Administrators should also note that some of the templates, such as Corporate Service Desk and eSvc Customer Support, create teams in addition to fields.

3. After selecting a template, click **Next**.

4. You can now advance to Step 1.

Information Needed for the Setup Wizard

The following information is needed to complete all steps of the Workspace Setup Wizard. If the information is not currently available, you can skip the corresponding step and configure the feature later from the administration pages within BMC FootPrints Service Core.

If configuring Email

- **Email server name**—For example, email.widget.com.
- **ID of support email account**—For example, support. This is an email account you create on your email server for the exclusive use of BMC FootPrints Service Core to process incoming email (e.g., *support@myserver.com*). All email sent to this account is processed by BMC FootPrints Service Core and registered as new Issues within the system or as updates to existing issues.

IMPORTANT

Do not use your own email address for this account.

- **Password of support email account.**
- **Whether the support email account uses the IMAP or POP messaging protocol.**

If configuring an LDAP/Address Book

- **LDAP Server Name**—For example, machinedomain.internetdomain.com
- **LDAP Server Port**—For example, 389. An additional option for users beside the standard LDAP port (389) is the Global Catalog port for Active Directory (3268). This enables LDAP to access additional users from trusted domains using a set of common LDAP attributes. The typical scenario in which this would be used is when a large organization has a number of offices that each maintains an Active Directory for its local users. Using the standard port, you might be able to retrieve only a local office's users. Using the Global Catalog port, you can often retrieve everyone, assuming the search base is set correctly.
- **LDAP Search Base for Directory Entries**—For example, cn=Recipients,ou=widget.com,o=chicagoOffice
- **Last Name of Any Person Known to be in the Directory**—For example, Smith
- **Distinguished Name**—Similar to the Search base, but including the LDAP/AD Administrator ID For example, cn=Administrator,cn=Recipients,ou=widget.com,o=chicagoOffice
- **Password**—Password of the LDAP/ID Administrator specified above.

NOTE

The last two are sometimes optional, although it is dependent on the setup of the LDAP server.

If configuring a Customer Survey

- **Workspace name**—The tracking workspace(s) to be associated with the Customer Survey workspace. The Customer Survey workspace uses the Address Book of the tracking workspace.
- **FootPrints Database**—The database BMC FootPrints Service Core is using might have a limit for field names. Included in these characters are some additional hidden characters placed by BMC FootPrints Service Core. If you are unable to create a question you desire for a survey as a result of this limit, you may type in a shorter field name, but then create a longer display value using the Language of Workspace and Address Book Fields feature. After completing the Workspace Setup Wizard, access this feature by selecting

Administration | Workspace | Fields | Language of Workspace and Address Book Fields starting at the BMC FootPrints Service Core Toolbar.

Workspace Wizard Step 1–Workspace Details

In this step, enter a name for your workspace and confirm the template and fields selected in the initial Workspace Setup Wizard screen. These fields can be modified later in the Wizard and can be changed or added to from within BMC FootPrints Service Core after the Wizard is complete. To select a different template, click Back.

Enter a workspace name in the field.

NOTE

The template selected may contain some fields that have sample choices in them, such as Product (Product 1, Product 2, etc.) and Location (First Floor, Second Floor, etc.) They are intended for evaluation purposes only. To use these fields in your environment, you should edit them to include your actual product names, locations, and so on. This can be done at any time from within BMC FootPrints Service Core by selecting **Administration | Workspace | Form Designer** (for workspace or issue-based fields) or **Administration | Address Book | Field Maintenance** (for contact fields) from the **FootPrints Service Core** Toolbar.

Proceed to Step 2.

Workspace Wizard Step 2–Built-in Fields

This step allows you to customize some of the built-in BMC FootPrints Service Core fields for your workspace.

Priority

The Priority field is used to rate Issues by importance or impact. Options for priority include:

- **Maximum Priority**—The number selected here defines the range or number of priorities available for Agents to select when creating an Issue. Any number from 1—100 can be selected. This defaults to the number assigned by the workspace template.
- **Default Priority**—This is the default Priority assigned when users create new Issues. If 2 is selected, new Issues are created with a priority of 2 unless the Agent or an automated escalation rule changes it. If words are assigned to the Issue (see below), the corresponding word is the default (for example, Medium).
- **Priority Words and Colors**—Words and colors can be assigned to Priorities. Rather than selecting 1, 2, 3, etc., Agents can select Urgent, High, Medium, etc. If colors are selected, they appear on the BMC FootPrints Service Core Homepage. Words are assigned by the Workspace Setup Wizard. To change the words, to add a word or words for additional priorities, and to select colors, click the Assign Words and/or Colors to Priorities link.

To map Priority words and colors:

1. Click the Assign Words and/or Colors to Priorities link. A small pop-up window is displayed. There are input boxes for each priority level in the pop-up window.
2. Enter a word or phrase for each priority level that is blank, or change the existing word.
3. To select a color, click Pick next to a priority level. Another pop-up window appears with a color map.
4. Select a color. The color box for the priority is populated with the hex code.
5. Click **Save** to save your changes.

Status

The Status field is used to define the workflow of Issues, or the stages that an Issue will move through from beginning to end. Statuses can be added, deleted and reordered here. The dialog is pre-filled with the Statuses defined by the workspace template.

To add a Status:

1. Enter a name for the new Status.
2. Click the Add button. By default, the new Status is listed just before Closed.

To delete a Status:

1. Select the Status in the dialog box (it will be highlighted in blue).
2. Click Delete Status. The Status is removed from the list.

To re-order Statuses:

1. Select a Status in the dialog box (it will be highlighted in blue).
2. Use the Up and Down arrow buttons to move a Status up and down in the list.

NOTE

Open and Closed are built-in and cannot be changed or re-ordered. You can change the words that represent them from within BMC FootPrints Service Coreon the Status administration page. In addition, there are other built-in Statuses used by BMC FootPrints Service Core that are not displayed here, including Deleted and Request. Refer to the Workspace Administration topic on Statuses for more information.

Time Tracking

The Time Tracking field is used to track the time that Agents spend working on Issues. Time can be tracked automatically by the system or manually by the Agent. Agents can be assigned hourly billing rates to be used in tracking the cost of Issues in addition to the time spent. Time can be tracked for any Agent when creating Issues and when editing Issues. The total time counted over all sessions is accumulated and stored for the Issue. If this feature is not needed, it can be disabled for the workspace.

Time Tracking data can be included in reports or exported to a billing system. For more information on creating Time Tracking reports, please refer to the topic titled Time-tracking Reports.

Options for Time Tracking:

- **Automatic**—If this is selected, a visible clock automatically tracks the time spent by Agents working on Issues. This is useful for a call center or service desk where the Agents do most of their work at their desks. A "**Pause**" button is displayed on the Issue form to allow the Agent to temporarily pause the clock.
- **Manual**—If this is selected, Agents manually enter the amount of time worked on an Issue. This is useful for desktop support teams or workspaces where users will do much of their work away from BMC FootPrints Service Core. There are 2 sub-options:
  - **Permissions**
    - **Optional**—Agents have the option to fill in time spent when creating or editing Issues.
    - **Mandatory**—Agents are required to fill in time spent each time an Issue is created or edited.
  - **Start Date/Time**

- **Always use current date & time**—By default, the date and time at which the Agent enters the information is automatically recorded by BMC FootPrints Service Core.
- **Manually enter start date & time**—If this option is selected, the Agent can fill in the date and time work began manually. This is useful if Agents often do their work away from BMC FootPrints Service Core, and only update their Issues at a later time.

- **Disable**—If this is selected, Time Tracking is disabled for the workspace.

When you have finished making changes to the built-in fields, click **Next**.

Proceed to Step 3.

Workspace Wizard Step 2a–Customer Survey

In this step, select the Workspace(s) to link to this survey Workspace. Whichever Workspace(s) you select on this page automatically have their survey results filtered into this survey workspace and have their own individual issues created. The survey Workspace also shares the same Address Book that your selection(s) uses.

- **Workspace to Link Survey to**—Select a Workspace from the drop-down list whose survey results will be stored in the Customer Survey Workspace that you are creating.
- **Link to Additional Workspaces**—If the Workspace you select from the drop-down list shares its Address Book with other Workspaces, you can highlight additional Workspaces to be used with the Customer Survey Workspace being created. To select more than one Workspace from the list, hold down the CTRL key while clicking on the entry.

NOTE

Only Workspaces with unique address books or sharing the same address book can be linked to a single Customer Survey Workspace.

When you have finished making any changes desired to the Workspace fields, click **Next**.

Workspace Wizard Step 2b–Customer Survey

In this step, you enable customer surveys in the workspace(s) selected in the previous step. Surveys generated from the other workspace(s) are populated in this new survey workspace.

To change these settings later, select Administration | Workspace | Automated Workflow | Customer Surveys from the BMC FootPrints Service Core toolbar in the originating workspace (not in the survey workspace).

1. **Subject**—Enter a subject line for the survey email.
2. **Custom Message**—The text entered here will be in the body of the survey email. Certain keywords can be used that will automatically get replaced by their associated values once the email is sent. Click the "**Click here**" link to be presented with a list of those keywords.
3. **Survey Rules**—Select when to send customer surveys:
   - Send survey for each customer Issue that is closed.
   - For each customer Issue that is closed, there will be a 1 in X chance of the customer receiving a survey (if they haven't received a survey in the last Y months). You choose the values for X and Y.
     - **For X**: Choosing a value of 2 for X does not mean that every other issue closed sends a survey email; it means that each issue closed has a 1 in 2 (50%) chance of sending out a survey email.

- **For Y**: Indicate how often customers are allowed to receive surveys. You may not want the same customer to receive more than one survey in a 1, 3, 6, or 12 month period.

TIP

You may want to send a survey for every issue that gets closed, but only if the person receiving the email has not received a survey in the past 1, 3, 6, or 12 months. Use the second option and set the value of Y to 1 so that each closed issue has a 1 in 1 chance of sending a survey email.

- Send surveys to all linked customers when a Global Issue is resolved. This option can be selected regardless of when surveys are being sent.
- Include JavaScript data validation on surveys and HTML Forms. This option can be turned off so that the JavaScript validation is not included.

When you have finished making changes desired to the Customer Survey setup, click **Complete the Wizard**. The workspace is created and your survey setup is finished.

Workspace Wizard Step 3–Configure Issue Information Fields

The Workspace fields created by the Workspace Setup Wizard are displayed in the dialog box. They are based on the Workspace template you selected. These are the fields that will be displayed in the Issue Information section of the Issue pages later, after the Workspace has been built. In this step, as long as there are no dependent fields, you can re-order or delete fields (for more information on field dependencies, refer to Dropdown). If you would like to make additional changes to these fields, select Administration | Workspace | Form Designer from the BMC FootPrints Service Core Toolbar after completing the Wizard.

There is a different Step 3 if you are using the IT Service Management template, which is described in Workspace Wizard Step 3 for IT Service Management Workspace.

NOTE

When creating additional Workspaces with the Wizard, the full Form Designer dialog is available for adding and changing fields.

To re-order the fields:

1. Select a field in the dialog box (it will be highlighted in blue).
2. Use the Up and Down arrow buttons to move a field up and down in the list.
3. Continue to re-order the fields are desired. This is the order in which they are displayed in the workspace.

To delete a field:

1. Select the field in the dialog box (it will be highlighted in blue).
2. Click Delete. The field is removed from the dialog and is no longer included in the workspace.

NOTE

The Delete button is only visible when your workspace template does not contain any dependent fields. There are instances where deleting dependent fields can cause problems, so the Delete button is not available in the installation version of the Workspace Setup Wizard for those cases.

When you have finished making any changes desired to the Workspace fields, click **Next**.

Proceed to Step 4a.

Workspace Wizard Step 3 for IT Service Management Workspace

This step determines how you will create a CMDB for your Workspace. This step only applies to an IT Service Management Workspace. Options on this page are explained below. When you finish selecting options on this page, click the **Finish** button.

Use Template

If you select the Use Template radio button, you must select the CMDB template to use from the drop-down field. When you select a template from the drop-down field, the schema for that template is displayed at the bottom of the page. Drop-down options are:

- **ITIL CMDB**—This template contains configuration item types, attributes and relationships recommended as ITIL best practices.
- **BMC FootPrints Asset Core**—This template contains configuration item types, attributes and relationships drawn from the BMC FootPrints Asset Core.
- **All Assets**—This template contains configuration item types, all attributes and relationships. With this template, you would start off with all possible attributes and relationships and then remove the ones you do not want to use.
- **Inventory**—This templates contains configuration item types, attributes and relationships relating to facilities management.

Use Existing CMDB Configuration

If you select the Use Existing CMDB Configuration radio button, a drop-down field containing existing CMDBs is displayed. Select the CMDB you want to copy from the field. When you select a CMDB from the drop-down field, the schema for that CMDB is displayed at the bottom of the page.

Create on Your Own

If you select the Create on Your Own radio button, CMDB is enabled but no configuration item types, attributes, or relationships are created. Instead, you must create all of the configuration item types, attributes, and relationships on your own.

Workspace Wizard Step 4a–Address Book

In this step, you can select the type of Address Book to be used for your workspace. The Address Book is a place to keep the contact information for your end users, whether they are employees, remote users, or Customers. The data can be kept in BMC FootPrints Service Core or can be dynamically read from an outside source, such as Microsoft Exchange, Active Directory, or other LDAP source. The LDAP option is only available in the evaluation software or if you purchased the Dynamic Address Book Link add-on module with BMC FootPrints Service Core.

NOTE

If you purchased the Dynamic SQL Address Book add-on, you must configure the Address Book after you've run the Workspace Wizard. Select BMC FootPrints Service Core, which is converted later. Refer to Dynamic SQL Address Book Link in the *Address Book Administration* chapter.

To select an Address Book:

1. **Address Book Name**—Enter the name for the Address Book, for example, Employees.

2. **Address Book Type** (only requested if you are licensed for Dynamic LDAP Address Book Link)—Select the type of Address Book:
   - **New FootPrints Address Book**—With this option, contact data is kept within the BMC FootPrints Service Core database. Once the Wizard is complete, you can import contact records from a comma-delimited text file. Refer to the topic on Importing Data into the Address Book for more information.
   - **New LDAP/Exchange/Active Directory Connection**—With this option, contact data is read dynamically from an outside source each time it is accessed. No importing or synchronization is necessary. Supported databases include Active Directory, Microsoft Exchange, Lotus Notes, Sun ONE, and Novell eDirectory. If you select this option, you must enter information about the LDAP source in the next step.

NOTE

This option is only available when creating additional workspaces in BMC FootPrints Service Core. The LDAP feature can be configured after the Workspace Setup Wizard is complete under Address Book administration. If you are unsure of your Exchange/Active Directory configuration, select BMC FootPrints Service Core Address Book. You can change the Address Book later from the Address Book administration screen.

   - **Link to an existing Address Book**—This option allows you to use an existing Address Book for the workspace.

Once you have selected an Address Book, click Next. The next step differs based on the type of Address Book selected.

Proceed to Step 4b - FootPrints Address Book.

Proceed to Step 4b - Exchange/Active Directory Address Book

Workspace Wizard Step 4b–Address Book Fields

The Address Book fields created by the Wizard are displayed in the dialog box. They are based on the workspace template you selected. They are displayed in the Contact Information section of the Create Issue form and in the Address Book. In this step, you can re-order or delete the fields. If you would like to make additional changes to these fields, select Administration | Address Book | Field Maintenance from the BMC FootPrints Service Core Toolbar after completing the Wizard.

NOTE

When creating additional workspaces with the wizard, the full Form Designer dialog is available for adding and changing fields.

To re-order the fields:

1. Select a field in the dialog box (it will be highlighted in blue).
2. Drag-and-drop fields to move them up and down in the list.
3. Continue to re-order the fields are desired. This is the order in which they are displayed in the Address Book.

To delete a field:

1. Select the field in the dialog box (it will be highlighted in blue).
2. Click Delete. The field is removed from the dialog and is no longer included in the Address Book.

The Address Book also contains two additional properties:

- **Primary Key**—The Primary Key is a unique identifier for each Contact in your Address Book. If the Customer Self-service feature is used, it is the ID and password that Customers use to log into BMC FootPrints Service

Core. This field should be both present and unique to all Contacts. User ID is the recommended field, and also the default value for all templates.

- **Organizational Field**—The Organizational Field is used to organize Contacts in the Address Book. Examples include Department, Business Unit, or Company. It is an optional property. If one is selected, the Contacts in the Address Book are grouped by the field.
- **Master Contact Record**—Check here to enable the Master Contact Record feature.

When you have finished making any changes desired to the Address Book fields, click **Next**.

Workspace Wizard Step 4b–Configure Exchange/Active Directory

If Exchange/Active Directory Address Book was selected in Step 4a, the LDAP Address Book must be configured in the next few steps. With this option, contact data is dynamically read from an outside source each time it is accessed. No importing or synchronization is necessary. Supported databases include Active Directory, Microsoft Exchange, Lotus Notes, Sun ONE, and Novell eDirectory.

This page requires information about your LDAP source. Please consult with your system or LDAP administrator for more information.

LDAP Server Name

Enter the full domain name of the machine hosting the contact database server.

NOTE FOR MICROSOFT USERS

If Exchange and Active Directory are on different servers, the Active Directory Server name should be entered. The Exchange/Active Directory administrator should be able to provide this name. It will usually be in the form: *machinedomain.internetdomain.com*

LDAP Server Port

This is the port that BMC FootPrints Service Core uses to communicate with the LDAP contact database to retrieve user contact information. In most cases, the default value of 389 should be used. However, when a machine has more than one directory, a different port number may be used. If port 389 is already in use, administrators often set port 390 as the LDAP port.

LDAP Search Base for Directory Entries

LDAP (including MS Exchange/Active Directory) stores its data in a tree structure. To enable BMC FootPrints Service Core to retrieve user information, a search base specifying where to search in the tree and in what order must be specified here. The search base is formed by adding names of the root and each subsequent branch of the tree until reaching the point where a search should commence. The search base should be the branch of the tree closest to the data being searched. In most instances, all data being sought is in one branch of the LDAP tree. For instance, if the root of the LDAP Directory tree is o=server.com and the next branch to be taken was ou=People, which contains all the directory information, the search base is: ou=People,o=server.com

The form of the search base is different for Microsoft Exchange 5.5, Exchange 2000, and other LDAP servers. Specific instructions are given below for help in finding the correct search base for two of the most popular LDAP-compliant contact databases: Microsoft Exchange 5.5 and Microsoft Active Directory (2000). For other databases, such as Sun ONE Directory Server, Lotus Notes, and Novell Directory Services, please refer to the product documentation for that server, or email Support for help.

NOTE

If linking to Microsoft Exchange/Active Directory, contacts must reside directly in Exchange/Active Directory as a contact record or user. Contact records that reside in Public Folders are not supported.

Microsoft Exchange 2000/Active Directory

Exchange 2000/Active Directory usually has a search base beginning with cn=Users. For Windows 2000 and later releases using Active Directory, read the value for the following key:

1. On the server where Exchange or Active Directory is installed, select Start | Run from the Start Menu.
2. Enter regedit or regedt32, and then click Open.
3. Browse to the following key:

   HKEY_LOCAL_MACHINE/System/CurrentControlSet/Services/NTDS/Parameters/Root Domain
4. Take the value in the above key and create your search base by starting with cn=Users and continuing by adding the key found above, separated by a comma. For example, if the value found is DC=Ntdomain,DC=internetName,DC=com, you would try:

   cn=Users,DC=NTdomain,DC=internetName,DC=com

NOTE

Spacing, punctuation, and capitalization must be exact for a search base to work correctly. For instance, if one of the values in your search base has spaces and/or punctuation (e.g., o=My Company, Inc.), you must place the value in quotation marks (e.g., o="My Company, Inc.") and make sure that the spacing, punctuation, and capitalization are correct.

Microsoft Exchange 5.5

Exchange 5.5 usually has a search base beginning with cn=Recipients. The search base can be determined by reading the registry. To find the full search base:

1. On the server where Exchange is installed, select Start | Run from the Start Menu.
2. Enter regedit or regedt32, and then click Open.
3. Browse to the following key:

   HKEY_LOCAL_MACHINE/System/CurrentControlSet/Services/MSExchangeCCMC/Parameters/SiteDN
4. Take the value in the above key and create your search base by starting with cn=Recipients and continuing by adding each key starting with the last (keys are separated by slashes (/)) and adding the last remaining key, separating each new key added with a comma. For example, if you see the following "/o=company/ou=organization" you would try as your search base:

   cn=Recipients,ou=organization,o=company

The parameters for the search base are listed in reverse order from what is displayed in Exchange and commas separate the records rather than forward slashes. See your Exchange administrator if there is any difficulty.

NOTE

Spacing, punctuation, and capitalization must be exact for a search base to work correctly. For instance, if one of the values in your search base has spaces and/or punctuation (e.g., o=My Company, Inc.), you must place the value in quotation marks (e.g., o="My Company, Inc.") and make sure that the spacing, punctuation, and capitalization are correct.

Last Name of Any Person Known to be in the Directory

Enter the last name (surname) of a contact in the Exchange directory. This is the name that BMC FootPrints Service Core uses to test the connection to your LDAP server.

Distinguished Name (Optional)

Some LDAP servers allow an anonymous login. In these cases, no distinguished name and password are needed; however, if your server requires an authenticated bind of a user to access the directory, you should enter distinguished name and password of the administrator user here. Specifying the distinguished name and password can also improve performance in searching and retrieving data from the LDAP server.

The distinguished name of the binding user can be retrieved from your LDAP Administrator or can be found using the techniques discussed above for the *LDAP Search Base for Directory Entries*. The distinguished name to use for binding is generally cn=userid (where userid is the ID for the account used for binding) followed by a comma and then the search base. For example, if the User ID is Administrator:

- For **Exchange 2000**, if the search base is:

  cn=Users,DC=NTdomain,DC=internetName,DC=com

  then the distinguished name is:

  cn=Administrator,cn=Users, DC=NTdomain,DC=internetName,DC=com

- For **Exchange 5.5**, if the search base is:

  cn=Recipients,ou=organization,o=company

  then the distinguished name is:

  cn=Administrator,cn=Recipients,ou=organization,o=company

Be sure to leave all information of the user in the distinguished name. Do not omit such information as a CN or UID as you would with a search base. Leave blank if binding anonymously.

NOTE

Exchange 5.5 usually allows anonymous binding, while Exchange 2000 normally does not support anonymous binding. If you have Exchange 2000, you probably need to fill in the distinguished name and password.

Password (Optional)

Place the password of the binding user here. This is the password of the administrator specified in the distinguished name above. Leave this blank if you are binding anonymously.

After all of the information is entered, click **Next**. The Wizard attempts to connect to your Exchange/LDAP/Active Directory server and search for the contact specified above using the search base and other information entered. If the connection is successful, the Address Book Field Mapping page is displayed. If the Wizard is not able to connect to your LDAP server, an error is displayed or the browser times out. Please contact your LDAP administrator or email Support for assistance.

roceed to Step 4c.

Workspace Wizard Step 4c–Exchange/Active Directory Field Mapping

If the test to connect to the Exchange/Active Directory server is successful, the Field Mapping page is displayed. On this page, you can map attributes from your Exchange/Active Directory server to the BMC FootPrints Service Core Address Book.

- **Available LDAP/Exchange Attributes**—A list of available Exchange/Active Directory Attributes is in the LDAP Attribute drop-down box. These are attributes found on the Exchange/Active Directory server based upon the search base provided in your LDAP configuration. To see an explanation of the most common Exchange/Active Directory attributes, click the small Help link above the attribute list.
- **BMC FootPrints Service Core Field Names**—The right side of the page contains a list of some default fields. All of the fields in the Address Book schema for the template are highlighted. When one of the field names is highlighted and then Edit is clicked, the LDAP Attribute drop-down box is populated with either a recommended name or the name of the Exchange/Active Directory attribute. Regardless of what appears in the box, you can change the name of the field. In addition, the Field Type contains a recommended BMC FootPrints Service Core field type, which can also be changed. You cannot use the same attribute for more than one field.

1. For each field, select an available Exchange/Active Directory attribute from the drop-down.
2. If there is no corresponding attribute for the field, select Delete. This deletes the field from the Address Book in BMC FootPrints Service Core.
3. Although some Exchange/Active Directory attributes are obvious in how they relate to the BMC FootPrints Service Core Address Book fields, others are not. The Exchange/Active Directory administrator should assist in mapping attributes to BMC FootPrints Service Core Address Book fields.

On this screen, any additional changes desired can be made to the Exchange/Active Directory Address Book fields.

Once you have completed changes in name or field type, click Add Field to send the field to the BMC FootPrints Service Core Fields box.

- **Fields**—The BMC FootPrints Service Core Fields box contains all fields currently selected.
- **Primary Key**—The Primary Key is a unique identifier for each Contact in your BMC FootPrints Service Core Address Book. If the Customer Self-service feature is used, it is the ID that Customers use to log into BMC FootPrints Service Core, along with a password. This field should be both present and unique to all Contacts. User ID is the recommended field and also the default for all templates.
- **Organizational Unit**—The Organizational Unit is used to organize Contacts in the Address Book. Examples include Department, Business Unit, or Company. It is an optional property. If an Organizational Unit is selected, the Contacts in the Address Book are grouped by that field.

To re-order the fields:

1. Select a field in the dialog box (it will be highlighted in blue).
2. Drag-and-drop fields to move them up and down in the list. This is the order in which they are displayed in the Address Book.
3. Continue to re-order the fields are desired.

To delete a field:

1. Select the field in the dialog box (it will be highlighted in blue).
2. Click Delete. The field is removed from the dialog and is no longer included in the Address Book.

Proceed to Step 5.

Workspace Wizard Step 5–Email

BMC FootPrints Service Core can be configured to work with your email server to both send email notification to users about their Issues and to process incoming email submissions for users. The basic email options for your workspace are configured in this step. Additional options are available on the administration pages within BMC FootPrints Service Core.

1. **Email Notification - When to Send Mail**—BMC FootPrints Service Core can automatically send email notification to users when Issues are created and edited. Separate rules can be set for both Assignees (Agents assigned to Issues) and Customers (end users who report Issues). For example, you may want email notification sent to the Agent assigned to an Issue for all statuses, but you may only want email notification to go to the Customer who submitted the Issue when it is opened, and when it is closed.

   A default template is used for email notifications from BMC FootPrints Service Core. To change the template, select Administration | Workspace | Mail Preferences | Contents of Mail from the BMC FootPrints Service Core Toolbar after completing the Wizard.

   For each of the categories, the options are:

   - **Never send mail:** If this option is chosen, no notification email is sent.
   - **Always send mail for every creation/edit:** Email is sent to all assignees for each change to an Issue (default).
   - **Send mail only for Issues matching the following criteria:**
     - **Priority**—Notification is only sent to the assignees/cc's when the Issue's priority falls into the range chosen here.
     - **Status**—Notification is only sent to the assignees/cc's when the Issue's status matches one of the statuses defined here. Multiple statuses can be selected (Windows users must hold down the CTRL key to highlight multiple statuses).

NOTE

The email notification rules selected here can be manually overridden for a particular Issue by the Agent assigned to that Issue. These are simply defaults.

2. **Request Creation**—An email can be sent automatically to one or more internal users when a new Request is submitted by a Customer. This is in addition to notification sent to Assignees as defined above. If selected, you receive an email each time a Customer submits a new Request to BMC FootPrints Service Core via the web or email. This option can be changed later under Administration | Workspace | Mail Preferences after additional users are added to the system.
3. **Incoming Email Management**—BMC FootPrints Service Core can process incoming email requests from users. An email account must be created on the email server for the exclusive use of BMC FootPrints Service Core (e.g., *support@myserver.com*). All email sent to this account is processed by BMC FootPrints Service Core and registered as new Issues within the system or updates to existing issues.

NOTE

Do not enter your own email address in this section.

   To enable this feature:

   a. Select the mail retrieval protocol used by your email server. The choices are:
      - **IMAP** (Internet Message Access Protocol)
      - **POP** (Post Office Protocol)

To skip this step: If you do not wish to configure incoming email, select SKIP SETUP (this is the default). You can enable incoming email at a later time by selecting Administration | System | Email | Incoming Email Setup from the BMC FootPrints Service Core Toolbar.

b. Enter the POP/IMAP mail server name for your organization, e.g., *mail.myserver.com* or *123.33.44.55*. This is pre-filled with the name entered during installation.

c. Enter the email account name of the account you have created on your mail server for the exclusive use of BMC FootPrints Service Core, e.g., support.

NOTE

Do not enter your own email address in this section. All mail sent to the account entered here is processed by BMC FootPrints Service Core. If you enter your own email address, you will no longer receive email.

d. Enter the password for the email account (this must be entered twice).

e. Enter the default reply address for this account. We recommend entering the full email address of the account specified above, e.g., *support@myserver.com*.

f. Enter the From name for this account. This is the name that populates the From line of email notification mail headers, e.g., BMC FootPrints Service Core or Widget Support. It is used to respond to BMC FootPrints Service Core email notifications, which can be threaded back to the originating Issue.

When you have completed configuration of email, click **Complete the Wizard** to finish the configuration of the workspace.

Workspace Wizard Step 6–Other Options

This step allows you to configure some system-wide options for BMC FootPrints Service Core. These options apply to the first workspace and all subsequent workspaces, although most can be changed per workspace or user, as noted.

NOTE

This step is only available the first time you set up BMC FootPrints Service Core.

- **Cookies**—Cookies allow BMC FootPrints Service Core to remember a user's ID and password. If this option is enabled, all users will see a checkbox on the login screen that, if checked, will bypass the login screen when they access BMC FootPrints Service Core with their local browser. This cookie will contain a unique token, which will be updated on subsequent logins to the system, and which will expire in 3 months. This option applies to the whole system.

NOTE

Because this option poses a security risk (anyone can log in as that user if they have access to the user's machine), do not enable Cookies if security is an issue for your organization. Also, if many of your users access BMC FootPrints Service Core from public or shared terminals, do not use Cookies.

- **Record Names**—The terms entered here are used throughout BMC FootPrints Service Core. Terms can be specified for both Issue database records, and the Contact records in the Address Book. These names can also be changed per workspace.
- **Date Format**—This option determines how dates are represented throughout BMC FootPrints Service Core. Users can also set a personal preference for dates. The options are:
  - **American**—MM/DD/YYYY
  - **European**—DD/MM/YYYY
  - **ISO**—YYYY/MM/DD

- **Logo**—This is the logo that will appear on the BMC FootPrints Service Core login screen and in the top-left corner of each screen. You can keep the BMC FootPrints Service Core logo, or upload your own logo. The image's size should not be larger than 180x68 pixels.

To upload your logo:

1. Click the Attach File button.
2. Browse your local machine or network drive for the logo. The image's size should not be larger than 180x68 pixels. (A .GIF file is recommended.)
3. When you have selected the file, click Open. The file is copied to BMC FootPrints Service Core. A message that the file was copied successfully is shown in the attachment box on the screen.
4. The logo, when displayed in the top-left corner in BMC FootPrints Service Core, can be a hypertext link. You can select Yes or No for this option.
5. If Yes is selected, enter a URL for the hypertext link.

By default, when you have completed the Workspace Setup, the Add Agents setup page is displayed, allowing you to add agents to your newly created workspace immediately. If you selected the BMC FootPrints Service Core Customer Service template, you are given the option to refresh to either the Customer Service Portal setup page or to the Add Agents page.

You have completed the Workspace Setup Wizard! Click the **Complete** button to finish. You are now on the BMC FootPrints Service Core Homepage. Go to Configuration and Administration, to learn more about BMC FootPrints Service Core configuration and administration, or browse the Online Help for other topics. You can return to the Help at any time by clicking the Help link in the top right corner of the FootPrints Service Core header.

Workspace Wizard for IT Service Management

Step 1-Workspace Details

For IT Service Management, enter names for the following workspaces in the appropriate fields:

- the Incident Workspace, for tracking Incidents
- the Problem Workspace, for tracking Problems
- the Change and Release Management Workspace, which will provide change management, and
- the Service Portfolio Workspace which creates a workspace for proposing and approving items to be included in the Service Catalog.

Step 2-Select Address Book

In this step, you can select the type of Address Book to be used for your workspace. The Address Book is a place to keep the contact information for your end users, whether they are employees, remote users, or Customers. The data can be kept in BMC FootPrints Service Core or can be dynamically read from an outside source, such as Microsoft Exchange, Active Directory, or other LDAP source. The LDAP option is only available in the evaluation software or if you purchased the Dynamic Address Book Link add-on module with BMC FootPrints Service Core.

NOTE

If you purchased the Dynamic SQL Address Book add-on, you must configure the Address Book after you've run the Workspace Wizard. Select BMC FootPrints Service CoreAddress Book, which is converted later. Refer to Dynamic SQL Address Book Link in the *Address Book Administration* chapter.

To select an Address Book:

1. **Address Book Name**—Enter the name for the Address Book, for example, Employees.
2. **Address Book Type** (only requested if you are licensed for Dynamic LDAP Address Book Link)—Select the type of Address Book:
   - **New BMC FootPrints Service Core Address Book**—If this is selected, the contact data is kept within the BMC FootPrints Service Core database. Once the Wizard is complete, you can import contact records from a comma-delimited text file. Refer to Importing Data into the Address Book for more information.
   - **Link to an existing Address Book**—This option allows you to use an existing Address Book for the workspace.

Step 3 - Create or Select a Configuration Management Database (CMDB)

- **Use Template**—If you select the Use Template radio button, you must select which CMDB template to use from the drop-down field. When you select a template from the drop-down field, the schema for that template is displayed at the bottom of the page. Drop-down options are:
  - **ITIL CMDB**—This template contains configuration item types, attributes and relationships recommended as ITIL best practices.
  - **BMC FootPrints Asset Core**—This template contains configuration item types, attributes and relationships drawn from the BMC FootPrints Asset Core.
  - **All Assets**—This template contains configuration item types, all attributes and relationships. With this template, you would start off with all possible attributes and relationships and then remove the ones you do not want to use.
  - **Inventory**—This templates contains configuration item types, attributes and relationships relating to facilities management.
- **Use Existing CMDB Configuration**—If you select the Use Existing CMDB Configuration radio button, a drop-down field containing existing CMDBs is displayed. Select the CMDB you want to copy from the field. When you select a CMDB from the drop-down field, the schema for that CMDB is displayed at the bottom of the page.
- **Create on Your Own**—If you select the Create on Your Own radio button, CMDB is enabled but no configuration item types, attributes, or relationships are created for you. Instead, you must create all of the configuration item types, attributes, and relationships on your own.

Getting Started Quickly

After completing the Setup Wizard, you will have the basics of a complete BMC FootPrints Service Core workspace, including fields, email notification, an Address Book, and some other options. You can start using BMC FootPrints Service Core right away, or you may want to do some additional configuration. While there are many configuration options in BMC FootPrints Service Core, you will probably want to do the following before going into initial production:

- Add Agent and Customer Users to the system
- Populate the Address Book with contact data for your end users

- Configure Other Workspace Options
- Create Escalation and Auto Assignment Rules
- Create Search queues
- Create Reports
- Learn more about the different kinds of Issues
- Learn about the Knowledge Base

The following options are initially configured by the Setup Wizard, but you may want to make some additions or changes:

- Change and configure your workspace fields
- Change and configure your contact field
- Change and configure the Statuses and Priorities
- Configure Email options
- Change the Appearance of FootPrints Service Core

Chapter 7: Configuration and Administration

Introduction to Configuration and Administration

What you will find in this section

- Workspace Administration—Workspace Options, users, workspace fields, escalation, auto assignment.
- Address Book Administration—Address Book fields, options, importing and exporting contact data, LDAP, Dynamic SQL Address Book Link
- System Administration—Workspace management, appearance, user management, licensing, other system options.

Workspace Administration

Workspace Administration Overview

In order to use BMC FootPrints Service Core to track specific data and take full advantage of its power, BMC FootPrints Service Core workspaces can be customized. To customize the current workspace, select Administration | Workspace from the BMC FootPrints Service Core toolbar (you must be a Workspace or System Administrator). This displays the Workspace Administration page in the main frame of the browser, from which you can add users, customize fields, automate business rules, and customize other options for the current workspace.

Workspace Administrators can set options on a per workspace basis. The options are:

- General
    - Workspace Options—Set workspace-wide option
    - Mail Preferences—Configure Email notification rules and formatting
- Users and Roles
    - Agents
        - Add Agents—Add new Agents to this workspace
        - Edit Agents—Change the properties of or remove Agents from the workspace
        - Teams—Organize Agents into assignment Teams
    - Customers
        - Add Customers—Add new Customers to this workspace
        - Edit Customers—Change the properties of or remove Agents from the workspace
        - Customer Options—Define workspace-wide options for Customers
    - Roles
        - User Roles—Create and manage permission roles for Agents and Customers
        - Agent Preferences Templates—Define Agent Preferences Templates for Roles
- Fields

  - Form Designer—Manage the Workspace Fields that appear in the Issue Information section
  - Statuses—Manage the Status field
  - Schema—Show Workspace's schema
  - Language of Workspace and Address Book Fields—Manage the language of the labels of Workspace and Address Book fields
  - Dynamic SQL Field Mapper—Dynamically link workspace fields to entries in an external database
- Automated Workflow
  - Escalation—Configure automated Escalation and Business Rules
  - Service Level Management—Configure Service Level Agreements
  - Auto Assignment—Configure default assignment and auto-assignment rules
  - Quick Issue Template—Create and manage Quick Issue templates
  - Auto Run Reports—Set up automated report scheduling
  - Customer Surveys—Create a Customer Survey to be sent to Customers when their Issues are closed
  - Submission Tracking—Track the method used to submit Issues
  - Issue Workflow—Configure behavior for dynamically linked issues
  - Change Manager—Configure the rules for the Change Manager module. Only available if you have the add-on module.
- Other Options
  - Configuration Manager and Service Catalog Options—Only available with the add-on module.
  - Mobile Options—Manage options for mobile devices.
  - Knowledge Base—Manage the Knowledge Base
  - Report Templates—Create Report templates for single-Issue reports
  - Calendar and Scheduling—Manage the Workspace Calendar and Agent availability matrix
  - Edit Lock—Release lock on currently edited Issues or on Form Designer
  - File Attachments—Manage file attachments
  - Colors—Manage the colors in the interface
  - Asset Management—Set rules for including asset data in issues. Only available if you have the BMC FootPrints Asset Core add-on module.

Workspace Options

Workspace Options

BMC FootPrints Service Core gives you control over a number of options on a Workspace wide level. These options are set under the "Workspace Options" menu.

The options are:

- General tab
  - Workspace name
  - Default Language
  - FootPrints Terminology
  - Rich Text Mode Editor
  - Validation of email address fields
  - Disable Address Book
  - Global Issues
  - Service Catalog (only available if you have a BMC FootPrints Configuration Manager license)
  - Workspace Logo
  - Display Total Number of Matching Issues on Home Page and Searches
  - Splash Screen
- Quick Edit tab
  - Enable or Disable
  - Configure Fields
- Issue Page tab
  - Number of Columns on Create and Edit Page
  - Order Sections for Create/Edit Entry Screens
  - Description Ordering
  - Drop-down/Multi-select Width
  - Assignee Picker Field Width
  - Address Book Fields to Exclude
- Time Tracking Tab
  - Priority definition
  - Time Tracking
- Add-on Module
  - Sales/CRM Integration
- Toolbar

All workspace options can be changed at any time without affecting any existing data. They are explained in more detail below. To set an option, follow the instructions for that option below, enter your password and then click **Save**.

General Tab

Workspace Name
This feature allows you to change the current Workspace's name (rename workspace), which was given when the Workspace was first created. To change the name, erase it and replace it with the new name. This does not affect the Workspace's data or database directory.

Default Language

BMC FootPrints Service Core supports multiple languages for display. If multiple languages are available in the current installation, this option allows you to choose a default language for the current workspace. If Use System Default, is selected, then System Administrator's default setting applies for this workspace. This option can be overridden by individual user preferences. BMC FootPrints Service Core includes French, German, Spanish (Latin American), and Portuguese (Brazilian) language packs as part of the basic installation.

For information on multiple language support, please refer to Language under *System Administration*.

BMC FootPrints Service CoreTerminology

The name for records in the current workspace can be changed here. For example, in a Service Desk Workspace, a record might be called "Case", while in a Software Development Workspace, a record might be called "Change Request". Both the singular and plural forms can be specified. The name chosen here is reflected throughout the Workspace. The default name for records is the system-wide preference.

HTML Description Editor

The standard Description input area can be replaced by a WYSIWYG editor that allows the Description to contain HTML formatting, allowing you to make text bold or use different fonts and colors. This feature is compatible with the following browsers: Internet Explorer 5.5+, Firefox 2.0+, and Safari 3.0+. This feature defaults to enabled, and individual agents can disable it or enable it in their preferences. If you would like to disable it for all users in the Workspace (i.e., make this feature unavailable to users), uncheck this option.

Validation of Email Address Fields

If enabled, the values given to email address fields are required to contain the '.' and '@' characters. Email fields that are the primary key for the address book are not validated by this option. In order to apply this to the primary key, set values for the Customer Email Address Format from the Customer Options administration page. To set those values, select Administration | Workspace | Customer Options, then scroll to the Primary Key Options section of the page.

Disable Address Book

If this workspace does not require it, the Address Book feature can be disabled, simplifying many BMC FootPrints Service Core forms for the members of this Workspace. If the Address Book is disabled, the Address Book link is removed from the BMC FootPrints Service Core Toolbar and Address Book fields no longer appear in any BMC FootPrints Service Core forms, including the Create Issue page, Edit Issue page, and Search page.

Disabling the Address Book also affects Customers. BMC FootPrints Service Core cannot link Customer Requests to Customer Address Book contact information if the Address Book is disabled.

NOTE

If there is at least one Customer account for this Workspace and you want Customer Requests linked to their Address Book contact information, the Address Book must be enabled.

Global Issues

The use of Global Issues may be enabled on a Workspace-by-Workspace basis. Change your preference to enable or disable the use of Global Issues for this Workspace. For more information, refer to Global Issues.

Workspace Logo

Each Workspace can have be customized with any image in the top left-hand corner. Browse for the image on your local machine or network. The image's size should not be larger than 180x68 pixels. In addition, the logo image can, optionally, be set as a hyperlink to a URL of your specification. The default image is the system-wide preference. Finally, you can specify text that will appear as a pop-up when the cursor is moved over the logo image in the field labeled If yes, alt text is.

Display Total Number of Matching Issues on Homepage and Searches

When enabled, the total number of matches to a search or Homepage is displayed, e.g., Matches 1 - 20 displayed of 150 total matching Issues. To speed up searches in a large Workspace, it can be disabled to not include the total number, e.g., Matches 1 - 20 displayed.

Splash Screen

An optional splash screen can be displayed when users first log into BMC FootPrints Service Core. This page can be customized (in HTML) to contain Workspace information, updates, important messages, etc. One page can be created just for internal users and, simultaneously, a different page can be displayed for Customers.

To add a splash page:

1. Select Administration | Workspace |Workspace Options | General tab and then go to the Splash Screen/Workspace Info section.
2. Enter plain text or HTML into the box provided. To make this easier, you can create an HTML page in an HTML editor, copy the HTML, and then paste it into this box.
3. Select Agent User to display the page to internal users or Customer to display the page to Customers.
4. Check Splash Screen to have the page displayed in a separate window when users log into BMC FootPrints Service Core.
5. Check Linked on Home page to have a link on the Workspace Homepage to the splash page (the Workspace name in the upper right corner of the home page becomes a link to the page).
6. If you select Linked on Homepage, you have the option to choose an icon to display next to the Workspace name on the home page (this icon links to the splash page).
7. Enter your password and click **Save**.

Issue Page Tab

Number of Columns on Create and Edit Page

The Create Entry and Edit Entry pages display workspace and address book fields in columns to save space. Choosing more columns reduces the amount of scrolling you need to do on these pages. Choosing fewer columns better accommodates large field names and small screen resolutions. Choices are 1, 2 or 3 columns. This option also determines the number of columns displayed on the Details page.

Order Sections

This option allows the Workspace Administrator to change the display order of the sections of the Issue Details pages. The defaults are:

- Title/Priority/Status

- Related Issues
- Solution Approval
- Address Book Fields
- Issue Information
- Attachments

To change the display order of the sections, highlight a section name and use the up and down arrows to reorder them. When you are finished, click GO at the bottom of the page.

NOTE

Disabled fields, such as Address Book, are included in this list. However, if they are disabled they do not appear on the Issue Details screens.

Description Ordering

By default, the most recent Description appears first in the Descriptions section of the Issue Details page. You can change this so that Descriptions are displayed in order with the Oldest Description at the top down to the most recent Description at the bottom. Check the appropriate radio button to select the order in which you want Descriptions displayed.

Drop-down/Multi-select Width

To achieve visual flow and alignment within Issue forms, all user-defined choice fields are drawn with the same fixed width. Sometimes, however, choices for these fields are too long to fit into the drop-down or multi-select and are truncated. If you see this is a problem in your organization, you can configure the width to allow each drop-down and multi-select field to be exactly as long as necessary to accommodate its longest choice. The drawback to this configuration option is that disabling the formatting may disrupt the formatting of the form layout.

Assignee Picker Field Width

You can specify the width of the Assignee Picker field in pixels. The default size is 170 pixels wide. This option is provided because of problems similar to the problems with the Drop-down/Multi-select field width; when options in those fields are too long to be displayed properly, they may be truncated.

Address Book Fields to Exclude

If the Address Book has not been disabled, you can select Address Book fields to exclude from the Create and Edit Issue pages. Excluded fields are also excluded from the Select Contact search. However, these fields are available from the Address Book. Excluded fields can be specified for each workspace that uses an Address Book.

Quick Edit

The Quick Edit feature provides an interface to quickly edit existing issues from the homepage using a limited set of configured fields. Administrators should determine which fields are used the most often by agents and which fields are used the least and configure the Quick Edit feature accordingly. Enabling this feature and configuring it to display only frequently used fields means agents can more quickly conclude their business on an issue page without having to search for the relevant fields. The Quick Edit feature also provides the following Time Tracking functions: enter manual time spent, save automatic time spent, stop the clock, and add comments to the time entered. It does not allow you to time, add or remove time records, or change Start and End date time.

Quick Edit is configured on a workspace-by-workspace basis.

To **enable Quick Edit**:

1. Select Administration from the BMC FootPrints Service Core Toolbar, then select Workspace from the menu.
2. From the workspace administration page, select Workspace Options.
3. Select the Quick Edit tab.
4. Click the Enabled radio button.
5. Enter your password and click **SAVE**.

To **configure fields** for Quick Edit:

Select Administration from the BMC FootPrints Service Core Toolbar, then select Workspace from the menu.

1. From the workspace administration page, select Workspace Options.
2. Select the Quick Edit tab.
3. Click a field that you wish to display in the All Workspace Fields list and then click the Add button. Continue to add fields until you have all the fields you want displayed in the Quick Edit Fields list.
4. If you need to change the order in which the fields are displayed on the Quick Edit page, click on a field and then move it up or down using the arrows to the right of the Quick Edit Fields list.
5. Enter your password and click **SAVE**.

To **remove a field** from the Quick Edit page:

1. Select Administration from the BMC FootPrints Service Core Toolbar, then select Workspace from the menu.
2. From the workspace administration page, select Workspace Options.
3. Select the Quick Edit tab.
4. Click on a field in the Quick Edit Fields list.
5. Click the Remove button. This means the field will no longer be displayed on the Quick Edit page but will continue to be displayed on the full Details and Edit Issue pages. Repeat this procedure until all the fields that you want to remove have been removed.
6. Enter your password and click **SAVE**.

Time Tracking Tab

If the Time Tracking option is enabled, the amount of time spent creating and editing an Issue can be recorded using the time-tracking system. This data can be used to build reports and can be useful in conjunction with agent billing rates.

Available Methods

Set the time tracking method. Options are:

- **Automatic** -A clock, visible on the Issue page, automatically tracks time during Issue creation and editing. That is, when the Issue is open during creation or editing, the clock tracks the amount of time spent on the Issue. When an Issue is submitted, the clock stops. The clock restarts when a new editing session is

initiated. The time is appended for each additional edit and a history is available showing the time spent during each session. This is useful for a call center or service desk where the agents do most of their work at their desks. The pause option (described below) is only available with automatic time tracking. If automatic time tracking is not selected, the pause option is greyed out.

- **Manually Enter Hours & Minutes**- Agents type in the amount of time spent in hours and minutes. This is done for creation as well as for each editing session. The time is appended for each additional edit and a history is available showing the time spent during each session. The Require Time Tracking option (described below) is only available when this method or the Set Start and End Times method is selected. If neither is selected, the Require Time Tracking option is greyed out. You cannot enter hours and minutes with a date that occurs in the past. You would have to set the start date/time and end date/time to do that.
- **Set Start and End Times**- Agents specify when work began and when work completed. BMC FootPrints Service Core calculates the time spent based on the information supplied by the agent. This is done for creation as well as for each editing session. The time is appended for each additional edit and a history is available showing the time spent during each session.
-

Allow Clock to Be Paused

Specify whether a pause button is displayed in the time tracking section of the Issue. The pause button can be used for a more accurate time tracking if, for example, an agent must stop work on one Issue for some period of time, but keeps the session with that Issue active.

Require Time Tracking

This option is only available when the Manual or Start and End Times method of time tracking is used. The options for this function are Optional and Mandatory. If Optional is selected, agents have the option to fill in time spent when creating or editing Issues. If this is selected, the Agent can enter the same start date/time and end date/time, effectively registering zero time spent on the issue. If Mandatory is selected, agents are required to fill in time spent each time an Issue is created or edited. If this is selected, the agent cannot enter the same start date/time and end date/time. Instead, the agent must enter an end date/time that comes after the start date/time.

Time-Tracking Comments

This option adds a comments field below the time tracking data on the Create Issue or Edit Issue pages. The field is limited to 255 characters. Comments in the time tracking field can be viewed through a time tracking report, a custom report, or by clicking the Time Tracking button from the Details page of an Issue.

Start Date/Time

Select whether to always use the current date and time or to manually enter the start date and time. By default, the date and time at which the agent enters the information is automatically recorded by **BMC FootPrints** If the Manually enter start date & time option is selected, the agent can manually fill in the date and time when work began. This is useful if agents often do their work away from **BMC FootPrints** and only update their Issues at a later time.

Add-on Module Option

Sales/CRM Integration

Enable this feature to allow a read-only link to this BMC FootPrints Service Core workspace from a Sales/CRM application. The link displays the Issues for a single Contact.

You should also enter a Key Value in the Key Value field to secure the link. Otherwise, anyone with the correct URL could view the data. The key entered here becomes part of the link that the Sales/CRM application creates. The key can be any combination of numbers and it must be at least 6 characters long.

Example Sales/CRM Links:

With key:

http://cetus/MRcgi/MRentrancePage.pl?PROJECTID=1&ABN=ContactDataHere&EXT_LINK=1&EXT_LINK_KEY=KeyValueHere

Without key:

http://cetus/MRcgi/MRentrancePage.pl?PROJECTID=1&ABN=ContactDataHere&EXT_LINK=1

Toolbar Tab

The Toolbar Tab of the Workspace Options page is where you configure the buttons displayed on the BMC FootPrints Service Core Toolbar. Some buttons are displayed by default. You can select items that are displayed in the sub-menu for the More button of the Toolbar to be displayed as individual buttons on the Toolbar. Items that are selected to be displayed on the Toolbar are not removed from the More sub-menu, so you can still access the buttons from the More sub-menu. In addition, sub-menus for the buttons on the Toolbar are not configured on this page.

Any changes made will affect all Agents that use that Workspace.

By default, the Toolbar displays buttons for:

- Home
- New Issue
- Reports
- BMC FootPrints Asset Core (if BMC FootPrints Asset Core is enabled for the Workspace)
- Administration
- More

NOTE

The BMC FootPrints Asset Core button will only be visible on the Home Page Toolbar if BMC FootPrints Asset Core is enabled for the System and Workspace.

Additional buttons are:

- APM
- Knowledge Base
- Address Book
- Workspace Calendar
- Personal Calendar
- CMDB
- Service Catalog
- Instant Talk

- BMC

NOTE

You can select up to three additional buttons for the toolbar. The BMC FootPrints Asset Core button is automatically added to the toolbar and to the More sub-menu when BMC FootPrints Asset Core is enabled for the Workspace.

To select buttons for the Toolbar, from the Toolbar Tab of the Workspace Options administration page:

1. Click on an item in the Toolbar Options list.
2. Click the Add button. The selected item is displayed in the Selected Options list. Repeat this step until you have selected all the items that you want to make into buttons on the Toolbar.
3. Enter your password and click **Save**.

To remove buttons from the Toolbar, repeat the procedure above, but instead of clicking the Toolbar Options list and then the Add button, click the Selected Options list and then click the Remove button.

Mail Preferences

BMC FootPrints Service Core supports email notification for internal (Agent and administrator) and external (Customer) users. Notification emails are routed directly to the SMTP mail server (defined during installation). Incoming email submissions are also supported. Refer to Email Management for instructions on setting up and using all email options.

User Types

User Types Overview

A "user", in BMC FootPrints Service Core, is anyone who has access to the BMC FootPrints Service Core system. This may include a service technician who is assigned to work on a router, an employee client who is reporting a problem with their PC, an external customer who has a question about the organization's products and services, or a manager who needs to run a report on service desk activity. These users are just examples; BMC FootPrints Service Core can be configured to work for virtually anyone who needs to track Issues.

A number of different user types are supported in the system. Each user type is intended for users with different needs. As described in the introduction to this manual, BMC FootPrints Service Core users are categorized within two broad categories:

- **Agent Users**—This type of account is intended for internal users, such as Service Desk agents, customer service representatives, engineers, and administrators. Depending on the permission level, these users can create, update and close Issues, run reports and queries on the database, configure workspaces, etc. They are also sometimes referred to as "Individual Users".
- **Customer Users**—This type of account is intended for employee customers and external customers. These users can submit Requests to the system, track the status of their Requests, search the Knowledge Base, and may have limited update privileges to their own Requests, depending on the type of license purchased and the permissions for that user.

Permission Levels Overview

As explained earlier, BMC FootPrints Service Core uses the concept of "roles". Roles help to define and limit the permission level of users. BMC FootPrints Service Core comes with a number of built-in roles, with different privileges

for users with different needs. Custom roles can also be created by an administrator to define permissions for different groups of users.

Differences between Individual and Customer User Roles

Below is a table outlining some of the differences between most of the built-in agent and customer role types. This should help to determine which types of license are needed for your organization. The permissions specified here are the maximum permissions allowed for each built-in role. Many of the options can also be restricted by role.

	Built-in User Roles						
	Individual			Customer			
	System Administrator	Project Administrator	Agent	Read KB	Read KB/Request	Read/Submit	Read/Submit/Edit
License Type	Fixed	Fixed or Concurrent	Fixed or Concurrent	Unlimited Customer License	Unlimited Customer License	Unlimited Customer License	Unlimited Customer License
Login	Unique ID & password	Unique ID & password	Unique ID & password	Shared ID & password	Unique & Shared ID & password options	Unique & Shared ID & password options	Unique & Shared ID & password options
Read Issues	Yes (all projects)	Yes (per Project)	Yes (per Project)	No	Own Issues and optionally Issues for Org. Unit	Own Issues and optionally Issues for Org. Unit	Own Issues and optionally Issues for Org. Unit
Create Issues	Yes (all)	Yes (per Project)	Yes (per Project)	No	Own Issues and optionally Issues for Org. Unit	Own Issues and optionally Issues for Org. Unit	Own Issues and optionally Issues for Org. Unit
Assign/Assigned to Issues	Yes	Yes	Yes	No	No	No	No
Edit Issues	Yes (all)	Yes (per Project)	Yes (must be assigned)	No	No	No	Yes (own Issues only)
Close Issues	Yes (all)	Yes (per Project)	Yes (must be assigned)	No	No	No	Yes (own Issues only)
Global Issues	Create, link customer Issues	Create, link customer Issues	Create (optional), link customer Issues	No	No	Subscribe (optional)	Subscribe (optional)
Quick Issues	Create templates, create Quick Issues	Create templates, create Quick Issues	Create Quick Issues	No	No	Create limited Quick Issues	Create limited Quick Issues
Queries and Reports	Yes (all)	Yes (per Project)	Yes (per Project)	No	Only on own Issues, optionally Issues for Org. Unit	Only on own Issues, optionally Issues for Org. Unit	Only on own Issues, optionally Issues for Org. Unit
Knowledge Base	Read all, add, approve, administer FAQs	Read all, add, approve, administer FAQs	Read all, add	Read public KB	Read public KB	Read public KB	Read public KB
Calendar & Scheduling	Read and write Personal and Project	Read and write Personal and Project	Read and write Personal, read Project (option to write Project)	No access	No access	No access	No access
Address Book	Read, write (if local AB)	Read, write (if local AB)	Read, write (if local AB)	No	No	No	No
Change Management	Create processes, approve	Create processes, approve	Approve	No	No	No	No
Project Membership	All Projects	One or more specified Projects	One or more specified Projects	One or more specified Projects	One or more specified Projects	One or more specified Projects	One or more specified Projects
Web-based Project Admin	Yes	Yes	No	No	No	No	No
Web-based System Admin	Yes	No	No	No	No	No	No

Differences between Individual and Customer Users

Managing Users - Workspace vs. System Administration

This manual contains many topics on managing users in BMC FootPrints Service Core. There are two main categories for User Management: Workspace and System.

Workspace-wide User Management

- **Agents**
  - Add Agents—Add new Agents/administrators to this workspace.
  - Edit Agents—Edit the properties of Agents.
  - Teams—Create and edit teams of Agents for assignment in this workspace.
- **Customers**
  - Add Customers—Add new Customers to this workspace.
  - Edit Customers—Edit the properties of Customers.
  - Customer Options—Configure options for Customers.
- **Roles**
  - User Roles—Define and manage permission roles for Agents and Customers.

System-wide User Management

- User Management—Change user's password, add or delete user to/from**FootPrints Service Core**.
- Auto Add Customers—Allow Customers to be automatically.
- Configure Authentication—Select password authentication type:**FootPrints Service Core**, Windows, UNIX or LDAP.
- Customer Forgot Password—Allow customers to request a password reminder email.
- User Roles—Create and manage system default roles for Agents and Customers.
- License—View license usage, including users' workspace membership and roles.

Other

- Customer Self Service—This chapter focuses on the various user options for Customers in BMC FootPrints Service Core.

Users & Roles

About Users

This set of functions is intended for user management on a workspace-wide basis. There are also some system-wide user management options; these are detailed in the chapter on System Administration.

The workspace-wide user options include:

- **Agents**
  - Add Agents—Add new Agents/Administrators to this workspace.
  - Edit Agents—Edit the properties of Agents.
  - Teams—Create and edit Teams of Agents for assignment in this workspace.
- **Customers**
  - Add Customers—Add new Customers to this workspace.
  - Edit Customers—Edit the properties of Customers.
  - Customer Options—Configure options for Customers.
- **Roles**
  - User Roles—Define and manage permission roles for Agents and Customers.

Agents

About Agents

Agents are the standard, default users of BMC FootPrints Service Core. These users can potentially create Issues, be assigned to Issues, search and add to the Knowledge Base, run Reports, and more. The term "Agent" is used to refer to both a type of license and to a specific, built-in user role. These properties and other features of Agents are explained in the topics below.

- Agent User Types—Explains the different types of Agents.
- Add Agents—Add new Agents and existing Agents from other workspaces to the current workspace.
- Editing Agents
  - Edit Agent—Change a user's Role, password, etc.
  - Delete Agent—Remove the user from the current workspace.
  - Billing Rates—Define multiple billing rates for the user to be used in conjunction with the Time Tracking feature.
  - Change to Customer—Make the Agent user a Customer in the current workspace.

Agent User Types

The term "Agent" in BMC FootPrints Service Core is used to refer to both a type of license, and to a specific built-in user Role that is applied to users.

License

Agent users require a license. There are two kinds of licenses that Agents can have:

- **Fixed**—The user is assigned a single license, and logs into BMC FootPrints Service Core with his own unique ID and password. Only one user can use this type of license. The license is always available to the user.
- **Concurrent**—A concurrent license can be used by an unlimited number of people, but only one can be logged in at a time. Each user sharing a concurrent license has a unique ID and password, but can only log in if a concurrent license is available. If five concurrent licenses are purchased and twenty-five people are

sharing those licenses, only five individuals can be logged in to BMC FootPrints Service Core at one time. When the sixth person tries to log in, that person receives a message stating that there are no available licenses. When one of the five users who is logged in logs out of BMC FootPrints Service Core, a license is freed. Refer to Concurrent Licenses under *System Administration* for more information.

NOTE

The Extended Starter Pack is required to add concurrent licenses, or to add more than fifteen named (fixed) licenses. Please contact your salesperson for details on obtaining the Extended Starter Pack.

Role

Role refers to the level of access to the BMC FootPrints Service Core system that is allowed to the new user. FootPrints comes with a number of built-in roles. In addition, the Workspace Administrator can create custom Roles to give different levels of access to different users. The Roles listed here apply to "Agent" users. Customers have their own Roles.

Built-in Agent Roles

- **Agent**—A standard, full-strength user. Common uses for this user type include: Help Desk Agent, Call Center Agent, Developer, Engineer, Manager and Workspace Member. Agent users have the ability to use all of the basic functions of BMC FootPrints Service Core, including creating, viewing, editing Issues, and running queries. Can use a fixed or a concurrent license.
- **Workspace Administrator**—In addition to Agent User privileges, the Workspace Administrator can administer a workspace, including adding custom fields, setting options, and adding users. Can use a fixed or a concurrent license.
- **System Administrator**—In addition to Agent User and Workspace Administrator privileges, the System Administrator has control over the whole BMC FootPrints Service Core system, including administration of any workspace, adding new workspaces, and administering licenses.

NOTE

System Administrators must have a fixed license.

Refer to User Roles for more information on customizing Role properties.

Add Agents

To add a new user to a Workspace, select Administration | Workspace | Users | Add Agents from the BMC FootPrints Service Core Toolbar. From the resulting page, you can create new Agent and administrator users, as well as add existing BMC FootPrints Service Core users to the current workspace.

Add a New User to the Current Workspace

NOTE

If the user is already a member of another BMC FootPrints Service Core workspace, refer to Add an Existing BMC FootPrints Service Core User to the Current Workspace.

1. Enter the new user's name. When you enter the name, use the full name, e.g., Jill Smith.
2. Enter a BMC FootPrints Service Core user ID. This is the ID used to log into BMC FootPrints Service Core, e.g., jsmith. The user ID must be a single word with no spaces.
3. Enter the user's email address.

4. Select a Role for the user.
5. Optionally select a Supervisor for the user from the list of agents in the workspace. Supervisors can be used to designate where emails are sent when escalating Issues.
6. If the System administrator has defined only a single authentication method, and it is a non-BMC FootPrints Service Core authentication method, be sure that the user ID you select corresponds to a user ID on the system against which you are authenticating. If two authentication methods are available, you can select the method the agent is to use to log into BMC FootPrints Service Core. A BMC FootPrints Service Core user ID is required even if you are using non-BMC FootPrints Service Core authentication.
7. Select a password for the new user (this is requested twice for accuracy). If you hover the mouse over the word "Password", the Password complexity rules are displayed. Passwords must conform to the password complexity rules.
8. Enter a value for Billing Rate if you want to calculate a fee based on time spent by the user working on Issues. This is the hourly rate in dollars. This field is optional.
9. If the system supports both concurrent and fixed licenses, there is a choice to select the type of license for the user.
10. Check the Accessibility checkbox if the Agent that you are adding is vision-impaired and will be using a screen reader.
11. Enter the user's time zone. This is an optional field.
12. Enter a date format. This is an optional field.
13. Enter a language preference. This is an optional field.
14. Enter your password and click **Save**.

Add an Existing BMC FootPrints Service Core User to the Current Workspace

1. Select the users you want to add from the Other FootPrints Agents list (hold down the CTRL key to highlight multiple users).
2. Enter your BMC FootPrints Service Core password.
3. Click the **Save** button. The users are added to the Users who belong to this workspace list.

NOTE

Adding an existing Agent, Workspace Administrator, or System Administrator to a workspace does not require an additional license. A user with a fixed license can participate in any number of workspaces within a single BMC FootPrints Service Core installation using the same license.

Adding Users to Multiple Workspaces

An Agent or Workspace Administrator can belong to multiple workspaces. You can add a user to a new workspace from the Add Agent User page for that workspace. System Administrators are automatically members of all BMC FootPrints Service Core workspaces. Adding an Agent to multiple workspaces does not affect the number of licenses available. That is, an Agent who is a member of multiple workspaces still only uses one individual license.

Editing Agents

Edit Agents

The following options are available from the Edit Agent page:

- Edit Agent User- Change a user's role, password, etc.
- Delete Agent- Remove the user from the current Workspace.
- Billing Rates- Define multiple billing rates for the user to be used in conjunction with the Time Tracking feature.
- Change to Customer- Make the Agent a Customer in the current Workspace.

Edit Agent User

The Edit Agents page includes options to edit a user's permission level, billing rate, password, etc. In addition, individual users can change many of their own preferences from the Preferences screen.

1. Select Administration | Workspace on the BMC FootPrints Service Core Toolbar, then select Edit Agents from the main frame in the Users & Roles section.
2. Select the user from the Users drop-down list, which displays a list of all users in the workspace.
3. Click **GO**.
4. An Edit User page is displayed, with options as follows:
   - **User Role**—Select a new role for the user for the current Workspace and specify the type of license the Agent is to use.
   - **Billing Rate**—Optionally assign the user one or more hourly billing rates or edit existing rates (refer to Billing Rates for complete details on editing this portion of the page).
   - **Agent Preferences**—These options can also be changed by the Agent on the Preferences page.
     - **Name**—Change the user's display name (does not affect the user ID). Replace the current name in the text box.
     - **Authentication**—If the System Administrator has defined two authentication methods, you can change the method the agent uses to log into BMC FootPrints Service Core.
     - **Password**—Change the user's BMC FootPrints Service Core password. The password must be entered twice. If you hover the mouse over the word "Password", the Password complexity rules are displayed. Passwords must conform to the password complexity rules.
     - **Primary Email Address**—Change the user's email address for BMC FootPrints Service Core email notification. The option must be checked to receive email.
     - **Pager Email Address** (optional)—Optionally enter a separate email address for a pager. This address can be used for escalation notification. Check this option to receive regular notification email at this address.
     - **Wireless Email Address** (optional)—Optionally enter a separate email address for a wireless device. This address can be used for escalation notification. Check this option to receive regular notification email at this address.
     - **Supervisor** (optional)—Optionally designate a supervisor to whom the Agent reports.
     - **Default Workspace**—If the user is a member of more than one workspace, change the default workspace that is displayed when logging in to BMC FootPrints Service Core. To change the default workspace, choose from the drop-down box.
     - **User's Local Time Zone** (optional)—Optionally enter a time zone specific to the user.
     - **Date Format** (optional)—Optionally enter a date format for this user.
     - **Preferred Language** (optional)—Optionally enter a preferred language for this user.

- **Unlock Account**—If an agent has been locked out of his or her account, a checkbox may be displayed to allow the workspace administrator to override the lockout. Check the checkbox to override the lockout, which allows the agent to once again log in to BMC FootPrints Service Core. While locked out, an agent cannot log in to BMC FootPrints Service Core, but can create or edit an issue via email.

5. Enter your administrator password and click **Save**.

Delete Agent User

To delete an Agent from a Workspace:

1. Select Edit Agents under Administration | Workspace | Users & Roles on the BMC FootPrints Service Core Toolbar.
2. Select the user from the Users drop-down list.
3. Click the checkbox to delete the user from the current workspace. A confirmation is displayed.
4. Enter your password and click **GO**. A confirmation is displayed.
5. If the user has assignments in the current workspace, an option to re-assign the user's Issues is displayed. There are three choices:
   - **Leave assignments as-is**—The Issues remain assigned to the (deleted) user. When the Issues are viewed, the user ID (not user name) is displayed. The Issues can be re-assigned individually when they are edited.
   - **Unassign the deleted user from assignments**—The user is no longer assigned to the Issues. If the deleted user was the only assignee on an Issue, the Issue becomes unassigned. If the Issue was assigned to other users (or to a Team), the Issue remains assigned to the other users or Team.
   - **Reassign assignments to**—Select a user or Team to whom you reassign the deleted user's Issues. Hold down the CTRL key to select multiple users.

     In addition, you can limit the re-assignment or unassignment to certain statuses. For example, you may only want to re-assign Active Issues (Open, Pending, etc.)
   - **Check here to disable the default of updating the Date and Time of Last Edit when unassigning or reassigning these Issues**—Normally, when an assignment is changed for an issue, the Last Edit date and time are updated. Check this box so that, in this circumstance, the Last Edit date and time are not updated when deleting this user.
6. Enter your password and click **Save**. If you re-assigned or unassigned Issues, it may take a few minutes for the changes to take effect.
7. To delete the user from all workspaces, you must go to the System Administration User Management page.

NOTE

If an mail preferences are configured to send an agent a notification when a customer opens a new request or when an incident/problem report is created, removing the agent from the workspace or removing the agent's account will not change that configuration. Instead you must administer the Mail Preferences page and remove the agent from the notifications list(s).

Billing Rates

Multiple billing rates can be defined for each Agent in BMC FootPrints Service Core to be used in conjunction with the Time Tracking feature.

1. Select Administration | Workspace | Edit Agent from the BMC FootPrints Service Core Toolbar.
2. Select an Agent and click **GO**. The existing hourly billing rate (if any) is displayed.

3. Enter a new hourly billing rate (in dollars) in the box provided.
4. Enter a description in the box provided, if desired. For example, you might enter “Overtime”, “Holiday”, “On-Site”, etc.
5. Click Add to add the new billing rate.
6. Use the up and down arrows to re-order the billing rates for this user.
7. Use the Edit and Delete options to change or remove a billing rate.
8. When you are finished, enter your password and click **Save**.

Hereafter, when the Agent creates or edits an Issue, a drop-down box with the available billing rates is displayed. It defaults to the first billing rate in the list. The user can select the appropriate billing rate for the work done. The Time Tracking and billing amounts are calculated based on the rate selected.

Change to Customer

When an existing Agent is added to a new Workspace, by default, the Agent receives the same user role that he has in his default (or first) Workspace. It is possible to make an Agent (or user with another custom Agent-type role) a Customer in another Workspace. This allows the user to act as an Agent in their default workspace, creating Issues, getting assigned to Issues, adding to the Knowledge Base, etc., while allowing him to submit Requests as a Customer in another workspace.

To make an Agent a Customer in the current Workspace:

1. Select Edit Agents under Administration | Workspace | Users & Roles on the BMC FootPrints Service Core Toolbar.
2. In the Change to Customer section at the bottom of the Edit Agent page, select a Customer role for the user.
3. Enter your password and click **Save**.

The user is now a Customer in the current Workspace, but still an Agent in his default Workspace.

NOTE

When an Agent changes to a workspace in which he is a Customer, he can switch back to a workspace in which he is an Agent without having to log in again. If the user is a Customer in multiple workspaces, he must first switch back to a workspace in which he is an Agent to have access to the other Customer workspaces. This prevents conflicts with Address Books that have different primary keys.

Restrictions on Changing Agents to Customers

- An Agent cannot be a Customer in his default workspace. You must change the default workspace before you can change the Agent's role to a Customer.
- System Administrators can never be changed to a Customer in any workspace.
- If you want to change the user back to an Agent, you must first remove the user from the workspace (from the Edit Customer page) and then re-add him as an Agent.
- When an Agent switches to a workspace in which he is a Customer, the Agent must log out and log in again to switch back to being an Agent.

NOTE

If a user is a customer in one Workspace and an Agent in another Workspace, the Agent Workspace will always became that user's default Workspace. Also, when you add a customer to a Workspace and set the role to an Agent role, the new Workspace will be automatically selected as the default.

Teams

About Teams

For assignment purposes, Agents can be organized into Teams, such as “Application Support”, “Network Support”, “Development”. Issues can be assigned to the whole Team or to individual users within the Team. This allows an Agent to assign an Issue to a group of people, such as a development Team, without needing to know the individual person who will work on the Issue.

Various assignment options are available to handle automatic Team assignments, including round-robin assignment. Issues can be reported on by Team and custom user roles can be created to handle access to Issues by members of a Team. Agents can be organized into Teams by selecting Administration | Workspace | Teams from the BMC FootPrints Service Core Toolbar. The Agents must first be created and be members of the Workspace before they can be added to a Team. Round robin and the other team assignment rules are only applied if no member of that team is already assigned to the issue or is being assigned to the issue along with the team.

The following topics are in this section:

- Creating Teams
- Using Teams
- Editing Teams
- Deleting Teams
- Managing Team Membership

Creating Teams

To organize users into Teams:

1. Select Administration | Workspace | Teams from the BMC FootPrints Service Core Toolbar.
2. Select the **GO** button to create a new team. The Create a New Team page is displayed.
3. Enter a name for the Team in the Team Name field. Example names might be "Developers" or "Level 1 Support Team".
4. Select members for the Team from the Available Agents multi-select field. The individuals listed in the Available Agents field include the Workspace's administrators. To select a member, highlight a user's name and click the right arrow button to add the user to the Members field. An unlimited number of users can be added to a Team and users can belong to multiple Teams. The pool of potential team members comes from the list of agents who are members of the current workspace.
5. If you wish to designate someone as a Team leader, after you have selected the Team members, select the Team leader from the Team Leader drop-down field.

NOTE

To see a list of current Team Membership for all teams, click the link for Current Teams.

6. You can select the assignment method for Team members on this page as well. The options are:
   - **Leave assigned to Team**—This is the default. When a Team is assigned to an Issue, the Team name appears in the Assignee field for that Issue (on the Homepage, in reports, etc.) Individual Team members can still be assigned by taking the Issue or via auto-assignment, escalation, or manual assignment.
   - **Assign individual member(s)**—Select one or more Team members to assign to each new Issue that is assigned to the Team. The user(s) selected here are assigned to every new Issue that is assigned to the

Team. If you want different Team members assigned to Issues based on another field, such as Problem Type or Location, use the Auto Assignment or Escalation feature.

- **Assign all members**—If this option is selected, all Team members are assigned individually to each new Issue that is assigned to the Team.
- **Dynamically assign based on round-robin rule**—When a Team is created with this assignment option, the first Issue assigned to the Team is assigned to the first individual in the Team list. Each subsequent issue is assigned to the next Team member, and so on, restarting at the first position when the last person in the list has been assigned. This option is applied to Issues that are assigned to a Team manually, via auto-assignment, or via an Escalation rule. This is useful for balancing the workload of Agents within a Team.
  - Agent availability within the round-robin assignment is determined by one or both of the following options:
    - **Use agent availability based on an assignment time or a date field**—If selected, the Agent is considered available if shown as available in the Availability Matrix for the time and date selected here (for example, "Work Scheduled Date"), including Agent Work Schedule and Workspace Calendar appointments to which the Agent is invited. If "Assignment Time" is selected, the time that the auto-assignment rule is applied is used to determine availability.

NOTE

When selecting a date in a round-robin Team assignment, the date must be specified in the Workspace's work schedule.

    - **Use personal appointments in determining Agent availability**—In addition to taking the Agent's Work Schedule and Workspace Calendar appointments into account, appointments that only appear on the Agent's Personal Calendar are taken into account when assigning if this is checked.

NOTE

Assignment options are not applied until the Issue is actually submitted.

NOTE

Additional assignment options are available using the Auto Assign and Escalation features. To use round-robin assignment in conjunction with these, enable the options above and select the Team name in the Auto-assignment or Escalation rule.

7. Select how email notifications are to work in the Member Privileges section of the page. There are three options:
   - **Always**—All Team members receive email notification about Issues whether they are assigned only to the Team or to the Team and one or more members of the Team.
   - **Only when no individual agents are assigned**—Team members only receive email notification about Issues when the Issues are assigned to the Team only and not assigned to individual Team Members.
   - **Never**—Team members do not receive email notification about Issues assigned to the Team.

     The frequency and content of the emails sent are regulated by the Workspace Mail Preferences. If the Workspace Mail Preferences are set to send mail to Agents on Open and Closed statuses, but not in Pending Status, and Always is selected in the option above, then Team members receive email notification about all Team Issues when they are in Open and Closed statuses, but not when they are in Pending status.

     Agents assigned individually to an Issue receive email according to the Workspace Mail Preferences, regardless of the rule above or whether the Team is assigned.
8. When you are finished configuring the Team, enter your password and click **Save**.

The Team is now created and Issues can be assigned to Teams from the Create and Edit Issue pages. Additional Teams can be created using the same method, with users as members of only one Team or multiple Teams.

Using Teams

Once Teams are configured, it affects the Assignees field throughout BMC FootPrints Service Core, including on the Create and Edit Issue pages, the Search and Report pages, and the Escalation page. Agents are now organized by Team in those dialogs and Issues can be assigned to both Teams and individual users.

Some Features of Teams

- **Viewing Issues**—Users can view the Issues assigned to their Team from the Display drop-down on the Homepage. If a user belongs to multiple Teams, an option for each Team is available.
- **Permission within Team**—Users can be confined to viewing Issues, taking Issues, editing Issues, etc., based on their Team membership via user roles. Refer to User Roles and How Roles and Teams Work Together for more information.
- **Email Notification**—When an Issue is assigned to a Team (refer to *Assignments with Teams* below), if the option is configured to send email to Team members, all users receive an email.
- **Taking**—When a user takes an Issue that is assigned to the Team, the Team can still be assigned. Although the user is responsible for working on the Issue, the Issue also shows up on reports and searches for the whole Team.
- **Multiple Teams**—Users can be members of multiple Teams.
- **Searches and Reports**—When Teams are configured, you can search and report on Issues by Team or by user. Refer to Advanced Searches and Reports for more information.
- **Assignment and Teams**—Refer to *Assignments with Teams* below.

Assignment with Teams

To assign an Issue to a Team or user when Teams are enabled:

1. On the Create Issue page, each Team is listed in the Workspace Members field. Select a Team to expand it. The first option is always to Assign Team. All Team members are listed under this option.
2. To assign the Issue:
   - **only to the Team**, select Assign Team and click the right arrow. The Team name is now listed under Assignees.
   - **to a user from the Team**, select the user's name and click the right arrow. Notice that the Team name is now listed under Assignees and the user's name is listed, indented, under the Team name.

NOTE

Multiple users can be assigned from the same Team.

3. To assign users from another Team, click the Team name again in the left field to shrink the list, then select another Team to expand it and assign users from the new Team.

In addition to being listed under their Teams, all Workspace members are listed under the heading of Individual Users. Assign a user from this heading when you want to assign an Issue without it showing up as an assignment for a Team. Users who are not members of any Team are also listed here.

While a user can belong to multiple Teams, he can only be assigned to an Issue individually once.

Other Assignment Options

In addition to the manual assignment described above, a number of options are available for assignment of Issues to Teams and Users:

- **Default Assignment**—This determines who is initially assigned when an Agent first opens a new Issue. This option can be overridden manually by the user or automatically by the system. This is configured on the Administration | Workspace | Auto Assign page. Options include assignment to the Issue creator, assignment to the creator's Team, assignment to the creator's Team and the creator, assignment to none, and assign to all. Refer to Auto Assign for more information.
- **Team Assignment Options**—Default options can also be set on the Create/Edit Team page. These options include leaving the Issue assigned to Team only, assign to one or more individual members (e.g., assign new Issues for the Team to the manager), assign all members, and round-robin.

NOTE

These options are not applied until the Issue is actually submitted. Refer to Creating Teams for more information.

- **Auto Assign**—Teams and users can also be assigned to Issues automatically by the system using the Auto Assign feature, configured under Administration | Workspace | Auto Assign. This allows you to assign an Issue automatically to a Team or user based on the value selected in a drop-down field. For example, if Problem Type is Hardware, assign the Hardware Team. Auto-assignment occurs dynamically on the Create Issue page when the user selects the value from the drop-down. Refer to Auto Assign for more information.
- **Escalation**—For more complex assignment rules involving multiple criteria, Escalation rules can be used. A Team or user can be assigned to an Issue based on any combination of criteria, including Status, Priority, Contact and Workspace fields, and so on. Escalation rules are applied at the time the Issue is submitted (for instant Escalations) or after a specified period of time (for time-based Escalations). Refer to Escalation for more information.

Editing Teams

Once a Team has been created, the properties of the Team can be changed at any time, including Team name, membership, email and assignment rules.

To edit a Team:

1. Select Teams from the Workspace Administration page.
2. Under Edit Team, select the Team from the drop-down and click **Edit**.
3. Make any changes desired to the Team properties. Refer to Creating Teams for details on the fields of this page.
4. When you are finished making changes, enter your password and click **Save**. The changes to the Team take effect immediately.

Deleting Teams

Once a Team has been created, it can be deleted from a workspace. This does not remove the members of the Team from the Workspace. It only deletes the Team name and the assignment option for that Team.

To delete a Team:

1. Select Teams from the Workspace Administration screen.
2. Under Edit Team, select the Team from the drop-down menu and click **Delete**. A confirmation message is displayed.

3. To continue, enter your password and click **Save**. The Team is deleted and no longer is listed in the Assignees list on any pages.

Managing Team Membership

Once you have created some Teams, you may want to re-assign users to different Teams as their roles change. Assigning Team membership can be done in two ways:

- Modifying a single Team at a time from the Edit Team page
- Modifying all Teams at once from the Team Setup page under Change Team Membership

On the Team Setup page in the Change Team Membership section, there is a dialog that allows you to manage the membership of multiple users and Teams for the Workspace.

All Workspace members are listed in the multi-select field on the left. Current Team members are listed in the field on the right for the Team selected in the drop-down.

To assign users to Teams:

1. From the Existing Teams drop-down menu, select the Team to which you want to assign users. The current Team members are listed in the Members field on the right.
2. To:
   - **Add a user to a Team**, select a name in the Nonmembers field on the left and click the Add Member button. The user's name is displayed in the Members field.
   - **Remove a user from a Team**, highlight the name in the Members field and click the Delete button. The user is no longer listed as a Team Member.
3. To assign users to another Team, select another Team from the Existing Teams drop-down list and repeat steps 1-2.
4. To see a list of all Teams and their members, select the option to Display all Teams above the dialog boxes (the **here** link). Each Team is displayed with the Team members listed along with their user roles.
5. Enter password and click **Save** to complete the page.

Users can be members of multiple Teams. User permissions are determined by their User Role for the Workspace, which is not affected by Team membership.

Customers

About Customers

Customers have access to many self-service features. Depending on their permission level, Customers can submit Requests, track the status of their Requests, search the Knowledge Base, etc. The Customer user type is appropriate for both employee and external Customers of your organization.

Customers have a number of components:

- **User Account**—This is the ID and password of the Customer. Users can have unique IDs and passwords or they can share a generic ID and password. This record is kept in the password file.
- **Contact Record**—The contact information for the user is kept in the **FootPrints** Address Book (or dynamically read from an LDAP or other External Database/SQL source). The data kept depends on the fields in the Address Book.

- **Primary Key**—The Customer User Account and Contact record are linked via the Primary Key field. This is a field in the Address Book, such as User ID or Email Address, that uniquely identifies the user.
- **Role**—The permission level for the user. Built-in and custom roles are available.

Roles

Role refers to the level of access to the BMC FootPrints Service Core system that is allowed to the user. BMC FootPrints Service Core comes with a number of built-in Customer roles. In addition, the Workspace Administrator can create custom roles to give different levels of access to different users. The roles listed here apply to Customers. Agents have their own roles.

Built-in Customer Roles

- **Read KB**—View and search the Knowledge Base.
- **Read KB/Requests**—View and search the Knowledge Base and check the status on Customer's own Requests (entered by an internal Agent user, or via email).
- **Read/Submit**—In addition to Read KB/Requests functionality, can submit Requests via the web interface. This is the most popular Customer role.
- **Read/Submit/Edit**—In addition to Read/Submit functionality, these users have limited edit privileges of their own Requests (only available if the Customer Edit license is purchased).

Refer to User Roles for more information on customizing role properties.

Topics in this section:

- Add a New Customer
- Add Existing Customer to the Current Workspace
- Unique Customer Account
- Shared Customer Account
- Shared Login Screen
- Edit Customers
- Customer Options

Add a New Customer

To add a new Customer to a BMC FootPrints Service Core workspace, select Administration | Workspace | Customers | Add Customers from the BMC FootPrints Service Core Toolbar. From this page, you can create new Customers as well as add existing BMC FootPrints Service Core users to the current workspace.

TO ADD A NEW CUSTOMER TO THE CURRENT WORKSPACE

1. Select the account type. A Shared account can be used by many people (who identify themselves with a unique key, such as email address). A Unique account is intended for one user only and allows you to specify a unique password for the user.

NOTE

If the user is already a member of another BMC FootPrints Service Core workspace, refer to Add Existing Customer User to Current Workspace.

2. Create a BMC FootPrints Service Core user ID. This is the ID entered to log into BMC FootPrints Service Core. The format of the ID depends on the account type:
   - **Shared account**—The ID can be any string with no spaces, such as “customer”, “guest” or “accounting”.
   - **Unique account**—The ID must be in the format of the Primary Key for the Address Book associated with the current Workspace. This is set under Address Book Field Maintenance. For example, if Email address is the primary key, the ID should be in the form of the user’s email address, e.g., jsmith@widget.com. If the Address Book field Customer ID is the primary key, then the ID might be in the form jsmith.

NOTE

If the System administrator has defined only a single authentication method and it is a non-BMC FootPrints Service Core authentication method, be sure that the user ID you select corresponds to a user ID on the system against which you are authenticating. If two authentication methods are available, you can select the method the agent uses to log into BMC FootPrints Service Core.

3. Select a Role for the user.
4. Select the customer's authentication method
5. Enter a password for the new user (this is requested twice for accuracy). A password is not required if the authentication method is not BMC FootPrints Service Core authentication.
6. Enter customer preferences for time zone, date format, and language.
7. Enter your password and click **Save**.
8. If a Unique user is created, a Contact Information page is displayed. Enter the contact information for the user. This creates a contact record in the Address Book. If the user already has a contact record in the Address Book (based on their primary key), the page is not displayed, but the user account is automatically linked to that contact record via the primary key.

Customers can also be automatically added to the system from a network password or LDAP source, or they can create their own accounts. These features are detailed in the topic on Auto Add Customers under *System Administration*.

Add Existing Customer User to Current Workspace

Customers can belong to multiple Workspaces. Customers from other Workspaces can be added to the current Workspace from the Add Customer page. The Workspaces must share the same Address Book and primary key.

To add an existing Customer to the current Workspace:

1. Select Administration | Workspace | Customers | Add Customers from the BMC FootPrints Service Core Toolbar. Users from other Workspaces can be added in the top section of the page.
2. If you know the user ID, enter it in the field provided.
3. To browse from a list of users, click Select Customer. A pop-up window is displayed. If there are a large number of Customers in the system, the pop-up window may take a long time to display.

   There are three options in the pop-up:
   - **Unique Customers**—Customers from other Workspaces with unique IDs.
   - **Shared Customers**—Shared, generic customer IDs.
   - **Agents**—Agents from other Workspaces can be added as Customers to the current workspace. Agents added as Customers from this dialog receive Unique Read/Submit Customer access. This can be changed later under Edit Customer.

NOTE

Only Customers from Workspaces that share the same Address Book with the current Workspace are listed.

4. To add a user to the Workspace, click the user ID in the pop-up. It is added to the User ID dialog box. Multiple IDs can be entered space-separated either manually or by using the Select Customer dialog.
5. When you are finished adding Customers to the Workspace, enter your password and click **Save**.

Notes on Customers in Multiple Workspaces

- Customers who belong to multiple Workspaces can change Workspaces using the Change Workspace icon on the BMC FootPrints Service Core Toolbar. To give Customers a drop-down of available Workspaces when they first log into BMC FootPrints Service Core, enable the Workspace Menu Customer option.
- If you need to associate an existing Workspace with an existing Address Book from another Workspace in order to allow Customers to access both Workspaces, email Support for instructions on linking the new Workspace to another Address Book.
- Adding or removing a Unique Customer account that was created with the Auto Add Customer feature removes that user from the group of Customers who were Auto-Added, including any defaults set for the Auto-Added Customers. Refer to the chapter on System Administration for more information on this option.

Unique Customer Account

To link a unique user ID to the user's contact information in the Address Book, the ID entered here must match the unique key for that user in the Address Book for the current Workspace. If the user does not have an entry in the Address Book, the following occurs the first time they log in:

- If using the BMC FootPrints Service Core Address Book, the user has the opportunity to enter contact information the first time they submit a Request.
- If using the LDAP Address Book option, the user has no opportunity to enter contact information. Ensure that the user exists in your Contact database (MS Exchange, etc.) before adding him or her to BMC FootPrints Service Core.
- If NT or UNIX authentication is enabled and the user ID is not found in the NT domain or the UNIX password file, the user cannot log in. Ensure that the user exists in the domain before adding him or her to BMC FootPrints Service Core.

Shared Customer Account

Shared Customer accounts do not require a particular ID associated with Address Book contact information. The shared account is used by multiple users and is intended for casual users of the system. Common IDs associated with a shared account include "guest", "customer", "employee", etc.

After logging in with a shared Customer ID and password, the Customer is prompted for his or her unique key, such as email address. The contact information associated with that unique key is displayed when the user submits a new Request. If this is the first time the user has entered the system, he or she can create a new Address Book contact record.

One exception to this rule is the Customer Read KB user role. Because these users cannot submit Requests (they only have permission to search the Knowledge Base), there is no need for them to enter contact information. This user type is normally created as a shared account.

The shared account is not recommended in a workspace where an LDAP Address Book is used. In addition, if NT, LDAP, or UNIX password authentication is enabled, the shared ID must exist in the domain password file.

Shared Login Screen

Users accessing BMC FootPrints Service Core with a shared Customer account use the same login page by default as other users. When the shared ID and password are entered, they are taken to a second page that prompts them for their primary key (User ID, email address, etc.) If you are on a secure intranet or do not need to password protect the Customer Self-service interface, a special login page can be used for shared Customers only. This special login page only prompts the user for the primary key; the shared ID and password are embedded in the page.

NOTE

Much of this functionality can be accomplished using the Customer Service Portal.

NOTE

This cannot be used with LDAP Authentication.

To bypass the default login page, point the support link that your customers will access to localhost/footprints/group.html. This file can be found in your **FootPrints** folder under html. This login page uses the shared login account guest, with the password guest.

NOTE

If you modify the default group.html page and you wish to upgrade BMC FootPrints Service Core with a new release, the upgrade overwrites the existing group.html page. Your modified group.html page is saved under the group.bak file in the same directory if you want to restore your modifications.

To modify the default shared Customer login page:

1. Create a shared Customer account under Administration | Workspace | Customers | Add Customer. The rest of this procedure does not involve the BMC FootPrints Service Core interface.
2. Edit the group.html file manually. The group.html file is found in the c:\FootprintsServiceCore\HTML directory on the BMC FootPrints Service Core server (assuming BMC FootPrints Service Core is installed to c:\FootprintsServiceCore).
3. Open group.html using Notepad to edit in plain text, or use an HTML editor.
4. Search for the lines:

   <INPUT TYPE=HIDDEN NAME=USER VALUE=guest>

   <INPUT TYPE=HIDDEN NAME=PASSWORD VALUE=guest>

   If you are using an HTML editor, you must search for and make the changes within the Source Code Editor.
5. On the first line, replace the value "guest" with the actual Shared Customer ID you created in step 1. On the second line, replace the value "guest" with the password of the Shared Customer ID you created in step 1. So, if your Shared Customer ID is "client" and the password is "CLIENT", the two lines should look like this:

   <INPUT TYPE=HIDDEN NAME=USER VALUE=client>

   <INPUT TYPE=HIDDEN NAME=PASSWORD VALUE=CLIENT>
6. Make any additional changes to the HTML of the page. For example, you can add your own company logo, add a custom canned message for customers to read, etc. Do not make any changes to the inputs.
7. Save the file to the same ./Footprints/HTML directory. You can optionally change the name of the file.

IMPORTANT

Do not rename the file index.html, login.html or default.html or other users will not be able to login with the default login page.

Users access BMC FootPrints Service Core from this page by going to http://yourserver.com/footprints/group.html, or whatever you rename the file. When users access this page, they only need to enter their primary key to log into BMC FootPrints Service Core.

An example of the group.html file can be found at http://support.numarasoftware.com (the BMC Support site). If you have any questions about using this file, please email Support, or submit a request from the BMC Support site mentioned above.

Edit Customers

The Edit Customers page includes options to edit a user's permission level and to remove a user from the current Workspace. Normally, Customer accounts that were created using the System Administrator's Auto-Add method inherit certain properties and can be manipulated as a group. Keep in mind that modifying any such Customer through this page sets the user apart from this group irreversibly; changes to the Auto-Add feature by the System Administrator do not affect this Customer.

1. Select Administration | Workspace | Customers | Add Customers from the BMC FootPrints Service Core Toolbar.
2. If you know the user ID, enter it in the field provided.
3. To browse from a list of users, click Select Customer. A pop-up window is displayed. If there are a large number of Customers in the system, the pop-up window may take a long time to display.

   There are two options in the pop-up:

   - **Unique Customers**—Customers from other Workspaces with unique IDs.
   - **Shared Customers**—Shared, generic customer IDs.
4. Click the user ID in the pop-up. It is added to the User ID dialog box.
5. Select from the following options:
   - **Remove this account from this workspace**—This permanently removes the customer from the current Workspace.
   - **Change this account's role in this workspace to**—This allows you to change the customer's role to a different customer role, e.g., change from Customer Read KB to a customized customer role that you have developed, or even to an agent or administrator role.
   - **Change default workspace to**—This changes the Workspace that the customer sees when first logging in.
   - **Change customer's authentication method to**—If multiple authentication methods have been defined, you can change the method required of this customer for logging into BMC FootPrints Service Core.
   - **Change customer's password to**—If BMC FootPrints Service Core internal authentication is being used for your customers, then the customer password can be changed through BMC FootPrints Service Core. If you are using external authentication methods, such as LDAP or Windows, you cannot change the customer's password here.
   - **Change user preferences**—As Workspace Administrator, you can change the preferences of a particular customer as follows:
     - **User's Local Time Zone**—Select a time zone from the drop-down field.
     - **Date Format**—Select a date format from the drop-down field. Options are "American-MM-DD-YYYY", "European-DD-MM-YYYY", "ISO-YYYY-MM-DD", and "revert to system default"
     - **Preferred Language**—Select a language from the drop-down field.
6. Enter your password and click **Save**.

NOTE

Auto-added customers are not displayed in the Select Customer pop-up window from the Add Customer or Edit Customer pages because of the processing overhead involved in sites that have thousands of auto-added customers.

Notes on Editing and Removing Customers

- If a Customer is removed from the only Workspace to which he or she belongs, the customer is also removed from the system.
- When a Customer user account is removed, the user's contact information remains in the Address Book. The contact record must be removed from the Address Book separately.
- To change a Customer's password, go to the User Management page under System Administration.
- Adding or removing a unique Customer account that had been created through the Auto Add Customer feature removes that user from the group of Customers who were Auto-Added, including any defaults set for the Auto-Added Customers. Refer to the chapter on System Administration for more information on this option.

Customer Options

Workspace-wide options for Customers are configured on the Customer Options page. These options affect all Customers in the current Workspace.

Define Login Method

You can require customers to log in to the Portal using a unique ID and password, or you can allow them to enter only a unique identifier, such as user ID or email address, with no authentication. Either:

- Select Unique ID and password required to authenticate the customers logging into the Portal
- Select Primary key only required with no password if you don't want to authenticate the customers

NOTE

When using web server authentication with the Customer Service Portal, the customer URL provided on the Customer Service Portal setup page will not bypass customer login. If a customer goes to the regular /footprints URL, they bypass the login correctly.

Enable Browse Mode

Browse mode allows users to browse the Knowledge Base without logging in. Additional options are displayed when Browse Mode is enabled, as follows:

- Navigation Toolbar
- Create a Welcome Message
- Workspace Menu

Navigation Toolbar

Under Available Options you can select which options your customers can access. The Potential Options drop-down lists the available options from which to choose, and the Current Toolbar drop-down lists the options that have been selected to appear on the customer Homepage. Once options are selected, click **Add** to add the option to the Current Toolbar drop-down. If browse mode is enabled, customers must log in if they select one of these additional options. The Potential Options list includes:

- Home-When selected by the customer, displays the homepage of the Customer Service Portal.
- Global Issues-When selected by the customer, displays a pop-up window listing the workspace's active Global Issues and allows the customer to subscribe to each of the issues.

- Submit Request-When selected, displays the customer version of the create Issue page, allowing customers to submit their own Issues.
- Password Reset-Submits a Password Reset request.
- Service Catalog-Displays the Service Catalog (only available with the Configuration Management add-on module).
- Reports-When selected, displays options for the customer to print pre-defined reports.
- Instant Talk-Initiates an Instant Talk chat session.
- Knowledge Base-Displays the Knowledge Base search page.

Create a Welcome Message

1. Click the Show Welcome Message on Homepage checkbox. If the Customer Service Portal is not enabled, the welcome message associated with the customer role is displayed instead.
2. Create a Welcome message using the WYSIWYG editor.
3. Click on the Insert Variable Text hyperlink under the WYSIWIG editor and use the pop–up menu to insert fields into the message

Workspace Menu

Insert a workspace menu into the customer's Welcome Message using the "_PROJMENU_" keyword. Select which workspaces appear in this menu from the list of other Customer Service Portal workspaces. When a customer logs in using a User ID, the list displays all of the workspaces to which the customer belongs. To select the workspaces that may be displayed to the customer, highlight them in the multi-select field. Use the CTRL key to highlight multiple workspaces.

Colors

You can customize the colors displayed on the Customer Service Portal.

NOTE

To get maximum value from the Color Editor, make sure your browser can display all of the colors at your disposal. To change your color palette, go to Start | Settings | Control Panel, choose Display and go to Settings to make sure your monitor can display more than 256 colors (Windows only).

To change colors:

1. Click the link in the Color section of the Customer Options page after the Customer Service Portal is enabled.
2. Select one of the following choices by clicking its radio button:
    - **Body Background**—Background color of BMC FootPrints Service Core (defaults to off-white).
    - **Table**—All tables throughout BMC FootPrints Service Core (defaults to light green).
    - **Highlighted Text**—Any highlighted text throughout BMC FootPrints Service Core (defaults to red).
    - **Page Header Text**—All header and title text (defaults to dark blue).
    - **Dialog Heading**—Heading bars of most BMC FootPrints Service Core pages.
    - **Dialog Heading Text**—All header text that appears in the dialog heading bars (defaults to light blue).
    - **Home page List 1**—One of two alternating colors for the Homepage list of Issues (defaults to light blue).
    - **Home page List 2**—One of two alternating colors for the Homepage list of Issues (defaults to light green).

- **Home page Text 1**—One of two text colors use throughout BMC FootPrints Service Core pages, including the Toolbar text (defaults to dark blue).
- **Home page Text 2**—The other of two text colors use throughout BMC FootPrints Service Core pages, including the Toolbar text (defaults to dark green).

3. Either:
   - Select a color in the Color Palette or
   - Type the hex value of a color (in hex code format, i.e., 000000-FFFFFF) in the Hex color value field, then click **Apply**.

     A box is displayed below the Color Palette showing the old and new colors.
4. You can adjust the color choice at any time before you click the **Finish** button to implement the color change. You can continue to change other colors on this page
5. When you are satisfied with all of your changes, click **Finish** to apply them.
6. To restore all colors to their default values, click the **Restore** button.

To insure proper functionality, you may have to clear out your browser's cache, refresh the screen, and/or close and re-open the browser to see all of the new colors correctly.

Hide or Show the FootPrints Logo

By default, the "Powered by BMC" logo appears on the Customer Service Portal. If you wish to remove the logo from the Customer Service Portal, click the **Hide** radio button. To restore it, click the **Show** radio button.

Define the Entry Point for the Customer Service Portal

The entry point is the URL that customers use to access this workspace's customer interface. BMC FootPrints Service Core generates an HTML file that redirects the customer to a more complicated URL, which they shouldn't have to type in themselves. Enter the name to be used for this file following the /footprints/ portion of the URL.

To simplify access even further, create either a Web Alias or Virtual Directory, depending on the platform that can be detected in Perl. IIS uses Virtual Directories and Apache uses Aliases that bring the customer directly to this file. Move the file to a new directory and rename the file so that it matches the default document name used by your web server (usually index.html or default.html).

Hide or Show Workspace Menu

When customers log into BMC FootPrints Service Core, if they belong to multiple Workspaces, they can be presented with a drop-down menu to choose the Workspace to enter (of their available Workspaces). This option must be enabled in a Customer's default Workspace for the drop-down menu to appear. Consequently, it is recommended that you enable this option in all workspaces to which Customers belong. Customers who only belong to one workspace are not affected.

Fields Displayed and Ordering

This dialog is used to choose the columns to display for customers in the current Workspace, as well as the order of the columns. These columns apply to all Solution and Request lists available to the customer.

To use this dialog:

1. Select the Type of Field to choose from. The three categories are BMC FootPrints Service Core Fields (status, title, priority, etc.), Issue Information (public fields only), and Contact Information fields (public only).
2. Under Available Fields, select a field.
3. Click **Add Field**. The field is listed in the Displayed Fields field.
4. To change the order of fields to be displayed, highlight a field in the Displayed Fields field and click the up or down arrow to move it.
5. To delete a field from the display, highlight the field in the Displayed Fields field and click **Delete**.

NOTE

Issue number is not available in the dialog, but it is automatically displayed as the first field in all lists. Title is also mandatory, but the placement can be selected in the Displayed Fields field.

While the columns chosen here apply to both Solution and Request lists for Customers, there are some exceptions. If Status is chosen, that column is displayed in Request lists, but not in any Solution lists. This is because all Solutions available to Customers have the special status of Public Solution. If Popularity is chosen, that column is displayed in Solution lists, but not in the View Mine Request list because that field does not apply to Requests.

NOTE

The names of many of the fields in BMC FootPrints Service Core can be changed by the administrator (e.g., Title, Priority, Status, Description, etc.). For clarity, this manual always uses the default names for these fields.

Primary Key Options

Customer Email Address Format

If Email address is the primary key for the Address Book associated with the current Workspace, the administrator can determine whether a complete address (including "@" and domain name) is required. There are three options:

- **Require full address**—Only email addresses which include an @ sign and domain address are accepted, e.g., jsmith@widget.com.
- **Require user name only**—Only email addresses without an @ sign and domain address are accepted, e.g., jsmith. In this case, the default domain (defined by the System Administrator) is appended to the user's ID name for email notification.
- **Allow either format**—Both formats are allowed.

Primary Key Required

If this option is required, Customers can only login if their unique key is found in the Address Book. This option only applies to shared Customer accounts. Unique Customer accounts are allowed into the system based on whether they are in the password file, i.e., they were added to the system with a unique ID and password by the Administrator or were auto-added via the Auto-Add feature.

User Roles

Roles

BMC FootPrints Service Core comes with a number of built-in permission roles (also called "user types") to assign to users of the system. Each role includes a variety of permission options that dictate what users can and cannot do within a BMC FootPrints Service Core Workspace. Options include creating and editing Issues, access to searches and reports, adding to the Knowledge Base, and more. The administrator can define and change which actions users of that role type can perform. In addition, an unlimited number of custom roles can be created.

There are two categories of roles in BMC FootPrints Service Core. They are:

- **Agents**—These roles apply to users of BMC FootPrints Service Core, such as Service Desk agents, customer service representatives, technicians, developers, project managers, etc. Users that can be added to an Agent-based role must have an Agent or administrator-strength license, either fixed or concurrent.
- **Customers**—These roles apply to end-users of BMC FootPrints Service Core, such as external customers, internal clients, employees, outside vendors, etc.

NOTE

This feature is optional. If you do not want to set permissions for different sets of users (for example, if you have a small department using the Workspace, all of whom fit into one or two categories), then the built-in roles that come with BMC FootPrints Service Core may be sufficient. This feature is useful for creating very detailed permissions for different levels of users or can be used to change just one or two options for a set of users. It can also be used to create special permissions for a single user.

Creating System vs. Workspace Roles

Roles can be defined at both the workspace and system level. System roles are not automatically assigned to users. Instead, they can be created by the System Administrator to be used by Workspace Administrators in their workspaces. This is an easy way to create standard roles that can be maintained in one place and are constant throughout the system.

- To create a system role, select Administration | System | User Roles from the BMC FootPrints Service Core Toolbar. Once a system role is created, it can be linked from the Workspace User Role page.
- To create a Workspace role, select Administration | Workspace | User Roles from the BMC FootPrints Service Core Toolbar. Once a role is created, one or more users can be assigned to that role on the Add/Edit Agent or Customer pages.

Other topics in this section:

- Built-in Roles
- Create a Role
- Agent Permission Options
- Field-level Permissions
- Customer Permission Options
- Assign Roles to Users
- Edit Roles
- Delete Roles
- How Roles and Teams Work Together

Built-in Roles

On the User Roles administration page, a list of roles is listed in a drop-down box. If no custom roles have been created, the list only includes the built-in roles. These are the roles that come with BMC FootPrints Service Core.

They include:

- **Agents**

  - Agent
  - Workspace Administrator
  - System Administrator
- **Customers**
  - Read Knowledge Base
  - Read Knowledge Base and Requests
  - Read/Submit
  - Read/Submit/Edit (Only available if the Customer Edit license is enabled).

Refer to User Types for an explanation of these built-in roles.

Create a Role

To create a new role, click the Create New Role button from the System or Workspace Administration User Roles page.

- To create a system role, select Administration | System | User Roles on the BMC FootPrints Service Core Toolbar. Once a system role is created, it can be linked to from the Workspace User Role page.
- To create a Workspace role, select Administration | Workspace | User Roles from the BMC FootPrints Service Core Toolbar. Once a role is created, one or more users can be assigned to that role on the Add/Edit Agent or Customer pages.

This topic discusses the following:

- **Create a New Role from Scratch**—Create a new custom role type to apply to one or more Agents or Customers.
- **Copy an Existing Role**—Copy the properties of an existing role (custom or built-in) to use as the template for a new custom role.
- **Link to a System Default Role**—Use a system role in the current Workspace (not available on the System Administration User Roles page).

Create a New Role from Scratch

1. Select Administration | System | User Roles or Administration | Workspace | User Roles from the BMC FootPrints Service Core Toolbar.
2. Enter the name for the role in the Name of role field. This is the name displayed on the Add Agent or Add User pages when selecting a role for a user.
3. Select the role type (Agent or Customer) by clicking the appropriate radio button. The role created can be applied to either Agents or Customers. An Agent is anyone with a full-strength license (fixed or concurrent). These users can potentially create, update, and close Issues, get assigned to and change the status of Issues, add to the Knowledge Base, etc. A Customer is a user of the Customer Self-service interface, i.e., someone who has a problem or question that needs attention. These users can potentially submit and track their own Issues and search the Knowledge Base. Refer to User Types for more information.
4. Enter your administrator password and then click **GO**. The User Role Properties page is displayed, pre-filled with the options from the originating role or with the default values.
5. Select the permission options desired for the role. The options available are different for Agents and Customers.

Details for setting Agent permission options can be found in Agent Permission Options. Details for setting Customer permission options can be found in Customer Permission Options.

7. When you are finished selecting permission options, enter your password and click **Save**. All users who are assigned the role inherit the permissions selected for that role.

Copy an Existing Role

The properties of an existing role (custom or built-in) can be used as a template for a new custom role. This is useful if you want to make a new role that is similar to an existing role, with only a few changes.

To copy a role:

1. Select Administration | System | User Roles or Administration | Workspace | User Roles from the BMC FootPrints Service Core Toolbar.
2. Select a role from the Role to copy drop-down list in the Copy an Existing Role section of the page. All roles, including system roles, those from the current Workspace, and those from other Workspaces are listed.
3. Enter the name for the role in the Name of New Role field. This is the name displayed on the Add Agent or Add User pages when selecting a role for a user. The name entered must be different from the originating role.
4. Enter your administrator password and then click **GO**. The User Role Properties page is displayed, pre-filled with the options from the originating role or with the default values.
5. Modify the permissions for the new role as needed. Modifying the permissions for this role does not affect the originating role; it is used as a template only.

   Details for setting Agent permission options can be found in Agent Permission Options. Details for setting Customer permission options can be found in Customer Permission Options.

6. When you are finished, enter your password and click **Save**. All users who are assigned the role inherit the permissions selected for that role.

NOTE

The new role and the original role used as a template are not linked in any way. Changes made to one do not affect the other. The exception to this is linking to system default roles.

Link to a System Default Role

NOTE

This option is not available on the System Administration User Roles page.

The System Administrator can define system roles that remain constant throughout all Workspaces. For example, a standard "Director" role can be created for the system that gives the same level of permission to users assigned to that role no matter which Workspace they are in.

While system roles are created by the System Administrator, they are not put into use until a Workspace Administrator links to one from his or her Workspace.

To link to a system role:

1. Select Administration | System | User Roles or Administration | Workspace | User Roles from the BMC FootPrints Service Core Toolbar.
2. In the Link to a System Default Role section, select a system role from the drop-down list. All system roles that are not yet linked to from the current Workspace are listed.

3. Enter your administrator password and then click **Save**. The role is now available in the Workspace and can be selected when creating or editing a user.

Editing a Linked System Default Role

To keep a system role constant throughout all workspaces, it should only be edited by the System Administrator on the system User Roles page. A linked role can be edited by the Workspace Administrator from the Workspace User Roles page, but this unlinks the role from the system. Refer to Edit Roles for more information.

Agent Permission Options

The permission options available for Agents can only be modified by an administrator. The page from which these permissions are modified is accessed by selecting Administration | Workspace | User Roles or Administration | System | User Roles, then selecting an Agent role from the drop-down list, and then clicking the Edit Role Properties button. This topic in the document describes the sections of the page and the options for each section.

1. **Read Permissions**—These options determine which Issues the user can view and search in the Workspace. There are three options:
   - **Can only view their own assigned Issues**—The user can only view Issues to which he is assigned.

NOTE

Users can also always see Solutions and Customer Requests.

   - **Can only view Issues that are assigned to them or to their team**—The user can view Issues that are assigned to him and those Issues that are assigned to his Team (only applies if the user is a member of a Team).
   - **Can view all Issues in the workspace**—The user can view all Issues in the Workspace regardless of assignment.
2. **Field Permissions**
   - **Built-in Fields**
     - **Create Issue**—Options are for when agents create new issues only.
       - **Specifying Assignees**—Options are Allowed (agent may specify assignees) or Not Allowed.
       - **Create New Issues With Statuses Of**—Specify which statuses the agent may select when creating a new issue. Check as many boxes as appropriate.
       - **Descriptions are mandatory for new Issues created with Statuses of**—Require an entry in the Description field when a new issue is created with the specified status. Check as many boxes as appropriate.
     - **Edit Issue**—Options are for when agents edit an existing issue only.
       - **Editing Title**—Options are Allowed (to edit the Title field) or Not Allowed.
       - **Editing Priority**— Options are Allowed (to edit the Priority field) or Not Allowed.
       - **Editing Assignees**—Options are Allowed (to edit the Assignees field) or Not Allowed.
       - **Change Status**—Options are Any, None, or Selected. If Selected is chosen, a grid is displayed. Specify which statuses the agent can change from and to using the checkboxes in the grid. Check as many boxes as appropriate. The vertical list of statuses are the current statuses and the horizontal list shows the statuses to which the agent may change the value. For example, you may not want a custom agent role to have permission to close an issue. In that instance, you would uncheck the Closed checkboxes

in all instances. On the other hand, you might have as status for requiring an approval before an issue is closed, in which case you would only check a Closed checkbox permitting the issue to go from Approved to Closed.

- **Editing Inactive (a special Status used only for Subtask Sequencing)**—Options are Allowed (to edit a subtask that is currently inactive) or Not Allowed.
- **Mandatory Description Appends**—Options are Any, None, or Selected. If Selected is chosen, a grid is displayed. Specify when an entry in the Description field is required using the checkboxes in the grid, i.e., require a description entry when the status is changed from one status to another. Check as many boxes as appropriate. The vertical list of statuses are the current statuses and the horizontal list shows the statuses to which the agent may change the value. For example, you may require a description entry when the agent changes the status of an issue from Open to Closed.
- **Ordering Subtasks**—Options are Allowed (to set a subtask sequence) or Not Allowed.

- **Custom Fields**—Refer to Field-level Permissions for Custom Fields for details.

3. **Issue Creation**—These options all concern Issue creation.
   - **Creating New Issues**—This option determines if the user can create new Issues from scratch, including regular Issues and Quick Issues.
   - **Copy/Move Issues**—If this is allowed, the user can copy Issues within the same Workspace or copy or move Issues to another Workspace. This is useful in creating an Issue in which the information is repeated.
   - **Creating New Global Issues**—If this is allowed, the user can create Global Issues for important or frequently reported Issues.
   - **Can use the following quick Issue templates**—Optionally exclude some Quick Issues from Agents. By default, all defined Quick Issues are defined for Agent access.
4. **Edit Permissions**—These options relate to the editing of Issues, Requests, and other Issue types by the user.
   - **Editing Issues**—Which Issues can the user edit:
     - **Can only edit their own assignments**—The user can only edit Issues assigned to him.
     - **Can edit Issues that are assigned to their own Team**—The user can edit Issues assigned to him and those assigned to his Team (if he belongs to a Team).
     - **Can edit any Issue without being assigned**—The user can edit all Issues in the Workspace regardless of assignment.
     - **Editing Requests**—The user can edit Customer Requests (those that haven't been assigned yet) without actually taking them (i.e., without assigning themselves).
     - **Editing Public Solutions**—The user can edit existing Solutions in the public Knowledge Base.
     - **Editing Internal Solutions**—The user can edit existing Solutions in the internal Knowledge Base.

NOTE

The two previous options do not apply to Pending Solutions, only to published Solutions. Whether an Agent can edit a Pending Solution is based on whether the Agent is an Approver and whether the Agent is the one who submitted the Solution for approval. Refer to Knowledge Base Approvals for more information.

- **Taking Issues**—"Taking" refers to an Agent editing an Issue to which he is not assigned and assigning that Issue to himself. There are three options:
  - **Cannot take any Issues**—Taking is not allowed for the user.

- **Can take Issues that are assigned to their own Team**—The user can take Issues that are assigned to his Team (if he is a member of a Team).
- **Can take any Issue**—The user can take any Issue in the Workspace.

NOTE
If a user has edit rights to Issues, this overrides the Taking option.

- **Taking Requests**—If this is allowed, then the user can take new Requests submitted by Customers and work on them (and at the same time assign himself).
- **Deleting Issues**:
  - Agents cannot delete any Issues
  - Agents can only delete Issues that they submitted
  - Agents can delete any Issue
- **Can use the following Quick Actions from the Homepage**—Only the checked Quick Actions are displayed in the Quick Action dialog on the homepage for the agent role being edited. All checkboxes default to being checked (all actions are allowed).

5. **Knowledge Base**—These options determine whether the user can create Solutions in the Knowledge Base. There are two types of Solution: Public (which Customers and Agents can view) and internal (only Agent users can view)

- There are **two permission options**, one for each Solution type:
  - **Ability to add to the Public Knowledge Base**
  - **Ability to add to the Internal Knowledge Base**
- For each type of Solution, there are three options plus another permission:
  - **Yes**—User can create Solutions which are published immediately.
  - **Needs Approval**—User can create Solutions, but they need to be approved by an Approver (an Administrator or other Workspace Member) before they can be published to the Knowledge Base.
  - **No**—User cannot create Solutions of this type.
  - **Ability to change Status within pending Statuses**—User can change the status within statuses that are pending but not approved.

NOTE
If Needs Approval is selected for one of the Solution types, you must designate one or more Knowledge Base Approvers for the Workspace. This is done on the Workspace Administration | Knowledge Base page.

6. **Address Book**—These permission options relate to creating and editing contacts in the **FootPrints Service Core** Address Book.

NOTE
These options do not apply if an LDAP or SQL Address Book is used in the Workspace.

- **Creating new Contacts**—The user can create new contact records in the Address Book for the current workspace.
- **Can Edit**—If All Contacts is selected, the user can edit any contact record in the Address Book for the current workspace. If Only Contacts that they created is selected, the user can only edit contact records that they

originally created in the Address Book. If the user cannot create new contacts and Only Contacts that they created is selected, the user cannot edit any contacts.

- **Can View Contacts**
  - Can view all contacts in the Address Book
  - Can view only contacts with the same organizational unit as the Agent. The Agent must be added to the Address Book in order for this role property to work correctly. The organizational unit field must be populated for the Agent and the Agent's account ID must match the User ID field in the Address Book.
  - Cannot view contacts
- **Creating new Master Contacts**—Options are Allowed or Not Allowed.
- **Editing Master Contacts**—Options are Allowed or Not Allowed.

7. **Searching and Reporting**—This set of permission options determines what access the user has to searches and reports. Depending on what is selected, the user's toolbar is updated to show only permitted report and query options. Also, the data returned in the searches and reports is determined by their Read Permissions (see above). The following options are available:

- **Custom Reports**
  - **No Access**—User cannot access custom reports.
  - **Personal Reports Only**—User can create, run and save reports for himself, but has no access to Shared reported created by other users.
  - **Run Shared Reports Only**—User cannot create, run, or save their own custom reports, but can run shared reported created by other users.
  - **Personal Reports (Full Access) and Run Shared Reports**—User can create, run, and save their own custom reports and can run shared reported created by other users.
  - **Personal and Shared Reports Full Access**—User can create, run, and save their own custom reports and can create, run and save shared reports for other users.

NOTE

The data that is returned in these reports is based on the user's Read Permissions. For example, if the user can only view his own Team's Issues, any custom reports he runs (personal or shared) returns only his Team's data.

- **Cross-workspace Reports**—Same options as Custom Reports. User can run cross-workspace reports that include data from any workspace to which the user belongs.

NOTE

This option applies to the current workspace. If Cross-workspace Reports are not allowed for the user in the current Workspace but are allowed in another one of his workspaces, the user can run a cross-workspace report from the other Workspace that contains data from this Workspace.

- **Address Book Reports**—Same options as Custom Reports.
- **Issue Searches**
  - **Personal Searches Only**—User can only run, save, and edit personal searches.
  - **Personal Searches and Run Shared Searches**—User can run, save, and edit personal searches, and can run shared searches created by other users.

  - **Personal and Shared Searches Full Access**—The user can run, save, and edit personal searches and shared searches for other users.
- **Cross Workspace Issue Searches**—Search Issues across the Workspaces to which the Agent has access. Same options as Issue Searches.

NOTE

The data that is returned in these searches is based on the user's Read Permissions. For example, if the user can only view his own Team's Issues, any custom searches he runs (personal or shared) only returns his Team's data.

- **Address Book Searches**—Same options as Issue Searches.
- **Time Tracking Reports**
  - **No Access**—User has no access to Time Tracking reports.
  - **Full Access**—User has full access to Time Tracking reports.
- **Metric Reports**—Same options as Time Tracking reports.
- **Flashboard**—User has access to the personal flashboard, the Workspace flashboard, or both.
- **Executive Dashboard**—User has access to the Executive Dashboard. User access is set to No Access by default. If an upgrade for FootPrints is installed, all roles that have been enabled for Executive Dashboard access are set to Full Access in the upgrade and those that do not have access continue to not have access. Note that, if an agent exports a Statistics Drill-down report in the Executive Dashboard, the agent can click a link in the report that displays the issue. Agents with such access can view any issues in the report without regard to other permission restrictions. In other words, in this way, and agent who has Executive Dashboard access but is restricted from viewing certain issues may, through the Drill-down report, be able to view those issues anyway.

NOTE

This option is not dependent on the user's Read Permissions. The user can access all data in the Workspace for Metric reports.

8. **Time Tracking**
   - **See Time Tracking Info for Other Users**—User has access to time tracking information for other internal users.
   - **See Rate and Cost Info**—User has access to rate and cost information for other internal users.
   - **Edit existing Time Tracking entries—Choices are Allowed or Not Allowed.**
9. **Change Manager**
   - **View change management history and run change management reports**—The user has access to the change management history information and can run change management reports.
   - **Ability to override approval/disapproval voting**—The user can override the votes in any phase of any change management process and end the phase immediately. This removes the override ability from the Issue pages, but Workspace Administrators can still override votes by selecting Administration | Workspace | Change Manager, then selecting the Issue Approval States link on the Change Management page, and then selecting a voting option from the drop-down menu in the Override column of the table. This Workspace Administration function is not a true voting function, but an administration function to move an Issue within a phase.
10. **CMDB and Service Catalog—This option is only available if Configuration Manager has been enabled for this BMC FootPrints Service Core installation.**

- **Allow to propose a new CI linked to a Issue**—If set to Yes, the agent can propose that a new CI be created via the Change Manager approval process.
- **Allow to propose changes to a CI linked to a Issue**—If set to Yes, the agent can propose changes to a CI via the Change Manager process.
- **CMDB Access: Display CMDB link in workspace toolbar**—Display a link to the CMDB in the toolbar (like the New Issue or Reports links). Otherwise, the link is displayed in the menu under the **More** link in the toolbar.
- **Service Catalog Access: Display Service Catalog link in workspace toolbar (if Service Catalog is enabled)**—Display a link to the Service Catalog in the toolbar (like the New Issue or Reports links). Otherwise, the link is displayed in the menu under the **More** link in the toolbar.

11. Miscellaneous

- **Instant Talk**—If Instant Talk is enabled for the Workspace and this option is enabled, the user can initiate a chat session with other users.
- **Remote Manager**—If this add-on module is licensed, enable or disable the use of it for the role.
- **Workspace Administration**—Workspace Administration rights can optionally be given to the users of this custom role.
- **Workspace Administration Rights Checkboxes**—Check the boxes to specify the functions that this role can administer as a Workspace Administrator.
- **Address Book Administration**—Use can perform Address Book administration functions.
- **Workspace Calendar**—User can create and edit appointments in the Workspace Calendar. Users can always create and edit appointments in their Personal Calendars. In addition, users can edit an appointment in the Workspace Calendar if they are an invitee of the appointment, regardless of this permission option.
- **Change Personal Preferences**—Select Yes to allow users with this role to set their own password, time zone, date format, screen size setting, and language and delete their login cookie from the Preferences page or choose No to deny the privilege.
- **BMC FootPrints Sync**—Select whether users with this role can download the FootPrints Sync client.
- **Homepage Dashboard**—Specify the maximum number of dashboard components for Agents in this Workspace. The maximum number that an administrator can specify is 10 and the minimum is 1.

12. Social Media

- See Select User Roles Allowed to Broadcast Issues to Social Media (per Workspace) and Select User Roles Allowed to Broadcast Issues to Social Media (All Workspaces).

When you are satisfied with the permissions selected for the role, enter your password and click **Save**. All users who are assigned the role inherit the permissions defined.

Field Permissions Overview

Permissions can be specified for fields used in Issues and Address Books, and they can be set up per user role.

Specifying Field Permissions

Workspace Fields

Field permissions for custom workspace fields can be specified by selecting Administration | Workspace from the BMC FootPrints Service Core toolbar, and then selecting Form Designer. You can edit an individual field and set the default field permissions for agent and customer roles. See the Permissions and Access section in the topics on defining fields in the Form Designer, such as in the Single-line Character topic.

Address Book Fields

For Address Book fields, permissions can be specified by selecting Administration | Address Book from the BMC FootPrints Service Core toolbar, and then selecting Field Maintenance. You can edit an individual field and set the field permissions for agent and customer roles. See Adding Address Book Fields.

Permissions per Role

Custom field permissions can be specified for specific user roles by selecting Administration | Workspace from the BMC FootPrints Service Core toolbar, selecting User Roles, and then selecting the role you want to edit. Permissions for user roles override the Agent Default or Customer Default permissions defined in Form Designer. See Field-level Permissions for Built-in Fields and Field-level Permissions for Custom Fields.

Field Permissions for Built-in Fields

Configuration of field permissions is separated into two categories: built-in fields and custom fields. This topic describes the way you configure field level permissions for built-in fields.

To set field permission for built-in fields:

1. Select Administration | Workspace from the BMC FootPrints Service Core toolbar, then selecting User Roles under the Roles section of the main frame. The User Role Properties page is displayed.
2. A number of options are provided in the Field Permissions section:
   - **Create Issues**
     - **Specifying Assignees**—Use the radio buttons to either permit users to or restrict users with this role from designating assignees when creating an Issue.
     - **Create New Issues With Statuses of**—When the box is checked, the user can assign the specified status when creating an Issue. When it is not checked, the user cannot assign the specified status.
     - **Descriptions are mandatory for new Issues created with Statuses of**—When the box is checked, data must be entered into the Description field when creating an Issue in the specified status. When it is not checked, entering data in the Description field is optional.
   - **Edit Issue**—The role properties in this section only apply if the user is able to edit or take the Issue.
     - **Editing Titles**—Allow or disallow users with this role to edit an Issue's Title field.
     - **Editing Priority**—Allow or disallow users with this role to edit an Issue's Priority field.
     - **Editing Assignees**—Use the radio buttons to allow or not allow users with this role to designate assignees when editing an Issue.
     - **Changing Status**—Use this option to restrict which statuses can be changed to either Open or Closed. For example, you might want to allow a user in the assigned role to only change a status of Request to Open. To use this option, select the original option that the user sees when editing the Issue from the drop-down list. Next, check the box to specify the status to which the Issue can be changed. When this is used, the user can only change the status from the specified original status to the built-in status you specify here.
     - **Editing Inactive** (a special Status used only for Subtask Sequencing)—Options are Allowed (to edit a subtask that is currently inactive) or Not Allowed. Editing is restricted to the fields that are permitted by the settings on this page.

- **Editing Most Recent Description**—Allow or disallow editing of the most recent Description.
- **Mandatory Description Appends**—Select a status from the drop-down list and then check one of the checkboxes for either the Open or Closed status. When the status is the one you selected from the drop-down, it is mandatory for an Agent with this user role to append a Description when changing the status to the specified built-in statuses.

Field Permissions for Custom Fields

Field permissions allow the administrator to set permissions to apply to specific user roles. This feature allows more granular control, allowing fields to be visible or invisible, read-only or read/write, and optional or mandatory for users with the specified role.

To set field permission for custom fields:

1. Select Administration | Workspace from the BMC FootPrints Service Core toolbar, select User Roles under the Roles section of the main frame, then select a role from the Roles drop-down. The User Role Properties page is displayed.
2. Select a custom field from the drop-down field. The section expands and displays the current permissions for the field.
3. Permission settings are listed below. The selected permission applies to the specified Status when permissions are displayed in advanced view. It applies to all permissions when displayed in basic view.
   - **Hidden**—Users cannot view the field
   - **Read only**—Users can view but not edit the field
   - **Optional**—Users can view and edit the field, but are not required to populate the field
   - **Required**—Users can view and edit the field, and are required to populate the field
4. **Use Default Permissions**—This option allows you to reset the permissions of the selected field to use the default permissions defined in Form Designer. It removes any custom permissions that were defined in this role. After saving this page, the role's properties will then display the default permissions for the field. For more information on the default permissions in Form Designer, see the Permissions and Access section of the field type topics, such as in the Single-line Character topic.
5. Additional options in the Field Permissions section are:
   - **Summary**—Click the Summary button to display a table showing the field permissions for all fields and statuses.
   - **Cancel All Changes**—Click the Cancel All Changes button to cancel all changes you have made for all fields.
   - **Cancel Changes to This Field**—Click the Cancel Changes to This Field button to cancel changes you have made for this field only.
6. To set permissions for additional fields, select a new field from the Field drop-down list and then follow the instructions above.
7. When you have finished making all of your changes to this page, scroll to the bottom of the page and enter your password, then click **Save** to save the changes.

Customer Permission Options

Customer permissions can be set if you have a Customer license. You can define multiple roles for your Customers using the built-in Customer roles or by creating new Customer roles, and then define different permission sets for each role. Note that roles are not available if you are using the Customer Service Portal.

The permission options available for Customers can only be modified by an administrator. The page from which these permissions are modified is accessed by selecting Administration | Workspace | User Roles or Administration | System | User Roles, then selecting a Customer role from the drop-down list, and clicking the Edit Role Properties button. This topic describes the sections of the page and the options for each section.

1. **Requests**—These options determine what the user can do with Requests.
   - **Viewing Requests**—There are three options:
     - **Can only view their own Requests**—The user can only view his own Requests, including those entered by him via the web, email, or entered by an Agent for him (based on the user's primary key).
     - **Can view their own Requests and their Organization's Requests**—The user can view his own Requests and those of his Organizational Unit (only applies if an Organizational Unit field is enabled in the Address Book).
     - **Cannot view Requests**—The user has no access to Requests. This option is appropriate if the user only needs to search the Knowledge Base.
   - **Creating Requests**—There are several options:
     - **Creating Requests**—User can create new Requests via the web interface for himself only. This is the default for Customer Read/Submit and Customer Edit roles.

NOTE

Customers cannot enter Requests for other users. If you would like to create a role that allows the user to create Requests for other users, be assigned to Issues, etc., you must create an Agent role.

     - **Entering Priority of Requests**—Customer users can optionally enter a priority when creating Requests (disabled by default). If this is not allowed, the default priority for the workspace is assigned automatically when the user submits a Request. This option only applies if the user is allowed to create Requests.
     - **Change Priority of Requests**—Customer users can optionally change a priority when editing an existing Request (disabled by default). If this is not allowed, the default priority for the workspace is assigned automatically when the user submits a Request. This option only applies if the user is allowed to create Requests.
     - **Update Contact Info**—User can update his own contact information when submitting a Request, which then updates the Address Book. This option only applies if the user is allowed to create Requests and if the BMC FootPrints Service Core Address Book is used (does not apply to LDAP or Dynamic SQL Address Books, which are read-only).
     - **Can add CC: addresses to Requests**—Customers can add email addresses that BMC FootPrints Service Core includes in the list of Request recipients. They do not have to be email addresses of BMC FootPrints Service Core users.
     - **Can use the following Quick Issue templates**—Customers can use specified Quick Issue templates, like Password Reset. Customers do not have access to Master/Subtask Quick Issues.
     - **Editing Requests**—With a Customer Edit License, customers can edit fields in Requests, subject to the field permissions configured for the Customer.
     - **Closing Requests**—Allow customers to change their own request status to Closed.
   - **Global Issues**—Customer can subscribe to Global Issues created by Agents or administrators.
   - **Enable Rich Text Editor**—Allows customers to use the same Rich Text Editor available to agents. The Rich Text Editor provides a richer range of functions for changing the appearance of text, such as colors, indents, font changes, etc.

2. **Field Permissions**
   - Set custom field permissions for customers with this role. Custom permissions set here in the role override the default field permissions in Form Designer.
   - **Use Default permissions**—Reset the permissions of the selected field to use the default permissions defined in Form Designer. This removes any custom permissions that were defined here in the role.
3. **Reports**
   - **Run Pre-defined Reports**—Allow customers to run pre-defined reports.
   - **Create Custom Advanced Reports**—Allow customers to create their own custom reports. This would require customers to be fairly sophisticated in their understanding of BMC FootPrints Service Core reports.
   - **Allow Running "large" Reports**—If there are more than 750 issues in the report, FootPrints Service Core considers it large.
4. **Miscellaneous**
   - **Instant Talk**—If Instant Talk is enabled for the Workspace and this option is enabled, the user can initiate an Instant Talk chat session with an available Agent. If it is disabled, the Instant Talk option is not available for the Customer on the BMC FootPrints Service Core Toolbar.
   - **Knowledge Base**—User can search the public Knowledge Base and has access to the public FAQs. Customers can never view internal Solutions.
   - **Initial Content**—The Homepage that Customers see when they first log into BMC FootPrints Service Core can be customized per role. Under certain circumstances, this role property may not function. For example, this property may not function if browse mode is enabled or the login method is primary key only. The options are:
     - **All Solutions—**All Knowledge Base solutions.
     - **My Requests**—A list of the user's personal requests is displayed.
     - **My Service Requests**—A list of the user's Service Catalog requests is displayed. This only applies if you have the BMC FootPrints Configuration Manager add-on module and Service Catalog has been enabled.
     - **My Organization's Requests**—A list of the user's Organizational Unit's requests is displayed.
     - **Submit Request**—The Submit Request form is displayed.
     - **Service Catalog**—The initial Service Catalog page. This only applies if you have the BMC FootPrints Configuration Manager add-on module and Service Catalog has been enabled.
     - **Global Issues**—A list of Global Issues is displayed.
     - **Knowledge Base Categories**—Select one of the Knowledge Base categories. The list of Issues in that category are displayed to the customer on login.
   - **Customer Welcome Message**—If the Customer Service Portal is not enabled, the welcome message associated with the customer role is displayed instead. Create a Welcome message using the rich text editor. Click on the Insert Variable Text hyperlink under the rich text editor and use the pop–up menu to insert fields into the message.
   - **Change Personal Preferences**—User can change his own preferences, including changing password, time zone for date/time display, date format, screen size setting, and language.
   - **Service Catalog Access**—If the BMC FootPrints Configuration Manager Service Catalog feature is enabled, you can decide whether a Service Catalog link is displayed in the workspace toolbar.

NOTE

Change Personal Preferences only applies to unique customer accounts; shared accounts do not display a **Preferences** option to the customer.

5. When you are satisfied with the permissions selected for the role, enter your password and click **Save**. All Customers who are assigned the role inherit the permissions selected.

Assign Roles to Users

Once a custom role is created, users can be assigned to the role in the following ways:

- **Edit Role Membership** (described below)—From the Roles Administration page, you can assign one or more users to a role.
- **Add Agent**—On the Add Agent page, all Agent roles are available to assign to a newly created Agent.
- **Edit Agent**—On the Edit Agent page, all Agent roles are available to assign to an existing Agent.
- **Add Customer**—On the Add Customer page, all Customer roles are available to assign to a newly created Customer.
- **Edit Customer**—On the Edit Customer page, all Customer roles are available to assign to the existing Customer.
- **Auto-Add Customers**—Auto-added Customers can be assigned to any custom or built-in role.
- User Import—Users imported from a comma-delimited text file can be assigned any built-in or custom role.

Refer to the individual topics listed above for complete instructions on adding/editing users with the various methods.

Edit Role Membership

Once you have created a role, you can assign one or more users to that role from the Edit Role Membership page. This allows you to quickly assign and re-assign multiple users at once to a role.

To use this feature:

1. Select Administration | Workspace | User Roles from the BMC FootPrints Service Core Toolbar.
2. On the User Roles administration page, select a role from the drop-down list and click Edit Role Membership. The Role Membership page is displayed. This page lists the current users who belong to the role on the left in the Members field and other Workspace members on the right in the Other Workspace Members field. The other Workspace members are listed with their current assigned Role.
3. To:
   - **Assign a user to this role**, select the name from the Other Workspace Members field and click the left arrow button. The user's name is displayed in the Members field.
   - **Unassign a user from this role**, select the name from the Members field and click the right arrow button. You are prompted to reassign roles on the next page for any users unassigned on this page.

     A summary of the changes you've made are listed in the box below for your reference.
4. When you are finished assigning and unassigning users to and from this role, enter your password and click **Save**.
5. If any users were unassigned from the role on the previous screen, a list of users is displayed, each with a drop-down list of roles. Select the new role for each user, then click **Save**.

The users now have the permissions of the new roles assigned to them. You can change their role at any time from this page or from the Edit Agent page.

Edit Roles

To edit a role after it has been created:

1. Select Administration | Workspace | User Roles.
2. Select a role from the drop-down list.
3. Click Edit Role Properties.
4. Change the permission options for the role as needed.
5. Enter your password and click **Save**. The new permissions are automatically in effect for all users of the role.

Editing a Built-in Role

Built-in roles, such as Agent, Workspace Administrator, etc. can be edited, with one exception (see the note below). This affects all users in the workspace who have that role. If you have not configured roles and you want to change permissions for all existing Agents, you can easily edit the properties of the Agent role. If you plan to assign different permissions to different groups of users, it is recommended that you leave the built-in roles unedited for future reference.

NOTE

The System Administrator role cannot be edited or deleted; the permissions are displayed for reference only.

Editing a Linked System Default Role

To keep a system role constant throughout all workspaces, it should only be edited by the System Administrator on the System Administration User Roles page. A linked role can be edited by the Workspace Administrator from the Workspace Administration User Roles page, but this unlinks the role from the system.

To edit a system role from the Workspace Administration screen, and thereby unlink it:

1. On the Administration | Workspace | User Roles page, select a system role from the drop-down list.
2. Click Edit Role Properties. The Permission Options page is displayed. Because this is still a system role at this point, this page is read-only. The properties cannot be changed by a Workspace Administrator.
3. Select the option to unlink the role from the System Default Role. A confirmation message is displayed. By unlinking the roles, any future changes made to the System Default Role will not affect this role in this Workspace.
4. Click **GO**.
5. Make changes to the permission options for the role as needed.
6. Enter your password and click **Save**. The new permissions are automatically in effect for all users of the role in the current Workspace only.

To re-institute the system role properties, edit the role again from the Workspace and select the option to Discard this role's properties and link it to the System Default Role.

To edit a system role in a way that will affect all workspaces, edit the role from the System Administration User Roles page.

NOTE

This applies to both built-in and custom roles.

Delete Roles

To delete a role:

1. Select Administration | Workspace | User Roles from the BMC FootPrints Service Core Toolbar.
2. Select a role from the drop-down list.
3. Click Delete Role. A confirmation is displayed. If users belong to the selected role, you are prompted to select a new role for each user using the drop-downs.
4. To delete the role, enter your password and click **Save**. The role is deleted and users of the role inherit the permissions of the new role(s) selected.

NOTE

The System Administrator role cannot be edited or deleted; the permissions are displayed for reference only.

Agent Preference Templates

Agent Preferences Template

The Agent Preferences Template enables Workspace administrators to create a template for user preferences. The template applies to a user role or roles. For example, you might specify some columns to be displayed on the homepage for service desk agents and a different set of columns to be displayed for supervisors. Users can change those preferences individually on their User Preferences page.

There are two basic steps for Agent Preferences Templates:

- Create a template or templates
- Assign the template or templates to the user roles

After that, you can edit the templates and reapply them or delete templates as needed.

Create Agent Preference Template

To create an agent preferences template:

1. Select **Administration | Workspace** from the BMC FootPrints Service Core Toolbar.
2. Select **Agent Preferences Templates** under the **Roles** heading.
3. Click the **Create New Template** button in the Create/edit Templates section.
4. In the **Create New Template** section of the page, enter a name for the template in the **Template Name** field.
5. In the **Default Page for Current Workspace**, select an option.
6. In the **Homepage** section, set the following preferences:

   a. **Number of Columns for the Dashboard**-- Select the number of columns to display on the Agent Dashboard from the **Number of Columns for the Dashboard** field.
   For a complete description of the options in this section, refer to the Dashboard section of the Homepage Preferences topic.
   b. Set the preferences for the **Dashboard** item(s) that are displayed above the list of Issues on the Agents' homepages. For a complete description of the options in this section, refer to the Dashboard section of the Homepage Preferences topic.
   c. Set the preferences for the **list of Issues** that is displayed in the main frame of the Workspace homepage. For a complete description of the options in this section, refer to the Homepage Preferences topic

7. In the **Issues** section, select the preferences for how Issues are displayed, whether spell checking is enabled in the Description section of Issues, etc. For a complete description of the options in this section, refer to the Issue Page Preferences topic. The only exception is that the Agent Preferences Template does not include the Quick Descriptions/Signatures option.
8. In the **Security** section, the security option restricts others from updating an agent's assigned Issues (for example, if the agent is away from his or her desk) by requiring a password. If enabled, a password is required each time the agent creates or edits an Issue. Refer to for complete details.
9. In the **FootPrints Service Core Sync** section, specify whether the role(s) to which this template applies use the BMC FootPrints Sync feature or one-way synchronization with Outlook. From the link, you can customize the BMC FootPrints Sync options. Refer to BMC FootPrints Sync for complete details on the settings that apply to this feature.
10. In the **Instant Talk** section, choose whether to allow customers to initiate an Instant Talk session with the agent. If Instant Talk is set to Not Allow, the agents are still able to initiate Instant Talk sessions with one another.

    NOTE

    This option only applies if Instant Talk is enabled.

11. When all options are set, enter the password in the **Apply Changes** section and click the **Save** button. This creates the template. The template has not yet been applied to any roles, however. To apply the template to a role, return to the Agent Preferences Templates page. Refer to the Assign Template to Role topic for details.

Assign Template to Role

Once you have created a Agent Preferences Template, you can assign the template to a role or roles so that the preferences take effect.

To assign a template to a role:

1. Select Administration | Workspace from the BMC FootPrints Service Core Toolbar. The Workspace Administration page is displayed in the main frame.
2. Select Agent Preferences Templates under the Roles heading in the main frame. The Agent Preferences Templates page is displayed in the main frame.
3. All of the roles in the current workspace are listed in the Assign Template to Role section. Use the drop-down fields to the right of the roles to select the template assigned to each role or leave the drop-down set to None (i.e., no template will be applied).
4. To the right of each drop-down menu is a checkbox to update the user preferences for existing users. If you leave that box unchecked, the preferences of current agents and/or customers remain unchanged. If you update the existing users, all user preferences for the selected roles will be changed to the values you selected for that template. This could cause some unhappiness with your current users, so exercise caution in checking this box. The newly assigned templates are applied to any users who are added to the workspace from this point forward.
5. Complete the assignment by entering the administrator password into the Password field and clicking the **Save** button.

Edit Agent Preference Template

To edit an Agent Preferences Template:

1. Select **Administration | Workspace** from the BMC FootPrints Service Core Toolbar.
2. Select **Agent Preferences Templates** under the **Roles** heading in the main frame.

3. Select a template to edit from the **Current Templates** drop-down in the **Create/edit Templates** section, and then click the **Edit** button .
4. You can change the name of the template in the **Template Name** field under **Edit Template**.
5. In the **Default Page for Current Workspace**, select an option.
6. In the **Homepage** section, set the following preferences:
   a. **Number of Columns for the Dashboard**-- Select the number of columns to display on the Agent Dashboard from the **Number of Columns for the Dashboard** field.
   For a complete description of the options in this section, refer to the Dashboard section of the Homepage Preferences topic.
   b. Set the preferences for the **Dashboard** item(s) that are displayed above the list of Issues on the Agents' homepages. For a complete description of the options in this section, refere to the Dashboard section of the Homepage Preferences topic.
   c. Set the preferences for the **list of Issues** that is displayed in the main frame of the Workspace homepage. For a complete description of the options in this section, refer to the Homepage Preferences topic
7. In the **Issues** section, select the preferences for how Issues are displayed, whether spellchecking is enabled in the Description section of Issues, etc. For a complete description of the options in this section, refer to the Issue Page Preferences topic. The only exception is that the Agent Preferences Template does not include the Quick Descriptions/Signatures option.
8. In the **Security** section, the security option restricts others from updating an agent's assigned Issues (for example, if the agent is away from his or her desk) by requiring a password. If enabled, a password is required each time the agent creates or edits an Issue. Refer to for complete details.
9. In the **FootPrints Service Core Sync** section, specify whether the role(s) to which this template applies use the BMC FootPrints Sync feature or one-way synchronization with Outlook. From the link, you can customize the BMC FootPrints Sync options. Refer to BMC FootPrints Sync for complete details on the settings that apply to this feature.
10. In the **Instant Talk** section, choose whether to allow customers to initiate an Instant Talk session with the agent. If Instant Talk is set to Not Allow, the agents are still able to initiate Instant Talk sessions with one another.

    NOTE
    This option only applies if Instant Talk is enabled.

11. When your edits are complete, enter the password in the **Apply Changes** section, and then click the **Save** button.
    This saves the changes to the template.

    Note: Any changes you have made at this point do not apply to existing users. To update existing user preferences with your changes, return to the **Agent Preferences Templates** page. Refer to the Assign Template to Role topic for details.

Delete Agent Preference Template or Templates

Delete a Single Agent Preference Template

To delete a Agent Preferences Template:

1. Select Administration | Workspace from the BMC FootPrints Service Core Toolbar. The Workspace Administration page is displayed in the main frame.
2. Select Agent Preferences Templates under the Roles heading in the main frame. The Agent Preferences Templates page is displayed in the main frame.

3. Select a template to delete from the Templates List drop-down in the Create/edit Templates section of the main frame.
4. Enter your password in the Password field.
5. Click the **Delete** button.

Delete All Agent Preference Templates

To delete all of the Agent Preferences Templates simultaneously:

1. Select Administration | Workspace from the BMC FootPrints Service Core Toolbar. The Workspace Administration page is displayed in the main frame.
2. Select Agent Preferences Templates under the Roles heading in the main frame. The Agent Preferences Templates page is displayed in the main frame.
3. At the bottom of the page, enter your password in the Delete All Templates section, then click the **Save** button. A confirmation pop-up dialog is displayed.

Fields

About Fields

The fields found in BMC FootPrints Service Core forms are highly customizable by workspace. Custom workspace and Address Book fields are defined by the workspace administrator. Other built-in BMC FootPrints Service Core fields, such as Title, Status, and Description, can be further defined as well. All fields dynamically appear in all BMC FootPrints Service Core forms, including Create Issue, Edit Issue, Advanced Search, and Advanced Reports.

Before any custom workspace or Address Book fields are created, you should decide which information you want associated with the Customer record in the Address Book and which will be entered on a per-Issue basis. Information that would remain fairly constant for the Customer, such as last name, first name, email address, and phone number should become Address Book fields. Information that pertains to an individual Issue, such as problem type, call type, etc. should become workspace fields.

See also Field Permissions Overview.

Form Designer

Form Designer Introduction

Workspace fields are used to track information for issues in the current workspace. The fields, tabs, and other data configured here are displayed on the tabs of the Create Issue and Edit Issue pages. The fields are available as criteria for searches, reports, escalation rules, and auto-assignment. The Form Designer designs the form used for issues. A form comprises the format of the issue page (the number of columns in which the fields are represented and the tabs or sections in which those fields appear) as well as the fields contained on the issue page. BMC FootPrints Service Core issue pages have built-in fields and the workspace administrator may add custom fields.

The BMC FootPrints Service Core built-in fields are:

- **Title**—Single line character field for providing a brief synopsis of the issue. Default maximum length is 240 characters.
- **Description**—Multi-line character field for providing an in-depth description of the issue and related information. Maximum length is unlimited. The Workspace administrator can define the size of the visible portion of the field.

- **Status**—Drop-down field for selecting a status of an issue. Workspace administrator can define the values of this field. The Open and Closed statuses are built-in, but can be renamed by the Workspace administrator.
- **Priority**—Drop-down field for assigning a priority to an issue. Workspace administrator can define the values of this field.
- **Assignees**—Multi-select field for assigning agents to be responsible for the issue.
- **Submitter**—Individual who submitted the issue (not necessarily the same as the "contact").
- **Last update date/time**—BMC FootPrints Service Core automatically enters the date and time of the last time an issue was updated.
- **Submitted date/time**—BMC FootPrints Service Core automatically enters the date and time of the last time an issue was submitted.

Only one version of a form can be developed in a single Workspace. That is, you cannot have forms with different fields and layouts in the same Workspace. Different forms can be designed for different Workspaces and also fields can be displayed or hidden based on user role and permissions.

Field Types

BMC FootPrints Service Core supports the following field types:

- Single line text
- Multi-line text
- Integer
- Checkbox
- Real number
- Date only
- Date and time
- Drop-down
- Multiple selection choice
- Web site URL
- FTP URL
- Email address

Restrictions

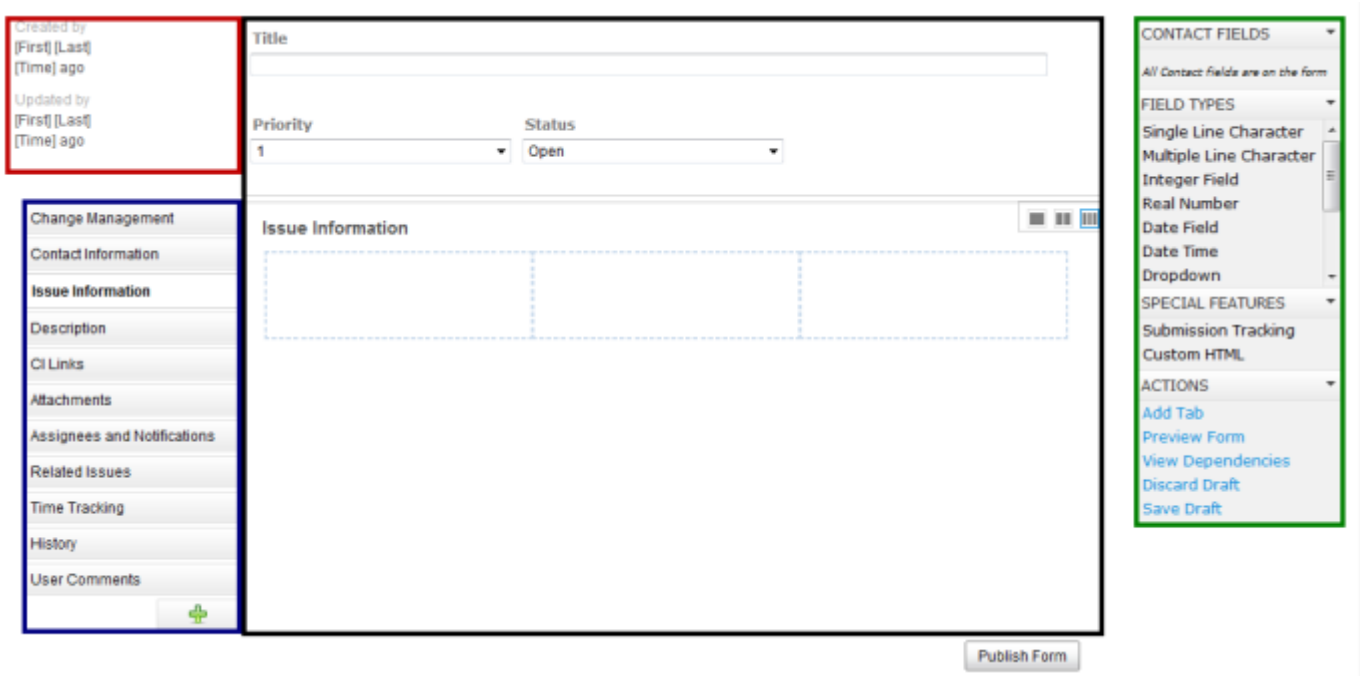
With respect to any size limits for fields, there is very little danger of exceeding the limits of most databases. Nevertheless, there are limits of which administrators should be aware. When the number of fields in an individual workspace grows into the hundreds, performance may begin to degrade or data may begin to be truncated. Administrators should at least be aware of this possibility. There are two ways in which field proliferation could get out of hand. One is through the use of field dependencies. The other can occur by using field-level permissions to combine multiple workspaces into a single workspace. Both of these features are extremely valuable and help to simplify life for the user. Administrators should not in any way avoid using these features. They are mentioned here only because of the slim chance that they could cause a problem through field proliferation.

Reserved Words

For a list of BMC FootPrints Service Core Reserved Words, open the mrReservedWords.pl file in the FootPrints/cgi directory.

Form Designer Administration Page Layout and Tools

To access the Form Designer administration page, select Administration | Workspace from the BMC FootPrints Service Core homepage, then select Form Designer from the Fields section of the administration page. The Form Designer page is displayed (the colored rectangles in the following figure are not part of the actual administration page).



For the purposes of this help topic, Form Builder is described as four "zones", plus the **Publish Form** button.

The zones on the Form Designer are:

- **Static Information** (outlined in red above)—The information in this zone cannot be changed by the administrator. The information in the fields is determined by FootPrints and is automatically populated in the published form. The Static Information zone is displayed in the Form Designer solely for informational purposes. The following content is displayed on the published form:
  - **Issue Number** (not shown)—The Issue Number is not displayed on the Form Designer, but is displayed in the published form.
  - **Created By**—The name of the individual who created the issue.
  - **Updated By**—The name of the last individual to edit the issue.
- (outlined in blue above)—Select a tab for editing. The selected tab can be altered as the administrator sees fit using the controls on the right side of the page. By default, the Issue tab is displayed. The Change Management and/or CI Links tabs are only displayed if the BMC FootPrints Change Manager and/or BMC FootPrints Configuration Manager add-on modules have been installed. The following are the default tabs.
  - Change Management

  - Contact Information
  - Issue Information
  - Description
  - CI Links
  - Attachments
  - Assignees and Notifications
  - Related Issues
  - Time Tracking
  - History
  - User Comments
- **Canvas** (outlined in black above)—The "canvas" is the actual issue page form that the administrator is developing. The Canvas is displayed with the Title, Priority, and Status fields always at the top of the page and the fields for the selected tab below that.
- **Palette** (outlined in green above)—The "palette" is the set of controls used to manipulate the canvas. There are three areas within the palette:
  - **Fields**—Used to add fields to the canvas. Select a field type and add it to a tab by dragging it from the palette to the canvas.
  - **Special Features**—Special Features are:
    - **Submission Tracking**—A special field for tracking the way in which the issue was submitted (via email, via web, via telephone, etc.)
    - **Custom HTML**—A means of adding HTML to the issue page. The HTML can be any HTML content, such as a link to a web page or text.
  - **Actions**—General controls that enable the administrator to:
    - **Add Tab**—Add a new tab to the issue page.
    - **Preview Form**—View the form as it would appear if it were published as the issue page.
    - **View Dependencies**—View a map of the field dependencies.
    - **Discard Draft**—Discard all changes to the draft without leaving the Form Designer page.
    - **Save Draft**—Save a copy of the issue page as edited in Form Designer without publishing it. The draft can be worked on again at a later date. In the meantime, the current issue page would remain unchanged.
- **Publish Form**—Puts the issue page into production and is similar to the **SAVE** button found on other pages.

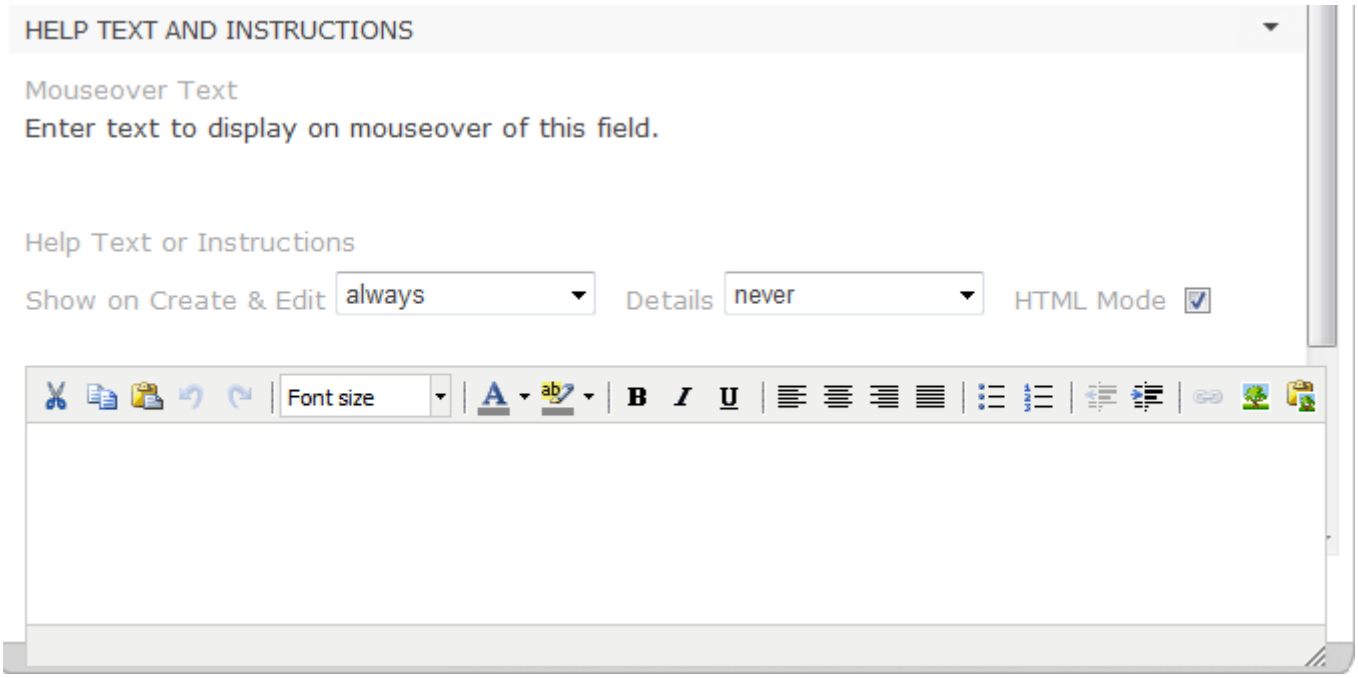
Additional Form Designer Functions

The Form Designer can create tool tips, the text that is displayed when a cursor hovers over a field or tab. In addition, you can set field permissions and field dependencies in the Form Designer.

Working with Tabs

Tabs divide and categorize the fields on the issue form. The Tabs on the Form Designer page can be moved up or down in the list to change the layout of the form, but most of them cannot be altered. The Workspace administrator can add custom tabs and enter any field types into the custom tabs. The default tabs on the Form Builder are:

- **Change Management**—This tab can be moved, but cannot be customized. This tab is only displayed if the BMC FootPrints Change Manager add-on module has been installed.
- **Contact Information**—This tab can be moved and customized in the Form Designer. This tab can also be customized from the Address Book Field Maintenance page. The fields are added to the Address Book from Address Book field maintenance and by default are instantiated in Contact Information. The Form Designer allows them to be included/excluded. Both custom Workspace fields and Address Book fields can be displayed here. When the Form Designer is displayed, fields that have already been configured for the Contact Information tab are present.
- **Issue Information**—This tab can be moved and customized.
- **Description**—This tab can be moved and customized. The Description field, which is a multi-line text field, cannot be removed from the tab. Placing a field either before or after the Description field essentially changes its position on the tab.
- **CI Links**—This tab can be moved, but cannot be customized. This tab is only displayed if the BMC FootPrints Configuration Manager add-on module has been installed.
- **Attachments**—This tab can be moved, but cannot be customized. The Help Text and Instructions properties of the Attachments field within the tab can be changed as follows:
  - **HELP TEXT AND INSTRUCTIONS**



    - **Mouseover Text**—Enter the text to be displayed when a cursor hovers over the field or the field name. Text is limited to 100 characters.

- **Help Text and Instructions**—Help text and instructions can be as detailed as you like and are displayed above the field on the published form.
    - **Show on Create & Edit**—Select whether to show the help text and instructions on the Create and Edit pages of an issue:
        - **Always**—The text and instructions are always visible to the agent or customer.
        - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
        - **If row is shown**—Display the text and instructions only if the row in which the field appears is visible to the agent or customer.
- **Details**—Select whether to show the help text and instructions on the Details page of an issue.
    - **Never**—The text and instructions are never visible to the agent or customer.
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
- **Rich Text Mode checkbox**—Check the box to use the Rich Text Mode Editor to edit the instructions. The editor provides a variety of text formatting options, including font options and HTML options such as inserting an image from a file or the clipboard, linking to a URL, etc. Leave the box unchecked to use plain text for the help text and instructions. The box is checked by default.
- **Text field**—Enter the help text or instructions into the multi-line character field.

- **Assignees and Notifications**—This tab can be moved, but cannot be customized. Some Basic Attributes of the field can be changed.
- **Related Issues**—This tab can be moved, but cannot be customized.
- **Time Tracking**—This tab can be moved, but cannot be customized.
- **History**—This tab can be moved, but cannot be customized.
- **User Comments**—This tab can be moved, but cannot be customized.

Adding Tabs

Tabs can be added to the set tabs by either clicking the Add button at the bottom of the list of tabs or by clicking the **Add Tab** button in the Action section of the Palette. When you add a tab:

1. The new tab is displayed on the Canvas. The name of the tab is "Tab *N*", where *N* is a number. A yellow field displays the tab name. Enter a name for the tab.
2. When the cursor is placed within the tab on the Canvas, three icons are displayed in the upper right corner of the tab. These icons represent the number of columns in the tab layout. The default is three columns, but you can click on an icon to specify how many columns you want (1, 2, or 3).
3. No further action is required. The tab is not, at this point, visible in the production version of the issue. The tab will not be visible until the form is published.

Moving Tabs

Tabs can be moved up or down in the list of tabs. The position in the list determines the position of the tab on the issue page. To move a tab, position the cursor over the button representing the tab, move the cursor over the Move symbol, then hold the left mouse button down and drag the tab to its new position in the list.

NOTE

Changing the order of tabs or fields on this page does not affect the database. It only affects the display of fields in the BMC FootPrints forms.

Deleting Tabs

To delete a tab, position the cursor over the button representing the tab and click the Trash Can symbol. Deleting tabs/sections moves all fields in that tab to the previous tab. If there is no previous tab, the field(s) go to top of next tab. If there is no previous or next tab, then the tab cannot be deleted.

Changing the Number of Columns in a Tab

By default, tabs are created with three columns of width. When the cursor is placed within the tab on the Canvas, three icons are displayed in the upper right corner of the tab. These icons represent the number of columns in the tab layout. The default is three columns, but you can click on an icon to specify how many columns you want (1, 2, or 3). The default is three columns because that is the default for the Administration| Workspace | Workspace Options on the Issue Page tab. To change the default number of columns, change that administration setting.

Columns 4, 5, and 6 are available by using CTRL-ALT while clicking on the 1, 2, and 3 buttons.

Changing Tabs

While working within the Form Designer, certain hot keys are enabled for your convenience. To change tabs, you can click on the button labeled with the tab name, of you can use **CTRL-DOWN ARROW** or **CTRL-]** to go to the next tab or **CTRL-UP ARROW** or **CTRL-[** to go to the previous tab.

Field Types

The following Workspace field types are supported:

- **Character** (single or multiple line)—This type of field can contain any type of data, such as alpha, numeric, or special characters. Single-line character fields accept one line of data, while multiple-line character fields accept an unlimited number of lines of data. There is no effective limit on the amount of text in a field.
- **Integer**—Accepts integers.
- **Real Number**—Accepts integers or decimal numbers. You will be asked to include Total Digits and Total Decimal Places for the real number when configuring the field. Total Digits is the total number of digits in the number and Total Decimal Places is the number of digits to the right of the decimal. If an unacceptable value is entered into a real number field, such as a value that includes alphabetical characters, has too many digits after the decimal place, or is too wide for the field as it has been configured, BMC FootPrints Service Core generates a warning before you can leave the page.

  When creating a new real number field, MS SQL versions of BMC FootPrints Service Core asks for the total digits and total decimal places on the Form Designer page. This is necessary since SQL Server real numbers default to four decimal places, which might not be what you want displayed if you are entering currency information.
- **Date**—Accepts valid dates (format based on system or user preference).
- **Date-Time**—The user can select both a date and a time for this field type. Can optionally be linked to the Calendar. A default link to the calendar(s) can be changed at the time of Issue creation by the Agent. In

addition, the field can be configured as a link to the personal calendar or personal and Workspace calendars by default or by clicking the radio button for either linking to the personal calendar or linking to the personal and Workspace calendars when the Issue is created. To select the current date-time, click the checkbox provided with the field.

- **Drop-down**—Offers a pre-defined drop-down list of choices from which the user chooses one of the options.
- **Multi-select**—Allows the user to select multiple choices from a pre-defined list.
- **Checkbox**—Offers a checkbox for users to select in the Issue form. In searches, reports and on the Details screen, the values "On" and "Off" are displayed, or alternate values can be defined. Mandatory/optional permissions do not apply to checkboxes; this field can be checked or left unchecked by the user.
- **Web site**—Accepts URL addresses (of the form http://*server.name.com*). Appears as a hypertext link on the Details page of an Issue.
- **FTP**—Accepts fully-qualified FTP addresses (of the form ftp://ftp.*sitename*.com). Appears as a hypertext link on the Details page of an Issue.
- **Email Address**—Accepts Email addresses. Appear as a hypertext link on the Details page of an Issue.

Title, Priority, and Status Fields

Editing the Title, Priority, and Status

The **Title**, **Priority**, and **Status** fields are displayed at the top of the Canvas and are always present regardless of which tab is selected. Every issue has a Title, Priority, and Status. Title is always in the top of the page, but Priority and Status can be moved to other tabs.

Hover the mouse over a field to view the controls for that field. Controls are:

- Edit
- Move

Click the **Edit** icon to display the Properties window. Edit the field content in the Properties window. Click the **Move** icon to move the field within the current area of the page (you cannot move any of these fields into any other tab).

The following topics explain the Properties for each of the fields:

- Titles
- Priorities
- Statuses

Titles

By default, titles are entered by the user in free form when issues are created. Optionally, the Workspace administrator can define the Title field as a drop-down field and then define a list of acceptable titles in advance. Users must then select titles from that list when Issues are entered. When this feature is enabled, users can only pick from the list of defined subjects.

To edit Title properties, hover the cursor over the Title field and click the Edit icon.

Setting Properties

Select the type of field you want to use for the Title field from the Type drop-down. Choices are:

- Single-line character
- Drop-down

By default, the Title field is a single-line character field. Refer to the topic on setting properties for single-line character fields for details on setting field properties. The administrator cannot change access permission for the Title field.

If you select "Drop-down", refer to the topic on setting properties for drop-down fields. For the Title field, there are two separate sections for Choices. The sections are:

- **Public**—Can be viewed by agents or customers.
- **Internal**—Can only be viewed by agents.

NOTE

The Title field cannot be moved to a different tab.

- **CANCEL/SAVE buttons**—To cancel the edits you've made to the field, click the **Cancel** button below the Properties window. To save the edits, click the **Save** button. If the field is being introduced for the first time and has not been saved before, clicking Cancel leaves the Properties window without adding the field to the form. Clicking Save does not publish the field addition/edit to the production version of the form, that is, the changes to the form do not become visible to the user until the form has been published.

Priorities

The Priority field is used to rate Issues by importance or impact. You can define the properties of the Priority field to set:

- Name of the field
- Names for each level of priority
- Colors associated with each priority level
- Abbreviation to be used in the field (in case the actual name is too long)
- Whether the priority is displayed in a Priority column on the BMC FootPrints Service Core homepage.

To edit Priority properties, hover the cursor over the Priority field and click the Edit icon.

Setting Properties

Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **BASIC ATTRIBUTES**
  - **Name**—Enter a name for the field. This will be displayed as a label for the field on the published form.
  - **Width**—Select the number of columns that the field spans. The form is limited to three columns, so options are 1, 2, and 3.
  - **Input Size**—Input Size allows you to determine how much of a one, two, or three column selection is occupied by the field. For example, you might want a field to occupy a row by itself (three columns), but because the value entered into that row will only be a few characters long, you might not want the field to occupy the entire length of the row. Options for this property are:
    - **Mini**—Occupies approximately 20% of a one, two, or three column field.
    - **Very Small**—Occupies approximately 45% of a one, two, or three column field.
    - **Small**—Occupies approximately 50% of a one, two, or three column field.
    - **Medium**—Occupies approximately 80% of a one, two, or three column field.
    - **Long** (the default)—Occupies approximately 98% of a one, two, or three column field.

        - **Priority**—The number beside the Priority option states the number of values that have been defined for the field. Click the number to expand the PRIORITY OPTIONS section of the Properties window.

- **PRIORITY OPTIONS**—Use the list to set properties for the priority levels as well as to delete levels.
  - **Word**—Words and colors can be assigned to priorities. Rather than selecting 1, 2, 3, etc., agents can select Urgent, High, Medium, etc. Click in the field to replace the number with any string you wish.
  - **Color**—If colors are selected, the issue is displayed in that color on the BMC FootPrints Service Core homepage. Select a color by clicking the word "Pick" next to the priority. A color map is displayed from which you can select a color by clicking on it. The hex code for that color is displayed in the color box for the priority.
  - **Abbreviation**—Type in the letters you want displayed in the Priority column on the homepage. If nothing is entered, then an abbreviation is automatically configured using the first four letters of the Priority word, or the whole word if it has four or fewer letters.
  - **Display**—Determine whether a priority is displayed in the Priority column on the homepage list of issues. By displaying only the higher priorities or specialized priorities, those issues stand out more when an agent is viewing the list of issues on the homepage. To specify that a priority is displayed on the homepage, click the empty checkbox next to the priority. To turn off the display of a priority, click a populated checkbox next to the priority.
  - **Add**—The **Add** link adds values to the field. When you click the Add link, the Add Choices Editor is displayed. Type the values into the field and press Enter after each value. Click the **Add Choice(s)** button when you have entered all of the values. The Add Choices Editor enforces uniqueness; if you enter the same value twice, when you click the Add Choice(s) button, the values are not added but, instead, an asterisk is displayed next to the repeated value. If the values are accepted, a list of the values are displayed in the section.
  - **Controls for the list of values**—Once values have been added to the field, the values are displayed in a list. The following controls can then be viewed and selected when hovering the mouse over a value in the list:
    - **Checkmark icon**—Sets the value as the default for the field. Click the icon to set the value as the default. To change the default, click the same icon on a different value.

- **HELP TEXT AND INSTRUCTIONS**
  - **Mouseover Text**—Enter the text to be displayed when a cursor hovers over the field or the field name. Text is limited to 100 characters.
  - **Help Text and Instructions**—Help text and instructions can be as detailed as you like and are displayed above the field on the published form.
    - **Show on Create & Edit**—Select whether to show the help text and instructions on the Create and Edit pages of an issue:
      - **Always**—The text and instructions are always visible to the agent or customer.
      - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
      - **If row is shown**—Display the text and instructions only if the row in which the field appears is visible to the agent or customer.
    - **Details**—Select whether to show the help text and instructions on the Details page of an issue.

        - **Never**—The text and instructions are never visible to the agent or customer.
        - **Always**—The text and instructions are always visible to the agent or customer.
        - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
    - **Rich Text Mode checkbox**—Check the box to use the Rich Text Mode Editor to edit the instructions. The editor provides a variety of text formatting options, including font options and HTML options such as inserting an image from a file or the clipboard, linking to a URL, etc. Leave the box unchecked to use plain text for the help text and instructions. The box is checked by default.
    - **Text field**—Enter the help text or instructions into the multi-line character field.
- **CANCEL/SAVE buttons**—To cancel the edits you've made to the field, click the **Cancel** button below the Properties window. To save the edits, click the **Save** button. If the field is being introduced for the first time and has not been saved before, clicking Cancel leaves the Properties window without adding the field to the form. Clicking Save does not publish the field addition/edit to the production version of the form, that is, the changes to the form do not become visible to the user until the form has been published.

Editing or Moving the Field

To edit the field properties, from the Form Designer, hover over the field and click on the edit icon.

To move the field, from the Form Designer, hover over the field, click on the move icon, hold down the mouse button, and drag the field to the location in which you want it displayed. The Priority field cannot be moved to another tab.

Changing the Field Name

You can change the field name from the Form Designer without going into the Properties window. To do so, click in the field name from the Form Designer. The name is highlighted in yellow. Type the new name into the field.

Statuses

The Status field is used to define the workflow of Issues or the stages that an Issue moves through from beginning to end. Statuses can be added, deleted, and reordered here. The dialog is pre-filled with the Statuses defined by the workspace template.

NOTE

Open and **Closed** are built-in statuses and cannot be deleted or moved from their positions in the list. They can be renamed. **Request** is also a built-in status that cannot be removed from the choices, but can also be renamed.

To edit Status properties, hover the cursor over the Status field and click the Edit icon.

Setting Properties

Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **BASIC ATTRIBUTES**
    - **Name**—Enter a name for the field. This will be displayed as a label for the field on the published form.
    - **Width**—Select the number of columns that the field spans. The form is limited to three columns, so options are 1, 2, and 3.
    - **Input Size**—Input Size allows you to determine how much of a one, two, or three column selection is occupied by the field. For example, you might want a field to occupy a row by itself (three columns), but

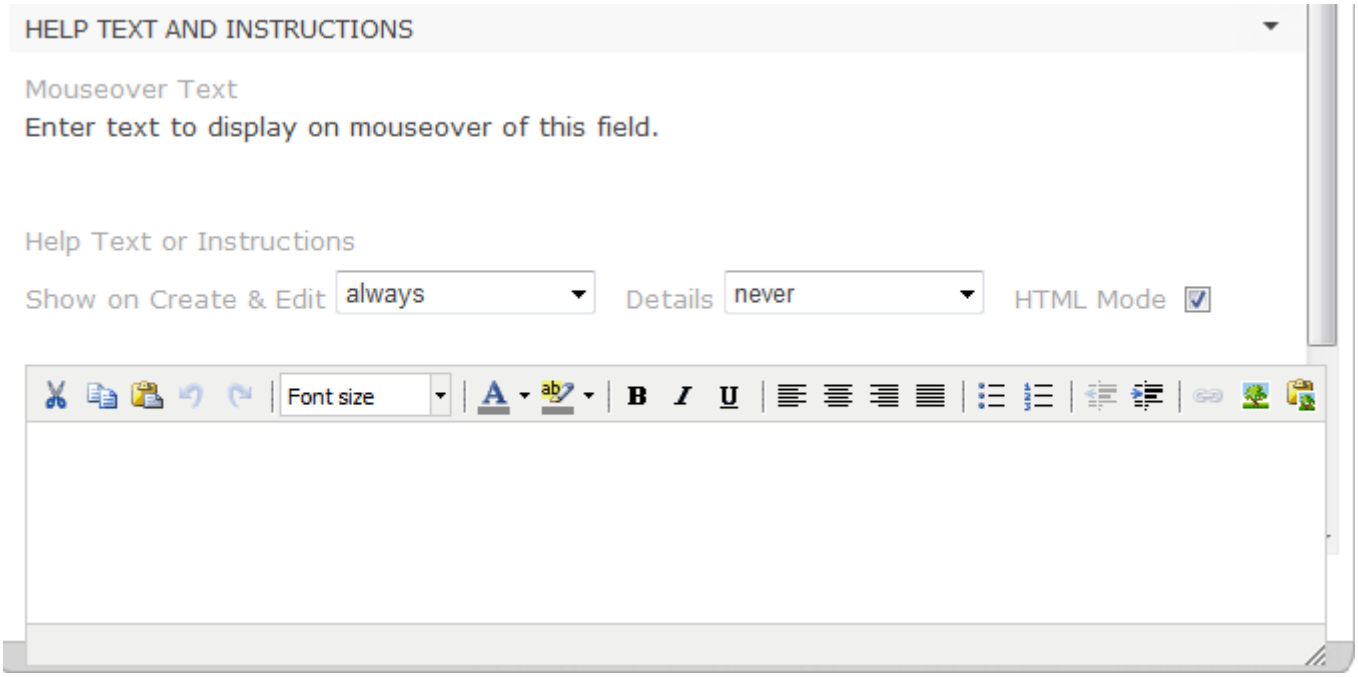
because the value entered into that row will only be a few characters long, you might not want the field to occupy the entire length of the row. Options for this property are:

- **Mini**—Occupies approximately 20% of a one, two, or three column field.
- **Very Small**—Occupies approximately 45% of a one, two, or three column field.
- **Small**—Occupies approximately 50% of a one, two, or three column field.
- **Medium**—Occupies approximately 80% of a one, two, or three column field.
- **Long** (the default)—Occupies approximately 98% of a one, two, or three column field.

- **Dropdown**—The number beside the Dropdown option states the number of values that have been defined for the field. Click the number to expand the CHOICES section of the Properties window. By default, Open and Closed are always part of the Status field.

- **CHOICES**—Specify the choices available to the user from the drop-down field.
  - **Add**—The **Add** link adds values to the field. When you click the Add link, the Add Choices Editor is displayed. Type the values into the field and press Enter after each value. Click the **Add Choice(s)** button when you have entered all of the values. The Add Choices Editor enforces uniqueness; if you enter the same value twice, when you click the Add Choice(s) button, the values are not added but, instead, an asterisk is displayed next to the repeated value. If the values are accepted, a list of the values are displayed in the section.
  - **You can also change the display for the built-in Statuses**—To change the name displayed for a built-in status, click in the field where the name appears and type in the new name.
  - **Controls for the list of values**—Once values have been added to the field, the values are displayed in a list. The following controls can then be viewed and selected when hovering the mouse over a value in the list:
    - **Trash can icon**—Click the icon to delete the field.
    - **Checkmark icon**—Sets the value as the default for the field. Only the Open or Closed status can be set as a default. Click the icon to set the value as the default. To change the default, click the Checkmark icon of a different value.
    - **Move icon**—Move the value to another position in the list. To move the value, hold down the mouse button on the Move icon and drag the value to the new location.

- **HELP TEXT AND INSTRUCTIONS**



- **Mouseover Text**—Enter the text to be displayed when a cursor hovers over the field or the field name. Text is limited to 100 characters.
- **Help Text and Instructions**—Help text and instructions can be as detailed as you like and are displayed above the field on the published form.
  - **Show on Create & Edit**—Select whether to show the help text and instructions on the Create and Edit pages of an issue:
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
    - **If row is shown**—Display the text and instructions only if the row in which the field appears is visible to the agent or customer.
  - **Details**—Select whether to show the help text and instructions on the Details page of an issue.
    - **Never**—The text and instructions are never visible to the agent or customer.
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
  - **Rich Text Mode checkbox**—Check the box to use the Rich Text Mode Editor to edit the instructions. The editor provides a variety of text formatting options, including font options and HTML options such as inserting an image from a file or the clipboard, linking to a URL, etc. Leave the box unchecked to use plain text for the help text and instructions. The box is checked by default.
  - **Text field**—Enter the help text or instructions into the multi-line character field.

- **CANCEL/SAVE buttons**—To cancel the edits you've made to the field, click the **Cancel** button below the Properties window. To save the edits, click the **Save** button. If the field is being introduced for the first time

and has not been saved before, clicking Cancel leaves the Properties window without adding the field to the form. Clicking Save does not publish the field addition/edit to the production version of the form, that is, the changes to the form do not become visible to the user until the form has been published.

Defining Permissions Per Role

To define field permissions with greater granularity, edit the Role Properties for the field. Once you have done so, if you return to the Form Designer, specific permissions can be entered for specific roles.

Editing, Moving, or Deleting the Field

To edit the field properties, from the Form Designer, hover over the field and click on the edit icon.

To move the field, from the Form Designer, hover over the field, click on the move icon, hold down the mouse button, and drag the field to the location in which you want it displayed.

To delete the field, from the Form Designer, hover over the field and click on the trash can icon. Deletion is not permitted if a field is part of some other feature (such as a field dependency). In those instances, the relationship between the field and the other feature must first be severed before the field can be deleted.

NOTE

Deleted data fields are no longer viewable, and BMC FootPrints Service Core forms no longer contain that field. The column is also deleted and the data no longer accessible. To undelete a field (assuming you've made a backup of your database), contact BMC for instructions.

Changing the Field Name

You can change the field name from the Form Designer without going into the Properties window. To do so, click in the field name from the Form Designer. The name is highlighted in yellow. Type the new name into the field.

The Palette

Palette Overview

The Palette contains the tools for manipulating fields, as well as some additional controls. The controls in the Palette are:

- **Contact Fields**—Used to manipulate fields on the Contact Tab.
- **Field Types**—Used to add fields to the Canvas.
- **Special Features**—Used to add the Submission Tracking field and for adding Custom HTML.
- **Actions**—Actions are additional controls for working with the Canvas. The available Actions are:
    - **Add Tab**—Adds a tab to the set of tabs on the form.
    - **Preview Form**—Opens a new window and displays the form as it would look if it were published.
    - **View Dependencies**—Displays a map of the field dependencies in a separate window. This is very useful for organizing field dependencies.
    - **Discard Draft**—Deletes all changes made to the Canvas during this session.
    - **Save Draft**—Saves a copy of all the work done on the Canvas during this session. Save Draft does not publish the form. Only when the form is published does it become visible to agents and customers as a production issue page.

Contact Fields

When you select the Contacts tab, all configured contact fields are displayed on the Canvas. You can choose to exclude a field from the Canvas using the Exclude icon with the field. If you exclude the field, it is not gone. Instead, the field name is displayed below the Contact Fields section of the Palette. To restore the field, drag and drop the field from the Palette to a tab.

Adding Workspace Fields

Fields of any type can be added to any tab of an issue and/or to the top area where the Title, Priority, and Status are displayed. Adding fields is done by dragging and dropping the field from the Palette to the Canvas into the desired location.

When you drop the field, the Properties window for the field is displayed. Define the characteristics of the field in the Properties window.

Defining Field Properties

Different fields have different characteristics. These characteristics are defined in the Properties window. Regardless of the field, the Properties window displays the same three expanding/collapsing sections:

- **Basic Attributes**—Enter basic characteristics of the field, such as length and width.
- **Help Text and Instructions**—Enter text or instructions that are visible to the agent when a cursor hovers over the field.
- **Permissions and Access**—Set field permissions.

Drop-down fields display an additional section:

- **Choices and Dependent Fields**—Set the values that can be selected from the drop-down and also create dependent fields.

Multi-select fields display an additional section:

- **Choices**—Set the values that can be selected from the menu.

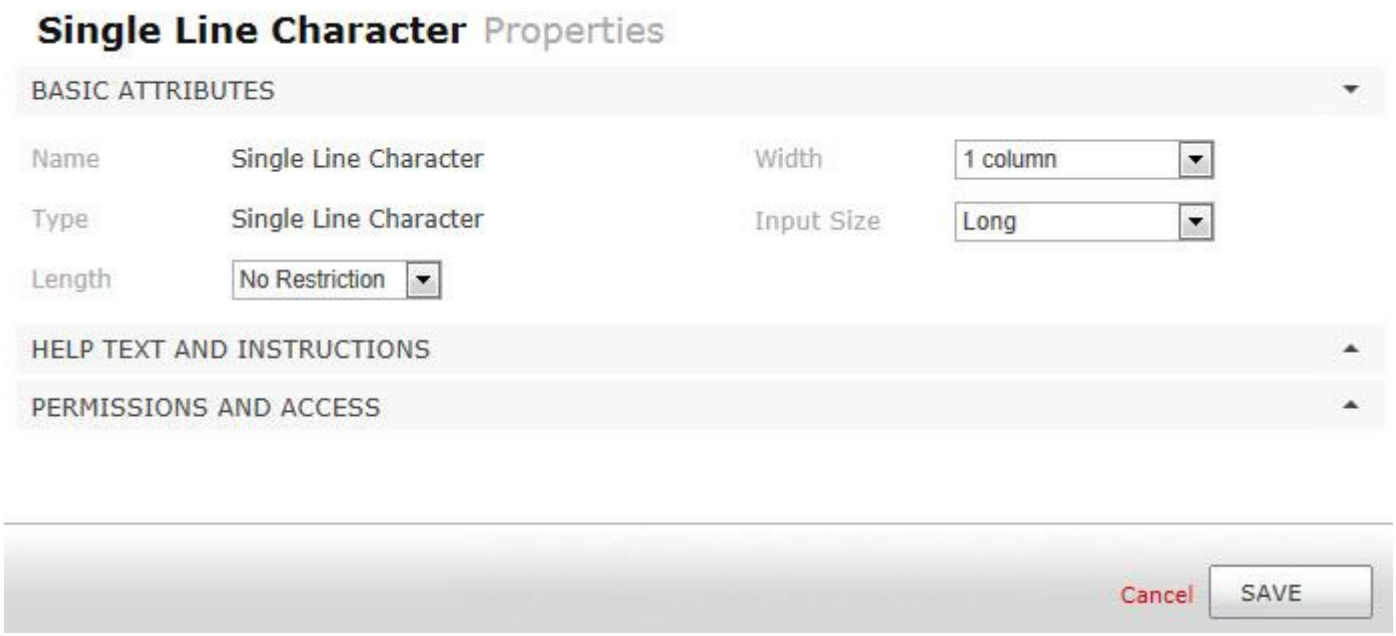
Definable field types are:

- Single-line Character
- Multi-line Character
- Integer
- Real Number
- Date
- Date Time
- Drop-down
- Multi-select
- Checkbox
- Web Site
- FTP File/Site
- Email Address

Single-line Character

Setting Properties

When you drag and drop a Single-line Character field onto the Canvas, the Properties window is displayed.

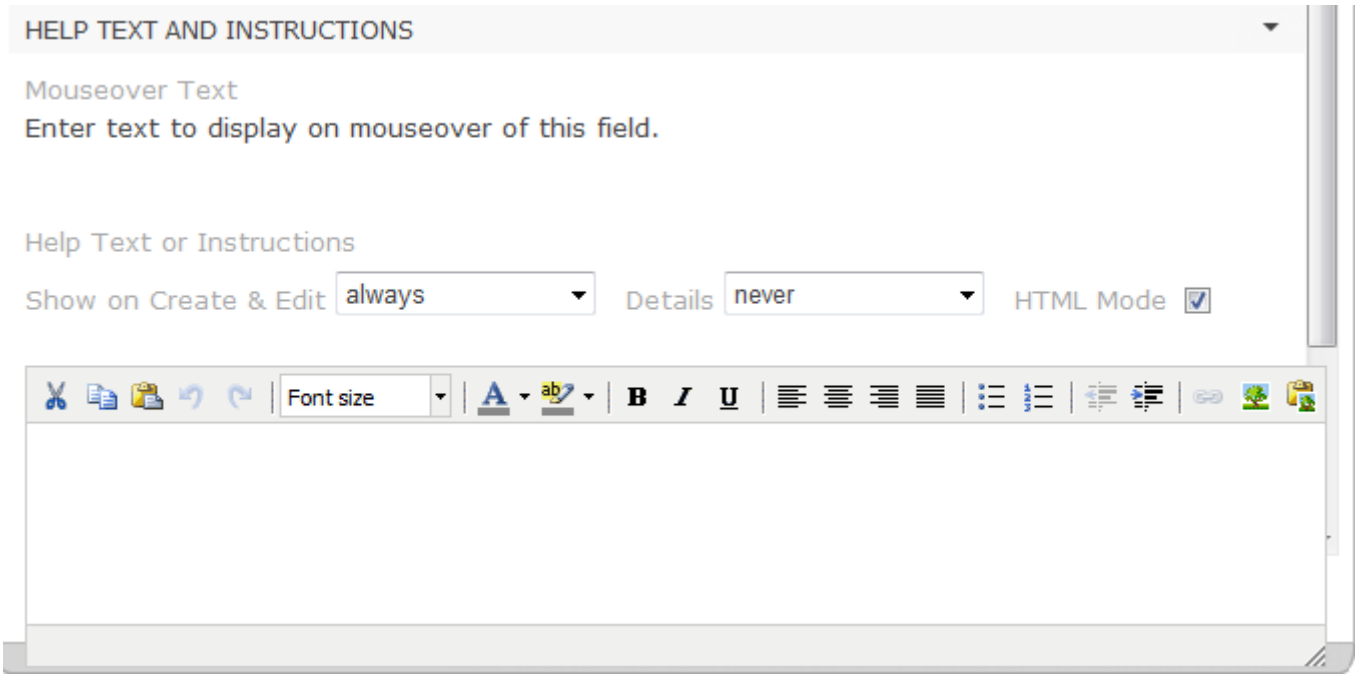


Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **BASIC ATTRIBUTES**
  - **Name**—Enter a name for the field. This will be displayed as a label for the field on the published form.
  - **Width**—Select the number of columns the field spans. The field can span up to six columns, depending on the settings (see Changing the Number of Columns in a Tab in Working with Tabs).
  - **Input Size**—Input Size allows you to determine how much of the field's width is occupied by the field input. For example, you might want a field to occupy a row by itself (three columns), but because the value entered into that row will only be a few characters long, you might not want the field input to occupy the entire length of the row. Options for this property are:
    - **Mini**—Occupies approximately 20% of the field width.
    - **Very Small**—Occupies approximately 45% of the field width.
    - **Small**—Occupies approximately 50% of the field width.
    - **Medium**—Occupies approximately 80% of the field width.
    - **Long** (the default)—Occupies approximately 98% of the field width.
  - **Length**—This option applies to single-line character, integer, and real number fields only. For these fields, the administrator has the option of defining a field length. If defined, users must enter data of the specified number of characters or digits when creating or editing an issue or request. Choices for defining field length are:
    - **No Restriction**—No field length restriction (the default).
    - **Exactly**—Enter a number in the box for the exact number of characters users must enter in the field.

- **At least**—Enter a number in the box for the minimum number of characters field data must contain.
- **At most**—Enter a number in the box for the maximum number of characters field data can contain.
- **Between**—Enter two numbers defining a range of the number of characters accepted for field data.

- **HELP TEXT AND INSTRUCTIONS**



- **Mouseover Text**—Enter the text to be displayed when a cursor hovers over the field or the field name. Text is limited to 100 characters.
- **Help Text and Instructions**—Help text and instructions can be as detailed as you like and are displayed above the field on the published form.
  - **Show on Create & Edit**—Select whether to show the help text and instructions on the Create and Edit pages of an issue:
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
    - **If row is shown**—Display the text and instructions only if the row in which the field appears is visible to the agent or customer.
  - **Details**—Select whether to show the help text and instructions on the Details page of an issue.
    - **Never**—The text and instructions are never visible to the agent or customer.
    - **Always**—The text and instructions are always visible to the agent or customer.

        - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
    - **Rich Text Mode checkbox**—Check the box to use the Rich Text Editor to edit the instructions. The editor provides a variety of text formatting options, including font options and HTML options such as inserting an image from a file or the clipboard, linking to a URL, etc. Leave the box unchecked to use plain text for the help text and instructions. The box is checked by default.
    - **Text Input field**—Enter the help text or instructions into the input field.

- **PERMISSIONS AND ACCESS**—View or set the default permissions for a custom field.

  For each field, you can set up separate sets of permissions for agents and customers for this workspace. These are called "Agent Default" and "Customer Default" settings.

  Example

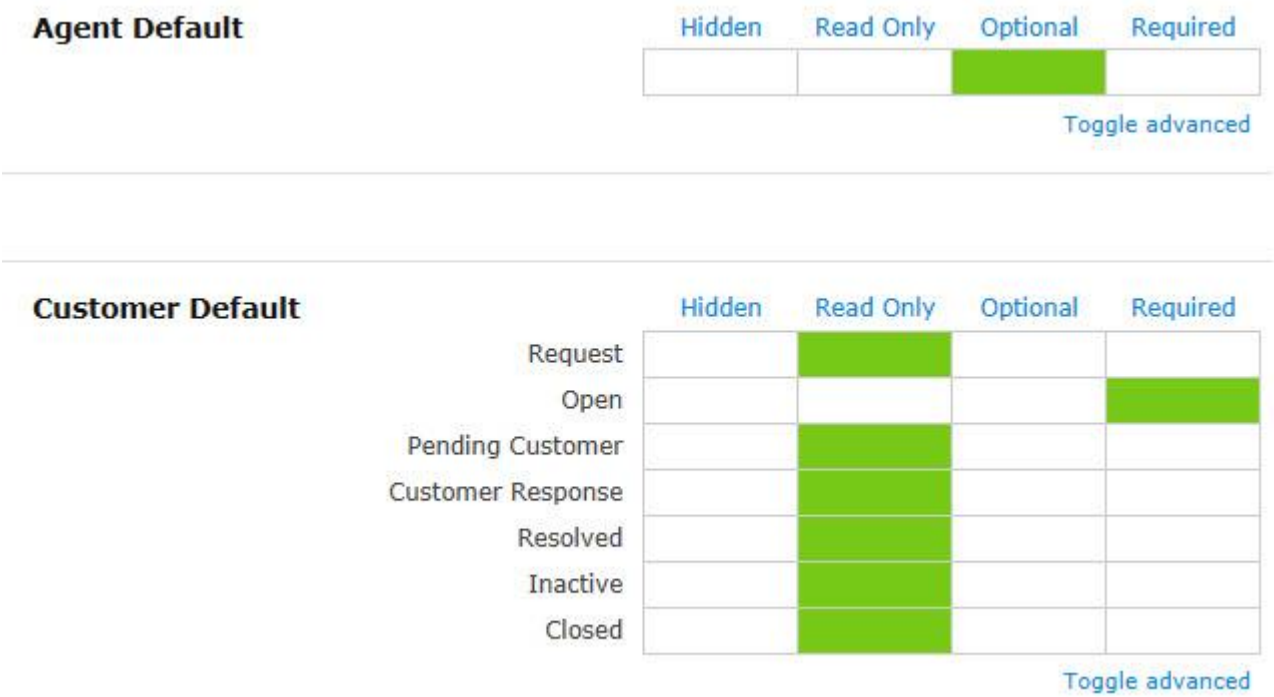
  You might want to require agents to enter information in an issue information field when the issue's status is open, and restrict them from entering information in the field when the issue is closed. So when setting up the Issue Information field, you would set the Agent Default permissions to "Required" for the status "Open", "Read Only" for the status "Closed", and "Optional" for all other statuses.

NOTE
Workspace Administrators can customize permissions per user role, which override the Agent Default and Customer Default permissions set up here. If permissions for a user role have been set up, a message will display above the default permissions listing the user role along with an option to remove custom permissions from the role. If you remove the custom permissions, the field will return to using the Agent Default or Customer Default permissions. (See below for steps.) For more information on field permissions per user role (set up in Administration | Workspace | User Roles) see Field Permissions.

To Set Permissions for a Field:

1. Click a cell in the table corresponding to one of the permissions listed below, such as "Optional".
   This will apply the permission to all statuses at once (Open, Resolved, Closed, etc). The selected cell is color-coded green (see the Agent Default example in the screen shot, below).
   - **Hidden**—Users cannot view the field
   - **Read Only**—Users can view but not edit the field
   - **Optional**—Users can view and edit the field, but are not required to populate the field
   - **Required**— Users can view and edit the field, and are required to populate the field
     Note: "Required" is not available for the Checkbox field type.
2. To set separate permissions per status (advanced permissions):
   a. Click **Toggle advanced** below Agent Default or Customer Default to view all of the statuses.
   b. Then click the cell corresponding to the permission and status (see the Customer Default example in the screen shot, below).

Tip: Click a column heading to apply the permission to all statuses for that column at once.



3. To reset advanced permissions to the initial (basic) settings, click **Toggle advanced** .
   This will reset the permissions to Optional for Agent Default or Hidden for Customer Default.

To Remove Custom Permission from a User Role:

NOTE

The following applies only when a message displays above the Agent Default or Customer Default permissions indicating that a role has custom permissions.

Mouse over the role (listed above the Agent Default or Customer Default permissions), then click the **Remove** button. The custom permissions are removed from the role and the name of the role displays with a strikethrough (e.g., ~~Role Name~~). Once you save your changes, the role name will no longer display on the window.
If you decide not to remove the role and have not yet saved your changes, you can mouse over the role and click the **Undo** button.

- **CANCEL/SAVE buttons**—To cancel the edits you've made to the field, click the **Cancel** button below the Properties window. If the field is being introduced for the first time and has not been saved before, clicking Cancel leaves the Properties window without adding the field to the form. To save the edits, click the **Save** button. Clicking Save does not publish the field addition/edit to the production version of the form, that is, the changes to the form do not become visible to the user until the form has been published.

Defining Permissions Per Role

To define field permissions with greater granularity, you can customize them for a specific role by editing the Role Properties. Once you have done so, if you return to the Form Designer, the customized roles are listed as exceptions to the default permissions.

Editing, Moving, or Deleting the Field

To edit the field properties, from the Form Designer, hover over the field and click on the edit icon.

To move the field, from the Form Designer, hover over the field, click on the move icon, hold down the mouse button, and drag the field to the location in which you want it displayed.

To delete the field, from the Form Designer, hover over the field and click on the trash can icon. Deletion is not permitted if a field is part of some other feature (such as a field dependency). In those instances, the relationship between the field and the other feature must first be severed before the field can be deleted.

NOTE

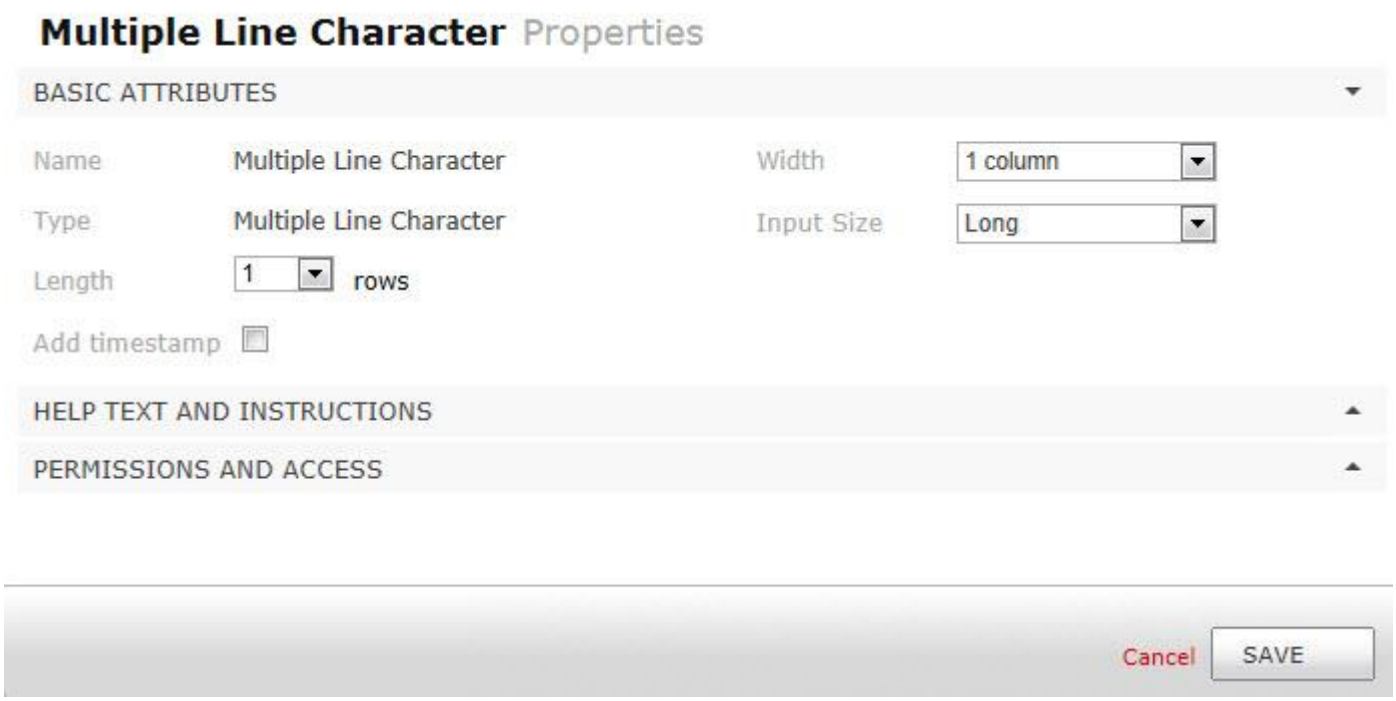
Deleted data fields are no longer viewable, and BMC FootPrints Service Core forms no longer contain that field. The column is also deleted from the database and the data is no longer accessible. To undelete a field (assuming you've made a backup of your database), contact BMC for instructions.

Changing the Field Name

You can change the field name from the Form Designer without going into the Properties window. To do so, click in the field name from the Form Designer. The name is highlighted. Type the new name into the field.

Multi-line Character
Setting Properties

When you drag and drop a Multi-line Character field into the Canvas, the Properties window is displayed.

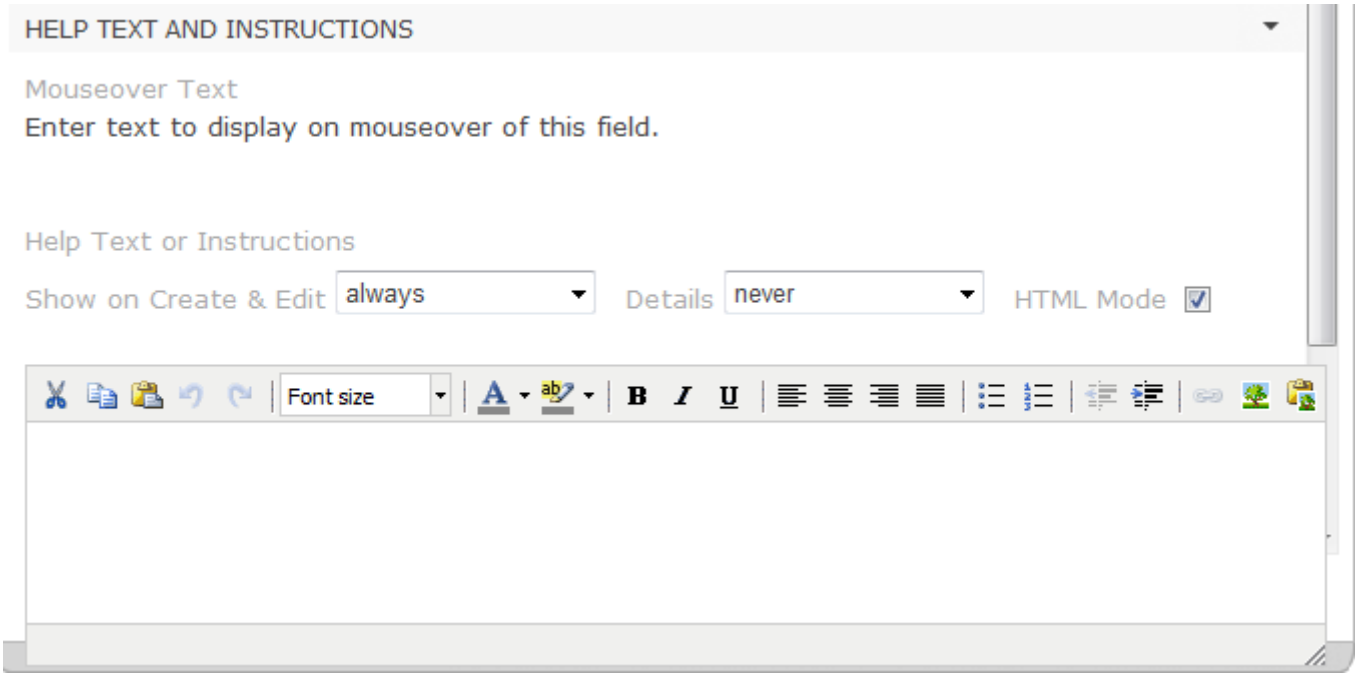


Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **BASIC ATTRIBUTES**
  - **Name**—Enter a name for the field. This will be displayed as a label for the field on the published form.
  - **Width**—Select the number of columns the field spans. The field can span up to six columns, depending on the settings (see Changing the Number of Columns in a Tab in Working with Tabs).

- **Input Size**—Input Size allows you to determine how much of the field's width is occupied by the field input. For example, you might want a field to occupy a row by itself (three columns), but because the value entered into that row will only be a few characters long, you might not want the field input to occupy the entire length of the row. Options for this property are:
    - **Mini**—Occupies approximately 20% of the field width.
    - **Very Small**—Occupies approximately 45% of the field width.
    - **Small**—Occupies approximately 50% of the field width.
    - **Medium**—Occupies approximately 80% of the field width.
    - **Long** (the default)—Occupies approximately 98% of the field width.
- **Length**—This option applies to single-line character, integer, and real number fields only. For these fields, the administrator has the option of defining a field length. If defined, users must enter data of the specified number of characters or digits when creating or editing an issue or request. Choices for defining field length are:
    - **No Restriction**—No field length restriction (the default).
    - **Exactly**—Enter a number in the box for the exact number of characters users must enter in the field.
    - **At least**—Enter a number in the box for the minimum number of characters field data must contain.
    - **At most**—Enter a number in the box for the maximum number of characters field data can contain.
    - **Between**—Enter two numbers defining a range of the number of characters accepted for field data.
- **Add timestamp**—You can add a date/time stamp to multi-line character fields. The date/ time stamp is displayed beside the field when you edit the issue or view the issue on the Details page. Checking the box adds the date/time stamp. If you use the date/time stamp option, users cannot edit existing data in the field when it is published, only add to it.

- **HELP TEXT AND INSTRUCTIONS**



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  - **Show on Create & Edit**—Select whether to show the help text and instructions on the Create and Edit pages of an issue:
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  - **Rich Text Mode checkbox**—Check the box to use the Rich Text Editor to edit the instructions. The editor provides a variety of text formatting options, including font options and HTML options such as inserting an image from a file or the clipboard, linking to a URL, etc. Leave the box unchecked to use plain text for the help text and instructions. The box is checked by default.
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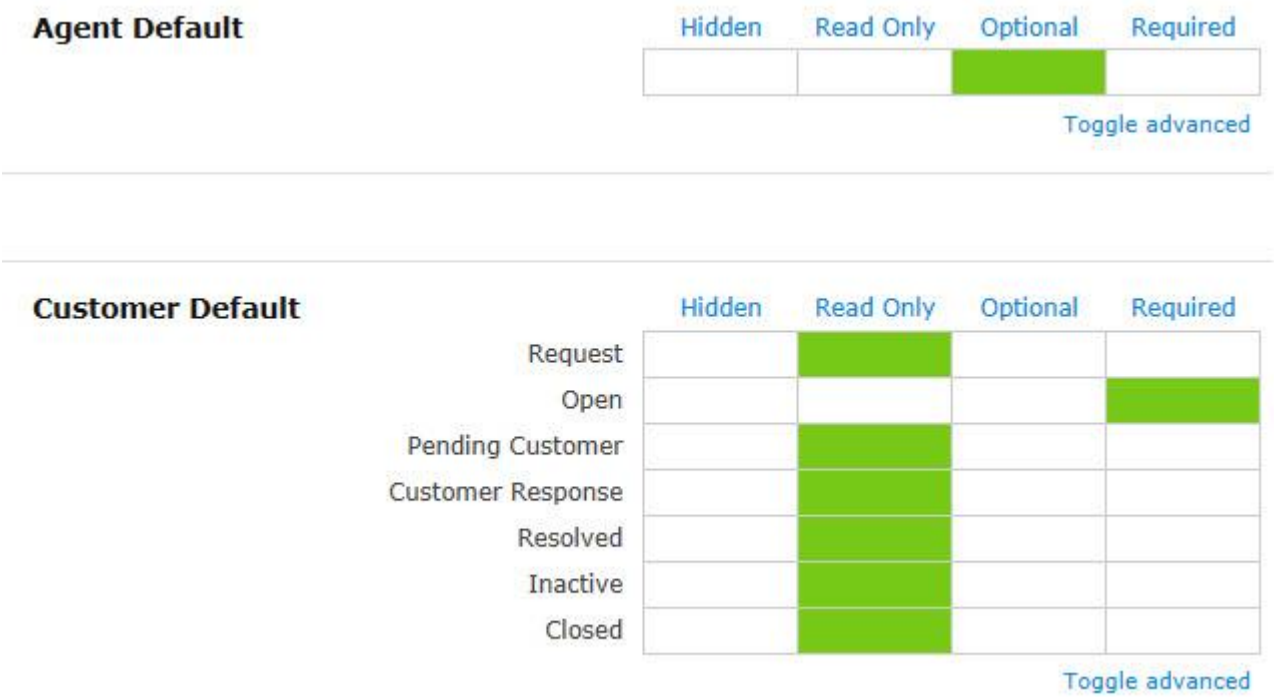

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Changing the Field Name

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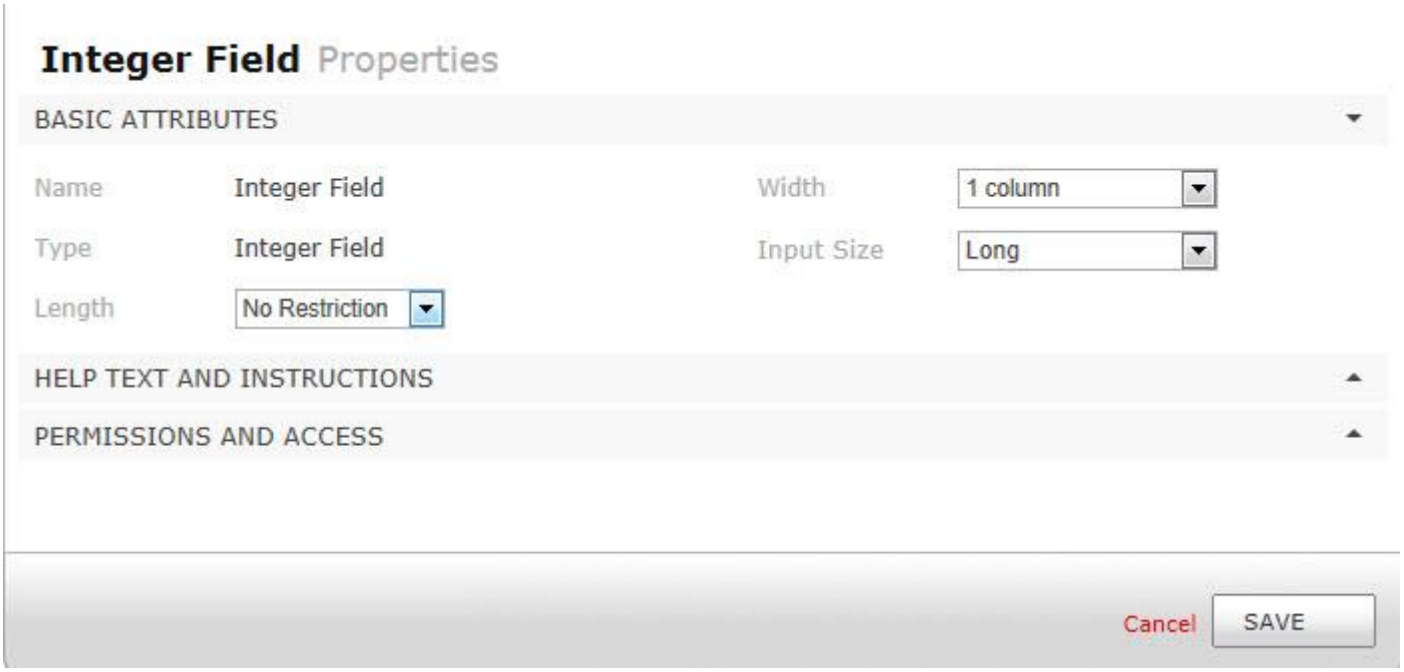
Integer
Setting Properties

When you drag and drop an Integer field into the Canvas, the Properties window is displayed.



Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **BASIC ATTRIBUTES**
  - **Name**—Enter a name for the field. This will be displayed as a label for the field on the published form.
  - **Width**—Select the number of columns the field spans. The field can span up to six columns, depending on the settings (see Changing the Number of Columns in a Tab in Working with Tabs).

- **Input Size**—Input Size allows you to determine how much of the field's width is occupied by the field input. For example, you might want a field to occupy a row by itself (three columns), but because the value entered into that row will only be a few characters long, you might not want the field input to occupy the entire length of the row. Options for this property are:
    - **Mini**—Occupies approximately 20% of the field width.
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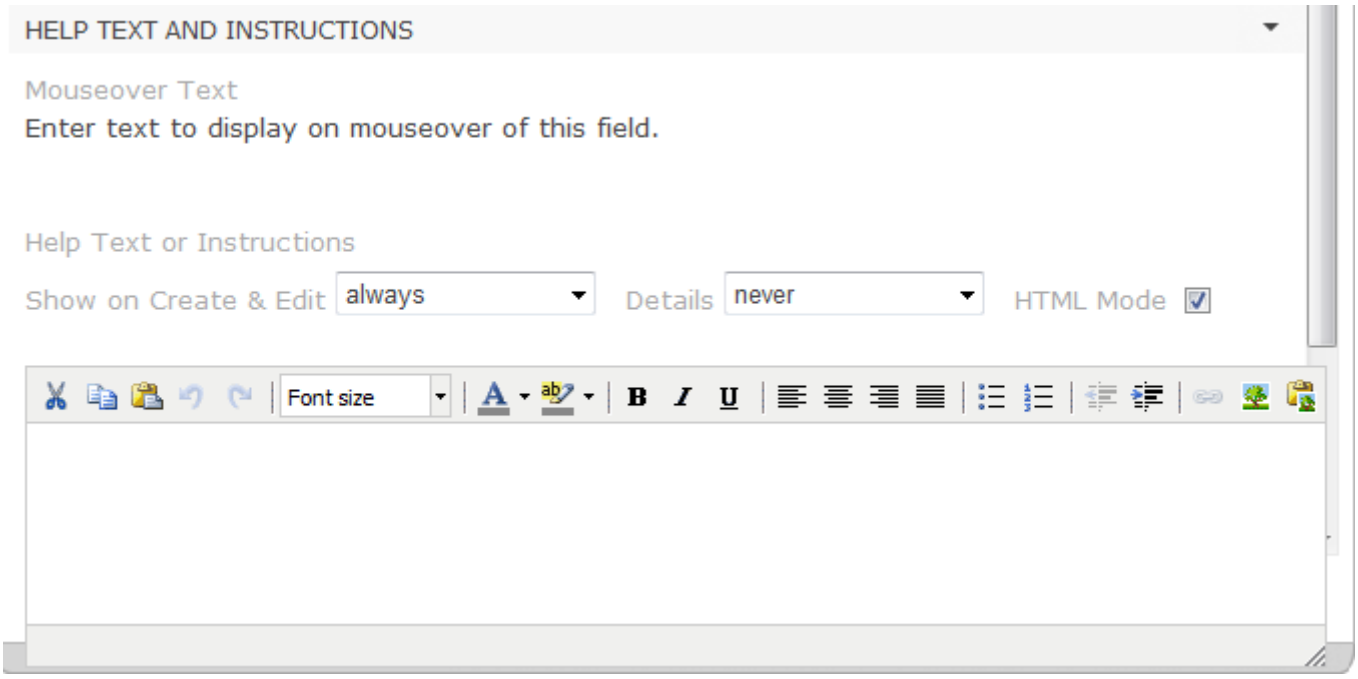
    - **Small**—Occupies approximately 50% of the field width.
    - **Medium**—Occupies approximately 80% of the field width.
    - **Long** (the default)—Occupies approximately 98% of the field width.
- **Length**—This option applies to single-line character, integer, and real number fields only. For these fields, the administrator has the option of defining a field length. If defined, users must enter data of the specified number of characters or digits when creating or editing an issue or request. Choices for defining field length are:
    - **No Restriction**—No field length restriction (the default).
    - **Exactly**—Enter a number in the box for the exact number of characters users must enter in the field.
    - **At least**—Enter a number in the box for the minimum number of characters field data must contain.
    - **At most**—Enter a number in the box for the maximum number of characters field data can contain.
    - **Between**—Enter two numbers defining a range of the number of characters accepted for field data.

- **HELP TEXT AND INSTRUCTIONS**



- **Mouseover Text**—Enter the text to be displayed when a cursor hovers over the field or the field name. Text is limited to 100 characters.
- **Help Text and Instructions**—Help text and instructions can be as detailed as you like and are displayed above the field on the published form.
  - **Show on Create & Edit**—Select whether to show the help text and instructions on the Create and Edit pages of an issue:
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
    - **If row is shown**—Display the text and instructions only if the row in which the field appears is visible to the agent or customer.
  - **Details**—Select whether to show the help text and instructions on the Details page of an issue.
    - **Never**—The text and instructions are never visible to the agent or customer.
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
  - **Rich Text Mode checkbox**—Check the box to use the Rich Text Editor to edit the instructions. The editor provides a variety of text formatting options, including font options and HTML options such as inserting an image from a file or the clipboard, linking to a URL, etc. Leave the box unchecked to use plain text for the help text and instructions. The box is checked by default.
  - **Text Input field**—Enter the help text or instructions into the input field.

- **PERMISSIONS AND ACCESS**—View or set the default permissions for a custom field.

  For each field, you can set up separate sets of permissions for agents and customers for this workspace. These are called "Agent Default" and "Customer Default" settings.

  Example

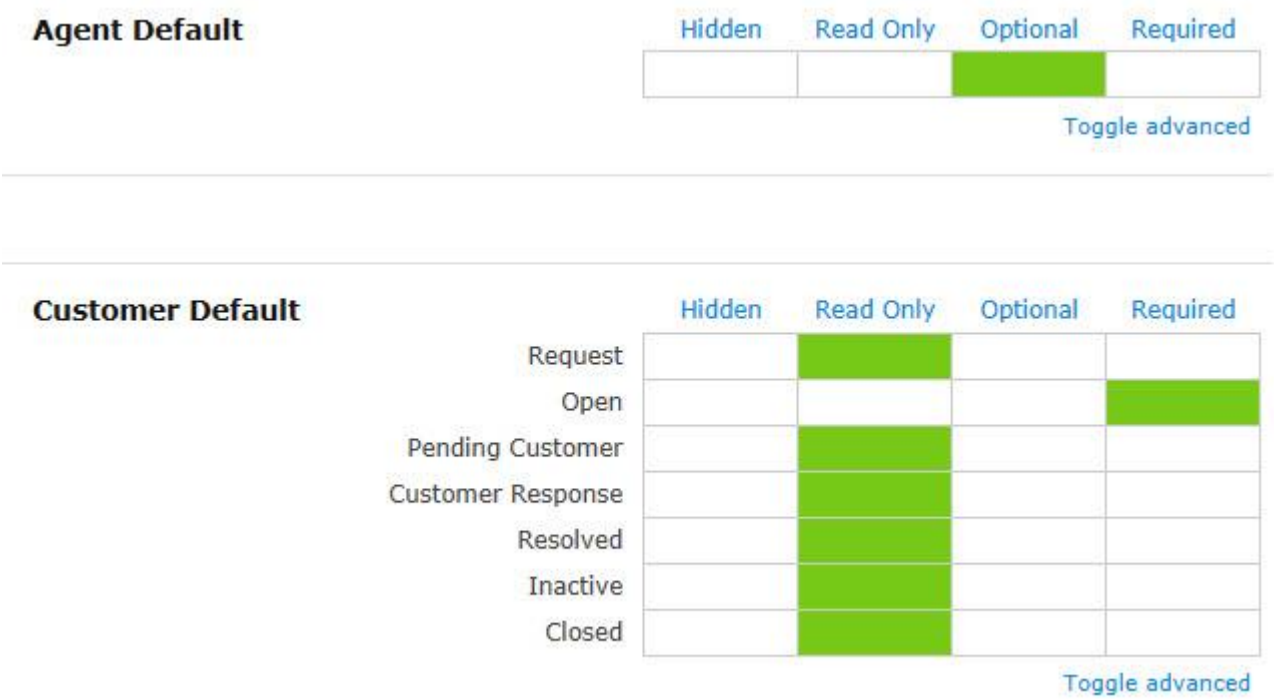
  You might want to require agents to enter information in an issue information field when the issue's status is open, and restrict them from entering information in the field when the issue is closed. So when setting up the Issue Information field, you would set the Agent Default permissions to "Required" for the status "Open", "Read Only" for the status "Closed", and "Optional" for all other statuses.

NOTE
Workspace Administrators can customize permissions per user role, which override the Agent Default and Customer Default permissions set up here. If permissions for a user role have been set up, a message will display above the default permissions listing the user role along with an option to remove custom permissions from the role. If you remove the custom permissions, the field will return to using the Agent Default or Customer Default permissions. (See below for steps.) For more information on field permissions per user role (set up in Administration | Workspace | User Roles) see Field Permissions.

To Set Permissions for a Field:

1. Click a cell in the table corresponding to one of the permissions listed below, such as "Optional".
   This will apply the permission to all statuses at once (Open, Resolved, Closed, etc). The selected cell is color-coded green (see the Agent Default example in the screen shot, below).
   - **Hidden**—Users cannot view the field
   - **Read Only**—Users can view but not edit the field
   - **Optional**—Users can view and edit the field, but are not required to populate the field
   - **Required**— Users can view and edit the field, and are required to populate the field
     Note: "Required" is not available for the Checkbox field type.
2. To set separate permissions per status (advanced permissions):
   a. Click **Toggle advanced** below Agent Default or Customer Default to view all of the statuses.
   b. Then click the cell corresponding to the permission and status (see the Customer Default example in the screen shot, below).

   Tip: Click a column heading to apply the permission to all statuses for that column at once.



3. To reset advanced permissions to the initial (basic) settings, click **Toggle advanced** .
   This will reset the permissions to Optional for Agent Default or Hidden for Customer Default.

To Remove Custom Permission from a User Role:

NOTE

The following applies only when a message displays above the Agent Default or Customer Default permissions indicating that a role has custom permissions.

Mouse over the role (listed above the Agent Default or Customer Default permissions), then click the **Remove** button. The custom permissions are removed from the role and the name of the role displays with a strikethrough (e.g., ~~Role Name~~). Once you save your changes, the role name will no longer display on the window.

If you decide not to remove the role and have not yet saved your changes, you can mouse over the role and click the **Undo** button.

- **CANCEL/SAVE buttons**—To cancel the edits you've made to the field, click the **Cancel** button below the Properties window. If the field is being introduced for the first time and has not been saved before, clicking Cancel leaves the Properties window without adding the field to the form. To save the edits, click the **Save** button. Clicking Save does not publish the field addition/edit to the production version of the form, that is, the changes to the form do not become visible to the user until the form has been published.

Defining Permissions Per Role

To define field permissions with greater granularity, you can customize them for a specific role by editing the Role Properties. Once you have done so, if you return to the Form Designer, the customized roles are listed as exceptions to the default permissions.

Editing, Moving, or Deleting the Field

To edit the field properties, from the Form Designer, hover over the field and click on the edit icon.

To move the field, from the Form Designer, hover over the field, click on the move icon, hold down the mouse button, and drag the field to the location in which you want it displayed.

To delete the field, from the Form Designer, hover over the field and click on the trash can icon. Deletion is not permitted if a field is part of some other feature (such as a field dependency). In those instances, the relationship between the field and the other feature must first be severed before the field can be deleted.

NOTE

Deleted data fields are no longer viewable, and BMC FootPrints Service Core forms no longer contain that field. The column is also deleted from the database and the data is no longer accessible. To undelete a field (assuming you've made a backup of your database), contact BMC for instructions.

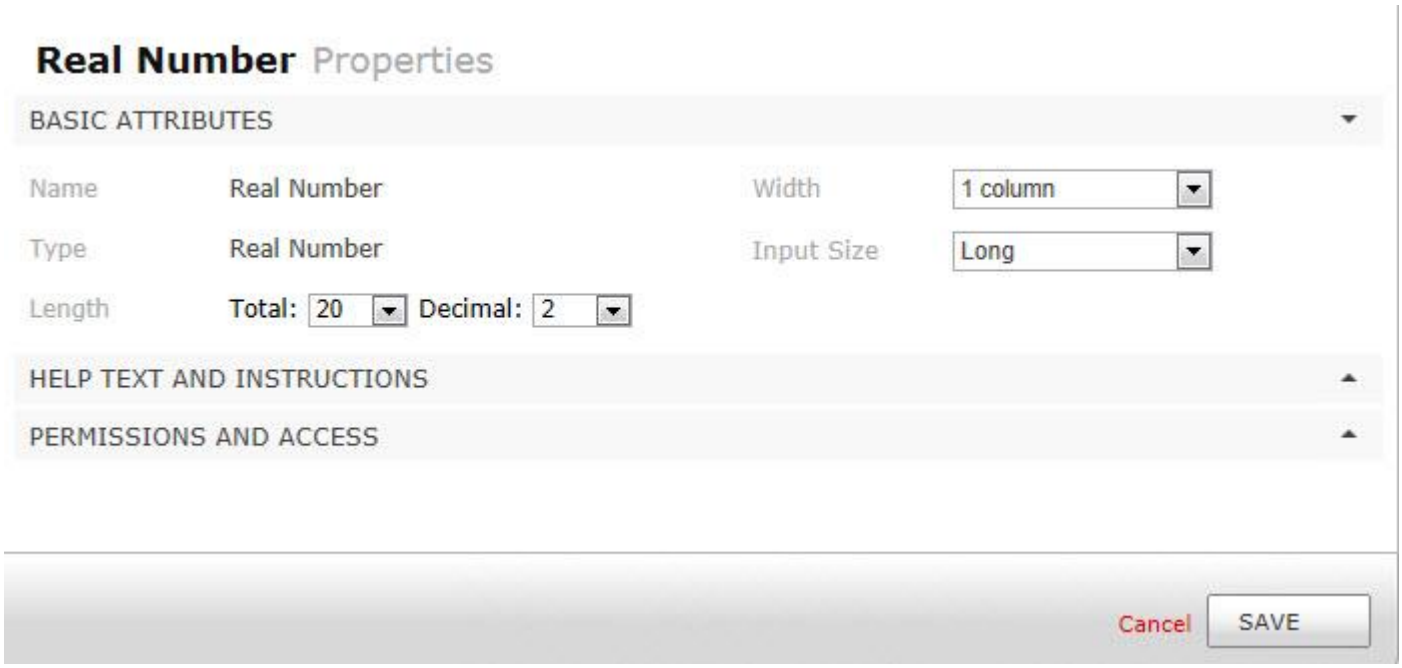
Changing the Field Name

You can change the field name from the Form Designer without going into the Properties window. To do so, click in the field name from the Form Designer. The name is highlighted. Type the new name into the field.

Real Number

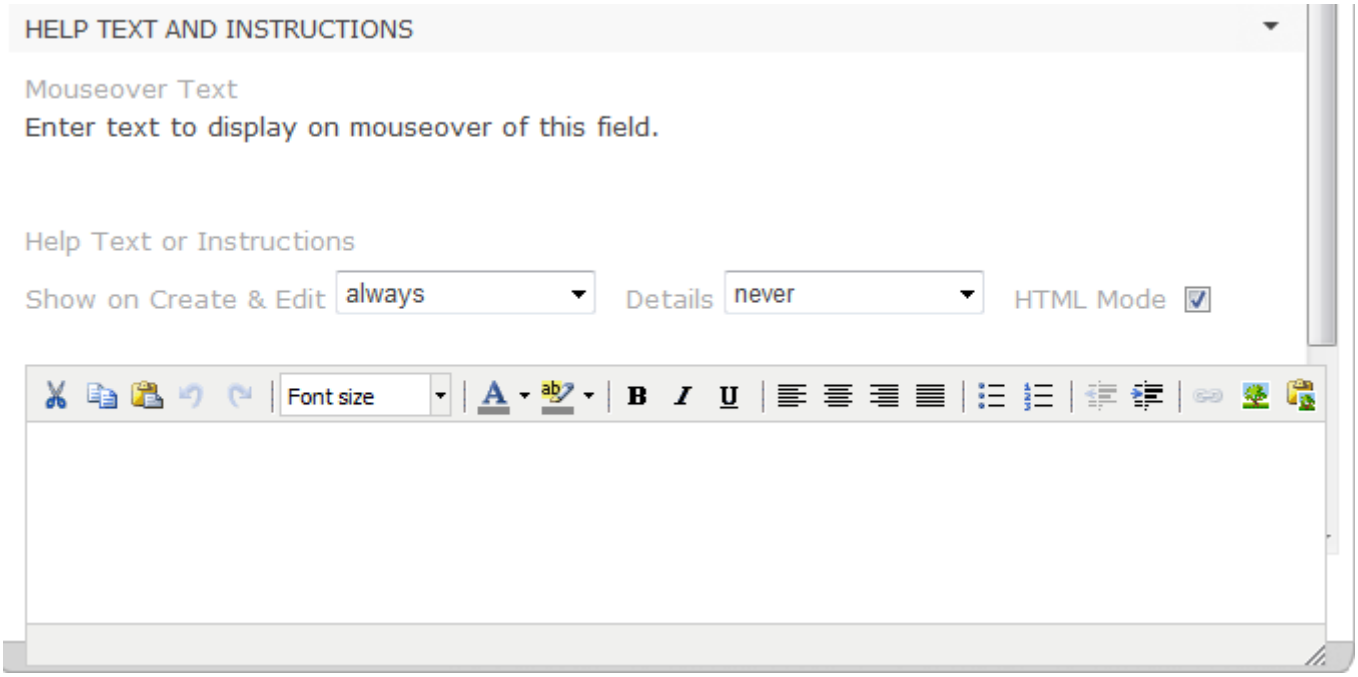
Setting Properties

When you drag and drop a Real Number field into the Canvas, the Properties window is displayed.



Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **BASIC ATTRIBUTES**
  - **Name**—Enter a name for the field. This will be displayed as a label for the field on the published form.
  - **Width**—Select the number of columns the field spans. The field can span up to six columns, depending on the settings (see Changing the Number of Columns in a Tab in Working with Tabs).
  - **Input Size**—Input Size allows you to determine how much of the field's width is occupied by the field input. For example, you might want a field to occupy a row by itself (three columns), but because the value entered into that row will only be a few characters long, you might not want the field input to occupy the entire length of the row. Options for this property are:
    - **Mini**—Occupies approximately 20% of the field width.
    - **Very Small**—Occupies approximately 45% of the field width.
    - **Small**—Occupies approximately 50% of the field width.
    - **Medium**—Occupies approximately 80% of the field width.
    - **Long** (the default)—Occupies approximately 98% of the field width.
  - **Length**—This option applies to character single-line, integer, and real number fields only. For these fields, the administrator has the option of defining a field length. If defined, users must enter data of the specified number of characters when creating or editing an issue or request. For a Real Number field, the administrator must define the number of digits before and after a decimal place. The number of digits before the decimal place can be defined from 0–20. The number of digits that can be defined after the decimal place are 0–2.
- **HELP TEXT AND INSTRUCTIONS**



- **Mouseover Text**—Enter the text to be displayed when a cursor hovers over the field or the field name. Text is limited to 100 characters.
- **Help Text and Instructions**—Help text and instructions can be as detailed as you like and are displayed above the field on the published form.
  - **Show on Create & Edit**—Select whether to show the help text and instructions on the Create and Edit pages of an issue:
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
    - **If row is shown**—Display the text and instructions only if the row in which the field appears is visible to the agent or customer.
  - **Details**—Select whether to show the help text and instructions on the Details page of an issue.
    - **Never**—The text and instructions are never visible to the agent or customer.
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
  - **Rich Text Mode checkbox**—Check the box to use the Rich Text Editor to edit the instructions. The editor provides a variety of text formatting options, including font options and HTML options such as inserting an image from a file or the clipboard, linking to a URL, etc. Leave the box unchecked to use plain text for the help text and instructions. The box is checked by default.
  - **Text Input field**—Enter the help text or instructions into the input field.

- **PERMISSIONS AND ACCESS**—View or set the default permissions for a custom field.

For each field, you can set up separate sets of permissions for agents and customers for this workspace. These are called "Agent Default" and "Customer Default" settings.

Example

You might want to require agents to enter information in an issue information field when the issue's status is open, and restrict them from entering information in the field when the issue is closed. So when setting up the Issue Information field, you would set the Agent Default permissions to "Required" for the status "Open", "Read Only" for the status "Closed", and "Optional" for all other statuses.

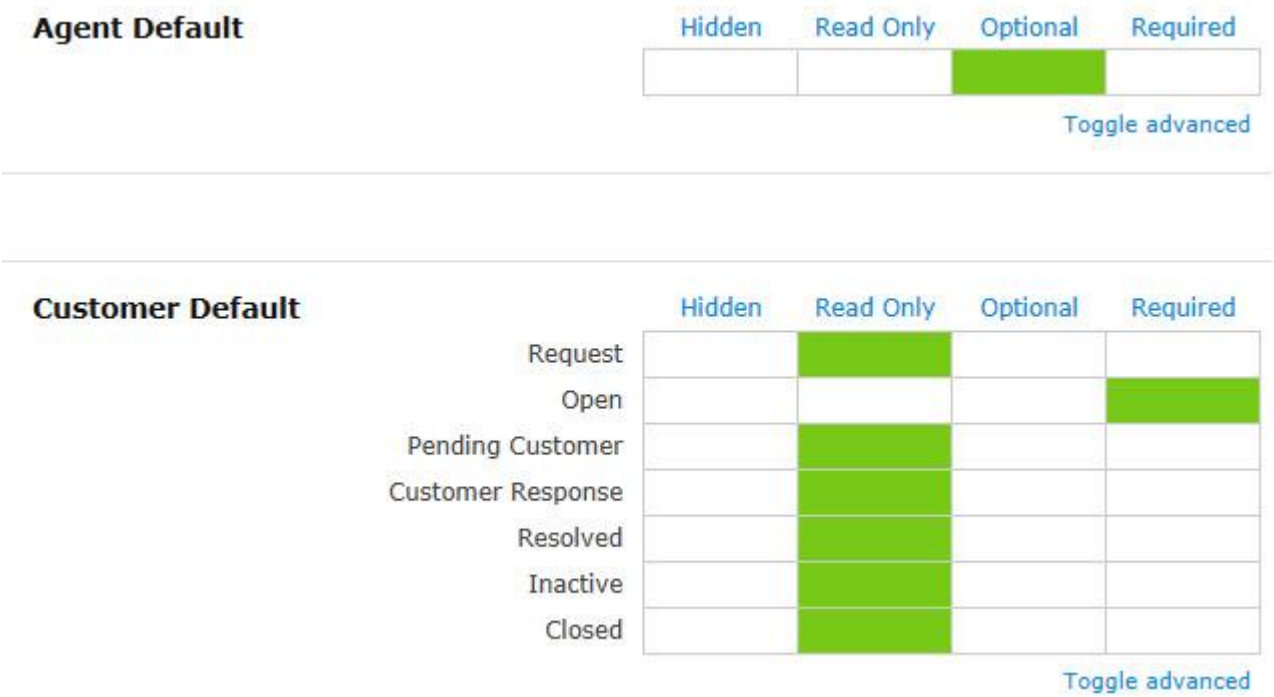
NOTE

Workspace Administrators can customize permissions per user role, which override the Agent Default and Customer Default permissions set up here. If permissions for a user role have been set up, a message will display above the default permissions listing the user role along with an option to remove custom permissions from the role. If you remove the custom permissions, the field will return to using the Agent Default or Customer Default permissions. (See below for steps.) For more information on field permissions per user role (set up in Administration | Workspace | User Roles) see Field Permissions.

To Set Permissions for a Field:

1. Click a cell in the table corresponding to one of the permissions listed below, such as "Optional".
   This will apply the permission to all statuses at once (Open, Resolved, Closed, etc). The selected cell is color-coded green (see the Agent Default example in the screen shot, below).
   - **Hidden**—Users cannot view the field
   - **Read Only**—Users can view but not edit the field
   - **Optional**—Users can view and edit the field, but are not required to populate the field
   - **Required**— Users can view and edit the field, and are required to populate the field
     Note: "Required" is not available for the Checkbox field type.
2. To set separate permissions per status (advanced permissions):
   a. Click **Toggle advanced** below Agent Default or Customer Default to view all of the statuses.
   b. Then click the cell corresponding to the permission and status (see the Customer Default example in the screen shot, below).

Tip: Click a column heading to apply the permission to all statuses for that column at once.



3. To reset advanced permissions to the initial (basic) settings, click **Toggle advanced** .
   This will reset the permissions to Optional for Agent Default or Hidden for Customer Default.

To Remove Custom Permission from a User Role:

NOTE

The following applies only when a message displays above the Agent Default or Customer Default permissions indicating that a role has custom permissions.

Mouse over the role (listed above the Agent Default or Customer Default permissions), then click the **Remove** button. The custom permissions are removed from the role and the name of the role displays with a strikethrough (e.g., ~~Role Name~~). Once you save your changes, the role name will no longer display on the window.
If you decide not to remove the role and have not yet saved your changes, you can mouse over the role and click the **Undo** button.

- **CANCEL/SAVE buttons**—To cancel the edits you've made to the field, click the **Cancel** button below the Properties window. If the field is being introduced for the first time and has not been saved before, clicking Cancel leaves the Properties window without adding the field to the form. To save the edits, click the **Save** button. Clicking Save does not publish the field addition/edit to the production version of the form, that is, the changes to the form do not become visible to the user until the form has been published.

Defining Permissions Per Role

To define field permissions with greater granularity, you can customize them for a specific role by editing the Role Properties. Once you have done so, if you return to the Form Designer, the customized roles are listed as exceptions to the default permissions.

Editing, Moving, or Deleting the Field

To edit the field properties, from the Form Designer, hover over the field and click on the edit icon.

To move the field, from the Form Designer, hover over the field, click on the move icon, hold down the mouse button, and drag the field to the location in which you want it displayed.

To delete the field, from the Form Designer, hover over the field and click on the trash can icon. Deletion is not permitted if a field is part of some other feature (such as a field dependency). In those instances, the relationship between the field and the other feature must first be severed before the field can be deleted.

NOTE

Deleted data fields are no longer viewable, and BMC FootPrints Service Core forms no longer contain that field. The column is also deleted from the database and the data is no longer accessible. To undelete a field (assuming you've made a backup of your database), contact BMC for instructions.

Changing the Field Name

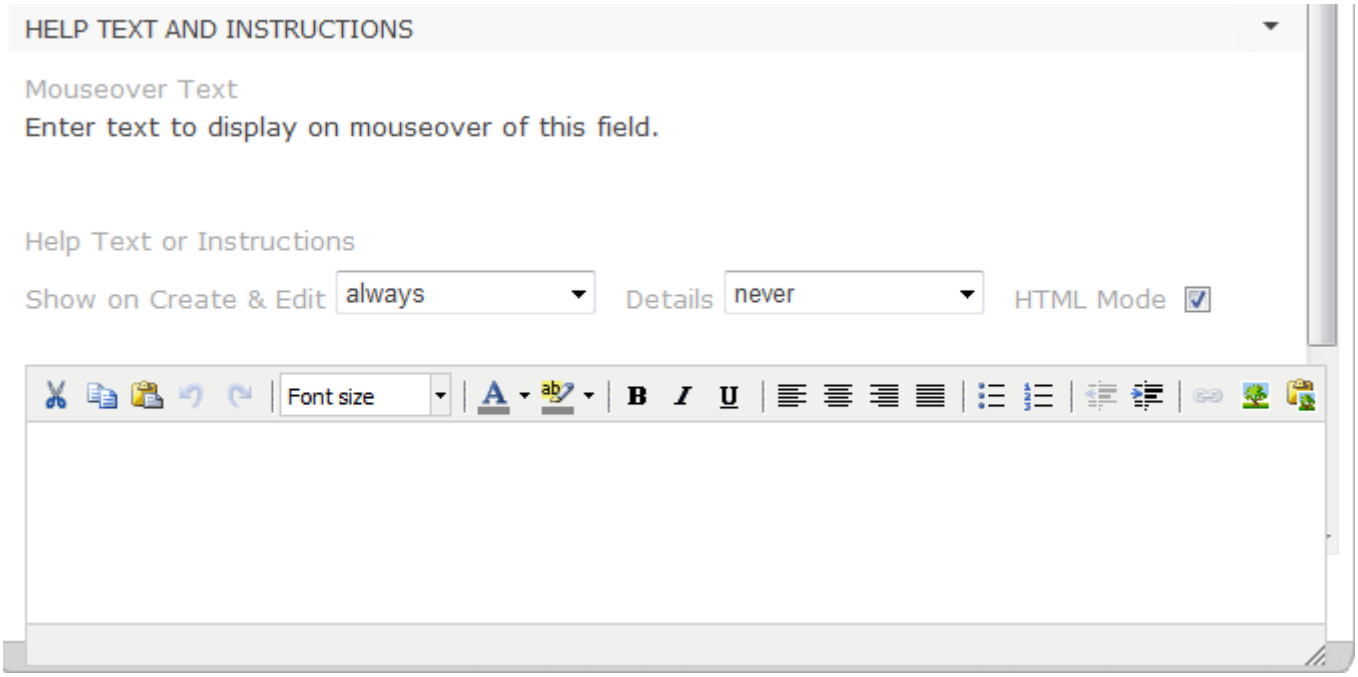
You can change the field name from the Form Designer without going into the Properties window. To do so, click in the field name from the Form Designer. The name is highlighted. Type the new name into the field.

Date
Setting Properties

When you drag and drop a Date field into the Canvas, the Properties window is displayed.

Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **BASIC ATTRIBUTES**—The attributes of a Date field are predefined and require no configuration.
- **HELP TEXT AND INSTRUCTIONS**



- **Mouseover Text**—Enter the text to be displayed when a cursor hovers over the field or the field name. Text is limited to 100 characters.
- **Help Text and Instructions**—Help text and instructions can be as detailed as you like and are displayed above the field on the published form.
  - **Show on Create & Edit**—Select whether to show the help text and instructions on the Create and Edit pages of an issue:
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
    - **If row is shown**—Display the text and instructions only if the row in which the field appears is visible to the agent or customer.
  - **Details**—Select whether to show the help text and instructions on the Details page of an issue.
    - **Never**—The text and instructions are never visible to the agent or customer.
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
  - **Rich Text Mode checkbox**—Check the box to use the Rich Text Editor to edit the instructions. The editor provides a variety of text formatting options, including font options and HTML options such as inserting an image from a file or the clipboard, linking to a URL, etc. Leave the box unchecked to use plain text for the help text and instructions. The box is checked by default.
  - **Text Input field**—Enter the help text or instructions into the input field.

- **PERMISSIONS AND ACCESS**—View or set the default permissions for a custom field.

For each field, you can set up separate sets of permissions for agents and customers for this workspace. These are called "Agent Default" and "Customer Default" settings.

Example

You might want to require agents to enter information in an issue information field when the issue's status is open, and restrict them from entering information in the field when the issue is closed. So when setting up the Issue Information field, you would set the Agent Default permissions to "Required" for the status "Open", "Read Only" for the status "Closed", and "Optional" for all other statuses.

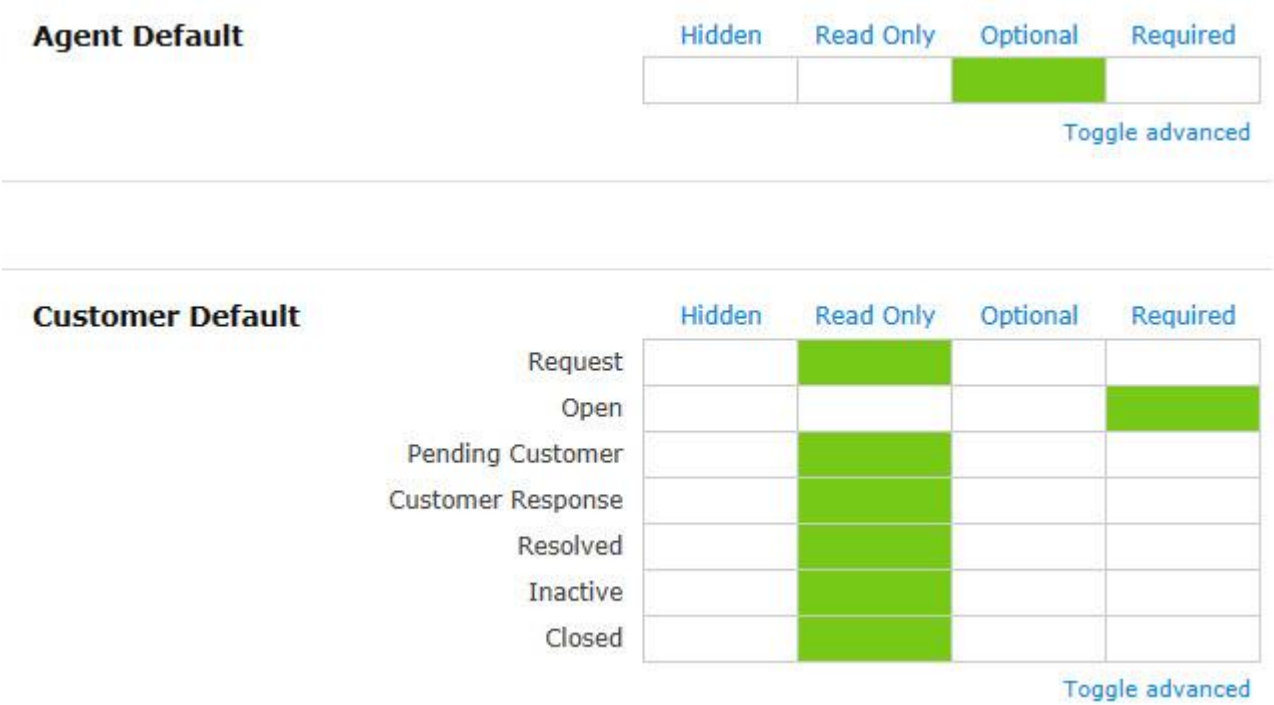
NOTE

Workspace Administrators can customize permissions per user role, which override the Agent Default and Customer Default permissions set up here. If permissions for a user role have been set up, a message will display above the default permissions listing the user role along with an option to remove custom permissions from the role. If you remove the custom permissions, the field will return to using the Agent Default or Customer Default permissions. (See below for steps.) For more information on field permissions per user role (set up in Administration | Workspace | User Roles) see Field Permissions.

To Set Permissions for a Field:

1. Click a cell in the table corresponding to one of the permissions listed below, such as "Optional".
   This will apply the permission to all statuses at once (Open, Resolved, Closed, etc). The selected cell is color-coded green (see the Agent Default example in the screen shot, below).
   - **Hidden**—Users cannot view the field
   - **Read Only**—Users can view but not edit the field
   - **Optional**—Users can view and edit the field, but are not required to populate the field
   - **Required**— Users can view and edit the field, and are required to populate the field
     Note: "Required" is not available for the Checkbox field type.
2. To set separate permissions per status (advanced permissions):
   a. Click **Toggle advanced** below Agent Default or Customer Default to view all of the statuses.
   b. Then click the cell corresponding to the permission and status (see the Customer Default example in the screen shot, below).

Tip: Click a column heading to apply the permission to all statuses for that column at once.



3. To reset advanced permissions to the initial (basic) settings, click **Toggle advanced** .
   This will reset the permissions to Optional for Agent Default or Hidden for Customer Default.

To Remove Custom Permission from a User Role:

NOTE

The following applies only when a message displays above the Agent Default or Customer Default permissions indicating that a role has custom permissions.

Mouse over the role (listed above the Agent Default or Customer Default permissions), then click the **Remove** button. The custom permissions are removed from the role and the name of the role displays with a strikethrough (e.g., ~~Role Name~~). Once you save your changes, the role name will no longer display on the window.
If you decide not to remove the role and have not yet saved your changes, you can mouse over the role and click the **Undo** button.

- **CANCEL/SAVE buttons**—To cancel the edits you've made to the field, click the **Cancel** button below the Properties window. If the field is being introduced for the first time and has not been saved before, clicking Cancel leaves the Properties window without adding the field to the form. To save the edits, click the **Save** button. Clicking Save does not publish the field addition/edit to the production version of the form, that is, the changes to the form do not become visible to the user until the form has been published.

Defining Permissions Per Role

To define field permissions with greater granularity, you can customize them for a specific role by editing the Role Properties. Once you have done so, if you return to the Form Designer, the customized roles are listed as exceptions to the default permissions.

Editing, Moving, or Deleting the Field

To edit the field properties, from the Form Designer, hover over the field and click on the edit icon.

To move the field, from the Form Designer, hover over the field, click on the move icon, hold down the mouse button, and drag the field to the location in which you want it displayed.

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NOTE

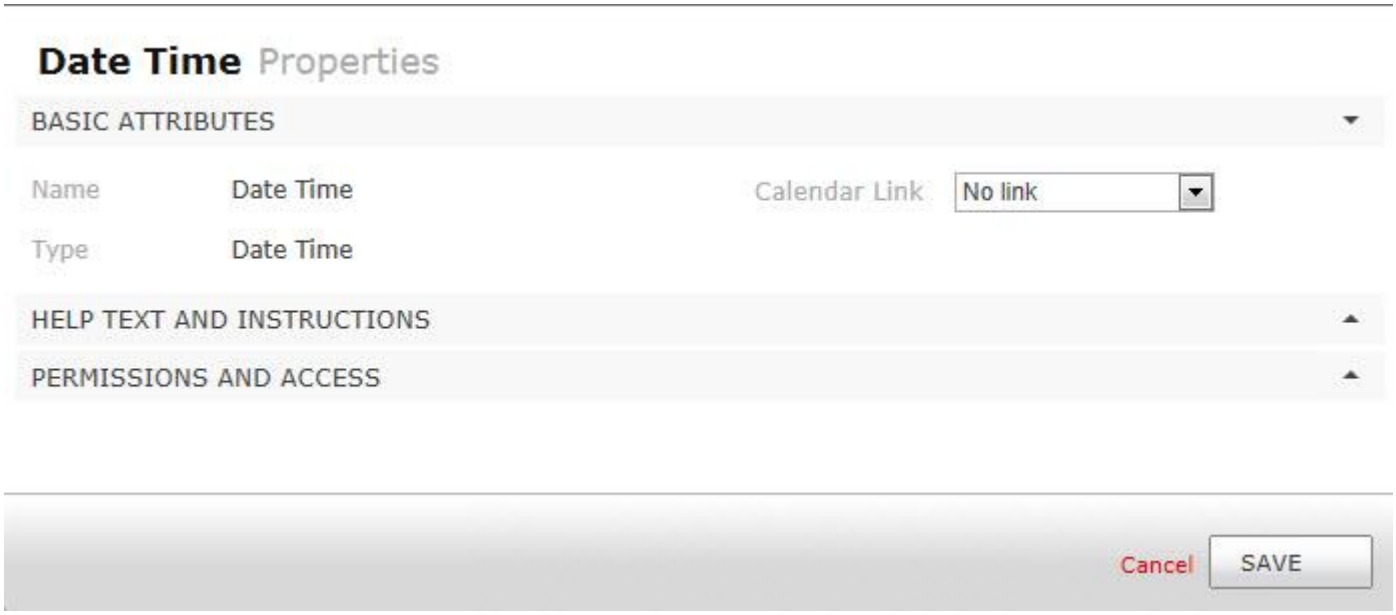
Deleted data fields are no longer viewable, and BMC FootPrints Service Core forms no longer contain that field. The column is also deleted from the database and the data is no longer accessible. To undelete a field (assuming you've made a backup of your database), contact BMC for instructions.

Changing the Field Name

You can change the field name from the Form Designer without going into the Properties window. To do so, click in the field name from the Form Designer. The name is highlighted. Type the new name into the field.

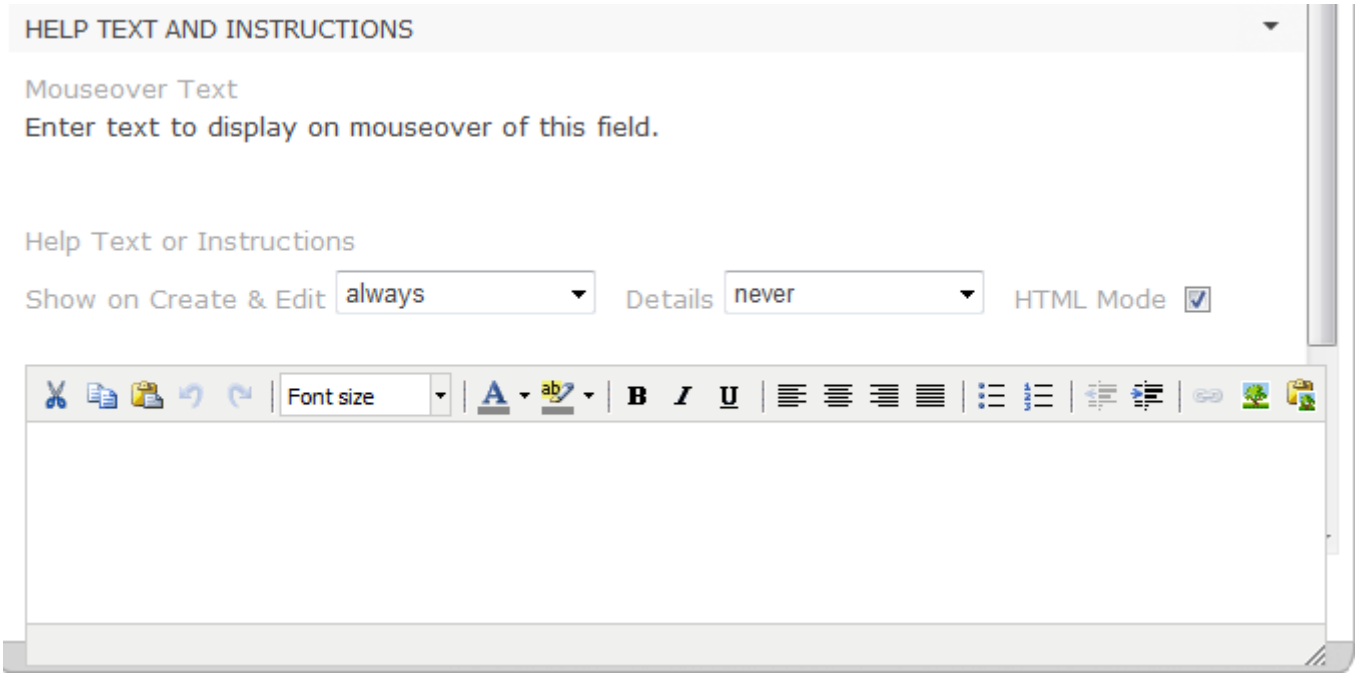
Date Time
Setting Properties

When you drag and drop a Date Time field into the Canvas, the Properties window is displayed.



Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **BASIC ATTRIBUTES**—The attributes of a Date Time field are predefined and require no configuration.
- **HELP TEXT AND INSTRUCTIONS**



- **Mouseover Text**—Enter the text to be displayed when a cursor hovers over the field or the field name. Text is limited to 100 characters.
- **Help Text and Instructions**—Help text and instructions can be as detailed as you like and are displayed above the field on the published form.
  - **Show on Create & Edit**—Select whether to show the help text and instructions on the Create and Edit pages of an issue:
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
    - **If row is shown**—Display the text and instructions only if the row in which the field appears is visible to the agent or customer.
  - **Details**—Select whether to show the help text and instructions on the Details page of an issue.
    - **Never**—The text and instructions are never visible to the agent or customer.
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
  - **Rich Text Mode checkbox**—Check the box to use the Rich Text Editor to edit the instructions. The editor provides a variety of text formatting options, including font options and HTML options such as inserting an image from a file or the clipboard, linking to a URL, etc. Leave the box unchecked to use plain text for the help text and instructions. The box is checked by default.
  - **Text Input field**—Enter the help text or instructions into the input field.

- **PERMISSIONS AND ACCESS**—View or set the default permissions for a custom field.

For each field, you can set up separate sets of permissions for agents and customers for this workspace. These are called "Agent Default" and "Customer Default" settings.

Example

You might want to require agents to enter information in an issue information field when the issue's status is open, and restrict them from entering information in the field when the issue is closed. So when setting up the Issue Information field, you would set the Agent Default permissions to "Required" for the status "Open", "Read Only" for the status "Closed", and "Optional" for all other statuses.

NOTE

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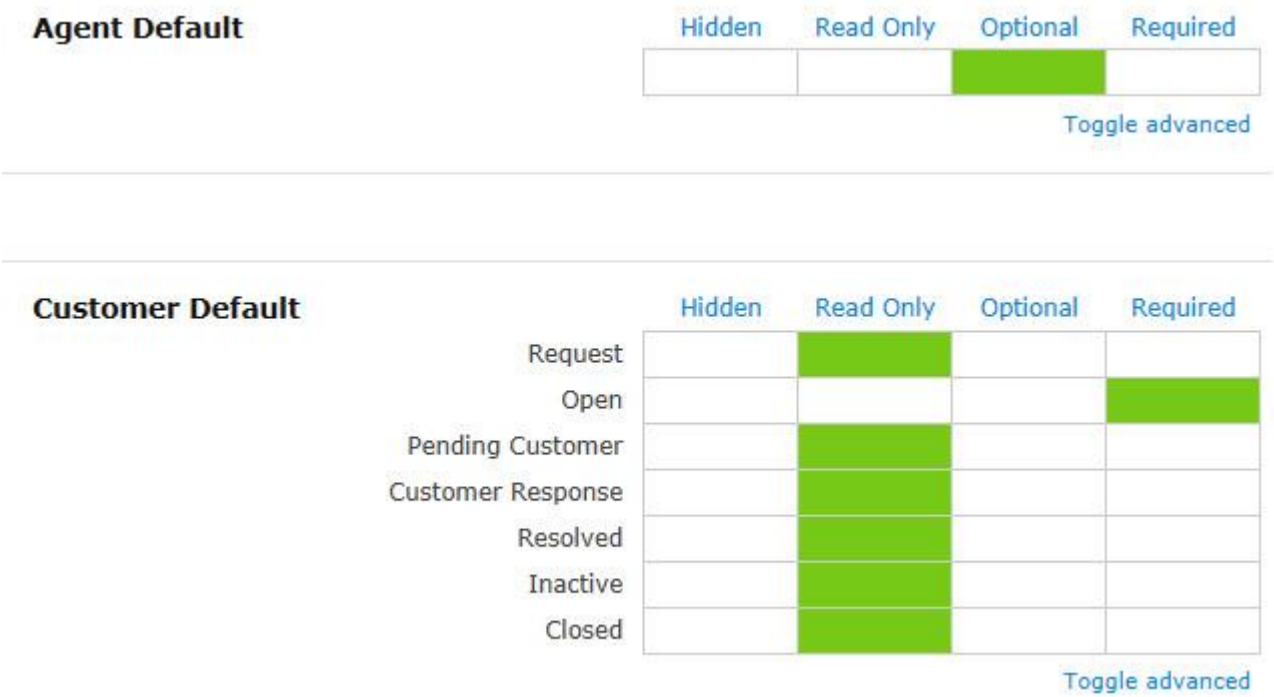
To Set Permissions for a Field:

1. Click a cell in the table corresponding to one of the permissions listed below, such as "Optional".
   This will apply the permission to all statuses at once (Open, Resolved, Closed, etc). The selected cell is color-coded green (see the Agent Default example in the screen shot, below).
   - **Hidden**—Users cannot view the field
   - **Read Only**—Users can view but not edit the field
   - **Optional**—Users can view and edit the field, but are not required to populate the field
   - **Required**— Users can view and edit the field, and are required to populate the field
     Note: "Required" is not available for the Checkbox field type.
2. To set separate permissions per status (advanced permissions):
   a. Click **Toggle advanced** below Agent Default or Customer Default to view all of the statuses.
   b. Then click the cell corresponding to the permission and status (see the Customer Default example in the screen shot, below).

Tip: Click a column heading to apply the permission to all statuses for that column at once.



3. To reset advanced permissions to the initial (basic) settings, click **Toggle advanced** .
   This will reset the permissions to Optional for Agent Default or Hidden for Customer Default.

To Remove Custom Permission from a User Role:

NOTE

The following applies only when a message displays above the Agent Default or Customer Default permissions indicating that a role has custom permissions.

Mouse over the role (listed above the Agent Default or Customer Default permissions), then click the **Remove** button. The custom permissions are removed from the role and the name of the role displays with a strikethrough (e.g., ~~Role Name~~). Once you save your changes, the role name will no longer display on the window.
If you decide not to remove the role and have not yet saved your changes, you can mouse over the role and click the **Undo** button.

- **CANCEL/SAVE buttons**—To cancel the edits you've made to the field, click the **Cancel** button below the Properties window. If the field is being introduced for the first time and has not been saved before, clicking Cancel leaves the Properties window without adding the field to the form. To save the edits, click the **Save** button. Clicking Save does not publish the field addition/edit to the production version of the form, that is, the changes to the form do not become visible to the user until the form has been published.

Defining Permissions Per Role

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Editing, Moving, or Deleting the Field

To edit the field properties, from the Form Designer, hover over the field and click on the edit icon.

To move the field, from the Form Designer, hover over the field, click on the move icon, hold down the mouse button, and drag the field to the location in which you want it displayed.

To delete the field, from the Form Designer, hover over the field and click on the trash can icon. Deletion is not permitted if a field is part of some other feature (such as a field dependency). In those instances, the relationship between the field and the other feature must first be severed before the field can be deleted.

NOTE

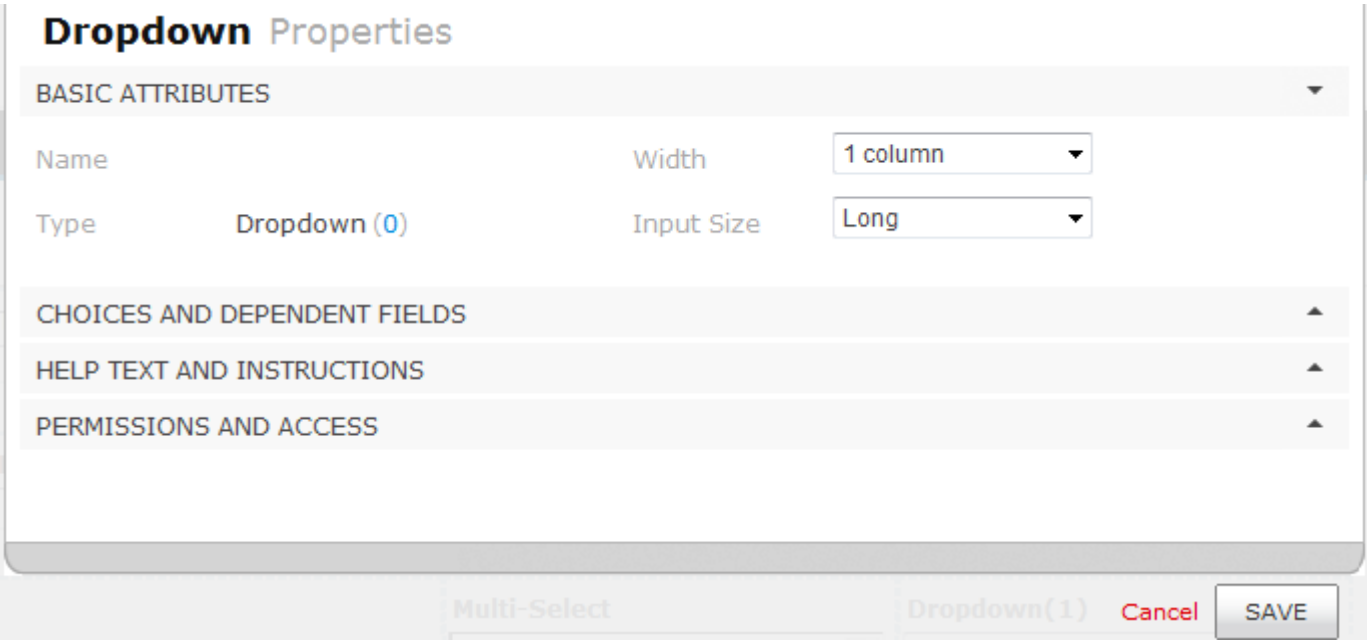
Deleted data fields are no longer viewable, and BMC FootPrints Service Core forms no longer contain that field. The column is also deleted from the database and the data is no longer accessible. To undelete a field (assuming you've made a backup of your database), contact BMC for instructions.

Changing the Field Name

You can change the field name from the Form Designer without going into the Properties window. To do so, click in the field name from the Form Designer. The name is highlighted. Type the new name into the field.

Drop-down
Setting Properties

When you drag and drop a Drop-down field into the Canvas, the Properties window is displayed.



Click a section heading to expand or collapse the section. Enter values into the fields as follows:

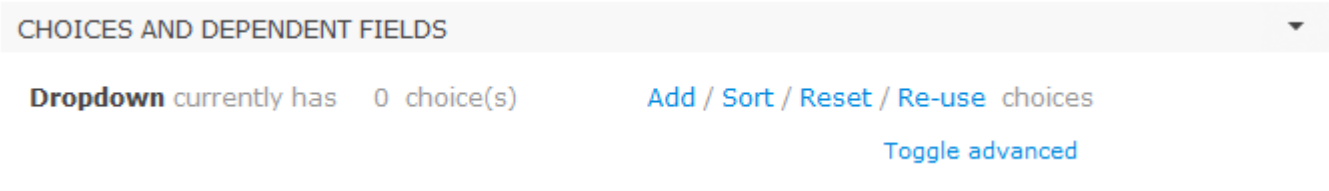
- **BASIC ATTRIBUTES**
  - **Name**—Enter a name for the field. This will be displayed as a label for the field on the published form.
  - **Width**—Select the number of columns the field spans. The field can span up to six columns, depending on the settings (see Changing the Number of Columns in a Tab in Working with Tabs).
  - **Input Size**—Input Size allows you to determine how much of the field's width is occupied by the field input. For example, you might want a field to occupy a row by itself (three columns), but because the

value entered into that row will only be a few characters long, you might not want the field input to occupy the entire length of the row. Options for this property are:

- **Mini**—Occupies approximately 20% of the field width.
- **Very Small**—Occupies approximately 45% of the field width.
- **Small**—Occupies approximately 50% of the field width.
- **Medium**—Occupies approximately 80% of the field width.
- **Long** (the default)—Occupies approximately 98% of the field width.

- **Dropdown**—The number beside the Dropdown option states the number of values that have been defined for the field. Click the number to expand the CHOICES AND DEPENDENT FIELDS section of the Properties window.

- **CHOICES AND DEPENDENT FIELDS**—Specify the choices available to the user from the drop-down field and also specify field dependencies.



- **Add**—The **Add** link adds values to the field. When you click the Add link, the Add Choices Editor is displayed. Type the values into the field and press Enter after each value. Click the **Add Choices** button when you have entered all of the values. The Add Choices Editor enforces uniqueness; if you enter the same value twice, when you click the Add Choices button, the values are not added but, instead, an asterisk is displayed next to the repeated value. If the values are accepted, a list of the values are displayed in the section.
- **Sort**—The **Sort** link sorts the list of value in ascending alphabetical order. Clicking the button again sorts the list in descending alphabetical order.
- **Reset**—The **Reset** link deletes all values from the field.
- **Re-use**—The **Re-use** link opens a separate window that displays a list of all existing drop-down and multi-select fields in the system. To preview a field's list of choices, select a field from the drop-down on the left. When you have found the field whose choice list you want to re-use, click the **GO** button. You are returned to the Properties window and the drop-down field is populated with the Re-use values. If you re-use values, the Web and Email values remain. These values cannot be deleted from the field.
- **Toggle Advanced**—The **Toggle Advanced** link displays radio buttons with the following for those instances when you are changing the selected choice in the field:
  - Retain none of the values previously entered into the original choice's dependent fields.
  - Retain the values previously entered into the common fields contained in the original choice's dependent fields and the current choice's dependent fields.
- **Controls for the list of values**—Once values have been added to the field, the values are displayed in a list. The following controls can then be viewed and selected when hovering the mouse over a value in the list:
  - **Trash can icon**—Click the icon to delete the field.

- **Checkmark icon**—Sets the value as the default for the field. Click the icon to set the value as the default. To change the default, click the same icon on a different value.
- **Move icon**—Move the value to another position in the list. To move the value, hold down the mouse button on the Move icon and drag the value to the new location.

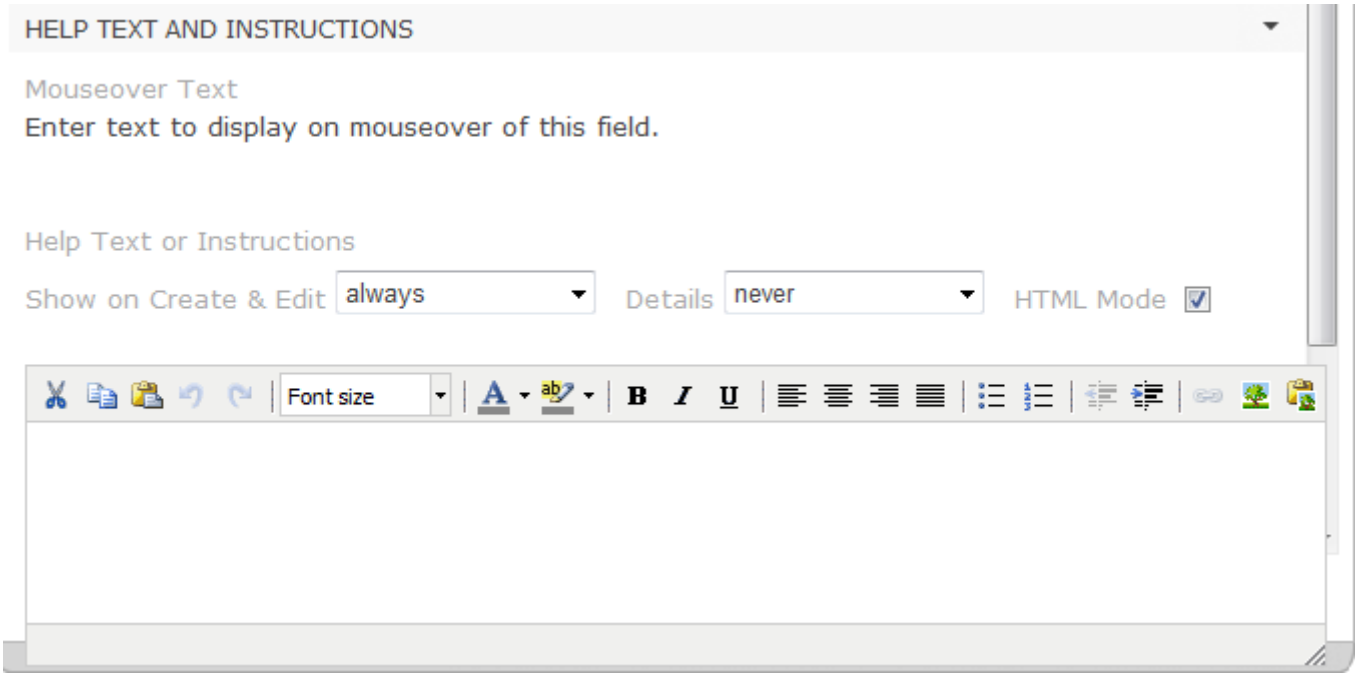
- **Set Field Dependencies**—If you click the Link icon for a value in the list, the Dependencies Editor is displayed. The Dependencies Editor displays a drop-down field containing all of the drop-down or multi-select fields that are available for you to link to the value. Select a field from the drop-down, then click the **LINK FIELD** button to set the field as dependent on the value. When a user selects that value from the drop-down list, the second field is displayed in the form. You can set dependent fields for each value in a drop-down field. You can also, by editing the dependent fields, create field dependencies for the values in those fields as well. Finally, you can, by selecting the Link icon again for the same value, link additional dependent fields.

NOTE

Clicking the View Dependencies button in the Palette displays a map of all field dependencies. This is a useful tool for tracking and organizing your dependent fields.

- **View and Filter Choices**—The values in a dependent field can be filtered to show only some of the values when the dependent field is displayed. If you click the View and Filter Choices link, a list of the values in the dependent field is displayed, with checkboxes beside the values. The checkboxes are checked by default. Uncheck the boxes that you do not want when the field is displayed as a dependent field. This feature can be used to set a large number of options in a single drop-down field so that, for example, drop-down is re-used as a dependent field multiple times, but with only some values displayed when one value is selected in the parent field and other values displayed when a different value is selected in the parent field.

- **HELP TEXT AND INSTRUCTIONS**



- **Mouseover Text**—Enter the text to be displayed when a cursor hovers over the field or the field name. Text is limited to 100 characters.
- **Help Text and Instructions**—Help text and instructions can be as detailed as you like and are displayed above the field on the published form.
  - **Show on Create & Edit**—Select whether to show the help text and instructions on the Create and Edit pages of an issue:
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
    - **If row is shown**—Display the text and instructions only if the row in which the field appears is visible to the agent or customer.
  - **Details**—Select whether to show the help text and instructions on the Details page of an issue.
    - **Never**—The text and instructions are never visible to the agent or customer.
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
  - **Rich Text Mode checkbox**—Check the box to use the Rich Text Editor to edit the instructions. The editor provides a variety of text formatting options, including font options and HTML options such as inserting an image from a file or the clipboard, linking to a URL, etc. Leave the box unchecked to use plain text for the help text and instructions. The box is checked by default.
  - **Text Input field**—Enter the help text or instructions into the input field.

- **PERMISSIONS AND ACCESS**—View or set the default permissions for a custom field.

  For each field, you can set up separate sets of permissions for agents and customers for this workspace. These are called "Agent Default" and "Customer Default" settings.

  Example

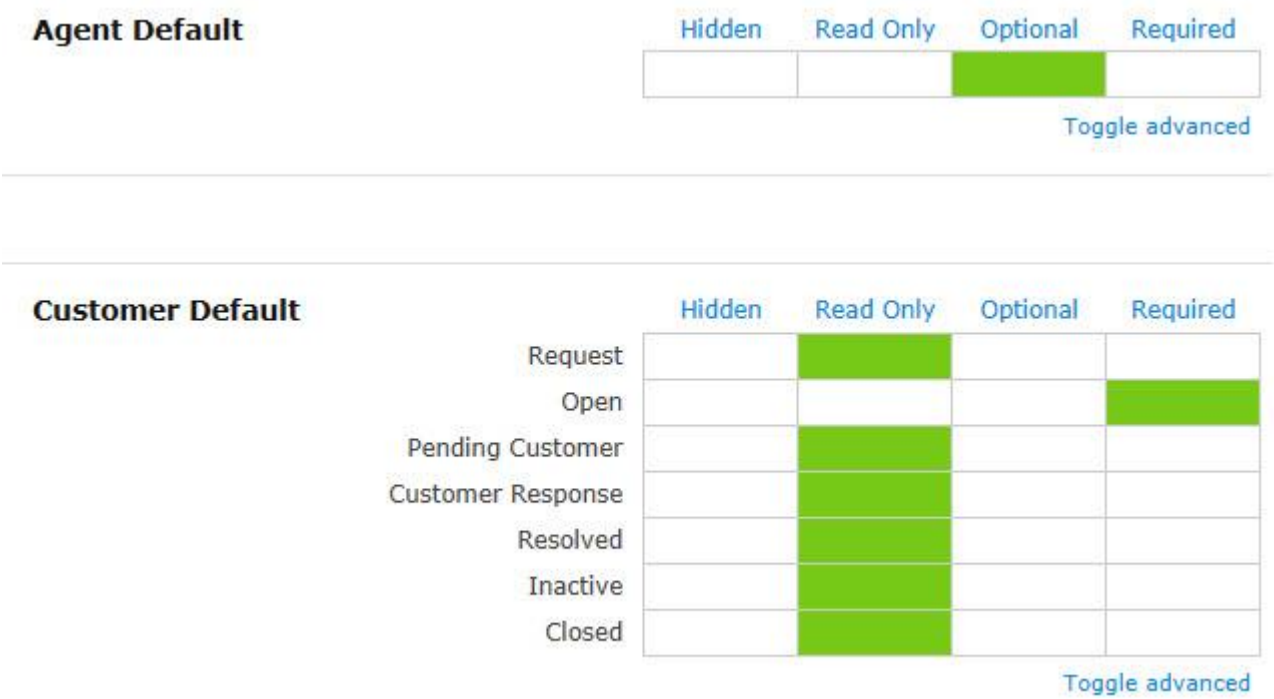
  You might want to require agents to enter information in an issue information field when the issue's status is open, and restrict them from entering information in the field when the issue is closed. So when setting up the Issue Information field, you would set the Agent Default permissions to "Required" for the status "Open", "Read Only" for the status "Closed", and "Optional" for all other statuses.

NOTE
Workspace Administrators can customize permissions per user role, which override the Agent Default and Customer Default permissions set up here. If permissions for a user role have been set up, a message will display above the default permissions listing the user role along with an option to remove custom permissions from the role. If you remove the custom permissions, the field will return to using the Agent Default or Customer Default permissions. (See below for steps.) For more information on field permissions per user role (set up in Administration | Workspace | User Roles) see Field Permissions.

To Set Permissions for a Field:

1. Click a cell in the table corresponding to one of the permissions listed below, such as "Optional".
   This will apply the permission to all statuses at once (Open, Resolved, Closed, etc). The selected cell is color-coded green (see the Agent Default example in the screen shot, below).
   - **Hidden**—Users cannot view the field
   - **Read Only**—Users can view but not edit the field
   - **Optional**—Users can view and edit the field, but are not required to populate the field
   - **Required**— Users can view and edit the field, and are required to populate the field
     Note: "Required" is not available for the Checkbox field type.
2. To set separate permissions per status (advanced permissions):
   a. Click **Toggle advanced** below Agent Default or Customer Default to view all of the statuses.
   b. Then click the cell corresponding to the permission and status (see the Customer Default example in the screen shot, below).

   Tip: Click a column heading to apply the permission to all statuses for that column at once.



3. To reset advanced permissions to the initial (basic) settings, click **Toggle advanced** .
   This will reset the permissions to Optional for Agent Default or Hidden for Customer Default.

To Remove Custom Permission from a User Role:

NOTE

The following applies only when a message displays above the Agent Default or Customer Default permissions indicating that a role has custom permissions.

Mouse over the role (listed above the Agent Default or Customer Default permissions), then click the **Remove** button. The custom permissions are removed from the role and the name of the role displays with a strikethrough (e.g., ~~Role Name~~). Once you save your changes, the role name will no longer display on the window.

If you decide not to remove the role and have not yet saved your changes, you can mouse over the role and click the **Undo** button.

- **CANCEL/SAVE buttons**—To cancel the edits you've made to the field, click the **Cancel** button below the Properties window. If the field is being introduced for the first time and has not been saved before, clicking Cancel leaves the Properties window without adding the field to the form. To save the edits, click the **Save** button. Clicking Save does not publish the field addition/edit to the production version of the form, that is, the changes to the form do not become visible to the user until the form has been published.

Defining Permissions Per Role

To define field permissions with greater granularity, you can customize them for a specific role by editing the Role Properties. Once you have done so, if you return to the Form Designer, the customized roles are listed as exceptions to the default permissions.

Editing, Moving, or Deleting the Field

To edit the field properties, from the Form Designer, hover over the field and click on the edit icon.

To move the field, from the Form Designer, hover over the field, click on the move icon, hold down the mouse button, and drag the field to the location in which you want it displayed.

To delete the field, from the Form Designer, hover over the field and click on the trash can icon. Deletion is not permitted if a field is part of some other feature (such as a field dependency). In those instances, the relationship between the field and the other feature must first be severed before the field can be deleted.

NOTE

Deleted data fields are no longer viewable, and BMC FootPrints Service Core forms no longer contain that field. The column is also deleted from the database and the data is no longer accessible. To undelete a field (assuming you've made a backup of your database), contact BMC for instructions.

Changing the Field Name

You can change the field name from the Form Designer without going into the Properties window. To do so, click in the field name from the Form Designer. The name is highlighted. Type the new name into the field.

About Drop-down Dependency Groups

By default, all fields in a **FootPrints Service Core** workspace are displayed when an agent accesses the Create Issue and Edit Issue pages. Depending on your needs, you may, for example, prefer to have some fields only appear depending on the problem type selected, or you might want to have the list of choices in a drop-down restricted by the choice made in the preceding drop-down. Both of these options are available in **FootPrints Service Core** and can be used alone or in combination. Multiple dependencies can be configured per workspace, and multi-level "dependency groups" can be created to funnel the user to categories and sub-categories with different choices, depending on what is selected for each drop-down.

The administrator can designate a set of drop-down choice fields to create an unlimited number of categories and sub-categories for which the available choices are restricted in each field based on what was selected in the previous field. This feature can be used for simple two-field dependencies (e.g., a software application with dependent version numbers), or complex, multi-level groups of dependent fields that guide the user to drill-down and select more and more granular data to define the problem. For example, if a user selects Hardware from a Problem Type field, the next drop-down displays a list of hardware types (Laptop, Wireless Card, Mouse, Keyboard, etc.) If the user picks Laptop, the next drop-down lists might contain known laptop problems, etc.

Visually, the Form Designer displays dependency groups by grouping them by color.

Before setting up the Drop-down dependency groups, you must first create the drop-down fields that will be part of the dependency group with all of the possible choices for each field. You create new fields on the Administration | Workspace | Form Designer page.

NOTE ON EXAMPLES

The examples here outline setting up a group of three dependent fields for Problem Type, Issue Type, and Root Cause for a standard IT service desk. Dependency groups can be created for any type of process, with any number of fields and choices.

1. You could make three drop-down fields called Problem Type, Issue Type, and Root Cause.
2. For Problem Type, the choices could be Hardware, Software, Network, and Printer.
3. The Issue Type field would contain all of the possible sub-categories for each of those choices: Hardware types like CD-ROM, Mouse, Phone, etc., Software types like Acrobat, Word, etc., Network Issue types like Reset Password, Can't connect to network, etc.
4. The Root Cause field would contain any further categorization needed for each of the Issue types. For CD-ROM, the choice might be Can't open tray, Can't access drive, etc.

- The fields for the dependency group must all be of type public or internal. We recommend all fields are all either mandatory or optional. If the fields are mixed mandatory and optional, the earlier fields in the group should be mandatory, while the later ones are optional.
- The fields should be arranged in the order of the desired dependency.
- You may want to map all of the possible choices and paths out on paper before you create the fields.

IMPORTANT NOTES ON DEPENDENCIES

- **Editing Drop-down Choices**—When editing a drop-down field that is used in a dependency, you must go through the dependency setup again and edit it there.
- **Multiple Dependencies**—Multiple sets of dependencies can be created and dependency group and pop-up windows can be combined.
- **Field Permissions**—All fields in the same dependency group must be either internal or public. The system prevents you from creating a dependency group that contains a mixed group of internal and public fields.
- **Mandatory vs. Optional**—The fields in a dependency group can be a mix of mandatory and optional. But while configuring a group, if a field later in the group is mandatory, you must select at least one value for that later field for each value in the current field. Otherwise, there may be a mandatory field that contains no values.
- **Internet Explorer's Display of Dependencies**—Internet Explorer hides dependent fields until the parent field is selected. Once selected, the child field is displayed and highlighted.
- **HTML form and Field Dependencies**—BMC FootPrints Service Core does not support the use of field dependencies in the incoming email HTML form. The form contains all of the fields and choices on one screen.

Dependencies and Upgrades

If you are upgrading from a version of BMC FootPrints Service Core 10.0.2 or earlier, consider the following:

- Pop-up dependency fields are automatically arranged to display properly under the dependency color groupings. This means that fields might be moved into different tabs after an upgrade.

- Disabled field headers are not migrated to **Help Text & Instructions** and would need to be re-applied.
- Field headers are not guaranteed to “migrate” perfectly. For example, if a form’s DOM and migrated field headers were changed using Javascript to manipulate the DOM or if a field header relied on having a full row to itself and is now restricted to one of three columns, they might not migrate properly.
- Field Headers migrate to **Help Text & Instructions** with Rich Text Mode disabled.

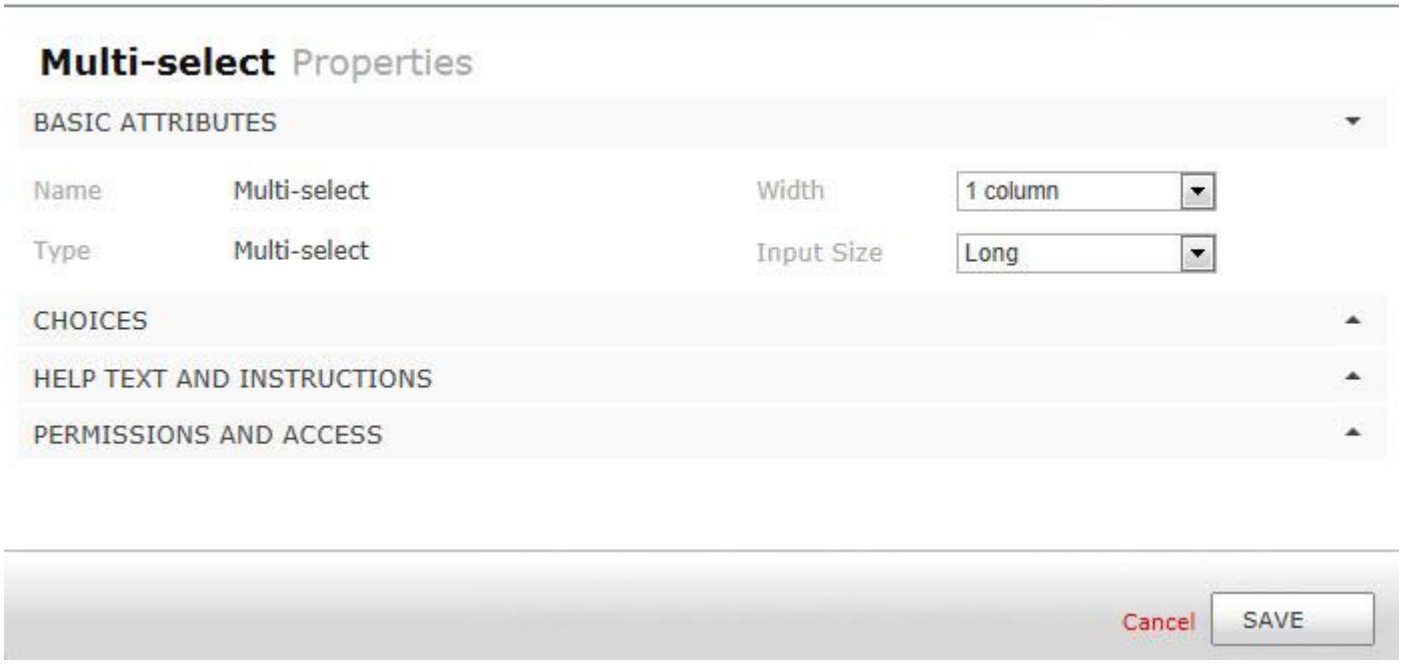
Create Dependency Groups

To create drop-down dependency groups (assuming you have already created drop-down fields for your dependent choices and are on the Form Designer administration page):

1. Select the parent drop-down field and click the **Edit** icon. The Properties window is displayed.
2. Click the **CHOICES AND DEPENDENT FIELDS** tab. The tab is expanded.
3. Hover over the value you want as a parent dependent field value and click the **Link** icon. The tab is further expanded to show additional options.
4. In the **Field you want to link** to drop-down menu, select the drop-down that you wish to use as a child of the current drop-down field.
5. Specify the values to be displayed in the child drop-down when the parent value is selected:
   - To display all values in the child when the parent value is selected, click **Link Field**.
   - To display a subset of all the values in the child field when the parent is selected:
     a. Click **View and Filter Choices**. The values in the child field are displayed with checkboxes. By default, all values are selected. Click the checkmarks to remove them from the checkboxes of the values you do not want to display.
     b. Click **Link Field**. The drop-down is set as the child of the current drop-down field. If the form is completed and put into production, when a user accesses the parent drop-down field and selects the specified value, the child field will be displayed with only the specified values in the list.
6. When you have completed setting values for all dependent fields, click the **SAVE** button at the bottom of the Properties window. You can view the dependent fields you have specified by clicking the **View Dependencies** button under the **Actions** tab on the right side of the Form Designer.

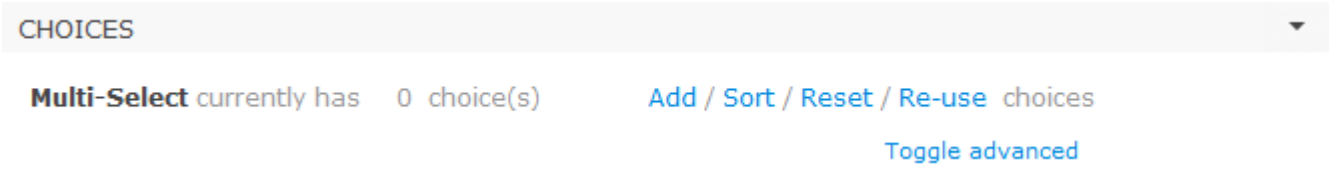
Multi-select
Setting Properties

When you drag and drop a Multi-select field into the Canvas, the Properties window is displayed.



Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **BASIC ATTRIBUTES**
  - **Name**—Enter a name for the field. This will be displayed as a label for the field on the published form.
  - **Width**—Select the number of columns the field spans. The field can span up to six columns, depending on the settings (see Changing the Number of Columns in a Tab in Working with Tabs).
  - **Input Size**—Input Size allows you to determine how much of the field's width is occupied by the field input. For example, you might want a field to occupy a row by itself (three columns), but because the value entered into that row will only be a few characters long, you might not want the field input to occupy the entire length of the row. Options for this property are:
    - **Mini**—Occupies approximately 20% of the field width.
    - **Very Small**—Occupies approximately 45% of the field width.
    - **Small**—Occupies approximately 50% of the field width.
    - **Medium**—Occupies approximately 80% of the field width.
    - **Long** (the default)—Occupies approximately 98% of the field width.
- **CHOICES**—Specify the choices available to the user from the multi-select field.

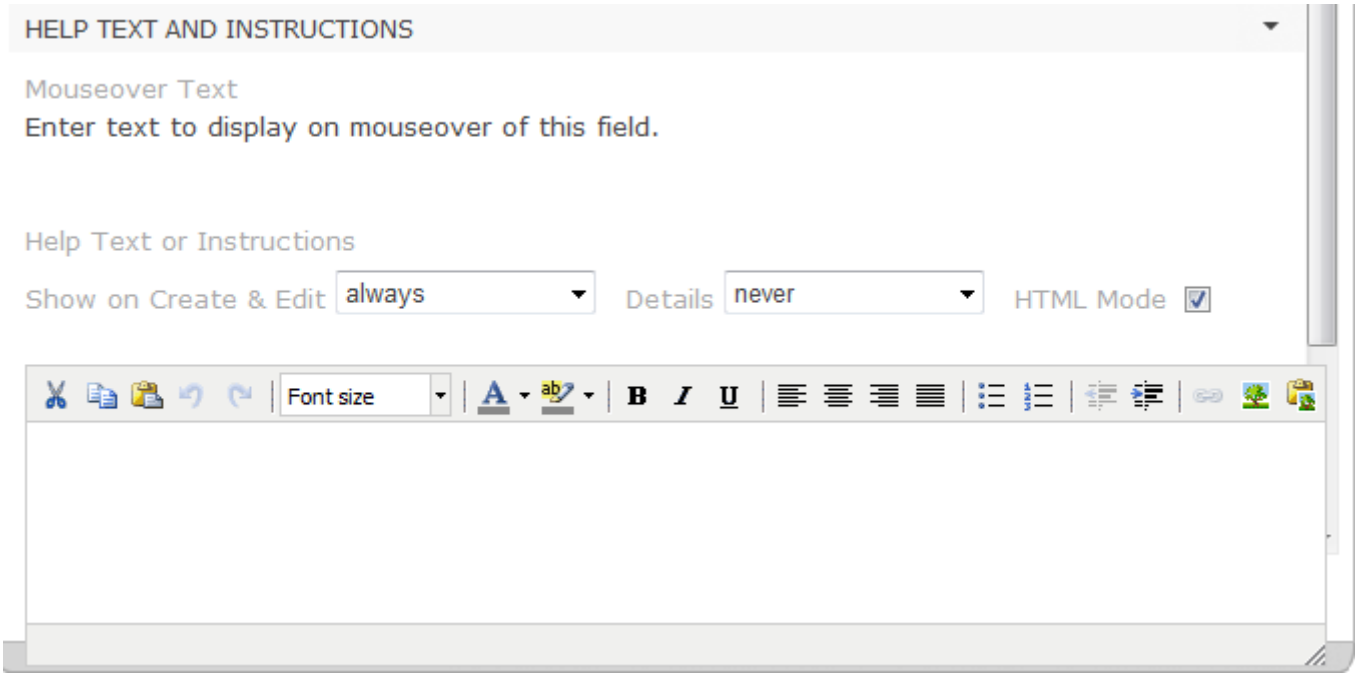


  - **Add**—The **Add** link adds values to the field. When you click the Add link, the Add Choices Editor is displayed. Type the values into the field and press Enter after each value. Click the **Add Choices** button when you have entered all of the values. The Add Choices Editor enforces uniqueness; if you enter the

same value twice, when you click the Add Choices button, the values are not added but, instead, an asterisk is displayed next to the repeated value. If the values are accepted, a list of the values are displayed in the section.

- **Sort**—The **Sort** link sorts the list of value in ascending alphabetical order. Clicking the button again sorts the list in descending alphabetical order.
- **Reset**—The **Reset** link deletes all values from the field.
- **Re-use**—The **Re-use** link opens a separate window that displays a list of all existing drop-down and multi-select fields in the system. To preview a field's list of choices, select a field from the drop-down on the left. When you have found the field whose choice list you want to re-use, click the **GO** button. You are returned to the Properties window and the drop-down field is populated with the Re-use values. If you re-use values, the Web and Email values remain. These values cannot be deleted from the field.
- **Toggle Advanced**—The **Toggle Advanced** link displays radio buttons with the following for those instances when you are changing the selected choice in the field:
    - Retain none of the values previously entered into the original choice's dependent fields.
    - Retain the values previously entered into the common fields contained in the original choice's dependent fields and the current choice's dependent fields.
- **Controls for the list of values**—Once values have been added to the field, the values are displayed in a list. The following controls can then be viewed and selected when hovering the mouse over a value in the list:
    - **Trash can icon**—Click the icon to delete the field.
    - **Checkmark icon**—Sets the value as the default for the field. Click the icon to set the value as the default. To change the default, click the same icon on a different value.
    - **Move icon**—Move the value to another position in the list. To move the value, hold down the mouse button on the Move icon and drag the value to the new location.

- **HELP TEXT AND INSTRUCTIONS**



- **Mouseover Text**—Enter the text to be displayed when a cursor hovers over the field or the field name. Text is limited to 100 characters.
- **Help Text and Instructions**—Help text and instructions can be as detailed as you like and are displayed above the field on the published form.
  - **Show on Create & Edit**—Select whether to show the help text and instructions on the Create and Edit pages of an issue:
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
    - **If row is shown**—Display the text and instructions only if the row in which the field appears is visible to the agent or customer.
  - **Details**—Select whether to show the help text and instructions on the Details page of an issue.
    - **Never**—The text and instructions are never visible to the agent or customer.
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
  - **Rich Text Mode checkbox**—Check the box to use the Rich Text Editor to edit the instructions. The editor provides a variety of text formatting options, including font options and HTML options such as inserting an image from a file or the clipboard, linking to a URL, etc. Leave the box unchecked to use plain text for the help text and instructions. The box is checked by default.
  - **Text Input field**—Enter the help text or instructions into the input field.

- **PERMISSIONS AND ACCESS**—View or set the default permissions for a custom field.

For each field, you can set up separate sets of permissions for agents and customers for this workspace. These are called "Agent Default" and "Customer Default" settings.

Example

You might want to require agents to enter information in an issue information field when the issue's status is open, and restrict them from entering information in the field when the issue is closed. So when setting up the Issue Information field, you would set the Agent Default permissions to "Required" for the status "Open", "Read Only" for the status "Closed", and "Optional" for all other statuses.

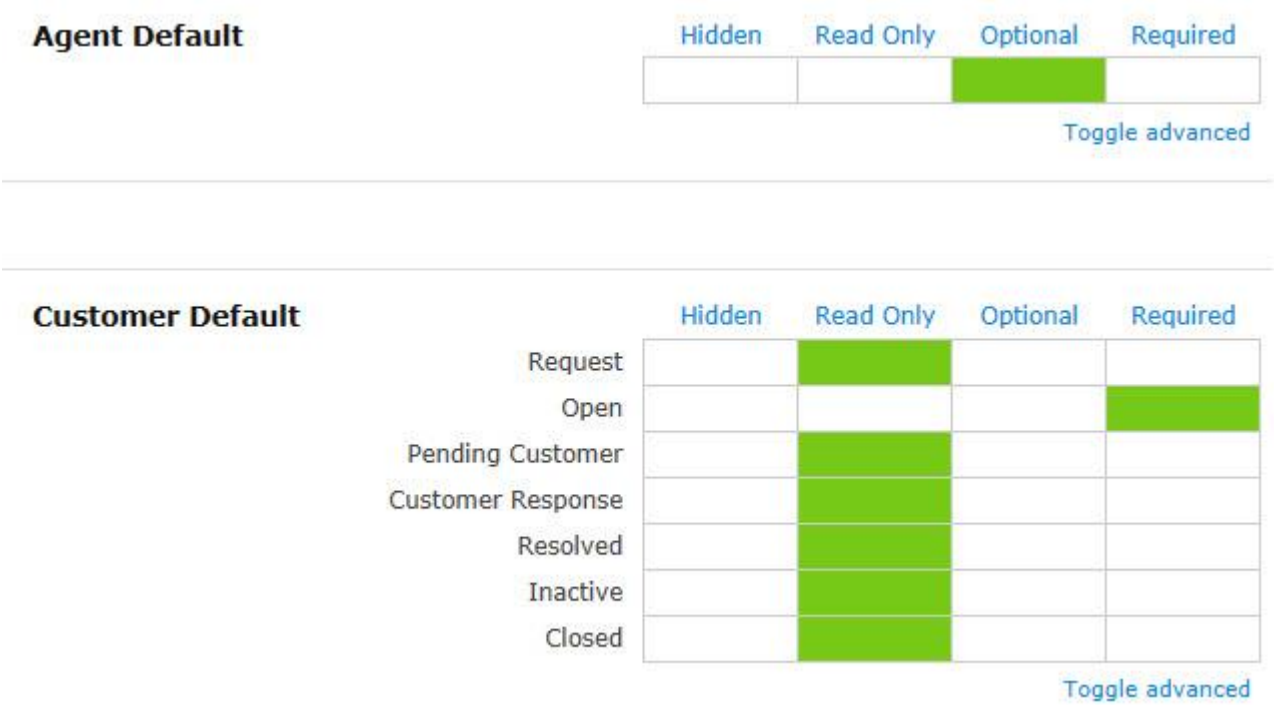
NOTE

Workspace Administrators can customize permissions per user role, which override the Agent Default and Customer Default permissions set up here. If permissions for a user role have been set up, a message will display above the default permissions listing the user role along with an option to remove custom permissions from the role. If you remove the custom permissions, the field will return to using the Agent Default or Customer Default permissions. (See below for steps.) For more information on field permissions per user role (set up in Administration | Workspace | User Roles) see Field Permissions.

To Set Permissions for a Field:

1. Click a cell in the table corresponding to one of the permissions listed below, such as "Optional".
   This will apply the permission to all statuses at once (Open, Resolved, Closed, etc). The selected cell is color-coded green (see the Agent Default example in the screen shot, below).
   - **Hidden**—Users cannot view the field
   - **Read Only**—Users can view but not edit the field
   - **Optional**—Users can view and edit the field, but are not required to populate the field
   - **Required**— Users can view and edit the field, and are required to populate the field
     Note: "Required" is not available for the Checkbox field type.
2. To set separate permissions per status (advanced permissions):
   a. Click **Toggle advanced** below Agent Default or Customer Default to view all of the statuses.
   b. Then click the cell corresponding to the permission and status (see the Customer Default example in the screen shot, below).

Tip: Click a column heading to apply the permission to all statuses for that column at once.



3. To reset advanced permissions to the initial (basic) settings, click **Toggle advanced** .
   This will reset the permissions to Optional for Agent Default or Hidden for Customer Default.

To Remove Custom Permission from a User Role:

NOTE

The following applies only when a message displays above the Agent Default or Customer Default permissions indicating that a role has custom permissions.

Mouse over the role (listed above the Agent Default or Customer Default permissions), then click the **Remove** button. The custom permissions are removed from the role and the name of the role displays with a strikethrough (e.g., ~~Role Name~~). Once you save your changes, the role name will no longer display on the window.
If you decide not to remove the role and have not yet saved your changes, you can mouse over the role and click the **Undo** button.

- **CANCEL/SAVE buttons**—To cancel the edits you've made to the field, click the **Cancel** button below the Properties window. If the field is being introduced for the first time and has not been saved before, clicking Cancel leaves the Properties window without adding the field to the form. To save the edits, click the **Save** button. Clicking Save does not publish the field addition/edit to the production version of the form, that is, the changes to the form do not become visible to the user until the form has been published.

Defining Permissions Per Role

To define field permissions with greater granularity, you can customize them for a specific role by editing the Role Properties. Once you have done so, if you return to the Form Designer, the customized roles are listed as exceptions to the default permissions.

Editing, Moving, or Deleting the Field

To edit the field properties, from the Form Designer, hover over the field and click on the edit icon.

To move the field, from the Form Designer, hover over the field, click on the move icon, hold down the mouse button, and drag the field to the location in which you want it displayed.

To delete the field, from the Form Designer, hover over the field and click on the trash can icon. Deletion is not permitted if a field is part of some other feature (such as a field dependency). In those instances, the relationship between the field and the other feature must first be severed before the field can be deleted.

NOTE

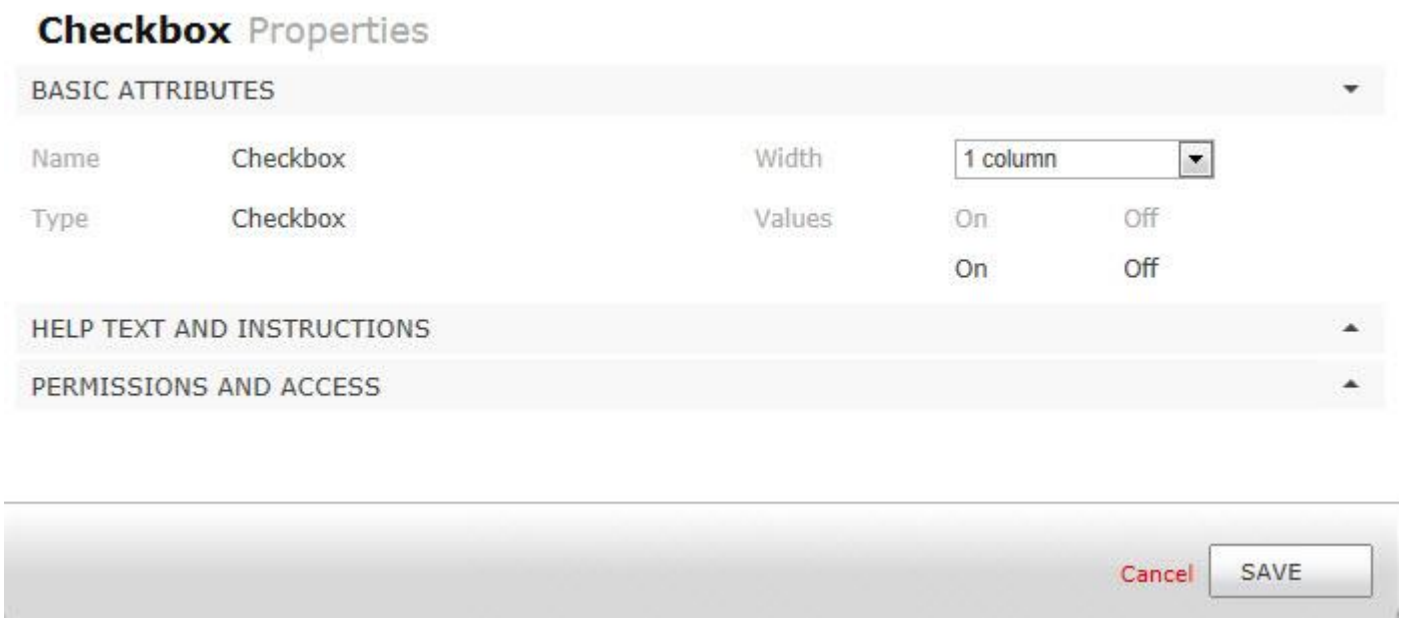
Deleted data fields are no longer viewable, and BMC FootPrints Service Core forms no longer contain that field. The column is also deleted from the database and the data is no longer accessible. To undelete a field (assuming you've made a backup of your database), contact BMC for instructions.

Changing the Field Name

You can change the field name from the Form Designer without going into the Properties window. To do so, click in the field name from the Form Designer. The name is highlighted. Type the new name into the field.

Checkbox
Setting Properties

When you drag and drop a Checkbox field into the Canvas, the Properties window is displayed.

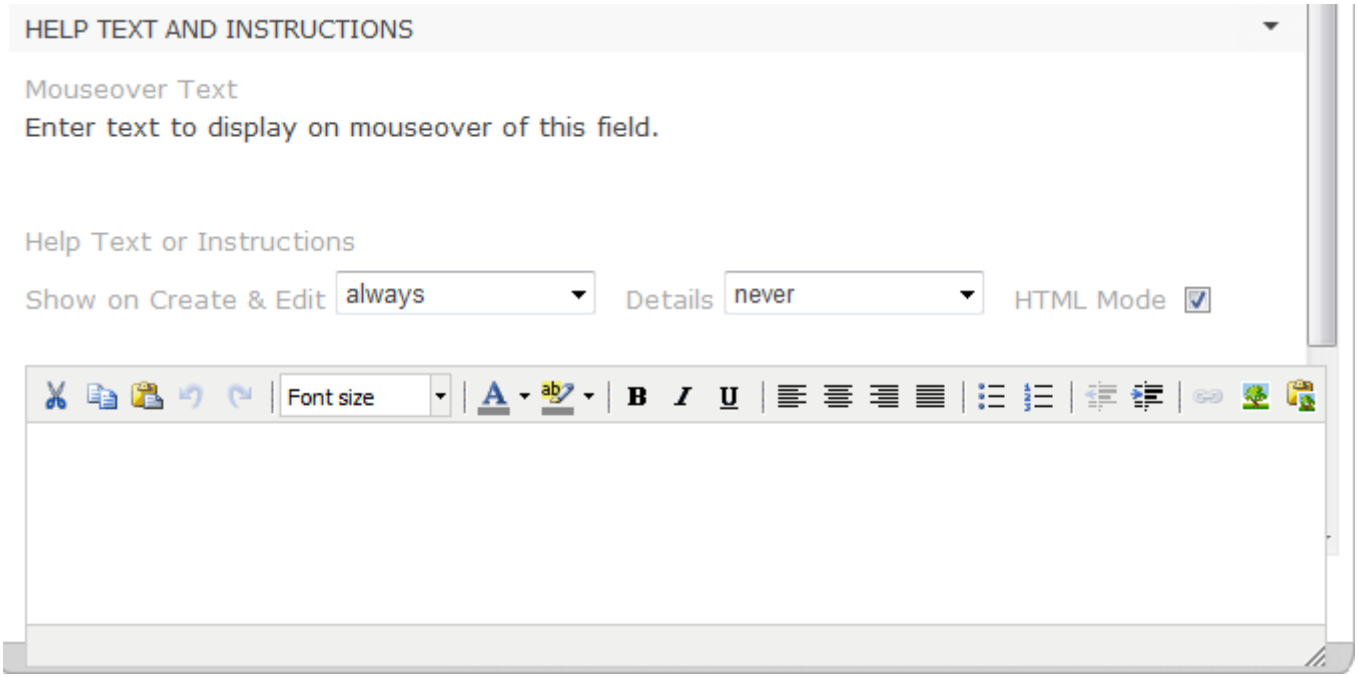


Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **BASIC ATTRIBUTES**
  - **Name**—Enter a name for the field. This will be displayed as a label for the field on the published form.
  - **Width**—Select the number of columns the field spans. The field can span up to six columns, depending on the settings (see Changing the Number of Columns in a Tab in Working with Tabs).
  - **Values**—There are only two values for a checkbox: On (the box is checked) and Off (the box is not checked). You cannot add or remove either of these values, but you can change the label beside each

value. Click on the label (On and Off by default) to activate the text field, then type the name you want to use in the field (for example, "True" or "False").

- **HELP TEXT AND INSTRUCTIONS**



- **Mouseover Text**—Enter the text to be displayed when a cursor hovers over the field or the field name. Text is limited to 100 characters.
- **Help Text and Instructions**—Help text and instructions can be as detailed as you like and are displayed above the field on the published form.
  - **Show on Create & Edit**—Select whether to show the help text and instructions on the Create and Edit pages of an issue:
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
    - **If row is shown**—Display the text and instructions only if the row in which the field appears is visible to the agent or customer.
  - **Details**—Select whether to show the help text and instructions on the Details page of an issue.
    - **Never**—The text and instructions are never visible to the agent or customer.
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
  - **Rich Text Mode checkbox**—Check the box to use the Rich Text Editor to edit the instructions. The editor provides a variety of text formatting options, including font options and HTML options such as inserting an image from a file or the clipboard, linking to a URL, etc. Leave the box unchecked to use plain text for the help text and instructions. The box is checked by default.

- **Text Input field**—Enter the help text or instructions into the input field.

- **PERMISSIONS AND ACCESS**—View or set the default permissions for a custom field.

  For each field, you can set up separate sets of permissions for agents and customers for this workspace. These are called "Agent Default" and "Customer Default" settings.

  Example

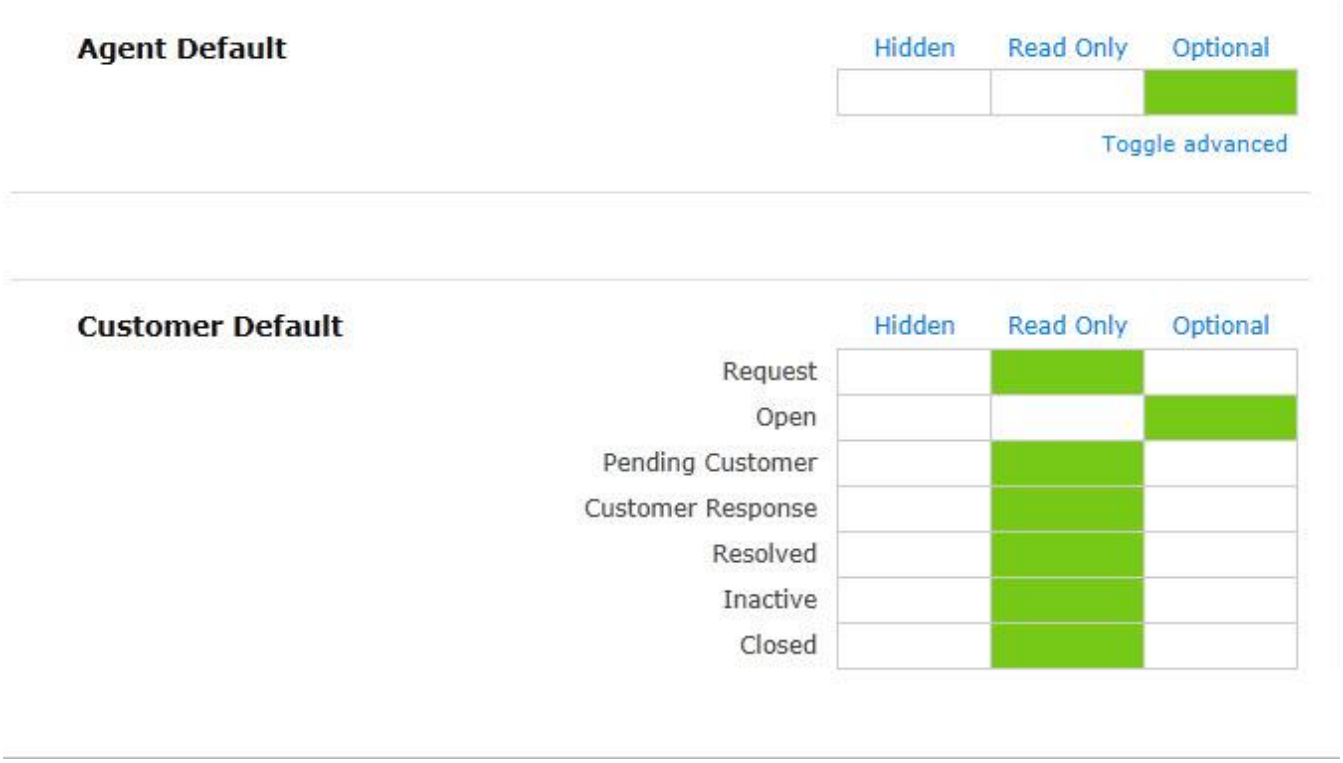
  You might want to require agents to enter information in an issue information field when the issue's status is open, and restrict them from entering information in the field when the issue is closed. So when setting up the Issue Information field, you would set the Agent Default permissions to "Required" for the status "Open", "Read Only" for the status "Closed", and "Optional" for all other statuses.

NOTE
Workspace Administrators can customize permissions per user role, which override the Agent Default and Customer Default permissions set up here. If permissions for a user role have been set up, a message will display above the default permissions listing the user role along with an option to remove custom permissions from the role. If you remove the custom permissions, the field will return to using the Agent Default or Customer Default permissions. (See below for steps.) For more information on field permissions per user role (set up in Administration | Workspace | User Roles) see Field Permissions.

To Set Permissions for a Field:

1. Click a cell in the table corresponding to one of the permissions listed below, such as "Optional".
   This will apply the permission to all statuses at once (Open, Resolved, Closed, etc). The selected cell is color-coded green (see the Agent Default example in the screen shot, below).
   - **Hidden**—Users cannot view the field
   - **Read Only**—Users can view but not edit the field
   - **Optional**—Users can view and edit the field, but are not required to populate the field
   - **Required**— Users can view and edit the field, and are required to populate the field
     Note: "Required" is not available for the Checkbox field type.
2. To set separate permissions per status (advanced permissions):
   a. Click **Toggle advanced** below Agent Default or Customer Default to view all of the statuses.
   b. Then click the cell corresponding to the permission and status (see the Customer Default example in the screen shot, below).

   Tip: Click a column heading to apply the permission to all statuses for that column at once.



3. To reset advanced permissions to the initial (basic) settings, click **Toggle advanced** .
   This will reset the permissions to Optional for Agent Default or Hidden for Customer Default.

To Remove Custom Permission from a User Role:

NOTE

The following applies only when a message displays above the Agent Default or Customer Default permissions indicating that a role has custom permissions.

Mouse over the role (listed above the Agent Default or Customer Default permissions), then click the **Remove** button. The custom permissions are removed from the role and the name of the role displays with a strikethrough (e.g., ~~Role Name~~). Once you save your changes, the role name will no longer display on the window.
If you decide not to remove the role and have not yet saved your changes, you can mouse over the role and click the **Undo** button.

- **CANCEL/SAVE buttons**—To cancel the edits you've made to the field, click the **Cancel** button below the Properties window. If the field is being introduced for the first time and has not been saved before, clicking Cancel leaves the Properties window without adding the field to the form. To save the edits, click the **Save** button. Clicking Save does not publish the field addition/edit to the production version of the form, that is, the changes to the form do not become visible to the user until the form has been published.

Defining Permissions Per Role

To define field permissions with greater granularity, you can customize them for a specific role by editing the Role Properties. Once you have done so, if you return to the Form Designer, the customized roles are listed as exceptions to the default permissions.

Editing, Moving, or Deleting the Field

To edit the field properties, from the Form Designer, hover over the field and click on the edit icon.

To move the field, from the Form Designer, hover over the field, click on the move icon, hold down the mouse button, and drag the field to the location in which you want it displayed.

To delete the field, from the Form Designer, hover over the field and click on the trash can icon. Deletion is not permitted if a field is part of some other feature (such as a field dependency). In those instances, the relationship between the field and the other feature must first be severed before the field can be deleted.

NOTE

Deleted data fields are no longer viewable, and BMC FootPrints Service Core forms no longer contain that field. The column is also deleted from the database and the data is no longer accessible. To undelete a field (assuming you've made a backup of your database), contact BMC for instructions.

Changing the Field Name

You can change the field name from the Form Designer without going into the Properties window. To do so, click in the field name from the Form Designer. The name is highlighted. Type the new name into the field.

Web Site
Setting Properties

When you drag and drop a Web Site field into the Canvas, the Properties window is displayed.

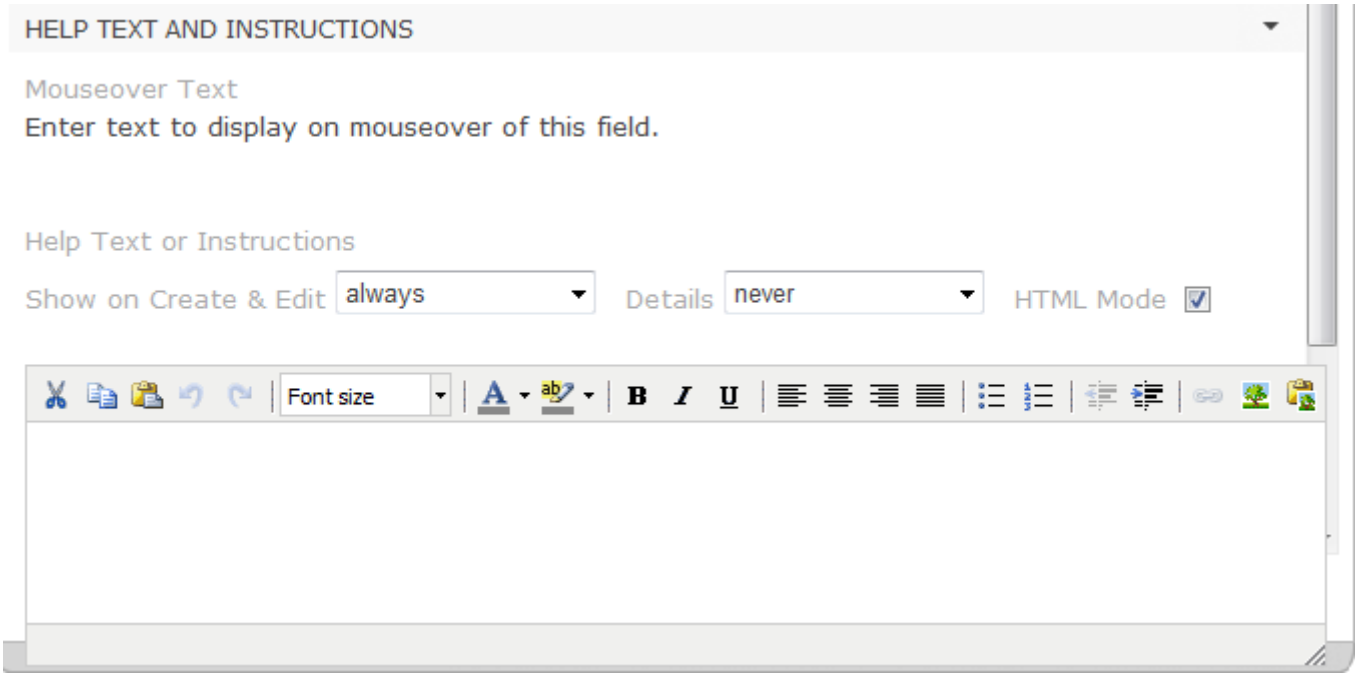
Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **BASIC ATTRIBUTES**
  - **Name**—Enter a name for the field. This will be displayed as a label for the field on the published form.
  - **Width**—Select the number of columns the field spans. The field can span up to six columns, depending on the settings (see Changing the Number of Columns in a Tab in Working with Tabs).
  - **Input Size**—Input Size allows you to determine how much of the field's width is occupied by the field input. For example, you might want a field to occupy a row by itself (three columns), but because the

value entered into that row will only be a few characters long, you might not want the field input to occupy the entire length of the row. Options for this property are:

- **Mini**—Occupies approximately 20% of the field width.
- **Very Small**—Occupies approximately 45% of the field width.
- **Small**—Occupies approximately 50% of the field width.
- **Medium**—Occupies approximately 80% of the field width.
- **Long** (the default)—Occupies approximately 98% of the field width.

- **HELP TEXT AND INSTRUCTIONS**



- **Mouseover Text**—Enter the text to be displayed when a cursor hovers over the field or the field name. Text is limited to 100 characters.
- **Help Text and Instructions**—Help text and instructions can be as detailed as you like and are displayed above the field on the published form.
  - **Show on Create & Edit**—Select whether to show the help text and instructions on the Create and Edit pages of an issue:
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
    - **If row is shown**—Display the text and instructions only if the row in which the field appears is visible to the agent or customer.
  - **Details**—Select whether to show the help text and instructions on the Details page of an issue.
    - **Never**—The text and instructions are never visible to the agent or customer.

        - **Always**—The text and instructions are always visible to the agent or customer.
        - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
    - **Rich Text Mode checkbox**—Check the box to use the Rich Text Editor to edit the instructions. The editor provides a variety of text formatting options, including font options and HTML options such as inserting an image from a file or the clipboard, linking to a URL, etc. Leave the box unchecked to use plain text for the help text and instructions. The box is checked by default.
    - **Text Input field**—Enter the help text or instructions into the input field.
- **PERMISSIONS AND ACCESS**—View or set the default permissions for a custom field.

  For each field, you can set up separate sets of permissions for agents and customers for this workspace. These are called "Agent Default" and "Customer Default" settings.

  Example

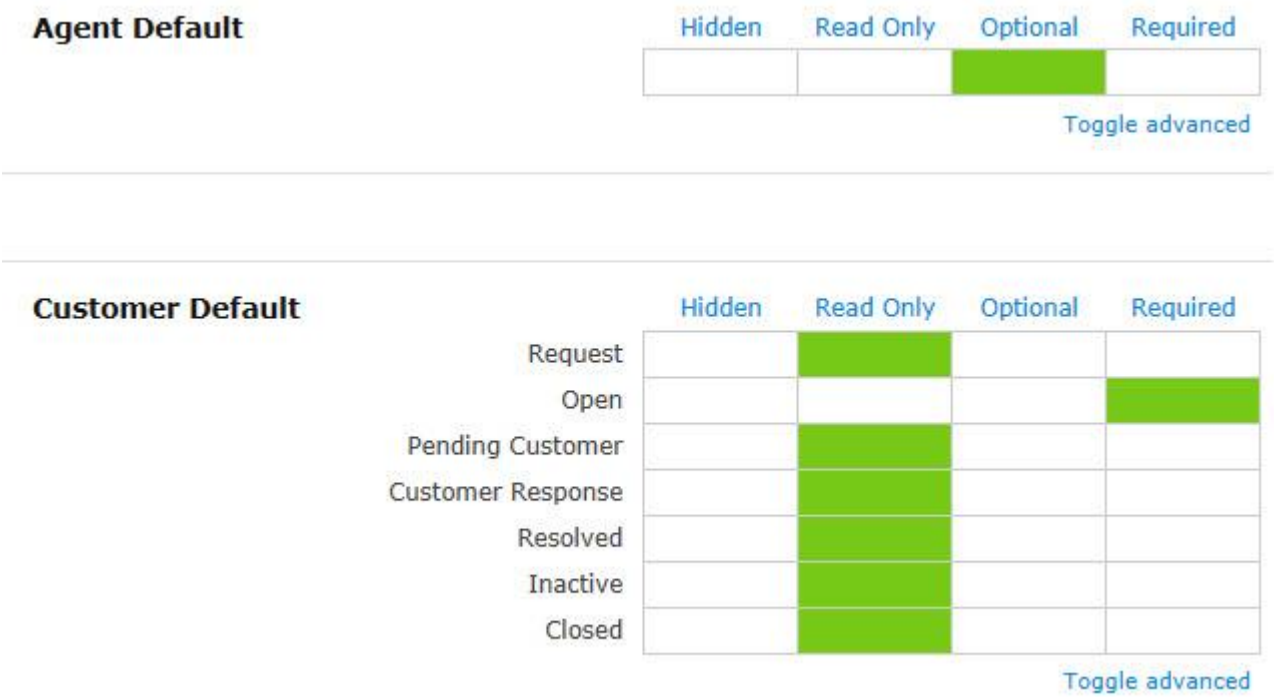
  You might want to require agents to enter information in an issue information field when the issue's status is open, and restrict them from entering information in the field when the issue is closed. So when setting up the Issue Information field, you would set the Agent Default permissions to "Required" for the status "Open", "Read Only" for the status "Closed", and "Optional" for all other statuses.

NOTE
Workspace Administrators can customize permissions per user role, which override the Agent Default and Customer Default permissions set up here. If permissions for a user role have been set up, a message will display above the default permissions listing the user role along with an option to remove custom permissions from the role. If you remove the custom permissions, the field will return to using the Agent Default or Customer Default permissions. (See below for steps.) For more information on field permissions per user role (set up in Administration | Workspace | User Roles) see Field Permissions.

To Set Permissions for a Field:

1. Click a cell in the table corresponding to one of the permissions listed below, such as "Optional".
   This will apply the permission to all statuses at once (Open, Resolved, Closed, etc). The selected cell is color-coded green (see the Agent Default example in the screen shot, below).
   - **Hidden**—Users cannot view the field
   - **Read Only**—Users can view but not edit the field
   - **Optional**—Users can view and edit the field, but are not required to populate the field
   - **Required**— Users can view and edit the field, and are required to populate the field
     Note: "Required" is not available for the Checkbox field type.
2. To set separate permissions per status (advanced permissions):
   a. Click **Toggle advanced** below Agent Default or Customer Default to view all of the statuses.
   b. Then click the cell corresponding to the permission and status (see the Customer Default example in the screen shot, below).

Tip: Click a column heading to apply the permission to all statuses for that column at once.



3. To reset advanced permissions to the initial (basic) settings, click **Toggle advanced** .
   This will reset the permissions to Optional for Agent Default or Hidden for Customer Default.

To Remove Custom Permission from a User Role:

NOTE

The following applies only when a message displays above the Agent Default or Customer Default permissions indicating that a role has custom permissions.

Mouse over the role (listed above the Agent Default or Customer Default permissions), then click the **Remove** button. The custom permissions are removed from the role and the name of the role displays with a strikethrough (e.g., ~~Role Name~~). Once you save your changes, the role name will no longer display on the window.
If you decide not to remove the role and have not yet saved your changes, you can mouse over the role and click the **Undo** button.

- **CANCEL/SAVE buttons**—To cancel the edits you've made to the field, click the **Cancel** button below the Properties window. If the field is being introduced for the first time and has not been saved before, clicking Cancel leaves the Properties window without adding the field to the form. To save the edits, click the **Save** button. Clicking Save does not publish the field addition/edit to the production version of the form, that is, the changes to the form do not become visible to the user until the form has been published.

Defining Permissions Per Role

To define field permissions with greater granularity, you can customize them for a specific role by editing the Role Properties. Once you have done so, if you return to the Form Designer, the customized roles are listed as exceptions to the default permissions.

Editing, Moving, or Deleting the Field

To edit the field properties, from the Form Designer, hover over the field and click on the edit icon.

To move the field, from the Form Designer, hover over the field, click on the move icon, hold down the mouse button, and drag the field to the location in which you want it displayed.

To delete the field, from the Form Designer, hover over the field and click on the trash can icon. Deletion is not permitted if a field is part of some other feature (such as a field dependency). In those instances, the relationship between the field and the other feature must first be severed before the field can be deleted.

NOTE

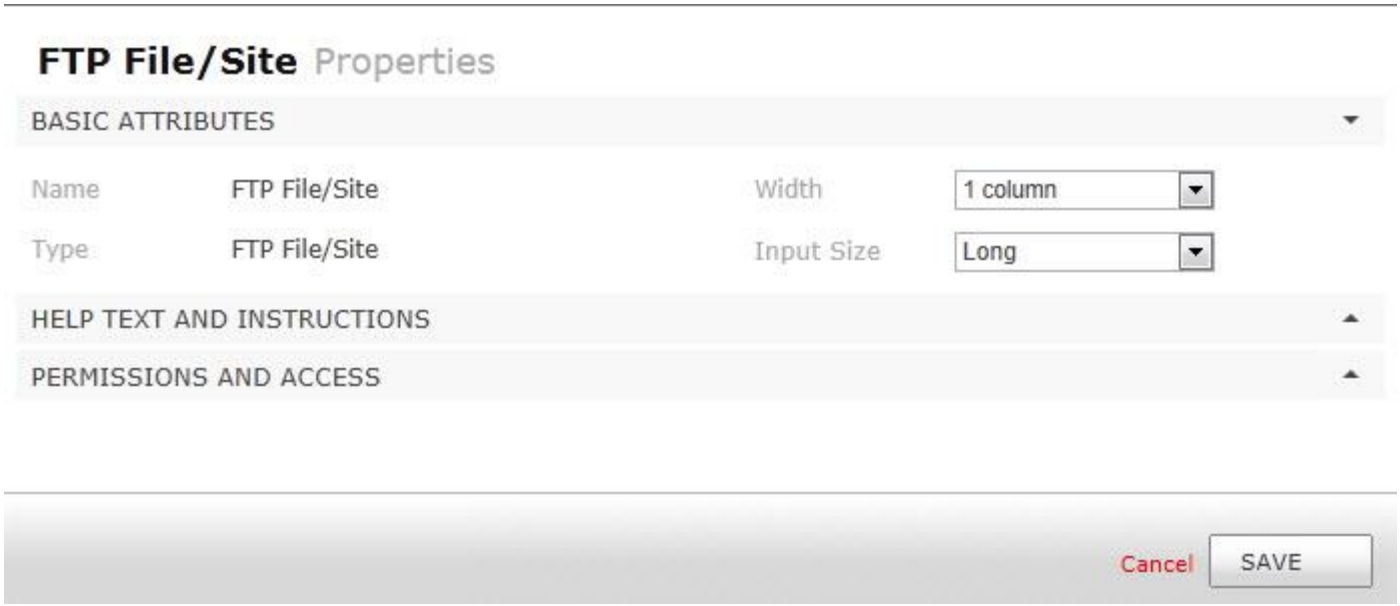
Deleted data fields are no longer viewable, and BMC FootPrints Service Core forms no longer contain that field. The column is also deleted from the database and the data is no longer accessible. To undelete a field (assuming you've made a backup of your database), contact BMC for instructions.

Changing the Field Name

You can change the field name from the Form Designer without going into the Properties window. To do so, click in the field name from the Form Designer. The name is highlighted. Type the new name into the field.

FTP File/Site
Setting Properties

When you drag and drop a FTP/File Site field into the Canvas, the Properties window is displayed.



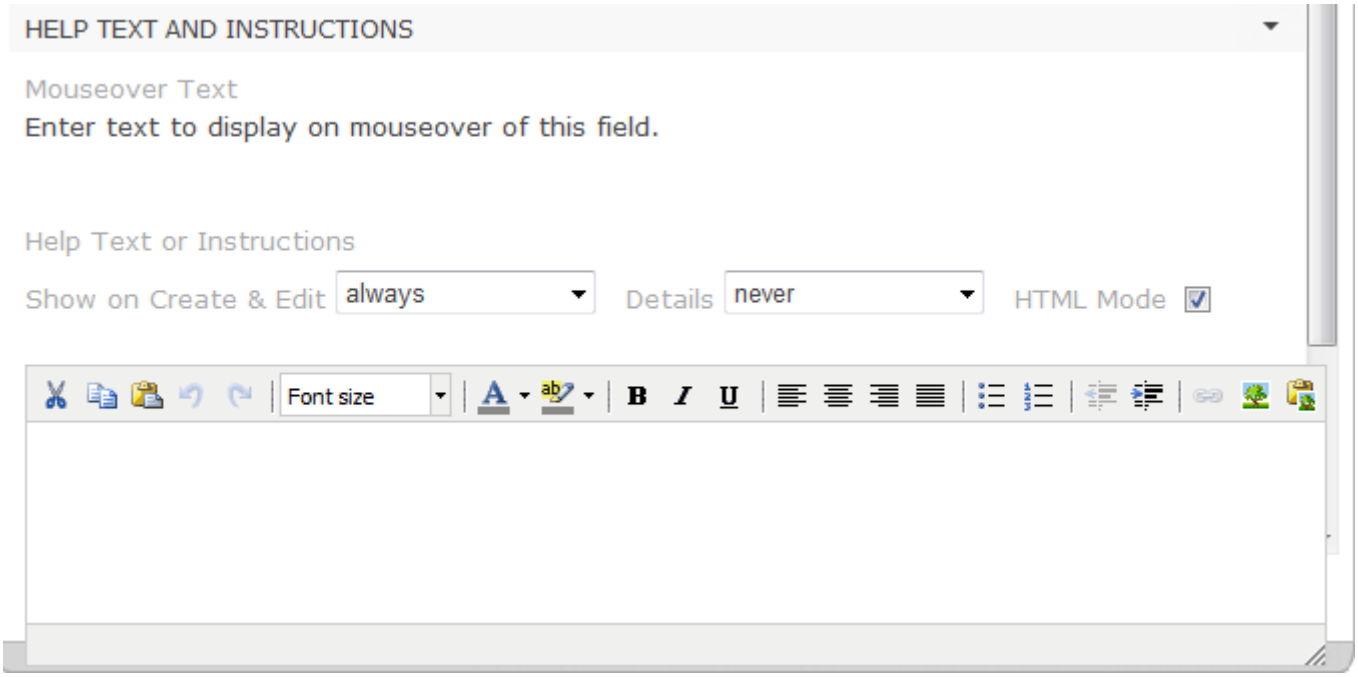
Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **BASIC ATTRIBUTES**
  - **Name**—Enter a name for the field. This will be displayed as a label for the field on the published form.
  - **Width**—Select the number of columns the field spans. The field can span up to six columns, depending on the settings (see Changing the Number of Columns in a Tab in Working with Tabs).
  - **Input Size**—Input Size allows you to determine how much of the field's width is occupied by the field input. For example, you might want a field to occupy a row by itself (three columns), but because the

value entered into that row will only be a few characters long, you might not want the field input to occupy the entire length of the row. Options for this property are:

- **Mini**—Occupies approximately 20% of the field width.
- **Very Small**—Occupies approximately 45% of the field width.
- **Small**—Occupies approximately 50% of the field width.
- **Medium**—Occupies approximately 80% of the field width.
- **Long** (the default)—Occupies approximately 98% of the field width.

- **HELP TEXT AND INSTRUCTIONS**



- **Mouseover Text**—Enter the text to be displayed when a cursor hovers over the field or the field name. Text is limited to 100 characters.
- **Help Text and Instructions**—Help text and instructions can be as detailed as you like and are displayed above the field on the published form.
  - **Show on Create & Edit**—Select whether to show the help text and instructions on the Create and Edit pages of an issue:
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
    - **If row is shown**—Display the text and instructions only if the row in which the field appears is visible to the agent or customer.
  - **Details**—Select whether to show the help text and instructions on the Details page of an issue.
    - **Never**—The text and instructions are never visible to the agent or customer.

        - **Always**—The text and instructions are always visible to the agent or customer.
        - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
    - **Rich Text Mode checkbox**—Check the box to use the Rich Text Editor to edit the instructions. The editor provides a variety of text formatting options, including font options and HTML options such as inserting an image from a file or the clipboard, linking to a URL, etc. Leave the box unchecked to use plain text for the help text and instructions. The box is checked by default.
    - **Text Input field**—Enter the help text or instructions into the input field.
- **PERMISSIONS AND ACCESS**—View or set the default permissions for a custom field.

  For each field, you can set up separate sets of permissions for agents and customers for this workspace. These are called "Agent Default" and "Customer Default" settings.

  Example

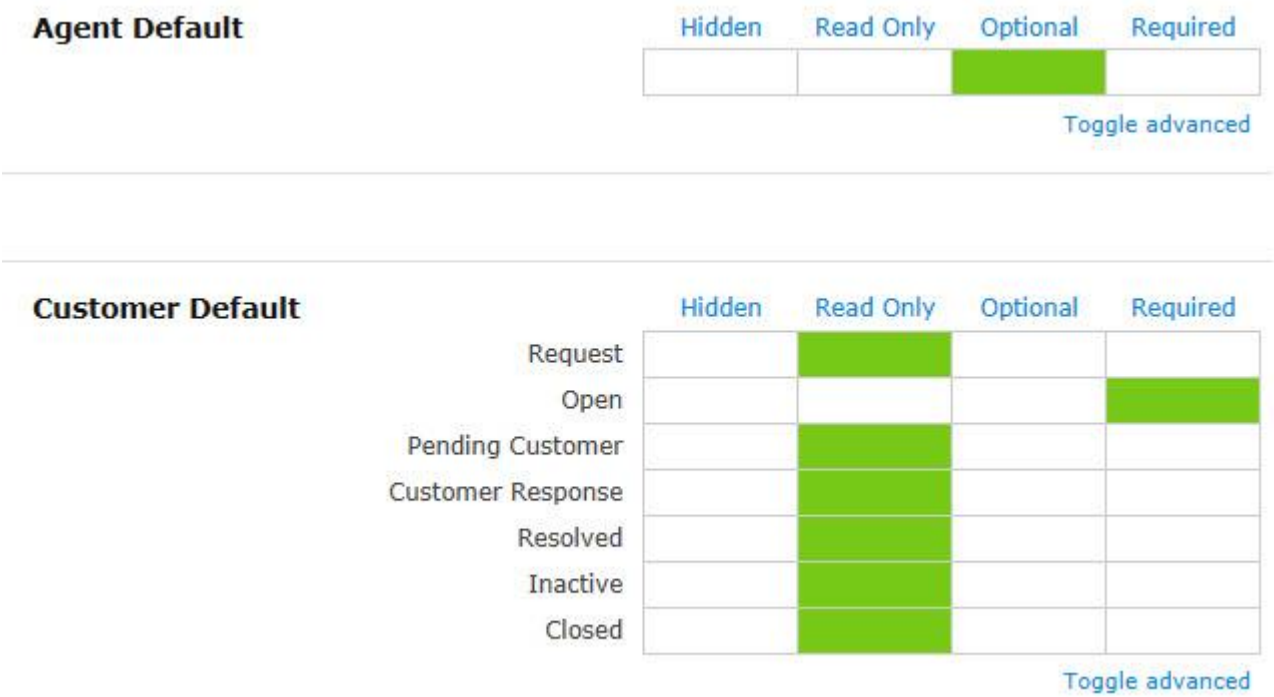
  You might want to require agents to enter information in an issue information field when the issue's status is open, and restrict them from entering information in the field when the issue is closed. So when setting up the Issue Information field, you would set the Agent Default permissions to "Required" for the status "Open", "Read Only" for the status "Closed", and "Optional" for all other statuses.

NOTE
Workspace Administrators can customize permissions per user role, which override the Agent Default and Customer Default permissions set up here. If permissions for a user role have been set up, a message will display above the default permissions listing the user role along with an option to remove custom permissions from the role. If you remove the custom permissions, the field will return to using the Agent Default or Customer Default permissions. (See below for steps.) For more information on field permissions per user role (set up in Administration | Workspace | User Roles) see Field Permissions.

To Set Permissions for a Field:

1. Click a cell in the table corresponding to one of the permissions listed below, such as "Optional".
   This will apply the permission to all statuses at once (Open, Resolved, Closed, etc). The selected cell is color-coded green (see the Agent Default example in the screen shot, below).
   - **Hidden**—Users cannot view the field
   - **Read Only**—Users can view but not edit the field
   - **Optional**—Users can view and edit the field, but are not required to populate the field
   - **Required**— Users can view and edit the field, and are required to populate the field
     Note: "Required" is not available for the Checkbox field type.
2. To set separate permissions per status (advanced permissions):
   a. Click **Toggle advanced** below Agent Default or Customer Default to view all of the statuses.
   b. Then click the cell corresponding to the permission and status (see the Customer Default example in the screen shot, below).

Tip: Click a column heading to apply the permission to all statuses for that column at once.



3. To reset advanced permissions to the initial (basic) settings, click **Toggle advanced** .
   This will reset the permissions to Optional for Agent Default or Hidden for Customer Default.

To Remove Custom Permission from a User Role:

NOTE

The following applies only when a message displays above the Agent Default or Customer Default permissions indicating that a role has custom permissions.

Mouse over the role (listed above the Agent Default or Customer Default permissions), then click the **Remove** button. The custom permissions are removed from the role and the name of the role displays with a strikethrough (e.g., ~~Role Name~~). Once you save your changes, the role name will no longer display on the window.
If you decide not to remove the role and have not yet saved your changes, you can mouse over the role and click the **Undo** button.

- **CANCEL/SAVE buttons**—To cancel the edits you've made to the field, click the **Cancel** button below the Properties window. If the field is being introduced for the first time and has not been saved before, clicking Cancel leaves the Properties window without adding the field to the form. To save the edits, click the **Save** button. Clicking Save does not publish the field addition/edit to the production version of the form, that is, the changes to the form do not become visible to the user until the form has been published.

Defining Permissions Per Role

To define field permissions with greater granularity, you can customize them for a specific role by editing the Role Properties. Once you have done so, if you return to the Form Designer, the customized roles are listed as exceptions to the default permissions.

Editing, Moving, or Deleting the Field

To edit the field properties, from the Form Designer, hover over the field and click on the edit icon.

To move the field, from the Form Designer, hover over the field, click on the move icon, hold down the mouse button, and drag the field to the location in which you want it displayed.

To delete the field, from the Form Designer, hover over the field and click on the trash can icon. Deletion is not permitted if a field is part of some other feature (such as a field dependency). In those instances, the relationship between the field and the other feature must first be severed before the field can be deleted.

NOTE

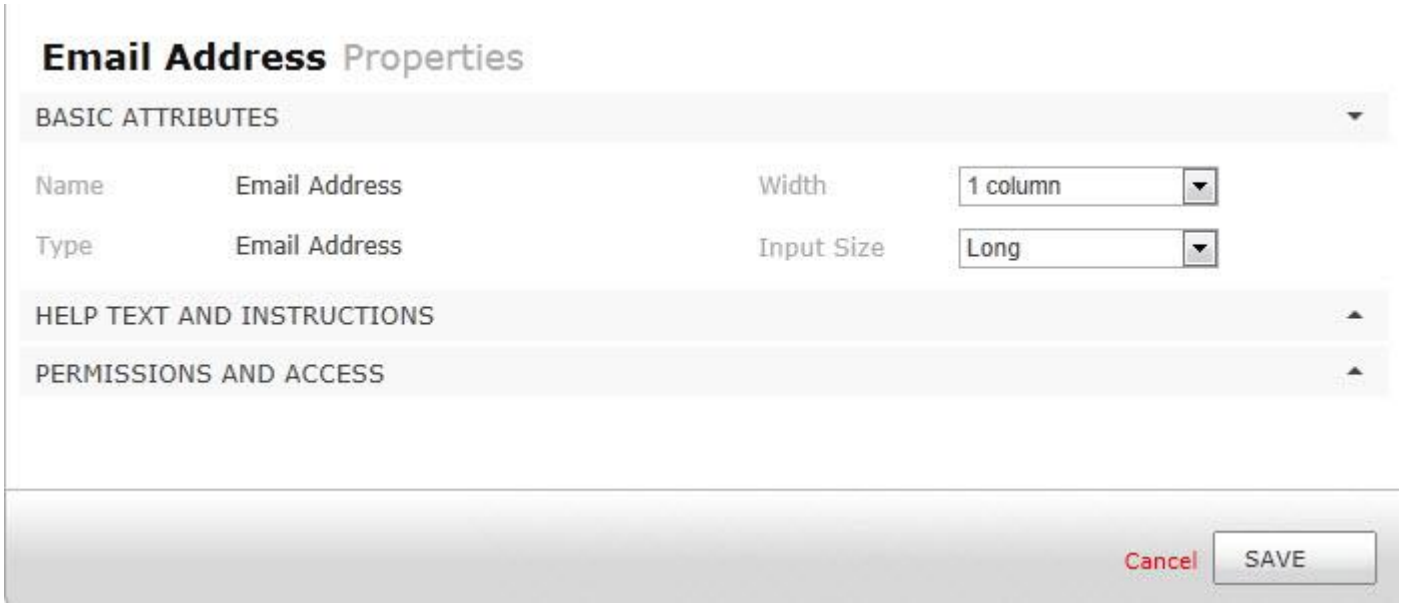
Deleted data fields are no longer viewable, and BMC FootPrints Service Core forms no longer contain that field. The column is also deleted from the database and the data is no longer accessible. To undelete a field (assuming you've made a backup of your database), contact BMC for instructions.

Changing the Field Name

You can change the field name from the Form Designer without going into the Properties window. To do so, click in the field name from the Form Designer. The name is highlighted. Type the new name into the field.

Email Address
Setting Properties

When you drag and drop an Email Address field into the Canvas, the Properties window is displayed.



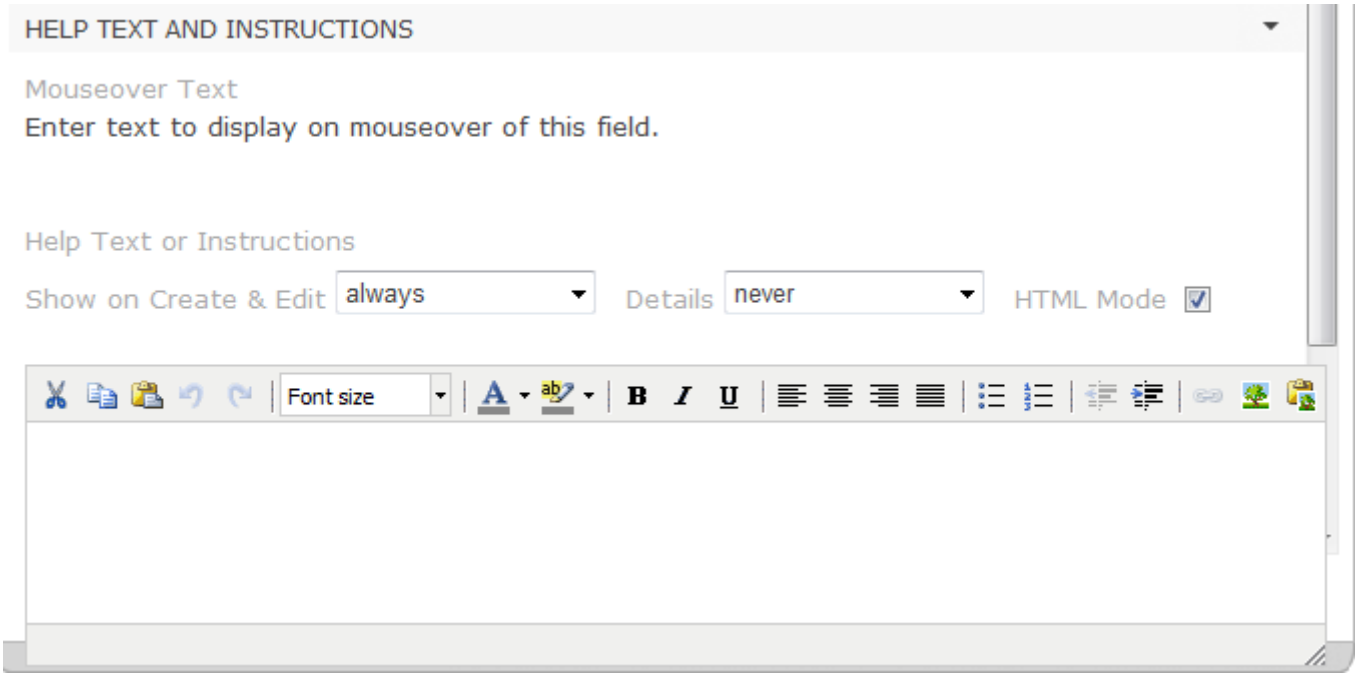
Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **BASIC ATTRIBUTES**
  - **Name**—Enter a name for the field. This will be displayed as a label for the field on the published form.
  - **Width**—Select the number of columns the field spans. The field can span up to six columns, depending on the settings (see Changing the Number of Columns in a Tab in Working with Tabs).
  - **Input Size**—Input Size allows you to determine how much of the field's width is occupied by the field input. For example, you might want a field to occupy a row by itself (three columns), but because the

value entered into that row will only be a few characters long, you might not want the field input to occupy the entire length of the row. Options for this property are:

- **Mini**—Occupies approximately 20% of the field width.
- **Very Small**—Occupies approximately 45% of the field width.
- **Small**—Occupies approximately 50% of the field width.
- **Medium**—Occupies approximately 80% of the field width.
- **Long** (the default)—Occupies approximately 98% of the field width.

- **HELP TEXT AND INSTRUCTIONS**



- **Mouseover Text**—Enter the text to be displayed when a cursor hovers over the field or the field name. Text is limited to 100 characters.
- **Help Text and Instructions**—Help text and instructions can be as detailed as you like and are displayed above the field on the published form.
  - **Show on Create & Edit**—Select whether to show the help text and instructions on the Create and Edit pages of an issue:
    - **Always**—The text and instructions are always visible to the agent or customer.
    - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
    - **If row is shown**—Display the text and instructions only if the row in which the field appears is visible to the agent or customer.
  - **Details**—Select whether to show the help text and instructions on the Details page of an issue.
    - **Never**—The text and instructions are never visible to the agent or customer.

        - **Always**—The text and instructions are always visible to the agent or customer.
        - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
    - **Rich Text Mode checkbox**—Check the box to use the Rich Text Editor to edit the instructions. The editor provides a variety of text formatting options, including font options and HTML options such as inserting an image from a file or the clipboard, linking to a URL, etc. Leave the box unchecked to use plain text for the help text and instructions. The box is checked by default.
    - **Text Input field**—Enter the help text or instructions into the input field.
- **PERMISSIONS AND ACCESS**—View or set the default permissions for a custom field.

  For each field, you can set up separate sets of permissions for agents and customers for this workspace. These are called "Agent Default" and "Customer Default" settings.

  Example

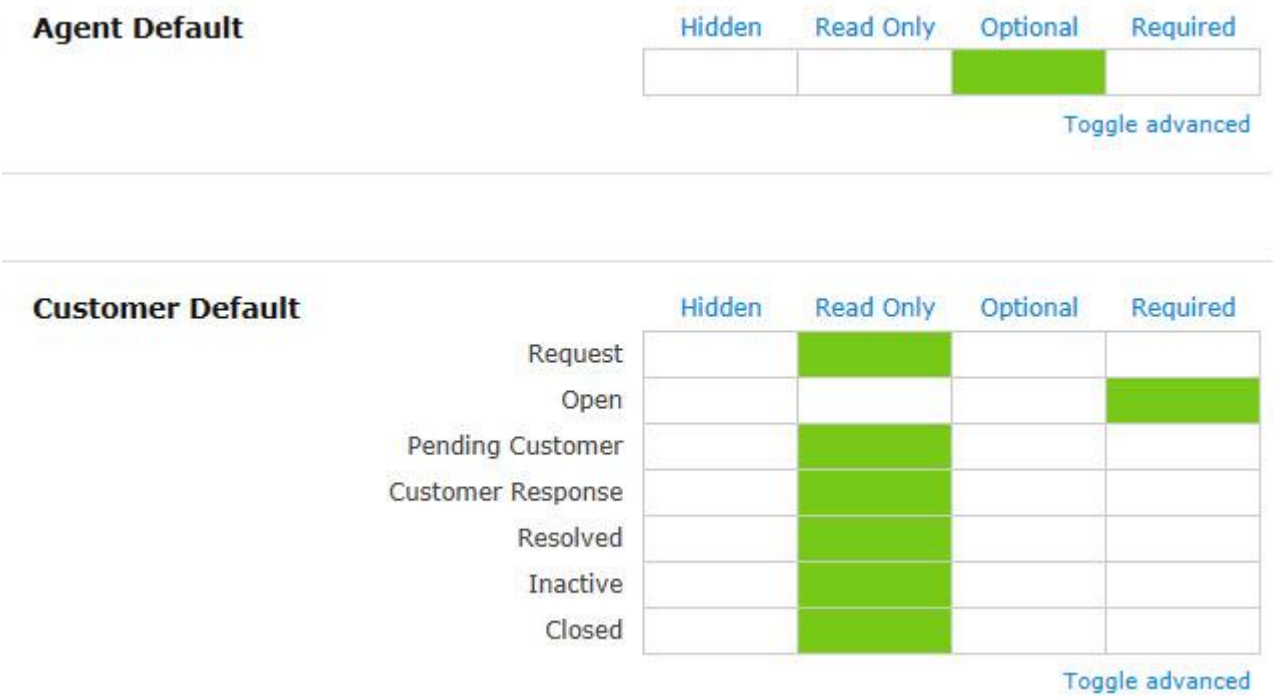
  You might want to require agents to enter information in an issue information field when the issue's status is open, and restrict them from entering information in the field when the issue is closed. So when setting up the Issue Information field, you would set the Agent Default permissions to "Required" for the status "Open", "Read Only" for the status "Closed", and "Optional" for all other statuses.

NOTE
Workspace Administrators can customize permissions per user role, which override the Agent Default and Customer Default permissions set up here. If permissions for a user role have been set up, a message will display above the default permissions listing the user role along with an option to remove custom permissions from the role. If you remove the custom permissions, the field will return to using the Agent Default or Customer Default permissions. (See below for steps.) For more information on field permissions per user role (set up in Administration | Workspace | User Roles) see Field Permissions.

To Set Permissions for a Field:

1. Click a cell in the table corresponding to one of the permissions listed below, such as "Optional".
   This will apply the permission to all statuses at once (Open, Resolved, Closed, etc). The selected cell is color-coded green (see the Agent Default example in the screen shot, below).
   - **Hidden**—Users cannot view the field
   - **Read Only**—Users can view but not edit the field
   - **Optional**—Users can view and edit the field, but are not required to populate the field
   - **Required**— Users can view and edit the field, and are required to populate the field
     Note: "Required" is not available for the Checkbox field type.
2. To set separate permissions per status (advanced permissions):
   a. Click **Toggle advanced** below Agent Default or Customer Default to view all of the statuses.
   b. Then click the cell corresponding to the permission and status (see the Customer Default example in the screen shot, below).

Tip: Click a column heading to apply the permission to all statuses for that column at once.



3. To reset advanced permissions to the initial (basic) settings, click **Toggle advanced** .
   This will reset the permissions to Optional for Agent Default or Hidden for Customer Default.

To Remove Custom Permission from a User Role:

NOTE

The following applies only when a message displays above the Agent Default or Customer Default permissions indicating that a role has custom permissions.

Mouse over the role (listed above the Agent Default or Customer Default permissions), then click the **Remove** button. The custom permissions are removed from the role and the name of the role displays with a strikethrough (e.g., ~~Role Name~~). Once you save your changes, the role name will no longer display on the window.
If you decide not to remove the role and have not yet saved your changes, you can mouse over the role and click the **Undo** button.

- **CANCEL/SAVE buttons**—To cancel the edits you've made to the field, click the **Cancel** button below the Properties window. If the field is being introduced for the first time and has not been saved before, clicking Cancel leaves the Properties window without adding the field to the form. To save the edits, click the **Save** button. Clicking Save does not publish the field addition/edit to the production version of the form, that is, the changes to the form do not become visible to the user until the form has been published.

Defining Permissions Per Role

To define field permissions with greater granularity, you can customize them for a specific role by editing the Role Properties. Once you have done so, if you return to the Form Designer, the customized roles are listed as exceptions to the default permissions.

Editing, Moving, or Deleting the Field

To edit the field properties, from the Form Designer, hover over the field and click on the edit icon.

To move the field, from the Form Designer, hover over the field, click on the move icon, hold down the mouse button, and drag the field to the location in which you want it displayed.

To delete the field, from the Form Designer, hover over the field and click on the trash can icon. Deletion is not permitted if a field is part of some other feature (such as a field dependency). In those instances, the relationship between the field and the other feature must first be severed before the field can be deleted.

NOTE

Deleted data fields are no longer viewable, and BMC FootPrints Service Core forms no longer contain that field. The column is also deleted from the database and the data is no longer accessible. To undelete a field (assuming you've made a backup of your database), contact BMC for instructions.

Changing the Field Name

You can change the field name from the Form Designer without going into the Properties window. To do so, click in the field name from the Form Designer. The name is highlighted. Type the new name into the field.

Editing Fields

The page for editing fields in a Workspace is accessed by selecting Administration | Workspace | Form Designer from the BMC FootPrints Service Core Toolbar.

To edit a field:

1. Select the tab on which the field appears and then click the Edit icon within the field. The Properties window is displayed.
2. Edit the field properties.
3. Click Cancel or Save when you are done.
4. Save or Discard the draft of changes from the Actions section of the Palette, or publish the edits by clicking the Publish Form button. Changes made to fields are not visible in the production environment until the form has been published.

To see how the issue page will look without saving the configuration or leaving the Form Designer page, click the Preview Form button.

NOTE ON DATA

Editing a field does not affect the data in existing Issues.

NOTE ON CHANGING FIELD NAMES AND TYPES

BMC FootPrints Service Core does not allow you to change the field type and does not allow you to change the field name except for SQL Server or MySQL databases. For all other databases, if you want to change the field type or field name, you must delete the field and create a new one.

Special Features

The Special Features section of the Palette allows the administrator to add the Submission Tracking field to a tab and to add Custom HTML.

Submission Tracking

Submission Tracking allows you to track the medium by which issues in a BMC FootPrints Service Core workspace are received. When this feature is enabled, it creates a special field that is used to track how Issues are submitted in

BMC FootPrints Service Core. This field cannot be edited by customers; it is a read-only field whose value is automatically set by the system for Web, Web-Auto Suggest, and Email. If custom values are defined, the agent can select a value when creating an issue (the default value is Phone). The field can be included in reports, searches, and escalation rules. The feature allows for the medium to be recorded as follows:

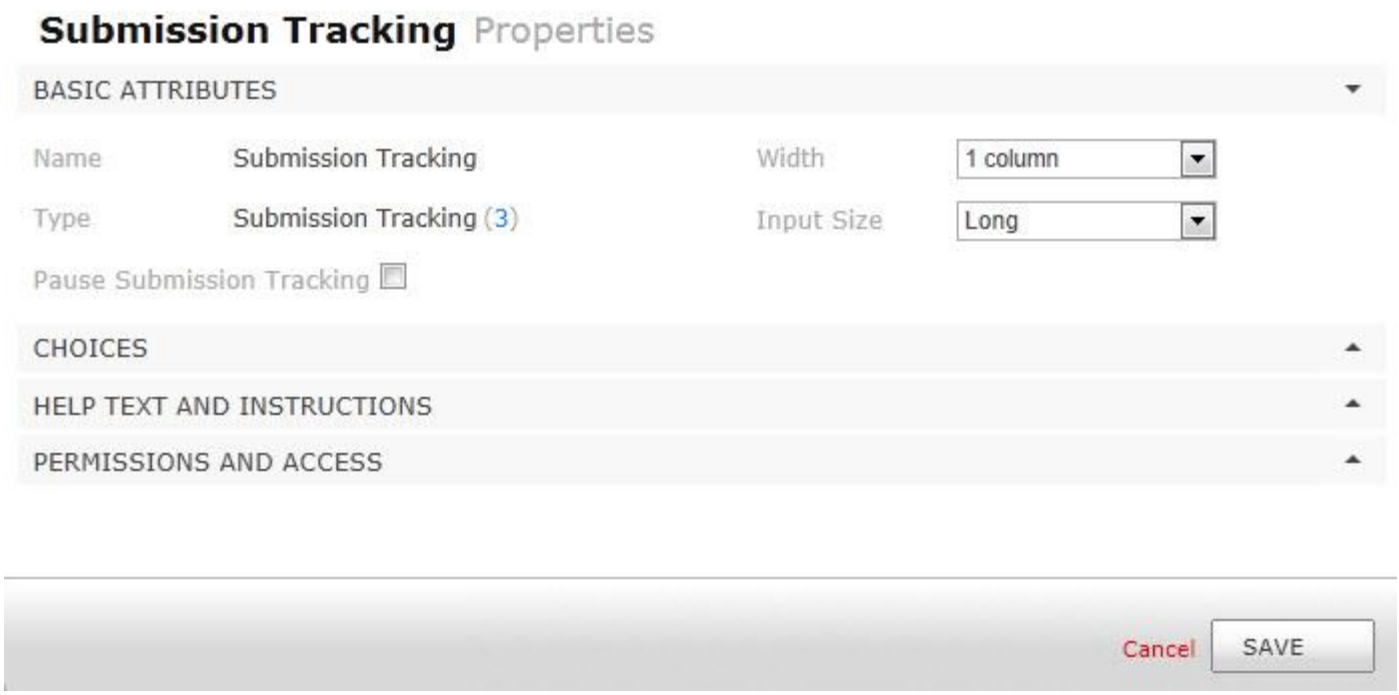
- **Web**—Applies to issues submitted by customers via the Customer Self-service web interface.
- **Web - Auto Suggest** Applies to issues submitted and closed by customers via the Customer Self-service web interface when both the Auto-Suggest Solutions feature and the Submission Tracking feature are enabled.
- **Email**—Applies to issues sent to FootPrints via email.
- **Phone**—The default for issues created by agents if custom choices are not defined.
- **Twitter** — The agent can select "Twitter" if he created an Issue from a Twitter Tweet.
- **Custom**—In addition to Phone, additional values can be added for the agent to select (e.g., "Walk-up").

Adding the Submission Tracking Field

To add a Submission Tracking field to a tab, drag and drop "Submission Tracking" from the Palette to the location where you want it to appear on the tab.

Setting Properties

When you drag and drop a Submission Tracking field into the Canvas, the Properties window is displayed.

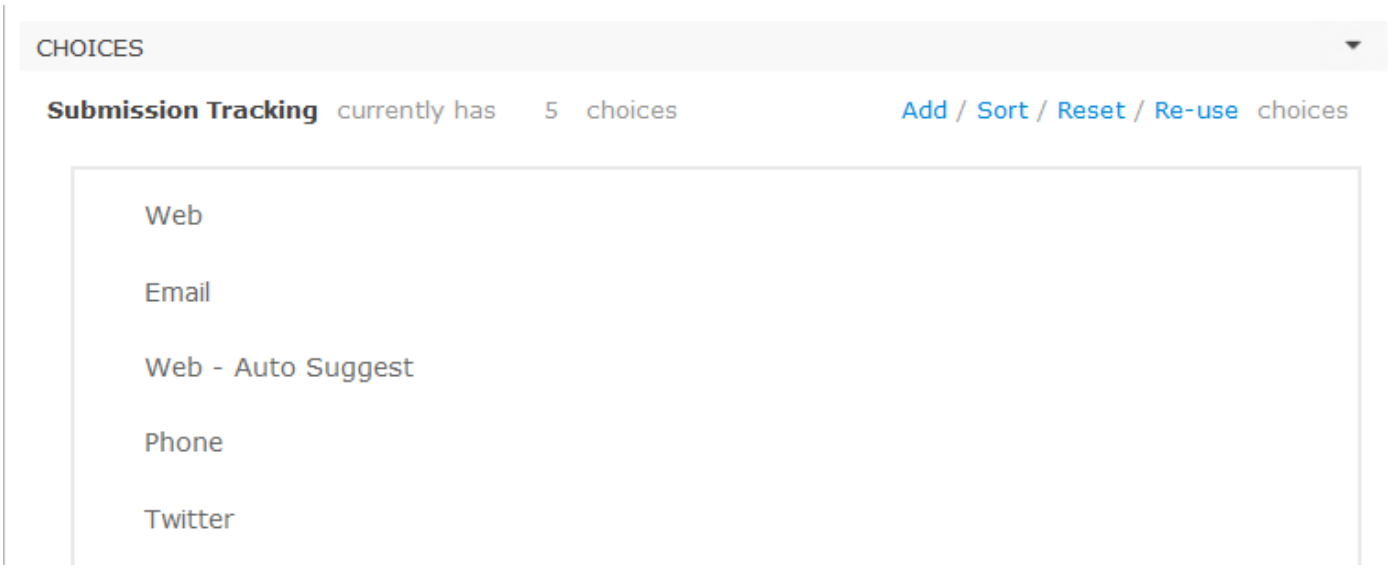


Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **BASIC ATTRIBUTES**
  - **Name**—Enter a name for the field. This will be displayed as a label for the field on the published form.

- **Width**—Select the number of columns the field spans. The field can span up to six columns, depending on the settings (see Changing the Number of Columns in a Tab in Working with Tabs).
- **Input Size**—Input Size allows you to determine how much of the field's width is occupied by the field input. For example, you might want a field to occupy a row by itself (three columns), but because the value entered into that row will only be a few characters long, you might not want the field input to occupy the entire length of the row. Options for this property are:
    - **Mini**—Occupies approximately 20% of the field width.
    - **Very Small**—Occupies approximately 45% of the field width.
    - **Small**—Occupies approximately 50% of the field width.
    - **Medium**—Occupies approximately 80% of the field width.
    - **Long** (the default)—Occupies approximately 98% of the field width.
- **Type**—The number beside Submission Tracking states the number of values that have been defined for the field. Click the number to expand the CHOICES section of the Properties window.

- **CHOICES**—Specify the choices available to the user from the field.

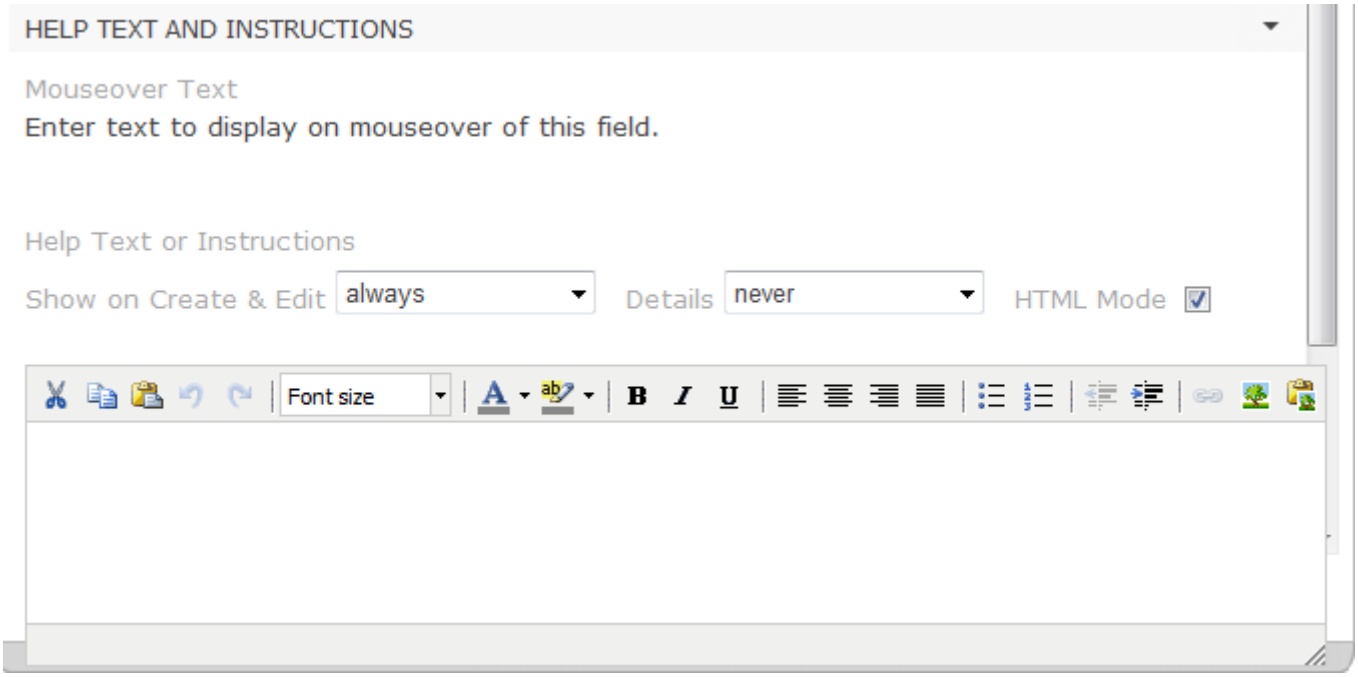


- **Add**—The **Add** link adds values to the field. When you click the Add link, the Add Choices Editor is displayed. Type the values into the field and press Enter after each value. Click the **Add Choices** button when you have entered all of the values. The Add Choices Editor enforces uniqueness; if you enter the same value twice, when you click the Add Choices button, the values are not added but, instead, an asterisk is displayed next to the repeated value. If the values are accepted, a list of the values are displayed in the section.
- **Sort**—The **Sort** link sorts the list of value in ascending alphabetical order. Clicking the button again sorts the list in descending alphabetical order.
- **Reset**—The **Reset** link deletes all values from the field.
- **Re-use**—The **Re-use** link opens a separate window that displays a list of all existing drop-down and multi-select fields in the system. To preview a field's list of choices, select a field from the drop-down on the left. When you have found the field whose choice list you want to re-use, click the **GO** button. You are

returned to the Properties window and the drop-down field is populated with the Re-use values. If you re-use values, the Web and Email values remain. These values cannot be deleted from the field.

- **Controls for the list of values**—Once values have been added to the field, the values are displayed in a list. The following controls can then be viewed and selected when hovering the mouse over a value in the list:
    - **Trash can icon**—Click the icon to delete the field.
    - **Checkmark icon**—Sets the value as the default for the field. Click the icon to set the value as the default. To change the default, click the same icon on a different value.
    - **Move icon**—Move the value to another position in the list. To move the value, hold down the mouse button on the Move icon and drag the value to the new location.

- **HELP TEXT AND INSTRUCTIONS**



- **Mouseover Text**—Enter the text to be displayed when a cursor hovers over the field or the field name. Text is limited to 100 characters.
- **Help Text and Instructions**—Help text and instructions can be as detailed as you like and are displayed above the field on the published form.
    - **Show on Create & Edit**—Select whether to show the help text and instructions on the Create and Edit pages of an issue:
        - **Always**—The text and instructions are always visible to the agent or customer.
        - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
        - **If row is shown**—Display the text and instructions only if the row in which the field appears is visible to the agent or customer.
    - **Details**—Select whether to show the help text and instructions on the Details page of an issue.

        - **Never**—The text and instructions are never visible to the agent or customer.
        - **Always**—The text and instructions are always visible to the agent or customer.
        - **If field is shown**—Display the text and instructions only if the field is visible to the agent or customer.
    - **Rich Text Mode checkbox**—Check the box to use the Rich Text Editor to edit the instructions. The editor provides a variety of text formatting options, including font options and HTML options such as inserting an image from a file or the clipboard, linking to a URL, etc. Leave the box unchecked to use plain text for the help text and instructions. The box is checked by default.
    - **Text Input field**—Enter the help text or instructions into the input field.
- **PERMISSIONS AND ACCESS**—Permissions cannot be changed for the Submission Tracking field. The field is optional (can be viewed or edited) for all agent roles and hidden for all customer roles.
- **CANCEL/SAVE buttons**—To cancel the edits you've made to the field, click the **Cancel** button below the Properties window. To save the edits, click the **Save** button. If the field is being introduced for the first time and has not been saved before, clicking Cancel leaves the Properties window without adding the field to the form. Clicking Save does not publish the field addition/edit to the production version of the form, that is, the changes to the form do not become visible to the user until the form has been published.

Editing, Moving, or Deleting the Field

To edit the field properties, from the Form Designer, hover over the field and click on the edit icon.

To move the field, from the Form Designer, hover over the field, click on the move icon, hold down the mouse button, and drag the field to the location in which you want it displayed.

To delete the field, from the Form Designer, hover over the field and click on the trash can icon. Deletion is not permitted if a field is part of some other feature (such as a field dependency). In those instances, the relationship between the field and the other feature must first be severed before the field can be deleted.

NOTE

Deleted data fields are no longer viewable, and BMC FootPrints Service Core forms no longer contain that field. The column is also deleted from the database and the data is no longer accessible. To undelete a field (assuming you've made a backup of your database), contact BMC for instructions.

Changing the Field Name

You can change the field name from the Form Designer without going into the Properties window. To do so, click in the field name from the Form Designer. The name is highlighted. Type the new name into the field.

Custom HTML

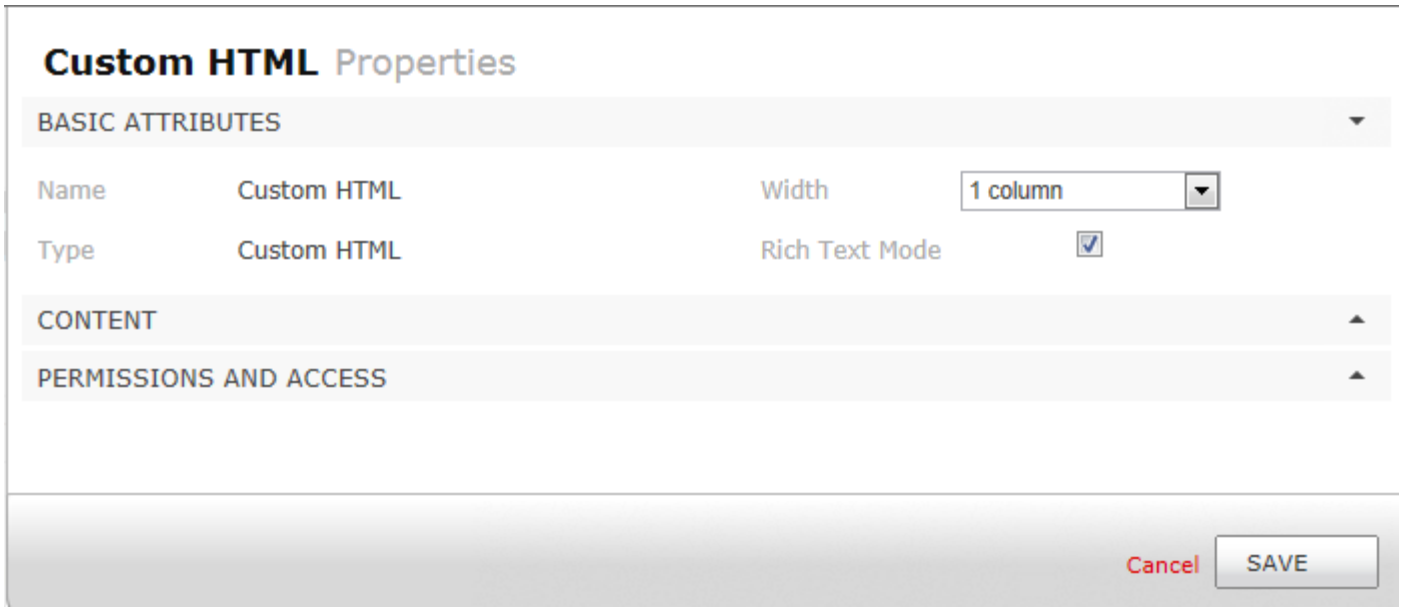
The workspace administrator can include instructions or other information in the Create Issue, Edit Issue, Detail, and Submit Request pages. You can optionally insert HTML or text headers above any field or row of fields, including custom Issue fields, custom Address Book fields, and Attachments.

In addition, if any of the fields are set to be hidden fields, you can choose to display the HTML/text header even if the field is hidden, for instances when:

- You want field headers to break up the Issue Information section into different subsections, or
- You want field headers to put additional SAVE buttons throughout a long Issue Information section.

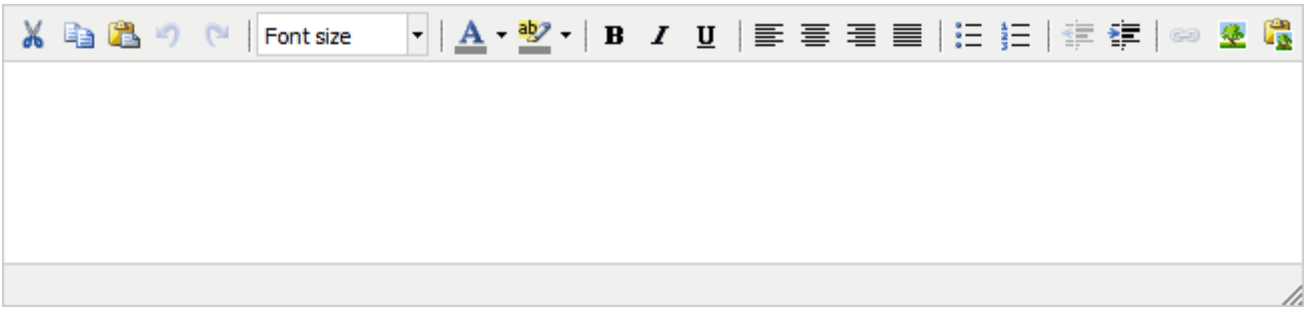
To Insert Custom HTML:

1. Drag and drop "Custom HTML" from the Palette to the location where you want it to appear on the tab.



2. Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **BASIC ATTRIBUTES**
  - **Name**—Enter a name for the field. This will be displayed as a label for the field on the published form.
  - **Width**—Select the number of columns that the field spans. (The field can span up to six columns, depending on the settings (see Changing the Number of Columns in a Tab in Working with Tabs).
  - **Rich Text Mode checkbox**—Check the box to use the Rich Text Editor to edit the instructions. The editor provides a variety of text formatting options, including font options and HTML options such as inserting an image from a file or the clipboard, linking to a URL, etc. Leave the box unchecked to use plain text for the help text and instructions. The box is checked by default.
- **CONTENT**—Enter the HTML or plain text in the field. If Rich Text Mode is selected above, you can use the Rich Text Editor to format the content. The screen shot below shows the Rich Text Editor. With respect to %%Variable%% expressions, some field data from the Issue can also be used in the custom HTML/text headers, as follows:
  - **Issue Number**—%%MRID%%
  - **Title**—%%TITLE%%
  - **Priority**—%%PRIORITY%%
  - **Status**—%%STATUS%%
  - **Submitter**—%%SUBMITTER%%
  - **Workspace ID**—%%PROJID%%
  - **Workspace and Address Book fields**—%%FIELD NAME%% where "FIELD NAME" is the name of the field in upper case.



- **PERMISSIONS AND ACCESS**—The only permission choices available are Hidden or Visible. Click a box in the table to select your choice.
- **CANCEL/SAVE buttons**—To cancel the edits you've made to the field, click the **Cancel** button below the Properties window. To save the edits, click the **Save** button. If the field is being introduced for the first time and has not been saved before, clicking Cancel leaves the Properties window without adding the field to the form. Clicking Save does not publish the field addition/edit to the production version of the form, that is, the changes to the form do not become visible to the user until the form has been published.

Editing, Moving, or Deleting the Field

- To edit the Custom HTML, from the Form Designer, hover over the Custom HTML and click on the edit icon.
- To move the Custom HTML, from the Form Designer, hover over the Custom HTML, click on the move icon, hold down the mouse button, and drag the Custom HTML to the location in which you want it displayed.
- To delete the Custom HTML, from the Form Designer, hover over the Custom HTML and click on the trash can icon.

Changing the Custom HTML Name

You can change the Custom HTML name from the Form Designer without going into the Properties window. To do so, click in the Custom HTML name from the Form Designer. The name is highlighted. Type the new name into the field.

Link Custom HTML to a URL

When the following sample Javascripts are entered in the HTML Editor, theCustom HTML becomes a link to the URL and the data in the field is passed to the URL.

The following script works for drop-down fields only. The following sample script uses a field named "Product" for this example. Use your own field name in place of the word "Product", "url =" must point to the URL to which you want to pass the value, and use the "+prod" where you want to place the value of the field into the URL.

```
<SCRIPT LANGUAGE="JavaScript"> function ProductInfo(){var
prod=document.regform.Product.options[document.regform.Product.selectedIndex].value;
var url = '/MRcgi/product.pl?PROD='+prod; var ProductInfo=window.open(url);}</SCRIPT><a
href=javascript:ProductInfo();>Click for Product info</a>
```

The following field works for single-line character fields only. The example field name is "Company Documentation", and the value of variable "CompanyVal" is what is passed from the text field. Again, "url =" must point to the URL to which you want to pass the value.

```
<SCRIPT LANGUAGE="JavaScript"> function CompanyInfo(){ var CompanyVal
=document.regform.Company__bDocumentation.value; var url =
'/tmp/Attachments/Workspace7/' + CompanyVal; var
CompanyInfo=window.open(url);}</SCRIPT><a href=javascript:CompanyInfo();>Click for
Document</a>
```

Actions

Actions are additional controls for working with the Canvas. The available Actions are:

- **Add Tab**—Adds a tab to the set of tabs on the form.
- **Preview Form**—Opens a new window and displays the form as it would look if it were published.
- **View Dependencies**—Displays a map of the field dependencies in a separate window. This is very useful for organizing field dependencies.
- **Discard Draft**—Deletes all changes made to the Canvas during this session.
- **Save Draft**—Saves a copy of all the work done on the Canvas during this session. Save Draft does not publish the form. Only when the form is published does it become visible to agents and customers as a production issue page.

Add Tab

Refer to Working with Tabs for details on how to add tabs using the Add Tabs action.

Preview Form

Administrators can preview the issue page when they are working on the Form Designer page and can view it based on user roles. For example, if the administrator wants to see what the page would look like for an agent, he or she can select that view or, alternatively, can view it for a custom agent role that has read and write permissions for some statuses, but has hidden fields for other statuses.

To view a preview of the issue page:

1. Select Administration | Workspace, and then select the Form Designer link from the Fields section of the Workspace Administration page.
2. Click the Preview Form button in the Palette. A new browser tab or window is displayed showing the issue.
3. To view the page as it would be seen by the various roles in the workspace, select a role from the User Role drop-down field at the top of the Preview page.
4. To exit the Preview page, close the window.

View Dependencies

Click the View Dependencies button to display a map of field dependencies. The view is not editable.

Discard Draft

When you click the Discard Draft button, you are asked to confirm the selection. Discarding the draft throws away all changes that were made to the form during the current session without saving a copy of the draft.

Save Draft

Saving a draft saves a copy of the changes made during the current session, but does not publish the form. Only one draft can be saved at a time. When you return to Form Designer at a later time, you will have to choose whether to continue with the saved draft or discard the draft. Form Designer can only work on one draft of a form at a time. If you choose to start a new form, the saved draft is entirely discarded and the current configuration for the form is loaded into the Form Designer.

Publish Form

Clicking the **Publish Form** button puts the form into production as the issue page.

Statuses

Statuses

To edit issue Statuses, edit the Status field using the Form Designer.

The Statuses page is used to define the Status field, Issue Lifecycle statuses, and the Homepage Workspace Totals counts.

- The Issue Lifecycle is used to define the content of Executive Dashboard reports.
- The Homepage Workspace Totals are counts of the number of issues currently set to each Status.

Issue Lifecycle

Issue Lifecycle

The workspace administrator defines which statuses fit into which categories of the Issue Lifecycle. The Issue Lifecycle is used in the Executive Dashboard and other reports. Where a status is placed in the Executive Dashboard determines what is counted. For example, if a status is included as an Activation event, it will not be counted when a report is derived showing Resolution events. Therefore, it is important to associate the statuses with the appropriate events. Issue Lifecycle events are defined as follows:

- **Creation**—The event that marks the creation of an issue. An issue is not necessarily Active when it is Created. Some activity, such as assignment, may have to occur before the issue is considered to be Activate.
- **Activation**—The event that marks the activation of an issue. Before this event happened, the issue was not considered Active. This event happens once in the lifecycle of an Issue. Activation usually is not undone but it can be undone if an issue goes back to a Pre-Active status; in this case, the system considers the Activation Event as not having occurred and it is erased from the reporting history. An issue is Active from the time it is Activated until reaches Resolution.
- **Response**—The event that marks an issue as being responded to by an agent in accordance with the Service Level Agreement (SLA). This event happens once in the lifetime of an issue. This event cannot be undone. Transitioning from a Responded status to a not Responded status does not change the fact that the Responded status already happened. An issue is considered Responded to from the time a Response occurs and for all time after that.
- **Resolution**—The event that marks the resolution of an issue. This even happens once in the lifetime of an issue. This event can be undone if an issue transitions from a resolved status to an unresolved status, in which case the system considers the issue as never had been resolved; the Resolution Event is removed from the reporting history. This is important to note since it may result in different numbers being reported at different times. For example, Executive Dashboard might show 35 issues as resolved the previous month one day, but one of those issues might return to an unresolved status at some point. If the same report is viewed the next day, the number of issues that were resolved in the previous month would show as 34. An issue is not yet Closed when it has been Resolved. Customers may require some additional processing to occur before an issue is Closed.
- **Closure**—The event that marks the closure of an Issue. This even happens once in the lifetime of an issue. This event is undone when an issue transitions back from the closed status to an unclosed status, in which case the system considers the issue as never had been closed; the Closure Event is removed from the reporting history. As with Resolution, this could result in different numbers showing up in a report at different times.

There are three sections of the Statuses administration page for configuring Issue Lifecycle statuses:

- Configure Issue Lifecycle for Reporting
- Configure Response Event in Issue Lifecycle for Reporting
- Configure Issue Lifecycle Time Measurements for Reporting

Configure Issue Lifecycle for Reporting

Group all statuses according to their place in the Issue Lifecycle. This configuration is used in the Executive Dashboard and other reporting features in BMC FootPrints Service Core. New statuses can be added through Form Designer. The Deleted and Solution statuses are excluded from the Issue Lifecycle by default.

To configure the Issue Lifecycle for reporting:

1. Select Administration|Workspace from the BMC FootPrints Service Core toolbar, then select Statuses from the Fields section of the workspace administration page. The Statuses administration page is displayed.
2. In the Configure Issue Lifecycle for Reporting section of the page, select statuses, one by one, in the lists and move them to the appropriate list using the arrows. Statuses can only be moved from one list to another, so you may need to select and move a status twice to get it to the right list. The lists are:
   - **Not Yet Active**—Select statuses that represent issues that have been created, but are not active (are not ready to be worked on). When reporting, issues in a Not Yet Active status count as created but not Active or Resolved.
   - **Active**—Select statuses that represent issues that are active (are being worked on or are ready to be worked on), but not resolved. When reporting, they are counted as Created and Active, but not Resolved.
   - **Resolved**—Select statuses that represent issues that have been resolved. When reporting, they are counted as Created and Resolved, but not Closed.
3. Continue by configuring the Response Event in Issue Lifecycle for Reporting.

Configure Response Event in Issue Lifecycle for Reporting

A Response Event is a status that indicates the agent has responded to the issue. Responses are associated with Service Level Agreements (SLAs) in that SLAs usually have a Response Time requirement. Configure the Response Event by selecting active statuses that mark the issue as having been responded to. This configuration is used in the Executive Dashboard and other reporting features in BMC FootPrints Service Core.

To configure the Response Event in Issue Lifecycle for reporting:

1. If you are not already on the Statuses administration page, select Administration|Workspace from the BMC FootPrints Service Core toolbar, then select Statuses from the Fields section of the workspace administration page. The Statuses administration page is displayed.
2. Statuses that have been configured as Active statuses in the Configure Issue Lifecycle for Reporting section of this page are displayed in the Configure Response Event in Issue Lifecycle for Reporting lists. Select statuses, one by one, in the lists and move them to the appropriate list using the arrows. The lists are:
   - **Active and Responded**—The issue is in an Active status and has been responded to by an agent.
   - **Active and Not Responded**—The issue is in an Active status and but an agent has not responded to it.
3. Continue by configuring the Configure Issue Lifecycle Time Measurements for Reporting.

Configure Issue Lifecycle Time Measurements for Reporting

In the Executive Dashboard and other reports, the time it took for an issue to get from one status to another may be measured. The Issue Lifecycle Time measurements for Reporting section of the Statuses administration page is used to define which statuses are excluded from measuring the time it took to get from one status to another.

To configure the Issue Lifecycle Time Measurements for reporting:

1. If you are not already on the Statuses administration page, select Administration|Workspace from the BMC FootPrints Service Core toolbar, then select Statuses from the Fields section of the workspace administration page. The Statuses administration page is displayed.
2. In the Configure Issue Lifecycle Time Measurements for Reporting section of the page, select statuses, one by one, in the lists and move them to the appropriate list using the arrows. The lists are:
   - **Counts for Time**—Time elapsed in these statuses counts for time in Reports.
   - **Does Not Count for Time**—Time elapsed in these statuses does not count for time in Reports.
3. Enter your password and click **Save**. Configuration is complete.

Homepage Workspace Totals

The Status counts displayed on the Homepage can be specified from the Administration | Workspace | Statuses page. This option controls the statuses displayed in the Workspace Totals dialog for all internal users in the current Workspace. The defaults are: Open, Active, Closed, Request, Internal Solution, and Public Solution. "Active" refers to all statuses except for Closed, Deleted, and all Solution-based statuses.

To add a status to the Workspace Totals:

1. Select Administration | Workspace | Statuses.
2. Select the status from the All Statuses dialog box and click **Add Status**.
3. If you are finished working on this page, enter your password and click **Save**. Changes are not actually made in the Workspace until you have entered your password and clicked **Save**.

To re-order statuses in the Workspace Totals:

1. Select the status in the Selected Status dialog box (it will be highlighted in blue).
2. Use the Up and Down arrow buttons to move a status up and down in the list.
3. If you are finished working on this page, enter your password and click **Save**. Changes are not actually made in the Workspace until you have entered your password and clicked **Save**.

To remove a status from the Workspace Totals:

1. Select the Status in the Selected Status dialog box (it will be highlighted in blue).
2. Click **Delete Status**.
3. If you are finished working on this page, enter your password and click **Save**. Changes are not actually made in the Workspace until you have entered your password and clicked **Save**.

NOTE

The changes made in this dialog do not affect the statuses in the database or Issue forms; they only affect the Workspace Totals dialog on the Homepage for the current Workspace.

Schema

The order of the field data is specified in the Workspace Schema. The Schema for a Workspace can be viewed from a number of resources and locations. The most straight-forward way to display the Schema page is to select Administration | Workspace | Schema from the BMC FootPrints Service Core Toolbar. The page that loads shows you the order of the fields, which is useful when importing data from another resource.

As an example, suppose the workspace has several custom Workspace fields, called Category, Device/Application, Symptom, Error Message, Platform, and Follow-up Date. The Schema would look like this:

The following fields are included in the schema for "eSERVICE Demo" :

(1) Subject (Character (Single Line))	(2) Description (Character (Multiple Line))
(3) Priority (Integer)	(4) Status (Character (Single Line))
(5) Assignees (Character (Single Line))	(6) Product (Choice)
(7) Request Type (Choice)	(8) Follow-Up Date (Date Time)
(9) Submission Channel(Automated Submission Tracking Field)	(10) Follow-Up Occurred? (Checkbox)
(11) Due Date (Date Time)	(12) Category (Choice)
(13) Root Cause (Choice)	(14) Internal Comments (Character (Multiple Line))
(15) Error Message (Character (Multiple Line))	(16) Respond By (Date Time)
(17) Development Notes (Character (Multiple Line))	

There are 17 fields.

'Submission Channel' has been enabled in your Workspace as an Automated Submission Tracking Field, and is a 'read-only' field. Picasso SVN records the source of each Issue in this field.

Schema file for "Service Desk" Workspace

Language of Workspace and Address Book Fields

BMC FootPrints Service Core screens can display text in different languages for different users and Workspaces. This option, configured in the System Administration page, allows users in the same Workspace or system to view the labels and instructional text on the various screens in their own local language.

In addition to changing the fixed text, language-dependent labels can also be assigned to the Workspace and Address Book fields as they appear in the Issue Information and Contact Information sections of BMC FootPrints Service Core pages.

To change the labels of Workspace and Address Book fields:

1. Select Administration | Workspace | Language of Workspace and Address Book Fields from the BMC FootPrints Service Core Toolbar.
2. Select a language from the drop-down list. If only one language appears, then additional languages are not available. Each Workspace and Address Book field for the current Workspace is listed (in the Workspace default language) with a text box.
3. For each field, enter the label for the field in the new language.
4. When you are finished changing the labels, click **Save**. The field labels are displayed in the local language for each user.

Dynamic SQL Field Mapper

Dynamic SQL Field Mapper

This feature enables data from an external table to be populated in an Issue into one or more fields. The lookup is performed automatically when lookup key field is populated. The lookup key field may be something like "User ID", "Asset Name", etc.

One or more lookup key fields can be designated within a Workspace. The lookup key field can be either an Issue Information or Address Book field. Associated Issue Information or Address Book fields can then be designated to be populated with data from the external database. Allowed field types for lookup are character (single line), integer, mail, and drop-down.

NOTE

If a customer process has an Access database open, BMC FootPrints Service Core may not be able to read that Access database until the customer process closes. If you encounter this situation, check the permissions for the folder in which the database (.mdb) file is located and make sure that the folder is enabled for read and write permissions for everyone. When the folder is enabled with read and write permissions for everyone, the database should be available to BMC FootPrints Service Core and the customer process at the same time.

Supported Databases

- **Windows BMC FootPrints Service Core versions**—Can connect to MS SQL Server, Oracle, MySQL, Sybase, Postgres, Access, and DB2 for Windows.
- **UNIX/Linux Versions**—Can connect to Oracle, MySQL, DB2 or Postgres. If the external database is of a different type than the BMC FootPrints Service Core database, a DBD driver must be built.

NOTE

This feature is part of the Dynamic SQL Database Link add-on module and must be licensed. Please contact your salesperson for more information on obtaining a license to enable this feature.

Topics in this section:

- Configure Dynamic SQL Field Mapper
- Managing Dynamic SQL Field Mapper
- Using Dynamic SQL Field Mapper

Configure Dynamic SQL Field Mapper

The following instructions are for configuring this feature for both Windows and UNIX/Linux BMC FootPrints Service Core versions.

1. A link to the external database must first be enabled before the feature can be configured within BMC FootPrints Service Core:
   - **Windows versions**—A system Data Source Name (DSN) must first be created on the BMC FootPrints Service Core web server that can make a connection to the database that is being linked. This can be done using the option under the Windows Start menu for Administrative Tools | Data Sources (ODBC). If an Open Database Connectivity (ODBC) driver is not listed for the database, you must obtain the driver from the manufacturer.
   - **UNIX versions**—This feature uses the database driver (DBD) for the Perl Database Interface (DBI) to connect to external databases. If the database you connect to is of the same type as your BMC FootPrints Service Core database, nothing additional must be done. If you want to connect to a different database type (for

example, BMC FootPrints Service Core data is kept in MySQL, but you want to connect to an Oracle database), a DBD for the external database must be built.

2. To configure the feature within BMC FootPrints Service Core, select Administration | Workspace | Dynamic SQL Field Mapper from the BMC FootPrints Service Core Toolbar. Available Workspace and Address Book fields are listed in the Available Fields dialog box. Only integer, drop-down, email, or character (single-line) fields can be used as lookup keys when querying the database.

NOTE

This feature is part of the Dynamic SQL Database Link add-on module and is not available unless it is licensed.

3. Highlight the field to be used as the lookup key. The data from this field is used to search the external database. It must be a unique data type in the external database, such as "User ID", "Asset name", "IP Address", etc.
4. Click **Add Link**. The Configure Lookup in External Database window is displayed with the configuration dialog:
   - **Data Source Name**—Enter the name of the system DSN (Windows) or external server name (UNIX) you configured in Step 1.
   - **Database Type—**Select the database type to which you connect.
   - **Server Username/Server Password**—Enter the username and password for a system user that has access to the database to which you are connecting.
5. When you have completed the dialogue, click Next to continue. The Configure Lookup in External Database window is displayed.
6. Enter the information requested.
   - **Select a Table or a View**—Select the name of the database table that contains the lookup field.
7. Click Next to continue. The Configure Lookup i External Database window is displayed.
8. Address Book and Issue Information fields are listed that can be populated from the external table (checkbox fields are not available). For each field that you want populated, enter the name of the corresponding column in the external table. Only fill in those fields that are to be mapped to columns in the external table.
   - **Lookup Field**—Enter the column name in the database table that matches the lookup key field in BMC FootPrints Service Core. For example, if the lookup key field in BMC FootPrints Service Core is "UserID", the primary key in the external table might be "UID".
   - **Workspace Fields**—Match the BMC FootPrints Service Core Workspace fields to the fields in the external database.
   - **Address Book Fields**—Match the BMC FootPrints Service Core Address Book fields to the fields in the external database.
   - **Optional Delimiter**—Optionally enter a delimiter character in this field. This option is displayed for all BMC FootPrints Service Core multi-line text fields. The database column you are connecting to might contain data separated by a delimiter. For example, one of the database columns may contain a list of software on a particular computer that is separated with colons, such as “MS Word:MS Excel:Outlook:Acrobat Reader”. If this option is not used, that data will be populated in the field in that exact format, with the colons displayed. If the option is used with a colon character, the data will be populated in the field with each item on its own line and colons removed, as follows:

     MS Word
     MS Excel
     Outlook
     Acrobat Reader

9. Click Next to continue. The Configure Lookup in External Database window is displayed. The window shows a summary of the configuration options you have selected as well as some additional options.
10. Complete the additional options as needed:
    - **Automatically trigger this lookup when submitting a ticket**—This checkbox applies only to when customers submit Issues. If checked, this lookup is performed automatically when the issue is submitted based on the completed lookup field data only from the GUI. That is, when the **SAVE** button is clicked, BMC FootPrints Service Core checks for lookup fields and, if a lookup field is populated, it populates the rest of the data that it has been configured to complete from the SQL database. If there is no data for a field, it leaves the field blank. If a field is mandatory and there is no data for that field in the SQL database, BMC FootPrints Service Core pops up the mandatory field error window to inform the user that the incident report cannot be submitted without completing that field. If multiple lookup fields have been configured, BMC FootPrints Service Core populates the data in the order that the fields are set on the administration page; this means that fields may be overwritten with data discovered in subsequent lookups during the same submission.
    - **If multiple matches are found, append data in multi-line fields**—Populate multiple results in one multi-line field if this checkbox is checked.
    - **If this lookup populates another Lookup Key, then trigger that lookup**—If checked, can initiate more than one lookup with a single click.
    - **If a Select Contact action populates this Lookup Key, then trigger this lookup**—If checked, initiates an external database lookup from the internal database lookup.
    - **Primary Sort Field**—If multiple entries are found for the same lookup, set the field and order of sorting for the multiple entries. For example, if the lookup key is Last Name and this field is set to sort by last name, then the entries are displayed in alphabetical order based on last name.
    - **Secondary Sort Field**—If multiple entries are found for the same lookup, set a secondary field and order of sorting for the multiple entries. For example, if the Primary Sort Field is Last Name and this field is set to First Name, then the entries are displayed in alphabetical order based on last name and then based on first name. To continue the example, if the lookup finds four entries for "Malo", the order in which they are displayed might be:

      Malone, David
      Malone, Shirley
      Maloney, Bob
      Maloney, Karen
11. Click **Finish** to complete the configuration.
12. To map another field, repeat the process above. There is no limit to the number of lookup key fields you can configure, and different key fields can point to different tables or databases. In addition, a field mapped from one database table can become the lookup key field to another table (i.e., a cascading lookup), but a lookup must be done individually for each key field.
13. When you are finished, click **Save** on the Dynamic SQL Field Mapper page.

Matching Rules

To stop "1" from matching "10", "11", "12", etc. in the dynamic field mapper setup, make the footprints field an "integer" field, because the SQL query is different for integer fields.

Limitations of the Dynamic SQL Field Mapper

- The lookup key field should be a unique value in the external database.

- Only integer, drop-down, email, or character (single-line) fields can be used as lookup keys when querying the database.
- Checkbox fields cannot be auto-populated from the external database.
- The Dynamic SQL Field Mapper feature must be set up per Workspace, but you can have multiple lookup keys mapped to different sets of fields within a Workspace.
- Column names cannot have spaces or start with numbers.

- Does not work via email. Only works from the BMC FootPrints Service Core interface.

Managing Dynamic SQL Field Mapper

Editing a Dynamic Link

To edit a dynamic link:

1. Select Administration | Workspace | Dynamic SQL Field Mapper from the BMC FootPrints Service Core Toolbar.
2. Highlight the lookup field to be edited in the Lookup Keys Defined list and click **Edit Link**.
3. Make the changes in the pop-up window and click **GO.**
4. Click **Save** in the main window to enable the changes.

Removing a Dynamic Link

To remove a dynamic link:

1. Select Administration | Workspace | Dynamic SQL Field Mapper from the BMC FootPrints Service Core Toolbar.
2. Highlight the lookup field to be removed in the Lookup Keys Defined list and click **Remove Link**.
3. Confirm that you want to remove the lookup field configuration by clicking OK.
4. Click **Save** in the main window to enable the changes.

Using Dynamic SQL Field Mapper

Once enabled, BMC FootPrints Service Core automatically populates the fields that you mapped when the lookup field is populated, if that option was selected during configuration. You can also manually initiate or clear a lookup by using the two icons to the right of the field: **Lookup** and **Clear**.

To use this feature manually:

1. The lookup key field must first be populated (either manually by the user, or dynamically from another field mapper lookup or the LDAP or SQL Address Book). You can enter the exact data, or you can enter a partial string (for example, Smi) to see a list of matches.
2. Click the **Lookup** icon or press **Enter**.
3. If a match is found, the data is populated in the associated fields.
4. If there are multiple matches, a pop-up window is displayed with a list of matches. Select the desired match and the data is populated in the associated fields.

NOTE

Only text-based lookup fields return partial matches. Due to limitations in some databases, if the lookup field is numeric, an exact match must be found.

5. If the matched data is not what you want, click **Clear**, and the data fields will be cleared.

Notes on Using the Dynamic Field Mapper

- If data already exists in one of the mapped fields, it is overwritten by the lookup.
- If public fields are used, Customers do not get the lookup option; only Agents can use this feature.
- Multiple lookup key fields may be configured within a Workspace, but a lookup must be done individually for each key field.

Quick Descriptions

A "quick description" is pre-defined text that can be inserted into the Description field. Quick descriptions can be configured on a Workspace-by-Workspace basis or set by the individual Agent from the Preferences page.

Create a Quick Description

To create a quick description:

1. Select Administration | Workspace and then click the Quick Description link at the end of the Fields section on the Workspace Administration page. The Quick Descriptions page is displayed in the main frame.
2. Enter a name for the quick description in the Create section, then enter your administrator password and click **GO**. A multi-character field is displayed.
3. Enter the text for the quick description into the multi-character field and click **Save**.
4. The description is saved.

Once a quick description has been created, a drop-down box appears on the Create Issue and Edit Issue pages in the Description field title bar. The drop-down box contains the name(s) of the quick description(s) in the Workspace. If the user selects a name from the drop-down, the Description field is populated with the pre-defined text. The Agent can still enter additional text in the Description field.

Edit a Quick Description

To edit a quick description:

1. Select Administration | Workspace and then click the Quick Description link at the end of the Fields section on the Workspace Administration page. The Quick Descriptions page is displayed in the main frame.
2. Click on the name of the quick description in the Edit, Re-order or Delete Quick Descriptions section, then enter your administrator password and click **Edit**. A multi-character field is displayed.
3. Make the changes you want to the text in the multi-character field. You can delete, add, or alter text as you see fit. When you are done making changes, click **Save**.
4. The description is saved.

Deleting a Quick Description

To delete a quick description, which removes the quick description from the drop-down box on the Create Issue and Edit Issue pages:

1. Select Administration | Workspace and then click the Quick Description link at the end of the Fields section on the Workspace Administration page. The Quick Descriptions page is displayed in the main frame.
2. Click on the name of the quick description in the Edit, Re-order or Delete Quick Descriptions section, then enter your administrator password and click **Delete**.
3. The quick description is deleted.
4. Enter your administrator password and click **Save**.

Re-order Quick Descriptions
To re-order the display of the Quick Descriptions:

1. Select Administration | Workspace and then click the Quick Description link at the end of the Fields section on the Workspace Administration page. The Quick Descriptions page is displayed in the main frame.
2. In the Edit, Re-order or Delete Quick Descriptions section, click on a Quick Description name, then use the large arrow buttons immediately to the right of the Quick Description list to move the highlighted Quick Description up or down in the list. You can use the Sort Descending or Sort Ascending buttons to sort the Quick Descriptions in descending or ascending alphabetical order.
3. Enter your administrator password and click **Save**.
4. The description is saved.

InstaCalc

Simple mathematical formulas can be incorporated into BMC FootPrints Service Core Issues.

All mathematical formulas follow standard order of operations and the use of unary minus and parentheses is permitted.

NOTE
To create a mathematical, formula, you must first create the integer and/or real number fields to be used in the formula, including a "result" field for the result of the formula. To create integer or real number fields, refer to Adding Fields.

Once you have created the fields, including a result field, you can create the mathematical formula.

NOTE
InstaCalc does not work with dependency fields. Do not include dependency fields in your InstaCalc formulas.

Operators are ***** (multiply), **/** (divide), **+** (add), and **-** (subtract). You can also use parentheses in formulas. The parentheses are validated and an error message displays if you have unmatched parentheses, parentheses in incorrect order (i.e., a closing parenthesis prior to the opening parenthesis), parentheses with no data within them, etc.

Create a Mathematical Formula with InstaCalc

To create a mathematical formula that will appear in an Issue:

1. Select Administration | Workspace from the BMC FootPrints Service Core Toolbar, then select InstaCalc from the Fields section of the main frame.
2. Select a field to contain the result of the formula from the Formula Result Field drop-down field.
3. Enter the formula in the Enter Formula field, using a combination of typing information directly into the field, clicking the operators buttons to select operations, and selecting fields from the Insert Field Variables field and then clicking the Insert arrow to move the field variable into the Enter Formula Field. When you insert a field, the value that is entered in the field by the agent is used in the formula. For example, if a field named "Cost" is inserted into the formula, then a multiplication operator, and then a field named "Quantity", when an agent later completes an Issue, the result of the formula would be the cost multiplied by the quantity.
4. You can use other elements on this page to perform other actions, as follows:
   - If at any time you wish to clear the entire formula, click the Clear button. For new formulas, the Undo button works exactly the same as the Clear button.
   - Blank fields radio buttons:

- **All fields in the formula must be filled in**—No blank fields may be left in the formula. If a formula is completed and a field is blank, there will be no result in the results field.
- **Blank fields will be given a default value**—If a blank field is left in the formula, the field will be assigned a default value specified in the Default Value field on this page.

5. When you have finished entering your formula, click the **Save** button.

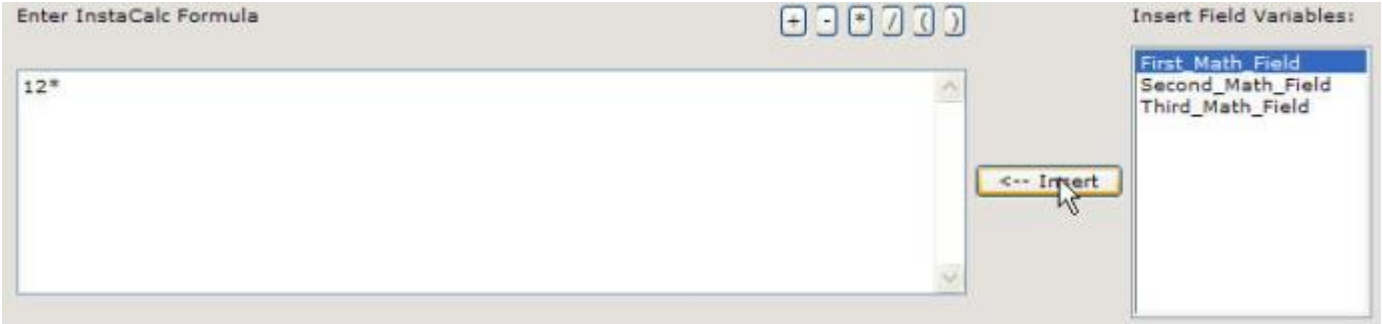
Example:

The following is an example of how to enter a mathematical formula:

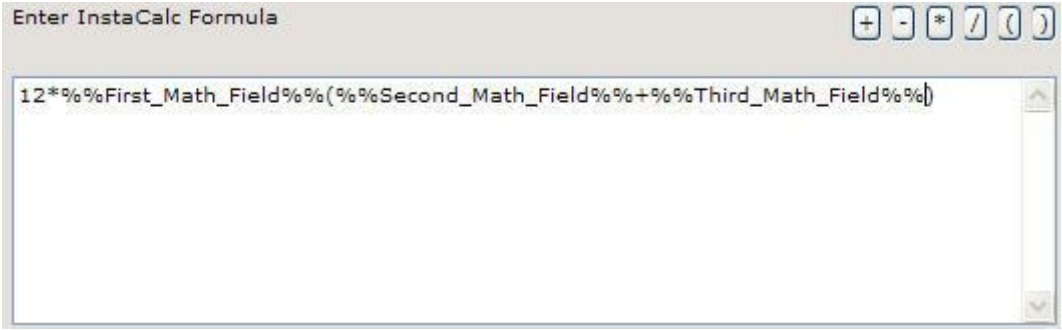
Select the Result field.

Type 12 and then click the * operator button.

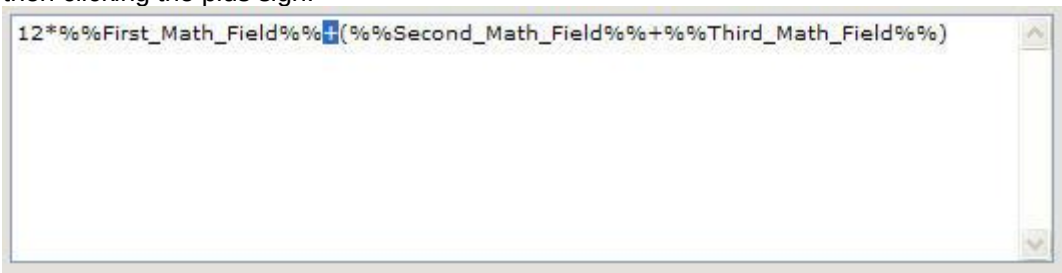
In the Insert Field Variables field, select First_Math_Field and click Insert.



Insert an open parenthesis, then the Second_Math_Field, a plus sign, the Third_Math_Field, and finally a closing parenthesis into the formula field.



Add the result of the First_Math Field calculation to the calculation in the parentheses by clicking in the formula and then clicking the plus sign.



Edit a Mathematical Formula with InstaCalc

To edit an existing mathematical formula:

1. Select Administration | Workspace from the BMC FootPrints Service Core Toolbar, then select InstaCalc from the Fields section of the main frame.
2. Select the result field of the formula you want to change from the Formula Result Field drop-down field.
3. Edit the formula in the Enter Formula field as described in Step 3 in the Create a Mathematical Formula with InstaCalc above. If you want to reset the formula to the original state before you began changing it, click the Undo button. To delete the entire formula, click the Clear button.

NOTE

The Undo button only resets the values in the formula fields. If you have changed the Blank Fields radio buttons, the selections are not reset with the Undo button, nor is the Default Value changed. If, for example, you changed an

operator in the formula from + to * and then changed the Default Value for blank fields from 0 to 1, you will have to change that value back manually.

4. When you have finished editing the formula, click the **Save** button.

Deleting a Mathematical Formula with InstaCalc

1. Select Administration | Workspace from the BMC FootPrints Service Core Toolbar, then select InstaCalc from the Fields section of the main frame.
2. Select the result field of the formula you want to delete from the Formula Result Field drop-down field.
3. Click the Clear button.
4. Click the **Save** button.

Automated Workflow

Automated Workflow

This section covers tasks and rules that can be configured by Workspace Administrators to occur automatically based on many different criteria. The options include:

- Escalation—Configure automated Escalation and Business Rules.
- Service Level Management—Configure service level agreements.
- Auto Assign—Configure default assignment and auto assignment rules.
- Quick Issues—Manage Quick Issue Templates.
- Auto Run Reports—Schedule saved reports to be emailed automatically.
- Customer Survey—Create a customer satisfaction survey to be sent to customers when their Issues are closed.
- Submission Tracking—Track how Issues are submitted.
- Issue Workflow—Configure options for cross-workspace copying and subtasks.
- Change Management—Configure the Change Manager approval processes and phases.
- Social Media -- Configure the Workspace so that Agents can broadcast Issues to social media.

Escalation

Managing Escalations

Escalation rules are created under Administration | Workspace | Escalation from the BMC FootPrints Service Core Toolbar. A list of existing escalations (if any) is displayed. You have several options from this page:

- **Create a new escalation**—To set up a new escalation, click **Add Escalation**. A number of steps for setting up a new escalation rule are displayed.
- **Edit**—Highlight an existing escalation in the list and then click **Edit** to change it.
- **Delete**—Highlight an existing escalation in the list and then click **Delete** to delete the escalation.
- **Escalation Details**— Highlight an existing escalation in the list and then click **Escalation Details** to view summary of the escalation criteria and actions.

- **On/Off**—Turn existing escalations on or off without going to the Escalation Setup page. When you turn an escalation on or off, a pop-up appears for you to enter your password and save the change.
- **Configure Escalation Email**—Define templates for escalations. You can perform this either before or after you've created the escalation rules.
- **Summary of all Escalations**—View a pop-up window that lists all properties of all escalations in the workspace. Print the summary by clicking the Print button at the bottom of the page.

The order of escalation rules on the escalation page determines which rules take precedence. The order can be changed by dragging and dropping the rules. When you drag and drop a rule in the list, you must place the dragged rule on top of the rule you want to replace in the order. The rule you are replacing is moved and the dragged rule replaces it. This type of move requires that you enter your password the first time you move an escalation rule, but subsequent moves during the same session do not require the password.

Setting up an Escalation Rule

This section covers the following steps to create an escalation:

- **When to Run**—Specify when the escalation should run.
- **Issue Criteria**—Select Issue criteria used to escalate Issues.
- **Contact Criteria**—Select Contact criteria used to escalate Issues.
- **Advanced Criteria**—Specify the types of Issues to be checked for escalation as well as other advanced criteria and also whether Advanced Actions, such as Change Manager activity, is included in the escalation.
- **Actions**—Select one or more actions to occur when an Issue meets the escalation criteria.
- **Name/Save**—Name and save the escalation information.

NOTE

Master Issues cannot be closed by an escalation rule.

Tab 1: When to Run

There are two kinds of escalation rules: instant and time-based. Instant escalation rules are run at the time an Issue is created, edited, or both. Time-based escalations are only applied after an Issue has remained open or unedited for a specified amount of time. Depending on which option is chosen, a number of sub-options are available.

- **Instant Escalation**—If you select this option, one of the following additional options can be selected. Note that, when an escalation is based on a status change, if there is a status change for a Global Issue and it changes all of the linked Issues, this is problematic when the escalation is instant. Therefore, that type of escalation must be time-based not instant:
  - **Instantly escalate Issue after it has been created and/or edited**—Select one or both of the following:
    - Instant Escalation upon creation of Issue
    - Instant Escalation upon editing of Issue
  - **Instantly escalate Issue received as a copy**:
    - **From Workspace**—Specify the workspace from which the Issue is being received to trigger the escalation.
- **Time-Based Escalation**—If you select this option, the following additional options become available (only one can be selected):

- **Time unedited/Age**—Select the amount of time that must pass since the Issue was created (Age) or since anyone edited it (Time unedited) before it is escalated. Minute, hour, day, and week increments are available. Combinations of hours, minutes, days, and weeks can be selected. The time is based on a 24/7 schedule.
- **Time unedited/Age based on "Work Time**"—This option also counts the time since an Issue was created or last edited, but uses the workspace Work Schedule rather than the standard 24/7 schedule. Regular working days and hours, as well as holidays, can be configured for the organization by clicking the link for Work time or by selecting Work Schedule from the Workspace Administration page. When using the Workspace Schedule, only one unit of time can be chosen (minutes, hours, days, or weeks). Refer to Workspace Schedule for more information.

- **Re-escalate Issue**—This option applies to both types of escalations. When selected, the system will apply or re-apply the escalation rule to an already escalated Issue. Recurring age-based escalations are also allowed; each escalation will only run once when the Issue sufficiently ages. So, for example, you can create separate age-based recurring escalation rules for 5 minutes, 10 minutes, 1 hour, 2 hours, and 1 week, and each escalation rule will only be applied once to an Issue when it is sufficiently aged for that rule.

  Example:

  - The support hours are Monday-Friday from 8am to 6pm (as configured in the workspace Work Schedule).
  - An escalation rule states that an Issue must be unedited for 6 hours before it is escalated.
  - A new Issue comes in at 4pm on Friday.

  In the above case, the Issue will be escalated at 12pm on Monday (6 working hours later).

NOTE

Escalated Issues lose their urgent status once they are edited. If an Issue is reported as escalated, it is not escalated again until it has lost its urgency (by being edited) and then becomes urgent again. The exception to this is if Re-escalate Issue is selected under the Time criteria.

Select when to check an Issue against escalation criteria. There are two options:

- **Anytime**—The escalation can be run at any time (the default).
- **Follow the Sun**—"Follow the Sun" escalations allows you to assign or reassign Issues to Agents in different locations and time zones depending on the time of day or day of the week that the Issue is created or escalated. The time and day specified here are based on the BMC FootPrints Service Core server time. This integrates the escalation time on the server with when the escalation rule is to be applied. Some examples are:
  - Escalate Issues received off hours to someone's pager (time intervals when support team is not available).
  - Escalate Issues and route them based on the time of day, e.g., Issues submitted 9am-5pm EST are routed to the East Coast US Service Desk; those submitted 5pm-1am EST are routed to the Tokyo Service Desk; those received 1am-9am EST are routed to the London Service Desk.

To set Follow the Sun criteria:

1. Select Follow the Sun.
2. Select the time range for the escalation rule.
3. If this escalation should run during a span of time that includes a change of date, you must specify the time spanned during both dates in order to cover the entire period. For example, the four hours between 8:00pm and

2:00am can be covered by selecting 8:00pm-11:59pm above and, additionally, Midnight-2:00am in the second set of time criteria.

4. Check the boxes corresponding to the days of the week that the escalation is required to run.

Tabs 2 and 3: Issue and Contact Criteria

The criteria chosen here determine which Issues are automatically escalated. Available criteria include virtually all options that appear on the Advanced Search page, including Status, Priority, Assignee, Workspace fields, Address Book fields, etc. (see the section on Advanced Search for more information).

NOTE

If your rule requires that Create/edit must be by an agent, but a Customer Request status (such as Request) is used as a criterion for escalating an Issue, then it becomes possible for Customer Requests to be escalated (i.e., an escalation created by a Customer).

Tab 4: Advanced Criteria

In the Advanced Criteria tab, enter other criteria. These criteria are not matched to data in fields, but instead provide a filter for the Issues that are returned.

1. **Issue Types to Include**—Specify whether Advanced Issue types, including Subtasks and Global Issues, are returned. Options include:
   - **All Issue Types**—All Issue types are returned.
   - **Regular Issues**—Regular (non-Global or Master/Subtask) Issues are returned.
   - **Include Master Issues**—Master Issues that contain subtasks are returned.
   - **Include Subtasks**—Subtasks of Master Issues are returned.
   - **Include Global Issues**—Global Issues are returned.
   - **Include GlobalLinks**—All users' Issues linked to a Global Issue are returned.
   - **Group Master Issues with Subtasks/Global Issues with GlobalLinks**—Available for Reports only. These options override the sort order selected in the report.

- **Date**—If dates are specified, the search returns only Issues from the time period specified. For more information, refer to Date Field Search Options.
- **Age**—Returns Issues created in the time specified. Number of days and hours can be specified. Modifiers are also provided, including “Greater Than”, “Less Than”, “Equal to”, “Greater than or Equal to”, “Less than or Equal to”, and “Not Equal to”. As an example, to return Issues greater than 1 day old, choose “Greater than” and fill in “1” for “Days”.

NOTE

Age is always 24/7 and does not use the Workspace Work Schedule.

NOTE

Date/time fields can only be searched by date, not time.

- **Multiple Criteria**
  - **And/Or**—Select whether the criteria you entered are all required to be fulfilled before triggering the Change Manager approval process (And) or only one of them must be fulfilled before triggering the approval process (Or).

- **Advanced Action Criteria**—Click the checkbox to indicate that the issue has an associated Advanced Action that requires workflow (i.e., an approval via Change Manager or some other factor) before execution on the asset. This checkbox only applies if you have the BMC FootPrints Asset Core.

Tab 5: Actions

1. **Notification**

   a. **Email**—One or more email actions can be selected.

   - **Send a summary mail**—When the escalation routine is run and matches are found, an email is sent to the specified addresses. The email contains a summary of escalated Issues for the Workspace. If you enter multiple email addresses, separate the addresses with a space. Summary mails are not coded to use uploaded custom formatted files. To use an uploaded mail template, edit the escalation to modify Email Notification from "Send a summary mail to ...." to "Send Single Issue notification mail to ..."
   - **Send mail to Assignees**—When an Issues is escalated, an email is sent to all Assignees of each escalated Issue. Select the email address type to use for this escalation rule:

   - **Agent**—the Agent's agent email address.
   - **Pager**—the Agent's pager email address.
   - **Wireless**—the Agent's wireless email address.

NOTE

The different email address types are defined for each user on the Edit Agent Administration page, or on the My Preferences page by the Agent.

   - **Send mail to the Supervisor of each Assignee**—An email is sent to the Assignees' Supervisor(s). Refer to Add Agents or Edit Agent User for information on designating Supervisors.
   - **Send mail to the Team Leader of each Team**—An email is sent to each Team's Team Leader. Refer to Creating Teams for information on designating Team Leaders.
   - **Send mail to Contact**—An email is sent to the Customer contact for the escalated Issue.
   - **Send mail to CC of each Issue**—An email is sent to each CC for the escalated Issue.
   - **Send mail to the last agent to edit (or submitter if none) if last edit was by an agent**—An email is sent to either the last agent to edit the Issue or, if no editing has been done on the Issue, send mail to the person who submitted the Issue.
   - **Send single-Issue notification mail to the following space-separated email addresses**—Send an email to the specified email addresses only once for this escalation.
   - **Email Template**—Select or define an email template to be used for this escalation. If you elect to configure an email template, you can refer to Escalation Email for further instructions.

   b. **Broadcast Message—**One or more broadcast message types can be selected.

   - **Display pop-up notification to the following users**—Specify a user or users to receive a broadcast message from **FootPrints Service Core**.
   - **Display pop-up notification to the Assignees**—Agents assigned to the escalated Issues receive a broadcast message from **FootPrints Service Core**.

2. **Workflow**—One or more workflow actions can be selected.

   a. **Priority**—Automatically raises or lowers the Issue's priority as specified. You can also change the priority of all escalated Issues to a specific priority.

   b. **Status**—Automatically change the status of the escalated Issue.

c. **Advanced Action**—Execute the pending Advanced Action for the asset associated with the issue. This only applies if you have the BMC FootPrints Asset Core.

d. **Workspace/Address Book Fields**—Automatically change specified Workspace/Address Book fields. If you check this box, you must click the Click here to configure field edits link to specify the changes.

- **Click here to configure field edits—**This page allows you to update Workspace and Address Book fields via an escalation. In addition to editing other fields, you can change the Title field or append a description to the Description field. Fill in the fields with the appropriate data and then click the "GO" button.
  - **Add field variables on left to target fields on right—**This feature allows you to populate a field with the value from another field upon escalation. Select a field from the left drop-down and then select a field from the right drop-down. When an Issue is escalated, the field in the right drop-down is populated with the value of the field in the left drop-down.
  - **Address Book Fields**—Specify the changes to be made to Address Book fields upon escalation, i.e., select the data that is to populate the field after the escalation. If you do not change a field, it is unchanged after the escalation.
  - **Workspace Fields—**Specify the changes to be made to Workspace fields upon escalation, i.e., select the data that is to populate the field after the escalation. If you do not change a field, it is unchanged after the escalation.

NOTE

If you notice that dependent fields are being displayed with a null value when an escalated Issue is edited, it may be that the dependent field was configured with an incorrect value in the escalation rule. If you configure a dependent field to be changed to an invalid choice as a result of an escalation, the dependent field is populated with null data. For example, if the first field were set to Software and the dependent field were changed to Printer when escalated, and Printer is not a valid choice for the Software dependent drop-down, when the Issue is edited, the dependent field will show no selection. The drop-down for the dependent field will contain the normal, valid choices, so it can be corrected at that time. To correct the problem at its source, edit the escalation rule and replace the incorrect choice with the correct choice.

e. **Assignment**—Highlighted users are assigned to the escalated Issue. If Add Selected Users is chosen, the original assignees of the Issue remain assigned. If Re-Assign is chosen, the original assignees are unassigned. Teams and/or individual users can be selected. Re-assignment can also automatically be made to Team Leaders or Assignees' Supervisor(s) by checking the appropriate box.

f. **Add to CC list**—Click the **Append This List to CCs of the Issue** checkbox to include a list of email addresses to receive a notification as a CC to the issue. Click in the text field to add the CC list. When you click in the text field, a CC list editor pop-up window is displayed:

- **CC addresses—**The addresses you select are displayed in this field. Additionally, you can type email addresses directly into this field. Addresses must be space-separated. Select addresses
- **Select FootPrints Service Core users—**Click the user or users to be added to the CC list. If you select the **Flat** radio button, you can use the CTRL key to click on multiple users at one time. Once you have made your selections, click the **add selected users** icon to add them to the list. Alternatively, double-click the user names to add them to the list.
- **Select a Contact from the Address Book—**When you click the **Select a Contact from the Address Book** icon, the address book search engine is opened in a new window. Enter search criteria and click the **GO** button. When the search is completed, click the result to add it to the CC list, close the window without adding the user, or start a new address book search.

When you have finished creating your list, click the **GO** button.

g. **Add to one time CC list**—Check the box to add email addresses. The addresses will be copied on the escalation notification the first time a notification is sent, but not on subsequent notifications. Click in the field below the checkbox to open the CC list editor pop-up window. See the instructions in step 2.f. (above) for details on using the editor.

h. **Sub-tasks for this Issue**—Automatically creates sub-tasks for the Issue using the Master Quick Issue template that you select from the drop-down list.

i. **Copy Selected Fields of Escalated Subtasks to Master**—When enabled, administrators can select subtask fields to be copied to the associated master task when this escalation runs on subtasks. Copies are made even if escalations do not change the subtask. Master task fields that are changed by this copy are identified in the master task history. Master task fields that already contain the desired values are not changed. If all selected fields match each other then no copies are made and no entry is logged in the history of the master task. This configuration is ignored by Issues that are not subtasks.

When enabled, a field picker is displayed. Select the fields that are to be copied to the master issue from the subtask by highlighting the field in the Available Workspace Fields list and then clicking the Add Field button. Remove a field that was previously selected by highlighting it in the Field to Copy list and then clicking the Remove Field button (this only removes the field from the list, not from the issue form).

NOTE

Sub-tasks are not created for an escalated Issue if the Issue is itself a sub-task, a GlobalLink, a Global Issue, or a Solution.

i. **Cross-workspace**—The Issue is automatically copied or moved to the Workspace specified. If Copy with a Dynamic Link is selected, the Issues update each other when field data changes. If Include Related Subtasks is checked, then when a Master Issue is copied or moved across Workspaces, the related subtasks are also copied or moved.

NOTE

Subtasks are not accepted by the receiving Workspace unless the receiving Workspace is configured for Cross-workspace copy/move of subtasks. Refer to the topic for Issue Workflow for more information on setting this option.

j. **Color**—The Issue is displayed on the **FootPrints Service Core** Homepage with the specified color.

k. **External Action**—An external application can be run by the rule. This feature is especially useful for running scripts. For VBS scripts, some changes must be made to the registry (instructions for VBS script are below). The application must be one that can run and stop on its own without any user intervention. In addition, if the program involves running a graphical user interface (GUI), it may not be able to display the interface to a screen, which could cause the application to hang and fail. Therefore, the application should also be one that can run from a command line rather than a GUI. Enter the full path to the program, e.g., D:\Programs\AppLite\applite.exe. Some field data from the escalated Issue can also be passed to the program as arguments:

- **Issue Number**—%%MRID%%
- **Title**—%%Title%%
- **Priority**—%%Priority%%
- **Status**—%%Status%%
- **Submitter**—%%SUBMITTER%%
- **Workspace ID**—%%PROJID%%
- **Workspace and Address Book fields**—%%FIELD NAME%% where "FIELD NAME" is the name of the field in upper case.

External actions run applications from the CGI directory. Make sure that directory has permission to run the application or the external action will fail.

l. **Surveys**—If checked, a customer satisfaction survey is sent to the contact when the escalation occurs.

Unassigning One Agent While Keeping the Rest Assigned

The administrator may need to build an escalation in which one agent, who is always the same agent, is removed from the assignments list while others, who vary from Issue to Issue, remain assigned to the Issue. In this instance, it would not be possible to use the standard escalations page to unassign everyone and then re-assign the Issue because the agents who are to remain would vary from Issue to Issue. An example where this might be needed is in the case of an Issue requiring an approval. The approver might be the same agent every time, but the other assignees could vary. This re-assignment can be accomplished via an escalation, but not by using the Assignment section of Step 4: Escalation Actions. Instead, you would use the External Action function to run a command from the BMC FootPrints Service Core API. To do so, specify the following as an external action:

c:\FootprintsServiceCore\bin\perl\bin\perl c:\FootprintsServiceCore\bin\mrUnassign.pl %%MRID%% userID

Tab 6: Name/Save

After criteria and actions are chosen, you can name the escalation, decide whether to turn it on or off, and then save it

- **Escalation Name**—Give a name to the escalation rule, for example, Gold Level Issues.
- **Escalation On/Off**—To activate this escalation rule, the On radio button must be selected (the default). If an escalation rule is turned off, the settings are saved until the rule is re-activated or deleted.

Enter your password and click **Save**; the escalation rule is enabled. When an Issue matches the criteria of the rule, the specified actions occur. If an escalation rule fails for any reason, the Workspace Administrator receives an email notification.

Scheduler Service

Escalations are run by the BMC FootPrints Service Core Scheduler service. On Windows, FPSchedule.exe is automatically set as a service on the BMC FootPrints Service Core server. On UNIX, a cron job is automatically created that runs the MRrunScheduledScripts.pl file. This service handles incoming email, outgoing email notification, escalations, mass emails, and scheduled reports.

VBS Scripts

The VBS scripts interpreter (wscript.exe or cscript.exe) requires the presence of certain registry entries for IUSR_Machine user. Since an `HKEY_CURRENT_USER` hive is not available for the IUSR_Machine, IIS loads the `HKEY_USERS\.DEFAULT` hive in its place. However, the `HKEY_USERS\.DEFAULT` hive does not contain the necessary keys and entries for the scripting engine, and read access for `IUSR_Machine` user is not granted to the `HKEY_USERS\.DEFAULT` hive. Therefore, in order to run VBS scripts as an external action from an escalation, the registry must be changed as follows:

1. Using the Registry Editor, create the following Keys and Entries:
   ```
   HKEY_USERS\.DEFAULT\Software\Microsoft\Windows Scripting Host
   HKEY_USERS\.DEFAULT\Software\Microsoft\Windows Scripting Host\Settings
   ```
2. Verify that the user IUSR_Machine has Read access to these keys(using regedt32).
3. Create the following entries under `HKEY_USERS\.DEFAULT\Software\Microsoft\Windows Scripting Host\Settings`:
   ```
   DisplayLogo: REG_DWORD: 0
   Timeout: REG_DWORD: b4
   BatchMode: REG_DWORD: 0
   ```

Edit Escalation Rule

Escalation rules can be changed or removed at any time by the Workspace Administrator.

Changes made to escalation rules only apply to Issues escalated in the future. Previously escalated Issues are not affected (unless they are escalated again by the newly edited rule).

To edit a rule:

1. Select Administration | Workspace | Escalation from the BMC FootPrints Service Core Toolbar. A list of existing escalations is displayed.
2. Click the escalation rule to highlight it and then click the **Edit** icon.
3. Make changes to the rule.
4. Enter your password and click **Save**.

To delete a rule:

1. Select Administration | Workspace | Escalation from the BMC FootPrints Service Core Toolbar. A list of existing escalations is displayed.
2. Click the escalation rule to highlight it and then click the **Delete** button.
3. Enter your password and click **Save**.

Escalation Email

The information that is included in escalation email can be configured to include certain fields. To configure the default escalation email for a Workspace, select Administration | Workspace | Escalation from the BMC FootPrints Service Core Toolbar, then click the Configure Escalation Email link on the main Escalation Setup page. To configure the email template for a particular rule (doing this for a particular rule does not affect the template), select Configure in Step 4: Escalation Actions on the Set Up Escalation page. The form you use to set up the escalation email is the same regardless of whether you are configuring the email for a template or for a particular rule.

1. Either select Administration | Workspace | Escalation from the BMC FootPrints Service Core Toolbar, then click the Configure Escalation Email link on the main Escalation Setup page to configure the email template, or select the Configure link in Step 4: Escalation Actions on the Set Up Escalation page. A pop-up window is displayed.
2. If previous templates have been created, you can select one to edit or delete by clicking the appropriate radio button and then selecting the template from the drop-down list. To create a new template, click the Create radio button and then click GO using the Default selection, or choose an existing template, making that the basis for the new template, and click GO.
   - **Subject of Mail**—Click the Edit icon to configure the information that appears in the Subject line of the email. The following options are displayed.
     - **Single Issue notification mail**—Applies to single Issue notifications that go to Assignees or contacts.
     - **Summary report mail**—Applies to summary email notifications (which may list multiple Issues).
     - **Allow replies to escalations**—If the box is checked, the Issue number and workspace ID are included in the subject, allowing users to respond to the email.
   - **Short list of what just changed**—A summary of what was changed in the Issue that caused the email to be sent. If you click the Edit icon in each of the columns, a pop-up window is displayed that allows you to specify whether to include changes to internal Issues or Employee fields.
   - **Text at top of message**—Customizable message that is displayed near the top of the notification email. Click the Edit icon to display the page to create the message. The checkbox must also be checked in that column. The following variables can be placed in the greeting to include the subject of the email, the user's name, etc.:
     - _WHONAME_ : Name of user who created/edited Issue

  - _WHOMAIL_ : Email address of user who created/edited Issue
  - _PROJECTNAME_ : Workspace Name
  - _ENTRYTITLE_ : Title of Issue
  - _ENTRYNUMBER_ : Issue number
- **Workspace Name**—The name of the Workspace is displayed in the body of the notification email.
- **Workspace ID**—Each Workspace is assigned a number within **FootPrints Service Core**. You can include that number.
- **Title**—The Title of the Issue is displayed in the body of the notification email.
- **Issue Number**—The Issue number is displayed in the body of the notification email.
- **Link to Details Page**—A hyperlink to the Details page of the Issue in **FootPrints Service Core** (requires password authentication).

NOTE

If you are using a custom login page for customers (e.g., group.html), that URL can be specified for Customers by clicking the icon in the customer column and entering the URL. This does not automatically bring the Customers to the Details page of their Issue; after entering their email address, the main customer page is displayed.

- **Last Edit Date**—The last date the Issue was edited.
- **Last Edit Time**—The last time the Issue was edited.
- **Priority**—The priority of the Issue.
- **Status**—The current status of the Issue.
- **Creation Date**—The date on which the Issue was created.
- **Creation Time**—The time at which the Issue was created.
- **Creator**—The submitter of the Issue.
- **Show Subtask or Global Entry Relationship**—If the Issue is a Master, Subtask, Global, or GlobalLink, include this reference in the email.
- **Description**—The Issue's description, with time/date/user stamps. Two options are available by clicking the Edit icon: Most Recent Description and All Descriptions.
- **Assignees**—The list of users/Teams assigned to the Issue.
- **CC's**—Any email addresses that are listed in the CC section of the Issue. Both permanent and one-time CCs are shown, denoted by one of these labels: (permanent); (permanent, but not CC'd on this edit); (this edit only)
- **Issue Information**—Workspace field data. By default, customers only see Public fields and internal users see all fields. Individual fields can be selected for inclusion by clicking the Edit icon.
- **Address Book Fields**—Address Book data. By default, customers only see Public fields and internal users see all fields. Individual fields can be selected for inclusion by clicking the Edit icon.
- **List attached files**—A list of files attached to the Issue are displayed in the body of the email.
- **Attach attached files**—Attached files are sent with the escalation email.

- **Complete Issue History**—A summary of the Issue's history appears in the body of the escalation email.
- **Text at bottom of message**—Customizable message that appears at the end of the escalation email. A different message can be made for each type of mail by clicking the Edit icon in that column, entering the message in the text box, and clicking **GO**. The checkbox must also be checked in the column. In addition, variables can be placed in the greeting to include the subject of the email, the user's name, etc. The **Text at top of message** option above describes the variables.
- **Send mail as text**—Notification mail is sent as plain text.
- **Send mail as html**—Notification mail is sent in HTML format.

NOTE

If both text and html are checked, BMC FootPrints Service Core includes both formats in the message. For most Windows-type email readers (Outlook, Lotus Notes, etc.), only the HTML is seen.

- **Custom formatting for text message**—Create a custom email template for BMC FootPrints Service Core escalation email layout and custom formatting in plain text (refer to Custom Email Templates).
- **Custom formatting for HTML message**—Create a custom email template for BMC FootPrints Service Core escalation email layout and custom formatting in HTML (refer to Custom Email Templates).

NOTE

For Issue Information and Address Book fields, custom email template settings override settings you specify on this page, regardless of whether the custom formatting is for text or HTML messages. For example, if your Specify Email Content page specifies that the message is to contain only public fields in the Issue Information section and you specify an internal field in the custom email template, the custom email template overrides the other settings. Refer to Custom Email Templates for details on how to include the settings on this page with the custom email.

3. Enter a name at the bottom of the page under which this escalation email is to be saved.
4. When you are finished configuring the template, click **Save**.

When you have finished configuring the escalation email template, it includes the fields and other options selected for the escalation rules that use this template. Escalation email notifications are flagged with the "Urgent" flag (**!**) in Microsoft Outlook and Lotus Notes.

Copy Escalation

You can create a new escalation rule by copying an existing rule rather than creating it entirely from scratch. You can then edit the escalation criteria, actions, etc., to differentiate the copied escalation from the original.

To copy an escalation rule:

1. From the Escalation Setup page, click the **Copy Escalation** icon. The Setup Escalation page is displayed. The values for the original escalation are already entered into the various fields on the tabs of this page.
2. Edit the values as needed.
3. On the Name/Save tab, enter a name for the escalation, enter your password, and click **Save**. The rule is saved and, if you set it to On, will begin functioning immediately.

Per-Issue Reminders

This escalation feature can be used to create reminders on a per-Issue basis. This allows an Agent, for example, to set a follow-up date for an Issue and receive an email reminder on that date.

To set up per-Issue reminders:

1. Create an internal optional Workspace field called Follow-Up Date of type date field.
2. Create an escalation with the following criteria (may be slightly different depending on your system):
   - **Name:** Per-Issue Reminders
   - **Escalation On/Off:** Select On
   - **Actions:** Send mail to the Assignees checked, select one or more email types, Color=Red
   - **Time Unedited:** 5 minutes
   - **Criteria:**
     - Status=Highlight ”Request”, “Open”, and any custom statuses to get reminders on active Issues, or “Closed” to get reminders on Closed Issues (or highlight all statuses except for “Solution” to get reminders on any status Issue).
     - For Follow Up Date, choose equal to and check the box for Current Date (do not fill in any dates).
3. Enter your password and click **Save**.

To set a reminder, simply edit an Issue and fill in a follow-up date. On the day of the follow-up date, the Agent receives an email reminder and the Issue is highlighted in red on the Homepage.

Reminders can also be sent by the BMC FootPrints Service Core Calendar based on the data in a date/time field. Refer to BMC FootPrints Calendar for more information.

Viewing/Printing a Summary of Escalations

You can view a summary list of the properties of all of the escalation rules and send the summary to a printer.

To view the summary:

1. Select Administration | Workspace | Escalation from the BMC FootPrints Service Core Toolbar. A list of existing escalations is displayed.
2. Click the **Summary of all Escalations** link in the lower right corner of the section. A pop-up displays tables of the escalations and their properties.
3. To print the summary, scroll down the page and click the **Print** button at the bottom of the page. Click the **Close** button to close the page.

AutoField

The AutoField feature allows you to create multiple sets of rules for automating the workflow of Issues. A matrix of rules is created from combinations of field values (called "decision fields") that automatically set the value of another field (called the "result field"). Decision and result fields can include Priority, Status, Assignees, SLA, and any drop-down or multi-select field. For example, Issue assignment can be automated so that specifying a value of Urgent in the Priority field, Platinum or Gold in the SLA field, and Hardware in the Category field assigns the Issue automatically to the Hardware Team Leader.

AutoField Rules are applied on all creates, edits, subtask creations, etc. They are not applied for escalations, i.e., if field values match decision field values as the result of an escalation.

Precedence

Different rules can share decision or result fields. The way this feature works, the first rule in the list takes precedence over the next. Therefore, it is important that you exercise care in ordering the rules.

Create an AutoField Rule

To create an AutoField rule:

1. Select Administration | Workspace from the BMC FootPrints Service Core Toolbar, then select AutoField from the Automated Workflow section of the administration page.
2. Select a result field from the drop-down and click "Add". Potential decision fields are displayed in the Decision Fields list.
3. Select a decision field or fields.
4. Click the Apply button. The Automation Rules page is displayed.
5. On the Automation Rules page, select a value or values for each of the decision fields.

NOTE

Fields that have been configured with Advanced Field Permissions are not available as decision or result fields when configuring AutoFields.

- **Drop-down fields**—Click on an individual value or use the Ctrl key to select multiple values.
- **Multi-select fields**—Click on an individual value or use the Ctrl key to select multiple values. In addition, two radio buttons are displayed below the values when a decision field is a multi-select field. These buttons specify that the decision criteria are matched when any of the values you select are entered in the Issue or, alternatively, there is only a match when All of the values you select are entered in the Issue.

6. On the Automation Rules page, select a value or values for the Result Field. When an Issue is submitted and the values in the Issue match the values in the decision fields on this page, the Result Field in the Issue is populated with the values specified on this page. When Assignees is the result field, two radio buttons give you extra options at the bottom of the Result Field. The options are:
   - **Replace Assignees**—Remove the current assignees and replace them with the assignees selected in this field.
   - **Append Assignees**—Leave existing assignees to the Issue and add the assignees selected in the Result Field to the set of assignees.
7. Click the Save Rule button. The table at the bottom of the page displays a summary of the rule. At this point, you can change the rule settings by clicking the Edit Rule button or delete the rule by clicking the Delete Rule button.

To return to the previous page, click the Go Back button at the top of the page.

Automation Rule Table

When you create an automation rule, a table is displayed at the bottom of the Automation Rules page summarizing the current automation rule. That table has the following functionality:

- Left-click on a field heading to reorder the table by that column. If the column is ordered in ascending order, a left-click reorders the column in descending order and vice-versa. You can also use the left mouse button on column headings to drag and drop columns, i.e., move entire columns left and right using drag and drop.
- Right-click on a column heading to display a menu with the following options:
  - **Sort Ascending**—Sorts the column in ascending order.
  - **Sort Descending**—Sorts the column in descending order.

Edit Decision Fields

To edit or change the decision fields of an AutoField Rule:

1. Select Administration | Workspace from the BMC FootPrints Service Core Toolbar, then select AutoField from the Automated Workflow section of the main frame.
2. In the list of rules at the bottom of the page, click the rule you want to edit.
3. Click the Edit button.
4. The rule characteristics are highlighted in the fields above. Change them as needed.
5. Click the **Save Rule** button.

Delete an AutoField Rule

To delete an AutoField rule:

1. Select Administration | Workspace from the BMC FootPrints Service Core Toolbar, then select AutoField from the Automated Workflow section of the main frame.
2. In the list of rules at the bottom of the page, click the rule you want to delete.
3. Click the **Delete Rule** button. A confirmation pop-up window is displayed.
4. Click the OK button in the confirmation window. The rule is deleted.

Service Level Management

Creating the Service Level Field

Service Level Management provides the means for integrating your service level agreements (SLAs) into BMC FootPrints Service Core. If you need an SLA to be based on multiple fields, use the AutoField feature.

To create a Service Level field, select Administration | Workspace from the BMC FootPrints Service Core Toolbar, then select Service Level Management from the main frame in the Automated Workflow section. If this is the first time service levels are being configured for this workspace, the Initial Service Level Management Setup screen is displayed.

1. Select a field type to be used to track service levels:
   - **Address Book field**—Select this option if you would like to associate service levels with customers (i.e., contacts in the Address Book). For example, Gold, Silver and Bronze levels can be created, guaranteeing customers a certain level of service. This option is good for Customer Service Portal workspaces or for workspaces where a VIP flag needs to be set for certain customers.
   - **Workspace field**—Select this option if you would like to associate service levels with incident type or another issue-based field. For example, network outage can have a different resolution time than request for new monitor. This option is good for service desk Workspaces, or for Customer Service Portal Workspaces where the product or service involved in the incident (defined in a Workspace field) determines the level of service.
   - **Priority**—Select this option if you would like to associate service levels with an Issue's priority. Consequently, higher priority levels can have different resolution times than lower levels.
2. In the Field Description section, the four fields associated with Service Levels are defined. For each field, a new field can be created or an existing field can be used.
   - **Service Level Field**—Assign a name for the main service level field (the default is Service Level). This field is a drop-down field (choices are defined later). To select an existing field, click the radio button on the right and select from the drop-down. If this option is grayed out, no drop-down fields are available and a new field must be created.

- **Service Level Response Time**—Assign a name for this field (the default is SLA Response time). This date/time field represents the time by which a response must be made to the Issue. This is not the same as resolution, but instead acknowledges the Issue.
- **Service Level Expiration Date**—Enter a name for this field (the default is SLA Expiration Date). This is the date the service contract expires for the associated customer or incident type. This field (a date field) is for reference only, but escalation rules can be created to notify the Customer or Agent when the contract expires. An existing date field can also be selected, if one is available.
- **Service Level Due Date**—Assign a name for this field (the default is SLA Due Date). This date/time field represents the date and time by which an Issue must be resolved. The due date is calculated for each new issue automatically by the system based on the service level and time of issue creation. An existing date/time field can also be selected if available.

3. After defining these fields, enter your password and click **Save**. Before you can define the individual service level agreements be defined, you must set the Pending Statuses List.
4. Pending statuses are excluded from SLA reports. Any events that occur or time spent in a pending status is excluded from Service Level Reporting. To specify the pending statuses:
   a. Click the Edit button for the Pending Statuses List.
   b. Select the statuses you want to set as pending in the Available Statuses field. You cannot select Open and Closed statuses as pending, but you can select any other statuses.
   c. Click the Add Status button. The pending statuses are displayed in the Selected Statuses field. To remove a status from the pending list, click on the status in the Selected Statuses field and then click the Delete Status button. This only removes the status from the list of pending statuses; it does not delete the status from the Workspace.

Defining Service Level Agreements

An unlimited number of service level agreements (SLAs) can be defined. The names, resolution times, and contract descriptions of each SLA depend on the service level field type, the capacity of the service desk, and the requirements of the customers and their service contracts.

For example, in a corporate service desk, SLAs may be defined for different incident types, such as “Network outage”, with a resolution time of 2 hours, or “request new speakers”, with a resolution time of 2 weeks.

TIP

Because missed service level due dates can produce negative SLA reports, and unhappy customers, it is important to set realistic expectations when creating SLAs. Over time, as the system is used and service level metrics are tracked, you should see an increase in issues that meet or exceed their service levels.

1. **Name**—Enter a name for the Service Level, for example, Gold or Network outage. This is the name that is displayed.
2. **Description of Contract**—Enter the details of the service level contract, for example, "Resolve in 2 hours". A virtually unlimited amount of text can be entered. The description is available to agents in a pop-up window when viewing a customer’s Issue.
   - **Attach a new description file** (optional)—An electronic file, such as a Word document or text file, can be uploaded containing a detailed service level description. This attachment is available to agents in the SLA Information pop-up window from the customer’s Issue screen.
3. **Response Time**— Enter the amount of time allowed for Issue response for this service level. Time can be specified in minutes, hours, days, and/or weeks. The response time auto-populates an SLA Date/Time field (which you can designate). If, for example, 2 hours is entered and an Issue comes in at 9am on Friday, the associated Date/Time is automatically set to 11am on Friday. This differs from the resolution time in that the Issue is supposed to be resolved by the designated time with resolution time, but with response time, only a

response to the Issue needs to be sent within the designated period. There are two additional choices for calculating response time:

- **Real Time** (default)**—**Time is calculated on a 24-hour, 7-day week, 365-day per year basis. So, if an Issue is received at 4pm on Friday, and the response time is 2 hours, the due date will be set to 6pm on Friday.
- **Work Schedule Time—**Time is calculated using the Workspace Work Schedule. For example, if an Issue is received at 4pm on Friday (with a two-hour response time) and the Workspace Work Schedule is defined as 9am-5pm Monday-Friday, the due date is Monday at 10am.
- **Fulfillment Percentage Threshold——**Enter the Fulfillment Percentage Threshold defined in the SLA.

NOTE

One day of work schedule time is equal to the number of workday hours of work schedule time, not necessarily the next day that work is scheduled.

NOTE

If you specify work schedule time, but you haven't defined the Workspace Work Schedule, real-time is used.

4. **Resolution Time—**Enter the amount of time allowed for Issue resolution for this service level. Time can be specified in minutes, hours, days, and/or weeks. The resolution time auto-populates the SLA Due Date field. If, for example, 2 hours is entered and an Issue comes in at 9am on Friday, the due date is automatically set to 11am on Friday. There are two additional choices for calculating resolution time:
   a. **Real Time** (default)—Time is calculated on a 24-hour, 7-day week, 365-day per year basis. So, if an Issue is received at 4pm on Friday, and the resolution time is 2 hours, the due date will be set to 6pm on Friday.
   b. **Work Schedule Time**—Time is calculated using the Workspace Work Schedule. For example, if an Issue is received at 4pm on Friday (with a two-hour resolution time) and the Workspace Work Schedule is defined as 9am-5pm Monday-Friday, the due date is Monday at 10am.
   c. **Fulfillment Percentage Threshold**—Enter the Fulfillment Percentage Threshold defined in the SLA.
5. **Escalations Associated with SLA—**If this is a new service level, there are no associated escalation rules. Escalation rules can be defined in the next step.
6. **SLA Response Time—**If you select Auto-populate based on the Submission Time + Response Time, the designated Response Time field is automatically set by the system when Issues are created based on the response time defined for this service level. For example, if the response time is one hour, and the Issue is received on Friday October 1 at 2pm, the response time field is automatically set to Friday October 1 at 3pm. This is done dynamically on the Create Issue page for Issues submitted by an Agent or by the system for Issues submitted by Customers via the web or email. If you do not want the system to auto-populate this field, select Do not auto-populate. You can also opt to leave the field empty.
7. **SLA Due Date—**If you select Auto-populate based on the Submission Time + Resolution Time, theDue Date field is automatically set by the system when Issues are created based on the resolution time defined for this service level. For example, if the resolution time is two hours, and the Issue is received on Friday October 1 at 2pm, the due date is automatically set to Friday October 1 at 4pm. This is done dynamically on the Create Issue page for Issues submitted by an Agent or by the system for Issues submitted by Customers via the web or email. If you do not want the system to auto-populate this field, select Do not auto-populate. You can also opt to leave the field empty.
8. When you are finished, enter your password and click **Save SLA** to create the service level. The page refreshes to the Service Level Agreement Administration page.

To create additional service levels, click the Add New SLA button on the Service Level Agreement Administration page and repeat the above process. An unlimited number of service levels can be created. Each is listed as a drop-down choice in the Service Level field.

NOTE

Metric reports are available for service-level agreements.

Creating Escalation Rules for Service Levels

Escalation rules can be created for each service level. Rules can be created to auto-assign Issues, change the priority or status, send email notification, and more. An unlimited number of escalation rules can be created for each service level.

To create an escalation rule, select Workspace | Administration | Service Level Agreements. Under Existing Service Level Agreements, select Add a New Escalation under the desired service level. The escalation setup page is displayed. For more information, refer to Escalation.

For example, if requests from "Gold" level users should be escalated to high priority immediately and assigned to the Workspace Administrator, you might create the following escalation:

- **Name:** Gold Level
- **Escalation On/Off:** Select On.
- **Escalation Time:** Check Instant Escalation.
- **Actions:**
- **Send Email to Workspace Administrator**
- **Priority**—Change to High
- **Color code**—Red
- **Status**—Change to Open (assuming Issues may be submitted by Customers as Requests or may be entered by an internal user)
- **Assignment**—Re-assign to Workspace Administrator.
- **Criteria:** Status=”Request” or “Open” (highlight both), Service Level=Gold

NOTE

The associated service level in the Service Level field is highlighted by default.

Now all new Requests and Issues submitted where the SLA level is Gold in the Address Book will immediately receive a priority of High and are assigned to the Workspace Administrator. The Administrator also receives an email (or page) and the Issue appears in red on the BMC FootPrints Service Core Homepage.
One or more escalation rules can be made for each service level (or no rules can be created). If you want an Issue’s priority to escalate as the Issue ages, you can create multiple rules based on age using the re-escalate Issue checkbox.

NOTE

To make a rule based on Due Date, use the Age rather than the Due Date field.

Editing Service Levels

Service levels can be edited or removed, associated escalation rules can be edited or removed, or the entire service level configuration can be removed.

1. Select Administration | Workspace | Service Level Management to see the existing service levels that are listed under Existing Service Level Agreements.
2. To edit the properties of a service level, click the Edit icon in the right column under SLA Configuration Actions (or, alternatively, click the name of the service level). The name, response time, resolution time, and other properties can be changed here.
3. To delete a service level, click the **Delete** icon under SLA Configuration Actions.
4. To move a service level, use the up and down arrows. This changes the order in which the service levels are displayed in the service level drop-down field.

5. To edit an escalation rule associated with a service level, select the rule under that service level.
6. To change the Pending Statuses of the SLA, click the Edit button of the Pending Statuses List.

Using Service Levels

The service level feature can help the service desk meet service levels for customers based on their service contracts or based on pre-set resolution times for different incident types. Service level information is available to Agents when viewing a Customer's contact record or Issue.

On the Create Issue or Edit Issue page, the Service Level field is displayed in either the Contact Information or Issue Information section of the form, depending on the configuration.

NOTE

The names of the Service Level, SLA Due Date, and SLA Expiration Date fields are customizable by the administrator and may have alternate names.

If the Service Level field is displayed in the Contact Information section:

1. The Service Level field is auto-populated once the contact information is pre-filled.
2. To view the details of the service contract, click the SLA Information link. The details appear in a pop-up window, including the description of the contract, the required resolution time, and any file attachments.
3. If enabled, the SLA Due Date field (always displayed in the Issue Information section) is auto-populated with the due date for this Issue based on the resolution time for the Customer's service level.

   For example, if the Customer's service level is "Gold", which has a resolution time of two hours, and an Issue is created at 9am on Friday, the due date is auto-set to 11am on Friday. This is the time by which the Issue must be resolved to meet the terms of the Customer's service contract.
4. The SLA Expiration Date, if populated, indicates when the Customer's service contract expires. This can be used to determine if the Customer is entitled to service.Ccontact your administrator for more information on how this feature is being used.
5. If automated escalation rules exist for a service level, automated actions may also occur with an issue based on the service level or due date, such as auto-assignment, email notifications, or change to priority and status.

If the Service Level field is displayed in the Issue Information section:

1. Select a choice for the Service Level field. For example, if the Incident Type field determines the service level, selecting network outage determines the required resolution time.
2. To view the details of the service level, click the SLA Information link. The details appear in a pop-up window, including the description of the contract, the required resolution time, and any file attachments.
3. If enabled, the SLA Due Date field (always displayed in the Issue Information section) is auto-populated with the due date for this Issue based on the resolution time for the incident type.

   For example, if network outage has a resolution time of two hours and an Issue is created at 9am on Friday, the due date is automatically set to 11am on Friday. This is the time by which the Issue must be resolved to meet the terms of the service level agreement for network outages.
4. If automated escalation rules exist for a service level, automated actions may also occur with an issue based on the service level or due date, such as auto-assignment, email notifications, or change to priority and status.

Remove Service Level Configuration

The entire service level configuration for this workspace can be removed by selecting Administration | Workspace, clicking Service Level Management link in the Automated Workflow section of the administration page, then clicking Remove Entire SLA Configuration in the Global SLA Configuration Details section of the Service Level Management page. This deletes all choices, properties, and escalation rules associated with service levels. The associated fields are not automatically deleted, but can be deleted manually from the Address Book and Workspace Field Maintenance pages. This option is useful if you would like to start over with configuring service levels for the current Workspace.

Auto Assign

Issues can be assigned to different users and Teams automatically based on the choice selected in a drop-down Workspace field. For example, if the Workspace contains a Workspace field called Problem type, and Problem type contains hardware, software, and network as its three choices, Issues could be assigned automatically to different BMC FootPrints Service Core users and Teams depending on which choice is selected for that Issue or Request by the Agent or Customer creating the Issue. In this way, the hardware Team is automatically assigned to hardware problems, the software group is automatically assigned to software problems, etc. Default assignment can also be configured on this page.

To configure default assignment and Auto Assignment, select Administration | Workspace | Auto Assign from the BMC FootPrints Service Core Toolbar, then scroll to the appropriate section of the page.

Default Assignment

When an Agent opens a new Issue, you can control who is assigned by default to that Issue with the options described below. The option selected here determines who is listed in the Assignees dialog box on the Create Issue page when an Agent opens a new Issue.

There are five options:

- **Assign to creator**—The Agent creating the Issue is assigned.
- **Assign to creator's Team**—The Agent's Team is assigned automatically. If the Agent belongs to multiple Teams, the first Team in the list is selected.
- **Assign to creator's Team and creator**—The Agent is assigned along with the Agent's Team to the Issue.
- **Assign to none**—The Assignees box is blank when an Issue is created by an Agent. This option should be selected if Auto-Assignment is configured for most or all possible choices for at least one field.
- **Assign to all**—All users are assigned. This is appropriate if the Workspace only contains a small group of Agents.

The default assignment option only affects who is listed as the Assignee when an Agent first creates an Issue. The option selected here can be overridden by the Auto Assignment options selected below, manually by the Agent (with permissions), by Team assignment rules, or by an Escalation rule.

Field-Based Auto Assign

To configure Auto-Assignment:

1. Select Administration | Workspace | Auto Assign from the BMC FootPrints Service Core Toolbar.
2. **Create or modify an assignment rule**—To create or modify an assignment rule, select the field you want to modify or for which you want to create a rule from the drop-down field, then click the **GO** button. The Choose Assignees page is displayed. Select the assignees for each choice in the selected drop-down field, then enter your password and click the **Save** button. When an incident/problem is submitted with that specified value in that field, the incident/problem is assigned to the specified agent(s) or team(s).

3. **Current Auto Assignment** Summary—The Current Auto Assignment Summary displays a summary of the current auto assignment rule(s).
4. **General auto assign options**

   a. Auto assign on create/edit

   - **Create only**—Auto Assignment only occurs when the Issue is first created. Any subsequent changes to the Auto Assign field(s) have no effect on assignment.
   - **Create and Edit**—Each time an Auto Assignment field is edited, Auto Assignment rules are re-applied. This is useful if Auto Assignment is being used to assign an Issue from one group to another, for example, from Support to Development, then to QA, etc.

   b. Add to or replace existing assignees

   - **Add new assignees**—Any users assigned manually will remain assigned in addition to any users auto-assigned.
   - **Unassign existing assignees**—When users are Auto Assigned, any users added manually or Auto Assigned by a previous edit are removed. This is useful if Auto Assignment is being used to assign an Issue from one group to another, for example, from Support to Development, then to QA, etc.

NOTE

If Auto Assign is configured for more than one drop-down field, the Add New Assignees option is recommended. If the Unassign option is selected, the Auto Assignment rule for one field may unassign users who were assigned by another field choice. Therefore, to assign Issues based on multiple criteria, use Escalation rules. In addition, auto assignment occurs during the issue creation; if dynamic drop-downs are used, escalation rules, which occur at the end of the issue creation or edit, should be used to do these kinds of assignments

3. **Drop-Down Fields**—This section contains one sub-section for each drop-down Workspace field in the current Workspace. Each section is broken down into each choice for the field, with a list of Workspace members and Teams for each choice.
4. For each choice, you can choose to Auto Assign Issues to one or more users or Teams. Highlight a user's ID or Team name in the list for that value. Use the CTRL key to highlight more than one user or Team.
5. It is not necessary to configure Auto Assignment for each choice in a single field or for more than one drop-down field. It is completely optional. More complex assignment based on multiple criteria, including contact fields, time, etc., can be accomplished with Escalation rules.
6. When you are finished, click **Save**.
7. New Issues for which a configured value is selected are automatically assigned to the users or Teams specified on the "Auto Assign" screen. The users receive notification email, and the Issue appears in their Assignments lists.
8. If the Auto Assignment feature is enabled for a public field, Requests submitted by Customers are also automatically assigned and given a status of Open. They skip the Request bin.
9. Auto Assignment is done in addition to any assignees chosen manually on the Create Issue or Edit Issue page. Auto Assignment rules are applied directly on the Create Issue and Edit Issue pages for Issues created by Agents. Requests submitted by Customers are assigned instantly when the Customer submits the Request via the Customer Self-service interface. Assignment for Email submissions is processed when the email is received by BMC FootPrints Service Core.

Delete an Auto Assignment

To delete an auto assignment rule:

1. Select Administration | Workspace | Auto Assign from the BMC FootPrints Service Core Toolbar.
2. In the Create or Edit an Auto Assignment Rule field, select the rule you want to delete from the drop-down menu, then click the GO button.
3. Unassign the assigned user or users.
4. Enter your password and click the **Save** button.

Quick Issues

Quick Issues are templates that contain pre-filled information for frequently reported customer Issues, such as Password Reset, Service Request, etc. For example, a Quick Issue template for Password Reset would include a description of the problem, the problem categories pre-filled with Network and Password Reset, and perhaps a status of Closed. The Agent only needs to fill in the user's contact information to submit the Issue. The Workspace Administrator can create an unlimited number of templates, which are available to all Agents and customers from the BMC FootPrints Service Core Toolbar. (Customers cannot access Master Issues.)

The Quick Issue Templates page is also where you create and edit Master Issues and Subtasks.

Quick Issues are considered advanced BMC FootPrints Service Core features. Refer to Creating Quick Issue Templates and subsequent topics in that section for details on configuring Quick Issues.

NOTE

The name of this feature depends on the name given to records in BMC FootPrints Service Core for the system/workspace. For example, if the name "Call" has been defined for records in the current workspace, the feature is called "Quick Call" throughout the workspace (on the toolbar, in the Administration pages, etc.). For consistency, all help files refer to the feature as "Quick Issue".

Preventive Maintenance

The Preventive Maintenance feature allows the Service Desk to provide proactive service management with Quick Issue Templates that automatically create new issues on a recurring basis, which can be used for periodic server maintenance, ensuring password changes on strategic accounts every 90 days, and regular auditing of systems for SOX compliance. With Preventive Maintenance, you provide the data for the Quick Issue Template and, when it is time for the recurrence, an issue is automatically created using the data.

The Preventive Maintenance feature allows you to create either a single Issue to cover the maintenance item or a Master Issue and subtasks to cover the maintenance item (for details on Master Issue templates and subtasks, refer to Master Quick Issue). When the date of the scheduled maintenance item occurs, an Issue is generated for the maintenance item. Since maintenance activities may require several different tasks, the Master Issue/subtasks option is available.

The process for setting up a Preventive Maintenance template is as follows:

- Create the template for a single Issue or a Master Issue.
- Set the schedule for the date on which an Issue is created from the template.
- For Master Issues, create the subtasks.

Creating Preventive Maintenance Templates

To create a Preventive Maintenance template:

1. Select Administration | Workspace from the BMC FootPrints Service Core Toolbar, then select the Preventive Maintenance link from the Automated Workflow section of the main frame.

2. In the Manage Preventive Maintenance frame, select the Create button. Two additional fields are displayed:
   - **Template Name**-Enter a name for this template. Keep it brief, but try to make it descriptive so that you'll be able to identify the task at a glance later.
   - **Master**-The Master checkbox is for designating the Issue as a Master Issue. If you create the Issue as a Master Issue, you will make subtasks in a new step that follows.
3. Click the **GO** button. You may be prompted for your password at this point. Enter it and click the GO button in the pop-up password window. The Create a Preventive Maintenance Template page is displayed.
4. The Preventive Maintenance Template page is completed in the same way that you would complete a Quick Issue template. Enter the information you want in the Issue when it is created. The fields on the Preventive Maintenance Issue are the same ones as on regular Issues in the workspace, so you may want to think about adding fields that are specifically for Preventive Maintenance, if they are needed. Note that the template page does not identify any required (i.e., mandatory) fields. Required fields will still be required when an Issue created from the template is edited. Note that, after the Preventive Maintenance template is created, when scheduling the recurring appointment for the template (see below), the Invitees field for the appointment is populated with the Assignees from the template (if there were any). If Invitees are added to the appointment, they are also added to the Assignees in the issue(s) generated by the recurring appointment. Both the template's Assignees and the appointment's Invitees become Assignees in generated issues.
5. **Advanced Action**—If your system has the BMC FootPrints Asset Core integration enabled, you can associate an Advanced Action with this template. From the **Asset Information** tab of the template, select an action from the drop-down menu on the BMC FootPrints Asset Core bar, and then click **Apply**. When a Service Request/Issue is initiated that has an associated Advanced Action, and that action is designated as **Requires Workflow**, the same workflow used for manually selected Requires Workflow Advanced Actions goes into effect. When a Service Request/Issue is initiated that has an associated Advanced Action, and that action is not designated as Requires Workflow, the deployment is initiated immediately upon request, following the same workflow that occurs when an agent manually selects an Advanced Action that does not require pre-approval. The Advanced Actions function in the template only works if **Automatically link CIs to Issues** is enabled on the Administration | Workspace | Configuration Manager and Service Catalog options page.
6. When you have finished entering the Issue information, click the SAVE button. The Preventive Maintenance administration page is displayed and the new template is listed in the Templates field. The next step is to schedule the date on which an Issue is created from the template.

Scheduling Preventive Maintenance Templates

To schedule a Preventive Maintenance template:

1. Click on the template that you wish to schedule in the Templates field.
2. Click the Schedule button.
   - **Title**—Enter a Title for the appointment. This is the subject of the appointment, such as Quarterly Meeting. If it is important for other users to know who is involved in the appointment at a glance, you may want to include the names of the people involved in the Title, e.g., Bob S. to work on Server.
   - **Start Time**—Select a time for the appointment to start. If a time was selected from the Day View, it is pre-filled here. Hours are listed in one drop-down (1-12 or 0-23 depending on your preferences), with minutes available in 5-minute increments (from 0-55) in a second drop-down. If the 12 hour clock is used, a third drop-down is available to select AM or PM. If an appointment lasts all day, select None for Start and End times. These appointments are displayed at the top of the Day View with no time associated.
   - **End Time**—Select a time for the appointment to end. If a time was selected from the Day View, this will default to 1 hour after the Start Time. If the 12-hour clock is used, remember to select the correct option for AM or PM. If None is selected for Start Time, it should also be selected for End Time.

- **General Info tab**—The General Info tab has the following options:
  - **Location**—Optionally enter a location for the meeting or Appointment, e.g., Board Room or Customer Site
  - **Link to Issues Using the Field**—When creating the appointment from the Calendar, this automatically creates a new Issue with data from the appointment. Select the Date/Time field to populate with the appointment Start Time from the drop-down. For Preventive Maintenance tasks, a Date/Time field must exist in the Workspace already and one must be chosen in the **Link to Issues Using the Field** drop-down when creating the appointment for scheduling a Preventive Maintenance template/task. Refer to Linking Appointments to Issues for complete information on this feature.
  - **Use Data from Issue**—By default, the template shown here is the one you selected before you clicked the Schedule button. This field is provided to allow you to set the Schedule of a different template if you decide that the one you selected previously is not the one you want to schedule. When you initially create a schedule, you will likely remain with the default selection. Use the drop-down to select the template whose data will be used to populate the Issue you are scheduling.

NOTE ON USE OF CALENDAR

Customers, members of other Workspaces, and non–users of BMC FootPrints Service Core are not available to be Invitees. The BMC FootPrints Service Core Calendar is intended for use by BMC FootPrints Service Core Agent/administrator users. If non–Workspace Members must be notified of an appointment, the email notification you receive can be forwarded to them (see below). Users can also be copied on any Issue linked to an appointment.

  - **Description**—The Description can be used to include any notes or details of the appointment.

- **Invitees tab**—One or more members of the current Workspace can be invited to the appointment. Invitees become Assignees on the generated Preventive Maintenance issue. Examples of invitees would be members of a committee who attend a committee meeting or a technician who is scheduled to work at a customer's site or an entire Team at once for a Team meeting. To invite a user, select the name on the left and click the right arrow button. Select **Check Availability** to see who is available for the appointment. Refer to About scheduling for more information. To invite an entire Team at one time, click the team name, then select Assign Team, then click the right arrow button. The appointment is propagated to the Availability calendar for all the individual members of the team. The ability to invite a Team is only supported in the Day View.
  - **Check Availability**—Before inviting Agents to an appointment, you can check Agent schedules to determine the best time for scheduling the appointment.
- **Email Confirmation**—BMC FootPrints Service Core can send users email confirmation about an appointment. This is in addition to any email notification the users receive regarding BMC FootPrints Service Core Issues (including linked Issues). Email notifications include all of the information about an appointment as well as an optional link to synchronize the appointment with the Microsoft Outlook Calendar (the link is for those not using the BMC FootPrints Sync add-on module). The options are:
    - **Email me**—If this is checked, you receive an email notification about this appointment (regardless of whether you are invited to the appointment).
    - **Sync w/Outlook**—If this is checked, notifications include an attachment that synchronizes the appointment with the user's Microsoft Outlook Calendar (refer to Syncing Appointments–this is not for FootPrints Sync users).
    - **Email Invitees**—If this is checked, all users invited receive an email notification for the appointment.
    - **Set reminder**—If a reminder is set, users receive a second email notification before the appointment starts. The reminder is sent before the appointment as specified by the person who

created the appointment. Time period available before the appointment starts are: 5, 10, 15, or 30 minutes, 1-5 hours, 1 day, 2 days, and 1 week.

NOTE

The time specified for the email notification to be sent is based on the internal clock of the BMC FootPrints Service Core server. If an appointment is set to begin at 1:00 PM, Monday, December 2, 2016, and the reminder is set for 30 minutes, the email is sent at 12:30 PM of that day based on the time on the server where BMC FootPrints Service Core is installed.

- **Recurrence tab**—Appointments can be set to recur at regular intervals. Recurrence is mandatory for a Preventive Maintenance task. The appointment is displayed on the Calendar for each day that it recurs. The options are:
  - **Daily, Weekly, Monthly, Yearly**—Click the radio button to select the frequency with which the appointment occurs. It can be once every day, once a week, once a month, or once a year.
    - **Daily**—Set the recurrence for every X day(s) of the week (i.e., enter "1" for the recurrence to be every day, Sunday through Saturday, "2" for every other day, "3" for every third day, etc.) or only on weekdays (i.e., Monday through Friday) in combination with the every X day(s) schedule.
    - **Weekly**—Set the recurrence for every X weeks (i.e., enter "1" for the recurrence to be every week, "2" for every other week, "3" for every third week, etc.) and select which day(s) of the week it is to occur by clicking the appropriate checkbox. You can select more than one day per week. For example, you could create an appointment for every second week on Monday and Wednesday.
    - **Monthly**—The appointment recurs on a monthly basis. By default, there is no end date. Specify the date on which it is to occur (for example, the 19th of the month) by selecting the radio button and entering the date, as well as the frequency (every X months) of the appointment (i.e., enter "1" for the appointment to take place every month, "2" for the appointment to take place every other month, etc.). Alternatively, select the second radio button, then use the drop-down fields to designate in which week of the month (first week, second week, etc.) the appointment occurs, the day in that week, and the frequency.
    - **Yearly**—The appointment recurs on a yearly basis. By default, there is no end date. Specify the date on which it is to occur (for example, September 19th) by selecting the radio button and entering the date of the appointment. Alternatively, select the second radio button, then use the drop-down fields to designate in which week of the month (first week, second week, etc.), the day of the week, and the month of the year in which the appointment occurs.
  - **No end date**—When this is checked, the appointment recurs without end.
  - **End by**—Specify the date on which the appointment ceases to recur.

3. Click **SAVE** to create the appointment. The appointment is added to the Calendar and email notifications are sent to users (if selected). The appointment is displayed in the Day, Week, and Month view of the Calendar.

Creating Subtask Templates

If you created a Master Preventive Maintenance template, you will need to create subtasks for the Master template.

To create a subtask template:

1. From the Preventive Maintenance Templates page, click on the Master Issue in the Templates field for which you want to create a subtask.
2. Click the Create button next to the Subtasks list field. A Template Name field is displayed.
3. Enter a name for the Subtask template and then click the **GO** button.

4. If a Password pop-up window is displayed, enter your password and click the **GO** button. The Create Subtask Template window is displayed.
5. The Create Subtask Template page is completed in the same way that you would complete a Quick Issue template. Enter the information you want to appear in the Issue when the Issue is created. The fields on this page are the same ones as on regular Issues in the workspace. Note that the template page does not identify any required (i.e., mandatory) fields. Required fields will still be required when an Issue created from the template is edited.
6. When you have finished entering the Issue information, click the **Save** button. The Preventive Maintenance administration page is displayed and the new template is listed in the Subtasks field. Repeat this procedure as necessary until you have created all of the subtasks for the Master Issue.

NOTE

The Subtasks list is not displayed unless you have highlighted a Master Preventive Maintenance template in the Templates list.

Editing Preventive Maintenance Templates

To edit a Preventive Maintenance template:

1. Select Administration | Workspace from the BMC FootPrints Service Core Toolbar, then select the Preventive Maintenance link from the Automated Workflow section of the main frame.
2. Click on the template to be edited in the Templates list.
3. Click the Edit button.
4. Click the **GO** button. You may be prompted for your password at this point. Enter it and click the GO button in the pop-up password window. The Edit a Preventive Maintenance Template page is displayed.
5. Edit the fields for the template.
6. Click the **Save** button.

Renaming Preventive Maintenance Templates

To rename a Preventive Maintenance template:

1. Select Administration | Workspace from the BMC FootPrints Service Core Toolbar, then select the Preventive Maintenance link from the Automated Workflow section of the main frame.
2. Click on the template to be edited in the Templates list.
3. Click the **Rename** button.
4. In the Rename Template field, enter the new name, then click the GO button. You may be prompted for your password at this point. Enter it and click the GO button in the pop-up password window. The Preventive Maintenance Template page is displayed and the renamed template is listed in the Templates list.

Deleting Preventive Maintenance Templates

To delete a Preventive Maintenance template:

1. Select Administration | Workspace from the BMC FootPrints Service Core Toolbar, then select the Preventive Maintenance link from the Automated Workflow section of the main frame.
2. Click on the template to be deleted in the Templates list.
3. Click the **Delete** button.
4. Click the **OK** button in the pop-up window to confirm the deletion. The template is deleted and no longer appears in the Templates list.

Setting a Sequence for Subtasks

Subtasks can be sequenced. This means that an order for closing the subtasks can be designated and the next subtask in the sequence cannot be closed or edited until the current subtask has been closed. Subtask sequencing can be specified by an administrator or, with appropriate permissions, by an Agent on the Details page of a Master Quick Issue. A Master Quick Issue must have at least two subtasks in order to specify sequencing. The procedure for specifying a subtask sequence is as follows:

1. Assuming you are still on the Preventive Maintenance Templates page, click on the Master Issue in the Templates field for which you want to sequence subtasks. The Sequence/Remove Sequence for Subtask Templates page is displayed. You will see a checkbox and a list of the subtasks that you will be sequencing.
2. Check the box. Drop-down fields are displayed next to each of the subtasks.
3. Use the drop-down fields next to the subtask names to set the order. You can specify more than one subtask with the same number. If you do so, then either of the equivalent subtasks can be closed ahead of the other, but any subtasks that have been set to higher numbers must still wait until the subtasks with equivalent numbers have been closed. For example, you could have the first two subtasks set to "1", which means either can be closed first, but both must be closed before the subtask set to "2" can be edited or closed.
4. When you have specified the order for all of the subtasks, click the **Save** button. The sequence is saved and will be enforced by FootPrints Service Core. The Preventive Maintenance Template page is displayed.

If you wish to edit the sequence, perform the steps in the preceding procedure. To remove sequencing, return to the sequencing page and remove the check in the checkbox.

Editing, Renaming, and Deleting Subtasks

To edit a subtask, assuming you are on the Preventive Maintenance Templates page, click on the appropriate Master Issue in the Templates field, click on the subtask in the Subtasks list, and then click the Edit button. Click Edit the subtask and then click the SAVE button.

To rename a subtask, assuming you are on the Preventive Maintenance Templates page, click on the appropriate Master Issue in the Templates field, click on the subtask in the Subtasks list, and then click the Rename button. Enter the new name in the Rename Subtask field and click the GO button.

To delete a subtask, assuming you are on the Preventive Maintenance Templates page, click on the appropriate Master Issue in the Templates field, click on the subtask in the Subtasks list, and then click the Delete button. Click OK in the pop-up window and the subtask is deleted.

Auto Run Reports

BMC FootPrints Service Core can run any saved report automatically at regularly scheduled times. The reports can be saved to a file on the server, emailed to a list of addresses, or both. This is configured under Administration | Workspace | Auto Run Reports.

NOTE

If FootPrints sends out an auto-run report that is formatted to include the project logo, a chart, an embedded image, or a Description, the report results are embedded in the body of the email. If the project logo or chart is not present, a standard email is sent in which report results are sent as an attachment

To schedule a report:

1. Create a Saved Report.
2. Select Administration | Workspace | Auto Run Reports from the BMC FootPrints Service Core Toolbar.

3. On the Auto Run Reports page, choose the report to be run from the Report to run drop-down box. The box contains a list of all saved reports and time tracking reports..
4. To save the report to the server, enter a path, e.g., C:\Reports\myReport.html. Optionally, you can check the box to include the time and date in the name of the report.
5. To email the report, enter a space-separated list of email addresses.
6. Select the time and day(s) to run the report (based on the server time).
7. If you want to prohibit emailing empty auto-run reports, i.e., reports that returned no data, click the checkbox.
8. Enter your password and click **Save**.

To remove a report from the schedule:

1. Select Administration | Workspace | Auto Run Reports from the BMC FootPrints Service Core Toolbar.
2. In the Currently Scheduled reports section of the page, click the Delete checkbox for each report to be deleted.
3. Enter your password and click **Save**.

NOTE

Auto run reports are run by the BMC FootPrints Service Core Scheduler service. On Windows, FPSchedule.exe is automatically set as a service on the BMC FootPrints Service Core server. On UNIX, a cron job is automatically created which runs the file "MRrunScheduledScripts.pl". This service handles incoming email, outgoing email notification, escalations, mass emails, and scheduled reports. It replaces the manual scheduling necessary in previous versions.

Customer Survey

Customer Survey

IMPORTANT

Check local laws governing automated surveys before enabling the feature!

When this feature is enabled, a customer satisfaction survey is automatically emailed to customers when their Issues are closed. The email with the attached survey is sent to the Customer in addition to the regular notification email, based on the rules specified under Administration | Workspace | Mail Preferences.

Surveys contain field data from the originating workspace (as opposed to the Customer Survey workspace), but the field names in the survey are all from the Customer Survey workspace and should be set there.

NOTE

A Customer Survey workspace does not count towards the limitation of three workspaces for owners of the Base Starter Pack. Additional survey workspaces will count towards the limitation. Contact your salesperson for details on obtaining the Extended Starter Pack.

NOTE

For the survey option to work correctly, outgoing email notification must be enabled for the system (under Administration | System | Email).

To enable this feature:

1. Select Administration | Workspace | Automated Workflow | Survey from the BMC FootPrints Service Core Toolbar.
2. Place a check in the box to enable this workspace to send Customer surveys.

3. Select whether you want to have surveys tracked in a BMC FootPrints Service Core workspace associated with this workspace or if you want to create and use your own survey.

NOTE

If you wish to use a BMC FootPrints Service Core Workspace, you must create that Workspace in advance using the Workspace Setup Wizard and selecting the Customer Surveys template.

- **Track Surveys in a BMC FootPrints Service Core Workspace**—A list of survey workspaces that have been created and associated with this workspace is displayed in the Step 2: Configuration section.
  - **Select a Workspace to Send the Surveys to**—You must have another BMC FootPrints Service Core Workspace already built if you want BMC FootPrints Service Core to track the survey results. Use the Customer Survey workspace template from the Workspace Setup Wizard to create this workspace. You can create a new workspace using the Administration | System | Workspaces | Create A New Workspace option. Step 4b of the Workspace Setup Wizard allows you to setup all the survey options for this workspace. A template is created for the survey workspace that is attached to the survey email. When the customer fills this template out and submits it, the results automatically go into the survey workspace.
- **Create and track your own survey**—If you choose to Create and Track Your Own Survey, BMC FootPrints Service Core only generates the email for the survey or generates the email that contains an additional file for the survey. If you click on "Track surveys in a FootPrints workspace", the first option under Step 2: Configuration is the option to choose a valid BMC FootPrints Service Core Survey Workspace. If you choose "Create and track your own survey" the first option under Step 2: Configuration is for the "Reply Address for Surveys". You can ask the questions in the actual outgoing message or you can ask the questions in an attached file. The answers are returned to the "Reply address for survey emails" that you specified. At this point, BMC FootPrints Service Core does not take any further action with these results. It is up to you to determine who is responsible for the incoming survey results and how they would be handled/correlated. In short, choosing to create and track your own survey means that you are using BMC FootPrints Service Core to determine when to send a survey and with what questions, however you are not using BMC FootPrints Service Core to correlate the responses or store them.
  - **Reply address for survey email**—Enter the email address to which replies to survey emails should be sent. In Step 4 you may have set up the survey results to go into another Workspace. You may also want the replies to the survey email to go into this Workspace. In that case, use the email address for this other Workspace. Incoming email address can be set up on the Administration | System | Email page. Also, you may not want BMC FootPrints Service Core to track the survey results at all. Enter the email address to which you want people to send email when they reply to the survey email. This address can belong to a person who is responsible for reading the survey results or to another application's email address.
  - **Attach File**—If you are not tracking your survey results in a BMC FootPrints Service Core Workspace, you must create the survey outside of BMC FootPrints Service Core and then attach it here if you want a survey attached to your survey email. Only .txt and .html files are supported. Options are also provided to update attachment.

4. **Step 2: Configuration**
   - **Subject of the survey email**—Enter a subject line for the survey email.
   - **Custom Message**—The text entered here is included in the body of the survey email. Certain keywords can be used that are automatically replaced by their associated values once the email is sent. Click the Click here link to view a list of keywords.
5. **Step 3: Survey Criteria**—Select when to send customer surveys:

- **Send surveys for Issues with Closed Status - When selected, Step 4: Frequency displays options that are appropriate for sending surveys based on the Issue status.**
- **Send surveys for Issues based on Escalation Rule(s) - When selected, Step 4: Frequency displays options appropriate for sending surveys based on an escalation rule.**
- **An Add New Escalation link allows you to create an escalation rule on the fly. Clicking the link displays the page for setting up an escalation rule.**

6. **Step 4: Frequency**
   - **If sending surveys based on status.**
     - **Send surveys each time Issues get Closed**
     - **Customers have a 1 in** *X* **chance of receiving a survey if they haven't received a survey in the last** *Y* **months.** Select the values for X and Y.
       - **For X**: Choosing a value of 2 for X does not mean that a survey email is sent for every other issue that is closed. It means that each issue closed has a 1 in 2 (50%) chance of resulting in a survey email.
       - **For Y**: Indicate how often customers are allowed to receive surveys. You may not want the same customer to receive more than one survey in a 1, 3, 6, or 12 month period.
     - **Allow on demand surveys** - Checking this box adds a checkbox to the create/edit Issue screen to send the survey when the Issue is submitted regardless of other choices in this section and regardless of status.

NOTE

You may want to send a survey for every issue that is closed, but only if that person has not received one in the past 1, 3, 6, or 12 months. Use the second option and set the value of Y to 1 so that each closed issue has a 1 in 1 chance of sending a survey email.

7. **Step 5: Miscellaneous**
   - **Send surveys to customers and agents**- Leave unchecked to send surveys to customers only or check this box to have surveys sent to both customers and agents.
   - **Send surveys to all linked customers when a Global Issue is resolved.** This option can be selected regardless of when surveys are being sent out.
   - **Include Javascript data validation on surveys and HTML Forms.** This option can be turned off so that the Javascript validation is not included.
   - **Allow anonymous survey submissions** - When the survey is returned, it comes back with the original issue information deleted.
8. Enter your password in the Apply Changes section and click **Save**.

Add Survey Question

If you've chosen to track surveys in a BMC FootPrints Service Core workspace, you must create the survey questions to be sent out.

To create survey questions:

1. Change to the survey workspace.
2. Select Administration | Workspace from the BMC FootPrints Service Core Toolbar and then select Survey Question Configuration from the Fields section of the main frame. The Survey Question Configuration page is displayed. In other, non-survey workspaces, the link in this position is labeled "Form Builder".

3. You can **Add**, **Edit**, or **Delete** a survey question from this page. Click the **Add Question** button. The Question Setup section is displayed.
   - **Type Question**- Enter the survey question in this field. Responses are in the form of selecting a value from a set of numbers or words, so the question should be appropriate to that form of survey. Some examples might be:

My experience with Widgets International was helpful:

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

On a scale of 1 to 6, with 6 being the highest, how highly do you rate our speed of response?

1	2	3	4	5	6

   - **Make this question mandatory** - Checking this box makes answering the question a requirement. If the question is made mandatory and the customer or agent tries to return the survey without answering a mandatory question, the customer or agent is notified that the question must be answered prior to returning the survey.
   - **Define Scale** - This drop-down field allows you to reuse the answer scale from another question.
   - **Max Scale Value** - Sets the number of values in the answer scale. The maximum allowable number of values in the scale is 10.
   - **Enter the caption that will be associated with each value** - By default, answer scale is populated with numeric values. You can change those to words or a combination of words and numbers.
   - **Caption alignment** - Select whether to place the caption for the answer scale to the right, left, above, or below the field for entering the value.
   - **Include a comments box with this question?** - Check the box to include a field for entering comments with the question. If you check the box, drop-downs are displayed for you to select the size of the box that is displayed in the survey. The answers given by the customer are not limited to the size of the box. The column and row drop-downs only determine what size box is visible.
   - **Include a question header?** - Check the box to include a heading with the question. If you check the box, a multi-line character field is displayed for you to enter the text for the header and a drop-down is displayed for you to choose whether to align the heading flush left, flush right, or centered above the question.
4. Click the **Finish Question** button to add the question to the survey. Repeat these steps to add more questions to the survey.
5. When you have finished adding questions, enter your password in the Apply Changes field and click the **GO** button. If you skip this step, the questions are not added to the survey.

Using Scaled Surveys to Get Averages

Because integers represent the responses to survey questions, you can run a Metric Report to determine averages for answers.

To create averages reports using scaled surveys:

1. Create at least one survey scaled report, for example, "Rate the service you received on a scale of 1-5, with 1 being Excellent and 5 being Poor".
2. Create a Custom Metric and Graphics Report. Refer to Custom Reports for details on how to create the report. Additional information for Metric Reports can be found in Metrics and Graphics.
3. When building the report, in Step 3, choose to get an Average of your survey question.
4. You can get a subtotal of these values. For example, you might choose to subtotal them by "Original Assignee".

Upgrade Customers

If you already have a survey Workspace when you upgrade to BMC FootPrints Service Core 8.1+, your existing survey Workspace will not contain any scale questions. For this reason, BMC FootPrints Service Core 8.1+ displays the Form Designer page when you try to access the Survey Question Configuration page for the first time and includes a link to the Scale Question page.

Once scale questions are added, each visit to the Survey question configuration screen displays the scale question setup page, which also contains a link to the traditional Form Designer page. Scale and comment boxes are available on the new page. Drop-down, date, date time, and other fields are available on traditional Form Designer page. "Q1, Q2..., Q*n"* are noted in parentheses next to the scale questions to avoid confusion when visiting the Form Designer page.

Change Survey Question Order

When you have more than one question in your survey, the questions are displayed in order of appearance on the Survey Question Configuration page.

To change the order in which survey questions are displayed:

1. Change to the survey workspace.
2. Select Administration | Workspace from the BMC FootPrints Service Core Toolbar and then select Survey Question Configuration from the Fields section of the main frame. The Survey Question Configuration page is displayed.
3. Click on the survey question in the Current Questions list.
4. Click the **Move Up** or **Move Down** arrow buttons to move the question up and down in the order.

Edit Survey Question

To edit a survey question:

1. Change to the survey workspace.
2. Select Administration | Workspace from the BMC FootPrints Service Core Toolbar and then select Survey Question Configuration from the Fields section of the main frame. The Survey Question Configuration page is displayed. In other, non-survey workspaces, the link in this position is labeled "Form Designer".
3. You can **Add**, **Edit**, or **Delete** a survey question from this page. Highlight the survey question to be edited in the Current Questions list and click the **Edit Question** button. The Question Setup section is displayed.

   - **Type Question**- Enter the survey question in this field. Responses are in the form of selecting a value from a set of numbers or words, so the question should be appropriate to that form of survey. Some examples might be:

My experience with Widgets International was helpful:

Strongly Agree	Agree	Neutra	Disagree	Strongly Disagree

On a scale of 1 to 6, with 6 being the highest, how highly do you rate our speed of response?

1	2	3	4	5	6

   - **Make this question mandatory** - Checking this box makes answering the question a requirement. If the question is made mandatory and the customer or agent tries to return the survey without answering a mandatory question, the customer or agent is notified that the question must be answered prior to returning the survey.
   - **Define Scale** - This drop-down field allows you to reuse the answer scale from another question.

- **Max Scale Value** - Sets the number of values in the answer scale. The maximum allowable number of values in the scale is 10.
- **Enter the caption that will be associated with each value** - By default, answer scale is populated with numeric values. You can change those to words or a combination of words and numbers.
- **Caption alignment** - Select whether to place the caption for the answer scale to the right, left, above, or below the field for entering the value.
- **Include a comments box with this question?** - Check the box to include a field for entering comments with the question. If you check the box, drop-downs are displayed for you to select the size of the box that is displayed in the survey. The answers given by the customer are not limited to the size of the box. The column and row drop-downs only determine what size box is visible.
- **Include a question header?** - Check the box to include a heading with the question. If you check the box, a multi-line character field is displayed for you to enter the text for the header and a drop-down is displayed for you to choose whether to align the heading flush left, flush right, or centered above the question.

4. Click the **Finish Question** button to add the question to the survey. Repeat these steps to edit more questions in the survey.
5. When you have finished editing questions, enter your password in the Apply Changes field and click the **GO** button. If you skip this step, your changes are not accepted.

Delete Survey Question

To delete a survey question:

1. Change to the survey workspace.
2. Select Administration | Workspace from the BMC FootPrints Service Core Toolbar and then select Survey Question Configuration from the Fields section of the main frame. The Survey Question Configuration page is displayed. In other, non-survey workspaces, the link in this position is labeled "Form Designer".
3. You can **Add**, **Edit**, or **Delete** a survey question from this page. Highlight the survey question to be deleted in the Current Questions list and click the **Delete Question** button. A confirmation pop-up window is displayed.
4. Click the OK button to delete the question or the Cancel button to leave the question in the survey.
5. When you have finished deleting questions, enter your password in the Apply Changes field and click the **GO** button. If you skip this step, your deletions do not occur.

Submission Tracking

Submission Tracking allows you to track the medium by which issues in a BMC FootPrints Service Core workspace are received. When this feature is enabled, it creates a special field that is used to track how Issues are submitted in BMC FootPrints Service Core. This field cannot be edited by customers; it is a read-only field whose value is automatically set by the system for Web, Web-Auto Suggest, and Email. If custom values are defined, the agent can select a value when creating an issue. The field can be included in reports, searches, and escalation rules. The feature allows for the medium to be recorded as follows:

- **Web**—Applies to issues submitted by customers via the Customer Self-service web interface.
- **Web - Auto Suggest** Applies to issues submitted and closed by customers via the Customer Self-service web interface when both the Auto-Suggest Solutions feature and the Submission Tracking feature are enabled.
- **Email**—Applies to issues sent to FootPrints via email.
- **Phone**—The default for issues created by agents if custom choices are not defined.

- **Twitter** — The agent can select "Twitter" if he created an Issue from a Twitter Tweet.
- **Custom**—In addition to Phone, additional values can be added for the agent to select (e.g., "Walk-up").

For more information, see the Special Features topic.

Attachment Rules

By default, attachments may be added and manipulated by anyone upon Issue creation, editing, or display. Rules can be created to allow restrictions to be placed on how attachments for an Issue are to be handled, namely restricting who may access them, what type of access they will have, and whether they can add and/or alter attachments.

BMC FootPrints Service Core goes through the list of rules in the order in which they appear on the attachment rules page until it is determined that an Issue meets the criteria. The rule is then applied. To reorder the list, use the up and down arrows in front of a rule, then save the changes. Click "Edit" to edit a rule, "Delete" to remove it. To add rules, click the "Create New Rule" button.

Create a New Attachment Rule

To create a new attachment rule:

1. Select Administration | Workspace from the FootPrints toolbar, then select the Attachment Rules link from the Automated Workflow section of the administration page.
2. Click the Create New Rule button. The Create New Rule page is displayed.
3. Enter a name for the rule. Make it as descriptive as possible.
4. Apply the rule to All, Customers, or Agents.
5. Select a status, secondary field, and secondary field value for the rule. These are applied as criteria for the attachment rule. That is, the rule is applied when an issue is found to be in the specified status and the secondary field contains the selected value. For example, you might require the agent to attach a file when an issue is in the Open status and a field named "Purchase Order" is set to "Yes".
6. Specify the rule to apply, i.e., what is required or forbidden when the criteria are met. Options are:
   - Create Issue
     - Allow Add—Permit the user to add an attachment when the issue is created. If the checkmark is removed from this field, the checkmark is automatically removed from the Require Add checkbox below it.
     - Require Add—Require an attachment when the issue is created. If this is checked, the Allow Add option is also checked automatically. Also, if this is checked, the Require Add Error Message is displayed.
     - Require Add Error Message—If you select "Require Add", a text box is displayed, allowing you to alter the error message sent to the user when they attempt to submit an Issue without a mandatory attachment. This is optional; If you do not create you own, the default error message is used.
   - Edit Issue—Combinations of the following checkboxes are permitted, with restrictions noted below.
     - Allow Download—Permit the user to download the attachment when the issue is being edited.
     - Allow Add—Permit the user to add an attachment when the issue is created. If the checkmark is removed from this field, the checkmark is automatically removed from the Require Add checkbox below it.
     - Allow Delete/Replace—Permit the user to delete or replace the attachment when the issue is being edited.

- Allow Attach to Email—Permit the attachment to be attached to email notifications when the issue is being edited.
- Require Add—Require an attachment when the issue is created. If this is checked, the Allow Add option is also checked automatically. Also, if this is checked, the Require Add Error Message is displayed.
- Require Add Error Message—If you select "Require Add", a text box is displayed, allowing you to alter the error message sent to the user when they attempt to submit an Issue without a mandatory attachment. This is optional; If you do not create you own, the default error message is used.

- Issue Details—The Allow Download option allows the user to download the attachment when the issue is in the Details view.

7. Enter your password and click the SAVE button to save the rule.

Issue Workflow

This section allows you to define workspace-wide options for Issue behavior under specific circumstances, e.g., subtask creation and closure, linking and moving issues. The options are:

- **Copy/Move Issues Into This Workspace**—Define the workspaces from which issues can be copied/moved into the current workspace.
  - **All Workspaces**—Issues can be copied/moved from any other workspace into the current workspace.
  - **Selected Workspaces**—If this radio button is selected, additional fields are displayed. Click a workspace in the Workspaces list and use the arrows to move the workspace into the Allowed list. To remove a field from the Allowed list, click the workspace and use an arrow button to move it into the Workspaces list. When an agent tries to copy/move an issue into the current workspace, the agent will only be able to copy/move issues from the Allowed list of workspaces into the current workspace.
- **Dynamic Issue Linking**—Select which actions should be performed on Issues in this workspace when they are being automatically updated as a result of a dynamically linked Issue having been updated. The options available are:
  - **Update Title**—Checked by default
  - **Update Status**—Checked by default
  - **Update Description**—Checked by default
  - **Update Priority**—Checked by default
  - **Update Issue Information Fields**—Checked by default
  - **Update Contact Information Fields in Issue**—Checked by default
  - **Copy New Attachments**
  - **Update Contact in Address Book**
  - **Add Contact to Address Book if New**

NOTE

In the case of Issues dynamically linked across different workspaces, statuses, priorities, fields, etc. that are not present in this workspace do not carry over to the Issue in this workspace. Dynamically linked Issues are not updated at all when a Customer performs an edit.

Also, note that, when using Issue Workflow rules, dynamically linked Issues in the receiving Workspace are updated even if the agent's role would not normally allow that agent to update those fields if the Issue Workflow allows the

update. In the case of customers, however, dynamically linked Issues are not normally updated, regardless of the customer's role properties in the receiving Workspace.

- **Status for Moved Issues**—Select the status for the source Issue when moving an Issue from the current Workspace to another Workspace. The default is Closed.
- **Subtask Closure Process**—Upon the closure of the last non-closed subtask, **FootPrints Service Core** can either automatically close the Master Issue or send an email to the assignees of the Master Issue informing them that all subtasks have been closed without changing the Master Issue status. The default is to automatically change the status to Closed.
- **Subtask Sequencing**—This feature sets default Status names for the sequencing of Master Issues. An inactive Status has been built into BMC FootPrints Service Core for Subtasks that are not due to be performed in the sequencing queue. This can be renamed by typing in the Name of Inactive Subtask Status field. By default, when a Subtask becomes active in the sequence, its Status is set to Open, but you can select a different Status upon activation from the Status Upon Activation of Subtask field. By default, when a Subtask is completed, its Status is set to Closed, but you can select a different Status upon completion from the Status Upon Completion of Subtask field.
- **Subtask Automatic Status Change**—Upon changing the status of a Master Issue to one of the statuses selected below, BMC FootPrints Service Core can automatically change the statuses of each subtask to that of the Master Issue.
- **Copy Subtasks Into This Workspace**—When performing a cross-workspace copy of a Master Issue, BMC FootPrints Service Core can either copy or not copy the subtasks as well.
- **Template Subtask Field Inheritance**—Select which fields will inherit their value from the Master Issue when a Subtask gets created from a Subtask Template. Manually created Subtasks always inherit all fields. If there is a value for the Subtask field in a Subtask Template and the field is set on this page to inherit its value from the Master Issue, the field will take the value from the Master Issue and not the Subtask Template. For details on Subtask Templates, refer to Create Subtask Templates.

When you have selected the necessary Issue workflow options, type in your password and click **Save**.

Social Media

Configuring the Workspace to Broadcast Issues to Social Media

Broadcasting Issues to Social Media (Overview)

BMC FootPrints Service Core can be configured to post messages to your organization's Facebook page and/or Twitter feed about specific Issues affecting the entire organization. Once this is configured by the BMC FootPrints Service Core System Administrator and Workspace Administrators, Agents can broadcast individual Issues from the Assignees and Notifications tab/section on the Create Issue and Edit Issue pages.

The following represents the user workflow from configuring the system to viewing Issues in social media:

System Administrator

1. Create a FootPrints Facebook App for Your Organization
2. Create a FootPrints Twitter App for Your Organization
3. Connect Social Media Accounts to FootPrints
4. Activate Social Media Accounts for a Workspace (by System or Workspace Administrators)
5. Select User Roles Allowed to Broadcast Issues to Social Media (All Workspaces)

Workspace Administrators

6. Activate Social Media Accounts for a Workspace

7. Activate Social Media Accounts for a Workspace (by System or Workspace Administrators)
8. Select User Roles Allowed to Broadcast Issues to Social Media (per Workspace)

Agents

9. Broadcast an Issue to Social Media

Customers

- View Issues in Facebook
- View Issues in Twitter

Activate Social Media Accounts for a Workspace

The instructions below describe how to activate or deactivate a social media account for a BMC FootPrints Service Core Workspace. For more information on the social media feature and configuration, see Broadcasting Issues to Social Media (Overview).

Prerequisite

The System Administrator must configure Footprints before Workspace Administrators can activate social media accounts for a Workspace. See Broadcasting Issues to Social Media (Overview).

1. If you are not already logged in, log into FootPrints as a System or Workspace Administrator.
2. Select **Administration | Workspace| Automated Workflow | Social Media Connectors** from the BMC FootPrints Service Core toolbar.
3. To activate the social media accounts for the Workspace, select one or more accounts from the **Inactive Connectors** list, then click the **Activate** button.
   The social media account (e.g., Facebook) appears in the **Active Connectors** list.

Test the connection

1. Click the **Test Active Connectors** button.
   A pop-up window displays the message "OK" when the test is successful.
2. Click the **Close Window** button, then click the **Save** button on the **Social Media Connectors** page.

Next step: Select User Roles Allowed to Broadcast Issues to Social Media

Select User Roles Allowed to Broadcast Issues to Social Media (per Workspace)

The instructions below describe how to select which roles (for a particular Workspace) will be allowed to broadcast Issues to social media (i.e., Facebook or Twitter). System Administrators can allow user roles from every Workspace to broadcast to social media. See: Select User Roles Allowed to Broadcast Issues to Social Media (All Workspaces).

For more information on the social media feature and configuration, see Broadcasting Issues to Social Media (Overview).

Note: System Administrators by default are always allowed to broadcast Issues to social media.

Prerequisite

The System or Workspace Administrator must activate social media accounts for a Workspace before selecting user roles allowed to broadcast Issues to social media. See Broadcasting Issues to Social Media (Overview).

1. If you are not already logged in, log into FootPrints as a System or Workspace Administrator.
2. Select **Administration|Workspace|Users & Roles|Roles|User Roles** from the BMC FootPrints Service Core toolbar.
3. Select a Role (e.g., Agents) from the **Role** drop-down list, then select **Edit role properties**.
4. On the **User Role Properties** page, in the **Social Media** section at the bottom of the page, select the Yes option for **Can send Social Media Broadcast**.

   The Workspace is now configured so that the selected user roles can broadcast Issues to social media.

Next topic: Broadcast Issues to Social Media

Configuring the Workspace to Capture Twitter Tweets to Create Issues

Capturing Twitter Tweets to Create Issues (Overview)

BMC FootPrints Service Core is integrated with Twitter so that Agents can view Twitter messages ("Tweets") on their Homepage and create Issues from them. By default, all Administrators and Agents can customize their Homepages to capture Tweets. To do this, Agents customize their Homepage preferences to capture Tweets from specific Twitter users and display them on their Homepage Dashboard. They select a specific Tweet, click Create, and the Issue page us created. Agents can also configure the feature to capture specific keywords (search queries) in Tweets.

A benefit of this feature is if your organization's service desk has a Twitter account, when Twitter users mention your Twitter username or particular keywords in their tweets, your Agents can view the Tweets in real time on their BMC FootPrints Service Core Homepages. In this way, you and your Agents can proactively manage your service desk by monitoring social media. Your Agents can then decide to create Issues from the Tweets and resolve any requests or problems.

When Workspace Administrators associate a Twitter username with a Contact in the Workspace's Address Book, Issues created from Tweets are automatically populated with the sender's Contact information. Agents can then respond to the sender of the Tweet without leaving the Issue page.

The following represents the user workflow from configuring the system to capture Tweets to viewing Issues created from them.

Note: it is not necessary to configure the Social Media Connectors feature in order to capture Twitter Tweets, since that feature is to broadcast messages from BMC FootPrints Service Core

System Administrator

By default, Agents and Administrators can create Issues from Twitter Tweets. However, System Administrators can prevent this ability system-wide. See: Prevent Agents and Administrators from Creating Issues from Twitter Tweets (System-wide) in the Administrator's Guide **(Optional)**.

Workspace Administrators

By default, Agents and Administrators can create Issues from Twitter Tweets. However, Workspace Administrators can prevent this ability via user roles. See: . Preventing Agents and Administrators from Creating Issues from Twitter Tweets in the Administrator's Guide.

1. Create or edit an Agent Preference Template to capture Twitter Tweets on Agents' Homepages (optional).
   (Agents can capture their own Tweets in addition to the Agent Preference Template set up by Workspace Administrators).
   a. Add the Twitter dashboard component to the Agent Preference Template.
2. Add an Address Book field in the Workspace using the Twitter ID field type.
   This allows Issues to be automatically populated with the FootPrints user ID of the Twitter user (sender).
3. Add the user's Twitter username to the Twitter ID field in his Contact information in the Workspace's Address Book (e.g., @username).

Agents

1. Customize your user preferences to capture Twitter tweets on your Homepage.
   a. Add the Twitter dashboard component to your Homepage.
2. Monitor the Tweets and create Issues from them as necessary.
3. Respond to user from the Issue page (optional).

Customers

1. Send Twitter Tweets mentioning your organization's Twitter username (optional).
2. Track Issuescreated from your Tweets in the Customer Service Portal.

Preventing Agents and Administrators from Creating Issues from Twitter Tweets

By default, all Administrators and Agents can create Issues from Twitter Tweets. However, Workspace Administrators can prevent these roles from creating Issues from Tweets by editing the Workspace user role properties. System Administrators can also edit the system default Workspace Administrator and Agent roles.

To prevent Agent and Administrator roles from creating Issues from Twitter Tweets:

1. If you are not already logged in, log into FootPrints as a Workspace Administrator.
2. Select **Administration|Workspace** from the BMC FootPrints Service Core toolbar, then select **Roles|Roles|User Roles**.
3. Select a Role (e.g., Agents) from the **Role** drop-down list under **User Roles**, then select **Edit role properties**.
4. **On the User Role Properties page, in the Social Media section at the bottom of the page, select the No option for Can create Issue from Twitter:.**

   The Workspace **is now configured so that the selected user roles cannot create** Issues **from Twitter Tweets.**

Other Options

Other Options Overview

This group of functions cover various options that can be set on a Workspace-wide bases. They include:

- Configuration Manager and Service Catalog—Manage Configuration Manager and Service Catalog options. This is only available if your organization has purchased the Configuration Manager add-on module.
- Knowledge Base—Manage the Knowledge Base.
- Calendar and Scheduling—Configure the Workspace Work Schedule and default schedules for Agents.
- Report Templates—Create Report templates for single-Issue reports.
- Edit Lock—View and unlock currently edited Issues or Form Designern lock.
- File Attachments—Manage file attachment directory.
- Colors—Manage the colors of the foreground, background, tables, and text of the interface.

BMC FootPrints Service Core Configuration Manager and Service Catalog

Access the BMC FootPrints Service Core Configuration Manager and Service Catalog administration page by selecting Administration | Workspace from the BMC FootPrints Service Core toolbar, and then selecting the Configuration Manager and Service Catalog link from the Other Options section of the administration page. This link is only available if you have a BMC FootPrints Configuration Manager license.

Propose Creation/Change to CI

If enabled, roles that have permission to propose the creation of or make a change to a Configuration Item (CI) will be able to do so.

Service Catalog

If Service Catalog is enabled for this workspace, roles allowed to use the service catalog will have access to it.

Automatically Link CIs to Issues

This option is available only when the address book is enabled for the workspace. If enabled, if a CI is associated with a contact, it automatically links a CI to an issue when that contact is selected from the address book or upon submission of the issue. When you enable this option, additional options are displayed. As you select options via the checkboxes, drop-down fields with additional options are displayed.

The default behavior in all cases is to automatically link the CI if exactly one match is found.

Options for this feature allow you to configure the system to automatically link CI(s) in the following places as follows:

- Create Issue page for agents (when a contact is selected)—If an issue page is created for an agent when a contact is selected, FootPrints will link the CI to the issue if exactly one CI is found as a match. Otherwise, it take the actions specified in the drop-down fields, as follows:
  - No Matches Found—Options are: Do Nothing, Display the Keyword Search, Display the Advanced Search.
  - Multiple Matches Found—Options are: Link All, Display List of CIs Linked to Contact
- Edit Issue page for agents (when a Contact is selected)—If an issue page is edited by an agent when a contact is selected, BMC FootPrints Service Core will link the CI to the issue if exactly one CI is found as a match. Otherwise, it take the actions specified in the drop-down fields, as follows:
  - No Matches Found—Options are: Do Nothing, Display the Keyword Search, Display the Advanced Search.
  - Multiple Matches Found—Options are: Link All, Display List of CIs Linked to Contact
- Create Request page for customers (after the Request is submitted)—If an issue page is created for a customer when a request is submitted, BMC FootPrints Service Core will link the CI to the issue if exactly one CI is associated with that customer. Otherwise, it take the actions specified in the drop-down fields, as follows:
  - Multiple Matches Found—Options are: Link All, Link 1st CI found of this Type, Link None
- Create Issue through incoming email (agents)—If an issue page is created for an agent via incoming email, BMC FootPrints Service Core will link the CI to the issue if exactly one CI is found as a match. Otherwise, it take the actions specified in the drop-down fields, as follows:
  - Multiple Matches Found—Options are: Link All, Link 1st CI found of this Type, Link None
- Create Request through incoming email (customers)—If an issue page is created for a customer when a request is submitted via incoming email, BMC FootPrints Service Core will link the CI to the issue if exactly one CI is associated with that customer. Otherwise, it take the actions specified in the drop-down fields, as follows:
  - Multiple Matches Found—Options are: Link All, Link 1st CI found of this Type, Link None

Configuring Fields to Display for the Mobile Interface

The inherent drawback of mobile devices is the small viewing area. Configuration on the Mobile Options page, therefore, is concerned with selecting which fields you want to be viewed via the mobile device. When users view a BMC FootPrints Service Core Issue on their mobile devices, they will see only the fields selected here for the Create/ Edit Issue page. However, users will be able to view all fields included on the BMC FootPrints Service Core details page.

All field types (text fields, date/time fields, etc.) are available for the mobile device.

NOTE

Auto-assign does not work for the mobile interface. However, you can use Autofield as an alternative.

To configure mobile device options:

1. From the **BMC FootPrints Service Core** Toolbar, select Administration | Workspace, then select Mobile Options from the Other options section of the main frame. The Mobile Interface Fields page displays.
2. In the multi-select fields listed below, select the fields that you want displayed on mobile devices:
   - Create/Edit Contact Information
   - Create/Edit Issue Information
   - Details Contact Information
   - Details Issue Information

   These fields display all of the fields that are present on a BMC FootPrints Service Core Create/Edit or Details page. Highlight the fields that you want displayed on the mobile device for each page. For example, when displaying contact information, you might only want to display the contact's first and last name, phone number, and email address, and exclude such information as department, employee number, and job title.
3. When you have finished selecting fields, enter your password and click **SAVE**.

Be sure to test your selections after you've made them. You'll want to see how everything looks on a mobile device before making this available to other users.

Mobile View Limitations

Administrators can restrict the fields viewed by users on their mobile devices, but some things work differently on mobile devices than they do in the full version of BMC FootPrints Service Core.

Advanced Field Permissions do not fully apply to mobile devices. If a field is always hidden from a user in BMC FootPrints Service Core, then it will be hidden in the mobile view. However, if a field is sometimes hidden and sometimes visible in BMC FootPrints Service Core, then it will always be visible in the mobile view. In addition, if a field is writable in one status but not writable in another status in the BMC FootPrints Service Core, it is always writable in the mobile view. Administrators should take these limitations into consideration when selecting fields for the mobile view.

Other restrictions are:

- There is no way to stop an issue from being closed via BMC FootPrints Mobile.
- There is no way to stop particular agents from using BMC FootPrints Mobile. Once licensed, any agent can use it.
- Descriptions cannot be pulled from the Knowledge Base.
- Contact cannot be selected from a Quick Issue template.

- Automatic Time Tracking is not supported.
- There is no link to the calendar from the Date-Time field.

Knowledge Base Administration

Knowledge Base Administration

The Knowledge Base is a place to record, organize, and manage important information for a BMC FootPrints Service Core Workspace. This can include, but is not limited to: Solutions to common problems, answers to Frequently Asked Questions, patches, and documents. By utilizing the Knowledge Base feature, you can turn the past experiences of individual customers and Agents into a database of Solutions for all Workspace members. This can assist in Agents in finding resolutions to recurring problems and in empowering customers to find answers to their questions without submitting a Request.

The following administration options are available for the Knowledge Base:

- Knowledge Base Approvals—Require Solutions to be approved before being published.
- Manage External Knowledge Bases—Add, edit, and re-order the external Knowledge Bases available for searching by Agents.
- Field Availability—Exclude some fields from the Solution form.
- FAQ Administration—Create and manage FAQ categories in the Knowledge Base.
- Auto-Filter Fields —Select fields to use as filters on Knowledge Base searches from the Issue create/edit form.
- Auto-Suggest Solutions —Display suggested Knowledge Base results to users before accepting their Issue submission.
- Auto-Close Issues —Auto close Issues when a user selects a Solution.

Knowledge Base Approvals

Knowledge Base Approvals

By default, Agents can submit Solutions to both the Public and Internal Knowledge Bases. Using role permissions, you can limit certain users from submitting to the Knowledge Bases and/or require some users to receive approval before their Solutions are published. This allows the administrator to have better control over what information is published to customers and to review Solutions before customers see them.
The following topics are in this section:

- Knowledge Base Role Permissions for Agents
- Selecting Approvers
- Knowledge Base Role Permissions for Customers
- Using Knowledge Base Approvals

Knowledge Base Role Permissions for Agents

To limit users from creating Solutions or to require them to first get approval, you must change the permissions for the users' Role.

To configure Knowledge Base permissions for a User Role:

1. Select Administration | Workspace | User Roles from the BMC FootPrints Service Core Toolbar.

2. Select the role from the drop-down and click Edit Role Properties.
3. If you have never configured roles for this Workspace, you can select the default Agent role to apply the permission to all Agents in the Workspace.
4. If you have one or more custom roles, you can choose to apply the permission to one or more roles.
5. If you would like to require only certain Agents to get approval to publish Solutions, and you've never configured roles, you can create a new role and then apply it to those users. Refer to User Roles for complete information.
6. In the Knowledge Base section of the Agent Role Properties page, there are two permission options:
   - **Ability to add to the Public Knowledge Base**—For creating Public Solutions.
   - **Ability to add to the Internal Knowledge Base**—For creating Internal Solutions.
7. For each type of Solution, there are three options:
   - **Yes**—User can create Solutions that are published immediately.
   - **Needs Approval**—User can create Solutions, but they must be approved by an approver (an administrator or other Workspace member designated as an approver; refer to Selecting approvers for more information) before they can be published to the Knowledge Base.
   - **No**—User cannot create Solutions of this type.
8. If Needs Approval is selected for one of the Solution types for at least one role, then you must designate one or more Knowledge Base Approvers for the Workspace. This is done on the Workspace Administration | Knowledge Base page (see below).
9. In the Edit section of the Roles page, there are two additional permission options for Solutions:
   - **Editing Public Solutions**—If this is enabled, the user can edit existing Solutions in the Public Knowledge Base.
   - **Editing Internal Solutions**—If this is enabled, the user can edit existing Solutions in the Internal Knowledge Base.

NOTE

These two options do not apply to approvals of pending Solutions, only to published Solutions. Whether or not a user can edit a pending Solution is based on whether the user is an approver and whether the user is the one who submitted the Solution for approval.

10. When you are finished changing the Knowledge Base permissions, scroll down to the bottom of the screen, enter your password, and click **GO**.

NOTE

The permissions selected above only apply to creating and editing Solutions. Agents can always view and search the Knowledge Base, both Internal and Public.

Selecting Approvers

When Agents are required to receive approval before publishing Solutions, one or more users must be designated as approvers. These users (usually administrators) receive email each time a Solution is submitted for approval and can approve, edit, or reject the Solution.

To select Approvers:

1. Select Administration | Workspace | Knowledge Base from the BMC FootPrints Service Core Toolbar.

2. A list of all internal users in the Workspace is displayed in the Knowledge Base Approvals section. Select the users that you want to be approvers for the Knowledge Base from this list.
3. By default, any administrators in the Workspace are pre-selected as approvers. You can leave them selected, designate only one or more of them, or select a completely different user or users.
4. Users selected as approvers should have permission to submit Solutions without approval.
5. Users selected as approvers can approve all pending Public Solutions and pending Internal Solutions for the Workspace for all users that require approval. You cannot designate certain approvers for certain users or different approvers for Internal and Public Solutions.
6. When you are finished selecting the Knowledge Base approvers, scroll to the bottom of the screen, enter your password, and click **Save**.

Knowledge Base Role Permissions for Customers

Customer users cannot create, edit or submit Solutions for approval. Customers can only view Solutions in the Public Knowledge Base, and view Public FAQs. There is a permission option for Customer Roles that determines whether those Customers can view the Public Knowledge Base and FAQs.

To configure Knowledge Base permissions for a Customer User Role:

1. Select Administration | Workspace | User Roles from the BMC FootPrints Service Core Toolbar.
2. Select the customer role from the drop-down and click Edit Role Properties.
3. If you have never configured roles for this Workspace, you can select the default Customer Read/Submit role to apply the permission to all Customer Read/Submit users in the Workspace.
4. If you are using multiple built-in or custom customer roles, you can apply the permission to one or more of these roles. Refer to User Roles for complete information.
5. There is an option for Knowledge Base in the Miscellaneous section of the Customer Role Properties page. If Yes is selected, users can view and search the Public Knowledge Base and FAQs. If No is selected, the Public Knowledge Base is hidden from the users. Customers can never view the Internal Knowledge Base or FAQs.
6. The next option, Default home page, can be configured to display Solutions or FAQs to the customers when they first log into BMC FootPrints Service Core (assuming they have permission to view the Knowledge Base), or to display their Requests or the New Request form (if they are not allowed to view the Knowledge Base).
7. When you are finished changing the Knowledge Base permissions, scroll to the bottom of the screen, enter your password and click **GO**.
8. If the users of that role are not allowed to view the Public Knowledge Base, the Search Knowledge Base options are removed from their interface.

Using Knowledge Base Approvals

Agents can be required to receive approval before their Solutions are published. This is configured by the Workspace Administrator. Refer to Knowledge Base Role Permissions for Agents for instructions.

Once approvals are configured for at least one user role, the approval process is in place automatically. The workflow of the Knowledge Base approval process is fixed and includes automatic email notification, new options for Solutions for the approvers, and two new special Statuses: Pending Internal Solution and Pending Public Solution.

Approval Workflow

1. When an Agent who requires approval creates a new Solution, the Solution automatically receives the Pending Internal Solution or Pending Public Solution status (depending on the Solution type).

2. All Knowledge Base approvers for the Workspace receive an email notifying them that there is a new Public or Internal Solution requiring approval.
3. Approvers can view the pending Solution by selecting Pending Internal Solutions or Pending Public Solutions from the Display drop-down list on their homepage. These queues are listed under the Knowledge Base heading in the Display drop-down.
4. The approver can view the Details of the Solution by selecting the Solution number or Title from the list.
5. The Details of the pending Solution include the Title, the Description, the name of the Submitter, and any other field data.
6. The approver also gets three approval buttons for the pending Solution:
   - **Approve**—This changes the status to Public Solution or Internal Solution (depending on the type). For Public Solutions, the Solution is displayed to all users who have access to that Knowledge Base. The Solution is no longer listed in the pending Solutions queue.
   - **Edit and Approve**—If selected, the Edit Solution page is displayed. The approver can make any changes desired to the Solution. Once the approver clicks **Save**, the Solution changes status and is published to the correct Knowledge Base (as described above).
   - **Disapprove**—If selected, the Disapprove Pending Solution page is displayed. The approver can give a reason for the rejection. The Submitter receives an email notification of the rejection, with the reason for the rejection. This reason is also written to the History of the Solution, but not to the Description.
7. When a Solution is rejected, the Submitter receives an email with the reason given for the rejection. The Agent can view the Solution by selecting Pending Internal Solutions or Pending Public Solutions from the Display drop-down list on his homepage. These queues are listed under the Knowledge Base heading in the Display drop-down. The Agent only sees pending Solutions that the Agent personally submitted.
8. The Submitter now edits the Solution, based on the comments made by the approver. Once the update is submitted, the approver receives an email notification and the workflow continues until the approver selects Approve for the pending Solution.

Once a Solution is approved, the status is changed to Public Solution or Internal Solution (depending on the type). For Public Solutions, the Solution is displayed to all users who have access to the Knowledge Base (all Agents and any customers who have access to the Public Knowledge Base). For Internal Solutions, the Solution is available to all Agents. The Solution is no longer listed in the Pending Solutions queue.

Manage External Knowledge Bases

Manage External Knowledge Bases

Agents can search external Knowledge Bases from the Search Knowledge Base option in the Create Issue and Edit Issue pages and from the BMC FootPrints Service Core Toolbar. When a user enters a keyword and submits the search to an external Knowledge Base, the results are displayed in a new browser window.

BMC FootPrints Service Core comes with a number of popular external Knowledge Bases pre-configured. The Workspace Administrator has the ability to remove or re-order these selections and to add the list of external Knowledge Bases.

To manage the External Knowledge Bases:

1. Select Administration | Workspace | Other Options | Knowledge Base from the BMC FootPrints Service Core Toolbar. The External Knowledge Bases dialog is displayed in the second section of the resulting page.
2. The current Knowledge Bases are listed in the dialog box. The various controls are explained in the following topics:

- Built-in Knowledge Bases
- Add a New Knowledge Base
- Edit/Re-order/Delete Knowledge Bases

Built-in Knowledge Bases

The following is the list of Knowledge Bases that are linked in BMC FootPrints Service Core by default. The links to public sites are provided as-is. BMC is in no way affiliated with the respective companies.

- BMC FootPrints Service Core **Internal Knowledge Base**—Points to the Internal Knowledge Base for the current Workspace.
- BMC FootPrints Service Core **Public Knowledge Base**—Points to the Public Knowledge Base for the current Workspace.
- BMC FootPrints Service Core **Internal/Public Knowledge Bases**—Points to both the Public and Internal Knowledge Bases for the current Workspace.
- **Adobe**—Adobe Software's public site.
- **Apple**—Apple public site.
- **Google Groups**—Searches public groups on the Google Groups site.
- **Hewlett-Packard**—Hewlett-Packard public site.
- **Microsoft Technet**—Microsoft public site.
- **Novell**—Novell public site.

Add a New Knowledge Base

This option is available under Administration | Workspace | Other Options | Knowledge Base | External Knowledge Bases from the BMC FootPrints Service Core Toolbar.

To add a new Knowledge Base:

1. **Name**—Give a name to the Knowledge Base. This name is displayed to users, e.g., "Widget Knowledge Base".
2. **URL**—Enter the URL for the Knowledge Base. The Knowledge Base must have a web interface (i.e., be accessible via a web URL) and can either be on the Internet or on your Intranet.
3. The URL must be formatted in a specific way:
   a. Enter the full URL for the site, followed by the syntax used by that site's search engine.

NOTE

You must obtain the correct syntax from the administrator of that site, or by analyzing the search syntax used by that site.

   b. At the end of the search string, enter **%s** in place of the actual search string that is entered by the user.

      For example:

      http://groups.google.com/groups?hl=en&lr=&safe=off&site=groups&q=%s

   c. When a user submits a search, the **%s** variable is replaced by the string they enter. If the user enters "password" to the Google Groups site, BMC FootPrints Service Core submits:

      http://groups.google.com/groups?hl=en&lr=&safe=off&site=groups&q=password

4. **Language**—BMC FootPrints Service Core can support multiple languages. Select the language for the new Knowledge Base (defaults to the system default). This allows you to link to different Knowledge Bases for different languages.
5. Click the Add Knowledge Base button.
6. The new Knowledge Base is not added to BMC FootPrints Service Core until you enter your password and click **Save** at the bottom of the page.

Link to a FootPrints Service Core Knowledge Base

This option is available under Administration | Workspace | Knowledge Base | External Knowledge Bases from the BMC FootPrints Service Core Toolbar.

To add a link to the FootPrints Service Core Knowledge Base:

1. **Name**—Give a name to the Knowledge Base. This name is displayed to users, e.g., "Help Desk Knowledge Base".
2. **URL**—In the URL box, enter the special syntax for the BMC FootPrints Service Core Knowledge Bases:
   a. To point to the Public Knowledge Base for the current Workspace, enter:

      FOOTPRINTS

      No additional syntax is needed, such as a URL or the **%s** variable.

   b. To point to the Internal Knowledge Base for the current Workspace, enter:

      FOOTPRINTSINTERNAL

   c. To point to the combined Public and Internal Knowledge Bases for the current Workspace, enter:

      FOOTPRINTSALLKB

   d. To point to the Public Knowledge Base for a different Workspace, enter:

      FOOTPRINTS-projID

      where projID is the ID number of that Workspace. This can be obtained by selecting Administration | System | Workspaces | List All Workspaces. To link to the Public Knowledge Base for the Bug Tracking Workspace, for example, which has an ID of 3, you would enter:

      FOOTPRINTS-3

   e. To point to the Internal Knowledge Base for a different Workspace, enter:

      FOOTPRINTSINTERNAL-projID

      Using the same method as described in the previous step.

   f. To point to the combined Public and Internal Knowledge Bases for a different Workspace, enter:

      FOOTPRINTSALLKB-projID
3. **Language**—Select the language for the new Knowledge Base (defaults to the system default). This allows you link to different Knowledge Bases for different languages.
4. Click the Add Knowledge Base button.
5. Enter your password and click **Save** at the bottom of the page.

Edit Knowledge Bases

These options are available by selecting Administration | Workspace | Knowledge Base | External Knowledge Bases from the BMC FootPrints Service Core Toolbar.]

To Edit a Knowledge Base

1. Select the Knowledge Base in the Knowledge Bases dialog box.
2. Click **Edit**. The details are displayed in the appropriate fields.
3. Make any changes. For example, you can change the display name for the Knowledge Base or update the syntax, if it has changed.
4. Click Complete Edit.

To Delete a Knowledge Base

1. Select the Knowledge Base in the Knowledge Bases dialog box.
2. Click **Remove**.

To Re-order the Knowledge Bases

1. Highlight a Knowledge Base in the Knowledge Bases dialog box.
2. Use the up and down arrows to move it's position or click Sort Alphabetically to sort them alphabetically from A-Z.

Field Availability

By default, solutions contain many of the same fields found in Issues, including Title, Description, and Issue Information (workspace) fields. Some other fields that are never included in solutions, including Contact Information, Time Tracking, and Assignment, as they do not apply to solutions.

There may be some workspace fields that also do not apply to solutions, such as Follow-up Date. You can exclude these fields from appearing in solutions, both on the Create Solution screen and in the Details of a solution.

Additionally, some fields that appear in solutions may not be appropriate for issues. You can include fields in solutions and exclude them from issues.

To exclude some workspace fields from solutions:

1. Select Administration | Workspace | Knowledge Base from the BMC FootPrints Service Core Toolbar.
2. Highlight the fields to be excluded from solutions in the **Select fields to be hidden in Solutions** list in the Field Availability section. To highlight multiple fields, hold down the CTRL key.
3. Enter your password and click **Save** .

Solutions in the Knowledge Base no longer contain the fields excluded.

To exclude some workspace fields from issues:

1. Select Administration | Workspace | Knowledge Base from the BMC FootPrints Service Core Toolbar.
2. Highlight the fields to be excluded from solutions in the **Select fields to appear in Solutions** list in the Field Availability section. To highlight multiple fields, hold down the CTRL key.
3. Enter your password and click **Save**.

Issues in the Knowledge Base no longer contain the fields excluded.

Notes and Restrictions

- Excluded fields are excluded from both Internal and Public Solutions.

- Workspace fields that are part of a dynamic dependency group or that normally appear in a pop-up dependency window cannot be excluded.
- Public fields that are excluded are no longer visible to Customers when they view Public Solutions or to Agents when creating and viewing Public Solutions.
- Internal fields that are excluded do not appear for Agents when creating and viewing both Internal and Public Solutions (internal fields are never visible to customers).
- Existing Solutions that contain data for the excluded fields no longer display the data.

Setting up Auto-filter Fields to Filter Solutions

By default, when an Agent performs a Knowledge Base search from an Issue's Description field, the most popular Solutions are displayed, regardless of the Issue's classification (such as a hardware Issue).

The Auto-filter Fields feature in Knowledge Base administration allows Workspace administrators to select fields to use as a filter when users search the Knowledge Base from the create/edit Issue pages.

Auto-filter Fields are also used with the Auto-suggest Solutions feature.

Examples

- If an Issue has a field called Category and the choices are Hardware and Software, and you have set up Auto-filter Fields with Category as a Filter Field, when a user searches the Knowledge Base from within a Hardware Issue, the results will automatically filter out all Solutions except for Hardware Solutions.

- The more fields you add to the Filter Fields list, the more specific the Knowledge Base search will become. For example, if an Issue has another field called Subcategory and the choices are Desktop and Laptop, and you have also set up Auto-filter Fields to include the Subcategory field, when a user searches the Knowledge Base from within a Hardware/Desktop Issue, the Knowledge Base search will only return Solutions classified as Category: Hardware and Subcategory: Desktop. As you add more fields to the Filter Fields list, the Knowledge Base searches become more specific and return fewer results.

To select Auto-filter Fields to use as a filter for the Knowledge Base search with Issues:

1. Select **Administration | Workspace | Knowledge Base** from the BMC FootPrints Service Core Toolbar.
2. In the **Auto-filter Fields** section of the **Knowledge Base** page, select a field or fields from the **Select Fields** list, then click the **Add** button to move the field(s) to the **Filter Fields** list.
3. Enter your password and click the **SAVE** button.

To remove selected fields from the Filter Fields list:

1. Select the field or fields to remove from the **Filter Fields** list, then click the **Remove** button.
   This moves the field(s) back to the **Select Fields** list.
2. Enter your password and click the **SAVE** button.

See also: Enabling Auto-suggest Solutions for Issues

Enabling Auto-suggest Solutions for Issues and Requests

By default, Agents and Customers can submit Issues without first searching the Knowledge Base for an existing Solution. Administrators may instead prefer that users first search the Knowledge Base before submitting Issues. This gives Agents the opportunity to more quickly resolve Issues, and for Customers to resolve their Requests on their own without having to contact your Support desk.

The Auto-Suggest Solutions feature, when enabled in Knowledge Base administration, will require a user to first view the Auto-suggested Solutions that exist in the Knowledge Base which match the criteria he enters in the Issue Information before he can submit the Issue. The user can select a Solution or browse the Knowledge Base. If a Solution does not resolve his Issue, he can continue entering information in the Issue and submit it.

Customers will be able to view auto-suggested Solutions from the Public Knowledge Base. Agents can view the auto-suggested Solutions from the Internal and Public Knowledge Bases.

The Auto-Suggest Solutions feature can be set up for Agents, Customers, or both.

Prerequisite

The Workspace Administrator must first set up Auto-filter fields to filter solutions.

To enable Auto-suggest Solutions for Issues:

1. Select **Administration | Workspace | Knowledge Base** from the BMC FootPrints Service Core Toolbar.
2. In the **Auto-Suggest Solutions** section of the **Knowledge Base** page, select one of the following options:

   - Agents
   - Customers
   - Both agents and customers

6. Enter your password and click the **SAVE** button.

To disable the Auto-Suggest Solutions feature:

Select the **Disabled** option under **Auto-Suggest Solutions**.

Setting Issues to Automatically Close With Solutions

By default, when an Agent searches the Knowledge Base from the Issue's Description field and selects a Solution to resolve theIssue, the Agent can indicate that the Solution resolves his Issue. Then the Agent can continue to enter the remaining information on the Issue page. (It doesn't matter whether or not the Auto-Suggest Solutions feature is enabled).

Workspace Administrators can set up the Auto-close Issues feature so that Issues automatically close when a user selects a Solution. (This is the default setting for Customers; for Agents, the default setting is to not close the Issue, and to remain on the create/edit page.)

NOTES

- When both the Auto-Suggest Solutions feature and the Submission Tracking feature are enabled, “Web – Auto Suggest”, is automatically added to the Submission Tracking field to track customer-submitted Issues that triggered successful automatic Knowledge

Base searches. Successful searches are defined as searches which resulted in the user being able to indicate that the solution resolved their Issue. In any other case the Submission Tracking value for Customer submissions will simply be displayed as “Web”.

- When the Auto-Close Issues feature is set to “Auto Close”, it will close issues even if the Agent or Customer role does not have permission to close issues.
- When the Auto-Close Issues feature is set to “Auto Close”, fields that are mandatory for the Closed status are filled in from the Solution article. If values for some mandatory fields are not found, the user will be prompted to manually fill in the fields before the Issue can be submitted.

To set Issues to automatically close when an Agent selects a Solution:

1. Select **Administration | Workspace | Knowledge Base** from the BMC FootPrints Service Core Toolbar.
2. In the **Auto-close Issues** section of the **Knowledge Base** page, select one of the following options:

   - Do not Auto-Close and remain on create / edit page
     This is the default setting for Agents.
   - Auto-Close and exit page
     This is the default setting for Customers.

5. Enter your password and click the **SAVE** button.

FAQ Administration

The FAQ (Frequently Asked Questions) categories are available to the Agent when searching the Knowledge Base. FAQs are also available to customers who have access to BMC FootPrints Service Core. These categories are created and maintained by the Workspace Administrator for each Workspace. The categories are defined by advanced search criteria and named and saved by the administrator. Each time a category is accessed, it returns the latest Solutions that match the criteria defined for that category.

Create FAQ Category

To create an FAQ category:

1. Select Administration | Workspace, then select Knowledge Base in the mainframe under Other Options. The Knowledge Base administration page is displayed. The FAQ Setup section is the first section on the Knowledge Base administration page.
2. To make a public FAQ category, i.e., accessible to both agents and customers, select the PUBLIC link. To make an internal FAQ category, i.e., accessible to agents only, select the INTERNAL link.
3. To add the FAQ category, click the Add New Category button. The Search Criteria page is displayed.
4. Select the criteria for the FAQ. Options include Title, Description, Keyword, Date and Age, and all Workspace fields for the current Workspace. For example, to return Solutions with the word “password” in the Solution, enter password for the keyword.
5. Select the Advanced options, which allow you to determine the order of display for the Solutions within the category. The Solutions that are returned can be ordered by virtually any field, including popularity.
6. At the bottom of the form, name the FAQ and click **GO**.
7. The current matching Solutions are displayed in the main frame. In addition, the category appears in the FAQ list for Agents and customers in the current Workspace. Each time someone accesses the FAQ, the latest Solutions that match the criteria selected are returned.

Create FAQ Sub-categories

To create an FAQ sub-category:

1. Select Administration | Workspace, then select Knowledge Base in the mainframe under Other Options. The Knowledge Base administration page is displayed. The FAQ Setup section is the first section on the Knowledge Base administration page.
2. To create a sub-category to a public FAQ category, select the **PUBLIC** link. To create a sub-category to an internal FAQ category, select the **INTERNAL** link.
3. Click on the name of the FAQ category in the list of FAQ categories underneath the **PUBLIC/INTERNAL**.
4. Click the **GO TO** button. A list of sub-categories, if there are any, is displayed.
5. To add a sub-category, click on the **Add New Sub-category** button. To add an additional level of sub-category to an existing sub-category, click on the existing sub-category, click the **GO TO** button again, then click on the **Add New Sub-category** button. The Search Criteria page is displayed.
6. Select the criteria for the sub-category. Options include Title, Description, Keyword, Date and Age, and all Workspace fields for the current Workspace. For example, to return Solutions with the word “password” in the Solution, enter password for the keyword.
7. Select the Advanced options, which allow you to determine the order of display for the Solutions within the sub-category. The Solutions that are returned can be ordered by virtually any field, including popularity.
8. At the bottom of the form, name the sub-category and click **GO**. The sub-category is created and you are returned to the previous page. The new sub-category is displayed in the list.

Edit FAQ Category/Sub-category

To edit a FAQ category or sub-category:

1. Select Administration | Workspace, then select Knowledge Base in the mainframe under Other Options. The Knowledge Base administration page is displayed. The FAQ Setup section is the first section on the Knowledge Base administration page.
2. Select the appropriate link, **PUBLIC** or **INTERNAL**, to display the FAQ category or sub-category that is to be edited.
3. Click on the category in the list of FAQ categories. If you want to edit a sub-category, click on the **GO TO** button. Continue to select sub-categories and click the **GO TO** button as necessary to navigate to the category that you want to edit.
4. Click on the category or sub-category that you want to edit in the list of categories/sub-categories.
5. Click the **Edit** button. The Search Criteria page is displayed with all of the current settings for that category/sub-category.
6. Change the settings in the Search Criteria page as needed.
7. When you have finished changing the settings, click the **GO** button. The new settings are saved and the previous page is displayed.

Change the Order of FAQ Categories/Sub-categories

To change the order in which FAQ categories/sub-categories are displayed:

1. Select Administration | Workspace, then select Knowledge Base in the mainframe under Other Options. The Knowledge Base administration page is displayed. The FAQ Setup section is the first section on the Knowledge Base administration page.
2. Select the appropriate link, **PUBLIC** or **INTERNAL**, to display the FAQ category or sub-category that is to be edited.

3. Click on the category in the list of FAQ categories. If you want to edit a sub-category, click on the **GO TO** button. Continue to select sub-categories and click the **GO TO** button as necessary to navigate to the category that you want to edit.
4. Click on the category or sub-category that you want to edit in the list of categories/sub-categories.

Delete FAQ Category/Sub-category

To delete a FAQ category or sub-category:

1. Select Administration | Workspace, then select Knowledge Base in the mainframe under Other Options. The Knowledge Base administration page is displayed. The FAQ Setup section is the first section on the Knowledge Base administration page.
2. Select the appropriate link, **PUBLIC** or **INTERNAL**, to display the FAQ category or sub-category that is to be deleted.
3. Click on the category in the list of FAQ categories. If you want to delete a sub-category, click on the **GO TO** button. Continue to select sub-categories and click the **GO TO** button as necessary to navigate to the category that you want to delete.
4. Click on the category or sub-category that you want to delete in the list of categories/sub-categories.
5. Click the **Remove** button. A confirmation window is displayed. The confirmation window warns that any sub-categories beneath the category you are deleting will also be deleted.
6. Click the **OK** button in the confirmation window. The category or sub-category, as well as all sub-categories beneath it, is deleted.

Calendar and Scheduling

Calendar and Scheduling

A Workspace Work Schedule can be defined for a Workspace and for individual Agents. Regular working hours, days off, and holidays can be defined by the Workspace Administrator. Escalation rules can be configured to follow the calendar. Holidays and exceptions to the regular schedule are also defined here. In addition, administrators can set a schedule for a second shift.

Select Administration | Workspace | Calendar and Scheduling | Work Schedule to access the administrative options for these features.

Schedules are created for the entire Workspace and for individual Agents. The corporate schedule, as reflected in the Workspace Work Schedule, can be tied to the Agent schedule for company holidays, or separated if Agents need to be available to work when the organization is officially closed. These options can be defined as follows:

- **Define Work Schedule for Workspace and Individual Agents**—The work schedule for the Workspace default and for individual Agents can be defined here, including normal working days and hours, vacations, and holidays. Select the Workspace or an agent from the drop-down, click **Add**, and proceed to:
    - Manage the Workspace Schedule or
    - Manage the Agent Schedule
- **Define options for Availability**—The following options are available for determining availability of Agents throughout BMC FootPrints Service Core:
    - **Auto Check Availability**—If enabled, the availability of assigned Agents is automatically checked when creating or editing Issues based on the current date/time or based on the value in a date/time field (such as Work Scheduled Date)

- **Date Fields for Availability—**When viewing the availability matrix from the Create Issue, Edit Issue, or Appointment page, one or more date or date/time fields can be used as criteria for determining Agent availability in addition to the current date/time. Select the fields to be included.

NOTE
If no date fields are highlighted here or no date fields exist in the workspace, the current date/time at the time of assignment is used to determine availability when assigning Issues.

Type in your password to save changes and click **Save.**

Using Availability with Round-robin Team Assignment

In addition to using Agent availability when creating appointments or assigning Agents to Issues manually, Agent availability can be taken into account when auto-assigning Issues using the Round-robin Team Assignment feature. When enabled, this option assigns each Issue that is assigned to the Team to the next available Team member in the list. It is applied when Issues that are assigned to a Team manually, via auto-assignment, and via an Escalation rule. Refer to Round-robin Team Assignment for more information.

Manage Workspace Schedule

The work schedule can be defined for the Workspace as a whole or for individuals in the Workspace, including normal working days and hours, vacations, and holidays, by selecting Administration | Workspace | Calendar and Scheduling. In addition, a second shift can be defined for the entire Workspace or for individuals in the Workspace.

NOTE
Any changes made to the workspace schedule may affect future Executive Dashboard calculations.

To define the work schedule:

1. Select Administration | Workspace | Calendar and Scheduling. The Calendar and Scheduling page is displayed.
2. The current Workspace name is displayed in the drop-down in the Work Schedule section. If other schedules were created in the current Workspace, they are also displayed in the drop-down. The Workspace radio button is selected by default. If you wish to set a schedule for an Agent in the Workspace, you must select the Agent radio button.

NOTE
If a work schedule is defined for an Agent, the Agent's work schedule is used in determining availability. If there is no work schedule for an Agent, the Workspace work schedule is used.

3. Click the **Add** or the **Edit** button. The Work Schedule page is displayed.
4. FootPrints Service Core allows you to define more than one work schedule per workspace. In the Custom Work Schedule section, name this schedule.
5. To define the Workspace Work Schedule, select options in the following sections on this screen:
   - **Normal Work Week—**Define the normal work days and working hours for the Workspace. For each day of the week, do the following:
     - For each day worked, check the Work Day box and select a time range by entering start and stop times in the drop-down boxes.
     - For 24-hour work days, check the 24 Hour Day option.
     - Use the **Toggle shift** button to set a second shift work schedule. The **Toggle shift** button displays a second set of work schedule times for the selected day.
   - **Holidays/Exceptions—**Define special days when the normal work days and hours are not in effect.

- **Add New Holiday/Exception**—To add a new holiday or exception to the Workspace calendar, specify the following:
  - **Type**—For days off, such as a holiday, select Day Off. For extended closing periods, select Date Range. For half-days or other exceptions (including, for example, a special Saturday that is worked), select Partial Day.
  - **Name**—Give the holiday or exception a name, like Independence Day, Closed for Inventory, etc.
  - **New Date**—Provide the date of the holiday or exception.
  - **End Date**—When Date Range is selected, also provide the date when the holiday ends (this should be the last day of the holiday, not the first day back).
  - **Start Time/End Time**—When Partial Day is selected, you must provide the start and end time of the special time that is included in the work schedule (not the time that will not be worked). This is useful when you need to define additional work days for a busy season or to define a half-day. For example, if 8am-12pm is selected on a day where the normal work hours are 8am-5pm, the default Agent's schedule only shows availability for 8am-12pm for that day.
  - Click **Add New** to add the holiday or exception.
- **Modify Existing Holiday/Exception**—To modify an existing holiday or exception, select it from the list and click **Modify**. The characteristics of the holiday/exception populate the options in that section. Make the changes.
- **Delete Existing Holiday/Exception**—Select the holiday/exception to delete and click **Delete**.

- **Reporting Options**—Using these reporting options only make sense when you have the same number of work hours defined for each day in the week.
  - **Make this the default work schedule**—If you wish to use the schedule you've defined for the Workspace when calculating the age of issues for reporting purposes, check this box.
  - **Time Format**—Define the format for presenting time-based calculations for reporting.
  - **Define Work Day**—Define the number of hours in a work day for reporting calculations. If the Time Format is specified as "Days, Hours, Minutes" and the work schedule is in effect, then a work day is defined as the number of hours you specify in the Define Work Day field.
- **SLA Options**
  - **Define Work Day**—Define the number of hours in a work day for reporting purposes when defining reports for SLAs. One day of work schedule time is configured to be equal to this many hours of the work schedule time calculating the SLA due date, not the next day for which work is scheduled.

6. To apply any changes made in this section, enter your password and click **Save**.

Manage Agent Schedule

The Workspace Administrator can create and manage Agents' work schedules. Agents can also create and modify their own schedules through the BMC FootPrints Service Core personal Calendar.

To manage an individual Agent's work schedule as an Administrator, under Administration | Workspace | Other Options | Calendar and Scheduling, click the Agent radio button, select an Agent from the drop-down list, then click the **Edit** button. The Work Schedule page is displayed.

NOTE

If a work schedule is defined for an Agent, the Agent's version of the work schedule is used in determining availability. If there is no work schedule for an Agent, the Workspace work schedule is used.

The Agent's work schedule can be defined here, including normal working days and hours, vacations, and holidays. If an Agent does not have a work schedule defined, the Workspace schedule is used to determine availability.

The following options are available:

- **Normal Work Week**—Define the normal work days and working hours for the Agent. For each day of the week, do the following:
  - For each day worked, check the Work Day box and select a time range by entering start and stop times in the drop-down boxes.
  - For 24-hour work days, check the 24 Hour Day option.
- **Holidays/Exceptions**—Define special days when the normal work days and hours are not in effect.
  - **Add New Holiday/Exception**—To add a new holiday or exception to the schedule, specify the following:
    - **Type**—For days off, such as a holiday, select Day Off. For vacations and extended leaves, select Date Range. For half-days or other exceptions (including, for example, a special Saturday that is worked), select Partial Day.
    - **Name**—Give the holiday or exception a name, like Independence Day, Closed for Inventory, etc.
    - **New Date**—Provide the date of the holiday or exception.
    - **End Date**—When Date Range is selected, also provide the date when the holiday ends (this should be the last day of the holiday, not the first day back).
    - **Start Time/End Time**—When Partial Day is selected, you must provide the start and end time of the special time that is included in the work schedule (not the time that will not be worked). This is useful when you need to define additional work days for a busy season or to define a half-day. For example, if 8am-12pm is selected on a day where the normal work hours are 8am-5pm, the default Agent's schedule only shows availability for 8am-12pm for that day.
    - Click **Add New** to add the holiday or exception.
  - **Modify Existing Holiday/Exception**—To modify an existing holiday or exception, select it from the list and click **Modify**. The characteristics of the holiday/exception populate the options in that section. Make the changes.
  - **Delete Existing Holiday/Exception**—Select the holiday/exception to delete and click **Delete**.

To apply any changes made in this section, enter your password and click **Save**.

Report Templates

Custom report templates can be created and used for single-Issue reports generated from the Homepage using the Quick Action Checkbox dialog, as well as from the Details page of an Issue. For example, templates can be made for Work Orders, Return Merchandise Authorization forms (RMA), and Purchase Orders.

To create a Report template:

1. Select Administration | Workspace | Report Templates from the BMC FootPrints Service Core Toolbar.
2. An HTML page must be created for the template. Use your favorite HTML editor to create the file. You can include your own headings, text, logo, etc.
3. A list of keywords for BMC FootPrints Service Core fields can be inserted into the HTML page. A list of keywords for your Workspace can be viewed by clicking the link for instructions under Create and Load templates. You can print this for easy reference when creating templates.

4. Once the file is completed, click the link to upload the file to the BMC FootPrints Service Core server.
5. Each time you generate a single-issue report,BMC FootPrints Service Core scans the file for data keywords and substitutes Issue data for the keywords.
6. Templates can be edited and deleted from the same screen in the Manage Report Templates section.

The report format is now available when doing a single-issue report from the Details screen of an Issue and from the Homepage Quick Action Checkbox dialog.

Edit Lock

The Edit Lock feature prevents multiple Agents from working on the same Issue at one time or Administrators from working on the same form in Form Designer at the same time.. If enabled, when someone tries to access an Issue that another user is working on, the user receives a message stating that the Issue is being edited by another user.

Enable/Disable Edit Lock for Issues

To enable or disable the Edit Lock feature:

1. Select Administration | Workspace | Edit Lock from the BMC FootPrints Service Core Toolbar.
2. To:
   - **enable** the Edit Lock, select a time-out period from the drop-down list. This is the amount of time an Issue or form remains locked if a user keeps the page open. After the time-out period elapses, the page is freed. The options for this field range from 5 minutes to 55 minutes, in 5 minute increments (5, 10, 15...) Options are also available for 1,2, and 3 hours.
   - **disable** Edit Lock, select Off from the drop-down. This allows two users to work on the same Issue at the same time. This does not cause a system error. Instead, both edits are submitted and handled as though they had taken place serially, e.g., if the first submitted edits changed the status to Pending Approval and the second one submitted changed the status to Closed, the Closed status would be current. If both users append a Description, both Descriptions are saved.
3. Enter your password and click **Save** at the bottom of the screen to submit the change.

Using Edit Lock

- To lock an Issue, an Agent must access the Edit function for that Issue, either from the Homepage or the Details page of the Issue. Using the Take function also locks the Issue. Viewing the Details of an Issue does not lock the Issue. Only editing it locks the Issue.
- When other users try to access a locked Issue, they receive a message stating that the Issue is being edited by another user and to try back later.
- An Issue, once locked, remains locked until:
  - The Agent submits the edit by clicking **Save** on the Edit Issue page.
  - Another user tries to access the Issue (via Edit or Take), and the first Agent has had the Issue open for longer than the time-out period selected above.
  - The Administrator frees the lock (see below).

  Once unlocked by one of these methods, the Issue is free for editing by other users.
- If a user keeps an Issue up for editing past the time out period and another user starts editing the Issue, when they try to submit their changes, they receive the message "Issue 123 is currently being edited by another user, and is not available". Any changes they made to the Issue are lost. It is important to keep the Edit Lock

time-out interval long enough to prevent this from happening often. The recommended time-out period is 30 minutes or more.

- The Edit Lock feature does not apply to Customer Edit users or to email updates to Issues.

Unlocking Issues

It may sometimes be necessary to manually unlock an Issue. For example, a user may take an Issue for editing and then go to lunch. Rather than waiting for the time-out period, the administrator can unlock the Issue manually.

All currently locked Issues are listed on the Edit Lock Administration page, as in the following example:

Issue 35958 is being edited by Nikki Singh who began the edit on 05-06-2003 at 11:02:03
Issue 4562 is being edited by Pedro Gomez who began the edit on 05-06-2003 at 10:51:11
Issue 1237 is being edited by Jill Smith who began the edit on 05-06-2003 at 10:48:07

To unlock an Issue:

1. Check the box next to the Issue on the Edit Lock Administration page.
2. Click **Save**. The Issue is unlocked.

CAUTION

Any user who is currently editing the Issue has the potential of losing their modifications. Only use this feature when necessary.

NOTE

This feature is also useful for seeing what different users are working on at any given time.

Edit Lock for Form Designer

Form Designer Edit Lock displays whether Form Designer is locked for the current workspace and, if it is locked, displays who is using it.

File Attachments

Internal users and Customers can optionally attach files to a request or Issue. These attachments are kept in a separate directory in the /footprints/html/tmp/Attachments directory. A link to the file attachment is placed in the Details page of the Issue. To use a virus scanner on all BMC FootPrints Service Core file attachments, point the scanner to the Attachments directory. If a file attachment is replaced, the replacement is noted in the Issue history.

Deleting File Attachments

The Workspace Administrator can delete file attachments. This permanently deletes the files, freeing up server space.

To delete file attachments:

1. Select Administration | Workspace and then select the File Attachments link. A list of files is displayed, along with the file size and known references. The total number and size of all attachments is listed at the bottom of the screen.
2. For each attachment you want to delete, check the box in the Delete column.
3. When you are finished, enter your password and click **GO**. The files are permanently deleted.

Limiting the Size of File Attachments

The System Administrator can control the size of file attachments and the attachment directory itself. Refer to File Attachment Restrictions for instructions.

Changing the Location of the File Attachments Directory

The System Administrator can change the location of the file attachment directory. Refer to File Attachment Restrictions for instructions.

Viewing File Attachments

To view a file attachment, on the Details page of an Issue, scroll down to the Attachments section of the Issue and click on the link to the attached file. This allows you to download the file to your system.

Downloading File Attachments with Windows XP Service Pack 2

Windows XP Service Pack 2 may prevent you from downloading .csv files with Internet Explorer. If this happens, to disable the security software that is preventing the download, do the following in your Internet Explorer browser:

1. On the Tools menu in Internet Explorer, click Internet Options.
2. On the Security tab, click Custom Level.
3. To turn off the Information Bar for file downloads, in the Downloads section of the list, under Automatic prompting for file downloads, click Enable.
4. Click the OK button.

Colors

You can change the background colors, table colors, and some text colors in a specific BMC FootPrints Service Core Workspace from this page. The Color Editor lets you select the colors for eight different areas within the Workspace, including:

- **Body Background**—Background color of the Workspace pages (defaults to off-white).
- **Table**—All tables throughout the Workspace (defaults to light green).
- **Highlighted Text**—Any highlighted text throughout the Workspace (defaults to red).
- **Page Header Text**—All header and title text (defaults to dark blue).
- **Dialog Heading**—Heading bars of most Workspace pages.
- **Dialog Heading Text**—All header text that appears in the dialog heading bars (defaults to light blue).
- **Home page List 1**—One of two alternating colors for the Homepage list of Issues (defaults to light blue).
- **Home page List 2**—One of two alternating colors for the Homepage list of Issues (defaults to light green).
- **Home page Text 1**—One of two text colors use throughout the Workspace pages, including the Toolbar text (defaults to dark blue).
- **Home page Text 2**—The other of two text colors use throughout the Workspace pages, including the Toolbar text (defaults to dark green).

NOTE

To get maximum value from the Color Editor, make sure your browser can display all of the colors at your disposal. To change your color palette, go to Start | Settings | Control Panel, choose Display and go to Settings to make sure your monitor can display more than 256 colors (Windows only).

To change colors:

1. Select one of the ten choices listed above.
2. Either:
   - Select a color in the Color Palette or
   - Type the hex value of a color (in hex code format, i.e., 000000-FFFFFF) in the Hex color value field, then click **Apply**.

     A box is displayed below the Color Palette showing the old and new colors.
3. You can adjust the color choice at any time before you click the **Finalize Change** button to implement the color change. You can continue to change other colors on this page
4. When you are satisfied with all of your changes, click **Finalize Changes** to apply them.
5. To restore all colors to their default values, click the **Restore** button.

To insure proper functionality, you may have to clear out your browser's cache, refresh the screen, and/or close and re-open the browser to see all of the new colors correctly.

Address Book Administration

Address Book Administration

The Workspace Administrator can customize the Address Book for the current workspace. Adding, editing, and deleting Address Book fields works similarly to Workspace Fields. Address Book fields can be administered by the Workspace Administrator under Administration | Address Book on the BMC FootPrints Service Core Toolbar. These options are also available by clicking Options on the Address Book Toolbar.

The options on the Address Book administration page change dynamically depending on whether you are configuring your workspace for the first time or converting the Address Book from BMC FootPrints Service Core format to either LDAP or Dynamic SQL. These options are available if you have purchased them from BMC.

Topics in this section include:

- Address Book Options—Edit Address Book options
- Address Book Type—Select Dynamic Address Book Link for SQL or LDAP (only available if you have purchased this option)
- Field Maintenance—Create, edit and delete Address Book fields
- Export Data—Export Address Book contact data
- Populating the Address Book—Different methods of populating the data in the Address Book, including:
  - Load Data—Import Address Book data
  - Dynamic LDAP Address Book Link—Configure the Address Book to work with an LDAP-compliant contact database (including Microsoft Exchange)
  - Dynamic SQL Address Book Link—Configure the Address Book to work with an ODBC-compliant contact database

- Mass Email—Schedule an email to be sent to multiple Address Book contacts

Address Book Options

Address Book Options

Define basic Address Book options from this page:

- **Address Book Name**—The display name for the current Address Book can be changed.
- **Change Address Book Home to Search Page**—By default, a BMC FootPrints Service Core Address Book Homepage automatically lists the first fifty contacts, with links to browse contacts by first letter. If performance is an issue (due to a large number of contacts), display a search screen instead. Non-BMC FootPrints Service Core Address Books always display a search screen.
- **Organizational Unit—**Optionally define an Organizational Unit for Address Book contacts for display and for Customer read permissions. Details on this option are in the Organizational Unit section of this document.
- **Email Fields**—Define primary email field (only appears when more than one email address field exists in the Address Book).
- **BMC FootPrints Service Core Address Book Records**—Define the name of your Address Book records, i.e., change the word used for "Contact" and "Contacts" or the words used for "Master Contact Record" and "Master Contact Records".

Organizational Field

The Organizational Field represents a number of individual contact records, organized by a field such as Department or Company Name. Any Address Book field can be selected as the Organizational Field. Other examples include Business Unit, Location, and Client. If enabled, the contacts in the Address Book are organized by the specified field. If the Organizational Field is also the first field in the Address Book, the contacts are sorted by that field as well.

When the Organizational Unit option is enabled, the Address Book Homepage displays two hyperlinks for each contact. The Organizational Field is displayed as a hyperlink on the Address Book Homepage. Selecting this link displays information based about the Organizational Unit, which in most cases consists of more than one contact. The hyperlink to view the details for an individual contact remains as the first column, or moves to the second column if the Organizational Field is the first column.

The options for the Organizational Details page are:

- **History**—Display a list of all Issues associated with this organization in the main **FootPrints Service Core** window.
- **Report**—Generate a report of all Issues associated with this organization in a separate browser window.
- **List Contacts**—List the contacts for this organization in the Address Book window.

Customers can also be configured to view all of the contacts for their Organizational Unit. This is configured under User Roles.

Options for Organization Field

- **Select Field**—Select an Address Book field to act as the Organizational Field. The drop-down defaults to No Organizational Unit.
- **Email Notification**—Optionally receive email notifications for new Customer sign-ups. A notification email may be sent to the supplied list of comma-separated recipients whenever a Customer enters an organization

when filling out their contact information for the first time. This is helpful in ensuring that each Customer is properly recognized as a member of their organization.

NOTE

When you select an Organizational Field as the key for the Master Contact Record, the name displayed for the field changes to "Master Contact Key".

Email Fields

Multiple email addresses can be handled in the Address Book for incoming and outgoing email. For example, if there are two fields in the Address Book of type Email address that are called Email address and Secondary Email address, one can be set as the primary address under Administration | Address Book | Edit Options | Email Fields (this option only appears when there are multiple email address fields defined in the Address Book). Here is how it works:

- **Outgoing Email notification**—Notification on an Issue can be sent to any email address for a contact. Notification emails default to the primary email address unless the Issue was submitted from a secondary account. In that case, the secondary account receives the notifications automatically for that Issue. The agent, when creating/updating the Issue, can select the email address to receive the notification in the Email section of the Create Issue or Edit Issue page.
- **Incoming Email submissions**—Incoming email submissions by customers are accepted from any email account found in the Address Book, including secondary email addresses. If a customer's primary email account is, for example, bsmith@widget.com, but he sends an email to BMC FootPrints Service Core from bsmith@yahoo.com and the Yahoo account is part of his contact record as a secondary email address, his contact information is included as part of the Issue record, and he is specified as the submitter of the Issue.

Address Book Type

If you have any of the add-on address book types for BMC FootPrints Service Core, you may change your address book type to one of the following: Dynamic LDAP Address Book Link, Dynamic SQL Address Book Link (SQL Server, Oracle, MySQL or Access), Salesnet Address Book Link, Saleforce.com Address Book Link.

In addition, if your Address Book is configured to use one of the Dynamic Link add-ons, you may convert the Address Book back to BMC FootPrints Service Core format.

WARNING

If you change this Address Book from the BMC FootPrints Service Core database to another type, while you may eventually change it back to the BMC FootPrints Service Core database, any change back only contains changes made as of the initial change. Any subsequent changes to your schema are not reflected in the re-instituted Address Book and may adversely affect the data contained in your entries.

To configure your Address Book type, select Administration | Address Book | Address Book Type from the BMC FootPrints Service Core Toolbar. Select the Address Book type for this workspace:

- Dynamic LDAP Address Book Link
- Dynamic SQL Address Book Link (SQL Server, Oracle, MySQL or Access)
- Salesnet Address Book Link
- Salesforce.com Address Book Link

NOTE

Your options depend on whether you have purchased one or both of these add-ons.

Complete details on configuring these options are in Dynamic Address Book Link for the LDAP Address Book Link, in Dynamic SQL Address Book Link for the SQL Address Book Link, Configuration of Address Book in FootPrints for Salesnet for the Salesnet Link, and Configuration of Address Book in FootPrints for Salesforce.com for the Salesforce.com Link.

Address Book Field Maintenance

Address Book Field Maintenance

Address Book fields are used to track contact information for users. The fields configured here are displayed in the Contact Information section of the Create Issue and Edit Issue forms and in the Address Book. They are also available automatically as criteria for searches, reports, and escalation rules.

If the Workspace Setup Wizard was used to create the current Workspace, the default Address Book fields from the template are displayed in the dialog box. If no wizard was used, and this is the first time you have visited this page, the dialog box is blank. On this page, you can create, edit, delete, and re-order fields.

This page is accessed by selecting Administration | Address Book | Field Maintenance from the BMC FootPrints Service Core Toolbar.

If you wish to exclude some of the Address Book fields from appearing in the Contact Information section, refer to Address Book Fields to Exclude in the *Workspace Administration* chapter in the *Workspace Options* section

The following topics are covered in this section:

- Address Book Field Types
- Adding Address Book Fields
- Drop-down and Multi-select Address Book Fields
- Edit Address Book Field
- Delete Address Book Field
- Re-order Address Book Fields

Address Book Field Types

The following Address Book field types are supported:

- **Character** (single or multiple line)—This type of field can contain any type of data, such as alpha, numeric, or special characters. Single-line character fields accept one line of data, while multiple-line character fields accept an unlimited number of lines of data. There is no effective limit on the amount of text in a field.
- **Supervisor**—Select a supervisor.
- **Integer**—Accepts integers.
- **Real Number**—Accepts integers or decimal numbers.
- **Date**—Accepts valid dates (format based on system or user preference).
- **Drop-down**—Offers a pre-defined drop-down list of choices for the user to select from.
- **Multi-select**—Allows the user to select multiple choices from a pre-defined list.
- **Checkbox**—Select one or more values by clicking in a checkbox or checkboxes.
- **Web site**—Accepts URL addresses (of format http://*server.name*.com). Appears as a hypertext link on Details page of Issue.
- **FTP File/Site**—Accepts FTP addresses. Appears as a hypertext link on Details page of Issue.
- **Email Address**—Accepts Email addresses. Appear as a hypertext link on Details page of Issue.

- **Twitter ID**—Allows Issues to be automatically populated with the FootPrints user ID (in the Address Book) of the Twitter user (sender).

Adding Address Book Fields

Access the page for adding Address Book fields by selecting Administration | Address Book | Field Maintenance from the BMC FootPrints Service Core Toolbar.

To create a new field:

1. **Name**—Enter a name for the field. This is the name used for the field in all BMC FootPrints Service Core forms, such as Service Level or Company.
2. **Type**—This defines the type of data the field accepts. Refer to Field Types for additional information.
3. **Permissions**—The permission level chosen here determines both the access and requirement for users for the field.

   a. **Access**—This option determines who can see the field, and who can write to it.

   - **Internal**—Only internal Agent and administrator users (including custom Agent-type roles) can view and enter data in the field. The field appears in the Create Issue and Edit Issue pages for internal users only, and in the Address Book.
   - **Public**—Same as internal, plus Customers can view the field data and enter their contact data in the field when creating a new Request. The field appears in the Create Issue and Edit Issue pages for internal users, in the Address Book, and in the Customer Submit Request form.

4. **Advanced Field Permissions**—Click the Advanced Field Permissions button to set advanced field permissions for all Agent roles or all Customer roles.
   Advanced field permissions can be set per-role on the User Roles administration page. This page offers a convenient (but more limited) way of setting a field's permissions for multiple roles. (Advanced field permissions set here or on the role properties page will override the default permissions chosen on the Form Designer page.) The permissions that you choose here will only affect the current workspace. Other workspaces that also use this address book will not be affected.

NOTE

If an LDAP Address Book is used, all Address Book fields are read-only.

   a. **Required**—The second drop-down determines whether the field is required.

- **Optional**—The field is not required for any user who can write to it. The user has the option of entering data in the field.
- **Mandatory**—The field is required for all users. If a user tries to submit an Issue or contact record without any data in a mandatory field, the form is rejected and an error with instructions to go back and enter the information is displayed. Mandatory fields appear in red on the Create Issue and Edit Issue pages for internal users, in the Address Book, and in the Submit Request form for Customers (it is pre-filled for the Customer if data already exists).

5. **Length Restrictions**—This option applies to character single-line, integer, and real number fields only. For these fields, a field length can be defined for the field. If defined, users must enter data of the specified number of characters when creating or editing an Issue or Request. The following options control the characteristics of the field length:

   - **Unrestricted**—No field length restriction (the default).
   - **Exactly**—Enter a number in the first box for the exact number of characters users must enter in the field. Leave the second input box blank.

- **At least**—Enter a number in the first box for the minimum number of characters field data must contain. Leave the second input box blank.
- **At most**—Enter a number in the first box that for the maximum number of characters field data can contain. Leave the second input box blank.
- **Between**—Enter two numbers defining a range of the number of characters accepted for field data.

6. **Field Size**—Only applies to multi-line character fields. Define the number of rows and columns displayed for the text box. This only affects the size of the area displayed. The amount of data that can be entered into multi-line character fields is virtually unlimited.
7. **Define Choices**—For drop-down and multi-select field types, choices are defined in a pop-up after adding the field (instructions are here).
8. Click **Create Field**. The field is added to the Field list.
9. The field is not added to the Address Book until you enter your password and click **Save**.

The Address Book also contains three additional properties that can be specified on this screen:

- **Primary Key**—The Primary Key is a unique identifier for each contact in your Address Book. If the Customer Self-service feature is used, it is the ID that Customers use to log into BMC FootPrints Service Core (along with a password). This field should be both present and unique to all contacts. User ID is the recommended field, and also the default for all templates.
- **Organizational Unit**—The Organizational Unit is used to organize contacts in the Address Book. Examples include Department, Business Unit, or Company. It is an optional property. If an Organizational Unit is selected, the contacts in the Address Book are grouped by the field.
- **Master Contact Record**—Check here to enable the Master Contact Record feature.

NOTE

For most versions of BMC FootPrints Service Core, there is no limit to the number of fields allowed per workspace, however, the BMC FootPrints Service Core database only allows 100 fields per Address Book. To add workspace fields, read the topic on Form Designer.

Adding a Date/Time Stamp to Internal Fields

You can add a date/time stamp to multi-line character fields. The date/ time stamp is displayed beside the field when you edit the Address Book field or view it on the Details page. When you create a multi-line character field by selecting Character (Multiple Line) as the Type or edit an existing multi-line character field, a checkbox labeled "Add timestamp to field data" is displayed. Checking the box adds the date/time stamp.

If you use the date/time stamp option, the field acts like the Description field in that you cannot edit existing data in the field, only add to it.

Drop-down and Multi-select Address Book Fields

A drop-down field offers the user a drop-down list of choices. The multi-select field allows the user to select multiple choices from a dialog box. Up to 1000 choices can be defined per drop-down or multi-select field. After adding one of these fields, a pop-up window is displayed in which to define the choices and options for the field.

To define choices:

1. **Add choices**—Enter the first choice to appear in the field under Actions and click the **Add** button. The choice is displayed in the box on the right. Continue to add as many choices as needed.

2. **Re-order choices** (optional)—To reorder the choices, highlight a choice and click the up or down arrow to move it through the list.
3. **Resort Ascending**—Automatically re-orders the values in the list alphabetically from A-Z. Values with an integer as the first character are sorted before those beginning with a letter in the order 0-9.
4. **Resort Descending**—Automatically re-orders the values in the list alphabetically from Z-A (or 9-0).
5. **Reuse Choice List**—Select this option to reuse the choices from another drop-down field in this Workspace or another Workspace. It only copies the choices; there is no link between the fields.
6. **Import Choice List**—If you have many choices, you can create a text file outside of BMC FootPrints Service Core (for example, in Notepad or Excel) and import them here. The file must contain one choice on each line. For example:

   - Boston Office
   - Chicago Office
   - Dallas Office
   - New York Office

   Browse for the file in the pop-up that appears and click Open. After you click **GO** the choices are displayed in the dialog box.
7. **Remove**—To delete a choice from the list, highlight it and click Remove.
8. **Reset**—To delete all choices and start over, click Reset.
9. After all choices are added, click **GO**. The values are saved.
10. The field is not added to the Address Book until you enter your password and click **SAVE** on the Field Maintenance page.
11. The choices can be changed later by editing the field and selecting Edit Field Choices.

Edit Address Book Field

Editing a field does not affect contact data in existing Issues.

To edit an Address Book field:

1. Select the field to be edited from the dialog box on the Field Maintenance page and click **Edit**.
2. The Field Maintenance dialog is highlighted in a darker color until the edit is complete.
3. Make any needed changes.
4. If the field is a drop-down or multi-select type and you would like to edit the choices in the field, click Edit Field Choices.
5. Click **Complete Edit** to complete the edit.
6. Click **Cancel Edit** to cancel the changes. The changes are not submitted until you enter your password and click **Save**.

NOTE

Some field types in the SQL version of BMC FootPrints Service Core cannot be altered, due to a limitation in the SQL database. In this case, if you want to change the field type, you must delete the field and create a new one.

Delete Address Book Field

To delete an Address Book field:

1. Select the field in the dialog box (it will be highlighted in grey).
2. Click **Remove**.
3. The field is removed from the dialog and is no longer included in the Address Book. The changes are not submitted until you enter your password and click **Save**.

NOTE

While the default fields can be deleted, you must have a field of type Email, preferably entitled Email address, for Customers to be linked to their Address Book contact information when submitting Requests via the BMC FootPrints Service Core interface and via email.

NOTE

Deleted data fields are no longer viewable and are removed from all BMC FootPrints Service Core forms. The column is also deleted and the data no longer accessible. To undelete a field (assuming you've made a backup of your database), please contact BMC for instructions.

Re-order Address Book Fields

Changing the order of the Address Book Fields on this page does not affect the database; it only affects the display of fields in the BMC FootPrints Service Core forms.

To re-order the fields:

1. Select a field in the dialog box (it will be highlighted in blue).
2. Drag and drop fields using the mouse.
3. Continue to re-order the fields as needed. This is the order in which they are displayed in the Address Book.
4. The changes are not submitted until your enter your password and click **Save**.

Insert Field Headers

If you would like to include instructions or other information about Workspace fields in the Create Issue, Edit Issue, and Submit Request pages, you can optionally insert text or HTML headers above any custom Issue field, custom Address Book Field, and the Attachments field. In addition, if any of the fields are set to be hidden fields, you can choose to display the HTML/text header even if the field is hidden. You may want to display the HTML/text header even when the field is hidden if, for instance:

- You use field headers to break up the Issue Information section into different subsections. The field may be associated with the first field in this section even though it really applies to all the fields in that section.
- You use field headers to put an additional GO button(s) throughout a long Issue Information section.
- A field header must be associated with the first field in a row if you want all three fields to remain on that row. The field header is really above the third field. If the first field disappears, the field header above the third field disappears.

To include custom headers:

1. Click the Insert Field Headers link. Each Workspace field is listed in the table in the pop-up that appears.
2. Insert text or HTML code before one or more fields as needed.

3. Click in the checkbox for each field for which you want the text or HTML code to be displayed. The text or HTML code is not displayed if the checkbox is not checked. This feature allows the user to create text or HTML code and leave it for later to be displayed or to temporarily disable the text or HTML code.
4. In the Display column, if you have any fields that are hidden for a particular status, select from the displayed drop-down field. A drop-down is displayed for fields on the Create & Edit Issue pages and a second drop-down provides the same options for the Issue Details page. The drop-down field has the following options:
   - **always**—Always show the inserted header regardless of whether the field is hidden.
   - **if field is shown**—Show the inserted field header only when the field is visible.
   - **if row is shown**—Show the inserted field header only when the row in which the field appears is visible.
8. After you finish adding headers, click **GO**. The page is dismissed and you are returned to the Field Maintenance page.
9. Enter your password and click **GO**.

Notes on the Field Headers Page

- The Field Name field displays the name of the field.
- Check the box in the Enabled field to include the header. If you don't check the box, the content you entered for the field header remains in this form, but is not displayed when you access the Create Issue, Edit Issue, or Submit Request page.
- The Alignment drop-down allows you to align the header left, center, or right.
- Enter plain text or HTML code in the Text or HTML to Insert Above Field field.
- To start the field associated with the header on a new line, enter a line break **
** at the end of the header.
- With respect to %%Variable%% expressions, some field data from the Issue can also be used in the field headers, as follows:
  - **Issue Number**—%%MRID%%
  - **Title**—%%TITLE%%
  - **Priority**—%%PRIORITY%%
  - **Status**—%%STATUS%%
  - **Submitter**—%%SUBMITTER%%
  - **Workspace ID**—%%PROJID%%
  - **Workspace and Address Book fields**—%%FIELD NAME%% where "FIELD NAME" is the name of the field in upper case.

Link a Field Header to a URL

When the following sample Javascripts are entered in the Text or HTML to Insert Above Field field, the field header becomes a link to the URL and the data in the field is passed to the URL.

The following script works for drop-down fields only. The following sample script uses a field named "Product" for this example. Use your own field name in place of the word "Product", "url =" must point to the URL to which you want to pass the value, and use the "+prod" where you want to place the value of the field into the URL.

<SCRIPT LANGUAGE="JavaScript"> function ProductInfo(){var prod=document.regform.Product.options[document.regform.Product.selectedIndex].value; var url =

'/MRcgi/product.pl?PROD='+prod; var ProductInfo=window.open(url);}</SCRIPT>Click for Product info

The following field works for single-line character fields only. The example field name is "Company Documentation", and the value of variable "CompanyVal" is what is passed from the text field. Again, "url =" must point to the URL to which you want to pass the value.

<SCRIPT LANGUAGE="JavaScript"> function CompanyInfo(){ var CompanyVal =document.regform.Company__bDocumentation.value; var url = '/tmp/Attachments/Workspace7/' + CompanyVal; var CompanyInfo=window.open(url);}</SCRIPT>Click for Document

Field Headers on Upgrade

Because certain Field Headers are anticipated to behave differently in version 11, if the upgrade to v11 detects that a given installation of BMC FootPrints Service Core was using Field Headers, a broadcast message will be sent to all administrators of that FootPrints instance the first time they log in to v11 alerting them to the fact that Field Headers were detected and it is possible the Field Headers in their workspace are not behaving as they did previously.

The content of the message is as follows:

> During the upgrade, BMC FootPrints Service Core detected the use of “HTML/Text Field Headers” in one or more Workspaces. Prior to the upgrade it was possible for the content of these Field Headers to span the entire width of the form, but after the upgrade any such Field Headers will conform to only span the width of the Field that the header was associated with. This could cause Field Header text to wrap across several lines, for example, rather than appearing as one long line spanning several fields. If you preferred the pre-upgrade handling of the Field Header content and want the display to revert to the pre-upgrade state, then it is recommended that you follow these steps:
>
> 1. Inspect your Issue form immediately to find the Field Headers you would like to modify.
> 2. From Administration | Workspace, visit the new Form Designer.
> 3. Find and edit the Field that contained the Field Header.
> 4. From the field properties panel, copy the content of the Field Header that was migrated to the field’s Help Text And Instructions, then remove the content and save the Field with a blank header.
> 5. Drag and drop the new Custom HTML field type onto the form where the desired content should appear.
> 6. Paste the previously copied content into the properties panel of the newly added Custom HTML field.
> 7. Adjust the column width and text mode of the Custom HTML field until the desired appearance is achieved

Populating the Address Book

Populating the *Address* Book

The BMC FootPrints Service Core Address Book can be populated with user contact data in a variety of ways:

- **By Agents**—Contacts can be entered manually by Agents and Administrators in Address Book or on the Create Issue page.
- **By Customers**—Customers can enter their own contact information the first time they submit a Request to the system via the Customer Self-service web interface.
- **Imported**—Contacts can be imported from a comma-delimited file (see below).

- **Dynamically**—Contact data can be retrieved dynamically from an external database that is either LDAP–compliant (such as Microsoft Exchange/Active Directory, Lotus Notes, SunONE or Novell eDirectory) or SQL–based (such as SQL Server, MySQL, Access, etc.) using the BMC FootPrints Service Core Dynamic LDAP Address Book Link or the BMC FootPrints Service Core Dynamic SQL Address Book link (available as add–on modules).
- **Master Contact Record**—Partial contact data can be entered into a record and the rest of the record can be populated with data from a Master Contact Record.

This section covers the three administrative methods: data import, the Dynamic LDAP Address Book Link, and Dynamic SQL Address Book Link. Refer to Using the Address Book and Customer Self-Service for more information on entering contacts manually.

- Complete Instructions on Importing Contacts
- Complete Instructions for Dynamic LDAP Address Book Link
- Complete Instructions for Dynamic SQL Address Book Link

Importing Address Book Contact Data

Importing Address Book Contact Data

Customer contact data can be imported into the BMC FootPrints Service Core Address Book from a flat text file. This allows you to start using BMC FootPrints Service Core with existing contact data from another database. Internal users can look up customers in the BMC FootPrints Service Core Address Book when logging an Issue. Customers need only enter an email address or other primary key and BMC FootPrints Service Core completes the rest of the contact data. The data must first be exported from the existing contact database and formatted as described below. The import can be done by the Workspace or System Administrator, either on the Workspace Administration page under Address Book | Administration | Load Data, or under Administration in the Address Book itself.

NOTE

BMC FootPrints Service Core also supports the importing of Issue data. This Issue data must be loaded separately from Address Book data. It is recommended that Address Book data be imported first. Instructions on importing Issue data and how to link those Issues to imported Address Book contacts can be found in the chapter on System Administration.

Topics in the section:

- Create the Data File
- Load External Data into the Address Book
- Update Address Book Records from a Data File
- Optional Features for Address Book Imports

Create the Address Book Data File

You can import data into a BMC FootPrints Service Core Address Book from a flat text file in CSV (Comma Separated Value) format. This file must be formatted according to certain rules, and it must follow the Address Book's schema. You can import up to nine fields from your CSV file to the BMC FootPrints Service Core Address Book. You can also map your fields to the BMC FootPrints Service Core Address Book Fields.

Example

The CSV file example below contains a header line (LAST NAME, etc.) and fields separated by commas:

```
LAST NAME, FIRST NAME, EMAIL, USER ID, PHONE, SITE
Smith,Bob,bsmith@widget.com,12345,212-555-1234,Woodbridge
```

```
Jones, Mary, mjones@widget.com,45678,813-227-4500,Tampa
```

Verify Your CSV File Format

1. Review the BMC FootPrints Service Core Address Book schema.

   Below is a screenshot of the default schema, which you can view from Administration | Address Book | Schema.
   - Fields in red are mandatory; your CSV file must have data in these fields.
   - You can choose not to import optional fields (e.g., Phone or Department) when you load the data, as described in Load External Data into the Address Book.

(1) Last Name (Character (Single Line))	(2) First Name (Character (Single Line))
(3) Email Address (Email)	(4) User ID (Character (Single Line))
(5) Phone (Character (Single Line))	(6) Site (Choice)
(7) Department (Choice)	(8) Service Level (Choice)
(9) Supervisor (Supervisor)	

2. Verify that your CSV file has the following formatting:
   - Required fields: Last Name, First Name, Email Address, and User ID. (The field "User ID" is the Primary Key and must be included as one of the fields to be imported.)
   - Optional: A header line with header names in uppercase, such as the example above (for ease of identification when mapping the fields)
   - Data (or a placeholder for optional fields) must be present for each field.
   - The fields for each contact must be separated by a comma “,”
   - The system new line separator (i.e., the result of pressing “Enter”, “Return”, “^M”, etc.) should appear at the end of each record (Contact)
   - The fields can be in any order in the CSV file
   - CSV files can wrap on multiple lines, with double-quotes, and with commas as the separator
   - The Checkbox data type can be loaded. The value for checked is "on"; for unchecked use either a null field or "off".

Next Step: Load External Data into the Address Book
Related Topic: Optional Features for Address Book Imports

Load External Data into the Address Book

NOTE
This option is not available for LDAP- or SQL-enabled Address Books. It is only for use with the BMC FootPrints Service Core Address Book.

Before you begin, the Address Book fields must first be created to match the fields in the data to be imported. Also, the contact data must be placed into a single, flat text file in CSV format. See Creating the Address Book Data File for details on creating the text file. Only the CSV file format is supported.

To load data from the web screens:

1. Select Administration | Address Book | Load Data.
2. Complete the fields as follows:
   - **Select Time to Load Contact Information** —The data can be imported immediately or scheduled for a future time. If your import file is large (e.g., more than 1,000 contacts) and the BMC FootPrints Service Core server is in use, we recommend scheduling the import for a time when the server is not being accessed by users.

- **Please browse for the data import file ...**—Click the **Browse** button to browse your local machine or network drives for the file. A link is also provided to review the schema of the data.
- **Data encoding**—Select the type of data encoding to use for the import file from the following options:
  - **Server Default** - If you're planning to view the CSV file in Excel or other non-UTF-8-aware application, or if you are loading data saved from Excel, select this option.
  - **UTF-8** - If you are sure that the application used to view the data in the CSV file can handle UTF-8 encoded data, select this option.
- **Userid or full name of an agent...**—There are two different methods for indicating the default submitter of the contact:
  - If no submitter is indicated, the user ID of the administrator performing the data import becomes the submitter for all Issues being imported.
  - Enter a valid one-word BMC FootPrints Service Core ID in the field provided. This user becomes the submitter for all of the Issues being imported.

3. After confirming that everything is correct, click **GO** at the bottom of the screen to load the data. A new Load External Data page displays, showing information about the data to be loaded at the top of the page.
4. Complete the fields as follows:
   - **You may use the parameters in a built-in Field-Mapping List...**—If you have saved mappings previously, a list of built-in and saved field mappings displays on the left side of the Schema section. To use a saved or built-in mapping, select the mapping from the list and the click the **Use Selected List** button. The fields for mapping will be populated from the selected list. To delete a saved list, select the field and then click the **Delete Selected List** button.
   - **Check here if your Load File...**—Select this check box if your import file has a Heading line. If the box is checked, the first line of the import file will not be loaded as data.
   - **Save Field-Mapping List** —Click this button to save the mappings that you create. You are prompted to enter a name for the saved field mapping. Saved mappings display in the list on the left side of the page.
   - **Field Mapping**—Map the fields in the load file to Address Book fields by selecting the appropriate load file fields from the drop-downs. To skip a field mapping, select Do Not Import from the drop-down. If you select Do Not Import, no data is entered into that field. You can also select Blank Field #1 to leave fields blank.
   - **Check here to create/update Master Contact Records with values from your import file...**—Check the box to ensure that Master Contact Records are updated for all Address Book entries with information from the import file.
5. Click the **GO** button at the bottom of the page to import the data.

The data is validated. If the data is good, the import proceeds. If bad data is present, an error message displays with the line numbers of contacts containing errors.
If you scheduled the import to occur in the future, the import does not occur until that time. To remove a scheduled import, click the Review a List of Address Book Load events link. Imports that are in process cannot be removed.

Load Data As Batch Process

You can import data into the BMC FootPrints Service Core Address Book using a batch process without using the web screens. You must prepare the Upload file as described in Create the Address Book Data File. Batch Upload files receive no error checking; they are loaded as-is, so it is essential that your Upload file be properly set up and that it contains no errors.

The batch process is run via the command line interface.

For loading a web queue of Address Book imports, the command is:

perl MRloadBackgroundABData.pl

For importing a CSV file to the Address Book, the command is:

perl MRloadBackgroundABData.pl [args]

where the arguments [args] are:

- -abnumber=<address book number> (address book number for target address book)
- -file=<path to CSV file>
- -csvEncoding=<'local' or 'utf8'> (optional; defaults to "local"; enter "utf-8" if the upload file is in utf-u format - applies only to utf8 installations)
- -updateMasterContact=1 (optional; set to 1 if updating master contact records from imported contacts)
- -updateContactsFromMasterContact=1 (optional; set to 1 if updating Contacts from the updated Master Contact record)
- -submitter=<address book submitter> (optional; defaults to 'ABLOAD' and will affect only the ability to delete or edit depending on role. This can be set by contact in the file.)

The default is to not update Master Contact records and to not validate fields in the background except to require that the primary key value be set.

Related Topics

- Create the Address Book Data File
- Optional Features for Address Book imports

Optional Features

You can configure the following optional features:

- **Empty fields**—All fields in the Schema must be delimited for each Issue. However, optional fields need not contain data. An empty field should be indicated by placing nothing between the field delimiters (commas) or at the end of the line. In the following example, there is no value for the "Phone" field:

  Smith=Bob=bsmith@widget.com=Widget==212-555-3232

  Notice the two equals signs, "==" to represent afield with no data.

  Missing data is represented by commas in CSV files as shown below:

  Smith,Bob,bsmith@widget.com,Widget,,212-555-3232

NOTE

Mandatory fields must contain data or, if the import fails, contain the exception described below under **Field Count Test**. Mandatory fields are indicated in red in the Schema. To import data with missing information, temporarily make the fields optional on the Edit Address Book Fields page. After the import is complete, change the fields back to mandatory. Optional fields must still be accounted for with empty delimiters.

- **Field Count Test**—By default, each field must be accounted for each record in the load file. During the data validation step, if any records do not have the correct number of fields, the load ends. This also applies to optional fields accounted for by commas or other delimiters as described above. There may be cases where

one or more of the last fields in the Schema are optional and there is no data present in the load file, nor are there empty delimiters to represent those optional fields.

For example, if the load file was created in Microsoft Excel, the CSV file created by Excel does not provide comma characters for null fields at the end of the data line. For this case, we have provided an option to skip the Field Count Test. If you select this option, you can submit a load file without the trailing commas normally required for optional, empty fields. By skipping this test, there is a risk that your data may not load properly, so be careful in preparing your data.

The following example shows a record using the schema above that is acceptable when the Field Count Test is skipped:

Smith,Bob,bsmith@widget.com,Widget

NOTE

Notice that the trailing commas for the two final optional fields (Phone and Fax) are missing. When a CSV file is created by Excel, commas are never included for empty trailing columns even if the fields are normally required by **BMC FootPrints Service Core**. By skipping the Field Count Test, a CSV file created from Excel can be used without editing it to add the trailing commas.

- **Wrapped text** (embedded new lines)—Because the text file containing the data to be loaded presents each record in a single line, the records cannot include new line characters.
- **Number fields**—For Integer or Real Number fields, all values must be numeric.
- **Date fields**—Data for Date fields must be in the ISO date format, YYYY-MM-DD, e.g., 2003-09-22, even if your Date Format system or user option is set to an alternate format, such as American or European.
- **Date/Time fields**—Data for Date/Time fields must be in the ISO date format, YYYY-MM-DD HH:MM:SS, e.g., 2003-09-22 11:22:35, even if your Date Format system or user option is set to an alternate format, such as American or European.
- **Drop-down Choice Fields**—Choice field data is not verified. You must ensure that data for such fields matches the list of values you established when you created the choice field.
- **Multi-select Fields**—Multiple values separated by semi-colons can be imported for a multi-select field, e.g., choice1;choice2;choice3
- **Comments**—You may make your data file easier to read by using blank lines and comment lines beginning with a # sign.
- **Deleted fields**—Deleted Address Book fields are not displayed in the schema; they must be ignored in the text file.

Related Topics

- Load External Data into the Address Book
- Creating the Address Book Data File

Update Address Book Records from a Data File

In addition to creating new records in the Address Book by importing a CSV file (as described in Creating the Address Book Data File), you can also update the Address Book by importing a CSV file.

CSV File Format

The format of the import file is the same whether creating new records or updating existing records (as described in Creating the Address Book Data File).

Creating New Records and Updating Existing Records at the Same Time

- A single import file can be used to import new contact records and update existing records.
- The value of the Address Book's primary key field for an entry in the CSV file must match the primary key value in the Address Book.
- Any rows containing primary key values that do not match primary key values of records already in the BMC FootPrints Service Core Address Book will create new records.
- Any rows containing different values for a contact will update the BMC FootPrints Service Core Address Book.

Preventing Changes in Existing Records

There are two options to prevent changes to values in existing records:

- The field value must be re-imported, or
- Select **Do Not Import** on the **Load External Data** page where fields of the import file are mapped to fields of the Address Book (as described in Load External Data into the Address Book)
    - The **Do Not Import** option for a field is only recommended where NO values for that field in the import file need to populate or update the field of records in the Address Book

Therefore, the following is recommended in order to prevent changes to existing records:

1. Export the contents of the BMC FootPrints Service Core Address Book to a CSV file (as described in Export Data).
2. Change any field values as desired in the exported file.
3. Add new records to the file as needed.
4. Re-import the file (as described in Load External Data into the Address Book).

Removing Values from a Contact's Record

To remove or "empty" values for an existing contact's record, "no value" can be represented in the import file for the field by entering nothing in the placeholder for the field (e.g., ",," where there are no characters between the two commas).

Example

In the CSV file example below, the Company value will be removed, since the placeholder for the Company name has no value (between the two commas corresponding with the COMPANY field).

```
LAST NAME,FIRST NAME,USER ID,COMPANY,PHONE,FAX
Smith,Bob,bsmith@widget.com,,212-555-1234,212-555-3232
```

Dynamic LDAP Address Book Link

About Dynamic Address Book Link for LDAP

The BMC FootPrints Service Core Dynamic Address Book Link feature retrieves contact data dynamically from any LDAP-compliant contact database for the Address Book. If this option is used, BMC FootPrints Service Core dynamically accesses the outside database for contact information in the Address Book.

NOTE

This feature is an optional add-on module and must be activated on your BMC FootPrints Service Core server for the option to appear. Please contact your BMC salesperson or reseller if you would like to purchase this option.

This section contains the following topics:

- Selecting an LDAP Directory for the Address Book
    - Creating a New Workspace

  - Convert an Existing Address Book
- LDAP Address Book Configuration
  - Name for LDAP Address Book
  - LDAP Server Name
  - LDAP Server Port
  - LDAP Search Base for Directory Entries
  - Anonymous Binding or Using Distinguished Name and Password
- LDAP Address Book Field Mapping
  - Available LDAP/Exchange Attributes
  - FootPrints Service Core Field Names to Map to LDAP/Exchange
- LDAP Field Setup
  - LDAP Attributes
  - Displayed Name and Field Type
  - FootPrints Service Core Fields
  - Customer Primary Key Select
  - Organizational Unit
- Using an LDAP Address Book
  - Limitations

NOTE

Throughout this section, the names “LDAP Address Book” and “LDAP Directory” are used to refer to any LDAP-compliant contact database, including Microsoft Exchange.

Selecting an LDAP Directory for the Address Book

There are two ways to select an LDAP Directory for an Address Book:

- Create a new Workspace
- Convert an existing Address Book

These two options are discussed below.

Create a New Workspace

New workspaces are created by selecting to the Administration | System | Workspaces link on the BMC FootPrints Service Core Toolbar. Only the System Administrator has access to this option.

The instructions below refer specifically to linking to an LDAP Address Book when creating a new Workspace. For complete instructions on creating Workspaces, please refer to the section on Workspaces in the chapter on System Administration.

There are three options for creating a new Workspace:

1. **Use the Wizard to create my workspace**—The System Administrator has the option to create a new BMC FootPrints Service Core Address Book, Link to an existing Address Book, or link to an LDAP Address Book.

2. **Create the workspace on my own**—The System Administrator has the option to create a new BMC FootPrints Service Core Address Book, link to an existing Address Book, or link to an LDAP Address Book.
3. **Use an existing workspace configuration**—Only the existing Address Book for the originating Workspace or a new BMC FootPrints Service Core Address Book is allowed. If the Address Book for the originating workspace is an LDAP one, the new Workspace links to the same LDAP database using the same fields.

In options 1 and 2, select link to an LDAP Address Book and the next page displayed (after the other Workspace options are selected) is the LDAP Configuration page. In option 3, to link to an LDAP Address Book, the options are to select BMC FootPrints Service Core Address Book and then convert the Address Book later (see below) or to convert the Address Book associated with the originating Workspace to an LDAP Address Book (see below).

Convert an Existing Address Book

An existing BMC FootPrints Service Core Address Book can be converted to an LDAP Address Book at any time. This is done from the Address Book Administration Address Book Type page. Click the Dynamic LDAP Address Book Link radio button for Change to LDAP, enter your password, and click **GO**. The LDAP Configuration page is displayed.

When converting from a BMC FootPrints Service Core Address Book to an LDAP Address Book, the references between Issues and address contacts may be affected. Contacts are linked to Issues based on the primary key in the Address Book. In order to ease the transition, you can map existing Address Book fields to LDAP field attributes. Although not all fields map directly to the LDAP attributes, for those that do map directly, you can search the Address Book for a particular contact and any existing Issues with contact data that matches the primary key in the new LDAP Address Book are associated with that contact.

Dynamic Address Book Link (LDAP) Address Book Configuration

For BMC FootPrints Service Core to access an outside contact database (e.g., Active Directory, Lotus Domino Server, etc.) for user contact information, the information described below must be entered. Please consult with your System Administrator if you need to gather some of this information. If the LDAP Address Book has been converted from a BMC FootPrints Service Core Address Book, it may be converted back by checking a checkbox that appears at the top of the page.

Name for Address Book

This is an arbitrary name used to identify the Address Book in BMC FootPrints Service Core, e.g., Widget Company Users. The field in the wizard is pre-filled with the name entered during installation, but it can be changed here. The name of the Address Book is visible to users in the Address Book.

LDAP Server Name

Enter the full domain name of the machine hosting the contact database server.

LDAP Server Port

This is the port that BMC FootPrints Service Core uses to communicate with the LDAP contact database to retrieve user contact information. In most cases, the default value of 389 should be used. However, when a machine has more than one directory, a different port number may be used. Often when port 389 has already been used, administrators set port 390 as the LDAP port. An additional option for users beside the standard LDAP port (389) is the Global Catalog port for Active Directory (3268). This enables LDAP to access additional users from trusted domains using a set of common LDAP attributes. The typical scenario in which this would be used is when a large organization has a number of offices that each maintains an Active Directory for its local users. Using the standard port, you might be able to retrieve only a local office's users. Using the Global Catalog port, you can often retrieve everyone, assuming the search base is set correctly.

LDAP Search Base for Directory Entries

LDAP (including Active Directory) stores its data in a tree structure. To enable BMC FootPrints Service Core to retrieve user information, a search base specifying where to search in the tree, and in what order, must be specified here. The search base is formed by adding names of the root and each subsequent branch of the tree until you reach the point where a search should commence. The search base should be the branch of the tree closest to the data being searched. In most instances, all data being sought are in one branch of the LDAP tree. For instance, if the root of the LDAP Directory tree is dc=server, dc=com and the next branch to be taken is ou=Users, which contains all the directory information, the search base would be: ou=Users, dc=server, dc=com

If users exist in multiple search bases, place each on a separate line. They will be searched in order for authentication from top to bottom.

The form of the search base is different for various LDAP servers. Please speak to your LDAP administrator, refer to the product documentation for that server or contact BMC support for help.

NOTE

Spacing, punctuation, and capitalization must be exact for a search base to work correctly. For instance, if one of the values in your search base has spaces and/or punctuation (e.g., o=My Company, Inc.), you must place the value in quotation marks (i.e., o="My Company, Inc.") and make sure that the spacing, punctuation, and capitalization are correct.

Last Name of Any Person Known to be in the Directory

Enter the last name (surname) of a contact in the LDAP directory. This is the name that BMC FootPrints Service Core uses to test the connection to your LDAP server. The name should contain values for all the LDAP attributes (fields) you plan to use.

Distinguished Name (Optional)

Some LDAP servers allow an anonymous login. In these cases, a distinguished name and password are not needed; however, if your server requires an authenticated bind of a user to access the directory, you should enter the distinguished name and password of the Administrator user here. Specifying the distinguished name and password can also improve performance in searching and retrieving data from the LDAP server.

The distinguished name of the binding user can be obtained from the LDAP Administrator or can be found using the techniques discussed above for the LDAP Search Base. The distinguished name to use for binding is generally cn=userid (where userid is the ID for the account used for binding) followed by a comma and then the search base. For example, if the User ID is Administrator:

- **For Active Directory**:

  If the search base is: cn=Recipients,ou=organization,o=company

  Then the distinguished name will be: cn=Administrator,cn=Recipients,ou=organization,o=company

  Active Directory also provides some alternatives in lieu of a distinguished name. For example, if you know the domain and userid of a user, you could place in the distinguished name field: DOMAIN\userid

  An additional alternative for Active Directory is to use the userprincipalname of a user, which is typically of the form: userid@domain.com

- **For Exchange 2000**:

  If the search base is: cn=Users, DC=NTdomain,DC=internetName,DC=com

  Then the distinguished name will be: cn=Administrator,cn=Users, DC=NTdomain,DC=internetName,DC=com

Be sure to leave all information of the user in the distinguished name. Do not omit such information as a CN or UID as you would with a search base. Leave blank if binding anonymously.

NOTE

Active Directory normally does not support anonymous binding. If you have Active Directory, you may need to fill in the distinguished name and password.

Password (Optional)

Place the password of the binding user here. This is the password of the Administrator specified in the distinguished name above. Leave blank if binding anonymously.

After all of the information is entered, click **GO**. BMC FootPrints Service Core attempts to connect to your LDAP/Active Directory server and search for the contact specified above using the search base and other information entered. If you are creating a new Address Book, if the connection is successful then the configuration is complete. If you are converting an existing Address Book to LDAP and the connection is successful, the Address Book Field Mapping page is displayed. If BMC FootPrints Service Core is not able to connect to your LDAP server, an error is displayed or the browser times out. You can contact your LDAP administrator or BMC support if you need assistance.

LDAP Address Book Field Mapping

The LDAP Address Book Field Mapping screen appears after LDAP Address Book Configuration is complete only if an existing Address Book is being converted. New Address Books do not require this step. This screen is also displayed if the LDAP configuration for an Address Book is altered.

When an LDAP Address Book configuration has been changed, the administrator can minimize the disruption to the database caused by the change. When creating new Issues, contact information is stored according to the Address Book fields selected. Were these fields to change, part of the contact information would be lost. By mapping the new LDAP Address Book fields to previously existing Address Book fields, disruption is minimized.

Available LDAP Attributes

A list of available LDAP Attributes is in the left column at the bottom of the page. These are attributes found on the LDAP server based upon the search base provided in your LDAP configuration. Each of these attributes is available to match to the current schema, as described below.

BMC FootPrints Service Core Field Names to Map to LDAP

The second column at the bottom of the page contains a table, which contains two columns. The first column is a list of all fields in the current schema. The second column contains a drop-down select box for each of those fields. This select box allows the administrator to delete the field or to map the field to any of the LDAP attributes which were listed as available for use. Although some LDAP attributes are obvious in how they relate to the BMC FootPrints Service Core fields, others are not. The LDAP administrator should assist in mapping LDAP attributes to BMC FootPrints Service Core fields.

It is important that a proper mapping is made so that the contact information previously entered in the issue entries matches the Address Book and you are required to delete or map every field.

Once all selections have been made and the **GO** button is pressed, the Administrator enters the LDAP Field Setup page.

LDAP Field Setup

System or Workspace Administrators can get to the LDAP Field Setup page in one of two ways:

- Following the Field Mapping page after a change in LDAP configuration.
- Selecting Administration | Address Book | Field Maintenance from the BMC FootPrints Service Core Toolbar.

The sections on the LDAP Field Setup page should be filled in as described below.

Refer to Adding Fields for details.

LDAP Attributes

A list of available LDAP Attributes is provided in a drop-down field. These attributes, found on the LDAP server, are based on the search base provided in your LDAP configuration. You cannot use the same attribute for more than one field. The LDAP “manager” field is available only if the address book field type is “Supervisor.”

Using an LDAP Address Book

Once the LDAP Address Book is fully configured, the contact data in the Address Book is automatically pulled from the LDAP directory. The LDAP Address Book looks virtually the same as a BMC FootPrints Service Core Address Book. LDAP Address Book data is not stored in a BMC FootPrints Service Core Address Book table; it is always taken directly from the LDAP directory. However, the contact data for a particular customer, when chosen using the Select Contact button on the Create Issue or Edit Issue pages, will be saved along with the history of the Issue.

The contact data saved in an Issue is a snapshot of the data taken from the LDAP database at the time the Select Contact was performed. If the customer’s data changes at a later date (e.g., the customer's phone number changes), it is not reflected in the history of the Issue. It will be reflected the next time that contact data is accessed from the LDAP directory.

Limitations of LDAP Address Book

Using an LDAP directory, once properly configured, is no different than using a BMC FootPrints Service Core Address Book, with the following exceptions:

- BMC FootPrints Service Core permits only read access to an LDAP directory. Write access is not available in the current release.
- If a server limit is set on the number of contacts to be returned for an LDAP query and one is attempting to look at any query that would return a number of results greater than the server limit, some of the results are missing and the missing results may be randomly dispersed throughout. This most commonly appears when browsing through the entire Address Book. Any more specific search for a contact work correctly even if the contact does not appear when browsing the Address Book. To correct this problem, the number of results returned for an LDAP query can be raised on the LDAP server (Active Directory, Sun ONE Directory Server, etc.)
- The Address Book Homepage and the Select Contact page do not allow browsing using A-Z links. In addition, the Address Book Homepage does not list the first fifty contacts in the Address Book; instead, it displays the Address Book search. Because LDAP does not support browsing of contacts, and many users have large LDAP Address Books with various response times, the browsing options were removed from the interface to prevent time-outs. To find a contact, fill in one or more fields and click **GO**. The non-LDAP BMC FootPrints Service Core Address Book is not affected.

Dynamic SQL Address Book Link

About Dynamic SQL Address Book Link

The BMC FootPrints Service Core Dynamic SQL Address Book Link feature retrieves contact data dynamically from supported contact databases for the Address Book via ODBC. Open DataBase Connectivity, or ODBC, is a standard relational database access method developed by Microsoft Corporation. The goal of ODBC is to make it possible to access any data from any application, regardless of which database management system (DBMS) is handling the data. BMC FootPrints Service Core harnesses this power by providing access to existing ODBC-compliant contact data without requiring that the records be loaded into a separate BMC FootPrints Service Core Address Book. The supported ODBC-compliant databases include Oracle, SQL Server, Access, MySQL, and DB2.

NOTE

If a customer process has an Access database open, BMC FootPrints Service Core may not be able to read that Access database until the customer process closes. If you encounter this situation, check the permissions for the folder in which the database (.mdb) file is located and make sure that the folder is enabled for read and write permissions for everyone. When the folder is enabled with read and write permissions for everyone, the database should be available to BMC FootPrints Service Core and the customer process at the same time.

BMC FootPrints Service Core dynamically accesses the outside database for contact information in the Address Book. This feature is an optional add-on module and must be activated on your BMC FootPrints Service Core server for the option to appear. Please contact your BMC salesperson or reseller if you would like to purchase this option.

NOTE

This feature is part of the Dynamic SQL Database Link add-on module and must be licensed. Please contact your salesperson for more information on obtaining a license to enable this feature.

This section contains the following topics:

- Selecting a data source for the Address Book
  - Linking to an Existing Address Book
  - Convert an Existing Address Book
- Naming the Data Source
- Dynamic SQL Address Book Configuration
  - Linking to the Data Source
  - Selecting the table used from the Data Source
  - Data Source Table Mapping
  - Address Book Field Setup
    - Displayed Name and Field Type
    - FootPrints Service Core Fields
    - Customer Primary Key Select
    - Organizational Unit
- Using a Dynamic SQL Address Book
  - Limitations

Selecting a Data Source for the Address Book

There are two ways to link to a data source for an Address Book:

- Create a new Workspace
- Convert an existing Address Book

These two options are discussed below.

Create a New Workspace

New workspaces are created by selecting the Administration | System | Workspaces link on the BMC FootPrints Service Core Toolbar. Only the System Administrator has access to this option.

The instructions below refer specifically to linking to an ODBC Address Book when creating a new Workspace. For complete instructions on creating Workspaces, please refer to Workspaces in the chapter on System Administration.

There are two options for creating a new workspace:

1. **Create the workspace on my own**—The System Administrator can create a new BMC FootPrints Service Core Address Book, link to an existing Address Book, or link to an ODBC Address Book.
2. **Use an existing workspace configuration**—Only the existing Address Book for the originating Workspace or a new BMC FootPrints Service Core Address Book is allowed. If the Address Book for the originating workspace is in ODBC format, the new workspace links to the same ODBC database using the same fields.

In option 1 select the Create a Dynamic SQL Address Book Link and the next page that is displayed (after the other Workspace options are selected) is the ODBC Configuration page. In option 2, if you would like to link to an ODBC Address Book, the options are to select BMC FootPrints Service Core Address Book and then convert the Address Book later (see below), or to convert the Address Book associated with the originating workspace to an ODBC Address Book (see below).

Converting an Existing Address Book

An existing BMC FootPrints Service Core Address Book can be converted to a Dynamic SQL Address Book at any time. This is done from the Address Book Administration Address Book Type page. Under Select Address Book Type, click the radio button for Dynamic SQL Address Book Link (SQL Server, Oracle, MySQL or Access), enter your password, and click **GO**. The Configure Address Book Connection to Dynamic SQL Address Book (Step 1) page is displayed. For more information about configuring the Address Book, please review Setting up a Relational Database.

When converting from a BMC FootPrints Service Core Address Book to a Dynamic SQL Address Book, the references between Issues and Address contacts may be affected. Contacts are linked to Issues based on the primary key in the Address Book. In order to ease the transition, you can map existing Address Book fields to ODBC field attributes. Although not all fields map directly to the ODBC attributes, for those that do map directly you may still search the Address Book for a particular contact and any existing Issues with contact data that matches the primary key in the new ODBC Address Book is associated with that contact.

Naming the Data Source

Data sources must be named before BMC FootPrints Service Core can link to them. On Windows, ODBC data sources are configured by selecting Data Sources from the Windows Administrative Tools, which opens the ODBC Data Source Administrator. Your System Administrator can help you with this task if necessary. You must have the proper ODBC drivers installed on your system. BMC FootPrints Service Core currently supports Access, MS SQL Server, MySQL, and Oracle.

1. Select System DSN, which allows the data source to be visible to all the system users, including BMC FootPrints Service Core.
2. Select Add. A list of available drivers pops up.
3. Select the driver that corresponds to the correct data source.
4. Select Finish.
5. In the next pop-up, enter a descriptive name under Data Source Name.
6. Depending on the type of data source you selected, select the location of the database.
7. Configure any necessary security options, including specifying the name and password that BMC FootPrints Service Core will use to access the data source.

Special Notes for Access Users

1. Open Access.
2. Select Tools/Options. The View tab should be in the front.

3. Near the top under the section called Show, check the System objects checkbox.
4. Open the database file using Access.
5. Select Tools/Security/User and Group Permissions. Make sure that the user with which you log into the database is highlighted (by default this is Admin).
6. Highlight the MSysObjects database located on the right side (if you don't see it, you probably didn't do Step 1 correctly)
7. Check the box for Read Data. Read Design is checked automatically as well.
8. Press the Apply button. The setup should work correctly.

NOTE

BMC FootPrints Service Core supports linking to table queries for Access and table views for other databases that have this feature. Your database administrator can help you determine how your external databases are configured.

Dynamic SQL Address Book Configuration

Dynamic SQL Address Book Configuration

For BMC FootPrints Service Core to access an external database for the Address Book, information about the external data source must be entered. If you don't have this information, check with your Database or System Administrator. This section describes how to configure the link to the external data source. To access the configuration wizard, select Administration | Address Book | Configure Dynamic SQL Address Book.

Topics included in this section are:

- Linking to the data source
- Selecting the table to use from the data source
- Mapping fields from the data source to FootPrints Service Core
- Adding additional fields from the table to FootPrints Service Core

Linking to the Data Source (Windows version)

Step 1 of Address Book Configuration is as follows:

1. **Name for Address Book**—This is an arbitrary name used to identify the Address Book in BMC FootPrints Service Core, e.g., Widget Company Users. The field in the wizard is pre-filled with the name entered during installation, but it can be changed here. The name of the Address Book is visible to users in the Address Book.
2. **Data Source Name**—From the drop-down list of databases available to you, select the one you want your BMC FootPrints Service Core Workspace to use as the Address Book. If you don't see the one you need, you may need to name the data source.
3. **Database Type**—The database types currently supported for BMC FootPrints Service Core running on Windows include SQL Server, Access, MySQL, and Oracle. Based on the Data Source Name you select, BMC FootPrints Service Core places a default value in this field based on data drivers associated with the data source.
4. **Server User**—This is the name of the database login ID for the data source. If you do not have this information, check with your System or Database Administrator. If you configured the data source name, use the server user ID that you specified.
5. **Server Password**—This is the password of the server user. If you configured the data source name, use the server user password that you specified. Your Database Administrator should have this information.

When you have finished with Step 1, click Next.

Linking to the Data Source (UNIX version)

Step 1 of Address Book Configuration is as follows:

1. **Name for Address Book**—This is an arbitrary name used to identify the Address Book in BMC FootPrints Service Core, e.g., Widget Company Users. The field in the wizard is pre-filled with the name entered during installation, but it can be changed here. The name of the Address Book is visible to users in the Address Book.
2. **Hosting Server**—From the drop-down list of databases available to you, select the one you want your BMC FootPrints Service Core Workspace to use as the Address Book. You can only connect to the same database type that BMC FootPrints Service Core is using
3. **Oracle SID** or **MySQL Database**—The database types currently supported for BMC FootPrints Service Core running on Windows include SQL Server, Access, MySQL, and Oracle. Based on the Hosting Server you select, BMC FootPrints Service Core places a default value in this field based on data drivers associated with the data source.
4. **Server User**—This is the name of the database login ID for the data source. If you do not have this information, check with your System or Database Administrator. If you configured the data source name, use the server user ID that you specified.
5. **Server Password**—This is the password of the server user. If you configured the data source name, use the server user password that you specified. Your Database Administrator should have this information.

When you have finished with Step 1, click Next.

Selecting the Table to Use from the Data Source

In Step 2 of Address Book Configuration, you define the table in the data source that you want to use for the Address Book.

- **Select a Table**—Click the drop-down list of tables for the data source and select the table that contains the data you want to use in your workspace.

When you have finished with Step 2, click Next.

Mapping Fields from the Data Source to BMC FootPrints Service Core

In Step 3, you associate fields in your external data source with the fields that are displayed in the Contact Information section of your Issue. For example, to map Last Name, First Name, and User ID to fields in your external data source, you must:

- **Last Name**—Select the field from the drop-down list of fields in the external data source that corresponds to the Last Name in the Address Book.
- **First Name**—Select the field from the drop-down list of fields in the external data source that corresponds to the First Name in the Address Book.
- **User ID**—Select the field from the drop-down list of fields in the external data source that corresponds to the User ID in the Address Book.

Continue mapping fields from the external data source to BMC FootPrints Service Core contact information. When you have finished click Next.

NOTE

Your list of fields will vary depending upon your Workspace. For example, depending on what your Workspace is tracking, you might be mapping employee information or facilities information.

Adding Additional Fields from the Table to BMC FootPrints Service Core

In Step 4, the last step in the configuration process, you can add additional fields to the Address Book that are available in the external data source table. The final page for configuring the additional fields is identical to the page you use to add new fields to a BMC FootPrints Service Core Address Book or Workspace, with the addition of the External Database Field drop-down list.

To configure additional fields for the Address Book:

1. Click on the drop-down list of fields in External Database Field.
2. In the **Name** field, enter the name that BMC FootPrints Service Core uses for this information. You can use the same name used in the external data source.
3. Define the Permissions for BMC FootPrints Service Core users.
4. Click **Create Field**. The field is added to the Field List.
5. Continue adding fields until you have all the fields from the external data source that you want to include in the Address Book.
6. Select a Primary Key from the field list to be used to find issues related to the specified contact.

NOTE FOR ACCESS USERS

If any records in the external database are missing data in the Primary Key field that you select, BMC FootPrints Service Core cannot find those records. This is a specific characteristic of Access.

7. If required, select a field to be used as the Organizational Unit. This is useful for reporting and searching.

When you have finished, click **Finish**.

Using an SQL Address Book

Once the Dynamic SQL Address Book is fully configured, the contact data in the Address Book is automatically pulled from the external directory. The SQL Address Book looks the same as a BMC FootPrints Service Core Address Book. The SQL Address Book data is not stored in a BMC FootPrints Service Core Address Book table; it is always taken directly from the external directory. However, the contact data for a particular customer, when chosen using the Select Contact button on the Create Issue or Edit Issue pages, is saved along with the history of the Issue.

NOTE FOR ACCESS USERS

If any records in the external database are missing data in the Primary Key field that you select, BMC FootPrints Service Core cannot find those records. This is a specific characteristic of Access.

The contact data saved in an Issue is a snapshot of the data taken from the SQL database at the time the Select Contact was performed. If the customer’s data changes at a later date (for example, the customer's phone number changes), it is not reflected in the history of the Issue. It is reflected the next time the customer's contact data is accessed from the SQL directory.

Limitations of SQL Address Book

Using a SQL directory, once properly configured, is no different than using a BMC FootPrints Service Core Address Book, with the following exceptions:

- BMC FootPrints Service Core permits only read access to an external directory. Write access is not available in the current release.
- If a server limit is set on the number of contacts to be returned for a SQL query and if you are attempting to look at any query that would return a number of results greater than the server limit, some of the results are missing and the missing results may be randomly dispersed throughout. This most commonly appears when

browsing through the entire Address Book. A more specific search for a contact works correctly even if that contact does not appear when browsing the Address Book. To correct this problem, the number of results returned for a SQL query can be raised on the external server (Exchange, Sun ONE Directory Server, etc.)

Master Contact Record Setup

The Master Contact Record provides an easy way to organize contacts by a common factor, such as "Company", "Department", "Domain", or some other Address Book field, with contacts that share the same factor inheriting properties from the master record. For example, if you set "Company" as the common factor, then any contacts that are created and that have the same value in the Company field can be populated automatically with values in the Address, City, State, and Zip Code fields. This is useful when creating contacts in the Address Book, entering contact information in an issue, or performing searches.

You must create all of your Master Contact Record fields before enabling the Master Contact Record feature. Refer to Address Book Field Maintenance in this document for complete instructions on creating the fields.

The Master Contact Record is set up from the Field Maintenance page. It is based on the Organizational Unit. To have a Master Contact Record, at least one more field must be part of the Master Contact Record. Address Book contacts are stored the same way whether the Master Contact Record feature is or is not enabled, so existing Address Book contact records are not broken if Master Contact Records are enabled.

NOTE

The Master Contact Record feature does not work with external address books.

Enable the Master Contact Record Feature

To create a master contact record:

1. Select Administration | Address Book | Field Maintenance.
2. Click the checkbox marked **Check here to enable the Master Contact Record Feature**. At that point, the Organizational Unit label changes to **Master Contact Key**. In addition, a pop-up window is displayed explaining that you must select a Master Record Key and associate one or more fields with it before saving the page. That means you must designate a field as the key that is used to look up associated records and also select additional fields that are to be displayed as part of the Master Contact Record information. For instance, if you select "Company" as the Master Contact Record Key, when you look up Master Contact Records, all the contacts that match the Company field are assembled and the information displayed with those records will be the fields you associated with it, such as Address, City, State, Zip Code, etc. The procedure for associating fields with the record are in the steps below.
3. Click the **OK** button to dismiss the pop-up window.
4. Edit fields and associate them with Master Contact Records by selecting **Yes** from the **Associate with** radio buttons. To do this, highlight a field in the Field List, click **Edit**, then click the **Yes** radio button to associate it with the Master Contact Record. The feature does not work until you have associated fields with the Master Contact Record. For example, you could highlight "Address" in the Field List, then click the EDIT button. You would then be able to click a radio button and associate the Address field with the Master Contact Record. You must have at least one field associated with the record for this feature to work.
5. Check the "Check here to create Master Contact Records from existing Contacts" checkbox if you wish to have Master Contact Records created from the existing contacts in the Address Book. This checkbox is only visible once for each Address Book, when you are first setting up the Master Contact Record feature. After that, if you wish to create a Master Contact Record, you can do so from the Address Book toolbar.
6. Enter your password and click **Save** to save the changes.

Select an Organizational Unit

For instructions on selecting an Organizational Unit, refer to Organizational Unit.

Export Data

Address Book contact data can be exported to a .csv file. This allows you to export all or some contacts to an external spreadsheet, database, etc.

To export Address Book data:

1. Select Export Data from the Address Book administration menu.
2. Click **GO** to export the entire Address Book or indicate logical selection criteria for a portion of the Address Book.
3. Enter a file name and browse for the directory to save the export file.
4. Click **Save**. The file is in comma-separated-variable (CSV) format, suitable for editing or loading into another database. Export criteria can be saved for future exports.

Notes about Date and Date/Time Fields

If you plan to export BMC FootPrints Service Core data to a .CSV file for manipulation in Excel for eventual re-importing in BMC FootPrints Service Core (i.e., open the .CSV file in Excel for manipulation, re-save it to a .CSV file, and then load it back into BMC FootPrints Service Core) you must perform certain steps if your data contains Date or Date/Time fields:

1. After you open the .CSV file in Excel, you it is displayed suitably for your locale. For example, in the United States, the date 2003-02-14 in the import file is displayed as 2/14/03.
2. You must change the format of that column by selecting Format | Cells | Custom. Select one of the existing formats and then input into the Type box YYYY-MM-DD for a date field and YYYY-MM-DD HH:MM:SS for a Date/Time field.
3. Make any additional changes desired and then save it as a .CSV file for re-importing into **FootPrints Service Core**.

ISO Date Problems

If there is a date field in the Address book, export dates in the ISO format becomes a problem. There are two workarounds to this problem:

The first workaround is:

1. Select Administration | System | Date Format.
2. Change the format for the entire system to the ISO format. This requires System Administration privileges.
3. Export the data again.
4. Open the file with WordPad. The date data should now be in ISO Format. If you view the exported file in Excel, you may find a different format than if you open it with WordPad. If you save the file in Excel, it may change the date format without being told to do so.
5. Select Administration | System | Date Format and return the format to what it was before you changed it.

The second workaround is:

1. Open the exported data in Excel.
2. Highlight the entire column of any date field.
3. Right-click in the highlighted column and chose "format cells".
4. Select Category | Highlight "Custom"

5. Under "Type", enter yyyy-mm-dd and then click OK. The date format should change for the entire column.
6. Save the file.

Mass Email

The Mass Email feature allows you to send an email to all or some of the contacts in the Address Book. First, you must design an email in HTML or text format. Next, a set of contacts is selected (using a saved Address Book report) and the mailing is scheduled. The BMC FootPrints Service Core scheduler service sends the email to all contacts in the report in small batches (using your email server), ensuring the process runs smoothly. When all of the emails are sent, a confirmation email is sent to the initiator of the mailing.

To use this feature:

1. Create the desired email text in any text or HTML editor and save the file with either a .txt or .html extension.
2. Optionally create an Address Book report to retrieve the contacts desired for the mailing under Report on the Address Book Toolbar. You must save and name the report. For example, to send the email to a certain department or company, select that department or company in the appropriate search field. To retrieve all contacts, no report is necessary.
3. Select Administration | Mass Email from the Address Book Toolbar. The following options can be selected:
   - **Select the time for the mailing**—Options include send immediately and specify date and time. For large mailing, we recommend scheduling the process after hours.
   - **Select Recipients**—The email can be sent to all contacts in the current Address Book or to a subset of the contacts based on an Address Book report.
   - **Optionally force breaks between batches of mail**—Select a length of time here for batches of mail to be sent between the breaks. For example, to send mail continually for one minute, then take a break, then continue sending mails for another minute, select 1 minute. A break length between fifteen seconds and one hour can be selected. This feature is recommended if escalations and incoming emails are also being handled by the BMC FootPrints Service Core service for Windows and to minimize the web server load (Windows and UNIX). For each break, the mailing process ends and then restarts for the next period.
   - **Select message format**—Options include text, HTML, and Mixed text and HTML. If Mixed text and HTML is selected, both text and HTML files can be included in the mass email.
   - **“From” name for outgoing email**—This is the name that is displayed in the recipients’ inboxes on the email.
   - **“Reply” address**—This is the reply address used for the mailing.
   - **Subject**—This is the subject of the mail.
   - **Upload Text File**—If text or Mixed text and HTML was selected above, upload the text file from your local machine using the Browse button.
   - **Upload HTML File**—If HTML or Mixed text and HTML was selected above, upload the HTML file using the Browse button.
   - **Upload Attachments** (optional)—Optionally include one or more attachments (up to five) to be included with the emails.
4. To schedule the mailing, click the **GO** button. If the preview checkbox is checked, you receive a preview of the email.
5. To see a list of mailings scheduled or to delete a mailing from the queue, click the link in the Select Time for Mass Mailing section of the administration page.

Additional configuration options that apply to all mass mailings from all Address Books can be found under Administration | System | Email | Configure Mail on the **BMC FootPrints Service Core** Toolbar. The following two options are available:

- **Batch size**—Defaults to 100. Select the batch size of emails to be sent at once (between 10 and 1000).
- **Length of Delay in seconds**—Select 1–10 seconds. This delay is in addition to the breaks configured above for each mass emailing. This delay occurs between batches and is useful in giving the email server a rest between batches. This delay does not stop the BMC FootPrints Service Core process itself on the BMC FootPrints Service Core server, it only pauses the emails actually being sent to the email server. To stop the process at intervals (to give the server a rest and to allow other BMC FootPrints Service Core processes, such as escalation, to run), configure breaks on the Mass Email Administration page as described above.

After a mass emailing is completed, a confirmation email is sent to the initiator. If a problem occurs with a scheduled mailing, it goes to the bottom of the queue, which can be viewed from the link mentioned in Step 5 above. Use the delay and break options provided to ensure that regular processing is not interrupted on the BMC FootPrints Service Core and email servers.

Mass Mail Encoding

When creating messages for a mass mailing in a program such as Microsoft Word, the files may contain non-ASCII characters when they are exported to HTML or text. This can cause the some characters in the message to be garbled when it is sent in a mass mailing because BMC FootPrints Service Core expects the message be in UTF-8 encoding and characters exported in this manner might be saved in a local encoding, such as ISO-8859.

If you create a mass mailing message in a program that is not using UTF-8 encoding, or you are unsure as to what encoding the program is using, you can use the following procedure to make sure that the message is in the correct encoding before it is sent:

1. Open the HTML file using the Notepad application.
2. Select File | Save as.
3. In the Save as pop-up, select the Encoding drop-down. ANSI should be pre-selected in the drop-down.
4. Change ANSI to UTF-8.
5. Save the file.
6. Use the file you saved as UTF-8 for the mass mailing message.

System Administration

System Administration

The focus of this section is on routine administration; refer to Workspace Administration and other chapters for additional important information on installing and administering BMC FootPrints Service Core. To access the System Administration options, select Administration | System from the BMC FootPrints Service Core Toolbar.

Only the System Administrator can set system-wide options.

The options are:

- BMC FootPrints Service Core**Version**—The version of BMC FootPrints Service Core running on the server is listed at the top of this screen.
- Workspaces—Create, delete, and manage Workspaces.

- **Configuration Manager**—Configuration Manager is described in detail in Chapter 9: Advanced Features.
- **Appearance**
  - System Preferences—Configure system-wide settings.
  - Languages—Configure multiple language support.
  - Colors—Change the display colors forBMC FootPrints Service Core.
  - Date and Time Format—Select American, European or ISO format.
- **Features**
  - Configure Email—Set up**BMC FootPrints Service Core** to handle incoming email requests.
  - Asset Management—Set up asset management tool
  - Instant Talk—Configure settings for Instant Talk one-on-one chat feature.
  - Attachments—Attachment restrictions
- **Users**
  - User Management—Change user's password, add or delete user to/from BMC FootPrints Service Core.
  - Auto Add Customers—Allow Customers to be added automatically and assign these users to be assigned to particular workspaces.
  - Configure Authentication—Select password authentication type: FootPrints, Windows, UNIX or LDAP.
  - Customer Forgot Password—Allow customers to request a password reminder email.
  - User Roles—Create and manage system default roles for Agents and customers.
- **Miscellaneous**
  - License Management—Get and install a new license, show the details of your current license.
  - Broadcast Message—Broadcast a message to all logged in users.
  - Logs—View and manage system logs.
  - Web Server and/or Database Migration—Essential information you must read before doing a migration.
  - Server Benchmark—Test server performance.
  - Server Performance Report—Miscellaneous statistics for diagnosing performance problems.
  - Debug Manager—Manage debugging tools.
  - FootPrints User Group—Link to the BMC FootPrints Service Core Tech Community to share ideas, modifications, and questions with other BMC FootPrints Service Core users.

NOTE

System Administrators are automatically given Workspace Administration privileges in all workspaces.

Workspace Management

About Workspace Management

The Workspace Management page contains System Administration options for BMC FootPrints Service Core Workspaces. To customize an existing Workspace, refer to Workspace Administration.

The options on this page are:

- List All Workspaces—View a list of all current Workspaces and their corresponding Workspace ID numbers.
- Create a New Workspace—Create a new Workspace database.
- Delete a Workspace—Delete Workspace database.
- Database Maintenance—Archive and purge issues from an existing Workspace.
- Synchronize FootPrints Schema with Database Schema—Ensure that the BMC FootPrints Service Core schema and the underlying database schema are synchronized.
- Export data—Export Workspace data to a .csv file.
- Load External Data—Import data into BMC FootPrints Service Core from a flat text file.

Create a New Workspace

BMC FootPrints Service Core provides three options for creating a new Workspace:

- Workspace Setup Wizard
- Create Workspace on your own
- Copy configuration from existing workspace

Whichever option is chosen, the Workspace options can always be changed later. In addition, there is no limit to the number of Workspaces that can be created in BMC FootPrints Service Core.

To create a new Workspace, choose Administration | System | Workspaces from the BMC FootPrints Service Core Toolbar. The following sections describe each method.

Workspace Setup Wizard

The New Workspace Setup Wizard walks you through setting up a new Workspace. It includes many of the most popular options and uses, but it does not include all options. If you use the wizard, you can easily go back after you have set up the Workspace and change or add to your Workspace settings.

To create a new Workspace, choose Administration | System | Workspaces from the BMC FootPrints Service Core Toolbar. Under Create A New Workspace, select Use the Wizard to create my workspace. Refer to Workspace Setup Wizard for complete instructions.

Create a New Workspace on Your Own

If this option is chosen and **GO**, is clicked, the following information must be entered:

- **Name of Workspace**—This is the name that BMC FootPrints Service Core displays for the Workspace.
- **Address Book**—Select to create a new Address Book for the Workspace and give it a name, link to an existing Address Book, or link to an LDAP Address Book. The last option is only available if the LDAP Address Book link option is licensed. Refer to the section on LDAP Address Book link for more information.

After you click **GO**, BMC FootPrints Service Core changes to the new Workspace and displays the Workspace Administration page. From there, you can add custom fields, settings, and users to the new Workspace.

Use an Existing Workspace Configuration-Copy a Workspace

This option allows you to copy the Workspace fields, Address Book, saved searches and reports, and other custom options from another Workspace into a new Workspace.

NOTE
Copying a Workspace's configuration does not copy the Workspace's data. It only copies the Workspace's custom fields and other settings.

To copy an existing Workspace configuration:

1. Check the radio button for Use an existing workspace configuration.
2. Select a workspace from the drop-down list.

NOTE
Clicking the View Details button displays the configuration information for that Workspace.

3. Click **GO**.
4. Enter a name for the new Workspace.
5. **Address Book**—Select from one of the two Address Book options:
   a. **Create a new address book with the same fields**—This links the new Workspace to its own Address Book, which contains the same fields as the existing Workspace's Address Book (does not copy data, only fields).
   b. **Link to existing address book**—The new Workspace shares the existing Workspace's Address Book.
6. Select whether you wish to copy the agents (not customers) when you copy the workspace configuration. If you do not copy the agents, you must add them afterwards.
7. Select the feature configurations to copy. Any configuration items that are not listed are copied automatically. If you do not check a feature, the settings for that feature are not copied into the new workspace. Features are:
   - Escalation
   - User Teams
   - Auto Assignments
   - All Searches and Reports (this copies all shared, saved searches and reports)
   - Service Level Agreements
   - Change Manager
8. Click **GO**.

The new Workspace is now created. Click the View Details button to review the Workspace configuration, or click **GO** to go directly to the Workspace Administration page for the new Workspace. From there, you can add users to the new Workspace and make any other changes necessary.

Delete a Workspace

Deleting a BMC FootPrints Service Core Workspace can consists of up to three steps:

- Deleting the Workspace from the BMC FootPrints Service Core system
- Deleting the database for that Workspace
- Deleting users who are members of only that Workspace

Deleting a Workspace from BMC FootPrints Service Core removes the Workspace but not the data. To delete the actual database, you must remove it from the host computer (outside of BMC FootPrints Service Core). Before deleting the Workspace, BMC FootPrints Service Core displays where the data for that Workspace is stored and how to delete it.

You may also delete users when you delete a Workspace. In addition, if there are any BMC FootPrints Service Core users who are members of only the deleted Workspace, BMC FootPrints Service Core allows you delete them at the same time as the Workspace.

To delete a **FootPrints Service Core** Workspace:

1. Select the Workspace name from the drop-down list labeled Delete Workspace.
2. Click **GO**. A page is displayed describing where the database is located and which users may be deleted.
3. Select which, if any, users to delete and click **GO** on this page. The Workspace and any selected users are removed from BMC FootPrints Service Core.

Database Maintenance

Database Maintenance

Selected issues can be completely removed from a BMC FootPrints Service Core Workspace using the Database Maintenance feature. Specifically, issues that have been changed to the Deleted status are good candidates for archiving since Issues that have spent significant time as Deleted are no longer needed on a regular basis, but can be stored for reference information. These issues can be stored as read-only in a separate archive Workspace, which is useful for cleaning up the database by removing obsolete issues from a Workspace. Fewer issues in a Workspace leads to faster searching and reporting times, speeding up database access times.

IMPORTANT

Make a backup of your BMC FootPrints Service Core database before performing any purge function.

NOTE

Enabling archiving uses one workspace, and counts towards the limitation of three workspaces for BMC customers who own the Base Starter Pack. Please contact your salesperson for details on obtaining the Extended Starter Pack.

Topics covered in this section include:

- Archiving data from current workspace
- Purging data from current workspace
- Working in the archive workspace

Archiving Data from the Current Workspace

The archive function removes issues that meet specified search criteria in the source Workspace, copies those issues to the archive Workspace that you specify, and then removes those issues from the Workspace's issue table.

1. Select Administration | System | Workspaces, then click the **GO** button in the Database Maintenance section.
2. Select the Archive option as the Action to Take.
3. The Status and Date Criteria of Applicable Issues section allows you to define the selection criteria for Archive. This can be based on either the Issue’s current status, the date it was last edited/created, or a combination of both.
   a. By default, only the Deleted status is highlighted.
   b. Highlight additional statuses as needed.

c. Select issues based on one specific date that they were created or last edited or choose all issues before or after a particular date.

d. Select AND to select issues that must meet both the status and date criteria.

e. Select OR to select issues that meet either the status or the date criteria.

TIP

Set up an escalation rule that automatically changes the status of closed issues to Deleted for issues that are a certain age. Then you can skip this step and just use the default highlighted status of Deleted.

4. Type in your password and click **GO**.
5. **Matching Issues For Archive—**All issues that meet the Archive search criteria are listed here and highlighted. Review the list to ensure you are archiving issues that meet your intended criteria. You can deselect issues by holding the CTRL key and left clicking the issue with your mouse. Only highlighted issues are archived.
6. **SQL Query—**BMC FootPrints Service Core displays the query that was used to retrieve the issues that have met the archive search criteria for your review.
7. **Archive Location—**Each "source" Workspace has a designated "destination" archive workspace. The first time you archive Issues, you must provide a name for the archive Workspace.

   a. **Name of new archive workspace—**The first time you archive Issues from a given Workspace, you must set up some archive Workspace information. Give your archive Workspace a name. It is suggested that you use a name that is similar to the original Workspace for your archive Workspace, but not too similar. If your Workspace's name is Helpdesk try using Archived Helpdesk instead of Helpdesk (Archive). This tells you which Workspace is archived, but does not confuse people by starting with the same name.

   b. **Name of new workspace's address book—**You can choose to create a new Address Book for the archive Workspace or link to the existing one. You must provide a Workspace name if you are creating a new one. If linking to an existing Workspace, check the Link to current workspace's address book instead box if you do not want to create and archive the Address Book. We suggest you link to the original.

   a. All subsequent archive attempts from the same Workspace present an option to use the same archive Workspace or create a new one. Your business needs determine whether you want one or multiple archive Workspaces for a single source Workspace. If you are reporting on data by year, you might consider creating separate archive Workspaces for each year, especially if you have many issues to archive that you use for reporting.

8. **Scheduled Run-Time—**Archive jobs can be run immediately or at a time when server activity is light (if you have a large job with many issues to archive).

   a. **Start Immediately—**Run immediately. Immediately means the archive begins the next time the BMC FootPrints Service Core scheduled service runs, which could be up to one minute from the time you enter your password and click **GO**.

   b. **Start at the following data and time—**Enter the date and time you want to run the job. Since the entire process could take a long time to finish, depending on the number of records selected, you may want to schedule large jobs when there is little server activity to avoid server overload, e.g., on weekends or late at night.

9. **Scheduled Jobs Pending In Current Workspace—**This section lists those jobs scheduled to run in the future, as configured in the previous step.
10. Type in your password and click **GO**. Click **OK** when asked to confirm that you want to complete the archive. BMC FootPrints Service Core schedules the archiving to run as a background process based on the time set up in the Scheduled Run-Time step. This includes jobs scheduled to run immediately.

Purging Data from the Current Workspace

Purging data from the source workspace works the same way as archiving, except no archive workspace is created.

NOTE

If you think you might need to report on any of these purged issues, use the Archive function.

We recommend you make a backup of your BMC FootPrints Service Core database before performing the Purge function.

1. Select Administration | System | Workspaces, then click the **GO** button in the Database Maintenance section.
2. Select the Purge option as the Action to Take in the next page.
3. The Status and Date Criteria of Applicable Issues section allows you to define the selection criteria for Purge. This can be based on either the Issue's current status, the date it was last edited/created, or a combination of both.
   a. By default, only the Deleted status is highlighted.
   b. Highlight additional statuses as needed.
   c. Select issues based on one specific date that they were created or last edited or choose all issues before or after a particular date.
   d. Select AND to select issues that must meet both the status and date criteria
   e. Select OR to select issues that meet either the status or the date criteria.

TIP

Set up an escalation rule that automatically changes the status of closed issues to Deleted for issues that are a certain age. Then you can skip this step and use the default highlighted status of Deleted.

4. Type in your password and click **GO**.
5. All issues that have met the purge search criteria are listed in the Matching Issues For Purge field and highlighted. Review the list to make sure you are purging issues that meet your intended criteria. You can de-select issues by holding the CTRL key and left clicking the Issue with your mouse. Only highlighted issues are purged.
6. **SQL Query**—BMC FootPrints Service Core displays the query that was used to retrieve the issues that have met the purge search criteria for your review.
7. **Scheduled Run-Time**—Purges can be scheduled to run either immediately or at a time when server activity is light, if you have a large job with many issues to purge.
   a. **Start Immediately**—Run immediately. Immediately means the purge begins the next time the BMC FootPrints Service Core scheduled service runs, which could be up to one minute from the time you enter your password and click **GO**.
   b. **Start at the following data and time**—Enter the date and time you want to run the job. Since the entire process could take a long time to finish, depending on the number of records selected, you may want to schedule large jobs when there is little server activity to avoid server overload, i.e., on weekends or late at night.
8. **Scheduled Jobs Pending In Current Workspace**—This section lists those jobs scheduled to run in the future, as configured in the previous step.

Enter your password and click **GO**. After clicking the **GO** button, click OK to confirm that you want to complete the purge. After clicking OK, BMC FootPrints Service Core schedules the purge to run as a background process based on the time defined in Step 7. This include jobs scheduled to run immediately.

Working in the Archive Workspace

The archive Workspace is a read-only Workspace. There is no option in the left hand toolbar to create new issues or global issues, even for System Administrators, in an archive Workspace.

Cross-workspace copies into archive Workspaces by both escalations and from the Details page are no longer allowed. Archive Workspaces are not listed in the drop-down list of Workspaces.

Issues in the archive Workspace can be restored to the original Workspace individually or in a batch process. There is a Restore Archive button on the Details toolbar for individual Issues. Once clicked, you are asked to confirm your decision. After clicking **OK**, BMC FootPrints Service Core moves the issue from the archive Workspace back to the original Workspace.

Batches of Issues can be restored from the archive Workspace's Homepage using the Restore option in the Quick Action Checkbox dialog.

Synchronize BMC FootPrints Service Core Schema with Database Schema

This synchronization utility ensures that the BMC FootPrints Service Core schema and the underlying database schema are synchronized. The most likely scenario is for them to cease to be synchronized after migrating BMC FootPrints Service Core to a new server. This might cause an Error 203 to be displayed, with an indication that a field is missing. When the utility is run, it compares the BMC FootPrints Service Core schema with the database schema. If there are columns in the BMC FootPrints Service Core schema that are not reflected in the database schema, it adds those columns. It does not remove anything from the database or from BMC FootPrints Service Core and you cannot cause any harm by running the utility. Nevertheless, it is recommended that you check with BMC Support before running this utility.

To use the utility:

1. Select Administration | System | Workspaces.
2. From the Workspace Management page, scroll down to the Synchronize BMC FootPrints Service CoreSchema with Database Schema section.
3. Select the workspace you want to synchronize from the drop-down field.
4. Click the **GO** button.

Export FootPrints Service Core Data to a File

Use this option to export Workspace data from the current Workspace to another **FootPrints Service Core** Workspace, database, or application.

To export Workspace data:

1. Select Administration | System | Workspaces | Export FootPrints Service Core data from the BMC FootPrints Service Core Toolbar.
2. Click **GO**.
3. Use the Fields to be exported dialog to choose the columns (and column order) for the export file.
4. Select the criteria for the Issues to be exported. To export the entire workspace, highlight all statuses (and do not make any other restrictions).
5. Click **GO**.
6. Enter a file name.
7. Browse for the directory in which to save the export file
8. Click **Save**. The file is saved in comma-separated-variable (**CSV**) format, suitable for editing or loading into a Workspace in CSV format. For more information, refer to Notes on Data Encoding.

NOTE ABOUT ASSIGNEES

If Assignees is selected, the user IDs of the assignees are output to the report (e.g., bsmith). This is suitable for importing the report output into another Workspace. To create a file that includes assignees full names (e.g., Bob Smith), use the Report Text File option.

NOTE ABOUT DATE AND DATE/TIME FIELDS

If you plan to export BMC FootPrints Service Core data to a .CSV file for manipulation in Excel for eventual re-importing in BMC FootPrints Service Core (i.e., open the .CSV file in Excel for manipulation, re-save it to a .CSV file, and then load it back into BMC FootPrints Service Core) you must perform certain steps if your data contains Date or Date/Time fields:

1. After you open the .CSV file in Excel, it is displayed suitably for your locale. For example, in the United States, the date 2003-02-14 in the import file is displayed as 2/14/03.
2. You must change the format of that column by selecting Format | Cells | Custom. Select one of the existing formats and then input into the Type box YYYY-MM-DD for a date field and YYYY-MM-DD HH:MM:SS for a Date/Time field.
3. Make any additional changes desired and then save it as a .CSV file for re-importing into BMC FootPrints Service Core.

Importing Issue Data into BMC FootPrints Service Core

Load External Data into a Workspace

Data can be imported into a BMC FootPrints Service Core Workspace database from a flat text file. This feature is useful, for example, when migrating from an existing Service Desk system to or when combining a knowledge base with an existing Workspace.

NOTE

The data must first be placed into a single, flat text file. Details on creating this text file can be found in Creating the Data File.

To import data into a Workspace:

1. Select Administration | System | Workspaces and then scroll to the Load External Data section of the page.
2. Complete the appropriate fields, which are explained as follows:
   - **Select Time to Load Workspace Data (You May Wish to Select a Time When Server Load is Light)**—The data can be imported immediately, or can be scheduled for a future time. If your import file is large (e.g., more than one thousand records) and the BMC FootPrints Service Core server is in use, we recommend scheduling the import for a time when the server is not being accessed by users. A link to Review a List of Workspace Load events Currently in the Queue and/or Delete allows you to view scheduled loads.
   - **Please browse for the data import file ...**—Click the **Browse** button to browse your local machine or network drives for the file. A link is also provided to review the schema of the data.
   - **Data encoding**—Select the type of data encoding to use for the import file. For detailed information, see Note on Data Encoding.
   - Options are server default and UTF-8.
     - **Server Default** - If you're planning to view the csv file in Excel or other non-UTF-8-aware application, or if you are loading data saved from Excel, you should pick the "server default" choice.
     - **UTF-8** - If you are sure that the application used to view the data in the .csv file can handle UTF-8 encoded data, select "UTF-8".
   - **Link records to the Address Book**—This optional feature is explained in Linking Imported Data to Address Book Contacts. Select YES to link records or NO to not link records.
   - **Userid or full name of an agent...**—There are two different methods for indicating the default submitter of the data:
     a. The user ID of the administrator performing the data import becomes the submitter for all Issues being imported unless a different submitter is entered in this field.
     b. Enter a valid one-word BMC FootPrints Service Core ID in the field provided. This user becomes the submitter for all of the Issues being imported.

Different submitters' IDs can be entered for each individual Issue in the data file. Refer to Creating the Data File for information on how to do this.

- **Optional list of Assignees...**—Optionally enter one or more assignees, listed by BMC FootPrints Service Core ID, full name, or Team name, separated by commas if there is more than one assignee. The user(s) entered here become the assignee(s) for all imported Issues. Alternatively, the data file itself can contain assignment information (refer to Creating the Data File for Issue Import). If one or more assignee names are provided on the System Administration page, any names found in the load file are ignored.

3. Click **GO**. The system checks that the file exists. A new Load External Data page is displayed. The new page displays some workspace information at the top of the page. The rest of the page is concerned with mapping the load file to the workspace fields and saving the mapping for later use.
4. Complete the appropriate fields, which are explained as follows:
   - **You may use the parameters in a built-in Field-Mapping List...—**On the left side of the schema section of the page, a list of built-in and saved field mappings is displayed (if you have saved mappings previously). To use a saved or built-in mapping, select the mapping from the list and then click the **Use Selected List** button. The fields for mapping will be populated from the selected list. To delete a saved list, select the field and then click the **Delete Selected List** button.
   - **Check here if your Load File...**—The checkbox lets you indicate if your import file has a Heading line. Check the box as appropriate. If the box is checked, the first line of the import file will not be loaded as data.
   - The section below the checkbox lists fields with drop-down boxes for mapping the fields to load data:
     - **Submitter in Data**—If you want to indicate original submitters for issues in the import file, you can include that information in the import file, and use the drop-down to indicate which field has the information.
     - **Create/Close Date/Time in Data**—If you want to indicate create and/or close date/time for issues in the import file, you can include that information in the import file, and use the drop-downs to indicate which fields have the information.
   - **Save Field-Mapping List** button—The Save Field-Mapping List button saves the list of mappings you create. This button does not just save the list of mappings for Submitter in Data or the Create/Close Date/Time in Data fields, but for the rest of the mappings (below) as well. Consequently, if you want to save the entire mapping, you must click the button after you have completed mapping all of the fields. When you save the mapping, you are prompted for a name for the saved field mapping. When the save completes, the name is displayed in the list on the left side of the page.
   - **Field Mapping**—Map the fields in the load file to workspace fields by selecting the appropriate load file fields from the drop-downs. To skip a field mapping, select Do Not Import from the drop-down. If you select Do Not Import, no data is entered into that field. You can also select Blank Field #1 to leave fields blank.
5. If you are not using a saved mapping, after confirming that everything is correct, click the **Save Field-Mapping List** button if you wish to save the mapping for re-use at a later time.
6. Click the **GO** button at the bottom of the page to import the data.
7. The data is validated. If the data is good, the import proceeds. It takes some time if the import file is large, so be patient. If bad data is present, an error message is displayed with the line numbers of contacts containing errors.
8. If you scheduled the import to occur in the future, the import does not occur until that time. To remove a scheduled import, click the link to Review a List of Address Book Load events. Imports that have already started cannot be removed.

Time Out During Import

You may encounter a problem with CGI time out when validating large quantities of records during a data import. The solution to this is to increase the CGI timeout values on the web server. The following sections describe how to increase the timeout values for IIS servers on Windows 2000 and Windows 2003 and for Apache servers.

IIS on Windows 2000

To reset the CGI Timeout value for IIS on a Windows 2000 machine:

1. On the Start menu, select Start > Settings > Control Panel > Administrative Tools > Internet Services Manager. The Internet Information Services (IIS) window is displayed.
2. In the IIS window, right-click on the BMC FootPrints Service Core host machine and select Properties. The Properties window is displayed.
3. On the Internet Information Services tab, select WWW Service from the Master Properties drop-down field, and then click the Edit button. The WWW Service Master Properties window is displayed.
4. Select the Home Directory tab.
5. Click the Configuration button. The Application Configuration window is displayed.
6. Select the Process Options tab.
7. Change the value in the CGI script timeout field. The default value is 300 seconds. Increase the value as desired.
8. Click the OK buttons for all of the windows to complete resetting the CGI script timeout value.
9. Now you must restart the World Wide Web Publishing Service. To do so,from the Administrative Tools window, which should still be open on your desktop, double-click on Services. The Services window is displayed.
10. In the Services window, right-click on World Wide Web Publishing Service.
11. Select Restart from the menu.

IIS on Windows 2003

To reset the CGI Timeout value for IIS on a Windows 2003 machine:

1. Open to the Windows\system32\inetserv directory.
2. Using a text editor, open the MetaBase.xml file.
3. Search for CGITimeout in the file.
4. Change the value for CGITimeout as desired.
5. Save and close the file.
6. Now you must restart the World Wide Web Publishing Service. To do so,from the Administrative Tools window, which should still be open on your desktop, double-click on Services. The Services window is displayed.
7. In the Services window, right-click on World Wide Web Publishing Service.
8. Select Restart from the menu.

Apache on Linux/Unix

To reset the CGI Timeout value for Apache on a Linux/Unix machine:

1. Open the httpd.conf file (usually found in the /etc/httpd/conf/ directory) with a text editor.
2. If the Timeout value is not set, then the Timeout value is 300 seconds (the default). If you are using Virtual Host, enter:

Timeout *value*

in the Virtual Host section of the file. If you are not using Virtual Host, enter the value anywhere in the file.

If the Timeout value is set, locate Timeout in the file and change the value as desired.

3. Save and close the file.
4. Restart Apache.

Related Topics

- Creating the Data File
- Linking Data to the Address Book

Creating the Data File for Issue Import

To import data into a BMC FootPrints Service Core Workspace, the data must be contained in a Comma-separated-Variable (CSV) format file.

CSV File

1. The fields in each record must be separated by a comma (‘,’).
2. Each record must end with the system new line separator (i.e., the result of pressing “Enter”, “Return”, “^M”, etc.)
3. Fields that span more than one line or that have internal commas must be enclosed inside a pair of double-quote (" ") characters. Any field can optionally be inside a pair of double quotes. For example:

   “This field, the third, includes two commas.”
4. Only fields defined in **FootPrints** as multi-Line text fields are permitted to span more than line. For example, the Assignee field is not permitted to occupy more than one line.

The following are examples of CSV-formatted data:

this is the title,this is the description,1,Open,jsmith,Printer

this is the title,”this includes, a comma”,1,Open,jsmith,Printer

”more title”,”This description is on
multiple lines”,1,Open,jsmith,Printer

Other Features

- **Empty fields**—All fields in the Schema must be present in the load file for each Issue. However, optional fields need not contain data. An empty field should be indicated by placing nothing between the field delimiters or at the end of the line. Suppose the previous example has no value for the optional Platform field (using the comma-delimited option):

  System down,Please reboot machine.,1,Open,jsmith,,network

  Notice the two commas between jsmith (the Assignee) and network (the Problem Type). These represent the Platform field, for which there is no data in the record.

  Mandatory fields must contain data. Mandatory fields are indicated in red in the Schema.
- **Field Count Test**—By default, each field must be accounted for each record in the load file. During the data validation step, if any records do not have the correct number of fields (including optional fields accounted for by commas or another delimiter as described above), the load does not continue. There may be a case where one or more of the last fields in the Schema are optional and there is no data present. There are no "empty" delimiters to represent those optional fields.

For example, if the load file is created in Microsoft Excel, the final CSV file created by Excel does not provide comma characters for null fields at the end of the data line. For this case, there is an option to skip the Field Count Test. If you select this option, you can submit a load file without the trailing commas normally required for optional, empty fields. By skipping this test, there is a risk that your data may not be loaded properly, so please be careful in preparing your data.

NOTE

The choice to skip the Field Count Test is not available when the Link records to be loaded to this workspace's Address Book option is selected because the Address Book key is always the last field in the file, so all fields must be accounted for.

Here is an example of an acceptable record if the Field Count Test is skipped, using the Schema above, but assuming the Problem type field is optional:

System down,Please reboot machine.,1,Open,jsmith

Notice that the trailing commas for the two final, optional fields (Platform and Problem Type) are missing. When a CSV file is created by Excel, commas are never included for empty trailing columns, which are normally required by **FootPrints**. By skipping the Field Count Test, a CSV file created from Excel can be used without editing it to add the trailing commas.

- **Different Submitters for each Ticket**—If you want the individual issues in the load file to have different submitters, you can do this by starting each line with the submitter's user ID in braces, as in [jsmith]. For example:

  [jsmith]System down=Please reboot machine.=1=Open=jsmith=
  [jjones]printer broken=Printer #5 is broken=1=Open=joe=

- **Statuses**—Values used for the Status field must be valid for the Workspace. Otherwise, they are set to Open. (**FootPrints** requires that the status word, for example, Urgent, be capitalized. To eliminate a source of problems, the load process capitalizes the status values found in the load file.) The status Deleted is included in all Workspaces, but is treated differently than the others. It must be indicated in the Load File as _DELETED_ .
- **Solutions**—Solutions can be imported, but must be indicated by the following special statuses:
  - Public Solution (or _SOLVED_)
  - Internal Solution (or _INTERNALSOLVED_)
- **Assignees**—To assign individual Issues to different people or teams, use the Assignee field on each line of the text file and insert one or more **FootPrints** IDs or full names of agents (spelled exactly as found in the password file), separated by commas. To submit an Issue with no assignee, leave the Assignee field empty. See example below.

NOTE

To assign all the Issues in the text file to the same user(s), the IDs can be entered in a single place on the Administration | System | Workspaces page in the Load External Data into a FootPrints Workspace Database section. If one or more assignee names are provided on the System Administration page, any names found in the load file are ignored. A few more notes regarding Assignees:

- Solutions are not permitted to have Assignees. Any Assignees provided are ignored.
- If more than one ID, full name, or Team name, is supplied as the Assignee, these IDs must be separated by commas.
- If you are using a CSV (comma separated) data file including issues with multiple assignees you MUST put the assignee list in a pair or quotes; otherwise the commas separating the assignees will be interpreted as field separators. Here is an example of such a line:

  this is the title,"this includes, a comma",1,Open,"Hardware,fhp,scp,jsmith",Printer

  To submit an issue with no assignee, leave the assignee field empty:

  this is the title,"this includes, a comma",1,Open,,Printer

- **Number fields**—For Integer or Real Number fields, all values must be numeric.
- **Date fields**—Data for Date fields must be in the ISO date format, YYYY-MM-DD, e.g., 2003-09-22, even if your Date Format system or user option is set to an alternate format, such as American or European.
- **Date/Time fields**—Data for Date/Time fields must be in the ISO date format, YYYY-MM-DD HH:MM:SS, e.g., 2003-09-22 11:22:35, even if your Date Format system or user option is set to an alternate format, such as American or European.
- **Drop-down Choice Fields**—Choice field data is not verified. It is your responsibility to ensure that data for such fields matches the list of values you established when you created the choice field.
- **Multi-select Fields**—Multiple values separated by semi-colons can be imported for a multi-select field, e.g., choice1;choice2;choice3
- **Comments**—You may make your data file easier to read by using blank lines and comment lines beginning with a # sign.
- **Deleted fields**—An Address Book may have had certain fields deleted over time. These deleted fields are not displayed in the Schema; they must be ignored in the text file.
- **Checkbox fields**—Input “on” or “off” to import a checkbox field. “on” populates the checkbox field with a checkmark, while “off” leaves the checkbox unchecked.
- **Create Date / Time**—Create Date and Create Time are imported as columns like any other column. The format for the data is YYYY-MM-DD for Create Date and HH:MM:SS for Create Time. Prior to release 8.0, FootPrints used the keywords CDATE and CTIME for this data. These are no longer used.
- **Close Date / Time**—Close Date and Close Time are imported as columns like any other column. The format for the data is YYYY-MM-DD for Close Date and HH:MM:SS for Close Time. Prior to release 8.0, FootPrints used the keywords CLDATE and CLTIME for this data. These are no longer used.

Multiple Blank Spaces

By default, when a data file is imported, multiple blank spaces are ignored and only a single blank space is imported. For example, if a record in your data were as follows:

```
title,description,1,Open,joe     smith
```

It would be imported as this:

```
title,description,1,Open,joe smith
```

In other words, "Joe Smith" becomes "Joe Smith".

To import the blanks exactly as they appear, without compressing multiple blank spaces, set the $ReplaceBlanks variable in MRlocaldefs to "1". If you do so, imported multi-line data is imported exactly as it is in the load file.

Linking Imported Data to Address Book Contacts

The data import facility also permits the Issues you are going to import to be associated with their corresponding Address Book contacts as soon as they are imported. For example, if Bob Jones is in the Address Book, his imported Issues can be pre-filled with his contact information from the Address Book.

The linking facility requires that the Address Book be populated prior to the Issue data being loaded. Address Book data can be imported by the Workspace Administrator either on the Workspace Administration page under Address Book Administration | Load External Data, or under “Administration” in the Address Book itself. Complete instructions can be found in the section on Address Book.

The linking is done via a link or shadow field in data load file whose field name is specified on the initial Load External Data into a Workspace. This shadow field represents a field in the Address Book. For example, the Address Book might contain an Email address field, which could be specified as the link field. Specifically, the Primary Key, specified on the Address Book Administration Field Maintenance page, should probably be included as the Shadowed Link field. Although it is not the only choice one can make, it is the best choice.

The link field data must be included in the import file for each Issue. If the link field is Email address and the contact associated with an Issue is Bob Jones (whose email address in the Address Book is bjones@widget.com), an extra link field would be included in an Issue record in the import file, containing bjones@widget.com.

Here is an example of one line of an import file with an Address Book link field Email address included. This example assumes the Issue Schema includes only Title, Description, Priority, Status, and Assignee fields. The email address is represented by bjones@widget.com in the link field:

System Down,Must reboot the server on Monday,3,Open,jsmith,bjones@widget.com

The order of the fields in the import file is specified via the Field Picker.

The linked field should be unique. We recommend using the unique key for that Address Book. Email address and Social Security number would be good choices, while Last Name would not be a good choice. If the Address Book contains any duplicate contacts based on the link field, a warning message is presented and you are given choices on how to proceed.

The data in the link field must correspond to a contact in the Address Book or else an error message is presented and the load step does not proceed. This means that if a link field contains bjones@widget.com, there must be a contact in the Address Book whose email address is bjones@widget.com.

After the import is complete, the Issues are in the workspace. The contact information for each Issue will have been automatically filled in (based on the data in the Address Book).

Appearance

About Appearance

The appearance of BMC FootPrints Service Core can be altered to match your company's web site. The following tools are available on a system-wide basis:

- System Preferences—Configure general system-wide settings, including logos.
- Languages—Configure multiple language support.
- Colors—Change the display colors forBMC FootPrints Service Core
- Date Format—Select American,European, or ISO format.
- FootPrints Fields—Rename built-in BMC FootPrints Service Core fields (Title, Status, Priority, etc.)

System Preferences

General system preferences can be configured on this page. To access this page, select Administration | System | Appearance | System Preferences from the BMC FootPrints Service Core Toolbar.

The directory on the server where BMC FootPrints Service Core is located on your system is displayed at the top of the screen.

The following options are also available:

- **Define the SMTP server** (originally defined during installation)—This is the email server to which email notifications are sent.
- **FootPrints Base URL**—This is the URL for the BMC FootPrints Service Core server. Change this if this server address changes or if BMC FootPrints Service Core is installed to an SSL-enabled server (e.g., https).
- Select the name for BMC FootPrints Service Core records, e.g., Issue, Entry, Ticket, etc.
- Select the name for **Address Book** records. We recommend keeping this as the default (Contact).
- Select the default font for BMC FootPrints Service Core.
- **Maximum Incoming Body Size**—Define the largest body size in bytes for any incoming email.
- **Search Frame Logo**—By default, the BMC FootPrints Service Core logo is displayed in the top left corner of every BMC FootPrints Service Core page. This can be changed here to your company logo. The image must be no larger than 180x68 pixels. In addition, by default the logo is a clickable link that connects to the BMC web site. You can change the destination of this link to your own web site or disable the link altogether. Logos can also be defined per workspace on the Workspace Options screen.
- **Login Screen Logo**—This image can also be customized. It can be any size.
- **Currency Symbol**—Change the default currency symbol displayed in Time Tracking reports. Any symbol can be entered and you can select to display the symbol before or after the currency amount.
- **Multi-line text field size**—Optionally change the default height and width of multi-line text field input boxes throughout BMC FootPrints Service Core, including the Description field, and custom multi-line text fields. These fields can also be individually defined by the Workspace Administrator.
- **System administrator to refer users to when error messages are displayed**—Select an administrator for users to contact when they encounter an error.

When you are finished making changes, click **Save** to submit the changes.

Language

BMC FootPrints Service Core provides a number of system language options. You can create your own language directory and translate BMC FootPrints Service Core into your language of choice for localization. No programming is required; only plain text files need to be translated. In addition, you can use this feature to change only some of the embedded text in the BMC FootPrints Service Core pages without translating the whole program. For example, it can be used to change the title of the built-in field Description to Notes in every page in which that field appears.

Select a Default Language for the System

A default language can be set for the entire system. The language chosen here is used for Workspaces and users that have not chosen a preferred language. This applies to all of the text that appears on BMC FootPrints Service Core pages. By default, BMC FootPrints Service Core is shipped with American English as the default language. BMC FootPrints Service Core includes French, German, Spanish (Latin American), and Portuguese (Brazilian) language packs as part of the basic installation.

Select Data Encoding

Use the radio button to choose whether to use UTF-8 or the default local encoding. This applies to both the program text and the data. UTF-8 includes all characters from every language. Using UTF-8, you can add data from several different languages to the same BMC FootPrints Service Core and it all should display properly.

NOTE

The local encoding option is better for upgrades to foreign-language versions, since the existing data is stored in the local encoding. Therefore, if your default language is English, but you are dynamically linking to data that may contain foreign language characters, use the local encoding option.

For English and Chinese versions, UTF-8 is the default. For other languages, the local encoding is the default.

Add a New Language

To change text embedded in the program, refer to the Knowledge Base article at http://support.numarasoftware.com/support/articles.asp?ID=5896&mode=detail.

Translate Help Files

In addition to the BMC FootPrints Service Core pages, the Help files can also be translated. This feature can be used to translate the Help files into another language, or to customize your Help files.

To translate Help files:

1. You must first add a new language for the program text as described above.
2. The help directory is located under c:\FootprintsServiceCore\html\.
3. Make a new sub-folder with the same name as your new c:\FootprintsServiceCore\cgi\LANGUAGE directory.
4. Copy everything else in the directory into your new directory. For example: To translate the Help into French, create a c:\FootprintsServiceCore\html\help\FRENCH directory and copy the files from c:\FootprintsServiceCore\html\help to this directory.
5. Now you can edit the help files in your new directory to change what is displayed for that language.

NOTE

BMC FootPrints Service Core Help is generated using Flare by Madcap Software. The FootPrintsHelp subdirectory of the c:\FootprintsServiceCore\html\help folder contains all of the help files in HTML format. You can translate them using an XML editor, or contact BMC for the Flare source project to translate the help directly in Flare. BMC has translated the User Guide into French, German, Spanish (Latin American), and Portuguese (Brazilian).

Colors

You can change the background colors, table colors, and some text colors in BMC FootPrints Service Core from this page. The Color Editor lets you select the colors for eight different areas in BMC FootPrints Service Core, including:

- **Body Background**—Background color of BMC FootPrints Service Core (defaults to off-white).
- **Table**—All tables throughout BMC FootPrints Service Core (defaults to light green).
- **Highlighted Text**—Any highlighted text throughout BMC FootPrints Service Core (defaults to red).
- **Page Header Text**—All header and title text (defaults to dark blue).
- **Dialog Heading**—Heading bars of most BMC FootPrints Service Core pages.
- **Dialog Heading Text**—All header text that appears in the dialog heading bars (defaults to light blue).
- **Home page List 1**—One of two alternating colors for the Homepage list of Issues (defaults to light blue).
- **Home page List 2**—One of two alternating colors for the Homepage list of Issues (defaults to light green).
- **Home page Text 1**—One of two text colors use throughout BMC FootPrints Service Core pages, including the Toolbar text (defaults to dark blue).

- **Home page Text 2**—The other of two text colors use throughout BMC FootPrints Service Core pages, including the Toolbar text (defaults to dark green).

NOTE

To get maximum value from the Color Editor, make sure your browser can display all of the colors at your disposal. To change your color palette, go to Start | Settings | Control Panel, choose Display and go to Settings to make sure your monitor can display more than 256 colors (Windows only).

To change colors:

1. Select one of the ten choices listed above.
2. Either:
   - Select a color in the Color Palette or
   - Type the hex value of a color (in hex code format, i.e., 000000-FFFFFF) in the Hex color value field, then click **Apply**.

     A box is displayed below the Color Palette showing the old and new colors.
3. You can adjust the color choice at any time before you click the **Finalize Change** button to implement the color change. You can continue to change other colors on this page
4. When you are satisfied with all of your changes, click **Finish** to apply them.
5. To restore all colors to their default values, click the **Restore** button.

To insure proper functionality, you may have to clear out your browser's cache, refresh the screen, and/or close and re-open the browser to see all of the new colors correctly.

Date and Time Format

This option determines how dates are represented throughout BMC FootPrints Service Core. Users can also set a personal preference for dates. This affects all workspaces and can be changed at any time. It does not affect the internal format BMC FootPrints Service Core uses to store dates, only how dates are displayed. The options are:

- **American**—MM/DD/YYYY
- **European**—DD/MM/YYYY
- **ISO**—YYYY/MM/DD

Times can be represented in 12 hour and 24 hour format. This will affect the display and entry of times in custom date time fields. This setting will also affect all workspaces.

To specify the date and Time formats:

1. Select Administration | System from the BMC FootPrints Service Core toolbar, then select Date and Time Formats from the Appearance section of the administration page.
2. Select the date format by clicking a radio button for the desired format.
3. Select a time format by clicking a radio button for the desired format.
4. Enter your password and click SAVE.

System Administration Features

System Administration Features

This section includes miscellaneous System Administration options:

- PerlEx / FastCGI—Enable ActiveState's PerlEx or FastCGI for **FootPrints Service Core**. These engines are provided as performance enhancement solutions.
- Web Services—Enable access to BMC FootPrints Service Core via the XML/SOAP Interface.
- Email—Set upBMC FootPrints Service Coreto handle incoming email requests.
- Social Media -- Configure BMC FootPrints Service Core to broadcast Issues to Facebook and Twitter and create Issues from Twitter Tweets
- Asset Management—Set up asset management tool.
- Instant Talk —Configure settings for Instant Talk one-on-one chat feature.
- File Attachment Restrictions—Set maximum sizes for attachments.

PerlEx/FastCGI

ActiveState® PerlEx and FastCGI are two technologies that can boost the performance of BMC FootPrints Service Core, and are available for use with the application. FastCGI is available on all supported platforms, and PerlEx is available in Windows 32-bit. The technology can be compared to an automobile. The default BMC FootPrints Service Core installation uses CGI which is akin to starting up a car and pressing the accelerator every time a page is viewed. FastCGI and PerlEx leave the car running, so that the initial step of starting the car can be avoided on each page view. Below are the steps an administrator must complete before enabling either acceleration technology.

In following the steps below, c:\FootprintsServiceCore or /usr/local/footprintsservicecore refers to the "base install location" (i.e. "where BMC FootPrints Service Core is installed") of BMC FootPrints Service Core. By default, this would be c:\FootprintsServiceCore on a Windows server and /usr/local/footprintsservicecore on a Unix or Linux server. When performing the steps below, please adjust the path accordingly for the actual "base install location" of BMC FootPrints Service Core in your environment.

NOTE

PerlEx for FootPrints is only available on 32-bit Windows operating systems.

If both PerlEx and FastCGI are enabled, the PerlEx technology will take precedence and override the use of FastCGI. It is NOT recommended to turn on both technologies.

PerlEx

Before You Enable PerlEx

The following are necessary preconditions for PerlEx to function correctly. While this setup is automated for BMC FootPrints Service Core, users should check to ensure that the setup functioned properly:

1. Make sure permissions are correct by running MRchangePermissions.pl in the \Footprints\cgi\ directory. For example:

   ```
   cd c:\FootprintsServiceCore\cgi
   c:\FootprintsServiceCore\bin\perl\bin\perl MRchangePermissions.pl
   ```

2. Make sure .plex is mapped to \footprints\bin\perl\bin\PerlEx30.dll in application mappings and allow all verbs. To do so:

   a. In IIS, select web site->default web site->MRcgi, then right-click on Properties and select Configuration.
   b. Extension should be .plex and the executable path should be \footprints\bin\perl\bin\PerlEx30.dll; allow all verbs.

3. For IIS 6.0+ only, Web Service Extensions should have a PerlEx ISAPI Extension that maps .plex to \footprints\bin\perl\bin\PerlEx30.dll and it should be set to ”allowed” (earlier versions of IIS do not have a Web Service Extensions section).
4. For IIS 6.0+ only, reset the default application pool (earlier versions do not have application pools) and web site after any changes. To do this from a command prompt, enter `iisreset.exe` and press enter.

Enabling PerlEx in BMC FootPrints Service Core

To enable PerlEx in BMC FootPrints Service Core:

1. Select Administration | System from the BMC FootPrints Service Core Toolbar, then select PerlEx/FastCGI from the Features section of the System Administration page. The PerlEx/FastCGI page is displayed.
2. In the PerlEx section of the page, click the Test PerlEx button to test whether PerlEx and IIS are properly configured. Do not enable PerlEx unless your system passes the test successfully.
3. If your system successfully passes the test, click the Enabled radio button.
4. Enter the System Administration password in the space provided and click the **Save** button.

Reset the PerlEx Process

A button is provided for resetting the PerlEx process. Use this button only if BMC Support tells you to use it.

Switching from PerlEx to FastCGI

To change from the PerlEx engine to the FastCGI engine:

1. Select Administration | System from the BMC FootPrints Service Core Toolbar, then select PerlEx/FastCGI from the Features section of the System Administration page. The PerlEx/FastCGI page is displayed.
2. In the PerlEx section of the page, click the Disabled radio button.
3. Enter the System Administration password in the space provided and click the **Save** button.

FastCGI

Windows Server 2003 and 2003 R2 with IIS 6 (32-bit and 64-bit)

BMC FootPrints Service Core FastCGI on this platform requires the IIS FastCGI extension, and a URL rewriting mechanism (we recommend Ionic's ISAPI Rewrite Filter [IIRF]). These instructions are for a system that currently does not have any other FastCGI applications installed . If there are other FastCGI applications running on this machine, please contact BMC Support for further assistance.

Install and Configure Fast CGI, and Enable in IIS

1. Install FastCGI for IIS 6.0 by using the Web Platform Installer (WPI) at this address: http://www.iis.net/download/fastcgi.
2. Configure FastCGI by editing the fcgiext.ini file in the "<Windows Root>\system32\inetsrv" directory. Remove the entire contents of this file, and add the following to the end:

```
[Types]
fcgi=FootPrints FastCGI
[FootPrints FastCGI]
ExePath="c:\FootprintsServiceCore\bin\Perl\bin\perl.exe"
Arguments="c:\FootprintsServiceCore\cgi\CentralDispatch.fcgi"
```

QueueLength=500
InstanceMaxRequests=5000
MaxInstances=5
StderrMode=IgnoreAndReturn200

3. Enable the FastCGI extension in IIS.
   a. Open up the IIS manager (Start -> Run -> inetmgr.exe), and right-click the 'MRcgi' virtual directory item. Open the 'Properties' window from this menu.
   b. Click on the 'Virtual Directory' tab, and then click the 'Configuration' button.
   c. Click the 'Add' button on the 'Mappings' tab to add a new extension mapping.
      1. Set the executable field to:

         <*Windows Root*>\system32\inetsrv\fcgiext.dll

      2. Set the extension field to:

         .fcgi

      3. Press the **OK** button.

Install the URL Rewriting Mechanism (IIRF)

The following instructions describe how to install the URL rewriting mechanism, Ionic's ISAPI Rewrite Filter (IIRF), that will rewrite URLs, for example:

http://localhost/MRcgi/MRentrancePage.pl?PROJECTID=3

to

http://localhost/MRcgi/CentralDispatch.fcgi?dispatch_script=MRentrancePage.pl&PROJECTID=3

1. Go to http://iirf.codeplex.com/releases and download the correct version of the "Iirf".msi file for your server (x64 or x86).
2. Install IIRF by following the steps on Iconic's installation wizard.

Configure IIRF

1. Right-click the '**IIRF.dll**' file and click '**Properties**'.
2. Under the '**Security**' tab, verify that the **IIS web group** has read and execute privileges on the file (by default the group is called **IIS_WPG**).
3. Once the permissions have been verified, start up the **IIS manager**: **Start -> Run**, enter inetmgr.exe and then click the **OK** button. Right-click the website that is running BMC FootPrints Service Core (by default it will be '**Default Web Site**') and click '**Properties**'.
4. Click the '**ISAPI Filters'** tab, and click the '**Add**' button. For '**Filter Name**', enter 'IIRF' or some other uniquely identifiable name. For 'Executable', click the **Browse** button and choose the '**IIRF.dll**' file in the **IIRF bin directory**.
5. Copy the **IIRF.template** file from the '**etc**' directory into the `cgi` directory. Rename this file `IIRF.ini`. Edit the file and change the line that says `RewriteEngine OFF` to `RewriteEngine ON`. If you have previously done this, and have made changes to this file, make sure that the changes are propagated to the new copy.
6. Restart the web server (**Start -> Run ->** iisreset.exe), and then visit this URL: http://localhost/iirfStatus. The server name ('localhost' in this example) should be switched with the name of the server running BMC FootPrints Service Core. If IIRF is working properly, you will see a status screen describing the IIRF instance that is currently running.
7. On the '**System Administration**' page in BMC FootPrints Service Core, click the '**PerlEx**' or the '**FastCGI**' page. Verify that FastCGI is active (it will be stated in the FastCGI section).

To Disable FastCGI

To disable FastCGI, edit the 'IIRF.ini' file located in the 'cgi' directory of BMC FootPrints Service Core, and change the line that says 'RewriteEngine ON' to 'RewriteEngine OFF'.

Windows Server 2008 and 2008 R2 with IIS 7.x (32-bit and 64-bit)

BMC FootPrints Service Core FastCGI on this platform requires the IIS FastCGI extension (which should be enabled already), and URL Rewrite 2.0 from Microsoft. These instructions are for a system that currently does not have any other FastCGI applications installed. If there are other FastCGI applications running on this machine, please contact BMC Support for further assistance.

NOTE FOR WINDOWS SERVER 2008 SP1 AND SP2 (DOES NOT APPLY TO WINDOWS SERVER 2008 R2)
A default installation of Windows Server 2008 SP1 and SP2 requires a hotfix from Microsoft in order for FastCGI to run properly. The hotfix from Microsoft is available through the following Microsoft KB article:

http://support.microsoft.com/?kbid=980363

In addition, a package must be installed on the Windows Server 2008 host to enable the "FastCGI Settings" IIS option. The package can be installed from this URL:

http://www.iis.net/download/AdministrationPack

After applying the hotfix and the Administration Pack, run the MRconfigFastCGI.pl script, as indicated in step 2 below.

The FastCGI Settings, as identified in Step 5 below, will be available after installing the Administration Pack, but there is no option for the 'Standard Error Mode' setting. After executing the MRconfigFastCGI.pl script, the Windows Administrator can check the C:\Windows\System32\inetsrv\config\applicationHost.config file for the proper configuration of FastCGI. The correct configuration in this file is as follows:

```
<fastCgi>
    <application fullPath="c:\FootprintsServiceCore\bin\Perl\bin\perl.exe"
    arguments="c:\FootprintsServiceCore\cgi\CentralDispatch.fcgi" stderrMode="IgnoreAndReturn200"
    maxInstances="5" idleTimeout="300" activityTimeout="70" requestTimeout="90"
    instanceMaxRequests="3000" protocol="NamedPipe" flushNamedPipe="false" />
</fastCgi>
```

1. Install URL Rewrite 2.0 by using the Web Platform Installer (WPI) at this address: http://www.iis.net/download/URLRewrite.
2. A script is available to automatically enable FastCGI for BMC FootPrints Service Core on this platform configuration. To execute the script, open a shell (Run -> ‘cmd.exe’) and navigate to the ‘cgi’ directory inside the BMC FootPrints Service Core application directory. Execute the following command, and adjust the paths to match the BMC FootPrints Service Core installation on this machine.

   c:\FootprintsServiceCore\bin\Perl\bin\Perl.exe MRConfigFastCGI.pl

3. The script will present you with a menu of options. Select ‘Enable FastCGI’. If this script successfully executes, skip to step 7 and verify that FastCGI is active. If the script failed to run properly, or if you would like to manually enable FastCGI, continue on to step 4.
4. Add the FastCGI module mapping for IIS.
   a. Go to 'Start -> Run -> inetmgr.exe', and click on the 'MRcgi' virtual directory in the tree in the left pane.
   b. In the right pane, double-click the 'Handler Mappings' icon. Right-click in the mapping list and select 'Add module mapping'.
   c. For the 'Request Path' field enter:

      *.fcgi

d. In the 'Module' dropdown select 'FastCgiModule'. For the 'Executable' field, enter the following value and be sure to update the paths to match the actual BMC FootPrints Service Core installation on this machine:

c:\FootprintsServiceCore\bin\Perl\bin\perl.exe|c:\FootprintsServiceCore\cgi\CentralDispatch.fcgi

e. For the 'Name' field enter:

BMC FootPrints Service Core FastCGI Handler

f. When you complete the above dialog, you will be presented with another dialog asking if a FastCGI application should be created for this mapping. Answer ‘Yes’ to this dialog.

5. Configure the FastCGI application:

a. In the left pane of the IIS administration window, click on the item representing the entire computer or host (it will normally be at the top level of the tree under ‘Start Page’).

b. In the right pane, double-click the ‘FastCGI Settings’ icon.

c. Double-click the row on this page that has ‘CentralDispatch.fcgi’ listed in the Arguments column (the path to CentralDispatch.fcgi will also be present in the same column).

d. Set the ‘Standard Error Mode’ setting to IgnoreAndReturn200.

e. Set the ‘Activity Timeout’ to 70.

f. Set ‘Instance MaxRequests’ to 3000.

g. Set ‘Max Instances’ to 5.

h. All of the other settings can be left at their default values.

6. Configure URL Rewrite for FastCGI.

a. Go to Start -> Run -> inetmgr.exe, and click on the 'MRcgi' virtual directory in the tree in the left pane.

b. In the right pane, double-click the 'URL Rewrite' icon. Right-click in the 'Inbound Rule List' (the top section) and select 'Add Rule'.

c. Select to create a blank rule. You must give the rule a name.

d. 'Requested URL' should be set to 'Matches the Pattern', and 'Using' should be set to 'Regular Expressions'. The 'Pattern' field should be set to:

/?(\w+\.pl)(?!ex)

e. Make sure the 'Ignore Case' checkbox is checked.

f. Inside the 'Conditions' section, make sure that the 'Logical grouping' field is set to 'Match All', and click the 'Add' button. The 'Condition Input' is set to:

{R:1}

g. 'Check if input string' should be set to 'Matches the Pattern'.

h. The 'Pattern' field should be set to the following (this is all one string without spaces or breaks):

^(?:MRenablePerlEx\.pl|MRABregdetails\.pl|MRABreghome\.pl|MRABregsearch_page\.pl|MRcheckBack\.pl|MRdirectEdit2\.pl|MRdirectSearch\.pl|MRentrancePage\.pl|MRhomepage\.pl|MRlogin\.pl|MRlogsAlert\.pl|MRquickHelp\.pl|MRregister_command\.pl|MRsearch_page\.pl|MRspellCheck\.pl|MRTicketPage\.pl|MRAjaxLoadDashboardComponent\.pl)$

i. In the 'Action' section, set the 'Action Type' to 'Rewrite' and the 'Rewrite URL' to:

/MRcgi/CentralDispatch.fcgi?dispatch_script={R:1}

j. Make sure the 'Append query string' checkbox is checked, and that the 'Log rewritten URL' checkbox is unchecked.

k. Make sure that the 'Stop processing of subsequent rules' checkbox is checked.

l. Click the 'Apply' link on the right under 'Actions'.

7. Visit the 'System Administration' page in BMC FootPrints Service Core, and click on the 'PerlEx' or the 'FastCGI' page. Verify that FastCGI is active (it will be stated in the FastCGI section).

To disable FastCGI, click on the rewrite rule in the 'Inbound Rule List' and select 'Disable Rule' from the actions menu on the right.

Unix/Linux with Apache 2 (32-bit or 64-bit)

BMC FootPrints Service Core FastCGI on a Unix/Linux with Apache 2 (32-bit or 64-bit) platform requires installing and activating the mod_fcgid and mod_rewrite Apache modules before performing the procedure below. These instructions are for a system that does not have any existing FastCGI applications running. If FastCGI applications are running on the same machine as the one on which you are installing BMC FootPrints Service Core, contact BMC Support for further assistance.

1. Make sure that the following are installed:
   a. Apache Development package (httpd-devel)
   b. Apache Portable Runtime (apr)
   c. Apache Portable Runtime Development package (apr-devel)
   d. Apache Portable Runtime Utilities package (apr-util)
   e. GNU Build toolchain (make, ld, ar, gcc, etc.)
2. Download the most recent mod_fcgid source from the Apache Foundation (http://httpd.apache.org/download.cgi#mod_fcgid)
3. Unpack tarball and change directory to the unpack directory.
4. Run:

   ./configure.apxs
5. Run:

   make
6. Run:

   make install
7. The `make install` inserts a line into the httpd.conf file to load the newly built module:

   LoadModule fcgid_module modules/mod_fcgid.so
8. Run:

   mkdir /var/run/fcgidsock

   chown apache:root /var/run/fcgidsock

   chmod 700 /var/run/fcgidsock
9. Edit the BMC FootPrints Service Core Apache configuration file and add the following information to the end of the file. You cannot cut and paste these instructions. You must change the path of the LoadModule directive and the path of the BMC FootPrints Service Core application directory (<*Directory "/usr/local/footprintsservicecore/cgi"*>) in the instructions to match your system:

   <*Directory "/usr/local/footprintsservicecore/cgi"*>

   RewriteEngine on

```
RewriteCond $1
^(?:MRenablePerlEx\.pl|MRABregdetails\.pl|MRABreghome\.pl|MRABregsearchpage\.pl|MRcheckBack\.pl|
MRdirectEdit2\.pl|MRdirectSearch\.pl|MRentrancePage\.pl|MRhomepage\.pl|MRlogin\.pl|MRlogsAlert\.pl|M
RquickHelp\.pl|MRregister_command\.pl|MRsearch_page\.pl|MRspellCheck\.pl|MRTicketPage\.pl|MRAjaxL
oadDashboardComponent\.pl) [NC]

RewriteRule /?(\w+\.pl)(?!ex) /MRcgi/CentralDispatch.fcgi?dispatch_script=$1&%{QUERY_STRING} [L,NC]

</Directory>

LoadModule fcgid_module modules/mod_fcgid.so

FcgidIPCDir /var/run/fcgidsock

FcgidProcessTableFile /var/run/fcgidsock/fcgidsock_shm

FcgidBusyScanInterval 30

FcgidIdleScanInterval 120

FcgidMaxRequestInMem 262144

FcgidMaxRequestLen 262144

FcgidMaxRequestsPerProcess 1000

FcgidOutputBufferSize 524288

AddHandler fcgid-script fcgi
```

10. Restart the Apache web server.
11. In BMC FootPrints Service Core, select Administration | System from the toolbar, then select Perlex/FastCGI from the Administration page.
12. In the FastCGI Setup section of the administration page, verify that FastCGI is active.

To disable FastCGI, set the 'RewriteEngine on' line in the configuration file to 'RewriteEngine off'.

By default, the communications sockets reside in the Apache logs/fcgidsock directory, which is accessible only by root and not by child Apache processes. In this default configuration, a FastCGI process can never create the communications socket, resulting in a "Service Unavailable" message. In order for the default configuration to work, you can add an execute bit for the "other" group (permissions change from 700 to 701) on the/var/log/httpd directory. However, this creates two other problems:

1. Adding this execute bit allows all other users the ability to change directory into /var/log/httpd.
2. If the Apache program is updated via OS means (yum update httpd), there is a very good chance that the update could alter the file system permissions changes that allow FastCGI to function.

When configuring the mod_fcgid module in Apache, there are directives which allow the communications sockets to be placed in an alternate directory. The communications socket directive should be pointed at a directory in /var/run (numerous other applications use this same directory structure to store their PID and socket files).

Web Services

An XML/SOAP Web Services interface to BMC FootPrints Service Core is available for all platforms for integration with other applications. It supports .NET 1.1 and 2.0, Java, and Perl. Functions are available for creating Issues, updating Issues and querying the database. For detailed information on the Web Services interface, refer to BMC FootPrints Web Services API.

The administration page for Web Services allows you to enable or disable the service. This is a security feature to prevent unintended access to BMC FootPrints Service Core via the XML/SOAP API. An administrator must knowingly enable Web Services in order for them to be used.

To enable Web Services:

1. Select **Administration | System | Web Services** from the **BMC FootPrints Service Core** Toolbar.
2. Click the **Enable** radio button.
3. To allow an agent user ID to be used to authenticate Web Services, check the box labeled "**Check here to allow any Agent userid to authenticate Web Services**".
4. Enter your password, then click the **GO** button.

Active Directory Password Reset

The BMC FootPrints Service Core password reset feature is a Windows-based self-service password reset tool that resets the Windows network password, enabling users to reset the password without administrator intervention.

Configure Password Reset

To configure Password Reset:

1. Select Administration | System, then select the Active Directory Password Reset link from the Features section of the main frame. The Password Reset page is displayed.
2. There are four tabs on the Password Reset Page. When you first configure Password Reset, the Enable/Disable and Challenge Questions tabs are mandatory. The Actions tab is not required, but is used to create an Issue in a workspace when a password reset is requested by a user. The Users tab is informational only:
   - **Enable/Disable tab**
     - **Enabled/Disabled**—Select the appropriate radio button to enable or disable the feature.
     - **AD Server**—Enter the full domain name or IP address of the Active Directory server.
     - **AD Port**—Enter the port number for secure connection to the LDAP server. This is typically 636.
     - **Search Base**—LDAP (including Active Directory) stores its data in a tree structure. To enable BMC FootPrints Service Core to retrieve user information, a search base specifying where to search in the tree, and in what order, must be specified here. The search base is formed by adding names of the root and each subsequent branch of the tree until you reach the point where a search should commence. The search base should be the branch of the tree closest to the data being searched. In most instances, all data being sought are in one branch of the LDAP tree. For instance, if the root of the LDAP Directory tree is dc=server, dc=com and the next branch to be taken is ou=Users, which contains all the directory information, the search base would be: ou=Users, dc=server, dc=com

NOTE

Spacing, punctuation, and capitalization must be exact for a search base to work correctly. For instance, if one of the values in your search base has spaces and/or punctuation (e.g., o=My Company, Inc.), you must place the value in quotation marks (i.e., o="My Company, Inc.") and make sure that the spacing, punctuation, and capitalization are correct.

     - **Distinguished Name**-The Distinguished Name for the administrator account that will be used for actually resetting the password. It needs to be an account that has permission to change passwords on the LDAP directory. For example, "CN=Administrator,CN=Users,DC=fpqadomain". This can be obtained from the LDAP directory.

- **CA Certificate**—A certificate from the certificate authority ("CA") who signed the server's certificate in PEM (Base-64) format (this will be the server's own certificate if the certificate is self-signed). Because a secure connection is required for Password Reset, a valid certificate is also required or Password Reset will not work. If you need more information regarding the certificate, contact your LDAP administrator.
- **Password Policy**—Enter a brief description of your password policy. This will be displayed to users when they reset their passwords.

- **Challenge Questions tab**—The Challenge Questions tab is where you create the challenge questions to be completed by users when they register. When the user later tries to reset his or her password, they will be required to answer the challenge questions. The process for the administrator on this tab is to first add a challenge question and then enable it. More than one challenge question can be enabled at a time and users will be required to answer all enabled challenge questions in order to reset their passwords. As an example of a set of challenge questions, an administrator might add the following: In what month were you born? In which city were you born? What is your mother's maiden name?
  - **Add question**—Click the Add Question button to create a challenge question. Enter the question in the field that is displayed when you click the button. You can add multiple questions at one time by clicking the button again for each new question. After adding the question, enter your password and click SAVE. The main system administration page will be redisplayed in the main frame, so if you want to return to this page, you will have to select Active Directory Password Reset from the Features section again.
  - **Enable/Disable challenge question**—To enable a challenge question, click the checkbox to the left of the question where it is displayed. Questions are enabled by default when they are created, but can be disabled as necessary.
  - **Edit a challenge question**—To edit or change an existing challenge question, click the edit icon to the let of the question. The field in which the question is displayed becomes active for input at that time.
- **Actions tab**—The Actions tab allows you to create an Issue in a workspace when a user performs a Password Reset. To set up the Actions:
  - From the drop-down list, select a Workspace. When a user performs a password reset, an Issue is created in the selected Workspace for the password reset.
  - Use the drop-down fields to select which Quick Issue template is used to create a new Issue in each of the listed situations (to create Quick Issue templates for the situations, refer to the Creating Quick Issue Templates topic in this document). The situations are:
    - Password Reset Successful
    - Password Reset Unsuccessful
    - Account Unlock Successful
    - Account Unlock Unsuccessful
  - When you have made your selections, click the **Save** button.
  - **Users tab**—The Users tab lists the registered users, i.e., users who have registered answers to the challenge questions and are therefore able to use Password Reset. This tab is for informational purposes only and lists the user display names, account names, Distinguished Names, the number of reset attempts they have made that have failed, and the date and time of their last failed reset attempt. This can help flag potential misuse of the password reset (e.g., someone making multiple attempts to guess the answers to a user's challenge questions). When there are three or more consecutive failed reset attempts, that user is highlighted in red on the Users tab so that an administrator can easily locate the potential problem.

Email

BMC FootPrints Service Core can be configured to accept email, which generates new Issues when submitted by an internal BMC FootPrints Service Core user, or new Requests (when submitted by a customer). It can also append the description of an existing Issue or request. In addition, there are many email queries that are supported.

One or more email accounts must be created on your email server for the exclusive use of BMC FootPrints Service Core and a batch file (NT) or .forward file (UNIX) must be created so that the account for BMC FootPrints Service Core can take and process the mail. Refer to Email Management for detailed instructions on setting up and using the incoming email feature for UNIX and NT.

Social Media

Configuring the System to Broadcast Issues to Social Media

Broadcasting Issues to Social Media (Overview)

BMC FootPrints Service Core can be configured to post messages to your organization's Facebook page and/or Twitter feed about specific Issues affecting the entire organization. Once this is configured by the BMC FootPrints Service Core System Administrator and Workspace Administrators, Agents can broadcast individual Issues from the Assignees and Notifications tab/section on the Create Issue and Edit Issue pages.

The following represents the user workflow from configuring the system to viewing Issues in social media:

System Administrator

1. Create a FootPrints Facebook App for Your Organization
2. Create a FootPrints Twitter App for Your Organization
3. Connect Social Media Accounts to FootPrints
4. Activate Social Media Accounts for a Workspace (by System or Workspace Administrators)
5. Select User Roles Allowed to Broadcast Issues to Social Media (All Workspaces)

Workspace Administrators

6. Activate Social Media Accounts for a Workspace
7. Activate Social Media Accounts for a Workspace (by System or Workspace Administrators)
8. Select User Roles Allowed to Broadcast Issues to Social Media (per Workspace)

Agents

9. Broadcast an Issue to Social Media

Customers

- View Issues in Facebook
- View Issues in Twitter

Create a FootPrints Facebook App for Your Organization

The following describes how to create a BMC FootPrints Service Core Facebook app for your organization. For more information on the social media feature and configuration, see Broadcasting Issues to Social Media (Overview).

Note: Whether or not posts appear on users' Facebook newsfeeds depends on how they sort the posts (Most Recent vs. Top Stories) and page ranking algorithms determined by Facebook. Users can also view the posts by either searching for your page or viewing it from their Info page.

Prerequisite
You will need administrative access to your organization's Facebook page, and the email address and password to connect the Facebook page with BMC FootPrints Service Core.
If your organization does not already have a Facebook page, see http://www.facebook.com/pages/create.php.

Create New App

1. In your browser, go to https://developers.facebook.com/apps.
2. On the **Facebook Developers** page, enter your organization's Facebook page credentials (Email and Password), and then click the **Log In** button.
3. Enter your password again if requested.
4. On the **Request for Permission** page, click **Allow** to access your basic information.
5. Click the **+Create New App** button.
6. On the **Create New App** dialog, enter a display name in the **App Name** field (e.g., FootPrints Page).
7. Enter a namespace in the **App Namespace** field (optional).
8. Ignore the **Web Hosting** option.
9. Click the **Facebook Platform Policies** link and read the policies (this opens on a new page).
10. Click the **Continue** button on the **Create New App** dialog.
11. On the **Security Check Required** dialog, enter the **CAPTCHA** phrase in the text box, then click the **Submit** button.
    The **Apps > App Name > Basic** page displays with the name of your application, an App ID, and an App Secret.
12. Copy the **App ID** and **App Secret** to Notepad, as you will need these values (after you finish the steps below) when you connect the Facebook app to BMC FootPrints Service Core), described in the next topic.

Configure the App

Basic Info

Information in this section of the Facebook Developers page is already populated from the previous steps; you will need to enter the App Domain.

On the **Basic Info** section of the **Apps > App Name > Basic** page, enter the domain from which the Facebook posts will be sent in the **App Domain** field (e.g., yourcorporatedomain.com).

App Integration with Facebook

1. In the **Select how your app integrates with Facebook** section, click **Website**.
2. In the **Site URL** field, enter the public URL for the FootPrints server (e.g., http://www.footprintsserver.com), then click the **Save Changes** button.

   The following message displays: "Changes saved. Note that your changes may take several minutes to propagate to all servers."

Next step: Connect Social Media Accounts to FootPrints

Create a FootPrints Twitter App for Your Organization

The following describes how to create a BMC FootPrints Service Core Twitter app for your organization. For more information on the social media feature and configuration, see Broadcasting Issues to Social Media (Overview).

Prerequisite

A Twitter account must exist for your organization.
You will need the following to complete the steps below:

- Your organization's Twitter account's user name and password
- A name to call your Twitter app (e.g., My Organization's Twitter Feed) -- a unique name up to 32 characters
- A description of your Twitter application (between 10 and 200 characters)
- The URL for your organization's FootPrints host

Create New App

1. In your browser, go to https://dev.twitter.com.
2. On the **Twitter Developers** page, click **Sign In**, then enter your organization's Twitter account user name and password.
3. Under **Create applications that integrate Twitter**, click the **Create an app** link.
4. On the **Create an application** page, enter your application name in the **Name** field (a unique name up to 32 characters).
5. Enter a description of your application in the **Description** field (between 10 and 200 characters).
6. Enter the URL for your organization's FootPrints host in the **WebSite** field.
   The FootPrints host must be publicly accessible.
7. Enter the same URL entered in the WebSite field in the **Callback URL** (optional).
8. Under **Developer Rules Of The Road**, read and click **Yes, I agree**.
9. Enter the **CAPTCHA** phrase, then click the **Create your Twitter application** button.
   The Home > My applications page displays with the name of your Twitter app.

Configure the App

1. On the **Home >My applications** page, click the **Settings** tab.
2. Under **Application Type**, select **Read and Write**, then click the **Update this Twitter application's settings** button.
3. Click the **Details** tab, then copy the **Consumer key** and **Consumer secret** to Notepad, as you will need these values when you connect the Twitter app to FootPrints), described in the next topic.

Next step: Connect Social Media Accounts to FootPrints.htm

Connect Social Media Accounts to FootPrints

The instructions below describe how to connect your organization's social media accounts to BMC FootPrints Service Core. For more information on the social media feature and configuration, see Broadcasting Issues to Social Media (Overview).

1. Log into BMC FootPrints Service Core as a System Administrator.
2. Select **Administration | System | Social Media Connectors** from the BMC FootPrints Service Core toolbar.
3. Click the **Create connector** button, then follow the instructions below for Facebook or Twitter.

Facebook

Prerequisites

A Facebook App must exist for your organization. See Create a FootPrints Facebook App for Your Organization.

You will need the following to complete the steps below:

- The App ID and App Secret values from your Facebook app
- Your organization's Facebook user name and password
- A name to call your Facebook app in BMC FootPrints Service Core (e.g., "Facebook Page")

Create the Connector

1. Select the **Facebook** option.
2. Enter the **App ID** and **App Secret** values from your Facebook app into the respective fields.
3. Click the **Get Access Token** button.
   You are redirected to a Facebook page to use your organization's Facebook account with BMC FootPrints Service Core.
4. On the **Facebook** page, enter your organization's user name and password, then click the **Log In** button.
   Once successful authentication is complete, you will be redirected to the BMC FootPrints Service Core **Create Connector** page.
   The **Access Token** field is now populated with the value provided by Facebook. The Facebook accounts you are authorized to manage are displayed.
5. To test and name the connection, select the **Facebook** account from the **Select Account** radio buttons, then click the **Check Connection** button.
   This validates the App ID, App Secret and Access Token values for the selected Facebook account with FootPrints. A "Success" message will appear once the information is validated.
6. A name for the connection is automatically generated, for example, "My Company Name (Organization)"and displays in the **Name** field. (You can change the name if desired.) Then click the **Save Data** button.
   The Social Media Connectors page closes. See below to send a test post to Facebook.

Next step: Activate Social Media Accounts for a Workspace

Twitter

Prerequisites

A Twitter account must exist for your organization. See Create a FootPrints Twitter App for Your Organization.

You will need the following to complete the steps below:

- The Consumer key and Consumer secret values from your Twitter account
- Your organization's Twitter user name and password
- A name to call your Twitter app in BMC FootPrints Service Core (e.g., "Twitter Feed")

1. Select the **Twitter** option.
2. Enter the Consumer key, Consumer secret, Access token, and Access token secret values from your Twitter account into the respective fields.
3. Click the **Check Connection** button to validate the Consumer key, Consumer secret, Access token, and Access token secret values with FootPrints.
   A "Success" message will appear once the information is validated.
4. Enter a name for the configuration (e.g., Twitter Feed) then click the **Save data** button.
   "Twitter Feed" displays on the Social Media Connectors page in BMC FootPrints Service Core.

Send a Test Post to Facebook and Twitter

1. To test the configuration, click the **Make Test Post** button.
2. On the **Make Test Post** page, enter some text in the text box, then click the **Make Test Post** button.
   A "Testing process..." message appears, and "Success" displays when the test is successful>
   A "Failed" message appears if the test post is unsuccessful.

3. Log on to your Facebook or Twitter account.
   The test message appears.

Delete a Social Media Connector

1. Select the checkbox for the social media connector(s) you want to delete, then click the **Delete selected connectors** button.
2. Click **OK** on the confirmation dialog.

Next Step: Activate Social Media Accounts for a Workspace.htm

Select User Roles Allowed to Broadcast Issues to Social Media (All Workspaces)

The instructions below describe how to select which roles (in all Workspaces) will be allowed to broadcast Issues to social media (i.e., Facebook or Twitter). For more information on the social media feature and configuration, see Broadcasting Issues to Social Media (Overview).

Note: System Administrators by default are always allowed to broadcast Issues to social media.

Prerequisite

The System or Workspace Administrator must activate social media accounts for a Workspace before selecting user roles allowed to broadcast Issues to social media. See Broadcasting Issues to Social Media (Overview).

1. If you are not already logged in, log into FootPrints as a System Administrator.
2. Select **Administration|System|Users|User Roles** from the BMC FootPrints Service Core toolbar.
3. Select a Role (e.g., Agents) from the **Role** drop-down list, then select **Edit role properties**.
4. On the **User Role Properties (System Default)** page, in the **Social Media** section at the bottom of the page, select the Yes option for **Can send Social Media Broadcast**.

   The selected user roles in all Workspaces can now broadcast Issues to social media.

Next topic: Broadcast Issues to Social Media

Configuring the System to Create Issues from Twitter Tweets

Capturing Twitter Tweets to Create Issues (Overview)

BMC FootPrints Service Core is integrated with Twitter so that Agents can view Twitter messages ("Tweets") on their Homepage and create Issues from them. By default, all Administrators and Agents can customize their Homepages to capture Tweets. To do this, Agents customize their Homepage preferences to capture Tweets from specific Twitter users and display them on their Homepage Dashboard. They select a specific Tweet, click Create, and the Issue page us created. Agents can also configure the feature to capture specific keywords (search queries) in Tweets.

A benefit of this feature is if your organization's service desk has a Twitter account, when Twitter users mention your Twitter username or particular keywords in their tweets, your Agents can view the Tweets in real time on their BMC FootPrints Service Core Homepages. In this way, you and your Agents can proactively manage your service desk by monitoring social media. Your Agents can then decide to create Issues from the Tweets and resolve any requests or problems.

When Workspace Administrators associate a Twitter username with a Contact in the Workspace's Address Book, Issues created from Tweets are automatically populated with the sender's Contact information. Agents can then respond to the sender of the Tweet without leaving the Issue page.

The following represents the user workflow from configuring the system to capture Tweets to viewing Issues created from them.

Note: it is not necessary to configure the Social Media Connectors feature in order to capture Twitter Tweets, since that feature is to broadcast messages from BMC FootPrints Service Core

System Administrator

By default, Agents and Administrators can create Issues from Twitter Tweets. However, System Administrators can prevent this ability system-wide. See: Prevent Agents and Administrators from Creating Issues from Twitter Tweets (System-wide) in the Administrator's Guide **(Optional)**.

Workspace Administrators

By default, Agents and Administrators can create Issues from Twitter Tweets. However, Workspace Administrators can prevent this ability via user roles. See: . Preventing Agents and Administrators from Creating Issues from Twitter Tweets in the Administrator's Guide.

1. Create or edit an Agent Preference Template to capture Twitter Tweets on Agents' Homepages (optional).
   (Agents can capture their own Tweets in addition to the Agent Preference Template set up by Workspace Administrators).
   a. Add the Twitter dashboard component to the Agent Preference Template.
2. Add an Address Book field in the Workspace using the Twitter ID field type.
   This allows Issues to be automatically populated with the FootPrints user ID of the Twitter user (sender).
3. Add the user's Twitter username to the Twitter ID field in his Contact information in the Workspace's Address Book (e.g., @username).

Agents

1. Customize your user preferences to capture Twitter tweets on your Homepage.
   a. Add the Twitter dashboard component to your Homepage.
2. Monitor the Tweets and create Issues from them as necessary.
3. Respond to user from the Issue page (optional).

Customers

1. Send Twitter Tweets mentioning your organization's Twitter username (optional).
2. Track Issuescreated from your Tweets in the Customer Service Portal.

Preventing Agents and Administrators from Creating Issues from Twitter Tweets (System-wide)

By default, all Administrators and Agents can create Issues from Twitter Tweets. However, System Administrators can prevent these roles system-wide from creating Issues from Tweets by editing the system default user role properties. Workspace Administrators can also edit the Workspace Administrator and Agent roles for their Workspaces.

To prevent Agent and Administrator roles from creating Issuesfrom Twitter Tweets:

1. If you are not already logged in, log into FootPrints as a System Administrator.
2. Select **Administration|System** from the BMC FootPrints Service Core toolbar, then select **Users|User Roles**.
3. Select a Role (e.g., Agents) from the **Roles** drop-down list under **User Roles (System Default)**, then select **Edit role properties**.
4. **On the User Role Properties (System Default) page, in the Social Media section at the bottom of the page, select the No option for Can create Issue from Twitter.**

   The system is now configured so that the selected user roles cannot create Issues **from Twitter Tweets.**

Instant Talk System Administration

To use Instant Talk, click the link for Instant Talk on the BMC FootPrints Service Core Toolbar under "Communication".

On the Administration | System | Features | Instant Talk setup screen, the following options can be set:

- **Enable/Disable Talk**—Use this option to disable Instant Talk system-wide.
- **Refresh Times**—Specify the length of time between refreshes, in seconds. Specify a shorter refresh time to increase the response speed of Talk. Specify a larger time to reduce the processing load on your web server.
  - **Active Talk**—This is the refresh time for the Talk window during an ongoing Talk. This should be a small value. We recommend setting it between 3 and 10 seconds.
  - **Talk Check**—When a user is logged into BMC FootPrints Service Core, the Homepage periodically checks to see if another user has opened a Talk with them. This value should be much higher than the active Talk time. We recommend setting it to 30 to 90 seconds.
- **Exclude Users**—Restrict customers from opening a Talk session with certain Agent and administrative users on a system-wide basis. Users can also be excluded individually on the Preferences page.
- **Restrict by Workspace**—If this option is enabled, customers can only start a Talk session with Agents and administrators who are members of the customer's current workspace.

Full instructions on the Instant Talk feature can be found in the chapter on Real-Time Resolution Tools.

File Attachment Restrictions

You can set maximum sizes for file attachments in BMC FootPrints Service Core. This applies to attachments linked to Issues from the web interface and submitted via email. The options are:

- **Size Limits**—Limit the size of attachments and the directory:
  - Maximum size of each attachment in bytes.
  - Maximum size of the BMC FootPrints Service Core Attachment Directory in bytes.
- **Type Restrictions**—Restrict file types.
  - **Allow only**—Only allows files of this type.
  - **Don't allow**—Allow files of any type except those listed.
  - **Files with the following extensions**—Enter the file extensions that are to be allowed or excluded. Separate the extensions by commas, as in the following example: txt,html,pdf.

NOTE

If an image type (such as .png or .bmp) is restricted from file attachments, it is also restricted from being pasted intot he Description section of an issue.

Change Location of File Attachments Directory

To change the location of the file attachments directory:

1. Stop the web server for BMC FootPrints Service Core so that no updates can take place on the attachments directory during this process.

2. Copy or move the files to a new location for the attachments directory that is both readable and writable from BMC FootPrints Service Core (we recommend a directory created for this purpose called: /usr/local/footprintsservicecore_3000/Attachments). Make sure when copying the files that the entire directory structure is copied. Everything you see inside the directory /usr/local/footprintsservicecore_3000/html/tmp/Attachments should be inside your new directory.
3. Restart the web server for BMC FootPrints Service Core.
4. Select Administration | System | File Attachments from the BMC FootPrints Service Core Toolbar.
5. Scroll down to the Change Attachments Directory Location section.
6. Enter the full path to new attachments directory on the BMC FootPrints Service Core server.
7. Enter your password and click the **Save** button.

Users

About System Administration User Options

While most user options are determined on a workspace-by-workspace basis, some options are configured on a System-wide basis. The system options include:

- **User Management**—Change users' passwords, add or delete user(s) to/from all workspaces, or import large number of users from a file.
- **Auto Add Customers**—Allow customers to be added to the system automatically, and assign these users to particular workspaces.
- **Configure Authentication**—Select password authentication type, including BMC FootPrints Service Core authentication, Windows 2003/2008, UNIX, or LDAP.
- **Customer Forgot Password**—Allow customers to request a password reminder email.
- **User Roles**—Create and manage system default roles for Agents and customers.

User Management

User Management

The User Management page enables a System Administrator to perform the following tasks for multiple users and multiple Workspaces at one time and in one, convenient location:

- Create or edit a user
- Add a user or users to a Workspace or Workspaces
- Delete a user or users from a Workspace or Workspaces

Create or Edit a User

Create a User

System administrators can create a new user and assign the new user any role or privileges, including creating additional System Administrators. To create a new user from the System Administration page:

1. Select Administration | System from the BMC FootPrints Service Core Toolbar, then select User Management from the Users section of the main frame. The User Management page is displayed.

2. On the Create or Edit User tab, click the Create New User radio button.
3. Enter the information for the new user:
   - **Name**—The name of the new user.
   - **User ID**—The login ID that the user will enter when logging into BMC FootPrints Service Core.
   - **New Password**—Give the new user a password. The user can change the assigned password once he or she has logged in. Hovering the mouse over the word "Password" displays the password complexity rules if FootPrints password is used for login.
   - **New Password Again**—Enter the password a second time to confirm that it has been entered correctly.
   - **Primary Email Address**—Change the user's email address for BMC FootPrints Service Core email notification. The option must be checked to receive email.
   - **Pager Email Address** (optional) —Optionally enter a separate email address for a pager. This address can be used for escalation notification. Check this option to receive regular notification email at this address.
   - **Wireless Email Address** (optional) —Optionally enter a separate email address for a wireless device. This address can be used for escalation notification. Check this option to receive regular notification email at this address.
   - **Hourly Billing Rate** (optional)—Hourly billing rates are used in calculating the monetary amounts spent on Issues in addition to time spent.
   - **Rate's description** (optional)—Enter a brief description of the billing rate.
   - **Accessibility** (optional)—Checking this box enables use with "JAWS" and other text-to-speech browsers.
4. Enter the Workspaces to which this user belongs by highlighting the Workspace in the Available Workspaces field and using the arrow buttons to move the highlighted Workspaces into the Selected Workspaces field. The user will have access to Selected Workspaces. If you accidentally move an incorrect Workspace into the Selected Workspaces field, use the left arrow to move the Workspace out of the field.
5. Click the **Save** button to save the user information. As soon as you have saved the information, that user has access to the specified BMC FootPrints Service Core Workspaces.

Edit a User

System administrators can edit an existing user to change the user's information. To edit an existing user from the System Administration page:

1. Select Administration | System from the BMC FootPrints Service Core Toolbar, then select User Management from the Users section of the main frame. The User Management page is displayed.
2. On the Create or Edit User tab, click the Edit User radio button. The page displays a list of users, as well as fields to filter the users. The drop-down fields and checkbox are as follows:
   - **Select users drop-down**—Options are:
     - **All Users**—All of the users in all Workspaces.
     - **Agents**—All Agents, including administrators, in all Workspaces.
       - **Fixed Agents**—Agents with fixed licenses.
       - **Concurrent Agents**—Agents who use concurrent licenses.
     - **Unique Customers**—Customers in all Workspaces who have each of them a unique login.

  - **Shared Customers**—Customers in all Workspaces who share their logins.
  - **System Administrators**—All system administrators in all workspaces.
  - **Locked users**—All users in all Workspaces whose access to BMC FootPrints Service Core is in the Locked state.
- **not in**—Check this box to find users who are not in the Workspaces you designate in the Workspaces drop-down field.
- **Workspaces drop-down**—Select the Workspaces from which to choose the users or from which to exclude them if the "not in" checkbox was checked.

3. When you have finished setting up the filter to obtain the users list, click the Load button. The list of users is redisplayed, filtered as you have specified.
4. If you know the User ID of a specific user whom you wish to edit, you can enter that ID in the User ID field and then click the Find button. The user information for the specified user is displayed in the fields below the list of users. You can sort the
5. To edit a user in the list, click on the user's entry. The fields below the user list are populated with that user's information. Change the information as needed.
   - **Name**—The name of the new user.
   - **User ID**—The login ID that the user will enter when logging into FootPrints.
   - **New Password**—Give the new user a password. The user can change the assigned password once he or she has logged in.
   - **New Password Again**—Enter the password a second time to confirm that it has been entered correctly.
   - **Primary Email Address**—Change the user's email address for FootPrints email notification. The option must be checked to receive email.
   - **Pager Email Address** (optional) —Optionally enter a separate email address for a pager. This address can be used for escalation notification. Check this option to receive regular notification email at this address.
   - **Wireless Email Address** (optional) —Optionally enter a separate email address for a wireless device. This address can be used for escalation notification. Check this option to receive regular notification email at this address.
   - **Hourly Billing Rate** (optional)—Hourly billing rates are used in calculating the monetary amounts spent on Issues in addition to time spent.
   - **Rate's description** (optional)—Enter a brief description of the billing rate.
   - **Accessibility** (optional)—Checking this box enables use with "JAWS" and other text-to-speech browsers.
   - **Default Workspace**—The user's default Workspace is shown. This cannot be changed from this page.
   - **Address Book**—The Address Book containing the user's information is listed. This cannot be changed from this page.
   - **Role**—You can change the user's role by selecting a different role from the drop-down field.
   - **Supervisor**—The user's supervisor is listed. This cannot be changed from this page.
   - **Password Control**

- **Login Lockout**— The system administrator can click the Unlocked radio button to unlock a user's login or click the Locked radio button to lock the user's login. If a user has been locked out due to too many failed login attempts, or for any other reason, the Locked radio button is filled. Login Lockout does not work unless the Login History option has been enabled on the Administration | System | Authentication page. Locked out users can create or edit issues by email.

4. To add the user to a Workspace or Workspaces, highlight the Workspace(s) in the Available Workspaces field and using the arrow button to move the highlighted Workspaces into the Selected Workspaces field. To remove the user from a Workspace or Workspaces, highlight the Workspace(s) in the Selected Workspaces field and then click the left arrow.
5. Click the **Save** button to save the user information. As soon as you have saved the information, that user has access to the specified BMC FootPrints Service Core Workspaces.

Add Users to Workspaces

Most user administration tasks are performed from the Workspace Administration Screen. The Add Users to Workspaces section of the System Administration User Management page is a convenient place to add large numbers of users to multiple workspaces.

The general form of this procedure is to:

- Highlight users in the "users picker".
- Add the users to the list of selected users.
- Display the list of available Workspaces.
- Pick the Workspaces to which you want the users added.
- Add the users to the Workspaces.

The detailed procedure is as follows:

1. Select Administration | System from the BMC FootPrints Service Core Toolbar, then select User Management from the Users section of the main frame.
2. Select the Add Users to Workspaces tab. The page displays a list of users, as well as drop-down fields and a checkbox to help filter the users. The drop-down fields and checkbox are as follows:
   - **User Name**—Performs a wildcard search for user names in the specified workspace.
   - **Display**—Filters users according to the selected option in the specified workspace. Options are:
     - **All Users**—All of the users (agents and customers).
     - **Agents**—All Agents, including administrators.
       - **Fixed Agents**—Agents with fixed licenses.
       - **Concurrent Agents**—Agents with concurrent licenses.
     - **Unique Customers**—Customers who each have a unique login.
     - **Shared Customers**—Customers who share their logins.
     - **System Administrators**
     - **Workspace Administrators**
   - **not in**—When you click the checkbox, displays users who are not in the workspace specified in the Workspaces drop-down.

- **Workspaces**—Select the Workspaces from which to choose the users or from which to exclude them if the "not in" checkbox was checked.

These filters all work together. For example, if you select a User Name of "Don", a Display of "Fixed Agents", check the "not in" checkbox, and specify the Corporate Service Desk workspace, the list will display the user IDs of users with "Don" in their user name who have fixed licenses and are not in the Corporate Service Desk workspace.

3. When you have finished setting up the filter to obtain the users list, choose the users to be added to Workspaces. To do so, highlight the user(s) in the list, then click the right arrow button to move the highlighted user(s) into the Selected Users field. To remove a user from the Selected Users field, highlight the user in the Selected Users field and then click the left arrow.
4. Click the **Load Workspaces** button. A list of Available Workspaces is displayed, as well as an empty Selected Workspaces field.
5. Select the Workspaces to which the user(s) are to be added. To do so, highlight the Workspace(s) in the list, then click the right arrow button to move the highlighted Workspace(s) into the Selected Workspaces field. To remove a Workspace from the Selected Workspaces field, highlight the Workspace in the Selected Workspaces field and then click the left arrow. BMC FootPrints Service Core displays the Workspaces at the bottom of the page. You can continue to add or remove Workspaces as desired until the list of Workspaces is satisfactory.
6. Optionally, you can select a default Workspace for the users you have added. Because this page allows you to add existing users to Workspaces, and those users may already have a default Workspace, it is not required that you designate a default Workspace. To designate a default Workspace for all of the Selected Users, click the radio button beside the Workspace name under the Default Workspace heading. All of the users are then assigned the specified Workspace as their default (the Workspace they are shown first when they log into BMC FootPrints Service Core). If any of the users already have a default Workspace, that Workspace is changed to the one selected by the system administrator.
7. Specify a role for the users you have added in each of the Workspaces. To specify a role for all of the Selected Users, select the role in the drop-down field below the Role heading in each Workspace. All of the Selected Users are assigned the selected role in each Workspace.
8. Optionally, you can designate a Supervisor in each of the Workspaces for the users you have added. To designate a Supervisor, select the Supervisor from in the drop-down field below the Supervisor heading in each Workspace. All of the Selected Users are assigned the selected Supervisor(s) in each Workspace.
9. Once you have specified all of the values for the users, click the **Save** button. The users are added to the Workspaces with the properties you have assigned.

Delete Users From Workspaces

Most user administration tasks are performed from the Workspace Administration Screen. The Delete Users from Workspaces section of the System Administration User Management page is a convenient place to remove large numbers of users from multiple workspaces.

The general form of this procedure is to:

- Highlight users in the "users picker".
- Add the users to the list of selected users.
- Display the list of available Workspaces.
- Pick the Workspaces from which you want the users deleted.
- Delete the users from the Workspaces.

The detailed procedure is as follows:

1. Select Administration | System from the BMC FootPrints Service Core Toolbar, then select User Management from the Users section of the main frame.
2. Select the Delete Users to Workspaces tab. The page displays a list of users, as well as drop-down fields and a checkbox to help filter the users. The drop-down fields and checkbox are as follows:
   - **Select users drop-down**—Options are:
     - **All Users**—All of the users in all Workspaces.
     - **Agents**—All Agents, including administrators, in all Workspaces.
     - **Unique Customers**—Customers in all Workspaces who have each of them a unique login.
     - **Shared Customers**—Customers in all Workspaces who share their logins.
   - **not in**—Check this box to find users who are not in the Workspaces you designate in the Workspaces drop-down field.
   - **Workspaces drop-down**—Select the Workspaces from which to choose the users or from which to exclude them if the "not in" checkbox was checked.
3. When you have finished setting up the filter to obtain the users list, choose the users to be deleted from Workspaces. To do so, highlight the user(s) in the list, then click the right arrow to move the highlighted user(s) into the Selected Users field. To remove a user from the Selected Users field, highlight the user in the Selected Users field and then click the left arrow.
4. Click the **Load Workspaces** button. A list of Available Workspaces is displayed, as well as an empty Selected Workspaces field.
5. Select the Workspaces from which the user(s) are to be deleted. To do so, highlight the Workspace(s) in the list, then click the right arrow button to move the highlighted Workspace(s) into the Selected Workspaces field. To remove a Workspace from the Selected Workspaces field, highlight the Workspace in the Selected Workspaces field and then click the left arrow.
6. Once you have specified all the users and the Workspaces from which they are to be deleted, click the **Save** button. The users are deleted from the Workspaces.

Cookies

By default, users must log into BMC FootPrints Service Core by entering an ID and password each time to they access the system. If cookies are enabled, users can allow the system to automatically log them into BMC FootPrints Service Core when they access the login screen. The login is based on a cookie, a file created on the user's local machine with a unique token, which will be updated on subsequent logins to the system.

If cookies are enabled, a checkbox appears on the login page for all users. If it is checked at login, the next time the user accesses the log page, the login page is bypassed and the user is placed directly into BMC FootPrints Service Core. This affects all users who use the regular BMC FootPrints Service Core login page to access the system, including Agents, administrators, and customers (unless they access BMC FootPrints Service Core through a special login page, e.g., group.html).

The cookie, if left untouched, expires 3 months from the last time it was used. To log into BMC FootPrints Service Core with a different ID and password on the same machine where a cookie has been set, click Logout on the BMC FootPrints Service Core Toolbar. This brings you to the login page. Clicking Logout removes the cookie associated with this browser. To permanently remove all cookies associated with your account, use the Delete Cookie option under Preferences in the Security section.

NOTE

Enabling cookies is a potential security issue. If a cookie is enabled on someone's system, anyone who has access to that workstation can gain access to BMC FootPrints Service Core without an ID and password. Cookies are not appropriate if workstations are shared by multiple users or are located in a public space.

Enable Cookies

To enable cookies:

1. Select Administration | System | System Preferences. The System Preferences page is displayed.
2. In the section titled Cookies, click the Enable "Remember My Password" Cookies checkbox.
3. Click the **Save** button.

Cookies are enabled and this procedure is completed.

User Import

If large numbers of users must be added to the BMC FootPrints Service Core system, it is possible to load a large number of users into BMC FootPrints Service Core from a text file. This is done from the Administration | System | Users | User Import page under Load Users into FootPrints. The limit is 2000 records at one time. If you need to load more than 2000 users from an external file, you must do it in more than one batch.

NOTE

Password complexity rules are not enforced on imported users until the first time the user logs in.

On this page, you must specify:

- The name and full path of the file containing the data (use the browse button to select the file containing the user data).
- **User type**—Select a role to assign imported users. Only one role can be assigned to users in the file at a time.

NOTE

System Administrators cannot be imported using this method. They must be added to the system manually.

- **License type**—If Agent users are being imported, select whether the licenses for the users are Fixed or Concurrent (does not apply to customers).
- Whether or not email addresses must contain the @domainname.com suffix (select Yes to require the suffix or No).
- The default Workspace for users who are imported.
- Additional Workspaces for these users (optional).

NOTE

Click the link next to Workspace Information to see a list of workspaces and corresponding IDs.

- **Team membership** (optional). If you enter a team name here, then all users who are imported in this file are assigned as members of that team. This field only applies to agents, not customers.

The above information applies to each user specified in the file. To import users of different types, you should do separate imports.

Creating the Data File

The file containing the data must be in the correct format, which is a comma-separated-variable format. There should be one line for each user, with the data separated by commas. The file format differs depending on whether Customers or Agents are being loaded.

Agent Users

If Agents, Workspace Administrators, or users with a custom Agent-type role are being imported, the import file must contain the following fields in the order listed:

- **ID**—The BMC FootPrints Service Core user ID
- **Password**—The user's password if BMC FootPrints Service Core authentication is being used. This field should be left blank if an external authentication method, such as LDAP, is used.
- **Name**—The user's full name
- **Email**—The user's email address
- **Misc**—Optional fields defined below

All fields are mandatory except the optional Miscellaneous fields.

Customer Users

If customers are being imported, the data that is required is different. If you also want to import the user's contact data (name, email address, phone number, etc.), you must also do a separate Address Book import. In this case, the IDs specified in this user import must match the primary keys of the users in the Address Book.

- **ID**—The BMC FootPrints Service Core user ID
- **Password**—The user's password if BMC FootPrints Service Core authentication is being used. This field is omitted if an external authentication method, such as LDAP, is used.
- **Misc**—Optional fields to be defined below

Optional Miscellaneous Fields

While Workspace membership for the whole group to be imported is defined on the setup page, you can put information into the import file that defines the default Workspace for an individual, defines one or more Workspaces into which the individual is to be imported, or sets a billing rate for an individual. To set these options for an individual, use the following syntax in the import file:

- **Default Workspace**—Set a user's default Workspace by including DEF=*n* on the line in the import file for that user, where *n* is the Workspace number.
- **Workspace membership**—Set a user's Workspace membership in a single Workspace by including PROJ=*n* on the line in the import file for that user, where *n* is the Workspace number. Include PROJ=*n*:*m*:*q* for multiple workspaces, where *n*, *m*, and *g* are all Workspace numbers for Workspaces to which the user is to have membership.

NOTE

Click the link next to Workspace Information to see a list of Workspaces and corresponding IDs.

- **Billing rate**—Set a user's billing rate by including BILLRATE=n on the line in the import file for that user, where *n* is the number of dollars per hour. This field only applies to agents, not customers.
- **Team membership**—Set a user's team membership by including **TEAMINFO=P*n*;*name1*;*name2*:P*m*;*name3*** on the line in the import file for that user, where *n* and m are Workspace numbers and *name1*, *name2*, and

name3 are Team names. You can have as many Workspaces and Team names specified as you please. This field only applies to agents, not customers. Note that the "P" must be included in the above line.

The settings you use in the import file override the settings on the setup page. That is, if the setup page says to import everyone Workspace #2 as their default, but you have some individuals set in the file to default to Workspace #4, then everyone in the import file will have Workspace #2 as their default except for the individuals with Workspace #4 settings. This goes for all settings, including Team membership.

NOTE

You can import users into teams, but you cannot import users as supervisors. Once a user has been imported, you can configure that user as a supervisor.

Examples

Examples of valid lines in the file for Agents:

jsmith,orange23,Jill Smith,jsmith@widget.com

bjones,abc123,Bob Jones,bjones@widget.com,DEF=4,PROJ=3:4:27

jomalley,xxx543,James O'Malley,jomalley@pemb.com

bbudd,123abc,Billy Budd,bbudd@melville.com,BILLRATE=25.50

rrogers,g11R19,Roger Rogers,rrogers@widget.com,TEAMINFO=P3;Hardware;Software:P4;Network

Examples of valid lines in the file for customers:

lgomez,123456

mfranklin,dse234,DEF=2

vpatel,3ed9fr,DEF=3,PROJ=2:5:14

Examples of valid lines in the file if an external authentication method is used:

- **Agents**:

  jsmith,,Jill Smith,jsmith@widget.com

  bjones,,Bob Jones,bjones@widget.com,DEF=4,PROJ=3:4:27

- **Customers**:

  lgomez,

  mfranklin,,DEF=2

NOTE ON NAMES

Names with embedded commas are not allowed, such as "William Smith, Jr." Do not include any such names in a load file. Additionally, we recommend against suffixes in names even without the comma, such as "William Smith Jr.", as user names are sorted by last name in the assignee window; therefore, William Smith would be placed with the "J" names. Lastly, the double-quote marks used in this paragraph are for reading clarity only; do not use double-quotes in the load file.

System User Roles

BMC FootPrints Service Core comes with a number of built-in permission roles (also called "user types") to assign to users of the system. Each role includes a variety of permission options that dictate what users can and cannot do within a Workspace. An administrator can define and change which actions users of that role type can perform. In addition, an unlimited number of custom roles can be created.

Roles can be defined at both the Workspace and system Level. System roles are not automatically assigned to users. Instead, they can be created by the System Administrator to be used by Workspace Administrators in their Workspaces. This is an easy way to create standard roles that can be maintained in one place and that are constant throughout the system.

Refer to User Roles under Workspace Administration for complete instructions.

Auto Add Customers

The Auto Add Customer feature gives customers access to the system automatically and without the administrator creating or pre-loading account information. A default Workspace, additional Workspace membership, and the customer role type can be specified for new users added automatically. This feature is useful if you have a large employee customer or external customer user base that needs access to BMC FootPrints Service Core and you want them to have individual IDs and passwords.

There are two different cases for the Auto Add Customers feature, based on the authentication method for the system:

- **BMC FootPrints Service Core Authentication**—Customers create their own accounts and passwords like they do on public sites like Yahoo and Hotmail.
- **Windows, LDAP or UNIX password Authentication**—Customers access BMC FootPrints Service Core with their network IDs and passwords.

If unique passwords are not necessary, for example, on an internal network where security is not a big issue, a single shared ID and password can be created for the entire customer base. Those customers enter a unique key, such as Email address, when they log in, which identifies the individual customer and links to the customer's Address Book contact information. A special login page can be created for these users (group.html). If this method is preferred, then the Auto Add Customer feature should not be enabled.

NOTE

Auto-added customers are not displayed in the Select Customer pop-up window from the Add Customer or Edit Customer pages because of the processing overhead involved in sites that have thousands of auto-added customers.

BMC FootPrints Service Core Authentication

If BMC FootPrints Service Core password authentication is being used, the Auto Add Customer feature, if enabled, adds a New User Signup link to the BMC FootPrints Service Core login screen. Users create their own account IDs and passwords. In addition, users can fill in their contact information when they first create an account. The fields presented on the sign-up screen are based on the fields in the Address Book.

NOTE

Password complexity rules are displayed on the sign-up page to assist customers.

There are five steps to enabling this feature:

1. **Select "Yes" to enable**—This enabled the Auto Add feature. A New Users: Sign Up Here link is added to the BMC FootPrints Service Core login screen.

NOTE

When the Auto-Added Customers feature is enabled, resaving the feature configuration and selecting a different role will cause all existing Auto-Added Customers to be changed to the new role.

2. **Select the Default workspace**—This is the Workspace that auto-added customers are brought into when they log into BMC FootPrints Service Core. This Address Book must be enabled on this Workspace.

3. **Select additional workspaces (optional)**—You can optionally add these users to other Workspaces. Only Workspaces that share the Address Book and the same primary key with the selected default Workspace are available. Highlight the Workspaces with your mouse.
4. **Select the user role**—This option appears after enabling Auto Add and clicking **GO**. This is the user permission level auto-added customers receive. A different role can be specified for each Workspace to which users belong. Built-in roles include: Read KB/Requests, Read/Submit, and Customer Edit (only if the Customer Edit license is enabled). Custom roles are also available. All auto-added users have unique customer accounts of the role chosen here. Refer to Roles for more information.
5. **Password Retrieval** (optional)—Enable the Customer Forgot Password feature (below) for auto-added customers (this is where "hint questions" are administered).

Windows, LDAP or UNIX Authentication

If an external authentication method is enabled for the system, the Auto Add Customer feature allows employee and/or external customers to use their network user IDs and passwords to access BMC FootPrints Service Core. When they click the link to Sign Up Here, customers are prompted to enter a network ID and password, and a customer account is automatically created for them in BMC FootPrints Service Core using the properties selected on the Auto Add Customer setup screen. Alternatively, customers can enter their network IDs and passwords on the login page (for example, the first time they click a link in an email notification from BMC FootPrints Service Core) and a new account is created. Most of the setup options are the same as those enumerated above for BMC FootPrints Service Core authentication, with a few important exceptions:

- The Password Retrieval option is not available if an external authentication method is used.
- If LDAP authentication is used, multiple custom profiles can be created for groups of customers based on an LDAP attribute (such as Organizational Unit). More information on this feature can be found below.

Important Notes Regarding Auto Add Customer Feature (PLEASE READ!!)

- The account IDs that auto-added customers create are of the format of the primary key for the Address Book associated with the Workspace(s) selected above. This is what enables the user's account to link to contact information. We strongly recommend using the User ID field. If this field does not exist in the Address Book, you should make a single-line character Address Book User ID or Customer ID field. In addition, that field must be selected as the primary key in the Address Book on the Address Book Field Maintenance page.
- Auto-added Customers are linked to their contact information in the Address Book by their User IDs, which is the same as the primary key. Details of how this works for different Address Book and authentication method options are in the section below entitled Sign Up Form.
- Once a Workspace is designated to allow access to auto-added customers, the primary key cannot be changed. If it is necessary to change the primary key for a Workspace, that Workspace must be de-selected from the Auto Add Customers setup page first.
- If a specific customer account is edited on the Edit Customers Workspace Administration page, and the customer was originally auto-added, the customer is no longer an auto-added customer. Any changed made on the Auto Add Customers setup page (default Workspace, user type, etc.) no longer apply to this user.

Address Book Contact Information

In addition to user ID and password, customers typically have contact information that must be populated in the Address Book. Contact information can be entered into BMC FootPrints Service Core for auto-added users in a variety of ways:

- Users can enter their own contact information the first time they sign up (Auto Add with BMC FootPrints Service Core Authentication).

- The Address Book data can be imported using the Address Book import function. This is described in the chapter on Address Book Administration. The user IDs must match the primary key data for the contacts in the Address Book. For example, if Email address is the primary key, the user ID must also be the user's email address. This method is available for the Auto Add Customers feature with BMC FootPrints Service Core authentication or external authentication, if the BMC FootPrints Service Core Address Book is used.
- Contact data can be obtained dynamically from an outside contact database, such as Microsoft Exchange. This only applies if the LDAP Address Book link feature is enabled (using any authentication method). In this case, the unique keys in the Address Book must also match the user IDs.

Refer to Auto Add Customers Sign Up Form for more information on how contact data is populated for the different types of authentication and Address Books when a user signs up for the first time.

Auto Add Customer Sign-up Form

In addition to user ID and password, customers typically have contact information that must be populated in the Address Book. When customers first log into BMC FootPrints Service Core and Auto Add Customers is enabled, they are presented with a sign up form. This form differs depending on the authentication method and the Address Book type.

- BMC FootPrints Service Core Authentication and FootPrints Address Book
- BMC FootPrints Service Core Authentication and LDAP Address Book
- External Authentication and BMC FootPrints Service Core Address Book
- External Authentication and LDAP Address Book

BMC FootPrints Service Core Authentication and FootPrints Address Book

A New Users: Sign Up Here link appears on the BMC FootPrints Service Core login page. The sign up form prompts the user to provide the following information:

- **User ID**—This must be in the form of the primary key in the Address Book, i.e., Email address, Customer ID, Social Security #, etc.
- **Password**—Must be entered twice.

NOTE

Password complexity rules are displayed on the sign-up page to assist customers.

- **Hint Question -** If Password Retrieval is enabled, the customer can choose a hint question (if more than one is available).
- **Hint Answer**—Define an answer to the hint question selected above (or selected by the administrator). This option is only available if Password Retrieval is enabled.
- **Contact Information**—The customer fills in contact information, based on the public fields in the Address Book. The only field that won't be asked for is the primary key field, which was defined in the first step.

After completing the form, the account is created and a contact record is also created for the customer in the Address Book. If a duplicate user account is found, the new account is not created and the user associated with the account receives an email with the password to log in. If there is no duplicate user account, but there already is a contact record found in the Address Book based on the primary key (because it was loaded via import), the account is created, and is associated with the existing contact record.

BMC FootPrints Service Core Authentication and LDAP Address Book (Active Directory, etc.)

A New Users: Sign Up Here link appears on the BMC FootPrints Service Core login page. The sign up form prompts the user to provide the following information:

- **User ID**—This must be in the form of the primary key in the Address Book, i.e., Email address, Customer ID, Social Security #, etc.
- **Password**—Must be entered twice. Password complexity rules are displayed on the sign-up form below the password fields.
- **Hint Question -** If Password Retrieval is enabled, the customer can choose a hint question (if more than one is available).
- **Hint Answer**—Define an answer to the hint question selected above (or selected by the administrator). This option is only available if Password Retrieval is enabled.

No contact information needs to be entered because the Contact records are taken directly from the external contact database (i.e., Active Directory). The contact record is found based on the user ID entered (i.e., the primary key). If a duplicate user account is found, the new account is not created, and the user is prompted to enter another ID. If there is no duplicate user account but there is a duplicate contact found in the Address Book (based on the primary key), the account is created and is associated with the existing Contact record. An email with a random password is then sent to the customer. This ensures that only the real contact can claim an account with that primary key.

External Authentication and BMC FootPrints Service Core Address Book

There is a New Users: Sign Up Here link on the BMC FootPrints Service Core login page. When the link is clicked, the customer is prompted to enter a network ID and password. When the customer logs into BMC FootPrints Service Core the first time with a network ID and password, the system searches the network password file for the user ID. If the user ID is not found, or the password entered is incorrect, the user receives an error message. If the ID and password are found, BMC FootPrints Service Core searches the Address Book associated with auto-added customers for the user's ID (in primary key field).

If the ID/primary key is found in the Address Book, the Homepage is displayed and the customer's contact information populates the Request form. If a contact record is not found, the user is prompted to enter contact information. After completing this form, the account is created, and the contact record is added to the Address Book.

Because of multiple authentication methods, the Auto Add page does more checking to determine whether single profile mode is available to it. If either or both authentication methods are LDAP, you can create multiple profiles. If you have currently selected a method other than LDAP and attempt to go into multiple profile mode, you are warned and, if you accept it, you automatically use LDAP authentication. Conversely, if you are in multiple profile mode and attempt to change to an authentication method that is not LDAP, you are warned and you lose any multiple profiles you have created as you return to single profile mode.

Auto add customers can use both configured techniques.

External Authentication & LDAP Address Book (Active Directory, etc.)

There is a New Users: Sign Up Here link on the BMC FootPrints Service Core login page. When the link is clicked, the customer is prompted to enter a network ID and password. The customer enters a network ID and password and the Homepage is displayed. In this case, the customer does not have to fill in any forms at the first login to BMC FootPrints Service Core. The contact information taken from the LDAP Address Book automatically populates the Request form. If either the ID is not found in the network password file or a contact record isn't found in the LDAP Address Book (based on the primary key), the user receives an error message.

NOTE

The primary key for the Address Book must match the network user ID. If the primary key is currently Email address and that field does not match the network user ID, an additional field should be created in the Address Book called User ID and this should be set as the primary key.

Customer Forgot Password

If BMC FootPrints Service Core authentication is being used, auto-added customers can also take advantage of the Password Retrieval feature. This feature allows customers to retrieve forgotten passwords. A hint question can be defined for added security.

To enable this feature:

1. Select Administration | System | Customer Forgot Password.
2. Select Yes to enable. This displays a Forgot password? link to users when they enter an incorrect password.
3. Optionally enable one or more hint questions for customers who forget their password,e.g., “What is your mother’s maiden name?” The user defines a hint at first sign-up. If the user forgets his or her password and answers the hint question correctly, a new password is sent to the user's email address. The user can then change the new password when he or she logs in correctly.

   If no questions are defined, the customer receives the password via email.

Restrictions

- Using multiple authentication methods affects the Forgot Password feature. If you are using an external authentication method along with BMC FootPrints Service Core internal authentication, this feature only works for users who authenticate against BMC FootPrints Service Core, since BMC FootPrints Service Core cannot distinguish which users authenticate against which method
- If you are using two methods and both are external, or you're using only one method and it is external, the Forgot Password feature cannot be enabled.
- If an external authentication method is being used, such as Windows, LDAP or UNIX, this feature cannot be enabled.

Auto Add Customer based on LDAP Profiles (LDAP authentication only)

Auto-added customers are normally added to the same set of Workspaces and have the same default Workspace and customer user type. If LDAP password authentication is used, you can optionally create custom profiles for auto-added customers based on an LDAP attribute. For example, if the LDAP server has an attribute ou (Organizational Unit), and each user is assigned to an ou such as Finance, Sales, Marketing, etc., a profile can be made for each of these units in BMC FootPrints Service Core. The profile includes such information as customer user type, default Workspace, and additional Workspace membership. In this way, users from the Sales group can be placed in one workspace automatically, while users from the Marketing group are placed in a different Workspace. Multiple profiles can be created.

NOTE

Because of multiple authentication methods, the auto add page does more checking to determine whether single profile mode is available to it. If either or both authentication methods are LDAP, you can create multiple profiles. If you have currently selected a method other than LDAP and attempt to go into multiple profile mode, you are warned and, if you accept it, you automatically use LDAP authentication. Conversely, if you are in multiple profile mode and attempt to change to an authentication method that is not LDAP, you are warned and you lose any multiple profiles you have created as you return to single profile mode.

To create custom profiles based on an LDAP attribute:

1. Enable LDAP password authentication for the BMC FootPrints Service Core system (not the same as an LDAP Address Book). Each auto-added customer who accesses BMC FootPrints Service Core must have an ID and password in the LDAP database. Refer to the section on Authentication for more information.
2. On the Auto-Add Customer page, click the Switch to Multiple Profile Mode link.
3. The Auto-Add Customer page is redrawn with the custom profile options. These include radio buttons for Use LDAP Filter and Use Substring of Distinguished Name, a field for setting the Criteria and one for setting the Profile Name, and a Profiles box to manage custom profiles. Multiple profiles can be set, so you can specify one or more Distinguished Name criteria and, in addition, specify one or more LDAP search filters, which will search the LDAP attributes for the customer who is logging in to find matches.
4. For each profile, enter the LDAP attribute and/or Distinguished Name criteria that should be met for a Customer to become part of the profile (ou=accounting, for example).

NOTE

Make sure that the profile criteria are part of the distinguished name string to correctly assign profiles to auto-added users.

5. Name each profile (e.g., Accounting) that you enter. Naming the profile allows all of the customers in that group to be manipulated as a single entity through the Edit Customer page. The name must follow the naming rules for BMC FootPrints Service Core IDs (i.e., no spaces and no special characters as the first character).
6. Select a default Workspace for the profile. This is the Workspace customers matching the criteria log into by default.
7. Other compatible Workspaces may appear in the box on the right; highlight any Workspaces that should be accessible by customers in the group you are defining.
8. Select a customer user type for the profile.
9. Click the **ADD** button to add the Profile Name to the Profile List. The profile is displayed in the Profiles box on the right.
10. To create additional profiles, repeat the above steps and click **ADD** as many times as needed.
11. Use the **EDIT** and **DELETE** buttons to manage existing profiles.
12. To create a default Profile that is used for any auto-added customers that do not fit into a custom profile, leave the Criteria and Profile Name fields blank and click **ADD**. This profile is given the name Default.
13. When you have finished creating profiles, scroll down to the bottom of the screen and click **GO**.

NOTE

As LDAP password authentication is enabled, the Password Retrieval option cannot be used.

Now when customers log into BMC FootPrints Service Core for the first time, they are added to the system automatically. If multiple profiles were created, they receive the profile assigned to them based on their ou or other LDAP attribute. If only one default profile was created, all customers receive that profile.

Authentication

BMC FootPrints Service Core supports several modes of user/password authentication. You have the option of using BMC FootPrints Service Core' internal encryption techniques, where BMC FootPrints Service Core maintains its own database of users and passwords. Alternatively, BMC FootPrints Service Core can let the web server perform the

authentication, or can authenticate by interfacing with either an LDAP directory server or the Windows user list on Windows, and UNIX/Linux user list on UNIX systems.

BMC FootPrints Service Core supports the following methods of password verification for BMC FootPrints Service Core users:

- BMC FootPrints Service Core authentication (default)
- LDAP authentication
- Windows 2003/2008 authentication (Windows 2003/2008 only)
- UNIX authentication (UNIX only)
- Web Server Authentication

NOTE

When using web server authentication with the Customer Service Portal, the customer URL provided on the Customer Service Portal setup page will not bypass customer login. If a customer goes to the regular /footprints URL, they bypass the login correctly.

To administer authentication, select Administration | System from the BMC FootPrints Service Core Toolbar, then select Authentication under Users in the main frame.

Each BMC FootPrints Service Core user may be assigned either the primary or secondary authentication method. Only the assigned method is attempted when a user tries to authenticate. If the secondary authentication method selected is None, all **FootPrints** users are authenticated against the primary authentication method.

There are a variety of ways to add users to the system:

- **System Administrators**:
  - Manually from the Administration | Workspace | Users | Add Agents page.
- **Agents/Workspace Administrators:**
  - Manually from the Administration | Workspace | Users | Add Agents page.
  - Imported from a text file; refer to Load Users from an External File.
- **Customers:**
  - Manually from the Administration | Workspace | Users | Add Customers option.
  - Imported from a text file; refer to Load Users from an External File.
  - Auto added to BMC FootPrints Service Core from the network password file (if 2003/2008, LDAP or UNIX authentication is enabled). Refer to the Auto Add Customers option under System Administration.
  - Customers can create their own unique accounts and passwords (if BMC FootPrints Service Core authentication is enabled). This option is available on the Auto Add Customers page only if BMC FootPrints Service Core authentication is enabled.
  - If unique IDs and passwords are not required for customers, a single shared ID and password can be created for all customers. Customers then identify themselves by a single unique key (the primary key), such as Email address. If an external authentication method is selected, the shared ID must exist in the network password file.

Authentication Methods

BMC FootPrints Service Core Authentication (default)

When BMC FootPrints Service Core authentication is selected, the BMC FootPrints Service Core password file is checked when a user logs in (passwords are encrypted).

BMC FootPrints Service Core authentication includes password security features such as email notification on password change, enforced password complexity settings, preventing reuse of previous passwords, password lifetimes, and lockout on a number of incorrect login attempts.

Configure FootPrints Password Authentication

To configure BMC FootPrints Service Core password authentication:

1. Select Administration | System | Authentication from the BMC FootPrints Service Core Toolbar.
2. Select FootPrints Authentication from either the Primary or Secondary Authentication drop-down list.
3. Optionally, complete the Password Security Configurations section:
   - **Password Change Notifications**—Set the rules for notifications when a password is changed.
     - **Notify users by email when their passwords change**—Click the box to enable notification. When a user's password changes, BMC FootPrints Service Core sends an email notifying the user that it was changed. Because the user's email address is in BMC FootPrints Service Core, if someone other than the user changed the password, this notification reveals an improper change. Additional options are displayed when this is enabled. A dedicated email address that serves as a distribution list for system administrators is strongly recommended for notifications. This allows the list of system administrators to be maintained outside of BMC FootPrints Service Core by whoever maintains other distribution lists.
       - **System administrator emails are to be sent from**—Use the drop-down to select the System Administrator who will be named in the email as the sender. If the user has a problem with the password change, the user can respond to the administrator via email.
       - **Or enter real and email address of a BMC FootPrints Service Core Administrator**—You may wish to have someone other than a System Administrator act as the administrator for password security. Enter the real name and email address of this person in the fields provided. This allows administrators to use the email addresses of lists.
   - **Password Complexity**—If complexity requirements are enabled or changed, existing passwords that do not comply with the complexity rules are no longer valid. Users attempting to log in will receive an error message and be asked to set a new password.
     - **Require Password Complexity**—Enabling this option forces users to enter passwords that conform to the complexity rules. Rules are cumulative, which means that all rules that are enabled are enforced. Additional options are displayed when this is enabled.
       - **Minimum password length** and **Maximum password length**—Set the minimum and maximum number of characters that users can enter for their passwords. The smallest acceptable value for the Maximum Password Length is 8.
       - **Require one or more alphabetic letters**—Enabling this option means that any passwords selected by users must contain at least one letter from the English alphabet. All alphabet entries are case sensitive.
       - **Require mixed case alphabetics**—Enabling this option means that any passwords selected by users must contain at least one upper case and one lower case letter from the English alphabet.

  - **Require one or more numeric digits**—Enabling this option means that any passwords selected by users must contain at least one Arabic numeral (0,1,2,3,4,5,6,7,8,9).
  - **Require one or more punctuation**—Enabling this option means that any passwords selected by users must contain at least one keyboard symbol, such as @, %, &, and so on. Control characters are not permitted.

- **Password History**—The password history saves the history of users' password changes and users' previous passwords.
  - **Keep password history**—Click the checkbox to enable password history. Deleting the entries in a user's password history is a way to expire a users password. Additional options are displayed when this is enabled.
    - **Keep history for at least**—Enter a number in the integer field and then use the drop-down field to set how long the history is maintained. Time periods available in the drop-down field are Minutes, Hours, Days, Weeks, Months, and Years.
    - **Reuse limits: how many of the last passwords must be different**—Determines how long a user must wait before reusing a password. For example, if the limit is set to three, then a user can enter a password that he or she has used before once the user has entered three interim passwords. Consider this sequence of passwords: A, B, C, D. If A is the first password, then the user must change passwords to B, then C, and then D before going back to use A. Disabling the minimum lifetime (described below) for passwords is not recommended if a password reuse limit has been set. A user could, by going through as series of dummy passwords, return to the original password if no minimum lifetime has been set for passwords. This would thwart the password reuse limit.
- **Password Lifetime**—Set the minimum and maximum expiration periods for passwords.
  - **Limit lifetime of passwords**—Click the checkbox to enable password lifetime. Additional options are displayed when this is enabled.
    - **Min. lifetime**—Enter a number in the integer field and then use the drop-down field to set a minimum lifetime for passwords. Once a user changes a password, the password cannot be changed again until this period expires. Time periods available in the drop-down field are Minutes, Hours, Days, Weeks, Months, and Years. Disabling the minimum lifetime for passwords is not recommended if a password reuse limit (see above) has been set. A user could, by going through as series of dummy passwords, return to the original password if no minimum lifetime has been set for passwords. This would thwart the password reuse limit.
    - **Max. lifetime**—Enter a number in the integer field and then use the drop-down field to set a maximum lifetime for passwords. Passwords must be changed when this period expires. A user whose password has expired is prompted to change the password upon attempting to log in. Users with expired passwords cannot log in until they have changed their passwords. Time periods available in the drop-down field are Minutes, Hours, Days, Weeks, Months, and Years.
- **Login History**—Sets the amount of time problem logins (failed login attempts) are tracked. Individual problem logins are eliminated from the history when the Login History period expires.
  - **Keep login history**—Click the checkbox to enable login history. Additional options are displayed when this is enabled.
    - **Keep history for at least**—Enter a number in the integer field and then use the drop-down field to set a maximum lifetime for problem login attempts. Time periods available in the drop-down field are Minutes, Hours, Days, Weeks, Months, and Years.

- **Login Lockout**—A user with too many sequential problem logins in a given period gets a special “lock” entry in the login history. The lock prevents the user from logging in. Locked users remain locked until this time period passes or the “lock” notice falls off the end of the login history table. Locked out users can create or edit issues via email.

NOTE

A system administrator can override the lockout by going to the Administration | System | User Management page, selecting Edit User, selecting the user to edit, and then clicking the Unlocked checkbox at the bottom of the page. In the same way, a workspace administrator can override the lockout from Administration | Workspace | Edit Agents.

- **Lockout user after too many sequential bad login attempts in monitoring period**—Click the checkbox to enable lockout. Additional options are displayed when this is enabled.
  - **Bad attempts until lockout**—Enter a number specifying how many failed sequential login attempts can be made before the user is locked out of BMC FootPrints Service Core.

NOTE

Someone knowing a user's ID can, by making repeated bad login attempts, lock that user out (i.e., a Denial of Service Attack). This would not affect a user who is logged in when the bad login attempts occurred.

  - **Length of lockout**—Enter a number in the integer field and then use the drop-down field to set a maximum lifetime for the lockout. Time periods available in the drop-down field are Minutes, Hours, Days, Weeks, Months, and Years. Once the lockout period expires, the user can again attempt to log in.
  - **Monitoring period**—Enter a number in the integer field and then use the drop-down field to set the length of the monitoring period. If a user has too many bad sequential login attempts during this period and lockout is enabled, the user is locked out of BMC FootPrints Service Core. Time periods available in the drop-down field are Minutes, Hours, Days, Weeks, Months, and Years. Once the lockout period expires, the user can again attempt to log in.

4. Enter your password and click **Save** to complete the configuration.

Windows Authentication

When Windows Authentication is selected, the Windows domain password file is used authenticate a user’s password.

To configure Windows Authentication:

1. Select Administration | System | Authentication from the BMC FootPrints Service Core Toolbar.
2. Select Windows Authentication from either the Primary or Secondary Authentication drop-down list, then click **GO**.
3. Fill in the domain name in the box provided. Multiple domains can be added; each must be entered on a separate line.
4. Enter your Windows network password and click **Save**.

   Your ID and password are checked against the domain password file. If either the ID or password isn’t found, you receive an error message, and the change to NT authentication is not made.

NOTE

A system administrator can lockout an individual user from the Administration | System | User Management page using the Edit User function. A locked user can be unlocked from the same page.

The network ID and BMC FootPrints Service Core ID for every user in BMC FootPrints Service Core must be identical. For example, if the user’s Windows domain ID is jsmith, her BMC FootPrints Service Core ID must also be jsmith. This must be the case for all Agent and administrator users. If you do not require unique IDs and passwords

for your employee customers or external customers, you can create a shared ID for all customers. That shared ID must still be present in the network password file. Refer to the section above for more information about how customer accounts can be created in BMC FootPrints Service Core.

NOTE

If the domain setup exists, the system correctly authenticates against that domain. If the domain does not exist and a guest account is enabled on the BMC FootPrints Service Core server, any password authenticates. To prevent this from happening, the Guest account on the server must be disabled. In addition, if a guest account exists in the correctly specified domain, any login also works with any password if the user does not exist in the domain.

LDAP Authentication

When LDAP authentication is selected, the LDAP server is used to authenticate a user's password.

To configure LDAP Authentication:

1. Select LDAP from the Primary or Secondary Authentication Method drop-down list.
2. Select LDAP Authentication from either the Primary or Secondary Authentication drop-down list, then click **GO**.
3. Enter the LDAP Authentication Attribute. The LSAP Authentication Attribute is the attribute against which the user is authenticated, for example, uid, samaccountname, or mail.
4. Enter the LDAP server address (e.g., abc.widget.com).
5. Enter the LDAP server port (389 is the standard port). An additional option for users beside the standard LDAP port (389) is the Global Catalog port for Active Directory (3268). This enables LDAP to access additional users from trusted domains using a set of common LDAP attributes. The typical scenario in which this would be used is when a large organization has a number of offices that each maintains an Active Directory for its local users. Using the standard port, you might be able to retrieve only a local office's users. Using the Global Catalog port, you can often retrieve everyone, assuming the search base is set correctly.
6. Enter the LDAP base DN (Distinguished Name). This is the search base for user IDs (samaccountname or uid). An example is: ou=Users, dc=server, dc=com
7. Optionally enter login information to allow authentication, including DN and password. This can be left blank if the LDAP server allows anonymous binding.
8. If multiple DNs exist, enter each on a separate line. They are searched in order for authentication from top to bottom.
9. Enter your FootPrints password and click **Save**.
10. Your ID and password are checked against the LDAP server. If either the ID or password is not found, you receive an error message and the change to LDAP authentication is not made.

NOTE

A system administrator can lockout an individual user from the Administration | System | User Management page using the Edit User function. A locked user can be unlocked from the same page.

The LDAP ID and FootPrints ID for every user in FootPrints must be identical. For example, if the user's LDAP ID is bjones, the FootPrints ID must also be bjones. This must be the case for all Agent and administrator users. If you do not require unique IDs and passwords for your employee customers or external customers, you can create a shared ID for all customer. That shared ID must still be present in the LDAP password file. Refer to the section above for more information about how customer accounts can be created in FootPrints.

The next section of this document described how to configure LDAP security.

Configuring LDAP Security

Method of Security Used

By default, BMC FootPrints Service Core communicates with LDAP via an unsecured connection. This topic describes how to use secured LDAP connections.

LDAP communication can be secured using Transport Layer Security (“TLS”). FootPrints uses a method called “Start TLS,” which means an initial connection is made to the LDAP server over a standard port (typically, 389). Then the connection is changed to a secured TLS connection over a standard LDAP port.

In addition to LDAPS, we have code to do an LDAP secured connection (“LDAPS”) over a secured port (typically, 636).

Setting Start TLS:

1. Select LDAPS from the LDAP Security Type drop-down.
2. Select the SSL Version (if unsure, stay with the default).
3. Select how you wish to handle Certificate Verification. “Require” means that FootPrints will not connect to the remote LDAP server unless the server offers a certificate, which can be compared to the certificate uploaded by the administrator. If they are the same, the connection will be made. This is the most secure method. “Optional” also requires that a certificate be uploaded, but a comparison is only made if the server offers a certificate. In the absence of the server providing a certificate, the connection will be made. “None” means that no checking of a certificate will be required and therefore no certificate must be uploaded. Although the connection will be secured, there is no verification that FootPrints is connecting with the correct server.
4. If selecting “Require” or “Optional” for Certificate Verification, either a previous certificate can be used or a new one uploaded. In either case, the certificate provided must be the certificate of the certificate authority ("CA") who signed the server's certificate in PEM (Base-64) format (this will be the server's own certificate if the certificate is self-signed) . The certificate can be in any directory on the FootPrints server and can have any name, so long as it is in pem format.

Setting LDAPS:

1. Select LDAPS from the LDAP Security Type drop-down.
2. Select how you wish to handle Certificate Verification. “Require” means that FootPrints will not connect to the remote LDAP server unless the server offers a certificate, which can be compared to the certificate uploaded by the administrator. If they are the same, the connection will be made. This is the most secure method. “Optional” also requires that a certificate be uploaded, but a comparison is only made if the server offers a certificate. In the absence of the server providing a certificate, the connection will be made. “None” means that no checking of a certificate will be required and therefore no certificate must be uploaded. Although the connection will be secured, there is no verification that BMC FootPrints Service Core is connecting with the correct server.
3. If selecting “Require” or “Optional” for Certificate Verification, either a previous certificate can be used or a new one uploaded. In either case, the certificate provided must be the certificate of the certificate authority ("CA") who signed the server's certificate in PEM (Base-64) format (this will be the server's own certificate if the certificate is self-signed) . The certificate can be in any directory on the FootPrints server and can have any name, so long as it is in pem format.

NOTE

BMC FootPrints Service Core secures only with server certificates, not client certificates.

Active Directory can use only LDAPS. (Refer to http://support.microsoft.com/?id=321051 for additional information.)

UNIX Authentication

When UNIX authentication is selected, the UNIX password file is used to authenticate a user's password. This option is only available if BMC FootPrints Service Core is installed on a UNIX or Linux server.

To configure UNIX password authentication:

1. Select Administration | System | Authentication from the **FootPrints** Toolbar.
2. Select UNIX from either the Primary or Secondary Authentication drop-down list, then click **GO**.
3. Enter your **FootPrints** password and click **Save**.
4. Your ID and password are checked against the UNIX password file. If either the ID or password is not found, you receive an error message and the change to UNIX authentication is not made.

NOTE

A system administrator can lockout an individual user from the Administration | System | User Management page using the Edit User function. A locked user can be unlocked from the same page.

No additional information needs to be defined; BMC FootPrints Service Core automatically finds the UNIX password file for the system. The UNIX ID and BMC FootPrints Service Core ID for every user in BMC FootPrints Service Core must be identical. For example, if the user's UNIX ID is ebennet, the BMC FootPrints Service Core ID must also be ebennet. This must be the case for all Agent and administrator users. If you do not require unique IDs and passwords for your employee customers or external customers, you can create a shared ID for all customers. That shared ID must still be present in the UNIX password file. Refer to the section above for more information about how customer accounts can be created in BMC FootPrints Service Core.

Web Server Authentication

In this method, password checking is handled by the web server, not **FootPrints**.

To enable this feature:

1. Select Administration | System | Authentication from the BMC FootPrints Service Core Toolbar.
2. Select Web Server Authentication from the Primary Authentication Method drop-down list.
3. Click **GO**.
4. In order to put the web server in charge of passwords, anonymous access must first be taken away from the five BMC FootPrints Service Core web aliases: "footprints", "MRcgi", "help", "MRimg", and "tmp". If the web server is dedicated to running just **FootPrints**, you can disallow anonymous access on the whole site, instead of setting permissions on each alias.

   On Windows:

   - **In IIS**, right-click the alias (or the whole site), go to its properties, and disallow anonymous access.

     On UNIX/Apache:

   - Use a .htaccess file.

If anonymous access is disallowed, when the user tries to access the BMC FootPrints Service Core login:

- If the user is logged into the Windows domain where the web server runs, the user is considered authenticated already

  or

- The user is prompted for the network/web access name and password by a dialog spawned from the web browser.

The user's password is authenticated according to the configuration of the web server. The BMC FootPrints Service Core user ID must be identical to the user ID authenticated by the web server or access is not granted.

NOTE

Login lockout does not work for web server authentication.

NOTE

If Web Authentication is used, it must be the only authentication method; it cannot be combined with any other authentication method.

Switching Back to FootPrints Authentication

If Windows, LDAP, or UNIX authentication is chosen, then new users are created in BMC FootPrints Service Core and the authentication method is switched back to BMC FootPrints Service Core, the users' passwords default to their user IDs. Users who were added to BMC FootPrints Service Core before switching to an alternative authentication method retain their original BMC FootPrints Service Core passwords.

Security Notes on Denial of Service Attacks

Someone knowing a user's ID can, by making repeated bad login attempts. This would not affect a user who is logged in when the bad login attempts occurred.

License Management

License Management

BMC FootPrints Service Core is a licensed product. Licensing issues are handled by the System Administrator. The following topics are covered in the section:

- Get and Install a New LicenseIf you need new licenses or if you have problems with the licensing process, contact BMC and provide BMC with the license code, the number of users you want to license, and whether you want a permanent or evaluation license.
- Reset License Manager—This function clears the internal list that BMC FootPrints Service Core keeps of logged in users. All agents are immediately logged out. Any data that an agent is in the middle of entering is lost.
- Current License Use—Provide information about license usage
- Concurrent License Manager—Provide information about and manage concurrent licenses.

Get and Install a New License

BMC FootPrints Service Core must be licensed to run. When the BMC FootPrints Service Core evaluation package is first installed, a 30-day temporary license, which allows five individual users and unlimited customer access, is generated. After (or before) that license expires, you can email Support to get a permanent license if you have purchased BMC FootPrints Service Core. BMC FootPrints Service Core must also be re-licensed if it is moved, re-installed, or installed to a new server. Contact your sales representative for more information about acquiring a new license.

To generate a new license, select Administration | System | License from the BMC FootPrints Service Core Toolbar. In the Get and Install a New License section, a nine-character license code is displayed. Email Support to obtain a permanent license. Provide the support representative with the type of license you need, the nine-character license code, and your company information. You will then be provided with the appropriate evaluation or permanent license string to be installed.

Enter the license string you receive from BMC or your reseller in the License String field in the Get and Install a New License section, and click **GO** to install the new license.

NOTE

You can only generate one 30-day evaluation license from the automatic license generator accessed during installation of BMC FootPrints Service Core. To acquire an extension, to add more users, or to purchase BMC FootPrints Service Core, contact BMC or your local distributor.

Reset License Manager

The Reset License Manager function clears the internal list of logged in users. When the License Manager is reset, all agents are immediately logged out and any data that an agent is in the middle of entering is lost. For this reason, System Administrators should be careful in using the Reset License Manager function. It is recommended that you send a broadcast message to all Agents before resetting the License Manager to let them know what is about to happen. Refer to the Broadcast Message topic for additional information on sending a broadcast message.

To reset the License Manager:

1. Select Administration | System from the BMC FootPrints Service Core Toolbar, then select License from the Server Management of the main frame. The License Management page is displayed.
2. In the Reset License Manager section of the License Management page, click the **GO** button. All Agents are logged out and the internal list of logged in users is cleared.

Configure and Activate Licenses Use Report

This function lets you report the active and concurrent licenses use. You can set the time interval (in minutes) at which the sample is taken and saved to the database. The license use data is purged periodically to insure speed and effectiveness of the system. You can set the purging time period (in months). When you have selected the time periods for sampling and purging, click the **Save** button.

The Concurrent License Usage report, which is the report generated via this configuration, is accessed via saved metrics reports and is only available to system administrators. The report does not become available until this feature has been set and the **Save** button clicked to activate it.

Current License Use

Your current license information is displayed in this section. It includes a summary of the licenses available and lists each user's ID, name, and user type for all users in BMC FootPrints Service Core. The current login status for each user is also displayed. Click the user's ID for a list of all Workspaces to which the user belongs.

This feature is useful for assessing your situation when you run out of licenses and may need to buy more. It is also the best place to find a comprehensive list of all BMC FootPrints Service Core users for all Workspaces. If you have a large number of users, this page may take a long time to load.

Concurrent License Manager

BMC FootPrints Service Core supports both fixed and concurrent (floating) licenses for Agents. A fixed license allows one named user to log into BMC FootPrints Service Core with a specific ID and password. A concurrent license can be used by an unlimited number of people, but only one can use a particular concurrent license instance at a time. Each user sharing a concurrent license has their own unique ID and password, but can only log in if a concurrent license is free.

To make this clearer, if five concurrent licenses are purchased and thirty people are sharing those licenses, only five users can be logged in at one time. When a sixth user tries to log in, the sixth user receives a message stating that there are no available licenses. When one of the five logged in users finally logs out of BMC FootPrints Service Core, a license is freed.

This type of license is useful for casual users of BMC FootPrints Service Core or users working opposing shifts. This license is not appropriate for users who require access to BMC FootPrints Service Core at all times. As the concurrent license costs approximately 2.5 times as much as a fixed license, at least three users must share a concurrent license to make it cost-effective.

Other aspects of the concurrent licensing:

- Can be purchased by contacting your BMC sales representative.
- A site can contain mixed fixed and concurrent licenses.
- While an unlimited number of concurrent licenses can be purchased, at least three fixed Agent licenses must also be purchased (i.e., the BMC FootPrints Service Core Starter Pack). This allows at least three users (including at least one System Administrator) to have access to BMC FootPrints Service Core at all times.
- Concurrent licenses can be used by Agents and Workspace Administrators, including users assigned custom roles. They cannot be used by System Administrators, who must use fixed licenses.
- The Customer license is not affected by concurrent licenses. The unlimited Customer license continues to be appropriate for employee and external customers who need limited access to BMC FootPrints Service Core (to submit and track their own issues and to search the Knowledge Base).
- Once you are licensed for concurrent users, the choice to make an Agent or Workspace Administrator a concurrent or fixed user is available on the Add Agent and Edit Agent pages. You can only make as many fixed users as the number of fixed licenses available. An unlimited number of concurrent users can be created.
- Concurrent Agent and Workspace Administrators can be members of multiple Workspaces and are identical to fixed users in all other ways (with the exception of accessing BMC FootPrints Service Core based on there being an available license).
- Concurrent users should be encouraged to log out and free licenses for other users.
- When a concurrent user closes the browser without logging out of BMC FootPrints Service Core, the license is freed within fifteen minutes.
- When a concurrent user remains logged into BMC FootPrints Service Core, but does not perform any actions, the license is freed within one hour.
- If all licenses are being used and the System Administrator needs to free up licenses, a Reset License Manager function is available under Administration | System | License. If this function is used, all Agents and other Administrators (fixed and concurrent) in the system are logged out immediately. The System Administrator performing the action and customers are not affected. This feature should only be used when necessary, as users may lose their work.
- For customers who switch from fixed licenses to a smaller number of concurrent licenses, all Agents are changed automatically to concurrent users when the new license is installed. You can manually update any additional Agent or administrator users to match the correct number of fixed licenses purchased on the Edit Agent screen.

NOTE

A system log is kept to record each time a concurrent user attempts to log in to BMC FootPrints Service Core and is denied because no concurrent licenses are available. This log can be viewed on the BMC FootPrints Service Core server by reading the file c:\FootprintsServiceCore\etc\debugging\loginErrors.txt.

Concurrent License Usage Log

The Concurrent License Usage Log lists concurrent agent login attempts that either failed because all the concurrent licenses were in use at the time of the login attempt, or succeeded. Administrators can use this log to determine if they need additional licenses.

The Concurrent License Usage Log is accessed by selecting Administration | System | Logs from the BMC FootPrints Service Core Toolbar. This displays the BMC FootPrints Service Core System Logs page. In the View System Logs section of the page, click the link to view the Concurrent License Usage Log.

Other System Administration Topics

Broadcast Message

The System Administrator can broadcast a message to all logged in BMC FootPrints Service Core Agents at any time. A broadcast message can either be displayed to Agents (internal users) in a pop-up window or sent to Agents in email. In addition, the administrator can display or send the message to all Agents or can select specific Agents to receive the message. If the message is broadcast in a pop-up window, any Agents who are not logged in receive the message the next time they log in.

To broadcast a message to users:

1. Select Administration | System | Broadcast Message from the BMC FootPrints Service Core Toolbar to access this feature.
2. Click one of the radio buttons to specify whether to display the message in a pop-up window or to send the message in email.
3. Enter the message in the text box provided.
4. In the Select receiving user ids field, highlight the user ID of each user who should receive the message. Hold down the CTRL key to highlight multiple users. All Agents who are currently logged in to the system are automatically highlighted, but the message can also be sent to users who are not currently logged in.
5. Click **GO**.
6. The users receive a pop-up window with the broadcast message. If a user is not currently logged in, it is displayed for that user at his or her next login.

Logs

Logs

Many system events are kept in logs for later viewing by the System Administrator. These are useful when troubleshooting a problem. The Logs page is divided into three sections:

- **Log Summary**—Summary of system log statistics
- **View System Log**—Options for displaying log information to the administrator
- **Send Error Report—**Options for determining which information should be included in the error report that is sent to BMC Support to help troubleshoot a problem.

Log Summary

A summary of information includes:

- Total Number of Errors
- Total Number of Warning
- Total Number of Info Messages
- Date and Time of the Newest Entry
- Date and Time of the Oldest Entry

View System Log

The following options are available:

- **Show only messages from the last X days**—If this is left blank, all events are displayed. You can, at your discretion, enter a number to limit the events listed to those from the past *X* days (i.e., enter 5 to see events from the last five days only).
- **Show messages of type**—All events can be displayed or only certain types of events. The options are:
  - **All**—Show all events.
  - **Error**—Any system error, including errors in escalation, incoming email, and email notification processing.
  - **Info**—General system info.
  - **Warning**—Warnings received from other systems, such as a warning regarding bad email addresses.
- **Send Error Report**—Send logs to BMC Support. See below for more information.
- **Concurrent License Usage Log**—View the number of times users with concurrent licenses have either successfully logged into BMC FootPrints Service Core or failed to log in due to a concurrent license being unavailable. This is useful for determining whether you need additional licenses for your Agents.

Send Error Report

Occasionally you may be working with BMC Support and error output information is required for troubleshooting purposes. Your system log and a configuration summary can be generated and emailed to BMC, or to your local distributor, from this option. If you'd like to preview the information being sent, simply change the To: address to your own and then forward the mail that you receive to BMC.

To send an error report:

1. Enter an email address to send the logs to (defaults to nu-support.footprints@bmc.com).
2. In the Message box, describe the problem or behavior you are experiencing. Please be as detailed as possible.
3. **Issue Number**—If you are sending the log file in response to an ongoing issue you are discussing with BMC Support, enter that Issue number in the space provided.
4. **Configuration options**—check the boxes next to the information you wish to include in the error report:
   - **Email** (full)—This might create a very large file.
   - **Email** (compact)
   - **User data**
   - **Custom fields**

- **Escalation**
- **Roles and teams**
- **LDAP**—This option is only available if you have purchased the Dynamic LDAP Address Book Link.
- All configuration files for selected Workspace
- All configuration files for selected Workspace's Address Book
- All system configuration files from the etc directory
- All files from the debugging directory, excluding email files

5. **Workspace to include data for**—Select the Workspace to use for configuration data from the drop-down list.
6. Click **GO**. An email with your message and the system log attached is sent automatically.

Security and Query Logging

The security logging feature captures a record of who performed certain tasks using BMC FootPrints Service Core, such as running reports or creating or editing Issues, and when they performed those activities. This provides an audit trail for system administrators in case there are questions to be answered later.

NOTE

Security logging does have some small effect on efficiency and can also require a good deal of space for data storage. Therefore, BMC recommends that the system administrator only use this feature if an audit trail of user activity (such as modifying workspace schema or changing administrative parameters) is required.

The query logging feature records queries that have been placed in the Simple Search field, the date and time at which each query was made, and whether the query came from a customer or an Agent.

Enabling security logging involves:

- Checking the categories of data that you want saved
- Specifying where to save the log files
- Specifying the frequency at which the logs are to be deleted.

Enabling query logging involves checking the appropriate box to turn it on and specifying the directory in which to save the log files. Security logging and query logging use the same directory for storing the logs.

Security Logging

File Storage and File Naming

When security logging is configured, the administrator must specify a directory to store the log files. BMC FootPrints Service Core creates a sub-directory called ARCHIVE within the specified directory.

BMC FootPrints Service Core writes the security log data to .csv files. When an event is captured to a log file, BMC FootPrints Service Core creates a log file for each user ID for which an event is captured. For example, if user X does something that is captured to a log, a file is created named X.<*date*>. If user Y then does something that is captured to a log, another file named Y.<*date*> is created in the specified directory. Thereafter, every time user X or user Y does something that is captured, the data is saved to the existing log file for that user.

When BMC FootPrints Service Core performs an action that is logged, such as generating a message. it is saved to a log file named FP.<*date*>.

At the end of the day, the data in the individual log files are bundled into a single log file in the ARCHIVE directory, which is named according to the date. The original logs in the specified directory are then deleted. When, to return to the example, user X performs a new action that is captured the next day, it is written to a new file.

NOTE

Security logs become very large very quickly. Consequently, a mechanism is provided in the security logging configuration that erases the files periodically, as specified by the system administrator. If you elect not to delete the log files automatically, you must remember to delete them manually.

Logged Activities and Programs

The system administrator specifies which activities to capture by checking activity boxes on the system administration log page. The following types of activity can be captured:

- Create Issue/Contact
- Edit Issue/Contact
- Details of Issue and Contact
- Login/Logout
- Search/Report/Export
- Import
- Administration
- Web Services

The following programs are logged by the security logging options:

- Create Issue/Contact
  - Create an Contact record (MRABreg.pl)
  - Create a Issue (MRregister_command.pl)
- Edit Issue/Contact
  - Edit an Contact record (MRABedit.pl)
    (MRdirectEdit.pl)
- Details of Issue and Contact
  - Display Contact details (MRABdetails.pl)
  - Display Issue details (MRdetails.pl)
- Login/Logout
  - login (MRlogin.pl)
  - logout (MRlogout.pl)
- Search/Report/Export
  - Metric/Statistical report (MRCannedReports.pl)
  - Search or report (MRdirectSearch.pl)
  - Metric/Statistical report (MRFirstCallResolutionReport.pl)

    - Metric/Statistical report (MRhistory_report.pl)
    - Search or report (MRhomepage.pl)
    - Metric/Statistical report (MRstat30day_report.pl)
    - Metric/Statistical report (MRstatistical_report.pl)
    - Metric/Statistical report (MRTurnAroundTimeReport.pl)
    - Metric/Statistical report (StatReport.pl)
- Import
    - Load Contact data (MRABLoad2.pl)
    - Load Issue data (MRdbLoad2.pl)
- Administration
    - Add Users (MRadd_users.pl)
    - Manage Personal Preferences (MRchange_preferences.pl)
    - Manage Escalations (MRchangeUrgent.pl)
    - Delete a Workspace (MRdeleteProj.pl)
    - Edit/Delete Users (MReddelUsers.pl)
    - Email configuration (MREmailManage_page.pl)
    - Change Workspace Fields (MRFieldMaintenance.pl)
    - Make a new workspace (MRnew_proj.pl)
    - Manage Users of a Workspace (MRWorkspace_users.pl)
    - Setup parameters of Security Logging (MRSecurityLog.pl)
    - Change user Passwords (MRSysPasswd.pl)
    - Manage Teams (MRTeamSetupCommand.pl)
    - Load User data into Password file (MRUserLoad.pl)
- Web Services
    - Web Services (MRWebServices.pl)

Enabling and Configuring Security and Query Logging

To enable and configure security logging:

1. Select Administration | System | Logs. The BMC FootPrints Service Core System Logs page is displayed.
2. Scroll down to the Security/Query Logging section of the page.
3. In the LOGGING radio buttons, select either ON (enable) or OFF (disable). These radio buttons apply to both security and query logging at the same time. Note that you can configure security/query logging but still not have them enabled, i.e., you can select various logging settings, but logging does not take place unless you also check the ON radio button to enable logging; this allows you to turn logging on and off at will without having to reset the configuration.
4. Check the boxes for the types of security logging you want performed.

5. Check the Query Logging box to enable query logging.
6. Check a box to determine how frequently the logs are erased. Because of the large amount of data that can, potentially, be saved to the security logs, it is necessary to periodically erase the security logs.

NOTE

If you choose Never, automatic erasure of security logs is not enabled. In this instance, you must remember to erase the logs manually because they can grow extremely large in a very short time.

7. Enter a directory in which to store the security logs. When you submit your security logging specifications, a sub-directory named ARCHIVE is created under the directory that you specify here.
8. Click the **Save** button. Your specifications are saved and an ARCHIVE sub-directory is created. Security logging begins immediately.

Viewing the Security and Query Logs

Security logs are saved as .csv files. As such, they can be viewed with a variety of applications. However, it is best to use a program such as Microsoft Excel to render the data more readable.

Query log data is displayed through the interface as a metric report. Refer to Query Statistics for details on accessing and understanding the query log data.

Understanding the Security Logs

The security logs are difficult to understand because of the nature and density of the data. Should you need to review the security logs, contact technical support at BMC for assistance.

Web Server and/or Database Migration

To perform a migration of BMC FootPrints Service Core from one web server type to another, or from one database server type to another, you must contact BMC Support by telephone in advance. Call during normal Eastern Standard Time business hours at 800 537 1813 (USA and Canada).

If you wish to perform a migration of BMC FootPrints Service Core from one web server to another while continuing to use the same database, a migration tool has been developed for this purpose. This tool only moves the file system, not the database. After the move, the target BMC FootPrints Service Core file system points to the source BMC FootPrints Service Core database. The file system move is accomplished via a two part backup and restore process performed by the user. Refer to the Knowledge Base article titled Migration of FootPrints using the migration tool for details on this process and the migration tool.

Server Benchmark

The server benchmark utility tests your server's performance and lets you know how well BMC FootPrints Service Core is running. Note that this process may take a few minutes.

To begin the Server Benchmark process, click the **GO** button. After processing, the utility displays the benchmark statistics. Depending on the time taken to run the benchmark, a message indicates if the server is capable of running BMC FootPrints Service Core successfully.

Server Performance Report

This report contains miscellaneous statistics that will help to diagnose performance problems. BMC Support may request that you send them this data.

Debug Manager

System debugging options can be enabled and disabled here for help in troubleshooting system errors. The Debug Manager also makes it easier for the BMC Support team to help you determine the cause of a problem.

Enabling debugging may affect system performance and in some cases outputs additional information to the screen.

To enable the debugging option, click the check box in the Enabled column for the feature you'd like to debug. For some of the options, you can also specify additional criteria, e.g., for specific Agents or Perl files. The options appearing in the list are determined by the add-ons you have purchased and by your specific configuration.

The options for debugging include:

- **General Options**
    - Don't show debugging pop-up on login
    - Show passwords in debug files
- **System Debugging**
    - Script Logging
    - Sub Logging
    - Script Debugging
    - Show language labels
- **Feature Debugging**
    - BMC FootPrints Asset Core
        - Asset Management - Proxy
        - Asset Management - Microsoft System Center Configuration Manager/SMS
        - Change Manager
        - Auto-Run report
        - Email
        - Homepage and Report Queries
        - Instant Talk
        - Address Book Search
        - LDAP
        - Load - (FootPrints Service Core Address Book)
        - Load - Issue
        - Login - General
        - Login - Duplicate Licenses
        - User Roles
        - FootPrints Sync
- **Report Debugging**
    - Flashboard

    - Turn Around
    - Received Vs Closed
    - First Contact Resolution
    - Resolution Rate
    - History
- **Check this box to delete all files in "C:\<*FP_instance*>\etc\debugging" directory upon pressing "GO"**— Check this box to clear any debugging files that may exist from previous debugging efforts. This allows you to start with fresh files and avoid confusion with previous files.

When you have selected the debugging options you wish to turn on, click **Save** to save your changes.

Version Control

The Version Control page provides:

- a list of BMC FootPrints Service Core directories containing new or modified files
- a link to display directories that have not been modified since the current release of BMC FootPrints Service Core was installed
- a list of upgrades and patches applied since the current release was installed.

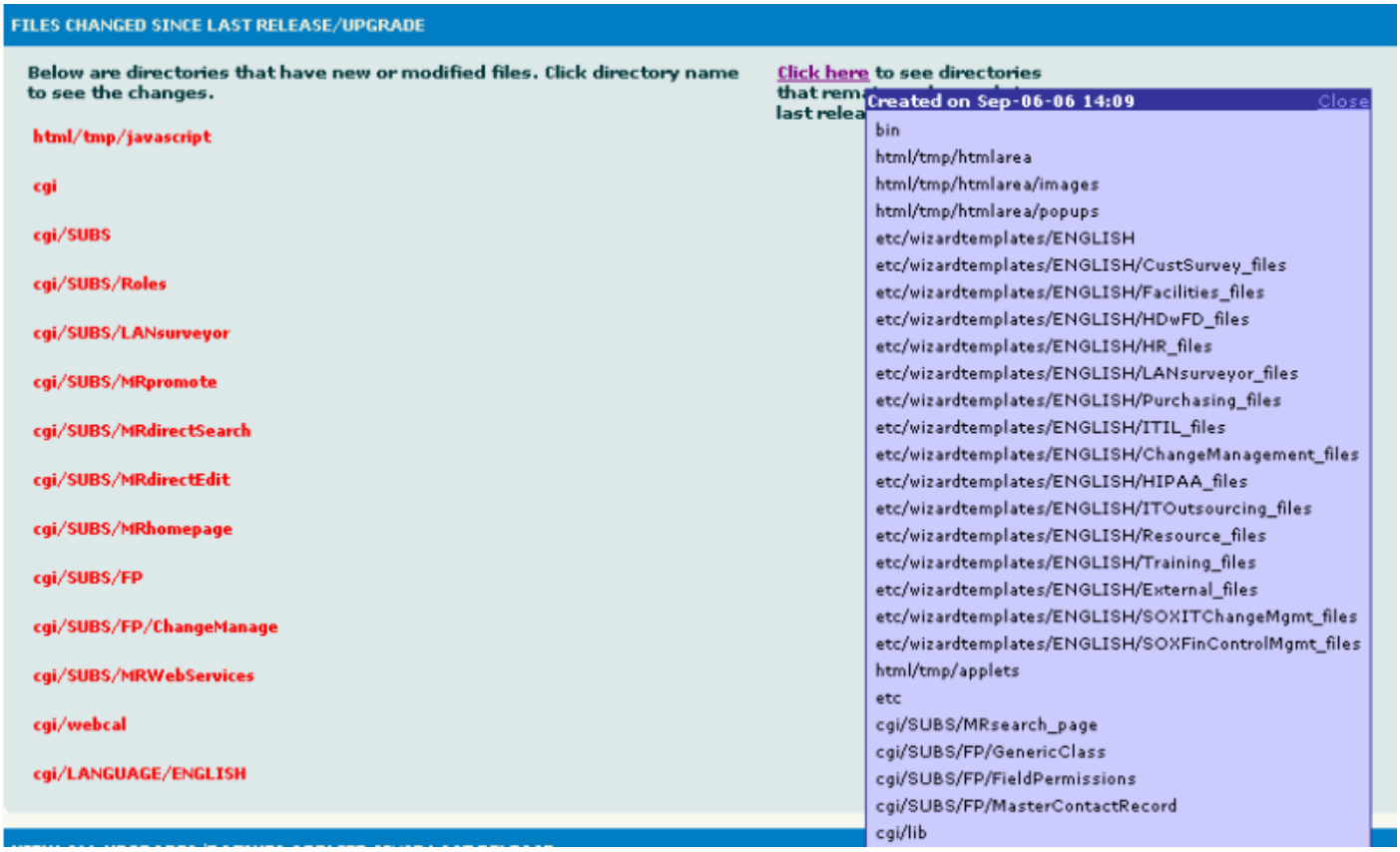
To access the Version Control page, select Administration | System | Version Control.

List of Directories Containing New Or Modified Files

Clicking on a directory in the list of new or modified directories displays a list of the files that were changed in the directory and the date on which they were added or modified. If you hold the cursor over the filename in the list, a mouseover pop-up tells you whether the file is new or modified. Clicking on the directory a second time makes the list disappear.

Display Directories That Have Not Been Modified Since the Current Release

Clicking on the link labeled “Click here” displays a pop-up window listing the directories that have not been modified since the current release was installed, along with the date and time that the current release was installed.



List of Upgrades and Patches Applied Since the Current Release Was Installed

This section on the Version Control page displays a list of all upgrades and patches applied to the current release of FootPrints Service Core since it was installed.

BMC FootPrints Service Core User Group

Selecting Administration | System | BMC FootPrints Service Core User Group allows you to access the BMC FootPrints Service Core User Group from within BMC FootPrints Service Core.

Continuous Improvement Program

The BMC FootPrints Service Core Continuous Improvement Program (CIP) tool collects anonymous data on your system in order to improve the BMC FootPrints Service Core product. No proprietary data is collected if CIP is enabled, only anonymous system data. The data collected is used to guide future product improvements and also assist BMC Support if and when you call in with a specific need or problem. At BMC, we respect and protect the privacy of our customers. Refer to the BMC Software Privacy Policy if you are concerned about your privacy.

To enable the CIP, click the button labeled **Send Anonymous Data**. No other action is required of you. Data is gathered and sent once only when you click the button.

Chapter 8: Using BMC FootPrints Service Core

Login

NOTE

The instructions below assume that BMC FootPrints Service Core has already been installed and licensed.

Use your web browser to go to the URL assigned to your BMC FootPrints Service Core system. For example, if the name of your web server machine is myserver, then the URL might be http://www.myserver.com/footprints. This brings you to the BMC FootPrints Service Core Login page.

To log in, enter the user ID and password assigned to you (or the user ID and password created during installation if you just installed BMC FootPrints Service Core), and click **LOGIN**. If you enter your ID or password incorrectly, you receive an error message. If, after another attempt, you are still unable to log in, please contact your Workspace or System Administrator.

If the login attempt is successful, the BMC FootPrints Service Core Homepage is displayed and you are logged in to the Workspace created during installation. If, for example, you named the first Workspace Help Desk, this is listed as the current Workspace in the top frame of the screen.

IMPORTANT

BMC FootPrints Service Core will not work properly if your browser's pop-up blocker is enabled. To resolve this problem, configure your pop-up blocker to allow pop-ups for just the BMC FootPrints Service Core application.

Password Complexity, Password Expiration, Failed Login Attempts, and Password Reuse

BMC FootPrints Service Core allows the setting of rules governing the complexity of passwords and password expiration. Password complexity rules govern the minimum and maximum lengths of passwords and the types of characters that a password must include. Rules are not mandatory and administrators may choose not to set some or all of the rules. If your password does not comply with the rules, a pop-up window will prompt you to change your password. If you do not change your password to comply with the rules, you will be unable to log in. Your password can go out of compliance if, for example, an administrator changes the rules.

Password expiration is also optional, but your administrator can set an expiration date for your password so that, after a period of time, you will be prompted to change your password before you can log in.

Administrators can optionally set a limit on the number of failed, sequential logins you can attempt. If, for example, a limit of six attempts is set and you mistype your password six times in a row, you may find yourself locked out of BMC FootPrints Service Core. Contact your BMC FootPrints Service Core System Administrator if this happens. Locks also have an expiration date, so you can also wait for the lock to expire before re-attempting login.

A limit can optionally be set on password reuse. For example, if you change passwords and the reuse limit is set at three, you cannot reuse the any password until there have been three different passwords intervening.

All of the rules for passwords are optional and none of these rules, or any combination of these rules, may be in effect for your BMC FootPrints Service Core.

Note

For each browser, only one user will be allowed to log into BMC FootPrints Service Core at a time. If a second user attempts to log in, the first user will lose their session and will be logged out. In order to log in to multiple accounts, you can use different browsers or private browsing windows.

Working with Issues

Issues

A BMC FootPrints Service Core Workspace comprises a set of related Issues. Issue is the default name given to a BMC FootPrints Service Core record. Each Issue is a numbered record in the BMC FootPrints Service Core Workspace database around which all Service Desk and problem tracking activity centers. There are different categories of Issues in BMC FootPrints Service Core, including regular Issues, Requests, Quick Issues, Subtasks, and Global Issues.

NOTE

During the initial Workspace Setup Wizard (and per Workspace), the administrator is given the chance to change the default term Issue to another name, such as Entry, Call, or Ticket. For clarity, this manual always refers to BMC FootPrints Service Core records as Issues.

A user's ability to access fields is determined by the user's role as configured by the Workspace administrator. You may encounter fields in which you are unable to enter data or which become hidden when their status changes. In addition, some fields may be optional in one status and mandatory in another. If you are unsure about why you cannot access a field at one time or another, contact your Workspace administrator to determine why this is.

This chapter covers the basics of creating and working with Issues in the following topics:

- Working with Issues
- Creating Issues
- Create a Test Issues
- Editing Issues
- Edit Test Issues
- Issues History
- Delete an Issue
- Copying Issues
- Unlinking Issues
- Quick Action Dialog
- Requests
- Email Submission of Issues and Requests

More advanced Issue types, including Quick Issues, Master Issues and Subtasks, and Global Issues are covered in Advanced Issue Types.

A Note On the Appearance of the Create and Edit Issues Pages

BMC FootPrints Service Core allows Agents to choose between expandable/collapsible sections or sections displayed as tabs. Agents select the type of view they wish to use in the Issues section of the Preferences page. To choose the view, select **Preferences**, scroll down to the Issues section or select the Issues tab, and make your selection. When tabs are used, tabs containing mandatory fields are labeled in red text on the Create and Edit Issue pages to assist in finding incomplete mandatory fields. However, the tabs remain in red even when the fields have been completed. The best way to determine whether all mandatory fields have been completed is to submit the Issue. If any mandatory fields have not been completed, BMC FootPrints Service Core will display a window listing the incomplete fields.

Working with Issues

Many options are available for an Issue from the Details screen for that Issue. They include:

- **Details**—Display details of Issue (default).
- **Edit**—Edit the Issue (only available if you have edit permissions to this Issue).
- **Take**—Take the Issue (only available if you have taking permissions).
- **Copy/Move**—This icon opens a second toolbar with options to copy the Issue within the current Workspace or copy or move the Issue to another Workspace.
- **Link**—Link to another Issue in the Workspace or in another Workspace.
- **Subtask**—This icon opens a second toolbar with options to create a Subtask of the Issue or make this Issue a subtask of an existing Issue.
- **Global**—Turn the Issue into a Global Issue or GlobalLink.
- **Delete**—Delete the Issue from the workspace (only available if you have delete permissions for the Issue).
- **Report**—Display a report of this Issue (opens in separate window for printing).
- **Add to KB**—Create a Solution for the Knowledge Base with the details from this Issue (does not change original Issue).

Many of these options are covered in this section, while some of the advanced features are covered in the chapter on Advanced Issue Types and Knowledge Base.

Creating Issues (Overview)

The following describes the Create Issue page, including descriptions of each field. For details on creating and completing the Create Issue page, see the next topic: Completing a New Issue.

To create a new Issue in BMC FootPrints Service Core, click **New Issue** on the BMC FootPrints Service Core toolbar.

NOTE

The names of many of the fields in BMC FootPrints Service Core can be changed by the administrator (Title, Priority, Status, Description, etc.), as well as the name of the records (Issue). Custom fields can also be created. This manual always refers to BMC FootPrints Service Core records as "Issues" and uses the default terms for the other field names.

The Create Issue page will appear different depending on whether you have enabled expandable/collapsible sections or tabs. (Refer to Issue Preferences for details on enabling expandable/collapsible sections or tabs.) If you have enabled tabs, the names labeling the tabs that contain mandatory fields are displayed in red. The fields and sections/tabs in the Create New Issue page can include:

- **Auto-Suggest**—If enabled, the Auto-suggest Solutions feature gives Agents the opportunity to more quickly resolve Issues by displaying suggested Solutions that exist in the Knowledge Base which match the criteria you enter in the Issue Information, and to browse the Knowledge Base from there as well.
- **Title**—The title or subject of the Issue.
- **Priority**—The importance or impact of the Issue (customizable).
- **Status**—The stage or workflow step of the Issue (customizable).

- **Contact Information**—Contact information for the customer who reported the Issue. The fields displayed here are different depending on how the administrator has set up BMC FootPrints Service Core.
- **Issue Information**—Additional information about the Issue. The fields displayed here are different depending on how your administrator has set up BMC FootPrints Service Core.
- **Description**—Full description of the Issue; it can include a virtually unlimited amount of text. The Description acts as a journal and can be appended to many times. Each time it is appended, the new material receives a time, date and user stamp automatically. The Description field can also contain a drop-down list of quick descriptions. Quick descriptions are pre-defined text that can be used to populate the Description field. For information on quick descriptions that have been defined by your Workspace administrator, contact your Workspace administrator.
- **Search Knowledge Base**—Search the Knowledge Base for a Solution to the Issue and optionally import that Solution into the Description.
- **CI Links**—If your BMC FootPrints Service Core installation includes the Configuration Manager add-on module, you may see a CI Links section for linking the Issue to configuration data. Refer to BMC FootPrints Configuration Manager in the Programmer's Reference Manual or full on-line help for details on this module.
- **Attachments**—Attach one or more files to the Issue.

NOTE

File attachments can be sent with email notifications. However, attachments of one or more files that exceed 5 Mb in total size can severely slow down notifications. If your total attachment size exceeds 5 Mb, a warning message is displayed.

- **Assignees**—Assign Agents or Teams to work on this Issue.
- **Email**—Select whether to send email notification on this Issue and also whether to send a Survey to the customer.
- **Time Spent**—Track the time spent on an Issue. Automatic and manual options are available. Can also be used for billing purposes, with hourly billing rates defined for each Agent.

Completing a New Issue

If the Auto-Suggest Solutions feature is enabled, you will be able to view suggested Solutions that exist in the Knowledge Base which match the criteria you enter in the Issue Information on the Issue page, and to browse the Knowledge Base from there as well. This will give you the opportunity to more quickly resolve the Issue. (See Auto-Suggest Solutions, below.)

NOTE

The names of many of the fields in BMC FootPrints Service Core can be changed by the administrator (Title, Priority, Status, Description, etc.), as well as the name of the records (Issue). Custom fields can also be created. These fields may also be in a different order from the order described here, and may contain different choices, depending on how the Workspace is configured. For clarity, this manual always refers to BMC FootPrints Service Core records as Issues, and uses the default terms for the other field names.

1. **Enter a Title**—Used as the summary or subject line.

NOTE

Although the Title is intended to be brief, it is important to enter meaningful words since it is used to identify the Issue. For example, a good title would be "MS Word crashes when underlining", but "READ THIS--IMPORTANT!!" would not be as effective. This field can optionally be a drop-down box with a defined set of subjects.

2. **Select a Priority**—The Priority of the Issue is a number or word that indicates the importance or impact of the Issue. Select the appropriate Priority from the drop-down list.
3. **Select a Status**—The Status is the indication of the current state of the Issue. The valid statuses depend on how the Workspace is configured. Statuses may include "Open", "Pending", "Testing", "Closed", etc. Select the appropriate Status from the drop-down list. Since you are creating a new Issue, set the Status to "Open."
4. **Fill in Contact Information**—This section contains the contact information for the Customer associated with this Issue. The Select Contact feature searches the Address Book for the user. Refer to Select Contact for more information.
5. **Enter Issue Information**—The fields that appear here vary according to Workspace and are defined by the BMC FootPrints Service Core Workspace Administrator. For example, you may have a field called Platform that is a drop-down box. Select the user's platform from the list of choices. You may also have a field called Version number with a text field next to it. You would type the version number in this field. Contact your BMC FootPrints Service Core Workspace Administrator for more information on the Workspace fields in the current Workspace.

NOTE

The fields in your BMC FootPrints Service Core installation may be different from those shown here, as they can be customized.

NOTE ON RED FIELDS

All fields displayed in red are mandatory and must be filled out.

6. **Auto-Suggest Solutions**—If this feature is enabled, you are required to view the suggested Solutions before you can submit the Issue. Once you have viewed the suggested Solutions, you can select a Solution or browse the Knowledge Base. If there are no Solutions that resolve your Request, you can continue entering information in the Issue and submit it.

   a. To view the suggested solutions, click **Auto-Suggest**. If any Solutions exist in the Knowledge Base that matches the criteria you entered in the Issue Information section, they will display on the **Select Solution** dialog box that appears.
   b. To view the Solution's description, point to the **Solution** in the list. A tooltip will appear with the description.
   c. Select the **Solution** if it resolves your Request. If not, you can search for other Solutions from the **Browse** section of the **Select Solution** dialog box.
   d. Once you've selected a Solution, and if it resolves your Issue, click **This solution resolves my Issue** on the next dialog box that displays.
   The Solution's Description is added to the Description in the Issue. You can continue entering information in the Issue.
   Note: Your Workspace Administrator may have configured the Auto-close Issues feature. If so, once you select a Solution, the Issue will automatically close and display on your Homepage.

7. **Description**—Enter a full description of the issue in this field. You can type an unlimited amount of text in this box. This field is designed to contain a complete description of the Issue and is usually mandatory when creating a new Issue. If you are using the Rich Text Mode Editor, there are many options available to format the text in the Description.

   Fill in a full description of your Issue. BMC FootPrints Service Core automatically records the date, time and your name as the originator of the Issue.

8. **Search Knowledge Base** (optional)—Search the Knowledge Base for a Solution to the current issue and then import that Solution into the Description. Refer to Knowledge Base Search Options for more information.
9. **Attach a File** (optional)—You can attach one or more files to this Issue from your local or network drive(s). Refer to File Attachments for more information.

10. **Assignees**—The list on the left contains a list of all BMC FootPrints Service Core users in this Workspace. To assign someone to this Issue, double-click the name in the **Workspace Members** list or highlight the user name in the Workspace Members list and click the right arrow. The name is displayed in the **Assignees** list. Multiple users can be assigned. Before assigning Agents, you can check Agent availability by clicking the **Check Availability** icon to see which Agents can be scheduled to work. To remove a name from the Assignees list, double-click it. Refer to Check Agent Availability for more information.

- If Teams are enabled, users are listed under t heir Team name. Both Teams and users can be assigned:

  a. To view the members of a Team, select the Team name. The Team expands with a list of users.

  b. To assign the Team, select Assign Team and click the right arrow. The Team appears in the assignment box.

  c. To assign a particular user, select the user's name and click the right arrow. The user is listed under the Team name in the assignment box.

  d. Multiple users can be assigned from the Team.

  e. To assign another Team, click the Team name to shrink the list and select another Team.

  a. To assign a user without his or her Team, or who doesn't belong to a Team, select the Individual Users option.

NOTE

If the Auto Assign feature is enabled, Teams and or users appear in the Assignee box automatically based on a choice in one of the drop-down fields. Ask your Workspace Administrator whether this feature is enabled.

11. **Email Notification**—This feature can send email notification to users when an Issue is created, updated, and closed and can also send a Survey to the customer. Refer to Email Notification Options for more information.

12. **Time Spent**—This section allows you to enter the amount of time you have spent on this Issue. This can include the entire time spent on this Issue, not necessarily just the time spent filling out the Issue in BMC FootPrints Service Core. Fill in the hours and minutes spent. Additional fields may be displayed in this section depending on the Workspace configuration, including Start Time/Date and End Date/Time and Billing Rate. If the field is mandatory and you must enter a Start and End Date/Time, you cannot enter the same Date/Time for both the Start and End (i.e., you cannot enter zero time). If the field is optional, you can enter the same Start and End Date/Times (i.e., you can enter zero time). Consult the Workspace Administrator for more information.

13. **Automated Time Tracking**—If this feature is enabled, the auto time clock is displayed in the upper-right corner of the Issue above the Title field. Click the pause button to stop the clock. Click the pause button again to restart the clock. When you submit the Issue, elapsed time is recorded.

14. **Comment**—If the Workspace administrator has enabled time tracking comments, you can enter a comment here. The field is limited to 255 characters. Comments in the time tracking field can be viewed in the Time Spent section of an Issue and can be displayed in a report.

15. **Submit Issue**—When you are ready to submit the Issue, click **Save**.
    If Auto-suggest Solutions is enabled, you will see an Auto-Suggest button instead of a Save button (see Search Knowledge Base, above).
    If BMC FootPrints Service Core detects that you have left a mandatory field blank or entered something incorrectly (e.g., entered text in a number field), a message is displayed instructing you to go back and fix the Issue.

Once you have successfully submitted the Issue, BMC FootPrints Service Core assigns it an Issue number and displays your BMC FootPrints Service Core Homepage. From there, you can select the new Issue to view the Details, click **Edit** to edit the Issue, or perform any other BMC FootPrints Service Core task.

Setting Appointments from a Date/Time Field

Users can set an appointment from a date/time field when creating or editing an Issue. To do so:

1. Select the date from the calendar.
2. Select the time for the appointment.
    a. Click in the date/time field or the calendar icon beside the field.
    b. Enter a start time for the appointment by clicking the Start Time radio button, then clicking on the time fields beside it (e.g., if the meeting begins at 2:30 in the afternoon, click on the 2, then the 30, and then the PM).
    c. Enter a time for the appointment to end by clicking the End Time radio button and then clicking on the time fields beside it and an end date, as appropriate.
3. Select whether to link the appointment to the personal calendar, personal and workspace calendars, or neither by selecting a radio button.
4. Click the **GO** button.

Sample Solution

What follows is a sample “journey” of an incoming user Request that is taken and worked on by an Agent user, and finally closed and turned into a Solution. This is only one of many possible routes, depending upon how BMC FootPrints Service Core is configured.

1. Jane (a Customer) logs into BMC FootPrints Service Core, enters her User ID, and submits a new Request.
2. Jill (an Agent user) logs into BMC FootPrints Service Core, and chooses “Requests” from the Display drop–down box on the Homepage.
3. Jill clicks on one of the Requests to review the details.
4. After reviewing the details, Jill decides she can handle this Request, and clicks Edit from the Details toolbar to take the request. Edit the Request When Jill clicked the Edit button, the Status changed to “Open”, and the Request becomes an Issue assigned to Jill, who now works on the Issue. She gives it a priority of “Medium”. She appends a new Description stating that she is researching Jane’s problem. She clicks GO to save her changes.
5. The Issue now appears in Jill’s “Assignments” list.
6. After researching the Issue, Jill enters a possible resolution to Jane's problem (by appending the Description of the Issue). Jane receives an automatic email with Jill’s suggestion.
7. Jane receives an email notifying her that the Issue is being worked on, including the possible solution. She can also log into BMC FootPrints Service Core to check the status of her Issue.
8. Jane replies to the BMC FootPrints Service Core notification email, stating that Jill’s suggestion worked!
9. Jill then closes the Issue by changing the status to Closed.
10. If Jill feels that Jane’s Issue is a common problem, she can make her Issue into a Solution. On the Details page of the Issue, she clicks the Add to KB button. She cleans up the spelling, and then clicks the GO button to create the Solution.
11. All Customers (as well as Agent and Administrator Users) can now view, search, and report on the new Solution.

Editing Issues

To edit an Issue, click the word More at the end of the issue title on the homepage list, then click Edit. You can also click **Edit** on the Details page of that Issue. Normally, an Agent only has edit permissions for Issues to which that Agent is assigned. Administrators can edit any Issue.

NOTE

If you have a button on the Details page of an Issue labeled Take (rather than Edit), the Workspace Administrator has enabled a feature called "Taking". This allows an unassigned Agent user to take any Issue in the database and edit it. Check with your administrator for more information on this feature.

After clicking the Edit button, the Edit page containing the current data for the Issue is displayed. From here, you can make changes in the same way that you enter information when you first create an Issue.

If your organization is licensed for BMC FootPrints Configuration Manager, all Agents and Customers with edit permissions can see the CIs linked to an Issue when viewing the Edit Issue page regardless of whether they have a Configuration Manager license. However, they cannot edit the CI links nor can they take advantage of any other Configuration Manager functions without a license.

If your administrator has configured the option, a link to the management process in the Alignability Process Model is displayed on Issue pages. For more information, see Viewing the Alignability Process Model.

Quick Edit

The Quick Edit feature allows agents to make edits quickly without viewing the entire issue page. To use the Quick Edit feature, click the Title of an issue in the homepage list. The Quick Edit page is displayed. The page displays built-in fields as well as up to three fields that are configured by your administrator. Complete the fields and submit the issue as you would with a full issue page. Administrators can define rules for attachments that include making attachments mandatory based on the content of certain fields. However, for Quick Edits, attachment rules only apply based on the Status field and not on any additional fields.

Quick Edit Limitation

Dashboard totals do not refresh after a quick edit is submitted. Only the individual row is updated. For example, if a quick edit changed a status from Open to Assigned, the Workspace Totals dashboard component would still count the issue as an Open issue.

Viewing the Alignability Process Model

The Alignability Process Model describes service management processes in a simple four-level structure. The model provides the easiest and fastest possible access to detailed information that tells the users what needs to be done in the relevant situation. This structure ensures that detailed instructions are always only clicks away from the model itself.
The Incident Management process of the Alignability Process Model describes how to resolve support requests as quickly as possible in a prioritized manner

To view a management process of the Alignability Process Model from an Issue page:

1. On an Issue page, click the **Request Management Alignability Process** link located above the Title field. The **Request Management** Process workflow page of the Alignability Process Model appears in a new tab. The link name varies based on the type of record you are viewing. For example, on a Change Request page, the link is named Change Management Alignability Process.takes you to the Change Management page of the Alignability Process Model.
2. Perform any of the following actions:
   - To view one of procedures of the Incident Management process, click one of the boxes that make up the process.
   - To view the work instructions for a step within a procedure, click the action box or the decision diamond that symbolizes the step.

- **Action boxes** symbolize actions that need to be taken. One arrow always points to an action box. One arrow points from an action box when further action is required after it has been completed.
- **Decision diamonds** symbolize decisions that need to be made. One arrow always points to a decision diamond. Two arrows always point from a decision diamond.
- **Event circles** symbolize events or situations that have occurred. No arrows point to an event circle. One arrow always points from an event circle.

- In each procedure, to view a description of the roles and responsibilities of the current process, click **Role**.

To view the Alignability Process Model from the Home page:
Click the More button and select APM. The Alignability Process Model page appears in a new tab.

Edit Test Issue

You can edit one or more fields on the Edit page.

NOTE
The names of many of the fields in BMC FootPrints Service Core can be changed by the administrator (Title, Priority, Status, Description, etc.), as well as the name of the records (Issue). Custom fields can also be created. For clarity, this manual always refers to BMC FootPrints Service Core records as Issues, and uses the default terms for the other field names.

1. **Title**—If you need to edit the title, replace the old text with new text.
2. **Priority**—To change the priority, choose the new priority from the drop-down box.
3. **Status**—To change the status, choose the new status from the drop-down box.
4. **Contact Information**—To choose a contact from the set of contacts in the Address Book, click Select Contact. To update the information for the current contact, change the data and check the Update Contact checkbox; this updates the information in the current Issue and in the Address Book (this feature is not available if the LDAP feature is enabled). To create a new contact, check the Create Contact checkbox and enter the data. This feature is also not available if the LDAP feature is enabled. Click Select Department to choose the contact based on t the contact's department. Click History to view a list of Issues submitted by that contact previously (the contact information must be entered before the **History** button can assemble a list of previously submitted Issues).

NOTE
The user's Issue history can be viewed by clicking the **History** button.

5. **Issue Information**—Replace the old text with new text (or select a new choice from the drop-down box) for each field that you want to edit.
6. **Description**—Add new notes for the Issue. The original description is kept intact; you are adding a new description with a time/date/user stamp. To view the current description in read-only format, click the link for View Current Description.

NOTE
If the Workspace Administrator has enabled the Edit most recent description option, an additional text box is displayed that contains the most recent description and which may be edited. Check with your administrator for more information.

7. **Search Knowledge Base** (optional)—Search the Knowledge Base for a Solution to the current Issue, and then import that Solution into the description. Refer to Creating Issues for complete instructions.

8. **Attachments**—You can attach one or more additional files to the Issue each time you edit it. Administrators can define rules for attachments that include restrictions on size and/or file type as well as making attachments mandatory. Rules can be applied based on fields, such as the Status field, which means an attachment may be made mandatory when the status is Open, for example, but not for other statuses. For Quick Edits, attachment rules only apply based on the Status filed and not on any additional fields.

NOTE

File attachments can be sent with email notifications. However, attachments of one or more files that exceed 5 Mb in total size can severely slow down notifications. If your total attachment size exceeds 5 Mb, a warning message is displayed.

9. **Assignee Picker**—There are two ways you can edit the assignees lists with the Assignee Picker:
   - To remove an assignee or Team, highlight the name in the box on the right and click the left arrow. The name is removed from the assignee box and is displayed in the box on the left. To assign a new user, highlight the user's name in the list on the left and click the right arrow.
   - Double-click an assignee in the **Assignees** list to remove the assignment. Double-click a member of the **Workspace Member** list to assign the issue to them. Assigning someone to the issue does not remove their name from the Workspace Member list.
10. **Email Notification**—Select the users to receive email notification for this update. The checkboxes for Agent/Contact/CC default to the settings chosen by the Workspace Administrator for the status and priority chosen.
11. **Time Spent**—Enter the additional time you have spent on this Issue. If auto time tracking is enabled, BMC FootPrints Service Core automatically tracks the time. There is also a link here to edit existing time tracking data. If time tracking comments are enabled, you can also enter comments of up to 255 characters.
12. **History**—You cannot edit the History section of an Issue.
13. **Submit Changes**—When you are ready to submit your changes, click **Save**. The Issue is updated and the BMC FootPrints Service Core Homepage is displayed.

If the Issue has multi-line character field(s) with a timestamp, these fields act the same as the Description field in that you cannot edit the existing data, but you can append data to the field. You can edit the data in multi-line character fields that do not have the timestamp.

Issue History

An audit trail of all actions performed on an Issue can be viewed from the Details page of the Issue in the History section.

There are links at the top of the History section for:

- **Complete History**—All activity of the Issue.
- **Issue History**—Actions performed on the Issue by all users and automatically by the system.
- **Email History**—All email activity for the Issue.

The following information is maintained for each entry in the History:

- **Date**—The date the action was performed.
- **Time**—The time the action was performed.

- **User**—The user who performed the action. If the action was performed by the system automatically, the escalation rule is listed here.
- **Action**—The action performed on the Issue, i.e. "Changed Status", "Changed Priority", "Updated Description", etc. The Action column includes initial settings for all BMC FootPrints Service Core Issue fields. The Action column describes any changes made to fields in subsequent history entries.
- **Email type**—For email actions, the type of mail (incoming update or outgoing email notification) is displayed and the user who made the update or received the notification.

Notes on History

- The history cannot be changed; it is created by the system automatically.
- Time and date stamps are based on the BMC FootPrints Service Core server time.

Deleting an Issue

To delete an Issue, click **Delete** on the Details page of the Issue. Agents can only delete Issues that they created themselves. Workspace and System Administrators can delete any Issue.

NOTE

Deleting an issue in this way does not remove the Issue from the database but only changes its status to Deleted which provide an intermediate step to archiving and purging Issues from the Workspace. Issues with Deleted status do not appear in searches or reports unless specifically requested.

Workspace and System Administrators can also undelete an Issue. To undelete an Issue:

1. On the BMC FootPrints Service Core Homepage, choose Deleted from the Display drop-down box. All deleted Issues are displayed.
2. Click **Edit** for the Issue to be undeleted.
3. Click the **Undelete** icon at the top of the page. A new page is displayed with instructions to change the Issue status.
4. Under Status, change the status and click the **GO** icon. The Status is changed and the Issue is returned to the Workspace.

Converting Regular Issues to Quick Issues

Quick Issues are templates that contain pre-filled information for frequently reported customer Issues, such as "Password Reset", "Service Request", etc. For example, a Quick Issue template for "Password Reset" would start out pre-filled with a description of the problem, the problem categories pre-filled with "Network" and "Password Reset", and perhaps a status of "Closed". The Agent only needs to fill in the user's contact information to submit the Issue. The Workspace Administrator can create an unlimited number of templates, which are available to all Agents from the BMC FootPrints Service Core Toolbar.

Master Quick Issue templates are Quick Issue templates that have subtask templates associated with them.

As long as one Quick Issue or Master Quick Issue template has been created, a drop-down field is provided above the Title field when creating or editing an Issue that allows the Agent to convert the Issue to a Quick Issue or Master Quick Issue. If the regular Issue is converted to a Master Quick Issue, all of the associated subtasks are created at the same time.

To convert an Issue to a Quick Issue:

1. When you are on either the Create Issue or Edit Issue page, select a Quick Issue template from the Use selected template field. The page refreshes and fields are populated by the pre-defined Quick Issue information.
2. Continue with the Issue as you normally would.

Copying Issues

Copying Issues

Copying allows you to copy the information from an existing Issue into a new Issue, which can be linked to the original Issue. This feature is useful in a number of situations, for example:

- A closed Issue needs to be reopened, but for administrative purposes a new Issue must be created.
- A new Issue needs to be created that is very similar to an existing Issue.
- An Issue must be moved or copied to another Workspace.
- A new Issue needs to be linked to an existing Issue.

To copy or move an Issue, access the Details page for the Issue and click **Copy/Move**. You have the following choices:

- Copy Issue in this Workspace
- Cross-Workspace Copy
- Move to Another Workspace

There are a number of Copy Restrictions that should be reviewed before copying or moving issues.

Copy Issue to the Same Workspace

1. On the Details page of the Issue, click **Copy/Move**.
2. Select **Copy in this workspace** and click **GO**.
3. A Create Issue page is displayed. The new page is pre-filled with information from the matching Issue.
4. Click the checkbox to link the new Issue to the matching Issue, if needed (this checkbox is checked by default).
5. Edit the new Issue as needed (editing does not affect the original Issue).
6. Click the **Save** button to register the new Issue.
7. If the "link" checkbox was checked, the link to the original Issue appears in the new Issue. This link is only viewable by internal users, so customers cannot follow the link to an Issue that they don't have permission to view.

Cross-workspace Copy/Move

Issues can be copied or moved between Workspaces. In a multi-Workspace environment, this enables you to escalate Issues between Workspaces. For example, you could have two Workspaces: Help Desk and Development. If an Issue in the Service Desk Workspace must be passed to the Development team, the service desk agent can copy the Issue to the Development Workspace, assigning it to one or more developers.

Copy an Issue to Another Workspace

To copy an Issue between Workspaces:

1. Access the Details page of the Issue.
2. Click **Copy/Move**. A different toolbar is displayed.
3. Select **Cross-Workspace Copy**. A new page is displayed.
4. Select a destination Workspace from the list. The list contains all active Workspaces.
5. As an optional feature, to link the Issues, click in the box next to Create Dynamic Link between new and original Issues.
6. Click **GO**. The Copy Issue to Another Workspace page is displayed.
7. Select the Agent to whom you wish to assign the Issue in the new Workspace. You can also CC: yourself.
8. Click **GO**. A new page is displayed.
9. Workspace fields in the current Workspace that do not match the fields in the destination Workspace are displayed. To append the data from those fields to the description, click the Append radio button. To ignore the data, choose Discard. Field data in the original Issue is not affected.
10. Click **GO** to complete the cross-Workspace copy.

Issues that are linked across Workspaces via a manual copy or a cross-workspace escalation update the other when one is updated. When the new Issue is updated, common fields in the originating Issue, like Description, Title, Priority, etc., are also updated. The same changes are made to the new Issue when the originating Issue is updated. The rules for this workflow are customizable by the Workspace Administrator in each Workspace under Issue Workflow.

Move an Issue to Another Workspace

1. On the BMC FootPrints Service Core Homepage, click the number of the Issue to access the Details page of that Issue.
2. On the Details page, click **Copy/Move**. To move the Issue to the destination Workspace and close the Issue in the current workspace, choose **Move to Another Workspace**. A new page is displayed.
3. Select a destination Workspace from the list. The list contains all active Workspaces.
4. Click **GO**. The Move Issue to Another Workspace page is displayed.
5. A list of Workspaces members for the destination Workspace is displayed. Select one or more assignees by highlighting the names and pressing the CTRL key, then click **GO**. The users selected are assigned to the Issue in the new Workspace. The assignees of the Issue in the originating workspace are not affected. You can also choose to be copied via email on changes to the new Issue.
6. Click **GO**. A new page is displayed.
7. Any Workspace fields in the current Workspace that do not match the fields in the destination Workspace are displayed. To append the data from those fields to the description, click the Append radio button. To ignore the data, choose Discard.
8. Click **GO**. The move is completed.

NOTE

CCs that have been set up for email notification are lost when an Issue is copied or move across workspaces.

Copy Restrictions

BMC FootPrints Service Core supports advanced Issue types. These Issue types have special properties and rules associated with them, and therefore have special restrictions:

- For restrictions relating to Global Issues, refer to Restrictions of Global Issues.
- For restrictions relating to Master Issues/Subtasks, refer to Restrictions of Master Issues and Subtasks.

Linking Issues

In addition to linking Issues by either copying an Issue, creating a Master Issue/Subtask relationship, or via GlobalLinks, Issues can be linked directly to one another. This can be done with a static link, in which changes to one Issue do not affect the data within the other Issue, or with a dynamic link, in which changes to one Issue's status are reflected in the other Issue. Issues can be linked within a Workspace or across Workspaces.

NOTE
The Workspace's Issue workflow rules dictate the fields that get updated for a dynamic link.

To link Issues:

1. Before creating the link, obtain the Issue number of the second Issue you want to link.
2. Go to the Details page of the first Issue you are linking.
3. Click the **Link** icon at the top of the page. A Make link to Existing Issue/Solution window is displayed.
4. Select the Workspace where the second Issue resides using the Workspace drop-down field.
5. Enter the Issue number of the second Issue to which you want to create a link.
6. Select a Link Type (Static or Dynamic) using the radio buttons.
7. Click **GO**. The link is created.

Unlinking Issues

Issues that are linked can be "unlinked" if you no longer wish the two Issues to be associated with each other. Issues that are linked together can only be unlinked from the Details view of the Issue.

To unlink an Issue from another issue:

1. Open the Issue in the Details view.
2. Select the **Unlink** button:
   - **For Copied Issues**—Next to Linked To, select the **Unlink** button. The current Issue is no longer linked to the previously linked issue. The Details view refreshes without the Linked To information.
   - **For Master/Subtasks**—In the Related Issues section in the Details view of the Master or the Subtask, select the **Unlink** button. The Issue is no longer linked. If a Master Issue only has one Subtask, unlinking the two issues removes special properties from both Issues; they revert to regular Issues.
   - **For Global Issues and GlobalLinks**—In the Related Issues section in the Details view of the Global or the GlobalLink, select the **Unlink** button. The Issue is no longer linked.

Updating Subtasks from Master Issue

BMC FootPrints Service Core provides a checkbox at the bottom of the Master Issue edit page to enable you to update all subtask fields from the Master Issue page. Check the "Check here to update the edited fields of this Master Issue (excluding assignees)" checkbox and the related fields of all subtasks will be updated with the same information as the Master Issue.

Quick Action Dialog

The Quick Action checkbox dialog, available on the BMC FootPrints Service Core Homepage, allows users to perform an action on one or more Issues. This provides a quick means to update or report on an Issue or to make a change

that affects many Issues simultaneously. Some of the functions are only available to administrators, while others are available to Agents and administrators.

To perform a Quick Action on Issues from the Homepage:

1. In the main frame, check the box for each of the Issues you wish to change, or check the All box at the top of the column to select all of the Issues displayed on the current page.
2. Select the action from the drop-down list.
3. Click GO.
4. Different options are available depending on the action selected. See below for more details.

The Following Options are Available to All Internal Users

- **Report**—Display the details of the Issues in a separate window. If custom templates have been created, a drop-down is displayed that lists the available templates (Work Order, RMA, etc.) The Summary report displays all Issues in one window. Custom templates display each Issue in a separate window for printing purposes.
- **Close**—Close the Issues selected. Only Issues to which you have close rights are Closed. When Close is selected:
  1. A special Close Issues page is displayed.
  2. You can enter final notes in the Description box. They are appended to all Issues selected.
  3. Check the boxes to send email to the Assignees, Customer Contacts, and CCs for the selected Issues.
  4. Click **GO**. The Issues are closed and updated and emails are sent.

The Following Options are Available Only to Administrators

- **Delete**—Delete all Issues selected. A confirmation message appears. Click OK to proceed.
- **Status**—Change the status of the Issues selected.
- **Priority**—Change the priority of the Issues selected.
- **Assign**—Re-assign the Issues selected.

When Status, Priority, or Assign is selected:

1. A special Change Issues page is displayed.
2. Select the new priority, status, or assignees for the Issues.
3. If re-assigning an Issue, you can unassign the current assignees of the Issues selected by checking the Remove Previous Assignees checkbox.
4. You can optionally enter notes in the Description box. The notes are appended to all Issues selected.
5. Check the boxes to send email to the Assignees, Customer Contacts, and CCs for the selected Issues.
6. Click **GO**. The Issues are updated and emails are sent.

The Following Option is Only Available If You Have "Taking" Rights

- **Taking**—Take the Issues and assign them to yourself.

When Taking is selected:

1. A special Take Issues page is displayed.
2. You can unassign the current assignees of the Issues selected by checking the Remove Previous Assignees checkbox.
3. You can optionally enter notes in the Description box. The notes are appended to all selected Issues.
4. Check the boxes to send email to the Assignees, Customer Contacts, and CCs for the Issues selected.
5. Click **GO**. You are now assigned to the selected Issues.

Requests

Viewing Requests

There are a few ways to find out if there are new Requests in the Workspace:

- From the Workspace Totals dashboard component, click the Requests link to display the list.
- Select Requests from the Display drop-down box on the Homepage.
- The administrator may have configured BMC FootPrints Service Core email notification to send email to one or more people each time a customer submits a new Request.

Taking Requests

If you have been assigned to a Request, it appears on your assignment list. To take a new Request:

1. Access the Details page of the request to see what it is about.
2. To take the Request, access the Edit page.
3. The status defaults to Open, which turns the Request into an Issue. To choose a different status, select from the list of statuses.
4. Edit the priority, edit Issue information, append a new description, etc., as necessary.
5. Your name is automatically added as the assignee for this Issue. To change this, move your name back to the Workspace Members box and choose a different Assignee.
6. To send an email update to the customer, make sure that the Contact checkbox is checked in the Email section. The box might already be checked by default based on the rules set by the Workspace Administrator.
7. When you are finished, click **Save** to submit the changes.

The Request now becomes an Issue (or Ticket, Entry, etc., depending on the name chosen for your system) and appears on your list of assignments.

Email Submission of Issues and Requests

The Incoming Email feature allows users to submit and update Issues via email without logging into BMC FootPrints Service Core. Check with your BMC FootPrints Service Core administrator to find out the email account designated for incoming submissions to BMC FootPrints Service Core.

For information on configuring and using the Incoming Email feature, refer to Email Management.

Customizing Your Preferences

Customizing Your Preferences

The Preferences option allows Agents, administrators, and customers (if they have been configured to have access to preferences) to customize their Homepages, and set other personal preferences. Users can change their email addresses, passwords, security options, Homepage list preferences, and more.

NOTE
Customers do not have access to all of the preferences available to Agents and administrators.

To change your preferences, click the **Preferences** link.

The available options are:

- Personal Info—Change your display name, email address, default Workspace, and more.
- Issue Page Preferences—Options for creating and editing Issues.
- Homepage Preferences—Define the dashboard components that appear at the top of the main frame on your BMC FootPrints Service Core Homepage and define the list of Issues and columns displayed on your BMC FootPrints Service Core Homepage.
- Miscellaneous Preferences—Other personal preferences.

NOTE
Most options apply to BMC FootPrints Service Core system-wide, with the exception of Homepage Preferences and the security option to Require Password for Issues, which are chosen on a per-Workspace basis. If a user belongs to multiple Workspaces, it is possible to display different list preferences for each Workspace.

Personal Info

These options apply to all Workspaces to which you belong. After configuring options, scroll to the bottom of the page, enter your password, and click **SAVE**.

- **Name**—Change your display name (does not affect user ID). Replace the current name in the text box.
- **Primary Email address**—Change your email address for BMC FootPrints Service Core email notification. To change your email address, replace the current address in the text box. The option must be checked to receive email.
- **Pager Email Address** (optional)—Optionally enter separate email address for notification via pager. Can be used for escalation notification. Check this option to receive regular notification email at this address.
- **Wireless Email Address** (optional)—Optionally enter separate email address for notification via wireless device. Can be used for escalation notification. Check this option to receive regular notification email at this address.
- **Change Password**—Change your BMC FootPrints Service Core password. Password complexity rules are displayed below the Change Password field. Passwords must conform to the password complexity rules. Rules that have not been set are not displayed. As an example, suppose the following rules have been set:

  Minimum length: 8

  Maximum length: 14

  Alphabetic characters required: Yes

  Mixed case characters required: Yes

Numeric digits required: Yes

Punctuation characters required: Yes

Then a password such as:

pencilc0se

is unacceptable because it does not contain a mix of upper and lower case characters and it also does not contain any punctuation characters, such as the @ symbol. However, the following password would be acceptable:

pencilC@se1

The password pencilC@se1 contains between 8 and 14 characters, alphabetic characters, both an upper and numerous lower case characters, a number, and a punctuation character. Although the password complexity rules say "characters" and "numbers", only one character or number for each rule is required for compliance. If your password does not comply with the password complexity rules, you will be prompted to change your password upon login and will be unable to log in until your password complies with the rules.

- **Default Workspace**—If you are a member of more than one Workspace, change the default Workspace that is displayed when logging in to BMC FootPrints Service Core. To change the default Workspace, choose from the drop-down box.
- **Default Page for Current Workspace**—If access to the Executive Dashboard feature is enabled, This option allows the user to specify whether the BMC FootPrints Service Core homepage or the Executive Dashboard is the page that is displayed when the user logs into BMC FootPrints Service Core.
- **Your Local Time Zone**—By default, BMC FootPrints Service Core displays all dates and times in the time zone where the BMC FootPrints Service Core server resides. If you select a time zone from the drop-down list, all dates and times are displayed adjusted to be accurate for that time zone (does not affect how data is stored).
- **Date Format**—This option determines how dates are represented throughout **FootPrints Service Core**. The options are:
  - **American**—MM/DD/YYYY
  - **European**—DD/MM/YYYY
  - **ISO**—YYYY/MM/DD
  - **Revert to the system default**—The default format set by the System Administrator is used.
- **Preferred Language**—If the current BMC FootPrints Service Core installation supports multiple languages, choose a language for display.
- **U.S. Government Section 508 Compliance/Visually Impaired Enhancement**—This feature enables BMC FootPrints Service Core to be better accessed by visually impaired users. If enabled, BMC FootPrints Service Core is optimized to be used with the "JAWS" browser and other similar browsers. If you enable or disable this feature, you must refresh the browser.
- **Delete Cookie**—If you elected to have BMC FootPrints Service Core remember your ID and password (on the Login page), an option to delete the login cookie appears here. Check the box to delete the cookie. Deleting the cookie means that you must enter your user name and password every time you log in to **FootPrints Service Core**.

NOTE

If you just changed your password, your old password is still active until after you apply the changes. Consequently, even though you changed your password on the Preferences page, you must enter the old password to apply the changes. After successfully changing your preferences, your new password becomes active.

Issue Page Preferences

These options apply to all Workspaces to which you belong. After configuring options, scroll to the bottom of the page, enter your password, and click **Save**.

- **Interface Style**—Choose between Tabs and Expand/Collapse
  - **Tabs**—Selecting Tabs causes sections to be displayed as tabs on Create, Edit, and Details Issue pages. If you select Tabs, you can select which section tab is displayed when each of the three page types (Create Issue, Edit Issue, and Details) is displayed. Select the tab to display from the drop-down box.
  - **Expand/Collapse**—Selecting Expand/Collapse causes sections to be displayed as expandable/collapsible sections on Create and Edit Issue pages. Agents can click the plus or minus sign beside the section heading to expand or collapse the section, respectively. If you select Expand/Collapse, you can select which sections are displayed in the expanded mode for each of the three page types (Create Issue, Edit Issue, and Details). Checking the box beside the section name means the section is expanded when you access the selected page.
- **Automatic Spell Check**—Optionally enable automatic spell check on the Create Issue and Edit Issue pages. The spell check occurs after you submit an Issue or an update to an Issue.
- **Rich Text Mode Editor**—The Description field can include controls for formatting the text, including font type, size, color, bulleted and numbered lists, and tables. This feature is compatible with the following browsers: Internet Explorer 5.5+, Firefox 2.0+, and Safari 3.0+. If disabled, a plain text box is used instead.

NOTE

The Rich Text Mode Editor feature may be disabled by the administrator in some Workspaces.

- **Use Flip-Thru Description Viewer**—If enabled, when the user views the Issue Description field, only one description is displayed at a time. Arrow buttons allow the user to "flip through" multiple descriptions for the Issue. An additional control above the Description field allows the user to display all of the descriptions at once in a new window.
- **Display Complete Description on Edit**—If enabled, a display field that cannot be edited is included just before the Description field that allows the Agent to scroll through previously entered descriptions without opening a separate View Current Description window.
- **Edit Most Recent Description**—If enabled, the last description of an Issue appears on the edit page in a separate box for editing purposes. This option is only available to administrators or other users with the correct role permission.
- **Prefill New Issues With My Contact Information**—If enabled, the Contact Information section of the Issue is always pre–populated with the Address Book record of the Agent entering Issue data. The Agent must have a corresponding record in the Address Book for this to work. Otherwise, the fields remain empty.
- **Open attachments from a new window**—If enabled, a new window is opened when you click on a file attachment to download it. The default is "Disable".
- **Behavior after issue create/edit**—The three options in this drop-down are: Close window and/or refresh homepage, Display issue details, and Display confirmation page only. **Close window and/or refresh homepage** closes the Issue page window. **Display issue details** displays the Issue details page in a new window after submission. **Display confirmation page only** displays a View Issue button and a Close

Window button. Clicking the View Issue button displays the Issue details page. On a heavily used system (one with many agents and Issues) the Display confirmation page only option provides the best performance, while the other two options are about equal in terms of their affect on system performance.

- **Quick Descriptions/Signatures**—If you select the link, a window is displayed that allows you to create pre-defined text with which to populate the Description field in the Create Issue and Edit Issue pages. This can be used to create a personal signature, or to have common answers readily available. To use a quick description when completing a Create Issue or Edit Issue page, select the name of the quick description from a drop-down list located in the Description field title bar. Additional information for creating, editing, and deleting quick descriptions is below.
- **Require Password for Issues**—The security option allows you to restrict others from updating your assigned Issues or creating or editing Address Book entries (for example, if you are away from your desk) by requiring a password. If enabled, a password is required each time you create or edit an Issue or an Address Book entry.

Create a Quick Description

To create a quick description:

1. Select **Preferences** and then click the Quick Description link in the Issues section on the Preferences page. A Quick Descriptions pop-up is displayed.
2. Enter a name for the quick description in the Create section, then enter your password and click **GO**. A multi-character field is displayed.
3. Enter the text for the quick description into the multi-character field and click **GO**.
4. The description is saved and the Quick Description pop-up is displayed to allow you to create, edit, or delete additional quick descriptions.

Once a quick description has been created, a drop-down box appears on the Create Issue and Edit Issue pages in the Description field title bar. The drop-down box contains the name(s) of the quick description(s) in the Workspace. If the Agent selects a name from the drop-down, the Description field is populated with the pre-defined text. The Agent can still enter additional text in the Description field.

Edit a Quick Description

To edit a quick description:

1. Select **Preferences** and then click the Quick Description link in the Issues section on the Preferences page. A Quick Descriptions pop-up is displayed.
2. Click on the name of the quick description in the Edit section, then enter your password and click **GO**. A multi-character field is displayed.
3. Make the changes you want to the text in the multi-character field. You can delete, add, or alter text as you see fit. When you are done making changes, click **GO**.
4. The description is saved and the Quick Description pop-up is displayed to allow you to create, edit, or delete additional quick descriptions.

Deleting a Quick Description

To delete a quick description, which removes the quick description from the drop-down box on the Create Issue and Edit Issue pages:

1. Select **Preferences** and then click the Quick Description link in the Issues section on the Preferences page. A Quick Descriptions pop-up is displayed.
2. Click on the name of the quick description in the Edit section, click the Check this box to delete the selected Quick Description checkbox, then enter your password and click **GO**.
3. The quick description is deleted and the Quick Description pop-up is displayed to allow you to create, edit, or delete additional quick descriptions.

Homepage Preferences

This section defines Homepage dashboard components and the list of Issues displayed on the Homepage.

Dashboard

The Dashboard section of the Preferences page is where you specify which dashboard components are displayed on your homepage in the Workspace. Users can specify different sets of dashboard components for each of their Workspaces. By default, Workspace Totals and Global Issues are displayed. Dashboard components can be displayed in as many as four columns. Users can also make custom components for display on the homepage.

Dashboard Components

The components that can be added to the dashboard for display on the Homepage are:

- **Chart**—When you select this component, you then select which chart to display from a drop-down field. Options are Received vs Closed and Active Issues. If you select Received vs Closed you must select the time period for which FootPrints Service Core will account and whether to display your Issues only or the entire Workspace's Issues. The component then displays the Issues that were received and the Issues that were closed during the designated period for the designated agent(s).
- **Currently Logged In Users**—Lists the number and IDs of users logged into the current workspace. When specifying this component, you will be asked to set the number of records to display on the first page of the list.
- **Custom Defined**—Enter custom code to display anything you want in the dashboard component. This can be HTML, javascript, etc.
- **Global Issues**—Lists the Global Issues. Links in the Global Issues component can be clicked to access the Issue and create a linked Issue. When specifying this component, you will be asked to set the number of records to display on the first page of the list.
- **Most Recent Solutions**—Displays the most recent solutions in the Knowledge Base. You must designate how much of the solution Title field is displayed.
- **My Assignments**—Lists the Issue number and Title of the user's active assigned Issues. The list entries are linked to the Issues. Clicking on a list entry displays the Issue. When specifying this component, you will be asked to set the number of records to display on the first page of the list.
- **Pending Approvals** (if you are a Change Manager approver)—Lists Change Manager Issues for which you are an approver and which still require a vote. When specifying this component, you will be asked to set the number of records to display on the first page of the list.
- **Pending KB Approvals** (if you are a Knowledge Base approver)—Lists submitted Knowledge Base solutions for which you are an approver and have not yet been approved. When specifying this component, you will be asked to set the number of records to display on the first page of the list.
- **Totals**—Lists the number of Issues broken down by status. Click on the status to display the Issues in the main frame.
- **RSS Feed**—Lists entries from your selected RSS feed. When specifying this component, you will be asked to set the number of records to display on the first page of the list and the URL for the RSS feed. RSS stands for "Really Simple Syndication". RSS feeds refer to a set of formats used to publish frequently updated content. Web logs and Internet news sites often provide RSS feeds. The feed contains a summary of content from the site. RSS enables you to obtain these summaries automatically.

- **Requests**—Lists customer requests.
- **Saved Search**—Lists saved searches.
- **Today's Appointments**—Lists your appointments for the day.
- **Twitter Feed**— You can capture Twitter messages ("Tweets") on your Homepage and create Issues from them.

Add a Dashboard Component

To add a dashboard component to your Homepage:

1. Select a component from the **Available Components** list.
   Only one component can be selected at a time. Fields are displayed for any additional settings you need to enter.
2. Enter any additional settings.
3. Click the **Add Component** button.
   The dashboard component is displayed as an icon in the **Current Dashboard** area. Mouse over displayed dashboard components to see what is included in the current dashboard.
4. When you are ready to exit the Preferences page, enter your password and click **Save**. If you skip this step, the changes are not made.

Edit a Dashboard Component

1. In the Current Dashboard area, click the dashboard component to be edited. Only one component can be selected at a time.
2. Change settings as needed.
3. Click the Complete Edit button to save the edits or click the Cancel Edit button to leave the dashboard component settings unchanged.
4. When you are ready to exit the Preferences page, enter your password and click **Save**. If you skip this step, the changes are not made.

Delete a Dashboard Component

You can delete dashboard components from either the Dashboard or from Preferences > Homepage.

To Delete a Dashboard Component from the Dashboard:

Note: If your Workspace Administrator has set up an Agent Preference Template for your role to include specific dashboard components, and you delete a component using this method, the component will redisplay on the Dashboard the next time the Workspace Administrator updates the template.

Click the **Delete Component** button (X) on the dashboard component you want to delete.

To Delete a Dashboard Component from the Preferences > Homepage:

1. Select the dashboard component, then click the **Delete Component** button.
2. To delete all of the dashboard components at once, click the **Delete All**button.
3. When you are ready to exit the **Homepage**, enter your password and click **Save**

Moving FootPrints Service Core Dashboard Components on the Homepage

Dashboard components can be moved around the homepage using drag-and-drop.

Homepage List

By default, My Assignments is chosen as the Homepage list. The My Assignments selection lists your most recent open assignments and is the recommended choice for most users. It is the fastest to display and allows you to be continuously updated on your assignments. However, the user can choose instead to display any built-in or custom list.

NOTE

The options chosen below are, in effect, on a per-Workspace basis. To change your preferences in another Workspace, change to that Workspace and re-configure the List Preferences.

The options are:

- **Select the Lists that will be available on the Homepage**—The lists that are displayed in the drop-down in the main window of the Homepage. One or more lists can be highlighted by holding down the CTRL key while clicking on the list. The choices are:
  - **My Assignments**—The most recent active Issues assigned to you. Shown by default.
  - **My Assignments and Requests**—Active Issues assigned to you and unassigned Requests from customers.
  - **My Team's Assignments**—Active Issues for your Team (only displayed if you belong to a Team).
  - **My Assignments in All Workspaces**—Active Issues assigned to you in all Workspaces (only displayed if you belong to multiple Workspaces).
  - **My Active Approvals**—Lists all Issues for which the Agent is an approver, the Agent may or may not have yet voted, and voting has not been completed. (Applies to Change Manager approvers only.)
  - **My Active Approvals and Assignments**—Lists all Issues for which the Agent is an approver, the Agent may or may not have yet voted, and voting has not been completed, as well as the Agent's assignments in the current workspace. (Applies to change manager approvers only.)
  - **My Vote Required**—Lists all Issues for which the Agent is an approver, the Agent has not yet voted, and voting has not been completed. (Applies to change manager approvers only.)
  - **My Vote Required and Assignments**— Lists all Issues for which the Agent is an approver, the Agent has not yet voted, and voting has not been completed, as well as the Agent's assignments in the current workspace. (Applies to change manager approvers only.)
  - **All Issues**—All Issues in the Workspace database (only available if you have rights to see all Issues in the Workspace).
  - **Global Issues**—All active Global Issues for the Workspace.
  - **Deleted Issues**—Deleted Issues (administrators only).
  - **Requests**—Requests submitted by customers (see below).
  - **Saved Searches**—Displays personal and shared custom searches.
  - **Knowledge Base**—Displays Solutions from the Knowledge Base.
- **Default List**—The default list of issues generated automatically on the Homepage when logging into BMC FootPrints Service Core is specified here. Select from one of the highlighted lists.

NOTE

Whichever list you choose as the default, you can always view a different list by choosing another option from the Display drop-down box on the Homepage.

- **Auto-Refresh Interval**—Normally, the default Homepage list refreshes each time you click Workspace Home or perform any action that brings you back to the Homepage. Optionally, you can set your preferences to automatically refresh the Homepage list at intervals of 15, 30, or 60 minutes. If you configure **FootPrints Service Core** to refresh every 30 minutes and then go to lunch, when you come back the list is refreshed, with no user intervention required.
- **Maximum Issues per Screen**—The maximum number of Issues that display at one time on the Homepage.
- **Default Sorting**—Sort list by a designated field (including Workspace and Address Book fields) and choose a field for secondary sorting (where there is a match in the primary sorting column, the secondary sorting column determines the order in which the Issues are displayed). Select descending (highest to lowest) or ascending (lowest to highest) order.
- **Homepage columns**—Select which columns to display and in what order. For example, to display the Issue Type field:
  - For Type of Field, choose FootPrints Service Core fields.
  - Highlight Issue Type under Available Fields.
  - Click **Add Field**. Issue Type is displayed in the Displayed Fields box.
- To change the order of fields to be displayed, highlight a field in the Displayed Fields box and click the up or down arrow to move it.
- To set the fields to what they were before you made changes, click the Reset button.
- To delete a field, highlight the field in the **Displayed Fields** box and click **Delete**.

NOTE

Certain columns are displayed automatically on the Homepage, including Issue number and the Quick Action Checkbox dialog. Title is also mandatory, but the placement can be selected in the **Displayed Fields** dialog box. In addition, by default, My Vote Required is displayed in the Homepage List for those who are designated as approvers to the change manager feature. The My Vote Required listing cannot be removed from the list.

NOTE

You can change the order of the columns as they appear on the homepage by dragging and dropping the column headings, e. g., while on the homepage you could grab the Priority heading with your mouse and drag it to the right or left of another heading.

- **Title Column Options**—These options affect the display of the Titles, Descriptions, and Quick Links in the Title column. The options work together to achieve different results, as follows:

Title Column Format	Quick Links Display	Result
Include Collapsed Description in Title	Always Include Quick Links	A collapsed (shortened) version of the Description is included in the Title column and Quick Links are displayed. Clicking the "more..." link in the Title column displays an expanded version of the Description.
Include Collapsed Description in Title	Only Include Quick Links with Expanded Description	A collapsed (shortened) version of the Description is included in the Title column and Quick Links are not displayed. Clicking the “more…” link in the Title column expands the Description and displays the Quick Links.
Include Expanded Description in Title	Always Include Quick Links	An expanded version of the Description is included in the Title column and Quick Links are displayed. Clicking the "less..." link collapses the Description
Include Expanded Description in Title	Only Include Quick Links with Expanded Description	An expanded version of the Description is included in the Title column and Quick Links are displayed. Clicking the "less..." link collapses the Description and the Quick Links are not displayed.

Title Column Format	Quick Links Display	Result
Do not Include Description in Title	Always Include Quick Links	Quick Links are displayed in the Title column but the Description is not. Neither the "more..." nor the "less..." links are displayed with this configuration.

Miscellaneous Preferences

The options below are configured for the entire system. After configuring options, enter your password and click **Save**.

- **Sync Method**—Select whether to use manual one-way calendar synchronization or two-way synchronization with external calendars. The sync method choices are:
  - **Manual Calendar Sync (1-way)**—This is the default selection. This option synchronizes calendar appointments with your Outlook Calendar and does so only from BMC FootPrints Service Core to Outlook, i.e., it places BMC FootPrints Service Core appointments in your Outlook calendar but does not place Outlook calendar appointments into your BMC FootPrints Service Core calendar.
  - **BMC FootPrints Sync (2-way)**—Displays a pop-up window for configuring the two-way calendar synchronization feature. Refer to BMC FootPrints Sync for complete details on using the BMC FootPrints Service Core two-way synchronization with external calendars feature.
- **Error Alerts** (administrators only)—Option to receive a pop-up window when system errors occur. The log is still viewable by selecting Administration | System | Logs, regardless of which option selected here.
- **Instant Talk Preferences**—Select whether to allow customers to initiate an Instant Talk session with you. If you choose to not allow them to initiate Instant Talk sessions with you, you'll still be able to initiate Instant Talk sessions with them and with other Agents.

NOTE

This option only applies if Instant Talk is enabled.

- **BMC FootPrints Asset Core Authentication**—This selection is only displayed when BMC FootPrints Asset Core is enabled for the system. This selection is used to enter credentials for authenticating the user to the BMC FootPrints Asset Core. Select the Edit button to enter your BMC FootPrints Asset Core user name and password. Select the Clear button to clear the user name and password fields entirely (leaving no credentials for authentication). These values must match your BMC FootPrints Asset Core (not BMC FootPrints Service Core) login. If "guest credentials" are defined for agents and an agent has credentials defined in Preferences, only the credentials in Preferences are applied. If authentication through these credentials fails, the system does not apply the guest credentials as an alternative. The login name can take one of three forms:
  - User ID login, for example: jsmith
  - Domain/login,for example: widgetdomain/jsmith
  - Internet style login, for example: jsmith@widgetdomain.com
- **Java Installation**—This selection is only displayed when BMC FootPrints Asset Core is enabled for the system. Integration with BMC FootPrints Asset Core requires a local installation of the Java runtime. Typically this is done automatically upon first use of an integrated BMC FootPrints Asset Core feature. If your Java installation should become corrupt or put of date, you can manually correct it by selecting the **Update My Java Installation** button provided here. Contact your BMC FootPrints Asset Core administrator if you need additional clarification.

Searching and Reporting

Searching and Reporting

BMC FootPrints Service Core contains a number of options for querying the database. From simple keyword searches to multi-level metrics with color charts, virtually any data can be reported on in BMC FootPrints Service Core to analyze activity, trends and statistics with no programming via the BMC FootPrints Service Core web interface. Assess how your team's resources are being allocated, review activity and capacity levels, and produce time tracking and billing information for charge-backs and billing. Use report data to justify staff changes, manage the types of problems assigned to each member, and use staff resources in the most effective manner.

Topics in this chapter include:

- **Searching**
  - About Searching—Introduction to search topics.
  - Quick Search —Available from anywhere in BMC FootPrints Service Core from the top frame. Search by keyword or Issue number.
  - Built-in Queues—Homepage queues available in BMC FootPrints Service Core.
  - Advanced Search—Complex search on all fields and criteria.
  - Saved Searches—Save advanced search criteria to create queues available from the BMC FootPrints Service Core Homepage.
  - Cross Workspace Searching—Search for issues that match criteria for multiple Workspaces
- **Reports**
  - About Reporting—Introduction to reporting topics.
  - Single Issue Report—Available from the Details page of an Issue. Displays a printable page.
  - Quick Report—Create a report of Issues displayed on the Homepage using the Quick Action dialog.
  - Custom Reports—Create custom reports with custom criteria and formatting options, including graphics and multi-level metrics.
  - Saving and Printing Report Data—Information on saving and printing report data from the browser.
  - Saved Reports—Access saved custom report templates.
  - Shared Reports—Report templates that are shared by different users.
  - Administrator Flashboard—Displays up-to-the-minute graphical representation of Service Desk and Workspace activity.
  - Cross-Workspace Reporting—Custom reports across multiple workspaces.
  - Time Tracking Reports—Generate time tracking and billing reports.
  - Metric Reports—Generate statistical data and metrics about the Workspace.
  - Report Templates—Create single-issue report templates for printing out Purchase Orders, Work Orders, RMAs, etc.
  - Auto-Run Reports—Schedule custom reports to be generated and emailed automatically on certain days/times.

Searching

About Searching

BMC FootPrints Service Core contains a number of search facilities that allow you to search and locate specific Issues in the database and create custom queues for the Homepage.

- Quick Search—The Quick Search is available from any BMC FootPrints Service Core screen (in the Address Book, the Quick Search searches the Address Book only).
- Built-in Queues—Homepage queues available in BMC FootPrints Service Core.
- Advanced Search—Complex search on all fields and criteria.
- Saved Searches—Save advanced search criteria to create queues available from the BMC FootPrints Service Core Homepage.
- Cross Workspace Searching—Search for issues across multiple Workspaces.

NOTE
Search results can be further refined by using Filtering. Refer to Below the Toolbar for details on Filtering.

Quick Search

The Quick Search is located at the top of a BMC FootPrints Service Core page. It is available from any BMC FootPrints Service Core screen (in the Address Book, the Quick Search searches the Address Book only).

By default, the Quick Search searches for an issue by number. Enter a number and click the search button to initiate the search. To use Quick Search, enter the search string in the Quick Search field, select the field to search from the drop-down (using the drop-down arrow), and the click the SEARCH button. A list of all Issues that match your search criteria are displayed. Issue Number can be searched regardless of the choice selected in the Quick Search drop-down.

Keyword Search Fields

The keyword search queries the Title, Description, Workspace (Issue) and Address Book fields.

Built-in Queues

The Display drop-down field on the Homepage contains a number of built-in queues. When selected, the Homepage list is updated with the results. To refresh the current list, click Refresh.

NOTE
Under Preferences on the BMC FootPrints Service Core Toolbar, the Agent can customize which lists are displayed in the drop-down in the main window of the Homepage.

Built-in queues:

- **My Assignments**—The most recent active Issues assigned to you. Shown by default.
- **Team Assignments**—Active Issues for your Team (only displayed if you belong to a Team).
- **My Assignments and Requests**—Active Issues assigned to you and unassigned Requests from customers.
- **My Active Approvals**—Lists all Issues for which the Agent is an approver, the Agent may or may not have yet voted, and voting has not been completed. (Applies to Change Manager approvers only.)

- **My Active Approvals and Assignments**—Lists all Issues for which the Agent is an approver, the Agent may or may not have yet voted, and voting has not been completed, as well as the Agent's assignments in the current workspace. (Applies to Change Manager approvers only.)
- **My Vote Required**—Lists all Issues for which the Agent is an approver, the Agent has not yet voted, and voting has not been completed. (Applies to Change Manager approvers only.)
- **My Vote Required and Assignments**— Lists all Issues for which the Agent is an approver, the Agent has not yet voted, and voting has not been completed, as well as the Agent's assignments in the current workspace. (Applies to Change Manager approvers only.)
- **My Assignments in All Workspaces**—Active Issues assigned to you in all Workspaces (only displayed if you belong to multiple Workspaces).
- **All Issues**—All Issues in the Workspace database (only available if you have rights to see all Issues in the Workspace; otherwise, it displays only Issues you have rights to see).
- **Global Issues**—All active Global Issues for the Workspace.
- **Deleted Issues**—Deleted Issues (administrators only).
- **Requests**—Requests submitted by Customers (see below).
- **Knowledge Base**—Displays Solutions from the Knowledge Base.
    - **Internal Solutions**—All internal (more technical) Solutions.
    - **Public Solutions**—All public (end-user) Solutions.
    - **Public Solutions in all Workspaces**—All Public Solutions from all Workspaces to which you belong.
    - **Internal Pending Solutions**—Internal Solutions pending approval before they are published (only displays if you are an approver or you have a pending solution waiting for approval).
    - **Public Pending Solutions**—Public Solutions pending approval before they are published (only displays if you are an approver or you have a pending solution waiting for approval).

Advanced Search

Advanced Search

The Advanced Search feature allows you to search the Workspace database on any combination of fields and advanced criteria. BMC FootPrints Service Core automatically generates the Advanced Search form for each workspace, with all of the custom and built-in fields for that Workspace included. For example, if a new field is added by the Workspace Administrator, the field is included automatically on the Advanced Search form. In the same way, if a field is deleted from the workspace, it is removed from the Advanced Search page.

To perform an Advanced Search, click Advanced below the Quick Search dialog. This form contains a combination of text fields, drop-down boxes, multi-select dialogs, and radio buttons which allow you to search on any combination of criteria. Each field acts as a filter. Only fill in or choose the criteria you want to search on. Any field that you do not want to perform a search on should remain untouched. Some Boolean operators can be used within in text fields.

Topics in this section:

- Advanced Search Criteria
- Sample Advanced Search

Advanced Search Criteria

The following options are available in the Advanced Search form, as well as the forms for Custom Reports, Time Tracking Reports, and Escalation and Business Rules (with minor differences):

NOTE
The names of many of the fields in BMC FootPrints Service Core can be changed by the administrator (Title, Priority, Status, Description, etc.), as well as the name of the records (Issue). Custom fields can also be created. For clarity, this manual always refers to BMC FootPrints Service Core records as "Issues," and uses the default terms for the other field names.

1. **Issue Tab-General Information**
   - **Title**—Enter a word or phrase to for which to search. Boolean operators AND, OR, and NODATA are supported.
   - **Description**—If a word or phrase is entered (or multiple words using Boolean Operators), only Issues containing that word/phrase in the Description are returned.
   - **Assigned to**—If an assignee or assignees are selected, the search returns only Issues assigned to the selected assignee(s).
   - **Advanced Assignment Controls**—Clicking on the Advanced Assignment Controls link displays the following options (Click the Hide Advanced Assignment Controls link to hide the following options):
     - **Advanced Assignment Controls**
       - **Any user selected above**—Returns all Issues to which any of the users you have highlighted in the list are assignees. For example, if you highlight three users, any Issues in which any of those three are assignees are returned.
       - **All users selected above**—Returns all Issues to which all of the users you have highlighted in the list are assignees. If, for example, you highlight three users, only Issues for which all three are assignees are returned.
       - **Add Assignee**—Optionally add an assignee to the list. Enter the name in the text field, and then click the icon. The name you added is appended to the end of the list. You must still highlight the name of the added assignee if you want the search to return all Issues to which the added user is assigned.
     - **Exclude Issues Assigned To**—Excludes all Issues to which the user(s) you have highlighted are assigned.
       - **Add Assignee**—Optionally add an assignee to the list. Enter the name in the text field, then click the icon. The name you added is appended to the end of the list. You must still highlight the name of the added assignee if you want the search to exclude all Issues to which the added user is assigned.
   - **Keyword**—If a word or phrase is entered, any Issues containing that word/phrase in any field are returned, including Title, Description, Workspace fields, and Address Book fields, as long as the full text search conforms to full text keyword search behavior.
     - **Fields Included:**—The Keyword search queries the Title field, Description field, Workspace (Issue), and Address Book fields.

     NOTE
     Refer to this Knowledge Base article for details on the behavior of the keyword search function.

- **Attachment Filename**—Returns all Issues in which the string matches the filename of an attachment to the Issue(s).

NOTE ON PERMISSIONS

Access to Issues is based on a user's Role. Assignment options may be restricted based on your role. Please consult your BMC FootPrints Service Core administrator for more information.

- **Submitted by**—If a user or users are selected, the search returns only Issues created by that user.
- **Priority**—Returns only Issues of the specified priority or priorities. Highlight the priorities to be included; hold down the CTRL key to highlight multiple priorities. To return all priorities, no priorities need to be selected (this has the same result as selecting all priorities).
- **Status**—Returns only Issues of the specified status(es). By default, Open and any custom statuses are highlighted in the status dialog. To select multiple statuses, hold down the CTRL key. To return all statuses, no statuses need to be selected (this has the same result as selecting all statuses).

2. **Issue Tab-Issue Information**—The fields in this section differ depending on the fields in the current Workspace. Search on as many fields as desired. Search methods vary with the field data types:
   - **Character field**—Displays a text box. Enter the word or phrase to search on (or multiple words using Boolean Operators).
     - **Number field**—Displays a text box. Enter the number or part of a number for which to search.
     - **Drop-down and Multi-select field**—Displays a multi-select dialog box. Highlight one or more values to search on. To search for Issues that contain no data for the field, select No data. If you do not want to restrict the search based on choices in a field, do not highlight any values.
     - **Date fields**—Search on a date or date range. For more information, refer to Date Field Search Options.

     Note
     Date/time fields can only be searched by date, not time.
   - **Other field types**—Email, URL, and FTP fields display a text box. Enter the word or phrase to search on (including partial addresses).
3. **Contact Tab**—Search by users' contact information. The fields in this section differ depending on the fields in current Address Book. Search methods are the same as those for Issue Information fields (see above).
4. **Advanced Criteria Tab**
   - **Issue Types to Include**—Specify whether Advanced Issue types, including Subtasks and Global Issues, are returned. Options include:
     - **All Issue Types**—All Issue types are returned.
     - **Regular Issues**—Regular (non-Global or Master/Subtask) Issues are returned.
     - **Include Master Issues**—Master Issues that contain subtasks are returned.
     - **Include Subtasks**—Subtasks of Master Issues are returned.
     - **Include Global Issues**— Global Issues are returned.
     - **Include GlobalLinks**—All users' Issues linked to a Global Issue are returned.
     - **Group Master Issues with Subtasks/Global Issues with GlobalLinks**—Available for Reports only. These options override the sort order selected in the report.

- **Date**—If dates are specified, the search returns only Issues from the time period specified. For more information, refer to Date Field Search Options.

NOTE

It is important to understand the meaning of relative periods and aging in order to obtain accurate information, especially as the searching and reporting functions of BMC FootPrints Service Core rely on the same types of criteria. If a search is requested on Issues for "the previous three months," and the date is the 15th of May, then the period searched or reported on will be from February 15th through May 14th, inclusive. That is, the report or search will exclude the current date and give the three month period prior to the current date. This is to ensure that reports and searches yield consistent results. If reports and searches included the current date, then the results might differ depending on the time of day at which the search or report was performed.

- **Time**—Specify the time in which the Issues were created or last edited based on the 24 hour clock. Available for Reports only.
- **Age**—Returns Issues created in the time specified. Number of days and hours can be specified. Modifiers are also provided, including “Greater Than”, “Less Than”, “Equal to”, “Greater than or Equal to”, “Less than or Equal to”, and “Not Equal to”. As an example, to return Issues greater than 1 day old, choose “Greater than” and fill in “1” for “Days”.

NOTE

Age is always 24/7 and does not use the Workspace Work Schedule.

- **Advanced Action Criteria**—Click the checkbox to indicate that the issue has an associated Advanced Action that requires workflow (i.e., an approval via Change Manager or some other factor) before execution on the asset. This checkbox only applies if you have the BMC FootPrints Asset Core.
- **Include Only x number of Issues found**—Restrict the results to the first or last x number of Issues specified, for example, First 20 Issues. Available for Reports only.
- **Include only Issue Numbers**—Restricts the search to a defined range of Issue numbers.
- **Advanced Date/Time Controls**—The following "Pending Clock" options apply to the "Time to Close" and "Age" calculations (available for Reports only):
  - **Don't include time outside of the Workspace Work Schedule**—If this is checked, the calculations do not include after-hours time based on the work schedule for the workspace. This option only affects output fields for reports such as Age of Issue. It does not apply to criteria on which BMC FootPrints Service Core searches (even though it appears as an option in the criteria section of the page). What that means is, for example, if you set criteria for reports that have aged five days or more, when assembling the set of reports, BMC FootPrints Service Core will not take this option into account and will use real time to determine whether the Issue is five days old or older. When the report is displayed, however, the Age of Issue will take the Workspace Work Schedule into account.
  - **Don't include time Issues spent in the following Statuses**—Select one more statuses (Pending, Waiting for Customer, etc.) to exclude time spent for the "Time to Close" and "Age" calculations.

NOTE

These time calculations are always based on the time zone in which the server resides.

- **Order Search Results by**—Order the Issues returned by the specified field, descending (most recent or highest first) or ascending (oldest or lowest first). By default, Issues returned are ordered by Issue number descending. This overrides your preferences.
- **And/Or**—If “And” is chosen, Issues must match ALL criteria chosen above (this is the default). If “Or” is chosen, only one criterion must be met.

5. **Save/Run Tab**—Save the search criteria as a queue. Select “Personal” to save search for yourself. Select “Shared/Internal” to share your search with other internal BMC FootPrints Service Core users. “Shared/Public” is available for reports only to allow all users (including Customers) to access the report (the report will only contain data user is allowed to see). Saved search queues appear in the Display Drop-down on the homepage.

For all text fields, regardless of section, entering just the % symbol finds all Issues with any data in that field.

When you are finished filling out the form, click **GO** to submit search. The Homepage is displayed with a list of matches. If a name was entered for the search, it appears as a queue in the Display drop-down.

Sample Advanced Search

The following search returns all Active Issues assigned to the user Jill Smith that are priority Urgent or High.

1. Click Advanced under the Search heading on the BMC FootPrints Service Core Toolbar.
2. For Assigned to, choose Jill Smith.
3. For Priority, select Urgent and High (hold down the CTRL key).
4. For Status, highlight Open, Need More Info, and Pending.
5. To save this search, enter a name for the search, e.g., My High Priority Issues.
6. Click **GO**.

BMC FootPrints Service Core returns a list of the Issues that match the above criteria.

Saved Searches

The Saved Searches feature can be used to save and name search criteria that are used frequently to create queues or “hot lists”. Each time the saved search is run, it returns the latest data from the current Workspace. Saved searches are available from the Display drop–down box on the Homepage and from the BMC FootPrints Service Core Toolbar. More information on creating saved searches can be found in the preceding topic on Advanced Search.

There are two kinds of saved searches:

- **Personal Searches**—Personal saved searches are viewable only by you and are accessed via the Display drop-down on the home page or by mousing over the Advanced search link. You can create personal queues for your own assignments of different types, overdue Issues, assignments with a due date for the next week, a follow-up date of today, etc. All Agents have access to create and save personal searches.
- **Shared Searches**—Shared searches appear in the Display drop–down box for all Agent/administrator users in the current Workspace. This is useful for creating shared queues for different groups, departments, locations, problem types, etc. Shared searches can only be viewed, edited, or deleted by users with the proper permissions.

Using Saved Searches

You can run, edit, or delete a saved search by mousing over the Advanced search link and then clicking Saved Searches on the menu.

To run a previously saved search:

1. Mouse over the Advanced search link and click Saved Searches on the menu that is displayed.
2. Select the search you want to run from either the Personal or Shared Searches drop-down.
3. Click the radio button for Run (this is the default).
4. **Click GO**. The results of the search are displayed in the main frame of the browser window.

To edit a previously saved search:

1. Mouse over the Advanced search link and click Saved Searches on the menu that is displayed.
2. Select the search you want to run from either the Personal or Shared Searches drop-down.
3. Click the radio button for Edit.
4. Click **GO**. This brings you to the Advanced Search page. The form is pre–filled with the search criteria from the saved search.
5. Make any changes necessary.
6. To save the new search criteria with the same name as the original, leave the name in the Save this Search As text box as–is. To save it as a new search, enter a different name.
7. When you are finished, click **GO**. The results of the edited search are displayed in the browser window.

To delete a previously saved search:

1. Mouse over the Advanced search link and click Saved Searches on the menu that is displayed.
2. Select the search you want to delete from either the Personal Searches or Saved Searches drop-down.
3. Click the radio button for Delete.
4. Click **GO**. The saved search is deleted.

Cross Workspace Searching

Each BMC FootPrints Service Core Workspace is contained in a separate sub-database. Each Workspace has its own fields, users, and other options. You may be a member of one Workspace or you could have membership in several Workspaces. If you are a member of two or more Workspaces, and your Role allows it, it is possible to display Issues that match search criteria from multiple Workspaces.

NOTE

Cross-workspace searches do not work for a person who is an Agent in one Workspace and a customer in another. If an Agent performs a Cross-workspace search, the results do not contain Issues from the Workspace in which the Agent is a customer.

Some characteristics of cross Workspace searches include:

- You can only search on fields that exist in all selected Workspaces.
- You can only sort on fields that exist in all selected Workspaces.
- You can select any field from any Workspace as long as it does not exist in multiple Workspaces with conflicting types.
- The Quick Action Checkbox dialog is not shown.
- The Workspace Totals scoreboard and Global Issues list is hidden.
- Issues from your default Workspace are always listed first; subsequent issues are ordered by ascending Workspace number.
- Filters can be applied to the columns in your cross workspace search results.
- If you choose to view the details of an Issue from a different Workspace, that Workspace is displayed.
- Cross Workspace searches may be saved as personal or shared.

- You can only see shared searches that include Workspaces to which you belong. Therefore, there may be two shared searches that have the same name that are saved by different Agents. BMC FootPrints Service Core adds a number 2 next to one of the searches to help distinguish between them for Agents who have access to all the included Workspaces.
- Cross Workspace searches do not work for a person who is an Agent in one workspace and a customer in another. If an Agent performs a cross Workspace search, the results do not contain Issues from the Workspace in which the Agent is a customer.
- The record counter (displayed at the top right-hand side of the list of issues above the column headings) is replaced with a page counter. Instead of saying, for example, "1 - 20 of 217", meaning that 1-20 out of 217 issues are displayed, it might say "Page 1 of 217 total matching Issues" when displaying Cross Workspace search results.

Create a Cross Workspace Search

1. Mouse over the Advanced search link and click Cross Workspace on the menu that is displayed.
2. **Included Workspaces**—Highlight the Workspaces to be included in the search. Hold down the CTRL key to select multiple Workspaces. Click **GO** when you are finished. The Search Criteria page is displayed.
3. **Criteria**—Cross-Workspace searches can include built-in fields like Title, Description, Status, Priority, etc. For additional information on specifying search criteria, refer to Advanced Search Criteria.
4. Optionally save your search for later personal use or as a shared search to share with other Agents in the workspace.
5. When you are finished entering the search criteria, click **GO**.
6. The results of the search are displayed in the main frame, with issues grouped by Workspace under the Workspace name. You can click on the row that contains the workspace name to collapse/expand the issues listed for that workspace.

NOTE ON PERMISSIONS

Searches can be restricted based on a user's Role. Cross-Workspace Searches may not be available if your role does not allow access. Contact your BMC FootPrints Service Core administrator for more information. Also, cross-workspace searches are not available to customers.

Reporting

About Reporting

BMC FootPrints Service Core contains a number of reporting options. From simple keyword searches to multi-level metrics with color charts, virtually any data can be reported on in BMC FootPrints Service Core to analyze activity, trends, and statistics with no programming via the BMC FootPrints Service Core web interface. Report data can help you assess how your team's resources are being allocated, review activity and capacity levels, and produce time tracking and billing information for charge-backs and billing. Use report data to justify staff changes, manage the types of problems assigned to each member, and use staff resources in the most effective manner.

The following topics contain detailed instructions for each of these kinds of reports.

- Single Issue Report—Create a report on a single Issue from the Details page.
- Quick Report—Create a report of Issues displayed on the Homepage using the Quick Action Checkbox dialog.

- Custom Reports—Create custom reports with custom criteria and formatting options, including graphics and multi-level metrics.
- Saving and Printing Report Data—Save and print report data from the browser.
- Saved Reports—Access saved custom report templates.
- Shared Reports—Access report templates that are shared by different users.
- Administrator Flashboard—Display up-to-the-minute, customizable, graphical representation of service desk and Workspace activity.
- Metrics—Generate reports for statistical and historical analysis
- Cross-Workspace Reporting—Create custom reports across multiple Workspaces.
- Time Tracking Reports—Generate time-tracking and billing reports.
- Report Templates—Create single-issue report templates for printing out Purchase Orders, Work Orders, RMAs, etc.
- Auto-Run Reports—Schedule custom reports to be generated and emailed automatically on certain days/times.
- Change Manager Reports—If you have the Change Manager add-on module, you can run reports on Issues that are part of a Change Manager workflow.
- Knowledge Base Reports—Knowledge Base reports provide data and statistics on Knowledge Base usage. Knowledge Base reports return data on internal and public solutions.

Single Issue Report

This option appears on the Details page for an Issue. Click **Report** on the Details page to display a printable report of the Issue. Only the fields that contain data appear in the report. This report is useful when you need to quickly print the details of an Issue.

To display a single issue report, click the Report button on the Details page of the issue, select a report format from the drop-down, and then click the GO button. If the chosen format is not support, the report is not displayed.

Other features:

- Master Issue reports contain a list of all Subtasks. Global Issues contain a list of all GlobalLinks.
- If one or more Report Templates are configured, an option to format the report using one of the templates is available.
- The Single Issue report can be printed from the browser or saved as an HTML file.

Quick Report

This feature allows you to quickly report on one or more Issues. It can be done from the Homepage or from the results of a search. This is useful when you want a report of one or more issues displayed on the Homepage without creating a custom report.

To create a Quick Report:

1. On the BMC FootPrints Service Core Homepage, select the Issues to be included in the report using the Quick Action Checkbox dialog.
2. To select all Issues on the Homepage, click the All checkbox.

3. Select Report from the drop-down box above the checkboxes.
4. Select a report format from the drop-down.
5. Click **GO**. A new browser window opens containing the report results. It can be printed or saved directly from the browser.
6. If one or more Report Templates are configured, an option to format the Issues using one of the templates is available. If a custom Report Template is used, each Issue selected is displayed in a separate window for printing purposes. If Summary is selected, all Issues are contained in one window.

Custom Reports

Custom Reports

The Custom Reports feature allows you to create report templates based on any combination of criteria, with many formatting options. Formatting options include headings, columns, sorting, and color graphs. Single and two-level metrics based on any fields can be included. Report output can be exported to another application (such as Excel) and can be scheduled to be run on a regular basis.

Report Options

NOTE

The names of many of the fields in BMC FootPrints Service Core can be changed by the administrator (Title, Priority, Status, Description, etc.), as well as the name of the records (Issue). Custom fields can also be created. For clarity, this manual always refers to BMC FootPrints Service Core records as “Issues” and uses the default terms for the other field names.

To create a custom report, select Reports | New Report from the BMC FootPrints Service Core Toolbar. The Custom Report Wizard is displayed:

1. **Style tab**—Select the output style of the report. Choices are:
   - **Columns**—Issue data is displayed in fixed columns. One Issue is displayed per row. Columns can be selected from any available fields.
   - **Wrapped**—Each Issue returned is displayed in its own mini-table. Line breaks can be used to wrap data to multiple rows, for example, to place the Description in its own row. This style is useful for printing reports that contain many fields.
   - **Metrics and Graphics**—Create custom metrics and graphs of counts, averages and sums on any field. Single and two-level metrics are supported. Output options include table, bar, and pie charts.
   - **Export**—Export data to a text file that can be saved to your local desktop. Use this format to import BMC FootPrints Service Core data into a spreadsheet or other programs
   - **Include metrics...**—Column and Wrapped reports can also contain metric charts and graphs. Check this box to include metrics in a Column or Wrapped report (not available for Export option).
2. Click **GO** to display the rest of the report options. The steps on the next page depend on the report style selected in Step 1.
3. **Heading tab**—Define what is included in the heading at the top of the report output. Available for all styles except Export. Options include:
   - **Report Title**—This is displayed at the top of the report.
   - **Date**—The date the report is run (updates each time the report template is re-run).

- **Time**—The time the report is run (updates each time the report template is re-run).
- **Workspace name**—The name of the Workspace.
- **Logo graphic**—The logo image displayed in the current Workspace.

3. **Formatting tab**—There are two sets of options for the Formatting tab. One is for column and wrapped reports and the other is for metric reports and combo reports.

   a. **Column and wrapped reports**—Select the issue information to display in the report. All fields are available. This option is available for all styles except Metrics.

      - **Type of Field**—Select the types of fields to be displayed in the report. Options are **Server fields**, **Issue Information** fields, and **Contact Information** fields. You can select fields from any or all of these options at any time by selecting the appropriate radio button. Once a radio button has been selected, click on a field in the **Fields** list and then click the **Add Field** button to display the field in the **Selected Fields** list. **Selected Fields** are displayed in the report in the order in which they appear in the list. Change the order by clicking on the field in the **Selected Fields** list and then clicking the **Change Order** up and down arrows. Remove a field from the **Selected Fields** list by clicking on the field and then clicking the **Remove** button. The **Reset** button allows you to reset the **Selected Fields** list to its default state and will do so regardless of which radio button has been selected (in other words, if you added Issue Information fields and then clicked the Contact Information button and added contact fields, then clicked **Reset**, all of the added fields, both Issue Information and Contact Information, are removed). Some fields have special characteristics:

         - **Email History**—The Email History field is a special field that includes the email history in the report. This provides an audit trail in reporting. Because this type of report searches every record included in the report for every email notification, using this field can cause a slowdown in the reporting.
         - **History**—The History field is a special field that includes the Issue history in the report. This provides an audit trail in reporting. Because this type of report searches every record of every change to the Issues that are being reported, using this field can cause a slowdown in the reporting.
         - **Last Edited By**—The Last Edited By field is a special field that displays the last user that edited a record. To include system edits as well (such as those performed as an Autofield action), clear the **Display the most recent non-system user who modified the Issue** check box.

      - **Line Break**—Insert a line break (Wrapped style only).
      - **Description**—Select which descriptions to include in the report and when to wrap the data (only applies if Description is included in the Selected Fields box). You can include all descriptions, the original, newest, two most recent, or three most recent descriptions in your report.
      - **Multi-line field wrapping**—Select Don't Wrap and the data is displayed on a single line. Otherwise, to wrap lines, choose **Wrap Every** *X* **Characters** and enter the number of characters at which to wrap in the text field.
      - **Process/Phase Voting Details**—If Change Manager is enabled, you may have options to display information regarding Change Manager approvals in the report. Select one or both checkboxes to display the information. Check the box for Display Final Decision information for each Issue to display whether or not the proposed changes were approved or denied. Check the box for Display Voting History for each Issue to display the record of voting on each issue.

- **Filter Voting History As Follows**—If the Voting History checkbox is checked, select the voting history to be displayed from the drop-down field. Options are: All Processes/Phases, Current Process/All Phases, Current Process/Current Phase [AllVotes], Current Process/Current Phase [Recent Vote].
    - **Assignees**—If Assignees is selected, the full names of the assignees are displayed in the report (e.g., Bob Smith). This is not suitable for importing the report output into another Workspace, as user ID's must be specified in a data import file. To create a file that includes assignees user IDs (e.g., Bob Smith), use the System Administration Export Workspace Data option.
    - **Sort Results By**—Select how the issues are sorted in the output. The issues can be sorted by up to three levels of criteria and in ascending (from lowest to highest) or descending (from highest to lowest) order. In the Field drop-down, select the field on which the issues are to be sorted. If a text field is selected, the issues are sorted alphabetically based on the first character in the field. If you select a number field, such as Issue Number, the issues are sorted numerically. If the sort is by Status, then the data is sorted according to the Status number, regardless of the label that is displayed in the Status field. For subsequent levels of sorting, the issues are sorted within each field of the preceding sort. For example, if issues are sorted first based on the Status field and a secondary sort is performed according to Issue Number, the all of the issues with a Status of Urgent might be displayed first, starting with the lowest Issue Number up to the highest within that group of Urgent issues. With regard to the Heading checkboxes, if a Heading checkbox is checked, a heading is displayed in the report to indicate how the issues were sorted. For example, if Status was selected, then a heading would be displayed at the beginning of the list indicating which Status was used in sorting the issues that followed. A new heading would then be displayed to indicate when the next set of Statuses began.

b. **Metrics**—Create custom metrics and graphs of counts, averages, and sums on any field. The option is available for Metric style, and for Column and Wrapped style if the Combo checkbox is checked. Refer to Metrics and Graphics for details on Metrics options.

NOTE

This section only determines which fields to display; it does not determine the selection criteria for the report. The criteria are chosen later in the report.

4. **Issue Criteria tab**—Select the criteria, using issue fields, for the report. Only select the criteria you want to search on. It is important to understand the meaning of relative periods and aging in order to obtain accurate information, especially as the searching and reporting functions of BMC FootPrints Service Core rely on the same types of criteria. If a search is requested on Issues for "the previous three months," and the date is the 15th of May, then the period searched or reported on will be from February 15th through May 14th, inclusive. That is, the report or search will exclude the current date and give the three month period prior to the current date. This is to ensure that reports and searches yield consistent results. If reports and searches included the current date, then the results might differ depending on the time of day at which the search or report was performed.
5. **Contact Criteria tab**— Select any additional criteria, using address book fields, for the report. Only select the criteria you want to search on.
6. **Advanced Criteria tab**— The BMC FootPrints Service Core Advanced Reporting criteria section uses the same mechanism as the Advanced Search. Refer to the topic on Advanced Search for detailed explanation of criteria.

NOTE

It is important to understand the meaning of relative periods and aging in order to obtain accurate information, especially as the searching and reporting functions of BMC FootPrints Service Core rely on the same types of criteria. If a search is requested on Issues for "the previous three months," and the date is the 15th of May, then the period searched or reported on will be from February 15th through May 14th, inclusive. That is, the report or search will exclude the current date and give the three month period prior to the current date. This is to ensure that reports and searches yield consistent results. If reports and searches included the current date, then the results might differ depending on the time of day at which the search or report was performed.

7. **Save/Run tab**—Click **GO** to run the report. To save the report, enter a name before you run it. Select Personal to save the report for yourself. Select Shared/Internal to share your report template with other internal BMC FootPrints Service Core users. Shared/Public reports are available to all users including customers (the report only contains data the user is allowed to see). Shared/Public reports appear on the customer Pre-Defined Reports page. Each time a saved report template is run, it returns the latest matching data.

NOTE

Saving the report here only saves the report formatting options and criteria chosen in this form, not the results of the report. This feature can be used to run the same report in the future, for example, once a week. Each time the report is run, it returns the latest data from the current Workspace. Saving report output is covered in the topic on Saving and Printing Report Data.

After you click **GO**, the report is displayed in a separate browser window. Large reports sometimes take a few minutes to run. To view the details of an Issue, click the Issue number (or whatever field is in the first column) in the report. This displays the Details page for that Issue in the main frame.

The report can be saved or printed from the browser window. If the Export style was selected, a Save As dialog box is displayed. Save and name the report to your local hard drive.

NOTE ON PERMISSIONS

Reports can be restricted based on a user's Role. Custom Reports may not be available or some options may not appear if your role does not allow access. Please consult your BMC FootPrints Service Core administrator for more information.

Metrics and Graphics

Custom reports can contain metrics and graphs of counts, averages, and sums on any field. Single and two-level metrics are supported and multiple metrics can be included in one report. Output options include table, bar, and pie charts. You must select the Metrics and Graphics or Combo style option.

These options appear in the Metrics section of the Custom reports:

1. **Type**—Each metric can represent one of the following types:
   - **Count**—A count on field data. Applies to virtually any field, including Status, Priority, and most Issue Information and Contact Information fields. Does not apply to Title, Description, and multi-line text fields, as these usually contain unique data. For example, a count on the Status field would return the number of Issues in each status.
   - **Average**—An average on the sum of all field data for the Issues returned. Only applies to built-in statistics and custom number fields. The built-in statistics available are:
     - **Age of Issue**—The elapsed time since the Issue was created (should only be applied to reports that report on active Issues).
     - **Time to Close**—The elapsed time from when the Issue was created until the Issue was closed (should only be applied to reports that report on closed Issues).
     - **Total Billing**—Total amount billed for the Issue based on time tracking data and users' hourly billing rates.
     - **Total Time**—Total work time spent on the Issue based on time tracking data.

NOTE

The Total Billing and Total Time statistics are based on the total life of the issue, regardless of date ranges or users selected in the report criteria. For time tracking data for specific users and date ranges, please use the Time Tracking Reports.

- **Sum**—The sum of all field data for the Issues returned for the field specified. Only applies to built-in statistics mentioned above and custom number fields.

2. **Field**—Select the field for which to create a metric. The fields available depend on the fields in the current Workspace and the metric type (see above).
3. **Subtotal By**—A two-level metric can be reported by selecting a second field here. For example, if Average Age of Issue was selected as the first field and Assignee is selected here as the subtotal, the average age of Issues is broken down by Agent assigned. This feature is optional.

   If, in the Subtotal By field, the user selects a date or date/time field, a dependency drop-down is displayed so that the user can specify that the subtotal be broken down by day, week, month, year, quarter, day of week, day and hour, or hour.
4. **Format**—Select the output style for the metric. Options are:
   - **Table**—Displays data in a text-based table.
   - **Chart**—Displays data in a color graphical chart (see below). Custom chart controls, colors and fonts can be administered by clicking in the background area of a chart (not on the bars or pie slices). This only works when the metrics report is using a single lookup. When reporting using a subtotal in the Metrics configuration, this functionality is not available.
   - **Table and Chart**—Both tables and charts are displayed (default).
5. **Chart Type**—If Chart or Table and Chart are selected, select a chart type. Options are:
   - **Bar**—Color bar graph, with one bar for each value. For two-level metrics, one long bar chart or multiple charts can be created.
   - **Pie**—Displays data in a color pie chart. For two-level metrics, a series of pie charts are displayed.
6. **Sort**—Select how the data is sorted in the output:
   - **By Field/Subtotal data**—Data is sorted by alphabetical or logical field data order.
   - **By metric values**—Data is sorted by frequency or amount descending. If the metric is a count by Status, then the statuses are displayed in the chart from highest to lowest: Open-34, Pending-22, Waiting for Approval-4, etc.
   - For two-level metrics, the second field is sorted within each group of the first field.
7. **Display Position**—Select whether to place metrics before or after detailed Issue data (Combo reports only).
8. Click **Add** to add the metric to the report. The metric is added to the dialog box to the right.
9. Continue to create additional metrics following the steps above.
10. To remove a metric, highlight it in the dialog box and click **Delete**.
11. Select choices for the other report options, including Heading, Report Criteria, etc. When the report is generated, it includes the metrics that were selected above.

NOTE

The options above are for selecting the metrics to be reported on. The results are affected by the criteria selected for the report in the Report Criteria section. For example, if a metric of count on Status is selected, the number of Issues per Status returned is different if the criteria limits the report to only high priority Issues, as opposed to all priorities. The criteria must be selected carefully to ensure meaningful metrics.

Sample Reports

Here are some samples of the different report formats:

1. Column Report:

Active Issues by Assignee (12:44 PM, 09/14/2006)

NUMARA FootPrints

This report contains data from 94 Issues.

Issue Number	Priority	Status	Title	Last Edit Date	Date Submitted	Assignees
Assignees: Hardware: Kam Akrami						
9569	Medium	Open	server qwevqrewe down	09/12/2006	09/12/2006	Hardware: Kam Akrami
Assignees: Hardware: Don Cholish						
Master Issue 9583						
9583	Medium	Open	New-Hire	09/13/2006	09/13/2006	Hardware: Don Cholish
Subtasks of Master Issue 9583						
9584	Medium	Open	Build PC for new hire	09/13/2006	09/13/2006	Hardware
9585	Medium	Open	Create Acct. for new hire	09/13/2006	09/13/2006	Network
9586	Medium	Open	Build Laptop for new hire	09/13/2006	09/13/2006	Hardware
9587	Medium	Open	Setup Phone for new hire	09/13/2006	09/13/2006	Hardware

Column Report

2. Wrapped Report:

Active Issues by Assignee (12:49 PM, 09/14/2006)

NUMARA FootPrints

This report contains data from 66 Issues.

Master Issue 9583

Issue Number	Priority	Status	Title	Last Edit Date	Date Submitted	Assignees
9583	Medium	Open	New-Hire	09/13/2006	09/13/2006	Hardware: Don Cholish

Description

Entered on 09/13/2006 at 13:27:23 by Don Cholish:
new hire master

Issue Number	Priority	Status	Title	Last Edit Date	Date Submitted	Assignees
9584	Medium	Open	Build PC for new hire	09/13/2006	09/13/2006	Hardware

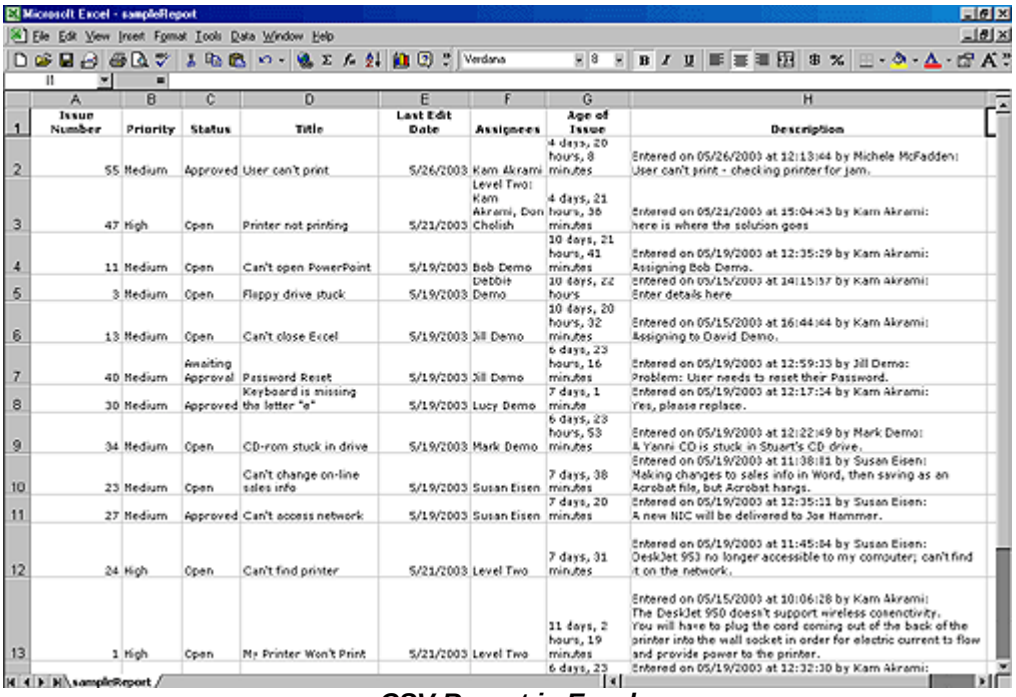
Description

Entered on 09/13/2006 at 13:27:24 by Escalated:
Build PC for new hire*.

*See Master Issue for more details

Wrapped Report

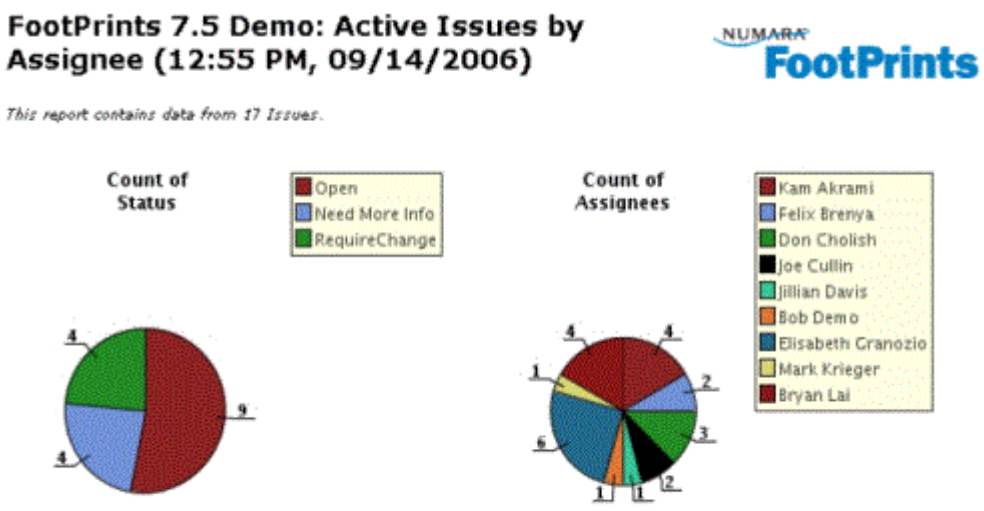
3. Exported Report:



	Issue Number	Priority	Status	Title	Last Edit Date	Assignees	Age of Issue	Description
2	55	Medium	Approved	User can't print	5/26/2003	Kam Akrami	4 days, 20 hours, 8 minutes	Entered on 05/26/2003 at 12:13:44 by Michele McFadden: User can't print - checking printer for jam.
3	47	High	Open	Printer not printing	5/21/2003	Level Two: Kam Akrami, Don Cholish	4 days, 21 hours, 36 minutes	Entered on 05/21/2003 at 15:04:43 by Kam Akrami: here is where the solution goes
4	11	Medium	Open	Can't open PowerPoint	5/19/2003	Bob Demo	10 days, 21 hours, 41 minutes	Entered on 05/19/2003 at 12:35:29 by Kam Akrami: Assigning Bob Demo.
5	3	Medium	Open	Floppy drive stuck	5/19/2003	Debbie Demo	10 days, 22 hours	Entered on 05/15/2003 at 14:15:57 by Kam Akrami: Enter details here
6	13	Medium	Open	Can't close Excel	5/19/2003	Jill Demo	10 days, 20 hours, 32 minutes	Entered on 05/15/2003 at 16:44:44 by Kam Akrami: Assigning to David Demo.
7	40	Medium	Awaiting Approval	Password Reset	5/19/2003	Jill Demo	6 days, 23 hours, 16 minutes	Entered on 05/19/2003 at 12:59:33 by Jill Demo: Problem: User needs to reset their Password.
8	30	Medium	Approved	Keyboard is missing the letter "e"	5/19/2003	Lucy Demo	7 days, 1 minute	Entered on 05/19/2003 at 12:17:54 by Kam Akrami: Yes, please replace.
9	34	Medium	Open	CD-rom stuck in drive	5/19/2003	Mark Demo	6 days, 23 hours, 53 minutes	Entered on 05/19/2003 at 12:22:49 by Mark Demo: A Yanni CD is stuck in Stuart's CD drive.
10	23	Medium	Open	Can't change on-line sales info	5/19/2003	Susan Eisen	7 days, 38 minutes	Entered on 05/19/2003 at 11:38:31 by Susan Eisen: Making changes to sales info in Word, then saving as an Acrobat file, but Acrobat hangs.
11	27	Medium	Approved	Can't access network	5/19/2003	Susan Eisen	7 days, 20 minutes	Entered on 05/19/2003 at 12:35:11 by Susan Eisen: A new NIC will be delivered to Joe Hammer.
12	24	High	Open	Can't find printer	5/21/2003	Level Two	7 days, 31 minutes	Entered on 05/19/2003 at 11:45:04 by Susan Eisen: DeskJet 950 no longer accessible to my computer; can't find it on the network.
13	1	High	Open	My Printer Won't Print	5/21/2003	Level Two	11 days, 2 hours, 19 minutes	Entered on 05/15/2003 at 10:06:28 by Kam Akrami: The DeskJet 950 doesn't support wireless connectivity. You will have to plug the cord coming out of the back of the printer into the wall socket in order for electric current to flow and provide power to the printer.
							6 days, 23	Entered on 05/19/2003 at 12:32:30 by Kam Akrami:

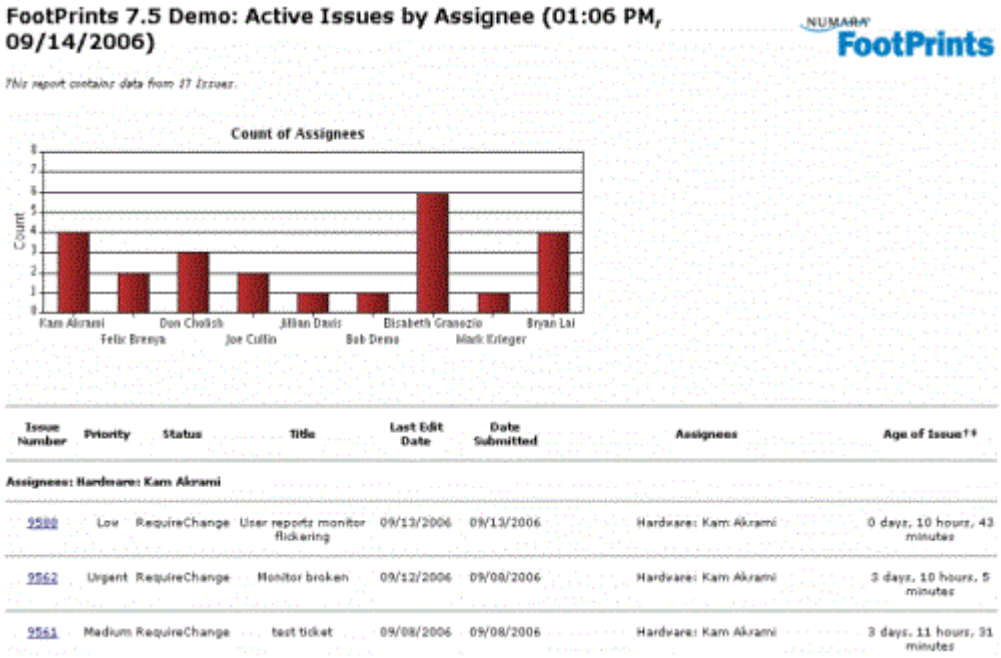
CSV Report in Excel

4. Metrics Report with pie charts:



Metrics Report

5. Combo report with columns and bar chart:



Combo Report with Columns and Bar Chart

Saving and Printing Report Data

Report data can be saved, printed, and distributed in a number of ways:

- **HTML**—After the report is displayed, it can be saved as an HTML file right from the browser window.

  To save report data in:

  - **Internet Explorer**:
    1. Select File | Save As in the browser.
    2. Enter a name under which to save file.
    3. Select the type of file to save report as (e.g., HTML) for **Save as type**.
    4. Browse in the **Save In** dialog to choose where on the local machine to save the file.
    5. Click the **Save** button.
  - **Firefox**:
    1. Select File | Save Page As...
    2. Select "**All Files**" for "**Save as type**".
    3. Enter a name to save file as in **File name**, and include the .html extension in the name. For example, to save the report as "**My Report**", the name should be "**My Report.html**".
    4. Use "**Save In**" to choose where to save the file.
    5. Click the "**Save**" button.
- **Text File**—If Export is chosen for report style, report data is saved to your local machine. After you click **GO**, a Save As dialog box is displayed. Select where on your local machine or network to save the file and click **Save**.
- **Printing**—Reports can be printed right from the browser. Select File | Print to display the browser's Print dialog box. If the report is wider than the screen, choose Landscape orientation. There are certain functions of the browser that BMC FootPrints Service Core cannot override. For example, page breaks cannot be controlled when printing directly from the browser (this is a function of HTML). In addition, for very wide reports, some text on the right may be cut off by the printer, even when printing in Landscape mode. To compensate, if the Description or other multi-line text field is included in the report, use the Description Wrapping feature to force the text to wrap more narrowly. For example, instead of wrapping at 70 characters (the default), try 50 characters. If text is still being cut off, we recommend trying the Wrapped report and inserting line breaks, or using the Export option.
- **Auto Run Reports**—Saved report templates can be run automatically, with the output emailed to a defined set of users and saved to the server. Please refer to Auto Run Reports for more information.

Saved and Shared Reports

Saved Reports

Custom report templates can be saved and run at any time. Each time a saved report is run, it returns the latest data from the current Workspace. Reports can be saved for personal use and for other Workspace members. Access to saved reports is defined by a user's Role.

Instructions on creating and saving report templates can be found in Custom Reports.

Shared Reports

Report templates can be shared with other BMC FootPrints Service Core users:

- **Shared/Internal Reports** appear on the Saved Reports page for Agents in the Workspace who have access to Shared Reports. An Agent whose role restricts him or her to seeing only his own Issues or his Team's Issues only sees those Issues that match the criteria of the report and that he is allowed to see.
- **Shared/Public Reports** are also available to customers, but such reports only contain data the customer is allowed to see (either his or her own Issues or those of the Organizational Unit).

Instructions on creating and saving report templates can be found in Custom Reports. Each time a saved report template is run, it returns the latest matching data.

Run a Saved or Shared Report

1. Select Reports | My Reports from the BMC FootPrints Service Core Toolbar.
2. Select the report you want to run from the Personal Reports, Shared Reports, or Metric Reports drop-down.
3. Select Run (this is the default).
4. Click **GO**. The report results are displayed in a separate browser window. If the report template is of Export style, the Save As Windows dialog is displayed instead.

Edit a Saved or Shared Report

1. Select Reports | My Reports from the BMC FootPrints Service Core Toolbar.
2. Select the report you want to edit from the Personal Reports or Shared Reports drop-down.
3. Select Edit above the corresponding drop-down.
4. Click **GO**. The Custom Report page is displayed, pre-filled with the report criteria and formatting options.
5. Make your changes.
6. To save the edited report with the same name as the original, leave the name in the Save this Report As text box as-is. To save it as a new report, enter a different name.
7. When you are finished, click **GO**. The report results are displayed in a separate browser window. If the report template is of Export style, the Save As Windows dialog is displayed instead.

Delete a Saved or Shared Report

1. Select Reports | My Reports from the BMC FootPrints Service Core Toolbar.
2. Select the report you want to delete from the Personal Reports, Shared Reports, or Metric Reports drop-down.
3. Select Delete above the corresponding drop-down.
4. Click **GO**. The saved report template is deleted.
5. Deleting a Shared Report deletes the report for all users.

NOTE ON PERMISSIONS

Shared reports are available to run, edit, and delete based on a user's role. If your role does not allow access, some of the options described above may not be displayed or otherwise available to you. Contact your BMC FootPrints Service Core administrator for more information.

Metric Reports

Metric Reports

Metric reports return statistical data and metrics about the Workspace, rather than returning specific Issue data. Output options include HTML Text, Graphical, and Text File Export. The information returned by these reports can help you measure how well your organization performs and where improvement is needed.

The following reports can be run from the Reports | Metrics menu:

- Current Performance by Team/Agent—Report on Issues currently active in the Workspace, grouped by assignee(s).
- Issue Statistics—Provide quick statistical information on specific groups of Issues.
- First Contact Resolution—Determine the percentage of Issues that were created with a status of Closed versus the number of issues that were received for a specific time period.
- Resolution Rate—Determine the rate at which Issues are resolved for specific criteria.
- Received vs. Closed Reports—List how many Issues were received and how many were closed, based on specific criteria.
- Turn-around Time—Measure how long issues have remained in a particular status or how long it takes to get from one status to another.
- Service-level Agreements—The service-level agreements reporting option returns the number and percent of Issues achieved, breached, resolved and unresolved per service-level agreement. This type of report cannot be saved and auto run.
- Historical—Return historical data on Issues in the current Workspace, including past statuses, priorities, and elapsed time. This type of report cannot be saved and auto run.
- Query Statistics—Return statistics on searches of the database, which can be categorized by whether they were performed by Customers or Agents. This type of report cannot be saved and auto run.

NOTE ON TEAMS

In all reports broken down by assignee, the bar/slice/row for a team only lists Issues assigned to that team and none of its members. If an issue is assigned to multiple teams, it counts for each team, just the way an issue assigned to multiple Agents counts for each Agent. If an issue is assigned to Team A, Team B, and a member of Team B, it counts for Team A and the member of Team B. If an issue is assigned to Team A, Team B, and an Agent who is a member of both teams, it only counts for the Agent.

NOTE ON COUNTS BY ASSIGNEE

Counts broken down by assignee may not add up to the total number of Issues in a report if Issues are assigned to multiple people.

Current Agent/Team Performance Report

The Current Agent/Team Performance reports provides data on Issues currently active in the Workspace, grouped by assignee(s). The report shows the average age of active Issues by assignee, allowing you to extrapolate meaning for the data in terms of "performance". Assignees can be individuals or teams.

If no teams are defined for your Workspace, you are only offered the choice to report by Agent.

The options for report output are:

- **HTML**—Display report as HTML in a browser window.

- **Graphical**—Create chart images (JPEG files) that can be printed or saved to disk and imported into another program.
- **Export**—Create a text file which can be read by spreadsheets and other programs.

If you have grouped your Agents into teams, you are offered all of the following choices:

- **Team and Agent**—Break down active Issues by teams and Agents. Agents who belong to teams are listed under their team.

NOTE
When the report includes totals for both teams and Agents, the totals for the team row do not include Issues that are assigned to individuals within the Team.

- **Team**—Break down active Issues by teams only.

NOTE
Each team total also includes Issues assigned to individual Agents within the team.

- **Agent**—Break down active Issues by Agents only.

NOTE
Issues assigned to multiple Agents are included in the totals for each Agent. This means that the total number of Issues as reported here may exceed the total number of Issues you see elsewhere. The reason for this is that a single Issue with multiple assignees is counted for each of the assignees; if you have three Agents assigned to an Issue, it is counted three times.

Issue Statistics Report

Issue Statistics reports provide quick information on specific groups of Issues. Exact and relative time (e.g., before or after date *X*) periods are available. To include all Issues, select After and a date before the first Issue was created or use Before and select tomorrow's date.

The options for report output are:

- **HTML**—Display report as HTML in a browser window.
- **Graphical**—Create chart images (JPEG files) that can be printed or saved to disk and imported into another program.
- **Export**—Create a text file which can be read by spreadsheets and other programs.

The following Issue Statistic reports are available:

- **Open Issues by Priority**—Number of Issues with Open status by priority, with the average time the Issues have been open.
- **Closed Issues by Priority**—Number of Issues with Closed status by priority, with the average time the Issues took to close.
- **Active Issues by Priority**—Number of active Issues (includes Open, Requests, and any custom statuses) by priority, with the average time the Issues have been open.
- **Active Issues by Status**—Number of active Issues (includes Open, Requests, and any custom statuses) by status and the average time the Issues have been open.
- **All Issues by Status**—Number of all Issues by status and the average time the Issue has existed since it was opened. This includes time that an Issue may have been in the Closed status.

- **Active Issues by Assignee**—Number of current active Issues (includes Open, Requests, and any status except Closed) by assignee and the average time the Issues have been open.
- **Closed Issues by Assignee**—Number of closed Issues in the workspace by assignee and the average time each assignee took to close the Issues.

NOTE

When viewing report data by assignee, remember that an Issue can be assigned to more than one individual or team at a time. When an Issue is assigned to more than one individual and/or team, it is counted in the report for each assignee, that is, an Issue assigned to three people and one team would be counted for each of the individuals and the one team. This means that, if you count up the total number of active Issues in the report, they can exceed the total given for the number of active Issues that you see displayed on the Homepage.

Received vs. Closed

Received vs. Closed reports list how many issues were received and how many were closed, based on specific criteria.

1. From the **Reports | Metrics** menu, select Received vs. Closed, then click **Go**.
2. Select a report output format from the following options, then click **Go**.
   - **HTML** - Display report as HTML in a browser window.
   - **Graphical** - Create chart images (JPEG files) that can be printed or saved to disk and imported into another program.
   - **Export** - Create a text file which can be read by spreadsheets and other programs.
3. Select one of the following reports, then click **Go**. For those indicated by asterisks below, you must also indicate a time period in step 4.
   - Received vs Closed by Priority*
   - Received vs Closed by Assignee*
   - Received vs Closed by Team Assigned*
   - Received vs Closed Today by Hour
   - Received vs Closed Yesterday by Hour
   - Received vs Closed This Week by Day
   - Received vs Closed Last Week by Day
   - Received vs Closed This Month by Week
   - Received vs Closed Last Month by Week
   - Received vs Closed This Year by Month
   - Received vs Closed Last Year by Month

Issue Information

- Received vs Closed by Category*
- Received vs Closed by Platform*
- Received vs Closed by Problem Type*

- Received vs Closed by Root Cause*
- Received vs Closed by Symptom*

Contact Information

- Received vs Closed by Department*
- Received vs Closed by Service Level*

4. *For each of the reports above, select options below:

- **Report by**—Select Day, Week or Month.
- **Time Period**—Define the date range from the following options:
  - **On**—Specify a particular date (leave second date blank).

NOTE

When "on" a single date is chosen, and you are reporting by month, the report contains Issues for the month that date is in. If "on" a single date is chosen, and you are reporting by week, the report contains Issues for the week the date is in.

  - **Before**—Issues that were created/last edited before the specified date are returned (leave second date blank).
  - **After**—Issues that were created/edited after the specified date are returned (leave second date blank).
  - **Between**—Returns Issues created/last edited between the dates specified (use both date fields).
  - **Exact**—Specify exact dates to search on in the period specified. Enter the date or dates to search on. Click the calendar icon to display a searchable calendar.
  - **Relative**—Searches by relative date, allowing you to create a search or report that for example, returns Issues for the last month. Select a number from the first drop-down (1-31), and select the period from the second drop-down (Day, Week, Month, or Year).
  - **Range**—Select this to search by a particular time period, e.g., yesterday, last Sunday, etc.

Service Level Reporting

Management reports can be generated to gauge how well service levels are being met.

NOTE

Service Level Reporting is affected by the pending statuses specified when creating the service level. Events that occur and time spent in a pending status is excluded from service level reports. For details on specifying pending statuses, refer to Creating the Service Level Field. To display the list of pending statuses, select Administration | Workspace from the BMC FootPrints Service Core Toolbar and then select Service Level Management from the Automated Workflow section of the main frame. Next, click the Edit button of the Pending Statuses List in the main frame of the Service Level Management Administration page. The Pending Statuses page is displayed. All of the statuses defined as "pending" are displayed in the Selected Statuses field.

To run a Service Level report:

1. Select Reports | Metrics from the BMC FootPrints Service Core Toolbar and choose the Service Level Agreements metric report in Step 1, then click **GO**. If this option is not available, you may not have permission to run this report type or service levels are not enabled in this workspace.

2. Select the output type under Report Formatting:
   - **HTML**—Display report as HTML in a browser window.
   - **Export**—If you chose to output the report to a text file, select a file format in which to output the report. Format choices are MS Excel (i.e., comma separated file), tab delimited file, or a custom separator of your choice in a text file.
3. On the next page, in the first part of Step 3, select the date range on which to report in the Report on Issues Submitted fields.
   - **Exact**—Specify exact dates to search on in the period specified. Enter the date or dates to search on. Click to display a searchable calendar.
     - **On**—Specify a particular date (leave second date blank).

NOTE

When "on" a single date is chosen, and you are reporting by month, the report contains Issues for the month that date is in. If "on" a single date is chosen, and you are reporting by week, the report contains Issues for the week the date is in.

     - **Before**—Issues that were created/last edited before the date entered are returned (leave second date blank).
     - **After**—Issues that were created/edited after the date entered are returned (leave second date blank).
     - **Between**—Returns Issues created/last edited between the dates specified (use both date fields).
   - **Relative**—Searches by relative date, allowing you to create a search or report that returns Issues, for example, for the last month. Select a number from the first drop-down (1-31) and select the period from the second drop-down (Day, Week, Month, or Year).
   - **Range**—Select this to search by a particular time period, e.g., yesterday, last Sunday, etc.
3. For Select SLA Time to report on, choose between whether to report on Issues according to SLA Due Date (the resolution time defined for this service level) or SLA Response Time (the amount of time allowed for Issue response for a service level).
4. Select the earliest status accepted for Issues to be considered as having met the service level. For example, if your organization considers Issues to have met their service level only when the Issue is closed, select Closed. But if your organization considers Issues to have met their service level if they have been responded to within the resolution time frame, and you have a status of Responded, select that status instead.
5. Select fields, which will be used to break down the Issues in the list further according to the selected fields.
6. Click **GO**. The report output is displayed in a separate window.

The report includes the following statistics for each service level:

- **Achieved**—The number of Issues and the percentage of the total that met the service level resolution time.
- **Breached**—The number of Issues and the percentage of the total that did not meet the service level resolution time.

  Breached is broken down into two additional categories:
  - **Resolved**—The number of Issues and the percentage of the total that were eventually resolved.
  - **Unresolved**—The number of Issues and the percentage of the total that were never resolved.

- **Neither**—The number of Issues and the percentage of the total that have neither achieved nor breached their service targets, as they have not yet reached their due date/time.
- **Total**—The total number of Issues for that service level in the time period specified.

First Contact Resolution

First Contact Resolution reports determine the percentage of issues that were created with a Resolved status versus the number of issues that were received during a specified time period. The workspace administrator defines which statuses are Resolved statuses in the Issue Lifecycle. If you need to know which statuses are Resolved statuses, contact your workspace administrator.

The following issues are counted as First Contact Resolutions:

- An issue was created by an agent and the issue status was set to one of the Resolved statuses on issue creation.
- An issue was created by a customer as a request via the BMC FootPrints Service Core self-service and the issue status was changed by an agent to one of the Resolved statuses on the first agent edit after the creation of the issue.
- An issue was created by a customer via email into BMC FootPrints Service Core and the issue status was changed by an agent to one of the Resolved statuses on the first agent edit after the creation of the issue.

If an issue was counted as a First Contact Resolution and then its status was changed to a status that is not one of the Resolved statuses, it is no longer counted as a First Contact Resolution and cannot be counted as one again.

The options for report output are:

- **HTML**—Display report as HTML in a browser window.
- **Graphical**—Create chart images (JPEG files) that can be printed or saved to disk and imported into another program.
- **Export**—Create a text file which can be read by spreadsheets and other programs.

The following options are available:

- **Report by**—Specify the time period by which to group Issues. Options include Month, Week, and Day received.
- **Time Period**—Define the date range for searching.
  - **Exact**—Specify exact dates to search on in the period specified. Enter the date or dates to search on. Click the calendar icon to display a searchable calendar.
    - **On**—Specify a particular date (leave second date blank).

NOTE

When "on" a single date is chosen, and you are reporting by month, the report contains Issues for the month that date is in. If "on" a single date is chosen, and you are reporting by week, the report contains Issues for the week the date is in.

    - **Before**—Issues that were created/last edited before the date entered are returned (leave second date blank).
    - **After**—Issues that were created/edited after the date entered are returned (leave second date blank).
    - **Between**—Returns Issues created/last edited between the dates specified (use both date fields).

- **Relative**—Searches by relative date, allowing you to create a search or report that returns Issues, for example, for the last month. Select a number from the first drop-down (1-31) and select the period from the second drop-down (Day, Week, Month, or Year).
- **Range**—Select this to search by a particular time period, e.g., yesterday, last Sunday, etc.

- **Breakdown by**—Specify whether to display subtotaled results by agent/customer, team, or neither.
- **Show First Contact Resolution Rate out of:**
  - **Issues Received**—The percentage of calls resolved immediately based on the total number of calls received for the time period
    or
  - **Issues Received and now Resolved**—The percentage of calls resolved immediately based on the total number of calls received and resolved.
- **Do Not Include Issues Created By**—Issues that were created via one or more of the following methods can be excluded from the report. Click the checkbox next to the methods you want to exclude:
  - **Email**
  - **Customer Self-service**
  - **Agent**

Resolution Rate

Resolution Rate reports determine the rate at which Issues are resolved based on specific criteria.

The options for report output are:

- **HTML**—Display report as HTML in a browser window.
- **Graphical**—Create chart images (JPEG files) that can be printed or saved to disk and imported into another program.
- **Export**—Create a text file which can be read by spreadsheets and other programs.

The options for creating Resolution Rate reports are:

- **Report by**—Specify either the time period by which to group issues, or report by Assignees
- **Time Period**—Define the date range for searching
  - **Exact**—Specify exact dates to search on in the period specified. Enter the date or dates to search on. Click the calendar icon to display a searchable calendar.
    - **On**—Specify a particular date (leave second date blank).

NOTE

When "on" a single date is chosen, and you are reporting by month, the report contains Issues for the month that date is in. If "on" a single date is chosen, and you are reporting by week, the report contains Issues for the week the date is in.

- **Before**—Issues that were created/last edited before the specified date are returned (leave second date blank).
- **After**—Issues that were created/edited after the specified date are returned (leave second date blank).
- **Between**—Returns Issues created/last edited between the dates specified (use both date fields).

- **Relative**—Searches by relative date, allowing you to create a search or report that returns Issues, for example, for the last month. Select a number from the first drop-down (1-31), and select the period from the second drop-down (Day, Week, Month, or Year).
- **Range**—Select this to search by a particular time period, e.g., yesterday, last Sunday, etc.

- **Cycle Time**
  - **30-60-90 Day**—Break down Issues resolved in less than 30 days, 30-60 days, 60–90 days, etc.
  - **7-Day Cycle Time**—Break down Issues resolved in less than 1 day, 1-7 days, 8-14 days, etc.
  - **Hourly/Daily**—Break down Issues resolved by hour.
  - **Hourly/Daily (Work Schedule)**—If a Workspace Work Schedule is defined, break down Issues resolved by hour within working hours.

Turn-around Time

Turn-around Time reports allow you to measure how long Issues have remained in a particular status or how long it takes to get from one status to another.

The options for report output are:

- **HTML**—Display report as HTML in a browser window.
- **Graphical**—Create chart images (JPEG files) that can be printed or saved to disk and imported into another program.
- **Export**—Create a text file which can be read by spreadsheets and other programs.

The reports available are:

- **Average Time Spent in a Particular Status**
- **Average Time to from Status A to Status B**
- **Average Time Spent in Each Status**

For each Turn-around Time report, you can chose to report by:

- **Agent**
- **Team**—Note that this option appears only if teams have been defined for your Workspace.
- **Time Period**

After you have selected one of the Turn-around Time reports and specified which information to gather, click **GO**.

Different options are available for these reports. The options are explained below for each type of Turn-around Time report.

Average Time Spent in a Particular Status

- **Status**—Select the status to report on.
- **Use Work Schedule in Time Calculations**—Check this box if you want to include only time spent during regular work hours, as defined in the Workspace Work Schedule.
- **Include Issues**—Define the date range for searching:
  - **Created or Edited**—Specify exact dates to search on in the specified period. Enter the date or dates to search on. Click the calendar icon to display a searchable calendar.
    - **On**—Specify a particular date (leave second date blank).

NOTE

When "on" a single date is chosen, and you are reporting by month, the report contains Issues for the month that date is in. If "on" a single date is chosen, and you are reporting by week, the report contains Issues for the week the date is in.

- o **Before**—Issues that were created/last edited before the specified date are returned (leave second date blank).
- o **After**—Issues that were created/edited after the specified date are returned (leave second date blank).
- o **Between**—Returns Issues created/last edited between the specified dates (use both date fields).

- ▪ **Relative**—Select this to search by relative date, allowing you to create a search or report, for example, that returns Issues for the last month. Select a number from the first drop-down (1-31) and select the period from the second drop-down (Day, Week, Month, or Year).
- ▪ **Range**—Select this to search by a particular time period, e.g., yesterday, last Sunday, etc.

Average Time to go from Status A to Status B

- **Starting Status**—Select the starting status.
- **Ending Status**—Select the ending status.
- **Use Work Schedule in Time Calculations**—Check this box if you want to include only time spent during regular work hours, as defined in the Workspace Work Schedule.
- **Include Issues**—Define the date range for searching:
  - ▪ **Created or Edited**—Specify exact dates to search on in the period specified:
    - o **On**—Specify a particular date (leave second date blank).

NOTE

When "on" a single date is chosen, and you are reporting by month, the report contains Issues for the month that date is in. If "on" a single date is chosen, and you are reporting by week, the report contains Issues for the week the date is in.

- o **Before**—Issues that were created/last edited before the specified date are returned (leave second date blank).
- o **After**—Issues that were created/edited after the specified date are returned (leave second date blank).
- o **Between**—Returns Issues created/last edited between the specified dates (use both date fields).

- ▪ **Dates**—Enter the date or dates to search on. Click the calendar icon to display a searchable calendar.
- ▪ **Relative**—Select this to search by relative date, allowing you to create a search or report, for example, that returns Issues for the last month. Select a number from the first drop-down (1-31) and select the period from the second drop-down (Day, Week, Month, or Year).

Average Time Spent in Each Status

- **Use Work Schedule in Time Calculations**—Check this box if you want to include only time spent during regular work hours, as defined in the Workspace Work Schedule.
- **Include Issues**—Define the date range for searching:
  - ▪ **Created or Edited**—Specify exact dates to search on in the period specified:

- **On**—Specify a particular date (leave second date blank).

NOTE

When "on" a single date is chosen, and you are reporting by month, the report contains Issues for the month that date is in. If "on" a single date is chosen, and you are reporting by week, the report contains Issues for the week the date is in.

- **Before**—Issues that were created/last edited before the specified date are returned (leave second date blank).
- **After**—Issues that were created/edited after the specified date are returned (leave second date blank).
- **Between**—Returns Issues created/last edited between the specified dates (use both date fields).

- **Dates**—Enter the date or dates to search on. Click the calendar icon to display a searchable calendar.
- **Relative**—Select this to search by relative date, allowing you to create a search or report, for example, that returns Issues for the last month. Select a number from the first drop-down (1-31) and select the period from the second drop-down (Day, Week, Month, or Year).

Historical Reports and Snapshot

The historical reporting option returns historical data on Issues in the current Workspace, including past statuses, priorities, and elapsed time. For example, a report can return the average and total elapsed time it took a particular service desk technician to close Issues assigned to that technician in the month of May. The report includes a breakdown of all matching Issues and the total and average times for all Issues.

To use the historical report tool, select Reports | Metrics | Historical from the BMC FootPrints Service Core Toolbar.

The options available in this report are:

- **Report Type**
  - **Historical Report—Returns all Issues from a specified time period that also match the selected assignment, status, and priority criteria.**
  - **Snapshot**—Returns a snapshot of all Issues created on a specified date that also match the selected assignment and priority criteria.
- **Report formatting**
  - **Output style**—Select whether to display the report in a browser window or output the data to a text file.
  - **File format**—If you chose to output the report to a text file, select a file format in which to output the report. Format choices are MS Excel (i.e., comma separated file), tab separated file, or a custom separator of your choice in a text file.
- **Report title**—Define what is included in the heading at the top of the report output. These options do not apply to the Text File style. Options include:
  - **Title**—Displayed at the top of the report. Enter the text you want included.
  - **Date**—The date the report is run (updates each time the report template is re-run).
  - **Time**—The time the report is run (updates each time the report template is re-run).
  - **Workspace name**—Name of the Workspace.
  - **Logo graphic**—The logo image displayed in the current Workspace.
- **Time Period**—Define the date range to search on.

- **Exact**—Specify exact dates to search on in the period specified:
  - **On**—Specify a particular date (leave second date blank).
  - **Before**—Issues that were created/last edited before the specified date are returned (leave second date blank).
  - **After**—Issues that were created/edited after the specified date are returned (leave second date blank).
  - **Between**—Returns Issues created/last edited between the specified dates (use both date fields).
- **Dates** - Enter the date or dates to search on. Click the calendar icon to display a searchable calendar.
- **Relative**—Select this to search by relative date, allowing you to create a search or report, for example, that returns Issues for the last month. Select a number from the first drop-down (1-31) and select the period from the second drop-down (Day, Week, Month, or Year).

- **Starting status in this time period**—Select the starting status that the Issue should have in the date range specified.
- **Ending status in this time period**—Select the ending status that the Issue should have in the date range specified.
- **Use Work Schedule in computing Time Elapsed between Starting Status and Ending Status**—When this box is checked, don't include time outside of the workspace work schedule when calculating the time in which an Issue was between its starting and ending statuses.
- **Assignees**—Select the user(s) to search on. Hold down the CTRL key to highlight multiple users.
- **Additional BMC FootPrints Service Core IDs**—Additional user IDs of users who do not appear in the Assignees list can be entered, each separated by a space. This is useful for searching on users who no longer belong to the Workspace.
- **Priority**—Select the priority Issues should have in the date range specified.

After choosing the report criteria, click **GO**. A second window displays the report results. If the text file option is chosen, a Windows Save As dialog box is displayed. Matching Issues, including Issue number, starting and ending dates and times, elapsed time, status and priority are displayed. At the end of the report, the total number of records returned, total elapsed time, and average elapsed time are displayed.

NOTE ON PERMISSIONS

Reports can be restricted based on a user's Role. Historical reports may not be available if your role does not allow access. Please consult your BMC FootPrints Service Core administrator for more information.

Query Statistics

The query logging feature records queries that have been placed in the Simple Search field, the date and time at which each query was made, and whether the query came from a customer or an Agent. The query statistics report performs counts on those queries based on specified criteria. To access the query statistics reports, select Reports | Metrics, then select Query statistics from the Step1: Select Report Type drop-down in the main frame. A Query Statistics report cannot be saved or autorun. Click the **GO** button when you are ready. This displays the criteria options.

Options for the query statistics reports are as follows:

- **Date Selection Section**—Define the date range for searching. The current date's data is never available in the report. This is because the data is not entered until the day is over.
    - **Exact**—Specify exact dates to search on in the period specified. Enter the date or dates to search on. Click the calendar icon to display a searchable calendar.
        - **On**—Specify a particular date (leave second date blank).

NOTE

When "on" a single date is chosen, and you are reporting by month, the report contains Issues for the month that date is in. If "on" a single date is chosen, and you are reporting by week, the report contains Issues for the week the date is in.

        - **Before**—Issues that were created/last edited before the date entered are returned (leave second date blank).
        - **After**—Issues that were created/edited after the date entered are returned (leave second date blank).
        - **Between**—Returns Issues created/last edited between the dates specified (use both date fields).
    - **Relative**—Searches by relative date, allowing you to create a search or report that returns Issues, for example, for the last month. Select a number from the first drop-down (1-31) and select the period from the second drop-down (Day, Week, Month, or Year).
    - **Range**—Select this to search by a particular time period, e.g., yesterday, last Sunday, etc.
- **Other options**—Define other reporting criteria.
    - **Queries by**—Process queries from customers, Agents, or both customers and Agents.
    - **Sort and Count by**—Sort and count the queries according to keywords occurrences or according to the entire line of the Simple Searches.
    - **Ignore words shorter than 4 characters for keyword sort**—If you chose to count and sort by keyword, choose Yes to leave words shorter than 4 characters in length out of the sort or No to include words shorter than 4 characters in the count.
    - **Exclusion List**—The exclusion list is a list of words that you can exclude from the report.
        - **Ignore words in the exclusion list**—Select Yes to leave words in the exclusion list out of the report. If you select No, the words in the exclusion list are included in the report.
        - **Review/Edit Exclusion List**—This link enables you to enter words in the exclusion list or to review the list. Administrators can edit the list. Users without administrator privileges cannot edit the list. To edit the list, click the link, type the word in the box with just one word permitted per line, and then click the **GO** button.

When you finish selecting options, click there **GO** button to generate the report.

Understanding the Query Report

Query statistics are intended to demonstrate which queries are repeated frequently and, therefore, can be used as a basis for product design. If a question keeps coming up time and again, the query statistics will show that repetition and, therefore, provide a pointer to a solution.

For example, if the query logs show that customers frequently want to know the meaning of an acronym that is used as a label on the GUI, you may want to use the full name in the GUI or use a more meaningful name to eliminate the questions. Questions that show Agents do not understand some function or other may require a change to Agent training.

When you read the report, you should be aware that the totals will differ depending on whether you count and sort by keyword or by entire line. If you count and sort by the entire line, then the number of queries processed will equal the number of instances found. If you count and sort by keyword, the number of queries processed will not necessarily match the number of word instances found in those queries.

Concurrent License Usage Report

The Concurrent License Usage report reports on license usage and is a valuable tool for system administrators to determine whether licenses are being used efficiently, additional licenses are required, or too many licenses have been obtained. To access the Concurrent License Usage report, select Reports | Metrics, then select Concurrent License Usage from the Step1: Select Report Type drop-down in the main frame. A Concurrent License Usage report can be saved and auto-run. Click the **GO** button when you are ready. Clicking the **GO** button displays the criteria options.

Options for the Concurrent License Usage report is as follows:

- **Select the license**—Define the type of license on which the report will be run. Options are Working and Logged In (Working and Logged In are explained below).
- **Select the report**—Define whether the report determines the average number of licenses used during the specified period or the maximum number of licenses used during the specified period. Maximum means the highest number during a given period, for example, if the period is one hour, then the maximum number of licenses that were actively in use during that hour may have been four, even though there may have been eight licenses or more available. Options are Average or Maximum.
- **Time period**—Define the date range for searching. The current date's data is never available in the report. This is because the data is not entered until the day is over.
  - **Exact**—Specify exact dates to search on in the period specified. Enter the date or dates to search on. Click the calendar icon to display a searchable calendar.
    - **On**—Specify a particular date (leave second date blank).

NOTE

When "on" a single date is chosen, and you are reporting by month, the report contains Issues for the month that date is in. If "on" a single date is chosen, and you are reporting by week, the report contains Issues for the week the date is in.

    - **Before**—Issues that were created/last edited before the date entered are returned (leave second date blank).
    - **After**—Issues that were created/edited after the date entered are returned (leave second date blank).
    - Between—Returns Issues created/last edited between the dates specified (use both date fields).
    - **Relative**—Searches by relative date, allowing you to create a search or report that returns Issues, for example, for the last month. Select a number from the first drop-down (1-31) and select the period from the second drop-down (Day, Week, Month, or Year).
    - **Range**—Select this to search by a particular time period, e.g., yesterday, last Sunday, etc.

Working Versus Logged In

When using the Concurrent License Usage report, you may encounter the terms Working and Logged In. Working refers to concurrent users who are currently active. Active is based on timeout values for being "inactive" and "idle", which default to 15 minutes and 60 minutes, respectively. The user must be within the limits of both to show as active.

An “inactive” concurrent agent can be kicked off if all licenses are used up and another concurrent agent attempts to log in. “Inactive” means that they have not requested a new page and the homepage refresh has not run within 15

minutes. “Idle” users will be kicked off if not enough licenses could be freed by kicking off “inactive” agents. “Idle” means that they haven’t requested a new BMC FootPrints Service Core page within the defined time limit.

BMC FootPrints Service Corenever explicitly logs you off except to free up a license. If you’re surpassed the defined limits, but the license was not requested by another user, you can come back to your browser and continue to work in that same session.

Saved Metric Reports

Saved metric reports are available to individual users based on their role privileges. Saved metric reports can be auto-run. Auto-run is only available to administrators.

Flashboard

Workspace Flashboard

Workspace Flashboard Overview

The BMC FootPrints Service Core Flashboard feature displays customizable, up-to-the-minute graphical reports of Service Desk and Workspace activity. There are two types of Flashboard. The Workspace Flashboard is only available to Workspace and System Administrators and reflects activity for the current Workspace. The Personal Flashboard is available to any Agent and reflects the individual's activity and the activity of Teams to which the Agent belongs for the current Workspace.

To access the Workspace Flashboard, select Reports | Workspace Flashboard from the BMC FootPrints Service Core Toolbar. The first time the Workspace Flashboard window opens, it displays a bar chart of Issues Received vs. Closed last 12 hours and basic statistics about the total number of calls received that day and the calls that are still active as pertain to that Workspace. You can optionally choose other statistics and charts.

There are several options from the main Flashboard window:

- **Customize**—You can include additional reports and statistics in the Workspace Flashboard window and change the format of some of the graphs from bar charts to pie charts. Refer to Customizing the Flashboard for detailed information.
- **Refresh**—Although the Workspace Flashboard window refreshes every five minutes, you can refresh the window at any time by selecting this option.
- **Print**—The contents of the Workspace Flashboard window are printed.
- **Close**—Close the Workspace Flashboard.

Customizing the Flashboard

The Workspace Flashboard can be customized to include specific charts or metrics. To customize the Flashboard, select **Customize** in the Flashboard window. A new window opens with a list of metrics that can be included or excluded by selecting the corresponding checkboxes. The Received vs. Closed charts are displayed as bar charts; the Active Issue charts allow you to choose between bar or pie chart format. In addition, you can display charts for up to four custom Workspace fields that have been defined as drop-down display fields.

Defining Graphical Flashboard Information

Received vs. Closed graphical information is displayed as bar charts. To include the charts in the Flashboard, select from one or more of the following by clicking the box in the Show column:

- **Received vs Closed last 12 hours**—A bar chart of Issues received vs. Issues closed over the last 12 hours broken down by hour.

- **Received vs Closed last 24 hours**—A bar chart of Issues received vs. Issues closed over the last 24 hours broken down by hour.
- **Received vs Closed this week**—A bar chart of Issues received vs. Issues closed over the last week broken down by day.
- **Received vs Closed last week**—A bar chart of Issues received vs. Issues closed during the previous week broken down by day.
- **Received vs Closed this month by week**—A bar chart of Issues received vs. Issues closed over the last week broken down by week.
- **Received vs Closed last month by week**—A bar chart of Issues received vs. Issues closed during the previous month broken down by week.

Active Issue information can be displayed as either bar or pie charts by selecting either pie or bar from the drop-down selection box in the Style column. Select one or more of the following to display in the Flashboard by clicking the box in the Show column:

- **Active Issues by Status**—A bar or pie chart that shows number of active Issues in the Workspace broken down by status.
- **Active Issues by Agent**—A bar or pie chart that shows number of active Issues broken down by Agent assigned.
- **Active Issues by Team**—A bar or pie chart that shows number of active Issues broken down by Team assigned.
- **Active Issues by Custom Field**—A bar or pie chart that shows number of active Issues broken down by any drop-down field (Problem Type, Department, etc.) Up to four fields can be selected.
- **Concurrent License Usage**—A pie chart that shows the number of licenses that are in use and free.

Defining Statistical Flashboard Information

Statistical Flashboard information is displayed in scoreboards. The following statistics can be displayed in the Workspace Flashboard:

- **Received Today Statistics**—Check the box in the Show column next to the statistics you want to include from the following list:
  - **Total Issues**—Total number of Issues received today.
  - **Still Active**—Of the Issues received today, the number that are still active.
  - **1st Call Resolution**—Of the Issues created by Agents today (i.e. received via phone), the percentage that were resolved on first contact (i.e. created in the "Closed" status).

NOTE

This statistic does not include Issues submitted by customers via web or email, as by definition those Issues cannot be created as closed.

  - **Average Time to Close**—Of the Issues that were received and closed today, the average elapsed time it took for them to close.
  - **Average Time Spent**—Of this Issues received today, the average time spent on them by Agents (using the Time Tracking feature).
- **Workspace Statistics**—Check the box in the Show column next to the statistics you want to include from the following list:

  - **Active Issues**—Total number of active Issues in the Workspace.
  - **Requests**—Total number of Issues in the Request status.
  - **Average Age of Active**—The average age of all active Issues in the Workspace.
- **Save Current Window Size**—If checked, the current size of the Flashboard window is saved for the future.

When you have finished customizing your Workspace Flashboard, you can save the changes just for this Flashboard display or as your default settings:

- **Apply**—Apply these settings for this time only.
- **Save**—Save these settings as your default.

Personal Flashboard

Personal Flashboard

To access the Personal Flashboard, select Reports | Personal Flashboard from the BMC FootPrints Service Core Toolbar. The first time the Personal Flashboard window opens, it displays a bar chart of Issues Received vs. Closed last 12 hours and basic statistics about the total number of calls received that day and the calls that are still active as pertain to that Agent. You can optionally choose other statistics and charts.

There are several options from the main Flashboard window:

- **Customize**—You can include additional reports and statistics in the Personal Flashboard window and change the format of some of the graphs from bar charts to pie charts. Refer to Customizing the Flashboard for detailed information.
- **Refresh**—Although the Personal Flashboard window refreshes every five minutes, you can refresh the window at any time by selecting this option.
- **Print**—The contents of the Personal Flashboard window are printed.
- **Close**—Close the Personal Flashboard.

Customizing the Flashboard

The Personal Flashboard can be customized to include specific charts or metrics. To customize the Personal Flashboard, click **Customize** in the Personal Flashboard window. new window opens with a list of metrics that can be included or excluded by selecting the corresponding checkboxes. The Received vs. Closed charts are displayed as bar charts; the Active Issue charts allow you to choose between bar or pie chart format. In addition, you can display charts for up to four custom Workspace fields that have been defined as drop-down display fields.

Defining Statistical Flashboard Information

Statistical Flashboard information is displayed in scoreboards. The following statistics can be displayed in the Flashboard:

- **Received Today Statistics for Me and My Teams**—Check the box in the Show column next to the statistics you want to include from the following list:
  - **Total Issues**—Total number of Issues received today. Checked by default.
  - **Active Issues**—Of the Issues received today, the number that are still active. Checked by default.
  - **1st Call Resolution**—Of the Issues created by the Agent or the Agent's Team today (i.e. received via phone), the percentage that were resolved on first contact (i.e. created in the "Closed" status).

NOTE

This statistic does not include Issues submitted by customers via web or email, as by definition those Issues cannot be created as closed.

- **Average Time to Close**—Of the Issues that were received and closed by the Agent or the Agent's Team today, the average elapsed time it took for them to close.
- **Average Time Spent Today**—Of the Issues received by the Agent or the Agent's Team today, the average time spent on them by Agents (using the Time Tracking feature).

Defining Graphical Flashboard Information

Received vs. Closed graphical information is displayed as bar charts. To include the charts in the Flashboard, select from one or more of the following by clicking the box in the Show column:

- **Received vs. Closed last 12 hours**—A bar chart of Issues received vs. Issues closed over the last 12 hours broken down by hour.
- **Received vs. Closed last 24 hours**—A bar chart of Issues received vs. Issues closed over the last 24 hours broken down by hour.
- **Received vs. Closed this week**—A bar chart of Issues received vs. Issues closed over the last week broken down by day.
- **Received vs. Closed last week**—A bar chart of Issues received vs. Issues closed during the previous week broken down by day.
- **Received vs. Closed this month by week**—A bar chart of Issues received vs. Issues closed over the last week broken down by week.
- **Received vs. Closed last month by week**—A bar chart of Issues received vs. Issues closed during the previous month broken down by week.

Active Issue information can be displayed as either bar or pie charts by selecting either pie or bar from the drop-down selection box in the Style column. Select one or more of the following to display in the Flashboard by clicking the box in the Show column:

- **Active Issues by Custom Field**—A bar or pie chart that shows number of active Issues broken down by any drop-down field (Problem Type, Department, etc.) Up to four fields can be selected.
- **Active Issues by Status**—A bar or pie chart that shows number of active Issues in the Workspace broken down by status.
- **Save Current Window Size**—If checked, the current size of the Flashboard window is saved for the future.

When you have finished customizing your Flashboard, you can save the changes just for this Flashboard display or as your default settings:

- **Apply**—Apply these settings for this time only.
- **Save**—Save these settings as your default.

Cross Workspace Reporting

Each BMC FootPrints Service Core Workspace is contained in a separate sub-database. Each Workspace has its own fields, users, and other options. You may be a member of one Workspace or you could have membership in several Workspaces. If you are a member of two or more Workspaces, and your Role allows it, it is possible to create a report that includes data from multiple Workspaces.

Create a Cross Workspace Report

1. Select Report | Cross Workspace from the BMC FootPrints Service Core Toolbar.
2. **Included Workspaces**—Highlight the Workspaces to be included in the report. Hold down the CTRL key to select multiple Workspaces. Click GO.
3. Refer to the section on Custom Reports (elsewhere in this document) for details on completing the remaining tabs.
4. When you are finished customizing the report, click **GO** .
5. The results of the report are displayed in a new browser window, specifying the Workspace for each Issue.

NOTE ON PERMISSIONS

Reports can be restricted based on a user's Role. Cross-Workspace reports may not be available if your role does not allow access. Please consult your BMC FootPrints Service Core administrator for more information.

NOTE

Cross-workspace reports do not work for a person who is an Agent in one Workspace and a customer in another. If an Agent creates a Cross-workspace report, the results do not contain Issues from the Workspace in which the Agent is a customer.

Time Tracking Reports

Time Tracking Reports

The BMC FootPrints Service Core Flashboard feature displays customizable, up-to-the-minute graphical reports of Service Desk and Workspace activity. There are two types of Flashboard. The Workspace Flashboard is only available to Workspace and System Administrators and reflects activity for the current Workspace. The Personal Flashboard is available to any Agent and reflects the individual's activity and the activity of Teams to which the Agent belongs for the current Workspace. You can track the time spent by internal users working on Issues. Only data from Issues that contain Time Tracking data are included in the report. Reports can be used to assess how your team's resources are being allocated, to justify staff changes, and to produce time tracking and billing information for charge-backs and customer billing.

To generate meaningful Time Tracking reports, you must configure the following options:

- **Time Tracking Field**—Configure the Time Tracking feature to automatically track the time Agents spend working on Issues or to require them to enter time spent manually in the field. Refer to Time Tracking under Administration | Workspace | General | Workspace Options in the BMC FootPrints Service Core Toolbar.
- **Billing Rates**—Assign billing rates to Agents. Refer to Billing Rates under Workspace Administration | Users and Roles in the BMC FootPrints Service Core Toolbar.

Other topics in this section:

- Create a Time Tracking Report
- Sample Time Tracking Report
- Saved Time Tracking Reports

Create a Time Tracking Report

1. Select Reports | Time Tracking from the BMC FootPrints Service Core Toolbar.
2. Complete the tabs as described earlier in this document under Custom Reports. Some items, however, are specific to the Time Tracking Report, as follows:

a. Formatting—Time Tracking reports contain built-in data, including Issue Number, Title, Time Spent, Billing Amount, etc. Additional fields can also be included. These fields are displayed one to a line in the order selected. The History field is a special field that includes the Issue history in the report. The Email History field is a special field that includes the email history in the report. This provides an audit trail in reporting. Because this type of report searches every record included in the report for every email notification, using this field can cause a slowdown in the reporting. This provides an audit trail in reporting. Also select the format for text file output. This only applies to Text File style. Choices are comma-delimited file (.csv), tab delimited (.tsv), or your custom delimited (.txt).

b. Time Tracking Tab

- Users—Select users and teams whose Time Tracking data goes into the report. Hold down the CTRL key to highlight multiple users or teams. Select the Flat radio button to display a flat list of the names of Agents. Select the Group By Team radio button to list the teams. Click the plus sign to expand a team list and display individual team member names.
- Time Tracked— Restrict report to a certain date range. If this is left blank, all time-tracking data for the current Workspace is included.

3. On the Save/Run tab, enter a name for the report to save it. Each time a saved report template is run, it returns the latest matching data. Click GO to run the report.

NOTE

Saving the report here only saves the report formatting options and criteria chosen in this form, not the results of the report. This feature can be used to run the same report in the future. For example, you could set the report to be run once a week. Each time the report is run, it returns the latest data from the current Workspace. Saving report output is covered in Saving and Printing Report Data.

NOTE ON PERMISSIONS

Reports can be restricted based on a user's Role. Time Tracking reports may not be available, or some options may not appear, if your role does not allow access. Please consult your **FootPrints** administrator for more information.

The BMC FootPrints Service Core Time Tracking report returns totals and averages of all time tracking data included in the report and individual time-tracking information for each Issue on which it reports. In addition to returning specific data for billing purposes, the Time Tracking report can return averages and totals for a specific internal user, customer, status or priority type, etc.

NOTE

Average times on Time Tracking reports are in decimal hours, not hours and minutes. For example, an average of "1.25" means 1 hour and 15 minutes.

In addition, if time tracking comments are enabled in this Workspace, they are automatically included in the Time Tracking report.

Saved Time Tracking Reports

Time Tracking reports can be saved as templates. Each time a saved report template is run, it returns the latest matching data. These reports can be run from the web interface or scheduled to be run and emailed automatically. Refer to Auto Run Reports for more information on how to run and email reports automatically.

Access a Saved Time Tracking Report

1. Select Reports | My Reports from the BMC FootPrints Service Core Toolbar. Saved Time Tracking Reports are listed in a drop-down.
2. Select the report from the drop-down.
3. Click the **Run** radio button to run the report (this is the default), the Edit radio button to edit the report, or the Delete radio button to delete the report.
4. Click the **GO** button.

5. If you selected Edit, change values as needed, then save and run the report. If you selected Run, the report is run and displayed. If you selected Delete, the report is deleted. Deleting a Time Tracking report deletes the report for all users.

NOTE

Saving the report here only saves the report formatting options and criteria chosen in this form, not the results of the report. This feature can be used to run the same report in the future. For example, you could set the report to be run once a week. Each time the report is run, it returns the latest data from the current Workspace. Saving report output is covered in Saving and Printing Report Data.

Report Templates

The Workspace Administrator can create single-issue report templates for printing out Purchase Orders, Work Orders, Return Merchandise Authorization forms (RMA), etc. Refer to Workspace Administration for more information.

Auto Run Reports

Saved reports can be scheduled to run automatically and to be sent automatically via email on specified days/times. Refer to the Auto Run Reports topic under the Workspace Administration heading for more information.

Change Manager Reports

Change Manager Reports

Change Manager reports return data about Issues that match the Change Manager criteria. Only Issues that are part of a Change Manager workflow are included in the Change Manager Reports. The report can include:

- Any or all fields from the Issues
- Voting history, including individual votes and final decisions for the Issue
- The Change Manager criteria, i.e., the criteria used to place an Issue into the Change Manager process
- Links to the Issues
- Other data that you choose when configuring the report.

The information returned by these reports can help you determine how well your Change Manager process is performing, whether approvers are voting on Issues in a timely manner, which approvers are not responding in a timely manner or at all, and so on.

Obviously, to generate meaningful Change Manager reports, you must have the BMC FootPrints Change Manager add-on module installed and Change Manager processes and phases configured.

Users should be aware that they cannot necessarily see Change Manager Issues that they have approved or that are awaiting their approval unless they are also assigned to the Issue. This is because what is seen in a Change Manager report is governed by one set of role permissions, but permission to run the reports may be governed by a different role permission.

Creating a Change Manager Report

To create a Change Manager Report:

1. Select Reports | Change Manager from the BMC FootPrints Service Core Toolbar.
2. **Heading**—Define what is included in the heading at the top of the report output. They do not apply to the Text File style. Options include:

- **Title**—This is displayed at the top of the report.
- **Date**—The date the report is run (updates each time the report template is re-run).
- **Time**—The time the report is run (updates each time the report template is re-run).
- **Workspace name**—Name of the Workspace.
- **Logo graphic**—Logo image displayed in the current Workspace.

3. **Formatting**—Change Manager reports contain built-in data, including Issue Number, Title, etc. Additional fields can also be included. These fields are displayed one to a line in the order selected. The History and Email History fields are special fields that include the Issue or email history in the report. This provides an audit trail in reporting.

   - **Fields Displayed**—Change management reports can contain any field data from change management Issues. These fields are displayed one to a line in the order selected.
     - **Select fields to display**—Use the radio buttons to select which field types to display: choose from BMC FootPrints Service Core, Issue Information, or Contact Information fields. From each set of fields, select the fields to be displayed in the report by clicking on the field name in the list on the left and then clicking the Add Field button. The History field is a special field that includes the Issue history in the report. This provides an audit trail in reporting.
     - **Descriptions included**—If the Description field data is to be included, the report may become too large due to the size of the Description data. You can use the radio button to determine whether all of the Descriptions for each Issue are included, or only the original, newest, two most recent, or three most recent Description entries are included in the report.
     - **Description and multi-line field wrapping**—Select whether the Description entries are not wrapped (Don't Wrap) or set the length of the lines for wrapping.
     - **Display complete voting history in report**—Check this box to display the complete voting history of every Issue. This includes the names of the voters and which way they voted.
     - **Display complete voting history in report**—Check this box to display the complete voting history of every Issue. This includes the names of the voters and which way they voted.
     - **Sort Results by**—Order the Issues returned by the specified field, descending (most recent or highest first) or ascending (oldest or lowest first). By default, Issues returned are ordered by Issue number descending.

4. **Change Manager Criteria**—Select the criteria to be used to determine whether an Issue is included in the report.

   - **Issue must have been in one of the below phases**—Highlight the phases to be included in the report. Only Issues that are or have been in the selected phases are included.
   - **Issue must have been in one of the below phases**—Highlight the phases to be included in the report. Only Issues that are or have been in the selected phases are included.
   - **Issue must have been in one of the below phases**—Highlight the phases to be included in the report. Only Issues that are or have been in the selected phases are included.
   - **Issue must have been in one of the below phases**—Highlight the phases to be included in the report. Only Issues that are or have been in the selected phases are included.

5. **Issue Criteria**—Specify the criteria for including Issues in the change management report. Only Issues matching the characteristics specified here are included. Built-in fields and Issue-specific fields are included on this page.

- **Title**—Enter a word or phrase to for which to search. Boolean operators AND, OR, and NODATA are supported. For more information, refer to Boolean Operators.
- **Description**—If a word or phrase is entered (or multiple words using Boolean Operators), only Issues containing that word/phrase in the Description are returned.
- **Keyword**—If a word or phrase is entered, any Issues containing that word/phrase in any field are returned, including Title, Description, Workspace fields, and Address Book fields, as long as the full text search conforms to full text keyword search behavior.
- **File Attachments**—Search for file attachments by name (not by content). Available in all versions except the BMC FootPrints Service Core database.
- **Assigned to**—Highlight one or more users to returns Issues assigned to the user(s) selected, holding down the CTRL key to select multiple users. If you do not want to limit the search to any particular assignees, do not highlight any users. Advanced Controls are also available for this field.

NOTE ON PERMISSIONS

Access to Issues is based on a user's Role. Assignment options may be restricted based on your role. Contact your BMC FootPrints Service Core administrator for more information.

- **Submitted by**—If a user is selected, the search returns only Issues created by that user.
- **Priority**—Returns only Issues of the specified priority or priorities. Highlight the priorities to be included; hold down the CTRL key to highlight multiple priorities. To return all priorities, no priorities need to be selected (this has the same result as selecting all priorities).
- **Status**—Returns only Issues of the specified status(es). By default, Open and any custom statuses are highlighted in the status dialog. To select multiple statuses, hold down the CTRL key.
- **Issue Information**—The fields in this section differ depending on the fields in the current Workspace. Search on as many fields as desired. Search methods vary with the field data types:
  - **Character field**—Displays a text box. Enter the word or phrase to search on (or multiple words using Boolean Operators).
  - **Number field**—Displays a text box. Enter the number or part of a number for which to search.
  - **Drop-down and Multi-select field**—Displays a multi-select dialog box. Highlight one or more values to search on. To search for Issues that contain no data for the field, select No data. If you do not want to restrict the search based on choices in a field, do not highlight any values.
  - **Date fields**—Search on a date or date range. For more information, refer to Date Field Search Options.

NOTE

Date/time fields can only be searched by date, not time.

  - **Other field types**—Email, URL, and FTP fields display a text box. Enter the word or phrase to search on (including partial addresses).

6. **Contact Criteria**—Search by users' contact information. The fields in this section differ depending on the fields in current Address Book. Search methods are the same as those for Issue Information fields (see above).
7. **Advanced Criteria**—Various criteria for determining which Issues are searched and other criteria.
   - **Issue Types to Include**—Specify whether Advanced Issue types, including Subtasks and Global Issues, are returned. Options include:
     - **All Issue Types**—All Issue types are returned.

- **Regular Issues**—Regular (non-Global or Master/Subtask) Issues are returned.
- **Include Master Issues**—Master Issues that contain subtasks are returned.
- **Include Subtasks**—Subtasks of Master Issues are returned.
- **Include Global Issues**—Global Issues are returned.
- **Include GlobalLinks**—All users' Issues linked to a Global Issue are returned.

- **Date**—If dates are specified, the search returns only Issues from the time period specified. For more information, refer to Date Field Search Options.
- **Age**—Returns Issues created in the time specified. Number of days and hours can be specified. Modifiers are also provided, including “Greater Than”, “Less Than”, “Equal to”, “Greater than or Equal to”, “Less than or Equal to”, and “Not Equal to”. As an example, to return Issues greater than 1 day old, choose “Greater than” and fill in “1” for “Days”.

NOTE
Age is always 24/7 and does not use the Workspace Work Schedule.

- **Include only Issue Numbers**—Restricts the report to a defined range of Issue numbers.
- **Advanced Date/Time Controls**—The following "Pending Clock" options apply to the "Time to Close" and "Age" calculations (available for Reports only):
  - **Don't include time outside of the Workspace Work Schedule**—If this is checked, the calculations do not include after-hours time based on the work schedule for the workspace.
  - **Don't include time Issues spent in the following Statuses**—Select one more statuses (Pending, Waiting for Customer, etc.) to exclude time spent for the "Time to Close" and "Age" calculations.

NOTE
These time calculations are always based on the time zone in which the server resides.

8. **Save/Run Report**—Save the report criteria as a queue. Note that this does not save the report results when you run the report, but just the criteria used. The report criteria can then be re-used to run reports at various times or to auto-run reports. Saved report queues appear in the Display Drop-down on the homepage. Click **GO** to run the report.

Saved Change Manager Reports

Change Manager reports can be saved as templates. Each time a saved report template is run, it returns the latest matching data. These reports can be run from the web interface or scheduled to be run and emailed automatically. Refer to Auto Run Reports for more information on how to run and email reports automatically.

Access a Saved Change Manager Report

1. Select Reports | My Reports from the BMC FootPrints Service Core Toolbar. Saved Change Manager Reports are listed in a drop-down.
2. Select the report from the drop-down.
3. Click the **Run** radio button to run the report (this is the default), the Edit radio button to edit the report, or the Delete radio button to delete the report.
4. Click the **GO** button.

5. If you selected Edit, change values as needed, then save and run the report. If you selected Run, the report is run and displayed. If you selected Delete, the report is deleted. Deleting a Time Tracking report deletes the report for all users.

NOTE

Saving the report here only saves the report formatting options and criteria chosen in this form, not the results of the report. This feature can be used to run the same report in the future. For example, you could set the report to be run once a week. Each time the report is run, it returns the latest data from the current Workspace. Saving report output is covered in Saving and Printing Report Data.

Knowledge Base Reports

Knowledge Base reports provide data and statistics on Knowledge Base usage. These are built-in reports for which you select criteria. Knowledge Base reports return data on internal and public solutions.

Statistics Reports

There are three types of Statistics report:

- **Activity Reports**—Activity reports return customer and agent votes on the usefulness and accuracy of Knowledge Base solutions. Results show responses to the question for whether the solution was useful. Responses are Yes, Yes, but Inaccurate, and No.
- **Outcome**—Outcome reports show the creators of solutions, how often the solutions were edited by them or others, and the number of times the solutions were used by them or others. This gives you an idea of how often solutions need to be updated or corrected once they have been created and how much they are being used.
- **Trends**—Trend reports show the number of solutions created by agent and by team, the number of solutions created by agent and by team, and the votes on accuracy of solutions by agent and by team.

Running a Statistics Report

To run a Statistics Report:

1. Select Reports | Knowledge Base from the BMC FootPrints Service Core Toolbar.
2. Select Statistics from the drop-down field, then click **GO**.
3. Select the type of output for the report.
    - **HTML**—The results will be displayed in a browser window after they have been generated.
    - **Export**—Results will be displayed in a file that can be saved. If you select Export, the next step will require that you specify the type of file into which the data is to be exported. Options are MS Excel (a comma-separated file with a .csv extension), Tab delimited (a file with tabs separating the fields and a .tsv extension), or Custom (you must select your own field separator and the file will be saved with a .txt extension).
4. Click **GO** after you’ve made your selection (or selections, if you chose Export).
5. Select from the following options:
    - **Select a Report**—Pick the type of report to return: Activity, Outcome, or Trends.
        - **Activity Reports**—Activity reports return customer and agent votes on the usefulness and accuracy of Knowledge Base solutions. Results show responses to the question for whether the solution was useful. Responses are Yes, Yes, but Inaccurate, and No.

- **Outcome**—Outcome reports show the creators of solutions, how often the solutions were edited by them or others, and the number of times the solutions were used by them or others. This gives you an idea of how often solutions need to be updated or corrected once they have been created and how much they are being used.
- **Trends**—Trend reports show the number of solutions created by agent and by team, the number of solutions created by agent and by team, and the votes on accuracy of solutions by agent and by team.

- **Include all Solutions**—Define the date range for searching.
  - **Exact**—Specify exact dates to search on in the period specified. Enter the date or dates to search on. Click to display a searchable calendar.
    - **Created**—Solutions that were created on, before, after or between (depending on the drop-down selection you make next) the specified date(s) are returned (leave second date blank for all but "between").
  - **Last edited**—Solutions that were last edited on, before, after or between (depending on the drop-down selection you make next) the specified date(s) are returned (leave second date blank for all but "between").
  - **Used**— Solutions that were used on, before, after or between (depending on the drop-down selection you make next) the specified date(s) are returned (leave second date blank for all but "between").

NOTE

When "on" a single date is chosen, and you are reporting by month, the report contains Solutions for the month that date is in. If "on" a single date is chosen, and you are reporting by week, the report contains Issues for the week the date is in.

- **Relative**—Searches by relative date, allowing you to create a search or report that for example, returns Solutions for the last month. Select a number from the first drop-down (1-31), and select the period from the second drop-down (Day, Week, Month, or Year).
- **Range**—Select this to search by a particular time period, e.g., yesterday, last Sunday, etc.

1. Click **GO**. The report is returned. If you elected to Export the file, you will be asked if you want to open or save the file.

Lifecycle Reports

Lifecycle reports return the amount of time a solution spent in a particular part of its lifecycle following creations. Types of lifecycle reports are:

- **Time Spent in a Particular Status**—The amount of time that the solution spent in a particular status. For example, the status might be "Pending", i.e., waiting for approval to be entered into the Knowledge Base.
- **Time to Go from Status A to Status B**—The amount of time a solution spent going from one status to another. For example, if your organization had several intermediate steps in the approval process but you wanted to know how long it took for solutions to be placed in the Knowledge Base after they were submitted to that process, this would tell you. Status A, for example, might be "Submitted for KB" and Status B might be "Closed", but statuses "Pending Approval" and "Verified by Test" might be intermediate steps between "Submitted for KB" and "Closed".
- **Time Spent in Each Status**—Time Spent in a Particular Status returns the amount of time that solutions spent in a specified status. Time Spent in Each Status returns the amount of time that solutions spent in each of the statuses, so that all statuses are returned with data.

Running a Lifecyle Report

To run a Lifecycle Report:

1. Select Reports | Knowledge Base from the BMC FootPrints Service Core Toolbar.
2. Select Lifecycle from the drop-down field, then click GO.
3. Select the type of output for the report.
   - **HTML**—The results will be displayed in a browser window after they have been generated.
   - **Export**—Results will be displayed in a file that can be saved. If you select Export, the next step will require that you specify the type of file into which the data is to be exported. Options are MS Excel (a comma-separated file with a .csv extension), Tab delimited (a file with tabs separating the fields and a .tsv extension), or Custom (you must select your own field separator and the file will be saved with a .txt extension).
4. Select a report:
   - **Time Spent in a Particular Status**—The amount of time that the solution spent in a particular status. For example, the status might be “Pending”, i.e., waiting for approval to be entered into the Knowledge Base.
   - **Time to Go from Status A to Status B**—The amount of time a solution spent going from one status to another. For example, if your organization had several intermediate steps in the approval process but you wanted to know how long it took for solutions to be placed in the Knowledge Base after they were submitted to that process, this would tell you. Status A, for example, might be “Submitted for KB” and Status B might be “Closed”, but statuses “Pending Approval” and “Verified by Test” might be intermediary steps between “Submitted for KB” and “Closed”.
   - **Time Spent in Each Status**—Time Spent in a Particular Status returns the amount of time that solutions spent in a specified status. Time Spent in Each Status returns the amount of time that solutions spent in each of the statuses, so that all statuses are returned with data.
5. Report by:
   - **Average for Team**—Averages the report data by team.
   - **Average for Agent**—Averages the report data by agent.
   - **Average for Time Period**—Averages the report data by the time period you specify.
6. Click **GO**.
7. The next page requires different information depending on which type of report you chose:
   - **Time Spent in a Particular Status**
     - **Status**—The status for which you want data.
     - **Include Issues**
       - **Exact**—Specify exact dates to search on in the period specified. Enter the date or dates to search on. Click to display a searchable calendar.
         - **Created**—Solutions that were created on, before, after or between (depending on the drop-down selection you make next) the specified date(s) are returned (leave second date blank for all but “between”).
         - **Last edited**—Solutions that were last edited on, before, after or between (depending on the drop-down selection you make next) the specified date(s) are returned (leave second date blank for all but “between”).

NOTE

When "on" a single date is chosen, and you are reporting by month, the report contains Solutions for the month that date is in. If "on" a single date is chosen, and you are reporting by week, the report contains Issues for the week the date is in.

- **Relative**—Searches by relative date, allowing you to create a search or report that for example, returns Solutions for the last month. Select a number from the first drop-down (1-31), and select the period from the second drop-down (Day, Week, Month, or Year).
- **Range**—Select this to search by a particular time period, e.g., yesterday, last Sunday, etc.

- **Time to Go from Status A to Status B**
  - **Starting Status/Ending Status**—The starting status for which you want data. The data will be returned for solutions based on the time it took to go from the starting status to the ending status.
  - **Only Include Issues that Still Remain in the Ending Status**—Check this box if you only want data for solutions that are still in the ending status. Leave this box unchecked if you want to include all solutions that meet the criteria regardless of their current status.
  - **Include Issues**
    - **Exact**—Specify exact dates to search on in the period specified. Enter the date or dates to search on. Click to display a searchable calendar.
    - **Created**—Solutions that were created on, before, after or between (depending on the drop-down selection you make next) the specified date(s) are returned (leave second date blank for all but “between”).
    - **Last edited**—Solutions that were last edited on, before, after or between (depending on the drop-down selection you make next) the specified date(s) are returned (leave second date blank for all but “between”).

NOTE

When "on" a single date is chosen, and you are reporting by month, the report contains Solutions for the month that date is in. If "on" a single date is chosen, and you are reporting by week, the report contains Issues for the week the date is in.

- **Relative**—Searches by relative date, allowing you to create a search or report that for example, returns Solutions for the last month. Select a number from the first drop-down (1-31), and select the period from the second drop-down (Day, Week, Month, or Year).
- **Range**—Select this to search by a particular time period, e.g., yesterday, last Sunday, etc.

- **Time Spent in Each Status**—Data is returned for all solutions for all statuses.
  - **Include Issues**
    - **Exact**—Specify exact dates to search on in the period specified. Enter the date or dates to search on. Click to display a searchable calendar.
    - **Created**—Solutions that were created on, before, after or between (depending on the drop-down selection you make next) the specified date(s) are returned (leave second date blank for all but “between”).
    - **Last edited**—Solutions that were last edited on, before, after or between (depending on the drop-down selection you make next) the specified date(s) are returned (leave second date blank for all but “between”).

NOTE

When "on" a single date is chosen, and you are reporting by month, the report contains Solutions for the month that date is in. If "on" a single date is chosen, and you are reporting by week, the report contains Issues for the week the date is in.

- **Relative**—Searches by relative date, allowing you to create a search or report that for example, returns Solutions for the last month. Select a number from the first drop-down (1-31), and select the period from the second drop-down (Day, Week, Month, or Year).
- **Range**—Select this to search by a particular time period, e.g., yesterday, last Sunday, etc.

Calendar and Scheduling

Calendar and Scheduling

The BMC FootPrints Service Core Calendar is a web-based calendaring system fully integrated with BMC FootPrints Service Core issue tracking and customer problem management. Agents and administrators can track personal and Workspace-wide appointments, schedule meetings, jobs, and more. Calendar appointments can be linked to BMC FootPrints Service Core issues. Recurring appointments can be created that automatically create new Issues when the next recurrence occurs. Appointments can be synchronized with an external calendar via email and appointments made in the external calendar can also be synchronized in the BMC FootPrints Service Core calendar. Work schedules can be defined for the Workspace and for individual Agents, including regular work hours, holidays, vacations, and sick leave, reducing conflicts when scheduling work.

There are three options for the BMC FootPrints Service Core calendar system:

- **Workspace**—The Workspace Calendar can be used to track appointments for all Agents and Teams for a BMC FootPrints Service Core Workspace. Each Workspace has its own calendar.
- **Personal**—Each Agent/administrator in BMC FootPrints Service Core has a personal Calendar. This is a place to add both personal appointments and work-related appointments. The personal Calendar remains constant throughout all Workspaces for a user.
- **Availability**—Each Agent/administrator can have an availability schedule defined for them, minimizing conflicts when work appointments are scheduled. Availability can be linked to date/time fields in an issue.

NOTE

Two-way synchronization of appointments requires the BMC FootPrints Mobile add-on module. Refer to BMC FootPrints Mobile for details on how to administer this feature.

The following topics cover the different aspects of the Calendar:

- Calendar Basics
- Viewing Appointments
- Creating Appointments
- Editing Appointments
- Syncing Appointments
- Linking Appointments to Issues
- Creating Recurring Issues from the Calendar
- Calendar Preferences

The following topics cover the different aspects of Availability Scheduling:

- About Scheduling and Availability
- Creating Schedules
- Viewing Schedules
- Checking Availability from the Calendar
- Checking Availability for an Issue

Calendar Basics

There are two types of Calendar in BMC FootPrints Mobile:

- **Workspace**—The Workspace Calendar can be used to track appointments for all Agents and Teams for a BMC FootPrints Mobile Workspace. Each Workspace has its own Calendar.
- **Personal**—Each Agent/administrator in BMC FootPrints Mobile has a personal Calendar. This is a place to add both personal appointments and work-related appointments. The personal Calendar remains constant throughout all Workspaces for a user.

To view a Calendar, select Calendar from the BMC FootPrints Mobile Toolbar's More menu. Select Personal to view your own Calendar, or select Workspace to see the Calendar for the current Workspace.

The Calendar consists of the following parts:

- **Main Frame**
  - **Day View**—A representation of the current day, with each hour represented. All of the day's appointments are listed in this area by hour. To see the details of an appointment, click the Title. To edit an appointment, click the **Edit** icon on the detailed view. The **Edit** icon is only visible if you have editing permission for the Calendar. To delete an appointment, click the **Delete** icon. To view a different day:
    - Use the Next and Previous arrows at the top of the screen to advance or go back one day at a time, and/or
    - Select a day from the current month on the left side of the screen. Use the small arrows to change months.
    - Use the "Go to Date" option to enter a specific date. That is, enter a date in the fields at the bottom left of the main Calendar frame and then click the GO button.
  - **Refresh**—Refresh the current view.
  - **Print**—Print the current view.
  - **Close**—Close the Calendar.
  - **Help**—Open context-sensitive help.
- **Left Frame**
  - **Current Month**—A small representation of the current month is displayed on the left side of the screen. Navigation options include:
    - Select a day to show the Day View for that day.
    - Select a Week (W1, W2, etc.) to switch to Week View for that week.
    - Use the small Next and Previous arrows to switch months.

  - **Create Appointment**—Select this to create an appointment for the current day (refer to Creating Appointments for complete instructions).
  - **Go To Date**—Enter a specific date and click the **GO** button to bring up that date in the Day View.
- **Other Views**—The Calendar can be viewed in multiple formats:
  - **Year View**—A representation of the current year. No appointments are displayed. Use the Next and Previous arrows to change the year. Select a day, week, or month to display that view.
  - **Month View**—Displays the current month. Appointments are listed for each day. Use the Next and Previous arrows to change the month displayed. Select a day to go to its Day View. Select an appointment to view the details for that appointment in a pop-up window.
  - **Week View**—Representation of a week. Appointments are listed for each day. Use the Next and Previous arrows to change the week displayed. Select a day to go to its Day View. Select an appointment to view the details for that appointment in a pop-up window.
  - **Day View**—The default view for the Calendar (see above).
- **Preferences**—The user can set various options for his or her own personal Calendar. The Workspace Administrator can set options for the current Workspace Calendar.

Viewing Appointments

Appointments can be viewed on the Calendar in multiple ways:

- **Day View**—All appointments for that day are listed on the Day View. To view the details, click the Title of the appointment. The details are displayed in a pop-up window.
- **Week View**—In the Week View, appointments are listed for each day in the box for that day. If your preferences are set to only show a certain number of appointments on the Week view, click the More link to view all appointments for that day. Click the Title of an appointment to view the details for that appointment in a pop-up window.
- **Month/Year Views**—Because of space limitations, these views do not show individual appointments. Select a day from these views and the Day View is displayed. Click the Title of an appointment to view the details.

Navigation options for the Calendar can be found in Calendar Basics.

Both personal and workspace Calendar appointments can be created by Date/Time fields in Issues. If a Calendar appointment was created by an Issue's Date/Time field, then:

- The date and time from the Issue Date/Time field are set as the date and time of the appointment
- The Assignees on the Issue are listed as the Invitees on the appointment
- The Issue Description field is entered as the appointment Description
- A dynamic link is set between the appointment and the Issue.

With respect to edits made on the Issue or the Calendar appointment:

- If the date or time are updated on the Issue, the Calendar is also updated
- If the Description is updated in the Issue, the original Description is unchanged in the appointment
- If the date and/or time of the appointment are updated in the Calendar, they are updated in the Issue
- If any other details of the appointment are edited in the Calendar, those edits are not changed in the Issue.

Creating Appointments

Appointments can be created in the Calendar using one of the following methods:

- Click the Create Appointment button on the left side of the page when in Day View.
- Select an hour in Day View.

If the Workspace contains at least one Date/Time field, appointments can also be created from the Create Issue page (described in Linking Appointments to Issues).

To create an appointment from either the Workspace or personal Calendar:

1. Click the Create Appointment button or select an hour in the Day View. A pop-up window is displayed with the Create Appointment dialog.
2. **Title**—Enter a Title for the appointment. This is the subject of the appointment, such as Quarterly Meeting. If it is important for other users to know who is involved in the appointment at a glance, you may want to include the names of the people involved in the Title, e.g., Bob S. to work on Server.
3. **Start Time**—Select a time for the appointment to start. If a time was selected from the Day View, it is pre-filled here. Hours are listed in one drop-down (1-12 or 0-23 depending on your preferences), with minutes available in 5-minute increments (from 0-55) in a second drop-down. If the 12 hour clock is used, a third drop-down is available to select AM or PM. If an appointment lasts all day, select None for Start and End times. These appointments are displayed at the top of the Day View with no time associated.
4. **End Time**—Select a time for the appointment to end. If a time was selected from the Day View, this will default to 1 hour after the Start Time. If the 12-hour clock is used, remember to select the correct option for AM or PM. If None is selected for **Start Time**, it should also be selected for End Time.
5. **General Info tab**—The General Info tab has the following options:
   - **Location**—Optionally enter a location for the meeting or Appointment, e.g., Board Room or Customer Site.
   - **Link to Issues using the field**—If the current Workspace contains at least one Date/Time field, you can optionally link the appointment to an Issue. When creating the appointment from the Calendar, this automatically creates a new Issue with data from the appointment. Select the Date/Time field to populate with the appointment Start Time from the drop-down. Select No Link if you do not want to create and link to an Issue. Refer to Linking Appointments to Issues for complete information on this feature.
   - **Calendar**—This option only appears when creating an appointment in a personal Calendar. If Personal is selected, the appointment is displayed in the user's personal Calendar as well as any invitees' personal Calendars. If Personal & Workspace is selected, the appointment is also displayed in the Workspace Calendar for all users to see. When an appointment is created in the Workspace Calendar, this option is not displayed. These appointments are automatically displayed in the Workspace Calendar and in the personal Calendars of all invitees.

NOTE ON USE OF CALENDAR

Customers, members of other Workspaces, and non–users of BMC FootPrints Service Core are not available to be Invitees. The BMC FootPrints Service Core Calendar is intended for use by BMC FootPrints Service Core Agent/administrator users. If non–Workspace Members must be notified of an appointment, the email notification you receive can be forwarded to them (see below). Users can also be copied on any Issue linked to an appointment.

   - **Description**—The Description can be used to include any notes or details of the appointment.
6. **Invitees tab**—One or more members of the current Workspace can be invited to the appointment. Examples of invitees would be members of a committee who attend a committee meeting or a technician who is scheduled to work at a customer's site or an entire Team at once for a Team meeting. To invite a user or Team, double-click

on the name in the **People** list; the name is displayed in the **Invitees** list. You can also click once on the name in the **People** list and click the right arrow button to make them an Invitee. Select **Check Availability** to see who is available for the appointment. Refer to the chapter on scheduling for more information. To invite all of the members of a single Team: double-click the team name or click the team name once, then select **Assign Team**, then click the right arrow button. The appointment is propagated to the Availability calendar for all the individual members of the team. The ability to invite a Team is only supported in the Day View.

- **Check Availability**—Before inviting Agents to an appointment, you can check Agent schedules to determine the best time for scheduling the appointment.

7. **Email Confirmation**—BMC FootPrints Service Core can send users email confirmation about an appointment. This is in addition to any email notification the users receive regarding BMC FootPrints Service Core Issues (including linked Issues). Email notifications include all of the information about an appointment as well as an optional link to synchronize the appointment with the Microsoft Outlook Calendar (the link is for those not using the BMC FootPrints Mobile add-on module). The options are:

   - **Email me**—If this is checked, you receive an email notification about this appointment (regardless of whether you are invited to the appointment).
   - **Sync w/Outlook**—If this is checked, notifications include an attachment that synchronizes the appointment with the user's Microsoft Outlook calendar (refer to Syncing Appointments-this is not for BMC FootPrints Mobile users).
   - **Email Invitees**—If this is checked, all users invited receive an email notification for the appointment.
   - **Set reminder**—If a reminder is set, users receive a second email notification before the appointment starts. The reminder is sent before the appointment as specified by the person who created the appointment. Time period available before the appointment starts are: 5, 10, 15, or 30 minutes, 1-5 hours, 1 day, 2 days, and 1 week.

NOTE

The time specified for the email notification to be sent is based on the internal clock of the BMC FootPrints Service Core server. If an appointment is set to begin at 1:00 PM, Monday, December 2, 2016, and the reminder is set for 30 minutes, the email is sent at 12:30 PM of that day based on the time on the server where BMC FootPrints Service Core is installed.

8. **Recurrence tab**—Appointments can optionally be set to recur at regular intervals. The appointment is displayed on the Calendar for each day that it recurs. The options are:

   - **None**—No recurrence. The appointment occurs just the one time. Recurrence is left off by default, but if you have clicked the Activate Recurrence checkbox, you can click it a second time to turn it off.
   - **Daily, Weekly, Monthly, Yearly**—Click the radio button to select the frequency with which the appointment occurs. It can be once every day, once a week, once a month, or once a year.
     - **Daily**—Set the recurrence for every X day(s) of the week (i.e., enter "1" for the recurrence to be every day, Sunday through Saturday, "2" for every other day, "3" for every third day, etc.) or only on weekdays (i.e., Monday through Friday) in combination with the every X day(s) schedule.
     - **Weekly**—Set the recurrence for every X weeks (i.e., enter "1" for the recurrence to be every week, "2" for every other week, "3" for every third week, etc.) and select which day(s) of the week it is to occur by clicking the appropriate checkbox. You can select more than one day per week. For example, you could create an appointment for every second week on Monday and Wednesday.
     - **Monthly**—The appointment recurs on a monthly basis. By default, there is no end date. Specify the date on which it is to occur (for example, the 19th of the month) by selecting the radio button and entering the date, as well as the frequency (every X months) of the appointment (i.e., enter "1" for the appointment to

take place every month, "2" for the appointment to take place every other month, etc.). Alternatively, select the second radio button, then use the drop-down fields to designate in which week of the month (first week, second week, etc.) the appointment occurs, the day in that week, and the frequency.

  - **Yearly**—The appointment recurs on a yearly basis. By default, there is no end date. Specify the date on which it is to occur (for example, September 19th) by selecting the radio button and entering the date of the appointment. Alternatively, select the second radio button, then use the drop-down fields to designate in which week of the month (first week, second week, etc.), the day of the week, and the month of the year in which the appointment occurs.

- **No end date**—When this is checked, the appointment recurs without end.
- **End by**—Specify the date on which the appointment ceases to recur.

9. Click **SAVE** to create the appointment. The appointment is added to the Calendar and email notifications are sent to users (if selected). The appointment is displayed in the Day, Week, and Month view of the Calendar.

NOTE

If you want the appointment to appear on the Availability Matrix, it must have a Start Time and End Time. If you select None, the appointment does not appear on the Availability Matrix. To schedule a full day appointment, select Start and End Times of your work day, e.g., 9 AM for the Start Time and 5 PM for the End Time.

Editing Appointments

Appointments can be edited in the Calendar using one of the following methods:

- Click the **Edit** icon for an appointment in the Day View.
- Click the **Edit** button on the Detail View of an appointment (pop-up).

NOTE

When the data within a Date/time field is cleared, the associated calendar reference is also deleted.

Editing an Appointment

To edit an appointment from either the Workspace or personal Calendar:

1. Click the **Edit** icon for an appointment in the Day or Detail View. A pop-up window appears with an Edit Appointment dialog.
2. Make any changes to the appointment data, such as the Title, Invitees, etc. Refer to Creating Appointments for more details on these fields.

NOTE

There is only one description per appointment (unlike the unlimited appends allowed for Issue descriptions). To add additional notes, type them at the end or beginning of the Description field. You may want to manually add a date/time stamp or signature.

3. Click **SAVE** to complete the edit. The changes are made to the appointment and email notifications are sent to users (if selected), including any new invitees.
4. To cancel the edit, click **Cancel**.

Deleting an Appointment

To delete an appointment, click the **Delete** button on the Day View or Detail View for that appointment. A dialog is displayed confirming that you want to delete the appointment; click **OK** to delete the appointment, or **Cancel** to cancel the deletion.

NOTE

Depending on your permissions, Agents may not be able to edit or delete appointments on the Workspace Calendar. Agents can always edit and delete appointments on their personal Calendars. If you are viewing one of your appointments on the Workspace Calendar and you want to edit or delete it, you must switch to your personal Calendar and edit/delete it from there.

Syncing Appointments

While the BMC FootPrints Service Core Calendar has many advantages (it's web-based, integrated with BMC FootPrints Service Core Issues, etc.), most people use it in addition to their usual personal or desktop calendar for tracking their appointments. In light of this need, BMC FootPrints Service Core Calendar appointments can be synchronized to Microsoft Outlook via email and the Vcal standard.

NOTE

Synchronizing appointments with Outlook as described here is separate from the BMC FootPrints Mobile add-on module. This function is part of the base product and is not used if you are using BMC FootPrints Mobile.

VCal is a standard used by software programs to allow users to exchange calendar appointments between different calendar applications. BMC FootPrints Service Core Calendar email notifications can include VCal attachments that allow users to place BMC FootPrints Service Core Calendar appointments in their Outlook calendar with a mouse click.

To synchronize an appointment with your desktop Outlook calendar:

1. Create an appointment in the BMC FootPrints Service Core Calendar.
2. Check the box for Sync w/Outlook. For invitees of the appointment to synchronize with their Outlook calendar, the Email Invitees checkbox must also be selected. If you would like to synchronize the appointment and you are not an invitee, only the creator, check the box for Email me as well.
3. An email notification is sent to your Outlook Inbox. Double-click the email to view the details.
4. The email contains an attachment. Double-click the attachment.
5. A Microsoft Outlook dialog box is displayed. The dialog asks if you would like to accept the appointment.
6. Accept the appointment.
7. If someone else has created the appointment, you can send an email confirmation to the user. If you do, Outlook sends the creator an email stating that you accept the appointment.
8. The appointment is included in your Outlook Calendar. All of the data for the appointment (Title, Location, etc.) is populated. If a reminder was set in the BMC FootPrints Service Core appointment, the reminder is also set in Outlook (i.e., you receive the Outlook pop-up reminder dialog 15 minutes before the appointment is scheduled, etc.)

NOTE

Synchronizing with Outlook is one-way only. Changes made to appointments in Outlook are not reflected in BMC FootPrints Service Core. Changes made in the BMC FootPrints Service Core Calendar result in another email notification. If the Vcal attachment is double-clicked and accepted, the change is made in Outlook.

Linking Appointments to Issues

Linking Appointments to Issues

The BMC FootPrints Service Core Calendar can be used strictly to track appointments added manually to the Calendar by Workspace members. It can be even more powerful if appointments and Issues are linked together.

If the current Workspace contains at least one Date/Time field, you can optionally link the appointment to an Issue. When creating the appointment from the Calendar, this automatically creates a new Issue with data from the appointment. Appointments can also be created automatically from the Create Issue and Edit Issue screen.

Some practical applications for linking appointments and Issues include:

- Showing when Agents are scheduled to work on specific Issues for scheduling purposes.
- Scheduling field service technicians to work on jobs (which came in as BMC FootPrints Service Core Issues).
- Scheduling Workspace or Team meetings related to a particular BMC FootPrints Service Core Issue.
- Displaying all of your follow-up calls on the Calendar.
- Displaying due dates for important Issues on the Calendar.
- Scheduling recurring maintenance calls.

The following subtopics explain the different aspects of linking appointments and Issues:

- Setting Up BMC FootPrints Service Core to Link Appointments and Issues
- Creating an Appointment from an Issue
- Creating an Issue from an Appointment
- Viewing Linked Appointments
- Editing Linked Appointments

Setting Up BMC FootPrints Service Core to Link Appointments and Issues

The only requirement to link Appointments and Issues is a minimum of one Date/Time field in the Workspace. The Date/Time field is a supported field type for BMC FootPrints Service Core Issues that allows the user to specify a calendar date and time to associate with an Issue. Examples of a Date/Time field include Due Date, Start Date, Follow-up Date, and Work Scheduled.

The Workspace Administrator can create a Date/Time field on the Administration | Workspace | Form Designer page. An unlimited number of Date/Time fields can be created. The user can choose which field to use to make the link when creating the appointment or Issue.

NOTE

Plain Date fields are not supported for linking to the Calendar, as no time can be specified for this data type.

Creating an Appointment from an Issue

To create an appointment from an Issue:

1. On the Create Issue or Edit Issue page, fill out all of the information for the Issue.
2. Select the Date/Time field to be used for the link (for example, Due Date). Date/Time fields are indicated by the Date/Time icon.

3. In the Date/Time field pop-up, select the date and the start and end times for the appointment. To select the start and end times, click the radio button, select a time from the times list for the start of the appointment, then do the same for the end of the appointment. If no time is required (only a date), check the box for No Time.
4. For Calendar, select either Personal or Personal & Workspace. If Personal is selected, the appointment is added to each assignee's personal Calendar. If Personal & Workspace is selected, the appointment is also displayed on the Workspace Calendar for the current Workspace.
5. Click **GO** in the pop-up to complete the date/time field selection, then click **GO** to submit the Issue.
6. The Issue is created and an appointment on the appropriate Calendar/Calendars is also created.

You can view the link to the Appointment on the Detail View of the Issue. The data for the Appointment includes:

- **Appointment Date**—The date selected in the Issue for Due Date.
- **Title**—The title of the Issue becomes the Title of the appointment.
- **Start Time**—The time of the selected for Due Date in the Issue.
- **End Time**—Default to one hour after the Start Time.
- **Linked to Issue X using Due Date field**—The Issue number is displayed along with the name of the field used in the link.
- **Invitees**—Users assigned to the Issue are listed as invitees.
- **Description**—The initial Issue Description is included here. The description information is not updated even if the Issue Description field is updated afterwards.

Round Robin Assignment

When an appointment is created from the Issue page and Round Robin assignment is enabled, the new appointment shows the correct Round Robin assignee. If an appointment is created from the calendar, then all members of the Round Robin team are assigned.

Creating An Issue from an Appointment

An Issue can be created from an appointment. When this method of Issue creation is used, the Issue is pre-filled with the data from the appointment. Additional Issue data can be entered from the Issue page.

NOTE

The names of many of the fields in BMC FootPrints Service Core can be changed by the administrator (Title, Priority, Status, Description, etc.), as well as the name of the records (Issue). Custom fields can also be created. For clarity, this manual always refers to BMC FootPrints Service Core records as “Issues” and uses the default terms for the other field names.

To create an Issue from an appointment:

1. Click the **Create Appointment** button or select an hour in the Day View of the Calendar. A pop-up window is displayed with a Create Appointment dialog.
2. Enter the data for Title, Description, Invite Users, etc. Refer to Creating Appointments for complete instructions.
3. For the **Link to Issue** field, select the Date/Time field to link, e.g., Due Date.
4. Click **Save** to create the appointment. The appointment and the Issue are created and the Create Appointment page for that date is displayed.

Both the Issue and an Appointment are created and linked.

Viewing Linked Appointments

A reference to the link can be found on both the Appointment and the linked Issue. To view the link:

- On the Detail View of an appointment in the Calendar, a link called Linked to Issue #*n* using the *Due Date field* (where *n* is the Issue number and *Due Date* is the name of the Date/Time field) is displayed.
- On the Detail View of the Issue, the reference Linked to Calendar is displayed along with the Linked to Calendar icon. Click the link to view the details of the appointment in a pop-up window.

Editing Linked Appointments

Issues and appointments that are linked can be edited from either record with the other automatically updated.

Fields that cause an update are described below.

For Appointments

- **Title**—Updating the Title field changes the Title of the Issue.
- **Start Date/Time**—Changing the Start Date/Time updates the corresponding field in the Issue (Due Date, Follow-up Date, etc.)
- **Invitees**—Changing the invitees changes the assignees of the Issue.
- **Description**—If you update the Description field, the latest description of the linked issue is updated as well.

For Issues

- **Title**—Updating the Title field changes the Title of the Issue.
- **Date/Time field**—Changing the data in the linked Date/Time field (Due Date, **Follow-up Date**, etc.) changes the Start Date/Time in the appointment. The End Date/Time defaults to one hour after the new Start Time.
- **Assignees**—Changing the assignees changes the invitees of the appointment.
- **Description**—Updating the Description field of the Issue does not alter the description of the linked appointment.

Recurring appointments function differently. If the Appointment is edited, only future Issues are affected. In the case of appointments that recur Today and *n* consecutive days (which only makes one Issue), the Issue is updated as described above.

If an Issue created from a recurring appointment is edited, it does not affect the appointment. This is because that instance of the Issue may have special properties or notes that are relevant only to that instance. To change the properties of all future Issues for the common fields (Title, Assignees/Invitees, etc.), the edit should be made to the originating appointment.

Creating Recurring Issues from the Calendar

Recurring appointments can be created that create new Issues automatically when the next recurrence occurs. This is useful for scheduling recurring maintenance jobs that require an issue to be created and assigned to a particular user automatically.

The appointment must originate in the Calendar. That is, you must make the appointment first (as a recurring appointment) and link it to an Issue via a Date/Time field. Recurring Issues cannot be created if the Issue is created first.

NOTE

The names of many of the fields in BMC FootPrints Service Core can be changed by the administrator (Title, Priority, Status, Description, etc.), as well as the name of the records (Issue). Custom fields can also be created. For clarity, this manual always refers to BMC FootPrints Service Core records as “Issues” and uses the default terms for the other field names.

To create a recurring appointment which creates automated recurring Issues:

1. Click the Create Appointment button or select an hour in the Day View in the Calendar. A pop-up window is displayed for the Create Appointment dialog.
2. Fill in the data for Title, Description, Invite Users, etc. Refer to Creating Appointments for complete instructions.
3. For the Link to Issue field, select the Date/Time field to link, e.g., Due Date.
4. For Recurrence, select the Recurrence tab, and then click the Activate Recurrence checkbox. The recurrence controls are activated.
5. Select the type of recurrence you want from the drop-down box. Options are:
   - Daily
   - Weekly
   - Monthly
   - Yearly
6. The options for the type of recurrence change depending on the type you select.
   - **Daily**—Options are Every *X* days (where *X* is a number you specify) or Every weekday (i.e., Monday through Friday)
   - **Weekly**—Specify that the appointment recurs every *X* weeks (where *X* is a number you specify) and the day of the week on which the appointment recurs.
   - **Monthly**—Specify either that the appointment recurs on a date (the 1st, 2nd, 3rd, 4th, etc.) every *X* many months (e.g., the appointment recurs on the 3rd day every two months) or that the appointment recurs on a day of the week (e.g., the third Tuesday) every *X* months.
   - **Yearly**—Specify either that the appointment recurs on a specific date every year (e.g., August 14) or that the appointment recurs on a day of the week of a specific month (e.g., the third Tuesday every August).
7. Next, either select "No end date" or an "End by" date, in which case you must fill out the date by which the recurring appointment ends. For example, you might choose to set up an appointment that occurs on every Monday of every week and then select a date three months later for the appointment to stop recurring on the calendar.
5. Click **Save** to create the appointment. The appointment and the issue are created and the Create Appointment page is displayed for that date.

Issues are created automatically by the system each time the appointment occurs. The first Issue created contains the manual information entered on the Issue page; subsequent Issues only contain the information taken from the appointment.

Calendar Preferences

The user can set various options for his or her own personal Calendar. The Workspace Administrator can set options for the current Workspace Calendar.

To set the preferences for the Calendar, select the Preferences link from the Day View of the Calendar.

The options are:

- **Email myself after appointment creation and update**—By default, the creator of an appointment receives an email notification for the appointment being created or updated regardless of whether the creator is invited. If this option is turned off, emails are not sent to the creator by default. The option can be overridden for a particular appointment when creating or updating it using the Email Me checkbox option.
- **Email all invitees after appointment creation and update**—By default, users invited to an appointment receive an email notification when an appointment is created or updated. If this option is turned off, emails are not sent, by default. The option can be overridden for a particular appointment when creating or updating it using the Email Invitees checkbox option.
- **Display the full item in the week/month views instead of truncating items that are too long**— All appointments for that week/month with full titles are displayed by default in Month View. To limit the number and size of appointments displayed, select NO for this option and select a maximum number and size using the two following options
    - **Number of items to show for each day in week/month views, if truncating items in week/month views**—Select the maximum number of appointments displayed for each day in the week/month View. This option only applies if the option above is set to NO.
    - **Number of characters in day boxes of week/month views before truncating the item, if not displaying the full item**— Select the maximum number of characters to display per appointment for all appointments displayed in the Month View. This option only applies if the first option above is set to NO.
- **Show hours for items in week/month views**—By default, the hours of items in the week and month views of the calendar are displayed. You can turn that off.
- **Show items in day view in all hours during which they occur**— By default, appointments that span multiple hours (e.g., 10:00 AM-12:00 PM) only display in the first hour in which they occur. If this option is enabled, appointments display in each hour block they occur as duplicate appointments.
- **Show hours with no items in day view**—By default, the day view calendar shows all the hours of the work day, regardless of whether there is an item during that hour. This can be turned off so that only hours with items entered are shown.
- **Show end time on week/month views**—By default, the end times for items on the week/month view of the calendar are displayed in addition to the start time. This can be turned off so that only the start time is displayed.
- **Show name of user who added or last edited each item**—This is turned off by default. If this option is enabled, the name of the user who created or last edited an appointment is displayed in parentheses next to the appointment in Day, Week, and Month Views (individual appointments are not displayed in Year view).
- **Day to start weeks on**—By default, weeks are displayed from Sunday-Saturday. You can elect to display weeks from Monday-Sunday by selecting Monday.
- **Time to start/end day view at, in 24-hour time format**—By default, the hours displayed in the Day View are 8:00am-5:00pm (0800-1700). You can elect to change this range using these two options. Appointments can be created for any time regardless of what is selected here.

- **12 or 24 hour time format**—Hours displayed on the Day View are displayed in the 12 hour format using AM and PM by default. If 24 is selected, hours are displayed in the 24 hour format.
- **Number of items to show for each day in week/month views, if truncating items in week/month views**—Specify the number.
- **Number of characters in day boxes of week/month views before truncating the item, if not displaying the full item**—Specify the number.
- **Time slot length (in minutes) on the day view page**—Time slots on the day view are displayed as 60 minute slots by default. You have the option to set the time slot to 15, 20, 30, or 60 minutes.
- **Default reminder time**—You can set reminders to be displayed X minutes/hours before the appointment or turn off reminders.

After you make changes, click the **GO** button.

Scheduling

About Scheduling and Availability

Scheduling allows you to manage your work schedule and make it available to other Agents in the Workspace, minimizing conflicts. The Workspace Calendar is defined by the Workspace Administrator. Default schedules can be created for all Agents in a Workspace, but Agents can also modify their own schedules as necessary.

The following topics cover the different aspects of scheduling and availability for Agents:

- Creating a Schedule
- Viewing Schedules
- Checking Availability
- Linking Availability to Issues

To administer the Workspace schedule and define default schedules for Agents, refer to Scheduling in the chapter on *Workspace Administration*.

Manage Agent Schedule

The Workspace Administrator can create and manage Agents' work schedules. Agents can also create and modify their own schedules through the BMC FootPrints Service Core personal Calendar.

To manage an individual Agent's work schedule as an Administrator, under Administration | Workspace | Other Options | Calendar and Scheduling, click the Agent radio button, select an Agent from the drop-down list, then click the **Edit** button. The Work Schedule page is displayed.

NOTE
If a work schedule is defined for an Agent, the Agent's version of the work schedule is used in determining availability. If there is no work schedule for an Agent, the Workspace work schedule is used.

The Agent's work schedule can be defined here, including normal working days and hours, vacations, and holidays. If an Agent does not have a work schedule defined, the Workspace schedule is used to determine availability.

The following options are available:

- **Normal Work Week**—Define the normal work days and working hours for the Agent. For each day of the week, do the following:
  - For each day worked, check the Work Day box and select a time range by entering start and stop times in the drop-down boxes.
  - For 24-hour work days, check the 24 Hour Day option.
- **Holidays/Exceptions**—Define special days when the normal work days and hours are not in effect.
  - **Add New Holiday/Exception**—To add a new holiday or exception to the schedule, specify the following:
    - **Type**—For days off, such as a holiday, select Day Off. For vacations and extended leaves, select Date Range. For half-days or other exceptions (including, for example, a special Saturday that is worked), select Partial Day.
    - **Name**—Give the holiday or exception a name, like Independence Day, Closed for Inventory, etc.
    - **New Date**—Provide the date of the holiday or exception.
    - **End Date**—When Date Range is selected, also provide the date when the holiday ends (this should be the last day of the holiday, not the first day back).
    - **Start Time/End Time**—When Partial Day is selected, you must provide the start and end time of the special time that is included in the work schedule (not the time that will not be worked). This is useful when you need to define additional work days for a busy season or to define a half-day. For example, if 8am-12pm is selected on a day where the normal work hours are 8am-5pm, the default Agent's schedule only shows availability for 8am-12pm for that day.
    - Click **Add New** to add the holiday or exception.
  - **Modify Existing Holiday/Exception**—To modify an existing holiday or exception, select it from the list and click **Modify**. The characteristics of the holiday/exception populate the options in that section. Make the changes.
  - **Delete Existing Holiday/Exception**—Select the holiday/exception to delete and click **Delete**.

To apply any changes made in this section, enter your password and click **Save**.

Viewing Schedules

Agent schedules can be accessed by selecting More | Calendar from the BMC FootPrints Service Core Toolbar, then clicking the Availability link. Both the Workspace and the Personal calendars show availability for all agents in the workspace from the Availability link.

A legend in the lower left of the window explains the matrix, using the colors that have been defined by your administrator.

- **Available**—Agent is available.
- **Appointment**—Agent is at an appointment, but working.
- **Out of Office**—Agent is out of the office.
- **Holiday/Exception**—Agent is out of the office due to holiday or vacation, etc.

There are various options on this page:

- **Change the date**—The Agent Availability pop-up window defaults to a schedule for the current day. To change the day, use the arrow buttons at the top of the window.

- **Display Agents**—The default display shows availability for all Agents. Available Agents (no appointments at the moment), Agents Logged On, or Agents by Team can be displayed by selecting an option in the Display drop-down.
- **Start Time**—The start of the work day defaults to 7:30 AM to 5:30 PM. Select a different start time from the drop-down to change the time range. Start times between midnight and 2 PM can be selected. You can also change the start and end times using the left and right arrow buttons within the availability matrix.

The actual scheduling of an Agent's time is done from the Agent Work Schedule, from the Calendar, and from the Create Issue and Edit Issue page when linked to the Calendar via a Time/Date field.

Checking Availability from the Calendar

Agents can access this window from the Calendar while scheduling appointments and from the Create Issue and Edit Issue pages. In addition to the options explained in Viewing Schedules, you can select the Agents you would like to invite to the appointment.

To include Agents in an appointment:

1. Select Create Appointment from the Workspace or personal Calendar.
2. Click **Check Availability**. The Agent Availability matrix window opens.
3. After reviewing the matrix, check the box(es) next to the names of the Agents you wish to invite to the appointment. If you allow the cursor to hover over an unavailable time slot, a small pop-up is displayed showing the reason that the Agent is unavailable.

NOTE

You will get a warning message if you select the name of an Agent whose time is not free for the scheduled appointment if the **Auto-check Availability** option is enabled.

4. Click **GO**. The Create Appointment page is displayed. The names of the Agents you checked are included in the list of invitees.

Checking Availability for an Issue

When creating or editing an Issue, you can check your availability or the schedules of Agents right from the Create or Edit issue screen.

1. Select Check Availability from the Assignee section of the Create Issue or Edit Issue page.
2. The availability matrix displays today's date. If your administrator associated date fields with the schedule, for example, Follow-up Date, you can switch to that date to see Agent availability. You can also click Change Date to select a different day's schedule to view.
3. Check the boxes next to the names of the Agent(s) you want to assign to the Issue.
4. Click **GO**.
5. If you've selected an Agent who isn't available at the moment or based on the date/time field selected, and the Auto-check Availability option is enabled, a warning message is displayed asking if you want to continue with the assignment.

Address Book

Address Book

The Address Book is used for maintaining employee and/or external customer contact and other information. This information should be relatively permanent for your end users. For example, data kept in the Address Book may include Department, Name, User ID, Email address, Phone number, Service Level, etc. This feature allows Agents to quickly view the latest user contact data and look up the data right from the Issue form, saving time and keystrokes.

Topics in this chapter:

- Address Book Home Page
- Create a New Contact
- Working with Contacts
- Create a New Issue from the Address Book
- Address Book Searches and Reports
- Address Book Administration

Address Book Homepage

To view the Address Book, select **Address Book** from the BMC FootPrints Service Core Toolbar | More menu. The Address Book is displayed in a second browser window.

Address Book Toolbar

The Address Book (AB) has its own toolbar with the following buttons:

- **Home**—Displays the Address Book Homepage.
- **Create Contact**—Create a new contact.
- **Reports**—Report on contact data.
- **Administration**—Configure the Address Book (administrators only).

NOTE

You may see additional toolbar buttons if, for example, your BMC FootPrints Service Core administrator has configured BMC FootPrints Service Core to use the Master Contact Record feature. In that instance, you might see buttons for Company Home and Company Search. The list above is for the basic buttons on the toolbar.

Above the Address Book Toolbar

Several functions are located above the Address Book toolbar:

- **Address Book Quick Search**—To use Quick Search, enter the search string in the Quick Search field, select the field to search from the drop-down (using the drop-down arrow), and the click the SEARCH button. A list of all Issues that match your search criteria are displayed.
- **Link to Advanced Search**—The Advanced Search feature allows you to search the Address Book database on any combination of fields and advanced criteria. BMC FootPrints Service Core automatically generates the Advanced Search form for each Address Book, with all of the custom and built-in fields for that Address Book

included. For example, if a new field is added by the Address Book Administrator, the field is included automatically on the Advanced Search form. In the same way, if a field is deleted from the Address Book, it is removed from the Advanced Search page. To perform an Advanced Search, click Advanced below the Quick Search dialog. This form contains a combination of text fields, drop-down boxes, multi-select dialogs, and radio buttons which allow you to search on any combination of criteria. Each field acts as a filter. Only fill in or choose the criteria you want to search on. Any field that you do not want to perform a search on should remain untouched. Some Boolean operators can be used within in text fields.

- **Close**—Close the Address Book browser.
- **Help**—Open the complete online help.

Below the Address Book Toolbar

Immediately below the Address Book toolbar is an alphabetical index. Click on a letter to display all contacts whose search field (by default, this is Last Name) begins with that letter.

- The Address Book contacts are listed below the toolbar.
- The contacts are sorted alphabetically on the first field. By default, this is Last Name, but any field can be set as the first field, such as Company, Department, User ID, etc.
- Clicking the hypertext link for a letter (A, B, C, etc.) brings you to the contacts for that letter.
- If the Address Book is either LDAP or Dynamic SQL-based, the Address Book Homepage contains a search window.

Create a New Address Book Contact

1. Click Create Contact on the Address Book Toolbar.
2. Fill in the fields (these can differ depending on how your administrator has customized BMC FootPrints Service Core).
3. Click SAVE to submit the new contact information.

The new contact is included, in alphabetical order, in the Address Book. Contacts can also be created from the Create Issue screen.

NOTE

When a new Address Book contact is created, the system checks for duplicate contacts by comparing the first two fields and/or the primary key. If a duplicate is found, the user is given the option to create the new contact or to go back and fix the data.

Working with Address Book Contacts

Selecting a contact in the Address Book (by clicking the hypertext link) displays the details of that contact. You also get a new set of buttons for that contact.

Contact Options

- **Edit Contact**—Edit the Address Book contact (if you have permission).
- **Copy Contact**—Create a copy of the contact.
- **Delete**—Delete contact from Address Book (if you have permission).

- **Create Issue**—Create a new Issue from an existing Address Book contact, with all of the contact's information pre-filled.
- **History**—Lists all Issues for that contact.
- **Report**—Reports all Issues (with details) for that contact in a separate browser window.

Organizational Unit

If contacts are grouped by an Organizational Unit, such as Department or Company, two fields have hypertext links. If the Organizational Unit field is selected for a contact, the Master Contact record is displayed. Options include:

- **History**—Lists all Issues for that contact.
- **Report**—Reports all Issues (with details) for that contact in a separate browser window.
- **List Contacts**—List all contacts for the Organization.

NOTE

The name of the contact records and Issue records can be changed by the BMC FootPrints Service Core administrator. For clarity, this manual always refers to BMC FootPrints Service Core contact records as "contacts", and to Issue records as "Issues".

Create a New Issue from the Address Book

You can create an Issue directly from the Address Book, with the contact's information pre-filled, in addition to creating one from the BMC FootPrints Service Core Toolbar.

To create a new Issue from the Address Book:

1. Use the A-Z hypertext letters at the top of the Address Book screen to search for the contact's Last Name or other first field. You can also use the Quick or Advanced Search options to search on other fields.
2. Once you have found the contact, click the hypertext link for that contact display the details.
3. Click New Issue on the BMC FootPrints Service Core toolbar.
4. The New Issue page is displayed in the main BMC FootPrints Service Core window and the contact's information is pre-filled in the Contact Information. The Address Book window remains active, but in the background.
5. Fill out the rest of the Issue as described in Create Test Issue and click **Save**. The new Issue is registered and given a number.

Address Book Searches and Reports

Address Book Search and Report Options

The search options for the Address Book are:

- **A-Z links**—Click a link to list the contacts for that letter or number. The field it refers to is the first field in the Address Book. By default, this is Last Name, but it could be any field, such as Company, Department, etc.
- **Quick Search**—The quick search option appears in the top frame of the Address Book. Search for a name in the first or second Address Book field. This search is always anchored to the beginning of the field. For example, if the string smi is entered and Last Name is selected to search on, Smith and Smithe might be returned, but Goldsmith is not returned.

- **Advanced Search**—Available by clicking the Advanced link below the Quick Search. Search on any combination of Address Book fields.
- **Reports**—Reports can be generated on contact information from the Address Book.
- **Saved Searches and Reports**—Create saved searches and report templates of contacts.

Address Book Contact Search

The Advanced Search is available by selecting the Advanced link below the Quick Search field. A search can be done on any combination of Address Book fields.

After selecting Advanced, you can run, edit, or delete personal or shared searches. These options work the same as with Issue searches. In the same way, you complete search criteria to create a new search.

The following options are available in the Address Book Advanced Search form:

1. **Contact Information**—The fields in this section differ depending on the fields in the current Address Book. Search on as many fields as desired. Search methods vary with the field data types:
   - **Character field**—Displays a text box. Enter the word or phrase for which to search.
   - **Number field**—Displays a text box. Enter the number or part of a number for which to search.
   - **Drop-down and Multi-select field**—Displays a multi-select dialog box. Highlight one or more values for which to search. To search for Issues that contain no data for the field, select No data. If you do not want to restrict the search based on choices in a field, do not highlight any values.
   - **Date fields**—Search on a date or date range. Date Field Search Options.

NOTE

Date/time fields can only be searched by date, not time.

   - **Other field types**—Email, URL, and FTP fields display a text box. Enter the word or phrase for which to search (including partial addresses).
2. **Order search results by**—Select a field to use in ordering the output. All output is displayed in alphanumeric order (numbers first, then alphabet characters). For example, if you select “Last Name”, the output is displayed in alphabetical order according to the Last Name field.
3. **And/Or**—If And is chosen, contacts must match all criteria chosen above (this is the default). If Or is chosen, only one criterion must be met.
4. **Anchoring**—By default, searches in the Address Book are anchored on the first letter for each field. If you would rather not anchor searches (such as when looking for a value that might appear in the middle of an address book field), you may do so by selecting Non-anchored.
5. **Data encoding**—Select the type of data encoding to use in displaying the output. Options are:
   - **Server default**—The default encoding that is in use for the BMC FootPrints Service Core server. Leave this as the selection if you are unsure about which choice to make.
   - **UTF-8**—UTF-8 is very universal and handles pretty much all scripts. If you have any problems with garbled characters in the output and are not exporting the output to an application such as Microsoft Excel, then use UTF-8. Otherwise, if there are no problems with the output, leave this field at the “server default” option.
   - **UTF 8 with Signature (MS Excel Compatible)**— UTF-8 with Signature (MS Excel Compatible) prints a UTF-8 Signature at the beginning of the file, which allows certain applications, such as Microsoft Excel, to identify

the text as UTF-8. Without this signature, those applications interpret the data with the server's local encoding and some characters may be garbled.

6. **Run Search**—Click **GO** to run the search.
7. To save the search as a template, enter a name. Select Personal to save the search for yourself. Select Shared/Internal to share your search with other internal BMC FootPrints Service Core users. Each time a saved search is run, it returns the latest matching data.
8. The search results are displayed in the Address Book Homepage.

Address Book Reports

Reports can be generated on contact information from the Address Book. The results are not related to Issue information, but strictly on contact information from the Address Book. To access Address Book reporting functions, click the **Reports** button on the Address Book toolbar.

NOTE

The names of many of the fields in BMC FootPrints Service Core can be changed by the administrator, including the name of the records in the Address Book. For clarity, this manual always refers to Address Book records as “Contacts”.

Shared and Personal Reports

For details on how to run, edit, or delete a saved Address Book report, refer to Saved and Shared Reports. That topic refers to running a report on issues, but the principles are the same for Address Book reports.

Create an Address Book Report

1. To create a contact report, select **Report** from the Address Book toolbar.
2. **Specify the Format of the Report—**Options include:
   - **Title**—This is displayed at the top of the report.
   - **Date**—The date the report is run (updates each time the report template is re-run).
   - **Time**—The time the report is run (updates each time the report template is re-run).
   - **Address Book name**—The name of the Address Book.
   - **Logo graphic**—The logo image displayed in the current Address Book.
3. **Sort Order—**Select a field to use in ordering the output. All output is displayed in alphanumeric order (numbers first, then alphabet characters). For example, if you select “Last Name”, the output is displayed in alphabetical order according to the Last Name field.
4. **Select Report Criteria**—Select the criteria for the report. Only fill in or choose the criteria for which to search. The Address Book Reporting criteria section uses the same mechanism as the Advanced Search. Refer to section above on Advanced Search for detailed explanation of criteria.
5. **And/Or**—If And is chosen, contacts must match all criteria chosen above (this is the default). If Or is chosen, only one criterion must be met.
6. **Anchoring**—By default, searches in the Address Book are anchored on the first letter for each field. If you would rather not anchor searches (such as when looking for a value that might appear in the middle of an address book field), you may do so by selecting Non-anchored.
7. **Data encoding**—Select the type of data encoding to use in displaying the output. Options are:

- **Server default**—The default encoding that is in use for the BMC FootPrints Service Core server. Leave this as the selection if you are unsure about which choice to make.
- **UTF-8**—UTF-8 is very universal and handles pretty much all scripts. If you have any problems with garbled characters in the output and are not exporting the output to an application such as Microsoft Excel, then use UTF-8. Otherwise, if there are no problems with the output, leave this field at the “server default” option.
- **UTF 8 with Signature (MS Excel Compatible)**— UTF-8 with Signature (MS Excel Compatible) prints a UTF-8 Signature at the beginning of the file, which allows certain applications, such as Microsoft Excel, to identify the text as UTF-8. Without this signature, those applications interpret the data with the server's local encoding and some characters may be garbled.

8. **Create Report**—Click **GO** to run the report.
9. To save the report as a template, enter a name. Select Personal to save the report for yourself. Select Shared/Internal to share your report template with other internal BMC FootPrints Service Core users. Each time a saved report template is run, it returns the latest matching data.

NOTE

Saving the report here only saves the report formatting options and criteria chosen in this form, not the results of the report. This feature can be used to run the same report in the future. For example, you could set the report to be run once a week. Each time the report is run, it returns the latest data from the current Workspace. Saving report output is covered in Saving and Printing Report Data.

After clicking **GO**, the report is displayed in a separate browser window. Large reports sometimes take a few minutes to run. The report can be saved or printed from the browser window.

Master Contact Records

Master Contact Record Actions

If the Master Contact Record feature is configured, if you move your mouse over the Home button on the Address Book toolbar, a menu is displayed for the Master Contact Record Home. Note that the name used for this is not “Master Contact Record Home”, but the name of the field used for Master Contact Records. If the field used is “Company”, the menu selection will say “Company Home”. If you select the Master Contact Record Home, records are displayed in alphanumeric order based on the field used for the Master Contact Record. For example, if the records are organized according to a field called Company Name, the first column listing contact records will be based on that field.

The Master Contact Record feature enables the user to take the following actions on the Address Book homepage:

- Create a Master Contact Record
- Search for Master Contact Records
- View details of Master Contact Records

From the Details page of a Master Contact Record, a user can:

- Edit the record
- Copy the record
- Delete the record
- Create a new issue

- Generate a report on the history
- List associated contacts

In addition, the label "Master Contact Record" can be changed as a system preference or as a Workspace preference. The term "Contact" is used as a default and may be changed prior to configuring the Master Contact Record feature. If that is the case and the term was changed previously to something like "Customer", this would be displayed as "Master Customer Record".

NOTE
The Master Contact Record is only available for BMC FootPrints Service Core Address Book users.

Creating a Master Contact Record

Creating a Master Contact Record is simpler than creating a new contact.

To create a Master Contact Record:

1. Select Address Book from the BMC FootPrints Service Core Toolbar. The Address Book Homepage is displayed.
2. Select **Create Master Contact Record** from the Create Contact menu. The Create New Master Contact Record page is displayed. Note that the name used for this is not “Create Master Contact Record”, but the name of the field used for Master Contact Records. If the field used is “Company”, the menu selection will say “Create Company”.
3. Enter the data in the appropriate fields. For example, if you are using a field named "Company" for lookup, enter the name of the company in the Company field.
4. To update all records that have a matching Master Contact Key, check the Update Contacts checkbox. This updates all of the records that have the same value in the Master Contact Key with the same data in the contact fields.
5. Enter your password and click the **GO** button. The Master Contact Record has been created.

Searching for Master Contact Records

To search for Master Contact Records, from either the Address Book home or Master Contact Record home, you can use the Quick Search field and select the Master Contact Record field from the drop-down, then search for records that have the specified string in the Master Contact Record field. For example, if the Master Contact Record field is "Company" and you are looking for all records for the International Widget Company, you could enter the string "Internat" in the Quick Search field, select "Company" from the drop-down, and then start the search. Because Quick Searches are anchored searches, the string you enter must start with the first letters that would appear in the Master Contact Record field. In the above example, searching for "Widget" would not work.

To perform non-anchored or more complex searches, you must use the Advanced search feature.

To search for a Master Contact Record:

1. Click the Advanced link below the Quick Search field on either the Address Book home or Master Contact Record home.
2. Enter the search data and select from the options to search for the Master Contact Record or Records.

   For a Master Contact Record search, be sure to enter data in the Master Contact Record field. The records you find will be further filtered by any other fields in which you enter data. For example, if your Master Contact Record field is "Company", you must enter characters in the Company field. To find all the records for that one entity, only use the Master Contact Record field and do not enter data in any other fields.

Other options on this page are:

- **Order search results by**—Select the order in which matching records are displayed by choosing a field from the drop-down list. The drop-down contains all of the Master Contact Record fields. Records will be displayed in alphabetical order based on the field you select here. For example, if you have two Master Contact Record fields named Company and Service Level and you choose to order the search results according to the Service Level, then "Bronze" is displayed in the results before "Gold".
- **And/Or**—Display only those records that match all fields by selecting And or display records that match any fields by selecting Or.
- **Anchored/Non-anchored**—When you select the Anchored option, BMC FootPrints Service Core searches for matching records starting with the first letter of the Master Contact Record fields. If you select Non-anchored, BMC FootPrints Service Core searches for any records that match the field data you provided regardless of where that string appears in the field. For example, if you perform a non-anchored search with "idge" entered in the Company field, BMC FootPrints Service Core would display Master Contact Records for companies with names like "Widget" and "North Ridge".
- **Data Encoding**—Select server default, UTF-8, or UTF-8 with Signature from the drop-down list.
    - **Server default**—The default encoding that is in use for the BMC FootPrints Service Core server. Leave this as the selection if you are unsure about which choice to make.
    - **UTF-8**—UTF-8 is very universal and handles pretty much all scripts. If you have any problems with garbled characters in the output and are not exporting the output to an application such as Microsoft Excel, then use UTF-8. Otherwise, if there are no problems with the output, leave this field at the “server default” option.
    - **UTF 8 with Signature (MS Excel Compatible)**— UTF-8 with Signature (MS Excel Compatible) prints a UTF-8 Signature at the beginning of the file, which allows certain applications, such as Microsoft Excel, to identify the text as UTF-8. Without this signature, those applications interpret the data with the server's local encoding and some characters may be garbled.

3. After you have entered your criteria, click **GO**. BMC FootPrints Service Core displays all of the Master Contact Records that match your criteria.

Master Contact Record Details Page

Viewing Details of Master Contact Records

You can edit, copy, or delete a Master Contact Record from the Master Contact Record Details page. You can also create a new issue, view the Issue history. generate a history report, and list associated contacts from this page.

To view the Details page of the Master Contact Records, click on the first column of one of the records in the list. The Master Contact Record Detail View page is displayed.

Editing the Master Contact Record from the Details Page

You can edit a Master Contact Record from the Master Contact Record Details page.

To edit a Master Contact Record:

1. Display the record on either the Address Book or Master Contact Record home page.
2. Click on the first column of the record you want to edit. The Master Contact Record Detail View page is displayed.
3. Select the Edit link from the options above the detail view of the record. The Edit page is displayed.

4. Edit the fields as appropriate.
5. To update all records that have a matching Master Contact Key, check the Update Contacts checkbox. This updates all of the records that have the same value in the Master Contact Key with the same data in the contact fields.
6. Click the **GO** button at the bottom of the page to save the changes.

Copying the Master Contact Record from the Details Page

You can copy a Master Contact Record from the Master Contact Record Details page.

To copy a Master Contact Record:

1. Display the record on either the Address Book or Master Contact Record home page.
2. Click on the first column of the record you want to copy. The Master Contact Record Detail View page is displayed.
3. Select the Copy link from the options above the detail view of the record. The Copy page is displayed
4. Enter a new company name and edit other fields as needed.
5. To update all records that have a matching Master Contact Key, check the Update Contacts checkbox. This updates all of the records that have the same value in the Master Contact Key with the same data in the contact fields.
6. Click the **GO** button at the bottom of the page to create the new record with copied data. The record that you copied from is unchanged.

Deleting a Master Contact Record from the Details Page

You can delete a Master Contact Record from the Master Contact Record Details page.

To delete a Master Contact Record:

1. Display the record on either the Address Book or Master Contact Record home page.
2. Click on the first column of the record you want to delete. The Master Contact Record Detail View page is displayed.
3. Click the Delete link from the options above the detail view of the record. A confirmation pop-up is displayed.
4. If you choose to delete the record, click **OK** on the pop-up. Otherwise, click Cancel. If you click on **OK**, a password page is displayed. An administrator password is required to delete a Master Company Contact Record.
5. Enter your administrator password and click **GO** to complete deletion of this record.

Creating a New Issue from the Master Contact Record Details Page

You can create a new issue from the Master Contact Record Details page.

To create a new issue from the Master Contact Record Details page:

1. Select Address Book from the BMC FootPrints Service Core toolbar, select Master Contact Record Home from the Home button, and then click the first column of the record for which you want to create an issue. The Master Contact Record details page is displayed.
2. Select the **Create Issue** link from the toolbar above the detail view of the record. The BMC FootPrints Service Core New Issue page is displayed, with the contact information populated with data from the Master Contact Record.

3. Complete the rest of the information for the new Issue as normal. When the Master Contact Record feature is enabled, it places a new button in the Contact Information section of the New Issue page.

Generating a History Report from the Master Contact Record Details Page

You can generate a History Report from the Master Contact Record Details page.

To generate a History Report from the Master Contact Record Details page:

1. View the Details of the Master Contact Record (refer to Viewing Details of Master Contact Records).
2. Select the **Report** link from the toolbar above the detail view of the record. The BMC FootPrints Service Core Select Report Format page is displayed.
3. Select the type of report you wish to view from the drop-down, then click **GO**. The report is generated and displayed.

Knowledge Base

Knowledge Base

The Knowledge Base is a place to record, organize, and manage important information for a BMC FootPrints Service Core Workspace. This can include, but is not limited to: Solutions to common problems, answers to frequently asked questions, patches, and documents. By using the BMC FootPrints Service Core Knowledge Base feature, you can turn the past experiences of individual customers and Agents into a database of Solutions for users to search. This can assist Agents in finding quicker resolutions to recurring problems and in empowering customers to find the answers to their questions without submitting a Request.

Topics in this section include:

- About Solutions
- Create Solution from Scratch
- Create Solution from an Existing Issue
- Viewing Solutions
- Knowledge Base Search Options
- Using the Knowledge Base to Resolve an Issue
- Popularity
- Knowledge Base Administration (includes Knowledge Base Approvals)

About Solutions

The primary component of the Knowledge Base is a Solution. Some of the properties of a BMC FootPrints Service Core Solution are:

- **Workspace-based**—Solutions are records which reside in the Workspace database but which have special attributes (detailed below).
- **Public** or **Internal**—A Solution can be categorized as a Public Solution, accessible to both customers and Agents, or Internal, accessible only to Agents.

- **Can be Categorized**—Solutions can be categorized using the Workspace fields for the particular Workspace. These categories can be used to make FAQ (Frequently Asked Questions) lists that group Solutions.
- **Generic**—Solutions contain no contact (Address Book) information.
- **File Attachments**—Solutions can contain file attachments, enabling the Agent/administrator to make patches or other documents available to users.
- **Can be Approved**—Agents can be required to receive approval before a Solution is published to the Knowledge Base or can be restricted from creating Solutions at all.

There are two ways to make a Solution:

- From Scratch—Solutions can be made from scratch by Agents as long as the user has permissions to do so.
- From an Existing Issue—When an Agent closes an Issue, a Solution can be added to the Knowledge Base with some of the information from that Issue. The original Issue remains intact; the Solution receives a new reference number.

In addition to creating solutions from scratch or from resolved Issues, Solutions can be imported into the Knowledge Base.

Refer to Importing Issue Data for more information.

Create Solution from Scratch

1. Mouse over the New Issue button on the toolbar and select Add to KB from the menu that is displayed. If you do not have the Add to KB option, you do not have permission to create Solutions.
2. The Create Solution page is displayed.
3. **Knowledge Base**—Select the Knowledge Base to which to add the Solution. The Public Knowledge Base is viewable by customers and Agents. The Internal Knowledge Base is only viewable by Agents.
4. **Title**—The Title can be used for a summary or brief description of the Solution or a question (e.g., “How do I…?”).

NOTE

The Title field may have a different name (e.g., Subject, Short Description, etc.)

5. **Issue Information**—Use the fields in the Issue Information section to categorize the Solution by problem type, product, etc.
6. **Description**—Use the Description field to detail the step-by-step Solution. You can use the formatting options (bullets, numbered lists, font options, etc.) to help display the Solution in the clearest possible manner.

NOTE

The Description field may have a different name (Notes, Journal, Details, etc.)

7. Use the **Spellcheck** option to review the spelling of your Solution. Because Solutions are viewable by many users, it is important for the language to be as clear as possible.
8. **Attachments**—Attach one or more files to the Solution. For example, you might attach a patch, an image file containing a screenshot, or a PDF file containing a product brochure.
9. Optionally CC one or more people. They receive a one-time email containing the Solution.
10. Click **GO**.

If an approval is required, the Solution goes into the Pending queue, and the approvers are notified. If no approval is required, the Solution is published to the appropriate Knowledge Base.

Refer to Approvals for more information.

Create Solution from an Existing Issue

1. Open the Details page of the issue you want to make into a solution.
2. On the Details page of the Issue, click **Add to KB**. If you do not have the Add to KB option, you do not have permission to create Solutions.
3. **If**:
   - **the Issue is already Closed**, the Create Solution form is displayed. The form is pre-filled with data, including the latest Description for the Issue. Contact information from the originating Issue is not included.
   - **if the Issue is still Active** (i.e., Open or another active status), you are prompted to close the Issue. If Yes is selected, a Description field is displayed for adding any additional comments or a resolution before closing the Issue. After clicking **Save**, the Solution form is displayed, pre-filled with the public information from the Issue, including the latest comments added.
4. **Knowledge Base**—Select the Knowledge Base to which to add the Solution. The Public Knowledge Base is viewable by customers and Agents. The Internal Knowledge Base is only viewable by Agents.
5. **Link to Issue**—If this is checked, the Solution is linked to the original Issue. This link is only viewable to internal BMC FootPrints Service Core users (not to customers).
6. **Title**—This is pre-filled with the Title of the Issue. The Title can be used for a summary or brief description of the Solution or a question (e.g., “How do I…?”). You may want to re-word the Title to better summarize the Solution; this does not affect the originating Issue.

NOTE
The Title field may have a different name (e.g., Subject, Short Description, etc.)

7. **Issue Information**—Use the fields in the Issue Information section to categorize the Solution by problem type, product, etc. These fields are pre-filled with the information from the Issue and vary depending on your configuration.
8. **Description**—The entire Description history of the Issue is pre-filled in the Description field. You may want to re-organize and format this information to create a step-by-step Solution. If you do re-organize and format the information, it does not affect the originating Issue. Use the formatting options (bullets, numbered lists, font options, etc.) to display the Solution in the clearest possible manner.

NOTE
The Description field may have a different name (Notes, Journal, Details, etc.)

9. Use the **Spellcheck** option to review the spelling of your Solution. Because the Solution is viewable to many users, it is important for the language to be as clear as possible.
10. **Attachments**—Check the box to include the attachments from the Issue with the Solution. You can also add new attachments. For example, you can attach a patch, an image file containing a screenshot, or a PDF file containing a product brochure.
11. Optionally CC one or more people. They receive a one-time email containing the Solution. By default, the assignees and contact for the originating Issue are pre-filled in the CC field. They can be removed and/or other CCs can be added.

12. Click **GO**.
13. If an approval is required, the Solution goes into the Pending queue and the approvers are notified.

    Refer to Approvals for more information.
14. If no approval is required, the Solution is published to the appropriate Knowledge Base.
15. Changes to the Solution do not affect the data in the original Issue. The Solution receives a new reference number.

Viewing Solutions

To view solutions:

- select More | Knowledge Base or
- select Solutions from the Workspace dashboard component or
- select Solutions from the Display Drop-down.

Types of solutions you can view are:

1. **Internal Solutions**—Select Internal Solutions from the Display drop-down list or the Workspace Totals box on the BMC FootPrints Service Core Homepage. Internal Solutions are only viewable by Agents and administrators and usually have more detailed or technical information than Public Solutions.
2. **Solutions**—Select Solutions from the Display drop-down list or the Workspace Totals box on the BMC FootPrints Service Core Homepage. Solutions are viewable by both Agents and customers.
3. **Solutions from All Workspaces**—Select Solutions from All Workspaces from the Display drop-down to see a list of Solutions from all Workspaces to which you belong.

When one of the options above is selected, a list of Solutions is displayed on the homepage. To view the Details of the Solution, click the Solution number.

Knowledge Base Search Options

Knowledge Base Search Options

Solutions can easily be searched and reported on in BMC FootPrints Service Core. Options include:

- Keyword Search—Search the Knowledge Base for the current Workspace by keyword.
- Keyword Search of External Knowledge Bases—Submit your keyword search to external Knowledge Bases.
- Advanced Search—Search using a combination of criteria.
- FAQs—View the FAQ categories created by the Workspace Administrator.
- Report on Solutions—Create a custom formatted report of the Knowledge Base.
- Cross-Workspace Report of Knowledge Base—Get a report of Solutions from multiple Workspaces (must be a member of those Workspaces or a System Administrator).

Knowledge Base Keyword Search

The Keyword Search (also called "Basic Search") is available by choosing More | Knowledge Base from the BMC FootPrints Service Core toolbar. The keyword search function is in the Browse section of the Knowledge Base page.

To perform a keyword search:

1. Select a Knowledge Base from the drop-down box (for example, BMC FootPrints Service Core Public Knowledge Base).
2. If it has been configured, choose the Category in which to search. For example, you might choose to search just this workspace, solutions in all workspaces, or solutions in another category, such as categories that have been set up for specific company products. The word “Category” may have been changed by your administrator.
3. Enter the word or phrase for which to search in the Search Results for Keyword field.
4. Click **GO**. BMC FootPrints Service Core searches all fields for the keyword (including Title, Description, and any Workspace and Address Book fields configured by your Workspace administrator to allow keyword searches).
5. A list of matching Solutions is displayed in the main frame or in the pop-up window, if you are searching from an Issue page. Click a Solution to see the Details or mouse over it to see a preview, if it is displayed in a pop-up.
6. If you are searching the Knowledge Base from an Issue page, selecting a Solution from a BMC FootPrints Service Core Knowledge Base automatically pastes the Solution into the Description field.

Keyword Search of External Knowledge Bases

In addition to searching the BMC FootPrints Service Core Knowledge Bases, the keyword search can be submitted to popular online Knowledge Bases, including Microsoft TechNet, Adobe, and Google Groups.

To perform a keyword search of an online Knowledge Base:

1. Select from the available online Knowledge Bases using the drop-down box. Choices may include Microsoft TechNet, HP, Adobe, Google Groups, etc.
2. Enter the word or phrase for which to search.
3. Click **GO**. A second browser window opens with the results of the search from the selected Knowledge Base.
4. If you are searching the Knowledge Base from an Issue page, you can copy and paste information from the external Knowledge Base into the Issue Description field if a matching Solution is found.

Knowledge Base Advanced Search

If the keyword search is not sufficient, the Advanced Search feature can be used to create searches with a combination of criteria. Click the **Switch to Advanced Search** link to use the Advanced Search. The options include:

1. Select Advanced Search of Public KB to search Public Solutions or Advanced Search of Internal KB to search Internal Solutions.
2. **Title**—Enter a word or phrase to search for in the Title field. This field may be named something else, such as Subject.
3. **Description**—Enter a word or phrase to search for in the Description field. This field may be named something else, such as Notes.
4. **Keyword**—Enter a word or phrase for which to search. The Title, Description, and Issue Information (Workspace) fields are searched.
5. **Issue Information**---The fields in this section are different depending on the Workspace fields in the current Workspace. Fill in criteria (or select one or more values for a drop-down or multi-select field) for one or more

fields to return Solutions that contain that data. For example, to return Issues where the platform is Windows XP, select Win XP for Platform.

6. On the **Advanced Criteria** tab, you can enter following criteria:

a. **Date**—If dates are specified, the search returns only Solutions either created or last edited on, before, after, or between the specified dates. For example, to return Issues created before January 1, 2016, choose created before, and fill in 1 1 2016 in the first date field, leaving the second date field blank. To search on the current date, click the Current Date checkbox. Other date ranges are also available. Refer to Advanced Search for more information.
b. **Age**—If this section is filled in, the search returns Solutions based on the specified time. Number of days and hours can be specified. Modifiers are also provided, including Greater Than, Less Than, Equal to, Greater than or Equal to, Less than or Equal to, and Not Equal to. For example, to return Solutions greater than three days old, choose greater than and fill in 3 for Days.
c. **Order Search Results by**—Order the Solutions returned by the specified field. The orders are descending (most recent or highest first) or ascending (oldest or lowest first). By default, Solutions are ordered by reference number descending.
d. **And/Or**—If And is chosen, Issues must match all criteria chosen (this is the default). If Or is chosen, only one criterion must be met.

7. Click the **Run** tab and then click **GO** to submit the search.
The results are displayed in the main window (or in the pop-up if searching from an Issue page).

Note: If you are searching the Knowledge Base from an Issue page, selecting a Solution from a BMC FootPrints Service Core Knowledge Base automatically pastes the Solution into the Description field.

FAQs

The FAQ (Frequently Asked Questions) categories are available to Agents when searching the Knowledge Base. These categories are created and maintained by the Workspace Administrator. The categories are defined by advanced search criteria and named and saved by the administrator. Each time a category is accessed, it returns the latest Solutions that match the criteria defined for that category.

Refer to FAQ Administration for instructions on creating and maintain FAQs.

To view an FAQ:

Select Frequently Asked Questions on the Knowledge Base Advanced Search page.

There are two lists of FAQ categories: Public and Internal. Public FAQs contain Solutions aimed at customers. Internal FAQs usually contain more detailed or technical Solutions.

Click the Title of the desired FAQ category.

The matching Solutions for that FAQ category are displayed in the main frame (or in the pop-up window if searching from an Issue page). Click a Solution to see the Details (or mouse over it to see a preview if displayed in a pop-up).

If you are accessing FAQs from an Issue page, selecting a Solution from a FAQ automatically pastes the Solution into the Description field.

NOTE

Public FAQ categories are also viewable by customers.

Report on Solutions

You may need to create a report of Solutions. Reports contain more search options and formatting options than the Knowledge Base searches. You can only create reports if you have the proper permissions.

To create a report of Solutions:

Select Reports| New Report from the BMC FootPrints Service Core toolbar.

Select the desired formatting options, fields displayed, etc. as described in Custom Reports.

To get the full details of the Solution, make sure to include the Description field in Step 3 (the field may have another name, such as Notes or Details).

Under Select Report Criteria, for Status, highlight one of the solutions options. This limits the report to the Knowledge Base only.

Select other criteria for the report. For example, to return Solutions with the word "password" in the Solution, enter password for as the keyword. **Do not specify any Address Book information**, as Solutions do not contain Address Book data.

Click **GO**. The results of the report are displayed new browser window.

Cross-Workspace Report of Knowledge Base

You may need to search for Solutions across multiple Workspaces. While there are limited options to view Solutions from multiple Workspaces from the Knowledge Base area, a cross-workspace report of Solutions allows you to use multiple search criteria. You must be a member of the Workspaces to be included in the report and have permission to run cross-workspace reports, or be a System Administrator.

To run a cross-workspace report of Solutions:

Select Reports | Cross Workspace | Copy from the BMC FootPrints Service Core Toolbar .

Select the Workspaces to include in the report. Use the CTRL key to highlight more than one Workspace.

Click **GO**.

Select the desired formatting options, fields displayed, etc., as described in Custom Reporting.

To get the full details of the Solution, make sure to include the Description field in Step 3 (the field may have another name, such as Notes or Details). To include the name of the Workspace where the Solution resides, select Workspace Name.

Under Select Report Criteria, for Status, highlight Internal Solution and/or Public Solution. This limits the report to the Knowledge Base only.

Select the other criteria for the report. For example, to return Solutions with the word “password” in the Solution, enter password for as the keyword. Do not specify any Address Book information, as Solutions do not contain Address Book data.

Click **GO**. The results of the report are displayed in a new browser window, specifying the Workspace for each Solution.

Using the Knowledge Base to Resolve an Issue

The Knowledge Base can be used by the agent to find a Solution to an Issue while working on that Issue. This allows the agent to quickly resolve an Issue without losing any work. If a matching Solution is found, it can be imported directly in the Description of the Issue.

NOTE

If the Auto-Suggest Solutions feature is enabled, you will be able to view suggested Solutions that exist in the Knowledge Base which match the criteria you enter in the Issue Information on the Issue page, and to browse the Knowledge Base from there as well. This will give you the opportunity to more quickly resolve the Issue. (For details, see "Enabling Auto-suggest Solutions for Issues and Requests" in the Administrator's Guide.

To use this feature:

On the Create Issue or Edit Issue page, select **Search Knowledge Base** above the Description field. A pop-up window appears containing the Knowledge Base search options.

Enter the keyword for which to search. For example, to find Solutions regarding password problems, search for the word "password".

Select one of the BMC FootPrints Service Core Knowledge Bases listed in the drop-down. Other Knowledge Base search features are also available from the Issue page, including FAQ categories and the Advanced Search. Refer to Knowledge Base Search Options for more information. To place a link in the Issue back to the originating Solution, click the checkbox.

Click **GO.** A list of matching Solutions is displayed.

Mouse-over the Titles to view the details of each Solution.

Click the Title of the desired Solution. If none match the current Issue, click the **Search** button to perform another search.

The Solution is displayed in the Description field. It can be edited if necessary. Editing the Description does not affect the originating Solution.

If an external Knowledge Base was searched, the results are displayed in a separate window. These results are not automatically pasted into the Description field when selected; you must copy and paste the Solution manually.

Make any other needed changes to the Issue and click **GO**. The Issue is updated with the selected Solution and email notification is sent to the assignees and customer if that option is chosen.

NOTE

The names of many of the fields in BMC FootPrints Service Core can be changed by the administrator (Title, Priority, Status, Description, etc.), as well as the name of the records (Issue). Custom fields can also be created. For clarity, this manual always refers to BMC FootPrints Service Core records as “Issues,” and uses the default terms for the other field names.

Popularity

Solutions in the Knowledge Base can be ranked by popularity in virtually any search or FAQ. Popularity is determined by a survey question posed to customers each time they access a Solution. When a customer logs BMC FootPrints Service Core and views a Solution, the question Was this Solution useful to you? appears, with Yes and No options. The responses are tracked and each Solution is given a Popularity rating (the higher the better).

Customers do not have read access to the ratings, but any list of Public Solutions displayed to them can be ordered by popularity (the Most Popular Solutions list displayed on the Customer Homepage is always sorted by popularity).

Agents and administrators can view the popularity rating at any time; it is included in most search results from the Knowledge Base.

Customer Self Service

Customer Self Service

The BMC FootPrints Service Core Customer Self-service option is designed to allow employee and external customers use the extensive self-help features BMC FootPrints Service Core. These features including searching the Knowledge Base, submitting and tracking Requests, and much more.

Customer Self Service Topics

- Customer Types
- Customer Login
- Getting Help
- Customer Homepage
- Working with Requests
- Global Issues
- Knowledge Base
- Reports
- Other Customer User Types
- Other Customer Options
  - Workspace Info
  - Instant Talk for Customers
  - Workspaces
  - Logout
  - Customer Service Portal
- Social Media

NOTE ON ADMINISTRATION

This chapter focuses on the various user options for customers. For information on creating and managing customers, administrators should refer to the chapter on Workspace Administration.

Customer Types

Customers have access to different self-service features and login into BMC FootPrints Service Core in different ways depending on a number of factors:

Role—The permission level assigned to a customer. This determines what a customer can do in BMC FootPrints Service Core and how the customer's homepage is configured.

Login Options—Login options determine how a user logs into BMC FootPrints Service Core.

Customer Roles

A role determines what one can do and see in BMC FootPrints Service Core. The BMC FootPrints Service Core administrator assigns roles to users to suit user needs in the system. The following is a list of some built-in customer roles:

Read/Submit—Users can search the Knowledge Base, access the FAQ categories, submit and track Requests via the web interface and/or email.

Read KB—Users can search the Knowledge Base and access the FAQ categories.

Read KB/Requests—Users can search the Knowledge Base, access the FAQ categories. and check the status of the their own requests (entered by an internal user, or via email).

Edit—Users can search the Knowledge Base, access the FAQ categories, submit and track Requests, and have limited edit and close privileges of their own Requests.

NOTE

Throughout this manual, different customer types are generally referred to as “customers”.

Login Options

How a customer logs into BMC FootPrints Service Core is determined by the License Type and other options configured by the administrator.

Unique Customer Account—A unique ID and password is assigned.

Shared Customer Account—Log into BMC FootPrints Service Core under a shared guest account. If identification is required (for example, to submit a Request), only an email address or other identifier is required.

Auto Add Customer—If the administrator has configured this option, customers can create their own account IDs and passwords, or possibly login with their existing network IDs and passwords.

Contact your BMC FootPrints Service Core administrator for information on how this aspect of BMC FootPrints Service Core is configured.

NOTE

The examples in this chapter are for a Unique Read/Submit Customer. Some specific examples for different customer types are found later in this chapter.

Customer Login

Customers usually log into BMC FootPrints Service Core from the same page as internal users.

NOTE

This example is for a Unique Read/Submit Customer user. Please contact your BMC FootPrints Service Core administrator for more information on your account.

To log in to BMC FootPrints Service Core:

Using the web browser, go the BMC FootPrints Service Core URL that your administrator gave you or follow the links from the corporate portal or company's web site.

Log in with the unique customer ID and password. Depending on the options chosen by the administrator, the ID and password may have been assigned to you, you may have created them yourself, or they may be the same as your network ID and password. Please check with your administrator for more information if you are uncertain as to which method you should use.

The BMC FootPrints Service Core Homepage is displayed.

Getting Help

Help is available from within BMC FootPrints Service Core. To access the online Help, click the Help link at the top right of the BMC FootPrints Service Core header. A new browser window is displayed containing information tailored to Customer users.

The Help system includes a Table of Contents. Help topics tailored for customers are found in the Customer Self-Service section.

A Glossary is available to give definitions for common terms used in BMC FootPrints Service Core.

The Index and Search features can be used to find topics by keyword.

Context-sensitive help links are available throughout the BMC FootPrints Service Core system. Click the Help link at the top right of the BMC FootPrints Service Core header to obtain context-sensitive help.

The topics in the online help are also available in the printed versions (PDF) on the Product Documentation section of our Support Web page.

Customer Homepage

Customer Homepage

The Homepage is displayed when you first log into BMC FootPrints Service Core. It contains three frames:

Main frame—Contains a welcome message, links to the Knowledge Base, the Request form, and your list of current Requests, as well as a list of the most popular solutions.

Toolbar—Links to all tasks available to customers.

Top frame—Contains quick search of Solutions and Requests.

If you belong to multiple Workspaces, you may be presented with a drop down menu to select a Workspace for you to log in. Select the Workspace to which you want to submit a Request, search the Knowledge Base, or otherwise have access.

Customer Toolbar

The BMC FootPrints Service Core Toolbar in the left frame of your homepage has links to all of your tasks in BMC FootPrints Service Core. It is located on the left side of every page in BMC FootPrints Service Core.

The options in the Toolbar are:

Home—Go to your BMC FootPrints Service Core Homepage.

Requests

Submit—Submit a new request to BMC FootPrints Service Core (Customer Read/Submit and Customer Edit users only).

View Mine—Display all of your Requests.

View Organization (optional)—Display Requests for your organizational unit (Company, Department, etc.) This option only appears when configured by your BMC FootPrints Service Core administrator.

Search—Search your Requests.

Global Issues—View and subscribe to known Issues (if available).

Knowledge Base

FAQ—Find Solutions to Frequently Asked Questions.

View All—View all Solutions.

Search—Search the Knowledge Base.

Reports

Pre-Defined—Access reports created by the BMC FootPrints Service Core administrator.

Advanced—Create your own report.

Instant Talk—Chat with an available Agent (if the option is enabled).

Change Workspace—Access another workspace (only available if the user is a member of multiple Workspaces).

Help—Get help using BMC FootPrints Service Core.

Logout—End your BMC FootPrints Service Core session.

Working with Requests

Working with Requests

A Request is an inquiry from a customer for help or for more information from the Service Desk or customer service team. The Request form contains fields for you to fill out to help the service team better respond to your Request, such as your contact information, request type, etc. Depending on your permission level, you may have access to the following options:

Submit a Request

Tracking Requests

Track Requests for your Organization

Responding to FootPrints Email

Editing Requests

Submit a Request

To submit a new Request, click **Submit Request** on the BMC FootPrints Service Core **Homepage** or click the link for **Submit** on the BMC FootPrints Service Core Toolbar. If you are using the eCustomer Service Portal, and you have not yet logged into **FootPrints Service Core**, you are prompted for your login ID and password.

If the Auto-Suggest Solutions feature is enabled, you will be able to view suggested Solutions that exist in the Knowledge Base which match the criteria you enter in the Issue Information on the Request page, and to browse the Knowledge Base from there as well. This will give you the opportunity to resolve the Request on your own without having to contact your Support desk. (See Auto-Suggest Solutions, below.)

NOTE ON FIELDS

These fields may be in a different order and may contain different options and names, depending on how the system is configured by the BMC FootPrints Service Core administrator.

Enter a Title—This is the subject or summary of the request. It should be brief, but descriptive. For example, “Computer does not boot up” would be a good title. “Help!!” would not be a good title because it does not give any indication of the problem.

Your Contact Information—This section holds your contact information. If this is the first time you have submitted a Request, these fields may be blank. Fill out the fields with your name, etc. (your email address or other unique key is pre-filled with the data you entered at login time). If you are already in the Address Book, all of the fields are pre-filled.

To update your Contact Information—If the option is available, you can update your contact information in this section. You must also select the checkbox for Update your contact information.

Issue Information—These fields vary depending on how the system is configured. For example, there may be a field called Platform, which is a drop-down box. Select your platform from the list of choices. There could also be a field called Version number with a text field next to it. Type in the version number in this field. Please consult your BMC FootPrints Service Core administrator for more information on these fields.

NOTE ON FIELDS

All fields displayed in **red** are mandatory and must be filled out.

Description—Enter the complete details of your Request. There is no limit to the amount of text that can be entered in the Description field. Be as specific as possible to ensure a quicker resolution to your Request. The Spellcheck option is available to check your spelling.

Auto-Suggest Solutions—If this feature is enabled, you are required to view the suggested Solutions before you can submit the Request. Once you have viewed the suggested Solutions, you can select a Solution or browse the Knowledge Base. If there are no Solutions that resolve your Request, you can continue entering information in the Request and submit it.

To view the suggested solutions, click **Auto-Suggest**. If any Solutions exist in the Knowledge Base that matches the criteria you entered in the Issue Information section, they will display on the **Select Solution** dialog box that appears.
To view the Solution's description, point to the **Solution** in the list. A tooltip will appear with the description.
Click the **Solution** if it resolves your Request. If not, you can search for other Solutions from the **Browse** section of the **Select Solution** dialog box.
Once you've selected a Solution, and if it resolves your Issue, click **This solution resolves my Issue**.
The Solution's Description is added to the Description in the Request, and the Request is closed and displays on your Homepage.

Attachments (optional)—You can attach one or more files from your local machine to your request. For example, you may want to attach a screenshot of the error you are receiving. Refer to How to Attach a File for more information.

Submit Request—When you are ready to submit the Request, click **GO**. The Request is assigned a number and the BMC FootPrints Service Core Homepage is displayed.
Note: If Auto-suggest Solutions is enabled, you will see an Auto-Suggest button instead of a **Go** button (see note in Description, above).

View My Requests

Customers can track their Requests in one or both of the following ways, depending on the system configuration:

BMC FootPrints Service Core Interface—Users can view, search, and report on their requests when logged in to BMC FootPrints Service Core.

Email—Users automatically receive email notification when a Request is submitted, worked on, and closed.

To view your Requests:

Click the **View My Requests** button on the Homepage, or click View Mine under the Requests heading on the BMC FootPrints Service Core Toolbar.

The main frame displays a list of all of your current and past Requests.

To view only your active Requests, click the Active link.

To view closed Requests, click the Closed link.

To view the details of a Request, click the Title. The latest information on the Request, including notes added by internal Agents, is displayed.

To view the Requests for your Organizational Unit, select View Company or View Department on the BMC FootPrints Service Core Toolbar under Requests. This option is only available if enabled by the Workspace Administrator.

Track Requests for Your Organizational Unit

By default, customers can only view their own personal Requests through the Customer Self-service interface. If an Organizational Unit is enabled for an Address Book, customers can view the Requests from other users in the same Organizational Unit, for example, Company, or Department. All customers from the same company or department can view all of the Requests for that company or department. This applies to all workspaces that share this Address Book.

Once enabled, in addition to the View Mine option to view their own Requests, customers have a View Organization link that allows them to view all of the Requests for their organization. If Department is the Organizational Unit, and the user bsmith is part of the HR department, bsmith can view all of the Requests for the HR department.

When customers view their organization's requests, links, labeled All, Active, and Closed, are provided in the dark green border at the top of the main frame. All Issues for an organization are displayed by default. Clicking the Active link displays all of the organization's active Issues that are not in the Closed status. Clicking the Closed link displays all of the organization's Issues that are in the Closed status.

NOTE

This feature only gives read access to the Organizational Unit Requests. The customer has no write or edit permissions to those Requests, even if the customer has Customer Edit permissions. Users who need write access to other users' Requests or Issues should be given an Agent license.

Responding to BMC FootPrints Service Core Email

Customers can receive email updates when their Requests are registered, updated, and closed. You may also have the option to respond to notification emails to communicate with the Agent working on your Request. For example, if the Agent suggests a fix to your problem, you can respond to the notification email informing her that the fix was successful.

To respond to notification email from BMC FootPrints Service Core:

Use the Reply button in your email package (Outlook, Lotus Notes, etc.) to respond to the email.

The email contains important information about the Issue in the subject line (e.g., Entry=*n*,ProjID=3, etc.) This information must be kept in the subject line of the reply email; this is how identifies the Request. The reply-to address must also be maintained.

Type your message to the Agent at the top of the email above the Please Reply Above This Line note .

Click Send to send the email. Your reply is threaded to your Request in BMC FootPrints Service Core and the Agent is notified.

Editing Requests

In addition to submitting Requests, Customer Edit users also have limited permission to update their own Requests through the Customer Self-service interface. These users can update the description of Requests they submitted, update fields designated by the administrator, and close their own Requests, as well as update their own contact information.

NOTE
The Customer Edit license must be enabled for this user option to be available.

If you have the Customer Edit license type, when an Agent responds to your Request with comments or questions, you can respond through the BMC FootPrints Service Core interface.

To edit a Request:

Click the View My Requests button on the homepage, or click View Mine under the Requests heading on the BMC FootPrints Service Core Toolbar. The main frame displays a list of your current Requests.

Click the number of the Request to see the details.

Read the Agent's latest comments in the Description field.

To respond, click the **Edit** button.

On the Edit page, edit fields as needed.

Enter your response in the Append a New Description field.

Click **GO**.

The Request is updated and email updates are sent to the Agent and the customer.

You can continue to update the Request each time the Agent responds.

To close the Request, click the **CLOSE** button on the Details page of the Request. Fill in your reasons for closing the Request in the Description field, then click **Save**. The Request is closed and email updates are sent out.

Global Issues for Customers

Global Issues are known Issues that the BMC FootPrints Service Core administrator has made available to you. Customers can view and subscribe to Global Issues themselves (if they have permission to do so). This saves the service desk time by allowing customers to identify their own problems and link to a central Global Issue rather than entering many disparate Issues that turn out to be the same problem. Customers receive faster service because they receive updates automatically when the originating Global Issue is updated and eventually resolved.

To view and subscribe to Global Issues:

Select **Global Issues** from the BMC FootPrints Service Core Toolbar. Global Issues are also displayed in a pop-up window when you first log into BMC FootPrints Service Core.

A pop-up window is displayed entitled Current Global Issues. It contains a list of Global Issues currently affecting other users.

To view the full description of a Global Issue, click the Title.

To subscribe to a Global Issue, select Subscribe.

Once you subscribe to a Global Issue, it is listed with your Requests. You are sent email updates as the Global Issue is updated and eventually resolved. You can view the latest status at any time by selecting View My Requests.

Knowledge Base

Knowledge Base

Customers can use BMC FootPrints Service Core to view, search, and report on Solutions in the Knowledge Base. The Knowledge Base provides solutions to common problems, answers to frequently asked questions, patches, documents, and more. By searching the Knowledge Base before submitting a Request, the customer has the opportunity to find the information he or she needs quickly and without waiting for a response from the support team.

The following sections detail how customers can find Solutions in BMC FootPrints Service Core.

Customer FAQ—Pre-defined categories of Solutions created by the administrator.

Basic Search—Search by keyword.

Customer Advanced Search—Complex search on all fields and criteria.

Most Popular Solutions—Solutions ranked by popularity feedback from other users; often available on the homepage.

Quick Search—Available from any screen inBMC FootPrints Service Core in the top frame. Search by keyword or number.

View All Solutions—Shows complete list of Solutions.

FAQ

The FAQs (Frequently Asked Questions) consists of pre-defined categories of Solutions created by the BMC FootPrints Service Core Workspace Administrator. These usually reflect the different problem types, products, or services that the service team supports.

To view an FAQ categories:

Click **Search Knowledge Base** on the Homepage or click **FAQ** on the BMC FootPrints Service Core Toolbar.

Select a category to view. A list of all Solutions for that category is displayed.

Click the number of a Solution to view the details.

Other options from this page:

Basic Search

Advanced Search

Basic Search

The Keyword Search (also called "Basic Search") is available by clicking Basic Search from the FAQ page.

NOTE

Refer to this Knowledge Base article for details on the behavior of the keyword search function.

To perform a keyword search:

Enter the word or phrase for which to search.

Select a Knowledge Base from the drop-down box (for example, FootPrints Service Core Public Knowledge Base).

NOTE

Customers do not have this option.

Click **GO**. BMC FootPrints Service Core searches all fields for the keyword (including Title, Description, and Workspace fields).

A list of matching Solutions is displayed in the main frame or in the pop-up window if you are searching from an Issue page. Click a Solution to see the Details.

Advanced Search

The Advanced Search feature allows you to search the Knowledge Base using any combination of fields and advanced criteria.

To perform an advanced search, click Search under the Knowledge Base heading on the BMC FootPrints Service Core Toolbar or click the link for Advanced in the top frame. The Advanced Search page contains a combination of text fields, drop-down boxes, and radio buttons that allow you to search on any combination of criteria. Each field acts as a filter. Only enter or select the criteria with which you want to search. Any field that you do not want to search should remain untouched.

An Advanced Search option is also available under the Requests heading on the BMC FootPrints Service Core Toolbar. This search, which has similar criteria options, returns the user's Requests or, optionally, the Requests for the Organizational Unit, rather than Solutions from the Knowledge Base. Any differences are noted below.

NOTE ON FIELD NAMES

The names of many of the fields in BMC FootPrints Service Core can be changed by the administrator (Title, Priority, Status, Description, etc.) Custom fields can also be created. For clarity, this manual uses the default terms for field names.

The options include:

Title—Enter a word or phrase for which to search. Boolean operators AND, OR, and NODATA are supported. Boolean Operators

Description—If a word or phrase is entered, or multiple words using Boolean Operators, only Issues containing that word/phrase in the Description are returned.

Keyword—If a word or phrase is entered, any Issues containing that word/phrase in any field are returned, including Title, Description, and Workspace fields as well as Address Book fields.

Fields Included—The Keyword search queries theTitle field, Description field, Workspace (Issue), and Address Book fields for all **FootPrints** database versions (SQL Server, Access, SQL Express, Oracle and MySQL) except for the **FootPrints** database. The **FootPrints Service Core** database version only searches the Title and Description.

File Attachments—Search for file attachments by name, not by content. This option is available for all database versions except the **FootPrints** database.

Report On—Reports can return either user Requests or Solutions from the Knowledge Base. If Your requests is selected, an additional option may be available to return both the user's Requests and Requests from other members of the same Organizational Unit. Check this box, if it is available, to return matching

Requests from all users in the same Organizational Unit (Company, Department, etc.) This option is only available for Reports.

Date—If dates are specified, the search returns only Issues from the specified time period. Date Field Search Options

Time—Specify the time in which the Issues were created or last edited based on the 24 hour clock. This option is only available for Reports.

Age—Returns Issues created in the time specified. Number of days and hours can be specified. Modifiers are also provided, including Greater Than, Less Than, Equal to, Greater than or Equal to, Less than or Equal to, and Not Equal to. As an example, to return Issues greater than one day old, choose Greater than and enter 1 for Days.

Issue Information—The fields in this section differ depending on the fields in current Workspace. Search on as many fields as desired. Search methods vary with the field data types:

Character field—Displays a text box. Enter the word or phrase for which to search, or multiple words using Boolean Operators.

Number field—Displays a text box. Enter the number or part of a number for which to search.

Drop-down and Multi-select field—Displays a multi-select dialog box. Highlight one or more values for which to search. To search for Issues that contain no data for the field, select No data. If you do not want to restrict the search based on choices in a field, do not highlight any values.

Date fields—Search on a date or date range. For more information, refer to Date Field Search Options.

NOTE

Date/time fields can only be searched by date, not time.

Other field types—Email, URL, and FTP fields display a text box. Enter the word or phrase for which to search, including partial addresse).

Order Search Results by—Order the Issues returned by the specified field. The order can be descending (most recent or highest first) or ascending (oldest or lowest first). By default, Issues returned by the search are ordered by Issue number in descending order.

And/Or—If AND is chosen, Issues must match all criteria chosen above (this is the default). If OR is chosen, only one criterion must be met. An exception to this is that the Status field is not included in the OR statement. If the criteria selected include Status=Open or Pending, Problem type=Hardware and Software=Excel, and OR is selected, Issues with an Open or Pending status with either Problem type of Hardware or Software of Excel are returned.

Perform Search—Click the **GO** button to submit search.

A list of Solutions that match your criteria is displayed. Click the Title of a Solution to view the details.

Most Popular Solutions

The most popular solutions are usually listed on the Customer Home Page (the Administrator may have configured a different view for your home page). These are ranked by their popularity with other Customers. To view the details of a Solution, simply click the number. The Description area of the Solution may contain step-by-step instructions, an answer to a question, or a reference to another site for more information.

The Solution may also contain one or more file attachments. These files were included by an Agent or Administrator to help illustrate a Solution. They may include patches, documents or images. Simply click on the name of an attachment to view it, or right-click on the name to save it to your local machine.

At the bottom of each Solution, you will see the question “Was this Solution useful to you?” Check the appropriate answer (Yes or No) based on whether the solution helped you with your problem or question. It is completely anonymous; only your response is recorded, not your contact information. Responses are saved and tallied by BMC FootPrints Service Core for the “Popularity” ranking.

Quick Search

The Quick Search is available from anywhere in BMC FootPrints Service Core in the top frame of the screen.

Search on Keyword or other options by choosing the term from the drop-down. If you enter a number in the field without selecting a category from the drop-down, BMC FootPrints Service Core searches for an issue with that number. To search for multiple Issue numbers, enter each number separated by a comma, e.g., 5,22,165.

For Keyword, enter the word or phrase for which you want to search in the box.

Click **GO**.

A list of Solutions that match the criteria is displayed. In addition, any Requests that contain the keyword are displayed.

View All Solutions

To view all Solutions:

Click View All under the Solutions heading on the BMC FootPrints Service Core Customer Toolbar.

A list of all Solutions is displayed. Click on the Title of a Solution to view the details.

Reports

Reporting

Customers can run reports on BMC FootPrints Service Core data that they have permission to view. This includes Solutions and the user’s own Requests. The reporting options are:

Pre-Defined Reports—Reports that have been defined by the Workspace Administrator.

Advanced Reports—The user selects report criteria and display style.

Pre-Defined Reports

Pre-defined reports are reports on Issues or Solutions that are saved and named as public reports by BMC FootPrints Service Core internal users. The internal user creates a new report, choosing report criteria and formatting options, and then saves it as a public report. The names of these reports appear in the Pre-defined Reports drop-down list available to customers. Each time a saved public report is run by a customer, it returns the latest matching Issues or Solutions.

The following reports are available:

My Active Requests—This report provides a synopsis of all the Issues you have submitted that have not been closed.

My Organization—If an Address Book field has been designated as an Organizational Unit, and you have permission to create reports based on the Organizational Unit, this report provides a synopsis of all the Issues related to your organization.

All Public Solutions—This report provides a synopsis of all the **FootPrints Service Core** public solutions in the Knowledge Base.

To run a Pre-defined Report:

Click on Pre-Defined under the Reports heading on the BMC FootPrints Service Core Customer Toolbar.

Select the report from the drop-down box.

Click **GO**. The results of the report are displayed in a new browser window.

To print a report, refer to Saving and Printing Report Data.

Advanced Reports

The Advanced Reporting feature allows Customers to control the style and content of a report. It uses the same search mechanism as the Advanced Search page, but also allows the user to choose the fields to report and the style in which they are displayed. All of the formatting options are pre-filled with default values, so changing them is optional.

NOTE ON FIELD NAMES

The names of many of the fields in **FootPrints Service Core** can be changed by the administrator (Title, Priority, Status, Description, etc.) Custom fields can also be created. For clarity, this manual uses the default terms for field names.

The options are:

To create a custom report, select Reports | Advanced from the BMC FootPrints Service Core Toolbar. The first page of the Custom Report Wizard is displayed.

Step 1: Style—Select the output style of the report. Choices are:

Columns—Issue data is displayed in fixed columns. One Issue is displayed per row. Columns can be selected from any available fields.

Wrapped—Each Issue is displayed in its own mini-table. Line breaks can be used to wrap data to multiple rows, for example, to place the Description in its own row. This style is useful for printing reports that contain many fields.

Metrics and Graphics—Create custom metrics and graphs of counts, averages, and sums on any field. Single and two-level metrics are supported. Output options include table, bar, and pie charts.

Export—Export data to a text file that can be saved to your local desktop. Use this format to import **FootPrints** data into a spreadsheet or other programs

Combo—Column and Wrapped reports can also contain metric charts and graphs. Check this box to include metrics in a Column or Wrapped report (not available for the Export option).

Click **GO** to display the rest of the of report options. The steps that are available on the next page depend on the report style selected in Step 1.

Heading—Define what is included in the heading at the top of the report output. This option is available for all styles except Export. Options include:

Title—This is displayed at the top of the report.

Date—The date the report is run (updates each time the report template is run).

Time—The time the report is run (updates each time the report template is run).

Workspace name—The name of the Workspace.

Logo graphic—The logo image displayed in the current Workspace.

Formatting—Select the columns to display in the report. All fields are available. This option is available for all styles except Metrics. For example, to display Title:

For Type of Field, choose FootPrints Fields.

Highlight Title under Fields.

Click Add Field. Title now appears in the Selected Fields box.

Re-order—To change the order of fields to be displayed, highlight a field in the Selected Fields box and click the up or down arrow to move it.

Line Break—Insert a line break (Wrapped style only).

Description—Select which descriptions to include in the report and when to wrap the data (only applies if Description is included in the Selected Fields box).

NOTE

This section only determines which fields to display. It does not determine the selection criteria for the report. The criteria are chosen later in the report.

Sort Order—Define how Issues are sorted in the report output. This option is available for all styles except Metrics. The default is by Issue number in ascending order (from lowest to highest). Optionally sort on up to three fields in ascending or descending order. Issues are sub-sorted within each field based on the sort order. Clicking the Heading box separates Issues into groups with the field name as header. For example, if sorting by Status with Heading checked, all Open Issues are grouped under the heading Open, Closed Issues are grouped under the heading Closed, etc.

Text File Format—Select the format for text file output. Only applies to Export style. Choices are comma-delimited file (.csv), tab delimited (.tsv), or your own, custom delimited (.txt).

Metrics and Graphics—Create custom metrics and graphs of counts, averages, and sums on any field. The option is available for Metric style, and for Column and Wrapped style if the Combo checkbox is checked. Metrics and Graphics Options

Select Report Criteria—Select the criteria for report. Only fill in or choose the criteria for which you want to search. The **FootPrints** Advanced Reporting criteria section uses the same mechanism as the Advanced Search. Refer to section above on Advanced Search for a detailed explanation of criteria.

Create Report—Click **GO** to run the report.

After clicking **GO**, the report is displayed in a separate browser window. Large reports sometimes take a few minutes to run. To view the details of a Request, click the number (or whichever field is in the first column) in the report. This displays the Details page for that Issue in the main BMC FootPrints Service Core frame.

The report can be saved or printed from the browser window. If the Export style was selected, a Save As dialog box is displayed. Name and then save the report to your local hard drive. For more information, refer to Saving and Printing Report Data.

Saving and Printing Report Data

Report data can be saved, printed and distributed in a number of ways:

HTML—After the report is displayed, it can be saved as an HTML file right from the browser window.

To save Report data in Internet Explorer:

Select File | Save As in the browser.

Enter a name for the file.

Select a file type for the report (e.g., HTML) for the Save as type field.

Browse in the Save In dialog to choose where on the local machine to save the file.

Click the Save button.

Text File—If Export is chosen for the report style, report data is saved to your local machine. After you click **GO**, a Save As dialog box is displayed. Select where on your local machine or network to save the file and click Save.

Printing—Reports can be printed from the browser. Select File | Print to display the browser's Print dialog box. If the report is wider than the screen, choose Landscape orientation. There are certain functions of the browser that BMC FootPrints Service Core cannot override. For example, page breaks cannot be controlled when printing from the browser (this is a function of HTML). In addition, for very wide reports, some text on the right may be cut off by the printer, even when printing in Landscape mode.

To compensate, if the Description or other multi-line text field is included in the report, use the Description Wrapping feature to force the text to wrap more narrowly. For example, instead of wrapping at 70 characters (the default), try 50 characters. If text is still being cut off, we recommend trying the Wrapped report and inserting line breaks or using the Export option.

Other Customer User Types

Other Customer User Types

Customer permissions in BMC FootPrints Service Core are configurable by an administrator. Your Role determines what you can do and what you see in BMC FootPrints Service Core. The examples in this manual are for a Unique Read/Submit Customer user. While you may have a custom role assigned to you that is not covered here, some of the other popular customer role types are discussed in this section.

Read KB

Read KB/Requests

Customer Edit

Shared User ID

Read KB Users

Read KB customers can only view and search the Knowledge Base for Solutions.

Read KB customers log into BMC FootPrints Service Core the same way as Read/Submit and Read/Submit/Edit customers. They can have either shared or unique IDs and passwords. The BMC FootPrints Service Core Homepage is slightly different from the Homepage displayed for customers with other roles.

Take note of the limited set of options on the BMC FootPrints Service Core Toolbar.

The options in the Toolbar for a Read KB customer are:

Home—Go to your BMC FootPrints Service Core Homepage.

Knowledge Base

FAQ—Find Solutions to Frequently Asked Questions

View All—View all Solutions.

Search—Search Solutions.

Reports

Pre-Defined—Access reports created by the BMC FootPrints Service Core administrator.

Advanced—Create your own report.

Instant Talk—Chat with an available Agent (if the option is enabled).

Change Workspace—Access another Workspace (only available if the customer is a member of multiple Workspaces).

Help—Get help using BMC FootPrints Service Core.

Logout—End your BMC FootPrints Service Core session.

Read KB/Requests Users

Read KB/Requests customers can view and search the Knowledge Base for Solutions and can check the status of their Requests, which were either submitted by an Agent or via email.

Read KB/Requests customers log into BMC FootPrints Service Core the same way as Read/Submit and Read/Submit/Edit customers. They can have either shared or unique IDs and passwords. After logging in, the BMC FootPrints Service Core Homepage is slightly different from the BMC FootPrints Service Core Homepage displayed for customers with other roles.

Take note of the limited set of options on the BMC FootPrints Service Core Toolbar.

The options in the Toolbar for a Customer Read Only user are:

Home—Go to your BMC FootPrints Service Core Homepage.

Requests

View Mine—Display all of your Requests.

View Organization (optional)—Display Requests for your Organizational Unit (Company, Department, etc.) This option only appears when configured by the **FootPrints Service Core** administrator.

Search—Search your Requests.

Knowledge Base

FAQ—Find Solutions to Frequently Asked Questions

View All—View all Solutions.

Search—Search Solutions.

Reports

Pre-Defined—Access reports created by the BMC FootPrints Service Core administrator.

Advanced—Create your own report.

Instant Talk—Chat with an available Agent (if the option is enabled).

Change Workspace—Access another Workspace (only available if the customer is a member of multiple Workspaces).

Help—Get help using BMC FootPrints Service Core.

Logout—End your BMC FootPrints Service Core session.

Customer Edit

Customer Edit users have the same permissions as Customer Read/Submit users, with the additional ability to update their own Requests through the Customer Self-service interface. These users can update the Description and certain fields (specified by the administrator) in Requests they submitted, close their own Requests, and update their own contact information. Refer to Editing Requests for more information.

Shared User ID

Customers can also log into BMC FootPrints Service Core with a shared ID and password. If this is the type of ID you have, your login process is slightly different from that of a user with a unique ID and password.

To log in to BMC FootPrints Service Core as a Shared Customer Read/Submit type:

Login with the shared Customer ID and password. You are prompted for your email address or other unique key. This key identifies you and allows you to see a personalized view of BMC FootPrints Service Core. Depending on the configuration of your system, you may not have to enter the shared ID and password, but instead only have to enter your unique key on a special login screen.

Enter your email address or other unique key and click **GO**.

The BMC FootPrints Service Core Homepage is displayed. Refer to the preceding topics in this chapter for more information on using BMC FootPrints Service Core.

Workspace Info

The Workspace Administrator may have created a page with information specific to the Workspace, instructions on using the Workspace, links to other pages on the web site, or alerts about current Issues. If this option is enabled, a pop-up window containing this information might appear as soon as you log into BMC FootPrints Service Core. Read the information carefully before closing the window; anything the Workspace Administrator has chosen to place here is important.

The Workspace Information page might also be available at any time from the BMC FootPrints Service Core Homepage. If the page has been enabled, there is a link in the top right corner of the Homepage. Click the icon to view the Workspace Information page.

Instant Talk

If this feature is enabled, there is an Instant Talk option in the BMC FootPrints Service Core Toolbar.

To use the Instant Talk™ feature:

Click **Instant Talk** in the BMC FootPrints Service Core Toolbar.

A box is displayed with a list of Agents with whom you can chat. Select an Agent and click **GO**.

An Instant Talk window is displayed. To chat, type something in the Message box and click **Send/Refresh**.

Your message is displayed in the top half of the window, preceded by your name.

An Instant Talk window is also displayed automatically to the other user. As each user enters messages, the messages are displayed in the window.

To manually refresh the window, click **Send/Refresh**. Otherwise, the window refreshes at the default rate set by the System Administrator.

If an Agent does not respond within a few minutes, the Agent may be away or on a phone call. You can close the session and restart, this time choosing a different Agent.

To clear the Talk window, click **Clear**.

To close the Talk window, click **Close**.

Workspaces

Customers can belong to multiple Workspaces. A Workspace is a sub-database or area within BMC FootPrints Service Corewhich can have its own custom fields, options and users. For example, if there are two separate areas to which you can submit Requests, such as Application Support and Enhancement Requests, BMC FootPrints Service Core can be configured to keep Requests for the two areas in different Workspaces.

Change Workspaces from the Toolbar

If you are a member of multiple Workspaces, there is a Change Workspace link on the BMC FootPrints Service Core Toolbar. If you click the link, a list of Workspaces is displayed. To switch Workspaces, click a name in the list. Your screen refreshes and the homepage for the new Workspace is displayed.

Login Workspace Menu

When you first log into BMC FootPrints Service Core, a drop-down menu is displayed that lists the Workspaces to which you belong. Select the Workspace you want to enter from the drop-down menu. This option is not provided to Customers who only belong to one Workspace.

As an alternative, you can display an icon for each Workspace when the customer is presented with a menu of Workspaces.

To enable the feature:

Add the following line to the footprints\cgi\MRlocalDefs file:

```
$PROJ_MENU_ICONS = 1;
```

Upload the icons you wish to use to the footprints\html\MRimg directory.

For each workspace to be accessed by the customers, a file named "menu_icon.txt" must exist in that workspace's "MR" directory which can be found in footprints\db\MASTERx\ where x is the Workspace ID. The file etc\MRprojects can be used to determine each Workspace's ID. The contents of this file must be the name of the icon to be used with this workspace, e.g.: proj1.jpg.

If a Workspace's icon is not found or is not specified, the name of the Workspace is displayed is a live link, just like the image would have been. Icons are not accompanied by the workspace name.

Requests in Multiple Workspaces

To check the status of your Requests for a Workspace, your browser must be in that Workspace. The View Mine list only contains Requests for the Workspace that is currently displayed. To see a list of your Requests in all Workspaces at once, there is a link entitled Requests from All Workspaces near the top of the View Mine page in each Workspace. Click the link and a second browser window is opened with a list of all of your Requests in all of your Workspaces, including the Details and latest status.

Logout

When you are finished with your BMC FootPrints Service Core session, click the **Logout** button on the BMC FootPrints Service Core Toolbar. This returns you to the BMC FootPrints Service Core login page.

Note
Clicking the Logout button will also remove the "Remember My Password" cookie associated with this browser.

Customer Service Portal

Customer Service Portal

The Customer Service Portal enables you to view the Knowledge Base Solutions to your problem without having to first log into the company Customer Support site or BMC FootPrints Service Core. To do so, select Customer Support or BMC FootPrints Service Core from the corporate website, which directs you to the Customer Service Portal. The available options depend on what the BMC FootPrints Service Core administrator has configured for this site.

If you have access to submitting requests, you are asked for login information. If the site administrator has not set up customer authentication, then no login ID and password are required, but you must still identify yourself by entering a unique key, such as your email address.

From this page, your administrator can give you permission to work with any of the following:

Knowledge Base

Submit a Request

View My Requests

Customer Reporting

Global Issues

Instant Talk for Customers

Knowledge Base

Customers can use BMC FootPrints Service Core to view, search, and report on Solutions in the Knowledge Base. The Knowledge Base provides solutions to common problems, answers to frequently asked questions, patches, documents, and more. By searching the Knowledge Base before submitting a Request, the customer has the opportunity to find the information he or she needs quickly and without waiting for a response from the support team.

The following sections detail how customers can find Solutions in BMC FootPrints Service Core.

Customer FAQ—Pre-defined categories of Solutions created by the administrator.

Basic Search—Search by keyword.

Customer Advanced Search—Complex search on all fields and criteria.

Most Popular Solutions—Solutions ranked by popularity feedback from other users; often available on the homepage.

Quick Search—Available from any screen inBMC FootPrints Service Core in the top frame. Search by keyword or number.

View All Solutions—Shows complete list of Solutions.

View My Requests

Customers can track their Requests in one or both of the following ways, depending on the system configuration:

BMC FootPrints Service Core Interface—Users can view, search, and report on their requests when logged in to BMC FootPrints Service Core.

Email—Users automatically receive email notification when a Request is submitted, worked on, and closed.

To view your Requests:

Click the **View My Requests** button on the Homepage, or click View Mine under the Requests heading on the BMC FootPrints Service Core Toolbar.

The main frame displays a list of all of your current and past Requests.

To view only your active Requests, click the Active link.

To view closed Requests, click the Closed link.

To view the details of a Request, click the Title. The latest information on the Request, including notes added by internal Agents, is displayed.

To view the Requests for your Organizational Unit, select View Company or View Department on the BMC FootPrints Service Core Toolbar under Requests. This option is only available if enabled by the Workspace Administrator.

Reporting

Customers can run reports on BMC FootPrints Service Core data that they have permission to view. This includes Solutions and the user's own Requests. The reporting options are:

Pre-Defined Reports—Reports that have been defined by the Workspace Administrator.

Advanced Reports—The user selects report criteria and display style.

Global Issues for Customers

Global Issues are known Issues that the BMC FootPrints Service Core administrator has made available to you. Customers can view and subscribe to Global Issues themselves (if they have permission to do so). This saves the service desk time by allowing customers to identify their own problems and link to a central Global Issue rather than entering many disparate Issues that turn out to be the same problem. Customers receive faster service because they receive updates automatically when the originating Global Issue is updated and eventually resolved.

To view and subscribe to Global Issues:

Select **Global Issues** from the BMC FootPrints Service Core Toolbar. Global Issues are also displayed in a pop-up window when you first log into BMC FootPrints Service Core.

A pop-up window is displayed entitled Current Global Issues. It contains a list of Global Issues currently affecting other users.

To view the full description of a Global Issue, click the Title.

To subscribe to a Global Issue, select Subscribe.

Once you subscribe to a Global Issue, it is listed with your Requests. You are sent email updates as the Global Issue is updated and eventually resolved. You can view the latest status at any time by selecting View My Requests.

Instant Talk

If this feature is enabled, there is an Instant Talk option in the BMC FootPrints Service Core Toolbar.

To use the Instant Talk™ feature:

Click **Instant Talk** in the BMC FootPrints Service Core Toolbar.

A box is displayed with a list of Agents with whom you can chat. Select an Agent and click **GO**.

An Instant Talk window is displayed. To chat, type something in the Message box and click **Send/Refresh**.

Your message is displayed in the top half of the window, preceded by your name.

An Instant Talk window is also displayed automatically to the other user. As each user enters messages, the messages are displayed in the window.

To manually refresh the window, click **Send/Refresh**. Otherwise, the window refreshes at the default rate set by the System Administrator.

If an Agent does not respond within a few minutes, the Agent may be away or on a phone call. You can close the session and restart, this time choosing a different Agent.

To clear the Talk window, click **Clear**.

To close the Talk window, click **Close**.

Using FootPrints with Social Media

Using FootPrints with Social Media (Overview)

You can view BMC FootPrints Service Core Issues broadcast from your organization's Facebook and Twitter accounts. You can also send Twitter Tweets to FootPrints.

View Issues in Facebook

You can view Issues from your organization's Facebook page. The instructions below describe how to view issues from your Facebook account.

Notes:

Replies or comments on Facebook posts are not captured in BMC FootPrints Service Core.
You will only be able to view Issue details once you access BMC FootPrints Service Core from Facebook if they are Global Issues or if you have rights to view the Issue. Viewing issue details in BMC FootPrints Service Core from mobile devices is not currently supported.
Note: Whether or not posts appear on your Facebook newsfeeds depends on how you sort the posts (Most Recent vs. Top Stories) and page ranking algorithms determined by Facebook. You can also view the posts by either searching for your page or viewing it from your Info page.

Log in to your Facebook account.
Enter your organization's Facebook name in the **Search** box, then click the **Search** button.
In the search results, click the **Like** button next to your organization's name.
Your organization's BMC FootPrints Service Core posts will now appear on your Facebook News Feed.

The BMC FootPrints Service Core Issue title, link to the Issue in BMC FootPrints Service Core (URL), and a brief description of the Issue appears on the Facebook post.
To view the Issue details, click the BMC FootPrints Service Core link in the post.
A new browser page opens.
Log in to BMC FootPrints Service Core with your User ID and Password.
The Issue details are displayed.

View Issues in Twitter

You can view Issues broadcast from your organization's Twitter account. The instructions below describe how to view Issues from your Twitter account.

Notes:

Replies to Twitter "tweets" are not captured in BMC FootPrints Service Core.
You will only be able to view Issue details once you access BMC FootPrints Service Core from Twitter if they are Global Issues or if you have rights to view the Issue.

Prerequisite

You will need a Twitter account, which you can obtain for free at www.twitter.com.

Log on to your **Twitter** account.
Enter your organization's Twitter name in the **Search** box, then press the **Enter** key.
In the search results, click the **Follow** button next to your organization's name.
Your organization's "tweets" will now appear, which you can access later from the Home button on the Twitter toolbar.

The BMC FootPrints Service Core Issue number, Issue title, and a link to the Issue in BMC FootPrints Service Core appears in the "tweet".
To view the Issue details, click the **BMC FootPrints Service Core link** in the "tweet".
A new browser page opens.
Log in to BMC FootPrints Service Core with your User ID and Password.
The Issue details are displayed.

Sending Twitter Tweets to FootPrints

Note: Verify that this feature is enabled for your company, as it must be configured first by your BMC FootPrints Service Core Workspace Administrator.

You can mention your service desk's Twitter username in a Tweet along with a request in the message. Your company's service desk can view the Tweet in real time in BMC FootPrints Service Core. They can then decide to create Issues from your Tweet to resolve your requests. If an Issue is created from the Tweet, the Issue will display on your Homepage ain the Customer Service Portal. You can then view and update the Issue as usual. (For details, see Editing Requests).

To mention your company's Twitter username in a Tweet:

Compose a new Tweet and include your service desk's Twitter username in the Tweet (e.g., @YourServiceDesk).

You can include the @username anywhere in the message.

Example

@YourServiceDesk I am having a problem with my email.

If an Issue is created from your Tweet, you can track your request on the Customer Service Portal Homepage. (See View My Requests.)

Real-time Issue Resolution Tools

Real-time Issue Resolution Tools

In addition to communication through the web interface and email, BMC FootPrints Service Core has the following features that allow the agent to resolve users' Issues:

Instant Talk—allows customers to communicate one-on-one with agents.
Telephony—Integrates telephony functions with BMC FootPrints Service Core.

These features can be used in conjunction to remotely control a user's desktop while holding a chat session at the same time. This section describes how to use these features.

Remote Manager

Instant Talk

If this feature is enabled, there is an Instant Talk option in the BMC FootPrints Service Core Toolbar.

To use the Instant Talk™ feature:

Click the **Instant Talk** icon in the BMC FootPrints Service Core Toolbar.

A box is displayed with a list of Agents with whom you can chat. Select an Agent and click **GO**.

An Instant Talk window is displayed. To chat, type something in the Message box and click **Send/Refresh**.

Your message is displayed in the top half of the window, preceded by your name.

An Instant Talk window is also displayed automatically to the other user. As each user enters messages, the messages are displayed in the window.

To manually refresh the window, click **Send/Refresh**. Otherwise, the window refreshes at the default rate set by the System Administrator.

If an Agent does not respond within a few minutes, the Agent may be away or on a phone call. You can close the session and restart, this time choosing a different Agent.

To clear the Talk window, click **Clear**.

To close the Talk window, click **Close**.

Note

All chats are one-on-one, but you can have multiple chat windows open at the same time.

Telephony Integration

BMC FootPrints Service Core can easily integrate with an existing local or hosted telephony solution. For this integration to occur, the telephony solution must be able to open a web browser on an Agent's PC with a specific URL when the a call is routed to the Agent. A successful integration, upon arrival of the call, automatically open theBMC FootPrints Service Core Create Issue screen with the customer information fields completed, opens the Details screen of an existing issue, or opens the Edit screen of an existing issue. For the customer lookup to take place, the telephony solution must pass a unique identifier to BMC FootPrints Service Core. The following example uses phone number.

Create Issues

To configure BMC FootPrints Service Core with your telephony solution to create issues containing customer information:

While logged in as a System Administrator, enable Remember My Password cookies by selecting Administration | System | System Preferences.

Configure your telephony solutions to open a web browser on the appropriate Agent's PC with the following URL:

http://***your_footPrints_domain_name***/MRcgi/MRlogin.pl?DIRECTLOGIN=1&PERFORM_SELECT_CONTACT=1&DOWHAT=REGISTER&Phone=732-555-1112

The last variable in the URL, Phone in this example, is what BMC FootPrints Service Core uses to lookup the contact information in the BMC FootPrints Service Core**e** Address Book. This can be any field or multiple fields in the BMC FootPrints Service Core Address Book.

To pass more than one field for Address Book lookup, add each name/value pair, separated by an ampersand (&). BMC FootPrints Service Core only returns the record if all of the fields passed in the URL match.

NOTE

The field name passed in the URL can be different than how it appears in BMC FootPrints Service Core, but must match the correct format in the database. For example, Last Name would be Last__bName. For assistance with this, contact BMC Support.

Prior to logging into BMC FootPrints Service Core, each Agent must check the Remember My Password box. This creates a cookie on the Agent's PC, after which the Agent is no longer prompted for the username and password when logging into BMC FootPrints Service Core**e**.

Open to Details Page

To configure BMC FootPrints Service Core with your telephony solution to open to the Details Screen:

While logged in as a System Administrator, Enable “Remember My Password” Cookies from the System Preferences screen of the System Administration Menu.

Configure your telephony solution to open a web browser on the appropriate agents PC with the following URL: http://*your_footPrints_domain_name*/MRcgi/MRlogin.pl?DOWHAT=JUMPTOTICKET&MR=*issue_number*&PROJECTID=*workspace_number*

Open to Edit Screen

To configure BMC FootPrints Service Core with your telephony solution to open to the Edit Screen:

While logged in as a System Administrator, Enable “Remember My Password” Cookies from the System Preferences screen of the System Administration Menu.
Configure your telephony solution to open a web browser on the appropriate agents PC with the following URL: http://*your_footPrints_domain_name*/MRcgi/MRlogin.pl?DOWHAT=JUMP_TO_EDIT& MR=*issue_number*
Each agent prior to logging must check the “Remember My Password” box. This will create a cookie on the agent's PC and will no longer prompt the agent to login to BMC FootPrints Service Core.

Override Default Workspace

An alternate workspace other than the agent’s default workspace can be specified by adding “&PROJECTID+the_workspace_number” to any of the above examples:

http://*your_footPrints_domain_name*/MRcgi/MRlogin.pl?DIRECTLOGIN=1&DOWHAT=JUMP_TO_EDIT&MR=*issue_number*&PROJECTID=*workspace_number*

Password Reset

The Password Reset function enables users to unlock their Windows Network password. There are two processes for password reset:

Register—Open a browser and access the BMC FootPrints Service Core interface, click the Password Reset icon, register your Windows Network User ID and password, then provide the answers to one or more challenge questions (such as "What was your mother's maiden name?" or "In which city were you born?"). This step provides BMC FootPrints Service Core with the basic information needed to verify your identity in case you need to reset your password.

Reset Password—In the event that you forget your Windows Network password, access the BMC FootPrints Service Core interface, click the Password Reset icon, enter your Windows Network User ID, then answer the same challenge questions that you answered when you registered. If you answer the questions correctly, you'll be able to enter a new password. When you have entered the new password and confirmed it, your Windows Network account is unlocked and your new password is active from that point on. Your answers must be an exact match to your original answers.

Executive Dashboard

Executive Dashboard Introduction

Executive Dashboard provides business intelligence regarding the performance of your service desk. Agents with access to Executive Dashboard can set the types of data they wish to display and observe that data, seeing it change dynamically as the Executive Dashboard is refreshed.

For detailed information, refer to the BMC FootPrints Service Core Reference Manual.

Access to the Executive Dashboard is enabled by the Workspace Administrator. Individual agents with Executive Dashboard access set:

Whether the BMC FootPrints Service Core homepage or the Executive Dashboard is the default page when they log in to BMC FootPrints Service Core.
The reports they see in Executive Dashboard.

When the Executive Dashboard is first displayed, it shows all of the built-in reports. You can then edit or discard the reports to display only the information you want to see. Built-in Executive Dashboard reports are (click the links to view the details of how to edit each type of report):

Statistics Report—This is similar to an Activity Report, and can show, for example, your totals and carryover for a period: how many issues were created, closed, active etc.

Watchlist Report—You can watch a problem type or other field and track how many of those problems were created or activated during a specific period (day, week, month, quarter, or year). If you use saved searches to track this type of information, the Executive Dashboard allows you to create a Watchlist that replaces those searches and see everything at a glance because multiple fields can be watched in one Watchlist.

Service Level Agreement (SLA) report—SLAs may include agreements regarding "thresholds". That is, they may require a specific amount of "up time" for a customer. The SLA report allows you to specify the thresholds and see how agents are doing in maintaining them. For example, if the minimum threshold is 93% up time, the report might show a line that is green when safely above the threshold, yellow when the threshold is being approached, and red when the threshold is breached. Agents can create reports tied to specific service levels, so that one report might be for the "Platinum" service level and another might be for the "Gold" service level, and so on, or combine all service levels in one report.

Resolution Rate Report—A First Contact Resolution Rate and a Resolution Rate report are combined so that you can watch the convergence of those two types of information in one place. The periods to be observed (per day, week, month, quarter, and year) are configurable.

Activity Report—A line graph tells you how many issues were active for a specific period so that you can observe the activity at various points. For example, if you tracked activity during the month, you might see how many issues were created on each day, how many were closed on each day, etc. This enables you to see where activity spikes for different statuses.

Issue Lifecycle

The Issue Lifecycle is defined by five "events": Creation, Activation, Response, Resolution, and Closure. The workspace administrator defines in which of these portions of the Issue Lifecycle each of the issue statuses falls. For example, the Open status might be defined as falling during the Creation period, which is before Activation. A status of "Assigned" might be defined as falling during the Activation period but before the Response. A status that indicates an issue as having been Responded to by the agent (Agent Responded) can be defined under the Response Event.

The issue and time measures display in the Executive Dashboard are metrics derived from the following issue lifecycle:

A change in status causes an event in the issue lifecycle to be recorded. For example, changing from Inactive to Open can cause the Activation Event.

Events are defined as follows:

Creation—The event that marks the creation of an issue. An issue is not necessarily Active when it is Created. Some activity, such as assignment, may have to occur before the issue is considered to be Active.

Activation—The event that marks the activation of an issue. Before this event happened, the issue was not considered Active. This event happens once in the lifecycle of an Issue. Activation usually is not undone but it can be undone if an issue goes back to a Pre-Active status; in this case, the system considers the Activation Event as not having occurred and it is erased from the reporting history. An issue is Active from the time it is Activated until reaches Resolution.

Response—The event that marks an issue as being responded to by an agent. This event happens once in the lifetime of an issue. This event cannot be undone. Transitioning from a Responded status to a not Responded status does not change the fact that the Responded status already happened. An issue is considered Responded to from the time a Response occurs and for all time after that.

Resolution—The event that marks the resolution of an issue. This even happens once in the lifetime of an issue. This event can be undone if an issue transitions from a resolved status to an unresolved status, in which case the system considers the issue as never had been resolved; the Resolution Event is removed from the reporting history. This is important to note since it may result in different numbers being reported at different times. For example, Executive Dashboard might show 35 issues as resolved the previous month one day, but one of those issues might return to an unresolved status at some point. If the same report is viewed the next day, the number of issues that were resolved in the previous month would show as 34. An issue is not yet Closed when it has been Resolved. Customers may require some additional processing to occur before an issue is Closed.

Closure—The event that marks the closure of an Issue. This even happens once in the lifetime of an issue. This event is undone when an issue transitions back from the closed status to an unclosed status, in which case the system considers the issue as never had been closed; the Closure Event is removed from the reporting history. As with Resolution, this could result in different numbers showing up in a report at different times. In a report, all issues that have been Closed also count as Created, Activated, Resolved and Responded To.

Events in the Issue Lifecycle for reporting always occur in the order in which they appear in the user interface (Creation, Activation, Responded To, Resolution and Closure). An issue cannot have an event in its lifecycle happen without all the preceding ones having happened as well.

An issue that is created in a Closed status will have the following events marked in the following order: Creation, Activation, Resolution, Responded and Closure.

An issue that is created in an Active Status will have the following events marked in the following order: Creation and Activation.

When a status is put in the Resolved category in the Issue Lifecycle, a transition to this status not only will cause the Resolution Event to happen, but will also cause the Creation, Activation, and Response Events to happen if these events did not already occur.

View the Executive Dashboard

To view the Executive Dashboard, select Reports from the BMC FootPrints Service Core toolbar, then select Executive Dashboard from the drop-down menu.

Make Executive Dashboard the Default Page

You can make the Executive Dashboard your default page when you log into BMC FootPrints Service Core. This means that the Executive Dashboard is the first page you see when you log in. This is useful for people who want to view the Executive Dashboard reports but have no need to learn anything else about navigating within BMC FootPrints Service Core.

To make the Executive Dashboard your default homepage, you must edit the Personal Info tab of your Preferences. Refer to Customizing Your Preferences for details.

Remove a Report

To remove a report from the Executive Dashboard, click the trash can icon beside the report name. If a report is removed and you wish to restore it, you must click the Change Dashboard link at the top of the reports view and then click the Add Now button for the report. Any customizations you made for the report will be gone so you will have to customize it all over again.

Common to All Executive Dashboard Reports

Some factors are common to all types of Executive Dashboard report.

Three categories of report are available for all Executive Dashboard reports:

Created—The Created report contains only issues that were created during the specified period. This means that issues that are active during the specified period but which were not created during that period are not included in the report.

Activated—The Activated report contains only issues that were Activated during the specified period. For example, if an Issue is resolved this time period but it was activated on a previous time period, then the issue is not part of the Resolved count. Issue creation is not pertinent to this report and the Created data are not included in this report. For example, if an Issue is resolved this time period but it was activated on a previous time period, then the issue is not part of the Resolved count.

All Activity—All issues, regardless of whether they were Created or Activated during the specified period, are included in this report. For example, if an issue is resolved this time period but was activated or created in a previous time period, this issue is part of the Resolved count.

Change the Dashboard and Other Controls

Change or Show Dashboard

The **Change Dashboard** link at the top of the Executive Dashboard page enables you to enter a name for the tab on which you clicked the link (the link appears on all Executive Dashboard tabs) and to add reports to the tab. When the **Change Dashboard** link is selected, it changes to a **Show Dashboard** link. When **Show Dashboard** is clicked, the Executive Dashboard reports view is displayed and the link is relabeled again as **Change Dashboard**.

Add Dashboard Tabs

Dashboard tabs allow you to put different reports on different tabs. You may want all the repots on one tab, different types of reports (such as Watchlist and Statistics reports) on different tabs, or the same reports using different criteria (such as a Watchlist Created report for this month and another Watchlist Created report containing data for this year) on different tabs. Tabs can be added by clicking the tab labeled **Add a New Tab**. Tabs names are defined and reports for a given tab are selected by clicking the tab, then clicking the **Change Dashboard** link on that tab.

Add Reports to Tabs

The **Add Now** buttons allow you to add reports to the current tab. To view the **Add Now** buttons, click the **Change Dashboard** link, then scroll down to the report type you want to add and click the **Add Now** button. Once the report has been added, you can customize it by clicking the **Show Dashboard** link and then clicking the Edit icon next to the report heading.

Statistics Report

The Statistics report can show, for example, your totals and carryover for a period: how many issues were created, closed, active, etc., and the percentage difference between the Reporting Period Metric and the Comparison Period Metric.

Agents can also generate a Drill-down report that displays the issue number and other issue information for the issues included in the Statistics report. The issue numbers in the Drill-down report are links that can be used to access the issue information within FootPrints Service Core.

Customize the Statistics Created, Activated, or All Activity Report

To customize the report, on the Executive Dashboard page:

Click the pencil icon beside the title of the report. The customization fields are displayed.

Name field—In the first field, where it says **Statistics "Created"**, **"Activated"** or **"All Activity"**, enter a name for the report.

Metric—Specify the metric to be used for the report. Options are:

Unresolved—Number of issues still unresolved of the ones that were created (Created report), activated (Activated report), this time period or total unresolved for “All Activity”.

Unclosed—Number of issues still unclosed of the ones that were created (Created report), or activated (Activated report), or both this time period or total unresolved for “All Activity”.

Created—The total number of issues created this time period.

Activated—The number of issues that have been activated of the ones created this time period. Activated does not implied Unresolved or Resolved or Closed. For example, an issue could be Activated and at the same time be Unresolved. An issue can also be Assigned and at the same time be Closed.

Responded—Number of issues that have been responded to of the ones created (Created report), or activated (Activated report), or both this time period or total unresolved for “All Activity”.

Active—Number of issues still unresolved that had been activated of the ones that were created (Created report), or activated (Activated report), or both this time period or total unresolved for “All Activity”.

Activated unclosed—Number of issues still unclosed that had been activated of the ones that were created (Created report), or activated (Activated report), or both this time period or total unresolved for “All Activity”.

Resolved—Number of issues that have been resolved of the ones created (Created report), or activated (Activated report), or both this time period or total unresolved for “All Activity”.

Closed—Number of issues that have been closed of the ones created (Created report), or activated (Activated report), or both this time period or total unresolved for “All Activity”.

Initial carry over unresolved—The total number of unresolved issues at the beginning of the time period. This number does not change during the period.

Initial carry over unclosed—The total number of unclosed issues at the beginning of the time period. This number does not change during the period.

Carry over unresolved—Total number of unresolved issues from previous periods. This number goes down every time issues that were created (Created report) or activated (Activated report) in a previous period get resolved.

Carry over unclosed—The total number of unclosed issues from previous periods. This number goes down every time issues that were created (Created report) or activated (Activated report) in a previous period get closed.

Qualifier—Select data from **This** time period or the **Previous** time period.

Time Period—Options are:

Day—Refers to the current or previous day. If, for example, you requested data for the current day, the data would cover the period from 12:00:01 that morning until the current time. Data for the previous day would include data for the entire 24 hours of the previous day.

Week—Refers to the current or previous week. If, for example, you requested data for the current week, the data would cover the period from 12:00:01 Sunday morning until the current time. Data for the previous week would include data for the entire seven days of the previous week.

Month—Refers to the current or previous week. If, for example, you requested data for the current month, the data would cover the period from 12:00:01 on the first day of the month until the current time. Data for the previous month would include data for all days of the previous month.

Quarter—Refers to the current or previous quarter (three month periods defined as January through March, April through June, July through September, or October through December of a given year). If, for example, you requested data for the current quarter, the data would cover the period from 12:00:01 on the first day of the quarter until the current time. Data for the previous quarter would include data for all three months.

Year—Refers to the current or previous year. If, for example, you requested data for the current year, the data would cover the period from 12:00:01 on January 1st until the current time. Data for the previous year would include data for all days of the previous year.

Comparison Period Length—Options are:

Full—Full Period shows the full prior period counts. For example if the report is showing Statistics This Week, the comparison period is Full Prior Week, and today is Wednesday, the Full Prior Period shows the counts at the end of the previous week.

Partial—Partial Period shows the partial prior period counts. The granularity of the Partial Period is always the end of the day. For example:

If the report shows Statistics This Week, the comparison eriod is Partial Prior Week, and today is Wednesday, the Partial Prior Period shows the counts as of Wednesday of the Previous Week at the current time, which would be Sunday at 23:59 hours.

For Month, the Partial Period is the end of the *n*th day of the Month.

For Quarter, the Partial Period is the end of the *n*th day in the Quarter.

For Year, the Partial Period is the end of the *n*th day of the Year.

Comparison Period Type—Options are:

Month

Quarter

Year

You can filter the Statistics report based on up to six fields, as follows:

Filter fields—Up to six fields can be used for filtering the report results. Filters are inclusive. That is, only issues that contain the filter item in the specified field are counted. To set a filter, click the pencil icon beside one of the empty fields. Select the items you want to use to filter the report from one of the drop-down lists. For drop-down and multi-select fields, you can select multiple values. You have the option of filtering the report using any combination of the following per field:

Up to three workspace fields can be used to filter the Watchlist Report. The following values can be selected for workspace fields:

No Filter—No issues are excluded.

Priority

Status

Assignee Field (Including Teams)

Custom Drop Down fields in the Workspace

Custom Multi-select fields in the Workspace

Custom Checkbox fields in the Workspace

The fourth filter can be selected from the custom single-line character fields available in the issues.

The fifth and sixth filters may be picked from the following list or the workspace's address book fields:

No Filter—No issues are excluded.

Custom Character (Single Line)

Custom Supervisor fields

Custom Drop Down fields

Custom Multi-select fields

Custom Checkbox fields

The Address Book fields listed will be the fields from the Address Book that is currently associated with the Workspace.

Click **Save** to save the customization or **Cancel** to clear the form.

Statistics Drill-down Report

By clicking on a metric in a Statistics report, an agent can view a Drill-down report. A Drill-down report displays a list of the issues counted in the metric. The Reporting Period Metric Counts support drill-down. The issue numbers in the report are links. When the issue number link is clicked, the Issue details are displayed.

When a metric that supports drill-down is clicked, the Drill-down report is displayed in either a new window or a new tab (depending on browser settings). The Drill-down report displays different columns depending on the metric that is clicked:

Resolved/Closed/Responded—The title of the report is "*NUMBER_OF_ISSUES_RESOLVED/CLOSED/RESPONDED* Resolved/Closed/Responded". The columns for the report are:

Number

Priority

Title

Status

Assignees

Time to Resolve/Close/Respond

This is "Created to Resolved/Closed/Responded (Working Hours)" for Created and All Activity.

This is "Activated to Resolved/Closed/Responded (Working Hours)" for Activated.

All Others—The title of the report is "*NUMBER_OF_ISSUES* Issues *NAME_OF_METRIC*". The columns for the report are:

Number

Priority

Title

Status

Assignees

Last Edited On

Exporting the Drill-down Report

Agents can export Statistics data to either PDF (maintaining look and feel) or Microsoft Excel (data only) by clicking the associated icon. The report shows:

The name of the report.

The date the report was run.

The name of the Statistics report from which the drill-down report was taken.

The type of report plus the reporting period type (for example, **Created This Month**).

Watchlist Report

You can watch a specified field and track how many issues with a specific value in that field were created, active, or created and active during a specified period (day, week, month, quarter, or year). In addition, track issues for a variety of metrics, such as how many were Created, Active, Resolved, and/or Carried Over Unresolved for a specific period.

If you use saved searches to track this type of information, the Executive Dashboard allows you to create a Watchlist that replaces those searches and can display the results in a single Watchlist.

Customize the Watchlist Created, Activated, or All Activity Report

To customize the report, on the Executive Dashboard page:

Click the pencil icon beside the title of the report. The customization fields are displayed.

Name field—In the first field, where it says **"Watchlist "Created"**, **"Activated"** or **"All Activity"**, enter a name for the report.

Metric—Specify the metric to be used for the report. Options are:

Unresolved—Number of issues not yet resolved of the ones that were created or activated this time period or total unresolved for “All Activity”.

Unclosed—Number of issues still not closed of the ones that were created or activated this time period or total unresolved for “All Activity”.

Created—The total number of issues created this time period.

Activated—The number of issues that have been activated of the ones created this time period. Activated does not implied Unresolved or Resolved or Closed. For example, an issue could be Activated and at the same time be Unresolved. An issue can also be Assigned and at the same time be Closed.

Responded—Number of issues that have been responded to of the ones created or activated this time period or total unresolved for “All Activity”.

Active—Number of issues still not resolved that had been activated of the ones that were created or activated this time period or total unresolved for “All Activity”.

Activated unclosed—Number of issues still not closed that had been activated of the ones that were created or activated this time period or total unresolved for “All Activity”.

Resolved—Number of issues that have been resolved of the ones created or activated this time period or total unresolved for “All Activity”.

Closed—Number of issues that have been closed of the ones created or activated this time period or total unresolved for “All Activity”.

Initial carry over unresolved—The total number of unresolved issues at the beginning of the time period. This number does not change during the period.

Initial carry over unclosed—The total number of unclosed issues at the beginning of the time period. This number does not change during the period.

Carry over unresolved—Total number of unresolved issues from previous periods. This number goes down every time issues that were created (Created report) or activated (Activated report) in a previous period get resolved.

Carry over unclosed—The total number of unclosed issues from previous periods. This number goes down every time issues that were created (Created report) or activated (Activated report) in a previous period get closed.

Qualifier—Select data from **This** time period or the **Previous** time period.

Time period—Options are:

Day—Refers to the current or previous day. If, for example, you requested data for the current day, the data would cover the period from 12:00:01 that morning until the current time. Data for the previous day would include data for the entire 24 hours of the previous day.

Week—Refers to the current or previous week. If, for example, you requested data for the current week, the data would cover the period from 12:00:01 Sunday morning until the current time. Data for the previous week would include data for the entire seven days of the previous week.

Month—Refers to the current or previous week. If, for example, you requested data for the current month, the data would cover the period from 12:00:01 on the first day of the month until the current time. Data for the previous month would include data for all days of the previous month.

Quarter—Refers to the current or previous quarter (three month periods defined as January through March, April through June, July through September, or October through December of a given year). If, for example, you requested data for the current quarter, the data would cover the period from 12:00:01 on the first day of the quarter until the current time. Data for the previous quarter would include data for all three months.

Year—Refers to the current or previous year. If, for example, you requested data for the current year, the data would cover the period from 12:00:01 on January 1st until the current time. Data for the previous year would include data for all days of the previous year.

To add a Watchlist item, type a name for the Watchlist in to one of the blank fields below the Time Period drop-down. Now filter the field options by clicking the Edit icon beside the new Watchlist icon name. The Filter Options are displayed. You can filter each Watchlist Item in the Watchlist Report based on up to six fields, as follows:

Filter fields—For the Watchlist, you can filter report results for each individual item using up to six fields. Filters are inclusive; only issues that contain the filter item in the specified field are counted. To set a filter,

click the pencil icon beside one of the empty fields. Select the items you want to use to filter the report from one of the drop-down lists. For drop-down and multi-select fields, you can select multiple values. You have the option of filtering the report using any combination of the following per field:

Up to three workspace fields can be used to filter the Watchlist Report. The following values can be selected for workspace fields:

No Filter—No issues are excluded.

Priority

Status

Assignee Field (Including Teams)

Custom Drop Down fields in the Workspace

Custom Multi-select fields in the Workspace

Custom Checkbox fields in the Workspace

The fourth filter can be selected from the custom single-line character fields available in the issues.

The fifth and sixth filters may be picked from the following list or the workspace's address book fields:

No Filter—No issues are excluded.

Custom Character (Single Line)

Custom Supervisor fields

Custom Drop Down fields

Custom Multi-select fields

Custom Checkbox fields

The Address Book fields listed will be the fields from the Address Book that is currently associated with the Workspace.

Click **Save** to save the customization or **Cancel** to clear the form.

SLA Report

Service Level Agreements (SLAs) may include agreements regarding resolutuon fulfillment. That is, they may require a specific percentage of issues that must be resolved within a given period of time. . The SLA report allows you to specify the thresholds for resolution fulfillment and see how well agents are maintaining them. The report is displayed as a graph, so that, for example, if the minimum threshold is 93% resolution, the report would show a line that is green when safely above the threshold, yellow when the threshold is being approached, and red when the threshold is breached. Specifically:

Fulfilled Percentage is colored green and represents any value greater than the configured fulfillment percentage threshold. The workspace administrator may configure Resolution and/or Response Due Dates in Service Level Management. The percentage of fulfillment displayed in the report is the percentage of issues that fulfilled the resolution or response time out of all the issues that were resolved or responded, plus all the issues that are still unresolved or unresponded whose due date is less than current date and time. An issue is considered to fulfill the SLA for resolution or response if the server resolved or responded date is less than or equal to the due dates(s). If no due date has been set for resolution or response, the issues are ignored when calculating the percentage.

The default **Watch Percentage** is colored yellow and represents any value between five percent below the fulfillment percentage threshold and the fulfillment percentage threshold.

The default **Warning Percentage** is colored red and represents any value between zero and five percent below the Watch Percentage.

If there are no issues that meet the criteria for the report, the line on the graph is colored gray.

In addition, agents can generate a Drill-down report that displays more details of the Service Level fulfillment data.

Customize the SLA Created, Activated, or All Activity Report

To customize the report, on the Executive Dashboard page:

Click the pencil icon beside the title of the report. The customization fields are displayed.

Name field—In the first field, where it says **SLA "Created"**, **"Activated"** or **"All Activity"**, enter a name for the report.

Metric—There are two options for the metric, but if only one of them is configured by the workspace administrator in Service Level Management, then only that option is displayed. Options are:

Resolution Due Date—The amount of time allowed for issue resolution for this service level.

Response Due Date—The amount of time allowed for issue response for this service level.

Qualifier—Select data from **This** time period or the **Previous** time period.

Time period—Options are:

Day—Refers to the current or previous day. If, for example, you requested data for the current day, the data would cover the period from 12:00:01 that morning until the current time. Data for the previous day would include data for the entire 24 hours of the previous day.

Week—Refers to the current or previous week. If, for example, you requested data for the current week, the data would cover the period from 12:00:01 Sunday morning until the current time. Data for the previous week would include data for the entire seven days of the previous week.

Month—Refers to the current or previous week. If, for example, you requested data for the current month, the data would cover the period from 12:00:01 on the first day of the month until the current time. Data for the previous month would include data for all days of the previous month.

Quarter—Refers to the current or previous quarter (three month periods defined as January through March, April through June, July through September, or October through December of a given year). If, for example, you requested data for the current quarter, the data would cover the period from 12:00:01 on the first day of the quarter until the current time. Data for the previous quarter would include data for all three months.

Year—Refers to the current or previous year. If, for example, you requested data for the current year, the data would cover the period from 12:00:01 on January 1st until the current time. Data for the previous year would include data for all days of the previous year.

SLA Issues—Select from one to five types of service level in which to report. Multiple levels can be selected by using SHIFT-CLICK or CTRL-CLICK.

Set Thresholds—Set the threshold level for the graph.The percentage for resolution fulfillment is set by the workspace administrator when the administrator configures the SLAs within FootPrints Service Core. The agent can specify:

Watch Percentage—Enter a number from zero to the Fulfillment Percentage to determine when the line on the graph becomes yellow, indicating that fulfillment may not be achieved.

Warning Percentage—Enter a number from zero to the Watch Percentage to determine when the line on the graph becomes red, warning that fulfillment has fallen dangerously below contracted levels..

Edit Optional Fields—Click the link to filter the SLA report. You can filter the SLA report based on up to six fields, as follows:

Filter fields—Up to six fields can be used for filtering the report results. Filters are inclusive. That is, only issues that contain the filter item in the specified field are counted. To set a filter, click the pencil icon beside one of the empty fields. Select the items you want to use to filter the report from one of the drop-down lists. For drop-down and multi-select fields, you can select multiple values. You have the option of filtering the report using any combination of the following per field:

Up to three workspace fields can be used to filter the Watchlist Report. The following values can be selected for workspace fields:

No Filter—No issues are excluded.

Priority

Status

Assignee Field (Including Teams)

Custom Drop Down fields in the Workspace

Custom Multi-select fields in the Workspace

Custom Checkbox fields in the Workspace

The fourth filter can be selected from the custom single-line character fields available in the issues.

The fifth and sixth filters may be picked from the following list or the workspace's address book fields:

No Filter—No issues are excluded.

Custom Character (Single Line)

Custom Supervisor fields

Custom Drop Down fields

Custom Multi-select fields

Custom Checkbox fields

The Address Book fields listed will be the fields from the Address Book that is currently associated with the Workspace.

Click **Save** to save the customization or **Cancel** to clear the form.

SLA Drill-down Report

By clicking on a metric in a SLA report, an agent can view a Drill-down report. A Drill-down report displays additional details of the Service Level fulfillment data. The following metrics support drill-down:

Response Fulfillment

Resolution Fulfillment

When a metric that supports drill-down is clicked, the Drill-down report is displayed in either a new window or a new tab (depending on browser settings). The Drill-down report displays different columns depending on the metric that is clicked:

Response Fulfillment—The title of the report is Response Fulfillment. The values displayed are:

Total Response Fulfillment

Total Responded

Total Responded that Fulfilled SLA

Total Responded that Breached SLA

Total still not Responded/Unresolved

Total still Not Responded/Unresolved that Breached SLA

Further drill-down can be performed by clicking on any of the metrics in the Drill-down report. The issue numbers in the report are links. When the issue number link is clicked, the issue is displayed in FootPrints Service Core. Results depend on the metric selected, as follows:

Total Part of Response Fulfillment—The title of the report is "*NUMBER_OF_RESPONDED* + *NUMBER_OF NOT_RESPONDED_THAT_BREACH_SLA* Issues part of Response Fulfillment". The Issues that did not fulfill are highlighted in red. The columns for the report are:

Number

Priority

Title

Status

Assignees

Response Due Date

Total still not Responded—The title of the report is "*NUMBER_OF_NOT_RESPONDED* Issues that have not yet been Responded to". The columns for the report are the same as for the previous report (Total Part of Response Fulfillment).

Total still Not Responded that Breached SLA—The title of the report is "*NUMBER_OF_RESPONDED_THAT_BREACH_SLA* Issues not yet Responded that have already breached the SLA.". The columns for the report are the same as for Total Part of Response Fulfillment.

Total Responded—The title of the report is "*NUMBER_OF_RESPONDED*Issues Responded". The Issues that did not fulfill are highlighted in red. The columns for the report are:

Number

Priority

Title

Status

Assignees

Response Date

Response Due Date

Responded that fulfilled SLA—The title of the report is "*NUMBER_OF_RESPONDED_THAT_FULLFILLED_SLA* Issues Responded before *RESPONSE_TIME*". The columns for the report are the same as for the previous report (Total Responded).

Responded that Breached SLA—The title of the report is "*NUMBER_OF_RESPONDED_THAT_BREACH_SLA* Issues Responded after *RESPONSE_TIME*". The columns for the report are the same as for Total Responded.

Total Part of Resolution Fulfillment—The title of the report is "*NUMBER_OF_RESOLUTION* + *NUMBER_OF NOT_RESOLVED_THAT_BREACH_SLA* Issues part of Resolution Fulfillment". The Issues that did not fulfill are highlighted in red. The columns for the report are:

Number

Priority

Title

Status

Assignees

Resolution Due Date

Total Unresolved—The title of the report is "*NUMBER_OF_UNRESOLVED* Issues Unresolved". The columns for the report are the same as for the previous report (Total Part of Resolution Fulfillment).

Total still Not Resolved that Breached SLA—The title of the report is "*NUMBER_OF_UNRESOLVED_THAT_BREACH_SLA* Issues Unresolved that have already breached the SLA.". The columns for the report are the same as for Total Part of Resolution Fulfillment.

Total Resolved—The title of the report is "*NUMBER_OF_RESOLVED*Issues Resolved". The Issues that did not fulfill are highlighted in red. The columns for the report are:

Number

Priority

Title

Status

Assignees

Resolution Date

Resolution Due Date

Resolved that fulfilled SLA—The title of the report is "*NUMBER_OF_RESOLVED_THAT_FULLFILLED_SLA* Issues Resolved before *RESOLUTION_TIME*". The columns for the report are the same as for the previous report (Total Resolved).

Resolved that Breached SLA—The title of the report is "*NUMBER_OF_RESOLVED_THAT_BREACH_SLA* Issues Resolved after *RESOLUTION_TIME*". The columns for the report are the same as Total Resolved.

Exporting the Drill-down Report

Agents can export Statistics data to either PDF (maintaining look and feel) or Microsoft Excel (data only) by clicking the associated icon. The report shows:

The name of the report.

The date the report was run.

The name of the SLA report from which the Drill-down report was taken.

The type of report plus the reporting period type.

Resolution Rate Report

A First Contact Resolution Rate and a Resolution Rate report are combined so that you can watch the convergence of the data on those rates in one place. The periods to be observed (per day, week, month, quarter, and year) are configurable.

Customize the Resolution Rate Created, Activated, or All Activity Report

To customize the report, on the Executive Dashboard page:

Click the pencil icon beside the title of the report. The customization fields are displayed.

Name field—In the first field, where it says **Resolution Rate "Created"**, **"Activated"** or **"All Activity"**, enter a name for the report.

Qualifier—Select data from **This** time period or the **Previous** time period.

Time period—Options are:

Day—Refers to the current or previous day. If, for example, you requested data for the current day, the data would cover the period from 12:00:01 that morning until the current time. Data for the previous day would include data for the entire 24 hours of the previous day.

Week—Refers to the current or previous week. If, for example, you requested data for the current week, the data would cover the period from 12:00:01 Sunday morning until the current time. Data for the previous week would include data for the entire seven days of the previous week.

Month—Refers to the current or previous week. If, for example, you requested data for the current month, the data would cover the period from 12:00:01 on the first day of the month until the current time. Data for the previous month would include data for all days of the previous month.

Quarter—Refers to the current or previous quarter (three month periods defined as January through March, April through June, July through September, or October through December of a given year). If, for example, you requested data for the current quarter, the data would cover the period from 12:00:01 on the first day of the quarter until the current time. Data for the previous quarter would include data for all three months.

Year—Refers to the current or previous year. If, for example, you requested data for the current year, the data would cover the period from 12:00:01 on January 1st until the current time. Data for the previous year would include data for all days of the previous year.

From Issue Lifecycle Event—Select whether the resolution rate will be measured beginning from **Creation** of the issues or **Activation** of the issues. If you are unfamiliar with the concepts of Creation and Activation Issue Lifecycle events, refer to the Introduction to Executive Dashboard.

To Issue Lifecycle Event—Select whether the resolution rate will be measured until a **Response**, **Resolution**, or **Closure** event occurs.

Measurement Type—Select whether the time it takes from the beginning Issue Lifecycle event until the ending Issue Lifecycle event is measured in **Work Hours** or **Clock Hours**. Work hours are the hours as configured in the workspace schedule and clock hours refers to a 24 hour day. Your workspace schedule might, for example, be based on an eight hour work day. If that is the case, if you selected **Work Hours**, then every eight hours it took to resolve an issue would be regarded as "one day".

Time Boundaries—Time boundary options are **First Contact** and **1–180**. You can select up to seven boundaries from the drop-down field. Time boundaries represent periods of time within which the specified Time Period (Day, Week, Month, Quarter, or Year) is displayed. The First Contact selection displays the percentage of issues that were resolved on the first call during the specified time period and regardless of the other time boundaries. For example, if you selected time boundaries of **1**, **3**, **5** , **7**specified to Display Time In days (see the next step in this process), the first period of the Resolution Rate report shows the rate from

0 to <= 1 day

>1 day to <= 3 days

>3 days to <=5 days

>5 days to <= 7 days

Display Time In—Options are **Days** and **Hours**. This determines the display for the Time Boundaries.

You can filter the Resolution Rate report based on up to six fields, as follows:

Filter fields—Up to six fields can be used for filtering the report results. Filters are inclusive. That is, only issues that contain the filter item in the specified field are counted. To set a filter, click the pencil icon beside one of the empty fields. Select the items you want to use to filter the report from one of the drop-down lists. For drop-down and multi-select fields, you can select multiple values. You have the option of filtering the report using any combination of the following per field:

Up to three workspace fields can be used to filter the Resolution Rate report. The following values can be selected for workspace fields:

No Filter—No issues are excluded.

Priority

Status

Assignee Field (Including Teams)

Custom Drop Down fields in the Workspace

Custom Multi-select fields in the Workspace

Custom Checkbox fields in the Workspace

The fourth filter can be selected from the custom single-line character fields available in the issues.

The fifth and sixth filters may be picked from the following list or the workspace's address book fields:

No Filter—No issues are excluded.

Custom Character (Single Line)

Custom Supervisor fields

Custom Drop Down fields

Custom Multi-select fields

Custom Checkbox fields

The Address Book fields listed will be the fields from the Address Book that is currently associated with the Workspace.

Only account for time spent in Statuses that the Workspace Administrator has included in the Issue Lifecycle Time Measurements—The Workspace administrator may have excluded some statuses from the Issue Lifecycle. For example, it may have been determined that a "Pending Answer From Customer" status, in which the agent working on the issue was waiting for a customer response, should not be counted when the Issue Lifecycle is measured. If you check this box, those excluded statuses are not counted when measuring the time spent before resolution. If you uncheck this box, time spent in all statuses is included in measuring the resolution rate. The box is checked by default.

Click **Save** to save the customization or **Cancel** to clear the form.

Resolution Rate Drill-down Report

By clicking on one of the bars in the graph of the Resolution Rate report, an agent can view a Drill-down report. A Drill-down report displays a list of the issues represented by that portion of the graph. The issue numbers in the report are clickable links. When the issue number link is clicked, the issue is displayed in FootPrints Service Core.

When a bar is clicked, the Drill-down report is displayed in either a new window or a new tab (depending on browser settings). The Drill-down report displays different columns depending on whether you click First Contact Resolution or one of the time boundary numbers:

First Contact Resolution—The title of the report is "*NUMBER_OF_ISSUES_FIRST_CALL* of *NUMBER_OF_TOTAL_ISSUES_IN_TIME_PERIOD* (*FIRST_CALL_PERCENTAGE*%) First Contact". The columns for the report are:

Number

Priority

Title

Status

Assignees

Other Columns—The title of the report is "*NUMBER_OF_ISSUES_IN_COLUMN*of *NUMBER_OF_TOTAL_ISSUES_IN_TIME_PERIOD*(*BUCKET_PERCENTAGE*%) in *COLUMN_NAME*". The columns for the report are:

Number

Priority

Title

Status

Assignees

FROM_ISSUE LIFECYCLE_EVENT to *TO_ISSUE_LIFECYCLE_EVENT*

The time “From Issue Lifecycle Event” to”To Issue Lifecycle Event” is displayed in hours or days depending on the option picked by the agent.

The time “From Issue Lifecycle Event” to”To Issue Lifecycle Event” is displayed in work hours or clock hours depending on the option picked by the Agent.

This number displays decimals when it is not complete hours or days.

The decimal number is rounded up to two decimal places.

Exporting the Drill-down Report

Agents can export Statistics data to either Microsoft Excel or PDF format by clicking the associated icon.The report shows:

The name of the report.

The date the report was run.

The name of the Statistics report from which the drill-down report was taken.

The type of report plus the reporting period type (for example, **Created This Month**), as well as the comparison period (for example, **Prior Month**).

Activity Report

The Activity report is a line graph that shows how many issues were active for a specific period so that you can observe the activity at various points. For example, if you tracked activity during the month, you might see how many issues were created on each day, how many were closed on each day, etc. This enables you to see where activity spikes for different statuses. The agent configures the metrics for the report.

The Activity report displays each line with a different color and different data point shape. If based there is no data for a selected metric, then the line for that metric is a flat line on the X axis. If there is no data for any of the metrics, then no lines are displayed at all.

Customize the Activity Created, Activated, or All Activity Report

To customize the report, on the Executive Dashboard page:

Click the pencil icon beside the title of the report. The customization fields are displayed.

Name field—In the first field, where it says **Activity "Created"**, **"Activated"** or **"All Activity"**, enter a name for the report.

Metric—Specify the metric to be used for the report. Options are:

Created (Point in Time)—The total number of issues created this time period.

Activated (Cumulative)—The number of issues that have been activated of the ones created this time period. Activated does not implied Unresolved or Resolved or Closed. For example, an issue could be Activated and at the same time be Unresolved. An issue can also be Assigned and at the same time be Closed.

Responded (Cumulative)—Number of issues that have been responded to of the ones created (Created report), or activated (Activated report), or both this time period.

Resolved (Cumulative)—Number of issues that have been resolved of the ones created (Created report), or activated (Activated report), or both this time period.

Closed (Cumulative)—Number of issues that have been closed of the ones created (Created report), or activated (Activated report), or both this time period.

Unresolved—Number of issues still unresolved of the ones that were created (Created report), activated (Activated report), or both this time period.

Unclosed—Number of issues still unclosed of the ones that were created (Created report), or activated (Activated report), or both this time period.

Active—Number of issues still unresolved that had been activated of the ones that were created (Created report), or activated (Activated report), or both this time period.

Activated unclosed—Number of issues still unclosed that had been activated of the ones that were created (Created report), or activated (Activated report), or both this time period.

Carry over unresolved—Total number of unresolved issues from previous periods. This number goes down every time issues that were created (Created report) or activated (Activated report) in a previous period get resolved.

Carry over unclosed—The total number of unclosed issues from previous periods. This number goes down every time issues that were created (Created report) or activated (Activated report) in a previous period get closed.

Qualifier—Select data from **This** time period or the **Previous** time period.

Time period—Options are:

Day—Refers to the current or previous day. If, for example, you requested data for the current day, the data would cover the period from 12:00:01 that morning until the current time. Data for the previous day would include data for the entire 24 hours of the previous day.

Week—Refers to the current or previous week. If, for example, you requested data for the current week, the data would cover the period from 12:00:01 Sunday morning until the current time. Data for the previous week would include data for the entire seven days of the previous week.

Month—Refers to the current or previous week. If, for example, you requested data for the current month, the data would cover the period from 12:00:01 on the first day of the month until the current time. Data for the previous month would include data for all days of the previous month.

Quarter—Refers to the current or previous quarter (three month periods defined as January through March, April through June, July through September, or October through December of a given year). If, for example, you requested data for the current quarter, the data would cover the period from 12:00:01 on the first day of the quarter until the current time. Data for the previous quarter would include data for all three months.

Year—Refers to the current or previous year. If, for example, you requested data for the current year, the data would cover the period from 12:00:01 on January 1st until the current time. Data for the previous year would include data for all days of the previous year.

You can filter the Activity Report based on up to six fields, as follows:

Filter fields—Up to six fields can be used for filtering the report results. Filters are inclusive. That is, only issues that contain the filter item in the specified field are counted. To set a filter, click the pencil icon beside one of the empty fields. Select the items you want to use to filter the report from one of the drop-down lists. For drop-down and multi-select fields, you can select multiple values. You have the option of filtering the report using any combination of the following per field:

Up to three workspace fields can be used to filter the Activity Report. The following values can be selected for workspace fields:

No Filter—No issues are excluded.

Priority

Status

Assignee Field (Including Teams)

Custom Drop Down fields in the Workspace

Custom Multi-select fields in the Workspace

Custom Checkbox fields in the Workspace

The fourth filter can be selected from the custom single-line character fields available in the issues.

The fifth and sixth filters may be picked from the following list or the workspace's address book fields:

No Filter—No issues are excluded.

Custom Character (Single Line)

Custom Supervisor fields

Custom Drop Down fields

Custom Multi-select fields

Custom Checkbox fields

The Address Book fields listed will be the fields from the Address Book that is currently associated with the Workspace.

3D Effect—Checking the **3D Effect** checkbox produces a three-dimensional view of the report.

Click **Save** to save the customization or **Cancel** to clear the form.

Format of the Report Output

When the report is displayed, it is formatted along the X axis of the graph as follows:

When the label is	The report shows
Hour	The hour of the day (for example: 8:00, 9:00, 10:00) starting at 1:00 AM and ending at 24:00 PM.
Day	The date using the Operating System date format of the client (for example: April 29, 2016) starting at the date of the beginning of the specified time period. Each day is labeled until the end of the time period even if there is no data available for the end of the time period.
Week	The date using the Operating System date format of the client starting at the date of the beginning of the time period. There is a day for each day of the week to the end of the time period, even if there is no data available for the end of the time period.
Month	The date using the Operating System date format of the client starting at the date of the beginning of the time period. There is a number for each of the days of the month to the end of the time period even if there is no data available for the end of the time period.
Quarter	The date using the Operating System date format of the client starting at the beginning of the time period. There is a week for each of the weeks of the quarter to the end of the time period even if there is no data available for the end of the time period.
Year	The date using the Operating System date format of the client starting at the date of the beginning of the time period. There is a month for all twelve months of the year to the end of the time period even if there is no data available for the end of the time period.

Activity Drill-down Report

By clicking on a data point in an Activity report, an agent can view a Drill-down report. A Drill-down report displays additional details of the Activity data. All of the metrics support the Drill-down reporting. The Drill-down report displays a list of all the issues that make up the selected data point. The issue numbers in the report are clickable links. When the issue number link is clicked, the issue is displayed in BMC FootPrints Service Core.

Exporting the Drill-down Report

Agents can export Activity data to either Microsoft Excel or PDF format by clicking the associated icon. The report shows:

The name of the report.

The date the report was run.

The name of the Activity report from which the Drill-down report was taken.

The type of report plus the reporting period type.

BMC FootPrints Asset Core

BMC FootPrints Asset Core Introduction

BMC FootPrints Asset Core provides PC Lifecycle Management capabilities that include inventory and discovery across the IP infrastructure, compliance, configuration management, patch management, remote control, and other functions targeted primarily at systems devices. Many of these capabilities are now tightly integrated with BMC FootPrints Service Core for overall service desk and service management support.

NOTE

BMC FootPrints Asset Core is an optional add-on to BMC FootPrints Service Core.

The following topics describe how to use BMC FootPrints Asset Core features integrated with BMC FootPrints Service Core. For detailed help on BMC FootPrints Asset Core, please see BMC FootPrints Asset Core's in-product documentation or the product documentation on our Web site.

NOTE ON TERMINOLOGY

Different terminology is used for Agents and Administrators in the in-product documentation for BMC FootPrints Service Core and BMC FootPrints Asset Core. Please refer to the table below explaining the differences.

BMC FootPrints Service Core Documentation	BMC FootPrints Asset Core Documentation
Administrator	Agent
Agent	Administrator
System Administrator	Administrator
Workspace Administrator	Administrator

BMC FootPrints Asset Core consists of five modules that have been integrated with BMC FootPrints Service Core. These modules are:

Inventory Manager

Deployment Manager

Patch Manager

Remote Manager

Compliance Manager

What You Can Do with BMC FootPrints Asset Core

Access and Log in to BMC FootPrints Asset Core from FootPrints Service Core

The BMC FootPrints Service Core/BMC FootPrints Asset Core integration is platform and browser independent, and does not require the BMC FootPrints Asset Core client to be pre-installed.

When configured, a BMC FootPrints Service Core agent can log into BMC FootPrints Asset Core from BMC FootPrints Service Core without providing credentials to BMC FootPrints Asset Core.

Perform BMC FootPrints Asset Core Asset Actions within BMC FootPrints Service Core

Agents can perform the following asset actions from the BMC FootPrints Service Core homepage, issues, or Configuration Items:

View Asset Summary–An overview of the Hardware, Software, Security, and Financial details of a BMC FootPrints Asset Core Device.

NOTE

BMC FootPrints Service Core uses the term "asset" and BMC FootPrints Asset Core uses the term "device". These terms can be used interchangeably.

Remote Control

View File System

View Registry

View Events

View Processes

Transfer File

Run Audit

Ping

Reboot

Shutdown

Wake up

Execute BMC FootPrints Asset Core Operational Rules (Advanced Actions)

BMC FootPrints Asset Core Operation Rules can be configured to modify asset configuration, including: software deployment, changing registry settings, controlling services, and more. Advance Actions can be configured to require using BMC FootPrints Service Core workflow before execution (e.g. via Escalation Rules or Change Manager).

Search for Assets

BMC FootPrints Service Core Agents can search for BMC FootPrints Asset Core assets from the Quick Search field on the BMC FootPrints Service Core homepage or from an asset search box which is displayed on an issue tab or section. By default, the asset search box is displayed on the Asset Information tab of an issue. Once the desired asset is located, an agent can perform the actions above or associate the device with an issue.

Directly Integrate BMC FootPrints Asset Core Data with the BMC FootPrints Configuration Manager Database (CMDB)

Administrators can directly import data (such as devices, software, and network relationships) from BMC FootPrints Asset Core into the BMC Configuration Manager. Once the data is imported, agents can perform the actions above on the CIs that are created during the import.

NOTE

BMC FootPrints Configuration Manager (with Service Catalog) is an add-on module available for integration with BMC FootPrints Service Core.

Import CMDB and Financial Asset Data from BMC FootPrints Asset Core

The CMDB page now includes columns for relationships with links to the details of the relationship.

The CMDB import feature can now import financial asset data from BMC FootPrints Asset Core.

Updates made in BMC FootPrints Asset Core can be imported into BMC FootPrints Service Core. However, if you modify financial data in BMC FootPrints Service Core, the changes are not updated in BMC FootPrints Asset Core. The financial asset data displayed in BMC FootPrints Service Core is a snapshot of the information uploaded during the most recent import. Financial values of the hardware assets underpinning a service can be rolled up into the CMDB under Service Configuration Items (CIs).

Service CIs now feature Service Cost, Estimated Current Value, and Managed By fields where Service Cost and Current Estimated Value are calculated by summing up the individual hardware CI values participating in a financial relationship with the Service CI in question. Current Estimated Value is based on the chosen depreciation method in BMC FootPrints Asset Core. When Hardware CIs are linked with a Financial type Relationship to Service CIs, the Service CIs include data calculating the entire cost of providing the service, based on the costs of the hardware CIs underpinning that service.

Hardware CIs feature support, warranty and cost fields. The Asset Owner and Managed By fields are also available in the Asset Summary window but do not display on the Issues pages.

There are three options for incorporating these fields into your data:

Using your existing CMDB, you can map the new fields in your next import from BMC FootPrints Asset Core.

OR Create a separate CMDB for financial data only and use it along with your existing CMDB.

OR Create a brand new CMDB which will include the new fields by default.

The Console

The BMC FootPrints Asset Core Console is the main interface for working within BMC FootPrints Asset Core.

To launch the BMC FootPrints Asset Core Console, select BMC FootPrints Asset Core from the toolbar. For further information on using the BMC FootPrints Asset Core Console, refer to the BMC FootPrints Asset Core documentation.

NOTE: ABOUT JAVA

Any time you attempt an Action that requires a call to BMC FootPrints Asset Core, BMC FootPrints Service Core tries to detect if you have Java 1.6.0_16 or higher installed.

If you do, the call continues.

If not, you are prompted with a page that gives you two options:

the first option is to begin the installation of Java and

the second is to ignore the Java check.

The second option is provided because some users' browser settings may prevent BMC FootPrints Service Core from detecting Java even though the correct version of Java is installed. Only select this option if your browser settings prevent detection of Java.

By clicking ignore, BMC FootPrints Service Core no longer performs the Java detection and goes directly to the call to BMC FootPrints Asset Core.

Once the ignore button has been selected, the only way to return to the Java install page is to go to the Miscellaneous tab of the Preferences page and click the “Update My Java” button

Search for Assets

BMC FootPrints Asset Core provides a means to search the database for assets. A search for assets can be initiated either from the BMC FootPrints Service Core homepage Quick Search or from a create or edit issue page. The asset search field is not available in the details view of an issue page. On an issue page, the search field is located on the Asset Information tab by default, but the BMC FootPrints Service Core Workspace administrator can change the location of the field, so agents may find it on a different tab or section.

On the BMC FootPrints Service Core homepage, to initiate a search for assets, select BMC FootPrints Asset Core using the down arrow next to the Quick Search field, then enter the keywords and click the Search button. Regardless of whether the search is initiated on the homepage or the issue page, the results are the same. However, a search from the homepage cannot be associated with an issue. For searches from an issue page only, an agent can select an asset on the search results page and associate it with the issue; asset data from the selected asset is entered into the corresponding fields on the Asset Information tab or section.

Search Rules

The rules for searching the assets database are as follows:

Searches are not case sensitive.

Wildcards can be used: use ? for a single missing character and * for one or more missing characters.

Wildcards must be used to match a substring within an alphanumeric string. For example, "manage" will not match "management" but "manage*" will match it.

Use quotation marks (") around a text sequence to indicate that everything within the quotes must be matched exactly as it appears.

Boolean searches are supported. Details on Boolean search rules are described below.

Specific fields can be searched using the following syntax:

alias::*keyword*

Note the use of two colons. For example if you want to find only assets that are running on the operating system Windows 2003 you can specify the alias “os” combined with the text “2003” by searching for the following: os::2003

Search Syntax

The following fields can be searched. They refer to either a device, a user, or financial asset management data:

Parameter	Description	Example
name	The name of the device	scotty.enterprise.com, PC1, M60-ITA.
os	The name of the operating system composed of its name, major version, minor version, revision, and build numbers	Microsoft Windows XP Professional 32 bit 5.1 rev:Service Pack 3 build:2600
fpac	The agent version, composed of its major version, minor version, revision, and build numbers	10.0.0 build:100415c
ip	The IP address in its dotted notation	194.50.68.255
domain	The domain name of the device	LABNET\PC2:
netbios	The NetBIOS name of the device -- this field is not applicable for Linux and Mac OS devices	M60-ITA
macaddress	The MAC (hardware address of the device)	00:01:02:AF:7D
serialnumber	The serial number of the hard disk of the device	0001657879
type	The topology type of the device	master or client
currentuser	The name of the user who was logged when the last hardware inventory was generated	LABNET\Administrator
user	The name of the user who was logged when the last hardware inventory was generated	LABNET\Administrator
security		
vendor	The name of the vendor of the asset	
po	The purchase order number of the asset	
support	The name of the support provider of the asset	
dept	The name of the department to which the asset belongs	
sku	The SKU vendor name of the asset	
status	The current life cycle status of the asset	
contact	The name of the administrator to contact for anything concerning the asset	
owner	The name of the user of the asset	

If a search is performed without specifying the field, many entries are searched in the assets database and the results may be very broad. For example, a search for "sql" would match any software data containing the term "Microsoft SQL Server". A search for "512" would match any hardware data containing the term "512 Mb (Physical Memory)". However, a search for "sql" would not return "MySQL" in the results, nor would a search for "512" return "512Mb" in the results. This is because the search would only match the string where there are blank spaces on either side of it. A search for "*sql" would return any results containing "MySQL" and a search for "512*" would return any results containing "512Mb".

Boolean Search Rules

Boolean Search Rules

A Boolean search request consists of a group of words, phrases, or macros linked by connectors such as AND and OR that indicate the relationship between them. The following table provides examples of the Boolean expressions supported by asset searches.

Boolean Connector	Example Expression	Description of the Results
and	apple and pear	Both words must be present.
or	apple or pear	Either word can be present.
not	apple and not pear	Only "apple" must be present.
w/	apple w/5 pear	"Apple" must occur within five words of "pear".
pre/	apple pre/5 pear	"Apple" must occur five or fewer words before "pear".
not w/	apple not w/5 pear	"Apple" must not occur within five words of "pear".
name contains	name contains smith	The field name must contain "smith"
w/*X* xfirstword	apple w/5 xfirstword	"Apple" must occur in the first five words.
w/*X* xlastword	apple w/5 xlastword	"Apple" must occur in the last five words.

Multiple Boolean connectors can be used with a single search. For example:

apple and pear not orange

If you use more than one connector, use parentheses to indicate the precise search. For example:

apple and pear or orange

could mean

(apple and pear) or orange

or it could mean

apple and (pear or orange)

Search Results

When a search is successfully executed, the results are displayed in a pop-up window. The choice of columns displayed in the pop-up window is fixed and cannot be configured from BMC FootPrints Service Core, but you can change the column order and sort direction. When the search is executed, it searches columns that may not be displayed in the search results. Consequently, you might, for example, search for "Microsoft SQL" and not see the term "SQL" in any of the results. This is because the term may have been present in a column that was searched but is not displayed in the results. If a search results in no matches, that information is displayed.

The columns displayed in the Search Results are:

Device Name

Device Type

Serial Number

IP Address

MAC Address

Domain

User

Operating System

Associate a Record with an Issue

To associate an asset record with an issue (and populate the corresponding Asset Information fields with asset data), highlight the asset in the Search window and click the Select Asset button.

View Asset Summary

The View Asset Summary button is displayed on the Action Button. Clicking the View Asset Summary button displays a summary of an asset. The summary page displays the following information:

Fields—The following fields are displayed on the Asset Summary page and are not configurable by an administrator:

Device Type

Serial Number

Operating System

IP Address

MAC Address

Domain

Device User

Tabs—The following fields are displayed on the Asset Summary page and are not configurable by an administrator:

Hardware-Hardware within the asset

Software-Software installed on the asset

Security-Data regarding anti-virus software, firewalls, etc.

Action History-A history of Advanced Actions taken by BMC FootPrints Asset Core on the asset. The date format follows the date format in the user's preferences.

Financial - Financial information about the asset

The Asset Summary page also contains an Action Button in the upper right-hand portion of the page.

The Action Button

When BMC FootPrints Asset Core is enabled for a workspace, the Action button can be found:

on the results page of a device search

by default, on the Asset Information tab or section of an issue page. The button can be moved to a different tab by a BMC FootPrints Service Core workspace or system administrator.

on the Configuration Item (CI) Details page

on the View Asset Summary

The Action button is the means by which you can access many BMC FootPrints Asset Core actions. By default, the button displays the View Asset Summary action. That is, if you were to click the Action button, a summary of all of the information in the database for that particular device is displayed. The arrow to the immediate right of the button is used to display the other actions you can take.

NOTE

This documentation only describes how you access the actions, not the actions that you can take and how to work with them. For complete information on the actions themselves, refer to the BMC FootPrints Asset Core documentation. This does not apply to View Asset Summary, Run Audit, or Advanced Actions.

The actions are:

—View a summary of an asset. An important point to note is that, when performing a search, the search string may appear somewhere in the asset summary but may not be displayed in the fields that are embedded in the FootPrints issue. Also note that an Action Button is displayed on the summary page. The summary displays four tabs, each of which lists data associated with the asset:

Hardware—Hardware within the asset

Software—Software installed on the asset

Security—Data regarding anti-virus software, firewalls, etc.

Action History—A history of Advanced Actions taken by BMC FootPrints Asset Core on the asset

Financial — Financial information about the asset

—Remotely control an asset.

View File System—Access the asset's file system.

—Access the asset's registry.

View Events—View the asset's system, application, and other events.

—View the processes currently running on the asset.

Transfer File—Transfer files to or from the asset

—Audit the asset's software, hardware, security, etc.

Ping—Ping the asset. When the asset is pinged, a pop-up window is displayed showing the result of the ping.

Reboot—Reboot the asset.

Shutdown—Shut the asset down. You may need to close applications on the asset before initiating a shutdown.

Wake Up—Turn the asset on. In the BMC FootPrints Asset Core documentation, this is referred to as "Wake On LAN".

—Advanced Actions are used to modify the configuration of an asset. An Advanced Action can be used to deploy software, change registry settings, control services, and more. Advanced actions are described in more detail in the BMC FootPrints Asset Core documentation where Advanced Actions are referred to as "Operational Rules".

Button selections are persistent. That is, while View Asset Summary is the default action displayed on the Action button, if you select another action, such as View Events, the button will be labeled with View Events until another action is selected.

Pending Advanced Action Icon

BMC FootPrints Asset Core can, through its Advanced Actions function, create a "pending action" associated with an asset. That action may depend on an approval via the BMC FootPrints Change Manager module, an escalation, or some other factor. When an asset has a pending action and that asset is also associated with an issue, an icon is displayed to the left of the Action Button indicating that there is an Advanced Action pending. If an agent is able to edit an issue, the agent can remove the pending action by first clicking the Pending Advanced Action icon and then clicking the Remove This Action button that is displayed in a pop-up. The Remove This Action button only works in the Edit views of an issue.

Advanced Action Messages

Some specialized messages, displayed in pop-up windows, have been developed specifically for Advanced Action selections as follows:

Queue Problem—If a problem has been encountered while attempting to queue an Advanced Action, an error message is displayed with specific information describing the problem. Contact your BMC FootPrints Asset Core administrator if the problem persists.

Replace Advanced Action—If an Advanced Action is already associated with an issue and you attempt to associate a second Advanced Action with the issue, a pop-up window asks if you wish to replace the first Advanced Action with the new one. The window also provides the name of the existing, associated Advanced Action.

Additional Processing Required—If you try to associate an Advanced Action with an issue and that Advanced Action requires an escalation rule or a Change Manager approval before it can be executed, a pop-up window is displayed. The window requests confirmation to associate the Advanced Action with the issue.

Advanced Actions

Advanced Actions are used to modify the configuration of an asset. An Advanced Action can be used to deploy software, change registry settings, control services, and more. Advanced actions are described in more detail in the BMC FootPrints Asset Core documentation where Advanced Actions are referred to as "Operational Rules".

In BMC FootPrints Asset Core, Advanced Actions are accessed from the Action Button.

Enabling Advanced Actions in BMC FootPrints Asset Core

Advanced Actions must be enabled in the BMC FootPrints Asset Core before they are available to the FootPrints Service Core user. If they are not available to the BMC FootPrints Service Core user, contact your BMC FootPrints Service Core administrator. The following instructions are provided to assist the user in directing the BMC FootPrints Asset Core administrator.

The BMC FootPrints Asset Core administrator must:

Open the Properties window for Operational Rule Configuration in BMC FootPrints Asset Core.

Select either Available or Change Approval in the BMC FootPrints Service Core Deployment drop-down field of the Properties window.

Not available in integrated solutions—Advanced Actions are not available in BMC FootPrints Service Core. This selection disables Advanced Actions in BMC FootPrints Service Core.

Available in integrated solutions—Advanced Actions are available, but not for escalations and the Change Manager module. This selection enables Advanced Actions in BMC FootPrints Service Core.

Additional workflow—Advanced Actions are available, including for escalations and the Change Manager module. This selection enables Advanced Actions in BMC FootPrints Service Core.

Click the **OK** button.

Once enabled, Advanced Actions become available immediately.

Error Messages

You may encounter error messages when working with BMC FootPrints Asset Core. Some of these are:

Account not enabled—This indicates that the BMC FootPrints Asset Core integration account credentials have not been enabled in BMC FootPrints Asset Core. There are two options in this instance. If guest credentials have been enabled by the BMC FootPrints Service Core administrator, the agent can clear the user-specific credentials on the Miscellaneous tab of his or her Preferences and then use the guest credentials or, alternatively, the BMC FootPrints Asset Core administrator must enable the account. This involves:

In BMC FootPrints Asset Core, expand Global Settings in the left hand toolbar, right click on "Administrators", and choose "Create Administrator". Give the account the desired Login name and fill out other information if desired. Make sure the "Account Enabled" checkbox is checked. Switch to the "Authentication" tab. The account must be configured to use Internal Authentication. Put in the desired password and click OK.

Under Global Settings in the left hand toolbar, select "System Variables". On the Security tab, select the "FootPrints Integration" row and either press F2, right click and choose "Properties", or choose Edit | Properties from the top menu. For the "FootPrints Integration" property, fill out the Login you created in the previous step and click OK.

Account not found—This indicates that your personal account does not exist in BMC FootPrints Asset Core. Your BMC FootPrints Asset Core administrator must create or fix the account for you.

Connection failed—The BMC FootPrints Asset Core or FootPrints Service Core administrator should test the connectivity to the BMC FootPrints Asset Core server using the "Click here to test connectivity" link from the BMC FootPrints Asset Core system administration page within FootPrints Service Core.

Invalid Credentials—This message means that credentials could not be validated for access to BMC FootPrints Asset Core This may occur when an agent is defining a user name and password on the Preferences page or a system administrator defines guest credentials on the BMC FootPrints Asset Core administration page. The most likely reasons for this error are that the credentials do not exist in BMC FootPrints Asset Core or an error was made when entering the credentials on the user Preferences or BMC FootPrints Asset Core system administration page.

NOTE: "Guest credentials" are system-wide credentials (user name and password) defined by a system administrator for all agents. An agent can log into the Asset Core with guest credentials as long as the agent has not defined user-specific credentials in his or her own Preferences.

Authentication Failed—The credentials used to access BMC FootPrints Asset Core have not been defined within BMC FootPrints Service Core. Go to the Miscellaneous tab of your Preferences to change your credentials and gain access to BMC FootPrints Asset Core. Alternatively, the system administrator can create guest credentials. You may need to check with your BMC FootPrints Asset Core administrator to obtain the correct credentials.

Change Manager

Using BMC FootPrints Change Manager

Change management is a process of acquiring approval for steps in that process. The steps in the process are defined as "phases". Designated approvers vote to approve or disapprove the Issue at each phase in the process.

An Issue that is in the Change Manager approval process looks the same as any other Issue unless the Agent has been designated as an approver for that phase of the approval process. Votes by approvers are cast either within the BMC FootPrints Service Core interface or via email.

Voting from the BMC FootPrints Service Core Interface

If the Agent has been designated as an approver, extra fields are displayed on the Details page so that the approver can cast his or her vote. Approval votes are cast on the Details page.

The fields for voting are as follows:

Change vote—This box is checked by default. Check the box to leave your vote unchanged. The buttons for voting are displayed when you uncheck the box.

Approve/Disapprove/Defer—Click the Approve or Disapprove button to vote to approve or disapprove the Issue. Click the Defer button to acknowledge that you have seen the "ballot" and leave a comment without affecting the final outcome of the decision. If the phase does not end before you have the chance, you can go back and change your vote to Approve or Disapprove as you see fit. If you defer, you continue receiving reminder emails.

When approval criteria have been met, the Issue is moved into another phase of the process or the process of approvals is completed. Voters may be required to vote on only one phase or multiple phases in the process.

End this phase - Override all voting—Some voters may be assigned the privilege of ending the phase entirely on the authority of their vote. This is a configurable option and is not present on all ballots.

NOTE

If you cast your vote before entering comments, the vote is recorded and the Details page changes to show the result of your vote. See below for information on how to change your vote, which allows you to add comments if you voted but did not include comments at that time.

Extended Voting Details—Extended Voting Details include:

- Issue number
- process name
- process description
- phase name
- phase description
- approval/disapproval requirements
- list of approvers
- next phase in the process
- list of approval/disapproval votes, including who voted, date of the vote, and voter comments

list of votes cast with voters' comments

Comments on Vote (optional)—You can enter any comments you wish in this field. Some comments you might include are the rational for your vote or, for example, if you vote to disapprove, you might include what you would require to vote to approve the Issue if it came back to you again.

Voting by Email

If approvers receive email notification when voting begins and/or recurring email reminders that a vote is pending, approvers may, depending on how the notifications are configured, be able to cast his or her vote by replying to the notification.

If you can vote by email, the email contains a line of text similar to the following:

```
[ ]Approve        [ ]Disapprove
```

To vote by email, select Reply in your mail program, enter an X between the appropriate square brackets in the reply, then send the reply. Do not alter the security ID in any way. That data is required for a successful vote.

If the email is configured to allow it, you can also enter comments in your reply along with your vote by simply typing your comments on the line indicated.

One of a set of responses is returned to email votes for both successful and unsuccessful votes, as follows:

For successful votes:

'Your re-vote for approval for [Issue: %s, Process: %s, Phase: %s] was counted.';

'Your vote for approval for [Issue: %s, Process: %s, Phase: %s] was counted.';

'Your re-vote against approval for [Issue: %s, Process: %s, Phase: %s] was counted.';

'Your vote against approval for [Issue: %s, Process: %s, Phase: %s] was counted.';

For unsuccessful votes:

'Your vote for [Issue: %s, Process: %s, Phase: %s] was not counted. Voting for this phase ended.';

'Your vote for [Issue: %s, Process: %s, Phase: %s] was not counted. The ballot was not clear.';

'Your vote for [Issue: %s, Process: %s, Phase: %s] was not counted. Reason not known.';

'Your vote for [Issue: %s, Process: %s, Phase: %s] was not counted. Your email address did not match our records.';

'Your vote for [Issue: %s, Process: %s, Phase: %s] was not counted. This is not the correct workspace.';

'Your vote was not counted. The security ID was invalid.';

'Your vote was not counted. The security ID was not found.';

Override Votes—Super-approvers

A "Super-approver" is empowered to end any phase immediately on the authority of his or her vote only. A super-approver's vote overrides all other votes in the phase.

If you are empowered with super-approver status and want to end the phase on your own authority, check the End this phase - Override all voting checkbox. A warning message is then displayed. Cast your vote to approve or disapprove and the phase is ended.

When the phase ends, it follows the normal procedure configured for approval or disapproval, depending on which way the super-approver voted.

Viewing Change Manager Issue Details

For designated Change Manager approvers only, the homepage Display drop-down list always contains a My Vote Required option. Selecting this option displays all of the active Issues that require a vote by the approver or that have been voted on by the approver. Once the Issue is closed, it is no longer displayed in this list. This provides a convenient way to view just those Issues that are active and require or have required the approver's vote.

View the Issue details for a Change Manager Issue the same way as with any other Issue. However, when you view the Issue details, not only are all of the usual fields displayed, but the Change Manager section is displayed also. Use the Change Manager section to vote on the Issue or to view the voting details. Refer to Using Change Manager for more information on casting a vote or viewing Extended Voting Details.

Viewing the Change Manager Audit Trail

If you are a member of a role with permission to view Change Manager history and run Change Manager reports, a voting history is provided in addition to the three tabs that comprise the regular Issue history (see the online help or Reference Guide PDF).

This audit trail provides a listing of all actions that were taken on a Change Manager Issue and when they were taken. Only users who have permission, based on role membership, can view all of the available history information.

The Audit Trail page cannot be edited.

To view the Change Manager audit trail:

Select the Details page of a Change Manager Issue.

Go to the History section of the page. The Audit Trail page for that Issue is displayed.

Using the Audit Trail Page

When you first open the Audit Trail page, the Issue's complete history is displayed. Use the links to view different history data, as follows:

Complete History—All activity of the Issue.

Issue History—Actions performed on the Issue by all users and automatically by the system.

Email History—All email activity for the Issue.

Voting history—A history of the individual votes cast. Voting history is not shown in any other view.

The following information is maintained for all views but the voting history:

Date—The date the action was performed.

Time—The time the action was performed.

User—The user who performed the action. If the action was performed by the system automatically, the escalation rule is listed here.

Action—The action performed on the Issue, i.e. "Changed Status", "Changed Priority", "Updated Description", etc.

Email type—For email actions, the type of mail (incoming update or outgoing email notification) is displayed and the user who made the update or received the notification.

The following information is maintained for the voting history:

Date—The date the vote was cast.

Time—The time the vote was cast.

User—The user who cast the vote.

Process—The name of the process in which the vote was cast.

Phase—The name of the phase in which the vote was cast.

Vote—The vote that was cast (approve or disapprove).

Comment—Any comments made by the voter that were a part of the vote.

Configuration Manager

Using Configuration Manager Overview

Understanding the Configuration Manager module requires that you understand what a Configuration Item is. A Configuration Item (CI) is any item of information technology (IT), including data or documents, that is or will be under the control of Configuration Manager and therefore.
Agents can link CIs to Issues (Incidents, Problems, Changes, etc.) and make use of the Configuration Management Database (CMDB), including the visualization tool, to determine which CIs are affected by an incident, problem, or change. Agents can view the Details pages of CIs that have been linked to Issues depending on the level of permission(Role) given to them by the CMDB Administrator. Customers can view the list of linked CIs when viewing the Edit Issues page, but cannot access the Details page or any other Configuration Manager information.

Linking CIs to an Issue

The CI Links Section/Tab
To link a CI or CIs to an Issue:

From the Create Issue page, select the CI Links section/tab and click the Add Links button. Select an option from the menu to locate the CI(s). Three menu options are displayed:

From Contact - Displays the Contact Search page. Complete the fields as needed and search for the CI(s). Highlight the appropriate CIs in the results and click Details to view the details of selected CIs. Click the Return Selections button to link the Issue to the CI. The CI Links section/tab is redisplayed.

From Keyword Search - Displays the Keyword Search page. Enter keyword(s) (for example, "laptop") and search for the CI(s). Highlight the appropriate CIs in the results and click Details to view the details of selected CIs. Click the Return Selections button to link the Issue to the CI. The CI Links section/tab is redisplayed.

From Advanced Search - The CMDB Search page is displayed. Refer to CMDB Search for complete details on performing a search. When you have completed your search, highlight the appropriate CIs in the results and click Details to view the details of selected CIs. Click the Return Selections button to link the Issue to the CI. The CI Links section/tab is redisplayed.

If the agent has any saved searches, the CMDB search is loaded automatically with the values in the agent's default CMDB search as saved in their CMDB preferences. If the user has no default search preference saved, no criteria are loaded automatically and any searches must be started from scratch. When selecting a CI to link, the CI Picker does not behave the way the homepage behaves by listing all CIs.

In the CI Links section, once a CI has been linked, the controls in the section/tab provide the following functionality:

Add Link - Repeat the procedure above to link more CIs to the Issue.

Delete Link - Highlight a CI in the list and click Delete Link to remove the CI from the list.

Propose - The Propose button is limited by Role. Not all users will have access to the Propose button. Propose displays two menu options:

Propose Changes - Propose changes to the CI. Displays a CI Editor for you to enter proposed changes to the CI. Proposed changes then become part of the record for this CI and must either be escalated or go through change manager approval to be implemented. When a proposal has been saved, the Proposed? column of the CI Links table displays the status.

Propose CIs - Propose the creation of a new CI. Displays the CI Creation Editor for you to enter proposed changes to the CI. This tab is only available if the workspace options for it have been set by the workspace administrator. Proposed changes then become part of the record for this CI and must either be escalated or go through change manager approval to be implemented. When a proposal has been saved, the Proposed? column of the CI Links table displays the status.

When all additional items have been completed, SAVE the Issue.

Changing the Linked CIs

To change the CIs that are linked to an Issue, repeat the procedure above. When you repeat the procedure, the CIs you selected previously are unlinked and only the newly selected CIs are linked.

Viewing CI Details

Agents who have a Configuration Management license can view the details of any CI that has been linked to an Issue.

To view the details of a CI from an Issue:

Open either the Issue Details or Edit Issue page.

In the CI Links section of the Issue, click on the CI that you want to examine.

Click the Details button. A new window is displayed containing the CI details. The page uses a tab format, except for information displayed in the top of the main frame as CI details.

CI Details—CI Details include the Status of the CI, the CI Type, CI Number, Last Date Edited, and state of the Import Lock. If Import Lock is "locked" when CI data is being imported, the data for that particular CI is not overwritten or updated by an import. Click on a tab to view additional details associated with that tab. The Details page has the following tabs:

Attributes—Displays the CI attributes, i.e., characteristics that are associated with the CI in the database.

Attachments—Displays any attachments associated with the CI, listing the filename, file size, and date it was attached. To view the attachment, click the "Download" link.

Impact Analysis—Provides an overview of links and relationships for the CI. Viewing the various connections between the CI and other CIs and Issues provides insight into how much a change to the CI will affect other CIs and Issues.

Summary—Summarizes the data in the other tables by totals, displaying the number of: Links to Active Issues, Links to All Contacts, Relationships from CIs, Relationships to CIs, and Total Relationships.

CI From Relationships—Displays the total number of From relationships between the CI and CI Types, broken down by CI Type.

CI From Relationships By CI Type—Lists the From Relationships and CI Types.

CI To Relationships—Displays the total number of To relationships between the CI and CI Types, broken down by CI Type.

CI To Relationships By CI Type—Lists the To Relationships and CI Types.

Active Issue Links By Workspace—List the totals for Issue links, by workspace, to this CI.

Contact Links By Address Book—List the totals for Contact links, by Address Book, to this CI.

CI Relationships—Lists the relationships associated with the CI. The CI Relationships tab has the following controls:

Relationships checkboxes—Display relationships "from" this CI or "to" this CI. Relationships are defined as "To" and "From" which denote dependency. The dependent CI is the "To" CI and the CI upon which it depends is the "From". For example, if a server goes down, it affects the PC, but if the PC goes down, it doesn't affect the server. In this example, the relationship is "From" the server "To" the PC.

—Go to next page.

—Go to last page.

—Go to previous page.

—Go to first page.

Add Relationships—Add a relationship or relationships to this CI. For details on adding relationships, refer to *Add Relationships* below. The relationships displayed depend on your selection in the "Relationships" checkboxes.

Delete Relationships—Delete a relationship. For details on Deleting relationships, refer to *Delete Relationships* below.

Go To—Go to the Details page for the selected CI. To Jump to a CI Details page, click on the CI in the list of related CIs, then click on the Jump button. A confirmation window pops up. Click OK to complete the jump.

Print—Print the related CIs listed on the current page or related CIs listed on all pages. This report contains only the information displayed in the list. The Print button displays the report in a separate browser window. Use that window's Print functions to send the report to a printer.

Visualization—Displays CI relationships in a figure. The visualization uses Java. The main portion of the display shows CI relationships. The right side of the display contains a summary of the current CI's attributes. If you click on a CI in the display, that CI's attributes are displayed in the summary. Use the mouse-wheel to increase or decrease the size of the visualization. Visualizations require JRE 1.6 or higher. In addition, you can use the left mouse button to drag CIs. If you drag a CI, the relationships and other CIs are dragged with it. This affects only the appearance of the visualization and does not actually alter relationships or CIs.

The Visualizations tab also has the following controls:

In/Out/Set to 100% buttons—The In button zooms in on the center of the visualization. The Out button zooms out on the center of the visualization. The Set to 100% button returns the visualization to the original size.

Expand button—Clicking this button expands the view of the visualization in a new browser window.

Connectivity Filter Distance—Click up or down arrow to display the next level of relationships. For example, if you move the slide to the "2" setting, CIs related to CIs related to the current are displayed.

Feature Toggle—Click the checkbox to toggle certain features on or off. Checking the appropriate box turns on the CI icon, CI text, or Relationship text. Unchecking a turns that feature off.

Stop/Restart Animation—The Stop Animation button stops any motion that is taking place in the visualization. The Restart Animation restarts the activity. The motion is simply the movement of the CIs and arrows as the visualization positions the many items on display. This can be a distraction and could, in a large configuration, take some time to conclude.

Save Settings—The Save Settings button allows you to save the settings for the visualization of the selected CI so that the same settings are used the next time you display that CI. For example, you might customize the display with certain CI Types and relationships and want to see those same CI Types and relationships every time you view that CI without having to check boxes.

Include CI Types—Checked CI types are included in the visualization. Multiple CI Types can be included.

Count—Displays a count of the included CI Types.

Include Relationships—Check types of Relationships you want included in the visualization. Multiple relationships can be selected. When unchecked, the type is removed from the visualization.

Upstream and Downstream—Upstream and Downstream filter on the relationship direction. Only CIs connected by a relationship having the direction specified are included. Direction is determined with respect to the current CI.

Issue Links—Lists the Issues linked to the CI. The Issue Links tab has the following controls:

Linked Issues in Workspace—Use the drop-down to select which Workspace's linked Issues you want to show.

Display—Displays the Issue types selected from the drop-down. Options are "All Issues", "Active Issues", and "Active Global Issues".

—Go to next page.

—Go to last page.

—Go to previous page.

—Go to first page.

Add link—Add an Issue link to this CI. To add the link, click the button and then enter the Issue number for the Issue you wish to link in the pop-up window. To link to an Issue in a different Workspace, change the Workspace using the Linked Issues in Workspace drop-down field.

Delete Link—Delete an Issue link. To Delete a link, from the list of Issues, click on the Issue that you wish to delete, then click the Delete Link button. Confirm the deletion in the pop-up window.

Details—Go to the Details page for the selected Issue. To display an Issue Details page, click on the Issue in the list of linked Issues, then click on the Details button.

Print—Select a report from the drop-down. The selected report is displayed in a separate browser window. Report options are to display the Issue information listed on the current page or all pages. The report contains only the information displayed in the list. Use the browser Print functions to send the report to a printer.

Contact Links—Lists the Contacts linked to the CI. The Contact Links tab has the following controls:

Linked Contacts in Address Book—Use the drop-down to select which Address Book's linked contacts you want to show.

—Go to next page.

—Go to last page.

—Go to previous page.

—Go to first page.

Add Link—Add a Contact link to this CI. To add the link, click the button and then locate the contact that you wish to link in the pop-up window. When you select the contact, click Yes in the confirmation window to add the link.

Delete Link—Delete a an Address Book link. To Delete a link, from the list of Address Book contacts that are linked to the CI, click on the contact that you wish to delete, then click the Delete Link button. Confirm the deletion in the pop-up window.

Details—Go to the Details page for the selected contact. To display an Issue Details page, click on the contact in the list of linked contacts, then click on the Details button.

Print—Select a report from the drop-down. The selected report is displayed in a separate browser window. Report options are to display the contact information listed on the current page or all pages. The report contains only the information displayed in the list. Use the browser Print functions to send the report to a printer.

History—The History tab displays a list of all actions performed on the CI since it was created. The History lists the date and time of the action, user name of the user who performed the action, CI revision number, where applicable, and the nature of the action performed.

Proposed Changes—The Proposed Changes tab only appears with Issues that are linked to one or more CIs and refers to proposed changes to the linked CIs. This tab is also only available if the workspace options for it have been set by the workspace administrator. The ability to create or view proposed changes is limited by user role. Proposed Changes require a Change Manager approval or an escalation to trigger implementation of the proposed change. The following information is returned in the Proposed Changes tab: Workspace on which the Proposed Change is Issued, meaning the Workspace Number, as well as a timestamp for the proposed change; the date and time of the last action taken on the proposal; the user who submitted the change; the Attribute(s) affected by the change; the proposed changes (change From and change To).

Editing CI Fields

Agents who are licensed for Configuration Manager can edit the CI information.

Complete information on editing CI details can be found in the following topics:

Edit a CI

Relationships

CMDB Preferences

Users can set CMDB preferences from the CMDB homepage. To set CMDB preferences, select the Preferences link.

Currently, agents can only select a default saved search on the preferences page. A default saved search is useful when linking CIs from an issue. When an agent attempt to link a CI from an issue, BMC FootPrints Configuration Manager automatically loads the search criteria from the default saved search into the CI Picker.

To set the saved search preference, select the preferred search from the drop-down list, then enter your password and click the SAVE button.

Mobile

BMC FootPrints Service Core Mobile and Sync Overview

The BMC FootPrints Mobile add-on module combines real-time, dynamic access to BMC FootPrints Sync via a web browser with BMC FootPrints Sync functionality for calendar, task, and contact synchronization.

BMC FootPrints Mobile offers Agents “service desk on the go” from mobile devices like the iPhone, Android, and Blackberry running Windows Mobile. Agents can manage their assignments, search the knowledge base, and look up contacts right from the mobile browser.

Access to BMC FootPrints Service Core via mobile is via web browser. BMC FootPrints Mobile supports the following mobile devices:

Rim Blackberry 9630 series (Tour)

Apple iPhone 3G, 3GS, and 4

HTC Desire Bravo, Desire A8181 on Android 2.2

Because of the screen limitations of mobile devices versus full-size computers, you should take a moment to familiarize yourself with what can be seen and what cannot.

The initial page of BMC FootPrints Mobile displays a set of links. These links display at the bottom of every page:

Workspace Home—Displays the homepage. Users can click links to view Issue details or edit Issues from the homepage.

Search—Displays the BMC FootPrints Service Core Quick Search where you can search by Keyword, Title, or Number. For Keyword or Title, enter the word or phrase that you want to find. For Number, enter the Issue number. To search for multiple Issue numbers, separate the numbers with commas, e.g., 5,22,165.

Change Workspace—Displays a drop-down field in which you can select the workspace you want to view. Only workspaces to which you have access display.

Create Issue—Opens the Create Issue page.

Select Contact—Searches the Address Book for contacts and displays them in the Contact Information section of a Create Issue page.

Logout—Logs you out of BMC FootPrints Service Core.

Mobile Access Web Browsing

Viewing and Editing Issues with BMC FootPrints Service Core Mobile

Homepage

The BMC FootPrints Mobile homepage is a very slimmed down version of the regular BMC FootPrints Service Core homepage. This page displays when you click the Workspace Home link at the bottom of any BMC FootPrints Mobile page. The Search, Change Workspace, Create Issue, Select Contact, and Logout links also display at the bottom of every page.

The following components display on the Workspace Home page:

Display Drop-down field - At the top of the page is the Display Drop-down field where you can quickly select the list that displays below it. The default selection is My Assignments. Select another option from the drop-down to view the Issues that meet the criteria for that list.

Refresh link - To the right of the Display Drop-down field is a link for refreshing your browser.

Main frame -In the main frame of the age is a list of Issues based on your Display Drop-down selection. The list headings are Number, Pri (i.e., "priority"), Status and Title. In the full version of BMC FootPrints Service Core, you can select the fields that are displayed via the Preferences page.

View Details of an Issue

To view the details of an Issue from the homepage, click the Issue number or title in the list. The details page of the Issue displays.

The details page is a slimmed down version of the full **BMC FootPrints Service Core** Details page. The fields that display are selected by the administrator, so not all fields may be shown in **BMC FootPrints Mobile**.

The following links display at the top of the Details page:

Details - Redisplays the current page.

Edit - Displays the edit for the Issue.

History - Displays the Issue History.

Time Tracking - Displays the time tracking info.

View All Details/Mobile View - Only a limited set of fields display on mobile devices. However, you can view all details of an Issue by selecting the View All Details link. The link is then relabeled "Mobile View" and you can redisplay the mobile view by clicking it.

Edit an Issue

To edit an Issue from the homepage, click the Edit icon of the Issue. The Edit page displays. You complete the Edit page in the normal manner, entering data into fields and submitting the Issue with the SAVE button at the bottom of the page. Mandatory fields are displayed in a different color and with an asterisk next to the field name, just as on the full version of **BMC FootPrints Service Core**.

The following links display at the top of the Edit page:

Details - Displays the details page.

Edit - Redisplays the current page. If you click this link before clicking SAVE, any data you entered will be lost. **Note:** Automatic time tracking does not work in **BMC FootPrints Mobile**, so you must enter the time tracking data to update the record.

History - Displays the Issue History.

Time Tracking - Displays the time tracking info.

Searching for Issues and Solutions with BMC FootPrints Service Core Mobile

Selecting the Search link from a mobile device using BMC FootPrints Mobile displays the search page. You can search Issues or solutions. The Workspace Home, Search, Change Workspace, Create Issue, Select Contact, and Logout links all display at the bottom of the page.

To use the Mobile Search facility:

Search on Keyword or Title by choosing the corresponding radio button, or enter a number without selecting a radio button to search by issue number. To search for multiple Issue numbers, enter the numbers separated by commas, e.g., 5,22,165 .

For Keyword or Title, enter the word or phrase that you want to find.

To limit the search to just solutions, click the Solutions checkbox.

Click the Search button.

If only a single Issue matches your search criteria, the Details page for that Issue displays. If more than one issue matches your search criteria, a list of all Issues that match your search criteria displays.

Searching for Contacts in BMC FootPrints Service Core Mobile

Clicking the Select Contact link displays the Select Contact page where you can search for contact information in the Address Book. You can perform two types of search: anchored and non-anchored. By default, searches in the Address Book are anchored on the first letter for each field. If you would rather not anchor searches (such as when looking for a value that might appear in the middle of an address book field), you may do so by selecting Non-anchored.

Searches are limited to searching in the primary key field. For example, if email address is the primary key, then the search is for email address. If last name is the primary key, then the search is on the email address.

Consequently, if the primary key is email address and you want to perform a non-anchored search for someone you believe works for the Widget Company, but you are not sure of the spelling of "Widget", you might click the "Non-anchored" radio button and then enter "get" in the text field. This would result in a list of contacts that have "get" in the primary field regardless where that string is located in the field. You might see a The returned list of contacts would included people who work for the Widget Company as well as contacts with the name "ron.gettysburg" in their email address, and so on.

The found contact records are displayed as a list. Click a contact in the list to display the Create Issue page, with the selected contact entered in the Contact Information section.

Installing and Configuring BMC Service Core FootPrints Sync

BMC FootPrints Sync is included with BMC FootPrints Mobile (an add-on module purchased separately) and supports the following:

Operating Systems: Windows XP Pro, Windows XP Home, Windows 2000, Windows 2003 Server

Personal Information Manager (PIM) software: Microsoft Outlook, Microsoft Outlook Express, Lotus Notes, Palm Desktop, Palm HotSync

Personal Digital Assistants (PDAs): PocketPC (through Outlook), BlackBerry (through Outlook or Lotus Notes), Palm (through Palm Hotsync or Palm Desktop)

Installing the Desktop Client

To install the BMC FootPrints Sync client:

Select **Preferences** on the BMC FootPrints Service Core homepage, then select FootPrints Sync (2-way) from the Miscellaneous tab. Select **Configure BMC FootPrints Sync Settings**. The BMC FootPrints Sync page displays.

Click the Download the BMC FootPrints Sync client link on this page to access the client. You can choose to open and run the client installation or download it and run it.

Double-click the BMC FootPrints Sync file (FPSync.exe) that you just downloaded to start the BMC FootPrints Sync InstallShield Wizard. The Welcome screen displays.

Click the Next button to continue. The Program Maintenance window displays.

Click the Install button to install the client. When installation is completed, the Completed window displays.

Click the Finish button to finish the installation.

Once installation is complete, there should be two icons on your desktop, one called BMC FootPrints Sync Setup and one called simply BMC FootPrints Sync. In addition, the BMC FootPrints Sync client displays. If it does not, double-click either icon to display it. See Configuring BMC FootPrints Sync Settings within BMC FootPrints Service Core for details on configuring and using BMC FootPrints Sync desktop client.

Uninstalling the BMC FootPrints Sync Desktop Client

There are three ways you can uninstall the BMC FootPrints Sync Client:

Run the FPSync.exe file:

Once the Welcome window displays, click the Next button.

In the Program Maintenance window, click the Remove radio button, then click the Next button. The client is removed.

On Windows, use the Add/Remove Software program:

Select Start-->Control Panel.

Select the Add/Remove Programs option. This can vary depending on your version of Windows.

Select FPSync in the list and click the uninstall button.

Open the BMC FootPrints Sync client and select File, then select the Uninstall option.

Configuring BMC FootPrints Sync Settings in FootPrints Service Core

These settings configure how BMC FootPrints Sync:

Handles appointments made in **BMC FootPrints Service Core** or made in the PIM

Synchronizes BMC FootPrints Service Core Issues with PIM tasks and vice versa

Maps contact fields between BMC FootPrints Service Core and the PIM

Some PIMs have a concept of “private” and “public” calendars, similar to the BMC FootPrints Service Core personal calendar and workspace calendar. A private calendar is viewable only by the PIM owner, but the public calendar can be seen by others, with the owner’s permission.

IMPORTANT

When BMC FootPrints Sync initially synchronizes BMC FootPrints Service Core assignments with the tasks list, it takes role permissions into consideration. Only the Agent's own assignments or team assignments are synchronized. However, if the Agent's role only permits him or her to edit his or her own assignments through the BMC FootPrints Service Core interface, the Agent will be able to close and add to the Description field of the team's assignments through the PIM. Administrators must be aware of this if they are to restrict Agents from editing team assignments and, in that circumstance, may wish to restrict use of BMC FootPrints Sync.

Enabling synchronization and defining the PIM are done in the client. The following options only apply when synchronization is enabled in the client.

To enable and configure BMC FootPrints Sync in BMC FootPrints Service Core:

Select **Preferences** from the BMC FootPrints Sync homepage.

On the Miscellaneous tab, select FootPrints Sync (2-way). If you want to continue to use the 1-way BMC FootPrints Sync, which only synchronizes calendar appointments with your Outlook Calendar and does so only from BMC FootPrints Service Core to Outlook, select Manual Calendar Sync (1-way). If you choose 1-way synchronization, continue no further with this procedure.

Select **Configure FootPrints Sync Settings** from the BMC FootPrints Sync section. The BMC FootPrints Sync page displays.

Select options as follows:

Appointments

BMC FootPrints Service Core -> PIM—Tell BMC FootPrints Sync how to handle appointments created in **BMC FootPrints Service Core** when writing them to the PIM.

Personal Appointments—Only write personal calendar appointments to the PIM.

Personal & Workspace Appointments— Write appointments from both personal calendar and workspace calendar to the PIM.

PIM -> BMC FootPrints Service Core—Tell BMC FootPrints Sync how to handle appointments created in the PIM when writing them to the **BMC FootPrints Service Core** calendar. BMC FootPrints Sync does not synchronize invitees in an appointment from a PIM to an appointment in BMC FootPrints Service Core.

Private Appointments—Tell **BMC FootPrints Sync** how to handle private appointments created in the PIM when writing them to **BMC FootPrints Service Core**.

Personal Calendar Only—Write private appointments from the PIM to the personal calendar only.

Personal and Workspace Calendars—Write private appointments from the PIM to the personal and workspace calendars.

NOTE

Because **BMC FootPrints Sync** has no way of knowing when a user is one of many invitees to an appointment, if multiple invitees to a single appointment synchronize their Outlook calendars to the **BMC FootPrints Service Core** workspace calendar, the same appointment will appear multiple times. To avoid this problem, invitees (but not the originator) to such an appointment should temporarily turn off synchronization to the **Personal & Workspace Calendars** and, instead, synchronize only with the personal calendar.

Public Appointments— Tell **BMC FootPrints Sync** how to handle public appointments created in the PIM when writing them to **BMC FootPrints Service Core**.

Personal Calendar Only—Write public appointments from the PIM to the personal calendar only.

Personal and Workspace Calendars—Write public appointments from the PIM to the personal and workspace calendars.

Tasks—BMC FootPrints Sync can write Issues to your PIM's Tasks list.

BMC FootPrints Service Core-> PIM—Tell **BMC FootPrints Sync** how to handle Issues when writing them to your PIM's Tasks list.

My Assignments—Writes all Issues that are assigned to you to the PIM's Tasks list when **BMC FootPrints Service Core** is synchronized with the PIM.

Post address book and workspace fields into the description of the tasks—All of the field data elsewhere in the Issue is written to the Description portion of the Task.

PIM -> BMC FootPrints Service Core

Completed/Deleted Tasks—If you mark a task as completed or deleted in your PIM, when you synchronize your PIM and BMC FootPrints Service Core, the status of the corresponding Issue in BMC FootPrints Service Core is changed to the status you select from the drop-down fields:

Open—Status is changed to Open.

Closed—Status is changed to Closed.

[**Other Statuses**]—Other BMC FootPrints Service Core statuses are displayed in the drop-down. Select one of those to determine what to do when the status is marked as completed in the PIM.

Don't change Status—Status is left unchanged].

Deleted Tasks—If you delete a task from your PIM, when you synchronize your PIM and BMC FootPrints Service Core, the status to the status you choose from the drop-down fields:

Open—Status is changed to Open.

Closed—Status is changed to Closed.

[**Other Statuses**]—Other BMC FootPrints Service Core statuses are displayed in the drop-down. Select one of those to determine what to do when the status is marked as completed in the PIM.

Don't change Status—Status is left unchanged.

NOTE

Lotus Notes only supports three levels of priority. When mapping priorities from **BMC FootPrints Service Core** to Lotus Notes, any priorities numbered higher than 3 are mapped to 3.

Contacts—BMC FootPrints Service Core can write the contacts in your BMC FootPrints Service Core Address Book to your PIM's Address Book. Contact synchronization requires that you have a personal Address Book search defined.

BMC FootPrints Service Core-> PIM—Tell **BMC FootPrints Service Core** whether to write the contacts from your BMC FootPrints Service Core Address Book to the Address Book in the PIM and maps the fields in **BMC FootPrints Service Core** to the fields in the PIM.

Search drop-down—Select the Address Book search. The results are what will be written to your PIM.

Field Mapper—If you are going to synchronize contacts, you must configure the mapping between **BMC FootPrints Service Core** Address Book fields and PIM Address Book fields.

BMC FootPrints Service Core Field to PIM Field—Using the drop-down boxes, select the PIM fields that correspond to the **BMC FootPrints Service Core** fields.

Configuring the FootPrints Sync Client

The first step after installation is to define the settings in the **BMC FootPrints Sync** client. The following sections of this document explain the buttons on the BMC FootPrints Sync interface and then the items in the menu bar at the top of the interface.

To configure settings in the BMC FootPrints Sync client:

Double-click the BMC FootPrints Sync Setup shortcut on your desktop.

Click the Settings button. A page displays where you can enter your BMC FootPrints Service Core User ID, password, and the URL for the location of the BMC FootPrints Service Core link. The default for this location is http://*localhost*/MRcgi/webcal/, where *localhost* is your PC or handheld device.

Click the Next button. The Information Manager Settings window displays.

Select your PIM from the Information Manager Name drop-down list, then click the Configuration Options button. Options are:

Lotus Notes

Microsoft Outlook

Outlook Express

Palm Desktop

Palm HotSync

PocketPC Sync thru Outlook

Click the Configuration Options button. A tabbed window is displayed with options for you to configure your PIM. Not all tabs are displayed for all types of PIM. Select settings on each tab.

The following are the tabs and their options:

User ID—Select the User ID from the drop-down (this tab displays for Palm and Palm HotSync only).

Transfer Method—Select whether to transfer data in both directions, from the PIM to **BMC FootPrints Service Core** only, or from **BMC FootPrints Service Core** to the PIM only.

Synchronize changes both ways—When synchronizing the PIM with **BMC FootPrints Service Core**, write new data in both directions.

Add *PIM_type* into BMC FootPrints Service Core—Only write data from the PIM to **BMC FootPrints Service Core**.

Add BMC FootPrints Service Core into *PIM_type*—Only write data from **BMC FootPrints Service Core** to the PIM.

Content—Select which data to transfer.

Contacts—Write **BMC FootPrints Service Core** contacts into the PIM. Regardless of whether you chose to synchronize both ways or in just one direction on the Transfer Methods tab, you can only write contacts from BMC FootPrints Service Core to the PIM.

Tasks—Write **BMC FootPrints Service Core** Issues to the Tasks list. When synchronizing from the PIM to **BMC FootPrints Service Core**, tasks synchronization changes the status field of the **BMC FootPrints Service Core** Issue according to what you specified when you configured this feature in **BMC FootPrints Service Core**.

Calendar—Write calendar appointments between **BMC FootPrints Service Core** and the PIM.

Personal Category—Select whether to synchronize Personal Category data (this tab displays for Palm HotSync only).

Synchronize Personal Category

Do not synchronize Personal Category

When you have configured all of your settings on the tabs, click the OK button. The Information Manager Settings window displays again.

Click the Next button. The Synchronization Settings window displays.

Select how you want your PIM synchronized with BMC FootPrints Service Core:

Synchronize once each day at *time*—Use the drop-downs to select the time of day at which the BMC FootPrints Sync client will perform synchronization. You can still synchronize “on-demand” by clicking the Synchronize button from the BMC FootPrints Sync client interface.

Synchronize every x *hours*—Use the drop-down to schedule synchronization every X hours. You can still synchronize “on-demand” by clicking the Synchronize button from the BMC FootPrints Sync client interface or by double-clicking the BMC FootPrints Sync icon. Because synchronization can be demanding on the server, auto-synchronization can be scheduled with a maximum frequency of once per hour per user. If immediate synchronization is required, double-click the FootPrints Sync icon in your system tray.

Synchronize when the computer is started—If you select this option, the BMC FootPrints Sync client will synchronize when the PC or handheld on which the client resides is booted. You can still synchronize “on-demand” by clicking the Synchronize button from the BMC FootPrints Sync client interface.

Synchronize Manually—Synchronization only occurs when you select the Synchronize button from the BMC FootPrints Sync client interface.

When you have made your choices, click the Next button. The final window displays.

Click the Finish button to complete the configuration tasks.

Chapter 9: Advanced Features

Advanced Issue Types

Advanced Issue Types

The Issues topics of this manual cover the basics of creating and working with BMC FootPrints Service Core Issues. In addition to regular Issues, BMC FootPrints Service Core supports other Issue types for improved workflow. These include Quick Issue templates, Master Issues and Subtasks, and Global Issues.

NOTE

During installation (and per Workspace), the administrator can change the default term "Issue" to another name, such as “Entry,” “Call,” or “Ticket.” For clarity, this manual always refers to BMC FootPrints Service Core records as “Issues.”

The *Advanced Issue Types* section covers the different types of Advanced Issue options in the following topics:

Quick Issues —Quick Issues are templates that contain pre-filled information for standard types of customer problems and Requests. Password Reset would start out pre-filled with a description of the problem, the problem categories pre-filled with Network and Password Reset, and perhaps a Status of Closed. The Agent only needs to fill in the user's contact information to submit the Issue. The Workspace Administrator can create an unlimited number of templates. For details, see Quick Issues in the Administration section of the user documentation.

Master Issue/Subtask— Master Issue/Subtask —When a Subtask is created for an Issue, the originating Issue automatically becomes a Master Issue of that Subtask. Sometimes an Issue needs to be separated into Subtasks to be completed by different users. Multiple Subtasks can be created for an Issue.

Master Quick Issues—Quick Issue templates can be defined to create Master Issues and related Subtasks automatically, for example, to define the New Hire process. In addition, you can sequence the subtasks so that subtasks cannot be performed until other subtasks are completed. This provides another level of control over the subtask process.

Global Issues/GlobalLink—Global Issues are used to designate important or frequently reported Issues that affect many users. Global Issues can be broadcast to all Agents, are displayed on the Agent homepage, and, optionally, can be displayed for customers. When a new Issue is reported with the same problem as that of a Global Issue, the Agent (and, optionally, the customer) can link the Issue to the known Global Issue (called GlobalLinks). Global Issues can be configured so that closing the Global Issue also closes the GlobalLinks at one time.

Quick Issues

Creating Quick Issue Templates

To create a new Quick Issue template:

Select Administration | Workspace from the BMC FootPrints Service Core Toolbar, then select Quick Issue under the Automated Tasks section of the Workspace Administration page.

If this is the first Quick Issue template for this Workspace, in the top section of the Quick Issue Administration page, enter a name for the template (which is displayed in the BMC FootPrints Service Core Toolbar) and click **GO**. The name is limited to 20 characters. A longer Title can be given in the actual template.

When creating subsequent templates, the Manage Quick Issue Templates dialog is displayed in the top section of the administration page. To create a new template, select the radio button for Create a new Quick Issue Template, enter the name, and click **GO**.

The Create Quick Issue template page is displayed. This page is similar to the regular Create Issue page, but with fewer fields. Address Book fields, time tracking, etc. will be filled in by the Agent when an Issue is created with the template.

The available fields are:

Title—This is the Title of the Issue. It can be as long as needed.

Priority—This is the default priority for Issues created with the template. It can be changed by the Agent when creating the Issue, as needed.

Status—This is the default status of Issues created with the template. It can be changed by the Agent when creating the Issue. If the type of Issue the template relates to is usually resolved during the initial call, Closed can be selected as the Status for the template.

Issue Information—One or more Workspace fields can be set here for the template. Any fields not filled out here can still be filled out by the Agent when creating a new Issue from the template. Mandatory fields do not have to be populated when creating the template (although they can be), but must be filled out when the Agent creates an Issue. For example, you may have a mandatory field for Follow-up Date that depends on when the Issue is created. Do not fill this field out when creating the template; instead, it is mandatory for the Agent to fill out when creating an Issue with template. A field like Problem Type, however, would be appropriate to set in the template as this remains constant for Issues created with the template. **Exception**: Date fields (but not Date/Time fields) contain a checkbox for Current Date. If this is checked in the template, it is pre-filled with the current date when an Agent creates an Issue. This would be useful for a field like Date Reported.

Asset Information—If your system has the BMC FootPrints Asset Core integration enabled, you can at this time associate an Advanced Action with this template. From the **Asset Information** tab of the template, select an action from the drop-down menu on the BMC FootPrints Asset Core bar, and then click **Apply**. When a Service Request/Issue is initiated that has an associated Advanced Action, and that action is designated as **Requires Workflow**, the same workflow used for manually selected Requires Workflow Advanced Actions goes into effect. When a Service Request/Issue is initiated that has an associated Advanced Action, and that action is not designated as Requires Workflow, the deployment is initiated immediately upon request, following the same workflow that occurs when an agent manually selects an Advanced Action that does not require pre-approval. The Advanced Actions function in the template only works if **Automatically link CIs to Issues** is enabled on the Administration | Workspace | Configuration Manager and Service Catalog options page.

Description—This can contain a pre-filled description of the problem and/or Solution. The Knowledge Base can be used in the template to select the Solution if it already exists there.

Attachments—One or more files can be attached to the template. New Issues created with the template automatically contain links to the attachments. This is useful for standard Request types for procedures, patches, or other documents.

Assignees—Optionally select one or more Assignees or Teams to be assigned to Issues created with the template. If no assignees are selected, the default Auto Assignment rules apply to Issues created with the template. For example, if the default rule is to assign an Issue to the Agent creating it, an Issue created by an Agent using the template is assigned to the Agent.

Email settings follow the rules for the Workspace.

When you are done populating fields, click **Save**.

The template is created. The Quick Issue Administration page is displayed. From here, you can edit or delete the template or create new templates.

The template appears on the BMC FootPrints Service Core Toolbar for all Agents under the new heading **Quick Issue**.

Editing Quick Issue Templates

Templates can be edited from the Manage Quick Issue Templates dialog. Any changes to the template only affect new Issues created with the template; old Issues are not affected.

To edit a template:

Highlight the template in the Manage Quick Issue Templates dialog, select the Edit radio button, and click **GO**. The Edit Quick Issue Template page is displayed with all of the information for the template pre-filled.

Make your changes. File attachments can be added, replaced or deleted.

When you are finished making changes, click **Save**. The template is updated and all new Issues created with the template reflect the changes.

Deleting Quick Issue Templates

Quick Issue templates can be deleted at any time. After deletion, the template is removed from the Toolbar, but old Issues created with the template are not affected.

To delete a template:s

Highlight the template in the Manage Quick Issue Templates dialog, select the Delete radio button and click **Save**.

A dialog box appears prompting you to confirm the deletion. Click OK to continue or Cancel to stop the deletion.

The template is removed and the Quick Issue Administration page is displayed. The template no longer appears on the BMC FootPrints Service Core Toolbar for Agents to use. If it was the only template, the Quick Issue option is removed from the BMC FootPrints Service Core Toolbar.

Define Quick Issue Ordering

By default, Quick Issue templates appear in the BMC FootPrints Service Core Toolbar in the order in which they were created. They can be easily re-ordered by the Workspace Administrator at any time.

To change the ordering of Quick Entry templates as they appear on the Toolbar menu:

On the Quick Issue Administration page, scroll to the bottom section, Define Quick Issue Ordering. This contains a dialog box listing all of the Quick Issue templates (including Master Quick Issues).

To:

move a template, highlight the template name and use the up and down arrow buttons to change its position.

sort templates alphabetically (A-Z), click Sort Ascending.

sort templates in reverse alphabetical order, click Sort Descending.

When you are satisfied with the order, click **Save**. The re-ordering is reflected for all users in the Workspace.

Using Quick Issue Templates

Quick Issue templates can be used by all Agents of a Workspace to open Issues quickly with information that is pre-filled for that Issue type. Agents only need to fill in the customer's contact data and any other mandatory fields not already set by the template. This is a useful timesaver for common or repetitive Issues, such as password resets, requests for brochures, etc.

NOTE

The name of this feature depends on the name given to records in BMC FootPrints Service Core for the system/Workspace. For example, if the name "Call" has been defined for records in the current Workspace, the feature is called "Quick Call" throughout the Workspace (on the Toolbar, on the administration pages, etc.) For consistency, all help files refer to the feature as "Quick Issue".

When at least one Quick Issue template has been created by the Workspace Administrator, the Quick Issue option appears on the BMC FootPrints Service Core Toolbar for Agents in the Workspace. To use a template:

Select the Quick Issue from the New Issue menu on the BMC FootPrints Service Core toolbar. For example, if a user has called in because of a forgotten password and needs it reset, select the Reset Password template. The menu displays all the available templates. If the option is not in the Toolbar, there are no templates in the Workspace.

NOTE

This is only an example; the available templates depend on what the BMC FootPrints Service Core administrator created for the current Workspace.

An Issue page is displayed with information pre-filled from the template. For example, the Title may be Reset Password, the Problem Type field may be set to Network, the Network Request Type field may be set to Password Reset, and the Description may contain the description and solution of the problem.

Select the user's contact information as you would when creating a regular Issue.

Fill in any mandatory fields (indicated by the red asterisk) that are not already pre-filled, as well as any optional fields desired. Email settings follow the rules for the Workspace.

Make any changes or additions to the Description (or any other fields) needed if the customer's Issue has special circumstances. Contact with your **FootPrints Service Core** administrator or your supervisor for guidance on what may be changed. These changes only affect the current Issue; the Quick Issue template is not affected.

Click **Save** to submit the Issue.

The Issue is created. If the status in the template was set to Closed, the Issue is closed automatically. If this Issue is active, it is automatically placed in the queue of the assigned Agent(s). If email notification is enabled for Assignees and/or the customer, notifications are sent.

If the Quick Issue template was a Master Quick Issue, one or more Subtasks are also created automatically without user intervention.

Issues created with the Quick Issue template are like any other regular Issue after they are created. They can be edited, deleted, re-assigned, etc. Escalation rules apply to them as well.

NOTE

Customers can use Quick Issue templates, however, built-in fields work differently for customers than for Agents when using Quick Issues. The only change a customer can make to a Quick Issue template built-in field that is saved when the Issue is submitted is a change to the assignee field. If a customer makes a change to a built-in field in a Quick Issue, such as a change to the Status or Priority field, the field reverts to the default when saved.

Master Issues and Subtasks

Creating Subtasks

Sometimes an Issue should be split into separate Subtasks with different properties, perhaps to be completed by different users. For example, setting up a new PC contains many tasks, including installing the operating system, installing software, configuring an email client, etc. The BMC FootPrints Service Core Master Issue/Subtasks feature allows you to create parent-child relationships between Issues for complex processes, such as the new hire process, change management, and other such Issues.

This topic describes creating Subtasks manually. For information on defining Subtasks automatically as part of a Master Issue template, refer to Master Quick Issue Templates.

Creating a Subtask of an Issue automatically makes the originating Issue a Master Issue, with a parent-child relationship between the Master Issue and the Subtask.

NOTE

The name of this feature is dependent on the name given to records in **FootPrints** for the system/Workspace. For example, if the name "Ticket" has been defined for records in the current Workspace, the parent Issue is referred to as a "Master Ticket" throughout the Workspace. However, Subtasks are always referred to as "Subtasks". For consistency, all help files refer to the feature as "Master Issue" and "Subtasks".

To create a Subtask of a regular BMC FootPrints Service Core Issue (and turn that Issue into a Master Issue), on the Details page of an Issue, select **Subtask**. If this option is not available, you might not have write access to the Issue or the Issue may already have other special properties that preclude it from becoming a Master Issue and having Subtasks. Refer to Restrictions for more information. A second menu appears with the following options:

Back—Return to the main Details toolbar

Create Subtask—Create a Subtask of the currently displayed Issue

The Create Subtask page is displayed, pre-filled with values from the originating Issue, including contact information and Issue information (Workspace fields). Edit the fields as necessary.

You can change the Title of the Subtask. For example, if the originating Issue was titled Setup New PC, the first Subtask may be to Install Operating System.

Fill in or make changes to any contact or Issue information fields. For example, if this task must be completed within two days, fill in the Due Date field with a date that is two days from the current date. This does not affect the Due Date field for the originating (Master) Issue, only for the new Subtask.

Enter a Description for the Subtask. This should describe the steps needed to complete the Subtask.

Optionally attach any files the Agent requires to complete the Subtask.

Assign the Subtask to an Agent or Team. Subtasks are not required to have the same assignees as the related Master Issue. In fact, Subtasks are a good way to assign a large Workspace to multiple users, defining the task for each user or team to complete.

Email rules follow the Workspace defaults unless you override them by selecting or deselecting the email check boxes.

Click **Save**. The Subtask is created and the originating Issue is now a Master Issue.

The Master Issue and Subtask are listed with special icons on the **FootPrints** Homepage. The related Subtasks of the Master Issue are listed on the Details page of the Master Issue. The Master Issue to the Subtask is listed on the Details page for the Subtask.

Additional Subtasks can be created from the Details page of the Master Issue by repeating steps 1–9 above. For example, other steps in setting up a new PC may include Install Software, Configure Email Client, Configure Network Card, etc. A Subtask can be created for each of these tasks and assigned to the same Team or Agent or different Agents/Teams.

Link to Master - Link this Issue to an existing Master Issue or to another Issue.

To **link this issue to an existing Master Issue**:

Select **View Master Issues** from the pop-up window. A second window with a list of existing Master Issues is displayed. The Issue number and Issue title are listed as well.

Click the radio button next to the Master Issue that you want to become the Master for the current Issue.

Click **GO**. The Master Issue number now appears in the Issue Number box of the Link to Master pop-up window. You can review the details of the Master Issue you selected by clicking on **View Details**.

Click **GO**. The current Issue is now a Subtask of the Master Issue you selected.

To **link this issue to any existing Issue**:

Enter the Issue number for the Issue to which you wish to link as a Subtask. You can select from any existing Master Issue or any regular Issue that is not a Global Issue, GlobalLink, Subtask, or Solution.

Click **GO**. The current Issue is now a Subtask of the Master Issue you selected.

NOTE

If you input the Issue number of an Issue that is a Global Issue, GlobalLink, Subtask, or Solution, an error message is displayed.

Viewing Master Issues and Subtasks

Master Issues and their Subtasks have special properties to help show their relationship.

For **Master Issues**

On the BMC FootPrints Service Core Homepage, Master Issues are listed with the Master Issue icon to indicate at a glance that it is a Master Issue.
If the Issue Type field is displayed on the Homepage (selected under My Preferences), the Issue is described as a Master in that column.
On the Details page for the Master Issue, a note indicates that it is a Master Issue and all Subtasks for that Issue are listed in a table with the Issue Number, Title, Status, and Assignees displayed for each one.
To view the Details of a related Subtask, click the Title of the Subtask. The view is refreshed to the Detail view of the Subtask.

For **Subtasks**

On the BMC FootPrints Service Core Homepage, Subtasks are listed with the Subtask icon to indicate at a glance that it is a Subtask.
If the Issue Type field is displayed on the home page (selected under Preferences), the Issue is described as a Subtask in that column.
On the Details page for the Subtask, a note indicates that it is a Subtask and the related Master Issue for that Subtask is listed. In addition, other related Subtasks are listed, each with the Issue Number, Title, Status, and Assignees displayed.
To view the Details of the Master Issue, click the Title of the Master Issue. The view is refreshed to the Detail view of the Master Issue. From here, you can view all Subtasks related to that Master Issue.

Editing Subtasks

A Subtask can be edited by the Assignees of that Subtask or anyone else who has write access (Workspace Administrator, Team members, etc.) Editing the Subtask does not affect other Subtasks or the Master Issue, only the current Subtask. The one exception is when closing Subtasks (refer to Closing Master Issues and Subtasks).

To edit a Subtask:

On:

the BMC FootPrints Service Core Homepage, click the **Edit** icon next to the Issue number, or

on the Details page, select Edit from the menu. If you do not have the Edit icon, then you do not have Edit rights to this Subtask.

The Edit Subtask form is displayed, pre-filled with information from the Subtask.

Make changes to the Subtask (see Editing Issues for more information).

Email notifications are sent to the assignees and customer contact for the Subtask, if the email checkboxes were checked.

If the Subtask is closed, and there are no more active Subtasks for the Master Issue, the Assignee of the Master Issue is notified. Refer to Closing Master Issues and Subtasks for more information.

Deleting Subtasks

Subtasks can be deleted by anyone who has Delete rights to that Subtask. Deleting a Subtask does not affect the other Subtasks or the related Master Issue. Refer to Deleting Issues for more information.

Editing Master Issues

A Master Issue can be edited by the assignees of that Master Issue or anyone else who has Edit rights (Workspace Administrator, Team members, etc.) In addition, Subtasks can, optionally, be updated automatically by editing their Master Issue.

To edit a Master Issue:

On:

the BMC FootPrints Service Core homepage, click the word More after the issue title and then click the Edit icon or

on the Details page, select Edit from the menu. If you do not have the Edit icon, then you do not have Edit rights to this Master Issue.

The Edit Master Issue form is displayed, pre-filled with information from the Master Issue.

Make changes to the Master Issue (refer to Editing Issues for more information).

If the Description is updated, you can update the Description of all related Subtasks by checking the box to Update all related Subtasks with this appended Description.

Email notifications are sent to the assignees and customer contact for the Master Issue, if the email checkboxes were checked.

If the Description was updated and the Update Subtasks checkbox was checked, the Subtasks are also updated and the assignees and customer contacts receive email notification.

Master Issues are normally not closed until after all of the Subtasks are closed. The assignee of the Master Issue can override this. Refer to Closing Master Issues and Subtasks for more information.

Updating Field Data in Subtasks from a Master Issue

Data in the Subtask fields can be updated "on-the-fly" from a Master Issue when you return to Master Issue to edit it. When you first fill out a Master Issue template, you can also use the Master Issue template fields to populate the Subtasks. To update the data in Subtask fields:

Edit the Master Issue or complete a Master Issue template as you normally would.

Before you click the **GO** button, select the item or combination of items in the Subtasks that you want updated (in existing Subtasks) by checking the boxes at the bottom of the Edit Issue page. This will update all of the Subtasks with the same information. The checkboxes are as follows:

Description—Appends the Description fields in all of the Subtasks with the Description data that was just completed in the Master Issue.

Assignees—Changes the Assignees in the Subtasks to match the Master Issue Assignees.

Priority—Change the Priority fields in the Subtasks to match the Master Issue Priority.

Status—Changes the Status fields in the Subtasks to match the Master Issue Status.

Title—Changes the Title fields in the Subtasks to match the Master Issue Title.

Changed Fields—Changes all other fields in the Subtasks not listed individually (above) to match the Master Issue fields. This applies to editing existing Master Issues only.

Issue Info—Populates the Subtasks' Issue information fields with all the Master Issue's Issue information. This applies to a newly completed Master Issue only.

New Attachments—Any files that were attached to the Master Issue during this edit are attached to the Subtasks as well. This applies to editing existing Master Issues only.

Attachments—Any files that were attached to the Master Issue are attached to the Subtasks as well. This applies to a newly completed Master Issue only.

Click the **GO** button. All of the Subtasks are updated as specified.

Deleting Master Issues

Master Issues can be deleted by anyone who has Delete rights to that Master Issue.

NOTE

Deleting a Master Issue also deletes the related Subtasks.

To delete the Master Issue:

Select Delete from the menu on the Details page of the Master Issue.

A dialog box is displayed that prompts you to confirm the deletion. Related Subtasks are listed in the dialog. Click OK to continue or Cancel to cancel the deletion.

The Master Issue and its associated Subtasks are deleted.

Closing Master Issues and Subtasks

When Master Issues or Subtasks are closed, it can affect the related Issues. When all Subtasks are completed, the Master Issue can either be closed automatically or an email can be sent to the assignee of the Master Issue. A Workspace option is available to control how this is handled.

To specify the rule for closing Master Issues when all related Subtasks are completed:

Select Administration | Workspace | Automated Workflow | Issue Workflow from the BMC FootPrints Service Core Toolbar.

Scroll to the section entitled Subtask Closure Process.

Upon closure of the last active subtask, there are two options:

Automatically close the Master Issue—The system automatically closes the Master Issue and sends the assignee an email confirmation.

Send email to Assignees upon closure—An email is automatically sent to the assignee of the Master Issue informing them that all Subtasks have been closed. The assignee of the Master Issue can then review the Subtasks and close the Master Issue manually.

NOTE

The closure option selected here specifies how closing is handled for all Master Issues and subtasks in the Workspace, whether created manually or with a Master Quick Issue template.

After selecting an option, enter your administrator password and click **Save** .

Closing a Master Issue with Active Subtasks

The Assignee of a Master Issue can choose to close the Master Issue manually when one or more related Subtasks are still active, but this also automatically closes all of the related Subtasks. Master Issues cannot be closed by an escalation rule.

To close a Master Issue that has active Subtasks:

On the Edit page of the Master Issue, select Close in the Status field, enter the reason for closing the Master Issue in the Description, and, optionally, check the box to Update the Subtasks.

Click **GO**. A dialog box listing all of the related Subtasks that are still active is displayed .

Click OK to continue or Cancel to cancel the closure.

The Master Issue and the remaining active Subtasks are all closed and updated.

Configuring Subtask Sequencing

Where there is more than one subtask for a master Issue, BMC FootPrints Service Core allows configuration of a sequence for subtasks so that some subtasks cannot be closed or edited (unless the Agent has appropriate permissions) until others have been closed. There are two ways to configure a sequence:

Specify a sequence using the administration functions,

Agents with appropriate role permissions can set a sequence for subtasks "on the fly" as they work in a master Issue.

This section describes how to set sequencing from the administration page. Refer to Using Master Quick Issue Templates for a description of how to set a subtask sequence from within the master Issue.

NOTE

In order to specify a subtask sequence you must first create a master Issue and at least two subtasks to that master Issue.

To specify subtask sequencing:

Select Administration | Workspace and then select Quick Issue Templates from the Automated Workflow section of the main frame. The Quick Issue Template page is displayed.

In the Master Templates section of the Quick Issue Template page, highlight the master Issue, click the Sequence/Remove Sequence ordering for Subtasks of the selected Master Quick Issue template checkbox, enter your password, and click the **Save** button. The Sequence/Remove Sequence for Subtask Templates page is displayed.

Click the checkbox to enable sequencing.

Use the drop-down boxes next to the subtask names to set the order. You can specify more than one subtask with the same number. If you do so, then either of the equivalent subtasks can be closed ahead of the other, but any subtasks that have been set to higher numbers must still wait until the subtasks with equivalent numbers have been closed. For example, you could have the first two subtasks set to "1", which means either can be closed first, but both must be closed before the subtask set to "2" can be edited or closed.

When you have specified the order for all of the subtasks, click the **Save** button. The sequence is saved and will be enforced by FootPrints. The Quick Issue Template page is displayed.

Editing the Subtask Sequence.

To change the sequence on a set of subtasks, perform the steps in the preceding procedure.

Restrictions of Master Issues and Subtasks

Because the parent-child relationship between Master Issues and Subtasks sometimes reflects a complicated relationship, and has certain rules associated with it, there are some restrictions on these Issue types:

A Subtask cannot be created of an existing Subtask—BMC FootPrints Service Core only supports two-level parent-child relationships. Nested Subtasks are not supported.

A Master Issue cannot become a Subtask of another Issue—As stated above, BMC FootPrints Service Core only supports two-level parent-child relationships. Nested Master Issues are not supported.

Master Issues and Subtasks cannot become Global Issues or GlobalLinks—The Global Issue feature allows you to link similar Issues together to be solved as one (for example, a System Down failure that is reported by many users). While this feature has some similarities to Master/Subtask Issues, it is intended for a different function and has different rules. Therefore, Master Issues and Subtasks cannot become Global Issues, nor can they be linked to a Global Issue.

Master Quick Issues

Master Quick Issue

Sometimes an Issue should be split into separate Subtasks with different properties, perhaps to be completed by different users. For example, the process to set up a new employee may consist of many steps, each performed by a different user. BMC FootPrints Service Core Master Issue/Subtasks allow you to create parent-child relationships between Issues for complex processes, such as the new hire process, change management, and more. Subtasks can be created manually by an Agent or can be created automatically by a Master Quick Issue Template.

This feature combines two other features of BMC FootPrints Service Core: Quick Issue templates and Master Issues/Subtasks. This topic describes how to set up Master Quick Issue templates. For more information on Master Issues and Subtasks, refer to Subtasks. For more information on creating, managing and using single Quick Issue templates, refer to Quick Issues.

Creating Master Quick Issue Templates

Master Quick Issue templates are created by the Workspace Administrator. To create a template, select Administration | Workspace from the BMC FootPrints Service Core Toolbar, then select Quick Issue under the Automated Tasks section of the Workspace Administration page. The second section on this page is entitled Manage Master Quick Issue Templates. From here, you can create, edit, and delete Master Quick Issue and Subtask Templates.

Creating a Master Quick Issue template involves multiple steps. First you create a Master Issue template. This is the template that is available on the BMC FootPrints Service Core Toolbar that Agents use to create a new Master Quick Issue. You also design one or more Subtask templates associated with the Master Issue. When an Agent creates an Issue with a Master Quick Issue template, the subtasks are created automatically by the system.

The Master Quick Issue templates section contains two dialog boxes:

Master Templates—This contains all Master templates. Controls to the right of the box allow you to create, edit, and delete Master templates.

Subtask Templates—Displays the Subtask templates associated with the Master template selected in the preceding dialog. Controls to the right of the dialog allow you to create, edit, and delete Subtask templates.

Related Topics

Create a Master Quick Issue Template

Create Subtask Templates

Edit Master and Subtask Templates

Delete Master and Subtask Templates

Master Issue Closure Process

Using Master Quick Issue Templates

Create a Master Quick Issue Template

Creating a Master Quick Issue template involves multiple steps. First you create a Master Issue template. This is the template that is available on the BMC FootPrints Service Core Toolbar that Agents use to create a new Master Quick Issue. You also design one or more Subtask templates associated with the Master Issue. When an Agent creates an Issue with a Master Quick Issue template, the subtasks are created automatically by the system.

To create a Master Quick Issue template:

On the Workspace Administration page, select Quick Issue Template from the Automated Tasks section. The Quick Issue Template page is displayed.

Click the Create button.

Enter a name for the template in the Template Name field.

Click the Master Template checkbox.

Click the GO button. A pop-up window is displayed with a field for entering your administrator password.

Enter your administrator password and click the GO button. The page for creating a new Master Quick Issue is displayed. This page is similar to the regular Create Issue page, but with fewer fields. Address Book fields, time tracking, etc. are filled in by the Agent when a Master Issue is created with the template.

The available fields are:

Title—This is the Title of the Master Issue. It can be as long as needed, for example, New Hire Process.

Priority—This is the default priority for Master Issues created with the template. It can be changed by the Agent when creating the Issue, as needed.

Status—This the is the default status of Issues created with the template. Because Master Issues are usually not closed until all of the related Subtasks are completed, Master Issue templates should not be created with the Closed status. Open, Working, Assigned, etc. would be appropriate statuses.

Template Usage—Select whether this template is available from the full FootPrints version (Web Interface), the Mobile Interface, or both. There are limitations in size for the mobile interface. Refer to the BMC FootPrints Mobile topic of this document for details on the interface and how it is used.

Issue Information—One or more Workspace fields can be set here for the template. Any fields not filled out here can still be filled out by the Agent when creating a new Issue from the template. Mandatory fields do not have to be filled in when creating the template (although they can be), but must be filled out when the Agent creates an Issue. For example, you may have a mandatory field for Follow-up Date that will be dependent on when the Issue is created. Do not fill this out when creating the template; instead, it is mandatory when creating an Issue with the template. A field like Problem Type, however, would be appropriate to set in the template (i.e., to New Hire, because this remains constant for Issues created with the template).Date fields and Date/Time fields) contain a checkbox for Current Date. If this is checked in the template, it is pre-filled with the current date when an Agent creates an Issue, not the date that the template was created. This is useful for a field like Date Reported.

Description—This can contain a canned description of the problem or process. The Knowledge Base can be used in the template to select a Solution for the template if it already exists there.

Attachments—One or more files can be attached to the template. New Master Issues created with the template automatically contain links to the attachments. This is useful for standard request types for procedures, patches, or other documents.

Assignees—Optionally select one or more assignees or Teams to be assigned to Issues created with the template. If no assignees are selected, the default Auto Assignment rules apply to Issues created with the template. For example, if the default rule is to assign an Issue to the Agent creating it, an Issue created by an Agent using the template is assigned to the Agent. Escalation rules can also be created that specifically address Master Issue workflow (for assignment, etc.)

Email settings follow the rules for the Workspace.

When all fields that you want pre-filled have been completed, click **Save**.

The template is created. The Quick Issue Administration page is displayed. From here, you can create Subtask templates for the Master Issue.

Create Subtask Templates

After the Master Issue template is created, one or more Subtask templates can be created. Subtasks inherit field values from their master issues when they are created from the interface without using these templates. That is, if an agent makes an issue into a master issue while working within the interface and then creates a subtask to that issue, the subtask inherits field values from the master issue. Subtask templates work a little differently. A checkbox is provided for the administrator to determine which fields are inherited from the master issue template. In this way, some fields can be excluded or specifically included in the subtask template.

Workspace administrators can globally instruct subtasks to inherit values from master issues by selecting the inheritance fields on the Issue Workflow page (refer to Issue Workflow for details). If a subtask template is created and a value is specified for a certain field but that field is also set to inherit its value from a master issue, the subtask is created with the value of that field inherited from the master issue, not from the template. If the same situation occurs but there is no value in the master issue for that field, the field gets its value from the subtask template.

To create a subtask:

In the Master Templates field, highlight the Master Issue template for which you would like to create Subtasks.

To the right of the Subtask Template field, select the radio button for Create a New Subtask Template, enter the name of the Subtask template and click **GO**. For example, to create a Subtask to assign a network ID to a new hire, enter the name Create ID. The field is limited to 20 characters. This restriction does not apply to the Title field when you complete fields in the actual template.

The Create Subtask Quick Issue Template page is displayed. This page is similar to the regular Create Issue page, but with fewer fields. Address Book fields, time tracking, etc. are filled in by the Agent when a Master Issue is created with the template.

Enter data into the fields as needed. To speed workflow, you can elect to retain values that are in the master issue template in the subtask template. Those values will be in the selected field when the subtask is created. To do so, check the Inheritance Checkbox at the beginning of each field for which you wish to retain the master issue template value. The available fields are:

Title—This is the Title of the Master Issue. It can be as long as needed.

Priority—This is the default priority for the Subtask created with the template.

Status—This is the default status of the Subtask created with the template. Because these Subtasks are created by the system automatically and are usually not closed until the task is completed, Subtask Issue templates should not be created with the Closed status. Open, Working, Assigned, etc. would be appropriate statuses.

Issue Information—One or more Workspace fields can be set here for the template. Any fields not filled out here can still be filled out by the Agent when creating a new Issue from the template. Mandatory fields do not have to be filled in when creating the template (although they can be), but must be filled out when the Agent creates an Issue. For example, you may have a mandatory field for Date Completed that depends on when the Subtask is completed by the Agent assigned. Do not fill this out when creating the template; instead, it is mandatory for the Agent to fill out when working on the Subtask. A field like Problem Type, however, would be appropriate to set in the template (e.g., to Create ID, as this will remain constant for Issues created with the template). **Exception**: Date fields (but not Date/Time fields) contain a checkbox for Current Date. If this is checked in the template, it is pre-filled with the current date when the Subtask is created. This would be useful for a field like Date Assigned.

Description—This can contain a canned description of the problem or process. The Knowledge Base can be used in the template to select a Solution for the template if it already exists there.

Attachments—One or more files can be attached to the template. New Subtasks Issues created with the template automatically contain links to the attachments. This is useful for standard request types for procedures, patches, or other documents.

Assignees—Optionally select one or more assignees or Teams to be assigned to Subtasks created with the template. For example, if the network administrator is responsible for creating new IDs, then the New ID Subtask of the New Hire process should be assigned to her. If no assignees are selected, the default Auto Assignment rules apply to Issues created with the template. For example, if the default rule is to assign an Issue to the Agent creating it, an Issue created by an Agent using the template is assigned to the Agent. Escalation rules can also be created that specifically address Master Issue workflow (for assignment, etc.)

Email settings follow the rules for the Workspace.

When all fields that you want pre-filled have been completed, click **GO**.

The template is created. The Quick Issue Administration page is displayed. From here, you can create additional Subtask templates for the Master Issue.

To create additional Subtasks, repeat steps 1-6 above. An unlimited number of Subtask templates can be created.

Edit Master and Subtask Templates

Master and Subtask Quick Issue templates can be edited from the Manage Master Quick Issue Templates dialog of the Quick Issue Administration page. Changes only affect new Master Issues and Subtasks created with the template; old Issues are not affected.

To edit a Master Issue template:

Highlight the template in the Master Templates field, select the Edit radio button to the right of the field and click **GO**.

The Edit Master Quick Issue Template page is displayed with all of the information for the template pre-filled.

Change the fields as needed. File attachments can be added, replaced, or deleted.

When you are finished making changes, click **GO**. The template is updated and all new Master Issues created with the template reflect the changes.

To edit a Subtask template:

Highlight the related Master template in the Master Templates field. The associated Subtasks appear in the Subtask Templates field below.

In the Subtask Templates field, select the desired Subtask, select the Edit radio button to the right of the field, and click **GO**.

The Edit Subtask Template page is displayed with all of the information for the template pre-filled.

Change the fields as needed. File attachments can be added, replaced, or deleted.

When you are finished making changes, click **GO**. The template is updated, and all new automated Subtasks created with the template reflect the changes.

Delete Master and Subtask Templates

Master Quick Issue and Subtask templates can be deleted at any time. After deletion, the template is removed from the BMC FootPrints Service Core Toolbar, but old Master Issues and Subtasks created with the template are not affected.

To delete a Master Quick Issue template:

Highlight the template in the Master Templates field, select the Delete radio button to the right of the box, and click **GO**.

A dialog box appears prompting you to confirm the deletion. Click OK to continue or Cancel to cancel the deletion.

The template is removed. The Quick Issue Administration page is displayed. The template is removed from the BMC FootPrints Service Core Toolbar. If it was the only template, the Quick Issue option is also removed from the BMC FootPrints Service Core Toolbar. Associated Subtasks are also automatically deleted.

To delete a Subtask template:

Highlight the related Master template in the Master Templates field. The associated Subtasks appear in the Subtask Templates field below.

In the Subtask Templates field, select the desired Subtask, select the Delete radio button to the right of the box, and click **GO**.

A dialog box appears prompting you to confirm the deletion. Click OK to continue or Cancel to cancel the deletion.

The Subtask template is removed. The Quick Issue Administration page is displayed. The Subtask is no longer associated with the Master Quick Issue template. Other Subtask templates associated with the Master Quick Issue are not affected.

Master Issue Closure Process

When a Master Issue is created from the Master Quick Issue template, the associated Subtasks are created automatically. Two options are available for closing a Master Issue when the Subtasks are completed. To select an option:

Select Administration | Workspace | Automated Workflow | Issue Workflow | Subtask Closure Process from the BMC FootPrints Service Core Toolbar.

Upon closing the last active subtask, there are two options:

The system automatically closes the Master Issue and sends the assignee an email confirmation.

An email is automatically sent to the assignee(s) of the Master Issue informing them that all Subtasks have been closed. The assignee of the Master Issue can then review the Subtasks and close the Master Issue manually.

NOTE

The option selected here affects all Master Issues and Subtasks in the Workspace, including both those created manually and those created using a Master Quick Issue template.

After selecting an option, enter you administrator password and click **GO**.

Using Master Quick Issue Templates

Master Quick Issue templates can be used by all Agents in a Workspace to open complex Issues quickly, with information pre-filled for that Issue type. Related Subtasks are created by the system automatically. Agents only need to enter the customer's contact data and complete any mandatory fields that are not already set by the template. This is a useful time saver to quickly handle common or repetitive multi-step Issues, such as the new hire process, change management approvals, etc.

When at least one Quick Issue template has been created by the Workspace Administrator, the Quick Issue option is included on the BMC FootPrints Service Core Toolbar for Agents in the Workspace. Master Quick Issue templates are listed in the same section.

Subtasks can be sequenced for Master Quick Issue Templates. This means that an order for closing the subtasks can be designated and the next subtask in the sequence cannot be closed or edited until the current subtask has been closed. Subtask sequencing can be specified by an administrator or, with appropriate permissions, by an Agent on the Details page of a Master Quick Issue. A Master Quick Issue must have at least two subtasks in order to specify sequencing. The procedure for specifying a subtask sequence is below.

To use a Master Quick Issue template, follow the same procedure as for using a Quick Issue (refer to Using Quick Issue Templates). When you have completed the procedure, the Master Issue is created and is automatically added to the queue of the Agent(s) assigned to the Master Issue. One or more associated subtasks are also created automatically and assigned to the appropriate users. For example, the Network Administrator is assigned to create a new network ID for the employee, the Telephony Administrator is assigned to get the employee a new phone, and the Inventory

Control team is assigned to get the user a new PC. If the email setting was set to email the assignees and/or customer, email notifications are also sent for the Master Issue and Subtasks.

NOTE

The name of this feature depends on the name given to records in BMC FootPrints Service Core for the system/Workspace. For example, if the name "Call" has been defined for records in the current Workspace, the feature is called "Master Quick Call" throughout the Workspace (on the Toolbar, in the administration pages, etc.) For consistency, all help files refer to the feature as "Master Quick Issue".

Issues created with the Master Quick Issue template are like any other regular Master Issue once they have been created. They can be edited, deleted, re-assigned, etc. Escalation rules apply to them as to any other Issue. Closure of the Master Issue is regulated by the Subtask Closure Process rule set by the Workspace Administrator.

To learn more about Master Issues and Subtasks, refer to Subtasks.

Specifying a Subtask Sequence from a Master Issue Details Page

You can specify a sequence for closing subtasks once you have created a Master Issue. In order to specify sequencing, the Master Issue must have at least two subtasks linked to it and the Agent must have role permission to specify sequencing. If you want to specify sequencing but cannot do it, check with your Workspace or System Administrator to determine whether you have permission.

To specify a subtask sequence from a Master Issue Details page:

Select the Master Issue Details page.

Select the tab for Related Issues.

Click the "Check this box to allow sequencing of Subtasks" checkbox. Drop-down boxes are displayed in the section for you to specify the sequence.

Use the drop-down boxes next to the subtask names to set the sequence. You can specify more than one subtask with the same number. If you do so, then either of the equivalent subtasks can be closed ahead of the other, but any subtasks that have been set to higher numbers must still wait until the subtasks with equivalent numbers have been closed. For example, you could have the first two subtasks set to "1", which means either can be closed first, but both must be closed before the subtask set to "2" can be edited or closed.

When you have specified the order for all of the subtasks, click the **Update Subtask Sequencing** button. The sequence is saved and will be enforced by BMC FootPrints Service Core. The Quick Issue Template page is displayed.

Remove Subtask Sequence

To remove the sequencing of subtasks from a Master Issue Details page:

Select the Master Issue Details page.

Select the section or tab for Related Issues.

Make sure the "Check this box to allow sequencing of Subtasks" checkbox is not checked and then click the **Remove Subtask Sequencing** button. The sequence is removed and the page is redisplayed.

Global Issues

Creating Global Issues

Global Issues are different from regular Issues in that they can be used to link many common or duplicate Issues into one entity. At any one time, you may have three or four Global Issues, or you may have none at all. It is not

recommended to have too many Global Issues at one time, as they might be confusing to agents and customers or may duplicate the same problem. They should be reserved for important, pervasive Issues that affect many users, such as system outages, application bugs, or virus warnings.

Because Global Issues are broadcast to many users (agents and, sometimes, customers), it may be advisable to restrict access to creating them. A User Permission Role option is available for this purpose.

If an Agent has permission to create a Global Issue, there are two ways to do so:

Create a Global Issue from the BMC FootPrints Service Core Toolbar

Convert a regular Issue into a Global Issue

NOTE

The name of this feature depends on the name given to records in BMC FootPrints Service Core for the system/Workspace. For example, if the name "Ticket" has been defined for records in the current Workspace, the Global Issue is referred to as a "Global Ticket" throughout the Workspace. However, GlobalLinks are always referred to as "GlobalLinks". For consistency, all help files refer to the feature as "Global Issue" and "GlobalLinks".

Create a Global Issue from the BMC FootPrints Service CoreToolbar

If an Agent or administrator knows that an Issue (such as a server crash) will soon be reported by many customers, then a Global Issue can be created from scratch to address the problem.

NOTE

Before you create a new Global Issue, it is a good practice to first check that there isn't already a similar or duplicate Global Issue. You can view Global Issues from the BMC FootPrints Service Core Home page.

To create a Global Issue:

On the BMC FootPrints Service Core Toolbar, select New Issue | New Global. If you do not have this option, then you do not have permission to create Global Issues.

The Create Global Issue form is displayed. It is similar to the regular Create Issue page, but with fewer fields and some different options.

Enter a Title for the Global Issue—This should be clearly worded and as descriptive and concise as possible. This is the Title that is broadcast to Agents and customers and appears on the BMC FootPrints Service Core Homepage. Agents and customers should be able to tell from the Title whether the problem they are reporting is related to an existing Global Issue. For example, Big Problem, while it may be true, is not a good Title for a Global Issue. Server 123 is Down is a better Title. It is descriptive of the problem while being concise enough that it does not overwhelm the user.

Broadcast Creation of Global Issue to All Agents in Workspace—If this is checked (the default), all Agents who belong to the Workspace receive a broadcast message in the form of a pop-up window alerting them to the new Global Issue.

Priority—Give the Global Issue a priority just as you would a regular Issue. This becomes the default priority for all GlobalLinks associated with the Global Issue.

Status—By default, a Global Issue is created with the Open status. This can be changed on this page to another active status (e.g., Pending, Working, etc.) It is not recommended that a Global Issue begin with the Closed status, as one of the main features of the Global Issue is to Close all related Issues simultaneously when the Global Issue is closed.

Issue Information—Fill in any Workspace field desired. Mandatory fields must be filled in. GlobalLinks inherit the choices selected here.

Description—Enter a Description of the Issue. You can use this field to enter a more detailed Description of the Global Issue, including symptoms, diagnostic information, known systems affected, estimated time it will take to fix the problem, etc. This description is inherited by Issues linked to the Global.

Attachments—Attach any files you would like associated with the Global Issue. These files also link to Issues that are linked to the Global Issue. Administrators can define rules for attachments that include restrictions on size and/or file type as well as making attachments mandatory. Rules can be applied based on fields, such as the Status field, which means an attachment may be made mandatory when the status is Open, for example, but not for other statuses.

Assignment—The user or Team selected here is responsible for updating and eventually closing the Global Issues. Different users can be assigned to the various GlobalLinks that are subsequently created.

NOTE

When an existing Issue is turned into a Global Issue, BMC FootPrints Service Core adds the assignees from the Global Issue to the existing issue.

Email—The Agent or Team Assigned to the Global Issue receives email notification if the assignee checkbox is checked.

Time Tracking—Time tracking information only applies to the Global Issue. GlobalLinks have their own Time Tracking information.

NOTE

It is important to ensure that each current Global Issue is unique, clearly worded, and not duplicated by any other active Global Issues.

Click **Save**. The Global Issue is created. It is viewable to Agents on the Homepage, broadcast to Agents via a pop-up window, and optionally broadcast to customers as well (if they have permission to link to Global Issues).

NOTE

Note that contact information is not included in Global Issues. This is because Global Issues are meant to be general and applicable to multiple users. Each GlobalLink created contains the contact information for the individual user who reports the problem.

Convert a Regular Issue into a Global Issue

Existing Issues can be turned into Global Issues after they have been created. For example, a customer may report a problem and, after some investigation, an Agent realizes that the Issue is pervasive and other customers will run into the same problem.

To convert a regular Issue into a Global Issue:

On the Details page for an Issue, select **Make Global** from the Details menu. If this option is not available, you might not have permission to create Global Issues or the type of Issue does not support Global Issues (as with a Subtask, Master Issue, etc.; refer to Restrictions for more information).

The Create Global Issue form is displayed. Make any necessary changes to the Issue to make it Global and generally applicable. Make sure the Title is descriptive and concise, the Description is detailed, etc.

Note that the contact information from the Issue is not displayed. This information is not lost. When the Global Issue is created, an associated GlobalLink is also created with the originating customer's contact information.

Click **Save**. The Global Issue is created. It is viewable to Agents on the Homepage, broadcast to Agents via a pop-up window, and optionally broadcast to customers if they have permission to link to Global Issues. A GlobalLink is also created which includes the contact information from the original Issue.

Viewing Global Issues

Once a Global Issue is created, it is viewable by all Agents in the Workspace, as well as customers who have permission.

Global Issues can be accessed in multiple ways:

In the Global Issues "Scoreboard" on the BMC FootPrints Service Core Homepage—On the BMC FootPrints Service Core Homepage for all Agents of the workspace, there is a Global Issues dashboard component. Click the Title of a Global Issue to see the Details, or click the GlobalLink icon to create a new GlobalLink for that Global Issue. If there are more Global Issues than can be displayed, click More; list of all active Global Issues is displayed.

Select "Global Issues" from the Display Drop-down—If this choice is selected, all active Global Issues are listed on the Homepage.

Broadcast Message—When a new Global Issue is created, a broadcast message is sent to all Agents in the Workspace (by default). To learn more about that Global Issue, visit your Homepage for that Workspace and use one of the methods above.

Customers—Customers can view and subscribe to Global Issues, if they have permission to do so, by selecting Global Issues from the BMC FootPrints Service Core Toolbar.

Global Issue Details

On the Details page of a Global Issue, a reference to the fact that it is a Global is displayed, along with a table listing all related GlobalLinks, including Issue Number, Title, Status, and assignees of each GlobalLink.

GlobalLink Details

On the Details page of a GlobalLink, a reference to the fact that it is a GlobalLink is displayed, along with information about the related Global Issue, including Issue Number, Title, Status, and assignees.

Creating a GlobalLink

Agents and customers can link to Global Issues, creating GlobalLinks, in a number of ways. When a GlobalLink is created, it inherits many of the properties of the Global Issue, but also contains the contact information for the individual customer. GlobalLinks can all be closed simultaneously when the Global Issue is closed.

There are two ways for an Agent to create a GlobalLink:

From a Global Issue

From a Regular Issue

Customers can also subscribe to Global Issues, creating their own GlobalLinks.

Create a Global Link from a Global Issue

From the Global Issues "Scoreboard" on the BMC FootPrints Service Core Homepage—On the BMC FootPrints Service Core Homepage, click the icon next to the Global Issue. If there are additional active Global Issues that are not displayed, click More; the issue list is updated to display all active Global Issues.

From the Details screen of the Global Issue—select Global | New Global Link from the Details menu.

The Create GlobalLink form is displayed. It is similar to the regular Create Issue page, but with fewer fields.

Title/Priority/Status—These fields are pre-filled with the information from the Global Issue. There is no need to change them unless the GlobalLink has special properties (for example, the CEO has reported the problem and the Issue should receive an Urgent priority).

Contact Information—Select the user's contact information, as you would when creating a regular Issue.

Issue Information—These are pre-filled with information from the Global Issue. Make any changes needed or fill in additional fields as required.

Description—This is pre-filled with the description from the Global Issue. Make any changes needed. Changes to this field do not affect the Global Issue.

Attachments—Files attached to the Global Issue are also linked here.

Assignment—By default, the GlobalLink is assigned to you or to whoever is normally assigned to Issues based on problem type or other Auto-Assign/Escalation rules. The main Global Issue remains assigned to the original assignee of that Global Issue. The original assignee is responsible for closing the Global Issue, which also closes all of the associated GlobalLinks.

Email—The Agent or Team Assigned to the GlobalLink receives email notification if the Assignee checkbox is checked, and the customer receive an email if the Contact checkbox is checked.

Time Tracking—Time tracking information applies to this GlobalLink.

Click **GO**. The GlobalLink is created. It is listed on the Details page for the Global Issue.

Create a Global Link from the Details Page of a Regular Issue

Regular Issues can also be converted into GlobalLinks.

To convert a regular Issue into a GlobalLink:

From the Details page of a regular Issue, select **Link to Global** from the Details menu. If this option is not available, it is because the Issue already has other special properties that prevent it from being linked to a Global Issue. Refer to Restrictions for more information.

A pop-up window is displayed with a list of available Global Issues to link. Select the radio button for the desired Global Issue and click **GO**.

The Create GlobalLink form is displayed. It is pre-filled with the information from the origination Issue, not the Global Issue. Make changes as necessary.

Click **GO**.

The GlobalLink is created. It is listed on the Details page for the Global Issue, along with the other GlobalLinks.

Updating Global Issues

A Global Issue can be updated by the assignee of the Global Issue or anyone with edit rights to it. Updating the Title, Workspace fields, priority, etc. of the Global Issue does not affect existing GlobalLinks.

The following occur when a Global Issue is updated:

Two important fields are updated in all associated GlobalLinks when updated in the Global Issue:

Status—When the Status of the Global Issue is updated, the statuses of all associated GlobalLinks are also updated.

Description - When a Description is appended to a Global Issue, it is appended to all associated GlobalLinks, unless the Include Appended Description option is unchecked.

Email notifications are sent when changes are made to the Global Issue:

When changes are made to the Global Issue, all Agents who have at least one GlobalLink linked to the Global Issue receive an email notification about the change (one per Agent, not one per GlobalLink).

If changes are made the Status or Description fields of the Global Issue, the customer contacts for each GlobalLink receive an email notification, provided that email notification is enabled for customers.

The Agent or Team assigned to the Global Issue also receives email notification for any changes.

When the Global Issue is resolved, it can be closed along with all related GlobalLinks at the same time.

Updating GlobalLinks

When GlobalLinks are updated, the originating Global Issue is not affected, nor are the other GlobalLinks. Update that affects all related GlobalLinks (to the Description or Status) must be done from the main Global Issue.

Deleting Global Issues

Global Issues can be deleted by anyone who has delete rights to that Global Issue. Deleting a Global Issue does not delete the related GlobalLinks, it only removes the links.

To delete the Global Issue:

Select Delete from the menu on the Details page of the Global Issue.

A dialog box appears prompting you to confirm the deletion. Click OK to continue or Cancel to cancel the deletion. The Global Issue is deleted. The link is removed from associated GlobalLinks, turning them back into regular Issues.

Closing Global Issues

Global Issues are used to designate important or frequently reported Issues that will affect many users, for example, a System Down failure that will be reported by many users. One of the main features of Global Issues is that when the Global Issue is closed, all related GlobalLinks are also closed and updated and the customer contacts are automatically notified via email. This feature can save time by combining the work of closing many related Issues into a single task. It also improves communication by notifying all affected users about the resolution of the problem at one time.

To close a Global Issue:

Select the **Edit** icon for the Global Issue you want to close on the Homepage or the Details page of the Global Issue. You must have Edit rights for the Global Issue to do this.

Change the status to Closed.

Enter the final resolution for the Issue in the Append Description field. Make sure the Include Appended Description in GlobalLinks checkbox is checked.

Click **GO**. The Global Issue is Closed, as are all associated GlobalLinks. Email notifications are sent to all Agents who have at least one GlobalLink linked to the Global Issue, to the assignees of the Global Issue, and to the customer contacts for all GlobalLinks.

Global Issues can also be closed using the .

Customers Subscribing to Global Issues

Customers can view and subscribe to Global Issues themselves if they have appropriate permissions. This saves the Help Desk time by allowing customers to identify their own problems and link to a central Global Issue, rather than entering many Issues that address the same problem. Allowing customers to do so provides them with faster service, because they receive updates automatically when the originating Global Issue is updated and eventually resolved.

To view and subscribe to Global Issues:

In the BMC FootPrints Service Core Toolbar, select **Global Issues**. A pop-up window is displayed entitled Current Global Issues. This contains a list of Global Issues currently affecting other users.

To view the full description of a Global Issue, click the Title.

To subscribe to a Global Issue, select **Subscribe**.

Once a customer subscribes to a Global Issue, it is listed with the customer's Requests. The customer receives email updates as the Global Issue is updated and eventually resolved. The customer can view the latest status at any time under View My Requests.

Administration Options for Global Issues

There are a few administrative options that affect Global Issues:

Workspace Option to disable Global Issues—By default, Global Issues are part of all BMC FootPrints Service Core Workspaces. They can be disabled for a Workspace (for example, for a development Workspace where customers are not reporting Issues) under Administration | Workspace | Workspace Options. When disabled for a Workspace, no user can create or view Global Issues from that Workspace, and the Global Issue scoreboard is no longer displayed on the Homepage for that Workspace. Existing Global Issues and GlobalLinks are not deleted. You should close any remaining Global Issues when the option is disabled in an active Workspace.

Agent Permissions—By default, Agents can create new Global Issues. As Global Issues are broadcast to many users, and it is important that duplicate Global Issues aren't created, it may be advisable to restrict access to creating them to certain Agents or administrators. A user permission role option is available for this purpose.

To restrict a group of Agents from creating Global Issues:

Under Administration | Workspace | Roles | User Roles, select the role you want to edit from the drop-down (Agent is the default Agent role) and click Edit Role Properties.

Under Issue Creation, select Not Allowed for Create Global Issues.

Scroll to the bottom of the page, enter your password, and click **GO**. All Agents of that user type can no longer create new Global Issues. They can still link to Global Issues created by administrators or other users, creating GlobalLinks to those Global Issues.

For more information on permissions and roles, refer to Roles.

Customer Permissions—By default, customers can view and subscribe to Global Issues. You may want to restrict this feature for some customers. A user permission role option is available for this purpose.

To restrict a group of Customers from viewing and subscribing to Global Issues:

Under Administration | Workspace | Roles | User Roles, select the role you want to edit from the drop-down (Customer Read/Submit is the default customer role) and click Edit Role Properties.

Under Requests, select No for "View Global Issues".

Scroll to the bottom of the page, enter your password, and click **GO**. All Customers of that user type can no longer view or subscribe to Global Issues. The option is no longer available on the BMC FootPrints Service Core Toolbar.

For more information on permissions and roles, refer to Roles.

Restrictions of Global Issues

As the relationship between Global Issues and GlobalLinks has certain rules associated with it, there are certain restrictions to these Issue types:

A GlobalLink cannot be created from another GlobalLink—You must create the GlobalLink from the Global Issue.

A Global Issue cannot be created from another Global Issue—This would result in duplicate Global Issues. To replace a Global Issue, delete the Global Issue, then create a new Global Issue.

A Subtask cannot be created for a Global Issue or a GlobalLink—Because Subtasks and Master Issues have their own rules and links, Global Issues and GlobalLinks cannot contain Subtasks.

A Master Issue cannot become a Global Issue or a GlobalLink—Because Subtasks and Master Issues have their own rules and links, Global Issues and GlobalLinks cannot contain Subtasks.

Global Issues and GlobalLinks cannot be copied and linked to other Issues or Workspaces—While regular Issues can be copied and linked to within the current Workspace or to another Workspace, Global Issues and GlobalLinks do not have this option.

Email Management

Email Management

BMC FootPrints Service Core Email Management feature gives you many of the capabilities to use in conjunction with the web interface. The system can send customized email notifications to users and process incoming email submissions and updates. Users can submit, track, update, and query Issues from any email client, including Microsoft Outlook and Lotus Notes.

The email notification feature includes extensive rules for when notification mail is sent to users regarding their Issues, what the emails contain, notification to Agents and administrators regarding automatic escalation, etc. Outgoing email notification requires an SMTP mail server that is accessible to the BMC FootPrints Service Core server. The incoming email feature allows users to send email to BMC FootPrints Service Core, which are converted into new Issues, allows users to update their Issues via email, and supports email queries. This feature requires at least one POP3 or IMAP account set up for the exclusive use of BMC FootPrints Service Core.

Outgoing Email Management

About Outgoing Email Management

BMC FootPrints Service Core supports email notification for both technical Agent/administrator users and external customer users. Notification emails are passed directly to your SMTP mail server (defined during BMC FootPrints Service Core installation). To change your SMTP server name, select Administration | System |Features | Mail from the BMC FootPrints Service Core Toolbar.

The Workspace Administrator can control the contents of notification email sent by BMC FootPrints Service Core. Different templates can be configured for internal users, customers, and CCs. Rules defining when email is sent can also be configured. One feature of BMC FootPrints Service Core is the ability to define content (templates) for email notifications based on the status of Issues.

Email notification is configured per Workspace. To set up email for a Workspace, select Administration | Workspace | General | Mail Preferences from the BMC FootPrints Service Core Toolbar. In addition, some system-wide preferences can be set for email notification.

The following options are covered in this topic:

Workspace Email Notification Preferences

Configure Email Templates

Custom Email Templates

Email Notification Rules

Default Email Address for Users

Escalation Email Notification

System Email Notification Preferences

System Email Notification Preferences

Workspace Email Notification Preferences

Configure Email Templates

Email notifications can be customized to include any Issue information, as well as custom canned messages. Different templates can be created for assignees, customers, and people copied on Issues. A special template can also be created for emails sent to wireless devices, such as pagers, cell phones, or PDAs.

The standard BMC FootPrints Service Core email templates can be changed by selecting from the checkboxes and options in the Contents of Mail grid. Completely custom templates designed in HTML or text are also supported.

To configure email templates, select Administration | Workspace | General | Mail Preferences from the BMC FootPrints Service Core toolbar. Next to the heading Email Templates, click **Configure Email Notification Templates**. A grid is displayed. It consists of many different options that can be included in notification email (represented by rows) and five columns that indicate the type of user/situation in which the option is to be enabled.

The columns are:

Field Name/Attribute—Lists the field types and options available to be included in notification email.

Assignee—Options checked in this column are included in notification email sent to internal users, including Agents, Workspace Administrators, and System Administrators.

Customer—Options checked in this column are included in notification email sent to customers.

CC—Options checked in this column are included in emails sent to anyone specified in the CC box of an Issue.

Wireless/Pager—Options checked in this column are included in mail sent to pager/wireless email addresses.

Any field or option checked in a particular column is included in all notification email sent to that level of user/situation. Some of the options include an **Edit** button; this indicates that the feature has further options.

The options available on this page are:

Customize subject of email—The information you want to appear in the subject line of the email. Data keywords can be used, as well as static text.

Short list of what just changed—A summary of what was changed in the Issue that caused the email to be sent. If you click the Edit icon in each of the columns, a pop-up window is displayed that allows you to specify whether to include changes to internal Issues or Employee fields.

Text at top of message—Customizable message that is displayed near the top of the notification email. A different message can be made for each type of user class by clicking the Edit icon in that column, entering the message in the text box, and clicking **SAVE**. The checkbox must also be checked in that column. In addition, variables can be placed in the greeting to include the subject of the email, the user's name, etc. Refer to Mail Variables in the Custom Email Templates section for additional information.

Workspace Name—The name of the Workspace is displayed in the body of the notification email.

Title—The Title of the Issue is displayed in the body of the notification email.

Number—The Issue number is displayed in the body of the notification email.

Link to Details Page—A hyperlink to the Details page of the Issue in BMC FootPrints Service Core (requires password authentication).

NOTE

If you are using a custom login page for customers (e.g., group.html), that URL can be specified for Customers by clicking the Edit icon in the customer column and entering the URL. This does not automatically bring the Customers to the Details page of their Issue; after entering their email address, the main customer page is displayed.

Last Edit Date—The last date the Issue was edited.

Last Edit Time—The last time the Issue was edited.

Priority—The priority of the Issue.

Status—The current status of the Issue.

Creation Date—The date on which the Issue was created.

Creation Time—The time at which the Issue was created.

Creator—The submitter of the Issue.

Show Subtask or Global Entry Relationship—If the Issue is a Master, Subtask, Global, or GlobalLink, include this reference in the email.

Description—The Issue's description, with time/date/user stamps. Two options are available by clicking the Edit icon: Most Recent Description and All Descriptions.

Assignees—The list of users/Teams assigned to the Issue.

CC's—Any email addresses that are listed in the CC section of the Issue. Both permanent and one-time CCs are shown, denoted by one of these labels: (permanent); (permanent, but not CC'd on this edit); (this edit only)

Issue Information—Workspace field data. By default, customers only see Public fields and internal users see all fields. Individual fields can be selected for inclusion by clicking Edit.

Address Book Fields—Address Book data. By default, customers only see Public fields and internal users see all fields. Individual fields can be selected for inclusion by clicking Edit.

Linked CIs—Include list for CIs linked to the issue in the email notification. Up to 100 linked CIs can be displayed in the email.

List attached files—A list of files attached to the Issue are displayed in the body of the email.

Attach attached files—Attached files are sent with the notification email. Rules regarding attachments can be set by clicking the Edit icon in the Field Name/Attribute column. They are:

Never send any attachment over n kilobytes—Where *n* is the maximum number of kilobytes.

Send each attached file on every edit—All attached files are included with all notification email for the Issue.

Send each attached file only on the first time the file is attached—Attached files are only included with notification mail when they are initially attached to the Issue.

Allow the user performing the edit to override these settings—Internal users can choose whether or not to include attachments upon editing an Issue.

Complete Issue History—A summary of the Issue's history appears in the body of the notification email.

Text at bottom of message—Customizable message that appears at the end of the notification email. A different message can be made for each type of mail by clicking the Edit icon in that column, entering the message in the text box, and clicking **SAVE**. The checkbox must also be checked in the column. In addition, variables can be placed in the greeting to include the subject of the email, the user's name, etc. Refer to Mail Variables in the Custom Email Templates section for additional information.

Send mail as text—Notification mail is sent as plain text.

Send mail as html—Notification mail is sent in HTML format.

NOTE

If both text and html are checked, BMC FootPrints Service Core includes both formats in the message. For most Windows-type email readers (Outlook, Lotus Notes, etc.), only the HTML is seen.

Custom formatting for text message—Create a custom email template for BMC FootPrints Service Core notification email layout and custom formatting in plain text (refer to Custom Email Templates).

Custom formatting for HTML message—Create a custom email template for BMC FootPrints Service Core notification email layout and custom formatting in HTML (refer to Custom Email Templates).

NOTE

For Issue Information and Address Book fields, custom email template settings override settings you specify on this page, regardless of whether the custom formatting is for text or HTML messages. For example, if your Specify Email Content page specifies that the message is to contain only public fields in the Issue Information section and you specify an internal field in the custom email template, the custom email template overrides the other settings. Refer to Custom Email Templates for details on how to include the settings on this page with the custom email.

After filling out the grid, click **SAVE**. All notification email includes the options indicated for the various user/mail types.

Custom Email Templates

As an alternative to using the layout options in the Contents of Mail grid for email notification, custom email templates can be created using plain text or HTML. The template can contain any combination of BMC FootPrints Service Core fields using special keywords, and any custom text, in any layout desired. Different templates can be created for each mail notification type: Assignee, Customer, CC, and Wireless/Pager. If a custom email template is enabled, it overrides most of the other options selected in the Contents of Mail grid (exceptions are listed below).

To create a custom email template:

Select Administration | Workspace | General | Mail Preferences | Configure Email Templates from the BMC FootPrints Service Core Toolbar.

Select the column for which you want to create a template: Assignee, Customer, CC or Wireless/Pager.

Check the box in that column for one of the two following options: Custom formatting for text message or Custom formatting for HTML message. These can be found at the bottom of the grid.

For whichever option you checked, click **Edit**.

In the pop-up window, click the link to see a list of keywords for this Workspace. Each field has a corresponding keyword, including built-in fields, custom Workspace fields, and custom Address Book fields. These can be inserted into the email template. When the email is sent, the value for that field is inserted into the mail for that field.

Use any text or HTML editor to create the email template.

For a text email template:

Only ASCII text can be used. Boldface, colors, underlining, etc. are not accepted. We recommend using “Notepad” on Windows, or an editor like “emacs” or “Pico” on UNIX/Linux to create the template.

Use your own text, formatted in any way supported in ASCII.

Keywords must be in the exact format specified to work correctly.

For an HTML email template:

An HTML editor can be used or a text editor can be used if you are comfortable writing HTML.

Use your own text, formatting, bold, underlining, colors, hypertext links, etc. To include a field from BMC FootPrints Service Core in the email, simply insert the corresponding keyword.

Keywords must be in the exact format specified to work correctly.

Example:

To insert the Issue Number into a sentence:

The reference number for your Issue is %%ATTRIB__NUMBER%%.

So, when an email notification is sent for Issue Number 3486, the sentence above displays as follows:

The reference number for your Issue is 3486.

When you have finished creating the template, save the file.

Back in the custom template pop-up window (step 5), use the Browse button to upload the new email template from your local machine.

Click **GO**.

On the main Contents of Mail screen, click **GO**. Ensure that the box is checked for the template created and uploaded.

Now email notification for the current Workspace is in the new format for the selected user type. A different custom template can be created for each type by following these instructions.

Sample Template (Text)

Hi %%FIRST-NAME%%!

This is an email notification regarding your Issue “%%ATTRIB__TITLE%%”.

The reference number for this Issue is %%ATTRIB__NUMBER%%.

Notes:

%%ATTRIB__DESCRIPTION%%

Sample Email Generated from the Template Above

When replying, type your text above this line.

Hi Bob!

This is an email notification regarding your Issue “Forgot password”.

The reference number for this Issue is 5429.

Notes:

Entered on 1/16/2001 at 11:48:50 by Jill Smith:

Customer cannot receive email. A technician is scheduled to call Monday, September 22 @ 2pm PST.

NOTE

The message “When replying, type your text above this line” is inserted even though it is not part of the template. This message is inserted automatically by BMC FootPrints Service Core for all Assignee, Customer, and CC email notifications. Wireless/Pager mail templates do not contain this sentence.

Exceptions

Enabling a custom email template overrides most of the other settings selected in the Contents of Mail grid for that email type. There are a few exceptions:

Description—If the Description variable (%%ATTRIB__DESCRIPTION%%) is included in the template, select the descriptions to include in the “Description” row of the grid by clicking the Edit button. The options include “All Descriptions” and “Most Recent Only”.

Keywords also include %%ATTRIB__FIRST_DESCRIPTION%% and %%ATTRIB__ALL_DESCRIPTION%%. If you use these keywords, you do not need to use the Edit button and select the "All Descriptions" or "Most Recent Only" options. %%ATTRIB_FIRST_DESCRIPTIONS%% provides the first description entered, %%ATTRIB__MOST_RECENT_DESCRIPTION%% provides the most recent description, and %%ATTRIB_ALL_DESCRIPTIONS%% provides all of the descriptions.

Link to Details Page—If a custom URL is defined for this option and the variable is included in the template (%%ATTRIB__LINK_TO_DETAILS%%), the custom URL is included in the email link. In addition, in HTML email templates, the words Click here to view Issue in Browser are included as part of the link. In text email, only the URL is included.

Workspace Fields—While individual Workspace fields can be specified in a template, they can also be included with the variable %%ATTRIB__PROJFIELDS%%. If this is used, the selection of Workspace fields chosen under Edit Email Attribute is included. Any Workspace fields you specified on the Specify Email Content page are included when the custom email template message is sent.

Address Book Fields—While individual Address Book fields can be specified in a template, they can also be included with the variable %%ATTRIB__ABFIELDS%%. If this is used, the selection of Address Book fields chosen under Edit Email Attribute is included. Any Address Book fields you specified on the Specify Email Content page are included when the custom email template message is sent.

Attach attached files—To include file attachments when using a custom email template, you must check the box for this option in the grid. Various options for file attachments can also be set by clicking the Edit button

in this section of the grid. To list file attachments, use the %%ATTRIB__ATTACHED_FILE_LIST%% attribute.

Send mail as Text—This must be selected to send text email notification.

Send mail as HTML—This must be selected to send HTML email notification.

Mail Variables

If the custom email template is not used, some variables can still be inserted into the canned message placed at the top or bottom of the email notification, such as the user name, subject, etc. When one of these variables is placed in the greeting message composed under Text at top of message or Text at bottom of message, emails sent by BMC FootPrints Service Core include the dynamic data specified.

The table below contains the list of valid keywords:

Variable Name	Description
WHONAME	Name of user who created/edited Issue
WHOMAIL	Email of user who created/edited Issue
PROJECTNAME	Workspace Name
ISSUETITLE	Title of Issue

Email variables

Here is a sample greeting which includes 2 variables:

> Hi_WHONAME_! Thank you for registering your request _ISSUETITLE_ with us using FootPrints Service Core. Your request is very important to us, and we will respond as soon as possible. To respond to this message, simply reply and type your message at the top. If you experience any problems using FootPrints Service Core, please send email directly to support@widget.com.

In the example above, the user's name is substituted for _WHONAME_ and the subject of the email (i.e., the title of the Issue) is substituted for _ISSUETITLE_.

NOTE

These variables only work in the canned email messages; they do not work for the custom email templates described in the last topic.

Email Notification Rules

Workspace Email Notification Rules for outgoing emails are configured by selecting Administration | Workspace, then clicking the Mail Preferences link in the General section of the main frame.

This section allows you to choose the criteria for email notification sent to users regarding their Issues. It is split into three sections: Assignees, Customers and CCs. Different rules for email notification can be defined for each group. For example, you may want email notification sent to the Agent assigned to an Issue for all statuses, but you may only want email notification to go to the customer who submitted the Issue when it is opened and when it is closed.

For each of the two categories, the options include:

Never send mail—No notification email is ever sent automatically.

Send mail only for creation—Notification email is automatically sent on creation of a new Issue only.

Always send mail for every creation/edit—Email is sent to all assignees for each change to an Issue.

Send mail only for Issues with the following Priorities and/or Statuses—The lists of priorities and statuses is expanded, allowing the user to select one or more in each category. In addition, boolean operators AND and OR are supported.

Priority—Mail is only sent to the assignees/CCs when the Issue's priority falls into the range chosen here.

Status—Mail is only sent to the assignees/CCs when the Issue's status matches one of the statuses defined here. Multiple statuses can be selected (hold down the CTRL key to highlight multiple statuses).

NOTE

The email notification rules selected here can be overridden for a particular Issue by the Agent assigned to that Issue (upon manual edit). These are simply defaults.

In addition to the rules specified above, three other rules can be defined:

Send Email Notification for Every Issue—Email addresses entered here receive email notification for every change to every Issue in the current Workspace, i.e., any time any Issue is created or edited in any way. This is in addition to the criteria chosen above. Multiple email addresses should be separated by a space. If an agent account is removed but that Agent's address is still in this list, that Agent's address will continue to receive emails from BMC FootPrints Service Core.

NOTE

The email format used for this feature is that chosen for assignees under Contents of Mail.

New Customer Request Notification—You can exclude email responses for customer requests or, alternatively, send email notification to one or more Workspace members whenever a customer submits a new Request. To prohibit email from being sent when customer requests are submitted, select the Don't send email for each new Customer Request radio button. To enable notification, choose Send email to the following users for each new customer Request submitted radio button and highlight the user's name in the list. Hold down the CTRL key to highlight multiple users. If an agent's account is removed, you must also remove that agent from this list in order to stop the sending of customer request notifications.

NOTE

The email format used for this feature is that chosen for assignees under Contents of Mail.

Creating Solutions from Issues—When a new Solution is created from an existing Issue, users associated with the originating Issue are emailed by default. If Don't send mail to addresses from original Issue is selected, these users are not copied on the Solution.

Append GMT offset to timestamps—Enable this feature to show the Greenwich Mean Time offset to the timestamp in the email.

After you finish updating the Mail Preferences page, you must enter your password and click **GO** to activate the changes.

Default Email Address for Internal and External Users

In BMC FootPrints Service Core, email notifications to internal and external users are handled differently:

Internal Users—By default, the email address entered when the user was created on the Add User screen is used for email notification for the user. Two additional email addresses can be defined for pager and other wireless services on the Edit Agent page (or on the user's My Preferences page). Users can change their default email address or choose to have mail sent to more than one address on the My Preferences page as well.

Customers—Outgoing email to customers on their own Requests uses the Email address field defined in the Address Book. This field is mandatory if customers are to receive email and must be of type Email. Customers receive updates regarding their Requests automatically, based on the rules defined by the Workspace Administrator.

Escalation Email Notification

The BMC FootPrints Service Core Advanced Escalation feature also supports email notification for escalated Issues. This email is handled separately from regular email notification. Refer to Escalation for more information.

System Email Notification Preferences

System Email Notification Preferences

System email notification settings are configured under Administration | System | Features | Email | Email Notification.

Enable Email Notification—When disabled, no email notification is sent by BMC FootPrints Service Core. This overrides any Workspace settings or user preferences that may be set. This option is useful if you can't connect to a mail server.

SMTP Server—Specify the SMTP server (Windows only).

SMTP Server Port—Define the port number for the connection.

SMT Server Encryption Method—Select the encrypted connection type. Options are **No Encryption**, **TLS** (default port 587), and **SSL** (default port 465). By default, the secure SMTP option is disabled. Refer to the Supported Platforms web page for a list of the secure SMTP servers that are supported.

Default Reply Address—This is the address that is displayed in the From and **Reply to** fields of all outgoing notification email sent by BMC FootPrints Service Core. Any direct replies to BMC FootPrints Service Core notification email go this address. Individual replay addresses can also be specified for individual Workspaces. Refer to Incoming Mail Setup for additional information.

Default "From" Name—Specify a name here for mail sent by BMC FootPrints Service Core. This is the name displayed in the From field of email notification. By default, this is BMC FootPrints Service Core. This name can be changed, for example, to your company or department name. Different From names can be defined for individual Workspaces. Refer to Incoming Mail Setup for additional information.

Default "Domain" Name—Specify a domain for mail sent by BMC FootPrints Service Core. This is the email domain that is added on to email addresses where the user has no domain specified. For example, if customers are configured to only enter their email ID names (e.g., jsmith) and your organization's email domain is @widget.com, enter widget.com here and BMC FootPrints Service Core appends that domain when sending an email to a user, e.g., jsmith@widget.com.

Default Sendmail Command (UNIX/Linux only)—Specify a sendmail command here for mail sent by BMC FootPrints Service Core (UNIX and Linux only). This is the sendmail command BMC FootPrints Service Core uses if you use something other than the Unix/Linux sendmail program for email processing.

Pager/Wireless Servers—Define certain email domains that should receive shortened email notification. Enter the email domains that BMC FootPrints Service Core should recognize for sending mail to wireless devices. Any email notification that goes to these domains follows the email format defined on the Email Preferences page (in Workspace Administration) for pager/wireless. Enter a space-separated list of domains, e.g., palm.net skytel.net motorola.com.

Send Introduction Email—If this option is selected, users can receive an introductory email the first time a notification email is sent to their email address. For more information, see Formatting Introduction Email

Mass Mail—The Mass Email feature allows you to send a broadcast email to contacts in the Address Book. Mass Mail Settings

Once you finish updating the Mail Preferences page, enter your password and click **GO** to activate the changes.

Incoming Email Management

About Incoming Email Management

BMC FootPrints Service Core Incoming Email Management can be configured to process incoming email submissions. Users can create Issues, update Issues, and submit queries via email. At least one POP or IMAP email account must be created on your email server for the exclusive use of BMC FootPrints Service Core. One email account can also be specified for each Workspace. This section describes how to set up the incoming email feature for Windows and UNIX.

Incoming email is configured for the entire system by selecting Administration | System | Features | Email from the BMC FootPrints Service Core Toolbar. Some incoming email preferences can also be configured per Workspace.

The following options are covered in this topic:

System Incoming Email Preferences

- System Incoming Email Preferences
- Incoming Email Setup
- Other System Incoming Email Preferences
  - Customer Response Flag
  - Incoming mail size
  - Recovering Lost Incoming Email

Workspace Incoming Email Preferences

- Workspace Incoming Email Preferences

System Incoming Email Preferences

System Incoming Email Preferences

Configure Incoming Email—Define email account(s) for processing incoming email submissions from users (see below).

Debug Incoming Mail—This option enables incoming email debugging, allowing BMC Support to assist you in finding configuration or other incoming email problems.

Select Error Notification Address—When an incoming mail processing error occurs, an error message is sent to the submitter of the email. In addition, an email is sent to a System Administrator and the text of the original submitted email is saved to a file on the server. In this section, choose which administrator should receive these emails. If Ignore Errors is selected, an error message is still sent to the submitter, but no error message is sent to a System Administrator and the mail is not saved.

Mail Filters—Optionally create a list of phrases which are used to reject incoming email messages, as in "vacation" messages. For more information, refer to Configuring Vacation Mail Filters.

Spam Catcher—The system can check for email messages that may be a result of Spam mail, or an email loop between BMC FootPrints Service Core email notification and an automated email daemon. The Spam Catcher integrates the BMC FootPrints Service Core server with SpamAssassin spam blocker. Instructions for installing SpamAssassin on Windows or links to commercial products using SpamAssassin on Windows are available at http://wiki.apache.org/spamassassin/UsingOnWindows. SpamAssassin is available on UNIX/Linux at http://spamassassin.apache.org/. The feature catches and deletes spam email from the mailbox and logs information about the deleted email to the system log as an 'Info' type message.

After you finish updating the Mail Preferences page, enter your password and click **GO** to activate the changes.

Incoming Mail Setup

Incoming Mail Setup

Incoming email must be configured before users can submit Issues via email, update Issues via email, reply to Issues via email, or submit email queries to the database. At least one POP3 or IMAP email account must be set up for the exclusive use of BMC FootPrints Service Core. Otherwise, BMC FootPrints Service Core deletes the mail from the POP3 account, but won't enter it as a request and the mail is lost.

To configure email, select Administration | System | Features | Email from the BMC FootPrints Service Core Toolbar. In the section entitled Incoming Mail Setup Feature, click **Add**. One email account can be configured for whole system or individual email accounts can be associated with each Workspace on this page.

Configure Incoming Email

Create a mail account on your mail server. This must be done on your mail server and not from within BMC FootPrints Service Core. For example, you could make a new mail account called support on your mail server. In this example, all mail sent to support@myserver.com is automatically processed by BMC FootPrints Service Core.

Ensure that you have created at least one customer account. Incoming mail from external users does not work without this.

Select Administration | System | Features | Email from the BMC FootPrints Service Core Toolbar.

In the Incoming Email section, click the Configure Incoming Email button.

Click **Add** on the Incoming Email Setup for BMC FootPrints Service Core page.

Select the mail retrieval protocol: IMAP (Internet Message Access Protocol), POP (Post Office Protocol), or IMAP/SSL (IMAP/Secure Socket Layer).

NOTE

Client certificates are not supported. BMC FootPrints Service Core supports SSLv2 and SSLv3.

Enter the POP/IMAP mail server name for your organization either as a DNS name or IP address, e.g., mail.myserver.com or 123.33.44.55.

Enter the support email account name, e.g., support.

IMPORTANT

Do not enter your own email account in this field. Any email sent to the account specified here is processed by BMC FootPrints Service Core as incoming email. If you enter your own email address, any email sent to your account, regardless of the source, will be processed by BMC FootPrints Service Core automatically.

Enter the password for the email account (must be entered twice).

Enter the default reply address for this account. We recommend entering the full email address of the account specified above, e.g., support@myserver.com.

Enter the From name for this account. This name is used to populate the From of email notifications, e.g., BMC FootPrints Service Core or Widget Support.

Select a Workspace for this account. This is the default Workspace for incoming email for the account specified above. If this is the only account defined for incoming email for BMC FootPrints Service Core, then all email goes into the Workspace selected here (unless the Workspace is defined in the email subject in the form PROJ=n).

Enter your password and click **Save**.

Additional accounts for other workspaces can be specified following the instructions above.

In order for incoming email to work properly, you must open the TCP Port associated with the mail server and provide the Port numbers for IMAP and POP3. IMAP needs Port 143 and the POP3 server needs Port 110.

Tip for configuring workspace email notification without an incoming email account

NOTE

Incoming and Outgoing Email are processed by the BMC FootPrints Service Core scheduling service. On Windows, FPSchedule.exe is automatically set as a service on the BMC FootPrints Service Core server. This service handles incoming email, outgoing email notification, escalations, mass emails, and scheduled reports.

Editing and Deleting Email Accounts

Incoming email accounts can be changed and deleted from the Incoming Email Setup screen, which is accessed by selecting Administration | System | Features | Email from the BMC FootPrints Service Core Toolbar and then, in the Incoming Email section, clicking the Configure Incoming Email button.

To change the properties of an account, click **Edit** for that account and change the values as desired.

To delete an account, click **Delete** for that account. The account is deleted. For UNIX, the corresponding .forward file must also be deleted.

Other System Incoming Email Options

Customer Append Flag

When a high volume of BMC FootPrints Service Core notification email is being sent, it may be desirable to flag email notifications that are generated by a customer responding to an email. This can be accomplished with the following change:

Edit the c:\FootprintsServiceCore\cgi\MRlocalDefs file (using WordPad).

Add the following line to the file:

```
$CUSTOMER_PREPEND_EMAIL_SUBJECT = 'Customer Response:';
```

Save the file, but do not save it with a .txt extension.

Now all email notifications received by Agents and administrators that are the result of a customer response contain the words Customer Response in the subject of the mail.

Size Limits for Incoming Email

The size of incoming email, and email attachments, can be limited. This limit can be kept low to handle possible email loops that may occur when an assignee's vacation message is enabled. The default limit is 102400 bytes.

To set limits for incoming email:

Select Administration | System | System Preferences from the BMC FootPrints Service Core Toolbar.

To change the size limit for emails (not including attachments), enter a new value in the Maximum Incoming Body Size field (in bytes).

After changing the value, click **Save**.

File attachment sizes can be restricted under System | Features | Attachments.

Recovering Incoming Email

If BMC FootPrints Service Core processes an incoming mail and fails while writing to the database, it generates an error message similar to the following (the message is saved in the system log and possibly also emailed to the System Administrator):

> An email message submitted to BMC FootPrints Service Core by mmarrison@test.com was not posted, due to an error code of '78' . The sender has been notified. The contents of the email have been saved for you in the file:
>
> /usr/local/footprintsservicecore/temp/IncomingMailErr_3511

Once you have resolved the problem and BMC FootPrints Service Core is able to handle incoming mails again, you can reintroduce the lost messages to BMC FootPrints Service Core manually by following these steps:

Open up a command prompt.

If your are running Windows, add perl to your path:

```
set path=c:\FootprintsServiceCore\bin\perl\bin;%path%
```

Once you have completed these steps, perform the following:

On UNIX:

```
/usr/local/footprints/cgi/MRincoming.pl < /usr/local/footprints/temp/IncomingMailErr_3511
```

On Windows:

```
perl c:\FootprintsServiceCore\cgi\MRincoming.pl < c:\FootprintsServiceCore\temp\IncomingMailErr_3511
```

Workspace Incoming Email Preferences

Workspace Incoming Email Preferences

Most incoming email options are defined by the System Administrator. There are a few options that can be configured on a per Workspace basis by the Workspace Administrator. They are found under Administration | Workspace | General | Mail Preferences | Incoming Email.

Create Issues—Determine whether customers and/or agents can create new Issues via incoming email.

Edit Issue Via Email—By default, only users associated with Issues and administrators can update Issues via email for a Workspace. This includes the assignees, the contact, and CCed users for the Issue. Alternatively, you can limit updates to only associated non-agent users (the contact and CCs). You can override the limitations by selecting Anyone can update any Issue via email for this option. Any user can then update an Issue via email for this Workspace.

Security Code—In a workspace where you do want your agents to be able to reply to issues, and you don't want to take away meaningful functionality, the Security Code option adds an extra barrier to anyone trying to spoof an agent's address. When enabled, every notification mail and escalation mail will have a code added to the end of the email (example, FPCODEX5RGtwlYMiPzfz2n6zpY3kq21u4). If this option si enabled, edits via incoming mail are rejected unless they contain the security code. There is a 7-day grace period after enabling this option, during which BMC FootPrints Service Core accepts replies without the code. This is to help ease the transition for someone who wants to enable it in a production system. If you need a longer period of time for the transition period, contact support for instructions. This option is disabled by default.

Email Queries—These options provide a way for administrators to completely shut off incoming email functionality for agents and/or customers on a per workspace basis.

Mandatory Fields for Incoming Email—By default, all users, including Agents, administrators, and customers, must include mandatory Workspace field data in incoming email submissions. Agents and administrators must include both internal and public mandatory Workspace field data, while customers must include public mandatory Workspace field data.

This option allows users to submit email to BMC FootPrints Service Core without mandatory field data while still having to enter the data when submitting an Issue via the web interface. In this way, customers are free to send free-form emails to BMC FootPrints Service Core to submit a Request, but must still give more detailed data when filling out a Request via the Customer Self-service web interface. There are three choices for this option:

Mandatory fields are mandatory for everyone—This is the default. Users must include mandatory Workspace field data (in the form *fieldname=data* or using the HTML Form) in all incoming email submissions.

Mandatory fields for agents, optional for customers—If this option is selected, internal (Agent and administrator) users are still required to include both public and internal mandatory field data when submitting an Issue via email, but customers can submit Requests via email with missing mandatory field data. We recommend this option if you would like to make it easier for customers to submit their Requests via email, but require internal users to give more detail. All users must still fill out mandatory fields when using the web interface.

Optional for everyone—All users, including Agents, administrators, and customers, can submit new Issues via free-form email to BMC FootPrints Service Core without including any field data. All users must still fill out mandatory fields when using the web interface.

Auto Assign Agent—If enabled, an Agent responding to a new customer Request via email is assigned to that Request automatically. This does not apply to Issues already assigned; it only applies to new Requests submitted by customers via email or via the Customer Self-service web interface.

Change Sender—If allowed an incoming email can substitute a sender different than the actual sender of the email.

Auto Select Status—The status of an Issue can be changed automatically when an Agent or customer responds to an Issue via email. There are four options:

Agent Response—Select the status that customer Requests should be changed to if an Agent responds via email. This feature only applies if the Auto Assign Agent feature is enabled.

Auto Assign Status—The status of any Issue can be changed automatically when an Agent or customer responds to the Issue via email.

Customer Response—Select the status that Issues should be changed to automatically when the customer responds via incoming email.

Responding to Closed Issues—Closed Issues can be handled separately from the Customer Response option above. Customer responses to closed Issues can remain closed or can be changed to a different status.

Field Permissions—Select which fields agents and customers can view and write via incoming mail. Per-role advanced field permissions are not used for incoming mail.

After you have finished updating the Mail Preferences page, enter your password and click **Save** to activate the changes.

Email Filters

This feature allows you to block BMC FootPrints Service Core from sending and receiving email from certain email accounts or domains. You can use this feature to prevent from sending mail to or receiving mail from a Mailer Daemon account, block known spammers, and temporarily block email for a BMC FootPrints Service Core user who is on vacation. Filters can be created per Workspace and defaults can be set for the entire system.

There are five options:

No Accept—Do not accept email submissions from the specified addresses or domains.

Always Accept—Always accept email submissions from the specified addresses or domains. Addresses and domains on this list have highest priority and bypass internal spam checks.

No Send—Do not send email notifications to the specified addresses or domains.

Only Accept—Only accept email submissions from the specified addresses or domains.

Only Send—Only send email notification to the specified addresses or domains.

To create an email filter:

To:

Create a Workspace filter, select Administration | Workspace | General | Mail Preferences | Email Filters.

Create a system filter, select Administration | System | Features | Email | Email Filters.

Select one of the four filter types using the radio buttons below the text box.

Enter the address or domain in the text box.

The following rules apply:

One address per line, with nothing else on that line.

Lines containing a # sign and empty lines are ignored.

Spaces are ignored.

Incomplete addresses can be used. For example, you can user yourserver.com. BMC FootPrints Service Core checks if the address contains the partial address or domain name specified.

Examples:

To block a domain:

yourserver.com

To block a particular address:

jsmith@yourserver.com

To block any address with the word mailer in it:

mailer

Use the radio buttons to switch between the different filter types. Your changes are saved.

When you are finished, click **Save**.

Workspace filters override system filters for that Workspace.

If a user's email address was entered to block mail while on vacation, set a reminder for yourself to remove the filter when the user returns.

Using BMC FootPrints Service Core Email

User Guide to BMC FootPrints Service Core Email

The Email Management feature gives you many of the capabilities of email management tools to use in conjunction with the web interface. The system can send customized email notifications to users and process incoming email submissions and updates. As an Agent user in BMC FootPrints Service Core, you can send email updates to users containing your latest comments about an Issue. You can also submit and update Issues via email and query the database from email. The available features depend on the options enabled by your BMC FootPrints Service Core administrator.

Topics in this section:

Using Email Notification

Using Incoming Email

Email Notification

Email Notification

The BMC FootPrints Service Core email notification feature allows the Agent to email other users about Issues from within BMC FootPrints Service Core. The administrator can configure rules to control when email is sent for an Issue by default. As an Agent, you can use the defaults or override them to send email to other users about an Issue.

This topic covers the different kinds of email notification.

Create/Edit Issue Email Notification

Escalation Email

Customer Requests

Create/Edit Issue Email Notification

The Send Email To section on the Create Issue and Edit Issue pages controls who receives email notification about the Issue. There are three parts to this section:

Assignees—If this is checked, the assignees of the Issue receive email notification for this submission.

Contact—If this is checked, the contact for this Issue receives email notification for this submission. This is based on the customer email address listed in the contact information for this Issue. If there are multiple email addresses defined for the contact, a link labeled Select contact address is displayed. This allows you to select the email address to which the notification is sent. By default, it goes to the primary email address (as defined by the Workspace Administrator) unless the Issue was submitted by the customer from a

secondary email address, in which case the default behavior is to send the notification to the secondary email address.

CC—To copy someone on this Issue, click the link for CC. A pop-up window is displayed. Enter the email address(es) to copy in the box provided (separated by spaces), select from the list of Agents, or click Select Contact to select an email address from the Address Book (does not affect the customer contact for this Issue). There are two options for CCs entered here:

All Changes—These users receive an email notification for each change to the Issue (unless they are removed during a later update).

Issue Creation Only/One-Time—These users only receive an email update for this update or submission.

Send Survey To Customer—If you select this checkbox, a BMC FootPrints Service Core survey is sent to the customer for this issue (the person listed as the Contact). If the administrator has set a rule governing frequency (i.e., send a survey to a particular customer no more than once every X months), this checkbox overrides that rule. This function is obedient to all other survey rules.

NOTE

If the Agent adds a CC or CCs to an Issue upon creation, the CCs are emailed a notification. However, that CC does not remain part of the Issue in subsequent edits, so if the Agent edits the Issue and a notification is sent out when the edited Issue is submitted, the CC(s) would have to be added again if the Agent wanted them notified. In addition, the CC(s) do not show up in the notification email to the contact. Therefore, if the contact replies to the notification email, a copy of the reply is not sent to the CC(s).

The BMC FootPrints Service Core administrator can define rules for when email should be sent, what the emails contain, and which user types receive updates (e.g., Agent and customer). The check boxes for Assignees and Contact are checked or unchecked based on these rules. They may change status based on the status or priority chosen on the Create Issue page. To override the default, click the checkbox to check or uncheck it.

You may receive these email notifications for various circumstances:

You created an Issue and assigned yourself.

Someone else assigned you to an Issue.

You were assigned automatically to an Issue by a rule.

An update is made to an existing Issue to which you are assigned.

You were copied (CC) on an Issue.

If you are assigned to an Issue and the Assignees checkbox is checked, you receive the email notification even if you are making the update yourself.

Email notifications look different depending on how the administrator configured the email templates. Different templates can be made for different types of users (Agents, customers, etc.)

Receiving Escalation Email

The administrator may have configured special rules to escalate certain Issues using BMC FootPrints Service Core Escalation feature. For example, there may be a rule that automatically raises the priority of an Issue and assigns it to a particular user based on the customer's service level. You may receive a special escalation email based on one of these rules.

NOTE

Escalation emails may also be sent to your wireless device. The administrator usually configures these to include minimal text.

Customer Requests

You may receive email notification when a customer registers a new Request to the system. These emails are similar to the regular email notification and contain all of the information about the user's Request. You can tell that it is a new submission from a user because the status is Request and no assignees are listed. Contact your BMC FootPrints Service Core administrator for instructions on how to process customer Requests.

Incoming Email

Using Incoming Email

The BMC FootPrints Service Core incoming email feature allows users to submit and receive information to and from the database without logging into BMC FootPrints Service Core. Your BMC FootPrints Service Core administrator may have configured BMC FootPrints Service Core to receive email from a certain address, e.g., support@mycompany.com. This topic covers the types of supported incoming email.

NOTE

Contact your BMC FootPrints Service Core System or Workspace Administrator to find out the email account designated for incoming submissions to BMC FootPrints Service Core for your Workspace.

Submitting Issues via Email

Updating Issues via Email

HTML Form

Email Queries

Alternate Submitter via Email

Email for Customers

Submitting Issues via Email

If incoming email is configured, both Agents and customers can submit Issues to the system via email. Information can be included in the subject and body of a regular email or a form can be requested (refer to HTML Form). Each Workspace can have its own email address (support@mycompany.com, development@mycompany.com, etc.)

In addition to configuring an incoming email account for the Workspace, the Workspace Administrator must specifically allow Request and Issue creation through email. Otherwise, only updates to Issues are allowed through the email interface. This option is enabled by default.

To allow incoming email submission:

Select Administration | Workspace |Mail Preferences.

Under Incoming Email Submissions, check the boxes to allow customers and/or Agents to create Issues via email.

As an Agent, the following information can be included in an email to BMC FootPrints Service Core. Please check with your administrator for the correct address.

When Agents and administrators send email to the designated BMC FootPrints Service Core account, the email becomes an Issue. BMC FootPrints Service Core detects that the user is an Agent/administrator by the email address and automatically assigns that user to the Issue. Submissions by Agents/administrators are formatted the same way as incoming email from customers.

Subject—The subject of the email becomes the Title of the Issue.

Body—The body of the email becomes the Description.

Workspace fields—You must include data for all mandatory Workspace fields. If you email BMC FootPrints Service Core without this information, you receive an error notification email with instructions on getting Workspace field information. See below for the format.

Address Book fields—You must include data for all mandatory Address Book fields. The format is described below.

Email address—Your email address is recorded as the submitter of the Issue. By default, the submitter is assigned to the Issue. If auto assignment or escalation is configured, other users may be assigned by the system in addition to or instead of the submitter. To designate a customer or other user as the submitter of the Issue, include the email address in the body of the email in the form: sender=jsmith@widget.com.

Priority—The default priority is automatically assigned to all new email submissions. To define a different priority, include the line Priority=*X* on a separate line in the body, where *X* is the priority.

Status—By default, Issues submitted via email by Agents get a status of Open. To define a different status, include the line Status=*X*, where *X* is the status.

Assignees—To define assignees, include the line Assignees=*X*, where *X* is the user ID of the assignee. For complete details on using this function, refer to Updating Issues via Email.

To submit Workspace or Address Book field information:

In the body of the email, include a line for each Workspace field, Address Book field, Priority or Status field to be submitted.

The Workspace field data must be in the form:

fieldname=data

For example, if the name of the field is Problem type, and the data is Software, then the line should be:

problem type=software

NOTE

By default, BMC FootPrints Service Core assumes that the data is contained on one line only. For multi-line data, the form is:

fieldname=data
data
data
END *fieldname*

To specify a value for a checkbox field, use the words specified for the checkbox, i.e., On and Off (which default to On and Off, but can be changed). For example, if you have a field called Customer Satisfied and the checkbox values are Yes and No, to indicate that the checkbox is checked, include Customer Satisfied=Yes in the body of the email.

Data submitted to checkbox or multi-select fields is validated against the permitted data values for those fields; incoming emails are rejected if the data values are not in the list. example: the field 'Color' has values 'red', 'blue' and 'green' in the workspace. If the incoming email has a line of 'Color = black', this email will be rejected.

Multi-select fields with multiple values must be semi-colon delimited. For example: 'Colors i like = red;green;blue'

By default, the Issue is entered into the default Workspace for incoming email or to the Workspace defined for that particular email account. To submit an Issue to a different Workspace, the following line must be included in the subject of the email:

PROJ=*n*

where *n* is the Workspace number. You can obtain the Workspace number by submitting the listprojects email query.

NOTE

When populating date and date/time fields in email, the field data should be provided according to the user's date format: American, European, or ISO. If the user has not set a format for himself or herself, then the data should be provided in the format of the system default. For date/time fields, enter the time in the form hh:mm. That is, after the date is entered (e.g., 03/04/2016), leave a space and then enter the time (e.g., 03/04/2016 14:45). When submitting a time via email, it is always submitted using a 24-hour clock.

Incoming email requests are checked for errors by BMC FootPrints Service Core. Data that is incorrectly formatted is not lost; it is added to the Description. For example, if the name of a Workspace field is misspelled, that line is placed in the Description of the request. BMC FootPrints Service Core also checks for invalid data. For example, if text is submitted for an integer type field, BMC FootPrints Service Core does not create the request and replies to the user with an error message email.

Updating Issues via Email

In addition to creating new Issues, existing Issues can be updated via email. You can respond to a BMC FootPrints Service Core email notification and have your response threaded to that Issue. Fields like Priority, Status, and custom fields can be updated as well.

BMC FootPrints Service Core automatically appends incoming email to the correct Issue in the correct Workspace. The Workspace ID number and Issue number are included in the subject of all BMC FootPrints Service Core notification email. You can reply to the mail, leaving the subject intact (and including new information at the top of the email), and the reply is automatically appended to the correct Issue in the correct Workspace. In this way, an Agent and customer can have an email conversation that is seamlessly tracked by BMC FootPrints Service Core.

To respond to an email notification:

In your email reader (Microsoft Outlook, Lotus Notes, etc.), reply to a BMC FootPrints Service Core email notification.

Type your response above the line that states **When replying, type your text above this line**. In this way, BMC FootPrints Service Core only takes the latest information that you add, eliminating duplication in the Description. You must enter your reply above this line. BMC FootPrints Service Core does not append anything below the line to an Issue.

Do not touch the subject of the email; it contains important information about the Issue and Workspace IDs and is needed by BMC FootPrints Service Core to update the correct Issue.

To update fields (optional):

Update priority—Must be in the form Priority=*n* (included in the body of the email), where *n* is the new priority.

Update status—Must be in the form Status=x (included in the body of the email), where *x* is the new status.

Update workspaces fields—Must be in the form FieldName=data (included in the body of the email), where *FieldName* is the name of the field and *data* is the field data.

Update Address Book fields—Address Book field data can be included in email submissions in the form FieldName=data (included in the body of the email), where *FieldName* is the name of the Address Book field and *data* is the field data.

Subject—Any new information added to the subject of the mail will be ignored. Do not change the Issue and Workspace ID information in the subject, or the Issue will not be updated properly or at all.

Update assignees—Add assignees to the assignees list using the syntax:

assignees=+*user_ID*

or leave out the plus sign and use:

assignees=*user_ID*

to add an assignee. Multiple assignees can be added by leaving a space between the user IDs, for example:

assignees=*user_ID1 user_ID2 user_ID3*

Subtract assignees using a minus sign, as in:

assignees=-*user_ID*

Subtract multiple assignees by leaving a space between user IDs, as in:
assignees=-*user_ID1 -user_ID2 -user_ID3*
You can also add and subtract assignees in the same email as in the following example:
assignees=+*user_ID1 -user_ID2 +user_ID3*
where the user IDs user_ID1 and user_ID3 are added to the Issue as assignees and user_ID2 is removed from the Issue as an assignee.
Add or subtract teams using the same syntax as for individuals unless there is a blank space in the team name. If the team name contains a blank space or non-alphanumeric characters, enclose the team name or the string containing non-alphanumeric characters in double quotation marks. Please note that team names are case sensitive.
For example, to add *Team1* and *Team 3* and remove *Team 2*, the syntax might be:
assignees=*Team1* -"*Team 2*" +"*Team 3*"
You can also combine teams and individuals using the syntax described above.

Time tracking—You can add time to an Issue, set the billing rate for an Issue, and add a comment to Issue time tracking via email. If time tracking is not enabled for the workspace, the text will be processed as a normal description.

Time—Add time to an issue. Users can only enter a non-zero time value. The syntax for adding time to an Issue is as follows:

time=20

The above syntax would add twenty minutes to the time tracking on an Issue.

time=20m

The above syntax would add twenty minutes to the time tracking on an Issue.

time=1h

The above syntax would add one hour to the time tracking on an Issue.

time=1h 20m

The above syntax would add one hour and twenty minutes to the time tracking on an Issue.

Billing Rate—Set the billing rate for an Issue. This can be set as a value or as a description (refer to Billing Rates for more information). Only rates that are set for agents on the Edit Agents page can be entered here. Invalid rates are not accepted. The syntax for setting rate is:

time rate=44.50

The above syntax would set the billing rate to 44.50 per hour of the currency for the Workspace.

time rate=$44.50

The above syntax would set the billing rate to $44.50 per hour. You can use any appropriate currency symbol.

time rate=*description*

The above syntax would set the billing rate to a description that was set by the administrator.

Comment—Enter a single line of text as a time tracking comment. If the mail client wraps it to multiple lines, the other lines will be lost in the time tracking comments, but the rest of the comment will be included as part of the description. The syntax for entering a time tracking comment is as follows:

comment=*single_line_of_text*

Combination of time and rate—You can combine an entry to enter both a time and rate for an Issue as in the following example:

time=$44.50, 1h 30m

Click **Send** to send the update to BMC FootPrints Service Core. The Issue is updated within a few minutes. If the email rules are configured to send email updates to the customer and/or assignees, email notification of your changes are sent.

NOTE

You can only update Issues to which you have “write” access. These include Issues to which you are assigned if you are an Agent or all Issues if you are an administrator. If CC updates are allowed, then you can update the Description of any Issue even if you are not assigned as an Agent. If the update is not allowed, you receive an error notification via email.

Appending Description

Customer, Agent, and Administrator users can append a new description to any existing Issue to which they are assigned.

The formatting of the email is as follows:

Subject—The subject of the email must include the phrase:

ENTRY=*n*

where *n* is the Issue number. Anything else in the Subject is ignored.

Body—The body of the email becomes the new description.

If the user is not assigned to the Issue, he/she receives an error notification email, and the description is not appended.

HTML Form

An HTML form containing the appropriate fields for a particular Workspace and the user’s permission level can be obtained by sending an email to the incoming email account for that Workspace with the subject: HTML form. This allows any user with access to a Workspace to submit an Issue, without logging into BMC FootPrints Service Core, from any email package that supports HTML, including Microsoft Outlook Eudora, Netscape Mail, Yahoo Mail, etc.

An HTML form is automatically generated by BMC FootPrints Service Core with the correct fields for each Workspace. There is no need for the administrator to create these forms. A different form is sent to Agent and customer users (identified by their email address).

For an agent to receive the customer version of the form, for example, in order to post the form for customers on a web site, enter HTML Form Customer in the subject line rather than HTML Form.

To obtain a form for a different Workspace (you must belong to the Workspace), send the HTML form request to the email account for that Workspace, e.g., support@widget.com or sales@widget.com, etc. If there is only one email account for the entire system, you can include the Workspace ID in the subject of the request, e.g., .HTML form PROJ=5

To use the form, simply fill out the fields and click the SUBMIT button.

NOTE

Field dependencies enabled for the Workspace do not appear in the email form. All Workspaces fields are displayed.

Email Queries

To receive information from BMC FootPrints Service Core via email, several email queries are available. To query BMC FootPrints Service Core via email, send an email to the incoming email account for the Workspace in question using one of the queries described below in the subject line.

General Queries

Help—Returns this section of the help documentation (i.e., the section you are currently viewing).

listworkspaces—Returns a list of Workspace names and corresponding Workspace numbers of all the Workspaces to which you belong.

Queries to the Database

The following queries return data for the default Workspace for incoming email as defined by the System Administrator. If different email accounts are defined for each Workspace, a query sent to a particular Workspace's email account returns information based from that Workspace.

To return data for a different Workspace to which you are assigned where that Workspace does not have its own email account, the line Workspace=*n* can be placed in the body of the email, where ***n*** is the Workspace number. It can alternatively be included in the subject line of the email in the form Proj=*n*. The Workspace number can be retrieved with the listworkspaces query. All searches are case-insensitive.

The following queries can be performed by placing the query in the subject of an email that is sent to the BMC FootPrints Service Core incoming email account:

getMine—Returns a list of your assignments.

Getschema—Returns the Workspace field schema of a Workspace. This describes the Workspace fields specific to the Workspace.

SearchFAQ "keyword"—Returns solutions based on a keyword found in the Title or Description, e.g., SearchFAQ printer.

getTicket "number"—Displays the details of an existing Issue based on the Issue number (you must be assigned to the Issue), e.g., getTicket 235.

getData "keyword"—Returns database Issues based on a keyword found in the Title or Description, e.g., getData Exchange. This is for internal users only. External users receive Solutions based on the keyword.

HTML form—Returns an HTML form with all fields for Issue submission for a Workspace, e.g., HTML form or HTML form PROJ=5.

Alternate Submitter via Email

An Agent or administrator may need to submit an Issue for another user via email. There are two steps to doing this.

Select Workspace Administration from the BMC FootPrints Service Core toolbar, then select **Mail Preferences**. In the **Incoming Email** section of the Mail Preferences page, set the **Change Sender** option to **Allowed**.

Include an extra line in the body of the email:

sender=jsmith@widget.com

When the line is included in an incoming email submission, the email address becomes the submitter of the Issue, regardless of the true sender.

Email for Customers

If the administrator has enabled the incoming email feature, customers can submit Requests without logging in to BMC FootPrints Service Core. To do so, a customer sends an email to a BMC FootPrints Service Core email account and it is processed as if it had been submitted via the web. Information can be included in the subject and body of a regular email or a form can be requested (see below).

The field breakdown is as follows:

Subject—The subject of the email becomes the Title.

Body—The body of the email becomes the Description.

Workspace fields—Customers are only required to include Workspace field information for fields that have the permission status of public mandatory. If a customer emails BMC FootPrints Service Core without this information, the customer receives an error notification email that includes instructions for obtaining Workspace field information.

Email address—The user's email address becomes the default submitter. Customers who submit a Request via email are also automatically linked to their Address Book contact information based on the submitter's email address. BMC FootPrints Service Core makes the link and places the Address Book data into the Issue record.

Auto assignment—The BMC FootPrints Service Core auto assignment feature allows you to specify users to be assigned automatically to Issues based on a custom choice field. New Issue and Request submissions via email can be auto assigned by including the choice field data in the body of the email submission in the form *FieldName=data*, where *FieldName* is the name of the choice field and *data* is the field data. The user(s) associated with the specified choice are automatically assigned to the Issue and receive notification email. For information on configuring auto assignment, refer to the Workspace Administration topic on "Auto Assign".

The default priority is automatically given to all new email submissions—Refer to Priorities for additional information..

Email addresses copied (CC) on an incoming email submission to BMC FootPrints Service Core are automatically added to the permanent CC list for that Issue. The Agent or administrator who takes the Issue can remove the CCs.

To submit workspace or Address Book field information:

In the body of the email, include a line for each Workspace field to be submitted.

The Workspace field data must be in the form:

fieldname=data

For example, if the name of the field is Problem type and the data is Software, the line should be:

problem type=software

NOTE

By default, BMC FootPrints Service Core assumes that the data is contained on one line only. For multi-line data, a single backslash (\) must be added to the end of each line.

By default, the request is entered into the default Workspace for incoming email or to the Workspace defined for that particular email account. To submit a request to a different Workspace, the following line must be included in the body of the email:

PROJECT=*n*

where *n* is the Workspace number. You can obtain the Workspace's number by submitting the listprojects email query.

Incoming email requests are checked for errors by BMC FootPrints Service Core. Data that is incorrectly formatted is not lost, but instead is added to the description. For example, if the name of a Workspace field is misspelled, that line is placed in the description of the request. BMC FootPrints Service Core also checks for invalid data. For example, if text is submitted for an integer type field, BMC FootPrints Service Core does not create the request and sends the user an error message email.

Once a Request has been submitted successfully via email, it works the same as a Request submitted via the BMC FootPrints Service Core interface. Agents can take the Request and turn it into an Issue or the Workspace Administrator can assign it to one or more Agents.

Updates from Customers

Customers can also update an Issue via email. To reply to a **FootPrints Service Core** email notification:

In your email reader (Microsoft Outlook, Lotus Notes, etc.), select Reply to reply to a **FootPrints Service Core** email notification.

Type your response above the line that states When replying, type your text above this line. In this way, BMC FootPrints Service Core only takes the latest information that you add (eliminating duplication in the Description). BMC FootPrints Service Core does not append anything below the line to an Issue.

Do not change the subject line of the email in any way; it contains important information about the Issue and Workspace IDs and is needed by BMC FootPrints Service Core to update the correct Issue.

Click Send to send the update to BMC FootPrints Service Core. The Issue is updated within a few minutes. If the email rules are configured to send email updates to customers and/or assignees, email notification of your changes is sent.

NOTE

When appending to an existing Issue, the BMC FootPrints Service Core incoming email feature only takes the latest information from a reply (eliminating duplication in the description).

The message:

When replying, type your text above this line.
----

appears in every BMC FootPrints Service Core notification email. Users must enter their reply above this line. BMC FootPrints Service Core does not append anything below the line to the Issue.

Password Changes and Password Lockout Email Notification

Password Change Notification

If an email user's password is changed by the system administrator, an email notification of the change is sent to the user. The following is an example of a typical email message to a user whose password has changed:

To: George gsmith@nowhere.example
From: FootPrints Administrator
Subject: FootPrints Service Core password change <*user name*> <*Name of FootPrints Instance*>
Your <*Name of FootPrints Instance*> password has been changed on the following server: <*Server Name*> *date of change*.
If you did not expect this change please contact your system administrator to be sure the change was authorized.
The <*Name of FootPrints Instance*> system administrator making the change is:

sysadmin@somewhere.example

If an email user changes the password, a notification with different wording is sent to the user.

Password Lockout Notification

The following is an example of a typical email message to a locked out user:

To: George gsmith@nowhere.example

From: FootPrints Administrator
Subject: FootPrints Service Core Account Locked Error <*user name*> <*Name of FootPrints Instance*>
Repeated <*Name of FootPrints Instance*> login failures have locked your account.
Ask system administrator to unlock account or wait for the lock to expire.

Social Media

Broadcasting Issues to Social Media

Broadcast an Issue to Social Media

Agents can broadcast individual Issues from the Assignees and Notifications tab/section on the Create Issue and Edit Issue pages.

The instructions below describe how to broadcast an Issue to social media (Facebook and Twitter).

Notes:

Users will be able to view the first 2,048 characters of the Issue description on the Facebook post and 140 characters on the Twitter post.
Users will only be able to view Issue details once they access BMC FootPrints Service Core from Facebook if they are Global Issues or if they have rights to view the Issue. For more information, see Creating Global Issues.
If the BMC FootPrints Mobile license has been applied to your BMC FootPrints Service Core installation, customers will not be able to view Issue details in BMC FootPrints Service Core from mobile devices when clicking the BMC FootPrints Service Core links in social media posts. More more information on BMC BMC FootPrints Service Core Mobile, see Mobile Options.

Prerequisite

Your user role (e.g., Agent) needs permissions set up by the System or Workspace Administrator before you can broadcast Issues to social media. See Broadcasting Issues to Social Media (Overview).

Select the **Assignees and Notifications** tab/section on the **Create Issue** or **Edit Issue** page.
Select the **Social Media Broadcast** checkbox in the **Send Email to** section.
Click the **Save** button.
The Issue will be broadcast the next time the BMC FootPrints Service Core scheduler runs (approximately every three minutes).

Capturing Twitter Tweets to Create Issues (Overview)

BMC FootPrints Service Core is integrated with Twitter so that Agents can view Twitter messages ("Tweets") on their Homepage and create Issues from them. By default, all Administrators and Agents can customize their Homepages to capture Tweets. To do this, Agents customize their Homepage preferences to capture Tweets from specific Twitter users and display them on their Homepage Dashboard. They select a specific Tweet, click Create, and the Issue page us created. Agents can also configure the feature to capture specific keywords (search queries) in Tweets.

A benefit of this feature is if your organization's service desk has a Twitter account, when Twitter users mention your Twitter username or particular keywords in their tweets, your Agents can view the Tweets in real time on their BMC FootPrints Service Core Homepages. In this way, you and your Agents can proactively manage your service desk by monitoring social media. Your Agents can then decide to create Issues from the Tweets and resolve any requests or problems.

When Workspace Administrators associate a Twitter username with a Contact in the Workspace's Address Book, Issues created from Tweets are automatically populated with the sender's Contact information. Agents can then respond to the sender of the Tweet without leaving the Issue page.

The following represents the user workflow from configuring the system to capture Tweets to viewing Issues created from them.

Note: it is not necessary to configure the Social Media Connectors feature in order to capture Twitter Tweets, since that feature is to broadcast messages from BMC FootPrints Service Core

System Administrator

By default, Agents and Administrators can create Issues from Twitter Tweets. However, System Administrators can prevent this ability system-wide. See: Prevent Agents and Administrators from Creating Issues from Twitter Tweets (System-wide) in the Administrator's Guide **(Optional)**.

Workspace Administrators

By default, Agents and Administrators can create Issues from Twitter Tweets. However, Workspace Administrators can prevent this ability via user roles. See: . Preventing Agents and Administrators from Creating Issues from Twitter Tweets in the Administrator's Guide.

Create or edit an Agent Preference Template to capture Twitter Tweets on Agents' Homepages (optional).
(Agents can capture their own Tweets in addition to the Agent Preference Template set up by Workspace Administrators).
Add the Twitter dashboard component to the Agent Preference Template.
Add an Address Book field in the Workspace using the Twitter ID field type.
This allows Issues to be automatically populated with the FootPrints user ID of the Twitter user (sender).
Add the user's Twitter username to the Twitter ID field in his Contact information in the Workspace's Address Book (e.g., @username).

Agents

Customize your user preferences to capture Twitter tweets on your Homepage.
Add the Twitter dashboard component to your Homepage.
Monitor the Tweets and create Issues from them as necessary.
Respond to user from the Issue page (optional).

Customers

Send Twitter Tweets mentioning your organization's Twitter username (optional).
Track Issuescreated from your Tweets in the Customer Service Portal.

Capturing Twitter Tweets on Your Homepage

By default, you can display six Dashboard components on your Homepage, depending on your role permissions as set up by your Workspace Administrator.

Follow the steps in the Homepage Preferences topic under **Add a FootPrints Service Core Dashboard Component**.
Select **Twitter Feed** from the **Available Components** list.
Under **Setting for Twitter Feed**:
Select the number of Twitter Tweets to display from the **Records to display** drop-down list (between 1 and 10).
To capture Tweets from or mentioning a specific Twitter user, select **User screen** name, then enter the Twitter username in the **User screen name field** (e.g., @Username).
To capture Tweets containing keywords, select **Search string**, enter the search query in the Search string field (e.g., @YourServiceDesk).

Below are some examples of search operators you can use in the Search string field. For more search operators, see Using the Twitter Search API on Twitter's Developers Web site.

Example	Finds Tweets	Useful for
to:YourServiceDesk	sent to the user @YourServiceDesk	tracking requests problems sent directly from your Twitter users to your service desk Twitter account, from which you can create Issues
@YourCompany	mentioning @YourCompany	monitoring Tweets mentioning your company name
MyProduct AnotherProduct	containing both "MyProduct" and "Another Product". This is the default operator.	monitoring Tweets comparing your product with another product

Select an option to capture Tweets from a specific Twitter user or from keywords:

Select an option to determine how much of the Tweet to display:
Display the first (from 5 to 60) characters option.
Display all characters

Click the **Add Component** button.
Enter your password and click **Save**

Your Homepage displays the Twitter Feeds on your Dashboard. To edit the Twitter Feeds, see Edit a Dashboard Component in HomePage Preferences.

Viewing Twitter Tweets on Your Homepage

After configuring your Preference to capture Twitter Tweets, you can view them on your Homepage.

Note: Your Workspace Administrator may have already set up an Agent Preference Template for your role to include the Twitter Feed dashboard component. You can display more dashboard components on your Homepage, depending on your role permissions as set up by your Workspace Administrator.

Twitter Feeds display as separate dashboard components on your Homepage. A Tweet can contain up to 140 characters, but not all of the message will display. Administrators and Agents can configure their Twitter Feeds to display only the first 5 to 60 characters, as well as all characters. You can also configure the number of tweets to display in a dashboard component (between 1 and 10).

Refresh Component— Twitter Feeds are updated in real time; however, you can click the **Refresh Component** button on the component to update the Tweets.
Minimize Component— To minimize the component, click the **Minimize Component** button.
Delete Component— To delete the component, click the **Delete Component** button. For detailed information on deleting components, see Homepage Preferences.

Creating Issues from Twitter Tweets

Prerequisite

In order to create Issues from Tweets, customize your user preferences to capture Twitter tweets on your Homepage. Then add the Twitter dashboard component to your Homepage. See Capturing Twitter Tweets on Your Homepage.

Once you create the Issue from the Tweet, the Issue will display on your Homepage as well as on the Contact's Homepage in the Customer Service Portal. You can then interact with the Contact from within the Issue using the email notifications feature. For details, see Create/Edit Issue Email Notification.

Click the **Create** button on the Twitter Tweet.
The **New Issue** page appears.

Note: If the Workspace Administrator has associated a Twitter username with a Contact in the Workspace's Address Book, Issues created from Tweets are automatically populated with the sender's Contact information.

If a **Search** dialog appears, search for a Contact to associate with the Issue.
Complete the **New Issue** page, then **Save** the page.

Note: Only the first 53 characters of the Tweet will display in the Issue Title. You can edit the title as necessary.

Change Manager

Configuring Change Manager

Configuring change management involves the following steps (for an explanation of change management is, see BMC FootPrints Change Manager Overview.

Planning

Determine your change management approval process

Decide the type of Issue(s) that requires an approval process—Decide what requires approval. Then decide which fields in an Issue should trigger placing an Issue into the approval process. For example, you might have a process for approving expenditures. You could have a drop-down field that contains different ranges for the cost of an expenditure, such as "1-500", "501-1000", "1000-5000", "5000-10000", and "10000+". The values could be used to determine which process gets that Issue. To use a different example, for a software change request you might use a drop-down field that contains values for the degree of difficulty of the change, such as “Minor”, “Moderate”, and “Significant”. Each value in the drop-down field could serve as a criterion to trigger placing the Issue into a different process.

Decide what happens to an Issue in a process—Once an Issue meets the criteria and is submitted to the approval process, it must pass through one or more "phases". In a phase, specified "approvers" vote on whether an Issue is approved or rejected. Action is then taken upon the Issue based on the results of the vote. There may be several levels of approval within a process, each level translating into a different phase. Using the expenditure example from above, an expenditure of $10,000 or more might require approval from a manager in one phase and from an upper level manager in the next phase. A third phase might be built for a large expenditure for CFO approval. Different sets of approvers can be specified for each phase.

Determine who your approvers are for each phase in the process—These may be the same approvers for every phase, different approvers, or a combination of the same and different approvers.

Decide what constitutes approval or rejection of a change request—Once you decide who has to approve the Issue, you have to decide what constitutes approval and rejection. You can require unanimous approval or rejection or you can require some percentage of the voters approve or reject the Issue (e.g., 51%

approve or 50% disapprove, which would mean a majority must approve the Issue but half or fewer of the approvers could reject the Issue).

Decide how you want to handle email notification—You can have emails sent when a phase begins, as a recurring reminder during the phase, or when a phase ends (i.e., voting has concluded in the phase), or any combination of these. In addition, you can include a ballot in the email so that approvers can vote by replying to the email. If you want to send recurring reminders, you must decide how frequently a reminder is sent to someone who has not voted.

Decide what you want to happen with an Issue at the end of each phase in the approval process—Determine what happens to an Issue if it is approved or if it is disapproved. There are two separate sections for specifying what to do to the Issue at the end of the phase, depending on whether it is approved or rejected. Fields within the Issue can be changed, an external program can be run, assignments can be changed, the Issue can be moved into another approval process and phase, etc. There are a variety of options for determining what to do with the Issue once voting in a phase has concluded.

A good way to understand the approval process in BMC FootPrints Change Manager is to read the Create Approval Processes and Create Phases sections of this document to get a feel for how an Issue is moved through BMC FootPrints Change Manager.

Configure the approval process—Once you have done your planning, the next step is to configure an actual process, including its phases.

Create the process

Create the phases of the process

Order Change Manager Processes and View/Print Summaries

Create Approval Processes

To create an approval process:

Select Administration | Workspace, then select Change Manager from the Automated Workflow section of the main frame. The BMC FootPrints Change Manager page is displayed.

Click **Add Approval Process**. The Configure Approval Process page is displayed.

In The Issue Criteria tab, enter the criteria for initiating the approval process. When an Issue is created, the data in the Issue is compared to the criteria specified here and on other tabs. If the criteria match the data in the Issue, the Issue is put into the approval process.

Title—Enter a word or phrase for which to search.

Description—If a word or phrase is entered (or multiple words using Boolean Operators), only Issues containing that word/phrase in the Description are returned.

Keyword—If a word or phrase is entered, any Issues containing that word/phrase in any field are returned, including Title, Description, Workspace fields, and Address Book fields, as long as the full text search conforms to full text keyword search behavior.

Assigned to—Highlight one or more users to returns Issues assigned to the user(s) selected, holding down the CTRL key to select multiple users. If you do not want to limit the search to any particular assignees, do not highlight any users. Advanced Controls are also available for this field.

NOTE ON PERMISSIONS

Access to Issues is based on a user's Role. Assignment options may be restricted based on your role. Please consult your BMC FootPrints Service Core administrator for more information.

Submitted by—If a user is selected, the search returns only Issues created by that user.

Priority—Returns only Issues of the specified priority or priorities. Highlight the priorities to be included; hold down the CTRL key to highlight multiple priorities. To return all priorities, no priorities need to be selected (this has the same result as selecting all priorities).

Status—Returns only Issues of the specified status(es). By default, Open and any custom statuses are highlighted in the status dialog. To select multiple statuses, hold down the CTRL key.

Other Issue Information—The fields in this tab differ depending on the fields in the current Workspace. Search on as many fields as desired. Search methods vary with the field data types:

Character field—Displays a text box. Enter the word or phrase to search on (or multiple words using Boolean Operators).

Number field—Displays a text box. Enter the number or part of a number for which to search.

Drop-down and Multi-select field—Displays a multi-select dialog box. Highlight one or more values to search on. To search for Issues that contain no data for the field, select No data. If you do not want to restrict the search based on choices in a field, do not highlight any values.

Date fields—Search on a date or date range. Date Field Search Options

In The Contact Criteria tab, enter contact criteria to be matched against data in the Issue. The fields in this tab differ depending on the fields in current Address Book. Search methods are the same as those for Issue Information fields (see above).

In the Advanced Criteria tab, enter other criteria. These criteria are not matched to data in fields, but instead provide a filter for the Issues that are returned.

Issue Types to Include—Specify whether Advanced Issue types, including Subtasks and Global Issues, are returned. Options include:

All Issue Types—All Issue types are returned.

Regular Issues—Regular (non-Global or Master/Subtask) Issues are returned.

Include Master Issues—Master Issues that contain subtasks are returned.

Include Subtasks—Subtasks of Master Issues are returned.

Include Global Issues—Global Issues are returned.

Include GlobalLinks—All users' Issues linked to a Global Issue are returned.

Group Master Issues with Subtasks/Global Issues with GlobalLinks—Available for Reports only. These options override the sort order selected in the report.

Date—If dates are specified, the search returns only Issues from the time period specified. Date Field Search Options

Age—Returns Issues created in the time specified. Number of days and hours can be specified. Modifiers are also provided, including “Greater Than”, “Less Than”, “Equal to”, “Greater than or Equal to”, “Less than or Equal to”, and “Not Equal to”. As an example, to return Issues greater than 1 day old, choose “Greater than” and fill in “1” for “Days”.

NOTE

Age is always 24/7 and does not use the Workspace Work Schedule.

NOTE

Date/time fields can only be searched by date, not time.

Advanced Action Criteria—Click the checkbox to indicate that the issue has an associated Advanced Action that requires workflow (i.e., an approval via BMC FootPrints Change Manager or some other factor) before execution on the asset. This checkbox only applies if you have BMC FootPrints Asset Core.

Multiple Criteria

And/Or—Select whether the criteria you entered are all required to be fulfilled before triggering the change management approval process (And) or only one of them must be fulfilled before triggering the approval process (Or).

In the Name/Save tab, enter a name for the process (e.g., Capital Expenditure) and any comments or description you want to include for the process. Enter your password and click the **SAVE** button to save this process.

The next section of this document describes how you create the individual phases in the process you created.

Create Phases

To create a phase:

Select Administration | Workspace, then select Change Manager from the Automated Workflow section of the main frame.

Click **Add Phase**. The Configure Approval Phase page is displayed.

Complete Step 1

Name field-The Name field is limited to 254 characters.

Description field-The Description field is unlimited.

Copy From Another Phase field-The **Copy From Another Phase** field allows you to copy all of the Phase values of an existing Phase into this Phase. To copy Phase data, select the existing Phase from the Copy From Another Phase drop-down field and save the page (scroll to the bottom of the page, enter your password, and click the SAVE button). Once you've created a Phase by copying it, you can come back and edit the values of the new Phase.

Complete Step 2-Set the requirements for Requests for Change (RFCs). Requirements include the Voters who will determine whether the RFC is approved or denied. There are several options for selecting approvers and you can select any combination of these options.

Agents/Contacts Tab—Highlight an individual user or users in the User List on the left and then use the arrow button to move them to the Eligible Voters list on the right (or highlight Eligible Voters and use the arrow button to remove them from the list).

Filters (User Name, Display)—The User Name and Display fields allow you to filter the names that are listed in the Eligible Voters list. Enter a string in the User Name field and click the Load button to repopulate the list with all names containing that string. Select from the Display drop-down to repopulate the list with all the names that meet the drop-down's criteria (for example, all Workspace Administrators users). The two fields, User Name and Display, can be used together to filter the names further. For example, if you enter the letter "b" in the User Name field and then select Concurrent Agents from the Display drop-down, the list displays all agents with the letter "b" in their user name that use a concurrent license.

User ID—Add a user to the Selected Users (eligible voters) list directly by entering a user ID in the User ID field and then clicking the Add button.

Phase approval when **All eligible voters approve. Phase Disapproval** when **One eligible voter disapproves**—All voters must unanimously approve the Issue in order for the Issue to be considered approved. This means that if there is just one vote against approval, the Issue is rejected. It also means that as soon as one disapproval is submitted, voting is closed regardless of whether all approvers have voted.

Phase approval when **At least *X*% of eligible voters approve. Phase Disapproval** when **More than *X*% of eligible voters disapprove**—Approval is given when X% voters approve. For example, if this is set to 33% and there are nine eligible approvers, when three of them approve then the Issue is approved. When the approval percentage is selected, the disapproval percentage is calculated for you automatically. Approval or disapproval do not always wait for all of the votes to be submitted; as soon as the approval or disapproval threshold is reached, the voting is closed.

Phase approval when **More than *X*% of eligible voters approve. Phase Disapproval** when **At least *X*% of eligible voters disapprove**— Approval is given when more than *X*% voters approve. For example, if this is set to 33% and there are nine eligible approvers, when four of them approve then the Issue is approved. When the approval percentage is selected, the disapproval percentage is calculated for you automatically. Approval or disapproval do not always wait for all of the votes to be submitted; as soon as the approval or disapproval threshold is reached, the voting is closed.

Phase approval when **One eligible voter approves. Phase Disapproval** when **All eligible voters disapprove**—The Issue is approved when one of the eligible voters approves. The Issue is only disapproved if disapproval is unanimous. Voting closes as soon as one of these states is reached.

First tally to reach *X*% of eligible voters—The Issue is approved or disapproved based on which set of voters achieves the specified percentage of voters first. For example, if 33% is specified and there are nine approvers, then the first vote count to reach three votes first decides the Issue.

Deadline for approval/disapproval checkbox—Check the box and enter the amount of time to set a deadline to approve/disapprove. If a clear approval or disapproval vote is not reached when the timer runs out, the decision is made according to what is specified in the drop-down field. The number of days refers to real days, not Workspace Schedule days. Drop-down options are: **Approved** (the Issue is approved when the timer runs out); **Disapproved** (the Issue is rejected when the timer runs out); Determined by Highest Tally-Tie: **Approved** (whichever set of votes is higher wins, but in the case of a tie the Issue is approved when the timer runs out); Determined By Highest Tally-Tie: **Disapproved** (whichever set of votes is higher wins, but in the case of a tie the Issue is disapproved when the timer runs out); **Expired** (the Issue is no longer active).

Teams Tab—Highlight a team or teams in the Team List on the left and then use the arrow button to move them to the Eligible Voters list on the right (or highlight Eligible Voters and use the arrow button to remove the team from the list). The phase approval parameters that appear on this tab are described immediately above.

Issue Characteristics—Select the eligible voters based on the issue characteristics. For example, if you want the person who submitted the Issue to be an eligible voter, click the Submitter checkbox. The phase approval parameters that appear on this tab are described above. Options are:

Individual Assignees—Designates the Issue assignees as approvers for this Issue and phase only.

Assignees' Supervisor—Designates the Issue assignee's supervisor as an assigned approver for this Issue and phase only.

Team Members of Assigned Team (if Team assigned)—Designates the members of an assigned Team as approvers for this Issue and phase only.

Team Leader (if Team assigned)—Designates the Team Leader of an assigned as an approver for this Issue and phase only.Assignee's Supervisor—Designates the Issue's Assignee(s) supervisor as an assigned approver for this Issue and phase only.

Submitter—Designates the Issue Submitter as an assigned approver for this Issue and phase only.

Submitter's Supervisor —Designates the Issue submitter's supervisor as an assigned approver for this Issue and phase only.

Submitter's Supervisor's Supervisor—Designates the Issue submitter's supervisor's supervisor as an assigned approver for this Issue and phase only.

Contact—Designates the Issue Contact as an assigned approver for this Issue and phase only.

Contact's Supervisor —Designates the Issue Contact's supervisor as an assigned approver for this Issue and phase only.

Contact's Supervisor's Supervisor—Designates the Issue Contact's supervisor's supervisor as an assigned approver for this Issue and phase only.

Issue Fields—BMC FootPrints Change Manager retrieves the voter from the value in a workspace field. The value must be a user ID or address book ID (in the case of customers). One use for selecting voters this way is that it allows an escalation retrieve the voter based on issue characteristics. The phase approval parameters that appear on this tab are described above.

Select an approver who will only vote if...—Select a fallback voter in case none of the selected eligible voters (e.g., Assignees' Supervisor) can vote on the Issue. A selection is only required when nobody is set to be an eligible voter and one of the selection boxes is selected in the 'Select Eligible Voters from User List'.

Step 3: General Options deals mainly with email notifications for approvers, but provides some other options as well.

Mandatory Comments For Voting—When a vote is submitted, the voter can be forced to enter a comment by selecting a checkbox for that type of vote. You can select any combination of checkboxes or leave all of them blank.

Phase Start Email Notification—Notify approvers that a phase requiring their approval has begun.

Email Title—Enter the title you want to include at the top of each email notification. With respect to %%Variable%% expressions, some field data from the Issue can also be used in the field headers, as follows:

Issue Number—%%MRID%%

Title—%%TITLE%%

Priority—%%PRIORITY%%

Status—%%STATUS%%

Submitter—%%SUBMITTER%%

Workspace ID—%%PROJID%%

Workspace and Address Book fields—%%FIELD NAME%% where "FIELD NAME" is the name of the field in upper case.

Voting by email—Include the %%BALLOT%% variable to include a ballot with the notification. It is a better idea, however, to include the ballot in the body of the email than in the header. The ballot can be completed and returned by the approver to cast the vote. Note that the HTML generated by some programs, such as MS Word, is not always 100% compatible with all email clients. If you experience formatting or display problems, try using a simpler basic HTML editor.

Click the [Insert Variable] link to display a list of valid variables. Double-click a variable or click it once and then click the Insert button to append the variable to the title. Click the [Preview] link to view a preview of the email you have built.

Email Body— Check the box for Text or HTML to determine the format to be used for outgoing BMC FootPrints Change Manager email. If you select HTML, you can use standard HTML tags to format the email, but the variables remain the same as always. Once you select the type of email body to use, click on either [Email Body: Text] or [Email Body: HTML] to access the message body and edit it. Enter the content you want included in the body of the email. With respect to %%Variable%% expressions, field data from the Issue can also be used in the email body, as follows:

Issue Number—%%MRID%%

Title—%%TITLE%%

Priority—%%PRIORITY%%

Status—%%STATUS%%

Submitter—%%SUBMITTER%%

Workspace ID—%%PROJID%%

Workspace and Address Book fields—%%FIELD NAME%% where "FIELD NAME" is the name of the field in upper case.

Description—Include all description data from the Description field by using the %%DESCRIPTION%% variable. Include only the first description entered by using the %%DESCRIPTIONFIRST%% variable. Include only the most recent description by using the %%DESCRIPTIONLAST%% variable.

Voting by email—Include the %%BALLOT%% variable to include a ballot with the notification. It is a better idea, however, to include the ballot in the body of the email than in the header. The ballot can be completed and returned by the approver to cast the vote. Click the [Insert Variable] link to display a list of valid variables. Double-click a variable or click it once and then click the Insert button to append the variable to the title. Note that the HTML generated by some programs, such as MS Word, is not always 100% compatible with all email clients. If you experience formatting or display problems, try using a simpler basic HTML editor.

Include attachments for this issue—Click the checkbox to include any attachments to the Issue with the email.

Vote Notification—You can optionally notify all eligible voters when another voter records a vote on the Issue. Use the checkbox to determine whether to notify voters of approval, disapproval, and/or deferred votes, as well as whether or not to send a notification to the vote submitter. The vote submitter will not receive a notification if none of the other checkboxes in this section are selected. Email Title, Email Body, and Attachment options are the same as above under Phase Start Email Notification.

Recurring Email Reminder—Enable email reminders, select the frequency with which email reminders are sent to approvers to remind them to vote on an Issue, and specify the content of the email. The emails are sent until the approver's vote has been recorded or the Issue has been approved or rejected. Email Title, Email Body, and Attachment options are the same as above under Phase Start Email Notification.

Minutes/Hours/Days/Weeks—Select the frequency with which email reminders are sent to approvers who have not yet voted. Selections are exclusive, meaning that you can only pick the frequency from one of the time periods. If you select a frequency from a different time period, the previous time period is zeroed out. In other words, if you picked "15 minutes" and then picked "3 hours", the minutes selection returns to 0.

Anonymous Voting—By default, details of the voting results can be displayed, including who voted and how they voted. Check this box to hide eligible voters and current vote lists from the extended voting details page. Votes are not completely anonymous to everyone because anyone with the role to run change management reports or view change management history can still view votes in those places.

Phase Status Workspace Field—The Workspace Status Field option is used to set up a field specifically to track the approval status of an issue. Click the checkbox to enable this function.

Use Existing Field or Create New Field—Check a radio button to specify whether an existing drop-down field will be used to track the status or a new drop-down will be created. Regardless of which radio button is selected, the following values are added automatically to the field:

Processing

Approved

Disapproved

Expired

These statuses cannot be removed from the field once they have been added. Other changes to the field, such as adding statuses or moving the field on the page, can be made on the Form Designer page. To delete a field that has been enabled for tracking approval status, you must first disable the Phase Status Workspace Field by removing the check from the checkbox on this page.

Step 4: Actions on Phase Approval determines what is done with an Issue once an approval has been obtained.

Status-Click the checkbox and then select a status from the drop-down list if you want the status to change once this phase of voting has concluded.

Priority—Click the checkbox and then decide how you want the priority changed when phase approval is obtained as follows:

Move the Priority *X* step(s) toward 10—Provides a relative number for raising the priority number.

Move the Priority *X* step(s) toward 1—Provides a relative number for lowering the priority number.

Change the priority to *X*—Specify a priority number to which the priority is changed when phase approval is obtained.

Workspace/Address Book Fields—By enabling this function, you can edit any combination of workspace and address book fields when the issue is approved. To do so, check the checkbox, then click the Configure Field Edits button. The issue page fields are displayed. Enter the values you want to be displayed in each field upon approval of the issue.

Assignment

Change assignment of Issue—Assign the Issue to another agent or agents when the approval is finalized.

Add selected users as Assignees if they are not already assigned—Does not change the current assignees, but allows you to add additional assignees. Use the assignee box to select the new assignees.

Re-assign to selected users after unassigning all existing users—Unassigns all current assignees. You then have to assign a new set of assignees. Use the assignee box to select the new assignees.

Flat and Group By Team—Selecting Flat displays an expanded list, showing the individual team members. Selecting Group collapses the list and assignments are then made on a group and not an individual basis.

Advanced Action—Execute the pending Advanced Action for the asset associated with the issue. This only applies if you have the BMC FootPrints Asset Core.

CI Links—These actions apply to CIs linked to the issue. This is only available if you have the BMC FootPrints Configuration Manager module. Either or both of the CI Links options can be selected.

Approve Proposed CIs—Approve proposed new CIs when the issue is approved

Approve Proposed Changes to Existing CIs—Approve proposed changes to existing CIs when the issue is approved.

External Action—Click the checkbox to enable this function, which allows you to execute an external program when approval is obtained for this phase. This feature is especially useful for running scripts. The external program must be one that can run and stop on its own without any user intervention. In addition, if the program involves running a graphical user interface (GUI), it may not be able to display the interface to a screen, which could cause the program to hang and fail. Therefore, the program should also be one that can run from a command line rather than a GUI. Enter the path to the program in the Execute external program field. In addition, you can pass field data to the external program by using the %%Variable%% functions. Click the [Insert Variable] link to display a list of valid variables. Double-click a variable or click it once and then click the Insert button to append the variable to the field.

Run instant edit-based escalation—If you check the box, if the end of a phase triggers an edit to an Issue, the Issue is checked against escalation criteria and, if it matches escalation criteria, the Issue is escalated accordingly. If the box is not checked, which is the default, then a BMC FootPrints Change Manager approval or disapproval does not trigger an escalation.

Transfer to Phase—By default, an approval moves an Issue into the next defined phase and a disapproval ends the process. However, an action can be defined to start any selected phase on approval or disapproval. Note that a transfer into a phase which has already finished in the past clears the old votes from it and restarts the voting. Click the checkbox and then select a phase from the drop-down to transfer the phase upon a phase approval.

Approval Notification Email

Email eligible voters/submitter/assignees/supervisors of assignees/team leaders of each team/contact(s)/last agent to edit the Issue a notification of phase verdict—Check the box(es) to have an email notification sent to the specified parties.

Send single-Issue notification mail to the following space-separated email addresses—Enter email addresses for additional individuals to be notified. You can use the select the **Insert Variables** button to insert a variable that represents a field that contains an email address. If you select a field that does not contain an email address, the email is sent to that address but will bounce.

Email Title—Click the [Insert Variable] link to display a list of valid variables. Double-click a variable or click it once and then click the Insert button to append the variable to the title. Click the [Preview] link to view a preview of the email you have built.

Email Body— Check the box for Text or HTML to determine the format to be used for outgoing BMC FootPrints Change Manager email. If you select HTML, you can use standard HTML tags to format the email, but the variables remain the same as always. Once you select the type of email body to use, click on either [Email Body: Text] or [Email Body: HTML] to access the message body and edit it. Enter the content you want included in the body of the email. With respect to %%Variable%% expressions, field data from the Issue can also be used in the email body, as follows:

Issue Number—%%MRID%%

Title—%%TITLE%%

Priority—%%PRIORITY%%

Status—%%STATUS%%

Submitter—%%SUBMITTER%%

Workspace ID—%%PROJID%%

Workspace and Address Book fields—%%FIELD NAME%% where "FIELD NAME" is the name of the field in upper case.

Click the [Insert Variable] link to display a list of valid variables. Double-click a variable or click it once and then click the Insert button to append the variable to the title.

Include attachments for this issue—Click the checkbox to include any attachments to the Issue with the email.

Step 5: Actions on Final Disapproval determines what is done with an Issue once a disapproval has been obtained. The options are the same as in the preceding step of this procedure.

Type in your password and then click the **Save** button to save this phase.

NOTE

If the final phase in a process does not specify at least one action to be taken upon final approval and the Issue is approved, the Issue will be re-submitted to the same Change Manager process. Likewise, if the final phase in a process does not specify at least one action to be taken upon final disapproval and the Issue is disapproved, the Issue will be re-submitted to the same Change Manager process. In other words, the Issue will loop back into the process in those instances. To ensure that this does not happen, the final phase in a process should specify some action to be taken upon final approval and upon final disapproval.

VBS Scripts

The VBS scripts interpreter (wscript.exe or cscript.exe) requires the presence of certain registry entries for IUSR_Machine user. Since an `HKEY_CURRENT_USER` hive is not available for the IUSR_Machine, IIS loads the `HKEY_USERS\.DEFAULT` hive in its place. However, the `HKEY_USERS\.DEFAULT` hive does not contain the necessary keys and entries for the scripting engine, and read access for `IUSR_Machine` user is not granted to the `HKEY_USERS\.DEFAULT` hive. Therefore, in order to run VBS scripts as an external action from an escalation, the registry must be changed as follows:

Using the Registry Editor, create the following Keys and Entries:

```
HKEY_USERS\.DEFAULT\Software\Microsoft\Windows Scripting Host
HKEY_USERS\.DEFAULT\Software\Microsoft\Windows Scripting Host\Settings
```

Verify that the user IUSR_Machine has Read access to these keys(using regedt32).

Create the following entries under `HKEY_USERS\.DEFAULT\Software\Microsoft\Windows Scripting Host\Settings`:

```
DisplayLogo: REG_DWORD: 0
Timeout: REG_DWORD: b4
BatchMode: REG_DWORD: 0
```

Order Change Manager Processes and View/Print Summaries

To change the order of the approval processes and view/print approval summaries, select Administration | Workspace | Change Manager.

Change Order of Processes

To change the order of the processes, select the Move up arrow or Move down arrow beside the process name to move that process up or down in the list.

View/Print Process Summaries

Across the top of the main frame, below the title of the page, you'll see links labeled "Configuration / Issue Approval States". The page you are on initially is the Configuration page. The linked pages are:

Configuration—Displays the list of Change Manager processes with the buttons for editing, deleting, or move the process up or down, and adding new processes and phases.

Open All Processes/**Close All Processes**—Open All Processes opens all of the processes on the page to display all of the phases in those processes. Close All Processes closes all of the processes on the page so that the phases associated with the processes are not displayed.

Phases—This is the default page when the plus sign for the process is clicked. The Phases page displays all of the phases for the process along with the Edit, Delete, and Move buttons.

Edit—Click this button to edit the phase properties.

Delete—Click this button to delete the phase

Move—Select the up arrow to move the phase up in the list or the down arrow to move the phase down in the list within the process.

Phase Name—The name of the phase is a link. Clicking this link displays a summary of the process criteria.

Summary— Displays a summary of the criteria for the current process and a summary of phase properties for every phase in the current process. There is also a button at the bottom of the window for printing the page.

Summary—Displays summaries of the criteria for all processes and summaries of phase properties for every phase in the processes. There is also a button at the bottom of the window for printing the page.

Active Approvals—Displays a list of processes and phases, and a list of Issues associated with the phases, as well as other information regarding the Issues that are in Change Manager phases, as follows:

Issue #—The Issue number is displayed. The Issue number is also a link to the Details page of the Issue.

Title—The title of the Issue.

Time In Phase— The length of time that the Issue has been in the current phase in the process in days, hours, and minutes.

Time Remaining— The amount of time before the approval/disapproval deadline is reached in days, hours, and minutes.

Override—This drop-down field allows the Workspace Administrator to approve or disapprove an Issue and is not part of the regular Change Manager voting process for approvals. The field allows the Workspace Administrator to move an Issue through a phase if, for whatever reason, the Issue has become "stuck". When a Workspace Administrator selects either Approve or Disapprove from this drop-down, the Issue is determined to have received phase approval or disapproval and follows the configured behavior for that case.

BMC FootPrints Asset Core

Asset Management

Asset Management for the service desk gives you the ability to track users' desktop configurations, including hardware, software, and network information, and to access that information in real-time while working on a user's Issue.

BMC FootPrints Service Core offers two options for Asset Management:

- BMC FootPrints Asset Core
- Integration with Microsoft Systems Center Configuration Manager (SCCM)/SMS

The topics in this portion of the documentation describe configurations for these options.

BMC FootPrints Asset Core

Configuring the BMC FootPrints Asset Core Integration

BMC FootPrints Asset Core Integration Setup

Prerequisite: Install and Configure BMC FootPrints Asset Core

BMC FootPrints Asset Core must be installed separately into a location that can be accessed by the BMC FootPrints Service Core server. For detailed instructions see the BMC FootPrints Asset Core Installation Guide (separate guides for Windows and Linux) and BMC FootPrints Asset Core External Integration Guide.

A system administrator can enable or disable the integration with BMC FootPrints Asset Core at the system level. BMC FootPrints Asset Core is disabled by default.

After BMC FootPrints Asset Core is enabled for the system, it must be configured for each individual workspace in which it is to be used. (The workspace administration page is only available if asset management is enabled for the system.)

There are three steps to configuring the integration:

1. Install BMC FootPrints Asset Core and configure options in it to be detailed later. This operation is not part of BMC FootPrints Service Core. Refer to the documentation accompanying BMC FootPrints Asset Core for details on installation.
2. Enable BMC FootPrints Asset Core system-wide in BMC FootPrints Service Core.
3. Enable BMC FootPrints Asset Core within specific workspaces that will utilize the integration.

Enable BMC FootPrints Asset Core for the System in BMC FootPrints Service Core

To use BMC FootPrints Asset Core, it must be configured by the System Administrator.

1. Select Administration | System from the BMC FootPrints Service Core toolbar. The System Administration page is displayed.
2. Select Asset Management from the Features section of the System Administration page. If this is your first time configuring, and BMC FootPrints Service Core is installed on a server, you will be asked to choose your asset management system. Select Asset Core and click SAVE. The Asset Core administration page is displayed.
3. Click the Enabled radio button.

Complete the BMC FootPrints Asset Core Server Information fields. BMC FootPrints Service Core will communicate with the BMC FootPrints Asset Core master server by calling BMC FootPrints Asset Core web services.

Server name—Enter the name of the BMC FootPrints Asset Core master server. This could be the machine name, the fully qualified domain name, or the IP address.

Port number—Enter the port number for BMC FootPrints Service Core to use when communicating with the BMC FootPrints Asset Core master server. This is the port that was set up previously on the master server. The default value is 1610, but the recommended value is 1611.

Enter the login ID and password for the integration account configured in BMC FootPrints Asset Core.

Click the "Click here to test connectivity" link to test the connection to the BMC FootPrints Asset Core server. If the connection is successful, a pop-up is displayed stating that "BMC FootPrints Asset Core server connection is verified." If the test is unsuccessful, a pop-up declares that the test failed and instructs you to verify your settings and that the server (i.e., the BMC FootPrints Asset Core master server) is running. The settings you should verify are the server name, port number, login, and password.

BMC FootPrints Asset Core Authentication for Agents—Optionally, enter system-wide credentials to be used to authenticate any FootPrints Service Core agents seeking to access BMC FootPrints Asset Core. These credentials do not apply to an agent who has defined credentials on his or her Preferences page. If an agent with BMC FootPrints Asset Core integration credentials defined on the Preferences page attempts to access BMC FootPrints Asset Core, only those credentials are authenticated. If that login attempt were to fail, the system-wide credentials would not be used a secondary login. System-wide credentials might be used to allow more limited (for example, read-only) access to BMC FootPrints Asset Core.

At the bottom of the page, enter the system administrator password and click **SAVE**.

Enable BMC FootPrints Asset Core for a Workspace in FootPrints Service Core

To enable the BMC FootPrints Asset Core integration for a workspace:

Select Administration | Workspace from the BMC FootPrints Service Core toolbar. The Workspace Administration page is displayed.

Select Asset Management from the Other Options section of the workspace administration page. The Asset Management page is displayed.

Click the Enabled radio button in the General Setup section.

The **Fields Section** allows you to specify which asset data should be imported into BMC FootPrints Service Core fields on the issue page when an asset is associated with an issue. It also allows you to specify the name of the issue fields that displays the data. In addition, you can exclude data. Be sure to make a selection in one of the columns (Use New Field, Use Existing Field, or Skip This Field) before submitting the page.

Use New Field—If you choose a new field for any of the BMC FootPrints Asset Core information, the new field for the selected data type is created and put in a tab called 'Asset Information'. Click the radio button and enter a name for the new field. You can later rename, reorder or reconfigure the fields on the Form Designer page.

Use Existing Field—Selecting Use Existing Field maps the specified BMC FootPrints Asset Core data to those fields as they exist today. You can later rename, reorder or reconfigure the fields on the Form Designer page.

Skip This Field—Select a radio button to exclude the asset data from the issue page. The data is still discovered by the BMC FootPrints Asset Core and exists in the database, but is not imported into the issue when an asset is selected.

In the **Using Integrated Functionality in Issues** section, select the field that will determine which tab on the Issue will display the BMC FootPrints Asset Core Control Panel (Search function and Action button). The Action button provides a number of functions through your integrated BMC FootPrints Asset Core. When an Agent is on an Issue page, BMC FootPrints Asset Core Control Panel is accessed from the tab or section where the specified field is located. For example, if you select the Device Name field, the Asset Control Panel would be accessed from the tab or section on which the Device Name field is located. By default, the fields listed here are located on the Asset Information tab, but you can move the field to a different tab via the Form Designer functions.

The **Searching Assets section** sets options for automatically looking up asset data from within BMC FootPrints Service Core as follows:

Contact Field—Select a contact field to use for looking up asset data associated with the contact. BMC FootPrints Asset Core will capture the system login that is most frequently used to access a machine and store that value as the asset's user. The specified contact field should be a field that is likely to contain the contact's system login. For example, if your contact is coming from Active Directory, you would likely want to use the field that maps to the attribute "samaccountname".

Automatic Lookups—When an action is taken, an asset data lookup will be performed automatically in each instance for which you have checked a box. For example, if you check the box for "create Issue page for agents (when a contact is selected)", an asset lookup is performed when an agent selects a contact on a create issue page and the appropriate fields in the issue page are populated with asset data. Uncheck any boxes for which you don't want an automatic asset lookup to occur. Options are:

Create Issue page for agents (when a contact is selected)

Edit Issue page for agents (when a contact is selected). When multiple matches are found or when mail is used, the system will select the device that was most recently updated by BMC FootPrints Asset Core.

Create Request page for customers (after the request is submitted)

Create Issue through incoming mail (agents)

Create Request through incoming mail (customers)

NOTE

If more than one match is found when an agent is creating an issue, the agent is shown a list of assets from which to choose. If only one match is found, the asset is selected automatically. If no matches are found, the agent is informed that no match has been found.

Enter your password and click the SAVE button to complete this operation. The workspace is enabled and configured for asset management.

NOTE

In order for BMC FootPrints Service Core Agents to be able to access everything they need in BMC FootPrints Asset Core, they need a valid BMC FootPrints Asset Core login. In addition, they must have their security profile set up correctly on the BMC FootPrints Asset Core side to allow them access to the desired functionality. Their AMP credentials must be given the permissions to do the functions listed in BMC FootPrints Service Core and they must be associated with the particular device they are trying to do the action on. Within BMC FootPrints Asset Core, on the Dynamic Objects tab, you must specify the objects in BMC FootPrints Asset Core to which the agent has rights, including rights to Inventory. Note that you can't just specify that the agent has rights to access the Inventory module, but also to see the objects. The default Admin account in AMP automatically gets all rights even though it looks like they aren't associated with any objects, so this only applies to accounts other than the default Admin.

Microsoft SMS

Microsoft System Center Configuration Manager/Microsoft Systems Management Server (SMS)

If your organization uses Microsoft System Center Configuration Manager/Microsoft Systems Management Server (SMS) for tracking PC-based inventory, you can take advantage of that data from within **BMC FootPrints Service Core**. BMC FootPrints Service Core with Microsoft System Center Configuration Manager/SMS integration allows help desk agents to dynamically access PC asset data for a user from within an Issue in BMC FootPrints Service Core. This automated process saves time, help agents solve users' Issues quickly, and ensures data accuracy.

When you are creating or editing an Issue from within BMC FootPrints Service Core, you can view the hardware, software, and network information in the SMS inventory database for a particular machine or user and import that data into the Issue with a click of the mouse. This information becomes part of the Issue's history and is searchable from the **BMC FootPrints Service Core** Advanced Search and Reporting tools. The **BMC FootPrints Service Core** administrator can set up the link to SMS in just a few minutes via the **BMC FootPrints Service Core** web interface. It can be enabled on a per Workspace basis.

NOTE
Microsoft System Center Configuration Manager/SMS support is an optional add-on to **BMC FootPrints Service Core** and must be licensed. Please contact your BMC sales representative or **BMC FootPrints Service Core** distributor for more information.

NOTE
The Microsoft System Center Configuration Manager/SMS add-on only works with the Windows versions of **BMC FootPrints Service Core**. It does not work with the Linux or UNIX versions. This is because it requires Windows libraries on the **BMC FootPrints Service Core** server.

There are two steps to setting up **BMC FootPrints Service Core** to work with SMS:

SMS System Administration Setup

SMS Workspace Administration Setup

Microsoft System Center Configuration Manager/SMS System Administration Setup

To access Microsoft System Center Configuration Manager/SMS Inventory data from BMC FootPrints Service Core, the feature must be configured by the System Administrator. This is done under Administration | System | Features | Asset Management.

NOTE
You must have a license for this feature. The option to use Microsoft System Center Configuration Manager/SMS is not available unless you are licensed. Please contact your sales representative to obtain a license.

This page contains the following settings:

Select Administration | System | Features | Asset Management from the BMC FootPrints Service Core Toolbar.

Select Systems Management Server and click **Save**.

The following options are displayed:

Enable Asset Management—This setting enables or disables Asset Management for the system. If you enable Asset Management here, it is enabled system-wide, but it must also be enabled in individual Workspaces. Refer to Microsoft System Center Configuration Manager/SMS Workspace Administration Setup for additional information.

Server Information—The following information is needed for connecting to the Microsoft System Center Configuration Manager/SMS server:

Server name (DNS name) or IP address of the Microsoft System Center Configuration Manager/SMS server

A valid login ID for that machine that has full access to the Microsoft System Center Configuration Manager/SMS server through the Windows WMI interface.

The password for the login ID specified above.

After entering the information above, click the link to test the connection.

If the test is successful, enter your password and click **GO**. If the test fails, try a second time. If the test fails a second time, please check your settings. Troubleshooting assistance is provided in FootPrints and Microsoft System Center Configuration Manager/SMS Troubleshooting Guide.

Before you can access Microsoft System Center Configuration Manager/SMS data from a Workspace, it must be enabled and configured for that Workspace. Please follow the instructions for Microsoft System Center Configuration Manager/SMS Workspace Administration Setup for each Workspace in which you would like to access Microsoft System Center Configuration Manager/SMS inventory data.

Microsoft System Center Configuration Manager/SMS Workspace Administration Setup

In addition to the system setup, Asset Management must be configured on a Workspace-by-Workspace basis. In this way, you can control which Workspaces use Microsoft System Center Configuration Manager/SMS asset data (e.g., you may want it in the Service Desk Workspace, but disabled in the Development Workspace) and which Workspace or Address Book field to use as a reference to the asset database.

Asset Management is configured for a Workspace under Administration | Workspace | Other Options | Asset Management. If Asset Management is not listed as an option, then it has not been configured correctly by the System Administrator. Refer to Microsoft System Center Configuration Manager/SMS System Administration Setup for more information.

The options are:

Enable Asset Management—This setting enables or disables Asset Management for the Workspace. It is disabled by default for new Workspaces.

Assets Field—Asset data is displayed as a multi-line Workspace field (permissions: internal optional) in the Create Issue and Edit Issue pages. Specify the field name. You can enter the name of a new field to create or select from the list of existing multi-line Workspace fields.

Included Asset Data—By default, all information about an asset in the Microsoft System Center Configuration Manager/SMS inventory is imported into an Issue when using the Select Asset feature. You can choose to only include some data in Issues. Three checkboxes are available to control the data imported: General, Hardware, and Software. All data is visible in the Assets pop-up window regardless of what is selected here. Removing some data can help save space in the Issue record and also improve the response time of the Select Asset feature.

Select Key Field (optional)—Assets can be selected from the Create Issue and Edit Issue pages by Agents and administrators. If a key field is defined here, the Select Asset button, when clicked, automatically displays search results from Microsoft System Center Configuration Manager/SMS based on the data for the key field in the current Issue. For example, if the BMC FootPrints Service Core Address Book contains a User ID field, and that field is mapped here to the Microsoft System Center Configuration Manager/SMS User field, the asset data for the customer contact in the current Issue should be displayed automatically when the Select Asset button is clicked.

Define the key field by selecting a BMC FootPrints Service Core field from the list, then select the corresponding Microsoft System Center Configuration Manager/SMS field. The data in both fields must match. If you don't have matching fields that contain the same data and want to use this feature, create a new BMC FootPrints Service Core Address Book or Workspace field that matches an Microsoft System Center Configuration Manager/SMS field.

If no key field is defined, clicking the Select Asset button displays a window that lists all assets in the Microsoft System Center Configuration Manager/SMS inventory. From there you can browse or search for the correct asset.

If a key field is defined but no matching asset is found, you can either show all assets or to display a message stating that no results were found.

Automatically Select Asset Data—This section provides options to automatically fill the Asset field without clicking the Select Asset button. The first two options attempt to populate this field at the time the Select Contact button is used on the Create Issue and Edit Issue pages. When the contact information is populated automatically, BMC FootPrints Service Core attempts to search on the Key field and populate the Asset field. The next option attempts to automatically populate the Asset field after a customer has submitted a request from the Customer Self-service interface. The last two options attempt to automatically populate the Asset field after a new Issue has been created through an email submission.

Select which columns should be displayed—This section allows you to choose which asset information is displayed when a list of assets is shown. The first option is a hyperlink allowing further access to the details of that asset.

Asset Window Preferences—You can control the display of Microsoft System Center Configuration Manager/SMS Inventory assets in the browser interface in this section. The options are:

Assets Window Initial Page—Select whether to display the homepage (list of assets) or search page for assets as the initial screen displayed in the Assets window.

NOTE

This does not apply to the Select Asset search window if you've selected a Key field above.

Details Page Initial Tab—Select which tab is initially displayed for the Details of an asset: General, Hardware, or Software.

Number of assets per page—Enter the number of assets to be displayed per screen (the maximum is 100).

When you finish configuring Asset Management, enter your password and click **GO**. An Asset Management link is displayed on the Toolbar for this Workspace and the Select Asset option is available from the Create Issue and Edit Issue pages. Refer to Asset Management Integration Features for more information.

If you are not able to connect to Microsoft System Center Configuration Manager/SMS after setting it up for a Workspace, refer to the Microsoft System Center Configuration Manager/SMS Troubleshooting Guide.

Microsoft System Center Configuration Manager/SMS Troubleshooting Guide

If the test to connect to Microsoft System Center Configuration Manager/SMS from BMC FootPrints Service Core fails on the Microsoft System Center Configuration Manager/SMS System Administration page, the error message displayed in the test window help you determine the cause of the failure. Here are some common causes for failure:

Wrong server name or ID/password—Confirm that the Microsoft System Center Configuration Manager/SMS server name and the ID/password entered on the setup page are correct. If you entered a one-word machine name (e.g., skippy), try the fully qualified name (e.g., skippy.widget.com) or IP address (e.g., 12.34.365.678). Also check that the ID and password combination is correct and that they have

enough permission to access Microsoft System Center Configuration Manager/SMS Inventory data on the Microsoft System Center Configuration Manager/SMS server.

Ping test—Sometimes the ping test fails, but the connection from within BMC FootPrints Service Core to Microsoft System Center Configuration Manager/SMS works. If the ping test fails, and you know the server name and ID/password are correct, enter your password and click **GO**, then try enabling the Microsoft System Center Configuration Manager/SMS link for a workspace.

Incorrect version of the Windows Management Instrumentation (WMI)—The BMC FootPrints Service Core Microsoft System Center Configuration Manager/SMS Integration requires WMI (the Windows interface BMC FootPrints Service Core uses to connect to Microsoft System Center Configuration Manager/SMS) version 1.5 or greater. If you do not have WMI 1.5 or greater, you must upgrade WMI on both the BMC FootPrints Service Core server and the Microsoft System Center Configuration Manager/SMS server. This is not typically a problem for Windows 2000.

You can download the required version of WMI from the Microsoft web site.

Domain and login—You can try specifying the domain as part of the login, e.g., BMC\Administrator. This may not work for all networks, but it has worked for some users.

Permissions—The connection may fail because of permissions. The login ID specified during the setup must have permissions to read all of the Microsoft System Center Configuration Manager/SMS Inventory data. This is typically tested with an "Administrator" ID. Because permissions vary from network to network, you might need to try a few different IDs with different Windows permissions (e.g., Full Control, etc.) before it works. One user could only connect after changing the user running the IIS web server from IUSR_machineName to a real user who was the same one associated with the Microsoft System Center Configuration Manager/SMS server.

If all else fails, please contact BMC Support.

Microsoft System Center Configuration Manager/SMS Server Permissions

The following procedure is to help in setting up Microsoft System Center Configuration Manager/SMS. Frequently these steps help when the connection succeeds but the test query returns no results.

Open the Microsoft System Center Configuration Manager or SMS Administration Console on the Microsoft System Center Configuration Manager/SMS server.

Open up the Security Rights folder.

Right-click in the right-hand frame and pick "new->class security right".

Set the user to the DOMAIN\user that BMC FootPrints Service Core is connecting as, which is the user that you specified on the BMC FootPrints Service Core Microsoft System Center Configuration Manager/SMS setup page.

Pick "Collection" from the drop-down list.

Make sure that the Read checkbox is checked.

Click "OK" and continue to select OK until you have exited the setup.

Try the BMC FootPrints Service Core test link again.

In Microsoft System Center Configuration Manager/SMS, there are two categories to which you can assign permissions:

Class Permissions (Collections)

Instant Permissions

If the instructions above, in which you are instructed to assign Read permissions to the Collections class, fails, try assigning permissions to All Systems Collection, which is not a class.

Asset Management Integration Features

Integration Features

Asset Management functions for both BMC FootPrints Asset Core and Microsoft System Center Configuration Manager/SMS can be accessed from three places in BMC FootPrints Service Core:

FootPrints Toolbar

Create Issue and Edit Issue Pages

Contact Details screen in the Address Book

BMC FootPrints Service Core Toolbar Link

Selecting **Search Assets** on the BMC FootPrints Service Core Toolbar opens a new browser window containing the interface for BMC FootPrints Asset Core or a web interface to your Microsoft System Center Configuration Manager/SMS Inventory data (when Microsoft System Center Configuration Manager/SMS integration is enabled). You can search for and report on corporate assets in this window.

Create and Edit Issue Pages

When BMC FootPrints Asset Core is enabled in a Workspace, the Create Issue and Edit Issue pages contain an Asset data field with a corresponding Select Asset button above it. Clicking this button opens a new browser window with your BMC FootPrints Asset Core data. This window is just like the one that opens from the Toolbar, with some extra functionality for importing the data into the Issue. The process is slightly different for BMC FootPrints Asset Core and Microsoft System Center Configuration Manager/SMS:

BMC FootPrints Asset Core

On the Create Issue or Edit Issue page, click the **Select Asset** button. An Asset window is displayed.

If:

an asset is found that is matched to the contact who was selected in the Contact Information section of the Issue (or other data depending on the asset key field selected by the administrator), the asset is displayed.

Select the asset's name to view the details of the asset.

Select the various tabs (General, Hardware, Software, etc.) to see more information about the asset.

To select the asset, click Grab currently displayed Asset. The asset's data is displayed in summary format.

Click Use this Asset. The asset's data is imported into the Asset field in the current Issue. This data is saved as part of the issue for searching and reporting.

an asset is not found that matches the user's key field, either a message stating that no asset was found is displayed or all assets are listed (depending on your configuration). From either screen, you can search the assets again or browse through them by selecting List All Assets.

Microsoft System Center Configuration Manager/SMS

On the Create Issue or Edit Issue page, click the **Select Asset** button. An Asset window is displayed.

If:

an asset is found that is matched to the contact who was selected in the Contact Information section of the Issue (or other data depending on the asset key field selected by the administrator), the asset is displayed.

Click Select to import an asset directly or click the asset's name to view the details of the asset.

If the details are displayed, select the various tabs (General, Hardware, Software, etc.) to see more information about the asset.

To select the asset, click Select Asset.

The asset's data is imported into the Asset field in the current Issue. This data is saved as part of the Issue for searching and reporting.

an asset is not found that matches the user's key field, either a message stating that no asset was found is displayed or all assets are listed (depending on your configuration). From either page you can search the assets again (by selecting the Search function) or browse through the assets by selecting List All Assets.

Address Book Contact Details

When BMC FootPrints Asset Core is enabled and the key field mapping is configured with an Address Book field, assets for a particular contact can be displayed from the Contact Details page in the Address Book. This link populates fields with asset data.

BMC Configuration Manager (with Service Catalog)

Asset Management, Configuration Management, and Service Catalog

Asset Management and Configuration Management

There is some overlap between asset management and configuration management in that you can use the assets in your asset management database to populate the CIs of your configuration management Database (CMDB). However, one of the main features that distinguishes a CMDB from an asset database is relationships. A CMDB allows you to define and manage how CIs are related to one another.

Service Catalog and Configuration Manager

Service Catalog is a part of the BMC FootPrints Configuration Manager add-on module. A Service Catalog is a document that provides a brief overview, in business terms, of all the business and infrastructure services offered by the IT provider, which may also include service charges. BMC FootPrints Service CoreService Catalog (SC) enables IT organizations to offer a menu of services customized to their business customers; this allows IT to demonstrate its value to the business, and provide transparency of service costs . Items in the Service Catalog might include new equipment (laptop, Blackberry, etc.), critical business services such as email, or services required for a new hire. An entry in the SC would include a description of service, costs, service level agreement, etc. in a customer-friendly interface.

Terms

You should be familiar with the following terms as they apply to BMC FootPrints Configuration Manager:

Configuration Management Database (CMDB)—A database used to store Configuration Records throughout their Lifecycle. The BMC FootPrints Configuration Manager System maintains one or more CMDBs, and each CMDB stores Attributes of CIs, and Relationships with other CIs.*

Configuration Item (CI)—Any Component that needs to be managed in order to deliver an IT Service. Information about each CI is recorded in a Configuration Record within the BMC FootPrints Configuration Manager System and is maintained throughout its Lifecycle by BMC FootPrints Configuration Manager. CIs are under the control of BMC FootPrints Change Manager. CIs typically include IT Services, hardware, software, buildings, people, and formal documentation such as Process documentation and SLAs.*

Configuration Type(CI Type)—A category for CIs. For example, you might create a configuration type called "Server" in the CMDB.

Attribute—A piece of information about a Configuration Item. Examples are name, location, Version number, and Cost. Attributes of CIs are recorded in the Configuration Management Database (CMDB).*

Relationship—A connection or interaction between two people or things. In BMC FootPrints Configuration Manager it is a link between two Configuration Items that identifies a dependency or connection between them. For example Applications may be linked to the Servers they run on; IT Services have many links to all the CIs that contribute to them.*

Visualization—A figure representing a relationship or relationships. BMC FootPrints Configuration Manager uses Java to "draw" a visualization of a CI's relationship(s) dynamically.

Status—Status is often a required field in many types of Record. It shows the current stage in the Lifecycle of the associated Configuration Item, Incident, Problem, etc.*

* ITIL V3 Glossary v3.1.24, 11 May 2007. The definition is reproduced with permission.

Administering Configuration Manager

Administering BMC FootPrints Configuration Manager Overview

Setting up BMC FootPrints Configuration Manager can be an involved process, depending on how large a configuration you want to manage and the number of Configuration Items (CIs) and CI Attributes you have. BMC FootPrints Configuration Manager has a number of automations to help get your configuration built as quickly as possible, including the ability to import CIs from a .csv file and Configuration Manager templates.

NOTE
Only System Administrators have BMC FootPrints Configuration Manager administrative privileges.

There are two levels of Administration for BMC FootPrints Configuration Manager:

System Administration – Create and Delete CMDBs, Link CMDBs to Projects, define system-wide CMDB terminology. Accessed from Administration | System | Configuration Manager from the main BMC FootPrints Service Core Toolbar.

CMDB-Specific Administration – Mange CI Types, their Attributes, Relationships and Statuses, Import Data, and more. Accessed from Administration Toolbar option within the CMDB.

Topics in this section:

The following topics in this document describe how to administer BMC FootPrints Configuration Manager:

List All CMDBs—Lists the CMDB IDs, CMDB names, and the Workspaces to which they are linked.

CMDB Access—View CMDB details and access the CMDB homepage.

Create a New CMDB—Describes how to create a new CMDB.

Manage Workspace Links to a CMDB—Allows you to link and unlink workspaces with CMDBs.

Delete a CMDB—Allows you to delete CMDBs.

CMDB Terminology—Change the terms used for "CMDB", "CI", and "Status".

List All BMC FootPrints Configuration Manager Databases (CMDBs)

The List All CMDBs section of the System Administration Configuration Manager page displays the CMDB IDs, CMDB names, and the workspaces to which they are linked. To view this information:

From the BMC FootPrints Service Core Toolbar, select Administration | System and then select the Configuration Manager link towards the top of the main frame. The Configuration Manager page is displayed.

Click the "here" link in the List All CMDBs section of the main frame.

The list is displayed.

CMDB Access

The CMDB Access section of the Configuration Manager page allows you to open the CMDB homepage or view the details of a CMDB. The CMDB homepage is for using and administering an individual CMDB, as opposed to performing system-wide CMDB administrative functions. The CMDB details show the attribute names, attribute types, and field choices for each CI Type in the CMDB.

To access a CMDB from the CMDB Access section:

From the BMC FootPrints Service Core Toolbar, select Administration | System and then select the Configuration Manager link towards the top of the main frame. The Configuration Manager page is displayed.

In the CMDB Access section, select the CMDB you wish to access from the drop-down field. If you wish to review the details for the selected CMDB, click the Details button. The attribute names, attribute types, and field choices for each CI Type in the CMDB are displayed.

Click the Open CMDB button. The CMDB homepage for the selected CMDB is displayed.

Refer to Configuration Manager Database Home for details on working with the CMDB homepage.

Create a New Configuration Manager Database

Once the planning has been completed, you can begin to create a CMDB in BMC FootPrints Configuration Manager. In this procedure, you name the new CMDB and link it to one or more workspaces. You can create the new CMDB in one of three ways:

Use a template

Use an existing CMDB and copy its structure

Create a CMDB entirely on your own

CMDB templates are provided with BMC FootPrints Service Core, enabling you to create a CMDB quickly, link it to a Workspace or Workspaces, and then adjust the CMDB to suit your specific needs. The templates speed up the process of CMDB creation significantly. When you create a CMDB entirely "from scratch", it can take longer, but is useful in that the administrator will be familiar with all of the detail of the new CMDB. Using an existing CMDB configuration is also a quick way to get a new CMDB up and running. In that instance, you are copying a CMDB that you have already created and modified for your own purposes.

Use Template

To create a CMDB by using a template:

Select Administration | System from the BMC FootPrints Service Core toolbar, then select Configuration Manager in the main frame. The Configuration Manager administration page is displayed.

Click the GO button in the Create a New CMDB section. The Create a New CMDB page is displayed.

Click the Use Template radio button.

Select the template to use from the drop-down field. When you make a selection, a description of the selected template is displayed at the bottom of the frame.

Select a workspace or workspaces to which the new CMDB is to be linked. Highlight the workspace in the Available Workspaces list, then click the Add button. Repeat this step for each workspace you want to link to the new CMDB or use the CTRL key with the left mouse button to highlight multiple workspace names at one time. When you click the Add button, the workspace names are removed from the Available Workspaces field and displayed in the Linked Workspaces field. CMDB information is pulled into Issues submitted to the selected workspace(s).

Enter a name for the CMDB in the CMDB Name field.

When you are certain that you have the appropriate template, click the **Create CMDB** button at the bottom of the page. The CMDB is created and the CMDB homepage is displayed so that you can begin working with the new CMDB. Once you have completed this step, you may still need to customize the CMDB with the CI types and attributes required for your configuration. Refer to the CMDB section titled Administration for details.

Use Existing CMDB Configuration

To create a CMDB by copying an existing CMDB configuration:

Select Administration | System from the BMC FootPrints Service Core toolbar, then select Configuration Manager in the main frame. The Configuration Manager administration page is displayed.

Click the GO button in the Create a New CMDB section. The Create a New CMDB page is displayed.

Click the Use Existing CMDB Configuration radio button.

Select the CMDB to use from the Existing CMDBs drop-down field. When you make a selection from the drop-down, a table showing the CIs and attributes of the selected CMDB is displayed. You can check the table to determine if this is the CMDB configuration you want to copy.

Select a workspace or workspaces to which the new CMDB is to be linked. Highlight the workspace in the Available Workspaces list, then click the Add button. Repeat this step for each workspace you want to link to the new CMDB or use the CTRL key with the left mouse button to highlight multiple workspace names at one time. When you click the Add button, the workspace names are removed from the Available Workspaces field and displayed in the Linked Workspaces field. CMDB information is pulled into Issues submitted to the selected workspace(s).

Enter a name for the CMDB in the New CMDB Name field.

When you are certain that you have the CMDB that you want to copy, click the **Create CMDB** button at the bottom of the page. The CMDB is created and the CMDB homepage is displayed so that you can begin working with the new CMDB. Once you have completed this step, you may still need to customize the CMDB with the CI types and attributes required for your configuration. Refer to the CMDB section titled Administration for details.

Create On Your Own

To create a CMDB on your own:

Select Administration | System from the BMC FootPrints Service Core toolbar, then select Configuration Manager in the main frame.. The Configuration Manager administration page is displayed.

Click the GO button in the Create a New CMDB section. The Create a New CMDB page is displayed.

Click the Create On Your Own radio button.

Select a workspace or workspaces to which the new CMDB is to be linked. Highlight the workspace in the Available Workspaces list, then click the Add button. Repeat this step for each workspace you want to link to the

new CMDB or use the CTRL key with the left mouse button to highlight multiple workspace names at one time. When you click the Add button, the workspace names are removed from the Available Workspaces field and displayed in the Linked Workspaces field. CMDB information is pulled into Issues submitted to the selected workspace(s).

Enter a name for the CMDB in the CMDB Name field.

Click the **Create CMDB** button at the bottom of the page. The CMDB is created and the CMDB homepage is displayed so that you can begin working with the new CMDB. Once you have completed this step, you must customize the CMDB with the CI types and attributes required for your configuration. Refer to the CMDB section titled Administration for details.

Manage Workspace Links to a CMDB

When you create a CMDB, you associate it with a workspace or workspaces. This enables you to link CMDB to Issues in the workspace. Once a CMDB has been created, you can add additional workspace links or disassociate a workspace from the CMDB.

To change the workspace links to a CMDB:

Select Administration | System from the BMC FootPrints Service Core toolbar and then select Configuration Manager Database from the main frame. The Configuration Manager administration page is displayed.

In the Manage Workspace Links to a CMDB section of the page, select a CMDB from the Existing CMDBs drop-down field. Two fields are displayed: the Available Workspaces field lists workspaces that are not linked to a CMDB and the Linked Workspaces field lists workspaces associated with the selected CMDB.

To:

Add a workspace link, click on the workspace name in the Available Workspaces list and then click the Add button. You can add multiple workspace links if you wish.

Remove a workspace link, click on the workspace name in the Linked Workspaces list and then click the Delete button. Only the link is deleted. The workspace itself remains intact in BMC FootPrints Service Core. You can delete multiple workspace links if you wish. You can even delete all workspace links; doing so does not delete the CMDB.

When you finish altering workspace relationships, click the **Save** button.

Delete a CMDB

You can delete an entire CMDB from BMC FootPrints Configuration Manager. A deleted CMDB can be restored manually if it is necessary. Contact BMC support if you need to restore a deleted CMDB.

To delete a CMDB:

Select Administration | System from the BMC FootPrints Service Core toolbar, then select Configuration Manager from the main frame. The Configuration Manager administration page is displayed.

In the Delete a CMDB section of the page, select a CMDB from the Existing CMDBs drop-down field.

Click the **GO** button. A new page is displayed with a field for you to enter your system administrator password.

Enter your password and click the **GO** button. The CMDB is deleted.

CMDB Terminology

Use this page to change the words used for "CMDB", "CI", and "Status".
To change the words used:

Select Administration | System from the BMC FootPrints Service Core toolbar, then select Configuration Manager in the main frame. The Configuration Manager administration page is displayed.

Type your preferred words in the appropriate fields in the CMDB Terminology section. Fields are provided for the singular and plural forms of the words.

Click the **Save** button.

CMDB Homepage

BMC FootPrints Configuration Manager Database Home Page Overview

There are two locations from which the CMDB is administered:

System Administration Configuration Manager page

CMDB administration window

The System Administration Configuration Manager page is accessed by selecting Administration | System from the BMC FootPrints Service Core toolbar and then selecting Configuration Manager and Service Catalog from the main frame. This displays an administration page from which you can administer system-wide functions for the CMDB.

The CMDB administration window is where you access the administration functions for a particular CMDB, as opposed to system-wide configuration functions performed from the BMC FootPrints Service Core interface. The CMDB administration window is accessed in one of two ways:

From the BMC FootPrints Service Core toolbar, select More | CMDB. The CMDB homepage is displayed. Click on Administration from the toolbar.

From the System Administration Configuration Manager page, select the CMDB you want to administer from the Existing CMDBs drop-down in the CMDB Access section and then click the Open CMDB link. The CMDB homepage is displayed. Click on Administration from the toolbar.

The CMDB Interface

If you created a CMDB and are accessing it for the first time, the CMDB homepage displays a welcome and informational message.

The CMDB homepage is divided into three areas, like the regular BMC FootPrints Service Core homepage. The top of the page contains the search interface, the name of the current CMDB, Sign-out link, Preferences page link, and Help link. Immediately below the top section is the toolbar, which provides access to the main CMDB options and menus. The current CMDB page is displayed below the toolbar.

Working with CIs

Create a CI

To create a CI:

Select the Create CI button in the CMDB toolbar. The Create a New CI page is displayed.

From the drop-down field, select the CI Type under which the CI falls. For example, if you are creating a router, select "Router" from the drop-down.

Click the Next button. The Create New page is displayed.

CI pages are organized into tabs and the fields in those tabs correspond to the Attributes associated with the CI Type. Built-in fields for CI pages are Service Request Template, Import Lock, and Status:

Service Request Template—Select a Service Request template to link to this CI (only displayed if the CI Type is a service).

Import Lock—Check the box to enable the import lock. Import Lock locks the CI when CI data is being imported. This means that the data for that particular CI is not overwritten or updated by an import.

Status—Enter the status of the CI.

Timestamp Override—When a CI page is created or edited, a timestamp is entered into the CI history for the time and date at which the create or edit took place. The administrator can override the timestamp by entering a different date and/or time in this field. To enter the date or time, click the clock icon and select the date and time from the pop-up, then click the GO button on the pop-up. This function must be enabled on the Administration | Miscellaneous Options page by the administrator in order for it to be available to agents.

Fill in the fields on the various tabs. CI fields, like Issue fields, can be mandatory or optional. Tabs that contain mandatory fields are in red. If you try to submit a CI before you have completed all of the mandatory fields, a pop-up window will be displayed and the CI is not submitted.

Attachments—You can attach files to the CI. Select the Attachments tab and click the Attach File button to attach a file to a CI. Full details on attachments are below in the section titled File Attachments.

Click the **Save** button to create the CI.

File Attachments

On the Create CI page, you can optionally attach one or more files from your local or network drive(s).

To attach a file:

On the Create CI page, select the Attachments tab and then click the “Attach File” button. This brings up a small window entitled “Upload Attachment”.

Click the “Browse” button to browse your local machine and/or network drives for the file.

When you find the file, highlight it and click “Open”. The file name and path now appears in the File Attachment window

NOTE

The CMDB Administrator may have set a limit for the size of file attachments – this information appears in the file Attachment window. If the file is too large, you will receive an error message. Please attach a smaller file.

Click the GO button to upload the file. When the upload is finished, the file name will appear in the “Create CI” form.

To attach additional files, repeat steps 1-4 for each file to be attached.

NOTE

You can continue to work on the CI while the file is uploading, but you must wait until the upload is complete to submit the CI.

Edit a CI

In order to edit a CI, you must find the CI through the search page. Refer to CMDB Search for details on locating CIs.

Once you have located a CI, select the Results tab. The Results page is displayed.

Click on the CI you wish to edit to highlight it.

Click on the Details button. The Details view of the CI page is displayed in a new window.

Click on the Edit button to open the CI page in Edit mode.

Perform your edits. CI pages are organized into tabs. The fields in the tabs correspond to the Attributes associated with the CI Type. Built-in fields for CI pages are Service Request Template, Import Lock, and Status:

Service Request Template—Select a Service Request template to link to this CI (only displayed if the CI Type is a service).

Import Lock—Check the box to enable the import lock. Import Lock locks the CI when CI data is being imported. This means that the data for that particular CI is not overwritten or updated by an import.

Status—Enter the status of the CI.

Timestamp Override—When a CI page is created or edited, a timestamp is entered into the CI history for the time and date at which the create or edit took place. The administrator can override the timestamp by entering a different date and/or time in this field. To enter the date or time, click the clock icon and select the date and time from the pop-up, then click the GO button on the pop-up.

Fill in the fields on the various tabs. CI fields, like Issue fields, can be mandatory or optional. Tabs that contain mandatory fields are in red. If you try to submit a CI before you have completed all of the mandatory fields, a pop-up window will be displayed and the CI is not submitted.

Attachments—You can attach files to the CI. Select the Attachments tab and click the Attach File button to attach a file to a CI. When you click the Attach File button, a pop-up window is displayed to enable you to enter a path to the file or browse for the file on your computer using the Browse button. File attachments are not accepted until the CI is saved. When you edit a file, you have the option to replace or delete a file attachment.

In addition to the Built-in fields already described, there is a checkbox on each CI page for **Import Lock**. Import Lock locks the CI when CI data is being imported. This means that the data for that particular CI is not overwritten or updated by an import.

If BMC FootPrints Asset Core is enabled, the Action button is displayed in the upper right corner of the page in both the Edit and Details views. For complete information on the Action button, refer to Action Button.

Click the Save button to save the edited CI.

File Attachments

On the Edit CI page, you can optionally attach one or more files from your local or network drive(s).

To attach a file:

On the Edit CI page, select the Attachments tab and then click the “Attach File” button. This brings up a small window entitled “Upload Attachment”.

Click the “Browse” button to browse your local machine and/or network drives for the file.

When you find the file, highlight it and click “Open”. The file name and path now appears in the File Attachment window

NOTE

The CMDB Administrator may have set a limit for the size of file attachments – this information appears in the file Attachment window. If the file is too large, you will receive an error message. Please attach a smaller file.

Click the GO button to upload the file. When the upload is finished, the file name will appear in the “Edit CI” form.

To attach additional files, repeat steps 1-4 for each file to be attached.

CI attachments are displayed in a grid format showing the size of the attachment, the date on which it was attached, a link to download the attachment, and a link to delete the attachment.

NOTE

You can continue to work on the CI while the file is uploading, but you must wait until the upload is complete to submit the CI.

Visualization

The visualization function displays a graphical representation of CI relationships (using Java). The main portion of the display shows the CI relationships. The right side of the display contains a summary of the current CI's attributes. If you click on a CI in the display, that CI's attributes are displayed in the summary. Use the mouse-wheel to increase or decrease the size of the visualization. The Visualizations tab has the following controls:

Connectivity Filter—Click up or down arrow to display the next level of relationships. For example, if you move the slide to the "2" setting, CIs related to CIs related to the current are displayed.

Exclude CI Types—Check a box next to CI types you want excluded from the visualization. You can check multiple boxes. Click in the checkbox a second time to remove the checkmark and display those CI types in the visualization.

Count—Displays a count of the excluded CI Types.

Exclude Relationships—Check a box next to relationships you want excluded from the visualization. You can check multiple boxes. Click in the checkbox a second time to remove the checkmark and display those relationships in the visualization.

Upstream and Downstream—Upstream and Downstream filter on the relationship direction. Only CIs connected by a relationship having the direction specified are excluded. Direction is determined with respect to the current CI.

Expand View—Clicking this button expands the view of the visualization in a new browser window.

Administration

CMDB Administration Overview

The Administration selection on the CMDB toolbar is the means by which the CMDB administrator accesses administration functions for a particular CMDB. When Administration is selected, the following options are displayed on the Configure CMDB page in the main frame:

CI Types—This is the page on which you create/edit/delete CI Types, define how those CI Types are displayed in visualizations, determine the layout of the CI Types with respect to their tabs, and add HTML headers.

Attributes—The Attributes page is where you create the set of attributes for CI Types and associate them with CI Types.

Statuses—Create the statuses for CI Types and associate them with CI Types.

Relationships—Create relationships between CI Types. Relationships are defined as "To" and "From" which denote dependency. The dependent CI is the "To" CI and the CI upon which it depends is the "From". For example, if a server goes down, it affects the PC, but if the PC goes down, it doesn't affect the server. In that example, the relationship is "From" the server "To" the PC. For example, you can create a relationship for a server that is used to back up data. The relationship might be named "Backup", the "To" category might be named "Backs up to", and the "From" might be named "Backs up from". When you establish specific relationships later between particular CIs, a certain desktop PC could back up to a certain server and this relationship would be used to describe it.

Imports—The Imports selection allows you to set up your data importation from an asset manager and to schedule regular importation of data.

Roles—Create, Edit, or Delete permission roles for Agents who have access to this CMDB.

Automations—With the automation function, you set criteria for the automation and specify when the automation is to run. When a CI matches the criteria, you can set the automation to change the CI's status field, create an Issue, send out email, or run an external script.

Service Request Templates—Create, Edit, or Delete templates used for requesting Services from the Service Catalog.

Miscellaneous Options—Enter the CMDB name and ID format from this page.

CI Types

CI Types, Layouts, and Attributes

Use the CI Types page to create/edit/delete CI Types, define how those CI Types are displayed in visualizations, determine the layout of the CI Types with respect to their tabs, and add HTML headers.

Create CI Type

To create a CI Type, from the CMDB homepage:

Select Administration | CI Types. The Configure CI Types page is displayed.

Click the **Create** button. The CI Type Editor is displayed containing fields and buttons for creating a CI Type. The fields and actions you can take in this area are as follows:

Name—Enter a name for the CI Type in the Name field. For example, you might enter "Server". Later, when you create the CIs themselves, you will categorize them according to CI Type. At that point, you might further refine a Server type and identify it as an "Email Server". It is mandatory that you enter a name in this field.

Description—Enter information about the CI Type in the Description field. The field is provided for maintaining useful information about the CI Type. Entering a description is optional.

All Statuses and Associated Statuses—The All Statuses and Associated Statuses fields allow you to associate statuses with the CI Type. Only the statuses you select can be set for the CI Type. You might have many different statuses, but associate only a few of them with a particular CI Type. To associate a status with a CI Type, highlight the status in the All Statuses field and then click the Add button. To remove an association between a status and a CI Type, highlight the status in the Associated Statuses field and click the Delete button. The status is not deleted, but removed from the Associated Statuses field. Changing the statuses is optional.

Background Color—Select a background color for visualizations representing the CI Type. The Graphics Visualization field shows the current (default) color. To select a background color, enter the hex value of the color you wish to use or use the color picker. Changing the color is optional. To use the color picker:

Click the **Select Color** button.

Select from the sample colors and then manipulate the RGB values by dragging the sliders along the color line. The color displayed in the Selected Color area changes as you move the sliders. When you have the color you want to use for the background, click the **GO** button.

Text Color—Select a text color for visualizations representing the CI Type. The Graphics Visualization field shows the current (default) color. To select a text color, enter the hex value of the color you wish to use or use the color picker. Changing the color is optional. To use the color picker:

Click the **Select Color** button.

Select from the sample colors and then manipulate the RGB values by dragging the sliders along the color line. The color displayed in the Selected Color area changes as you move the sliders. When you have the color you want to use for the background, click the **GO** button.

Icon—Select an icon for visualizations representing the CI Type. The Graphics Visualization field shows the current (default) icon. Changing the icon is optional. To select an icon:

Select from the sample icons by selecting the radio button below the icon or upload an icon of your own choosing. When you place the cursor over an icon, a pop-up gives you the item that it represents. Click the Browse button to upload an icon. When you have the icon you want to represent the CI, click the **Submit Icon** button.

Service Category—To designate this as a service category, check the Service Category checkbox. If you do not check this box, BMC FootPrints Service Core will assume you are creating a CI Type. If you check this box, two more fields are displayed:

Subcategory of—If there are other categories, you can make the category you created a subcategory of an existing category by selecting the higher level category from the drop-down list.

Category Icon—Click the **Select Icon** button to select an icon to represent the category or subcategory when it is displayed in the Service Catalog. You can choose an icon from the choices displayed by clicking on the radio button below the icon or you can upload an image file of your own by using the browse button. Icons are not sized automatically, so if you select your own icon, you should be careful that it is not too big or too small. The recommended size is 72 X 72 pixels.

When you are done creating your CI Type, click the **Save** button. The CI Type name is displayed in the Existing CI Types field and your selections for icon, background color, and text color are displayed in the Graphics Visualization area.

Edit CI Type

To edit an existing CI Type, from the CMDB homepage:

Select Administration | CI Types. The Configure CI Types page is displayed.

Click on the CI Type you want to edit in the Existing CI Types list to highlight it.

Click on the Edit button. The CI Type Editor is displayed.

From this point on, refer to Step 2 in the Create CI Type procedure above for details on the fields in the CI Types Editor.

When you are done editing your CI, click the **Save** button. Any changes you have made to the icon, background color, and text color are displayed in the Graphics Visualization area.

Delete CI Type

To delete an existing CI Type, from the CMDB homepage:

Select Administration | CI Types. The Configure CI Types page is displayed.

Click on the CI Type you want to delete in the Existing CI Types list to highlight it.

Click on the **Delete** button. A confirmation pop-up is displayed.

Enter your password and then click the **GO** button. The Configure Configuration Item ("CI") Types window is redisplayed and the deleted CI Type no longer appears in the Existing CI Types list.

When you are done deleting your CI, click the **Save** button.

Add, Edit, and Delete Attributes

Use the CI Types, Layouts, and Attributes page to add/edit/delete attributes and associate CI Types with their attributes.

Add an Attribute

To add an attribute, from the CMDB homepage:

Select Administration | CI Types. The Configure Types page is displayed.

Next to the Attributes and Layout field (bottom half of the page), if Attribute is not selected in the drop-down field by default, select it and click the **Add** button. The Attribute Editor is displayed.

The fields and actions you can take in this area are as follows:

Name—Enter a name for the attribute in the Name field. For example, you might enter "Vendor". It is mandatory that you enter a name in this field.

Permissions—The permission level chosen here determines both the access and requirement for users for the field.

Optional—The user has the option to enter or not enter data in the field.

Mandatory—The user must enter data into the field in order for the page to be accepted if it is submitted. If a user tries to submit an Issue without data in a mandatory field, an error message is displayed to the user, along with instructions to go back and enter the information. Mandatory fields appear in red on the Create Issue and Edit Issue pages for internal users and in the Customer Submit Request form.

Attribute Type—This defines the type of data the field accepts. Refer to Field Types for descriptions.

Attribute Header—If you would like to include instructions or other information about attribute fields when they are displayed, you can optionally insert text or HTML headers above the field. Enter the text or HTML into the Field Header field. For example, you might include an HTML href in this field linking to a company intranet page, or you might include text that describes the field contents or gives the user instructions.

Default Value—A default value is either entered or displayed here, depending on the field type. For example, if you select a character field type, you can enter a default value for that field here. If you select a drop-down field type, the default value is entered when the drop-down field is displayed in a field provided for that purpose. All field types can have a default value except for Multi-select fields. In addition, the default choices for Date and Date Time fields are limited to No Default and Today. For Date Time fields, Today means the day and time at which the attribute was saved).

When you have completed entering the attribute information, click the **Save** button to save the attribute. The attribute is then displayed in the Attributes and Layout field.

Edit an Attribute

To edit an attribute, from the CMDB homepage:

Select Administration | CI Types. The Configure CI Types page is displayed.

Next to the Attributes and Layout field, if Attribute is not selected in the drop-down field by default, select it.

Click on the attribute you wish to edit in the Attributes and Layout field and then click the Edit button. The Attribute Editor is displayed.

Refer to the instructions above in Add an Attribute, Step 2 for further details.

Delete an Attribute

To delete an attribute, from the CMDB homepage:

Select Administration | CI Types. The Configure CI Types page is displayed.

Next to the Attributes and Layout field, if Attribute is not selected in the drop-down field by default, select it.

Click on the attribute you wish to delete in the Attributes and Layout field and then click the **Delete** button. A confirmation pop-up window is displayed into which you must enter your password in order to complete the deletion.

Enter your password and click the **GO** button. The attribute is deleted and is no longer displayed in the Attributes and Layout field.

Change the Order in which Tabs, Sections, and Attributes are Displayed

To change the order in which tabs, sections, and attributes are displayed, from the CMDB homepage:

Select Administration | CI Types. The Configure CI Types page is displayed.

Next to the Attributes and Layout field, select Attribute, Tab Dialog, or Header from the drop-down field.

Click on the **Change Order** button to display the up and down arrows.

Click on the item you want to move in the Attributes and Layout field.

Use the up and down arrows beside the field to move the selected item up or down in the order.

Modify the Layout

Use the CI Types, Layouts, and Attributes page to modify the layout of the CI create and edit pages with by adding tabs, if tabs are enabled, or headers, if the agent is using section headers in the interface.

Add a New Tab or Section Header

To add a new tab or section header, from the CMDB homepage:

Select Administration | CI Types. The Configure CI Types page is displayed.

Next to the Attributes and Layout field, select Tab Dialog or Header from the drop-down field and then click the **Add** button. The Editor is displayed.

Enter the name you want to appear on the tab or section header in the Dialog Name field, then click the Save button. The name is displayed in the Attributes and Layout field. The words TAB DIALOG or HEADER are displayed next to the tab name so that you can determine which entries in the field are tab names, which are section header names, and which are field names.

Edit a Tab or Section Header

To edit a tab or section header, from the CMDB homepage:

Select Administration | CI Types. The Configure CI Types page is displayed.

Next to the Attributes and Layout field, select Tab Dialog or Header from the drop-down field.

Click on the tab or section header name you want to edit and then click the Edit button. The Editor is displayed.

Change the name in the Dialog Name field, then click the **Save** button. The altered name is displayed in the Attributes and Layout field. The words TAB DIALOG or HEADER are displayed next to the name so that you can determine which entries in the field are tab names, which are section header names, and which are field names.

Delete a Tab or Section Header

To delete a tab or section header, from the CMDB homepage:

Select Administration | CI Types. The Configure CI Types page is displayed.

Next to the Attributes and Layout field, select Tab Dialog or Header from the drop-down field.

Click on the name you want to delete and then click the **Delete** button. A confirmation pop-up window is displayed into which you must enter your password in order to complete the deletion.

Enter your password and click the **GO** button. The name is deleted and is no longer displayed in the Attributes and Layout field.

Change the Order in which Tabs, Sections, and Attributes are Displayed

To change the order in which tabs, sections, and attributes are displayed, from the CMDB homepage:

Select Administration | CI Types. The Configure CI Types page is displayed.

Next to the Attributes and Layout field, select Attribute, Tab Dialog, or Header from the drop-down field.

Click on the **Change Order** button to display the up and down arrows.

Click on the item you want to move in the Attributes and Layout field.

Use the up and down arrows beside the field to move the selected item up or down in the order.

Attributes

You can create the set of attributes for CI Types and associate them with CI Types.

Create an Attribute

To create an attribute, from the CMDB homepage:

Select Administration | Attributes. The Configure Attributes page is displayed.

Next to the Attributes field, click the **Create** button. The Attribute Editor is displayed.

The fields and actions you can take in this area are as follows:

Name—Enter a name for the attribute in the Name field. For example, you might enter "Vendor". It is mandatory that you enter a name in this field.

Default Permissions—This is different from setting Permissions (which is done from the Administration | CI Types selection. Default Permissions sets the default permission so that if an attribute is added to many types at once, that instance of the attribute will be added as Mandatory or Optional per this setting.

Attribute Type—This defines the type of data the field accepts. Refer to Field Types for descriptions.

Attribute Header—If you would like to include instructions or other information about attribute fields when they are displayed, you can optionally insert text or HTML headers above the field. Enter the text or HTML into the Field Header field. For example, you might include an HTML href in this field linking to a company intranet page, or you might include text that describes the field contents or gives the user instructions.

Default Value—A default value is either entered or displayed here, depending on the field type. For example, if you select a character field type, you can enter a default value for that field here. If you select a drop-down field type, the default value is entered when the drop-down field is displayed in a field provided for that purpose. All field types can have a default value except for Multi-select fields. In addition, the default choices for Date and Date Time fields are limited to No Default and Today. For Date Time fields, Today means the day and time at which the attribute was saved).

When you have completed entering the attribute information, click the **Save** button to save the attribute. The attribute is then displayed in the Attributes field.

Edit an Attribute

To edit an attribute, from the CMDB homepage:

Select Administration | Attributes. The Configure Attributes page is displayed.

Click on the attribute you wish to edit in the Attributes field and then click the Edit button. The Attribute Editor is displayed.

Refer to the instructions above in Create an Attribute, Step 2 for further details.

Delete an Attribute

To delete an attribute, from the CMDB homepage:

Select Administration | Attributes. The Configure Attributes page is displayed.

Click on the attribute you wish to delete in the Attributes field and then click the **Delete** button. A confirmation pop-up window is displayed into which you must enter your password in order to complete the deletion.

Enter your password and click the **GO** button. The attribute is deleted and is no longer displayed in the Attributes field.

Associate an Attribute with a CI Type

Attributes make sense in association with CI Types. For example, you wouldn't want to have data for a "Vendor" when the CI Type is "Location" or to have "License Plate Number" data for a CI Type of "Router". Once you have created the attributes, you must specify the CI Types with which they will appear.

To associate an attribute with a CI Type, from the CMDB homepage:

Select Administration | Attributes. The Configure Attributes page is displayed.

In the Attributes field, click on the CI Type for which you want to create an association.

Next to the Attributes field, click the **Select CI Types** button. The Select CI Types area is displayed beneath the Attributes field.

Click on the CI Type you want to associate with the attribute in the All CI Types field. You can select multiple CI Types by using the left mouse button in conjunction with the Shift or CTRL keys.

Click the **Add** button. The CI Type(s) you added are displayed in the Associated CI Types field.

Click the **Save** button. The Associated CI Types area is redisplayed and the CI Type(s) you added are shown in the list.

Remove an Attribute Association with a CI Type

To remove an attribute association with a CI Type, from the CMDB homepage:

Select Administration | Attributes. The Configure Attributes page is displayed.

In the Attributes field, click on the CI Type from which you want to remove the association.

Next to the Attributes field, click the **Select CI Types** button. The Select CI Types area is displayed beneath the Attributes field.

In the Associated CI Types field, click on the CI Type you want to disassociate from the attribute. You can select multiple CI Types by using the left mouse button in conjunction with the Shift or CTRL keys.

Click the **Delete** button. The CI Type(s) you disassociated is removed from the Selected CI Types field.

Click the **Save** button. The Selected CI Types area is redisplayed and the CI Type(s) you removed is no longer in the list.

Statuses

The Statuses option of the Admin selection is used to create the statuses for CI Types and associate them with CI Types.

Add a Status

To add a status, from the CMDB homepage:

Select Administration | Statuses. The Configure Statuses page is displayed.

Click the **Add** button. The Add Status Editor is displayed.

Enter a name for the status in the Name field.

Select the CI Types that can use this status. To do so:

Click on the CI Type in the All CI Types field, then click the **Add** button.

Click on the CI Types you don't want to be able to use this status in the Associated CI Types field (if any are in there), and click the **Delete** button. This does not delete the CI Type. It only removes its association with this status.

Click the **Save** button. The status is saved, along with the associations you specified, and is displayed in the Statuses field.

Edit a Status

To edit a status, from the CMDB homepage:

Select Administration | Statuses. The Configure Statuses page is displayed.

Click on the Status you want to edit in the Statuses field.

Click the **Edit** button. The Edit Status page is displayed.

Perform edits as described in steps 4 and 5 in the Add a Status procedure above.

Click the **Save** button. The status is saved, along with any changes you made, and is displayed in the Statuses field.

Delete a Status

To delete a status, from the CMDB homepage:

Select Administration| Statuses. The Configure Statuses page is displayed.

Click on the Status you want to delete in the Statuses field.

Click the **Delete** button. A confirmation pop-up window is displayed into which you must enter your password in order to complete the deletion.

Enter your password and click the **Save** button. The Status is deleted and is no longer displayed in the Statuses field.

Relationships

Relationships are defined as "To" and "From" which denote dependency. The dependent CI is the "To" CI and the CI upon which it depends is the "From". For example, if a server goes down, it affects the PC, but if the PC goes down, it doesn't affect the server. In this example, the relationship is "From" the server "To" the PC. The Relationships option is used to define these relationships, which can be viewed as text or as a figure.

Add a Relationship

To add a relationship for CIs that are not Services:

Select Administration | Relationships. The Relationship Configuration page is displayed.

Next to the Relationship field, click the **Add** button. The Relationship Editor is displayed.

The following fields are mandatory in the Relationships Editor:

Relationship Name (Overall)—Enter a name for this relationship.

Relationship Name (From other CIs to particular CI)—Enter a name for the relationship from the CI. For example, if you are setting up an email server relationship, the "From" would be from the email server and might be named "Email Server".

Relationship Name (To other CIs from particular CI)—Enter a relationship name for the dependent CI. For example, is you are setting up an email server relationship, the "To" would be the email client and might be named "Email Client".

Relationship Color—Select a color for the relationship. When a visualization of the relationship is displayed, the line between CIs in the relationship is displayed in the color you specify here.

Enforce constraints on CI types allowed to use this relationship?—If you select no, any CI can use this relationship. If you select Yes, fields are opened for you to specify which CIs can use the relationship.

Constraints—Allow this relationship From and To the following CI Types—Specify the permitted CIs in the From drop-down field and the permitted CIs in the To drop-down field, then click the **Add** button. To Edit a CI Constraint, click on the line containing the CI specifications, change the CI Types in the drop-down lists, and click on the Change link (to exit the Edit mode, click on the Change link without modifying any settings). To Delete a CI Constraint, click the Delete link beside the CI specification.

When you have completed the relationship definition, click the **Save** button. The relationship name is displayed in the Relationship field.

To add a relationship for a Service CI:

Edit the Service that you want to update, and select the CI Relationships tab.
Select the "derived from" option, select the items you want to relate, and then click Add. You can view the details of CIs before you save the relationship and use CTRL and Shift to select multiple CIs.
Modify the columns that will be displayed if needed by double-clicking them. The default columns are CI Name, Status, Related To and Related From.
To see the results of this action, return to the Service Catalog and review it there. If a CI has two related assets and you relate that CI to another asset or CI, the new relationship is displayed. You must view the individual asset records to see the original relationship.

Edit a Relationship

To edit a relationship:

Select Administration | Relationships. The Relationship Configuration page is displayed.

Click on the name of the relationship you want to edit in the Relationship field.

Next to the Relationship field, click the **Edit** button. The Relationship Editor is displayed. Refer to step 3 in the Add a Relationship procedure above for details on the fields.

When you have completed your edits, click the **Save** button.

Delete a Relationship

To delete a relationship:

Select Administration | Relationships. The Relationship Configuration page is displayed.

Click on the relationship you want to delete in the Relationships field.

Click the **Delete** button. A confirmation pop-up window is displayed into which you must enter your password in order to complete the deletion.

Enter your password and click the **GO** button. The relationship is deleted and is no longer displayed in the Relationships field.

Imports

Imports Overview

The CMDB imports page allows you to import CI data from BMC FootPrints Asset Core, a CSV file, or a SQL database. You can import the data "on-demand" by going to the Imports page and telling Configuration Manager to perform the import immediately or you can schedule the imports. Any data that can be saved in a CSV file or SQL database table can be imported, including the output of barcode scanners.

It is very important to note that, before you import any data into your CMDB, you must create your CI Types, Attributes, Relationships, and Statuses.

The CMDB import feature is extremely flexible and has been designed so that you can import data from a variety of sources to update the same CMDB. In addition, you can schedule your imports to be performed automatically and without any further intervention. For example, you can set up a schedule of imports to update a specific CMDB with data from BMC FootPrints Asset Core once a week and, at the same time, update the same CMDB from a SQL database on a different night every week. In addition, you can do immediate imports from a .CSV file to again update that same CMDB whenever you create the file. Furthermore, you can do all of these things with a variety of CMDBs. It is this flexibility that allows BMC FootPrints Configuration Manager to scale up to large organizations or work easily, quickly, and seamlessly within a small organization that has a single CMDB with a limited amount of data.

In order to import data from BMC FootPrints Asset Core, you must first create the ODBC Data Source.

Creating an ODBC DSN for SQL Database Import

To create the ODBC Data Source:

On the computer where BMC FootPrints Service Core is installed, select Control Panel | Administrative Tools | Data Sources (ODBC). The ODBC Data Source Administrator is displayed.

Select the System DSN tab.

Click the Add button.

Pick the ODBC driver for the type of database you are connecting to. If an ODBC driver is not listed for the database, you must obtain the driver from the manufacturer. If connecting to BMC FootPrints Asset Core, highlight "SQL Server" in the list and click the Finish button. The following instructions apply to SQL Server only. Please visit the web site of the manufacturer of the database type you are connecting to for more information on configuration.

The Create a New Data Source to SQL Server wizard is displayed. Give the new data source a name in the name field.

In the Description field, enter any description you like for this data source. For example, you might use "Data source for BMC FootPrints Asset Core for the CMDB import".

In the "Which SQL Server do you want to connect to?" field, select the SQL Server that contains the data you want to import from the drop-down field. If importing from BMC FootPrints Asset Core, this will be the SQL Server in which BMC FootPrints Asset Core stores its repository.

Click the Next button.

On the next page, select the SQL Server authentication radio button.

In the Login ID field, enter a login ID that has Read permissions for the BMC FootPrints Asset Core database.

In the Password field, enter the password, if there is one, for that Login ID to the BMC FootPrints Asset Core database. If there is no password configured for that ID, leave the field blank.

Click the Next button.

On the next page, if the default database for the login ID is not the database to which you want to connect, check the "Change the default database to:" checkbox and select database from the drop-down field. The database will be named “AssetManager” if you are connecting to BMC FootPrints Asset Core.

Click the Next button.

On the next page, accept all default selections and click the Finish button.

Imports Page Controls

Most of the controls on the Imports page only become useful when you have created rule sets for imports. The following explains the controls on this page:

New—Click this button to create a new import rule set.

Edit—To edit an existing rule set, highlight the rule set in the list, then click the Edit button.

Delete—To delete an existing rule set, highlight the rule set in the list, then click the Delete button.

Run—To run an import "on demand", i.e., manually, highlight the rule set in the list and then click the Run button. If the rule set requires email summaries of the results of the import be sent out, then when the import finishes, email summaries are sent to the specified email addresses. In addition, if the rule set requires it, then pop-up windows containing the results of the import are displayed to the designated agents. You must enter your password to run the import.

Refresh—Refreshes the page.

Headings—Headings in the list are Ruleset, Next Run, Previous Run, and Status. Clicking on the headings sorts the list according to that heading.

Ruleset—The name of the rule set.

Next Run—The date on which the next import will be run.

Previous Run—The date on which the import was last run.

Status—Displays the status of the most recent import. Clicking on the **Completed** status displays a summary report on the import. The summary contains information on:

the date and time that the import was run

the status of the import

the number of records in the CMDB to which the data was imported

the number of records that were created

the number of records that were updated

the number of records that were rejected.

Within this summary report, if you click on the icon, a detailed report on the import is displayed as a pop-up window.

Import from BMC FootPrints Asset Core

BMC FootPrints Asset Core information may need to be imported in several steps, with the Import Types (see below) imported at different times. Both CI data and relationship information can be imported.

Import CIs

To import CI data from BMC FootPrints Asset Core:

From the CMDB homepage, select Admin | Imports. The CMDB Import Data page is displayed.

Click the **New** button.

The Data Source step of the Data Import | Add New Ruleset page is displayed. Select BMC FootPrints Asset Core from the drop-down. The **Import Type** option is displayed.

Designate the type of data to import. Options are:

Devices—"Devices" are Desktops, Laptops, Servers, Routers, Switches, and Printers. The terms "Device" and "Asset" are used interchangeably in Configuration Manager.

Software Items—"Software Items" are applications that reside on devices.

Network Relationships—"Network Relationships" denote connections between switches and routers to desktops, servers, laptops, printers, and other switches and routers.

Software Relationships—"Software Relationships" denote which software is installed on each desktop, laptop, and server.

Click the **Next** button. If you selected Devices, the next step is Data Filter. If you selected Software Items, the next step is Data Mapping. If you selected Software or Network Relationships, the next step is Relationships. Options are as follows:

Data Filter—All Device Types from BMC FootPrints Asset Core will be included by default. Remove any types you don't want included from the Included Types field. If you selected Devices, when you click the Next button, the Data Mapping step is displayed.

Data Mapping—Complete the sections for Data Mapping.

Default CI Type—Select the CI type that will serve as the default. Any imported CI will be of this type unless it matches the criteria of subsequent CI type rules defined in the next step. It is best to choose the CI type that is most common for the default. The drop-down field will contain a list of all of the CI types in your CMDB. This field is mandatory. You must choose a default CI type.

CI Type Rules—Click the Add button to create a rule. When you click the Add button, the CI Type Rule field is displayed. Complete the fields to filter the CI types to be included. Select a column in the BMC FootPrints Asset Core database on which to filter, then choose the data that would identify the CI Type in that column. For example, you might choose a column called Product Type and enter "Word" in the "contains" field, then select a CI Type, such as "Authoring Application", from the CI Type drop-down field. This means that the CMDB, when it performs the import, will look in that column for each CI and, when it finds a match, will specify the CI Type for that CI as "Authoring Application". You should create a CI type rule for every CI type you want to import that is not the default. You can change the rules later by returning to this page, highlighting the rule in the CI Type Rules field, and then clicking the **Edit** button.

Attribute Mapping—Map the columns from BMC FootPrints Asset Core to CI attributes. This section is mandatory. You must have at least one mapping.

Remove any BMC FootPrints Asset Core columns that you don't want mapped from the list of column names by highlighting the column names and then clicking the **Remove** button. This allows you to only

import the data that you truly want to see as part of the CMDB. Removal of unwanted columns is mandatory.

Click the **Add** button. The Attribute Mapping fields are displayed.

Select the column name from the Column drop-down field, then select the Attribute that it so be mapped to that column from the Attribute drop-down field. When the import is performed, the data is extracted from the column field and entered, as appropriate, as that Attribute.

Click the **Complete** button when you have made your selection. Be sure to map every Attribute that you want to import, but again, you do not have to import every column in BMC FootPrints Asset Core.

Status—Click one of the radio buttons. You can either apply a single status to every item imported (select the status you want to apply from the drop-down field). This section is mandatory.

NOTE

By default we do not map the status column of the BMC FootPrints Asset Core import view to anything, so you won't see it in the Attribute Mapping list, but you will see the Status column listed in the columns drop-down if you choose to add a new Attribute Mapping.

Contacts—Optionally, use one of the columns in the data you are importing to associate the CI with a contact. For example, you may have a unique identifier in a particular column in BMC FootPrints Asset Core that associates the CI with an individual like "User Name" which will contain the user name of the user logged in at the time of the audit. This can be mapped to a contact field you have set up in the Address Book, such as User ID. To map the column to the field for the purpose of associating CIs with contacts, select the column from the Columns drop-down field and then select the contact field from the Contact Fields drop-down field.

Unique Key—The Unique Key identifies whether a CI already exists for the imported data. When BMC FootPrints Service Core performs the import, if the Unique Key for an existing CI matches the data to be imported, a new CI is not created, but the attributes for the existing CI are updated. If a match is not found for the Unique Key, then a new CI is created. For example, you might designate a BMC FootPrints Asset Core column named "Serial Number" as the Unique Key, assuming all serial numbers are unique. When Configuration Manager performs an update on the CMDB data, if the serial number of a CI that is being imported matches an existing serial number, BMC FootPrints Service Core updates the attributes of the existing CI in the CMDB with any new data. If, however, a CI is being imported and there is no match between the Serial Number column and an existing CI, Configuration Manager creates a new CI for that data. You can add more than one Unique Key if you need to combine multiple columns in order to uniquely identify CIs.

Relationships

Relationship—This option is provided if your import contains information on a single relationship type. For example, the file might have two columns, the first containing the IP addresses of PCs and the second containing the names of printers to which those PCs print. In that circumstance, you can define a single relationship for the data you are importing. Select the relationship that is associated with this import from the drop-down field.

From CI Identifier—This field is used to define which column(s) in the file corresponds to which CI attribute in the CMDB. Using our example above, the first column containing the IP addresses of the PCs might be called "IP adds", which could correspond to the attribute "IP Address" in the CMDB. At least one mapping must be defined. To perform the mapping, click the **Add** button. The Select Identifier fields are displayed.

Column—Select the name of the column that contains data that will uniquely identify a CI that exists in the CMDB for the From relationship from the drop-down field.

Attribute—Select the name of the attribute that contains data that will match the data being imported from the column for the From relationship from the drop-down field.

If two or more columns of data are needed to uniquely identify the From CI, you can add additional identifiers. Only CIs that match all From identifiers will be selected when the import runs.

When you have made your selections, click the **Complete** button. The mapping is displayed in the From CI Identifier field.

To CI Identifier—This field is used to define which column(s) in the file corresponds to which CI attribute in the CMDB. Using our example above, the second column containing the Names of the Printers might be called "Printers", which could correspond to the attribute "Printer Name" in the CMDB. At least one mapping must be defined. To perform the mapping, click the **Add** button. The Select Identifier fields are displayed.

Column—Select the name of the column that contains data that will uniquely identify a CI that exists in the CMDB for the To relationship from the drop-down field.

Attribute—Select the name of the attribute that contains data that will match the data being imported from the column for the To relationship from the drop-down field.

If two or more columns of data are needed to uniquely identify the To CI, you can add additional identifiers. Only CIs that match all To identifiers will be selected when the import runs.

When you have made your selections, click the **Complete** button. The mapping is displayed in the To CI Identifier field.

Click the **Next** button. The General Options step is displayed.

The General Options step displays fields which may be completed as follows:

Save As—Enter a name for this rule set. Saving the rule is required in order to rerun the rule, either on a schedule or manually. If you save the rule set, it will be displayed in a list the next time you select Admin | Imports from the CMDB homepage. At that point, you will also be able to edit the rule set as well.

Notes—Enter any commentary you wish in this field.

Schedule—Define a schedule for running the import. The import will run automatically on the schedule you set here.

Immediately—The import is scheduled to run as soon as you click the **Finish** button and will start running within 1 minute..

Specific Time/Date—When you click this radio button, a field is displayed for selecting the time and date at which to run the import. Click anywhere in the field or on the icon to display the time and date scheduler. This is a one-time import.

Recurring—Select Recurring to set up an automatic, recurring import of data. When you click this radio button, a **Configure** button is displayed. Click the **Configure** button to display the scheduler. Set the recurring import to occur Daily, Weekly, or Monthly, then set the day of the week or month and the time of day on which to perform the import.

Manual Only—Select Manual Only to perform imports only when the system is instructed to do so from the Admin | Imports page by clicking the **Run** button.

Email Summary—The email summary sends a summary when the import is finished. The summary contains some basic information about the import, such as how many CIs were created and/or updated, as well as error messages received.. Enter the email addresses or agent's user ID of those you want to receive an email summary.

Pop-up Summary—The pop-up summary displays the same information as the email summary, only as a pop-up window. The window is displayed either immediately to agents who are logged in or the first time an agent logs in after the import is performed. Enter the agent user IDs of those you want to receive a summary pop-up.

Enter your password and click the **Finish** button. The CMDB Data Import page is displayed with the new ruleset listed in the Ruleset column.

Import from Text (CSV) File

Any data that can be saved to a CSV file can be imported using an import ruleset. This is useful for data saved in spreadsheets or any data that can be saved in CSV format, for example output of some barcode scanners or data from other applications . The ordering of the columns can be flexible as the import will assist you in specifying what data you want and don't want and how that data should be mapped. You must create or import CIs before importing relationships; the CIs to relate have to already exist in the CMDB.

Import CIs

To import CI data from a text file that is in .CSV format:

From the CMDB homepage, select Admin | Imports. The CMDB Import Data page is displayed.

Click the **New** button. The Data Import | Add New Ruleset page is displayed.

From the Data Source Type drop-down field, choose Text File (csv). The page is expanded to display fields for defining the import.

Complete the fields as follows:

File location—Select one of the radio buttons:

Upload now—Enter the file location that is accessible from the current machine either by typing it directly in the field or by browsing to it. The location could be local, UNC path, or a shared network drive.

Read from FootPrints server—Enter the file location that is accessible from the server either by typing it directly in the field or by browsing to it. The location could be local, UNC path, or a shared network drive.

Retrieve from web—Enter the web address of the file.

Header row—Select one of the radio buttons:

the first row is a "header" row, with column names—The first row is not incorporated into the CMDB as data. The data in the header row will assist later in identifying the columns.

the first row is actual data— The first row is incorporated into the CMDB as data.

Import type—Select one of the radio buttons:

CIs—The data contains information about CIs, such as attributes.

Relationships—The data contains CI relationship information.

Click the **Next** button. The CSV File Properties step is displayed.

The CSV File Properties step enables you to perform two simple but important functions. The first is to provide names for the columns of data that you are importing. This is useful if you have columns without header rows, or if you want to rename the name that came from the header row. These names will be used in the next step so making user friendly names here will assist you later. All of your columns must have names and you cannot remove any of them even if you don't intend on using them. The second is to ensure that Configuration Manager correctly assigned a data type to the columns. For example, you may have a date/time field in one of your

columns. Configuration Manager is very likely to consider that text. The CSV File Properties step allows you to correct that property and, in the case of date or date/time fields, specify the format for the data. To check on and modify the CSV file properties:

Highlight a column in the CSV File Columns field.

Click the **Column Properties** button. Fields are displayed containing the column properties as Configuration Manager was able to determine them.

You must name or change the name of the column by typing into the Name field.

To change the data type, select the correct data type from the drop-down field. A few rows of sample data appear for convenience to help you decide the data type. If you select "datetime", a Date Format drop-down field is displayed. Select the appropriate format from the drop-down field. “[DAY,]” represents that an optional 3 letter day of the week followed by a comma may be present. “MON” represents a 3 letter abbreviation for the month is present.

When you are satisfied with the properties for a column, click the **Save Changes** button.

When you are satisfied with the properties for all of the columns, click the **Next** button. The Data Mapping step is displayed.

Default CI Type—Select the CI type that will serve as the default. Any imported CI will be of this type unless it matches the criteria of subsequent CI type rules defined in the next step. It is best to choose the CI type that is most common for the default. The drop-down field will contain a list of all of the CI types in your CMDB. This field is mandatory. You must choose a default CI type.

CI Type Rules—You should create a CI type rule for every CI type you want to import that is not the default. If this import will only consist of 1 CI type, this step can be skipped. Click the Add button to create a rule. When you click the Add button, the CI Type Rule field is displayed. Complete the fields to filter the CI types to be included. Select a column from the CSV file on which to filter, then choose the data that would identify the CI Type in that column. For example, if your import contains mostly Desktops and some Laptops, you will have chosen “Desktop” as the default type in the previous step and will have to create a rule for the laptops. Select a column that would contain information on what type of CI is being imported. There may be a column that specifically has the text “Laptop” in it. You may also want to use some portion of the text from 1 of the columns. For example, you naming convention for your assets could mandate that all laptops have the letters “LAP” as the 1st 3 letters of the name. Lastly choose the CI Type from the list of CI Types you defined in the CMDB. You can change the rules later by returning to this page, highlighting the rule in the CI Type Rules field, and then clicking the **Edit** button.

Attribute Mapping—Map the columns from the CSV file to CI attributes. This section is mandatory. You must have at least one mapping.

Remove any CSV file columns that you don't want mapped from the list of column names by highlighting the column names and then clicking the **Remove** button. This allows you to only import the data that you truly want to see as part of the CMDB.

Click the **Edit** button next to any existing column name, or click the Add button to map a column that was previously removed.. The Attribute Mapping fields are displayed.

Select the column name from the Column drop-down field, then select the Attribute that it so be mapped to that column from the Attribute drop-down field. When the import is performed, the data is extracted from the column field and entered, as appropriate, as that Attribute.

Click the **Complete** button when you have made your selection. Be sure to map every Attribute that you want to import and to **Remove** every column that you do not want to import. Removal of unwanted columns is mandatory.

Status—Click one of the radio buttons. You can either apply a single status to every item imported (select the status you want to apply from the drop-down field), or you can use one of the columns that you are importing to specify the status. This section is mandatory.

Contacts—Optionally use one of the columns in the data you are importing to associate the CI with a contact. For example, you may have a unique identifier in a particular column in the CSV file that associates the CI with an individual. This can be mapped to a contact field you have set up in the Address Book, such as User ID. To map the column to the field for the purpose of associating CIs with contacts, select the column from the Columns drop-down field and then select the contact field from the Contact Fields drop-down field.

Unique Key—The Unique Key identifies whether a CI exists for the imported data already. When Configuration Manager performs the import, if the Unique Key for an existing CI matches the data to be imported, a new CI is not created, but the attributes for the existing CI will be updated. If a match is not found for the Unique Key, then a new CI is created. For example, you might designate a CSV file column named "Serial Number" as the Unique Key, assuming all serial numbers are unique. When Configuration Manager performs an update on the CMDB data, if the serial number of a CI that is being imported matches an existing serial number, Configuration Manager updates the attributes of the existing CI in the CMDB with any new data. If, however, a CI is being imported and there is no match between the Serial Number column and an existing CI, Configuration Manager creates a new CI for that data. You can add more than one Unique Key if you need to combine multiple columns in order to uniquely identify CIs.

Click the **Next** button. The General Options step is displayed.

The General Options step has fields which may be completed as follows:

Save As—Enter a name for this ruleset. Saving the rule is required in order to rerun the rule, either on a schedule or manually. If you save the ruleset, it will be displayed in a list the next time you select Admin | Imports from the CMDB homepage. At that point, you will also be able to edit the ruleset as well.

Notes—Enter any commentary you wish in this field.

Schedule—Define a schedule for running the import. The import will run automatically on the schedule you set here.

Immediately—The import is scheduled to run as soon as you click the **Finish** button and will start running within 1 minute.

Specific Time/Date—When you click this radio button, a field is displayed for selecting the time and date at which to run the import. Click anywhere in the field or on the icon to display the time and date scheduler. This is a one-time import.

Recurring—Select Recurring to set up an automatic, recurring import of data. When you click this radio button, a **Configure** button is displayed. Click the **Configure** button to display the scheduler. Set the recurring import to occur Daily, Weekly, or Monthly, then set the day of the week or month and the time of day on which to perform the import. This option is not available for an uploaded CSV file.

Manual Only—Select Manual Only to perform imports only when the system is instructed to do so from the Admin | Imports page by clicking the **Run** button.

Email Summary—The email summary sends a summary when the import is finished. The summary contains some basic information about the import, such as how many CIs were created and/or updated, as well as error messages received. Enter the email addresses or agent user IDs of those you want to receive an email summary.

Pop-up Summary—The pop-up summary displays the same information as the email summary, only as a pop-up window. The window is displayed either immediately to agents who are logged in or the first time an agent logs in after the import is performed. Enter the agent user IDs of those you want to receive a summary pop-up.

Enter your password and click the **Finish** button. The CMDB Data Import page is displayed with the new ruleset listed in the Ruleset column.

Import Relationships

This procedure describes importing relationship data from a CSV file. Some CIs must already exist in the CMDB in order to import relationships between them. The CSV file must contain a minimum of 2 columns that will uniquely identify the 2 CIs being related. Additionally, a column could exist that identifies the type of relationship if 1 ruleset will contain multiple relationship types. Additional columns that help uniquely identify the CIs could also be included if a combination of data from 2 or more columns is needed to uniquely identify the CI.

From the CMDB homepage, select Admin | Imports. The CMDB Import Data page is displayed.

Click the **New** button. The Data Import | Add New Ruleset page is displayed.

From the Data Source Type drop-down field, choose Text File (csv). The page is expanded to display fields for defining the import.

Complete the fields as follows:

File location—Chose one of the radio buttons:

Upload now—Enter the file location that is accessible from the current machine either by typing it directly in the field or by browsing to it. The location could be local, UNC path, or a shared network drive.

Read from BMC FootPrints server—Enter the path of the file as it exists on the BMC FootPrints Service Core web server.

Retrieve from web—Enter the web address of the file.

Header row—Chose one of the radio buttons:

the first row is a "header" row, with column names—The first row is not incorporated into the CMDB as data. The data in the header row will assist later in identifying the columns.

the first row is actual data— The first row is incorporated into the CMDB as data.

Click the radio button for the Relationships import type. The two Import Type options are:

CIs—The data contains information about CIs, such as attributes.

Relationships—The data contains CI relationship information.

Click the **Next** button. The CSV File Properties step is displayed.

The CSV File Properties step enables you to perform two simple but important functions. The first is to provide names for the columns of data that you are importing. This is useful if you have columns without header rows, or if you want to rename the name that came from the header row. These names will be used in the next step so making user friendly names here will assist you later. All of your columns must have names and you cannot remove any of them even if you don't intend on using them. The second is to ensure that Configuration Manager correctly assigned a data type to the columns. For example, you may have a date/time field in one of your columns. Configuration Manager is very likely to consider that text. The CSV File Properties step allows you to correct that property and, in the case of date or date/time fields, specify the format for the data. To check on and modify the CSV file properties:

Highlight a column in the CSV File Columns field.

Click the **Column Properties** button. Fields are displayed containing the column properties as Configuration Manager was able to determine them.

You must name or change the name of the column by typing the name in the Name field.

To change the data type, select the correct data type from the drop-down field. A few rows of sample data appear for convenience to help you decide the data type. If you select "datetime", a Date Format drop-down field is displayed. Select the appropriate format from the drop-down field. "[DAY,]" represents that an optional 3 letter day of the week followed by a comma may be present. "MON" represents a 3 letter abbreviation for the month is present.

When you are satisfied with the properties for a column, click the **Save Changes** button.

When you are satisfied with the names and properties of all of the columns, click the **Next** button. The Relationships step is displayed. In this step, specify the relationship mapping from the CSV file to the relationships you defined within the CMDB.

Relationship—This is a mandatory selection.

Select one Relationship for the whole import—This option is provided if your CSV file contains information on a single relationship type. For example, the file might have two columns, the first containing the IP addresses of PCs and the second containing the names of printers to which those PCs print. In that circumstance, you can define a single relationship for the data you are importing. Select the relationship that is associated with this import from the drop-down field.

Relationship is specified in an imported column—This option is provided if your CSV file contains information about the type of relationships within one of the columns. This is useful if you are planning to import multiple relationship types within 1 ruleset. Select the column that contains the relationship information from the drop-down field.

From CI Identifier—This field is used to define which column(s) in the file corresponds to which CI attribute in the CMDB. Using our example above, the first column containing the IP addresses of the PCs might be called "IP adds", which could correspond to the attribute "IP Address" in the CMDB. At least one mapping must be defined. To perform the mapping, click the **Add** button. The Select Identifier fields are displayed.

Column—Select the name of the column that contains data that will uniquely identify a CI that exists in the CMDB for the From relationship from the drop-down field.

Attribute—Select the name of the attribute that contains data that will match the data being imported from the column for the From relationship from the drop-down field.

If two or more columns of data are needed to uniquely identify the From CI, you can add additional identifiers. Only CIs that match all From identifiers will be selected when the import runs.

When you have made your selections, click the **Complete** button. The mapping is displayed in the From CI Identifier field.

To CI Identifier—This field is used to define which column(s) in the file corresponds to which CI attribute in the CMDB. Using our example above, the second column containing the Names of the Printers might be called "Printers", which could correspond to the attribute "Printer Name" in the CMDB. At least one mapping must be defined. To perform the mapping, click the **Add** button. The Select Identifier fields are displayed.

Column—Select the name of the column that contains data that will uniquely identify a CI that exists in the CMDB for the To relationship from the drop-down field.

Attribute—Select the name of the attribute that contains data that will match the data being imported from the column for the To relationship from the drop-down field.

If two or more columns of data are needed to uniquely identify the To CI, you can add additional identifiers. Only CIs that match all To identifiers will be selected when the import runs.

When you have made your selections, click the **Complete** button. The mapping is displayed in the To CI Identifier field.

When you have completed the fields on this page, click the **Next** button. The General Options step is displayed.

The General Options step has fields which may be completed as follows:

Save As—Enter a name for this ruleset. Saving the rule is required in order to rerun the rule, either on a schedule or manually. If you save the ruleset, it will be displayed in a list the next time you select Admin | Imports from the CMDB homepage. At that point, you will also be able to edit the ruleset as well.

Notes—Enter any commentary you wish in this field.

Schedule—Define a schedule for running the import. The import will run automatically on the schedule you set here.

Immediately—The import is scheduled to run as soon as you click the **Finish** button and will start running within 1 minute.

Specific Time/Date—When you click this radio button, a field is displayed for selecting the time and date at which to run the import. Click anywhere in the field or on the icon to display the time and date scheduler. This is a one-time import.

Recurring—Select Recurring to set up an automatic, recurring import of data. When you click this radio button, a **Configure** button is displayed. Click the **Configure** button to display the scheduler. Set the recurring import to occur Daily, Weekly, or Monthly, then set the day of the week or month and the time of day on which to perform the import. This option is not available for an uploaded CSV file.

Manual Only—Select Manual Only to perform imports only when the system is instructed to do so from the Admin | Imports page by clicking the **Run** button.

Email Summary—The email summary sends a summary when the import is finished. The summary contains some basic information about the import, such as how many CIs were created and/or updated, as well as error messages received. Enter the email addresses or agent user IDs of those you want to receive an email summary.

Pop-up Summary—The pop-up summary displays the same information as the email summary, only as a pop-up window. The window is displayed either immediately to agents who are logged in or the first time an agent logs in after the import is performed. Enter the agent user IDs of those you want to receive a summary pop-up.

Enter your password and click the **Finish** button. The CMDB Data Import page is displayed with the new ruleset listed in the Ruleset column.

Import from SQL Database

The following instructions are for configuring this feature for both Windows and UNIX/Linux BMC FootPrints Service Core versions. A link to the external database must first be enabled before the feature can be configured within BMC FootPrints Service Core:

Windows versions—A system Data Source Name (DSN) must first be created on the **FootPrints Service Core** web server that can make a connection to the database that is being linked. This can be done using the option under the Windows Start menu for Administrative Tools | Data Sources (ODBC). If an Open Database Connectivity (ODBC) driver is not listed for the database, you must obtain the driver from the manufacturer.

UNIX versions—This feature uses the database driver (DBD) for the Perl Database Interface (DBI) to connect to external databases. If the database you connect to is of the same type as your BMC FootPrints Service Core database, nothing additional must be done. If you want to connect to a different database type (for example, BMC FootPrints Service Core data is kept in MySQL, but you want to connect to an Oracle database), a DBD for the external database must be built.

Import CIs

This procedure describes importing CI data from a SQL database. The procedure for importing relationship data from a SQL database follows this procedure.

From the CMDB homepage, select Admin | Imports. The CMDB Import Data page is displayed.

Click the **New** button. The Data Import | Add New Ruleset page is displayed.

From the Data Source Type drop-down field, choose SQL Database. The page is expanded to display fields for defining the import.

Click the **Configure** button to define the SQL database configuration. The Configure Database Connection pop-up is displayed. Complete the fields in the pop-up as follows:

Data Source Name—Enter the name of the system DSN (Windows) or external server name (UNIX) you configured previously.

Click the **Next** button in the Configure Database Connection pop-up window. Another Configure Database Connection pop-up window is displayed.

Select the table that you want imported from the Select a Table or a View drop-down field.

Click the **Next** button in the Configure Database Connection pop-up window. The pop-up is redisplayed, showing the columns in the table that you selected. This provides you with an opportunity to examine the columns before you decide to import the data.

If you are satisfied with the database table columns, click the **Finish** button. The pop-up window is closed and the connection configuration information is displayed on the Data Source page.

Click the radio button for the CIs import type. The two Import Type options are:

CIs—The data contains information about CIs, such as attributes.

Relationships—The data contains CI relationship information.

Click the **Next** button. The Data Mapping step is displayed.

Default CI Type—Select the software CI type that will serve as the default. Subsequent rules will filter for other software CI types. It is best to choose the software CI type that is most common for the default. The drop-down field will contain a list of all of the CI types in your CMDB, so do not be confused when you see hardware items in the list. This field is mandatory. You must choose a default CI type.

CI Type Rules—Click the Add button to create a rule. When you click the Add button, the CI Type Rule field is displayed. Complete the fields to filter the CI types to be included. Select a column in the SQL database on which to filter, then choose the data that would identify the CI Type in that column. For example, you might choose a column called Product Type and enter "Word" in the "contains" field, then select a CI Type, such as "Authoring Application", from the CI Type drop-down field. This means that the CMDB, when it performs the import, will look in that column for each CI and, when it finds a match, will specify the CI Type for that CI as "Authoring Application". You should create a CI type rule for every CI type you want to import that is not the default. You can change the rules later by returning to this page, highlighting the rule in the CI Type Rules field, and then clicking the **Edit** button.

Attribute Mapping—Map the columns from SQL database to CI attributes. This section is mandatory. You must have at least one mapping.

Remove any SQL database columns that you don't want mapped from the list of column names by highlighting the column names and then clicking the **Remove** button. This allows you to only import the data that you truly want to see as part of the CMDB.

Click the **Add** button. The Attribute Mapping fields are displayed.

Select the column name from the Column drop-down field, then select the Attribute that it so be mapped to that column from the Attribute drop-down field. When the import is performed, the data is extracted from the column field and entered, as appropriate, as that Attribute.

Click the **Complete** button when you have made your selection. Be sure to map every Attribute that you want to import and to **Remove** every column that you do not want to import. Removal of unwanted columns is mandatory.

Status—Click one of the radio buttons. You can either apply a single status to every item imported (select the status you want to apply from the drop-down field), or you can use one of the columns that you are importing to specify the status. This section is mandatory.

Contacts—Optionally use one of the columns in the data you are importing to associate the CI with a contact. For example, you may have a unique identifier in a particular column in the SQL database that associates the CI with an individual. This can be mapped to a contact field you have set up in the contact list, such as User ID. To map the column to the field for the purpose of associating CIs with contacts, select the column from the Columns drop-down field and then select the contact field from the Contact Fields drop-down field.

Unique Key—The Unique Key is required if you intend to reuse this ruleset for updating your CMDB with an import. This is because an import can create a new CI in the CMDB. The Unique Key identifies whether a CI exists for the imported data already. When BMC FootPrints Service Core performs the import, if the Unique Key matches the data to be imported, a new CI is not created. If a match is not found for the Unique Key, then a new CI is created. For example, you might designate a SQL database column named "Serial Number" as the Unique Key, assuming all serial numbers are unique. When BMC FootPrints Service Core performs an update on the CMDB data, if the serial number of a CI that is being imported matches an existing serial number, BMC FootPrints Service Core updates the attributes of the existing CI in the CMDB with any new data. If, however, a CI is being imported and there is no match between the Serial Number column and an existing CI, BMC FootPrints Service Core creates a new CI for that data. You can add more than one Unique Key if you need to provide identify multiple columns in order to uniquely identify CIs.

Click the **Next** button. The General Options step is displayed.

The General Options step is optional. The fields may be completed as follows:

Save As—Enter a name for this ruleset. Saving the rule is required in order to rerun the rule, either on a schedule or manually. If you save the ruleset, it will be displayed in a list the next time you select Admin | Imports from the CMDB homepage. At that point, you will also be able to edit the ruleset as well.

Notes—Enter any commentary you wish in this field.

Schedule—Define a schedule for running the import. The import will run automatically on the schedule you set here.

Immediately—The import is run as soon as you click the **Finish** button.

Specific Time/Date—When you click this radio button, a field is displayed for selecting the time and date at which to run the import. Click anywhere in the field or on the icon to display the time and date scheduler. This is a one-time import.

Recurring—Select Recurring to set up an automatic, recurring import of data. When you click this radio button, a **Configure** button is displayed. Click the **Configure** button to display the scheduler. Set the recurring import to occur Daily, Weekly, or Monthly, then set the day of the week or month and the time of day on which to perform the import.

Manual Only—Select Manual Only to perform imports only when the system is instructed to do so from the Admin | Imports page by clicking the **Run** button.

Email Summary—The email summary sends a summary when the import is finished. The summary contains some basic information about the import, such as how many CIs were created and/or updated, as well as error messages received. Enter the email addresses of those you want to receive an email summary.

Pop-up Summary—The pop-up summary displays the same information as the email summary, only as a pop-up window. The window is displayed either immediately to agents who are logged in or the first time an agent logs in after the import is performed. Enter the agent user IDs of those you want to receive a summary pop-up.

Click the **Finish** button. The CMDB Data Import page is displayed and the new ruleset is listed in the Ruleset field.

Import Relationships

This procedure describes importing relationship data from a SQL database.

From the CMDB homepage, select Admin | Imports. The CMDB Import Data page is displayed.

Click the **New** button. The Data Import | Add New Ruleset page is displayed.

From the Data Source Type drop-down field, choose SQL Database. The page is expanded to display fields for defining the import.

Click the **Configure** button to define the SQL database configuration. The Configure Database Connection pop-up is displayed. Complete the fields in the pop-up as follows:

Data Source Name—Enter the name of the system DSN (Windows) or external server name (UNIX) you configured previously.

Click the **Next** button in the Configure Database Connection pop-up window. Another Configure Database Connection pop-up window is displayed.

Select the table that you want imported from the Select a Table or a View drop-down field.

Click the **Next** button in the Configure Database Connection pop-up window. The pop-up is redisplayed, showing the columns in the table that you selected. This provides you with an opportunity to examine the columns before you decide to import the data.

If you are satisfied with the database table columns, click the **Finish** button. The pop-up window is closed and the connection configuration information is displayed on the Data Source page.

Click the radio button for the Relationships import type. The two Import Type options are:

CIs—The data contains information about CIs, such as attributes.

Relationships—The data contains CI relationship information.

Click the **Next** button. The Relationships step is displayed.

Click the **Next** button. The Relationships step is displayed. In this step you specify the relationship mapping from the SQL database to the relationships you have defined within the CMDB.

Relationship—This is a mandatory selection.

Select one Relationship for the whole import—This option is provided if you have a database table that contains information on a single relationship type. For example, the database table might have two columns, the first containing the IP addresses of PCs and the second containing the names of printers to which those PCs print. In that circumstance, you can define a single relationship for the data you are importing. Select the relationship that is associated with this column from the drop-down field.

Relationship is specified in an imported column—This option is provided if your table contains information about a variety of CIs and a variety of relationships, with one column containing the relationship information. Select the column that contains the relationship information from the drop-down field.

From CI Identifier—This field is used to define which column in the database table that you are importing corresponds to which CI attribute in the CMDB. Using our example above, the first column containing the IP addresses of the PCs might be called "IP adds", which could correspond to the attribute "IP addresses" in the CMDB. At least one mapping must be defined. To perform the mapping, click the **Add** button. The Select Identifier fields are displayed.

Column—Select the name of the column that contains the CI identifier for the From relationship from the drop-down field.

Attribute—Select the name of the attribute that contains the CI identifier for the From relationship from the drop-down field.

When you have made your selections, click the **Complete** button. The mapping is displayed in the From CI Identifier field.

To CI Identifier—This field is used to define which column in the database table that you are importing corresponds to which CI attribute in the CMDB. Using our example above, the first column containing the IP addresses of the PCs might be called "Prntrs", which could correspond to the attribute "Printer Name" in the CMDB. At least one mapping must be defined. To perform the mapping, click the **Add** button. The Select Identifier fields are displayed.

Column—Select the name of the column that contains the CI identifier for the To relationship from the drop-down field.

Attribute—Select the name of the attribute that contains the CI identifier for the To relationship from the drop-down field.

When you have made your selections, click the **Complete** button. The mapping is displayed in the To CI Identifier field.

When you have completed the fields on this page, click the **Next** button. The General Options step is displayed.

The General Options step is optional. The fields may be completed as follows:

Save As—Enter a name for this ruleset. Saving the rule is required in order to rerun the rule, either on a schedule or manually. If you save the ruleset, it will be displayed in a list the next time you select Admin | Imports from the CMDB homepage. At that point, you will also be able to edit the ruleset as well.

Notes—Enter any commentary you wish in this field.

Schedule—Define a schedule for running the import. The import will run automatically on the schedule you set here.

Immediately—The import is run as soon as you click the **Finish** button.

Specific Time/Date—When you click this radio button, a field is displayed for selecting the time and date at which to run the import. Click anywhere in the field or on the icon to display the time and date scheduler. This is a one-time import.

Recurring—Select Recurring to set up an automatic, recurring import of data. When you click this radio button, a **Configure** button is displayed. Click the **Configure** button to display the scheduler. Set the recurring import to occur Daily, Weekly, or Monthly, then set the day of the week or month and the time of day on which to perform the import.

Manual Only—Select Manual Only to perform imports only when the system is instructed to do so from the Admin | Imports page by clicking the **Run** button.

Email Summary—The email summary sends a summary when the import is finished. The summary contains some basic information about the import, such as how many CIs were created and/or updated, as well as error messages received. Enter the email addresses of those you want to receive an email summary.

Pop-up Summary—The pop-up summary displays the same information as the email summary, only as a pop-up window. The window is displayed either immediately to agents who are logged in or the first time an agent logs in after the import is performed. Enter the agent user IDs of those you want to receive a summary pop-up.

Click the **Finish** button. The CMDB Data Import page is displayed and the new ruleset is listed in the Ruleset field.

Automations

Automations Overview

BMC FootPrints Service Core provides an automation function for the CMDB. First you set criteria for the automation and set when the automation is to run. When a CI matches the criteria, you can set the automation to change the CI's status field, create an Issue, send out email, or run an external script.

Topics for this section describe how to:

Create an automation

Edit or delete an automation

Create an Automation

To create an automation for the CMDB:

From the CMDB homepage, select Administration from the toolbar and then select Automations from the main frame. The automations page is displayed.

Enter a name for the automation in the Name field.

Select a saved search or create custom automation criteria for the CI. The automation criteria, whether a saved search or a custom search, determine which CI, when the CI is saved, triggers an escalation.

Saved search—To use a saved search, select the search from the drop-down field. If you can't recall the search criteria for the saved searches, you will have to leave the automations page to review them. To review the saved search criteria, select Search | Saved from the CMDB toolbar. A summary of the saved searches and their criteria is displayed in the main frame.

Custom search criteria—To create custom automation criteria, click the Create Criteria button. The CMDB search page is displayed. Refer to CMDB Search for details on setting criteria in this page. When you have set your criteria, click the Return Criteria button.

Specify the When to Run values.

Select whether to run the automation when a CI is created only, edited only, created or edited, or periodically using the drop-down field. When you set the automation to run periodically, a drop-down field is displayed in which you set the period at which the automation runs. Options in the new field, which apply to Periodic Check only, are Hourly, Daily, Weekly, and Monthly. The Periodic check is run once an hour, day, week, or month according to the specified value. Periodic checking may result in a great many emails being sent and Issues being created, so use extreme caution with the periodic value.

If you want to run the automation upon creation, editing, or creation and editing of a CI, choose the times when the automation will run from the day and time checkboxes. You can choose any or all days of the week and any or all times of day. By default, all values are selected.

Specify the action(s) to be taken when a CI matches the criteria at least one must be specified. Click the Actions tab.

Change Status—Click the checkbox to change the Status field of the matching CI or CIs, then select the status to which the field should be changed.

Create Issue—Click the checkbox to create an Issue when a CI matches the criteria. The matching CI or CIs will be linked to the Issue that is created.

Workspace—Select the workspace in which to create the Issue.

AB Primary Key—Enter an Address Book primary key. The Primary Key is a unique identifier for each contact in your Address Book. If the Customer Self-service feature is used, it is the ID that Customers use to log into BMC FootPrints Service Core (along with a password). This field should be both present and unique to all contacts. User ID is the recommended field, and also the default for all templates. It is mandatory to enter the AB Primary Key when the action of an automation is to Create Issues. If the Address Book's Primary Key Field Name (such as "User ID") is entered, issues are created with no contact information when the automation runs. To have the issue created with a specific contact's information populated, enter that contact's Primary Key value (i.e. "jdoe").

Per CI or Aggregate CIs—The Aggregate CIs option is only available when the Periodic Check value is selected for When to Run the automation. Select whether an Issue is created for every CI that matches the criteria or, if Periodic Check was selected, all CIs that match the criteria when the automation is run are linked to a single Issue.

Create Issue As—Select a Quick Issue (either a regular Quick Issue or a Master Quick Issue) to be used to create the Issue. You must have at least one Quick Issue in the selected workspace in order to use the Create Issue function of CMDB automation.

Send Email—Click the checkbox to send an email when a CI matches the criteria.

Contacts—Send the email to AB contacts linked to the CI or CIs.

Additional Emails (one per line)—Enter email addresses, one per line, to receive an email when a CI matches the criteria.

Per CI or Aggregate CIs—The Aggregate CIs option is only available when the Periodic Check value is selected for When to Run (Criteria tab). Select whether an email is sent for each CI that matches the criteria or, if Periodic Check was selected, a single Issue to which all CIs that match the criteria are linked.

Template—Click the Template button to build the template for the email. When you click the button, the template window is displayed.

Insert Variable—The Insert Variable drop-down boxes insert a variable into the field below it. The first Insert Variable drop-down is for the Subject of the email and the second Insert Variable drop-down is for the Body of the email. Variables represent automation and CI data. Select as many variables as you wish, one at a time, to be inserted.

Subject—The variables and text you enter in this field become the subject line of the email.

Body—The variables and text you enter in this field become the body of the email message.

HTML or Text—Select whether to send the email as HTML or text.

Email field checkbox(es)—If you have an email field or fields set as a CI attribute, a checkbox is displayed for sending email to the address(es) designated in the field(s). For example, if you have a field called "Support Email", a "Support Email" checkbox is displayed here.

Run Script—Check the box and then enter the path and filename to an external script. If the checkbox is checked, the script is run when a CI matches the criteria.

Click the Add button to add the automation or click the reset button to clear all of the fields in the automation and begin again. If you add the automation, the fields are cleared and the automation name and status are displayed in the list of automations on the left side of the main frame.

Edit or Delete an Automation

Once you have created an automation or automations, they appear in the list of automations on the CMDB Automations page.

To edit an automation:

From the CMDB homepage, select Administration from the toolbar and then select Automations from the main frame. The automations page is displayed.

Click on the automation in the list of automations on the Automations page.

Click the Edit button. The right frame of the page is populated with the settings for the automation you selected. Edit the settings as needed. Refer to Create an Automation for further details of the settings.

Click the Add button to save the new settings.

Additional Editing Functions

In addition to editing the automation settings, you can change the order in which automations are performed and you can deactivate and activate automations. To change the order in which automations are performed, drag-and-drop the automation name to the desired position in the list of automations, then click the Save Active/Order button. To deactivate an automation, double-click on the entry in the Active column and then click the checkbox. When the box is checked, the automation is active and when the box is not checked, the automation is inactive. An active automation is denoted by the word Yes in the Active column and an inactive automation is denoted by the word No.

Delete an Automation

To delete an automation:

From the CMDB homepage, select Administration from the toolbar and then select Automations from the main frame. The automations page is displayed.

Click on the automation in the list of automations on the Automations page.

Click the Delete button. A confirmation window is displayed.

Click the OK button to delete the automation. The automation is removed from the list.

CMDB Roles

CMDB roles provide levels of permission to CMDB users in the same way as regular BMC FootPrints Service Core roles, except that these roles apply to CMDB users only. The three basic role properties are:

Read-only—Can view CMDB data, but cannot create CIs, edit CIs, or perform any CMDB administration tasks.

Create/Edit—Can create and edit CIs, but cannot perform any CMDB administration tasks.

Administrator—Can create CIs, edit CIs, and perform all CMDB administration tasks.

Administrators can also create new CMDB roles that include different combinations of creating and editing CIs and administering the CMDB. CMDB Roles can be created with a great deal of granularity to their permissions.

Edit CMDB Role Properties

To edit CMDB role properties:

From the CMDB homepage, select Administration | Roles. The CMDB Roles page is displayed.

Select a role from the drop-down field and click the **Edit role** button. The Properties page is displayed. Edit the fields as needed:

Select as default role—Unless otherwise specified, all users who are given access to a CMDB workspace have the role that is designated as the Default Role. By default, Read-Only is the default role in a CMDB Workspace. If you edit, for example, the Create/Edit role and check the "Select as default role" checkbox, all agents who have access to that Workspace have Create/Edit permissions unless they are

specifically given another role. This checkbox is provided to make it easier when creating agents so that the administrator does not have to specify a CMDB role for every agent who is given access to the Workspace.

Members—Highlight user IDs in the All CMDB Users field and then click the Add button to specify the role property for the highlighted users. When you click the Add button, the user IDs are displayed in the Role Members field. Highlight user IDs in the Role Members field and then click the Remove button to remove users from that role. If a user is removed from a role, that user still has access to the CMDB Workspace, but his or her role is changed to the Default Role.

Create CIs—Enable or disable permission to create CIs for this role using the radio buttons.

Edit CIs—Enable or disable permission to edit CIs for this role using the radio buttons.

CMDB Administration—Enable or disable permission to perform CMDB administration tasks for this role using the radio buttons.

Enter your password and click the **SAVE** button. The role properties are saved.

Create a CMDB Role

To create a new CMDB role property:

From the CMDB homepage, select Administration | Roles. The CMDB Roles page is displayed.

Click the **Create a new role** button. The Create New Role page is displayed.

Enter a name for the new role in the Role Name field, then click the **GO** button. The Properties page is displayed. Edit the fields as needed:

Select as default role—Unless otherwise specified, all users who are given access to a CMDB workspace have the role that is designated as the Default Role. By default, Read-Only is the default role in a CMDB Workspace. If you edit, for example, the Create/Edit role and check the "Select as default role" checkbox, all agents who have access to that Workspace have Create/Edit permissions unless they are specifically given another role. This checkbox is provided to make it easier when creating agents so that the administrator does not have to specify a CMDB role for every agent who is given access to the Workspace.

Members—Highlight user IDs in the All CMDB Users field and then click the Add button to specify the role property for the highlighted users. When you click the Add button, the user IDs are displayed in the Role Members field. Highlight user IDs in the Role Members field and then click the Remove button to remove users from that role. If a user is removed from a role, that user still has access to the CMDB Workspace, but his or her role is changed to the Default Role.

CMDB Administration—Enable or disable permission to perform CMDB administration tasks for this role using the radio buttons. Administration permissions enable access to the Administration button and functions from the CMDB Toolbar.

CI Permissions—The Permissions for CIs wizard allows you to specify whether this CMDB role can View, Create, Edit, and Delete CIs, and breaks down those permissions further by allowing you to specify the level of access to each CI Type for each Status. This provides a great degree of granularity in controlling access for users.

Show CI Types—Click only on the CI Types for which you want to administer permission. This is a multi-select field, so you can choose multiple CI Types to be displayed. When you change the selections, the fields in the Permissions Matrix below change to show only the selected CI Types.

Show Operations—Click only on the Operations (View, Create, Edit, and Delete) for which you want to administer permission. This is a multi-select field, so you can choose multiple Operations to be displayed. When you change the selections, the fields in the Permissions Matrix below change to show only the selected Operations.

Permissions Matrix—A checkmark in the Select All checks all of the checkboxes in the matrix. A checkmark in the box beside a CI Type checks all of the boxes in that row. A checkmark in the box beside a Status checks all of the checkboxes in that column.

Attribute Permissions—The Permissions for Attributes wizard allows you to specify whether this CMDB role can View, Create, Edit, and Delete Attributes, and breaks down those permissions further by allowing you to specify the level of access to each Attribute for each Status. This provides a great degree of granularity in controlling access for users.

Show Attributes—Click only on the Attributes for which you want to administer permission. This is a multi-select field, so you can choose multiple Attributes to be displayed. When you change the selections, the fields in the Permissions Matrix below change to show only the selected Attributes.

Permissions Matrix—A checkmark in the Select All checks all of the checkboxes in the matrix. A checkmark in the box beside Read and/or Edit checks all of the checkboxes in that column.

Enter your password and click the **SAVE** button. The role properties are saved.

Delete CMDB Role Properties

To delete a CMDB role property:

From the CMDB homepage, select Administration | Roles. The CMDB Roles page is displayed.

Select the role that you want to delete from the drop-down box.

Click the **Delete** button. The Delete Role page is displayed.

Confirm the deletion by entering your password and clicking the **SAVE** button. The role is deleted.

Miscellaneous Options

The Miscellaneous Options page provides tabs in which you can enter the CMDB name and the format for CI names.

Enter the CMDB Name

The CMDB name is the name that will identify the CMDB associated with the current workspace. If you change the name on this page, the change is propagated throughout BMC FootPrints Service Core.

Select Administration | Miscellaneous Options from the CMDB homepage. The Miscellaneous Options page is displayed. The CMDB Name tab is displayed by default.

Enter the name in the CMDB Name field.

Click the **Save** button to save the name.

Define the CI Name Format

The CI Name format is the format used to identify Configuration Items.

Select Administration | Miscellaneous Options from the CMDB homepage. The Miscellaneous Options page is displayed and the CMDB Name tab is displayed by default.

Select the CI Name Format tab. Variables are provided to help fine-tune the ID. Any attributes that you have created are represented as variables as well, so that you can include any information you've associated with the CIs as identifiers. If you enter text in this field, that text is included in the name format for every CI. If you enter variables, the information associated with the CI that is represented by that variable is displayed when you view the CI's name. For example, if you were to enter:

%%CI_ID%% SvcDsk-%%MAKER%% %%MODEL #%% %%CI_TYPE_NAME%%

then the name might be displayed as:

14-1 SvcDsk-Router

To select variables, click the [Insert Variable] link. Default variables are as follows:

CI ID—The CI ID is a number assigned to a CI when it is created. The CI ID is incremented by one and begins at one for each CI Type. For example, if you create five CIs of the CI Type "Router" in your CMDB, they will be identified as 1, 2, 3, 4, and 5 in their CI IDs.

CI Qualified ID—The CI Qualified ID is a combination of the CI Type ID and the CI ID. When a CI is created, the Qualified ID is assigned as "CI_Type_ID-CI_ID". For example, if the fifteenth CI Type you created was for Laptops and you create a CI for six laptop computers, the CI Qualified IDs of these laptops would be 15-1, 15-2, 15-3, 15-4, 15-5, and 15-6.

CI Revision—For every revision to a CI made after its initial creation, the CI Revision number is incremented by 1. Revisions are defined as changes to attributes or statuses. The addition of or change to a relationship or links to Issues or contacts are not considered revisions.

CI Type ID—The CI Type ID is a number assigned to a CI Type when it is created. The CI Type ID is incremented by one and begins at one for each CI Type. For example, if you create CI Types Router, Switch, Server, and Firewall, these will be identified as 1, 2, 3, and 4.

Last Edit Timestamp—The timestamp of the last time a CI was edited. This has nothing to do with edits to Issues or contacts that are linked to the CI.

Last Editor (userid)—The user ID of the last person to edit the CI.

Submit Timestamp—The timestamp of the initial creation of the CI.

Submitter (userid)—The user ID of the person who created the CI.

To update all of the CI name values in the current CMDB according to changes you are about to submit on this page, click the "Update existing CI's Name values" checkbox. The new name format is then applied to all existing CIs as well as new ones when they are created. If you do not check this box, the new custom CI name format is only applied to CIs you create after you save the new format.

Click the **Save** button to save the CI ID format.

Add Toolbar Buttons

The Toolbar tab of the Miscellaneous CMDB Options page enables you to add buttons to the CMDB homepage. The buttons are labeled Create *CI Type*, where *CI Type* is the name of a CI type. If you add a button, then, when it is clicked later, the create CI page for that CI type is opened. This provides a convenient way to speed up creation of new CIs by eliminating several mouse clicks. To add a toolbar button:

Select Administration | Miscellaneous Options from the CMDB homepage. The Miscellaneous Options page is displayed. The CMDB Name tab is displayed by default.\

Select the Toolbar tab.

Click on a CI type in the CI Types field that you want to add as a button.

Click the **Add** button. The CI type is displayed in the Create CI Types in Toolbar field.

Click the **Save** button to save the button. You must refresh the page in order to see the new button in the toolbar.

To delete a toolbar button:

Select Administration | Miscellaneous Options from the CMDB homepage. The Miscellaneous Options page is displayed.

Select the Toolbar tab.

Click on the CI type that you want to delete in the Create CI Types field.

Click the **Delete** button. The CI type is removed from the Create CI Types field.

Enter your password and click the **Save** button to save the button. You must refresh the page in order to see the button deleted from the toolbar.

To change the order in which toolbar buttons are displayed on the CMDB homepage:

Select Administration | Miscellaneous Options from the CMDB homepage. The Miscellaneous Options page is displayed.

Select the Toolbar tab.

Click on a CI type in the CI Types field that you want to move up or down in the order.

Click the up or down arrow buttons to change the position of the CI type in the Create CI Types field.

Enter your password and click the **Save** button to save the button. You must refresh the page in order to see the changed order.

Other Miscellaneous Options

The Other tab of the Miscellaneous Options page provides the following functionality:

Enable timestamp override

Set the number of columns for the Create/Edit/Details pages when viewing CIs

Enable Timestamp Override

When a CI page is created or edited, a timestamp is entered into the CI history for the time and date at which the create or edit took place. The administrator can override the timestamp by entering a different date and/or time in that field. To enable the override function, which allows the administrator to enter a different date and/or time, select "Yes" from the Enable Timestamp Override drop-down field on the Toolbar tab.

Set the Number of Columns

The Create/Edit/Details pages for a CI display attributes side by side to save space. Choosing more columns reduces the amount of scrolling you need to do on these pages. Choosing fewer columns accommodates large field names and small screen resolutions better. To set the number of columns, select the number from the " How many columns should attributes use on the CI page?" drop-down field on the Toolbar tab. The minimum number allowed is 1 and the maximum is 6.

CMDB Search

CMDB Search Overview

The search function is used to display data on CIs. By default, BMC FootPrints Configuration Manager displays the custom search page when you open the CMDB homepage. Also by default, all of the CI Types in the CMDB are listed in the CI Types to Search field when you access the CMDB homepage. In this way, you can view all of the CIs in the CMDB by clicking on the Results tab.

You can save CMDB searches and repeat them later.

When you access the search page, the following tabs are displayed (tabs are "greyed" out if they contain no data):

CI Types—Select the CI Types on which to search.

Attributes—From the CIs you selected, filter all but those that match the selected attribute criteria.

Relationships—From the CIs you selected, filter all but those that match the selected relationship criteria.

Columns Displayed—Select the attribute data to be displayed on the Results tab for the CIs returned by the search.

Save—Summarizes the search data, listing the CI Types searched for, filters selected, etc. and allows you to save the search.

Results—Displays the search results that match your search criteria, as well as the attributes you selected to display from the Columns Displayed tab. From this page, you can view the list of CIs, related CIs, Related Contacts, Details for a particular CI (where you can edit and delete the CI), export and print the list of CIs, and delete CIs.

CI Types

The CI Types tab is displayed when you select the CMDB homepage or Search | Advanced from the CMDB toolbar. This is the initial search page for creating a new, rather than saved, search. It is used to select the CI Types on which to search.

The page displays the fields for selecting CI Types initially. When a CI Type or CI Types are selected, the page displays the attributes and relationships common to the selected CI Types at the bottom of the page.

To perform a search:

Either begin on the CMDB homepage and select Home from the CMDB homepage toolbar, or select the Advanced Search CMDB homepage.

In the Available CI Types field, select the CI Type or types for which you want to search and then click the arrows to move them into the CI Types to Search field. You can select CI Types by clicking on them one at a time or use the Shift key and the left mouse button or the Ctrl key and the left mouse button to select multiple CI Types at one time. When you move the CI Types into the CI Types to Search field, the search begins automatically. The attributes and relationships common to all of the selected CI Types are displayed at the bottom of the page. If the search results contain common attributes, the Filter on Attributes tab is activated. If the search results contain any common relationships, the Filter on Relationships tab is activated.

To view the CIs returned by this search, click the Results tab. A list of the CIs is displayed.

Although you can view a list of results from this very basic level of search, you can refine the search by using the other tabs on the Search page. The Attributes tab allows you to build a filter that will return a list of CIs matching the CI Types chosen on the CI Types tab whose attributes match those specified in the filter. The Relationships tab lets you filter the CIs based on the relationship types you select. The Columns Displayed tab allows you to select which data is displayed. The Save tab shows a summary of information related to this search and allows you to save the search.

Attributes

The Attributes tab provides a powerful means to refine searches, allowing you to perform searches as simple as finding "all of the CIs with 2 Gb of RAM" or as complicated as "all of the CIs with 2 Gb of RAM that were created between March 2, 2009 and March 2, 2016 but not made by Vendor X or were made by Vendor X but have Pentium III processors". The Attributes tab only refines searches on the CI types you selected on the CI Types tab, filtering them based on the attribute criteria that you select.

You can have both an Attributes and a Relationships filter at the same time. Any results would fulfill the criteria of both filters.

Build a Simple Filter

To filter search results based on attributes:

After selecting the CI types to search on, select the Attributes tab.

In the drop-down field, select the attribute on which you want to base the filter. Only attributes common to all of the returned CIs are listed in the drop-down field.

Select the operation for the search in the second drop-down field. Operations are determined by the type of field you are searching. The following field types allow the following operations:

Character (single or multiple line), **Web Site**, **FTP File/Site**, and **Email Address**

is —Find CIs where the entire contents of the field match the entire contents of the specified filter string exactly.

begins with—Find CIs with a matching string at the beginning of the field.

ends with—Find CIs with a matching string at the end of the field.

contains—Find CIs with a matching string anywhere in the selected field.

is—Find CIs where the entire contents of the field do not match the entire contents of the specified filter string exactly.

does not begin with—Find CIs in which the beginning of the field does not match the specified string.

does not end with—Find CIs in which the end of the field does not match the specified string.

does not contain—Find CIs in which the field does not contain the specified string.

Integer and **Real Number**

equal to—Find CIs in which the field value is equal to the specified filter value.

greater than—Find CIs in which the field value is greater than the specified filter value.

less than—Find CIs in which the field value is less than the specified filter value.

greater than or equal to—Find CIs in which the field value is greater than or equal to the specified filter value.

less than or equal to—Find CIs in which the field value is less than or equal to the specified filter value.

not equal to—Find CIs in which the field value is not equal to the specified filter value.

Date and **Date Time**

is—Find CIs in which the date in the field is the same as the specified filter date.

is not—Find CIs in which the date in the field does not match the specified filter date.

is before—Find CIs in which the date in the field is before the specified filter date.

is after—Find CIs in which the date in the field is after the specified filter date.

is on or before—Find CIs in which the date in the field is the same as or before the specified filter date.

is on or after—Find CIs in which the date in the field is same as or after the specified filter date.

during the previous—Find CIs in which the date in the field falls before the specified period. The period can be specified as *X* days, weeks, months, years, or hours, where *X* is any number. For example, you could request CIs that were created during the previous 2 weeks. The time for this field begins with the moment at which the search is run. Therefore, if the search is run at 4:00 PM on a Tuesday, the search period is from 4:00 Monday (the day before) until 4:00 Tuesday (the current day).

during the next—Find CIs in which the date in the field falls after the specified period. The period can be specified as *X* days, weeks, months, years, or hours, where *X* is any number. For example, you could request CIs that were created during the previous 2 weeks. The time for this field begins with the moment

at which the search is run. Therefore, if the search is run at 4:00 PM on a Tuesday, the search period is from 4:00 Tuesday (the current day) until 4:00 Wednesday (the next day).

within range—Find CIs in which the date in the field falls within the period specified. Options are: today, yesterday, the day before yesterday, Sunday/Monday/Tuesday/Wednesday/Thursday/Friday/Saturday of last week, this week, last week, the week before last week, this month, last month, the month before last month. The days refer to 24-hour days. For example, "yesterday" means the 24 hours of yesterday from midnight to midnight.

Drop-down

is one of—Find CIs in which the field value matches the specified filter value.

is not one of—Find CIs in which the field value does not match the specified filter value.

Multi-select

has any of—Find CIs in which the field value(s) not matches any of the specified filter value(s).

has all of—Find CIs in which the field value(s) not matches all of the specified filter value(s).

has none of—Find CIs in which the field value(s) do not match any of the specified filter value(s).

Checkbox

is TRUE—Find CIs in which the checkbox is checked.

is not TRUE—Find CIs in which the checkbox is not checked.

After selecting the field and then the operation, complete the third field by entering the filter value or values. The third field may be a drop-down field, date field, date/time field, or character field.

After completing the fields, click the Apply button to accept the filter value. When a search is conducted, BMC FootPrints Service Core will return the CIs that match the CI Types you have selected and match the attribute filter value you've selected in this procedure. If you click the Results tab at this time, the matching CIs are displayed. You can return to the Attributes tab at any time to refine the attributes selected.

If you wish to save this search, including the attributes filter you've created, select the Save tab, enter a name and description for the search, and click the **Save** button. Refer to Saved Searches for details on how to run a search you have saved.

Build Complex Filters

You can run searches that filter results based on multiple attributes. In addition, you can nest the filters at varying levels. To do so:

After selecting the CI types to search on, select the Attributes tab.

Build a simple search as described in the procedure above.

After clicking the Apply button (step 5 in the above procedure), click the Add button (located in the bottom left corner of the page). The attribute filter you built is displayed with a new Filter Editor below it. The new Filter Editor is connected to the existing filter by a line and the word "AND".

Use the new Filter Editor to build an additional attributes filter per the procedure above. After you click the Apply button, the new filter is displayed below the first filter.

You can continue to build additional levels of filtering in this same manner and use the additional controls to make the new filters "AND" or "OR" filters. To make changes to a filter you have built, you must use the Open button within that filter to open the filter controls and then the Edit button to make the changes. Filter controls are:

Open—Opens the filter controls. Only one set of filter controls can be open at a time.

Edit—Allows you to change the filter.

Copy—Use the Copy button to begin a copy-and-paste. Wherever you click the Paste button, the copy is placed below the paste selection. For example, in one section you might filter to include all PCs using the Windows XP operating system, but in another section you might exclude all PCs with the Windows XP Pro operating system. You could copy the existing filter, paste it where you need it, and edit it to exclude Windows XP Pro.

Cut—Use the Cut button to begin a cut-and-paste. Wherever you click the Paste button, the copy is placed below the paste selection.

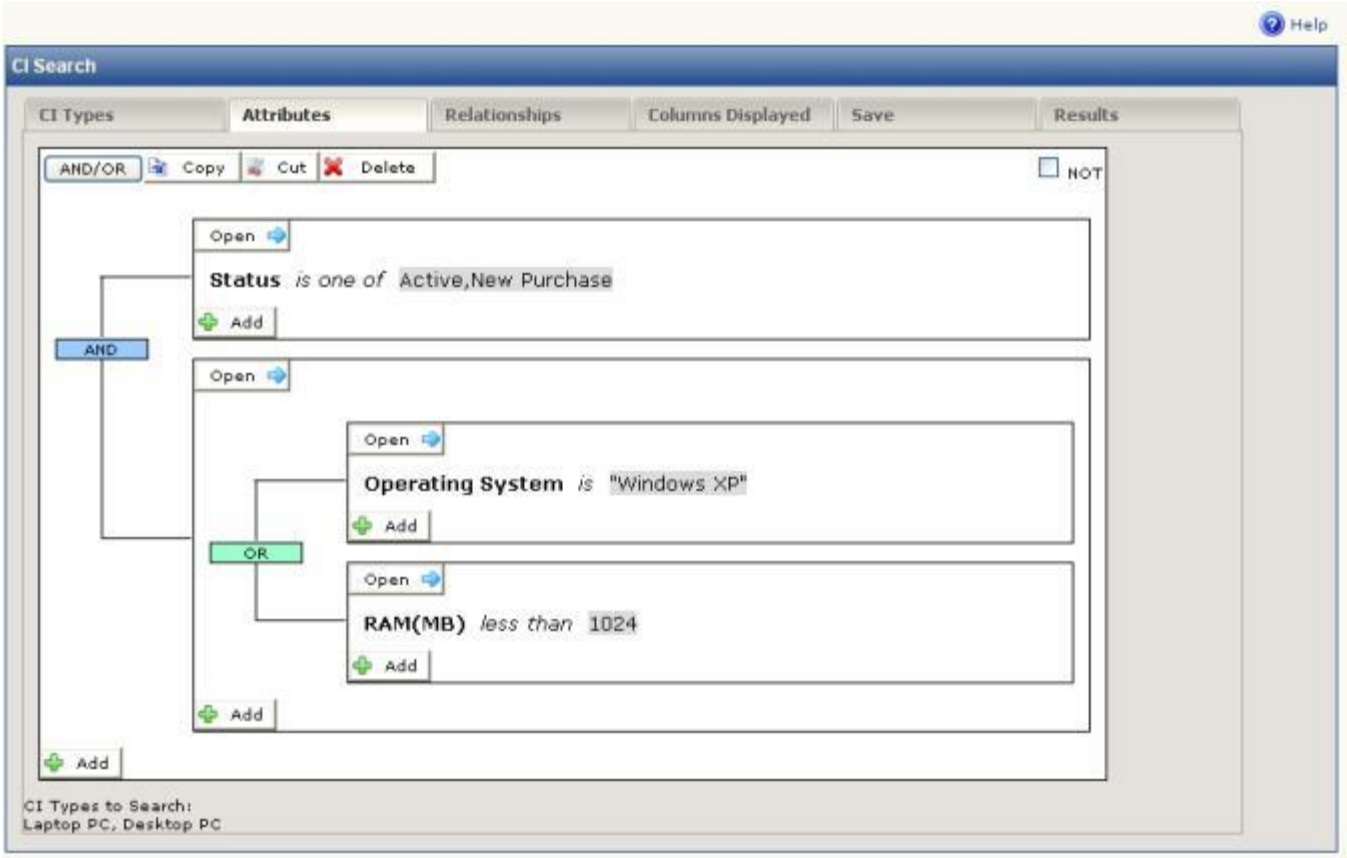
Delete—Deletes the selected filter.

Up and Down controls—Moves the filter up or down within the current nest.

Close—Closes the filter controls.

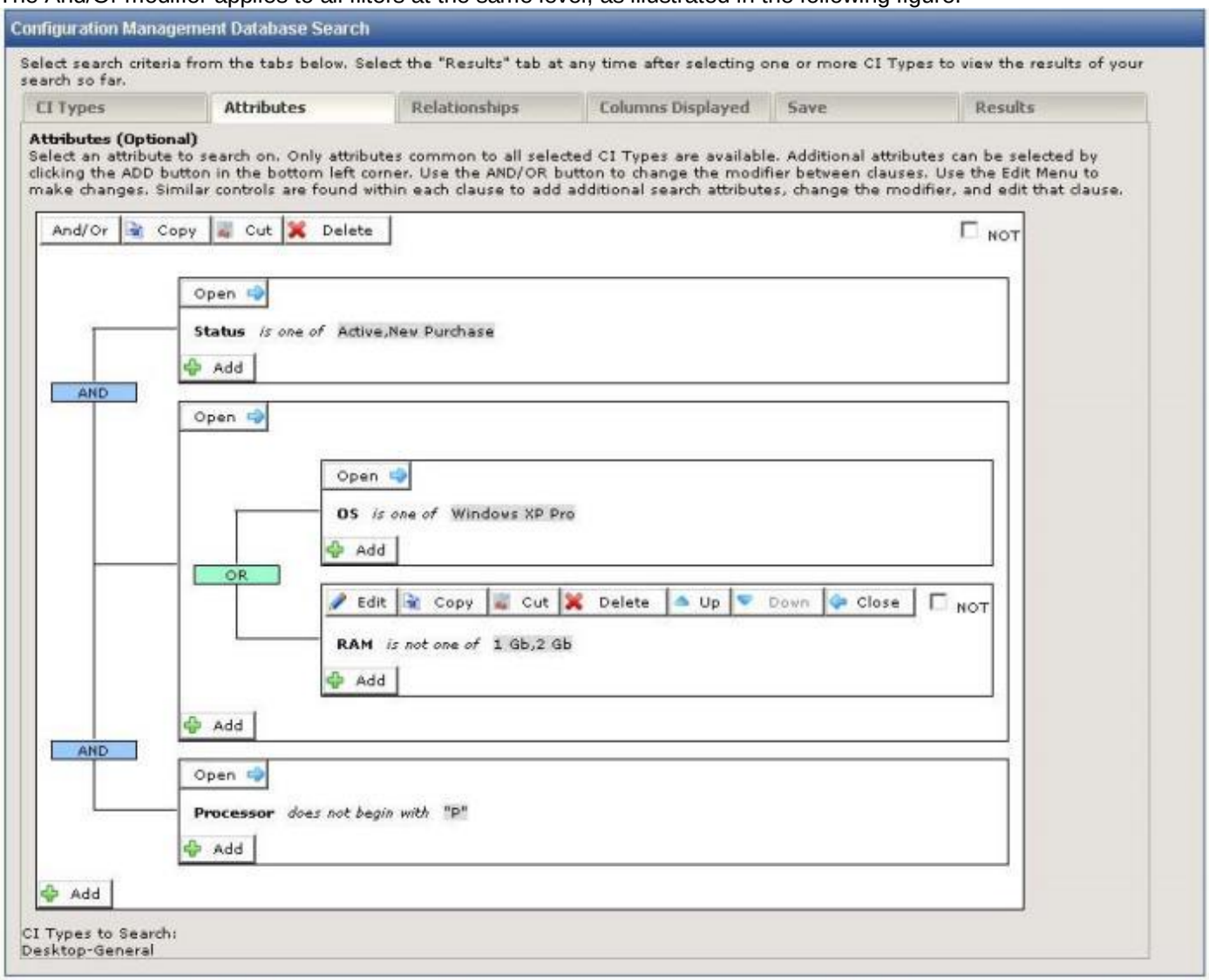
Paste—Only displayed after a copy or cut. Pastes the copied or cut filter.

The following figure illustrates a complex filter. Assume that you need to upgrade all active or newly purchased PCs to the Vista operating system. You will need the filter to identify all desktops and laptops using Windows XP or that have less than 1 gig of memory. Therefore, your search would be for all desktop PCs and laptops with a Status of Active or New. Purchase and where (the operating system is Windows XP or the RAM is less than 1 GB).

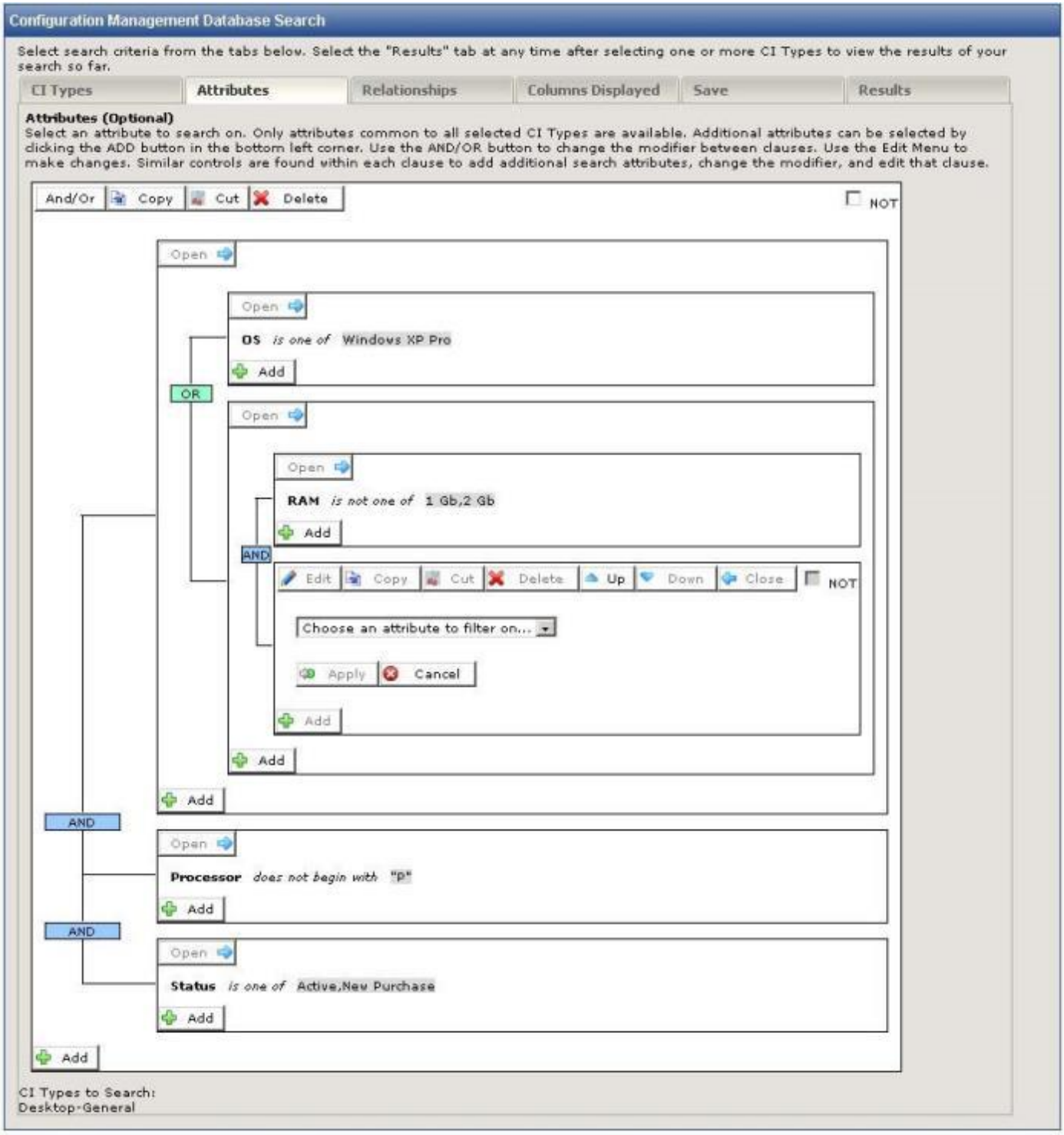


More on Complex Filters

The And/Or modifier applies to all filters at the same level, as illustrated in the following figure.



In the figure, all of the filters in the same next are either And or Or. Each of the filters has a NOT checkbox in the upper right corner. When this is clicked, the filter changes color and the filter criteria become the opposite of what they began as. With regard to nesting filters, filters are added at the level of the Add button. In the figure above, if you click the Add button in the “RAM is not one of 1 Gb, 2Gb” filter, the next filter would be nested with it, but not with the “OS is one of Windows XP Pro”. The following figure illustrates this.


Configuration Management Database Search
Select search criteria from the tabs below. Select the "Results" tab at any time after selecting one or more CI Types to view the results of your search so far.
CI Types
Attributes
Relationships
Columns Displayed
Save
Results
Attributes (Optional)
Select an attribute to search on. Only attributes common to all selected CI Types are available. Additional attributes can be selected by clicking the ADD button in the bottom left corner. Use the AND/OR button to change the modifier between clauses. Use the Edit Menu to make changes. Similar controls are found within each clause to add additional search attributes, change the modifier, and edit that clause.
And/Or
Copy
Cut
Delete
NOT
Open
OS is one of Windows XP Pro
Add
OR
RAM is not one of 1 Gb,2 Gb
AND
Edit
Up
Down
Close
Choose an attribute to filter on...
Apply
Cancel
Processor does not begin with "P"
Status is one of Active,New Purchase
CI Types to Search:
Desktop-General

Relationships

The Relationships tab provides a powerful means to refine searches, allowing you to perform searches as simple as finding "all of the CIs connected to an email server" or as complicated as "all of the CI connected to an email server with 2 Gb of RAM that were created between March 2, 2009 and March 2, 2016 but not made by Vendor X or were made by Vendor X but have Pentium III processors". The Filter on Relationships tab only refines searches on the CI Types you selected on the Choose CI Types page, filtering them based on the relationship criteria that you select.

You can have both an Attributes and a Relationships filter at the same time. Any results would fulfill the criteria of both filters.

Build a Simple Filter

To filter search results based on relationships:

After selecting CI types to search on, select the Relationships tab.

In the Available Related CI Types field, click on the relationship on which you want to base the filter. Only relationships common to all of the returned CIs are listed in the drop-down field. You can also select multiple relationships by using the Shift+left mouse button and/or Ctrl+left mouse button combinations.

Click the top arrow button next to the field to move the selected relationships into the Related CI Types to Filter on field. You can add additional relationships at any time by highlighting them and using the top arrow button. You can also move relationships back by clicking on them and then clicking the second arrow button. Filtering is performed immediately and you can view the results in the Results tab. When you click the arrow button, the Attributes of Related CIs tab becomes active.

To further refine the filtering, click the Attributes of Related CIs tab. To filter on related CI attributes:

In the drop-down field, select the attribute on which you want to base the filter. Only attributes common to all of the returned CIs are listed in the drop-down field.
Select the operation for the search in the second drop-down field. Operations are determined by the type of field you are searching. The following field types allow the following operations:

Character (single or multiple line), **Web Site**, **FTP File/Site**, and **Email Address**

is—Find CIs where the entire contents of the field match the entire contents of the specified filter string exactly.

begins with—Find CIs with a matching string at the beginning of the field.

ends with—Find CIs with a matching string at the end of the field.

contains—Find CIs with a matching string anywhere in the selected field.

is not—Find CIs where the entire contents of the field do not match the entire contents of the specified filter string exactly.

does not begin with—Find CIs in which the beginning of the field does not match the specified string.

does not end with—Find CIs in which the end of the field does not match the specified string.

does not contain—Find CIs in which the field does not contain the specified string.

Integer and **Real Number**

equal to—Find CIs in which the field value is equal to the specified filter value.

greater than—Find CIs in which the field value is greater than the specified filter value.

less than—Find CIs in which the field value is less than the specified filter value.

greater than or equal to—Find CIs in which the field value is greater than or equal to the specified filter value.

less than or equal to—Find CIs in which the field value is less than or equal to the specified filter value.

not equal to—Find CIs in which the field value is not equal to the specified filter value.

Date and **Date Time**

is—Find CIs in which the date in the field is the same as the specified filter date.

is not—Find CIs in which the date in the field does not match the specified filter date.

is before—Find CIs in which the date in the field is before the specified filter date.

is after—Find CIs in which the date in the field is after the specified filter date.

is on or before—Find CIs in which the date in the field is the same as or before the specified filter date.

is on or after—Find CIs in which the date in the field is same as or after the specified filter date.

during the previous—Find CIs in which the date in the field falls before the specified period. The period can be specified as *X* days, weeks, months, years, or hours, where *X* is any number. For example, you could request CIs that were created during the previous 2 weeks. The time for this field begins with the moment at which the search is run. Therefore, if the search is run at 4:00 PM on a Tuesday, the search period is from 4:00 Monday (the day before) until 4:00 Tuesday (the current day).

during the next—Find CIs in which the date in the field falls after the specified period. The period can be specified as *X* days, weeks, months, years, or hours, where *X* is any number. For example, you could request CIs that were created during the previous 2 weeks. The time for this field begins with the moment at which the search is run. Therefore, if the search is run at 4:00 PM on a Tuesday, the search period is from 4:00 Tuesday (the current day) until 4:00 Wednesday (the next day).

within range—Find CIs in which the date in the field falls within the period specified. Options are: today, yesterday, the day before yesterday, Sunday/Monday/Tuesday/Wednesday/Thursday/Friday/Saturday of last week, this week, last week, the week before last week, this month, last month, the month before last month. The days refer to 24-hour days. For example, "yesterday" means the 24 hours of yesterday from midnight to midnight.

Drop-down

is one of—Find CIs in which the field value matches the specified filter value(s). More than one value can be selected.

is not one of—Find CIs in which the field value does not match the specified filter value(s). More than one value can be selected.

Multi-select

has any of—Find CIs in which the field value(s) not matches any of the specified filter value(s).

has all of—Find CIs in which the field value(s) not matches all of the specified filter value(s).

has none of—Find CIs in which the field value(s) do not match any of the specified filter value(s).

Checkbox

is TRUE—Find CIs in which the checkbox is checked.

is not TRUE—Find CIs in which the checkbox is not checked.

After selecting the field and then the operation, complete the third field by entering the filter value or values. The third field may be a drop-down field, date field, date/time field, or character field.

After completing the fields, click the Apply button to accept the filter value. When a search is conducted, FootPrints Service Core returns the CIs that have the relationships and attributes you selected on this tab. If you click the Results tab at this time, the matching CIs are displayed.

NOTE

Related CIs selected on the Relationships tab do not appear in the Search results. This tab only serves to refine the CIs found from criteria on the CI Types and Attributes tabs based on related CIs.

If you wish to save this search, including the attributes filter you've created, select the Save tab, enter a name and description for the search, and click the **Save** button. Refer to Saved Searches for details on how to run a search you have saved.

You can return to the Relationships tab at any time to refine the relationships and related CIs selected.

Build More Complicated Filters

You can run searches that filter results based on multiple attributes. In addition, you can nest the filters at varying levels. To do so:

After selecting CI types to search on, select the Relationships tab.

Build a simple search as described in the procedure above.

After clicking the Apply button, click the Add button. The relationship filter you built is displayed with a new Filter Editor below it. The new Filter Editor is connected to the existing filter by a line and the word "AND".

Use the new Filter Editor to build an additional relationships filter per the procedure above. After you click the Apply button, the new filter is displayed below the first filter.

You can continue to build additional levels of filtering in this same manner and use the additional controls to make the new filters "AND" or "OR" filters. You can also drag and drop filters that you have built to change their order and associations.

Refer to the Attributes topic for additional details on building complex filters and the filter controls.

Columns Displayed

By default, the CI Name, Status, Related CI(s), and Related Contacts columns display on the **Results** tab of the Configuration Manager Database Search page. The **Columns Displayed** tab enables you to choose which attributes are shown on the Results page and the order in which their columns are shown.

To choose display attributes and set their order of display:

From the Configuration Manager Database Search page, any time after CI Types have been selected, click the **Columns Displayed** tab.

NOTE

The Columns Displayed tab is deactivated until at least one CI Type has been selected for the search.

Columns

To specify which columns to display on the **Search** page, in the **Available Attributes** list of the **Columns Displayed** section, select the attribute(s) that you want to see on the **Results** page, then click the **right arrow**. By default, <Empty> displays in the list when the default attributes are displayed (CI Name, Status, Related

CI(s), and Related Contacts).
The attributes are displayed in the **Attributes to Return** list, and will display as columns on the **Search** page.
Tip: You can select multiple attributes at once. Press and hold the **Ctrl** key while you select the attributes.
To select attributes in a continuous list, press and hold the **Shift** key while selecting them.

To remove columns from the **Search** page, select the attribute(s) from the **Attributes to Return** list, then click the **Left** button.
The attributes are removed from the and are displayed in the **Available Attributes** list.

To change the order of the columns on the **Search** page, click an attribute in the **Attributes to Return** list, and then click the **Up** or **Down arrow** buttons below the list.
Moving an attribute up the list, moves the column to the left; moving it down the list moves the column to the right.

Sort Order
Sorting is done on the top attribute first, the second attribute second, etc.) and then whether the attributes are sorted in ascending or descending order.

To change the sort order for values in a column (ascending or descending), select the attribute from the **Sortable Attributes** list in the **Sort Columns** section. Then click the **Right arrow** to move the attribute to the **Sorted on** list.

Select the attribute in the **Sorted on** list, then click the **Up** or **Down** arrows, or the **Ascending/Descending** toggle button.
Once the attribute displays in the **Sorted on** list, [ASC] indicates ascending and [DSC] represents descending order.

Save

The Save tab is used to save the search (including filter criteria) so that you can run the search again later without having to rebuild it.

The Save tab displays a summary of the search criteria, as follows:

CI Types—Lists the CI Types in the search.

Filter—Lists the attribute criteria.

With Related CI Types—Lists the CI Types related to the search criteria CI Types.

Filter—Lists the relationship criteria.

Search Name—Displays the search name. Searches are given a number by default. The number can be changed to a name on this page. For example, rather than listing this search as "Search 17", you might name it "Border Router dependencies".

Search Description—Space is provided for you to enter a description of this search for easier identification.

Save the Search

To save the search, enter a name and description in the appropriate fields and then click the Save button.

Viewing and Editing CIs from the Results Page (CMDB Search)

The **Results** tab of the BMC FootPrints Configuration Manager **Database Search** page displays the results of CMDB searches. From this page, you can view the list of CIs, related CIs, Related Contacts, Details for a particular CI (where you can edit and delete the CI), export and print the list of CIs, and delete CIs.

\View List of CIs

The **Results** page displays up to 25 CIs at a time. If more CIs exist, click the navigation buttons (Previous Page, Next Page, etc.) to view them.

View Related CIs and Contacts

The number of **Related CIs** and the number of **Related Contacts** display by default.

Click the number to display the **Details page** for the CI, which shows the **CI Relationships** or **Contact Links** tabs.

To print the list of Related CIs or Contacts, from the **CI Relationships** or **Contact Links** tabs on the **Detail** page, click the Print button, then select **This Page** or **All Pages**.

View CI Details

Select a CI, then click the **Details** button to display the **Details** page.

You can **edit** and **delete** a CI from the **Details** page.

Export the List

Click the **CSV** button to export the results to a .csv file.

On the dialog that displays, select to open with Microsoft Office Excel (default), or select to save the file, then click the **OK** button.

Print the List

Click the **Print** button, then when the browser page opens, press CTRL+P.

Delete CIs

Note: You cannot delete a CI that is linked to another CI or Issue.

Select the CI(s), then click the **Delete** button.

Tip: You can select multiple attributes at once. Press and hold the **Ctrl** key while you select the attributes.

To select attributes in a continuous list, press and hold the **Shift** key while selecting them.

Click **OK** on the confirmation dialog.

Saved Searches

You can edit, copy, delete, or run saved searches.

To use the saved search functions:

From the CMDB homepage toolbar, select Search | Saved. A list of saved searches is displayed.

Click on the search ID or search Name. A set of buttons is displayed below the saved search you select.

Edit—Click this button to display the various tabs for this search. From there, you can edit the search criteria. Refer to Choose CI Types, Filter on Attributes, Filter on Relationships, and/or Output for details on the tabs and how to change them.

Copy—If you select the Copy button, a second copy of the search is saved in which all criteria exactly duplicate the copied search. The purpose of this button is to allow you to create a search that you can then edit and refine as needed rather than rebuilding an entire search from the beginning.

Delete—Click the Delete button to delete the search. When you select the Delete button, a confirmation window pops up. Click the OK button to confirm the deletion or the Cancel button to cancel the deletion.

Run—Click the Run button to run the search. When you run the search, the Results page is displayed. Refer to Results for details on the Results page.

Reports

Create a Custom Report

There are two types of report available via the CMDB toolbar: custom and saved. A custom report is a report that you create to obtain information about a set of CIs. A saved report is a custom report that you have named and saved so that you can run it on demand.

To construct a custom report:

Select Reports | New Report from the CMDB toolbar. The Custom Reports page is displayed.

In this step, you specify the CIs on which the report will be run in the CI Search Criteria section. This can be done by either selecting a saved search from the Saved Search drop-down field or by creating a new search.

NOTE

Whether you create a new search or use one that is saved, the search results must contain CI attributes. Attributes for the results are specified in the Output tab of the CI Search page. If you do not have CI attributes in the results, there will be nothing on which to report.

To create a new search, refer to CMDB Search.

After you have created the new search, click the Return Criteria button. The criteria of the new search are displayed on the CMDB Report page in the CI Search Criteria section. If you are unhappy at any point with the search, you can click the Edit button to go to the CI Search page and make changes to the current search or click the Reset button to eliminate the current search entirely and begin again.

Select the report information you want returned in the Metrics Graphics section, as well as the report type, as follows:

Metric Type—Select the type of metric to be displayed in the report.

Count—Counts the number of CIs that contain the specified attribute. For example, you could run a report that counts the number of PCs in your organization, subtotaled by vendor/manufacturer. This might tell you that you have *X* number of PCs from Dell, *Y* number from Gateway, etc.

Average—Determine the average of field values for the CIs in the report. For example, you might build a report that gives you the average cost of the PCs in your organization. Average only applies to real number or integer fields.

Sum—Add the field values for the CIs. For example, you might build a report that adds up the depreciation on PCs. Sum only applies to real number or integer fields.

Minimum—From the set of CIs, returns the lowest value found in the specified field. Minimum only applies to real number or integer fields.

Maximum—From the set of CIs, returns the highest value found in the specified field. Maximum only applies to real number or integer fields.

Attribute—Specify the attribute from which to extract the count, average, sum, minimum, or maximum. Only attributes selected in the Output tab on the CI Search page are displayed. If you selected a report showing the average, sum, minimum, or maximum for an attribute, the Attribute drop-down field only displays real number or integer attributes.

Subtotal by—Specify the value on which you want the report subtotaled. For example, if you specify a report containing the average cost of PCs, you might subtotal the report by manufacturers. The report might then contain data that showed the average cost of a PC from Dell, Gateway, etc.

Format—Display report results in a table (i.e., only text is displayed in a table format), chart (i.e., data is represented in either a pie chart or bar chart), or table and chart (i.e., both the table and chart formats are displayed; both the table and the charts display identical information).

Chart type—Select either a bar chart or a pie chart.

If you wish to save the report so that you can run it on demand at a later time, enter a name for the report in the "Optionally, save this report as" field and then click the GO button. If you don't wish to save the report but just want to run the report, click the GO button without entering a report name. The report is created and displayed in a new window.

Service Catalog

Administer Service Catalog

Service Catalog Administration Overview

Service Catalogs are developed to describe and provide services for customers. When discussing Service Catalogs, the term "customer" does not mean a traditional BMC FootPrints Service Core customer, i.e., "someone who submits requests to a BMC FootPrints Service Core agent", but rather "any user of services". Therefore, in the context of Service Catalog, a customer can be an agent, administrator, or traditional BMC FootPrints Service Core customer.

The basic process for developing a Service Catalog is:

Determine the service categories, services (or "service items"), and service attributes to be included in your Service Catalog. This step takes place between the Service Catalog administrator and personnel within the organizations or departments to be included in the Service Catalog. It is a planning step and not performed within BMC FootPrints Service Core itself. The information developed from planning will be used to implement the Service Catalog. You may want to plan the information used for the other steps in the process listed below at this point as well.

Enable the Service Catalog. The Service Catalog must be enabled for a workspace in order for it to function.

Create Service Catalog categories. Categories allow you to create a hierarchy, with sub-categories to as many levels as you wish to develop. When others explore the Service Catalog, they will drill down into the service categories until they find the services they wish to view.

Create the attributes of the services. Attributes contain details about the service. For example, let us say you have an IT service providing new desktop computers. One of the service items may be the desktop computer itself. The attributes could be manufacturer, model, amount of RAM, size of hard drive, etc. Attributes could also include images. You might, for a desktop computer, include a picture of the computer itself.

Create Service Request Templates. When agents, customers, administrators, etc., request a service using the Service Catalog, an Issue is created using the data in the Service Request Template. Think of it as a Quick Issue template for services. Requests could be escalated after they are submitted like any other Issue or Request.

Create the services and add the services to the categories. Once you have created categories, you can create the services in the Service Catalog in the appropriate categories.

Select and list your Hot List services. A list of services is displayed to customers when they access the Services Catalog. These could be any services you want to list for any reason. The list provides a quick means of accessing the details of the service item and entering a request for the service without having to drill down through the various service categories. The list might contain the most popular services of a particular organization or it might contain new services with which few people are familiar or it might be services that are under-utilized and which you want to highlight.

Define user roles for Service Catalog. User roles determine which service categories can be seen by customers and, therefore, which services can be requested. The CMDB user roles function is used to define user roles for Service Catalog as well.

Enable Service Catalog

Before a Service Catalog can function in a workspace, it must be enabled. A Service Catalog can be created without being enabled, but it must be enabled before it can be used.

To enable the Service Catalog:

Open the workspace in BMC FootPrints Service Core for which you want to enable the Service Catalog.

Select Administration | Workspace from the Toolbar, then select Workspace Options from the General section of the main frame.

Find the Service Catalog option and select the Enable radio button.

Enter your password and click the SAVE button.

When the save completes, follow the prompts to refresh the screen and complete the operation.

Create, Edit, and Delete Service Categories

Service categories are categories of services. Service categories can be set up in a hierarchy with as many levels of sub-category as you want. For example, you might set up top-level categories for IT Services, Human Resources Services, Administrative Services, Accounting Services, etc. Under the Human Resources Services category, you might set up sub-categories such as Hiring, Termination, Benefits, Events, Miscellaneous. The Benefits category might have further sub-categories such as Insurance, Time Off, and so on. The Time Off category could have sub-categories such as Vacation, Holidays, Sick Leave, Unpaid Leave, and so on. Beneath those categories, you would eventually list your services, which might be things like "Enter vacation", "Submit request for unpaid leave", and so on. A service category can be any category of service an organization might offer, from services involving hardware to software to tracking time to adjusting payroll, etc. Once a service category has been created, it is added to the Service Catalog automatically.

Create Service Category

To create a service category:

From the BMC FootPrints Service Core Toolbar, click CMDB. The CMDB homepage is displayed.

Select Administration | CI Types. The Configure CI Types page is displayed. This page is used to configure CI Types and Service Categories.

NOTE

Once at least one service category has been created and the Service Catalog button is displayed on the CMDB homepage, you can add new service categories by first clicking the Service Catalog button and then clicking the Add Category button on the Service Catalog page.

Click the **Create** button next to the Existing CI Types/*Services list. Just as you see in the name of the list, when a service category is displayed in the list, an asterisk is added to the name of the category. When you click the Create button, the create CI Type or Service Category Editor is displayed, with fields and buttons for creating a service or service category. The fields and actions you can take in this area are as follows:

Name—Enter a name for the service category in the Name field. For example, you might enter "Administrator Services". Later, when you create the services themselves, you will categorize them according to service category. A service in that category might be "Install International Widget Software".

Description—Enter information about the service category in the Description field. The field is provided for maintaining useful information about the service category. Entering a description is optional.

All Statuses and Associated Statuses—The All Statuses and Associated Statuses fields allow you to associate statuses with the service category. Only the statuses you select can be set for the service category. You might have many different statuses, but associate only a few of them with a particular service category. To associate a status with a service category, highlight the status in the All Statuses field and then click the Add button. To remove an association between a status and a service category, highlight the status in the Associated Statuses field and click the Delete button. The status is not deleted, but removed from the Associated Statuses field. Changing the statuses is optional.

Background Color—Select a background color for visualizations representing the service category. The Graphics Visualization field shows the current (default) color. To select a background color, enter the hex value of the color you wish to use or use the color picker. Changing the color is optional. To use the color picker:

Click the **Select Color** button.

Select from the sample colors and then manipulate the RGB values by dragging the sliders along the color line. The color displayed in the Selected Color area changes as you move the sliders. When you have the color you want to use for the background, click the **GO** button.

Text Color—Select a text color for visualizations representing the service category. The Graphics Visualization field shows the current (default) color. To select a text color, enter the hex value of the color you wish to use or use the color picker. Changing the color is optional. To use the color picker:

Click the **Select Color** button.

Select from the sample colors and then manipulate the RGB values by dragging the sliders along the color line. The color displayed in the Selected Color area changes as you move the sliders. When you have the color you want to use for the background, click the **GO** button.

Icon—Select an icon for visualizations representing the service category. The Graphics Visualization field shows the current (default) icon. Changing the icon is optional. To select an icon

Click the **Select Icon** button.

Select from the sample icons by selecting the radio button below the icon or upload an icon of your own choosing. When you place the cursor over an icon, a pop-up gives you the item that it represents. Click the Browse button to upload an icon. When you have the icon you want to represent the service category or service, click the **GO** button.

Service Category—To designate this as a service category, check the Service Category checkbox. If you do not check this box, BMC FootPrints Service Core will assume you are creating a CI Type. If you check this box, two more fields are displayed:

Subcategory of—If there are other categories, you can make the category you created a subcategory of an existing category by selecting the higher level category from the drop-down list.

Category Icon—Click the **Select Icon** button to select an icon to represent the category or subcategory when it is displayed in the Service Catalog. You can choose an icon from the choices displayed by clicking on the radio button below the icon or you can upload an image file of your own by using the browse button. Icons are not sized automatically, so if you select your own icon, you should be careful that it is not too big or too small. The recommended size is 72 X 72 pixels.

When you are done creating your service category, click the **Save** button. The service category name is displayed in the Existing CI Types/*Services field with an asterisk added to the name to distinguish it from CI Types. Your selections for icon, background color, and text color are displayed in the Graphics Visualization area.

Edit Service Category

To edit an existing service category, from the CMDB homepage:

Select Administration | CI Types. The Configure CI Types page is displayed.

Click on the service category you want to edit in the Existing CI Types/*Services list to highlight it.

Click on the Edit button. The CI Type or Service Category Editor is displayed.

From this point on, refer to Step 2 in the Create Service Category procedure above for details on the fields in the CI Types or Service Category Editor.

When you are done editing, click the **Save** button. Any changes you have made to the icon, background color, and text color are displayed in the Graphics Visualization area.

Delete Service Category

To delete an existing service category from the CMDB homepage:

Select Administration | CI Types. The Configure CI Types page is displayed.

Click on the service category you want to delete in the Existing CI Types/*Services list to highlight it.

Click on the **Delete** button. A confirmation pop-up is displayed.

Enter your password and then click the **GO** button. The window is redisplayed and the deleted service category no longer appears in the Existing CI Types/*Services list.

Add, Edit, and Delete Attributes

Add Attributes

To add an attribute, from the CMDB homepage:

Select Administration | CI Types. The Configure CI Types page is displayed.

Highlight the Service in the CI Types/*Services list for which you want to configure Attributes.

Next to the Attributes and Layout field (bottom half of the page), if Attribute is not selected in the drop-down field by default, select it and click the **Add** button. The Attribute Editor is displayed.

The fields and actions you can take in this area are as follows:

Name—Enter a name for the attribute in the Name field. For example, you might enter "Vendor". It is mandatory that you enter a name in this field.

Permissions—The permission level chosen here determines both the access and requirement for users for the field.

Optional—The user has the option to enter or not enter data in the field.

Mandatory—The user must enter data into the field in order for the page to be accepted if it is submitted. If a user tries to submit an Issue without data in a mandatory field, an error message is displayed to the user, along with instructions to go back and enter the information. Mandatory fields appear in red on the Create Issue and Edit Issue pages for internal users and in the Customer Submit Request form.

Attribute Type—This defines the type of data the field accepts. Refer to Field Types for descriptions.

Attribute Header—If you would like to include instructions or other information about attribute fields when they are displayed, you can optionally insert text or HTML headers above the field. Enter the text or HTML into the Field Header field. The use of HTML also enables you to insert images directly into the Attributes.

Default Value—A default value is either entered or displayed here, depending on the field type. For example, if you select a character field type, you can enter a default value for that field here. If you select a drop-down field type, the default value is entered when the drop-down field is displayed in a field provided for that purpose. All field types can have a default value except for Multi-select fields. In addition, the default choices for Date and Date Time fields are limited to No Default and Today. For Date Time fields, Today means the day and time at which the attribute was saved).

When you have completed entering the attribute information, click the **Save** button to save the attribute. The attribute is then displayed in the Attributes and Layout field.

Edit an Attribute

To edit an attribute, from the CMDB homepage:

Select Administration | CI Types. The Configure CI Types page is displayed.

Highlight the Service in the CI Types/*Services list for which you want to configure Attributes.

Next to the Attributes and Layout field, if Attribute is not selected in the drop-down field by default, select it.

Click on the attribute you wish to edit in the Attributes and Layout field and then click the Edit button. The Attribute Editor is displayed.

Refer to the instructions above in Add an Attribute, Step 3 for further details.

Delete an Attribute

To delete an attribute, from the CMDB homepage:

Select Administration | CI Types. The Configure CI Types page is displayed.

Highlight the Service in the CI Types/*Services list for which you want to configure Attributes.

Next to the Attributes and Layout field, if Attribute is not selected in the drop-down field by default, select it.

Click on the attribute you wish to delete in the Attributes and Layout field and then click the **Delete** button. A confirmation pop-up window is displayed into which you must enter your password in order to complete the deletion.

Enter your password and click the **GO** button. The attribute is deleted and is no longer displayed in the Attributes and Layout field.

Change the Order in which Tabs, Sections, and Attributes are Displayed

To change the order in which tabs, sections, and attributes are displayed, from the CMDB homepage:

Select Administration | CI Types. The Configure CI Types page is displayed.

Next to the Attributes and Layout field, select Attribute, Tab Dialog, or Header from the drop-down field.

Click on the **Change Order** button to display the up and down arrows.

Click on the item you want to move in the Attributes and Layout field.

Use the up and down arrows beside the field to move the selected item up or down in the order.

Create Service Request Templates

Service Request Templates are used by customers to submit requests for the services in the Service Catalog. They are basically Issue templates with pre-populated fields. The use of pre-populated fields saves time and also makes it easier to develop escalations and Change Manager approval processes that use the requests. After the Service Request Templates have been created, they can be associated with services. This is done when the service is created in the Service Catalog.

You can create single Issue templates or you can create Master Issues with subtasks for your services. For example, if you were to create a "New Hire" service, you might want to do that as a Master Issue, with subtasks for obtaining various pieces of equipment, assigning office space, and other activities associated with hiring a new employee.

Create a Template

To create a Service Request Template for a single Issue:

From the CMDB homepage, select Administration. The CMDB Administration page is displayed.

Select Service Request Templates from the administration page.

Click the Create button. A Template Name field is displayed, as well as a checkbox to designate the template as a Master, from which Master Issues and subtasks can be generated.

Enter a name for the template. If you wish for it to generate a Master Issue with subtasks, check the Master Template checkbox.

Click the **GO** button. The template page is displayed. The template page is an Issue page. Enter the information that you want to pre-populate the Issue that is created when a service request is made. For example, you may wish to enter a specific title for all requests of this type. That title could then be used for escalations or Change Manager approvals for the request.

Advanced Action—If your BMC FootPrints Service Core has the BMC FootPrints Asset Core integration enabled, you can, at this time, associate an Advanced Action with this template. From the **Asset Information** tab of the template, select an action from the drop-down menu on the BMC FootPrints Asset Core bar, and then click **Apply**. When a Service Request/Issue is initiated that has an associated Advanced Action, and that action is designated as **Requires Workflow**, the same workflow used for manually selected Requires Workflow Advanced Actions goes into effect. When a Service Request/Issue is initiated that has an associated Advanced Action, and that action is not designated as Requires Workflow, the deployment is initiated immediately upon request, following the same workflow that occurs when an agent manually selects an Advanced Action that does not require pre-approval. The Advanced Actions function in the template only works if **Automatically link CIs to Issues** is enabled on the Administration | Workspace | Configuration Manager and Service Catalog options page.

Link CIs to Issues- This will only work if the Workspace has the option "Automatically link CIs to 'Issues'" set to "Enabled" on the Administration | Workspace | Configuration Management and Service Catalog Options page. We will need to handle the case where this option is not enabled, if it is enabled and fails to find a Device for the customer, or if a Device is later associated with the Issue.

When you have completed the information on the page, click the SAVE button. The Service Request Templates page is redisplayed with the new template listed in the Templates field.

Create Subtask Templates

To create subtask templates:

Select a Master Template from the Templates field. A Subtasks list and controls are displayed.

Click the Create button. A Template Name field is displayed.

Enter a name for the subtask in the Template Name field and then click the GO button. If a password is requested, enter your password and then click the GO button. A template page is displayed. Click the GO button. The template page is displayed. The template page is an Issue page. Enter the information that you want to pre-populate the Issue that is created when a service request is made. For example, you may wish to enter a specific title for all requests of this type. That title could then be used for escalations or Change Manager approvals for the request.

When you have completed the information on the page, click the SAVE button. The Service Request Templates page is redisplayed. To see the new subtask, click the Master Template in the Templates field with which the new subtask is associated. The Subtasks field will be displayed.

Edit a Template

To edit a template, click the template name in the Templates list, then click the Edit button. If you want to edit a Subtask template, click the appropriate Master Template first, then click on the subtask in the Subtasks field, and then click the Edit button next to the Subtasks field.

Delete a Template

To delete a template, click the template name in the Templates list, then click the Delete button. A pop-up window will request that you confirm the deletion. Click GO in the pop-up and the deletion will be complete. If you want to delete a Subtask template, click the appropriate Master Template first, then click on the subtask in the Subtasks field, and then click the Delete button next to the Subtasks field. Again, you will have to confirm the deletion.

Sequence Subtasks

To specify subtask sequencing:

Highlight the appropriate Master Template in the Templates field. The Subtasks will be displayed.

Click the Sequence button. A password may be requested of you. Enter your password and click the GO button. The Sequencing page is displayed.

Click the checkbox to enable sequencing.

Use the drop-down boxes next to the subtask template names to set the order. You can specify more than one subtask with the same number. If you do so, then either of the equivalent subtasks can be closed ahead of the other, but any subtasks that have been set to higher numbers must still wait until the subtasks with equivalent numbers have been closed. For example, you could have the first two subtasks set to "1", which means either can be closed first, but both must be closed before the subtask set to "2" can be edited or closed.

When you have specified the order for all of the subtasks, click the **SAVE** button. The sequence is saved and will be enforced by BMC FootPrints Service Core.

Create Services

Services are the basic unit of a Service Catalog and are organized under service categories. Each Service becomes a CI in the database. If you relate other services to a parent service CI, the costs are rolled up to the parent.

Create Service

To create a service and placed it under the correct category in the catalog:

From the CMDB homepage, click the Service Catalog button in the CMDB Toolbar. The Service Catalog is displayed.

Click the Service Category to which you want to add a service. You can continue in this manner to drill-down through sub-categories, if there are any, until you find the level to which you want to add the service.

Click the Add Service button at the top of the page. The Create Service page is displayed. The fields of this page consist of:

Service Request Template-Select the template to associate with this service from the drop-down field. When the service is requested by a customer, the template data will be used to populate a new Issue. Note

that it is not required that a template be associated with the service. Also note that services can be created before templates are created and associated with templates later, or templates can be created first. For more information on Service Request Templates, refer to Create Service Request Templates.

Status-Statuses displayed here are the ones you selected for the service category. This will be the Status of the Issue when the service request is submitted. You can leave this as it is or change it here. You can use escalations to change the status later.

Attributes-The attributes are the ones you associated with the service category. You can leave them as they are or change them here.

You can attach files to the service. Select the Attachments tab and click the Attach File button to attach a file to a service. Full details on attachments are in the section of this document titled File Attachments.

Click the **SAVE** button to create the Service. It will be displayed to when they view the category under which you saved it.

File Attachments

On the Create Service page, you can optionally attach one or more files from your local or network drive(s).

To attach a file:

On the Create Service page, select the Attachments tab and then click the “Attach File” button. This brings up a small window entitled “Upload Attachment”.

Click the “Browse” button to browse your local machine and/or network drives for the file.

When you find the file, highlight it and click “Open”. The file name and path now appears in the File Attachment window

NOTE

The CMDB Administrator may have set a limit for the size of file attachments – this information appears in the file Attachment window. If the file is too large, you will receive an error message. Please attach a smaller file.

Click the GO button to upload the file. When the upload is finished, the file name will appear in the “Create Service” form.

To attach additional files, repeat steps 1-4 for each file to be attached.

NOTE

You can continue to work on the Service while the file is uploading, but you must wait until the upload is complete to submit the Service.

Creating the Hot List

A list of services is displayed to customers when they access the Services Catalog. These could be any services you want to list for any reason. The list provides a quick means of accessing the details of the service item and entering a request for the service without having to drill down through the various service categories. The list might contain the most popular services of a particular organization or it might contain new services with which few people are familiar or it might be services that are under-utilized and which you want to highlight. The Hot List displays a list of the names of the services, so you might want to keep that in mind when naming them. A name that does not describe the service well will not convey much meaning in the Hot list.

To create your Hot List:

From the CMDB toolbar, click Services Catalog. The Service Catalog is displayed.

The Hot List is displayed on the right side of the Service Catalog page. Click the Customize This List button. The Service Catalog Hot List Administration page is displayed.

Enter a Title for the list. This will be displayed at the top of the list when customers view the Service Catalog. You might use the title Featured Services for services that are especially popular, or you might title the list New Services and include a roster of services you have recently added in the list.

Optionally enter a message to appear at the top of the list. This might explain the nature of the list and can include images or any other data you wish to include.

Next, add the services to the list. The All Services field on the left side of the page displays all of the Services offered in all categories. Click on a service in the All field and then click the Add button. The service will be added to the Chosen for List field. Continue to add services until your list is complete.

The order in which the services appear in Chosen for List field is the order in which they are displayed in the Service Catalog. To change the order, click on a service that you wish to move and then use the up and down arrows to change its position in the field.

If you wish to remove a service from the Chosen for List field, click on the service and then click the Remove button. This does not remove the service itself; it only removes it from the Hot List.

The Max to Show field allows you to set a limit on the number of services displayed on the Service Catalog. To leave it unlimited, do not enter anything in the field. Otherwise, enter an integer in the field.

When you have finished selecting services to list and have set your maximum number to be displayed, click the SAVE button. The Service Catalog is displayed and the services you selected are displayed in the Hot List, along with the title and any text you entered.

Define User Roles for Service Catalog

To define a user role for the Service Catalog, you can:

Create and configure the CMDB role with the service catalog item not viewable or viewable under specific circumstances.

Create (or change) a customer role to default to that CMDB role.

Assign the customer(s) to that customer role.

Roles in the Service Catalog only allow an administrator to limit the view based on Status or Category, so you cannot specifically set one particular service as available to a specific role only. To limit the view, therefore, you could create a new Status (for example, "Available-Manager") and only allow a specific role to view Service catalog requests that have the designated Status. As an example of limiting the view based on Category, you could specify that only a certain role can access services in the HR category and put a service such as "New Hires" under that category.

For example, you might:

Create a Status called "Available-Manager".

Create a role called "Available-Manager".

Set permissions so that only those with the Available-Manager role can access the service.

Add users to the Available-Manager role.

As another example, you might:

Create a Category called "HR Services".

Create, as one of the options in that category, "New Hires".

Set permissions so that only a "Hiring-Manager" can access that category.

Add users to the Hiring-Manager role.

Using Service Catalog

Customers can use the Service Catalog to place service requests or simply view the services that are available for future reference. To view the Service Catalog, select **Service Catalog** from the BMC FootPrints Service Core Toolbar. The Service Catalog is displayed.

The Service Catalog displays service categories and a Hot List. The service categories are a hierarchy that allows the services to be organized. The Hot List is a quick means of navigating to specific services.

Service Categories

Service categories are determined by the administrator and may contain subcategories to any number of levels. To view services, you have to click the appropriate service category, and perhaps continue clicking on subcategories until you get to the one you want. For example, you may want to find a service in the IT Services department dealing with a business application. To select the category, you would click on IT Services and then Business Application Services. There you would find a list of services. Clicking on the service reveals the details of the service. From there you may submit a service request for that service using the Service Request Template provided.

Hot List

The Hot List is a list of services that it is useful to access quickly. The Hot List is displayed when you click the Service Catalog button on the same page as the service categories. Rather than go through the process of drilling down through the service categories, a customer can click on a service in the list to view the details. From there, the customer can submit a service request using the Service Request Template.

Submitting a Request Via Service Catalog

Requests for services are submitted in substantially the same way as any other BMC FootPrints Service Core request once you have determined which service you want. To submit a request:

Select Service Catalog from the BMC FootPrints Service Core Toolbar. The Service Catalog page is displayed.

Either:

Drill-down through the service categories until you find the list of services

or

Find the service you want to request in the Hot List.

Click on the service you want to request. The Details page of the request is displayed.

Click the **SAVE** button. The service request is submitted.

Chapter 10: Database Administration

Database Administration

The BMC FootPrints Service Core database design is optimized to work with the most popular relational databases for efficient and fast performance. This chapter covers the following topics:

System Architecture—The general architecture of BMC FootPrints Service Core.

Database Design—Design of the BMC FootPrints Service Core database, including table structure and connection types.

Services—BMC FootPrints Service Core services for connecting to the database.

Database Maintenance—Purging and archiving Workspace data

Backups and Disaster Recovery—Information about backing up**FootPrints Service Core** and creating a disaster recovery plan.

Upgrades—About upgrades to BMC FootPrints Service Core.

Performance—Guidelines and troubleshooting system performance.

Field Limit Specifications—Rules regarding the number of Workspace fields allowed based on database used.

Security—About security in BMC FootPrints Service Core.

Restrictions

With respect to limits for the number of fields in an individual workspace, there is very little danger of exceeding the limits of most databases. Nevertheless, administrators should be aware that when the number of fields in an individual workspace grow into the hundreds, performance may begin to degrade or data may be truncated.

There are two ways in which field proliferation might become a problem. One is through using field dependencies and the other is by using field-level permissions to combine multiple workspaces into a single workspace. Administrators should not in any way avoid using these features. They are mentioned here only because of the slim chance that they could cause a problem through field proliferation.

System Architecture

BMC FootPrints Service Core is a web-based application that resides on a web-server machine. It can be accessed from anywhere from within an Intranet or the Internet via TCP/IP using a standard web browser.

The BMC FootPrints Service Core application consists of CGI (Common Gateway Interface) scripts that drive the application. The CGI scripts contain Perl, HTML, and JavaScript, and display forms, images, help files, and user and Workspace information. Data is retrieved though SQL calls to the underlying relational database.

The BMC FootPrints Service Core application directory contains the following sub-directories:

CGI—Contains CGI program files.

BIN—Contains database (.exe) programs. These are C programs containing SQL calls.

HTML—Contains help, image, and temporary files.

DB—Contains database schemas (also contains the database itself for the **FootPrints Service Core** native database version only).

ETC—User and Workspace information and settings and other miscellaneous files.

The following files are used to keep track of local definitions:

c:\FootprintsServiceCore\cgi\MRlocalDefs—This contains local definitions created during installation (path assumes application is installed to c:\FootprintsServiceCore).

c:\FootprintsServiceCore\etc\MRpasswd—This file contains the list of **FootPrints Service Core** users, their encoded passwords, and other user options.

c:\FootprintsServiceCore\etc\MRprojects—This file contains one line per active **FootPrints Service Core** Workspace.

c:\FootprintsServiceCore\etc\ABList.txt—This file contains one line per active **FootPrints Service Core** Address Book.

c:\FootprintsServiceCore\etc\MRusers—This directory contains one file per user, containing the user's Workspace preferences.

How BMC FootPrints Service Core Works

TheBMC FootPrints Service Core system architecture is fully web-based. The BMC FootPrints Service Core application resides on a web server, such as Windows/IIS or Linux/Apache. It can reside either within an Intranet or outside of the firewall for remote access. Data is kept in a relational database, such as Microsoft SQL Server, MySQL, or Oracle.

The application is written in Perl, JavaScript, and C++. The user interface is generated via CGI scripts that output HTML to the user's web browser, while the database is queried via C++ programs that contain the proper SQL commands. Customizations to the interface are performed through easy-to-use web administration tools with no programming needed.

Users are authenticated through the application to the domain, if using Windows, LDAP, or UNIX authentication, or directly to BMC FootPrints Service Core, if using the native authentication method. The user is then authenticated within BMC FootPrints Service Core to the proper Role, giving the user the correct preferences and permissions within the system.

Each time the user performs an action in BMC FootPrints Service Core, for example, clicking **GO** to submit a new Issue, a CGI script is run on the server. This script invokes a database program to update the database and then creates new HTML dynamically to display to the user, and so on. All CGI scripts, data gathering, and display creation are done on the web server only.

Other functions:

Email—Notifications and incoming email processing are done by the **FootPrints Service Core** application communicating directly to the email server.

LDAP—If using the Dynamic Address Book link, the BMC FootPrints Service Core application talks directly to the external contact database (Active Directory, Lotus Notes, etc.) via LDAP.

Asset Management—BMC FootPrints Service Core retrieves asset data dynamically via XML from the BMC FootPrints Asset Core or Microsoft System Center Configuration Manager/SMS Inventory database.

About Database Design

Database design information is relevant to those interested in accessing the BMC FootPrints Service Core database from a source outside of BMC FootPrints Service Core. This section provides a general understanding of the BMC FootPrints Service Core database structure. If all data manipulation and management is left solely to BMC FootPrints Service Core, you do not need to read any further.

With respect to editing table elements outside of BMC FootPrints Service Core, changing the values of certain table elements from an external source outside of may cause errors. Because BMC FootPrints Service Core uses many of the values within its tables to manage data internally, we have indicated the fields, which can cause errors if edited improperly.

BMC FootPrints Service Core flexible database design works with the most popular relational databases for fast and efficient performance. All data is kept in a single database within the database server (SQL Server, Oracle, etc.). The database can reside on a different server from the application web server or on the same server.

Workspaces

Different functions or groups can be separated into Workspaces. Each Workspace is a sub-database of theBMC FootPrints Service Coredatabase, with its own fields, forms, users and settings. For example, you may have one Workspace to track service desk activity, and a second Workspace to track development activity. Workspaces can be made on-the-fly through the BMC FootPrints Service Core web administration interface with no database administration required. There is no limit to the number of Workspaces that can be created. Incidents are stored in Workspaces as individual records, called “Issues”.

Address Book

User contact information is stored in the BMC FootPrints Service Core Address Book. Each workspace can have it’s own Address Book, or multiple workspaces can share a single Address Book. The Address Book is made up of records called “Contacts”. Alternatively, contact data can be dynamically accessed from an outside source, such as Active Directory, Lotus Notes, or Sun ONE Directory Server, via LDAP or to SQLServer, MySQL, Oracle, etc., via Dynamic SQL Link.

Database Connection

The BMC FootPrints Service Core application connects to the database via ODBC, for Windows, or via a Perl module (DBD/DBI), for UNIX and Linux.

UNIX/Linux Relational Database versions, including, Oracle, MySQL, Postgres, use DBI/DBD, a popular database access module for the Perl programming language. It defines a set of methods, variables, and conventions that provide a consistent database interface and makes database calls directly from Perl without having to do a system call to execute an external binary program.

Client programs communicate with the daemon through the use of a named pipe that has read and write access. Client programs send a structure containing a SQL statement to the daemon, and a structure containing a result code, possible data, and the number of rows (in the case of a query) is returned. This persistent-connection approach provides a more optimized performance than directly connecting to and disconnecting from the ODBC data source in each client because it benefits from the caching mechanisms built into most database management systems.

Table Design

All **FootPrints** versions use the same table design. BMC FootPrints Service Core data is kept in a single database. Each workspace within the database consists of five tables that hold the information about each record. Address Book data is kept in a separate, single table for each Address Book. Additional data, including schemas, workspace settings, and user information are kept in the BMC FootPrints Service Core application directory on the web server.

A workspace consists of five tables:

MASTER*x* (where *x* is the workspace ID)—Holds the core information about an Issue, including built-in and custom fields.

MASTER*x*_HISTORY—Contains a history log of actions performed on each issue.

MASTER*x*_DESCRIPTIONS—Contains past descriptions and notes (current Description is kept in the MASTER*x* table).

MASTER*x*_ABDATA—Contains the contact information for the Issue.

MASTER*x*_TIMETRACKING—Contains time tracking data for Issues.

The change management approval process involves four additional database tables:

MASTER*x*_APPROVALSTATES—Used to maintain and query information about the current state of an approval phase. The current state of the process is determined by the state of its final phase.

MASTER*x*_APPROVALVOTES/MASTER*x*_APPROVALVOTESHIST—Used to maintain and query individual user votes on approval phases. These two tables are the same in design. However, MASTERx_APPROVALVOTES only contains the current (mrPROCID,mrPHASEID,mrID) set, while MASTERx_APPROVALVOTESHIST contains them all. There are duplicate (mrPROCID,mrPHASEID,mrID) sets only if a phase has run multiple times on an mrID.

MASTER*x*_APPROVALPHASES—Contains the configuration of a phase.

MASTER*x*_APPROVALPROCS—Contains the configuration of a process.

In addition, user contact information is stored in the Address Book. Each workspace can have its own Address Book or multiple workspaces can share one Address Book. Each Address Book is maintained with a single ABMASTERy table and, optionally, the ABMASTERy_MASTER table:

ABMASTERy (where *y* is the Address Book ID)—Contains contact information for users (fields are customizable).

ABMASTERy_MASTER (where y is the Address Book ID)—Contains contact information for the organizational unit selected in the Address Book to be used as the Master Contact field (such as Department, Company, etc.) This table was added in FootPrints 7.0, and is automatically created when making a new address book in 7.0+, or accessing an older address book for the first time in 7.0+. When using the Dynamic LDAP or SQL Address Book, data is not stored locally in the **FootPrints** Address Book.

For detailed information, refer to Table Design and Indexes.

Table Design and Indexes

BMC FootPrints Service Core database design documents for versions 9 and higher have been moved to the following location:

http://support.numarasoftware.com/support/updates.asp?product=5&content=Documentation&version=95&Offering=5.

BMC FootPrints Service Core Scheduling and Database Services

BMC FootPrints Service Core installs a service to run automated processes. This service handles incoming email, outgoing email notification, escalations, mass emails, and scheduled reports. On Windows, FPSschedule.exe is automatically set as a service on the BMC FootPrints Service Core server. On UNIX, a cron job is automatically created which runs the file MRrunScheduledScripts.pl. This service replaces the manually created batch files and cron jobs necessary to run automated processes in earlier versions.

It may occasionally be necessary to start and stop the scheduling service manually (Windows only). Follow these instructions to do so:

On the BMC FootPrints Service Core server, open a command (DOS) prompt.

Change to the FootPrints\bin directory, i.e.:

cd c:\FootprintsServiceCore\bin.

To start the scheduling service:

FPSchedule –i

To stop the service:

FPSchedule –u

FPwatch is a backup service to FPSchedule. It restarts the schedule service if it was stopped. It takes the same command line arguments as FPschedule.exe:

Install the service:

FPwatch -i

Uninstall the service:

FPwatch -u

Print out scheduling debugging information to etc/watchLog.txt (only if requested from BMC Support):

FPwatch -d

NOTE

The fpservice.exe for Windows versions of BMC FootPrints Service Core was removed in **FootPrints Service Core** 6.5. Windows Access, MS SQL Server, and MS SQL Express versions now use DBI/DBD to access the database (fpservice is no longer needed). This allows more connections and eliminates the chance of the service hanging or requiring a restart, which increases performance and removes a single point of failure, which increases reliability. If you are using a version of BMC FootPrints Service Core from before release 6.5, the database services are automatically uninstalled on upgrade. Calling BMC FootPrints Service Core database commands has also changed. Refer to BMC FootPrints Service Core API for more information.

Database Maintenance

Database Maintenance

Selected issues can be completely removed from a BMC FootPrints Service Core Workspace using the Database Maintenance feature. Specifically, issues that have been changed to the Deleted status are good candidates for archiving since Issues that have spent significant time as Deleted are no longer needed on a regular basis, but can be stored for reference information. These issues can be stored as read-only in a separate archive Workspace, which is useful for cleaning up the database by removing obsolete issues from a Workspace. Fewer issues in a Workspace leads to faster searching and reporting times, speeding up database access times.

IMPORTANT

Make a backup of your BMC FootPrints Service Core database before performing any purge function.

NOTE

Enabling archiving uses one workspace, and counts towards the limitation of three workspaces for BMC customers who own the Base Starter Pack. Please contact your salesperson for details on obtaining the Extended Starter Pack.

Topics covered in this section include:

Archiving data from current workspace

Purging data from current workspace

Working in the archive workspace

Archiving Data from the Current Workspace

The archive function removes issues that meet specified search criteria in the source Workspace, copies those issues to the archive Workspace that you specify, and then removes those issues from the Workspace's issue table.

Select Administration | System | Workspaces, then click the **GO** button in the Database Maintenance section.

Select the Archive option as the Action to Take.

The Status and Date Criteria of Applicable Issues section allows you to define the selection criteria for Archive. This can be based on either the Issue’s current status, the date it was last edited/created, or a combination of both.

By default, only the Deleted status is highlighted.

Highlight additional statuses as needed.

Select issues based on one specific date that they were created or last edited or choose all issues before or after a particular date.

Select AND to select issues that must meet both the status and date criteria.

Select OR to select issues that meet either the status or the date criteria.

TIP

Set up an escalation rule that automatically changes the status of closed issues to Deleted for issues that are a certain age. Then you can skip this step and just use the default highlighted status of Deleted.

Type in your password and click **GO**.

Matching Issues For Archive—All issues that meet the Archive search criteria are listed here and highlighted. Review the list to ensure you are archiving issues that meet your intended criteria. You can deselect issues by holding the CTRL key and left clicking the issue with your mouse. Only highlighted issues are archived.

SQL Query—BMC FootPrints Service Core displays the query that was used to retrieve the issues that have met the archive search criteria for your review.

Archive Location—Each “source” Workspace has a designated “destination” archive workspace. The first time you archive Issues, you must provide a name for the archive Workspace.

Name of new archive workspace—The first time you archive Issues from a given Workspace, you must set up some archive Workspace information. Give your archive Workspace a name. It is suggested that you use a name that is similar to the original Workspace for your archive Workspace, but not too similar. If your Workspace’s name is Helpdesk try using Archived Helpdesk instead of Helpdesk (Archive). This tells you which Workspace is archived, but does not confuse people by starting with the same name.

Name of new workspace’s address book—You can choose to create a new Address Book for the archive Workspace or link to the existing one. You must provide a Workspace name if you are creating a new one. If linking to an existing Workspace, check the Link to current workspace's address book instead box if you do not want to create and archive the Address Book. We suggest you link to the original.

All subsequent archive attempts from the same Workspace present an option to use the same archive Workspace or create a new one. Your business needs determine whether you want one or multiple archive Workspaces for a single source Workspace. If you are reporting on data by year, you might consider creating separate archive Workspaces for each year, especially if you have many issues to archive that you use for reporting.

Scheduled Run-Time—Archive jobs can be run immediately or at a time when server activity is light (if you have a large job with many issues to archive).

Start Immediately—Run immediately. Immediately means the archive begins the next time the BMC FootPrints Service Core scheduled service runs, which could be up to one minute from the time you enter your password and click **GO**.

Start at the following data and time—Enter the date and time you want to run the job. Since the entire process could take a long time to finish, depending on the number of records selected, you may want to schedule large jobs when there is little server activity to avoid server overload, e.g., on weekends or late at night.

Scheduled Jobs Pending In Current Workspace—This section lists those jobs scheduled to run in the future, as configured in the previous step.

Type in your password and click **GO**. Click **OK** when asked to confirm that you want to complete the archive. BMC FootPrints Service Core schedules the archiving to run as a background process based on the time set up in the Scheduled Run-Time step. This includes jobs scheduled to run immediately.

Purging Data from the Current Workspace

Purging data from the source workspace works the same way as archiving, except no archive workspace is created.

NOTE

If you think you might need to report on any of these purged issues, use the Archive function.

We recommend you make a backup of your BMC FootPrints Service Core database before performing the Purge function.

Select Administration | System | Workspaces, then click the **GO** button in the Database Maintenance section.

Select the Purge option as the Action to Take in the next page.

The Status and Date Criteria of Applicable Issues section allows you to define the selection criteria for Purge. This can be based on either the Issue's current status, the date it was last edited/created, or a combination of both.

By default, only the Deleted status is highlighted.

Highlight additional statuses as needed.

Select issues based on one specific date that they were created or last edited or choose all issues before or after a particular date.

Select AND to select issues that must meet both the status and date criteria

Select OR to select issues that meet either the status or the date criteria.

TIP

Set up an escalation rule that automatically changes the status of closed issues to Deleted for issues that are a certain age. Then you can skip this step and use the default highlighted status of Deleted.

Type in your password and click **GO**.

All issues that have met the purge search criteria are listed in the Matching Issues For Purge field and highlighted. Review the list to make sure you are purging issues that meet your intended criteria. You can de-select issues by holding the CTRL key and left clicking the Issue with your mouse. Only highlighted issues are purged.

SQL Query—BMC FootPrints Service Core displays the query that was used to retrieve the issues that have met the purge search criteria for your review.

Scheduled Run-Time—Purges can be scheduled to run either immediately or at a time when server activity is light, if you have a large job with many issues to purge.

Start Immediately—Run immediately. Immediately means the purge begins the next time the BMC FootPrints Service Core scheduled service runs, which could be up to one minute from the time you enter your password and click **GO**.

Start at the following data and time—Enter the date and time you want to run the job. Since the entire process could take a long time to finish, depending on the number of records selected, you may want to schedule large jobs when there is little server activity to avoid server overload, i.e., on weekends or late at night.

Scheduled Jobs Pending In Current Workspace—This section lists those jobs scheduled to run in the future, as configured in the previous step.

Enter your password and click **GO**. After clicking the **GO** button, click OK to confirm that you want to complete the purge. After clicking OK, BMC FootPrints Service Core schedules the purge to run as a background process based on the time defined in Step 7. This include jobs scheduled to run immediately.

Working in the Archive Workspace

The archive Workspace is a read-only Workspace. There is no option in the left hand toolbar to create new issues or global issues, even for System Administrators, in an archive Workspace.

Cross-workspace copies into archive Workspaces by both escalations and from the Details page are no longer allowed. Archive Workspaces are not listed in the drop-down list of Workspaces.

Issues in the archive Workspace can be restored to the original Workspace individually or in a batch process. There is a Restore Archive button on the Details toolbar for individual Issues. Once clicked, you are asked to confirm your decision. After clicking **OK**, BMC FootPrints Service Core moves the issue from the archive Workspace back to the original Workspace.

Batches of Issues can be restored from the archive Workspace's Homepage using the Restore option in the Quick Action Checkbox dialog.

Backups and Disaster Recovery

The BMC FootPrints Service Core application and database must be backed up on a regular basis as part of a total IT disaster recovery plan. It is very easy to backup as part of the normal disk backups done by any organization. This section discusses which files and databases need to be backed up, procedures for getting a new emergency license during an Emergency restore, and other database-relevant information.

Database Requirements

FootPrints requires a database to store data. Currently supported databases and servers are listed in detail in the Technical Overview and System Requirements PDF on our Support Web site.

Back up the Database

BMC FootPrints Service Core typically resides in c:\FootprintsServiceCore on Windows systems and in /usr/local/footprintsservicecore under Unix or Linux systems. These directories are used in all examples.

First, the BMC FootPrints Service Core directory, as well as all database directories, must be backed up daily. This should be part of the customer's typical IT infrastructure backup and rotating media should be used so that catastrophic failure of a hard disk does not cause the loss of data. BMC is not responsible for your data backup.

In all cases, the BMC FootPrints Service Core directory tree must be backed up. In the case of some versions, you must also backup the database directory, using special database procedures.

Here are details on the different systems, the locations, and suggested methods of backup.

MS SQL Server (all versions, including SQL Express)—You must backup the **FootPrints** directory. In addition, this article by Microsoft gives full details of recommended database backup procedures:

Back Up and Restore of SQL Server Databases

This site have additional information on Differential backups and Transaction log backups for restoring databases from logs so that no data is lost, even up-to-the-last-minute of a server failure.

Oracle—You must backup the **FootPrints** directory. For the database, Oracle includes a comprehensive backup and recovery system called RMAN. For more information on this system, go to:

1.5 Backup and Recovery with RMAN

MySQL—You must backup the **FootPrints** directory. For the database, MySQL provides backup and restore procedures. For more information:

MySQL 5.7 Reference Manual — Chapter 7: Backup and Recovery

Postgres—You must backup the **FootPrints** directory. For the database, Postgres provides backup and restore procedures. For more information:

PostgreSQL 9.3.1 Documentation — Chapter 24: Backup and Restore

NOTE

All links were current at time of publication.

Disaster Recovery

There should be only four steps required when the server on which **FootPrints** resides gets a catastrophic failure:

Restore the FootPrints directory—Restore your latest copy of the **FootPrints** directory from tape backup. Typically this means c:\FootprintsServiceCore for Windows or /usr/local/footprintsservicecore for Unix or Linux.

Restore the Database—Follow the steps outlined in the documents above for all of the commercial databases.

Restore the Web Server settings—Please refer to the README file that came with your BMC FootPrints Service Core installation to re-add the aliases and Perl association to your web server.

Licenses

To obtain your license, follow the instructions in our Support article: Downloading and licensing FootPrints Service Core 11.x. Once you log in to your profile on our Support Web site, you can obtain your production, backup, and emergency license.

Support

BMC Support is available at 800 537 1813 (USA and Canada) or by email for help with any of these topics.

Load Balancing

If you wish to perform network load balancing, engage your BMC Software sales representative to contract for BMC Software Professional Services assistance in accomplishing this task.

Upgrades and Conversions

Upgrades

BMC FootPrints Service Core upgrades can usually be performed in minutes without data conversion or consulting. Your data, settings, and customizations made through the web interface are not affected. We do recommend you backup your system before upgrading as a precaution.

Upgrades are available to download for all maintenance customers at no additional cost.

Some special circumstances:

If you made custom changes directly to the code, these changes must be backed up and then re-integrated manually (or via a source code control program). BMC is not responsible for custom changes made directly to the code.

If you need to move your server at the same time, please contact BMC Support for instructions.

See also: Upgrading BMC FootPrints Service Core.

Database Conversions

BMC FootPrints Service Core can be converted from one platform and/or database to another. This is not a task to be undertaken lightly, and requires planning, time, and care. Platform- and database-specific conversion guides are available by emailing Support.

Some points to consider for a successful conversion:

We encourage you to contact our Support Center to get the very latest guide on how to perform the conversion. The Support Center will require the following information:

The platform on which BMC FootPrints Service Core is installed

The current version of your BMC FootPrints Service Core installation

Your current database type

The platform to which you are upgrading

The OS level

New database type

Allocate enough time for the conversion. It is best to convert on the weekend if you have several workspaces with over 10,000 issues within each of them, or a total of over 25,000 issues system-wide. If you have less, conversion could be scheduled after hours during the week.

Set up a test machine and do a dry run. This way if you run into trouble, you can contact our support group to work through the problem without your service desk experiencing any unnecessary down time. This is a "best practices" matter. It is better to experience any problems on a test system than a production machine.

NOTE

Only one (1) hour of conversion support comes with the standard BMC FootPrints Service Core maintenance agreement. Extra time required from the Support Team is billed at an hourly rate. Please contact your sales representative for more information.

Performance Guide

The performance of BMC FootPrints Service Core can be greatly enhanced by utilizing appropriate hardware and by carefully selecting the settings for BMC FootPrints Service Core, the operating system, and the database.

What to Expect

BMC FootPrints Service Core web pages, use an SQL-based database (such as SQL Server, MySQL, Oracle, or Postgres) and should typically take a few seconds to display. BMC FootPrints Service Core pages using the built-in database. Performance should be equally efficient for small Workspaces, but once the number of issues increases above ten thousand in a single Workspace, the time to display some pages, such as the Homepage, increases, and could require as much as 20 seconds or more. In these cases, we recommend changing over to a SQL-based environment.

What Hardware to Use

The BMC web site has a listing of recommended hardware to use for a BMC FootPrints Service Core server. Refer to the Technical Overview and System Requirements PDF on our Support Web site.

FootPrints Service Core Settings

The following suggestions can improve BMC FootPrints Service Core performance through the web interface:

Instant Talk—The current version of Instant Talk is implemented as a server-side only feature and polls the server periodically, determining whether or not people are talking. This polling frequency is higher during actual Instant Talk conversations.

The performance of the BMC FootPrints Service Core server can be improved by taking into account the following:

If Instant Talk is not used at your site, turn it off.

If Instant Talk is used at your site, but not used extensively, set the polling to a lower frequency.

Both of these options can be selected on the Administration | System | Instant Talk page. Recommended settings for a lower frequency are:

Active Talk time— 9 seconds

Talk check time— 50 seconds

Debugging—BMC FootPrints Service Core can create debug logs to help the support team diagnose customer problems. If the debug logs are still turned on after problems have been solved, large amounts of debug data is written whenever BMC FootPrints Service Core accesses that particular feature. This inevitably slows down the system. Absent a specific problem, it is recommended that debugging be disabled for the sake of system performance.

BMC FootPrints Service Core alerts the System Administrator (upon login) when debugging is enabled. Some examples of debugging are email and LDAP.

Debugging is administered from the Debug Manager. Access the Debug Manager by selecting Administration | System | Debug Manager from the BMC FootPrints Service Core Toolbar.

Temporary Files—BMC FootPrints Service Core creates temporary files in it's own tmp directory and cleans this directory out on a regular basis. However, older versions of BMC FootPrints Service Core may have left files in this tmp directory that, if not removed, can degrade system performance.

Delete the files found in the footprints/temp directory. If you do not clear the temp directory on a regular basis (e.g., you have 20,000+ files on a small installation), you may be experiencing other problems. If that is the case, email Support for additional assistance.

Escalation Rules—BMC FootPrints Service Core can handle large numbers of Escalation rules very easily, and does so from a background process. However, it is useful to 'clean up' unused rules in order to streamline that process. Turn off unused Escalation rules from the Administration | Workspace | Escalation page. Escalation rules can always be turned back on as needed.

If you have deleted Workspaces, remove the Escalation files from those Workspaces' database directories. These directories can be found by selecting Administration | System | Workspaces and clicking the option for List All Workspaces. The resultant page displays all Workspaces, their location on the server, whether they are deleted, and which Address Book the Workspace is using.

Find Workspaces that are listed with (*** Deleted ***) next to the name. The location of a Workspace is displayed below the Workspace's name (for example, the location might be c:\FootprintsServiceCore\db\MASTER3). Find this location on the server and go into the MR directory. The MR directory contains files related to this specific Workspace. Delete any files and folders with Escalation in their name (e.g., Escalation, EscalationEmails, etc.) This prevents BMC FootPrints Service Core from running these rules even though the Workspace has been deleted.

Homepage—An Agent can select the number of Issues that are displayed on his or her Homepage. Select My Preferences | Homepage List from the BMC FootPrints Service Core Toolbar to set the number of Issues that are displayed. Having a large number of issues (e.g., 50+) displayed on the Homepage slows down the display of

the page. If an Agent experiences slow performance, lowering the number of Issues displayed on the Homepage can help to improve the performance.

System Settings

The following list describes potential system problems, their causes, and their solutions. Most of these issues concern Windows servers:

Disk Fragmentation—As usage increases, hard disks in Windows-based systems can become very fragmented. Once they do, access to these disks becomes much slower. In order to remedy this, Windows is bundled with a disk defragmentation utility. Running this utility has shown to increase performance of a BMC FootPrints Service Core server by 2-4 times compared to the fragmented performance. Disk defragmentation should be run on a regular basis.

Viruses—Once a server is hit by a virus, particularly via Windows/IIS security holes, programs may either work incorrectly or run very slowly. Maintain virus checkers on all web servers running IIS and visit the Windows Update site (http://windowsupdate.microsoft.com) to apply security patches.

Anti-Virus Software—Although anti-virus software prevents performance-related issues from viruses, performance can be impacted due to an anti-virus program constantly checking files on each read and write. Here is a test to see if that may be happening on your BMC FootPrints Service Core machine:

Open a command prompt on the BMC FootPrints Service Core server.

Change directory (cd) to c:\FootprintsServiceCore\cgi (or the path to your BMC FootPrints Service Core directory).

Enter c:\FootprintsServiceCore\bin\perl\bin\perl MRbenchmark.pl

If the path to your Perl is different from the default, substitute that path for C:\ footprints\bin\perl\bin\perl

This should produce output similar to the following:

```
Please wait...
Started at 14:39:00 and finished at 14:39:10.
```

If the time from start to finish is greater than 20 seconds, you may need to fine-tune your current anti-virus program or get a less intensive program.

If your anti-virus software is running and you get a time greater than 20 seconds, uninstall the anti-virus software, reboot, and rerun MRbenchmark.pl. If this decreases the time significantly, you should reinstall the anti-virus software with different parameters. For instance, it might be useful to turn off constant file checking and have scans scheduled during off-peak hours.

Let a BMC Support Engineer know your results if they are abnormal or do not improve with these tips.

Network Access—This is a performance issue that is usually diagnosed easily because it affects only some users. There are no settings within BMC FootPrints Service Core that would cause network performance to decrease for some users while not affecting others. If certain users experience degraded performance while others do not, check the hubs, routers, and switches that connect them to the network.

A more critical problem, discussed later, is database access over the network.

IIS Processing—IIS is configured to process four simultaneous web requests per CPU. However, if a fifth request arrives, it is queued and waits for the next available process thread. A timeout on that request occurs if an available process thread is not allocated in an appropriate amount of time, which may appear as though BMC FootPrints Service Core has failed. Enabling IIS to run more than from simultaneous process threads can prevent this from occurring.

Microsoft has posted information on how to increase the number of threads each processor can handle (see the MSDN article: Optimizing IIS Performance). Making this change requires an administrator to edit the registry. Editing the registry is a dangerous task since a wrong entry or deletion can render the system unusable. If you have any questions regarding this change, do not change anything, but contact a BMC Support Engineer instead for assistance.

Open the registry editor by clicking on Start | Run in Windows and type in regedit. Find the following location in the registry:

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\InetInfo\Parameters

At this location, you need to create a new DWORD Value called MaxPoolThreads by right-clicking on Parameters and selecting New|DWORD Value.

Once you create that new value with the name of MaxPoolThreads, double-click the value to enter your desired decimal value (0-4,294,967,295). However, you should not create more than twenty threads per processor.

IIS Authentication—The IIS web server administrator can enable enhanced authentication. This can have the effect of slowing down all web server activities that run executables, like BMC FootPrints Service Core CGI scripts. If Anonymous Access is disabled and Integrated Windows Authentication is enabled, all scripts require NT login authentication and impact performance adversely. You can check this setting by right clicking on the web site where the BMC FootPrints Service Core virtual directories are set up, selecting Properties, and then selecting the Directory Security tab.

Virtual Memory—This is most important on Windows machines with insufficient memory. You can find the amount of Virtual Memory allocated for swapping when no system memory is available on the Control Panel | System Properties | Virtual Memory tab. This number should be two to three times the size of the real memory in the system.

Database Settings

SQL Server Debugging—If you turn on SQL server debugging, all SQL server performance will be adversely affected and therefore impacts the performance of **FootPrints Service Core**.

Do not use SQL server debugging/logging unless it is absolutely necessary. If it is currently enabled, turn it off as soon as possible.

SQL Server Network Access—If you decide to use a SQL database with **BMC FootPrints Service Core** on Windows and the database resides on a different server than BMC FootPrints Service Core, you must be certain that the servers have a reliably fast network connection.

By running Microsoft's Enterprise Manager from the BMC FootPrints Service Core server, you can easily compare data access and retrieval speeds. Compare the time it takes to access the BMC FootPrints Service Core database from the BMC FootPrints Service Core server verses accessing the data in Enterprise Manager running on the SQL server. If there is a significant difference in access time between the two servers, this would indicate a potential network or connectivity problem, or a permissions issue. It is essential to fix the problem before BMC FootPrints Service Core is put into production.

These types of speed issues have been discovered on NT/200x servers and have typically been caused by an anti-virus program. Verify whether an anti-virus program is running on your database server and how thorough the virus scanning heuristics are set.

FootPrints Service Core and mod_perl/PerlEx

The mod_perl program builds the perl processor into your Apache Web server and executes BMC FootPrints Service Core perl scripts much faster than the basic perl compiler. This greatly improves BMC FootPrints Service Core performance, especially with a large number of Agents.

BMC has tested mod_perl on both Linux and Sun Solaris systems extensively. Directions for building and testing mod_perl for Linux and Unix are included in the BMC FootPrints Service Core install package in a file named README.mod_perl. Please contact BMC Support if you need help with this installation.

BMC supportsBMC FootPrints Service Core 7.0+ on Windows releases using the PerlEx product from ActiveState Company. PerlEx is a mod_perl-equivalent for Windows servers and the IIS Web Server and greatly increases the performance of BMC FootPrints Service Core on Windows servers.

Field Limit Specifications

Microsoft SQL Express / SQL Server

Column width limit of 8060. The total of the size of all the varchar columns in one particular table can only add up to 8060. If they add up to a larger number, the table itself can exist, and more fields can still be added, but if you create an issue that uses more than 8060 characters of total varchar space, the issue is not added and an error is logged.

Oracle

1000 columns

MySQL

65535 characters, excluding blobs.

DB2

Description 4K page size limit 8K page size limit

1 Most columns in a table 500 1 012

3 Maximum length of a row including all overhead b 4 005 8 101

4 Maximum size of a table per partition (in gigabytes) c 64 128

15 Most elements in a select list 500 1 012

17 Maximum number of columns in a GROUP BY clause 500 1 012

18 Maximum total length of columns in a GROUP BY clause (in bytes) 4 005 8 101

19 Maximum number of columns in an ORDER BY clause 500 1 012

20 Maximum total length of columns in an ORDER BY clause (in bytes) 4 005 8 101

29 Most values in an INSERT statement 500 1 012

30 Most SET clauses in a single UPDATE statement 500 1 012

45 Maximum size of a regular DMS table space (in gigabytes)c 64 128

53 Most table objects in DMS table space f 6 648 13 305

Postgresql

Maximum size for a database is effectively unlimited, although you may see performance problems with more than a few thousand tables in a database, depending on how gracefully your file system copes with directories containing many files.

Maximum size for a table is 2G blocks, hence 16 to 64 terabytes depending on the BLCKSZ configuration constant.

Maximum size for a row - See limits on field size and number of columns.

Maximum size for an individual field value - Field values are limited to 1Gb, and in practice are more tightly limited by memory/swap space available to a back-end; a field value that is a large fraction of the maximum process memory size will probably cause out-of-memory failures.

Maximum number of columns in a table - 1600. In practice probably quite a bit less, even with TOAST, since the master tuple still has to fit in a block. If all the columns are large (toastable) then at most you could fit about 250 columns with BLCKSZ=8K, since an out-of-line TOAST value pointer takes 32 bytes. On the other hand, 1600 int4 columns would fit easily.

Maximum number of rows in a table - No specific limit. Note however that the COUNT() function currently uses an int4 counter, giving incorrect results for more than 2G rows.

Maximum number of indexes on a table - No limit.

Security

BMC FootPrints Service Core data is secured on multiple levels. **FootPrints Service Core** is completely password protected and supports password authentication using Windows, LDAP, UNIX, or built-in BMC FootPrints Service Core authentication. BMC FootPrints Service Core can run seamlessly in an SSL environment, where everything about your web session is secure.

BMC FootPrints Service Core LDAP authentication is available for Windows, Unix, and Linux.

Oracle Database Encoding

Should you encounter problems with database encoding on Oracle, use the following settings in both the Windows and UNIX/Linux environments to ensure that BMC FootPrints Service Core can process, display and store all character sets properly.

Set `NLS_LANG` to `AMERICAN_AMERICA.WE8MSWIN1252`

Set `NLS_CHARACTERSET` to `WE8MSWIN1252`

Set `NLS_NCHAR_CHARACTERSET` to `AL16UTF16`

If you do not have permission to configure `NLS_CHARACTERSET` and `NLS_NCHAR_CHARACTERSET`, consult your Oracle database administrator.

Chapter 11: BMC FootPrints Service Core API

BMC FootPrints Service Core API Overview

BMC FootPrints Service Core comes with two powerful programming interfaces to integrate your service desk with other critical applications in your organization:

Database API—A fully documented set of commands for accessing the database directly. Create and update Issues, perform queries, import data, and perform other tasks from a batch job, Visual Basic script, or other application. This API is uniform for all versions of BMC FootPrints Service Core.

BMC FootPrints Service Core Web Services API—An XML/SOAP Web Services interface to BMC FootPrints Service Core is available for all platforms for integration with other applications. It supports .NET 1.1 and 2.0, Java, and Perl. Functions are available for creating Issues, updating Issues and querying the database.

BMC FootPrints Service Core Database API

BMC FootPrints Service Core Database API Overview

NOTE
Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

The BMC FootPrints Service Core Database API is a set of commands for accessing the database directly. Create and update Issues, perform queries, import data, and perform other tasks from a batch job, Visual Basic script or other application. This API is uniform for all versions of BMC FootPrints Service Core.

Setting up the Environment

In order to run any of the commands, two environment variables, CMI and CMMASTER, must be set and the FootPrints Service Core command directory must be added to your path. Before running any Address Book commands, the ABMASTER environment variable must also be set.

NOTE
<*footprints_root*> refers to the root directory of your BMC FootPrints Service Core system. For example, if BMC FootPrints Service Core were installed to c:\FootprintsServiceCoreService, the <*footprints_root*> would be c:\FootprintsServiceCore .

If you have many Workspaces, there are many sub-directories in your database directory. You must find which directory is associated with the database you wish to access from the command line. This is done by looking at the file <*FootPrints_root*>/etc/MRprojects.

Each line in this file corresponds to one workspace. Find the line that has the name of the Workspace you want. Each line in MRprojects has a path in the second field that looks like <*footprints_root*>/db/MASTER*x*, where the *x* is the Workspace number. This is the path that goes into the CMMASTER variable. (The etc/Ablist.txt file defines which Address book is used.)

For Windows Users

<*footprints_root*>\bin must be added to your path first. This is by selecting Start | Settings | Control Panel | System. Select the Advanced tab and then click the Environment Variables... button. The Environment Variables pop-up is displayed.

Under System Variables, click on the Path variable and then select the Edit... button.

Add <*footprints_root*>\bin to the path by adding this string to the end of the existing string in the Variable Value field. Remember that environment variable entries must be separated by a semi-colon. Also remember to substitute the real location (e.g., c:\FootprintsServiceCore) for <*footprints_root*>. An example of this entry might be:

%SystemRoot%\system32;%SystemRoot%;%SystemRoot%\System32\Wbem;C:\MSSQL7\BINN;c:\FootprintsServiceCore\bin

Type the following from a DOS prompt:

C:\> set CMI=<*footprints_root*>
C:\> set CMMASTER=<*footprints_root*>\db\MASTER*x*
C:\> set ABMASTER=<*footprints_root*>\db\ABMASTER*x*

You can now run BMC FootPrints Service Core database commands from this DOS prompt.

NOTE
Spacing is important. Make sure that there are no spaces on either side of the "=".

For UNIX Users

From a C shell (csh) prompt, type the following:

% setenv CMI <*footprints_root*>
% setenv CMMASTER <*footprints_root*>/db/MASTER*x*
% setenv ABMASTER <*footprints_root*>/db/ABMASTER*x*
% set path=($CMI/bin $path)

See also:

Database Commands

Database Commands

Database Commands

NOTE
Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

The following is a list of the internal database commands of BMC FootPrints Service Core, with short descriptions of their functions. Each is discussed in more detail below, with syntax and examples.

mrABChange
Change the field of an Address Book Contact
mrABList
List contacts in the Address Book based on search criteria
mrABRegister
Create a single new contact
mrABState
Change the state of a contact
mrAppend
Append a new description to an Issue
mrAssign
Assign users to an Issue
mrAttach
Attach filenames to an Issue
mrChange

Change the title, user field data, or most recent description data

mrChangeTime

Change the time tracking date for an Issue

mrDetails

View the details of an Issue

mrEscalates

Escalate an Issue

mrList,mrQuick,mrFast

List Issues based on search criteria

mrNewPri

Change the priority of an Issue

mrNewState

Change the status of an Issue/multiple Issues

mrNewStates

Change the status of multiple Issues

mrReference

Create a link between Issues

mrRegister

Create a new Issue in the database

mrShow

Show various fields for a given Issue

mrTime

Read or write the time tracking data for an Issue

mrUnassign

De-assign users from an Issue

mrWriteHistory

Write the history for an Issue.

Command Syntax

To execute these mr<*name*> commands in the /bin directory correctly, you must use the correct syntax, which depends on the system on which **FootPrints Service Core** resides. The mr<*name*> command is now the first argument to one of the following, which must prefix those commands:

Windows SQL/Access:

perl\bin\perl mrFile.pl

MySQL/Oracle/DB2/Postgres (Unix/Linux):

mrFile.pl

Examples:

Windows SQL/Access:

c:\FootprintsServiceCore\bin\perl\bin\perl mrQuick.pl "mrSTATUS <> '_DELETED_'"

MySQL/Oracle/DB2/Postgres (Unix/Linux):

mrQuick.pl "mrSTATUS <> '_DELETED_'"

mrABChange

NOTE

Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

Change the field of an Address Book contact

Syntax (following correct mrFile)

mrABChange <*Issue number*>
line 1 of new data
.
line 2 of new data
.
etc

For each field in the Address Book, a line (or lines) of new data is optional, followed by a mandatory '.' on a line of its own. Any lines, which have new data, will replace the corresponding field in the Issue. The workspace fields in the Address Book can be found in $ABMASTER/MR/Schema.

Example

mrABChange 1
new name
.
.
.
new phone
.

In this case, the first field will be replaced by the words 'new name', and the fourth field will be replaced with 'new phone'.

mrABList

NOTE
Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

List contacts

Syntax (following correct mrFile)

mrABList <*query*> (see mrList for query syntax)
mrABList <*Issue #*>
mrABList <*letter*>
mrABList

mrABList is used to list groups of Address Book data. mrABList with no arguments will list all Address Book contacts. mrABList with a query will list those items, which match the criteria mrABList with a letter will list all items whose first field starts with that letter.

Example

mrABList
1

mrABList where FirstName contains Mark
mrABList k

mrABRegister

NOTE
Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

Create a single new contact

Syntax (following correct mrFile)

mrABRegister
field1
.
field2
.
etc

mrABRegister creates a single new contact. Each field defined in the schema for this ABMASTER must have a line or set of lines, followed by a line with a single '.' on it. Fields with no input data may have a '.' only.

Example

mrABRegister
Mark
.
Kaye
.
msk@widget.com
.

mrABState

NOTE
Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

Used to delete an Address Book entry.

Syntax (following correct mrFile)

mrABState <*number*> _DELETED_

Example

setenv CMI /usr/local/footprintsservicecore
setenv CMMASTER /usr/local/footprintsservicecore/db/ABMASTER1
mrABState 22 _DELETED_

NOTE

Most Address Book commands set ABMASTER, but this one sets the Address Book location into CMMASTER instead.

mrAppend

NOTE

Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

Append a new description to an Issue

Syntax (following correct mrFile)

```
mrAppend <Issue number>
line 1 of description data
line 2 of description data
.
```

Example

```
mrAppend 32
This is new text for Issue 32.
.
```

The description must be followed by a period on a new line.

See also

mrChange

mrAssign

NOTE

Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

Assign one or more users to an Issue

Syntax (following correct mrFile)

mrAssign <*Issue number*> <*username*>
mrAssign <*Issue number*> "<*username*> <*username*> ... "

Example

mrAssign 32 msk

This assigns the user msk to Issue 32

mrAssign 101 "agent1 agent2"

This assigns agent1 and agent2 to Issue 101.

Usage

When assigning multiple agents, be sure to enclose the agent usernames in quotation marks.

See also

mrUnassign

mrAttach

NOTE
Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

Used to add attachments to a issue

Syntax (following correct mrFile)

mrAttach <*number*>
(one line per attachment name follows)

Example

mrAttach 24
Attachment name 1
Attachment name 2

mrChange

NOTE
Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

Replace the description, title and/or user field data for an Issue

Syntax (following correct mrFile)

mrChange <*MR number*> "<*title*>"
line 1 of description data
line 2 of description data
.
data for user field 1
.
data for user field 2
.

Use the mrChange command to change the description, title, and/or user field data of an Issue. The title supplied on the command line replaces the old title. The description field and user fields are read from stdin. Separate each field

by a line containing only "." (but do not enter a "." between the title and description). You must know the order of the user fields: you are not prompted for each field by name.

You can obtain the order of the fields from the file <*footPrints_root*>/db/MASTER*x*/MR/Schema file, where *x* is the number of the Workspace. If you enter no text into the description and user fields, the previous data remains. If you leave the title blank, however, a blank title is entered. To leave the title unchanged, re-enter the old title.

See also

mrAppend

mrRegister

mrChangeTime

NOTE

Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

Used to add time to a time tracking entry

Syntax (following correct mrFile)

mrChangeTime <*Entry #*> <*record#*> <*hours_worked*> <*$hour rate*> <**username**> <*date*> <*time*>

Example

mrChangeTime 25 3 4 50 msk 12/12/2002 03:03:00

This updates the third time tracking entry of issue 25 to add four hours of work at 50 units per hour (in whatever currency you use) for Agent msk at 6/12/2016 at 03:03:00.

mrDetails

NOTE

Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

View the details for a single Issue

Syntax (following correct mrFile)

mrDetails <*MR number*>

The mrDetails command shows the complete details for an Issue, including all built-in fields and user-defined fields. Lastdate and Lasttime are the date and time of the last edit.

Example

% mrDetails 160

returns:

```
Issue  Pri   Date      Time      By      Status  Lastdate   Lasttime
160    5     12/06/96 17:27:31  temkin  Closed  12/19/96   20:40:02
Summary:
Bug in Date Fields
Number of Issues in this report: 1

DESCRIPTION:
This is fixed in 1.124

CURRENT LIST OF ASSIGNEES:
joec temkin

Customer Email:  jcustomer@company.com
Due Date:  12/30
FootPrints Version: 1.121

HISTORY:
Date                User      State    Remarks
12/06/96 17:27:31   temkin    Open     Bug in Date Fields
12/06/96 17:27:31   temkin    Open     New assignees: temkin msk
12/19/96 20:37:20   temkin    Open     Append description
12/19/96 20:40:02   temkin    Closed   New state entered
```

See also

mrList

mrEscalate

NOTE

Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

mrEscalate

Escalate a **FootPrints** Issue

Syntax (following correct mrFile)

mrEscalate <*Issue number*> <*Escalation level*>

Example

mrEscalate 22 8

Escalates Issue 22 to level 8. This typically controls the color, so that level 8 might be orange (and escalation ON).

mrList.pl, mrQuick, mrFast

NOTE

Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

List Issues based on search criteria

Syntax (following correct mrFile)

The program is the equivalent of the SQL select statement. Under SQL–based databases, mrList.pl, mrFast, or mrQuick (which are synonyms for the same program) all act as front ends for the “select * from table where” of a SQL database. Under the built–in **FootPrints** database, mrList.pl command has a syntax described in detail below.

NOTE

The first argument to mrQuick (the query) must be in double quotes and the second argument, the page number, starts at 0 and not 1.

Details for SQL based versions of FootPrints

The mrList.pl, mrQuick, mrFast commands for **FootPrints** using SQL–based systems (SQL–server, Access, Oracle, MySQL, or Postgres) are front ends to the select command of the underlying database used to store the **FootPrints** database whose issue number is less than 20:

mrList.pl “mrID < 20”

this is equivalent to:

select * from MASTER1 where mrID < 20

or:

mrList.pl “mrPRIORITY = 2 and mrSTATUS = CLOSED”

is equivalent to:

select * from MASTER1 where mrPRIORITY = 2 and mrSTATUS = CLOSED

A working knowledge of SQL language is required to use the mrList.pl/mrQuick/mrFast commands. A full layout of the **FootPrints** tables is defined in the ODBC table definition section of the manual and the help for assistance in running these commands.

Details for FootPrints built built–in database

mrList.pl with no query following it returns a list of every Issue in the database. A **FootPrints** query consists of two parts, either or both of which may be omitted. The first part is a range specification, and the second is a logical expression. Each part serves to constrain the set of Issues on which to reported.

Range specification

A range specification is either a single number or a pair of integers separated by "–" or "to." It is okay to specify an ending number greater than the highest Issue number. The highest existing Issue number is used. Here are some examples:

Command	Action
mrList.pl 46 to 53	returns Issues 46 to 53
mrList.pl 5	returns Issue 5
mrList.pl 23 – 93	returns Issues 23 to 93
mrList.pl 47 to 99999	returns Issues 47 and up

If you are also going to specify a logical expression, connect the range specification and the logical expression with the word "where".

For example:

For UNIX: mrList.pl '47 to 83 where priority > 5'

For NT: mrList.pl "47 to 83 where priority > 5"

Logical expressions

Logical expressions describe other constraints on which Issues are to appear in mrList.pl. There are many types of these, as follows.

Text Fields: Description and Title

Description fields are queried using the keywords "description contains". For example, to return a list of Issues with the word "hello" in the description, you would type:

On UNIX: mrList.pl 'where description contains "hello"'
On NT: mrList.pl "where description contains \"hello\""

Title searches are constructed using a similar grammar, but using the keyword "summary" instead. For example, to return a list of Issues with the word "FootPrints FootPrints" in the title, you would type:

On UNIX: mrList.pl 'where summary contains "FootPrints FootPrints"'
On NT: mrList.pl "where summary contains \"FootPrints FootPrints\""

IMPORTANT

The use of single quotes, double quotes and slashes is very important. On NT, if you do not type a "\" before the double quotes surrounding the string, the search fails.

Remember that NT queries are protected by double quotes, so that quotes protecting strings within queries must be escaped.

Priority

You may include Issues in a report based upon their current priority. You may use any of the numeric relational operators (<, <=, =, !=, >=, or >).

Examples (given here for NT only):

mrList.pl "priority > 3"

mrList.pl "priority <= 100"

mrList.pl "priority != 5"

Status

You may include Issues in a report based upon their current status. Use any of the relational operators (<, <=, =, !=, >=, or >) to compare against other statuses. These statuses are Workspace–specific and are named in the Life.cycle ($CMMASTER/MR/Life.cycle) file. The earlier the status is mentioned in the Life.cycle file, the less its value. If you are getting syntax errors, make sure you check the Life.cycle file to see what **FootPrints** calls your status. For example, the status "upside down" might be stored as "upside__bdown."

Examples of queries:

status > Open

status = Closed

You may refer to the previous status the Issue had, like this:

previous status > Open

In fact, you may refer to the history of any status using the word "previous" as many times as necessary:

previous previous previous status > Open

If you use "previous" too many times and go back through more statuses than the Issue has had, **FootPrints** excludes it from the report.

Originator

You may include Issues in a report based upon the user ID that originally created the Issue. You may use any of the relational operators (<, <=, =, !=, >=, or >) to compare against user IDs.

Examples:

originator = suzy

originator != george

Assignee

You may include Issues in a report based upon one of the user IDs, which have been assigned to work on them.

Example:

assigned to dan

Unassigned

To include Issues in a report based upon the absence of anyone having been assigned to work on them, simply place the word "not" in front of "assigned."

Example:

not assigned

Date of Issue

You may include Issues in a report based upon the date the Issue was created. You may use any of the relational operators (<, <=, =, !=, >=, or >) and the keywords “Issue date” to compare against a constant date in mm/dd/yy format.

Examples:

Issue date = 5/10/92

Issue date < 3/5/91

Date of promotion

You may include Issues in a report based upon the date the Issue last changed. Use any of the relational operators (<, <=, =, !=, >=, or >) and the keywords “date of status” to compare against a constant date in mm/dd/yy format.

Examples:

date of status = 5/10/92

date of status < 3/5/91

You may refer to the date previous to the current one like this:

date of previous status < 3/5/91

In fact, you may refer to any status date previous to that one by using the word "previous" as many times as necessary:

date of previous previous status < 3/5/91

If you use "previous" too many times and go back through more statuses than the Issue had, **FootPrints** excludes it from the report.

Age of Issue

You may include Issues in a report based upon the age of the Issue (how many days ago it was entered). You may use any of the relational operators (<, <=, =, !=, >=, or >) and the words “age of Issue date” to compare against a constant integer.

Examples:

age of Issue date > 30

age of Issue date < 7

Combining logical expressions

Logical expressions may be combined with "and" and "or." You may use parentheses to force evaluation.

Examples:

priority > 2 and age of Issue date > 30

(age of Issue date > 30 or age of previous status > 30) and priority = 3

You may also use the "not" operator to negate a condition:

not priority = 3

Ordering the report

You may sort the report by any combination of these criteria:

To sort by	Use this term
Issue number	mr
current priority	priority
Issue date	Issue date
originator	originator
current status	status

You may prefix a sort name by the word "ascending" or "descending." The default sorting order is ascending, so you need not use it except for clarity.

Examples:

order by descending priority

order by originator

Examples of useful queries

All unclosed high–priority Issues that have been unresolved for over a month:

mrList.pl "priority > 5 and status < Closed and age of Issue date > 30 order by descending priority"

All Issues assigned to george, ordered by priority:

mrList.pl "assigned to george order by descending priority"

NOTE

When you run the mrList.pl command, you must protect the "<" and ">" signs from the shell by either escaping then with a back–quote or by quoting the entire query.

See Also

mrDetails

mrNewPri

NOTE

Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

Change the priority of an Issue

Syntax (following correct mrFile)

mrNewPri <Issue Number> <Priority>

Use the mrNewPri program to change the priority of an Issue. A priority is a positive decimal integer greater than zero, consisting of up to five digits. **FootPrints** assigns no semantics to these numbers. It is up to the members of the Workspace to decide what range of allowable numbers to use and whether higher numbers imply higher priorities or if it is the other way around.

mrNewState

NOTE

Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

Assign a new status to an Issue

Syntax (following correct mrFile)

mrNewState <MR number> <Status> [“comment”]

Use the mrNewState program to change the status of an Issue. Five statuses are built into the **FootPrints** system: "Open," which is the initial status of all Issues, and "Closed," which is their final destination. **FootPrints** also comes with "_DELETED_", "_SOLVED_" and "_REQUEST_" for deleted Issues, solutions and requests respectively. Your also may have created intermediate statuses that represent the normal flow of work on a workspace-by-workspace basis. These customized state names are kept in the CMMASTER/MR/Life.cycle file. You may optionally comment the change in status.

See also

mrNewStates

mrNewStates

NOTE
Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

Assign a new status to multiple Issues

Syntax (following correct mrFile)

mrNewStates <Status> <MR number> [<MR number>…]

Use mrNewStates to change the status of multiple Issues at once. MrNewStates does not allow you to comment the changes in status.

See also

mrNewState

mrReference

NOTE
Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

Create a link from one Issue to another

Syntax (following correct mrFile)

mrReference <Issue number> <dependent number>

This command creates a reference from one Issue to another. The Issue will contain a link back to the dependent Issue.

Example

%MrReference 3 510

This creates a link in Issue number 510 referencing Issue number 3.

mrRegister

NOTE
Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

Create a new Issue in the database

Syntax (following correct mrFile)

```
mrRegister <priority> "<title>"
line 1 of description data
line 2 of description data
.
data for user field 1
.
data for user field 2
.
```

Use mrRegister to create a new Issue in the database. mrRegister reads the description field and user fields from stdin. Separate each field by a "." (but do not enter a "." between the title and description). You must know the order of the user fields: you are not prompted for each field by name. You can get the order of the fields from the <*footprints_root*>/db/MASTER*x*/MR/Schema file and <*footprints_root*>/db/ABMASTERx/MR/Schema file, respectively.

mrShow

NOTE

Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

Display various fields for a given Issue

Syntax (following correct mrFile)

```
mrShow <Issue number> <field code> <optional description code>
```

The field codes are as follows:

```
Summary: 0
Status: 2
Description: 3
```

Without the optional description code, viewing the description shows only the most recent description data. This is equivalent to using description code "1". The previous description has code "2", and the one before that "3", etc. Description code "0" displays all description data.

```
Priority: 4
Assignees: 5
Reference: 8
Escalation level: 9
Attachments: 11
FAQ count: 12

History: 500
```

Starting at 500 is a list of all histories of the issue.

Examples

```
mrShow 3 3 0
```

This displays all description data for Issue number 3.

```
mrShow 3 4
```

This displays the priority for Issue 3.

mrTime

NOTE
Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

Create a new time tracking element for a issue or read one or more elements of time tracking

Syntax (following correct mrFile)

```
WRITE: mrTime <Entry #> <hours_worked> <$/hour rate>"
READ : mrTime <Entry #>"
       mrTime 0 R <filename>"
```

Examples

```
mrTime 22 100 50
```

Writes a new record for issue 22, showing 100 hours worked, at 50 units per hour.

```
mrTime 22
```

Reads all time tracking data for issue 22.

```
mrTime 0 R ttfile.txt
```

Reads all time tracking data for all issues whose numbers appear in ttfile.txt. This is useful for time tracking reports.

mrUnassign

NOTE
Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

De-assign users

Syntax (following correct mrFile)

```
mrUnassign <Issue number> <username>
mrUnassign <Issue number> "<username> <username> ..."
```

Example

```
mrUnassign 32 msk
```

This unassigns the user msk from Issue 32.

```
mrUnassign 101 "agent1 agent2"
```

This unassigns agent1 and agent2 from Issue 101.

See also

mrAssign

mrWriteHistory

NOTE

Use of these commands is not recommended as they are no longer officially supported and may not work as intended.

Description

Write a new history element for an issue

Syntax (following correct mrFile)

mrWriteHistory <issue number>

One line description to go into the history follows.

Example

mrWriteHistory 27

This is new history for issue 27.

BMC FootPrints Service Core Web Services API

Web Services API

The Web Services API provides functions for both regular BMC FootPrints Service Core Issues and CMDB, as follows:

FootPrints Service Core Issues

search—Searching the BMC FootPrints Service Core database (using queries for Issue, Address Book, History data, etc.) This search can be more complex than the built-in searching functions of the BMC FootPrints Service Core interface, since users can, for example, build combinations of AND and OR queries.

getIssueDetails—Retrieve the details of an Issue.

createIssue—Create an Issue.

editIssue—Edit an Issue.

linkIssues—Create dynamic or static link between Issues.

createContact—Create a new contact in the Address Book.

editContact—Edit an existing contact in the Address Book.

createOrEditContact—Create a new or edit an existing contact in the Address Book.

CMDB

createCI—Create a CI.

editCI—Edit a CI.

createCIRelation—Define a relationship between CIs. This does not mean that you create the relationship, but that you sue an existing relationship to relate one CI to another.

createCIContactLink—Link a contact to a CI.

createCIIssueLink—Link an Issue to a CI.

If an error occurs in any of these functions, they will return a fault string containing a description of the error, including identifying where in the code the error has occurred.

The functionality is limited in that the programmatic interface to BMC FootPrints Service Core cannot alter the database structure. For instance, the user (or program) could not remove a database column.

The Web Services API also has the following characteristics/limitations:

Users are not formally logged in, thereby allowing multiple web services to run simultaneously.

Authentication is done on a subroutine by subroutine basis rather than authenticating and passing around a token. Therefore, each subroutine requires a username and password.

The authentication username can be an administrator or agent.

NOTE

An additional fixed license is not required for this particular system administrator username.

A system preference determines if web services are used and, by default, is set to OFF.

BMC FootPrints Service Core uses a Perl module, SOAP::Lite, to implement it's back-end web services, which allows for efficient implementation and code re-use. However, it does not fully support interoperability with C# web services. When complex data needs to be returned (i.e., data which is not a single string), web services returns an XML string. This comprises self-describing arrays and hashes defined by the following DTD:

```
<!ELEMENT array (item*)>
<!ELEMENT map (item*)>
<!ELEMENT item (#PCDATA|array|map)*>
<!ATTLIST item
key CDATA #REQUIRED
defined CDATA #IMPLIED>
<!ELEMENT data (array|map)*>
```

The **Web Services API** can be called from any programming language that supports an XML/SOAP client. BMC FootPrints Service Core Web Services has been tested with Perl, C#, and Java clients and examples of these calls are included in this document. Some C# and Java clients call FootPrints Service Core with the extraInfo parameter, which is an extension point to allow extra parameters to be passed into web services without changing their definitions. Currently, it is used to allow .NET and JAVA clients to request results as a single XML string. Refer to the sample code for additional information. Perl clients always use an empty string for this parameter.

This feature must be enabled by selecting Administration | System | Web Services from the BMC FootPrints Service Core Toolbar and then selecting the Enabled radio button. Enter your password and then click **Save** to complete enabling the feature.

DISCLAIMER

Sample Code included in this section are for your use only, and are not included or covered by the BMC Services Maintenance and Support Agreement nor are they supported by the BMC Support group. You use this at your own risk and BMC shall have no liability to you or any other party for damages in connection with your use and/or distribution of this sample code. BMC is not responsible for errors or defects in the software, any use of the software or inability to use the Software, or incidental or consequential damages arising out of use of Sample Code.

Issues with International Characters

It is possible that you might not be able to add international characters correctly to issues when using web services. Should this be the case, convert all the arguments to UTF-8 using a Perl module. An easy way to do this is as follows:

```
use Encode;
$argument = encode_utf8($argument);
```

There is no difference when you do this using either UTF-8 encoding for BMC FootPrints Service Core or local encoding, but your results may differ. If you are using .NET, similar encoding can take place with System.Text.Encoding from the .Net Framework (refer to the MSDN .NET Framework Class Library Encoding Class article).

Other languages have similar functionality available.

When reading the data using web services, you must do the opposite. In Perl, use:

```
use Encode;
$returnValue = decode_utf8($returnValue);
```

As already mentioned, .NET could use System.Text.Encoding from the .NET Framework.

createIssue

createIssue(userid, password, extraInfo, argumentHash)

Synopsis: Create a new issue.

Arguments: Userid and password for a system administrator (or any agent if enabled on Web Services Setup page). ExtraInfo. Argument hash is described below:

Key	Description	Mandatory/Optional
projectID	Workspace number.	Mandatory
submitter	Userid of submitter.	Optional – Default is the user calling this function.
title	Title of issue	Mandatory
status	Status in unfixed format	Mandatory
priorityNumber	Number for issue priority	Mandatory for either priorityNumber or priorityWords to be set. priorityNumber will be used if both are set.
priorityWords	Words representing priority.	Mandatory for either priorityNumber or priorityWords to be set. priorityNumber will be used if both are set.
description	Description in plain text. Any html tags will be readable in the description, but will not be used for formatting.	Mandatory
assignees	Reference to array of assignees (teams must be listed in fixed form, e.g., Tier__bOne).	Optional
permanentCCs	Reference to array of permanent CCs (userids or email addresses, with teams listed in fixed form).	Optional
oneTimeCCs	Reference to array of one-time CCs (userids or email addresses, with teams listed in fixed form).	Optional

mail	Reference to hash containing following arguments (if any particular key is not passed as an argument, the default will be to assume that mail is sent for that key): assignees => 1 (send email to assignees) contact => 1 (send email to contact) permanentCCs => 1 (send email to permanent CCs) 0 turns email off.	All arguments are optional.
projfields	Reference to hash containing proj fields in form: fieldname=>fieldvalue, where fieldvalue is in the same form as a user would type it in from the web. The function will itself fix values. If a multi-select field, the value should be a reference to an array containing the values. Date fields must be in form of YYYY-MM-DD and Datetime fields in form YYYYMM---DD HH24:MM:SS.	Optional
abfields	Reference to hash containing ab fields in form: fieldname=>fieldvalue, where fieldvalue is in the same form as a user would type it in from the web. The function will itself fix values. If a multi-select field, the value should be a reference to an array containing the values. Date fields must be in form of YYYY-MM-DD.	Optional. If using selectContact key, any values retrieved by that will overwrite these values.
selectContact	Primary key value of contact in unfixed form.	Optional. If using abfields key, those values will be applied first and then will be overwritten by these values.
Returns: Issue number of newly created issue.		

Usage Notes:

The ExtraInfo parameter is always empty for this function.

createIssue submits Issues regardless of whether required custom fields are set.

createIssue does not use the default choices configured in **FootPrints Service Core** if the field is not set in createIssue.

If you are using the priorityWords parameter, priorities do not use the normal __b for spaces as in other drop-downs. For example, the priority "HIGH PRIORITY" would be priorityWords="HIGH PRIORITY" and not priorityWords="HIGH__bPRIORITY".

editIssue

editIssue (userid, password, extraInfo, argumentHash)
Synopsis: Edit an existing issue.
Arguments: Userid and password for a system administrator (or any agent if enabled on Web Services Setup page). Extra Info. Argument hash is described below (other than workspace and

mrID, only keys actually being changed should be set).		
Key	**Description**	**Mandatory/Optional**
projectID	Workspace number.	Mandatory
mrID	Issue number of issue.	Mandatory
submitter	Userid of submitter.	Optional – Default is the user calling this function.
title	Title of issue	Optional
status	Status in unfixed format	Optional
priorityNumber	Number for issue priority	Optional for either priorityNumber or priorityWords to be set. priorityNumber will be used if both are set.
priorityWords	Words representing priority.	Optional for either priorityNumber or priorityWords to be set. priorityNumber will be used if both are set.
description	Description in plain text. Any html tags will be readable in the description, but will not be used for formatting.	Optional
assignees	Reference to array of assignees (teams must be listed in fixed form).	Optional
permanentCCs	Reference to array of permanent CCs (userids or email addresses, with teams listed in fixed form).	Optional
oneTimeCCs	Reference to array of one-time CCs (userids or email addresses, with teams listed in fixed form).	Optional
mail	Reference to hash containing following arguments (if any particular key is not passed as an argument, the default will be to assume that mail is sent for that key): assignees => 1 (send email to assignees) contact => 1 (send email to contact) permanentCCs => 1 (send email to permanent CCs) 0 turns email off.	All arguments are optional.
projfields	Reference to hash containing proj fields in form: fieldname=>fieldvalue, where fieldvalue is in the same form as a user would type it in from the web. The function will itself fix values. If a multi-select field, the value should be a reference to an array containing the values. Date fields must be in form of YYYY-MM-DD and Datetime fields in form YYYYMM---DD HH24:MM:SS.	Optional
abfields	Reference to hash containing ab fields in form: fieldname=>fieldvalue, where fieldvalue is in the same form as a user would type it in from the web. The function will itself fix values. If a multi-select field, the value should be a reference to an array containing the values. Date fields must be in form	Optional. If using selectContact key, any values retrieved by that will overwrite these values.

	of YYYY-MM-DD.	
selectContact	Primary key value of contact in unfixed form.	Optional. If using abfields key, those values will be applied first and then will be overwritten by these values.
Returns: Nothing.		

Usage Notes:

The ExtraInfo parameter is always empty for this function.

If you are using the priorityWords parameter, priorities do not use the normal __b for spaces as in other drop-downs. For example, the priority "HIGH PRIORITY" would be priorityWords="HIGH PRIORITY" and not priorityWords="HIGH__bPRIORITY".

getIssueDetails

getIssueDetails (userid, password, extraInfo, projectID, issueNumber)	
Synopsis: Retrieve the details of a particular issue.	
Arguments: Userid and password for a system administrator (or any agent if enabled on Web Services Setup page). Extra Info, and the workspace id and issue number for a particular issue.	
Returns: Hash with keys described below:	
Key	**Description**
mr	Issue number
submitter	Userid of submitter
entrydate	Submit date
entrytime	Submit time
title	Title
status	Status in fixed format
priority	Priority number of issue
description	Text of most recent description.
allDescriptions	Reference to array of all descriptions
alldescs	All descriptions in one field
description_stamp	Stamp for most recent description
assignees	Space-separated list of assignees
Fixed form of each field	Value of each field as stored in the database
emailRecipients	Reference to an array of all addresses and userids that have received a notification mail for this issue. Any element that is a userid has parentheses around it so that you can differentiate userids from real addresses.
history	History lines.
editors	Reference to an array of all userids found in the user column of the history.
lastdate	Last edited date.

lasttime	Last edited time.
mostrecentedit	Reference to an array of history lines. The history lines include the newest history line and any lines that were written within 10 seconds prior to the writing that line. They are in order from oldest to newest.

search

search (userid, password, extraInfo, query)
Synopsis: Query the BMC FootPrints Service Core database
Arguments: Userid and password for a system administrator (or any agent if enabled on Web Services Setup page). Query for the BMC FootPrints Service Core database, which may only be a 'SELECT' statement.
Returns: Hash containing each requested field, with the keys the lowercased version of the requested field.

linkIssues

linkIssues (userid, password, extraInfo, argumentHash)		
Synopsis: Links two issues together. If a static link, FootPrints Service Core simply reports a link between the issues. If a dynamic link, FootPrints Service Core will automatically update linked issues when an update is made to the other issue based on the settings in Issue Workflow.		
Arguments: Userid and password for a system administrator (or any agent if enabled on Web Services Setup page). ExtraInfo. Argument hash is described below.		
Returns: 1 if the link is successful. It will error out if not.		
Key	**Description**	**Mandatory/Optional**
issue1	Reference to hash containing the following keys: projectID => workspace number of issue mrID => number of issue	Mandatory for both values to be set.
issue2	Reference to hash containing the following keys: projectID => workspace number of issue mrID => number of issue	Mandatory for both values to be set.
linkType	Type of link, which must be either 'static' (the issues are linked but are not updated from each other) or 'dynamic' (the issues are linked and updates in one update the other based on the settings in Issue Workflow).	Mandatory

createContact

createContact (userid, password, extraInfo, argumentHash)		
Synopsis: Create a new contact.		
Arguments: Userid and password for a system administrator (or any agent if enabled on Web Services Setup page). ExtraInfo. Argument hash is described below.		
Returns: Contact number of newly created contact.		
Key	**Description**	**Mandatory/Optional**
abNumber	Address Book number	Mandatory for either abNumber or projected to be set. abNumber will be used if both are set.
projectID	Workspace number.	Mandatory for either abNumber or projected to be set. abNumber will be used if both are set.
submitter	Userid of submitter.	Optional – Default is the user calling this function.
abfields	Reference to hash containing ab fields in form: fieldname=>fieldvalue, where fieldvalue is in the same form as a user would type it in from the web. The function will itself fix values. If a multi-select field, the value should be a reference to an array containing the values. Date fields must be in form of YYYY-MM-DD.	Optional. If using selectContact key, any values retrieved by that will overwrite these values.

Usage Notes:

The ExtraInfo parameter is always empty for this function.

createContact submits Issues regardless of whether required custom fields are set.

createContact does not use the default choices configured in FootPrints Service Core if the field is not set in createContact.

editContact

editContact (userid, password, extraInfo, argumentHash)		
Synopsis: Edit an existing contact.		
Arguments: Userid and password for a system administrator (or any agent if enabled on Web Services Setup page). ExtraInfo. Argument hash is described below.		
Returns: Contact number of edited contact if successful.		
Key	**Description**	**Mandatory/Optional**
abNumber	Address Book number	Mandatory for either abNumber or projected to be set. abNumber will be used if both are set.
projectID	Workspace number.	Mandatory for either abNumber or

		projected to be set. abNumber will be used if both are set.
abID	Number of contact	Mandatory
submitter	Userid of submitter.	Optional – Default is the user calling this function.
abfields	Reference to hash containing ab fields in form: fieldname=>fieldvalue, where fieldvalue is in the same form as a user would type it in from the web. The function will itself fix values. If a multi-select field, the value should be a reference to an array containing the values. Date fields must be in form of YYYY-MM-DD.	Optional. If using selectContact key, any values retrieved by that will overwrite these values.

Usage Notes:

The ExtraInfo parameter is always empty for this function.

editContact submits Issues regardless of whether required custom fields are set.

editContact does not use the default choices configured in FootPrints Service Core if the field is not set in editContact.

createOrEditContact

createOrEditContact (userid, password, extraInfo, argumentHash)		
Synopsis: Creates or edits a contact. If abID is defined, it always edits the contact. If it is not defined, it will determine whether this is a create or edit based on whether the primary key value already exists in the address book.		
Arguments: Userid and password for a system administrator (or any agent if enabled on Web Services Setup page). ExtraInfo. Argument hash is described below.		
Returns: Contact number of create or edited contact if successful.		
Key	**Description**	**Mandatory/Optional**
abNumber	Address Book number	Mandatory for either abNumber or projected to be set. abNumber will be used if both are set.
projectID	Workspace number.	Mandatory for either abNumber or projected to be set. abNumber will be used if both are set.
abID	Number of contact	Optional
submitter	Userid of submitter.	Optional – Default is the user calling this function.
abfields	Reference to hash containing ab fields in form: fieldname=>fieldvalue, where fieldvalue is in the same form as a user would type it in from the web. The function will itself fix values. If a multi-select field, the	Optional. If using selectContact key, any values retrieved by that will overwrite these values.

	value should be a reference to an array containing the values. Date fields must be in form of YYYY-MM-DD.	

Usage Notes:

The ExtraInfo parameter is always empty for this function.

createOrEditContact submits Issues regardless of whether required custom fields are set.

createOrEditContact does not use the default choices configured in FootPrints Service Core if the field is not set in createOrEditContact.

createCI

createCI(userid, password, extraInfo, argumentHash)

Synopsis: Create a new Configuration Item (CI).

Arguments: Userid and password for a system administrator (or any agent if enabled on Web Services Setup page). ExtraInfo. Argument hash is described below:

Key	Description	Mandatory/Optional
CMDB_ID	Number of CMDB	Mandatory
CI_TYPE_ID	Number of CI Type	Mandatory
STATUS	Unfixed status for new CI	Mandatory
SUBMIT_USER	ID of User who creates CI	Optional
SUBMIT_SYSTIMESTAMP	Time of submission in FootPrints Configuration Manager	Optional
SUBMIT_USERTIMESTAMP	Time CI was actually created	Optional
LASTEDIT_USERTIMESTAMP	Time of last edit in FootPrints Configuration Manager	Optional
REVISION_USERTIMESTAMP	Time CI was actually changed	Optional
ATTRIBUTES	Reference to hash where keys are attribute names and values are attribute values	Optional

editCI

editCI(userid, password, extraInfo, argumentHash)

Synopsis: Edit an existing Configuration Item (CI).

Arguments: Userid and password for a system administrator (or any agent if enabled on Web Services Setup page). ExtraInfo. Argument hash is described below:

Key	Description	Mandatory/Optional
CMDB_ID	Number of CMDB	Mandatory
CI_ID	ID of CI within type	Mandatory
CI_TYPE_ID	Number of CI Type	Mandatory
STATUS	Unfixed status for new CI	Optional
ATTRIBUTES	Reference to hash where keys are attribute names and values are attribute values	Optional

createCIRelation

createCIRelation(userid, password, extraInfo, argumentHash)

Synopsis: Define a relationship between CIs. This does not mean that you create the relationship, but that you sue an existing relationship to relate one CI to another.		
Arguments: Userid and password for a system administrator (or any agent if enabled on Web Services Setup page). ExtraInfo. Argument hash is described below:		
Key	**Description**	**Mandatory/Optional**
CMDB_ID	Number of CMDB	Mandatory
RELATION_CFG_ID		Mandatory
FROM_CI_TYPE		Mandatory
TO_CI_TYPE		Mandatory
FROM_CI_ID		Mandatory
TO_CI_ID		Mandatory

createCIContactLink

createCIContactLink(userid, password, extraInfo, argumentHash)		
Synopsis: Link a contact to a CI.		
Arguments: Userid and password for a system administrator (or any agent if enabled on Web Services Setup page). ExtraInfo. Argument hash is described below:		
Key	**Description**	**Mandatory/Optional**
CMDB_ID	Number of CMDB	Mandatory
CI_ID	ID of CI within Type	Mandatory
CI_TYPE_ID	Number of CI Type	Mandatory
ABNUMBER	Number of Address Book	Mandatory
ABID	ID of Address Book Entry	Mandatory

createCIIssueLink

createCIIssueLink(userid, password, extraInfo, argumentHash)		
Synopsis: Link an Issue to a CI.		
Arguments: Userid and password for a system administrator (or any agent if enabled on Web Services Setup page). ExtraInfo. Argument hash is described below:		
Key	**Description**	**Mandatory/Optional**
CMDB_ID	Number of CMDB	Mandatory
CI_ID	ID of CI within type	Mandatory
CI_TYPE_ID	Number of CI Type	Mandatory
PROJECTID	Number of FootPrints Service Core workspace	Mandatory
MRID	Issue number	Mandatory

Sample Code

Perl Sample

Creating an Issue

```
use strict;
use SOAP::Lite;
my $USE_PROXY_SERVER = 1;
my $soap = new SOAP::Lite;
$soap->uri( 'http://fakeserver.phoneycompany.com/MRWebServices' );
```

```
if( $USE_PROXY_SERVER )
{
   $soap->proxy(
      'http://fakeserver.phoneycompany.com/MRcgi/MRWebServices.pl',
      proxy => ['http' => 'http://localhost:8888/'] );
}
else
{
   $soap->proxy( 'http://fakeserver.phoneycompany.com/MRcgi/MRWebServices.pl' );
}
my $soapenv = $soap->MRWebServices__createIssue(
   'WebServices',
   'fakepassword',
   '',
   {
      projectID => 78,
      title => 'Place title of new issue here.',
      assignees => ['user1', 'user2'],
      priorityNumber => 1,
      status => 'Open',
      description => "Place issue description here.\nFrom PERL code.",
      abfields =>
      {
         Last__bName => 'Doe',
         First__bName => 'John',
         Email__baddress => 'johndoe@nowhere.com',
         Custom__bAB__bField__bOne => 'Value of Custom AB Field One'
      },
      projfields =>
      {
         Custom__bField__bOne => 'Value of Custom Field One',
         Custom__bField__bTwo => 'Value of Custom Field Two'
      }
   }
);
my $result;
if( $soapenv->fault )
{
   print ${$soapenv->fault}{faultstring} . "\n";
   exit;
}
else
{
   $result = $soapenv->result;
}
print "Issue $result has been created.\n";
```

Editing an Issue

```
use strict;

use SOAP::Lite;
```

```
my $USE_PROXY_SERVER = 1;
my $soap = new SOAP::Lite;
$soap->uri( 'http://fakeserver.phoneycompany.com/MRWebServices' );
if( $USE_PROXY_SERVER )
{
   $soap->proxy(
      'http://fakeserver.phoneycompany.com/MRcgi/MRWebServices.pl',
      proxy => ['http' => 'http://localhost:8888/'] );
}
else
{
   $soap->proxy( 'http://fakeserver.phoneycompany.com/MRcgi/MRWebServices.pl' );
}
my $soapenv = $soap->MRWebServices__editIssue(
   'WebServices',
   'fakepassword',
   '',
   {
      projectID => 78,
      mrID => 44,
      title => 'NEW title is here.',
      abfields =>
      {
         Custom__bAB__bField__bOne => 'NEW VALUE FOR Custom AB Field One'
      },
      projfields =>
      {
         Custom__bField__bTwo => 'NEW VALUE FOR Custom Field Two'
      }
   }
);
my $result;
if( $soapenv->fault )
{
```

```
    print ${$soapenv->fault}{faultstring} . "\n";
    exit;
}
print "done\n";
```

Retrieving Issue Details

```
use strict;
use SOAP::Lite;
my $USE_PROXY_SERVER = 1;
my $soap = new SOAP::Lite;
$soap->uri( 'http://fakeserver.phoneycompany.com/MRWebServices' );
if( $USE_PROXY_SERVER )
{
    $soap->proxy(
        'http://fakeserver.phoneycompany.com/MRcgi/MRWebServices.pl',
        proxy => ['http' => 'http://localhost:8888/'] );
}
else
{
    $soap->proxy( 'http://fakeserver.phoneycompany.com/MRcgi/MRWebServices.pl' );
}
my $soapenv = $soap->MRWebServices__getIssueDetails(
    'WebServices',
    'fakepassword',
    '',
    78,
    1
);
my $result;
if( $soapenv->fault )
{
    print ${$soapenv->fault}{faultstring} . "\n";
    exit;
}
else
```

```
{
    $result = $soapenv->result;
}
my %hash = %{$result};
foreach my $item ( keys %hash )
{
    print "---\n";
    print "ITEM IS: [$item]\n";

    print "---\n";
    print $hash{$item};
    print "\n";

    print "---\n";
}
```

Querying the FootPrints Service Core Database

```
use strict;
use SOAP::Lite;
my $USE_PROXY_SERVER = 1;
my $soap = new SOAP::Lite;
$soap->uri( 'http://fakeserver.phoneycompany.com/MRWebServices' );
if( $USE_PROXY_SERVER )
{
    $soap->proxy(
        'http://fakeserver.phoneycompany.com/MRcgi/MRWebServices.pl',
        proxy => ['http' => 'http://localhost:8888/'] );
}
else
{
    $soap->proxy( 'http://fakeserver.phoneycompany.com/MRcgi/MRWebServices.pl' );
}
my $soapenv = $soap->MRWebServices__search(
    'WebServices',
    'fakepassword',
```

```
    ",
    "select mrID, mrTITLE from MASTER78 WHERE mrTITLE LIKE '%of%'"
);
my $result;
if( $soapenv->fault )
{
    print ${$soapenv->fault}{faultstring} . "\n";
    exit;
}
else
{
    $result = $soapenv->result;
}
my @result_list = @{$result};
for( my $i = 0; $i <= $#result_list; $i++ )
{
    print "RESULT $i\n";

    my $hash_ref = $result_list[$i];

    foreach my $item ( keys %{$hash_ref} )
    {
        my $val = $hash_ref->{$item};

        print "$item = '$val'\n";
    }

    print "---------------------\n";
}
```

Linking Issues

```
use strict;
use SOAP::Lite;
my $USE_PROXY_SERVER = 1;
my $soap = new SOAP::Lite;
$soap->uri( 'http://yourFootPrintsServer/MRWebServices' );
if( $USE_PROXY_SERVER )
```

```
{
   $soap->proxy(
      'http://yourFootPrintsServer/MRcgi/MRWebServices.pl',
      proxy => ['http' => 'http://localhost:8888/'] );
}
else
{
   $soap->proxy( 'http://yourFootPrintsServer/MRcgi/MRWebServices.pl' );
}
# By calling this, you don't need to worry about whether this is a new or edited contact. This method
# will do all the work.
my $soapenv = $soap->MRWebServices__linkIssues(
   'dpinkowitz',
   'root',
   undef,
   {
      linkType => 'dynamic',
      issue1 => {projectID => 1, mrID => 1},
      issue2 =>  {projectID => 2, mrID => 5},
   }
);
my $result;
if( $soapenv->fault )
{
   print ${$soapenv->fault}{faultstring} . "\n";
   exit;
}
else
{
   $result = $soapenv->result;
}
print "Link is successful.\n" if $result;
```

Creating a Contact

```
use strict;
use SOAP::Lite;
my $USE_PROXY_SERVER = 1;
my $soap = new SOAP::Lite;
$soap->uri( 'http://yourFootPrintsServer/MRWebServices' );
if( $USE_PROXY_SERVER )
{
   $soap->proxy(
      'http://yourFootPrintsServer/MRcgi/MRWebServices.pl',
      proxy => ['http' => 'http:///localhost:8888/'] );
}
else
{
   $soap->proxy( 'http://yourFootPrintsServer/MRcgi/MRWebServices.pl' );
}
my $soapenv = $soap->MRWebServices__createContact(
   'WebServices',
```

```
    'root',
    '',
    {
        abNumber => 78,
        abfields =>
        {
            Last__bName => 'Doe',
            First__bName => 'John',
            Email__baddress => 'johndoe@nowhere.com',
            Custom__bAB__bField__bOne => 'Value of Custom AB Field One'
        },
    }
);
my $result;
if( $soapenv->fault )
{
    print ${$soapenv->fault}{faultstring} . "\n";
    exit;
}
else
{
    $result = $soapenv->result;
}
print "Contact $result has been created.\n";
```

Editing a Contact

```
use strict;
use SOAP::Lite;
my $USE_PROXY_SERVER = 1;
my $soap = new SOAP::Lite;
$soap->uri( 'http://yourFootPrintsServer/MRWebServices' );
if( $USE_PROXY_SERVER )
{
    $soap->proxy(
        'http://yourFootPrintsServer/MRcgi/MRWebServices.pl',
        proxy => ['http' => 'http://localhost:8888/'] );
}
else
{
    $soap->proxy( 'http://yourFootPrintsServer/MRcgi/MRWebServices.pl' );
}
my $soapenv = $soap->MRWebServices__editContact(
    'WebServices',
    'root',
    '',
    {
        abNumber => 78,
        abID => 44,  # can leave this out so long as the primary key field has a value; must use this if editing name of
primary key value
        abfields =>
        {
```

```
            Last__bName => 'Doe',
            First__bName => 'John',
            Email__baddress => 'johndoe@nowhere.com',
            Custom__bAB__bField__bOne => 'Value of Custom AB Field One'
        },
    }
);
my $result;
if( $soapenv->fault )
{
    print ${$soapenv->fault}{faultstring} . "\n";
    exit;
}
else
{
    $result = $soapenv->result;
}
print "Contact $result has been edited.\n";
```

Creating or Editing a Contact

```
use strict;
use SOAP::Lite;
my $USE_PROXY_SERVER = 1;
my $soap = new SOAP::Lite;
$soap->uri( 'http://yourFootPrintsServer/MRWebServices' );
if( $USE_PROXY_SERVER )
{
    $soap->proxy(
        'http://yourFootPrintsServer/MRcgi/MRWebServices.pl',
        proxy => ['http' => 'http://localhost:8888/'] );
}
else
{
    $soap->proxy( 'http://yourFootPrintsServer/MRcgi/MRWebServices.pl' );
}
# By calling this, you don't need to worry about whether this is a new or edited contact. This method
# will do all the work.
my $soapenv = $soap->MRWebServices__createOrEditContact(
    'WebServices',
    'root',
    '',
    {
        abNumber => 78,
        abfields =>
        {
            Last__bName => 'Doe',
            First__bName => 'John',
            Email__baddress => 'johndoe@nowhere.com',
            Custom__bAB__bField__bOne => 'Value of Custom AB Field One'
        },
    }
```

```
);
my $result;
if( $soapenv->fault )
{
   print ${$soapenv->fault}{faultstring} . "\n";
   exit;
}
else
{
   $result = $soapenv->result;
}
print "Contact $result has been edited.\n";
```

Assigning individual Agents, Agents as Team members, and Teams

An 'assignees' key is available for the extraInfo parameter of the createIssue and editIssue Web API SOAP calls which is used for assigning or reassigning agents to an Issue. Agent assignment to an Issue is based on the order of Agents and Teams in the list applied to this 'assignees' key for the createIssue and editIssue Web API SOAP calls:

Assigning Agents

Agents which are not preceded by a Team name are assigned as individual agents regardless of team membership:

```
 'assignees' => [ 'individual_agent1', 'agent1_Team1', 'agentN_TeamK' ],
```

In this case, *individual_agent1*, *agent1_Team1*, and *agentN_TeamK* will be assigned as individual agents.

Assigning Agents as Team members

Agents preceded by Team name will be assigned as Team members:

```
 'assignees' => [ 'TeamK', 'agent1_TeamK'],
```

In this case, *agent1_TeamK* will be assigned as a member of TeamK.

```
 'assignees' => [ 'individual_agent1', 'agentN_TeamK', 'Team1', 'agent1_Team1',
'agent2_Team1', 'TeamK', 'agent1_TeamK', 'agent2_TeamK' ],
```

In this case, *individual_agent1* and *agentN_TeamK* will be assigned as individuals, *agent1_Team1* and *agent2_Team1* will be assigned as members of Team1, and *agent1_TeamK* and *agent2_TeamK* will be assigned as members of TeamK.

Assigning Teams

Teams which are not followed by agents will be assigned based on team properties, i.e. to a team, selected agents, all members, or round robin base:

```
'assignees' => [ 'TeamL', 'TeamN' ],
```

Both teams (*TeamL* and *TeamN*) will be assigned based on their properties - to a team, selected agents, all members or round robin base.

```
'assignees' => [ 'individual_agent1', 'agentN_TeamK', 'Team1', 'agent1_Team1',
'agent2_Team1', 'TeamK', 'agent1_TeamK', 'agent2_TeamK', 'TeamL', 'TeamN' ],
```

In this case, *individual_agent1* and *agentN_TeamK* will be assigned as individuals, *agent1_Team1* and *agent2_Team1* will be assigned as members of Team1, *agent1_TeamK* and *agent2_TeamK* will be assigned as

members of TeamK, and *TeamL* and *TeamN* will be assigned based on team properties - to a team, selected agents, all members, or round robin base.

Unassigning Agents

To unassign all agents, form an Issue using the editIssue Web API SOAP call. An empty list should be passed to the 'assignees' key of the extraInfo parameter:

```
'assignees' => [],
```

If the 'assignees' key of the externalInfo parameter is not defined, the assignees defined for an Issue remain unchanged.

Creating a CI

```
use strict;

my $soapUser = 'admin';
my $soapPass = 'root';
my $baseUrl = 'http://pyxis';

#######################################################
#######################################################
#######################################################

use SOAP::Lite;
my $soap = new SOAP::Lite;
$soap->uri( $baseUrl . '/MRWebServices' );
$soap->proxy( $baseUrl . '/MRcgi/MRWebServices.pl' );

my $cmdb_id = 3;
my $ci_type_id = 10;
my $status = 'Active';
my $submit_user;
my $submit_systimestamp;
my $submit_usertimestamp;
my $lastedit_usertimestamp;
my $revision_usertimestamp;
my %attributes = (
        x_float => 456.78,
        x_int => 999
        );

my $soapCall = $soap->MRWebServices__createCI(
        $soapUser,
        $soapPass,
        '', # extra info
        {
            CMDB_ID => $cmdb_id,
```

```
                CI_TYPE_ID => $ci_type_id,
                STATUS => $status,
                SUBMIT_USER => $submit_user,
                SUBMIT_SYSTIMESTAMP => $submit_systimestamp,
                SUBMIT_USERTIMESTAMP => $submit_usertimestamp,
                LASTEDIT_USERTIMESTAMP => $lastedit_usertimestamp,
                REVISION_USERTIMESTAMP => $revision_usertimestamp,
                ATTRIBUTES => \%attributes,
        }
        );
if (1)
{
        use Data::Dumper;
        print Dumper($soapCall);
}

if( $soapCall->fault )
{
        print ${$soapCall->fault}{faultstring} . "\n";
}
```

Edit a CI

```
use strict;

my $soapUser = 'admin';
my $soapPass = 'root';
my $baseUrl = 'http://pyxis';

#######################################################
#######################################################
#######################################################

use SOAP::Lite;
my $soap = new SOAP::Lite;
$soap->uri( $baseUrl . '/MRWebServices' );
$soap->proxy( $baseUrl . '/MRcgi/MRWebServices.pl' );

my $cmdb_id = 3;
my $ci_id = 49;
my $ci_type_id = 10;
my $status = 'Retired';
my %attributes = (
        x_int => 777
```

```
        );

my $soapCall = $soap->MRWebServices__editCI(
        $soapUser,
        $soapPass,
        '', # extra info
        {
            CMDB_ID => $cmdb_id,
            CI_ID => $ci_id,
            CI_TYPE_ID => $ci_type_id,
            STATUS => $status,
            ATTRIBUTES => \%attributes,
        }
        );
if (1)
{
        use Data::Dumper;
        print Dumper($soapCall);
}


if( $soapCall->fault )
{
        print ${$soapCall->fault}{faultstring} . "\n";
}
```

Create a CI Relationship

```
use strict;

my $soapUser = 'admin';
my $soapPass = 'root';
my $baseUrl = 'http://pyxis';

#######################################################
#######################################################
#######################################################

use SOAP::Lite;
my $soap = new SOAP::Lite;
$soap->uri( $baseUrl . '/MRWebServices' );
$soap->proxy( $baseUrl . '/MRcgi/MRWebServices.pl' );
```

```
my $cmdb_id = 3;
my $relation_cfg_id = 2;
my $from_ci_id = 49;
my $from_ci_type = 10;
my $to_ci_id = 51;
my $to_ci_type = 10;

my $soapCall = $soap->MRWebServices__createCIRelation(
        $soapUser,
        $soapPass,
        '', # extra info
        {
            CMDB_ID => $cmdb_id,
            RELATION_CFG_ID => $relation_cfg_id,
            FROM_CI_ID => $from_ci_id,
            TO_CI_ID => $to_ci_id,
            FROM_CI_TYPE => $from_ci_type,
            TO_CI_TYPE => $to_ci_type,
        }
        );

if (1)
{
        use Data::Dumper;
        print Dumper($soapCall);
}

if( $soapCall->fault )
{
        print ${$soapCall->fault}{faultstring} . "\n";
}
```

Link a Contact to a CI

```
use strict;

my $soapUser = 'admin';
my $soapPass = 'root';
my $baseUrl = 'http://pyxis';

#######################################################
#######################################################
#######################################################
```

```
use SOAP::Lite;
my $soap = new SOAP::Lite;
$soap->uri( $baseUrl . '/MRWebServices' );
$soap->proxy( $baseUrl . '/MRcgi/MRWebServices.pl' );

my $cmdb_id = 3;
my $ci_id = 49;
my $ci_type_id = 10;
my $abnumber = 2;
my $abid = 1;
my $soapCall = $soap->MRWebServices__createCIContactLink(
        $soapUser,
        $soapPass,
        '', # extra info
        {
            CMDB_ID => $cmdb_id,
            CI_ID => $ci_id,
            CI_TYPE_ID => $ci_type_id,
            ABNUMBER => $abnumber,
            ABID => $abid,
        }
        );

if (1)
{
        use Data::Dumper;
        print Dumper($soapCall);
}

if( $soapCall->fault )
{
        print ${$soapCall->fault}{faultstring} . "\n";
}
```

Link an Issue to a CI

```
use strict;

my $soapUser = 'admin';
my $soapPass = 'root';
my $baseUrl = 'http://pyxis';
```

```
#####################################################
#####################################################
#####################################################

use SOAP::Lite;
my $soap = new SOAP::Lite;
$soap->uri( $baseUrl . '/MRWebServices' );
$soap->proxy( $baseUrl . '/MRcgi/MRWebServices.pl' );

my $cmdb_id = 3;
my $ci_id = 49;
my $ci_type_id = 10;
my $projectid = 2;
my $mrid = 19;
my $soapCall = $soap->MRWebServices__createCIIssueLink(
$soapUser,
$soapPass,
'', # extra info
        {
            CMDB_ID => $cmdb_id,
            CI_ID => $ci_id,
            CI_TYPE_ID => $ci_type_id,
            PROJECTID => $projectid,
            MRID => $mrid,
        }
        );

if (1)
{
        use Data::Dumper;
        print Dumper($soapCall);
}

if( $soapCall->fault )
{
        print ${$soapCall->fault}{faultstring} . "\n";
}
```

C# Sample

Creating an Issue

```
using System;
[
```

```
    System.Web.Services.WebServiceBindingAttribute(
        Name="CreateIssueWebService",
        Namespace="MRWebServices"
    )
]
public class CreateIssue : System.Web.Services.Protocols.SoapHttpClientProtocol
{
    public CreateIssue()
    {
        this.Url = "http://fakeserver/MRcgi/MRWebServices.pl";

        // Comment this out if not using a proxy server.
        //System.Net.IWebProxy proxyObject = new System.Net.WebProxy("http://localhost:8888/", false);
        //this.Proxy = proxyObject;
    }
    [
        System.Web.Services.Protocols.SoapDocumentMethodAttribute(
            "MRWebServices#MRWebServices__createIssue",
            RequestNamespace="MRWebServices",
            ResponseNamespace="MRWebServices",
            Use=System.Web.Services.Description.SoapBindingUse.Encoded,
            ParameterStyle=System.Web.Services.Protocols.SoapParameterStyle.Wrapped
        )
    ]
    [return: System.Xml.Serialization.SoapElementAttribute("return")]
    public string MRWebServices__createIssue(
        string usr,
        string pw,
        string extraInfo,
        CreateIssueArgs args
    )
    {
        object[] results = this.Invoke(
            "MRWebServices__createIssue",
            new object[] {usr, pw, extraInfo, args }
        );
        return ((string)(results[0]));
    }
}
[System.Xml.Serialization.SoapTypeAttribute("ABFields", "MRWebServices")]
public class ABFields
{
    public string Last__bName;
    public string First__bName;
    public string Email__baddress;
    public string Custom__bAB__bField__bOne;
}
[System.Xml.Serialization.SoapTypeAttribute("ProjFields", "MRWebServices")]
public class ProjFields
{
    public string Custom__bField__bOne;
```

```
    public string Custom__bField__bTwo;
}
[System.Xml.Serialization.SoapTypeAttribute("CreateIssueArgs", "MRWebServices")]
public class CreateIssueArgs
{
    public string projectID;
    public string title;
    public string [] assignees;
    public string priorityNumber;
    public string status;
    public string description;
    public ABFields abfields;
    public ProjFields projfields;
}
class main
{
    [STAThread]
    static void Main()
    {
        CreateIssue issue = new CreateIssue();
        ABFields abFields = new ABFields();
        abFields.Last__bName = "Doe";
        abFields.First__bName = "John";
        abFields.Email__baddress = "johndoe@nowhere.com";
        abFields.Custom__bAB__bField__bOne = "Value of Custom AB Field One";
        ProjFields projFields = new ProjFields();
        projFields.Custom__bField__bOne = "Value of Custom Field One";
        projFields.Custom__bField__bTwo = "Value of Custom Field Two";
        CreateIssueArgs issueargs = new CreateIssueArgs();
        issueargs.projectID = "78";
        issueargs.title = "Place title of new issue here.";
        issueargs.assignees = new string [] { "user1", "user2" };
        issueargs.priorityNumber = "1";
        issueargs.status = "Open";
        issueargs.description = "Place issue description here.\nFrom C# code.";
        issueargs.abfields = abFields;
        issueargs.projfields = projFields;
        string result = issue.MRWebServices__createIssue(
            "WebServices",
            "fakepassword",
            "",
            issueargs
        );
        Console.WriteLine( "Issue " + result + " has been created.\n" );
    }
}
```

Editing an Issue

```
using System;
[
    System.Web.Services.WebServiceBindingAttribute(
```

```
        Name="EditIssueWebService",
        Namespace="MRWebServices"
    )
]
public class EditIssue : System.Web.Services.Protocols.SoapHttpClientProtocol
{
    public EditIssue()
    {
        this.Url = "http://fakeserver/MRcgi/MRWebServices.pl";
        // Comment this out if not using a proxy server.
        //System.Net.IWebProxy proxyObject = new System.Net.WebProxy("http://localhost:8888/", false);
        //this.Proxy = proxyObject;
    }
    [
        System.Web.Services.Protocols.SoapDocumentMethodAttribute(
            "MRWebServices#MRWebServices__editIssue",
            RequestNamespace="MRWebServices",
            ResponseNamespace="MRWebServices",
            Use=System.Web.Services.Description.SoapBindingUse.Encoded,
            ParameterStyle=System.Web.Services.Protocols.SoapParameterStyle.Wrapped
        )
    ]
    [return: System.Xml.Serialization.SoapElementAttribute("return")]
    public void MRWebServices__editIssue(
        string usr,
        string pw,
        string extraInfo,
        EditIssueArgs args
    )
    {
        object[] results = this.Invoke(
            "MRWebServices__editIssue",
            new object[] {usr, pw, extraInfo, args }
        );
    }
}
[System.Xml.Serialization.SoapTypeAttribute("ABFields", "MRWebServices")]
public class ABFields
{
    public string Custom__bAB__bField__bOne;
}
[System.Xml.Serialization.SoapTypeAttribute("ProjFields", "MRWebServices")]
public class ProjFields
{
    public string Custom__bField__bTwo;
}
[System.Xml.Serialization.SoapTypeAttribute("CreateIssueArgs", "MRWebServices")]
public class EditIssueArgs
{
    public string projectID;
    public string mrID;
```

```
    public string title;
    public ABFields abfields;
    public ProjFields projfields;
}
class main
{
    [STAThread]
    static void Main()
    {
        EditIssue issue = new EditIssue();
        ABFields abFields = new ABFields();
        abFields.Custom__bAB__bField__bOne = "NEW VALUE FOR Custom AB Field One";
        ProjFields projFields = new ProjFields();
        projFields.Custom__bField__bTwo = "NEW VALUE FOR Custom Field Two";
        EditIssueArgs issueargs = new EditIssueArgs();
        issueargs.projectID = "78";
        issueargs.mrID = "11";
        issueargs.title = "NEW title is here.";
        issueargs.abfields = abFields;
        issueargs.projfields = projFields;
        issue.MRWebServices__editIssue(
            "WebServices",
            "fakepassword",
            "",
            issueargs
        );
        Console.WriteLine( "done" );
    }
}
```

Retrieving Issue Details

```
using System;
using System.IO;
using System.Xml;
[
System.Web.Services.WebServiceBindingAttribute(
    Name="GetIssueDetailsWebService",
    Namespace="MRWebServices" )
]
public class GetIssueDetails : System.Web.Services.Protocols.SoapHttpClientProtocol
{
    public GetIssueDetails()
    {
        this.Url = "http://fakeserver/MRcgi/MRWebServices.pl";
        // Comment out if not using a proxy server.
        System.Net.IWebProxy proxyObject = new System.Net.WebProxy("http://localhost:8888/", false);
        this.Proxy = proxyObject;
    }
    [
    System.Web.Services.Protocols.SoapDocumentMethodAttribute(
        "MRWebServices#MRWebServices__getIssueDetails",
```

```
        RequestNamespace="MRWebServices",
        ResponseNamespace="MRWebServices",
        Use=System.Web.Services.Description.SoapBindingUse.Encoded,
        ParameterStyle=System.Web.Services.Protocols.SoapParameterStyle.Wrapped
        )
    ]
    [return: System.Xml.Serialization.SoapElementAttribute("return")]
    public byte[] MRWebServices__getIssueDetails(
        string usr,
        string pw,
        string extraInfo,
        int proj,
        int num,
        int api)
    {
        object[] results = this.Invoke(
            "MRWebServices__getIssueDetails",
            new object[] {usr, pw, extraInfo, proj, num, api} );
        return ((byte[])(results[0]));
    }
}
class main
{
    private static void ParseXml( XmlReader reader )
    {
        while( reader.Read() )
        {
            switch( reader.NodeType )
            {
                case XmlNodeType.Element:

                    while( reader.MoveToNextAttribute() )
                    {
                        if( reader.Name == "key" && reader.Value == "title" )
                        {
                            reader.Read();
                            Console.WriteLine( "Title: " + reader.Value );
                        }
                        else if( reader.Name == "key" && reader.Value == "mr" )
                        {
                            reader.Read();
                            Console.WriteLine( "Issue Number: " + reader.Value );
                        }
                        else if( reader.Name == "key" && reader.Value == "status" )
                        {
                            reader.Read();
                            Console.WriteLine( "Issue Status: " + reader.Value );
                        }
                    }
                    break;
            }
```

```
    }
}
[STAThread]
static void Main()
{
    System.IO.StringReader stream = null;
    System.Xml.XmlTextReader reader = null;
    try
    {
        GetIssueDetails obj = new GetIssueDetails();
        byte[] resultBytes = obj.MRWebServices__getIssueDetails(
            "WebServices",
            "fakepassword",
            "RETURN_MODE => 'xml'",
            12,
            20047,
            2 ); //The number 2 should be hard coded.
        //The below coding line may assume FootPrints is using,
        //UTF8. If using a different local encoding, you may need
        //to chahge the line to (example assumes Windows-1252):

        //System.Text.Encoding encoding =
        //    System.Text.GetEncoding(1252);
        System.Text.Encoding encoding = System.Text.Encoding.UTF8;

        //In addition to replacing the above encoding line, if
        //using a different encoding and saving data to
        //FootPrints, you will need to place a line in your
        //MRlocalDefs file with the following information (this
        //also assumes Windows-1252):

        //$FP::WEB_SERVICES_ENCODING = 'cp1252';
        string result = encoding.GetString(resultBytes);

        Console.WriteLine( "XML RESULT:\n-----------\n" + result );
        Console.WriteLine( "PARSING RESULT:\n---------------" );
        stream = new System.IO.StringReader( result );
        reader = new System.Xml.XmlTextReader( stream );
        ParseXml( reader );
    }
    catch( Exception e )
    {
        Console.WriteLine ("Exception: {0}", e.ToString());
    }
    finally
    {
        if( reader != null )
        {
            reader.Close();
        }
    }
```

```
    }
}
```

Querying the FootPrints Service Core Database

```
using System;
using System.IO;
using System.Xml;
[
    System.Web.Services.WebServiceBindingAttribute(
        Name="SearchWebService",
        Namespace="MRWebServices"
    )
]
public class Search : System.Web.Services.Protocols.SoapHttpClientProtocol
{
    public Search()
    {
        this.Url = "http://fakeserver/MRcgi/MRWebServices.pl";

        // Comment out if not using a proxy server.
        System.Net.IWebProxy proxyObject = new System.Net.WebProxy("http://localhost:8888/", false);
        this.Proxy = proxyObject;
    }
    [
        System.Web.Services.Protocols.SoapDocumentMethodAttribute(
            "MRWebServices#MRWebServices__search",
            RequestNamespace="MRWebServices",
            ResponseNamespace="MRWebServices",
            Use=System.Web.Services.Description.SoapBindingUse.Encoded,
            ParameterStyle=System.Web.Services.Protocols.SoapParameterStyle.Wrapped
        )
    ]
    [return: System.Xml.Serialization.SoapElementAttribute("return")]
    public byte[] MRWebServices__search(
        string usr,
        string pw,
        string extraInfo,
        string query,
        int api
    )
    {
        object[] results = this.Invoke(
            "MRWebServices__search",
            new object[] {usr, pw, extraInfo, query, api} );
        return ((byte[])(results[0]));
    }
}
class main
{
    private static void ParseXml( XmlReader reader )
    {
```

```
        while( reader.Read() )
        {
            switch( reader.NodeType )
            {
                case XmlNodeType.Element:

                    while( reader.MoveToNextAttribute() )
                    {
                        if( reader.Name == "key" && reader.Value == "mrtitle" )
                        {
                            reader.Read();
                            Console.WriteLine( "Title: " + reader.Value );
                        }
                        else if( reader.Name == "key" && reader.Value == "mrid" )
                        {
                            reader.Read();
                            Console.WriteLine( "Issue Number: " + reader.Value );
                        }
                    }
                    break;
            }
        }
    }
    [STAThread]
    static void Main()
    {
        System.IO.StringReader stream = null;
        System.Xml.XmlTextReader reader = null;
        try
        {
            Search search = new Search();
            byte[] resultBytes = search.MRWebServices__search(
                "WebServices",
                "fakepassword",
                "RETURN_MODE => 'xml'",
               "SELECT MASTER12.mrID, mrPRIORITY, mrASSIGNEES, mrUPDATEDATE, mrSTATUS, mrTITLE,
mrURGENT,
                    mrSUBMITTER, mrATTACHMENTS, First__bName, Last__bName
                    from MASTER12 inner join MASTER12_ABDATA on MASTER12.MRID = MASTER12_ABDATA.MRID
                    WHERE mrSTATUS <> '_DELETED_' and ( ( ( (mrTITLE LIKE '%.Net%'
                    or (CONTAINS(MASTER12.*, '\"*.Net*\"')) or Platform LIKE '%__dNet%'
                    or Product LIKE '%__dNet%' or request__btype LIKE '%__dNet%'
                    or Projected__brelease LIKE '%__dNet%' or FootPrints__bfeature LIKE '%__dNet%'
                    or DB LIKE '%__dNet%' or Complexity LIKE '%__dNet%' or Current__bversion LIKE '%__dNet%'
                    or Was__b5__d5__d1 LIKE '%__dNet%' or LocalDefs__bVariable LIKE '%.Net%'
                    or Customer__bpatch__Q LIKE '%__dNet%' or Not__bin__bGDBM__Q LIKE '%__dNet%'
                    or Tester__bAssigned LIKE '%__dNet%' or Alpha__b1__bVerified LIKE '%__dNet%'
                    or Fixed__bin LIKE '%__dNet%' or Alpha__b2__bVerified LIKE '%__dNet%'
                    or Alpha__b3__bVerified LIKE '%__dNet%' or Multi__bSelect__bField LIKE '%__dNet%'
                    or DateTime__bField__bLink LIKE '%.Net%' or SLA LIKE '%__dNet%'
                    or Last__bName LIKE '%.Net%' or First__bName LIKE '%.Net%'
```

```
            or Email__baddress LIKE '%.Net%' or Company LIKE '%.Net%' or Phone LIKE '%.Net%'
            or Customer__bstatus LIKE '%__dNet%' or Salesperson LIKE '%__dNet%'
            or Country LIKE '%.Net%' or on__bor__boff LIKE '%__dNet%') ) ) )
            order by MASTER12.mrID DESC",
            2); //The number 2 should be hard coded
         // The below encoding line may assumes FootPrints is using
         // UTF8. If using a different local encoding, you may need
         // to change the line to (example assumes Windows-1252):

         // System.Text.Encoding encoding =
         // System.Text.GetEncoding(1252);
         System.Text.Encoding encoding = System.Text.Encoding.UTF8;

         // In addition to replacing the above encoding line, if
         // using a different encoding and saving data to
         // FootPrints, you will need to place a line in your
         // MRlocalDefs file with the following information (this
         // also assumes Windows-1252):

         // $FP::WEB_SERVICES_ENCODING = 'cp1252';
         string result = encoding.GetString(resultBytes);

      Console.WriteLine( "XML RESULT:\n-----------\n" + result );
      Console.WriteLine( "PARSING RESULT:\n---------------" );
      stream = new System.IO.StringReader( result );
      reader = new System.Xml.XmlTextReader( stream );
      ParseXml( reader );
   }
   catch( Exception e )
   {
      Console.WriteLine ("Exception: {0}", e.ToString());
   }
   finally
   {
      if( reader != null )
      {
         reader.Close();
      }
   }
  }
}
```

Java Sample

Creating an Issue

```
import javax.xml.soap.*;
public class CreateIssue
{
   public static void main( String[] args )
   {
      try
```

```
{
    // Comment this out for NO proxy.
    java.util.Properties props = System.getProperties();
    props.put( "http.proxyHost", "localhost" );
    props.put( "http.proxyPort", "8888" );
    // Setup SOAP message.
    SOAPConnectionFactory scf = SOAPConnectionFactory.newInstance();
    SOAPConnection connection = scf.createConnection();
    MessageFactory msgFactory = MessageFactory.newInstance();
    SOAPMessage msg = msgFactory.createMessage();
    SOAPEnvelope env = msg.getSOAPPart().getEnvelope();
    env.addNamespaceDeclaration( "xsi", "http://www.w3.org/1999/XMLSchema-instance" );
    env.addNamespaceDeclaration( "xsd", "http://www.w3.org/1999/XMLSchema" );
    env.addNamespaceDeclaration( "namesp2", "http://xml.apache.org/xml-soap" );
    env.addNamespaceDeclaration( "SOAP-ENC", "http://schemas.xmlsoap.org/soap/encoding/" );

    // Compose SOAP body.
    SOAPBody body = env.getBody();
    SOAPElement invoke = body.addChildElement( env.createName("MRWebServices__createIssue",
"namesp1","MRWebServices") );

    SOAPElement arg1 = invoke.addChildElement( env.createName("user") );
    arg1.addAttribute( env.createName("type","xsi",""), "xsd:string" );
    arg1.addTextNode("WebServices");
    SOAPElement arg2 = invoke.addChildElement( env.createName("password") );
    arg2.addAttribute( env.createName("type","xsi",""), "xsd:string" );
    arg2.addTextNode("fakepassword");
    SOAPElement arg3 = invoke.addChildElement( env.createName("extrainfo") );
    arg3.addAttribute( env.createName("type","xsi",""), "xsd:string" );
    SOAPElement arg4 = invoke.addChildElement( env.createName("args") );
    arg4.addAttribute( env.createName("type","xsi",""), "namesp2:SOAPStruct" );
    SOAPElement arg4_1 = arg4.addChildElement( env.createName("priorityNumber") );
    arg4_1.addAttribute( env.createName("type","xsi",""), "xsd:int" );
    arg4_1.addTextNode("1");
    SOAPElement arg4_2 = arg4.addChildElement( env.createName("status") );
    arg4_2.addAttribute( env.createName("type","xsi",""), "xsd:string" );
    arg4_2.addTextNode("Open");
    SOAPElement arg4_3 = arg4.addChildElement( env.createName("abfields") );
    arg4_3.addAttribute( env.createName("type","xsi",""), "namesp2:SOAPStruct" );
    SOAPElement arg4_3_1 = arg4_3.addChildElement( env.createName("Custom__bAB__bField__bOne") );
    arg4_3_1.addAttribute( env.createName("type","xsi",""), "xsd:string" );
    arg4_3_1.addTextNode("Value of Custom AB Field One");
    SOAPElement arg4_3_2 = arg4_3.addChildElement( env.createName("Last__bName") );
    arg4_3_2.addAttribute( env.createName("type","xsi",""), "xsd:string" );
    arg4_3_2.addTextNode("Doe");
    SOAPElement arg4_3_3 = arg4_3.addChildElement( env.createName("First__bName") );
    arg4_3_3.addAttribute( env.createName("type","xsi",""), "xsd:string" );
    arg4_3_3.addTextNode("John");
    SOAPElement arg4_3_4 = arg4_3.addChildElement( env.createName("Email__baddress") );
    arg4_3_4.addAttribute( env.createName("type","xsi",""), "xsd:string" );
    arg4_3_4.addTextNode("johndoe@nowhere.com");
```

```
SOAPElement arg4_4 = arg4.addChildElement( env.createName("description") );
arg4_4.addAttribute( env.createName("type","xsi",""), "xsd:string" );
arg4_4.addTextNode("Place issue description here. From Java code.");
SOAPElement arg4_5 = arg4.addChildElement( env.createName("assignees") );
arg4_5.addAttribute( env.createName("type","xsi",""), "SOAP-ENC:Array" );
arg4_5.addAttribute( env.createName("arrayType","SOAP-ENC",""), "xsd:string[2]" );
SOAPElement arg4_5_1 = arg4_5.addChildElement( env.createName("item") );
arg4_5_1.addAttribute( env.createName("type","xsi",""), "xsd:string" );
arg4_5_1.addTextNode("user1");
SOAPElement arg4_5_2 = arg4_5.addChildElement( env.createName("item") );
arg4_5_2.addAttribute( env.createName("type","xsi",""), "xsd:string" );
arg4_5_2.addTextNode("user2");
SOAPElement arg4_6 = arg4.addChildElement( env.createName("projfields") );
arg4_6.addAttribute( env.createName("type","xsi",""), "namesp2:SOAPStruct" );
SOAPElement arg4_6_1 = arg4_6.addChildElement( env.createName("Custom__bField__bOne") );
arg4_6_1.addAttribute( env.createName("type","xsi",""), "xsd:string" );
arg4_6_1.addTextNode("Value of Custom Field One");
SOAPElement arg4_6_2 = arg4_6.addChildElement( env.createName("Custom__bField__bTwo") );
arg4_6_2.addAttribute( env.createName("type","xsi",""), "xsd:string" );
arg4_6_2.addTextNode("Value of Custom Field Two");
SOAPElement arg4_7 = arg4.addChildElement( env.createName("projectID") );
arg4_7.addAttribute( env.createName("type","xsi",""), "xsd:int" );
arg4_7.addTextNode("78");
SOAPElement arg4_8 = arg4.addChildElement( env.createName("title") );
arg4_8.addAttribute( env.createName("type","xsi",""), "xsd:string" );
arg4_8.addTextNode("This title comes from Java");
msg.saveChanges();
//System.out.println("Request Message ----------\n");
//msg.writeTo( System.out );
// Make SOAP call
SOAPMessage reply = connection.call( msg, "http://fakeserver/MRcgi/MRWebServices.pl" );
connection.close();
//System.out.println("Reply Message ----------\n");
//reply.writeTo( System.out );
// Get result
SOAPBody replybody = reply.getSOAPPart().getEnvelope().getBody();
// Check for error
if( replybody.hasFault() )
{
   throw new Exception( replybody.getFault().getFaultString() );
}
// Iterate through the result body, extracting information
java.util.Iterator it = replybody.getChildElements();
while( it.hasNext() )
{
   Object obj = it.next();
   if( obj instanceof SOAPElement )
   {
      SOAPElement ele = (SOAPElement)obj;
      String s = ele.getElementName().getLocalName();
      if( s.equals("MRWebServices__createIssueResponse") )
```

```
                {
                    java.util.Iterator it2 = ele.getChildElements();
                    while( it2.hasNext() )
                    {
                        Object obj2 = it2.next();
                        if( obj2 instanceof SOAPElement )
                        {
                            SOAPElement ele2 = (SOAPElement)obj2;
                            String s2 = ele2.getElementName().getLocalName();
                            if( s2.equals("return") )
                            {
                                java.util.Iterator it3 = ele2.getChildElements();
                                while( it3.hasNext() )
                                {
                                    Object obj3 = it3.next();
                                    if( obj3 instanceof Text )
                                    {
                                        Text txt = (Text)obj3;
                                        System.out.println( "Issue " + txt.getValue() + " has been created." );
                                    }
                                }
                            }
                        }
                    }
                }
            }
        }
    }
    catch( Exception ex )
    {
        ex.printStackTrace();
    }
  }
}
```

Editing an Issue

```
import javax.xml.soap.*;

public class EditIssue

{

   public static void main( String[] args )

   {

      try

      {

         // Comment this out for NO proxy.

         java.util.Properties props = System.getProperties();

         props.put( "http.proxyHost", "localhost" );
```

```
        props.put( "http.proxyPort", "8888" );
        // Setup SOAP message.
        SOAPConnectionFactory scf = SOAPConnectionFactory.newInstance();
        SOAPConnection connection = scf.createConnection();
        MessageFactory msgFactory = MessageFactory.newInstance();
        SOAPMessage msg = msgFactory.createMessage();
        SOAPEnvelope env = msg.getSOAPPart().getEnvelope();
        env.addNamespaceDeclaration( "xsi", "http://www.w3.org/1999/XMLSchema-instance" );
        env.addNamespaceDeclaration( "xsd", "http://www.w3.org/1999/XMLSchema" );
        env.addNamespaceDeclaration( "namesp2", "http://xml.apache.org/xml-soap" );
        env.addNamespaceDeclaration( "SOAP-ENC", "http://schemas.xmlsoap.org/soap/encoding/" );

        // Compose SOAP body.
        SOAPBody body = env.getBody();
        SOAPElement invoke = body.addChildElement( env.createName("MRWebServices__editIssue",
"namesp1","MRWebServices") );

        SOAPElement arg1 = invoke.addChildElement( env.createName("user") );
        arg1.addAttribute( env.createName("type","xsi",""), "xsd:string" );
        arg1.addTextNode("WebServices");
        SOAPElement arg2 = invoke.addChildElement( env.createName("password") );
        arg2.addAttribute( env.createName("type","xsi",""), "xsd:string" );
        arg2.addTextNode("fakepassword");
        SOAPElement arg3 = invoke.addChildElement( env.createName("extrainfo") );
        arg3.addAttribute( env.createName("type","xsi",""), "xsd:string" );
        SOAPElement arg4 = invoke.addChildElement( env.createName("args") );
        arg4.addAttribute( env.createName("type","xsi",""), "namesp2:SOAPStruct" );
        SOAPElement arg4_1 = arg4.addChildElement( env.createName("abfields") );
        arg4_1.addAttribute( env.createName("type","xsi",""), "namesp2:SOAPStruct" );
        SOAPElement arg4_1_1 = arg4_1.addChildElement( env.createName("Custom__bAB__bField__bOne") );
        arg4_1_1.addAttribute( env.createName("type","xsi",""), "xsd:string" );
        arg4_1_1.addTextNode("NEW VALUE FOR Custom AB Field One");
        SOAPElement arg4_2 = arg4.addChildElement( env.createName("projfields") );
        arg4_2.addAttribute( env.createName("type","xsi",""), "namesp2:SOAPStruct" );
```

```
    SOAPElement arg4_2_1 = arg4_2.addChildElement( env.createName("Custom__bField__bTwo") );
    arg4_2_1.addAttribute( env.createName("type","xsi",""), "xsd:string" );
    arg4_2_1.addTextNode("NEW VALUE FOR Custom Field Two");
    SOAPElement arg4_3 = arg4.addChildElement( env.createName("title") );
    arg4_3.addAttribute( env.createName("type","xsi",""), "xsd:string" );
    arg4_3.addTextNode("NEW title is here.");

    SOAPElement arg4_4 = arg4.addChildElement( env.createName("projectID") );
    arg4_4.addAttribute( env.createName("type","xsi",""), "xsd:int" );
    arg4_4.addTextNode("78");
    SOAPElement arg4_5 = arg4.addChildElement( env.createName("mrID") );
    arg4_5.addAttribute( env.createName("type","xsi",""), "xsd:int" );
    arg4_5.addTextNode("40");
    msg.saveChanges();
    //System.out.println("Request Message ----------\n");
    //msg.writeTo( System.out );
    // Make SOAP call
    SOAPMessage reply = connection.call( msg, "http://fakeserver/MRcgi/MRWebServices.pl" );
    connection.close();
    //System.out.println("Reply Message ----------\n");
    //reply.writeTo( System.out );
    // Get result
    SOAPBody replybody = reply.getSOAPPart().getEnvelope().getBody();
    // Check for error
    if( replybody.hasFault() )
    {
        throw new Exception( replybody.getFault().getFaultString() );
    }
    System.out.println( "done." );
}
catch( Exception ex )
{
    ex.printStackTrace();
}
```

```
    }
}
```

Retrieving Issue Details

```
import javax.xml.soap.*;
public class GetIssueDetails
{
    public static String GetIndent( int num )
    {
        String s = "";
        for( int i = 0; i < num; i++ )
        {
            s = s + " ";
        }
        return s;
    }
    public static void DumpSOAPElement( SOAPElement el, int indent ) throws Exception
    {
        java.util.Iterator it = el.getChildElements();
        while( it.hasNext() )
        {
            String indstr = GetIndent( indent );
            Object obj = it.next();

            if( obj instanceof SOAPElement )
            {
                SOAPElement ele = (SOAPElement)obj;
                System.out.println( indstr + "----------------------------" );
                System.out.println( indstr + ele.getElementName().getLocalName() );
                System.out.println( indstr + "----------------------------" );
                DumpSOAPElement( ele, indent + 4 );
            }
            else if( obj instanceof Text )
            {
                Text txt = (Text)obj;
```

```
            System.out.println( indstr + txt.getValue() + "\n" );
        }
    }
}
public static void main( String[] args )
{
    try
    {
        // Comment this out for NO proxy.
        java.util.Properties props = System.getProperties();
        props.put( "http.proxyHost", "localhost" );
        props.put( "http.proxyPort", "8888" );
        // Setup SOAP message.
        SOAPConnectionFactory scf = SOAPConnectionFactory.newInstance();
        SOAPConnection connection = scf.createConnection();
        MessageFactory msgFactory = MessageFactory.newInstance();
        SOAPMessage msg = msgFactory.createMessage();
        SOAPEnvelope env = msg.getSOAPPart().getEnvelope();
        env.addNamespaceDeclaration( "xsi", "http://www.w3.org/1999/XMLSchema-instance" );
        env.addNamespaceDeclaration( "xsd", "http://www.w3.org/1999/XMLSchema" );
        env.addNamespaceDeclaration( "namesp2", "http://xml.apache.org/xml-soap" );
        env.addNamespaceDeclaration( "SOAP-ENC", "http://schemas.xmlsoap.org/soap/encoding/" );

        // Compose SOAP body.
        SOAPBody body = env.getBody();
        SOAPElement invoke = body.addChildElement( env.createName("MRWebServices__getIssueDetails",
"namesp1","MRWebServices") );

        SOAPElement arg1 = invoke.addChildElement( env.createName("user") );
        arg1.addAttribute( env.createName("type","xsi",""), "xsd:string" );
        arg1.addTextNode("WebServices");
        SOAPElement arg2 = invoke.addChildElement( env.createName("password") );
        arg2.addAttribute( env.createName("type","xsi",""), "xsd:string" );
        arg2.addTextNode("fakepassword");
```

```
        SOAPElement arg3 = invoke.addChildElement( env.createName("extrainfo") );
        arg3.addAttribute( env.createName("type","xsi",""), "xsd:string" );
        SOAPElement arg4 = invoke.addChildElement( env.createName("projectnumber") );
        arg4.addAttribute( env.createName("type","xsi",""), "xsd:int" );
        arg4.addTextNode("78");
        SOAPElement arg5 = invoke.addChildElement( env.createName("mrid") );
        arg5.addAttribute( env.createName("type","xsi",""), "xsd:int" );
        arg5.addTextNode("1");
        msg.saveChanges();
        //System.out.println("Request Message ----------\n");
        //msg.writeTo( System.out );
        // Make SOAP call
        SOAPMessage reply = connection.call( msg, "http://fakeserver/MRcgi/MRWebServices.pl" );
        connection.close();
        //System.out.println("Reply Message ----------\n");
        //reply.writeTo( System.out );
        // Get result
        SOAPBody replybody = reply.getSOAPPart().getEnvelope().getBody();
        // Check for error
        if( replybody.hasFault() )
        {
            throw new Exception( replybody.getFault().getFaultString() );
        }
        DumpSOAPElement( replybody, 0 );
    }
    catch( Exception ex )
    {
        ex.printStackTrace();
    }
  }
}
```

Querying the FootPrints Service Core Database

```
import javax.xml.soap.*;
public class Search
```

```
{
    public static String GetIndent( int num )
    {
        String s = "";
        for( int i = 0; i < num; i++ )
        {
            s = s + " ";
        }
        return s;
    }
    public static void DumpSOAPElement( SOAPElement el, int indent ) throws Exception
    {
        java.util.Iterator it = el.getChildElements();
        while( it.hasNext() )
        {
            String indstr = GetIndent( indent );
            Object obj = it.next();

            if( obj instanceof SOAPElement )
            {
                SOAPElement ele = (SOAPElement)obj;
                System.out.println( indstr + "-----------------------------" );
                System.out.println( indstr + ele.getElementName().getLocalName() );
                System.out.println( indstr + "-----------------------------" );
                DumpSOAPElement( ele, indent + 4 );
            }
            else if( obj instanceof Text )
            {
                Text txt = (Text)obj;
                System.out.println( indstr + txt.getValue() + "\n" );
            }
        }
    }
    public static void main( String[] args )
```

```
{
    try
    {
        // Comment this out for NO proxy.
        java.util.Properties props = System.getProperties();
        props.put( "http.proxyHost", "localhost" );
        props.put( "http.proxyPort", "8888" );
        // Setup SOAP message.
        SOAPConnectionFactory scf = SOAPConnectionFactory.newInstance();
        SOAPConnection connection = scf.createConnection();
        MessageFactory msgFactory = MessageFactory.newInstance();
        SOAPMessage msg = msgFactory.createMessage();
        SOAPEnvelope env = msg.getSOAPPart().getEnvelope();
        env.addNamespaceDeclaration( "xsi", "http://www.w3.org/1999/XMLSchema-instance" );
        env.addNamespaceDeclaration( "xsd", "http://www.w3.org/1999/XMLSchema" );
        env.addNamespaceDeclaration( "namesp2", "http://xml.apache.org/xml-soap" );
        env.addNamespaceDeclaration( "SOAP-ENC", "http://schemas.xmlsoap.org/soap/encoding/" );

        // Compose SOAP body.
        SOAPBody body = env.getBody();
        SOAPElement invoke = body.addChildElement( env.createName("MRWebServices__search",
"namesp1","MRWebServices") );

        SOAPElement arg1 = invoke.addChildElement( env.createName("user") );
        arg1.addAttribute( env.createName("type","xsi",""), "xsd:string" );
        arg1.addTextNode("WebServices");
        SOAPElement arg2 = invoke.addChildElement( env.createName("password") );
        arg2.addAttribute( env.createName("type","xsi",""), "xsd:string" );
        arg2.addTextNode("root");
        SOAPElement arg3 = invoke.addChildElement( env.createName("extrainfo") );
        arg3.addAttribute( env.createName("type","xsi",""), "xsd:string" );
        SOAPElement arg4 = invoke.addChildElement( env.createName("query") );
        arg4.addAttribute( env.createName("type","xsi",""), "xsd:string" );
        arg4.addTextNode("select mrID, mrTITLE from MASTER78 WHERE mrTITLE LIKE '%of%'");
```

```
            msg.saveChanges();
            //System.out.println("Request Message ----------\n");
            //msg.writeTo( System.out );
            // Make SOAP call
            SOAPMessage reply = connection.call( msg, "http://virgo/MRcgi/MRWebServices.pl" );
            connection.close();
            //System.out.println("Reply Message ----------\n");
            //reply.writeTo( System.out );
            // Get result
            SOAPBody replybody = reply.getSOAPPart().getEnvelope().getBody();
            // Check for error
            if( replybody.hasFault() )
            {
                throw new Exception( replybody.getFault().getFaultString() );
            }
            DumpSOAPElement( replybody, 0 );
        }
        catch( Exception ex )
        {
            ex.printStackTrace();
        }
    }
}
```

Compiling the Java Code

The following is a sample batch file for compiling the sample Java code:

```
set JWSDP=C:\Sun\jwsdp-1.5
set SAAJ_LIB=%JWSDP%\saaj\lib
set JAXP_LIB=%JWSDP%\jaxp\lib\endorsed
set SHARED_LIB=%JWSDP%\jwsdp-shared\lib
set CLASSPATH=%SHARED_LIB%\activation.jar;%SAAJ_LIB%\saaj-
api.jar;%SHARED_LIB%\mail.jar;%SAAJ_LIB%\saaj-impl.jar;%JAXP_LIB%\..\jaxp-
api.jar;%JAXP_LIB%\sax.jar;%JAXP_LIB%\dom.jar;%JAXP_LIB%\xercesImpl.jar;%JAXP_LIB%\xalan.jar;
javac -d . -classpath %CLASSPATH% %1%
```

Running the Compiled Java Sample Code

The following is a sample batch file for running the compiled Java sample code:

```
set JWSDP=C:\Sun\jwsdp-1.5

set SAAJ_LIB=%JWSDP%\saaj\lib

set JAXP_LIB=%JWSDP%\jaxp\lib\endorsed

set SHARED_LIB=%JWSDP%\jwsdp-shared\lib

set CLASSPATH=%SHARED_LIB%\activation.jar;%SAAJ_LIB%\saaj-
api.jar;%SHARED_LIB%\mail.jar;%SAAJ_LIB%\saaj-impl.jar;%JAXP_LIB%\..\jaxp-
api.jar;%JAXP_LIB%\sax.jar;%JAXP_LIB%\dom.jar;%JAXP_LIB%\xercesImpl.jar;%JAXP_LIB%\xalan.jar;

java -classpath %CLASSPATH% %1%
```

php Samples

The following samples show how to access FootPrints Service Core Web Services using php.

create_issue.php

```
<h2>Web Service Test - create new issue</h2>
<?
try {
$client = new SoapClient(NULL,
   array(
"location"=>"http://some.server.com/MRcgi/MRWebServices.pl",
"uri"=>"MRWebServices",
"style"=>SOAP_RPC,
        "use" => SOAP_ENCODED
   )
);
$issue_number = $client->MRWebServices__createIssue("WebServices",'myPassword',",
array(projectID =>99,
       title=>"Test Issue creation.",
                              status=>"Open" ,
                     priorityNumber => 3,
                     description => "This is a test"
              )
);
print "<BR><b> Issue created; Issue number = $issue_number</b><br><hr>\n";

 } catch (SoapFault $exception) {
print "ERROR! - Got a SOAP exception:<br>";
echo $exception;
 }
?>
```

edit_issue.php

```
<h2>Web Service Test - edit issue #1</h2>
<?
try {
$client = new SoapClient(NULL,
   array(
"location"=>"http://some.server.com/MRcgi/MRWebServices.pl",
```

```
"uri"=>"MRWebServices",
"style"=>SOAP_RPC,
        "use" => SOAP_ENCODED
   )
);
$issue_number = $client->MRWebServices__editIssue("WebServices",'myPassword','',
array(
projectID =>99,
      title=>"NEW: editing Test Issue from WebService.",
mrID =>1,
                priorityNumber => 2,
                description => "Changing priority to 2"
           )
);
print "<BR><b> Issue changed;<hr>\n";

 } catch (SoapFault $exception) {
print "ERROR! - Got a SOAP exception:<br>";
echo $exception;
 }
?>
```

get_issue_dets.php

```
<h2>Web Service Test - get issue #1 details</h2>
<?
try {
$client = new SoapClient(NULL,
   array(
"location"=>"http://some.server.com/MRcgi/MRWebServices.pl",
"uri"=>"MRWebServices",
"style"=>SOAP_RPC,
        "use" => SOAP_ENCODED
   )
);
$iss_details = $client->MRWebServices__getIssueDetails("WebServices",'myPassword','','99','1");
print "<b>Issue details:</b><br>";
print "<pre>";
print_r($iss_details );
print"</pre><br>\n";

 } catch (SoapFault $exception) {
print "ERROR! - Got a SOAP exception:<br>";
echo $exception;
 }
?>
```

search.php

```
<h2>Web Service Test - search</h2>
<?
try {
$client = new SoapClient(NULL,
```

```
   array(
"location"=>"http://some.server.com/MRcgi/MRWebServices.pl",
"uri"=>"MRWebServices",
"style"=>SOAP_RPC,
        "use" => SOAP_ENCODED
   )
);
$issues = $client->MRWebServices__search("WebServices",'myPassword','',
"select mrID, mrTITLE from MASTER99 WHERE lower(mrTITLE) LIKE 'test%'");
print "<BR><b> Search:<hr><br>\n";
print "<pre>";
print_r($issues);
print"</pre><br>\n";
 } catch (SoapFault $exception) {
print "ERROR! - Got a SOAP exception:<br>";
echo $exception;
 }
?>
```

Some .NET aspx/C# Samples

Some .NET aspx/C# Samples

The following samples are working web pages that demonstrate using the BMC FootPrints Service Coreweb services as opposed to console applications. In order to use them,

Run the build.bat file.

Create a virtual directory in IIS pointing the directory where the .aspx pages reside.

Navigate to each page; each page is a self contained example.

build.bat

The content of the build.bat file is as follows:

```
csc /t:library /out:bin/CreateIssue.dll CreateIssue.aspx.cs CreateIssueService.cs

csc /t:library /out:bin/GetIssueDetails.dll GetIssueDetails.aspx.cs GetIssueDetailsService.cs

csc /t:library /out:bin/EditIssue.dll EditIssue.aspx.cs EditIssueService.cs

csc /t:library /out:bin/Search.dll Search.aspx.cs SearchService.cs
```

CreateIssue.aspx

```
<%@ Page language="c#" AutoEventWireup="false" Inherits="fp.CreateIssueWebForm" %>
<html>
   <body>
      <form id="Form1" method="post" runat="server">
         <table>
            <tr>
               <td>Workspace ID:</td>
               <td><asp:TextBox id="ProjID" runat="server"></asp:TextBox></td>
            </tr>
            <tr>
               <td>Title:</td>
```

```
            <td><asp:TextBox id="Title" runat="server"></asp:TextBox></td>
         </tr>
         <tr>
            <td>Description:</td>
            <td><asp:TextBox id="Desc" runat="server"></asp:TextBox></td>
         </tr>
         <tr>
            <td><asp:Button id="Create" runat="server" Text="Create"></asp:Button></td>
         </tr>
      </table>
      <h2><asp:Label id="Msg" runat="server"></asp:Label></h2>
   </form>
</body>
</html>
```

CreateIssue.aspx.cs

```
using System;
using System.Web.UI.WebControls;
namespace fp
{
   public class CreateIssueWebForm : System.Web.UI.Page
   {
      protected TextBox ProjID;
      protected TextBox Title;
      protected TextBox Desc;
      protected Button Create;
      protected Label Msg;

      override protected void OnInit( EventArgs e )
      {
         this.Create.Click += new System.EventHandler( this.Create_Click );
         base.OnInit(e);
      }
      private void Create_Click( object sender, System.EventArgs e )
      {
         CreateIssueService s = new CreateIssueService();
         Msg.Text = s.createIssue( ProjID.Text, Title.Text, Desc.Text );
      }
   }
```

```
}
```

CreateIssueService.cs

```
using System;
namespace fp
{
   [
   System.Web.Services.WebServiceBindingAttribute(
      Name="CreateIssueWebService",
      Namespace="MRWebServices" )
   ]
   public class CreateIssueServiceCalller : System.Web.Services.Protocols.SoapHttpClientProtocol
   {
      public CreateIssueServiceCalller()
      {
         this.Url = "http://fakeserver/MRcgi/MRWebServices.pl";
      }
      [
      System.Web.Services.Protocols.SoapDocumentMethodAttribute(
         "MRWebServices#MRWebServices__createIssue",
         RequestNamespace="MRWebServices",
         ResponseNamespace="MRWebServices",
         Use=System.Web.Services.Description.SoapBindingUse.Encoded,
         ParameterStyle=System.Web.Services.Protocols.SoapParameterStyle.Wrapped )
      ]
      [return: System.Xml.Serialization.SoapElementAttribute("return")]
      public string MRWebServices__createIssue(
         string usr, string pw, string extraInfo, CreateIssueArgs args )
      {
         object[] results = this.Invoke(
            "MRWebServices__createIssue", new object[] {usr, pw, extraInfo, args} );
         return ((string)(results[0]));
      }
   }
   [System.Xml.Serialization.SoapTypeAttribute("CreateIssueArgs", "MRWebServices")]
```

```
    public class CreateIssueArgs
    {
        public string projectID;
        public string title;
        public string description;
        public string status;
        public int priorityNumber;
    }
    public class CreateIssueService
    {
        public string createIssue( string projid, string title, string desc )
        {
            CreateIssueServiceCalller issue = new CreateIssueServiceCalller();

            CreateIssueArgs issueargs = new CreateIssueArgs();

            issueargs.projectID = projid;
            issueargs.title = title;
            issueargs.description = desc;
            issueargs.status = "Open";
            issueargs.priorityNumber = 1;

            string result = issue.MRWebServices__createIssue(
                "WebServices", "fakepassword", "", issueargs );
            return "Issue " + result + " has been created.";
        }
    }
}
```

EditIssue.aspx

```
<%@ Page language="c#" AutoEventWireup="false" Inherits="fp.EditIssueWebForm" %>
<html>
    <body>
        <form id="Form1" method="post" runat="server">
            <table>
```

```
            <tr>
                <td>Workspace ID:</td>
                <td><asp:TextBox id="ProjID" runat="server"></asp:TextBox></td>
            </tr>
            <tr>
                <td>Issue ID:</td>
                <td><asp:TextBox id="IssueID" runat="server"></asp:TextBox></td>
            </tr>
            <tr>
                <td>NEW Title:</td>
                <td><asp:TextBox id="NewTitle" runat="server"></asp:TextBox></td>
            </tr>
            <tr>
                <td><asp:Button id="EditIssue" runat="server" Text="Edit Issue"></asp:Button></td>
            </tr>
        </table>
        <h2><asp:Label id="Msg" runat="server"></asp:Label></h2>
    </form>
  </body>
</html>
```

EditIssue.aspx.cs

```
using System;
using System.Web.UI.WebControls;
namespace fp
{
  public class EditIssueWebForm : System.Web.UI.Page
  {
    protected TextBox ProjID;
    protected TextBox IssueID;
    protected TextBox NewTitle;
    protected Button EditIssue;
    protected Label Msg;

    override protected void OnInit( EventArgs e )
```

```
        {
            this.EditIssue.Click += new System.EventHandler( this.EditIssue_Click );
            base.OnInit(e);
        }
        private void EditIssue_Click( object sender, System.EventArgs e )
        {
            EditIssueService s = new EditIssueService();
            s.editIssue( ProjID.Text, IssueID.Text, NewTitle.Text );
            Msg.Text = "Done editing issue " + IssueID.Text + ".";
        }
    }
}
```

EditIssueService.cs

```
using System;
[
System.Web.Services.WebServiceBindingAttribute(
    Name="EditIssueWebService",
    Namespace="MRWebServices" )
]
public class EditIssueCaller : System.Web.Services.Protocols.SoapHttpClientProtocol
{
    public EditIssueCaller()
    {
        this.Url = "http://fakeserver/MRcgi/MRWebServices.pl";
        // Comment this out if not using a proxy server.
        //System.Net.IWebProxy proxyObject = new System.Net.WebProxy("http://localhost:8888/", false);
        //this.Proxy = proxyObject;
    }
    [
    System.Web.Services.Protocols.SoapDocumentMethodAttribute(
        "MRWebServices#MRWebServices__editIssue",
        RequestNamespace="MRWebServices",
        ResponseNamespace="MRWebServices",
        Use=System.Web.Services.Description.SoapBindingUse.Encoded,
```

```
        ParameterStyle=System.Web.Services.Protocols.SoapParameterStyle.Wrapped )
    ]
    [return: System.Xml.Serialization.SoapElementAttribute("return")]
    public void MRWebServices__editIssue(
        string usr,
        string pw,
        string extraInfo,
        EditIssueArgs args )
    {
        object[] results = this.Invoke(
            "MRWebServices__editIssue",
            new object[] {usr, pw, extraInfo, args} );
    }
}
[System.Xml.Serialization.SoapTypeAttribute("CreateIssueArgs", "MRWebServices")]
public class EditIssueArgs
{
    public string projectID;
    public string mrID;
    public string title;
}
class EditIssueService
{
    public void editIssue( string projid, string issueid, string newtitle )
    {
        EditIssueCaller issue = new EditIssueCaller();
        EditIssueArgs issueargs = new EditIssueArgs();
        issueargs.projectID = projid;
        issueargs.mrID = issueid;
        issueargs.title = newtitle;
        issue.MRWebServices__editIssue( "WebServices", "fakepassword", "", issueargs );
    }
}
```

GetIssueDetails.aspx

```
<%@ Page language="c#" AutoEventWireup="false" Inherits="fp.GetIssueDetailsWebForm" %>
<html>
   <body>
      <form id="Form1" method="post" runat="server">
         <table>
            <tr>
               <td>Workspace ID:</td>
               <td><asp:TextBox id="ProjID" runat="server"></asp:TextBox></td>
            </tr>
            <tr>
               <td>Issue ID:</td>
               <td><asp:TextBox id="IssueID" runat="server"></asp:TextBox></td>
            </tr>
            <tr>
               <td><asp:Button id="GetDetails" runat="server" Text="Get Details"></asp:Button></td>
            </tr>
         </table>
         <p><asp:Label id="Msg" runat="server"></asp:Label></p>
      </form>
   </body>
</html>
```

GetIssueDetails.aspx.cs

```
using System;
using System.Web.UI.WebControls;
namespace fp
{
   public class GetIssueDetailsWebForm : System.Web.UI.Page
   {
      protected TextBox ProjID;
      protected TextBox IssueID;
      protected Button GetDetails;
      protected Label Msg;
```

```
        override protected void OnInit( EventArgs e )
        {
            this.GetDetails.Click += new System.EventHandler( this.GetDetails_Click );
            base.OnInit(e);
        }
        private void GetDetails_Click( object sender, System.EventArgs e )
        {
            GetIssueDetailsService s = new GetIssueDetailsService();
            Msg.Text = s.getIssueDetails( ProjID.Text, IssueID.Text );
        }
    }
}
```

GetIssueDetailsService.cs

```
using System;
using System.IO;
using System.Xml;
[
System.Web.Services.WebServiceBindingAttribute(
    Name="GetIssueDetailsWebService",
    Namespace="MRWebServices" )
]
public class GetIssueDetailsCaller : System.Web.Services.Protocols.SoapHttpClientProtocol
{
    public GetIssueDetailsCaller()
    {
        this.Url = "http://fakeserver/MRcgi/MRWebServices.pl";
        // Comment out if not using a proxy server.
        //System.Net.IWebProxy proxyObject = new System.Net.WebProxy("http://localhost:8888/", false);
        //this.Proxy = proxyObject;
    }
    [
    System.Web.Services.Protocols.SoapDocumentMethodAttribute(
        "MRWebServices#MRWebServices__getIssueDetails",
        RequestNamespace="MRWebServices",
```

```
        ResponseNamespace="MRWebServices",
        Use=System.Web.Services.Description.SoapBindingUse.Encoded,
        ParameterStyle=System.Web.Services.Protocols.SoapParameterStyle.Wrapped
        )
    ]
    [return: System.Xml.Serialization.SoapElementAttribute("return")]
    public string MRWebServices__getIssueDetails(
        string usr,
        string pw,
        string extraInfo,
        string proj,
        string num )
    {
        object[] results = this.Invoke(
            "MRWebServices__getIssueDetails",
            new object[] {usr, pw, extraInfo, proj, num} );
        return ((string)(results[0]));
    }
}
class GetIssueDetailsService
{
    private static string ParseXml( XmlReader reader )
    {
        string s = "";
        while( reader.Read() )
        {
            switch( reader.NodeType )
            {
                case XmlNodeType.Element:

                    while( reader.MoveToNextAttribute() )
                    {
                        if( reader.Name == "key" && reader.Value == "title" )
                        {
```

```
                reader.Read();
                s += "<b>Title:</b>" + reader.Value;
                s += "<br>";
            }
            else if( reader.Name == "key" && reader.Value == "mr" )
            {
                reader.Read();
                s += "<b>Issue Number:</b>" + reader.Value;
                s += "<br>";
            }
            else if( reader.Name == "key" && reader.Value == "status" )
            {
                reader.Read();
                s += "<b>Issue Status:</b>" + reader.Value;
                s += "<br>";
            }
        }
        break;
    }
  }
  return s;
}
public string getIssueDetails( string projid, string issueid )
{
  System.IO.StringReader stream = null;
  System.Xml.XmlTextReader reader = null;
  try
  {
    GetIssueDetailsCaller obj = new GetIssueDetailsCaller();
    string result = obj.MRWebServices__getIssueDetails(
      "WebServices",
      "fakepassword",
      "RETURN_MODE => 'xml'",
      projid,
```

```
            issueid );
        stream = new System.IO.StringReader( result );
        reader = new System.Xml.XmlTextReader( stream );
        return ParseXml( reader );
    }
    catch( Exception e )
    {
        throw e;
    }
    finally
    {
        if( reader != null )
        {
            reader.Close();
        }
    }
  }
}
```

Search.aspx

```
<%@ Page language="c#" AutoEventWireup="false" Inherits="fp.SearchWebForm" %>
<html>
  <body>
    <form id="Form1" method="post" runat="server">
      <table>
        <tr>
          <td>Workspace ID:</td>
          <td><asp:TextBox id="ProjID" runat="server"></asp:TextBox></td>
        </tr>
        <tr>
          <td>Find issues where Title contains:</td>
          <td><asp:TextBox id="SearchTitle" runat="server"></asp:TextBox></td>
        </tr>
        <tr>
          <td><asp:Button id="Search" runat="server" Text="Search"></asp:Button></td>
```

```
            </tr>
        </table>
        <p><asp:Label id="Msg" runat="server"></asp:Label></p>
    </form>
  </body>
</html>
```

Search.aspx.cs

```
using System;
using System.Web.UI.WebControls;
namespace fp
{
  public class SearchWebForm : System.Web.UI.Page
  {
    protected TextBox ProjID;
    protected TextBox SearchTitle;
    protected Button Search;
    protected Label Msg;

    override protected void OnInit( EventArgs e )
    {
      this.Search.Click += new System.EventHandler( this.Search_Click );
      base.OnInit(e);
    }
    private void Search_Click( object sender, System.EventArgs e )
    {
      SearchService s = new SearchService();
      Msg.Text = s.search( ProjID.Text, SearchTitle.Text );
    }
  }
}
```

SearchService.cs

```
using System;
using System.IO;
using System.Xml;
```

```
[
System.Web.Services.WebServiceBindingAttribute(
    Name="SearchWebService",
    Namespace="MRWebServices" )
]
public class SearchCaller : System.Web.Services.Protocols.SoapHttpClientProtocol
{
    public SearchCaller()
    {
        this.Url = "http://fakeserver/MRcgi/MRWebServices.pl";

        // Comment out if not using a proxy server.
        //System.Net.IWebProxy proxyObject = new System.Net.WebProxy("http://localhost:8888/", false);
        //this.Proxy = proxyObject;
    }
    [
    System.Web.Services.Protocols.SoapDocumentMethodAttribute(
        "MRWebServices#MRWebServices__search",
        RequestNamespace="MRWebServices",
        ResponseNamespace="MRWebServices",
        Use=System.Web.Services.Description.SoapBindingUse.Encoded,
        ParameterStyle=System.Web.Services.Protocols.SoapParameterStyle.Wrapped )
    ]
    [return: System.Xml.Serialization.SoapElementAttribute("return")]
    public string MRWebServices__search(
        string usr,
        string pw,
        string extraInfo,
        string query
        )
    {
        object[] results = this.Invoke(
            "MRWebServices__search",
            new object[] {usr, pw, extraInfo, query} );
```

```
        return ((string)(results[0]));
    }
}
class SearchService
{
    private static string ParseXml( XmlReader reader )
    {
        string s = "";
        while( reader.Read() )
        {
            switch( reader.NodeType )
            {
                case XmlNodeType.Element:

                    while( reader.MoveToNextAttribute() )
                    {
                        if( reader.Name == "key" && reader.Value == "mrtitle" )
                        {
                            reader.Read();
                            s += "<b>Title:</b>" + reader.Value + "<br>";
                        }
                        else if( reader.Name == "key" && reader.Value == "mrid" )
                        {
                            reader.Read();
                            s += "<b>Issue Number:</b>" + reader.Value + "<br>";
                        }
                    }
                    break;
            }
        }
        return s;
    }
    public string search( string projid, string title )
    {
```

```
        System.IO.StringReader stream = null;
        System.Xml.XmlTextReader reader = null;
        try
        {
            SearchCaller search = new SearchCaller();
            string result = search.MRWebServices__search(
                "WebServices",
                "fakepassword",
                "RETURN_MODE => 'xml'",
                "select mrID, mrTITLE from MASTER" + projid + " WHERE mrTITLE LIKE '%" + title + "%'" );

            stream = new System.IO.StringReader( result );
            reader = new System.Xml.XmlTextReader( stream );
            return ParseXml( reader );
        }
        catch( Exception e )
        {
            throw e;
        }
        finally
        {
            if( reader != null )
            {
                reader.Close();
            }
        }
    }
}
```

Chapter 12: Sample Workspace Templates

Sample Workspaces Templates

While many people purchase BMC FootPrints Service Core to solve a specific functional need, such as tracking internal Service Desk, external support center/CRM or development/bug tracking activity, BMC FootPrints Service Core can be used for a variety of business functions and departments, supporting both employee and external customers.

Some of the departments or business functions that can benefit by using BMC FootPrints Service Core for Issue management include:

- Internal corporate Service Desk
- External customer support/CRM
- Software Change Management (development bug tracking, defect tracking, feature requests)
- IT Service Management
- Configuration Management
- Service Portfolio
- IT resource tracking
- Quality assurance testing
- Sales tracking
- Consultants
- Human resource tracking, including tracking recruiting efforts job applicants
- Maintenance contracts
- Management Issue tracking
- Training

The primary feature that makes BMC FootPrints Service Core so flexible is that it is **Workspace**-based. Each Workspace is a separate sub-database within the system that can have its own fields, forms, users and settings. It is this feature that enables you to create different areas within the system for different departments to use.

New Workspaces are created by the System Administrator under Administration | System | Workspaces. Once a Workspace is created, it can be administered by a Workspace Administrator. Each area, or Workspace, can be easily configured to include fields, settings, functions, reporting, etc. that fulfill its specific needs. While each Workspace is a discrete area, The BMC FootPrints Service Core cross-workspace functions can be used to aid communication and cooperation between Workspaces and departments. These functions include cross-workspace reports, cross-workspace Issue copy/move, Address Book sharing, and email notification/cc.

Release 11.6 contains the following Workspace templates:

Corporate Service Desk—This is intended for a typical corporate service desk that supports hardware, software, network, and other IT issues for employees of the company.

BMC FootPrints Service Core**Customer Service**—This template is intended for use by a customer service department that supports outside customers on the company's products and services.

Asset Requisitioning—This template is designed for purchasing.

Customer Survey—This template is used for responses to your customer surveys. This template takes you through a slightly different series of steps than the other templates. (only visible for new workspaces, not new installations).

Facilities Management—This template helps track maintenance and other facilities requests.

HIPAA Patient Management—The HIPAA Patient Management template was created to help medical facilities track and manage patient personal, insurance, and payment information, as well as visits, services rendered, and future appointments.

Human Resources Management - This template is used to track individual employee change requests.

Incident Management—This is an ITIL-compatible (Information Technology Infrastructure Library) workspace template for Incident Management.

Problem Management—This is an ITIL-compatible (Information Technology Infrastructure Library) workspace template for Problem Management.

Issue Tracking—This is a generalized template for tracking any kind of issues or workspaces that need to be tracked.

IT Outsourcing—This template is designed to keep track of IT issues for an IT Outsourcer who provides Third-Party technical support and services for another organization.

Resource Management—This template is designed to help an IT department track and manage both hardware and software that it might loan or otherwise install.

Sales Tracking—This template is designed to help a sales team track leads, quotes, and perform contact management.

Software Change Management—This template can be used for development and quality assurance teams to track feature requests, bugs, and other issues regarding a company's software products.

Training—This template is useful for an IT department that trains its employees, as well as for other training organizations uses.

Only Available with Change Management:

Change Management—This template can be used to track change requests for any number of categories. It is based on the ITIL standard.

SOX Financial Control Management—This template is designed to track process controls that relate to financial procedures and processes. The template was created in response to Sarbanes-Oxley requirements.

SOX IT Change Management—This template is designed to ensure that changes made to financial data comply with Sarbanes-Oxley requirements. The Issue page that is created with this template contains sections that are Status-dependent, meaning that the sections of the Issue expand or collapse depending on the value in the Status field.

Only Available with Change and Configuration Manager:

IT Service Management—This template creates Incident, Problem and Change Management workspaces integrated into a centralized CMDB.

This document contains detailed templates and suggestions for the following Workspace types:

Corporate Service Desk

FootPrints Customer Service

IT Service Management (BMC Change Management and BMC FootPrints Configuration Manager license required)

Asset Requisitioning

Change and Release Management (BMC Change Management licenses required)

Survey (only visible for new workspaces, not new installations)

SOX Financial Control Management (BMC Change Management license required)

SOX IT Change Management (BMC Change Management license required)

IT Outsourcing

HIPAA Patient Management

Facilities Management

Human Resources Management

Incident Management

Problem Management

Issue Tracking

Resource Management

Sales Tracking

Software Change Management

Training

In addition, this section contains material on the IT Infrastructure Library (ITIL)

NOTE

The fields and settings in the templates below are only suggestions. Feel free to adapt them to your needs. The templates are also useful as a checklist when planning a new Workspace in considering all of the many options available. Refer to the **BMC FootPrints Service Core Reference Manual** or online documentation for detailed information and instructions on configuring and using the features mentioned below.

Corporate Service Desk

BMC FootPrints Service Core was created to help the Service Desk track, manage, and resolve employee customer Issues. Many of the features of BMC FootPrints Service Core can aid Service Desk Agents and managers in saving time and resources. Here are some suggestions for setting up a Service Desk Workspace.

Fields—Custom fields can be created to track the different requests and problems reported to the corporate Service Desk. These fields will help with quick data entry, and help sort and report on different areas and problem types.

Built-in Fields:

Title —Is used as a brief summary or description of request. If desired, this can be a drop-down list of acceptable request types.

Description—Is used for complete description of request or problem, updates, and resolution. Each addition to the description automatically contains a time, date and user stamp.

Assignees —The Assignee field automatically lists all Service Desk agents. Refer to the section below on “Assignment” for more information.

Statuses—Request, Open, Closed, Need More Info, Await Approval, Pending, Internal FAQ

NOTE

Request” status is a built-in status, but only appears when an employee customer submits a Request, prior to it being assigned to an Agent. Open and Closed statuses are also built-in, so only the other 4 need to be created.

Priorities

Maximum—Set to 4

Default—Set to 2

Words defined—Urgent, High, Medium, Low

Workspace Fields—Up to 100 custom Workspace Fields can be created (no limit in SQL/Access versions) to record information about the incident. Contact information is tracked in the Address Book (see below). Here are some suggested fields for the corporate Service Desk. A three-level field dependency group will be automatically created using the fields **Problem Type**, **Category**, and **Symptom**

Problem Type (drop-down)—Hardware, Software, Network, Printer

Hardware:

Hardware Type (drop-down)—PC, CD-ROM, HD, Keyboard, Memory, Modem, Monitor, Mouse, NIC

Platform (drop-down)—Windows 2000, Windows 2003, Windows 2008, Mac OS 9, Sun OS

Software:

Application (drop-down)—Acrobat, Excel, Internet Explorer 5, Internet Explorer 6, Netscape, Outlook, PowerPoint, PhotoShop, MS Workspace, QuickBooks, Word

Network:

Network request type (drop-down) —Create ID, Reset ID, Change Authority, Can’t Connect to Network, Can’t Connect to Internet

Printer:

Printer Type (drop-down) —LJ 6P, LJ4000, LJ8100, LJ9000, DeskJet 350, DeskJet 950

Problem Type (drop-down)—Printer Broken, New Toner Cartridge, Paper Jam

New Hire

The following fields can apply to all Request types:

Error Message (character field)

Follow-up Date (date/time field)

Resolution (multi-line character field) —Provides a field to describe how the issue was resolved.

Time Tracking—BMC FootPrints Service Core can track the time spent by Agents working on Issues. This data can be used to create time tracking reports, which can be used for billing, or to track any time-related information, such as how long one or more users spend on certain kinds of Issues.

Recommended configuration for Corporate Service Desk—Enabled, Mandatory, Automatic.

With this configuration, BMC FootPrints Service Core automatically tracks the time spent by Agents as they fill out and edit an Issue, for example, as the Agent is speaking on the phone with the user. In addition, the initial Agent (or second/third level Agent) can fill in their time spent on troubleshooting/fixing manually. An hourly billing rate should be specified for each Agent (see **Users**). In this way, time tracking data can be used for charge-backs to other departments, or to justify increased resources.

Address Book—The Address Book is a sub-database that contains all of the contact information for your user base. Each record in the Address Book is called a "Contact". Users who are reporting problems are referred to as "Contacts" or "Employee Customers" in BMC FootPrints Service Core. The Address Book can contain up to 100 fields (SQL/Access versions are unlimited) for employee data, including Name, Department, Phone number, Email address, etc.

Suggested Address Book Fields:

Department (drop-down)—Customer Service, R&D, Executive, Finance, Human Resources, IT, Marketing, Sales

Last Name (character field)

First Name (character field)

User ID (character field)

Email address (Email address)

Phone (character field)

Location (drop-down)—1st Floor, 2nd Floor, 3rd Floor, 4th Floor, Downtown Office, Remote

Service Level (drop-down)—Platinum, Gold, Silver, Bronze.

NOTE

The preceding field should be specified as "Internal".

Address Book Data—Address Book data can be entered manually for each Contact, imported from a text file, or taken dynamically from and LDAP-compliant contact database. Please refer to the section on Address Book Administration for more information.

Assignment —Assignment can be handled manually, or the Auto Assign Feature can be used to assign one or more users to a new Issue based on, for example, the "Request Type" field.

Escalation—Escalation should be enabled and various rules defined to meet service levels, handle high-priority issues, and set up follow-up reminders. Some rules to consider:

One "Instant" escalation rule can be made for each Service Level. The actions can include changing the priority, to an appropriate priority for that level, assignment, etc. See the example in the topic on "Escalation".

Escalation rules can be defined for certain high priority issues, such as network outages, etc.

Rules can be made to handle Issues that have been open for a certain amount of time to send a reminder to the assignees that the Issue must be resolved, and/or to reassign them to someone else.

A rule should be set to send an email to the assigned Agent based on the "Follow Up Date" field. The criteria should include:

Name: Per-Issue Reminders

Escalation On/Off: Select "On"

Actions: "Send mail to the Assignees" checked, select one or more email types

Time Unedited: 5 minutes

Criteria:

Status=Highlight "Request", "Open", and any custom statuses to get reminders on active Issues, or "Closed" to get reminders on Closed Issues (OR highlight all statuses except for "Solution" to get reminders on any Status Issue)

For "**Follow Up Date**", choose "equal to" and check the box for "Current Date" (do not fill in any dates).

Email —Outgoing email notification rules should be set to send mail to assignees and customers for all changes, or, if you would prefer, only for certain statuses. One or more Agents should also be defined to receive an email each time a new Request is submitted by a Customer. Incoming email can be configured to handle both incoming email submissions and email updates to existing Issues.

CCs—Other agents, developers, or other users can be copied on an Issue without actually being assigned. These people will receive email notification, and can optionally respond to the email with comments or suggestions, which will automatically be threaded to the Description of the Issue with a time, date and user stamp.

Queues—Create one Saved Search for each "Request Type" (Hardware, Software, Network, etc). For example, the Criteria for the Hardware Queue would include "Status"=Request, Open, and all other active statuses, "Request Type"=Hardware, Sorting "Date Submitted Ascending" (oldest at the top), Name "Hardware Queue", Type "Shared".

Reports —The built-in Metric reports can be used by the Service Desk Manager to get important metrics like Open vs. Closed rates, number of Open Issues by assignee, etc. Custom report templates can be made to show details and stats for things like: All active Issues by assignee, All active Issues by Request Type, All active Issues by Department, Priority, etc. The Auto-run Reports feature can be used to automatically email one or more reports to the Managers every Monday morning, etc.

Cross-workspace Reports—The Administrator can create cross-workspace reports to return data from multiple workspaces, such as Service Desk, Development, and Issue Management. All built-in fields, as well as any common custom fields found in the workspaces, can be included in the report. So, if the Address Book is shared between the aforementioned workspaces, a report can be generated on a particular contact that includes all activity for that user across all departments.

Asset Management—The BMC FootPrints Asset Core Add-on Module is highly recommended for the Internal Service Desk. All hardware, software, and network information for each PC will be automatically tracked. Other network devices, like servers, routers and printers can also be tracked. Asset information can be included as part of the history of an Issue.

Knowledge Base—The BMC FootPrints Service Core Knowledge Base feature is very useful for the Internal Service Desk. Frequently Asked Questions, Solutions to common problems, and patches can be made into Solutions. When a Customer Issue is resolved, it can also be made into a Solution. FAQ categories can be defined to group solutions by problem type, platform, software version, etc. Both Agents and Customers can have access to Solutions and FAQ categories. Agents can use the Knowledge Base to solve current Issues, searching the BMC FootPrints Service Core Knowledge Base by keyword, by FAQ category, and even searching popular online knowledge bases like Microsoft TechNet.

Customer Self Service—The Customer Self Service option allows employee customers to submit and track their Service Desk requests, as well as search the Knowledge Base. Users can log into BMC FootPrints Service Core using a common shared ID and password, their email address, or a unique ID and password. Unique Customer IDs and passwords can be linked to their network IDs and passwords (using NT, UNIX or LDAP password authentication and the Auto-Add Customer feature). Customer contact information can be

dynamically populated via the Dynamic Address Book Link feature. Customers can also submit Requests, receive notification, and respond to notification via email.

Users—Agent users can set their personal preferences to view a list of their own assignments on the BMC FootPrints Service Core home page, as well as set their home page columns to display important information about those Issues on the home page, like “Request Type”, “Department”, “Platform”, etc.

Agents can use their network ID and password to log into BMC FootPrints Service Core if NT, UNIX or LDAP password authentication is enabled.

See more information on Customer users under “Customer Self Service”.

File attachments—File attachments are useful for employee customers to provide screenshots of the problem they have having, and for Agents to provide patches, Word documents with step-by-step instructions, etc. Solutions in the Knowledge Base can contain file attachments, allowing easy distribution of patches, procedures, and other files. Incoming email submissions from customers that contain attachments will automatically include those attachments with the Issue that is created in BMC FootPrints Service Core.

NOTE

File Attachments in BMC FootPrints Service Core are kept in the C:\FootPrints\html\tmp\Attachments directory on the BMC FootPrints Service Core server. Anti-virus software can be pointed to that directory to ensure that attachments do not contain viruses.

Surveys—The Customer Survey feature can be used to gather information about the quality of service employee customers receive from the Service Desk and other IT departments. The survey, created by the Workspace Administrator, is sent automatically to the employee customer each time his or her Request is closed.

BMC FootPrints Service CoreInstant Talk—The Instant Talk feature can be used by the Internal Service Desk to allow customers to chat with available agents, quickening resolution of Issues. Instant Talk can also be used by agents to chat with each other when they are in different parts of the building, different sites, or on the telephone.

Remote Control—The Remote Control feature can be used by agents to take control of a user’s desktop to aid in solving a PC-related issue. The VNC Remote Control software can be optionally installed on all PC’s, or can be installed on an as-needed basis.

Copy/Move Issue feature—This feature can be used to assign Issues to users in other workspaces. For example, a Service Desk agent could assign an Issue in the Service Desk workspace to the development workspace.

Splash screen—The splash screen option can be used to communicate important information and alerts to agents and customers. Different screens can be defined for agents and customers. Splash screens can include text, HTML, links to other sites or pages, graphics, etc. They can be updated at any time by the Workspace Administrator.

Customer Support

BMC FootPrints Service Coreis designed for customer service representatives, support agents, and managers to track customer requests and problems, and to allow customers to help themselves via the web. The BMC FootPrints Service Core for Customer Service template creates a workspace useful for handling customer requests. After setting up the workspace, the wizard will ask if you would like to configure the Customer Service Portal, which enables you to define a simple, single frame interface for your customers.

Here are some suggestions for setting up a customer support workspace.

Fields—Custom fields can be created to track the different requests and problems reported to the customer support center. These fields will help with quick data entry, and help sort and report on different areas and problem types.

Built-in Fields

Title—Is used as a brief summary or description of request. If desired, this can be a drop-down list of acceptable request types.

Description—Is used for complete description of request or problem, updates, and resolution. Each addition to the description contains a time, date and user stamp.

Assignees—The Assignee field automatically lists the customer support agents. Please refer to the section below on "Assignment" for more information

Statuses—Request, Open, Closed, Need More Info, Await Approval, Pending, Internal FAQ

NOTE

"Request" status is a built-in status, but only appears when an external customer submits a Request, prior to it being assigned to an Agent. Open and Closed statuses are also built-in, so only the other 4 need to be created.

Priorities

Maximum: Set to 4

Default: Set to 2

Words defined: Urgent, High, Medium, Low

Workspace Fields—Up to 100 custom Workspace Fields can be created (no limit in SQL/Access versions) to record information about the incident. Contact information will be tracked in the Address Book (see below). Here are some suggested fields for the customer support team. All fields can be displayed for each Issue, and only the applicable fields filled out, or the Field Dependencies feature can be used to only display the fields that apply for each request type. If the Field Dependencies feature is desired, create all of the fields below, then setup the dependencies based on the "Product" categories defined below.

Product (drop-down)—List of your company's products and services.

NOTE

If the Field Dependencies option is used, this is the recommended decision field.

Platform (drop-down)—Windows 2000, Windows 2003, Windows 2008, Windows ME, Mac OS 9, Palm OS

NOTE

The "Platform" field only applies if your products are PC or software-based.

Version number (drop-down)—List of the version numbers for your products. If using the Field Dependencies option, then all versions for all products should be listed. The correct versions for each product will be selected on the Field Dependencies screen.

Request Type (drop-down)—Request for Information, Question, Feature Request, Defect Report.

Invoice number (character field)—If applicable.

Serial number (character field)—If applicable.

Error Message (character field)—If applicable.

Follow-up Date (date field)

Time Tracking—BMC FootPrints Service Core can track the time spent by Customer Service or Support personnel working on Customer Issues. This data can be used to create time tracking reports, which can be used for billing, or to track any time-related information, such as how long one or more users spend on certain kinds of Issues, or for certain customers.

Recommended configuration for External Customer Support – Enabled, Mandatory, Automatic.

With this configuration, BMC FootPrints Service Core automatically track the time spent by the customer service or support agent as they fill out and edit an Issue, for example, as the agent is speaking on the phone with the customer. In addition, the initial agent (or second/third level agent) can later fill in their time spent on troubleshooting/fixing manually. An hourly billing rate should be specified for each Agent (see **Users**). In this way, time tracking data can be used for billing customers, or to justify increased resources.

Address Book—The Address Book is a sub-database that contains all of the contact information for your user base. Each record in the Address Book is called a "Contact". Users who are reporting problems are referred to as "Contacts" or "External Customers" in BMC FootPrints Service Core. The Address Book can contain up to 100 fields (SQL/Access versions are unlimited) for employee data, including Name, Department, Phone number, Email address, etc.

Suggested Address Book Fields

Company (character field)

Last Name (character field)

First Name (character field)

User ID (character field)

Email address (Email address)

Phone (character field)

Street Address (character field)

City (character field)

State (drop-down)—List of states and/or provinces

Country (drop-down) – list of countries (if applicable)

Zip/Postal Code (character field)

Service Level (drop-down) – Platinum, Gold, Silver, Bronze.

NOTE

This field should be specified as "Internal", or "Public Read-Only".

Address Book Data—Address Book data can be entered manually for each Contact, imported from a text file, or taken dynamically from and LDAP-compliant contact database. Please refer to the section on Address Book Administration for more information.

Assignment—Assignment can be handled manually, or the Auto Assign Feature can be used to assign one or more users to a new Issue based on, for example, the "Product" field.

Escalation—Escalation should be enabled and various rules defined to meet service levels, handle high-priority issues, and set up follow-up reminders. Some rules to consider:

One “Instant” escalation rule can be made for each Service Level. The actions can include changing the priority, to an appropriate priority for that level, assignment, etc. See the example in Escalation.

Escalation rules can be defined for certain high priority issues, such as Defect Reports, etc.

Rules can be made to handle Issues that have been open for a certain amount of time to send a reminder to the assignees that the Issue must be resolved, and/or to reassign them to someone else.

A rule should be set to send an email to the assigned Agent based on the “Follow Up Date” field. The criteria should include:

Name: Per-Issue Reminders

Escalation On/Off: Select “On”

Actions: “Send mail to the Assignees” checked, select one or more email types

Time Unedited: 5 minutes

Criteria:

Status=Highlight ”Request”, “Open”, and any custom statuses to get reminders on active Issues, or “Closed” to get reminders on Closed Issues (OR highlight all statuses except for “Solution” to get reminders on any Status Issue)

For “**Follow Up Date**”, choose “equal to” and check the box for “Current Date” (do not fill in any dates).

Email—Outgoing email notification rules should be set to send mail to assignees and customers for all changes, or, if you would prefer, only for certain statuses. One or more Agents should also be defined to receive an email each time a new Request is submitted by a Customer. Incoming email can be configured to handle both incoming email submissions and email updates to existing Issues.

CCs—Other agents, developers, or other users can be copied on an Issue without actually being assigned. These people will receive email notification, and can optionally respond to the email with comments or suggestions, which will automatically be threaded to the Description of the Issue with a time, date and user stamp.

Queues—Create 1 Saved Search for each “Product”. For example, the Criteria for a queue for a product called “Widget SuperApp” would include “Status”=Request, Open, and all other active statuses, “Product”=”Widget SuperApp”, Sorting “Date Submitted Ascending” (oldest at the top), Name “Widget SuperApp Queue”, Type “Shared”. Other queues can be made for Request types, Service Levels, etc.

Reports—The built-in Metric reports can be used by the Customer Service Manager to get important metrics like Open vs. Closed rates, number of Open Issues by assignee, etc. Custom report templates can be made to show details and stats for things like: All active Issues by assignee, All active Issues by Product, All active Issues by Company, Priority, etc. The Auto-run Reports feature can be used to automatically email one or more reports to the Managers every Monday morning, etc.

Cross-workspace Reports—The Administrator can create cross-workspace reports to return data from multiple workspaces, such as Customer Support, Development, and Sales. Any common fields found in the workspaces selected can be included in the report. So, if the Address Book is shared between the aforementioned workspaces, a report can be generated on a particular company or contact that includes all activity for that company or contact across all departments.

Knowledge Base—The BMC FootPrints Service Core Knowledge Base feature is very useful for the Customer Support Team. Frequently Asked Questions, Solutions to common problems, and patches can be made into Solutions. When a Customer Issue is resolved, it can also be made into a Solution. FAQ categories can be defined to group solutions by product, platform, version, etc. Both Agents and Customers

can have access to Solutions and FAQ categories. Agents can use the Knowledge Base to solve current Issues, searching the BMC FootPrints Service Core Knowledge Base by keyword or by FAQ category, and even searching popular online knowledge bases like Google Groups.

Customer Self Service—The Customer Self Service option allows external customers to submit and track their requests, as well as search the Knowledge Base. Users can log into BMC FootPrints Service Core using a common shared ID and password, their email address, or a unique ID and password. Unique Customer IDs and passwords can be assigned by the Administrator, linked to an LDAP password directory (if LDAP authentication and the Auto-Add Customer feature are enabled), or can be created by the customers (if BMC FootPrints Service Core authentication and the Auto-Add Customer feature are enabled). Customer contact information can be dynamically populated via the Dynamic Address Book Link feature. Customers can also submit Requests, receive notification, and respond to notification via email.

Users—Agent users can set their personal preferences to view a list of their own assignments on the BMC FootPrints Service Core home page, as well as set their home page columns to display important information about those Issues on the home page, like “Product”, “Company”, “Follow-up date”, etc.

Agents can use their network ID and password to log into BMC FootPrints Service Core if NT, UNIX or LDAP password authentication is enabled.

See more information on Customer users under “Customer Self Service”.

File attachments—File attachments are useful for external customers to provide screenshots of the problem they have having, and for Agents to provide patches, Word documents with step-by-step instructions, etc. Solutions in the Knowledge Base can contain file attachments, allowing easy distribution of patches, procedures, and other files. Incoming email submissions from customers that contain attachments will automatically include those attachments with the Issue that is created in BMC FootPrints Service Core.

NOTE

File Attachments in BMC FootPrints Service Core are kept in the C:\FootPrints\html\tmp\Attachments directory on the BMC FootPrints Service Core server. Anti-virus software can be pointed to that directory to ensure that attachments do not contain viruses.

Surveys—The Customer Survey feature can be used to gather information about the quality of service external customers receive from the Support or Customer Service team. The survey will be sent automatically to the external customer each time his or her Request is closed.

FootPrints Instant Talk—The Instant Talk feature can be used by the Customer support team to allow customers to chat with available agents, quickening resolution of Issues. Instant Talk can also be used by agents to chat with each other when they are in different sites, or on a call.

Remote Control—If your Support Team supports PC or software-based products, the Remote Control feature can be used by agents to take control of a user’s desktop to aid in solving a PC-related issue.

Copy/Move Issue feature—This feature can be used to assign Issues to users in other workspaces. For instance, a customer support agent could assign an Issue in the customer support workspace to the development workspace.

Splash screen—The splash screen option can be used to communicate important information and alerts to agents and customers. Different screens can be defined for agents and customers. Splash screens can include text, HTML, links to other sites or pages, graphics, etc. They can be updated at any time by the Workspace Administrator.

IT Service Management

BMC FootPrints Service Core' IT Service Management template provides a great deal of ITIL 3 compatibility, integrating the Change and Release Management, Configuration Management, and Service Catalog workspaces with a Service Desk workspace. The IT Service Management workspace template actually creates four separate workspaces: Service Desk; Problem Management; Change/Release Management; and Service Portfolio when it is created.

Service Desk

Fields - Custom fields can be created to track the different requests and problems reported to the corporate Service Desk. These fields will help with quick data entry, and help sort and report on different areas and problem types.

Built-in Fields:

Title – Is used as a brief summary or description of request. If desired, this can be a drop-down list of acceptable request types.

Description – Is used for complete description of request or problem, updates, and resolution. Each addition to the description automatically contains a time, date and user stamp.

Assignees – The Assignee field automatically lists all agents. Refer to the section below on "Assignment" for more information.

Statuses – Request, Open, Closed, Need More Info, Await Approval, Pending, Internal FAQ

NOTE

Request" status is a built-in status, but only appears when an employee customer submits a Request, prior to it being assigned to an Agent. Open and Closed statuses are also built-in, so only the other 4 need to be created.

Priorities

Maximum - Set to 5

Default - Set to 5

Words defined - Critical, High, Medium, Low, Planning

Workspace Fields – Up to 100 custom Workspace Fields can be created (no limit in SQL/Access versions) to record information about the incident. Contact information is tracked in the Address Book (see below). Here are some suggested fields.

Type of Incident (drop-down) – Failure, Service Request

Main Category (drop-down) – Hardware, Software, Printer, Network

Hardware

Sub-category (drop-down) - CD-ROM, Hard Drive, Floppy Drive, Keyboard, Memory, Modem, Monitor, Mouse

Software

Sub-category (drop-down) - Acrobat, Excel, Internet Explore, Outlook, PowerPoint, PhotoShop, Word

Printer

Sub-category (drop-down) - Various printer models

Network

Sub-category (drop-down) - Change Authority, Can't Connect to Network, Can't Connect to Internet

Closure Code (drop-down) - Completed successfully, Training required, Documentation needed, No fault found, Monitoring required, Advice given, RFC needed

Resolution - Multi-line text entry field for describing the resolution.

Service Level

Impact (drop-down) - High, Medium, Low

Urgency (drop-down) - High, Medium Low

SLA Response Time (date/time)

SLA Due Date (date/time)

CI Links - For BMC FootPrints Configuration Manager, an add-on module.

Time Tracking - BMC FootPrints Service Core can track the time spent by Agents working on Issues. This data can be used to create time tracking reports, which can be used for billing, or to track any time-related information, such as how long one or more users spend on certain kinds of Issues.

Recommended configuration – Enabled, Mandatory, Automatic.

With this configuration, BMC FootPrints Service Core automatically tracks the time spent by Agents as they fill out and edit an Issue, for example, as the Agent is speaking on the phone with the user. In addition, the initial Agent (or second/third level Agent) can fill in their time spent on troubleshooting/fixing manually. An hourly billing rate should be specified for each Agent (see **Users**). In this way, time tracking data can be used for charge-backs to other departments, or to justify increased resources.

Address Book – The Address Book is a sub-database that contains all of the contact information for your user base. Each record in the Address Book is called a “Contact”. Users who are reporting problems are referred to as “Contacts” or “Employee Customers” in BMC FootPrints Service Core. The Address Book can contain up to 100 fields (SQL/Access versions are unlimited) for employee data, including Name, Department, Phone number, Email address, etc.

Suggested Address Book Fields:

Department (drop-down) – Customer Service, R&D, Executive, Finance, Human Resources, IT, Marketing, Sales

Last Name (character field)

First Name (character field)

User ID (character field)

Email address (Email address)

Phone (character field)

Location (drop-down) – 1st Floor, 2nd Floor, 3rd Floor, 4th Floor, Downtown Office, Remote

Service Level (drop-down) – Platinum, Gold, Silver, Bronze.

NOTE

The preceding field should be specified as “Internal”.

Address Book Data – Address Book data can be entered manually for each Contact, imported from a text file, or taken dynamically from and LDAP-compliant contact database. Please refer to the section on Address Book Administration for more information.

Assignment – Assignment can be handled manually, or the Auto Assign Feature can be used to assign one or more users to a new Issue based on, for example, the "Request Type" field.

Escalation – Escalation should be enabled and various rules defined to meet service levels, handle high-priority issues, and set up follow-up reminders. Some rules to consider:

One "Instant" escalation rule can be made for each Service Level. The actions can include changing the priority, to an appropriate priority for that level, assignment, etc. See the example in the topic on "Escalation".

Escalation rules can be defined for certain high priority issues, such as network outages, etc.

Rules can be made to handle Issues that have been open for a certain amount of time to send a reminder to the assignees that the Issue must be resolved, and/or to reassign them to someone else.

A rule should be set to send an email to the assigned Agent based on the "Follow Up Date" field. The criteria should include:

Name: Per-Issue Reminders

Escalation On/Off: Select "On"

Actions: "Send mail to the Assignees" checked, select one or more email types

Time Unedited: 5 minutes

Criteria:

Status=Highlight "Request", "Open", and any custom statuses to get reminders on active Issues, or "Closed" to get reminders on Closed Issues (OR highlight all statuses except for "Solution" to get reminders on any Status Issue)

For "**Follow Up Date**", choose "equal to" and check the box for "Current Date" (do not fill in any dates).

Email – Outgoing email notification rules should be set to send mail to assignees and customers for all changes, or, if you would prefer, only for certain statuses. One or more Agents should also be defined to receive an email each time a new Request is submitted by a Customer. Incoming email can be configured to handle both incoming email submissions and email updates to existing Issues.

CCs – Other agents, developers, or other users can be copied on an Issue without actually being assigned. These people will receive email notification, and can optionally respond to the email with comments or suggestions, which will automatically be threaded to the Description of the Issue with a time, date and user stamp.

Queues – Create 1 Saved Search for each "Request Type" (Hardware, Software, Network, etc). For example, the Criteria for the Hardware Queue would include "Status"=Request, Open, and all other active statuses, "Request Type"=Hardware, Sorting "Date Submitted Ascending" (oldest at the top), Name "Hardware Queue", Type "Shared".

Reports – The built-in Metric reports can be used by the Service Desk Manager to get important metrics like Open vs. Closed rates, number of Open Issues by assignee, etc. Custom report templates can be made to show details and stats for things like: All active Issues by assignee, All active Issues by Request Type, All active Issues by Department, Priority, etc. The Auto-run Reports feature can be used to automatically email one or more reports to the Managers every Monday morning, etc.

Cross-workspace Reports – The Administrator can create cross-workspace reports to return data from multiple workspaces, such as Service Desk, Development, and Issue Management. All built-in fields, as well as any common custom fields found in the workspaces, can be included in the report. So, if the Address Book is shared between the aforementioned workspaces, a report can be generated on a particular contact that includes all activity for that user across all departments.

Asset Management – The BMC FootPrints Asset Core Add-on Module is highly recommended. All hardware, software, and network information for each PC will be automatically tracked. Other network devices, like servers, routers and printers can also be tracked. Asset information can be included as part of the history of an Issue.

Knowledge Base – The BMC FootPrints Service Core Knowledge Base feature is very useful for the Internal Service Desk. Frequently Asked Questions, Solutions to common problems, and patches can be made into Solutions. When a Customer Issue is resolved, it can also be made into a Solution. FAQ categories can be defined to group solutions by problem type, platform, software version, etc. Both Agents and Customers can have access to Solutions and FAQ categories. Agents can use the Knowledge Base to solve current Issues, searching the BMC FootPrints Service Core Knowledge Base by keyword, by FAQ category, and even searching popular online knowledge bases like Microsoft TechNet.

Customer Self Service – The Customer Self Service option allows employee customers to submit and track their Service Desk requests, as well as search the Knowledge Base. Users can log into BMC FootPrints Service Core using a common shared ID and password, their email address, or a unique ID and password. Unique Customer IDs and passwords can be linked to their network IDs and passwords (using NT, UNIX or LDAP password authentication and the Auto-Add Customer feature). Customer contact information can be dynamically populated via the Dynamic Address Book Link feature. Customers can also submit Requests, receive notification, and respond to notification via email.

Users – Agent users can set their personal preferences to view a list of their own assignments on the BMC FootPrints Service Core home page, as well as set their home page columns to display important information about those Issues on the home page, like “Request Type”, “Department”, “Platform”, etc.

Agents can use their network ID and password to log into BMC FootPrints Service Core if NT, UNIX or LDAP password authentication is enabled.

See more information on Customer users under “Customer Self Service”.

File attachments – File attachments are useful for employee customers to provide screenshots of the problem they have having, and for Agents to provide patches, Word documents with step-by-step instructions, etc. Solutions in the Knowledge Base can contain file attachments, allowing easy distribution of patches, procedures, and other files. Incoming email submissions from customers that contain attachments will automatically include those attachments with the Issue that is created in BMC FootPrints Service Core

NOTE

File Attachments in BMC FootPrints Service Core are kept in the C:\FootPrints\html\tmp\Attachments directory on the BMC FootPrints Service Core server. Anti-virus software can be pointed to that directory to ensure that attachments do not contain viruses.

Surveys—The Customer Survey feature can be used to gather information about the quality of service employee customers receive from the Service Desk and other IT departments. The survey, created by the Workspace Administrator, is sent automatically to the employee customer each time his or her Request is closed.

BMC FootPrints Service Core Instant Talk—The Instant Talk feature can be used by the Internal Service Desk to allow customers to chat with available agents, quickening resolution of Issues. Instant Talk can also be used by agents to chat with each other when they are in different parts of the building, different sites, or on the telephone.

Remote Control—The Remote Control feature can be used by agents to take control of a user's desktop to aid in solving a PC-related issue. The VNC Remote Control software can be optionally installed on all PC's, or can be installed on an as-needed basis.

Copy/Move Issue feature—This feature can be used to assign Issues to users in other workspaces. For example, a Service Desk agent could assign an Issue in the Service Desk workspace to the development workspace.

Splash screen—The splash screen option can be used to communicate important information and alerts to agents and customers. Different screens can be defined for agents and customers. Splash screens can include text, HTML, links to other sites or pages, graphics, etc. They can be updated at any time by the Workspace Administrator.

Problem Management

Fields - Custom fields can be created to track the different requests and problems. These fields will help with quick data entry, and help sort and report on different areas and problem types.

Built-in Fields:

Title – Is used as a brief summary or description of request. If desired, this can be a drop-down list of acceptable request types.

Description – Is used for complete description of request or problem, updates, and resolution. Each addition to the description automatically contains a time, date and user stamp.

Assignees – The Assignee field automatically lists all agents. Refer to the section below on "Assignment" for more information.

Statuses – Request, Open, Closed, Need More Info, Await Approval, Pending, Internal FAQ

NOTE

Request" status is a built-in status, but only appears when an employee customer submits a Request, prior to it being assigned to an Agent. Open and Closed statuses are also built-in, so only the other 4 need to be created.

Priorities

Maximum - Set to 5

Default - Set to 5

Words defined - Critical, High, Medium, Low, Planning

Workspace Fields – Up to 100 custom Workspace Fields can be created (no limit in SQL/Access versions) to record information about the problem. Contact information is tracked in the Address Book (see below). Here are some suggested fields.

Type (drop-down) – Problem, Known Error

Impact (drop-down) - High, Medium, Low

Urgency (drop-down) - High, Medium, Low

Incident Information

Type of Incident (drop-down) - Failure, Service Request

SLA Due Date (date/time)

CI Links - CI Links section for BMC FootPrints Configuration Manager, an add-on module.

Time Tracking - BMC FootPrints Service Core can track the time spent by Agents working on Issues. This data can be used to create time tracking reports, which can be used for billing, or to track any time-related information, such as how long one or more users spend on certain kinds of Issues.

Recommended configuration – Enabled, Mandatory, Automatic.

With this configuration, BMC FootPrints Service Core automatically tracks the time spent by Agents as they fill out and edit an Issue, for example, as the Agent is speaking on the phone with the user. In addition, the initial Agent (or second/third level Agent) can fill in their time spent on troubleshooting/fixing manually. An hourly billing rate should be specified for each Agent (see **Users**). In this way, time tracking data can be used for charge-backs to other departments, or to justify increased resources.

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Suggested Address Book Fields:

Department (drop-down) – Customer Service, R&D, Executive, Finance, Human Resources, IT, Marketing, Sales

Last Name (character field)

First Name (character field)

User ID (character field)

Email address (Email address)

Phone (character field)

Location (drop-down) – 1st Floor, 2nd Floor, 3rd Floor, 4th Floor, Downtown Office, Remote

Service Level (drop-down) – Platinum, Gold, Silver, Bronze.

NOTE

The preceding field should be specified as "Internal".

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Escalation — Escalation should be enabled and various rules defined to meet service levels, handle high-priority issues, and set up follow-up reminders. Some rules to consider:

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Name: Per-Issue Reminders

Escalation On/Off: Select “On”

Actions: “Send mail to the Assignees” checked, select one or more email types

Time Unedited: 5 minutes

Criteria:

Status=Highlight ”Request”, “Open”, and any custom statuses to get reminders on active Issues, or “Closed” to get reminders on Closed Issues (OR highlight all statuses except for “Solution” to get reminders on any Status Issue)

For “**Follow Up Date**”, choose “equal to” and check the box for “Current Date” (do not fill in any dates).

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Service Core using a common shared ID and password, their email address, or a unique ID and password. Unique Customer IDs and passwords can be linked to their network IDs and passwords (using NT, UNIX or LDAP password authentication and the Auto-Add Customer feature). Customer contact information can be dynamically populated via the Dynamic Address Book Link feature. Customers can also submit Requests, receive notification, and respond to notification via email.

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See more information on Customer users under “Customer Self Service”.

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NOTE

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Surveys—The Customer Survey feature can be used to gather information about the quality of service employee customers receive from the Service Desk and other IT departments. The survey, created by the Workspace Administrator, is sent automatically to the employee customer each time his or her Request is closed.

FootPrints Instant Talk—The Instant Talk feature can be used by the Internal Service Desk to allow customers to chat with available agents, quickening resolution of Issues. Instant Talk can also be used by agents to chat with each other when they are in different parts of the building, different sites, or on the telephone.

Remote Control—The Remote Control feature can be used by agents to take control of a user’s desktop to aid in solving a PC-related issue. The VNC Remote Control software can be optionally installed on all PC’s, or can be installed on an as-needed basis.

Copy/Move Issue feature—This feature can be used to assign Issues to users in other workspaces. For example, a Service Desk agent could assign an Issue in the Service Desk workspace to the development workspace.

Splash screen—The splash screen option can be used to communicate important information and alerts to agents and customers. Different screens can be defined for agents and customers. Splash screens can include text, HTML, links to other sites or pages, graphics, etc. They can be updated at any time by the Workspace Administrator.

Change/Release Management

This template is designed to track and manage changes. The Issue page that is created with this template contains sections that are Status-dependent, meaning that the sections of the Issue expand or collapse depending on the value in the Status field.

Built-in Fields

Title—Single-line character field.

Priority—Drop-down field.

Status—Drop-down field. Values are: New, Initiation Phase, Design Phase, Development Phase, QA Testing Phase, Implementation Phase, Rejected, Canceled, All Phases, Completed.

Summary of Change (Description) —Multi-line character field. Used for complete description of the proposed change.

Suggested Fields

Status set to New—When the Status field is set to New, the following suggested fields are shown in the RFC Information section:

Reason for Change—Drop-down field. Values are: Incident/Problem Resolution, User/Customer Dissatisfaction, New Requirements, Upgrade to Infrastructure, New or Changed Legislation, Location Change, Product/Service Change from Vendor, New Account, Personnel Vacancy, Updated Information.

Change Type—Drop-down field. Values are:

Data Content—Dependent values that are displayed in the Category field when this value is selected are Updating Information, Replacing Information, Deleting Information.

Data Storage Method—Dependent values that are displayed in the Category field when this value is selected are Change to Database (DDL), Change Server, Change Database.

Software Update—Dependent values that are displayed in the Category field when this value is selected are Upgrade to Software, Feature Request.

Equipment Update—Dependent values that are displayed in the Category field when this value is selected are CD-ROM/DVD, Hard Drive, Memory, Processor, Operating System.

New Application—Dependent values that are displayed in the Category field when this value is selected are Replacing Existing Application, For New Requirements.

New Equipment—Dependent values that are displayed in the Category field when this value is selected are Replacing Existing Equipment, Supplementing Existing Equipment, New Implementation.

Backup/Restore—Dependent values that are displayed in the Category field when this value is selected are Backup to Tape, Backup to CD/DVD, Restore from Tape, Restore from CD/DVD.

Policy Change—Dependent values that are displayed in the Category field when this value is selected are Data Access, Server Access, Physical Data Storage, User Account Management.

Access Control—Dependent values that are displayed in the Category field when this value is selected are Access to Data, Access to Server, Access to Application.

Category—Drop-down field for selecting the category for the change type. This is actually a dependent field, the choices for which depend on the choice of Change Type.

Data type— Drop-down field for selecting the type of data to be changed. Values are: Financial Accounting, Financial Reporting, Internal Auditing, Information Security, Product Information.

Data Classification—Drop-down field for selecting a classification for the data to be changed. Values are: Public, Proprietary, Confidential, Secret.

Business Unit Impacted—Drop-down field for defining the business unit that is affected by the change. Values are: Finance, IT, Audit, Legal, Operations.

Application—Drop-down field for defining the software applications that will be affected by the change. Values are: Acrobat, Excel, FootPrints Service Core, Internet Explorer, Netscape, Outlook, Photoshop, Powerpoint, Quick Books, Word.

Business Owner—Drop-down field for defining the title of the individual whose business Unit will be affected by the change. Values are: CFO, CIO, CEO, COO, Director of Accounting, Director of IT, Accounting Manager, IT Manager.

IT Owner/Custodian—Drop-down field for defining the title of the individual within the IT department who has responsibility for implementing the change. Values are: CIO, IT Director, IT Manager, IT Analyst.

Host server—Drop-down field for setting the name of the server on which the change is to be implemented. Values are: SERVER1, SERVER2, SERVER3, SERVER4, SERVER5, SERVER6, SERVER7, SERVER8.

Status set to Initiation/Evaluation Phase—When the Status field is set to Initiation/Evaluation Phase, the following suggested fields are shown in the RFC Information section:

Initiation Start Date—Date field for when the phase began.

Initiation Action—Drop-down field for selecting the status of action in this phase. Values are: In Progress, Completed, Insufficient Data.

Initiation Notes—Multi-line character field for notes.

Estimated Scope—Drop-down field for defining the scope of the change in terms of its severity. Values are: Minor, Significant, Major, Company-wide.

Cost/Impact—Drop-down field for defining the estimated financial impact of the change. Values are: $0-$5k, $5k-$10k, $10k-$50k, $100k-$500k, $500k+.

Business Owner Identified—Checkbox field for defining whether the business owner for the change has been determined. This field is to be completed at the end of the phase.

IT Owner Identified—Checkbox field for defining whether the IT owner for the change has been determined. This field is to be completed at the end of the phase.

Application Identified—Checkbox field for defining whether the application affected by the change has been determined. This field is to be completed at the end of the phase.

Server Identified—Checkbox field for defining whether the server affected by the change has been determined. This field is to be completed at the end of the phase.

Initiation End Date—Date field for noting when this phase is completed. This field is to be completed at the end of the phase.

Status set to Design Phase—When the Status field is set to Design Phase, the following suggested fields are shown in the RFC Information section:

Design Start date—Date field for when the phase began.

Design Action—Drop-down field for selecting the status of action in this phase. Values are: In Progress, Completed, Insufficient Data.

IT Lead—Drop-down field for specifying the title of the individual who will be the leading IT person for the development of the change. Values are: CIO, IT Director, IT Manager, IT Analyst.

Approximate Time to Complete—Estimate of the amount of time it will take to complete the design and implementation of the change.

Design Notes—Multi-line character field for notes.

Technical Specs Attached—Checkbox field for defining whether the Technical Specifications have been attached to the Issue. If checked, it means the specifications are attached.If not checked, it means the specifications are not attached. This field is to be completed at the end of the phase.

Security Review Completed—Checkbox field for defining whether the Security Review has concluded. If checked, it means the review has been completed. If not checked, it means the review has not been completed. This field is to be completed at the end of the phase.

Impact Review Completed—Checkbox field for defining whether the Impact Review has concluded. If checked, it means the review has been completed. If not checked, it means the review has not been completed. This field is to be completed at the end of the phase.

Design End date—Date field for noting when this phase is completed. This field is to be completed at the end of the phase.

Status set to Development Phase—When the Status field is set to Design Phase, the following suggested fields are shown in the RFC Information section:

Development Start Date—Date field for when the phase began.

Development Action—Drop-down field for selecting the status of action in this phase. Values are: In Progress, Completed, Insufficient Data.

Primary Developer—Drop-down field. The title of the individual who will be the leading developer on the project. Values are IT Director, IT Manager, IT Developer, IT Analyst.

Development Notes—Multi-line character field for notes.

Code Review Completed—Checkbox field for defining whether the Code Review has concluded. If checked, it means the review has been completed. If not checked, it means the review has not been completed. This field is to be completed at the end of the phase.

Development End date—Date field for noting when this phase is completed. This field is to be completed at the end of the phase.

Status set to QA Testing Phase—When the Status field is set to Design Phase, the following suggested fields are shown in the RFC Information section:

QA Testing Start—Date field for when the phase began.

QA Action—Drop-down field for selecting the status of action in this phase. Values are: Not Started, In Progress, Completed, Insufficient Data.

Primary Tester—Drop-down field. The title of the individual who will be the leading tester on the project. Values are IT Director, IT Manager, IT Developer, IT Analyst, QA Analyst, QA Manager, QA Director.

QA Testing Notes—Multi-line character field for notes.

Functionality Verified—Checkbox field for defining whether the test results are verified. If checked, it means the functionality has been verified. This field is to be completed at the end of the phase.

Usabillity verified—Checkbox field for defining whether the usability test results are verified. If checked, it means the usability has been verified. This field is to be completed at the end of the phase.

QA Testing End date—Date field for noting when this phase is completed. This field is to be completed at the end of the phase.

Status set to Implementation Phase—When the Status field is set to Design Phase, the following suggested fields are shown in the RFC Information section:

Implementation Start Date—Date field for when the phase began.

Implementation Action—Drop-down field for selecting the status of action in this phase. Values are: Not Started, In Progress, Completed, Insufficient Data.

Implementation Plan—Multi-line character field for describing the implementation plan.

Back-out Plan—Multi-line character field for describing the plan for backing out if there is a problem with the implementation.

Implementation Notes—Multi-line character field for notes.

Change Deployed—Checkbox field for defining whether the change has been deployed. If checked, it means the change has been deployed. This field is to be completed at the end of the phase.

User notified—Checkbox field for defining whether the users affected by the change have been notified of the change. If checked, it means the users have been notified. This field is to be completed at the end of the phase.

Implementation End date—Date field for noting when this phase is completed. This field is to be completed at the end of the phase.

Status set to Rejected, Canceled, or Completed—These Statuses do not affect the display of other fields.

Status set to All Phases—All of the sections are expanded when the status is set to All Phases.

Address Book—The Address Book is a sub-database that contains all of the contact information for your organization members. Each record in the Address Book is called a “Contact”. Organization members are referred to as “Contacts” in FootPrints Service Core. The Address Book can contain up to 100 fields (SQL/Access versions are unlimited) for employee data, including Name, Department, Phone number, Email address, etc.

Suggested Address Book Fields

Last Name (character field)

First Name (character field)

Email address (email address)

Department (character field)

Phone (character field)

Job Title (character field)

Service Portfolio

The Service Portfolio is a workspace for proposing and approving items to be included in the Service Catalog..

Built-in Fields

Brief Description—Single-line character field.

Priority—Drop-down field.

Status—Drop-down field. Values are: New, Initiation Phase, Design Phase, Development Phase, QA Testing Phase, Implementation Phase, Rejected, Canceled, All Phases, Completed.

Summary of Change (Description) —Multi-line character field. Used for complete description of the proposed change.

Service Proposal Details

Business Case—Multi-line text field.

Pricing Models—Multi-line text field.

Potential Customers—Multi-line text field.

Service Level Agreement—Multi-line text field.

CI Links - For BMC Configuration Management. BMC Configuration Management is an add-on module.

Owners and Notifications - The same as Assignees and Email

Address Book—The Address Book is a sub-database that contains all of the contact information for your organization members. Each record in the Address Book is called a “Contact”. Organization members are referred to as “Contacts” in FootPrints Service Core. The Address Book can contain up to 100 fields (SQL/Access versions are unlimited) for employee data, including Name, Department, Phone number, Email address, etc.

Suggested Address Book Fields

Last Name (character field)

First Name (character field)

Email address (email address)

Department (character field)

Phone (character field)

Job Title (character field)

Asset Requisitioning

This template is designed to create and track asset requisitions and other material purchases. The fields and modified field names provide a quick way to create a requisitioning Workspace. Issues are automatically renamed as "Purchase Orders" for ease of use.

Built-In Fields

Order Summary (Title)—Is used as a brief summary or description of Issue or task.

Notes (Description)—Is used for complete description of request or problem, updates, and resolution. Each addition to the description contains a time, date and user stamp.

Importance (Priority)—Three defined (High, Medium, Low)

Status—Open, Requested, Awaiting Approval, On Order, In Receiving, Received, Closed

Suggested Fields

Item #1—Text

Item #1 Quantity—Integer

Item #1 Unit Amount—Real Number

Item #2—Text

Item #2 Quantity—Integer

Item #2 Unit Amount—Real Number

Item #3—Text

Item #3 Quantity—Integer

Item #3 Unit Amount—Real Number

Shipping—Real Number

Total Amount—Real Number

Order Number—Text

Requester Name—Text

Requester Phone—Text

Requester email

Date Ordered—Date

Date Expected—Date

Date Received—Date

Address Book Fields

Company

Contact Last Name

Contact First Name

Mailing Address

City

State

Zip/Postal Code

Email Address

Phone

Fax

Terms

Change and Release Management

This template is designed to track and manage changes. The Issue page that is created with this template contains sections that are Status-dependent, meaning that the sections of the Issue expand or collapse depending on the value in the Status field.

Built-in Fields

Title—Single-line character field.

Priority—Drop-down field.

Status—Drop-down field. Values are: New, Initiation Phase, Design Phase, Development Phase, QA Testing Phase, Implementation Phase, Rejected, Canceled, All Phases, Completed.

Summary of Change (Description) —Multi-line character field. Used for complete description of the proposed change.

Suggested Fields

Status set to New—When the Status field is set to New, the following suggested fields are shown in the RFC Information section:

Reason for Change—Drop-down field. Values are: Incident/Problem Resolution, User/Customer Dissatisfaction, New Requirements, Upgrade to Infrastructure, New or Changed Legislation, Location Change, Product/Service Change from Vendor, New Account, Personnel Vacancy, Updated Information.

Change Type—Drop-down field. Values are:

Data Content—Dependent values that are displayed in the Category field when this value is selected are Updating Information, Replacing Information, Deleting Information.

Data Storage Method—Dependent values that are displayed in the Category field when this value is selected are Change to Database (DDL), Change Server, Change Database.

Software Update—Dependent values that are displayed in the Category field when this value is selected are Upgrade to Software, Feature Request.

Equipment Update—Dependent values that are displayed in the Category field when this value is selected are CD-ROM/DVD, Hard Drive, Memory, Processor, Operating System.

New Application—Dependent values that are displayed in the Category field when this value is selected are Replacing Existing Application, For New Requirements.

New Equipment—Dependent values that are displayed in the Category field when this value is selected are Replacing Existing Equipment, Supplementing Existing Equipment, New Implementation.

Backup/Restore—Dependent values that are displayed in the Category field when this value is selected are Backup to Tape, Backup to CD/DVD, Restore from Tape, Restore from CD/DVD.

Policy Change—Dependent values that are displayed in the Category field when this value is selected are Data Access, Server Access, Physical Data Storage, User Account Management.

Access Control—Dependent values that are displayed in the Category field when this value is selected are Access to Data, Access to Server, Access to Application.

Category—Drop-down field for selecting the category for the change type. This is actually a dependent field, the choices for which depend on the choice of Change Type.

Data type— Drop-down field for selecting the type of data to be changed. Values are: Financial Accounting, Financial Reporting, Internal Auditing, Information Security, Product Information.

Data Classification—Drop-down field for selecting a classification for the data to be changed. Values are: Public, Proprietary, Confidential, Secret.

Business Unit Impacted—Drop-down field for defining the business unit that is affected by the change. Values are: Finance, IT, Audit, Legal, Operations.

Application—Drop-down field for defining the software applications that will be affected by the change. Values are: Acrobat, Excel, BMC FootPrints Service Core, Internet Explorer, Netscape, Outlook, Photoshop, PowerPoint, Quick Books, Word.

Business Owner—Drop-down field for defining the title of the individual whose business Unit will be affected by the change. Values are: CFO, CIO, CEO, COO, Director of Accounting, Director of IT, Accounting Manager, IT Manager.

IT Owner/Custodian—Drop-down field for defining the title of the individual within the IT department who has responsibility for implementing the change. Values are: CIO, IT Director, IT Manager, IT Analyst.

Host server—Drop-down field for setting the name of the server on which the change is to be implemented. Values are: SERVER1, SERVER2, SERVER3, SERVER4, SERVER5, SERVER6, SERVER7, SERVER8.

Status set to Initiation/Evaluation Phase—When the Status field is set to Initiation/Evaluation Phase, the following suggested fields are shown in the RFC Information section:

Initiation Start Date—Date field for when the phase began.

Initiation Action—Drop-down field for selecting the status of action in this phase. Values are: In Progress, Completed, Insufficient Data.

Initiation Notes—Multi-line character field for notes.

Estimated Scope—Drop-down field for defining the scope of the change in terms of its severity. Values are: Minor, Significant, Major, Company-wide.

Cost/Impact—Drop-down field for defining the estimated financial impact of the change. Values are: $0-$5k, $5k-$10k, $10k-$50k, $100k-$500k, $500k+.

Business Owner Identified—Checkbox field for defining whether the business owner for the change has been determined. This field is to be completed at the end of the phase.

IT Owner Identified—Checkbox field for defining whether the IT owner for the change has been determined. This field is to be completed at the end of the phase.

Application Identified—Checkbox field for defining whether the application affected by the change has been determined. This field is to be completed at the end of the phase.

Server Identified—Checkbox field for defining whether the server affected by the change has been determined. This field is to be completed at the end of the phase.

Initiation End Date—Date field for noting when this phase is completed. This field is to be completed at the end of the phase.

Status set to Design Phase—When the Status field is set to Design Phase, the following suggested fields are shown in the RFC Information section:

Design Start date—Date field for when the phase began.

Design Action—Drop-down field for selecting the status of action in this phase. Values are: In Progress, Completed, Insufficient Data.

IT Lead—Drop-down field for specifying the title of the individual who will be the leading IT person for the development of the change. Values are: CIO, IT Director, IT Manager, IT Analyst.

Approximate Time to Complete—Estimate of the amount of time it will take to complete the design and implementation of the change.

Design Notes—Multi-line character field for notes.

Technical Specs Attached—Checkbox field for defining whether the Technical Specifications have been attached to the Issue. If checked, it means the specifications are attached.If not checked, it means the specifications are not attached. This field is to be completed at the end of the phase.

Security Review Completed—Checkbox field for defining whether the Security Review has concluded. If checked, it means the review has been completed. If not checked, it means the review has not been completed. This field is to be completed at the end of the phase.

Impact Review Completed—Checkbox field for defining whether the Impact Review has concluded. If checked, it means the review has been completed. If not checked, it means the review has not been completed. This field is to be completed at the end of the phase.

Design End date—Date field for noting when this phase is completed. This field is to be completed at the end of the phase.

Status set to Development Phase—When the Status field is set to Design Phase, the following suggested fields are shown in the RFC Information section:

Development Start Date—Date field for when the phase began.

Development Action—Drop-down field for selecting the status of action in this phase. Values are: In Progress, Completed, Insufficient Data.

Primary Developer—Drop-down field. The title of the individual who will be the leading developer on the project. Values are IT Director, IT Manager, IT Developer, IT Analyst.

Development Notes—Multi-line character field for notes.

Code Review Completed—Checkbox field for defining whether the Code Review has concluded. If checked, it means the review has been completed. If not checked, it means the review has not been completed. This field is to be completed at the end of the phase.

Development End date—Date field for noting when this phase is completed. This field is to be completed at the end of the phase.

Status set to QA Testing Phase—When the Status field is set to Design Phase, the following suggested fields are shown in the RFC Information section:

QA Testing Start—Date field for when the phase began.

QA Action—Drop-down field for selecting the status of action in this phase. Values are: Not Started, In Progress, Completed, Insufficient Data.

Primary Tester—Drop-down field. The title of the individual who will be the leading tester on the project. Values are IT Director, IT Manager, IT Developer, IT Analyst, QA Analyst, QA Manager, QA Director.

QA Testing Notes—Multi-line character field for notes.

Functionality Verified—Checkbox field for defining whether the test results are verified. If checked, it means the functionality has been verified. This field is to be completed at the end of the phase.

Usabillity verified—Checkbox field for defining whether the usability test results are verified. If checked, it means the usability has been verified. This field is to be completed at the end of the phase.

QA Testing End date—Date field for noting when this phase is completed. This field is to be completed at the end of the phase.

Status set to Implementation Phase—When the Status field is set to Design Phase, the following suggested fields are shown in the RFC Information section:

Implementation Start Date—Date field for when the phase began.

Implementation Action—Drop-down field for selecting the status of action in this phase. Values are: Not Started, In Progress, Completed, Insufficient Data.

Implementation Plan—Multi-line character field for describing the implementation plan.

Back-out Plan—Multi-line character field for describing the plan for backing out if there is a problem with the implementation.

Implementation Notes—Multi-line character field for notes.

Change Deployed—Checkbox field for defining whether the change has been deployed. If checked, it means the change has been deployed. This field is to be completed at the end of the phase.

User notified—Checkbox field for defining whether the users affected by the change have been notified of the change. If checked, it means the users have been notified. This field is to be completed at the end of the phase.

Implementation End date—Date field for noting when this phase is completed. This field is to be completed at the end of the phase.

Status set to Rejected, Cancelled, or Completed—These Statuses do not affect the display of other fields.

Status set to All Phases—All of the sections are expanded when the status is set to All Phases.

Address Book—The Address Book is a sub-database that contains all of the contact information for your organization members. Each record in the Address Book is called a “Contact”. Organization members are referred to as “Contacts” in FootPrints. The Address Book can contain up to 100 fields (SQL/Access versions are unlimited) for employee data, including Name, Department, Phone number, Email address, etc.

Suggested Address Book Fields

Last Name (character field)

First Name (character field)

Email address (email address)

Department (character field)

Phone (character field)

Job Title (character field)

Survey

The Survey workspace is designed to provide a fast track to starting your customer surveys. Customer surveys must be connected to another workspace about which the survey is conducted and must be linked to the other workspace's Address Book.

Fields - Custom fields can be created to track the different requests and problems reported to the corporate Service Desk. These fields will help with quick data entry, and help sort and report on different areas and problem types.

Built-in Fields:

Title – Is used as a brief summary or description of request. If desired, this can be a drop-down list of acceptable request types.

Comment – Is used for complete description of request or problem, updates, and resolution. Each addition to the description automatically contains a time, date and user stamp.

Assignees – The Assignee field automatically lists all Service Desk agents. Refer to the section below on "Assignment" for more information.

Statuses – Open, Reviewed, Responded, Closed

NOTE

Request" status is a built-in status, but only appears when an employee customer submits a Request, prior to it being assigned to an Agent. Open and Closed statuses are also built-in, so only the others need to be created.

Priorities

Maximum - Set to 4

Default - Set to 3

Words defined - Urgent, High, Medium, Low

Workspace Fields – Up to 100 custom fields can be created (no limit in SQL/Access versions) to record the survey and information about the survey. Contact information is tracked in the Address Book (see below). Here are some suggested survey questions that are part of the template.

Based on your recent experience, how satisfied are you with the service you received? -Very Dissatisfied, Dissatisfied, Neither, Satisfied, Very Satisfied

Based on your recent experience, would you use our service again? -Definitely Not, Probably Not, Maybe, Probably, Definitely

Timeliness of response to your inquiries -Very Dissatisfied, Dissatisfied, Neither, Satisfied, Very Satisfied

Frequency of contact to satisfy your needs -Very Dissatisfied, Dissatisfied, Neither, Satisfied, Very Satisfied

Technical knowledge -Very Dissatisfied, Dissatisfied, Neither, Satisfied, Very Satisfied

Understanding your needs -Very Dissatisfied, Dissatisfied, Neither, Satisfied, Very Satisfied

Ability to resolve a problem -Very Dissatisfied, Dissatisfied, Neither, Satisfied, Very Satisfied

Professionalism - Very Dissatisfied, Dissatisfied, Neither, Satisfied, Very Satisfied

How satisfied are you with the support you received? - Very Dissatisfied, Dissatisfied, Neither, Satisfied, Very Satisfied

How satisfied are you with the effectiveness of the solution? - Very Dissatisfied, Dissatisfied, Neither, Satisfied, Very Satisfied

Address Book – The Address Book for surveys must be linked to another workspace's Address Book.

Assignment – Assignment can be handled manually, or the Auto Assign Feature can be used to assign one or more users to a new Issue based on, for example, the “Request Type” field.

Email – Outgoing email notification rules should be set to send mail to as needed. You might have someone who needs to be notified every time a survey receives a response, for example.

Reports – The built-in Metric reports, such as Survey Statistics, can be used to get important data. Custom report templates can be made to show details and stats for things like: All active Issues by assignee, All active Issues by Request Type, All active Issues by Department, Priority, etc. The Auto-run Reports feature can be used to automatically email one or more reports to the Managers every Monday morning, etc.

Users – Agent users can set their personal preferences to view a list of their own assignments on the BMC FootPrints Service Core home page, as well as set their home page columns to display important information about those Issues on the home page.

Agents can use their network ID and password to log into BMC FootPrints Service Core NT, UNIX or LDAP password authentication is enabled.

See more information on Customer users under “Customer Self Service”.

NOTE

File Attachments in BMC FootPrints Service Core are kept in the C:\FootPrints\html\tmp\Attachments directory on the **BMC FootPrints Service Core** server. Anti-virus software can be pointed to that directory to ensure that attachments do not contain viruses.

SOX Financial Control Management

This template is designed to track process controls that relate to financial procedures and processes. The template was created in response to Sarbanes-Oxley requirements.

Built-in Fields

Control Objective (Title)—Single-line character field that is analagous to Title.

Priority—Drop-down field.

Status—Drop-down field. Values are: Pending, Testing, Request Approval, Requires Remediation, Control Updated, Effective.

Description of Control (Description) —Multi-line character field. Used for complete description of the process control.

Suggested Fields

Notes—Multi-line character field for any relevant information to be included with the Issue.

Process—Drop-down field. Values are:

Expenditures—Dependent values that are displayed in the Subprocess field when this value is selected are Purchasing, Processing AP, Maintaining Supplier Master File.

Fixed Assets— Dependent values that are displayed in the Subprocess field when this value is selected are Acquiring Fixed Assets, Depreciating Fixed Assets, Disposing of Fixed Assets, Managing Fixed Assets, Maintaining Register and/or Master File.

Inventory Management— Dependent values that are displayed in the Subprocess field when this value is selected are Managing Inventory, Receiving and Storing Raw Materials, Requisitioning Materials,

Producing/Costing Inventory, Handling Finished Products, Shipping Finished Products, Maintaining Inventory Master File.

Payroll and Personnel— Dependent values that are displayed in the Subprocess field when this value is selected are Hiring Personnel, Terminating Personnel, Recording Time, Calculating Payroll, Disbursing Payroll, Maintaining Payroll Master Files.

Revenue— Dependent values that are displayed in the Subprocess field when this value is selected are Managing and Processing Orders, Invoicing, Sales Returns and Adjustments, Processing Cash Receipts, Maintaining Customer Master File.

Treasury— Dependent values that are displayed in the Subprocess field when this value is selected are Borrowing, Managing Cash Investments, Managing Derivative Transactions.

Subprocess—Drop-down field for selecting the subprocess to the main process. This is actually a dependent field, the choices for which depend on the choice of Process.

Next Review Date—Date/time field. Set the appointment for the next review of the control process.

Test Date—Date/time field for defining the test date.

Test Plan—Multi-line character field for entering the test plan for the process.

Test Results—Drop-down field for entering the test results. Values are Abortd, Completed Successfully, Completed with Failures.

Address Book—The Address Book is a sub-database that contains all of the contact information for your organization members. Each record in the Address Book is called a “Contact”. Organization members are referred to as “Contacts”. The Address Book can contain up to 100 fields (SQL/Access versions are unlimited) for employee data, including Name, Department, Phone number, Email address, etc.

Suggested Address Book Fields

Last Name (character field)

First Name (character field)

Email address (Email address)

Department (character field)

User ID (chartacter field)

Phone (character field)

SOX IT Change Management

This template is designed to ensure that changes made to financial data comply with Sarbanes-Oxley requirements. The Issue page that is created with this template contains sections that are Status-dependent, meaning that the sections of the Issue expand or collapse depending on the value in the Status field.

Built-in Fields

Title—Single-line character field.

Priority—Drop-down field.

Status—Drop-down field. Values are: New, Initiation Phase, Design Phase, Development Phase, QA Testing Phase, Implementation Phase, Rejected, Canceled, All Phases, Completed.

Summary of Change (Description) **—**Multi-line character field. Used for complete description of the proposed change.

Suggested Fields

Status set to New—When the Status field is set to New, the following suggested fields are shown in the RFC Information section:

Reason for Change—Drop-down field. Values are: Incident/Problem Resolution, User/Customer Dissatisfaction, New Requirements, Upgrade to Infrastructure, New or Changed Legislation, Location Change, Product/Service Change from Vendor, New Account, Personnel Vacancy, Updated Information.

Change Type—Drop-down field. Values are:

Data Content—Dependent values that are displayed in the Category field when this value is selected are Updating Information, Replacing Information, Deleting Information.

Data Storage Method—Dependent values that are displayed in the Category field when this value is selected are Change to Database (DDL), Change Server, Change Database.

Software Update—Dependent values that are displayed in the Category field when this value is selected are Upgrade to Software, Feature Request.

Equipment Update—Dependent values that are displayed in the Category field when this value is selected are CD-ROM/DVD, Hard Drive, Memory, Processor, Operating System.

New Application—Dependent values that are displayed in the Category field when this value is selected are Replacing Existing Application, For New Requirements.

New Equipment—Dependent values that are displayed in the Category field when this value is selected are Replacing Existing Equipment, Supplementing Existing Equipment, New Implementation.

Backup/Restore—Dependent values that are displayed in the Category field when this value is selected are Backup to Tape, Backup to CD/DVD, Restore from Tape, Restore from CD/DVD.

Policy Change—Dependent values that are displayed in the Category field when this value is selected are Data Access, Server Access, Physical Data Storage, User Account Management.

Access Control—Dependent values that are displayed in the Category field when this value is selected are Access to Data, Access to Server, Access to Application.

Category—Drop-down field for selecting the category for the change type. This is actually a dependent field, the choices for which depend on the choice of Change Type.

Data type— Drop-down field for selecting the type of data to be changed. Values are: Financial Accounting, Financial Reporting, Internal Auditing, Information Security, Product Information.

Data Classification—Drop-down field for selecting a classification for the data to be changed. Values are: Public, Proprietary, Confidential, Secret.

Business Unit Impacted—Drop-down field for defining the business unit that is affected by the change. Values are: Finance, IT, Audit, Legal, Operations.

Application—Drop-down field for defining the software applications that will be affected by the change. Values are: Acrobat, Excel, FootPrints, Internet Explorer, Netscape, Outlook, PhotoShop, PowerPoint, Quick Books, Word.

Business Owner—Drop-down field for defining the title of the individual whose business Unit will be affected by the change. Values are: CFO, CIO, CEO, COO, Director of Accounting, Director of IT, Accounting Manager, IT Manager.

IT Owner/Custodian—Drop-down field for defining the title of the individual within the IT department who has responsibility for implementing the change. Values are: CIO, IT Director, IT Manager, IT Analyst.

Host server—Drop-down field for setting the name of the server on which the change is to be implemented. Values are: SERVER1, SERVER2, SERVER3, SERVER4, SERVER5, SERVER6, SERVER7, SERVER8.

Status set to Initiation/Evaluation Phase—When the Status field is set to Initiation/Evaluation Phase, the following suggested fields are shown in the RFC Information section:

Initiation Start Date—Date field for when the phase began.

Initiation Action—Drop-down field for selecting the status of action in this phase. Values are: In Progress, Completed, Insufficient Data.

Initiation Notes—Multi-line character field for notes.

Estimated Scope—Drop-down field for defining the scope of the change in terms of its severity. Values are: Minor, Significant, Major, Company-wide.

Cost/Impact—Drop-down field for defining the estimated financial impact of the change. Values are: $0-$5k, $5k-$10k, $10k-$50k, $100k-$500k, $500k+.

Business Owner Identified—Checkbox field for defining whether the business owner for the change has been determined. This field is to be completed at the end of the phase.

IT Owner Identified—Checkbox field for defining whether the IT owner for the change has been determined. This field is to be completed at the end of the phase.

Application Identified—Checkbox field for defining whether the application affected by the change has been determined. This field is to be completed at the end of the phase.

Server Identified—Checkbox field for defining whether the server affected by the change has been determined. This field is to be completed at the end of the phase.

Initiation End Date—Date field for noting when this phase is completed. This field is to be completed at the end of the phase.

Status set to Design Phase—When the Status field is set to Design Phase, the following suggested fields are shown in the RFC Information section:

Design Start date—Date field for when the phase began.

Design Action—Drop-down field for selecting the status of action in this phase. Values are: In Progress, Completed, Insufficient Data.

IT Lead—Drop-down field for specifying the title of the individual who will be the leading IT person for the development of the change. Values are: CIO, IT Director, IT Manager, IT Analyst.

Approximate Time to Complete—Estimate of the amount of time it will take to complete the design and implementation of the change.

Design Notes—Multi-line character field for notes.

Technical Specs Attached—Checkbox field for defining whether the Technical Specifications have been attached to the Issue. If checked, it means the specifications are attached.If not checked, it means the specifications are not attached. This field is to be completed at the end of the phase.

Security Review Completed—Checkbox field for defining whether the Security Review has concluded. If checked, it means the review has been completed. If not checked, it means the review has not been completed. This field is to be completed at the end of the phase.

Impact Review Completed—Checkbox field for defining whether the Impact Review has concluded. If checked, it means the review has been completed. If not checked, it means the review has not been completed. This field is to be completed at the end of the phase.

Design End date—Date field for noting when this phase is completed. This field is to be completed at the end of the phase.

Status set to Development Phase—When the Status field is set to Design Phase, the following suggested fields are shown in the RFC Information section:

Development Start Date—Date field for when the phase began.

Development Action—Drop-down field for selecting the status of action in this phase. Values are: In Progress, Completed, Insufficient Data.

Primary Developer—Drop-down field. The title of the individual who will be the leading developer on the project. Values are IT Director, IT Manager, IT Developer, IT Analyst.

Development Notes—Multi-line character field for notes.

Code Review Completed—Checkbox field for defining whether the Code Review has concluded. If checked, it means the review has been completed. If not checked, it means the review has not been completed. This field is to be completed at the end of the phase.

Development End date—Date field for noting when this phase is completed. This field is to be completed at the end of the phase.

Status set to QA Testing Phase—When the Status field is set to Design Phase, the following suggested fields are shown in the RFC Information section:

QA Testing Start—Date field for when the phase began.

QA Action—Drop-down field for selecting the status of action in this phase. Values are: Not Started, In Progress, Completed, Insufficient Data.

Primary Tester—Drop-down field. The title of the individual who will be the leading tester on the project. Values are IT Director, IT Manager, IT Developer, IT Analyst, QA Analyst, QA Manager, QA Director.

QA Testing Notes—Multi-line character field for notes.

Functionality Verified—Checkbox field for defining whether the test results are verified. If checked, it means the functionality has been verified. This field is to be completed at the end of the phase.

Usabillity verified—Checkbox field for defining whether the usability test results are verified. If checked, it means the usability has been verified. This field is to be completed at the end of the phase.

QA Testing End date—Date field for noting when this phase is completed. This field is to be completed at the end of the phase.

Status set to Implementation Phase—When the Status field is set to Design Phase, the following suggested fields are shown in the RFC Information section:

Implementation Start Date—Date field for when the phase began.

Implementation Action—Drop-down field for selecting the status of action in this phase. Values are: Not Started, In Progress, Completed, Insufficient Data.

Implementation Plan—Multi-line character field for describing the implementation plan.

Back-out Plan—Multi-line character field for describing the plan for backing out if there is a problem with the implementation.

Implementation Notes—Multi-line character field for notes.

Change Deployed—Checkbox field for defining whether the change has been deployed. If checked, it means the change has been deployed. This field is to be completed at the end of the phase.

User notified—Checkbox field for defining whether the users affected by the change have been notified of the change. If checked, it means the users have been notified. This field is to be completed at the end of the phase.

Implementation End date—Date field for noting when this phase is completed. This field is to be completed at the end of the phase.

Status set to Rejected, Cancelled, or Completed—These Statuses do not affect the display of other fields.

Status set to All Phases—All of the sections are expanded when the status is set to All Phases.

Address Book—The Address Book is a sub-database that contains all of the contact information for your organization members. Each record in the Address Book is called a “Contact”. Organization members are referred to as “Contacts” in FootPrints Service Core. The Address Book can contain up to 100 fields (SQL/Access versions are unlimited) for employee data, including Name, Department, Phone number, Email address, etc.

Suggested Address Book Fields

Last Name (character field)

First Name (character field)

Email address (email address)

Department (character field)

Phone (character field)

Job Title (character field)

IT Outsourcing

This template is designed to keep track of IT issues for an IT Outsourcer who provides Third-Party technical support and services for another organization.

Built-in Fields

Title—Single-line character field.

Priority—Drop-down field.

Status—Drop-down field. Values are: Open, Need More Info, Await Approval, Pending, Closed.

Description—Multi-line character field. Used for complete description of the proposed case for outsourcing.

Workspace Fields—Up to 100 custom Workspace Fields can be created (no limit in SQL/Access versions) to record information about the incident. Contact information is tracked in the Address Book (see below). Here are some suggested fields for the IT Outsourcing Service Desk. A three-level field dependency group will be automatically created using the fields Problem Type, Category, and Symptom

Problem Type (drop-down)—Hardware, Software, Network, Printer

Hardware:

Category (drop-down) —CD-ROM, Hard Drive, Floppy Drive, Keyboard, Memory, Modem, Monitor, Mouse, Network Card, Network, Telephone

Symptom (drop-down) —Disc stuck in drive - will not eject, Drive empty - will not open, Drive not responding, Error reading drive, Noisy hard drive, Slow hard drive, Keyboard dirty, Key(s) missing, Key(s) stuck, Keyboard not responding, Need more memory, Modem not responding, Modem too slow, Modem isn't detected, Monitor Flickering, Monitor too dim, Monitor not working, Mouse not responding smoothly, Mouse not responding at all, Mouse missing, Need NIC, Install Telephone, Repair Telephone

Software:

Category (drop-down) —Acrobat, Excel, FootPrints, Internet Explorer, Netscape, Outlook, Photoshop, Powerpoint, Quick Books, WorSymptom (drop-down) —Missing Shortcut to Application, Application will not open, Application hangs, Application will not close, Application too slow, Request for training

Network:

Category (drop-down) —Change Authority, Create ID, Reset ID, Can't Connect to Network, Can't Connect to Internet, Password Change, Email

Printer:

Category (drop-down) —Canon i9100, Canon MultiPASS F20, Canon MultiPASS F60, Epson Stylus 820s, Epson Stylus CS5200, HP DeskJet 3420, HP LaserJet 2100, HP LaserJet 2200, HP LaserJet 3330, HP LaserJet 2500tn, HP LaserJet 4200, HP LaserJet 4300, HP LaserJet 4600

Symptom (drop-down) —Printer not responding, Printer needs toner cartridge, Paper stuck in printer, Paper needed for printer

Due Date (date/time field)

Error Message (character field)

Platform (drop-down) —Windows 2000, Windows 2003, Windows 2008, Windows XP, Mac OS9, Mac OSX, Sun Solaris, Unix, Palm OS

Work Scheduled (date/time field)

Follow-up Date (date field)

Follow-up Occurred? (checkbox)—Check for yes or leave unchecked for no.

Asset Data (multi-line character field) —Provides a field to describe the assets of the customer.

Address Book—The Address Book is a sub-database that contains all of the contact information for your organization members. Each record in the Address Book is called a “Contact”. Organization members are referred to as “Contacts” in FootPrints Service Core. The Address Book can contain up to 100 fields (SQL/Access versions are unlimited) for employee data, including Name, Department, Phone number, Email address, etc.

Suggested Address Book Fields

Last Name (character field)

First Name (character field)

Email address (Email address)

Phone (character field)

FAX (character field)

Service level (drop-down field)

Company (character field)

Department (character field)

Country (drop-down field)

Street address (character field)

City (character field)

State (drop-down field)

Zip code (character field)

Site (drop-down field)

Industry (drop-down field)

Company setup (multi-line character field)

HIPAA Patient Management

The HIPAA Patient Management template was created to help medical facilities track and manage patient personal, insurance, and payment information, as well as visits, services rendered, and future appointments.

Built-in Fields

Service Type (title)—Single-line character field.

Priority—Drop-down field.

Status—Drop-down field. Values are: Open, Need More Info, Await Approval, Pending, Closed.

Description—Multi-line character field.

Workspace Fields—Up to 100 custom Workspace Fields can be created (no limit in SQL/Access versions) to record information about the incident. Contact information is tracked in the Address Book (see below). Here are some suggested fields for tracking and managing HIPAA Issues.

Appointment Date (date/time)

Provider (drop-down) —Dr. A, Dr. B, Dr. C, Dr. D

Detail of Service (date/time field)—Multi-line character field.

Service Code (drop-down) —A0130, A4206, B4034, E1399, H0025, S5100

Pre-Authorization Number (character field)

Reminder Call Made (checkbox field)

Reason for Cancellation (drop-down) —No-Show, Emergency, Scheduling Error, Other

Cost of Service (character field)

Copay Received (checkbox field)

Payment Method (drop-down) —Cash, Check, Credit

Check Number (character field)

Credit Card Type (drop-down) —Visa, Discover, American Express, MasterCard

Cost of Service (character field)

Credit Card Number (character field)

Expiration Date (date field)

Address Book—The Address Book is a sub-database that contains all of the contact information for your organization members. Each record in the Address Book is called a "Contact". Organization members are referred to as "Contacts" in BMC FootPrints Service Core. The Address Book can contain up to 100 fields (SQL/Access versions are unlimited) for employee data, including Name, Department, Phone number, Email address, etc.

Suggested Address Book Fields

Last Name (character field)

Middle Name (character field)

First Name (character field)

Patient ID (character field)

Home Phone (character field)

Work Phone (character field)

Address (character field)

City (character field)

State (drop-down field)

Zip (character field)

Employer (character field)

DOB (date field)

SS# (character field)

Gender (drop-down field)—Female, Male

Marital Status (drop-down field)—Married, Single, Widowed, Divorced, Separated, Unknown

Default Provider (drop-down field)—01-Dr. Jane Smith, 02-Dr. Mark Jones, 03-David Sanders

Allergies (character field)

Medications (character field)

Insurance Company (drop-down field)—Aetna, BCBS, United Healthcare, Cigna

Group # (character field)

ID (character field)

Deductible (character field)

Copay Amount (character field)

Relationship to Policy Holder (drop-down field)—Self, Spouse, Parent

Policy Holder Name (character field)

Address (Policy Holder) (character field)

City (Policy Holder) (character field)

State (Policy Holder) (drop-down field)

Zip(Policy Holder) (character field)

SS# (Policy Holder) (character field)

DOB (Policy Holder) (date field)

Employer (Policy Holder) (character field)

Facilities Management

The Facilities Management workspace is designed to provide a fast track to starting your customer surveys. Customer surveys must be connected to another workspace about which the survey is conducted and must be linked to the other workspace's Address Book.

Fields - Custom fields can be created to track the different requests and problems reported to the corporate service desk. These fields will help with quick data entry, and help sort and report on different areas and problem types.

Built-in Fields:

Title – Is used as a brief summary or description of request. If desired, this can be a drop-down list of acceptable request types.

Comment – Is used for complete description of request or problem, updates, and resolution. Each addition to the description automatically contains a time, date and user stamp.

Assignees – The Assignee field automatically lists all agents. Refer to the section below on “Assignment” for more information.

Statuses – Open, In Progress, Awaiting Parts, Closed

NOTE

Request status is a built-in status, but only appears when an employee customer submits a Request, prior to it being assigned to an Agent. Open and Closed statuses are also built-in, so only the others need to be created.

Priorities

Maximum - Set to 4

Default - Set to 3

Words defined - Urgent, High, Medium, Low

Workspace Fields – Up to 100 custom fields can be created (no limit in SQL/Access versions) to record the survey and information about the survey. Contact information is tracked in the Address Book (see below). Here are some suggested survey questions that are part of the template:

Category - Lighting, Equipment, Electrical, Cleaning, Plumbing, HVAC, Other

Symptom - Dependent on the answer for Category

Lighting - Replace light bulbs, Lights not working, Need New Light Fixtures, Outlet not working, Wall switch not working, Other-

Electrical - Need New Light Fixtures, Outlet not working, Wall switch not working, New wiring, Current wiring needs attention, Other

Cleaning - Garbage needs to be removed, Hardware needs to be dusted, Floors need to be mopped, Broken glass present in room, Other

Plumbing - Broken pipe, Leaking pipe, Clogged drain, Other

HVAC - No heat from vent, No AC from vent, Vent stuck shut, Other

Estimated Cost- Real number

Estimated Work Hours - Real number

Authorized by (drop-down) - Supervisor, Grounds Manager, Manager A, Manager B

Work Scheduled - Date/time

Time Tracking—BMC FootPrints Service Core can track the time spent by workspace members working on Issues. This data can be used to create time tracking reports, which can be used for billing, or to track any time-related information, such as how long one or more workspace members spend on certain kinds of Issues.

Address Book—The Address Book is a sub-database that can contain all of the contact information for your user base. It is assumed that all Issues concern some employee, with the Address Book used to identify the employee and associated information.

Assignment—Assignment can be handled manually, or the Auto Assign Feature can be used to assign one or more workspace members to Issue based on, for example, the “Issue type” field. A separate drop-down field can be defined with “Resource Names”, or the Assignee field can be used exclusively for the resources to be assigned.

Escalation—Escalation should be enabled and various rules defined to handle high-priority issues and set up due date reminders. Some rules to consider:

Escalation rules can be defined for high/urgent priority issues to send email notification to the Workspace Lead.

Rules can be made to handle Issues that have been open for a certain amount of time to send a reminder to the assignees that the Issue must be completed, and/or to reassign them to someone else.

A rule should be set to send an email to the assigned workspace member(s) based on the “Due Date” field. The criteria should include:

Name: Per-Issue Reminders

Escalation On/Off: Select “On”

Actions: “Send mail to the Assignees” checked, select one or more email types

Time Unedited: 5 minutes

Criteria:

Status=Highlight “Open”, and any custom statuses to get reminders on active Issues.

For “**Due Date**”, choose “equal to” and check the box for “Current Date” (do not fill in any dates).

Email—Outgoing email notification rules can be set to send mail to assignees for all changes, or, if you would prefer, only for certain statuses. Incoming email can be configured to handle both incoming email submissions and email updates to existing Issues, allowing workspace members to submit, update and close Issues via email.

CCs—Other workspace members, or people outside of the workspace, can be copied on an Issue without actually being assigned. The user receives email notification, and can optionally respond to the email with comments or suggestions, which are automatically threaded to the Description of the Issue with a time, date and user stamp.

Queues—Create 1 Saved Search for each “Request Type”. For example, the Criteria for a queue for a called “SuperApp Issues” would include “Status”=Request, Open, and all other active statuses, “Request type”=” SuperApp Issues”, Sorting “Due Date Submitted Ascending” (oldest at the top), Name “SuperApp Issues Queue”, Type “Shared”. Other queues can be made for each Workspace members’ assignments, sort all active Issues by due date, etc.

Reports—The built-in Metric reports can be used by the manager to get important metrics like aging reports, number of Open Issues by assignee, etc. Custom report templates can be made to show details and stats for things like: All active Issues by assignee, All active Issues by Request Type, All active Issues by Due Date, etc. The Auto-run Reports feature can be used to automatically email one or more reports to the Managers every Monday morning, etc.

Cross-workspace Reports—The Administrator can create cross-workspace reports to return data from multiple workspaces, such as Service Desk, Development, and Issue Management. Any common fields found in the workspaces selected can be included in the report. So, if the Address Book is shared between the aforementioned workspaces, a report can be generated on a particular contact that includes all activity for that user across all departments.

Knowledge Base—The BMC FootPrints Service Core Knowledge Base feature can be useful for the Workspace team. Procedures, policies, and documents can be made into (and attached to) Solutions. FAQ categories can be defined to group solutions by request type, etc. All workspace members can have access to Solutions, attachments and FAQ categories.

Users—The Workspace team will normally use Agent licenses as described in the functionality above. Agent users can set their personal preferences to view a list of their own assignments on the BMC FootPrints Service Core home page, as well as set their home page columns to display important information about those Issues on the home page, like “Request type”, “Title” “Due date”, etc.

Agents can use their network ID and password to log into BMC FootPrints Service Core if NT, UNIX or LDAP password authentication is enabled.

Copy/Move Issue feature—This feature can be used to communicate with teams in other workspaces. For instance, a workspace member could assign an Issue in a team member for another workspace. When the Issue is copied or moved to the other workspace, a reference to each other is placed in both the originating Issue and the new Issue.

File attachments—Workspace members can attach files to particular Issues. Solutions in the Knowledge Base can contain file attachments, allowing easy distribution and collaboration of procedures, documents, and other files to the whole workspace team.

NOTE

File Attachments in BMC FootPrints Service Core are kept in the C:\FootPrints\html\tmp\Attachments directory on the BMC FootPrints Service Core server. Anti-virus software can be pointed to that directory to ensure that attachments do not contain viruses.

BMC FootPrints Service Core Instant Talk—The Instant Talk feature can be used by team members to chat with each other when they are in different sites.

Splash screen—The splash screen option can be used to communicate important information and alerts to workspace members. The splash screen can include text, HTML, links to other sites or pages, graphics, etc. It can be updated at any time by the Workspace Administrator.

Human Resource Management

BMC FootPrints Service Core is an excellent tool for Human Resources management. Workspace team members in different locations can collaborate, communicate, and organize tasks, share documents, and more using theBMC FootPrints Service Core intuitive interface from any browser. Repetitive tasks with numerous subtasks, such as New Hire processes, can be managed with BMC FootPrints Service Core in such a way as to make them automatic and permit nothing to be forgotten. Here are some suggested fields and settings for a Human Resource Management Workspace.

Fields—Custom fields can be created to track the different Issues assigned to workspace members. These fields will help with quick data entry, and help sort and report on different areas and issue types.

Built-in Fields:

Issue Title—Is used for a brief summary or description of Issue or task.

Priorities—Maximum: Set to 5; Default: Set to 3 (Medium); Words defined: Urgent, High, Medium, Low

Statuses—Open, On Hold, In Progress, Need More Info, Approved, Denied, Closed.

Issue—Job Change, Benefit Change, Complaint, Discipline, Personal Request

Issue Category—Issue Categories are dependent on the selection made for the Issue.

If **Job Change** is selected—Changed Location, Changed Position, Changed Title

If **Benefit Change** is selected—Change Beneficiary, Change Coverage

If **Complaint** is selected—File Complaint, Dismiss Complaint

If **Discipline** is selected—Tardy, Absenteeism, Behavior, Job Performance, Other

If **Personal Request** is selected—Other, Vacation, Personal Day, Sick Day, Leave of Absence, Mat/Paternity Leave

Old/New Location—Dependent on the selection of Job Change. If Job Location is chosen, then a pop-up displays fields to enter the Old Location, the New Location, and Salary Change information.

Old/New Position—Dependent on the selection of Job Change. If Job Position is chosen, then a pop-up displays fields to enter the Old Position, the New Position, and Salary Change information.

Old/New Title—Dependent on the selection of Job Change. If Job Title is chosen, then a pop-up displays fields to enter the Old Title, the New Title, and Salary Change information.

Notes—Is used for a complete description of the Issue, and all activity and updates on that Issue. Each addition to the description contains a time, date, and user stamp.

Attachments—File attachments are useful to attach any documents relevant to the issue. The size of the attachment is unimportant so that, if you wanted, you could attach electronic copies of your Employee Handbook, Benefits documentation, etc.

Workspace Members—The Workspace Members field automatically lists the workspace members. This field is used to define the resources for each Issue. Please refer to the section below on "Assignment" for more information.

Assigned Personnel—Agents are assigned to the Issue by using the arrow buttons to move Workspace Members into the Assigned Personnel field.

Email Assigned Personnel—Notifies assigned Agents via email of the Issue.

Email Contact—Notifies the contact via email of the Issue.

Email CCs—You can enter other email addresses for notification.

Workspace Fields—Up to 100 custom Workspace Fields can be created (no limit in SQL/Access versions) to record information about the Issue. Here are some suggested fields for the workspace team.

Duration (integer or decimal field)—Enter in number of days.

Start Date (date field)

Due Date (date field)

Percentage completed (integer or decimal field)

Resources—A drop-down field can be defined with Resource Names, or the Assignee field can be used for the resources to be assigned.

Time Tracking—BMC FootPrints Service Core can track the time spent by workspace members working on Issues. This data can be used to create time tracking reports, which can be used for billing, or to track any time-related information, such as how long one or more workspace members spend on certain kinds of Issues.

Address Book—The Address Book is a sub-database that can contain all of the contact information for your user base. It is assumed that all Issues concern some employee, with the Address Book used to identify the employee and associated information.

Assignment—Assignment can be handled manually, or the Auto Assign Feature can be used to assign one or more workspace members to Issue based on, for example, the "Issue type" field. A separate drop-down field can be defined with "Resource Names", or the Assignee field can be used exclusively for the resources to be assigned.

Escalation—Escalation should be enabled and various rules defined to handle high-priority issues and set up due date reminders. Some rules to consider:

Escalation rules can be defined for high/urgent priority issues to send email notification to the Workspace Lead.

Rules can be made to handle Issues that have been open for a certain amount of time to send a reminder to the assignees that the Issue must be completed, and/or to reassign them to someone else.

A rule should be set to send an email to the assigned workspace member(s) based on the "Due Date" field. The criteria should include:

Name: Per-Issue Reminders

Escalation On/Off: Select "On"

Actions: "Send mail to the Assignees" checked, select one or more email types

Time Unedited: 5 minutes

Criteria:

Status=Highlight "Open", and any custom statuses to get reminders on active Issues.

For "**Due Date**", choose "equal to" and check the box for "Current Date" (do not fill in any dates).

Email—Outgoing email notification rules can be set to send mail to assignees for all changes, or, if you would prefer, only for certain statuses. Incoming email can be configured to handle both incoming email submissions and email updates to existing Issues, allowing workspace members to submit, update and close Issues via email.

CCs—Other workspace members, or people outside of the workspace, can be copied on an Issue without actually being assigned. The user receives email notification, and can optionally respond to the email with comments or suggestions, which are automatically threaded to the Description of the Issue with a time, date and user stamp.

Queues—Create 1 Saved Search for each "Request Type". For example, the Criteria for a queue for a called "SuperApp Issues" would include "Status"=Request, Open, and all other active statuses, "Request type"=" SuperApp Issues", Sorting "Due Date Submitted Ascending" (oldest at the top), Name "SuperApp Issues Queue", Type "Shared". Other queues can be made for each Workspace members' assignments, sort all active Issues by due date, etc.

Reports—The built-in Metric reports can be used by the manager to get important metrics like aging reports, number of Open Issues by assignee, etc. Custom report templates can be made to show details and stats for things like: All active Issues by assignee, All active Issues by Request Type, All active Issues by Due Date, etc. The Auto-run Reports feature can be used to automatically email one or more reports to the Managers every Monday morning, etc.

Cross-workspace Reports—The Administrator can create cross-workspace reports to return data from multiple workspaces, such as Service Desk, Development, and Issue Management. Any common fields found in the workspaces selected can be included in the report. So, if the Address Book is shared between the aforementioned workspaces, a report can be generated on a particular contact that includes all activity for that user across all departments.

Knowledge Base—The BMC FootPrints Service Core Knowledge Base feature can be useful for the Workspace team. Procedures, policies, and documents can be made into (and attached to) Solutions. FAQ categories can be defined to group solutions by request type, etc. All workspace members can have access to Solutions, attachments and FAQ categories.

Users—The Workspace team will normally use Agent licenses as described in the functionality above. Agent users can set their personal preferences to view a list of their own assignments on the BMC FootPrints Service Core home page, as well as set their home page columns to display important information about those Issues on the home page, like "Request type", "Title" "Due date", etc.

Agents can use their network ID and password to log into BMC FootPrints Service Core if NT, UNIX or LDAP password authentication is enabled.

Copy/Move Issue feature—This feature can be used to communicate with teams in other workspaces. For instance, a workspace member could assign an Issue in a team member for another workspace. When the Issue is copied or moved to the other workspace, a reference to each other is placed in both the originating Issue and the new Issue.

File attachments—Workspace members can attach files to particular Issues. Solutions in the Knowledge Base can contain file attachments, allowing easy distribution and collaboration of procedures, documents, and other files to the whole workspace team.

NOTE

File Attachments in BMC FootPrints Service Core are kept in the C:\FootPrints\html\tmp\Attachments directory on the BMC FootPrints Service Core server. Anti-virus software can be pointed to that directory to ensure that attachments do not contain viruses.

BMC FootPrints Service CoreInstant Talk—The Instant Talk feature can be used by team members to chat with each other when they are in different sites.

Splash screen—The splash screen option can be used to communicate important information and alerts to workspace members. The splash screen can include text, HTML, links to other sites or pages, graphics, etc. It can be updated at any time by the Workspace Administrator.

Service Desk

This is an ITIL-compatible (Information Technology Infrastructure Library) workspace template for tracking Incidents and Service Requests.

Fields - Custom fields can be created to track the different requests and problems reported to the corporate Service Desk. These fields will help with quick data entry, and help sort and report on different areas and problem types.

Built-in Fields:

Title – Is used as a brief summary or description of request. If desired, this can be a drop-down list of acceptable request types.

Description – Is used for complete description of request or problem, updates, and resolution. Each addition to the description automatically contains a time, date and user stamp.

Assignees – The Assignee field automatically lists all agents. Refer to the section below on “Assignment” for more information.

Statuses – Request, Open, Closed, Need More Info, Await Approval, Pending, Internal FAQ

NOTE

Request” status is a built-in status, but only appears when an employee customer submits a Request, prior to it being assigned to an Agent. Open and Closed statuses are also built-in, so only the other 4 need to be created.

Priorities

Maximum - Set to 5

Default - Set to 5

Words defined - Critical, High, Medium, Low, Planning

Workspace Fields – Up to 100 custom Workspace Fields can be created (no limit in SQL/Access versions) to record information about the incident. Contact information is tracked in the Address Book (see below). Here are some suggested fields.

Type of Incident (drop-down) – Failure, Service Request

Main Category (drop-down) – Hardware, Software, Printer, Network

Hardware

Sub-category (drop-down) - CD-ROM, Hard Drive, Floppy Drive, Keyboard, Memory, Modem, Monitor, Mouse

Software

Sub-category (drop-down) - Acrobat, Excel, Internet Explore, Outlook, PowerPoint, PhotoShop, Word

Printer

Sub-category (drop-down) - Various printer models

Network

Sub-category (drop-down) - Change Authority, Can't Connect to Network, Can't Connect to Internet

Closure Code (drop-down) - Completed successfully, Training required, Documentation needed, No fault found, Monitoring required, Advice given, RFC needed

Resolution - Multi-line text entry field for describing the resolution.

Service Level

Impact (drop-down) - High, Medium, Low

Urgency (drop-down) - High, Medium Low

SLA Response Time (date/time)

SLA Due Date (date/time)

CI Links - For BMC FootPrints Configuration Manager. BMC FootPrints Configuration Manager is an add-on module.

Time Tracking - BMC FootPrints Service Core can track the time spent by Agents working on Issues. This data can be used to create time tracking reports, which can be used for billing, or to track any time-related information, such as how long one or more users spend on certain kinds of Issues.

Recommended configuration – Enabled, Mandatory, Automatic.

With this configuration, BMC FootPrints Service Core automatically tracks the time spent by Agents as they fill out and edit an Issue, for example, as the Agent is speaking on the phone with the user. In addition, the initial Agent (or second/third level Agent) can fill in their time spent on troubleshooting/fixing manually. An hourly billing rate should be specified for each Agent (see **Users**). In this way, time tracking data can be used for charge-backs to other departments, or to justify increased resources.

Address Book – The Address Book is a sub-database that contains all of the contact information for your user base. Each record in the Address Book is called a “Contact”. Users who are reporting problems are referred to as “Contacts” or “Employee Customers”. The Address Book can contain up to 100 fields (SQL/Access versions are unlimited) for employee data, including Name, Department, Phone number, Email address, etc.

Suggested Address Book Fields:

Department (drop-down) – Customer Service, R&D, Executive, Finance, Human Resources, IT, Marketing, Sales

Last Name (character field)

First Name (character field)

User ID (character field)

Email address (Email address)

Phone (character field)

Location (drop-down) – 1st Floor, 2nd Floor, 3rd Floor, 4th Floor, Downtown Office, Remote

Service Level (drop-down) – Platinum, Gold, Silver, Bronze.

NOTE

The preceding field should be specified as “Internal”.

Address Book Data – Address Book data can be entered manually for each Contact, imported from a text file, or taken dynamically from and LDAP-compliant contact database. Please refer to the section on Address Book Administration for more information.

Assignment – Assignment can be handled manually, or the Auto Assign Feature can be used to assign one or more users to a new Issue based on, for example, the “Request Type” field.

Escalation – Escalation should be enabled and various rules defined to meet service levels, handle high-priority issues, and set up follow-up reminders. Some rules to consider:

One “Instant” escalation rule can be made for each Service Level. The actions can include changing the priority, to an appropriate priority for that level, assignment, etc. See the example in the topic on “Escalation”.

Escalation rules can be defined for certain high priority issues, such as network outages, etc.

Rules can be made to handle Issues that have been open for a certain amount of time to send a reminder to the assignees that the Issue must be resolved, and/or to reassign them to someone else.

A rule should be set to send an email to the assigned Agent based on the “Follow Up Date” field. The criteria should include:

Name: Per-Issue Reminders

Escalation On/Off: Select “On”

Actions: “Send mail to the Assignees” checked, select one or more email types

Time Unedited: 5 minutes

Criteria:

Status=Highlight ”Request”, “Open”, and any custom statuses to get reminders on active Issues, or “Closed” to get reminders on Closed Issues (OR highlight all statuses except for “Solution” to get reminders on any Status Issue)

For “**Follow Up Date**”, choose “equal to” and check the box for “Current Date” (do not fill in any dates).

Email – Outgoing email notification rules should be set to send mail to assignees and customers for all changes, or, if you would prefer, only for certain statuses. One or more Agents should also be defined to receive an email each time a new Request is submitted by a Customer. Incoming email can be configured to handle both incoming email submissions and email updates to existing Issues.

CCs – Other agents, developers, or other users can be copied on an Issue without actually being assigned. These people will receive email notification, and can optionally respond to the email with comments or suggestions, which will automatically be threaded to the Description of the Issue with a time, date and user stamp.

Queues – Create 1 Saved Search for each “Request Type” (Hardware, Software, Network, etc). For example, the Criteria for the Hardware Queue would include “Status”=Request, Open, and all other active statuses, “Request Type”=Hardware, Sorting “Date Submitted Ascending” (oldest at the top), Name “Hardware Queue”, Type “Shared”.

Reports – The built-in Metric reports can be used by the Service Desk Manager to get important metrics like Open vs. Closed rates, number of Open Issues by assignee, etc. Custom report templates can be made to

show details and stats for things like: All active Issues by assignee, All active Issues by Request Type, All active Issues by Department, Priority, etc. The Auto-run Reports feature can be used to automatically email one or more reports to the Managers every Monday morning, etc.

Cross-workspace Reports – The Administrator can create cross-workspace reports to return data from multiple workspaces, such as Service Desk, Development, and Issue Management. All built-in fields, as well as any common custom fields found in the workspaces, can be included in the report. So, if the Address Book is shared between the aforementioned workspaces, a report can be generated on a particular contact that includes all activity for that user across all departments.

Asset Management – The BMC FootPrints Asset Core Add-on Module is highly recommended. All hardware, software, and network information for each PC will be automatically tracked. Other network devices, like servers, routers and printers can also be tracked. Asset information can be included as part of the history of an Issue.

Knowledge Base – The BMC FootPrints Service Core Knowledge Base feature is very useful for the Internal Service Desk. Frequently Asked Questions, Solutions to common problems, and patches can be made into Solutions. When a Customer Issue is resolved, it can also be made into a Solution. FAQ categories can be defined to group solutions by problem type, platform, software version, etc. Both Agents and Customers can have access to Solutions and FAQ categories. Agents can use the Knowledge Base to solve current Issues, searching the BMC FootPrints Service Core Knowledge Base by keyword, by FAQ category, and even searching popular online knowledge bases like Microsoft TechNet.

Customer Self Service – The Customer Self Service option allows employee customers to submit and track their Service Desk requests, as well as search the Knowledge Base. Users can log into BMC FootPrints Service Core using a common shared ID and password, their email address, or a unique ID and password. Unique Customer IDs and passwords can be linked to their network IDs and passwords (using NT, UNIX or LDAP password authentication and the Auto-Add Customer feature). Customer contact information can be dynamically populated via the Dynamic Address Book Link feature. Customers can also submit Requests, receive notification, and respond to notification via email.

Users – Agent users can set their personal preferences to view a list of their own assignments on the BMC FootPrints Service Core home page, as well as set their home page columns to display important information about those Issues on the home page, like “Request Type”, “Department”, “Platform”, etc.

Agents can use their network ID and password to log into BMC FootPrints Service Core if NT, UNIX or LDAP password authentication is enabled.

See more information on Customer users under “Customer Self Service”.

File attachments – File attachments are useful for employee customers to provide screenshots of the problem they have having, and for Agents to provide patches, Word documents with step-by-step instructions, etc. Solutions in the Knowledge Base can contain file attachments, allowing easy distribution of patches, procedures, and other files. Incoming email submissions from customers that contain attachments will automatically include those attachments with the Issue that is created in BMC FootPrints Service Core.

NOTE

File Attachments in BMC FootPrints Service Core are kept in the C:\FootPrints\html\tmp\Attachments directory on the BMC FootPrints Service Core server. Anti-virus software can be pointed to that directory to ensure that attachments do not contain viruses.

Surveys—The Customer Survey feature can be used to gather information about the quality of service employee customers receive from the Service Desk and other IT departments. The survey, created by the Workspace Administrator, is sent automatically to the employee customer each time his or her Request is closed.

FootPrints Instant Talk—The Instant Talk feature can be used by the Internal Service Desk to allow customers to chat with available agents, quickening resolution of Issues. Instant Talk can also be used by agents to chat with each other when they are in different parts of the building, different sites, or on the telephone.

Remote Control—The Remote Control feature can be used by agents to take control of a user's desktop to aid in solving a PC-related issue. The VNC Remote Control software can be optionally installed on all PC's, or can be installed on an as-needed basis.

Copy/Move Issue feature—This feature can be used to assign Issues to users in other workspaces. For example, a Service Desk agent could assign an Issue in the Service Desk workspace to the development workspace.

Splash screen—The splash screen option can be used to communicate important information and alerts to agents and customers. Different screens can be defined for agents and customers. Splash screens can include text, HTML, links to other sites or pages, graphics, etc. They can be updated at any time by the Workspace Administrator.

Problem Management

This is an ITIL-compatible workspace template for Incident and Problem Management.

Fields - Custom fields can be created to track the different requests and problems. These fields will help with quick data entry, and help sort and report on different areas and problem types.

Built-in Fields:

Title – Is used as a brief summary or description of request. If desired, this can be a drop-down list of acceptable request types.

Description – Is used for complete description of request or problem, updates, and resolution. Each addition to the description automatically contains a time, date and user stamp.

Assignees – The Assignee field automatically lists all agents. Refer to the section below on "Assignment" for more information.

Statuses – Request, Open, Closed, Need More Info, Await Approval, Pending, Internal FAQ

NOTE

Request" status is a built-in status, but only appears when an employee customer submits a Request, prior to it being assigned to an Agent. Open and Closed statuses are also built-in, so only the other 4 need to be created.

Priorities

Maximum - Set to 5

Default - Set to 5

Words defined - Critical, High, Medium, Low, Planning

Workspace Fields – Up to 100 custom Workspace Fields can be created (no limit in SQL/Access versions) to record information about the problem. Contact information is tracked in the Address Book (see below). Here are some suggested fields.

Type (drop-down) – Problem, Known Error

Impact (drop-down) - High, Medium, Low

Urgency (drop-down) - High, Medium, Low

Incident Information

Type of Incident (drop-down) - Failure, Service Request

SLA Due Date (date/time)

CI Links - CI Links section for BMC FootPrints Configuration Manager. BMC FootPrints Configuration Manager is an add-on module.

Time Tracking - BMC FootPrints Service Core can track the time spent by Agents working on Issues. This data can be used to create time tracking reports, which can be used for billing, or to track any time-related information, such as how long one or more users spend on certain kinds of Issues.

Recommended configuration – Enabled, Mandatory, Automatic.

With this configuration, BMC FootPrints Service Core automatically tracks the time spent by Agents as they fill out and edit an Issue, for example, as the Agent is speaking on the phone with the user. In addition, the initial Agent (or second/third level Agent) can fill in their time spent on troubleshooting/fixing manually. An hourly billing rate should be specified for each Agent (see **Users**). In this way, time tracking data can be used for charge-backs to other departments, or to justify increased resources.

Address Book – The Address Book is a sub-database that contains all of the contact information for your user base. Each record in the Address Book is called a “Contact”. Users who are reporting problems are referred to as “Contacts” or “Employee Customers” in BMC FootPrints Service Core. The Address Book can contain up to 100 fields (SQL/Access versions are unlimited) for employee data, including Name, Department, Phone number, Email address, etc.

Suggested Address Book Fields:

Department (drop-down) – Customer Service, R&D, Executive, Finance, Human Resources, IT, Marketing, Sales

Last Name (character field)

First Name (character field)

User ID (character field)

Email address (Email address)

Phone (character field)

Location (drop-down) – 1st Floor, 2nd Floor, 3rd Floor, 4th Floor, Downtown Office, Remote

Service Level (drop-down) – Platinum, Gold, Silver, Bronze.

NOTE

The preceding field should be specified as “Internal”.

Address Book Data – Address Book data can be entered manually for each Contact, imported from a text file, or taken dynamically from and LDAP-compliant contact database. Please refer to the section on Address Book Administration for more information.

Assignment – Assignment can be handled manually, or the Auto Assign Feature can be used to assign one or more users to a new Issue based on, for example, the “Request Type” field.

Escalation – Escalation should be enabled and various rules defined to meet service levels, handle high-priority issues, and set up follow-up reminders. Some rules to consider:

One “Instant” escalation rule can be made for each Service Level. The actions can include changing the priority, to an appropriate priority for that level, assignment, etc. See the example in the topic on “Escalation”.

Escalation rules can be defined for certain high priority issues, such as network outages, etc.

Rules can be made to handle Issues that have been open for a certain amount of time to send a reminder to the assignees that the Issue must be resolved, and/or to reassign them to someone else.

A rule should be set to send an email to the assigned Agent based on the “Follow Up Date” field. The criteria should include:

Name: Per-Issue Reminders

Escalation On/Off: Select “On”

Actions: “Send mail to the Assignees” checked, select one or more email types

Time Unedited: 5 minutes

Criteria:

Status=Highlight ”Request”, “Open”, and any custom statuses to get reminders on active Issues, or “Closed” to get reminders on Closed Issues (OR highlight all statuses except for “Solution” to get reminders on any Status Issue)

For “**Follow Up Date**”, choose “equal to” and check the box for “Current Date” (do not fill in any dates).

Email – Outgoing email notification rules should be set to send mail to assignees and customers for all changes, or, if you would prefer, only for certain statuses. One or more Agents should also be defined to receive an email each time a new Request is submitted by a Customer. Incoming email can be configured to handle both incoming email submissions and email updates to existing Issues.

CCs – Other agents, developers, or other users can be copied on an Issue without actually being assigned. These people will receive email notification, and can optionally respond to the email with comments or suggestions, which will automatically be threaded to the Description of the Issue with a time, date and user stamp.

Queues – Create 1 Saved Search for each “Request Type” (Hardware, Software, Network, etc). For example, the Criteria for the Hardware Queue would include “Status”=Request, Open, and all other active statuses, “Request Type”=Hardware, Sorting “Date Submitted Ascending” (oldest at the top), Name “Hardware Queue”, Type “Shared”.

Reports – The built-in Metric reports can be used by the Service Desk Manager to get important metrics like Open vs. Closed rates, number of Open Issues by assignee, etc. Custom report templates can be made to show details and stats for things like: All active Issues by assignee, All active Issues by Request Type, All active Issues by Department, Priority, etc. The Auto-run Reports feature can be used to automatically email one or more reports to the Managers every Monday morning, etc.

Cross-workspace Reports – The Administrator can create cross-workspace reports to return data from multiple workspaces, such as Service Desk, Development, and Issue Management. All built-in fields, as well as any common custom fields found in the workspaces, can be included in the report. So, if the Address Book is shared between the aforementioned workspaces, a report can be generated on a particular contact that includes all activity for that user across all departments.

Asset Management – The BMC FootPrints Asset Core Add-on Module is highly recommended. All hardware, software, and network information for each PC will be automatically tracked. Other network devices, like servers, routers and printers can also be tracked. Asset information can be included as part of the history of an Issue.

Knowledge Base – The BMC FootPrints Service Core Knowledge Base feature is very useful for the Internal Service Desk. Frequently Asked Questions, Solutions to common problems, and patches can be made into Solutions. When a Customer Issue is resolved, it can also be made into a Solution. FAQ categories can be defined to group solutions by problem type, platform, software version, etc. Both Agents and Customers can have access to Solutions and FAQ categories. Agents can use the Knowledge Base to solve current Issues, searching the BMC FootPrints Service Core Knowledge Base by keyword, by FAQ category, and even searching popular online knowledge bases like Microsoft TechNet.

Customer Self Service – The Customer Self Service option allows employee customers to submit and track their Service Desk requests, as well as search the Knowledge Base. Users can log into BMC FootPrints Service Core using a common shared ID and password, their email address, or a unique ID and password. Unique Customer IDs and passwords can be linked to their network IDs and passwords (using NT, UNIX or LDAP password authentication and the Auto-Add Customer feature). Customer contact information can be dynamically populated via the Dynamic Address Book Link feature. Customers can also submit Requests, receive notification, and respond to notification via email.

Users – Agent users can set their personal preferences to view a list of their own assignments on the BMC FootPrints Service Core home page, as well as set their home page columns to display important information about those Issues on the home page, like “Request Type”, “Department”, “Platform”, etc.

Agents can use their network ID and password to log into BMC FootPrints Service Core if NT, UNIX or LDAP password authentication is enabled.

See more information on Customer users under “Customer Self Service”.

File attachments – File attachments are useful for employee customers to provide screenshots of the problem they have having, and for Agents to provide patches, Word documents with step-by-step instructions, etc. Solutions in the Knowledge Base can contain file attachments, allowing easy distribution of patches, procedures, and other files. Incoming email submissions from customers that contain attachments will automatically include those attachments with the Issue that is created in BMC FootPrints Service Core.

NOTE

File Attachments in BMC FootPrints Service Core are kept in the C:\FootPrints\html\tmp\Attachments directory on the BMC FootPrints Service Core server. Anti-virus software can be pointed to that directory to ensure that attachments do not contain viruses.

Surveys—The Customer Survey feature can be used to gather information about the quality of service employee customers receive from the Service Desk and other IT departments. The survey, created by the Workspace Administrator, is sent automatically to the employee customer each time his or her Request is closed.

FootPrints Instant Talk—The Instant Talk feature can be used by the Internal Service Desk to allow customers to chat with available agents, quickening resolution of Issues. Instant Talk can also be used by agents to chat with each other when they are in different parts of the building, different sites, or on the telephone.

Remote Control—The Remote Control feature can be used by agents to take control of a user’s desktop to aid in solving a PC-related issue. The VNC Remote Control software can be optionally installed on all PC’s, or can be installed on an as-needed basis.

Copy/Move Issue feature—This feature can be used to assign Issues to users in other workspaces. For example, a Service Desk agent could assign an Issue in the Service Desk workspace to the development workspace.

Splash screen—The splash screen option can be used to communicate important information and alerts to agents and customers. Different screens can be defined for agents and customers. Splash screens can

include text, HTML, links to other sites or pages, graphics, etc. They can be updated at any time by the Workspace Administrator.

Service Portfolio

This is an ITIL-compatible workspace template for proposing and approving Services for the Service Catalog.

Fields

Built-in Fields

Brief Description—Single-line character field.

Priority—Drop-down field.

Status—Drop-down field. Values are: New, Initiation Phase, Design Phase, Development Phase, QA Testing Phase, Implementation Phase, Rejected, Canceled, All Phases, Completed.

Summary of Change (Description) —Multi-line character field. Used for complete description of the proposed change.

Service Proposal Details

Business Case—Multi-line text field.

Pricing Models—Multi-line text field.

Potential Customers—Multi-line text field.

Service Level Agreement—Multi-line text field.

CI Links - For BMC FootPrints Configuration Manager. BMC FootPrints Configuration Manager is an add-on module.

Owners and Notifications - The same as Assignees and Email

Address Book—The Address Book is a sub-database that contains all of the contact information for your organization members. Each record in the Address Book is called a “Contact”. Organization members are referred to as “Contacts”. The Address Book can contain up to 100 fields (SQL/Access versions are unlimited) for employee data, including Name, Department, Phone number, Email address, etc.

Suggested Address Book Fields

Last Name (character field)

First Name (character field)

Email address (email address)

Department (character field)

Phone (character field)

Job Title (character field)

Issue Tracking

BMC FootPrints Service Core is an excellent tool for Issue management, Workspace management, communication, and collaboration. Workspace team members in different locations can collaborate, communicate, and organize tasks, share documents, and more using the intuitive BMC FootPrints Service Core interface from any browser. A

new BMC FootPrints Service Core Workspace can quickly be created for each new Workspace started. Here are some suggested fields and settings for an Issue Management Workspace.

Fields—Custom fields can be created to track the different Issues assigned to workspace members. These fields will help with quick data entry, and help sort and report on different areas and issue types.

Built-in Fields:

Title—Is used as a brief summary or description of Issue or task.

Description – Is used for a complete description of the Issue, and all activity and updates on that Issue. Each addition to the description contains a time, date and user stamp.

Assignees—The Assignee field will automatically list the workspace members. This field is used to define the resources for each Issue. Please refer to the section below on “Assignment” for more information

Statuses—Open, Accepted, Assigned, Completed, Closed.

NOTE

Open and Closed statuses are built-in, so only the other 3 need to be created.

Priorities

Maximum: Set to 5

Default: Set to 3 (Medium)

Words defined: Urgent, High, Medium, Low, Lowest

Workspace Fields—Up to 100 custom Workspace Fields can be created (no limit in SQL/Access versions) to record information about the Issue. Here are some suggested fields for the workspace team.

Issue type (drop-down)—List of types or categories of the types of Issues for the workspace.

NOTE

If the Field Dependencies option is used, this is the recommended decision field.

Duration (integer or decimal field)—Enter in number of days.

Start Date (date field)

Due Date (date field)

Percentage completed (integer or decimal field)

Resources—A drop-down field can be defined with Resource Names, or the Assignee field can be used for the resources to be assigned.

Time Tracking—BMC FootPrints Service Core can track the time spent by workspace members working on Issues. This data can be used to create time tracking reports, which can be used for billing, or to track any time-related information, such as how long one or more workspace members spend on certain kinds of Issues.

Recommended configuration for Development Tracking—Enabled, Mandatory, Manual.

With this configuration, workspace members are prompted to enter their time spent on a particular Issue. An hourly billing rate should be specified for each workspace member (see **Users**). In this way, time tracking data can be used for billing customers, creating budgets, or to justify increased resources.

Address Book—The Address Book is a sub-database that can contain all of the contact information for your user base. The Address Book is optional for Issue Management workspaces. For example, if Issues are generated by employee or external customers, then the Address Book is appropriate. If Issues are generated internally by workspace members, or if contact data is not essential to the Issue Management activity, the Address Book can be disabled. For suggestions on Address book fields, please refer to the Sales, Development, Customer Support or Service Desk templates.

Assignment—Assignment can be handled manually, or the Auto Assign Feature can be used to assign one or more workspace members to Issue based on, for example, the “Issue type” field. A separate drop-down field can be defined with “Resource Names”, or the Assignee field can be used exclusively for the resources to be assigned.

Escalation—Escalation should be enabled and various rules defined to handle high-priority issues and set up due date reminders. Some rules to consider:

Escalation rules can be defined for high/urgent priority issues to send email notification to the Workspace Lead.

Rules can be made to handle Issues that have been open for a certain amount of time to send a reminder to the assignees that the Issue must be completed, and/or to reassign them to someone else.

A rule should be set to send an email to the assigned workspace member(s) based on the “Due Date” field. The criteria should include:

Name: Per-Issue Reminders

Escalation On/Off: Select “On”

Actions: “Send mail to the Assignees” checked, select one or more email types

Time Unedited: 5 minutes

Criteria:

Status=Highlight “Open”, and any custom statuses to get reminders on active Issues. For

Due Date, choose “equal to” and check the box for “Current Date” (do not fill in any dates).

Email—Outgoing email notification rules can be set to send mail to assignees for all changes, or, if you would prefer, only for certain statuses. Incoming email can be configured to handle both incoming email submissions and email updates to existing Issues, allowing workspace members to submit, update and close Issues via email.

CCs—Other workspace members, or people outside of the workspace, can be copied on an Issue without actually being assigned. The user will receive email notification, and can optionally respond to the email with comments or suggestions, which will automatically be threaded to the Description of the Issue with a time, date and user stamp.

Queues—Create 1 Saved Search for each “Request Type”. For example, the Criteria for a queue for a called “SuperApp Issues” would include “Status”=Request, Open, and all other active statuses, “Request type”=” SuperApp Issues”, Sorting “Due Date Submitted Ascending” (oldest at the top), Name “SuperApp Issues Queue”, Type “Shared”. Other queues can be made for each Workspace members’ assignments, sort all active Issues by due date, etc.

Reports—The built-in Metric reports can be used by the Workspace Manager to get important metrics like aging reports, number of Open Issues by assignee, etc. Custom report templates can be made to show details and stats for things like: All active Issues by assignee, All active Issues by Request Type, All active Issues by Due Date, etc. The Auto-run Reports feature can be used to automatically email one or more reports to the Managers every Monday morning, etc.

Cross-workspace Reports—The Administrator can create cross-workspace reports to return data from multiple workspaces, such as Service Desk, Development, and Issue Management. Any common fields found in the workspaces selected can be included in the report. So, if the Address Book is shared between the aforementioned workspaces, a report can be generated on a particular contact that includes all activity for that user across all departments.

Knowledge Base—The BMC FootPrints Service Core Knowledge Base feature can be useful for the Workspace team. Procedures, policies, and documents can be made into (and attached to) Solutions. FAQ categories can be defined to group solutions by request type, etc. All workspace members can have access to Solutions, attachments and FAQ categories.

Users—The Workspace team will normally use Agent licenses as described in the functionality above. Agent users can set their personal preferences to view a list of their own assignments on the BMC FootPrints Service Core Home page, as well as set their home page columns to display important information about those Issues on the home page, like “Request type”, “Title” “Due date”, etc.

Agents can use their network ID and password to log into BMC FootPrints Service Core if NT, UNIX or LDAP password authentication is enabled.

Copy/Move Issue feature—This feature can be used to communicate with teams in other workspaces. For instance, a workspace member could assign an Issue in a team member for another workspace. When the Issue is copied or moved to the other workspace, a reference to each other is placed in both the originating Issue and the new Issue.

File attachments—Workspace members can attach files to particular Issues. Solutions in the Knowledge Base can contain file attachments, allowing easy distribution and collaboration of procedures, documents, and other files to the whole workspace team.

NOTE

File Attachments in BMC FootPrints Service Core are kept in the C:\FootPrints\html\tmp\Attachments directory on the BMC FootPrints Service Core server. Anti-virus software can be pointed to that directory to ensure that attachments do not contain viruses.

BMC FootPrints Service CoreInstant Talk—The Instant Talk feature can be used by team members to chat with each other when they are in different sites.

Splash screen—The splash screen option can be used to communicate important information and alerts to workspace members. The splash screen can include text, HTML, links to other sites or pages, graphics, etc. It can be updated at any time by the Workspace Administrator.

Resource Management

The Resource Management template was created to help IT department track and manage both hardware and software that it might loan or otherwise install. Many of the features of BMC FootPrints Service Core can aid IT department Agents and managers in managing resource operations without letting anything fall through the cracks. Here are some suggestions for setting up a Resource Management Workspace.

The normal Address Book is different in the Resource Management template. Rather than using the Address Book for an "inventory" of contacts, it has been set up to provide an inventory of equipment, allowing you to upload your inventory from an existing resource, such as an Excel spreadsheet or Access database. As a consequence of maintaining an inventory in what is normally used as an Address Book, some Workspace fields have been set up for contact information.

Fields - Custom fields can be created to track the different requests and problems reported to the corporate Service Desk. These fields will help with quick data entry, and help sort and report on different areas and problem types.

Built-in Fields:

Subject– Is used as a brief summary or description of request. If desired, this can be a drop-down list of acceptable request types.

Comment – Is used for complete description of request or problem, updates, and resolution. Each addition to the Comment field automatically contains a time, date, and user stamp.

Assignees – The Assignee field automatically lists all Service Desk agents. Refer to the section below on "Assignment" for more information.

Statuses – Open, Needs Approval, Pending, Approved, On Order, Received, In Production, Denied, Closed

Urgency - Low, Medium, High, Critical

Workspace Fields – Up to 100 custom Workspace Fields can be created (no limit in SQL/Access versions) to record information about the incident. Contact information is tracked in the Address Book (see below). Here are some suggested fields for Resource Management.

Request Type (drop-down) – Request Usage, Maintenance, Other

Requester's Full Name - Single-line character field

Requester's Phone Number-Single-line character field

Date Needed - Used to specify the deadline for delivery/installation of the equipment. This is a Date/Time field.

Expected Return Date - Used to specify the date on which the equipment is to be returned. This is a Date/Time field.

Actual Return Date - Used to specify the date on which the equipment was returned. This is a Date/Time field.

Install Software - A choice field for you to list software choices. You can select multiple items.

Install Hardware - A choice field for you to list hardware choices. You can select multiple items.

Time Tracking - **FootPrints Service Core** can track the time spent by Agents working on Issues. This data can be used to create time tracking reports, which can be used for billing, or to track any time-related information, such as how long one or more users spend on certain kinds of Issues.

Address Book – The Address Book is a sub-database that contains all of the inventory information for your user base. Each record in the Address Book is called a "Contact". In this template, Contact actually refers to a specific resource.

Suggested Address Book Fields:

Resource ID - Customer Service, R&D, Executive, Finance, Human Resources, IT, Marketing, Sales

Resource Type - Laptop, PDA, Blackberry, Cell Phone, Workspaceor, Pocket PC

Manufacturer - Dell, Sony, Sharp, HP, Toshiba, Compaq, Avaratec, IBM, PALMONE, Fellowes, Pilot, Cingular, Nokia, T-Mobile, Nextel, Verizon, Canon, Panasonic, Olympus, 3M, Mitsubishi

Model - Character field

Purchase Date - Date/time field

Last Service Date - Date/time field

Next Service Date - Date/time field

Contact Name - Single-line character field provided for the name of the hardware or software contact, not the requester.

Contact Phone Number - Single-line character field provided for the phone number of the hardware or software contact, not the requester.

Address Book Data – Address Book data can be entered manually for each Contact, imported from a text file, or taken dynamically from and LDAP-compliant database. Please refer to the section on Address Book Administration for more information.

Assignment – Assignment can be handled manually, or the Auto Assign Feature can be used to assign one or more users to a new Issue based on, for example, the “Request Type” field.

Escalation – Escalation should be enabled and various rules defined to meet high-priority issues and set up follow-up reminders. Some rules to consider:

Escalation rules can be defined for certain high priority requests.

Rules can be made to handle requests that have been open for a certain amount of time to send a reminder to the assignees that the request must have a response, and/or to reassign them to someone else.

A rule should be set to send an email to the assigned Agent based on the “Follow Up Date” field. The criteria should include:

Name: Per-Issue Reminders

Escalation On/Off: Select “On”

Actions: “Send mail to the Assignees” checked, select one or more email types

Time Unedited: 5 minutes

Criteria:

Status: - Highlight ”Request”, “Open”, and any custom statuses to get reminders on active Issues, or “Closed” to get reminders on Closed Issues (OR highlight all statuses except for “Solution” to get reminders on any Status Issue)

For “**Follow Up Date**”, choose “equal to” and check the box for “Current Date” (do not fill in any dates).

Email – Outgoing email notification rules should be set to send mail to assignees and requesters for all changes, or, if you would prefer, only for certain statuses. One or more Agents should also be defined to receive an email each time a new request is submitted by a requester. Incoming email can be configured to handle both incoming email submissions and email updates to existing requests.

CCs – Other agents, developers, or other users can be copied on a request without actually being assigned. These people receive email notification, and can optionally respond to the email with comments or suggestions, which are automatically threaded to the Description of the request with a time, date, and user stamp.

Queues – Create 1 Saved Search for each “Request Type” (Hardware, Software, Network, etc).

Reports – The built-in Metric reports can be used by the IT Manager to get important metrics like Open vs. Closed rates, number of Open Issues by assignee, etc. Custom report templates can be made to show details and stats for things like: All Active Requests by Assignee, All Active Requests by Request Type, All

active Requests by Department, Priority, etc. The Auto-run Reports feature can be used to automatically email one or more reports to the Managers every Monday morning, etc.

Cross-workspace Reports – The Administrator can create cross-workspace reports to return data from multiple workspaces, such as Service Desk, Development, and Issue Management. All built-in fields, as well as any common custom fields found in the workspaces, can be included in the report. So, if the Address Book is shared between the aforementioned workspaces, a report can be generated on a particular contact that includes all activity for that item across all departments.

Asset Management – The Asset Management Add-on Module is highly recommended for the IT group. All hardware, software, and network information for each PC is automatically tracked. Other network devices, like servers, routers and printers can also be tracked. Asset information can be included as part of the history of an request.

Customer Self Service – The Customer Self Service option allows employee customers to submit and track their requests. Users can log into BMC FootPrints Service Core using a common shared ID and password, their email address, or a unique ID and password. Unique Customer IDs and passwords can be linked to their network IDs and passwords (using NT, UNIX or LDAP password authentication and the Auto-Add Customer feature). Customer contact information can be dynamically populated via the Dynamic Address Book Link feature. Customers can also submit Requests, receive notification, and respond to notification via email.

Users – Agent users can set their personal preferences to view a list of their own assignments on the BMC FootPrints Service Core home page, as well as set their home page columns to display important information about those Issues on the home page, like “Request Type”, “Department”, “Platform”, etc.

Agents can use their network ID and password to log into BMC FootPrints Service Core if NT, UNIX or LDAP password authentication is enabled.

See more information on Customer users under “Customer Self Service”.

File attachments – File attachments are useful for employee customers to provide pictures of the requested resource, Word documents with step-by-step instructions, an application's setup.exe file, etc. Incoming email submissions from customers that contain attachments automatically include those attachments with the request that is created in BMC FootPrints Service Core.

NOTE

File Attachments in BMC FootPrints Service Core are kept in the C:\FootPrints\html\tmp\Attachments directory on the BMC FootPrints Service Core server. Anti-virus software can be pointed to that directory to ensure that attachments do not contain viruses.

Surveys—The Customer Survey feature can be used to gather information about the quality of service employee customers receive from IT. The survey, created by the Workspace Administrator, is sent automatically to the employee customer each time his or her Request is closed.

FootPrints Instant Talk—The Instant Talk feature can be used by IT to allow customers to chat with available agents, quickening resolution of Issues. Instant Talk can also be used by agents to chat with each other when they are in different parts of the building, different sites, or on the telephone.

Remote Control—The Remote Control feature can be used by agents to take control of a user’s desktop to aid in solving a PC-related issue. The VNC Remote Control software can be optionally installed on all PC’s, or can be installed on an as-needed basis.

Copy/Move Issue feature—This feature can be used to assign requests to users in other workspaces.

Splash screen—The splash screen option can be used to communicate important information and alerts to agents and customers. Different screens can be defined for agents and customers. Splash screens can

include text, HTML, links to other sites or pages, graphics, etc. They can be updated at any time by the Workspace Administrator.

Sales Tracking and Contact Management

A BMC FootPrints Service Core Workspace can easily be customized for the sales team to track leads, contacts, and sales activity. The Address Book should be used to hold the contact information for the lead. Other information about the particular sale or potential sale is contained in the Workspace fields. We recommend that each time there is a potential sale for a particular contact, a new “Issue” be created for the life cycle of that sale. The fields below are suggestions for the sales team Workspace.

Fields—Custom fields can be created to track leads for the sales team. These fields will help with quick data entry, and help sort and report on different lead types, products, etc.

Built-in Fields

Title—Is used as a brief summary or description. If desired, this can be a drop-down list of acceptable request types, i.e. “New Lead”, “Repeat”, “Cross-Sale”, “Follow-up”, etc.

Description—Is used for a complete description of the activity by the sales representative for that lead. Each addition to the description contains a time, date and user stamp.

Assignees—The Assignee field automatically lists the sales representatives. Please refer to the section below on “Assignment” for more information

Statuses—Open, Working, Request for Info, Quoted, PO Pending, No Response, Dead, Closed.

NOTE

Open and Closed statuses are built-in, so only the other six must be created.

Priorities

Maximum: Set to 4

Default: Set to 3 (Medium Interest)

Words defined: Hot Lead, High Interest, Medium Interest, Casual Interest

Workspace Fields—Up to 100 custom Workspace Fields can be created (no limit in SQL/Access versions) to record information about the lead. Contact information will be tracked in the Address Book (see below). Here are some suggested fields for the sales team.

Product (drop-down)—List of your company’s products and services.

Invoice number (character field)—If applicable.

Sales potential (integer or decimal field)—Enter in dollar/currency amount.

Percentage Chance of Closing (integer field)

Projected Close date (date field)

Primary Lead Source (drop-down)—List your lead sources, like trade shows, web sites, search engines, direct mail campaigns, referrals, etc.

Follow-up date (date field)

Date of Sale (date field)

Revenue of Sale (character field)

Maintenance Plan (drop-down field)—List your maintenance options, if applicable, i.e. Platinum, Gold, Silver, Bronze, None. The sales rep can select the appropriate one at time of purchase.

Time Tracking—BMC FootPrints Service Core can track the time spent by sales representative working leads, or travel time if desired. This data can be used to create time tracking reports for analysis of true profit of particular sales or sales types, or to aid in expense reports.

Recommended configuration for Sales Tracking—Enabled, Optional, Manual. If time tracking is not desired, the feature can be disabled.

When enabled sales representatives can optionally enter time spent working leads. In addition, travel time can be entered for time spent on the road. An hourly billing rate can be specified for each sales rep. for their travel time (see **Users**).

Address Book—The Address Book is a sub-database that contains all of the contact information for your leads. Each record in the Address Book is called a “Contact”. Leads are referred to as “Contacts” or “Customers”. The Address Book can contain up to 100 fields (SQL/Access versions are unlimited) for employee data, including Name, Company, Phone number, Email address, etc.

Suggested Address Book Fields

Company (character field)

Last Name (character field)

First Name (character field)

Title (drop-down)—List of titles i.e. Manager, Vice President, Director, etc. Can also be a fill-in character field.

Email address (Email address)

Phone (character field)

Street Address (character field)

City (character field)

State (drop-down)—List of states and/or provinces

Country (drop-down)—List of countries (if applicable)

Zip/Postal Code (character field)

Secondary Contact (character field)

Secondary Contact Information (character field)

Size of Company (drop-down)—1-49, 50-99, 100-199, 200-499, 500-999, 1000-9999, 10,000+, 100,000+

Industry (drop-down)—Advertising, Engineering, Financial, Government, Insurance, Legal, Manufacturing, Medical, Professional Services, Real Estate, Software, Other

Invoice Terms (drop-down)—Verbal, Pre-paid, Net 10, Net 30, Credit Card

Service Level (drop-down) – Platinum, Gold, Silver, Bronze. **NOTE**: This field should be specified as “Internal”, or “Public Read-Only”.

End Date of Maintenance Term (date).

NOTE

This field should be specified as “Internal”, or “Public Read-Only”.

Address Book Data—Address Book data can be entered manually for each Contact, imported from a text file, or taken dynamically from an LDAP-compliant contact database. Please refer to the section on Address Book Administration for more information.

NOTE

The Address Book can be shared between the Sales Workspace and the Support, Service Desk, and/or the Development Workspace. This is appropriate if the user base is the same for those departments.

IMPORTANT

Sales-related fields should be made "**Internal**" so that customers cannot view sensitive data if they have access to the support workspace, or receive email notification.

Assignment—Assignment can be handled manually, or the Auto Assign Feature can be used to assign one or more sales reps to a new Issue/contact based on, for example, the "Product" field.

Escalation—Escalation should be enabled and various rules defined to meet service levels, handle high-priority issues, and set up follow-up reminders. Some rules to consider:

Escalation rules can be defined for high priority leads, i.e. Hot Lead, or a certain dollar amount for the projected sale, etc.

A rule should be set to send an email to the assigned sales rep based on the "Follow Up Date" field. The criteria should include:

Name: Follow Up Reminder

Escalation On/Off: Choose "On"

Actions: "Send mail to the Assignees" checked, select one or more email types

Time Unedited: 5 minutes

Criteria:

Status=Highlight "Request", "Open", and any custom statuses to get reminders on active Issues, or "Closed" to get reminders on Closed Issues (OR highlight all statuses except for "Solution" to get reminders on any Status Issue)

For "**Follow Up Date**", choose "equal to" and check the box for "Current Date" (do not fill in any dates).

A second rule should be set to send an email to the assigned sales rep based on the "Projected Close Date" field. The criteria should include:

Name: Projected Close Date Reminder

Escalation On/Off: Choose "On"

Actions: "Send mail to the Assignees" checked, select one or more email types

Time Unedited: 5 minutes

Criteria:

Status=Highlight "Request", "Open", and any custom statuses to get reminders on active Issues, or "Closed" to get reminders on Closed Issues (OR highlight all statuses except for "Solution" to get reminders on any Status Issue)

For "Projected Close Date", choose "equal to" and check the box for "Current Date" (do not fill in any dates).

A third escalation rule based on “End Date of Maintenance” to remind the sales rep or maintenance coordinator when the contract comes up.

Email—Outgoing email notification rules can be set to send mail to assignees for all changes, or, if you would prefer, only for certain statuses. Typically customers are not notified from the sales workspace. The email address for each contact is available as a hyperlink that brings up the sales representative’s email software and pre-fill the contact’s email address into the “TO” line. Incoming email can be configured to handle both incoming email submissions and email updates to existing Issues for salespeople to update Issues and contacts from the road.

CCs—The sales manager or other users can be copied on an Issue without actually being assigned. These people will receive email notification, and can optionally respond to the email with comments or suggestions, which will automatically be threaded to the Description of the Issue with a time, date and user stamp.

Queues—Queues can be made by the Sales Manager to easily track the activity of the sales team. For example, create 1 Saved Search for each “Product”. For example, the Criteria for a queue for a product called “Widget SuperApp” would include “Status”=Request, Open, and all other active statuses, “Product”=”Widget SuperApp”, Sorting “Date Submitted Ascending” (oldest at the top), Name “Widget SuperApp Queue”, Type “Personal”. Other queues can be made for each rep and for the manager for Follow-up date, Company, Projected Close date, etc.

Reports—The built-in Metric reports can be used by the Sales Manager to get important metrics like aging reports, number of Active leads by assignee, etc. Custom report templates can be made to show details and stats for things like: all active Issues by assignee, all active Issues by Product, all active Issues by Company, Priority, projected amount of sale, etc. The “calculation” field can be used to total the projected or real sales amount for a certain category of sales i.e. by product, date range, or assignee. The Auto-run Reports feature can be used to automatically email one or more reports to the Sales Manager(s) every Monday morning, etc.

Cross-workspace Reports—The Administrator can create cross-workspace reports to return data from multiple workspaces, such as Customer Support, Development, and Sales. Any common fields found in the workspaces selected can be included in the report. So, if the Address Book is shared between the aforementioned workspaces, a report can be generated on a particular company or contact that includes all activity for that company or contact across all departments.

Knowledge Base—The BMC FootPrints Service Core Knowledge Base feature can be helpful to the sales team. Answers to customer’s Frequently Asked Questions, company policies, online documents, sales, and marketing materials can be made into (and attached to) Solutions. FAQ categories can be defined to group solutions by product. All sales representatives will have access to the Knowledge Base.

Users—The Sales Team will normally use Agent licenses as described in the functionality above. Sales representatives can set their personal preferences to view a list of their own assignments on the BMC FootPrints Service Core home page, as well as set their home page columns to display important information about those leads on the home page, like “Product”, “Company”, “Follow-up date”, etc.

Sales reps can use their network ID and password to log into BMC FootPrints Service Core if NT, UNIX or LDAP password authentication is enabled.

File attachments—Sales representatives can attach files to particular leads. Solutions in the Knowledge Base can contain file attachments, allowing easy distribution of marketing materials, policies, and other files to the whole sales team.

NOTE

File Attachments in BMC FootPrints Service Core are kept in the C:\FootPrints\html\tmp\Attachments directory on the BMC FootPrints Service Core server. Anti-virus software can be pointed to that directory to ensure that attachments do not contain viruses.

Surveys—Even if customers are not configured to receive regular email notification from the sales workspace, the Customer Survey feature can be used to gather information about the quality of service external customers receive from the sales team. The custom survey can be sent automatically to the external customer each time his or her sale is closed.

Copy/Move Issue feature—This feature can be used to assign Issues to users in other workspaces. For instance, a customer support agent could assign an Issue in the customer support workspace to the sales team in the sales workspace when an unqualified lead comes through the support center.

Splash screen—The splash screen option can be used to communicate important information and alerts to sales representatives. The Splash screen can include text, HTML, links to other sites or pages, graphics, etc. It can be updated at any time by the Workspace Administrator.

Software Change Management

This template can be used for development and quality assurance teams to track feature requests, bugs, and other issues regarding a company's software products. (Available to Change Manager users only.)

Built-in Fields

Title—Single-line character field.

Priority—Drop-down field.

Status—Drop-down field. Values are: Open, Accepted Assigned, Completed, Testing, Verified, Closed

Description —Multi-line character field. Used for complete description of the proposed change.

Suggested Fields

Product (drop-down) - Sample Product 1, Sample Product2. Replace these with your actual product(s)

Platform (drop-down) - Windows 2000, Windows XP, Mac OS9, Mac OSX, Sun Solaris, Unix, Palm OS

Current Version (drop-down) - 1.0, 1.5, 2.0, 2.5, 3.0 (replace with your actual version numbers)

Request Type (drop-down) - Feature Request, Bug Error

Module Affected (drop-down) - Module 1, Module 2 (replace with actual data from your products)

Complexity (drop-down) - High, Medium, Low

Error message - Character field for recording any error message that may have been displayed.

Due date (date/time)

Address Book—The Address Book is a sub-database that contains all of the contact information for your organization members. Each record in the Address Book is called a “Contact”. Organization members are referred to as “Contacts”. The Address Book can contain up to 100 fields (SQL/Access versions are unlimited) for employee data, including Name, Department, Phone number, Email address, etc.

Suggested Address Book Fields

Last Name (character field)

First Name (character field)

Email address (email address)

Department (character field)

Phone (character field)

Job Title (character field)

Assignment—Assignment can be handled manually, or the Auto Assign Feature can be used to assign one or more workspace members to Issue based on, for example, the “Issue type” field. A separate drop-down field can be defined with “Resource Names”, or the Assignee field can be used exclusively for the resources to be assigned.

Escalation—Escalation should be enabled and various rules defined to handle high-priority issues and set up due date reminders. Some rules to consider:

Escalation rules can be defined for high/urgent priority issues to send email notification to the Workspace Lead.

Rules can be made to handle Issues that have been open for a certain amount of time to send a reminder to the assignees that the Issue must be completed, and/or to reassign them to someone else.

A rule should be set to send an email to the assigned workspace member(s) based on the “Due Date” field. The criteria should include:

Name: Per-Issue Reminders

Escalation On/Off: Select “On”

Actions: “Send mail to the Assignees” checked, select one or more email types

Time Unedited: 5 minutes

Criteria:

Status=Highlight “Open”, and any custom statuses to get reminders on active Issues.

For “**Due Date**”, choose “equal to” and check the box for “Current Date” (do not fill in any dates).

Email—Outgoing email notification rules can be set to send mail to assignees for all changes, or, if you would prefer, only for certain statuses. Incoming email can be configured to handle both incoming email submissions and email updates to existing Issues, allowing workspace members to submit, update and close Issues via email.

CCs—Other workspace members, or people outside of the workspace, can be copied on an Issue without actually being assigned. The user receives email notification, and can optionally respond to the email with comments or suggestions, which are automatically threaded to the Description of the Issue with a time, date and user stamp.

Queues—Create 1 Saved Search for each “Request Type”. For example, the Criteria for a queue for a called “SuperApp Issues” would include “Status”=Request, Open, and all other active statuses, “Request type”=” SuperApp Issues”, Sorting “Due Date Submitted Ascending” (oldest at the top), Name “SuperApp Issues Queue”, Type “Shared”. Other queues can be made for each Workspace members’ assignments, sort all active Issues by due date, etc.

Reports—The built-in Metric reports can be used by the manager to get important metrics like aging reports, number of Open Issues by assignee, etc. Custom report templates can be made to show details and stats for things like: All active Issues by assignee, All active Issues by Request Type, All active Issues by Due Date, etc. The Auto-run Reports feature can be used to automatically email one or more reports to the Managers every Monday morning, etc.

Cross-workspace Reports—The Administrator can create cross-workspace reports to return data from multiple workspaces, such as Service Desk, Development, and Issue Management. Any common fields found in the workspaces selected can be included in the report. So, if the Address Book is shared between the aforementioned workspaces, a report can be generated on a particular contact that includes all activity for that user across all departments.

Knowledge Base—The BMC FootPrints Service Core Knowledge Base feature can be useful for the Workspace team. Procedures, policies, and documents can be made into (and attached to) Solutions. FAQ categories can be defined to group solutions by request type, etc. All workspace members can have access to Solutions, attachments and FAQ categories.

Users—The Workspace team will normally use Agent licenses as described in the functionality above. Agent users can set their personal preferences to view a list of their own assignments on the BMC FootPrints Service Core home page, as well as set their home page columns to display important information about those Issues on the home page, like “Request type”, “Title” “Due date”, etc.

Agents can use their network ID and password to log into BMC FootPrints Service Core if NT, UNIX or LDAP password authentication is enabled.

Copy/Move Issue feature—This feature can be used to communicate with teams in other workspaces. For instance, a workspace member could assign an Issue in a team member for another workspace. When the Issue is copied or moved to the other workspace, a reference to each other is placed in both the originating Issue and the new Issue.

File attachments—Workspace members can attach files to particular Issues. Solutions in the Knowledge Base can contain file attachments, allowing easy distribution and collaboration of procedures, documents, and other files to the whole workspace team.

NOTE

File Attachments in BMC FootPrints Service Core are kept in the C:\FootPrints\html\tmp\Attachments directory on the BMC FootPrints Service Core server. Anti-virus software can be pointed to that directory to ensure that attachments do not contain viruses.

BMC FootPrints Service CoreInstant Talk—The Instant Talk feature can be used by team members to chat with each other when they are in different sites.

Splash screen—The splash screen option can be used to communicate important information and alerts to workspace members. The splash screen can include text, HTML, links to other sites or pages, graphics, etc. It can be updated at any time by the Workspace Administrator.

Training

BMC FootPrints Service Core is useful for an IT department that trains its employees, as well as for other training organizations uses. Types of training might be application training, training on new HIPA requirements, Sarbanes-Oxley training, etc. Because many of the tasks associated with setting up a training class are repetitive (for example, making sure there are enough books, making sure there are enough computers, ordering lunch, confirming travel arrangements, etc.), Quick Master Issues with subtasks can be created to save time and resources. The following describes the Training Workspace template and some of its capabilities..

Fields - Custom fields can be created to track the different requests and problems reported to the corporate Service Desk. These fields will help with quick data entry, and help sort and report on different areas and problem types.

Built-in Fields:

Training Class – Is used as a brief summary or description of the training class or the class name. If desired, this can be a drop-down list of acceptable training types.

Urgency - Built-in options are Urgent and Standard, but you can create additional selections for the field.

Status – Training Request, Scheduled, Postponed, Canceled, Completed

Course Type - Suggested choices are No Choice, Orientation, Core Application, PC Application, Mandatory, Other.

Training Date - This is a Date/Time field.

Training Location - Used to enter the location where the training is to take place. If you might have unexpected training locations, you could provide an "Other" choice and create a dependent character field for entering the location that only pops-up when "Other" is chosen. There are a number of suggested locations in the default template.

Attended - Yes or No are the default choices.

Training Materials Sent - Yes or No are the default choices.

Reminder Sent - Yes or No are the default choices.

Description – Is used for complete description of request or problem, updates, and resolution. Each addition to the description automatically contains a time, date, and user stamp.

Instructors– The Instructors field automatically lists all instructors. Refer to the section below on "Assignment" for more information.

Workspace Fields – Up to 100 custom Workspace Fields can be created (no limit in SQL/Access versions) to record information about the request. Contact information is tracked in the Address Book (see below).

Time Tracking - BMC FootPrints Service Core can track the time spent by Agents working on Training Requests. This data can be used to create time tracking reports, which can be used for billing, or to track any time-related information, such as how long one or more users spend on certain kinds of Issues.

Address Book – The Address Book is a sub-database that contains all of the contact information for your user base. Each record in the Address Book is called a "Contact". Users who are reporting problems are referred to as "Contacts" or "Employee Customers". The Address Book can contain up to 100 fields (SQL/Access versions are unlimited) for employee data, including Name, Department, Phone number, Email address, etc.

Suggested Address Book Fields:

Department (drop-down) – Some default choices are provided. Customize this to your needs.

Last Name (character field)

First Name (character field)

User ID (character field)

Email address (Email address)

Phone (character field)

Site (drop-down) – Some default choices are provided. Customize this to your needs.

Address Book Data – Address Book data can be entered manually for each Contact, imported from a text file, or taken dynamically from and LDAP-compliant contact database. Please refer to the section on Address Book Administration for more information.

Instructors– Instructors can be handled manually, or the Auto Assign Feature can be used to assign one or more Instructors to a new training request based on, for example, the "Course Type" field

Escalation – Escalation should be enabled and various rules defined to meet handle high-priority issues and set up follow-up reminders. Some rules to consider:

Escalation rules can be defined for certain high priority issues, such as training that is required immediately, etc.

Rules can be made to handle Issues that have been open for a certain amount of time to send a reminder to the instructors that the Issue must be resolved and/or to reassign them to someone else.

A rule should be set to send an email to the assigned instructor based on the “Follow Up Date” field. The criteria should include:

Name: Per-Issue Reminders

Escalation On/Off: Select “On”

Actions: “Send mail to the Instructors” checked, select one or more email types

Time Unedited: 5 minutes

Criteria:

Status - Highlight Training Request and any custom statuses to get reminders on active Issues, or “Closed” to get reminders on Closed Issues (OR highlight all statuses except for Completed to get reminders on any Status Issue)

For “**Follow Up Date**”, choose “equal to” and check the box for “Current Date” (do not fill in any dates).

Email – Outgoing email notification rules should be set to send mail to assignees and customers for all changes, or, if you would prefer, only for certain statuses. One or more instructors should also be defined to receive an email each time a new Request is submitted by a Customer. Incoming email can be configured to handle both incoming email submissions and email updates to existing Issues.

CCs – Others can be copied on an Issue without actually being assigned. These people will receive email notification, and can optionally respond to the email with comments or suggestions, which will automatically be threaded to the Description of the Issue with a time, date and user stamp.

Queues – Create one Saved Search for each Course Type. For example, the criteria for the Orientation Queue would include Status=Training Request, Scheduled, and all other active statuses.

Reports – The built-in Metric reports can be used by the Training Manager to get important metrics like Requests vs. Completed rates, number of Scheduled courses by instructor, etc. Custom report templates can be made to show details and stats for things like: All active Requests by instructor, All active Requests by Course Type, All active Requests by Department, Priority, etc. The Auto-run Reports feature can be used to automatically email one or more reports to the Managers every Monday morning, etc.

Cross-workspace Reports – The Administrator can create cross-workspace reports to return data from multiple workspaces, such as Service Desk, Development, and Issue Management. All built-in fields, as well as any common custom fields found in the workspaces, can be included in the report. So, if the Address Book is shared between the aforementioned workspaces, a report can be generated on a particular contact that includes all activity for that user across all departments.

Asset Management – The Asset Management Add-on Module might be useful to training. All hardware, software, and network information for each PC is automatically tracked. Other network devices, like servers, routers and printers can also be tracked. Asset information can be included as part of the history of an Issue.

Knowledge Base – The **FootPrints Service Core** Knowledge Base feature is very useful for training. Frequently Asked Questions, Solutions to common problems, and patches can be made into Solutions. When a course is announced, it can be put in the Knowledge Base. FAQ categories can be defined to group solutions by course type, platform, software version, etc. Both instructors and Customers can have access to Solutions and FAQ categories. Instructors can use the Knowledge Base to provide additional information

about courses, searching the BMC FootPrints Service Core Knowledge Base by keyword, by FAQ category, and even searching popular online knowledge bases like Microsoft TechNet.

Customer Self Service – The Customer Self Service option allows employee customers to submit and track their training requests, as well as search the Knowledge Base. Users can log into BMC FootPrints Service Core using a common shared ID and password, their email address, or a unique ID and password. Unique Customer IDs and passwords can be linked to their network IDs and passwords (using NT, UNIX or LDAP password authentication and the Auto-Add Customer feature). Customer contact information can be dynamically populated via the Dynamic Address Book Link feature. Customers can also submit Requests, receive notification, and respond to notification via email.

Users – Instructors can set their personal preferences to view a list of their own training requests on the BMC FootPrints Service Core home page, as well as set their home page columns to display important information about those requests on the home page, like “Request Type”, “Department”, “Platform”, etc.

Instructors can use their network ID and password to log into BMC FootPrints Service Core if NT, UNIX or LDAP password authentication is enabled.

See more information on Customer users under “Customer Self Service”.

File attachments – File attachments are useful for attaching training materials such as labs, manuals, registration materials, etc. Solutions in the Knowledge Base can contain file attachments, allowing easy distribution of training materials. Incoming email submissions from customers that contain attachments will automatically include those attachments with the Issue that is created in BMC FootPrints Service Core.

NOTE

File Attachments in BMC FootPrints Service Core are kept in the C:\FootPrints\html\tmp\Attachments directory on the BMC FootPrints Service Core server. Anti-virus software can be pointed to that directory to ensure that attachments do not contain viruses.

Surveys—The Customer Survey feature can be used to gather information about the quality of training employee customers received. The survey, created by the Workspace Administrator, is sent automatically to the employee customer each time his or her Training Request is closed.

BMC FootPrints Service Core Instant Talk—The Instant Talk feature can be used to allow customers to chat with available instructors. Instant Talk can also be used by instructors to chat with each other when they are in different parts of the building, different sites, or on the telephone.

Remote Control—The Remote Control feature can be used by instructors to take control of a user’s desktop to help with labs in a classroom situation, or in a remote training situation. Remote Manager can be optionally installed on all PCs.

Copy/Move Issue feature—This feature can be used to assign requests to users in other workspaces. For example, an instructor could assign a request to another department that is more appropriate for the type of training requested.

Splash screen—The splash screen option can be used to communicate important information and alerts to instructors and customers, such as a change in the training schedule or location. Different screens can be defined for instructors and customers. Splash screens can include text, HTML, links to other sites or pages, graphics, etc. They can be updated at any time by the Workspace Administrator.

IT Infrastructure Library

IT Infrastructure Library

The IT Infrastructure Library (ITIL) is an integrated, process–based, best practice framework for managing IT services. It provides guidance for creating and operating a Service Desk that provides efficient communication between the user community and the IT provider. Originally initiated to improve IT service management for the UK central government, it has become relevant to all organizations; public or private sector, large or small, centralized or distributed. It integrates an organization's Incident Management, Problem Management, Configuration Management, and Change Management processes together under one Service Desk.

BMC FootPrints Service Core provides practical, rapid ITIL V3 enablement for the vital processes that support the demands of your customers, allowing you to give them the best possible experience. BMC FootPrints Service Core also offers a configurable customer portal integrated with your intranet or Internet site for proactive support of customer incidents and service requests.

BMC FootPrints Service Core offers a web-based architecture, built-in templates and flexible workflow, all which contribute to reduced time and effort necessary to implement ITIL processes. It can be tailored to meet your business and IT needs quickly and easily and without programming. Lengthy consulting engagements or extensive technical skills are not required.

BMC FootPrints Service Core is built on ITIL v3 processes

BMC FootPrints Service Core provides optimal support for the following ITIL service lifecycle processes:

Incident Management—Accelerate incident resolution with configurable forms and sophisticated workflow

Problem Management—Perform root-cause analysis to prevent incidents from reoccurring

Request Management—Optimize service delivery by managing all service requests and related workflows with optimal effectiveness

Event Management—Monitor key systems with BMC Network Monitor and create incidents automatically for significant events in BMC FootPrints Service Core.

Service Asset and Configuration Management—Discover assets with BMC FootPrints Asset Core and enhance your visibility of configuration item relationships with BMC FootPrints Configuration Manager

change manager—Automate unlimited approval workflows with full audit trail and secure email approval with BMC FootPrints Change Manager

Knowledge Management—Build a robust knowledge base of rich solutions with FAQ categorization and knowledge authoring approvals

Release and Deploy Management—Plan releases from approved changes with BMC FootPrints Service Core and deploy custom packages automatically with BMC FootPrints Asset Core

Service Portfolio Management—Design, approve and manage service offerings to customers and other key stakeholders

Service Catalog Management—Create, publish and offer customized menus of services to internal and external customers based on their role for end-to-end request management with BMC FootPrints Service Cores Service Catalog

Service Level Management—Enforce and report on agreed upon response and resolution times based on your service level agreements and their related services

Service Reporting—Create your own trend and performance reports with comprehensive and easy to use reporting tools to aid in the continuous improvement to your service delivery.

To get started building your ITIL service desk quickly, your organization can use the built-in ITIL process templates in BMC FootPrints Service Core which are easily customized.

ITIL Overview

Service Desk

Service Desk is not a process but a function. The Service Desk's objective is to provide a single point of contact between users and the IT service organization. ITIL provides guidance about creating and operating a Service Desk to provide efficient communication between the user community and the IT provider. The job of the Service Desk is to provide effective Incident, Problem, Change, and Configuration management.

Incident Management

The Incident Management process aims to restore normal service operation as quickly as possible and minimize the adverse impact on business operations. This ensures that the best possible levels of service quality and availability are maintained. **Translation:** The Level 1 team handles these issues because they can be closed quickly and do not affect many customers.

Problem Management

The process of Problem Management diagnoses the underlying cause of the incidents identified by the Service Desk. It arranges for correcting errors in the IT infrastructure and performs proactive problem prevention. **Translation:** These are incidents that Level 1 support cannot handle or may be affecting many customers. (Generally referred to as Problems before the cause is known, and Known Errors once the cause is determined.) These would be Global Issues in BMC FootPrints Service Core.

Change Management

The Change Management process ensures that standardized methods and procedures are used for efficient and prompt handling of all changes to minimize the impact of change related incidents on service quality. Consequently, change management aims to improve the day-to-day operation of the organization. **Translation:** All IT-related changes that may affect one or many customers are tracked with Change Management. Adding memory to one machine, getting a new server, and installing the latest Windows OS on all PCs are all examples.

Configuration Management

Configuration Management provides a logical model of the infrastructure or a service by identifying, controlling, maintaining and verifying the Configuration Items in existence. **Translation:** The Asset inventory stored in a database (such as BMC FootPrints Asset Core) is a Configuration Item database.

Using BMC FootPrints Service Core with ITIL

BMC FootPrints Service Core is certified for Incident, Problem, Configuration, and Change Management. The Change Management process is outlined in the "Using FootPrints Service Core for Change Management" document.

An ‘Incident’ is defined as: any event that is not part of the standard operation of a service and causes, or may cause, an interruption to, or a reduction in, the quality of that service. A ‘Problem’ is a known underlying cause of one or more Incidents, and a ‘Known Error’ is a Problem that is successfully diagnosed and for which a Work-around has been identified. Configuration Items (CIs) may be hardware, software, or documentation.

Incidents and Problems can be tracked in the same Workspace as they are similar, usually related to one another, and have the same fields for the most part. All initial calls/requests that come into the helpdesk will start out as Incidents. At some time they may be elevated to a problem or linked to a problem using a Global Issue/GlobalLink relationship. The workspace should contain a drop-down field that distinguishes the Incidents, Problems, and Known Errors.

Along with the other desired statuses, there should be a status of “Require Change” for Incidents/Problems that spawn a Request For Change (RFC) in the Change Manager workspace. This can be a manual process, or an instant escalation rule can be created to automatically perform a cross-workspace copy. In addition to these specific configuration options, the Workspace should behave like a normal Service Desk workspace.

Configuration management can be handled using the BMC FootPrints Asset Core add–on module, a separate asset management database, or in another BMC FootPrints Service Core workspace. Configuration Items, or CIs, should all be stored in the Configuration Management Database (CMDB) and should be accessible from both the Change and Incident/Problem Management Workspaces. BMC FootPrints Asset Core and MS/SMS already provide this integration. If using another database or BMC FootPrints Service Core Workspace, use the Dynamic Field Mapper (an add-on module to BMC FootPrints Service Core) to pull in the CI information.

Change Management

BMC FootPrints Change Manager Introduction

Solving business problems often results in procedural changes. However, changes just as often occur when companies proactively seek business benefits by reducing costs and/or improving services. The goal of the Change Manager process is to ensure that standardized methods and procedures are used for efficient and prompt handling of all changes, thus minimizing the impact of change-related incidents upon service quality, and consequently improving the day-to-day operations of the organization. Changes range from small solutions, i.e., upgrading memory or software on a single machine, to large projects, such as an organization–wide system upgrade.

The ITIL (Information Technology Infrastructure Library) standard for service and support defines Change Manager as a process that ensures that standardized methods and procedures are used for efficient and prompt handling of all changes to minimize the impact of change-related incidents on service quality. Consequently, change management aims to improve the day-to-day operation of the organization.

The BMC FootPrints Change Manager add-on module enables organizations to develop their own approval process for Issues with no programming. In BMC FootPrints Change Manager, approvers are designated for specific Workspaces. When an Issue meets approval criteria, the approvers are notified that an Issue awaits approval. The approvers then give or withhold approval. When an Issue meets approval criteria, it is moved to another stage in the process. Note that meeting "approval criteria" may mean that the Issue is rejected rather than approved.

In BMC FootPrints Change Manager, Workspace administrators can designate different approvers for different stages in the approval process. For example, a proposal for a software change may require an approval in principle for the change from product management, then an approval for the design from the development organization, then an approval for the actual software build from software development, then a testing approval from quality assurance, and so on. The BMC FootPrints Change Manager feature allows the Workspace administrator to create an orderly and efficient method for getting those approvals and ensuring that nothing falls through the cracks or waits too long for review.

BMC FootPrints Change Manager is implemented with customized statuses, fields, teams, roles, and escalation rules. The fields and statuses are built into the Change Manager template, a feature of the Workspace Wizard for building Change Manager workspaces. The included Change Manager template is a workflow recommendation from BMC, and can be customized as easily as any **FootPrints** workspace to reflect the specific needs of the organization.

NOTES

BMC FootPrints Change Manager is an add-on module that incurs an additional cost. BMC FootPrints Change Manager feature is related to but not to be confused with Change Manager as defined by the IT Infrastructure Library. The BMC FootPrints Change Manager feature provides the ability to manage changes via a voting/approval process.

Basic Workflow

The BMC FootPrints Change Manager template provides a basic workflow for handling a Request For Change (RFC). The RFC may originate from an Incident or Problem reported to the helpdesk. Examples of the types of Issues that could be RFCs include end-user dissatisfaction with their current system; company–wide change or single–system changes. Changes in how or where the company handles business changes may result in an RFC.

The following is a suggested workflow:

The RFC is submitted into a Pending queue, where it will be reviewed by a manager who will either Reject or Accept the RFC.

If the RFC is Rejected, it can be modified by the submitter and re–submitted to the Pending queue, or Closed, so that no further action can be taken on this RFC.

If the RFC is Accepted, it is placed in a queue for review by a Change Advisory Board (CAB). The CAB is responsible for authorizing what should be done, when exactly it should be done, and assigning the work.

NOTE

The CAB should be made up of a variety of technical and business staff, and should include the Change Manager(s).

After the CAB Authorizes the change, it is assigned out to one or more builders who will be responsible for implementing the change.

After the change is implemented, a Quality Assurance team then tests it.

If the change has been implemented successfully, it can be built for distribution.

If the change has failed testing, it may return to the builder(s) to implement the change again, or sent back to the CAB to be reevaluated.

Once the change is built, the change is scheduled for implementation.

After implementation, it may become obvious that the change is not working as planned, and a Back-Out plan must be implemented. Otherwise, the change enters a review period.

If after the review period, the change is deemed unsuccessful, a backout–out plan is implemented, or the change can be sent back to the CAB.

If the change has passed all the stages successfully, the RFC can be Closed.

This is a comprehensive guideline for a Change Manager workflow. You may not need all these stages or all of these teams of people. Feel free to streamline the process to meet your organization's needs.

Change Manager Template

Status Values

The following values are included with the template to support the workflow:

Pending

Accepted

Rejected

CAB Review

Authorized

Assigned Out

Testing

Failed

Built

Implemented

Back-Out

Under Review

Unsuccessful

Closed

Change Manager Workspace Fields

Template Fields

The Change Manager template comes with the following fields to support the basic workflow. These fields and their values may be modified to suit the specific business needs of your organization.

Reason for Change—A drop–down choice field defining why the change was requested. Values include:

Incident/Problem Resolution

User/Customer Dissatisfaction

Proposed Introduction/Removal of New CI

Proposed Upgrade to Infrastructure

Changed Business Requirements

New or Changed Legislation

Location Change

Product or Service Change from Vendors

Category—A drop–down choice field that further defines the type of infrastructure, service, or activity that requires change. You may find it convenient to create this field as a part of dependency group based on “Reason for Change”. Categories include:

Server Maintenance

Hardware

Software

Documentation

Telecommunications Facilities

Engineering Cover

Training Courses

IT Infrastructure Management Procedures

Tactical Plans

Environmental Infrastructure

Impact—A choice field defining what impact the change will have on the organization. Values include:

Minor

Significant

Major

Effect—A text field allowing anyone involved with the RFC to describe what the effect of implementing (or not implementing) might be.

Authorized By—A choice list with the names of users who can authorize the change. The template contains “User1”, “User2”, etc. These values should be replaced with the names of your authorizing users.

Authorization Date—A date/time field that should be entered when the “Authorized By” field is filled in.

Build Date—A date/time field for entering the projected date when the build will be done.

Testing Date—A date/time field for entering the projected date when testing will be done.

Implementation Date—A date/time field for entering the projected date when the implementation will be done.

Back-Out Plan – A text field for describing the Back–Out plan, describing the baseline system before changes were made.

Review Date – A date field for entering the date for reviewing the change to determine its success.

Suggested Additional Fields

The following fields are not currently included in the BMC FootPrints Change Manager Template, but can be created by the Workspace Administrator to support the Change Manager workflow:

Configuration Item—A multi–line text field for recording information pertinent to the RFC that is retrieved from a configuration or asset management database.

Scope—A drop–down choice field showing how many touch points the change will affect. Suggested choices could include:

1

2-99

100-999

1000+

Risk—A drop–down choice field defining assumed risk of the change, with choices:

High

Medium

Low

Root Cause—A drop–down choice field defining why the change needs to take place, with choices:

Human Error

Bug in Application

Procedural Failure

Hardware Failure

Network Failure

Server Down

Other

Other—A single line text field to be filled out if “Other” is chosen as a value for Root Cause. This field could be a pop–up dependency if the value “Other” is chosen for Root Cause.

Other BMC FootPrints Service Core Features

The following additional features can be used in the change management process:

Customer Self-service—The customer portal can be used to allow users throughout the organization to request and see the status of their changes.

Email—Good communication is essential to the change management process, so email notification should be used at each stage to email assignees and other affected parties on the change process.

Calendar—When changes are scheduled, they can be linked to the workspace calendar, providing additional visibility of changes to members of the organization.

Reporting—The extensive reporting features of BMC FootPrints Service Core can be used to track scheduled changes for the next week, month, etc., and to measure the efficacy of past changes.

Service Level Management—If changes are affected by service level agreements, the SLM feature can be used to manage the due dates for changes.

Additional Workspace Administration Tasks for Change Manager

In addition to the built-in BMC FootPrints Service Core and custom Workspace fields, additional administrative tasks are necessary to support the change management workflow. This includes creating Teams and Roles for everyone involved in the Change Management process, and Escalations to automate the workflow and ensure that criteria are being met for the process.

Teams and Roles

The following teams and roles should be created by the Workspace Administrator to support the workflow:

Builders—Builders should be limited to only editing their own assignments, and should not be able to change assignment. They should be limited to only changing the RFC status to “Testing” when the RFC is in the status of “Assigned Out” or “Failed”.

Testers—Testers should be limited to only editing their own assignments, and should not be able to change assignment. They can change RFCs from “Testing” to “Failed” or “Built” only.

CAB—CAB members may have various roles. If they are only CAB members, you can create a role for them that is also limited to only their own assignments, without any re-assignment capabilities. They should be limited to changing status to “Rejected” or “Authorized” when the current status is “CAB Review”. Once “Authorized” they should then be able to change to “Assigned Out” once a decision is made who should implement the change.

Managers—The managers should have complete access to the system and may be on the CAB team. There should be no restrictions on what statuses they can change to and what assignments they can make.

Escalation Rules

The escalation rules will automate the workflow process, ensuring compliance with the system through the various stages of the RFC life–cycle. These rules should all be based on status, and should automatically assign the next team as appropriate to the status of the RFC.

NOTE

The escalations must be created in the order presented so they will run in the correct order.

First create an escalation called “Pending”. This will be an instant escalation upon creation or edit. All RFCs that are requests or in Pending will automatically set to Pending and be assigned to the Manager or Managers Team if there are more than one.

Create an escalation called “CAB”. This will be an instant escalation upon creation or edit. Once an RFC is in the status of “Accepted”, this escalation rule will change the status to “CAB Review” and assign the CAB team.

Create an escalation called “Builder”. This will be an instant escalation upon creation or edit. Once the CAB puts an RFC into the “Assigned Out” status, this rule will assign the RFC to the Builders team.

Create an escalation called “Tester”. This will be an instant escalation upon creation or edit. Once the Builder puts the RFC into the status of “Testing”, this rule will reassign the RFC to the Testers team.

Create an escalation called “Failed”. This will be an instant escalation upon creation or edit. If the Tester puts an RFC into the status of “Failed”, this rule will reassign the RFC to the Builders team.

Create an escalation called “Built”. This will be an instant escalation upon creation or edit. Once a Tester puts an RFC into the status “Built”, this rule will reassign the RFC back to the Change Manager(s).

Finally, create an escalation called “Review Period”. This will be a time-based escalation that will be set for RFCs that have not been edited for some time period. It would be best to choose your minimum review time period. It will check all RFCs in the status “Implemented” and if their Review Date is the current date, send out email notifications to the managers that the review period is over.

This combination of escalation rules guarantees that no agents can circumvent any step of the change management process through the following restrictions:

The specific agents role configuration will not allow them to reassign the RFC, so they may only choose the next logical status(es) in the change process.

Since the reassignment rules are all based on teams, auto–assignment can be set up to use round–robin assignment or to leave the entire team assigned if a round robin method is not desired.

Change Managers can be involved in any part of the process since they have access to all statuses and reassignment at all times.

The size of your organization and the level of commitment you want to make to the change management process may result in less configuration and fewer restrictions in the BMC FootPrints Service Core Workspace.

Chapter 13: BMC FootPrints Service Core CRM Bridge

BMC FootPrints Service CoreCRM Bridge Overview

The FootPrints CRM Bridge is a set of integrations between BMC FootPrints Service Core and several of the leading sales automation tools. Specifically, the CRM Bridge integrates with:

Microsoft CRM

Salesforce.com

There are two parts to the CRM Bridge integration. The contact database from the sales automation database is dynamically linked to the BMC FootPrints Service Core Address Book, enabling support agents in BMC FootPrints Service Core to access customer contact information entered by the sales representative that resides in the sales automation tool. This enables the support representative to use the latest contact data for a customer. And if customer self-service is enabled, customer requests in v are pre-filled with the customer's latest information from the sales automation database. In this way, the organization only needs to maintain one customer contact database, saving time and ensuring data accuracy.

In addition, sales representatives can view their customers' active support issues residing in BMC FootPrints Service Core via a hypertext link or button from within the sales automation tool. This gives the sales representative read-only access to his or her customer's support history at a glance. Using this feature, sales representatives can get the latest support activity for their customers at any time, making them better prepared when contacting their customers. By providing fast, easy read-only access to important customer data, the CRM Bridge can also help improve communication between the sales and support teams.

The BMC FootPrints Service CoreCRM Bridge requires no additional programming and only a few minutes of configuration in each tool (BMC FootPrints Service Core and the selected sales automation tool). While the configuration for each sales tool is slightly different, all three of the sales force automation tools that have been integrated with BMC FootPrints Service Core can be configured in practically no time. Complete instructions are provided below for implementing the integration. Configuring the sales automation tool requires administrative access to the selected tool.

NOTE

The BMC FootPrints Service Core CRM Bridge is only available if you have purchased the Dynamic SQL Link license, an add-on to BMC FootPrints Service Core. If you are interested in purchasing a Dynamic SQL link license, contact a sales representative at BMC or your local distributor.

BMC FootPrints Service CoreCRM Bridge Installations and Platforms

BMC FootPrints Service Core with CRM Bridge support is now available on the BMC download site.

There are installations available for three platforms:

FootPrints CRM Bridge for Linux with MySQL Database

FootPrints CRM Bridge for Windows with Microsoft SQL Server database

FootPrints CRM Bridge for Microsoft SQL Express

This is a full installation of BMC FootPrints Service Core, and can not be used to upgrade an existing installation of BMC FootPrints Service Core. If a customer would like to try the CRM Bridge with an existing installation, they should call their BMC sales representative.

NOTE

If you are using the CRM Bridge with Microsoft CRM, you must be running BMC FootPrints Service Core on Windows. For Salesforce.com, you can run on any BMC FootPrints Service Core-supported platform

Topics in this chapter include:

Microsoft CRM

Configuration of Address Book in FootPrints for Microsoft CRM

Configuration of Contact Issue History in Microsoft CRM

Salesforce.com

Configuration of Address Book in FootPrints for Salesforce.com

Configuration of Contact Issue History in Salesforce.com

Field Mapping in Salesforce.com

Using the BMC FootPrints Service CoreCRM Bridge

Using MS-CRM to Access FootPrints Service Core Issues

Using Salesforce.com to Access FootPrints Service Core Issues

Footprints CRM Bridge and Salesforce.com Fields

BMC FootPrints Service Core CRM Bridge can work with different field types in contact records in Salesforce.com , but there are some considerations when using something other than a character field:

Character fields—Most built-in fields in both Salesforce.com are character fields, which work well with the Footprints CRM Bridge, both in displaying the field value and searching the field.

Integer and float fields—Custom integer and float fields in Salesforce.com correctly for both displaying and searching in both products. You must be careful that the **FootPrints Service Core** field type matches the field type in the sales tool.

Date fields

Salesforce.com—Date fields should be created as char fields in FootPrints Service Core. When this is done, both display and search of these fields will work correctly.

Dropdown fields

Salesforce.com—Drop-down fields in Salesforce.com contact list should be mapped to the equivalent drop-down field in FootPrints Service Core, with the same drop-down choices.

NOTE

When a field is created in BMC FootPrints Service Core for use by the CRM bridge, that field is available subsequently if the Workspace is converted to using the BMC FootPrints Service Core Address Book.

MS CRM Integration

Configuration of Address Book in BMC FootPrints Service Core for Microsoft CRM

This section describes setting up BMC FootPrints Service Core to use the MS CRM Address Book.

NOTE

The **FootPrints** CRM Bridge is only available if you have purchased the Dynamic SQL Link license, an add-on to BMC FootPrints Service Core. If you are interested in purchasing a Dynamic SQL link license, contact a sales representative at BMC or your local distributor.

To set up MS CRM integration with BMC FootPrints Service Core:

Select Administration | Address Book | Address Book Type.

Check the checkbox for MS CRM. The Configure Address Book Connection (Step 1) page is displayed.

From this page, you can define basic Address Book options:

Address Book Name - Enter a name for the Address Book.

Data Source Name - If it is not pre-selected for you, select MS CRM (SQL Server)

Database Type - If it is not pre-selected for you, select Microsoft SQL Server

Server user - Enter your SQL Server ID

Server Password - Enter your SQL Server password.

Click the Next button. The Configure Address Book Connection (Step 2) page is displayed.

If it is not pre-selected for you, select dbo.ContactBase from the Select a Table or a View drop-down menu and then click Next. The Configure Address Book Connection (Step 3) page is displayed.

Map your **FootPrints** fields to your MS CRM fields using the drop-down lists. Drop-downs are labeled as BMC FootPrints Service Core fields. From each drop-down list, select the MS CRM field that corresponds to the BMC FootPrints Service Core field. If there is no corresponding MS CRM field, select Delete Field from the drop-down list.

Click Next when you have finished mapping the fields. The Configure Address Book Connection (Step 4) page is displayed.

This page allows you to create new fields in BMC FootPrints Service Core to be mapped to fields you have in your MS CRM Address Book. This page is only for creating fields to map to MS CRM Address Book fields. Refer to Adding Fields to the Address Book for details on completing this page. When you add a new field, you can map it to an MS CRM field using the External Database Field drop-down list.

Click **Finish** when you have completed adding and mapping new fields (if you chose to add any).

Configuration of Contact Issue History in Microsoft CRM

BMC FootPrints Service Core can easily be integrated with Microsoft CRM, a web-based sales force automation solution. From within MS CRM, sales representatives can see active support issues for individual customers within their contacts list. For more information on MS CRM, visit the Microsoft Dynamics CRM TestDrive Demo site.

Configuring BMC FootPrints Service Core Integration with MS CRM

For BMC FootPrints Service Core Integration with MS CRM, two files are delivered to the MS CRM administrator. These are:

web.config

isv.config

A version of each of these files already exists within the MS CRM installation. The steps for configuring MS CRM 1.2 and MS CRM 3.0 (and higher) are different. Both procedures are described below.

MS CRM 1.2

Step 1

The MS CRM administrator must rename the current web.config file, located in \inetpub\wwwroot\, to something like web.config.old and copy or move the new web.config file to \inetpub\wwwroot\.

Step 2

The MS CRM administrator must:

Rename the isv.config file, located in \inetpub\wwwroot_Resources\, to something like isv.config.old and copy or move the new isv.config file to \inetpub\wwwroot_Resources\.

Open the new isv.config file with an editor such as Notepad.

Find the line:

```
Url="http://footprints.servername.com/MRcgi/MRentrancePage.pl" Id="navItem"/>
```

and change footprints.servername.com to the server on which BMC FootPrints Service Core is installed.

Save and close the file.

BMC FootPrints Service Core Integration with MS CRM 1.2 is now complete. You can begin to view BMC FootPrints Service Core Issues from within MS CRM.

MS CRM 3.0 and Higher

Step 1

The files that the administrator must change are located under the web site's home directory. For example, this might be C:\Program Files\Microsoft CRM\CRMWeb for the web.config file and C:\Program Files\Microsoft CRM\CRMWeb_Resources for the isv.config.xml file.

Step 2

The MS CRM administrator must:

Rename the isv.config.xml file, located in C:\Program Files\Microsoft CRM\CRMWeb_Resources, to something like isv.config.old and copy or move the new isv.config.xml file to \inetpub\wwwroot_Resources\.

Open the new isv.config.xml file with an editor such as Notepad.

Find the line:

```
<Entity name="contact" />
```

and change it to the following:

```
Entity name="contact">
<NavBar>
<NavBarItem Icon="/_imgs/ico_16_112.gif" Title="BMC FootPrints Service Core Cases"
Url="http://footprints.servername.com/MRcgi/MRentrancePage.pl" Id="navItem" /> </NavBar> </Entity>
```

where *footprints.servername.com* is the server on which BMC FootPrints Service Core is installed.

Save and close the file.

Open the new web.config file, located in \inetpub\wwwroot\, with an editor such as Notepad.

Find the line:

```
<add key="ISVIntegration" value="None"/>
```

and change it to:

```
<add key="ISVIntegration" value="Web"/>
```

Save and close the web.config file.

BMC FootPrints Service Core Integration with MS CRM 3.0 and higher is now complete. You can begin to view BMC FootPrints Service Core Issues from within MS CRM.

Salesforce.com Integration

Configuration of Address Book in FootPrints for Salesforce.com

BMC FootPrints Service Core can be configured to dynamically access and display contact data from the Salesforce.com CRM web-based sales force automation solution. This enables you to maintain one resource for your contact data and use that single resource for both BMC FootPrints Service Core and Salesforce.com CRM.

NOTE 1

Most Salesforce.com fields are character fields. If you map a BMC FootPrints Service Core integer (or other type of) field to a typical Salesforce.com field, BMC FootPrints Service Core correctly performs integer (and other) searches, but for best performance, it is recommended that BMC FootPrints Service Core Address Book fields be character fields.

NOTE 2

Salesforce.com integration with BMC FootPrints Service Core is only available if you have purchased a Dynamic SQL link license. If you are interested in purchasing a Dynamic SQL link license, contact a sales representative at BMC.

There are three steps to this configuration process:

Establish your BMC FootPrints Service Core fields before mapping them to Salesforce.com fields and set email address field as primary key. In the first step, you make sure you have all of the BMC FootPrints Service Core fields you want to use and also set your email address field in BMC FootPrints Service Core as the primary key. If there are Salesforce.com fields that do not have corresponding BMC FootPrints Service Core fields, you create those fields in this step.

Optionally configure an Account field in the BMC FootPrints Service Core Address Book.

Map your BMC FootPrints Service Core Address Book fields to your Salesforce.com fields.

Step 1. Create BMC FootPrints Service Core Address Book Fields and Primary Key

The first step is to establish BMC FootPrints Service Core fields for all corresponding Salesforce.com fields. To do so, you must check your existing fields and add any new fields you want to use with Salesforce.com. In addition, you set your email address as the primary key field in this step. In the next step, you map the fields in BMC FootPrints Service Core to fields in Salesforce.com.

To configure the fields in the BMC FootPrints Service Core Address Book, refer to Adding Address Book Fields. Follow the procedure and make sure you set the Email Address field as the primary key.

Step 2. Configure the Account Field (Optional)

The integration for Salesforce.com allows a contact field mapping to include the Account as part of the BMC FootPrints Service Core Address Book record. With this integration feature, whenever an Address Book record is accessed, the contact's Account is automatically used in that record along with the other fields.

To configure the Account field:

Create a field in the BMC FootPrints Service Core Address Book Schema called either "Company" or "Account". This should be a public optional character field. Refer to Adding Address Book Fields for this procedure.

On the same page as you created the "Company" or "Account" field, make the new field the Organizational Unit.

Save and exit the page.

Step 3. Map BMC FootPrints Service Core Address Book Fields to Salesforce.com Fields

To configure BMC FootPrints Service Core to dynamically access Salesforce.com, map your BMC FootPrints Service Core Address Book fields to your Salesforce.com fields as follows:

Select Administration | Address Book | Address Book Type from the BMC FootPrints Service Core Toolbar.

Select the radio button labeled “Salesforce.com Address Book Link”.

Enter your password, append the Salesforce.com Security Token to the end of the password, and click GO.

Enter your Salesforce.com user ID and password.

NOTE

Access and licenses for Salesforce.com is obtained from Salesforce.com and not from BMC.

Click Next to continue with the integration or Cancel to exit the integration process.

A warning pop-up may be displayed, along with the next configuration page. The warning concerns non-character field types (refer to the note above). Click **OK** on the warning message to continue with the integration.

Map your BMC FootPrints Service Core fields to your Salesforce.com fields using the drop-down lists. Drop-downs are labeled as BMC FootPrints Service Core fields. From each drop-down list, select the Salesforce.com field that corresponds to the BMC FootPrints Service Core field. Make sure you map the Organizational Unit you created for Salesforce.com to Account Name.

Click Finish when you are done mapping fields.

Configuration of Contact Issue History in Salesforce.com

This section describes how to set up access so that a salesperson in Salesforce.com can view BMC FootPrints Service Core Issues for a specified contact.

There are two types of links that can be created from Salesforce.com to BMC FootPrints Service Core:

Contact history—Displays all of the support issues for the individual user.

Company history—Displays all of the support issues for the user's organization.

An example of a contact history link is given on the Sales/CRM Integration Administration screen.

Configure the BMC FootPrints Service Core Side

To configure the BMC FootPrints Service Core side:

Within **BMC FootPrints Service Core**, go to Workspace Administration | Workspace Options | Add-on Modules | Sales/CRM Integration.

There is an option to enable Sales/CRM Integration for that Workspace only. Click Enabled.

For security reasons, there is an option to add a unique key for each Workspace. This key value must be present in any links created in order for this feature to work. The field can be left blank, but this leaves open the possibility of anyone being able to view the data.

Configure the Salesforce.com Side

To configure the Salesforce.com side:

In a web browser, access the Salesforce.com web site at http://www.salesforce.com.

NOTE

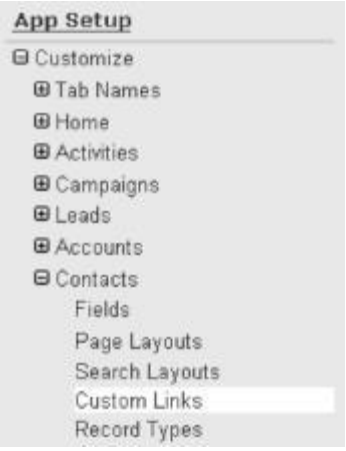
Access and licenses for Salesforce.com is obtained from Salesforce.com and not from BMC.

Select the Customer Login link and log in to the customer area with your username (an email address) and password. Your customer page is displayed.

Perform steps 3 through 16 of this procedure twice: once to set up the Contact History Web Link and once to set up the Company History Web Link.

Click the Setup link located in the top right corner of the web page. The setup page is displayed.

In the left frame, under the App Setup heading, select Customize | Contacts | Custom Links. The Web Links: Contact page is displayed.



In the main frame, click on New. Step 1 is displayed.

In the Link Label field, enter a name for the link. This label identifies the link to users. For example, you might name the link Contact Support History for the Contact History Web Link or Company Support History for the Company History Web Link. Don't change any other fields. After entering the label, click Next. Step 2 is displayed.

Step 2 provides drop-down lists that generate keywords for representing Salesforce.com data in a URL. You will use that data when entering the BMC FootPrints Service Core URL later in this procedure. The URL, in turn, is what Salesforce.com uses to access BMC FootPrints Service Core when you view BMC FootPrints Service Core Issues from within Salesforce.com.

In the Select Field Type drop-down, select Contact Fields to set up the Contact History Web Link or Company Fields to set up the Company History Web Link.

In the Select Field drop-down, select a field that uniquely identifies this contact. When you display BMC FootPrints Service Core issues later, it searches the database and displays all active issues with matching data in the selected field for the contact. It is recommended that you select Contact: Email, since an email address is generally unique to a contact.

When you select a field, the Copy Merge Field Value field is populated with a keyword. You will copy that keyword into the URL in the next step.

In the **Link URL** field, enter the BMC FootPrints Service Core URL that Salesforce.com will use to obtain the Issue information. An example URL is as follows:

http://*machine.domain*.com:2018/MRcgi/MRentrancePage.pl? EXT_LINK=1&
EXT_LINK_KEY=aabbcc&
PROJECTID=1&
ABN={!Contact_Email}&
GRPDETAIL={!Org_City}

You can cut and paste the sample URL provided on the Sales/CRM setup page in **FootPrints** and replace the sample values as follows:

***machine.domain*.com** (the name of the machine and the domain where **FootPrints** is installed)

EXT_LINK=**1** (Required constant)

PROJECTID=<<*Workspace #*>> (Required constant – should be the number of the workspace you are linking to in **FootPrints**. You can obtain this value from the System Administrator if you don't know it.)

EXT_LINK_KEY=<<*key value*>> (Optional constant - Security key as defined on the Administration screen in **FootPrints**. This is the value you specified in the third step of this procedure).

One of the next two fields must also be used. ABN is used to create a Contact History link, while GRPDETAIL is used to create a Company History Link.

ABN=<<*Copy_Merge_Field_Value*>> (The value Salesforce.com generated in the Copy Merge Field Value field)

GRPDETAIL=<<company>> (Optional variable for company data being passed in -- should correspond to Organizational Unit in BMC FootPrints Service Core Address Book. This type of link will not work unless an Organizational Unit is defined in the Address Book.) -- *This is only used for the company history lookup.*

Once all the parameters have been entered, click Next. Step 3 is displayed. Steps 3 and 4 are concerned with the appearance of the Salesforce.com interface. BMC makes no recommendations as to how you format your display.

Step 5 is a confirmation window for the settings you chose. Check the settings and, if you are satisfied, select Save. A warning window is displayed telling you that the setup is not completed until you add it to the Page Layout tab. Click OK on the warning window. The Web Links: Contact window is displayed, showing the link you created.

Click the Customize | Contacts | Page Layouts link in the left frame. The integration does not work until you have added it to the Page Layouts.

In the Contact Layout page in the main frame, click the Edit link next to the web link that you just created (Contact or Company).

On the right side of the main frame, there is a section labeled View. If the name of the Web Link that you just created is not displayed, select Contact Web Links from the drop-down list in the View section.

Drag and drop the name of the Web Link you just created from the View section to the Web Links section of the page.

Scroll to the top of the page and click Save.

A link is displayed on the Contact page in Salesforce.com. Clicking that link opens that contact's/company's history in **FootPrints**. Remember, if you want to set up links for both Contact Support History and Company Support History, you have to go through the procedure twice.

Changing the Link Label

To change the label on the button that links your Salesforce.com account with the BMC FootPrints Service Core database:

In a web browser, access the Salesforce.com web site at http://www.salesforce.com.

Select the Customer Login link and log in to the customer area with your username (an email address) and password. Your customer page is displayed.

Click the Setup link located in the top right corner of the web page. The setup page is displayed.

In the left frame, under the Studio heading, select Customize | Contacts | Web Links. The Web Links: Contact page is displayed.

In the main frame, click on Edit for the label you want to change.

Type the new label in the Link Label field in the Web Link Definition section.

Click the Save button.

Field Mapping in Salesforce.com

BMC FootPrints Service Core CRM Bridge can work with different field types in contact records in Salesforce.com, but there are some considerations when using something other than a character field:

Character fields—Most built-in fields in Salesforce.com are character fields, which work well with the BMC FootPrints Service Core CRM Bridge, both in displaying the field value and searching the field.

Integer and float fields—Custom integer and float fields in Salesforce.com map correctly for both displaying and searching. You must be careful that the **FootPrints Service Core** field type matches the field type in Salesforce.com.

Date fields—Date fields should be created as character fields in BMC FootPrints Service Core. When this is done, both display and search of these fields work correctly.

Drop-down fields—Drop-down fields in the Salesforce.com contact list should be mapped to the equivalent drop-down field in BMC FootPrints Service Core, with the same drop-down choices.

NOTE

When a field is created in BMC FootPrints Service Core for use by the CRM bridge, that field is available subsequently if the Workspace is converted to using the BMC FootPrints Service Core Address Book.

Salesnet.com Integration

Configuration of Address Book in BMC FootPrints Service Core for Salesnet

BMC FootPrints Service Core is integrated with Salesnet's contact database, allowing users to work with the Salesnet database from within the **BMC FootPrints Service Core** Address Book. If this option is used, **BMC FootPrints Service Core** dynamically accesses the Salesnet contact database for contact information in the Address Book.

NOTE

The BMC FootPrints Service Core CRM Bridge is only available if you have purchased the Dynamic SQL Link license, an add-on to BMC FootPrints Service Core. If you are interested in purchasing a Dynamic SQL link license, contact a sales representative at BMC or your local distributor.

There are three steps to this configuration process:

Establish your BMC FootPrints Service Core fields before mapping them to Salesnet fields and set email address field as primary key. In the first step, you make sure you have all of the BMC FootPrints Service Core fields you want to use and also set your email address field in BMC FootPrints Service Core as the primary key. If there are Salesnet fields that do not have corresponding BMC FootPrints Service Core fields, you create the corresponding BMC FootPrints Service Core fields in this step.

Optionally configure an Account field in the BMC FootPrints Service Core Address Book.

Map your BMC FootPrints Service Core Address Book fields to your Salesnet fields.

Step 1 Create BMC FootPrints Service Core Address Book Fields and Primary Key

The first step is to establish BMC FootPrints Service Core fields for all corresponding Salesnet fields. To do so, you must check your existing fields and add any new fields you want to use with Salesnet. In addition, you set your email address as the primary key field in this step. In the next step, you map the fields in BMC FootPrints Service Core to fields in Salesnet.

To configure the fields in the BMC FootPrints Service Core Address Book, refer to Adding Address Book Fields. Follow the procedure and make sure you set the Email Address field as the primary key.

Step 2 Configure the Account Field (Optional)

The integration for Salesnet allows a contact field mapping to include the Account as part of the BMC FootPrints Service Core Address Book record. With this integration feature, whenever an Address Book record is accessed, the contact's Account is automatically used in that record along with the other fields.

To configure the Account field:

Create a field in the BMC FootPrints Service Core Address Book Schema called either "Company" or "Account". This should be a public optional character field. Refer to Adding Address Book Fields for this procedure.

On the same page as you created the "Company" or "Account" field, make the new field the Organizational Unit.

Save and exit the page.

Step 3 Map BMC FootPrints Service Core Address Book Fields to Salesnet Fields

You may wish to refer to Field Mapping in Salesnet before beginning this procedure. In addition, drop-down fields in the Salesnet contact list are not supported at this time.

To dynamically link the BMC FootPrints Service Core Address Book to Salesnet's contact database:

Within BMC FootPrints Service Core, select Address Book Administration | Address Book Type.

There is an option to choose the Salesnet Address Book. Select the radio button for the Salesnet Address Book link.

Enter your password and click GO.

To verify that you can access the Salesnet Address Book, you must provide your company login information. Enter your Company, Username, and Password, then click Next.

Map your BMC FootPrints Service Core fields to your Salesnet fields using the drop-down lists. Drop-downs are labeled as BMC FootPrints Service Core fields. From each drop-down list, select the Salesnet field that corresponds to the BMC FootPrints Service Core field. Make sure you map the Organizational Unit you created for Salesnet to the account name.

NOTE

It is strongly recommended that all of the fields types, with the exception of Email Address, are created as character fields. Some field types, such as Date Time, Integer, Real Number, etc., do not map well with Salesnet field types because Salesnet stores most information in character fields. If you have any BMC FootPrints Service Core field types that are not character field, a warning is displayed. If the warning is displayed, click OK and continue with the setup, or click Cancel to allow yourself to change the field types to better fit the mapping process.

If You Cannot Access the Salesnet Address Book...

Salesnet has an option to prevent outside programs from logging into Salesnet. If this option is enabled, you cannot access the Salesnet Address Book from within BMC FootPrints Service Core. If you are having trouble logging into Salesnet from BMC FootPrints Service Core via BMC FootPrints Service Core integration with Salesnet, the problem may be that this option has been enabled on Salesnet.

To disable this option and allow BMC FootPrints Service Core to log into Salesnet:

Log into your Salesnet account.

Access the setup menu from the Salesnet Toolbar in the upper right hand corner (i.e., click the Wrench icon).

Towards the bottom of the administration form, in the Integration section, select Web Services API Configuration.

When the next page is displayed, select Edit from the bottom of the page. The Setup page is displayed.

Ensure that login is checked and also that all of the Read from Salesnet options are checked.

Read from Salesnet	Write to Salesnet	Delete from Salesnet
☑ GetFieldDefs	☐ ChangeRecordCurrency	☐ DeleteAccount
☑ GetActivityTypesAndPurposes	☐ ReassignRecordOwnership	☐ DeleteContact
☑ GetCompanyCurrencyInfo	☐ CreateAccount	☐ DeleteDeal
☑ GetCompanyUserInfo	☐ UpdateAccount	☐ DeleteAppt
☑ GetCompanyPositions	☐ ReassociateAccountRelatedObjects	☐ DeleteTask
☑ GetPosToPosMergedRecordAccess	☐ CreateContact	☐ DeleteMultiNote
☑ GetCompanyTeams	☐ UpdateContact	☐ DeleteLinkedEmail
☑ GetCompanyProcesses	☐ AssociateAccountWithContact	☐ UndoDealStep
☑ GetProcessDetail	☐ ReassociateContactRelatedObjects	
☑ GetResultsForProcessStep	☐ CreateDeal	
☑ GetInfoForStepCompletion	☐ UpdateDeal	
☑ GetServerTimeUTC	☐ AssociateContactsWithDeal	
☑ GetAccounts	☐ CreateAppt	
☑ GetAccountsWithAssocRecInfo	☐ UpdateAppt	
☑ GetContacts	☐ CreateTask	
☑ GetContactsWithAssocRecInfo	☐ UpdateTask	
☑ GetDeals	☐ CreateMultiNote	
☑ GetDealsWithAssocRecInfo	☐ UpdateMultiNote	
☑ GetRecordActivity	☐ CreateLinkedEmail	
☑ GetDealStepsOfDeal	☐ UpdateLinkedEmail	
☑ GetAppts	☐ CompleteCurrentDealStep	
☑ GetTasks	☐ UpdateDealStep	
☑ GetMultiNotes	☐ UpdateUserInfo	
☑ GetLinkedEmails	☐ UpdatePositionInfo	
☑ GetDealSteps	☐ UpdateCurrencyExchangeRates	

Further down the page are two options, in the Record Access and Field Access section, that allow for record access. Click both of the options to allow access.

On this same page, make sure that you have at least one API user set up for this account.

After setting these options and ensuring that there is at least one API user, click the SAVE button at the bottom of the page.

Once these changes are made, when you are asked in BMC FootPrints Service Core for a company, login and password for an external Salesnet Address Book, you should go right into the field mapping screen. Otherwise you will get a “bad username” message in **BMC FootPrints Service Core** and it will ask you to log in again.

Configuration of Contact Issue History in Salesnet

This section describes how to set up access so that a salesperson in Salesnet can view BMC FootPrints Service Core Issues for a specified contact.

There are two types of links that can be created from Salesnet to BMC FootPrints Service Core:

Contact history - Displays all of the support issues for the individual user.

Company history - Displays all of the support issues for the user's organization.

An example of a contact history link is given on the Sales/CRM Integration Administration screen.

Configure the BMC FootPrints Service Core side

To configure the BMC FootPrints Service Core side:

Within BMC FootPrints Service Core, go to Workspace Administration | Workspace Options | Add-on Modules | Sales/CRM Integration.

There is an option to enable Sales/CRM Integration for that workspace only. Click "Enabled".

For security reasons, there is an option to add a unique key for each workspace. This key value must be present in any links created in order for this feature to work. The field can be left blank, but that makes it possibility for anyone to view your data.

Configure the Salesnet side

To configure the Salesnet side:

In a web browser, access the Salesnet web site at http://www.salesnet.com.

NOTE

Access to Salesnet is obtained from Salesnet and not from BMC. In addition, licensing for Salesnet is not provided by BMC.

Log in to Salesnet.

A field must be created in Salesnet with the type "Integration Link" (or "I-Link"). This can be done by going to the setup page (clicking the wrench icon on the Toolbar) and scrolling down to the "Field Management" section, choosing "Contact Field Management" and then clicking the "Add" button.

Regardless of which type of link is being created, the Base URL must point to http://*server.domain*.com/MRcgi/MRentrancePage.pl (where *server.domain* is the name of the server and the name where you have installed BMC FootPrints Service Core).

The I-link takes several parameters (one per line on the setup page):

EXT_LINK=**1** (Required constant)

PROJECTID=<<*Workspace #*>> (Required constant – should be the number of the workspace you are linking to in FootPrints. If you do not know the workspace number, consult your **FootPrints** System Administrator)

EXT_LINK_KEY=<<*key value*>> (Optional constant -- Security key as defined in the third step of this procedure.)

One of the next two fields must also be used. ABN is used to create a Contact History link, while GRPDETAIL is used to create a Company History Link.

ABN=<<*primary key*>> (Optional variable for user data being passed in -- should correspond to primary key in BMC FootPrints Service Core Address Book. For example, if the Primary Key is set to "Email Address", the variable used here should be for the Email Address field in the Sales tool.) *This is only used for the contact history lookup.*

GRPDETAIL=<<*company*>> (Optional variable for company data being passed in -- should correspond to Organizational Unit in the BMC FootPrints Service Core Address Book. This type of link will not work unless and Organizational Unit is defined in the Address Book.) -- *This is only used for the company history lookup.*

Once all the parameters have been entered, click "Save".

A link is displayed on the contact details page in Salesnet. Clicking that link will open up that contact's/company's history in BMC FootPrints Service Core. Two define both Contact History and a Company History links, repeat this procedure.

Changing the Link Label

To change the label on the button that links your Salesnet account with the BMC FootPrints Service Core database:

In a web browser, access the Salesnet web site at www.salesnet.com.

Select the Customer Login link and log in to the customer area with your company, username, and password. Your customer page is displayed.

Select the wrench icon on the Toolbar.

Scroll down to the “Field Management” section, choosing “Contact Field Management” and then clicking the “Edit” link for the link you wish to change. The links are identified in the Label column of the table.

Enter the new label in the Field Label field.

Click the Save button.

Field Mapping in Salesnet

BMC FootPrints Service Core CRM Bridge can work with different field types in contact records in Salesnet, but there are some considerations when using something other than a character field:

Character fields—Most built-in fields in Salesnet are character fields, which work well with the BMC FootPrints Service Core CRM Bridge, both in displaying the field value and searching the field.

Integer and float fields—Custom integer and float fields in Salesnet map correctly for both displaying and searching. You must be careful that the BMC FootPrints Service Core field type matches the field type in Salesnet.

Date fields—Salesnet—Date fields in Salesnet should be created as INT fields in BMC FootPrints Service Core, due to the method used in Salesnet to search on Date fields. If this is done, both search and display of date fields work correctly.

Dropdown fields—Dropdown fields in the Salesnet contact list are not supported at this time.

NOTE

When a field is created in BMC FootPrints Service Core for use by the CRM bridge, that field is available subsequently if the Workspace is converted to using the BMC FootPrints Service Core Address Book.

Using Salesnet to Access BMC FootPrints Service Core Issues

To access a contact's support information from your Salesnet account:

Log into Salesnet.

Select a contact from the list of contacts. The contact information is displayed in a new window.

In the contact window, select the support link at the bottom of the Contact's Main Information section of the contact pop-up. A new pop-up is displayed showing the BMC FootPrints Service Core Issues list. The BMC FootPrints Service Core support link name is determined by the administrator when configuring the account. There may be several different links at the bottom of the Contact's Main Information section; contact your administrator if you do not know which link is the **FootPrints** support link.

You can now view the BMC FootPrints Service Core Issues.

Working with BMC FootPrints Service Core Issues from Salesnet

When the Issues list is displayed in the pop-up, several BMC FootPrints Service Core functions are available for viewing different aspects of the Issues. The available functions are:

Viewing the Details page

Viewing the Issue History (from the Details page)

Generating a Report (from the Details page)

Viewing the Time Tracking data (from the Details page)

Generate reports for multiple Issues using the checkbox on the Issues list page

Using the BMC FootPrints Service Core CRM Bridge

Using MS CRM to Access FootPrints Service Core Issues

Access to BMC FootPrints Service Core Issues within MS CRM is tied to specific contacts. That is, you select a contact within MS CRM and then, when the Contact pop-up page is displayed, you click the BMC FootPrints Service Core**Cases** button to display the BMC FootPrints Service Core Issues that are associated with that contact.

To access BMC FootPrints Service Core Issues from within MS CRM:

Log into MS CRM.

Click the Sales button at the bottom of the page. The contacts list is displayed

Double-click on one of the contacts in the list. A pop-up is displayed with the details for that contacts.

Click on the FootPrints Cases button at the bottom of the left frame.

The main frame is refreshed with the BMC FootPrints Service Core Issues list.

Using Salesforce.com to Access FootPrints Service Core Issues

To access a contact's support information from your Salesforce.com account:

Log into Salesforce.com.

Select the Contacts tab. The Contacts page is displayed.

On the Contacts page, click on the name of either an individual contact or the Account Name. The contact information for the selected contact is displayed.

Click the BMC FootPrints Service Core support link in the Web Links section of the contact information. The BMC FootPrints Service Core support link name is determined by the administrator when configuring the account. There may be several different links in the Web Links section; contact your administrator if you do not know which link is the BMC FootPrints Service Core support link. A pop-up window showing the BMC FootPrints Service Core Issues for the selected account is displayed.

You can now view the BMC FootPrints Service Core Issues.

Working with BMC FootPrints Service Core Issues from Salesforce.com

When the Issues list is displayed in the pop-up, several BMC FootPrints Service Core functions are available for viewing different aspects of the Issues. The available functions are:

Viewing the Details page

Viewing the Issue History (from the Details page)

Generating a Report (from the Details page)

Viewing the Time Tracking data (from the Details page)

Generate reports for multiple Issues using the checkbox on the Issues list page

Glossary

A

Address Book
FootPrints table used to keep customer contact and configuration information. For example, the Project Administrator may have set up the Address Book to hold a customer's name, email address, phone number, location, etc. Multiple Address Books can be created within FootPrints, each associated with one or more Projects.

Agent
A standard, full-strength user of FootPrints. Common uses for this user type include: Help Desk Agent, Call Center Agent, Developer, Engineer, Manager and Project Member. Agent users have the ability to use all of the basic functions of FootPrints, including creating, viewing, editing Issues, and running queries.

Appointment
A record of the FootPrints Calendar. Used to schedule meetings, service calls, and other types of appointments for FootPrints Agents. Can be optionally synced to the user's Outlook Calendar.

Assignees
FootPrints users assigned to work on an Issue.

Auto-run Reports
FootPrints can run any saved report automatically at regularly scheduled times. The reports can be saved to a file on the server, emailed to a list of addresses, or both.

B

Built-in Report
A report included in FootPrints (not a custom report).

C

Calendar
A web-based calendar for a FootPrints Workspace and/or Agent that can contain appointments, meetings, and jobs for that Workspace and/or Agent.

Category
A classification of items, such as an Issue type, Service Category, or FAQ category.

Change Management
A feature that helps manage changes ranging from small solutions, e.g., upgrading memory or software on a single machine, to large projects, such as an organization–wide system upgrade. Changes are managed by designated approvers who vote to approve or disapprove Requests for Change (RFCs) at each phase in the process.

Change Order
To change the order of the display of a list of items, e.g., to ascending or descending order.

Character
A letter, number, punctuation mark, or other symbol.

Character (Multiple Line)
A type of field that can accept an unlimited number of lines of data.

Character(Single Line)
A type of field that can accept one line of data.

Chart
A graphic or diagram that displays data or the relationships between sets of data in pictorial rather than numeric form.

Closed
Status of an Issue when completed.

Contact
The default name given to a record in the FootPrints Address Book. Normally contains a customer's name, email address, phone number, etc.

Cross-workspace report
Across Workspaces, such as searches or reports that can be created that include more data from more than one Workspace.

Customer
A user account type in FootPrints. This type of account is intended for both internal and external customers, and other groups of people who require only partial access to the data. A A Customer account is very cost-effective, and allow customer users to submit and track their own Requests via the Customer Self-service interface, and to search the Knowledge Base. The word "Customer" is used throughout this documentation to refer to both employee customers and external customers who access FootPrints.

Customer Read KB
Customer role that only allows the user to view and search the Knowledge Base.

Customer Read KB/Requests
Customer role that only allows the user to view and search the Knowledge Base, and track the status of his/her Requests.

Customer Read/Submit
Customer role that only allows the user to submit and track his/her own Requests, and search the Knowledge Base.

Customer Read/Submit/Edit
Customer role that only allows the user to submit, track and edit his/her own Requests, and search the Knowledge Base.

Customer Service Portal
The Customer Service Portal enables customers to view the Knowledge Base Solutions to their problems without having to first log into the company Customer Support site or FootPrints.

D

Dashboard
The FootPrints Dashboard section of the Preferences page is where Agents specify which dashboard components are displayed on your homepage in the Workspace. Agents can specify different sets of dashboard components for each of their Workspaces. By default, Workspace Totals and Global Issues are displayed. Dashboard components can be displayed in as many as four columns. Agents can also make custom components for display on the homepage.

Database Type
The type of database configured to use with FootPrints, e.g., SQL or Oracle.

Date Submitted
The date an email was sent.

Decision field
The single drop-down field that, when a value is selected, determines whether certain project fields appear in a pop-up window when creating or editing an Issue. This only applies when the "Field Dependencies" Pop-up Window option is enabled in a project.

Dependency
A sub-category field in an Issue can be dependent on the main category selected. For example, if a user selects "Hardware" as the main category, the sub-categories might be Printer, Monitor, etc.

Descending
From highest to lowest, as in "descending order".

Description
The built-in FootPrints field that contains all notes entered by users regarding an Issue. It is a multi-line text field, and acts as a journal for an Issue. Each addition to the description includes a time/date/user stamp. The Description can be displayed on the FootPrints Homepage, on an Issue's Details screen, and in reports. A full-text search can also be performed on the Description field.

Details
The Details Screen displays all the information about a FootPrints Issue. The details are displayed by clicking the title of an Issue from the FootPrints Homepage. Data can include Title, Status, Priority, Creator, Date and Time submitted, Description, Project field data, Contact data, and file attachments.

Device
Any piece of equipment that can be attached to a network or computer, for example, printers, keyboards, external disk drives, or other peripheral equipment. Devices normally require a device driver to function with Windows.

Disable
To make a device, component, or feature nonfunctional.

Disallow
To not allow an action.

Disapprove
To not approve a request.

Display drop-down
A dialog on the FootPrints home page that contains built-in and custom queues and searches, such as "My Assignments". By selecting an option, the list of Issues on the home page is updated to that queue.

Distinguished Name
A name that uniquely identifies an object by using the relative distinguished name for the object, plus the names of container objects and domains that contain the object. The distinguished name identifies the object as well as its location in a tree. Every object in Active Directory has a distinguished name.

Drop-down field
A type of custom Project and Address Book field. A drop-down choice field offers the user a drop-down list of choices from which to pick. An unlimited number of values can be defined per drop-down choice field.

Dynamic Address Book Link
The FootPrints feature that allows any LDAP-compliant contact database to be linked to FootPrints. Supported contact databases include Microsoft Exchange 5.x/2000, Netscape iPlanet, Lotus Notes and Novell Directory Services.

Dynamic LDAP Address Book
An address book using Dynamic LDAP as the data source (this requires the BMC FootPrints Service Core Dynamic Address Book Link add-on module).

Dynamic Link
A link between Issues in which changes made to fields in one Issue are automatically reflected in the other Issue.

Dynamic SQL Address Book
An add-on module that allows FootPrints access to Address Book entries maintained in a SQL database table not maintained by the FootPrints infrastructure.

E

Email Filter
A feature that allows FootPrints to block sending and receiving email from certain email accounts or domains.

Executive Dashboard
Executive Dashboard provides a customizable overview of the performance of your service desk. Agents with access to Executive Dashboard can set the types of data they wish to display and observe that data, seeing it change dynamically as the Executive Dashboard is refreshed.

G

Global Issue
A special FootPrints Issue type used to designate important or frequently reported Issues that will affect many users. Global Issues can be broadcast to all Agents, are displayed on the Agent Home page, and can optionally be displayed for Customers to subscribe to. Whenever a new Issue is reported with the same problem, the Agent (and optionally the Customer) can link the Issue to the known Global Issue (called GlobalLinks). Global Issues can be closed with the GlobalLinks together at one time.

Global Issues
A special FootPrints Issue type used to designate important or frequently reported Issues that will affect many users. Global Issues can be broadcast to all Agents, are displayed on the Agent Home page, and can optionally be displayed for Customers to subscribe to. Whenever a new Issue is reported with the same problem, the Agent (and optionally the Customer) can link the Issue to the known Global Issue (called GlobalLinks). Global Issues can be closed with the GlobalLinks together at one time.

GlobalLink
The child or related Issue linked to a Global Issue. A Global Issue is a special FootPrints Issue type used to designate important or frequently reported Issues that will affect many users. Global Issues can be broadcast to allAgents, are displayed on the Agent Home page, and can optionally be displayed for Customers to subscribe to. Whenever a new Issue is reported with the same problem,the Agent (and optionally the Customer) can link the Issue to the known Global Issue (called GlobalLinks). Global Issues can be closed with the GlobalLinks together atone time.

I

Individual user
A full-strength user of FootPrints. Built-in types include Agent, Project Administrator, and System Administrator. Custom Roles can also be created to assign different permissions to different groups of users. Each individual user is assigned an individual account and password and is the only person using that account. This type of account is intended for internal users of the system, such as Help Desk Agents, Customer Service Representatives, Engineers, and Administrators.

Issue
The default name given to a FootPrints record. Each Issue is a numbered record in the FootPrints database around which all help desk and problem tracking activity centers. The name for this may be different (Ticket, Entry, etc.) depending on how your system is configured. An Issue can be opened, assigned, worked on, and closed by Agent users and Administrators.

Issues
The default name given to a FootPrints record. Each Issue is a numbered record in the FootPrints database around which all help desk and problem tracking activity centers. The name for this may be different (Ticket, Entry, etc.) depending on how your system is configured. An Issue can be opened, assigned, worked on, and closed by Agent users and Administrators.

Issues linked
The child or related Issue linked to a Global Issue. A Global Issue is a special FootPrints Issue type used to designate important or frequently reported Issues that will affect many users. Global Issues can be broadcast to allAgents, are displayed on the Agent Home page, and can optionally be displayed for Customers to subscribe to. Whenever a new Issue is reported with the same problem,the Agent (and optionally the Customer) can link the Issue to the known Global Issue (called GlobalLinks). Global Issues can be closed with the GlobalLinks together atone time.

K

Knowledge Base
The Knowledge Base is a place to record, organize and manage important information for a FootPrints project database. This can include, but is not limited to: solutions to common problems, answers to frequently asked questions, patches, and documents. By utilizing the FootPrints Knowledge Base feature, you can turn the past experiences of individual customers and agents into a database of solutions for all project members. This can assist in Agents finding quicker resolutions to recurring problems, and in empowering Customers to find the answers to their questions without submitting a request.

L

LDAP Address Book
Any LDAP-compliant contact database linked to using the FootPrints Dynamic Address Book link feature. Supported contact databases include Microsoft Exchange 5.x/2000, Netscape iPlanet, Lotus Notes and Novell Directory Services.

Login
The first page that FootPrints displays when the URL for your Footprints system is requested by a user's web browser. Also, the act of starting a FootPrints session.

M

Master Issue
A type of FootPrints Issue that contain Subtasks, each with a different task that must be completed before the Master Issue is Closed. The Master issue is the "parent" in a parent/child relationship between the Master Issue and its Subtasks.

Master Issues
A type of FootPrints Issue that contain Subtasks, each with a different task that must be completed before the Master Issue is Closed. The Master issue is the "parent" in a parent/child relationship between the Master Issue and its Subtasks.

Multi-select field
A type of custom Project and Address Book field. A multi-select field offers the user a dialog box from which they can select multiple, pre-defined choices. An unlimited number of values can be defined per multi-select field.

O

Organizational Unit
An Address Book field used to organize contacts, such as “Department” , “Company Name”, “Business Unit”, or “Location”. Must be enabled by the Administrator.

P

Password complexity rules
Rules that govern the mandatory characteristics of passwords for FootPrints authentication. Rules are optionally set by the System Administrator. Rules can be configured to govern the length of a password (minimum and maximum number of characters), whether letters and/or numbers and/or punctuation characters are required, and case sensitivity.

Personal Calendar
A web-based calendar for a FootPrints Agent that can contain appointments, meetings, and jobs for that user.

Personal Report
A FootPrints report created by an Agent that is only available to that Agent.

Primary key
The key field in the FootPrints Address Book that is used by FootPrints as a reference to identify the customer contact. Examples include "Email Address" and "User ID".

Priority
A built-in field in FootPrints used to determine the severity or impact of an Issue. Priorities are customizable, and may include numbers (1,2,3) or words (High, Medium, Low).

Project
FootPrints stores and tracks information in projects. A project is a separate sub-database within the system, which can have its own custom fields, options and users. There is no limit to the number of projects that you can create within FootPrints. You may choose to keep all of your data in a single project, or you can create multiple projects. For example, one project can be used for help desk activity, while a second project is used for internal bug tracking.

Project Administrator
A built-in User Role in FootPrints . In addition to all Agent user privileges, the Project Administrator can administer a project, including adding custom fields, setting options, and adding users.

Project Calendar
A web-based calendar for a FootPrints Project that can contain appointments, meetings, and jobs for members of that Project.

Project field
Custom field created by the Project Administrator to store information about a particular Issue. There is no limit to the number of fields allowed per project (NOTE: The FootPrints database only allows 100 fields per project).

Q

Quick Issue
Quick Issues are templates that contain pre-filled information for frequently reported Customer Issues, such as "Password Reset", "Service Request", etc. For example, a Quick Issue template for "Password Reset" would start out pre-filled with a description of the problem, the problem categories pre-filled with "Network" and "Password Reset",and perhaps a Status of "Closed". The Agent only needs to fill in the user's contact information to submit the Issue. The Project Administrator can create an unlimited number of templates, which are available to all Agents from the FootPrints Toolbar.

R

Report
FootPrints reports can be created by the Agent from simple keyword searches to multi-level metrics with color charts. Virtually any data can be reported on in FootPrints to analyze activity, trends, and statistics with no programming from the FootPrints web interface.

Request
An Issue submitted by a Customer that has not yet been assigned. Also the Status assigned to Issues submitted by Customers. Agent users can then "Take" the Request to work on it, or Requests can be automatically assigned to one or more Agent users by the system. Your FootPrints Administrator can tell you how Requests are to be handled in your organization.

Role
A user type assigned to one or more users to define permissions. Both built-in roles and custom roles can be assigned to users. Examples of built-in roles include Agent, Customer Read/Submit, and Workspace Administrator.

S

Schema
The Workspace Schema is a display of the order of the fields in a workspace. The Workspace Schema is useful when you are attempting to import data to FootPrints or export data from FootPrints. The Workspace Schema can be used to check that the tables of data match up.

Search
1. To try to locate an object (a file, a folder, a computer, a text). 2. The process of seeking a particular file or specific data.

Shared Report
Report that is available to other users in the same workspace to run.

Solution
A record in the FootPrints Knowledge Base. Can be a solution to a common problem, frequently asked question, patch, or step-by-step procedure. Solutions can be created from scratch, or from existing Issues. Solutions are public, and can be viewed/searched by Customers (as well as Internal users).

Status
The state of a Footprints Issue. Each Issue has a Status field, which tracks the workflow of an Issue from "Open" status, the default state of a new Issue, to "Closed" status. The Project Administrator can easily add new statuses to a project database, such as "Assigned", "Pending" or "Testing".

Subtask
A type of FootPrints issue that is a "child" of a related "parent", called a Master Issue. Multiple subtasks can be created to define different tasks to be completed for a larger Master Issue. The Master Issue cannot be closed until all Subtasks are completed.

Subtasks
A type of FootPrints issue that is a "child" of a related "parent", called a Master Issue. Multiple subtasks can be created to define different tasks to be completed for a larger Master Issue. The Master Issue cannot be closed until all Subtasks are completed.

System Administrator
A built-in User Role in FootPrints. In addition to Agent user and Project Administrator privileges for all projects, the System Administrator has control over the whole FootPrints system, including administration of any project, adding new projects, and administering licenses.

T

Taking
The option of allowing Agent users to assign themselves to a given Footprints Issue. This is a Role option set by the Project Administrator for a particular Role.

Team
A organizational unit used to organize Agent users for assignment purposes, such as “Application Support”, “Network Support”, “Development”, etc. Issues can be assigned to the whole team, or to individual users within the Team. This allows an Agent to assign an Issue to a group of people, such as a Development Team, without needing to know the individual person who will work on the Issue.

U

User ID
The Footprints user name which, when entered with the proper password during login, permits access to the Footprints system.

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