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BMC FootPrints Service Core 11.6

Administrator's 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
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- 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

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

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.

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

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

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: 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.

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.)

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.

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.

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.

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.

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.

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).

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 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

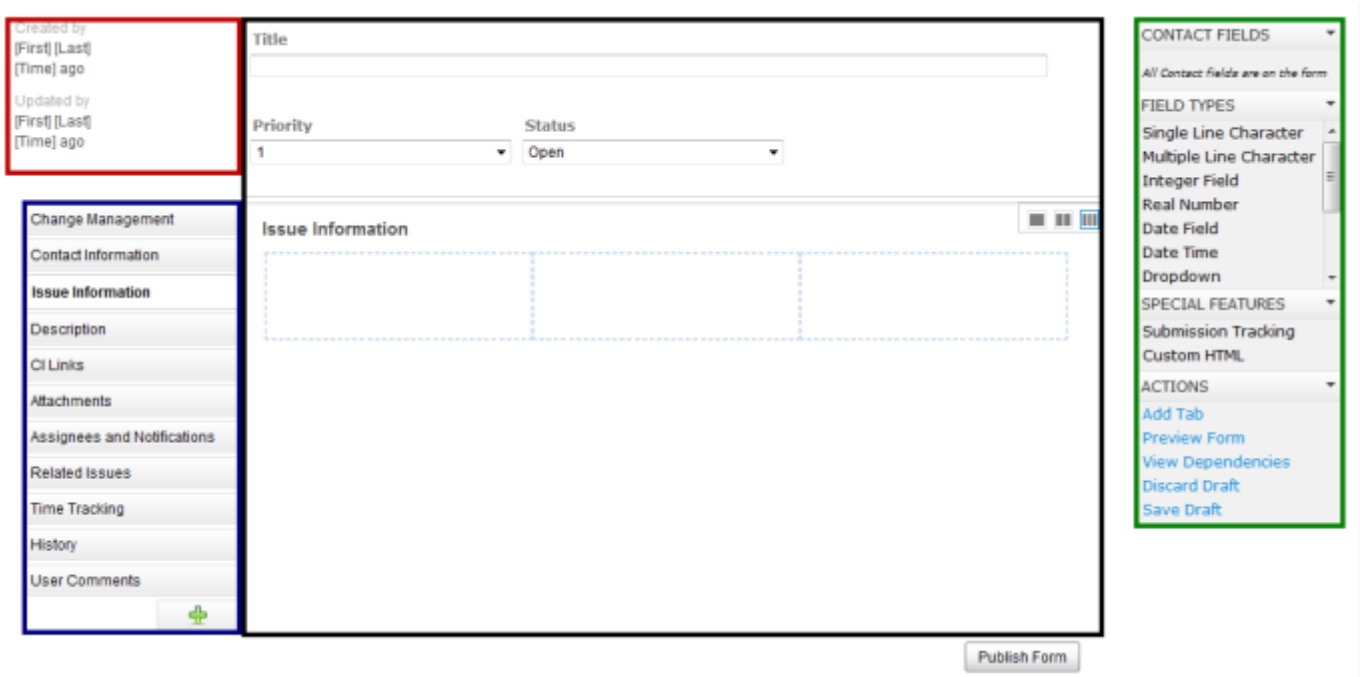
individual workspace grows into the hundreds, performance may begin to degrade or data may begin to be truncated. Administrators should at least be aware of this possibility. There are two ways in which field proliferation could get out of hand. One is through the use of field dependencies. The other 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.

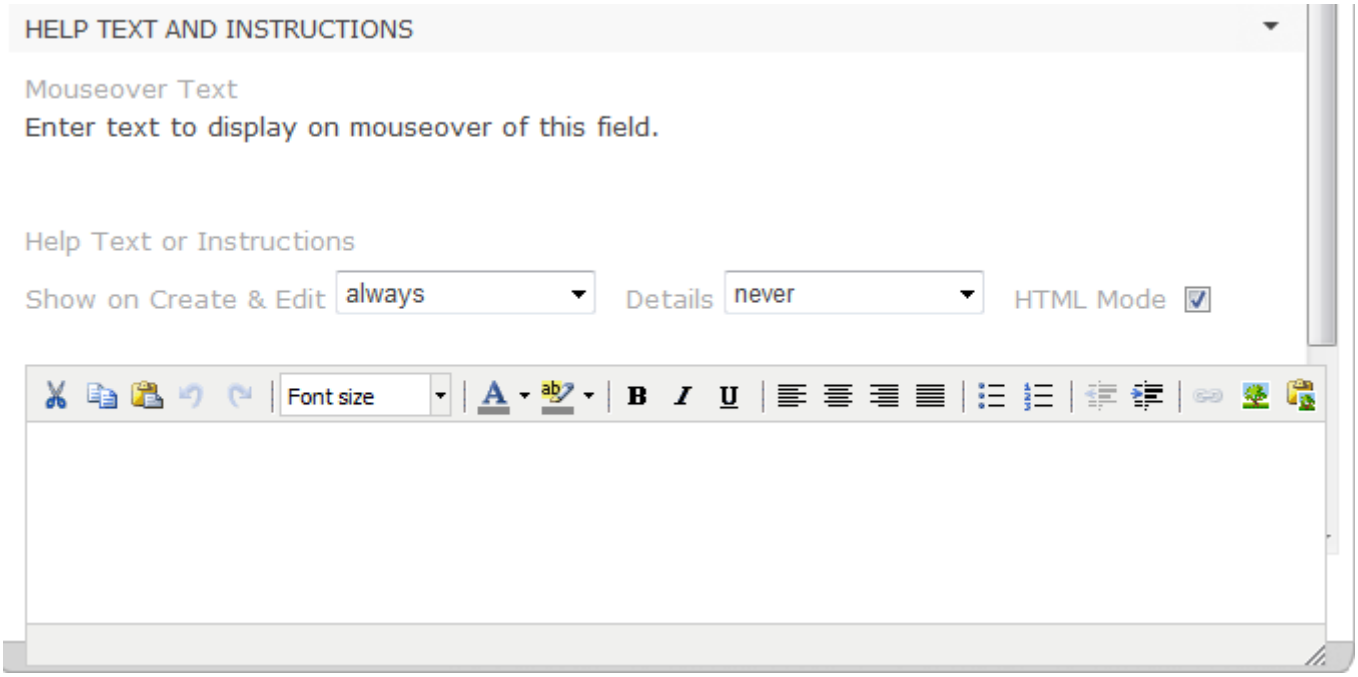
Additional Form Designer Functions

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.

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.

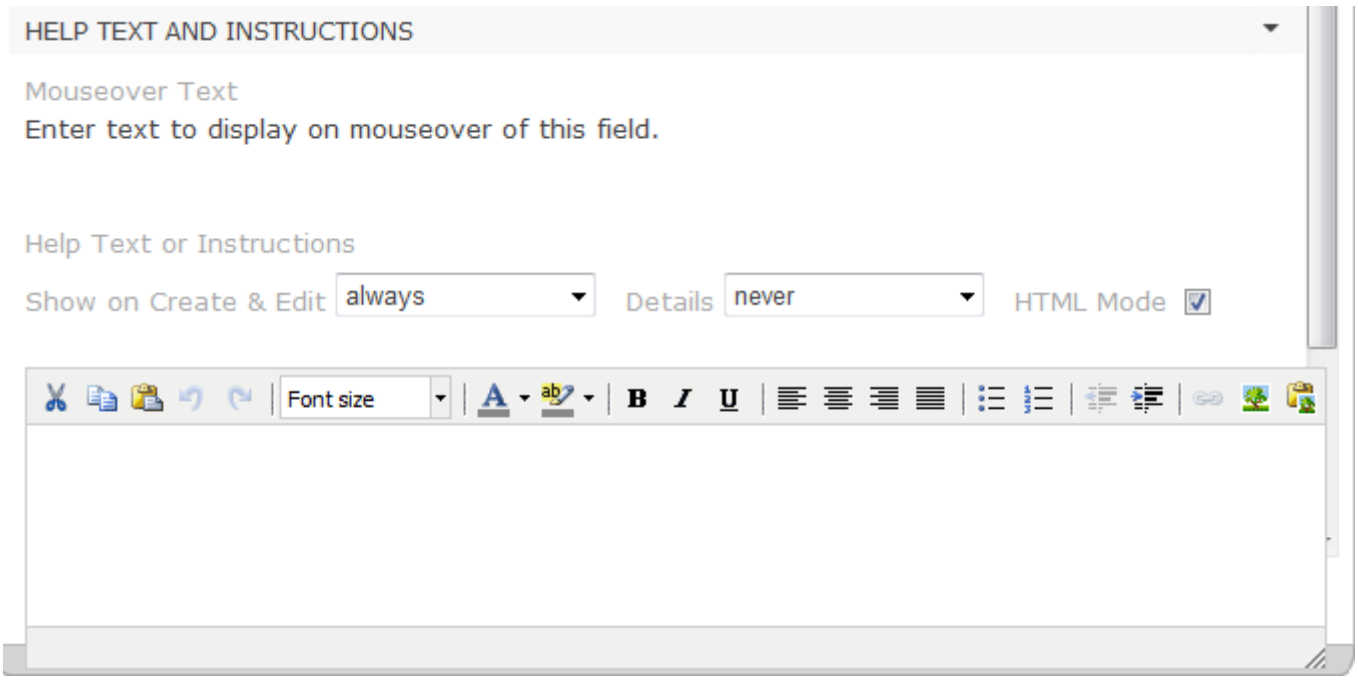
Setting Properties

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.

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.

Defining Fields

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:

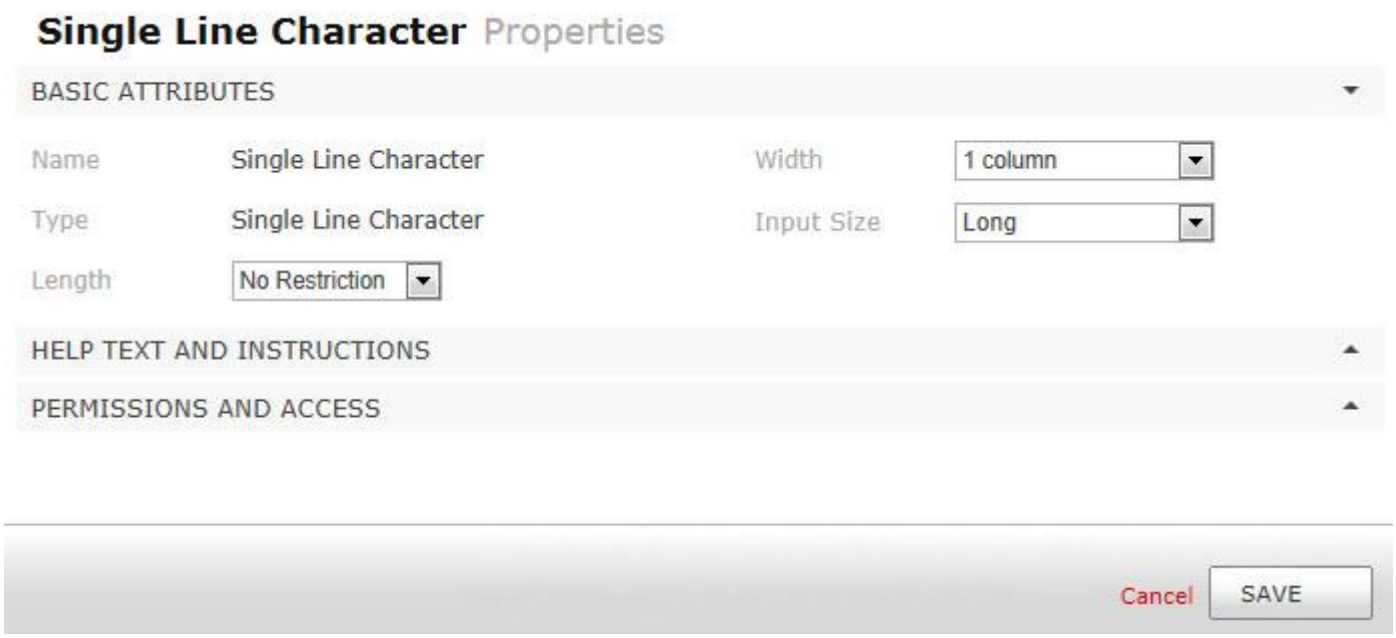
- Single-line Character
- Multi-line Character
- Integer

- 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.



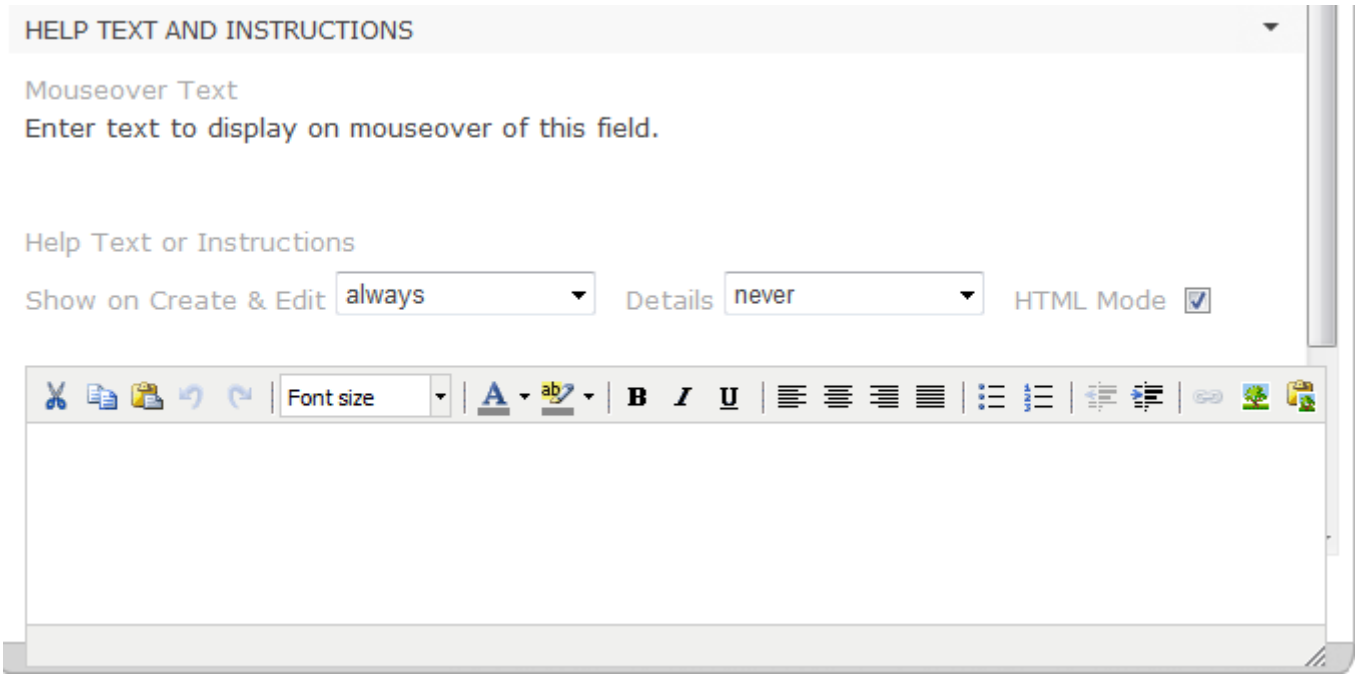
Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **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.

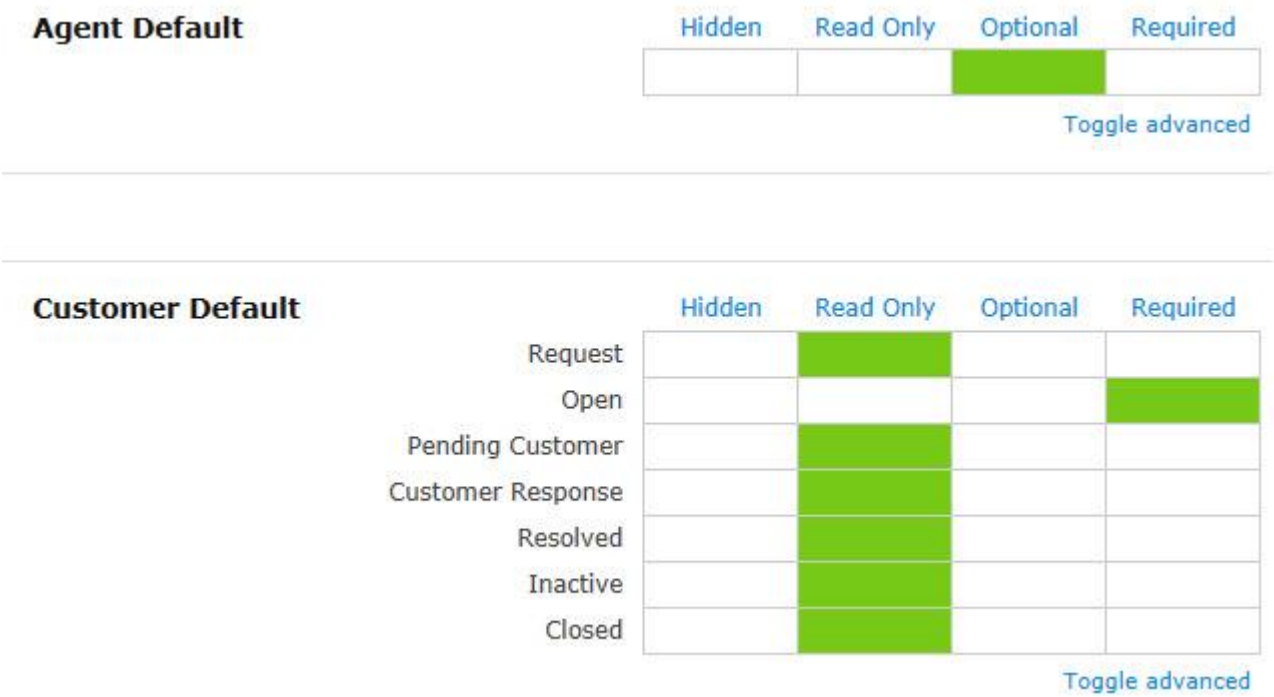
To Set Permissions for a Field:

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.

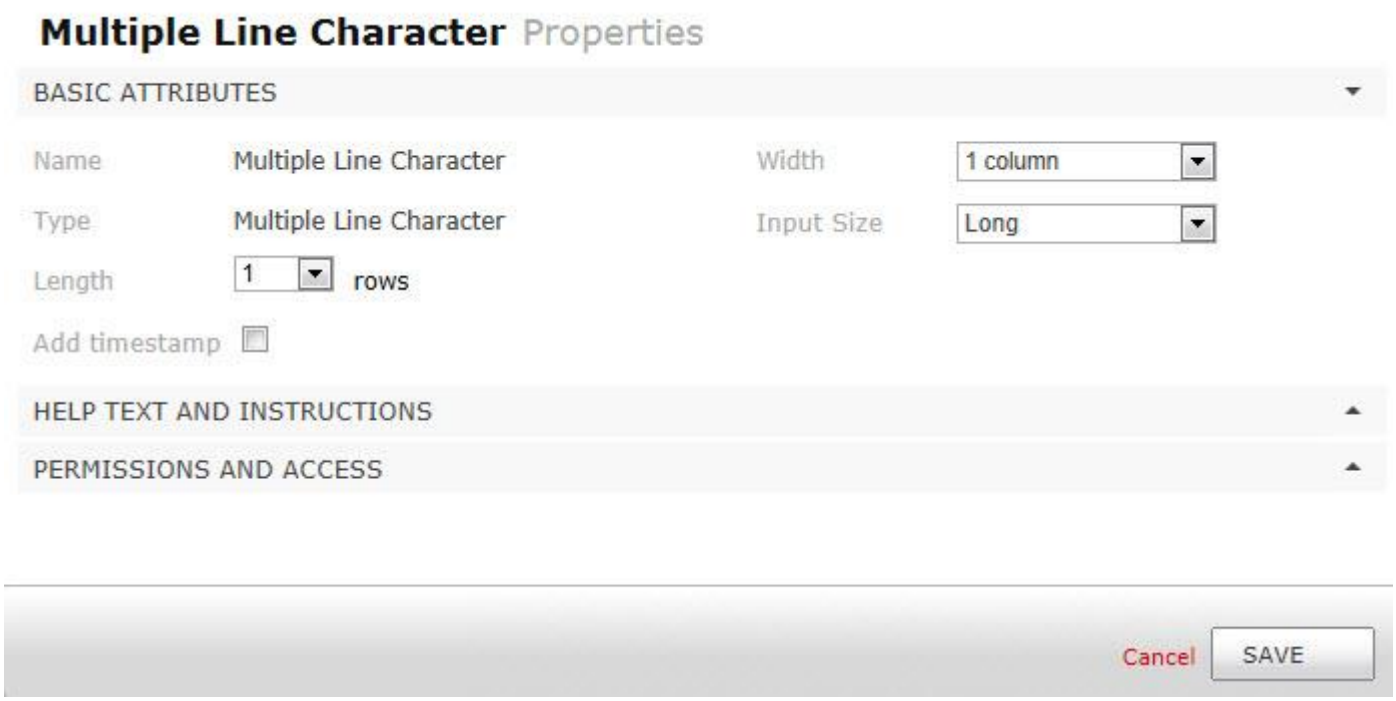
Changing the Field Name

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.



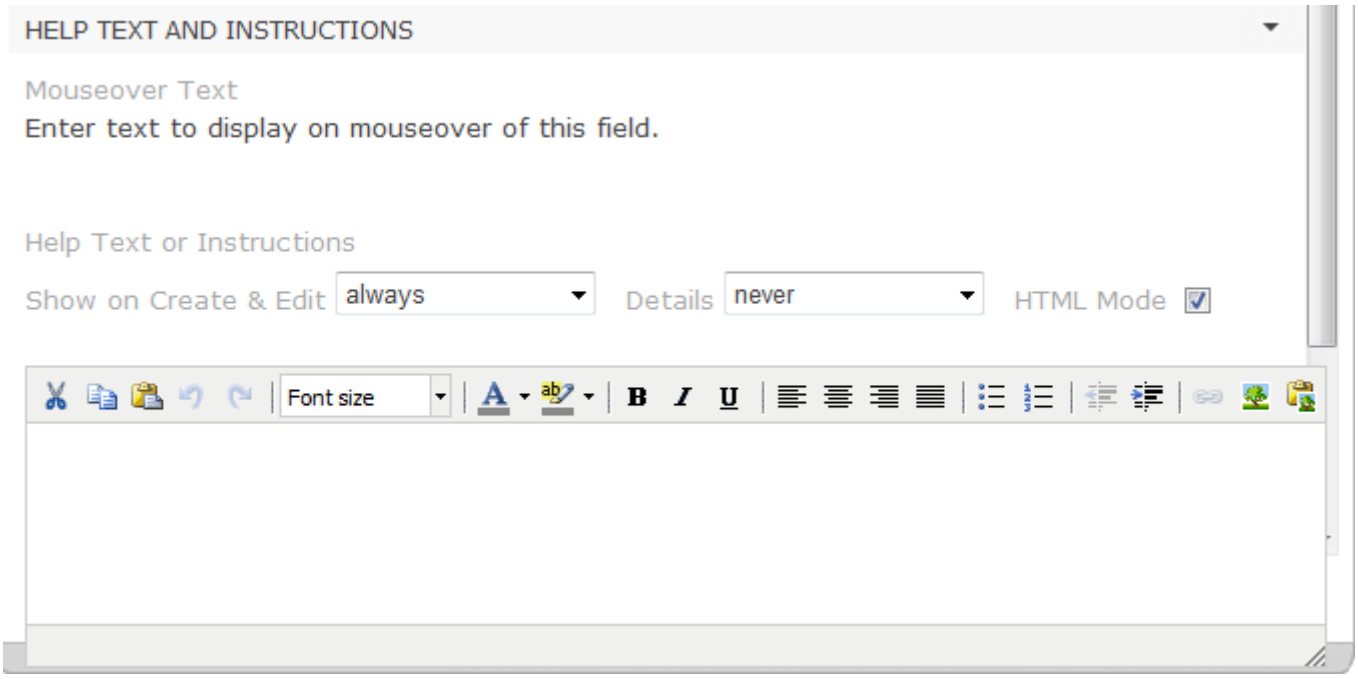
Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **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**



- **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

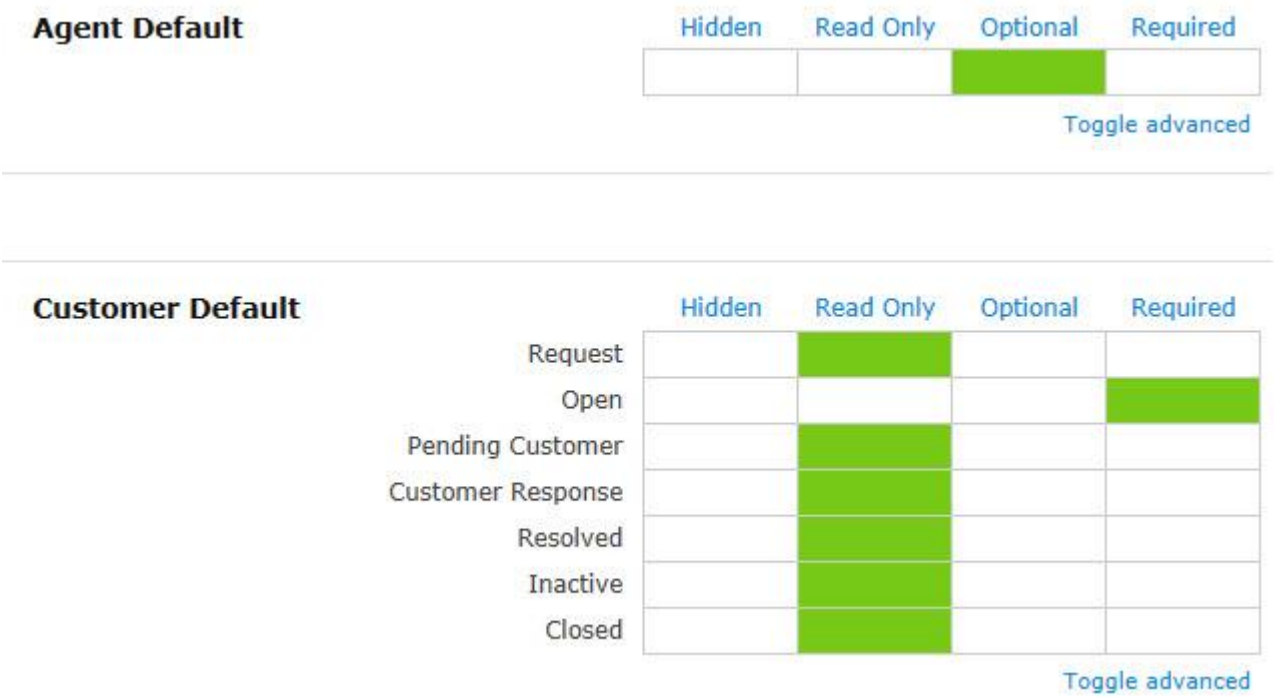
  You might want to require agents to enter information in an issue information field when the issue's status is open, and restrict them from entering information in the field when the issue is closed. So when setting up the Issue Information field, you would set the Agent Default permissions to "Required" 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.

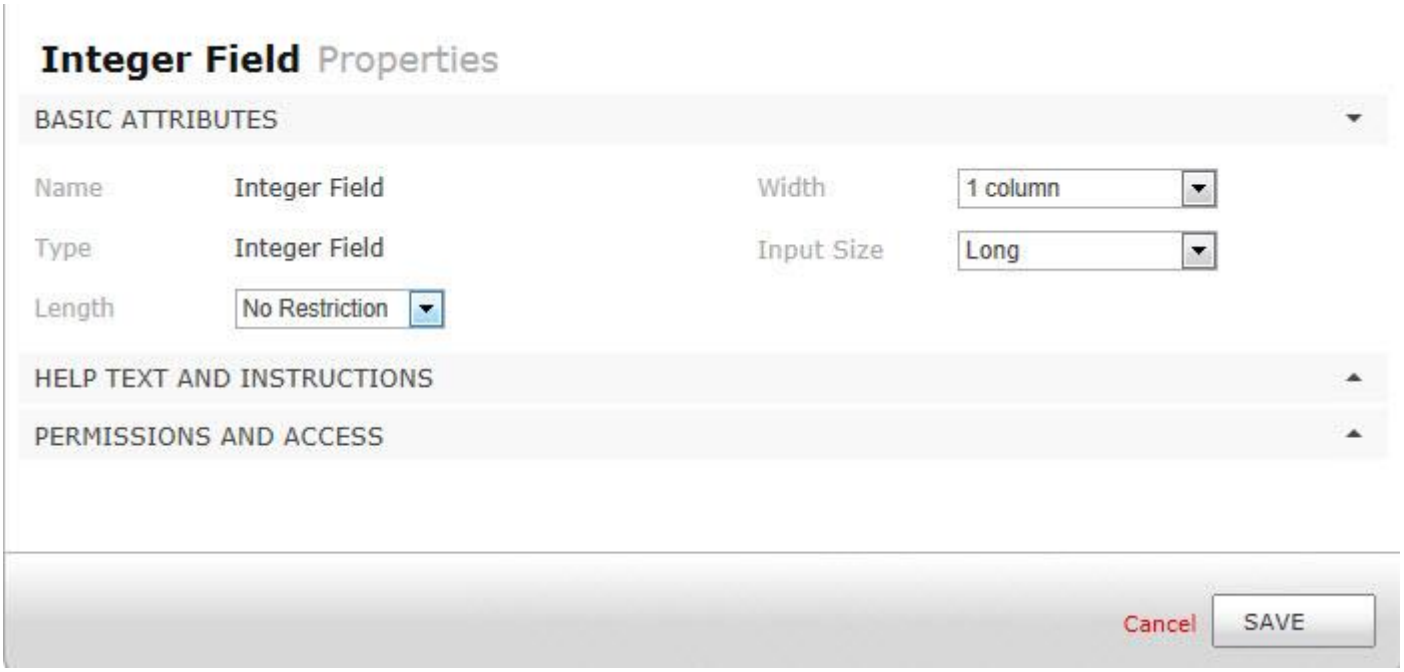
Changing the Field Name

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.

Integer

Setting Properties

When you drag and drop an Integer field into the Canvas, the Properties window is displayed.

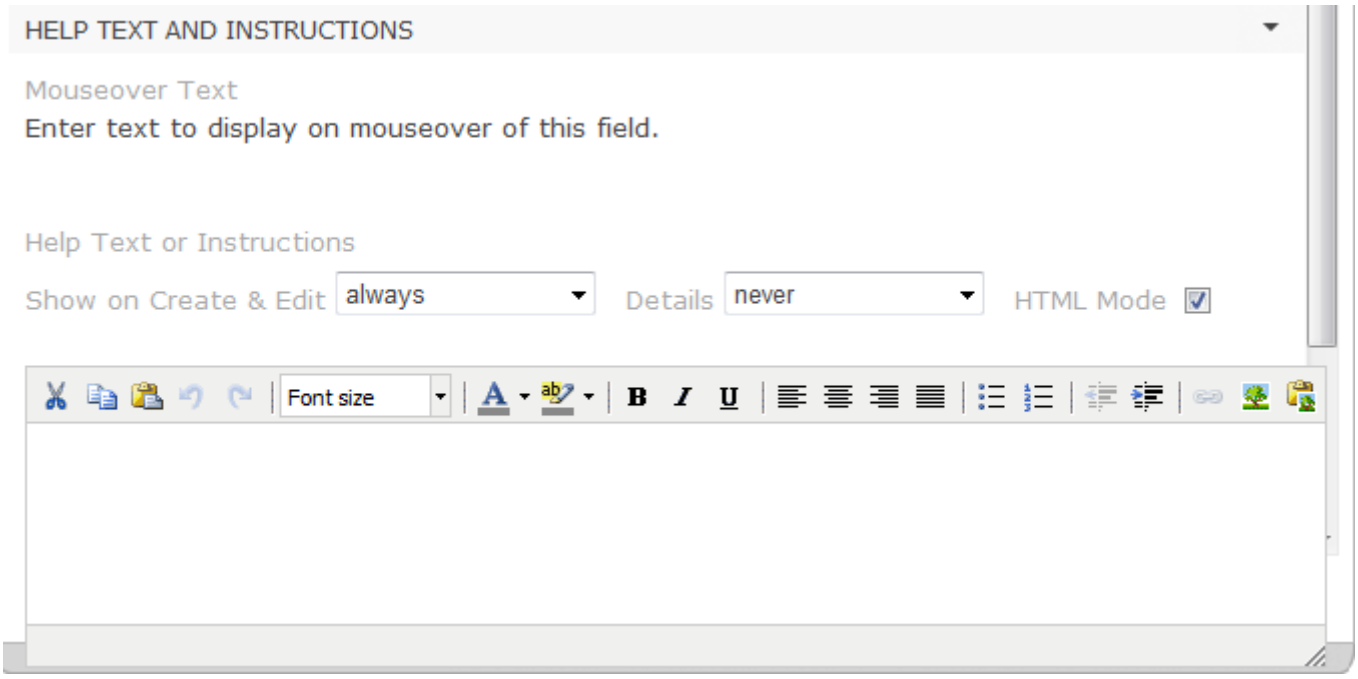


Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **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.
    - **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.

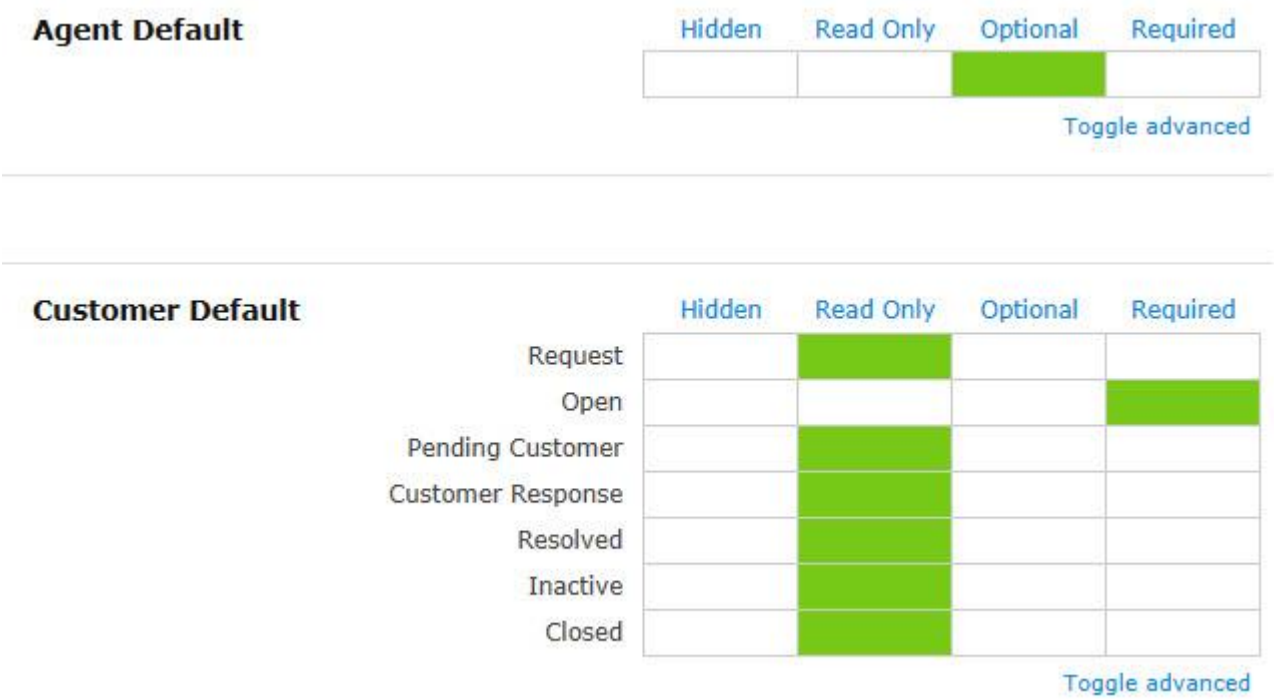
NOTE

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.

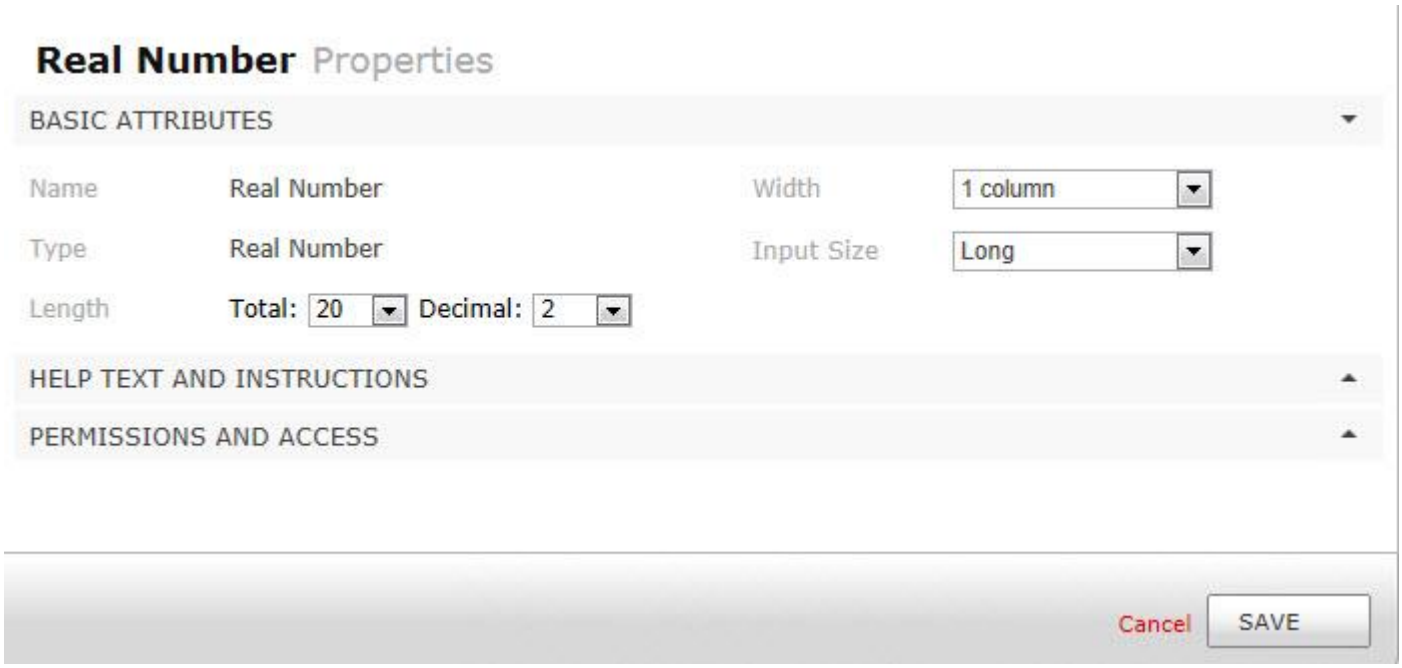
Changing the Field Name

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.

Real Number

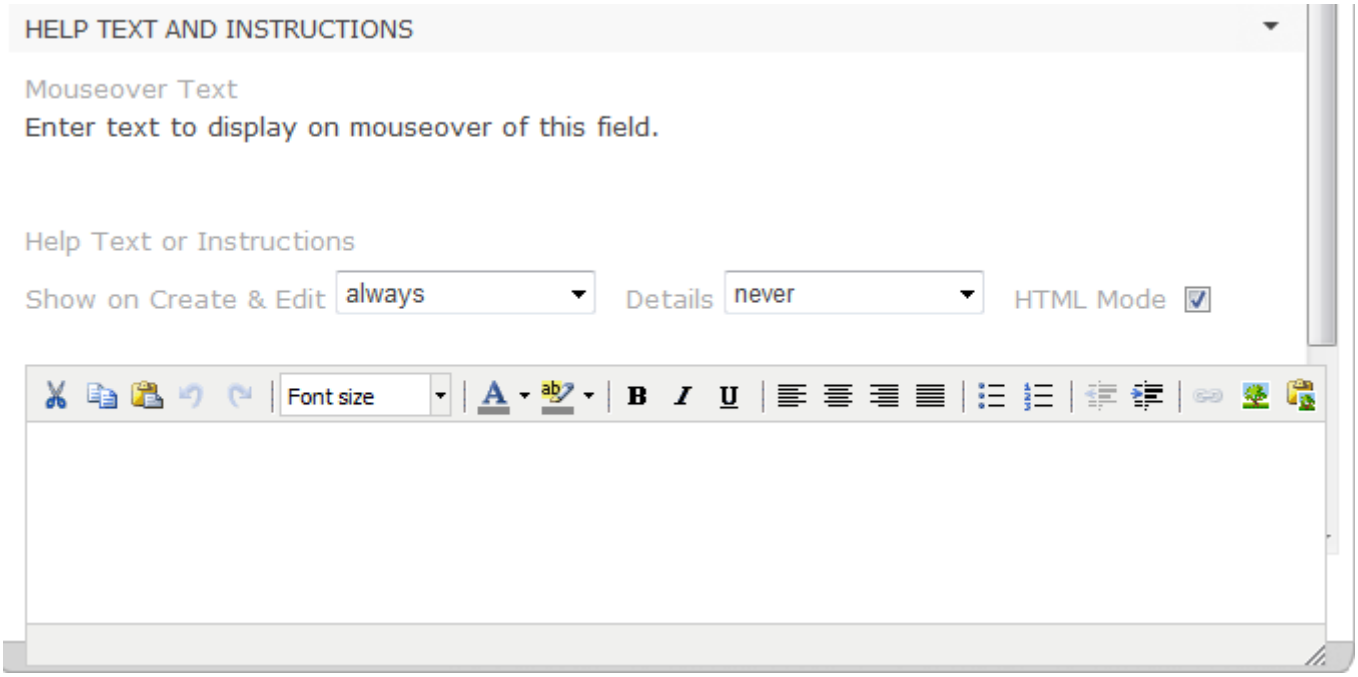
Setting Properties

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.

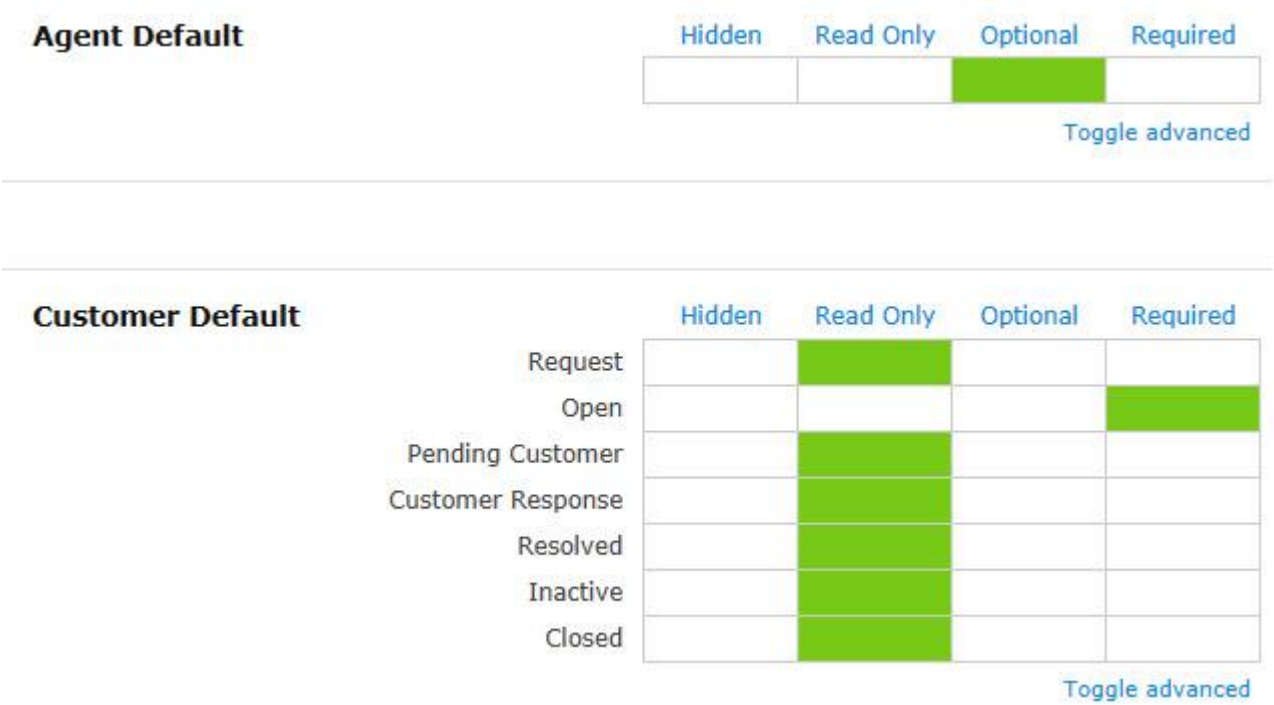
NOTE

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.

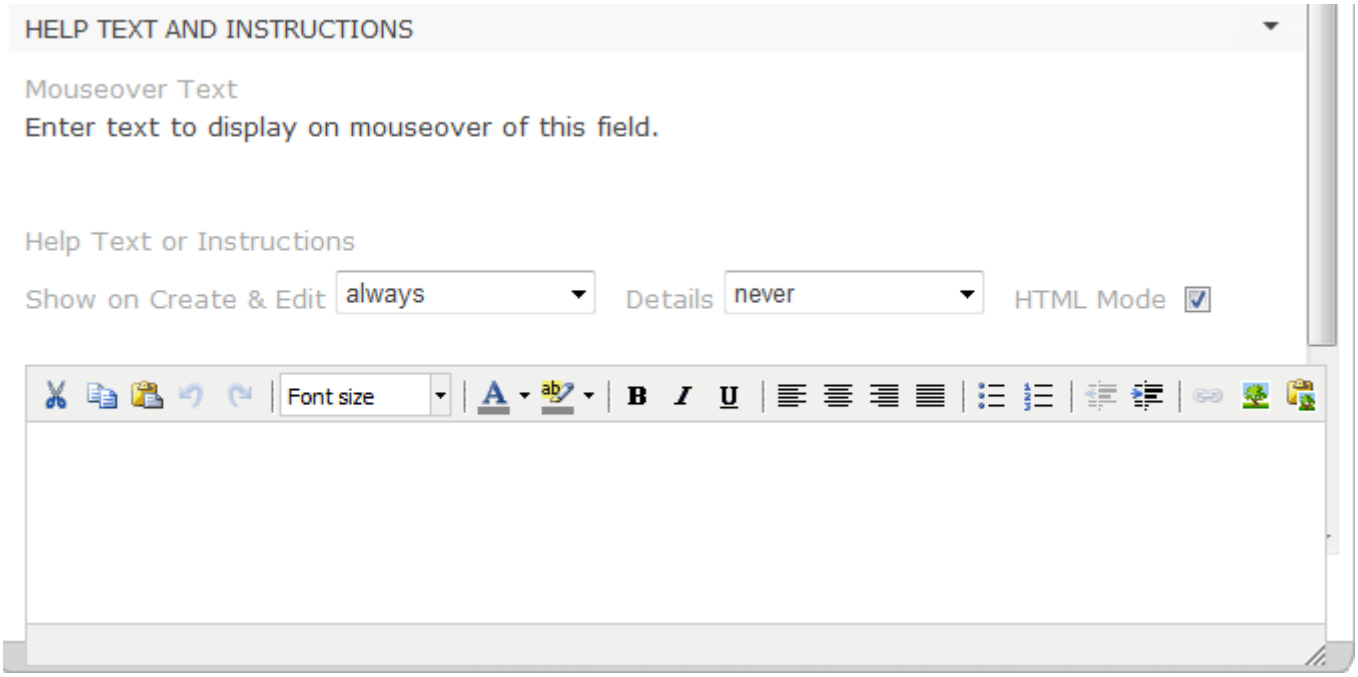
Date

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.

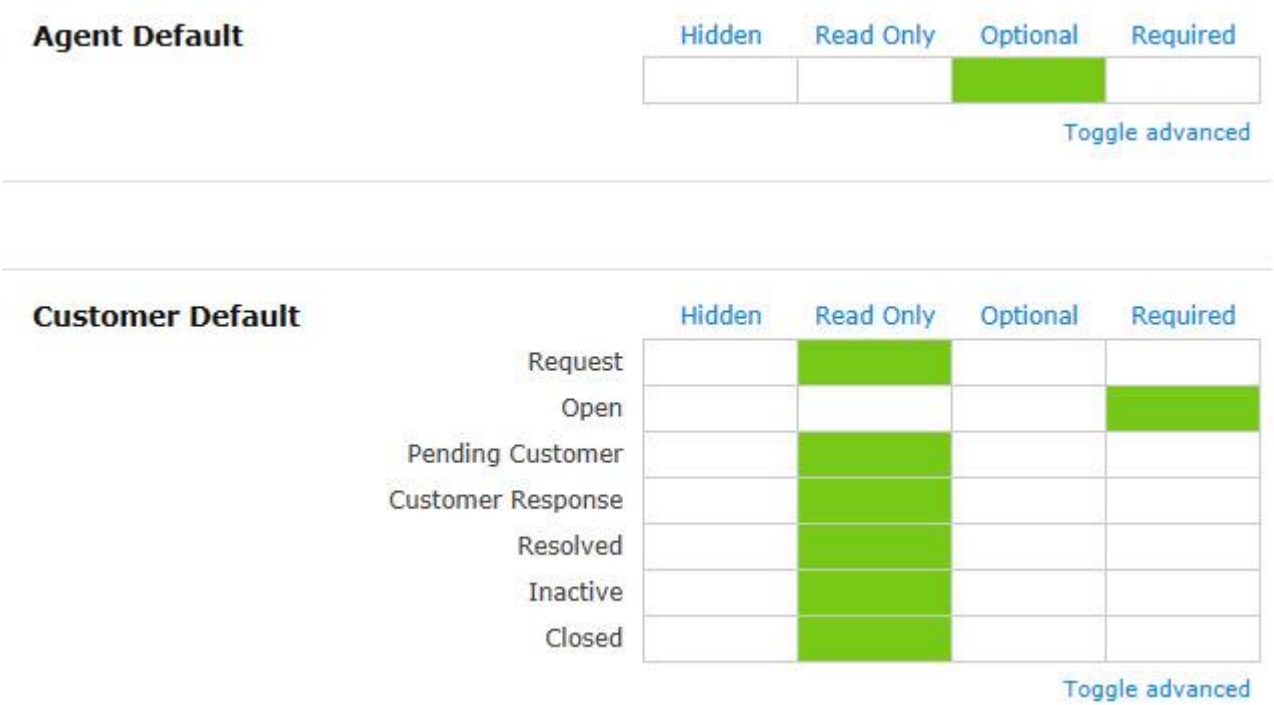
NOTE

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.

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.

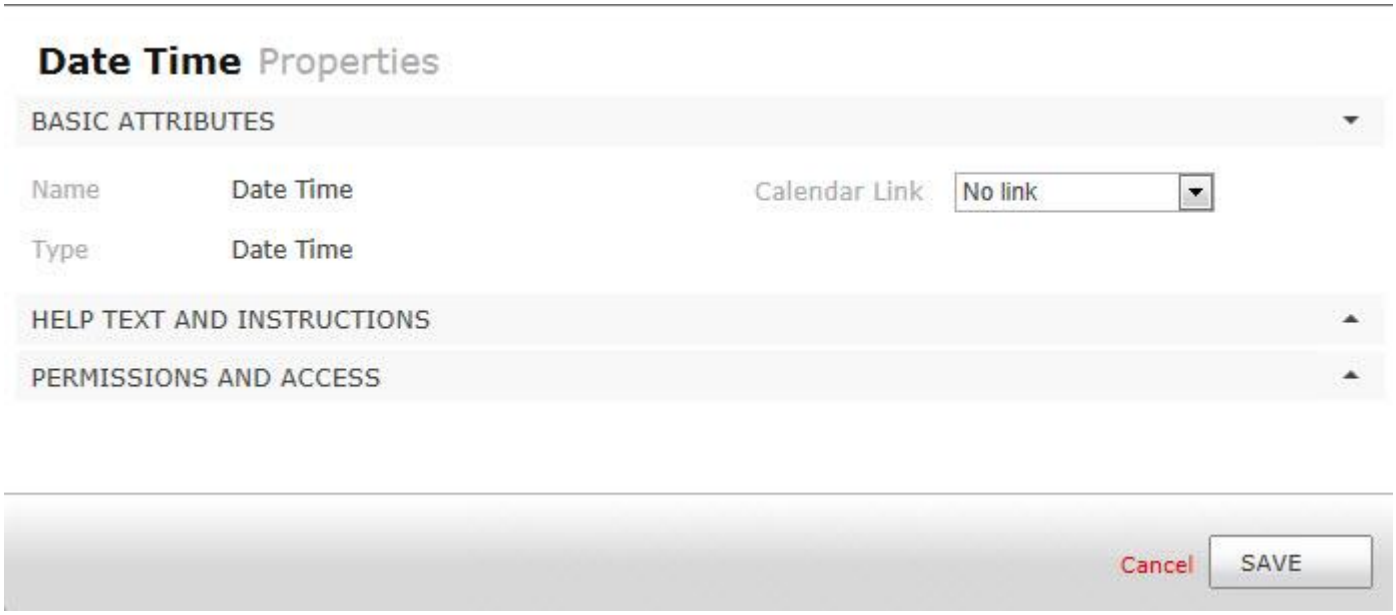
Changing the Field Name

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 Time

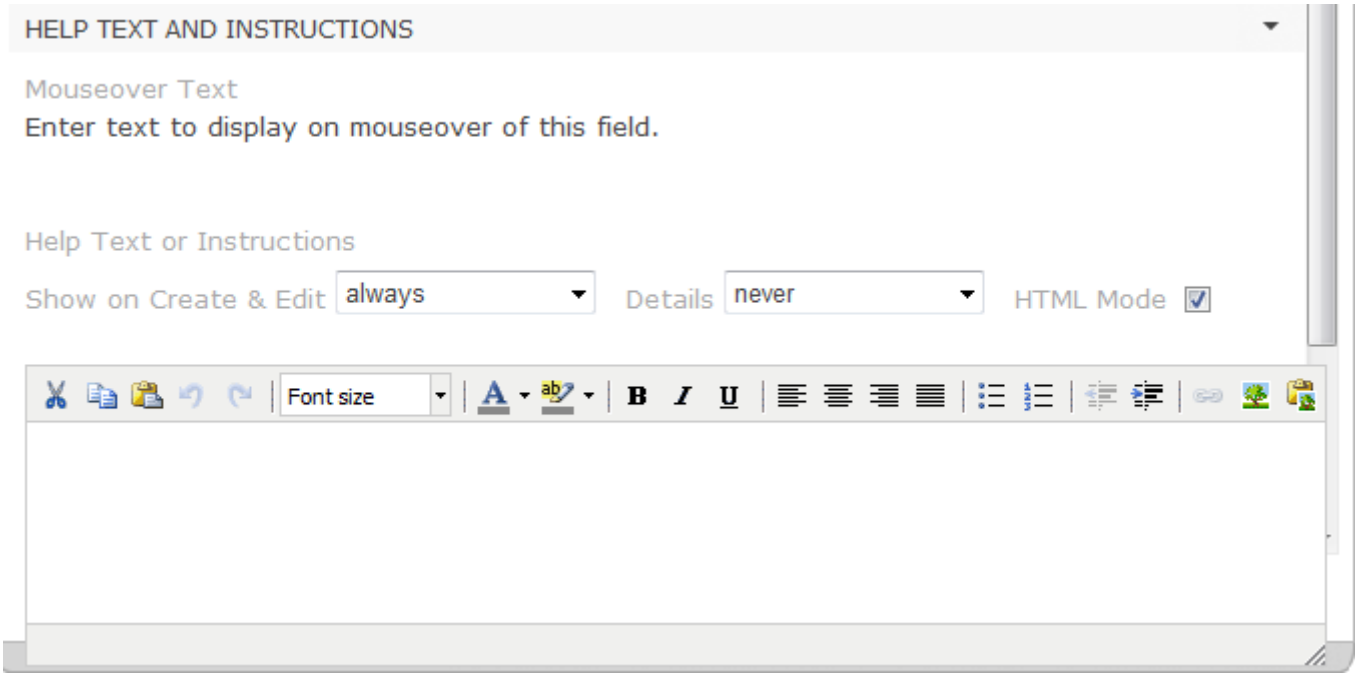
Setting Properties

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.

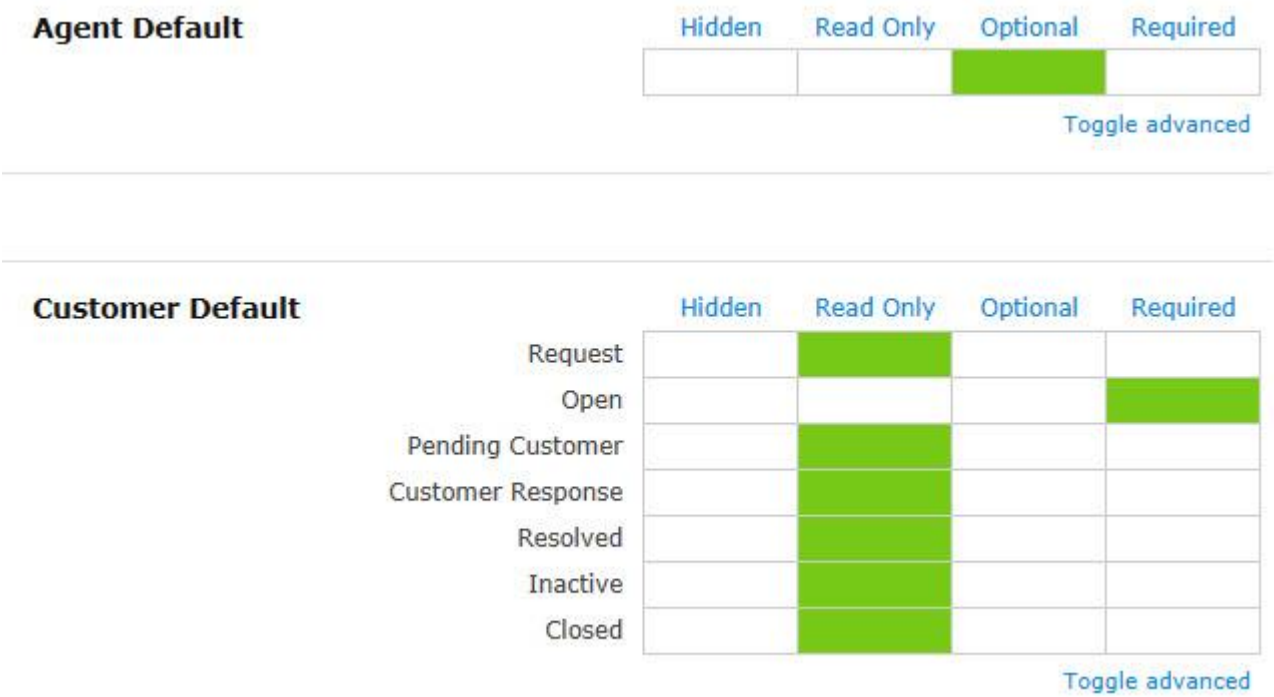
NOTE

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.

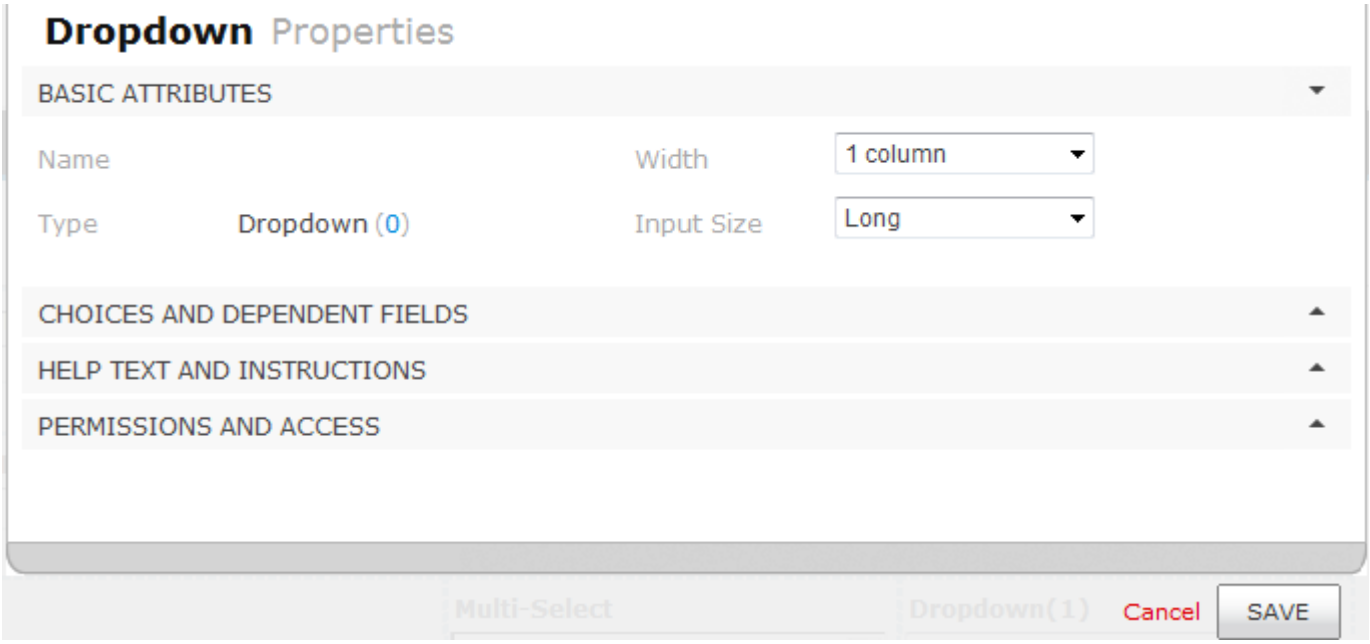
Changing the Field Name

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.

Drop-down

Setting Properties

When you drag and drop a Drop-down field into the Canvas, the Properties window is displayed.

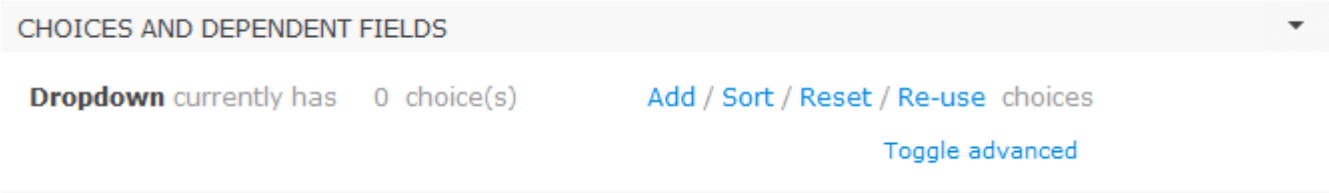


Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **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.

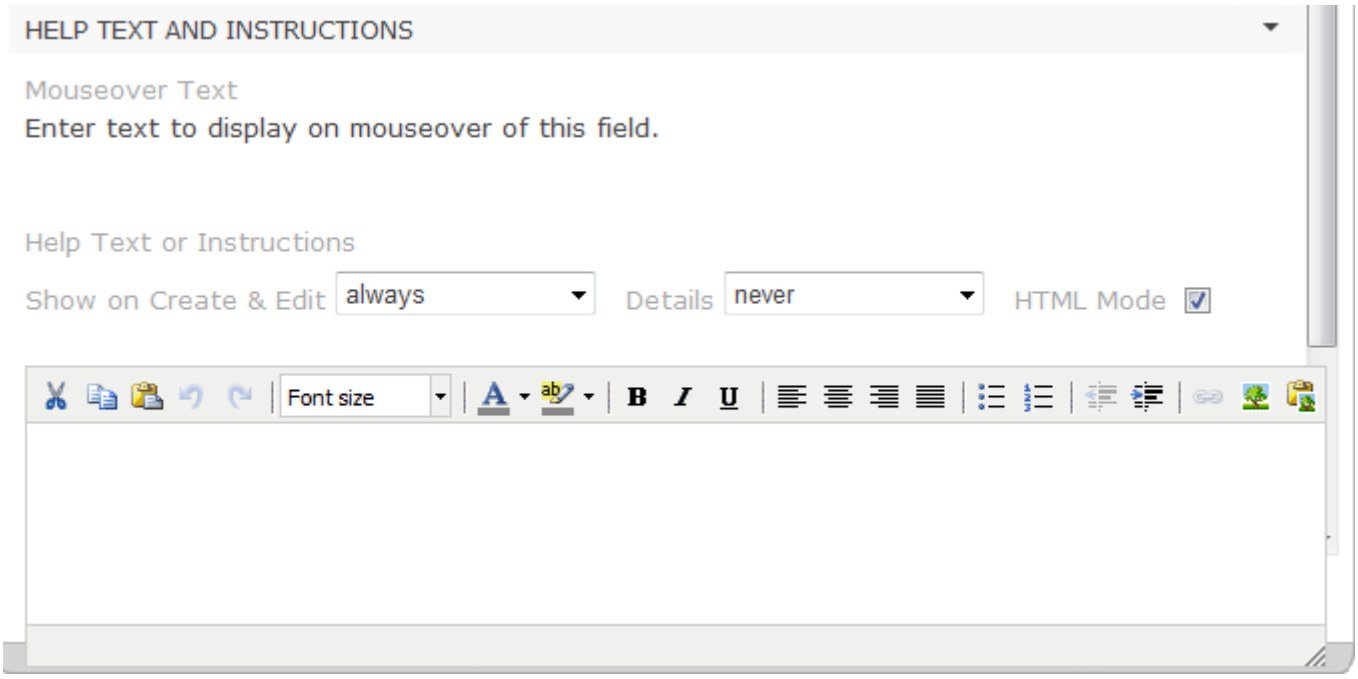
▪ **Set Field Dependencies**—If you click the Link icon for a value in the list, the Dependencies Editor is displayed. The Dependencies Editor displays a drop-down field containing all of the drop-down or multi-select fields that are available for you to link to the value. Select a field from the drop-down, 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

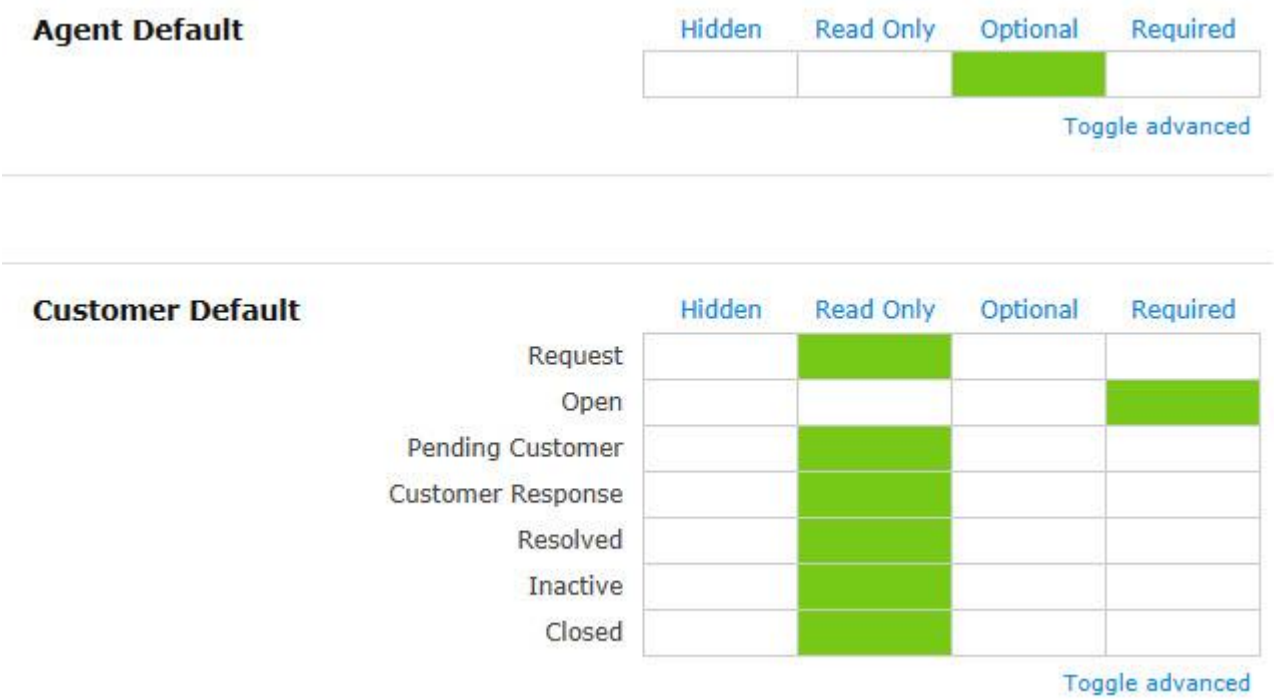
  You might want to require agents to enter information in an issue information field when the issue's status is open, and restrict them from entering information in the field when the issue is closed. So when setting up the Issue Information field, you would set the Agent Default permissions to "Required" 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

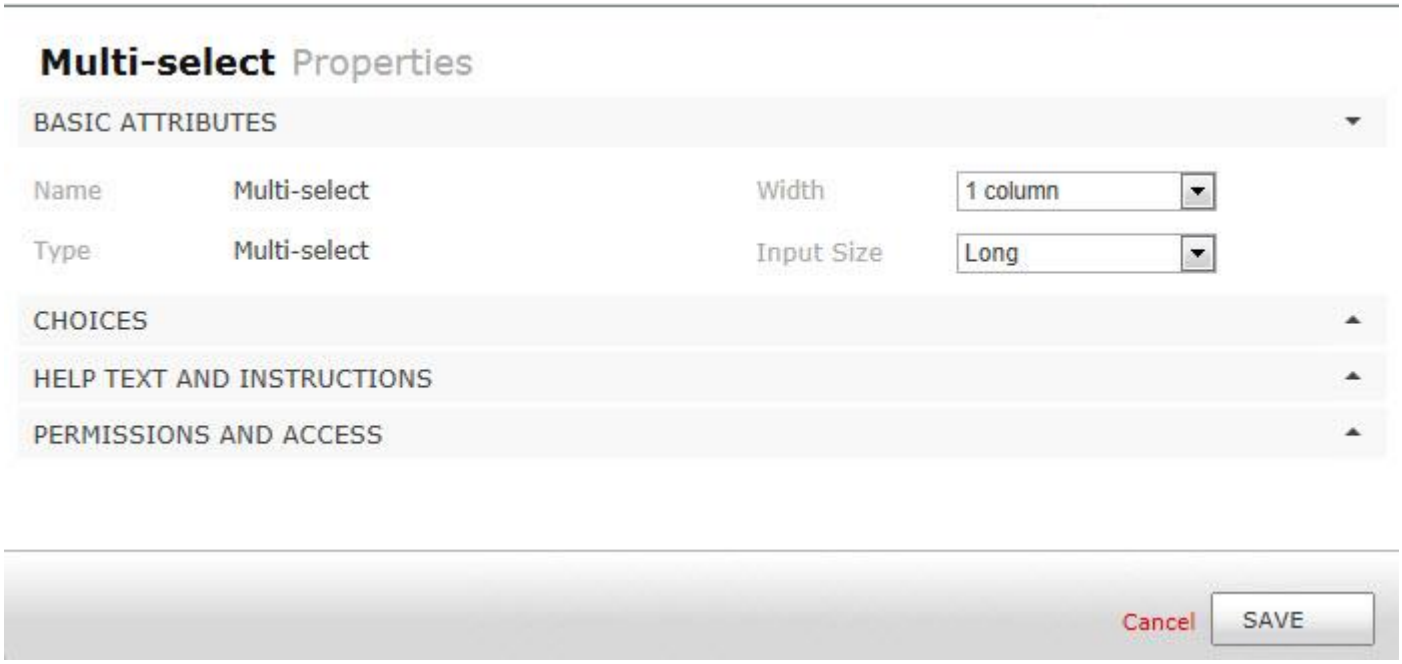
To create drop-down dependency groups (assuming you have already created drop-down fields for your dependent choices and are on the Form Designer administration page):

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

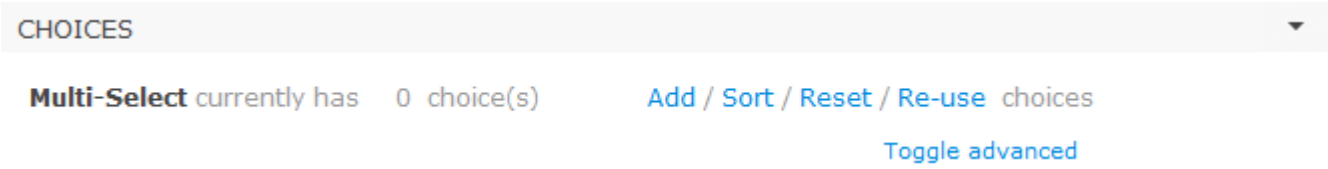
Setting Properties

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.

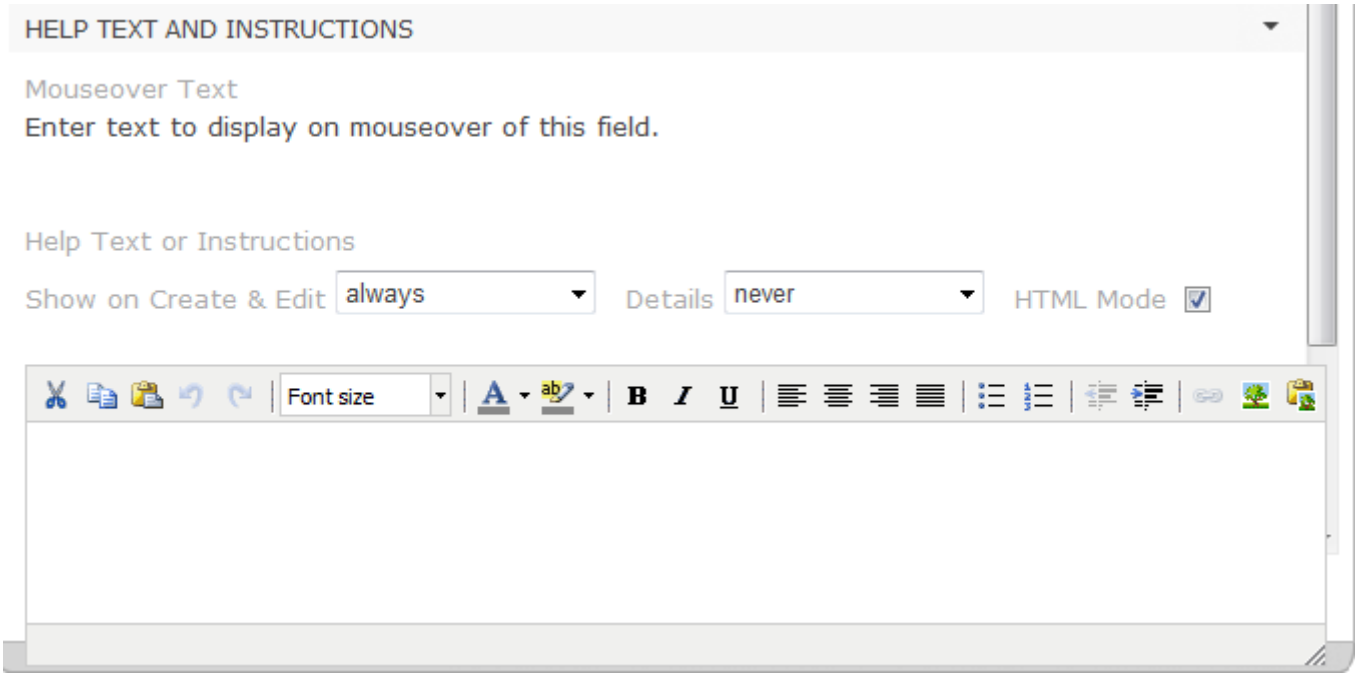


  - **Add**—The **Add** link adds values to the field. When you click the Add link, the Add Choices Editor is displayed. Type the values into the field and press Enter after each value. Click the **Add Choices** button when you have entered all of the values. The Add Choices Editor enforces uniqueness; 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.

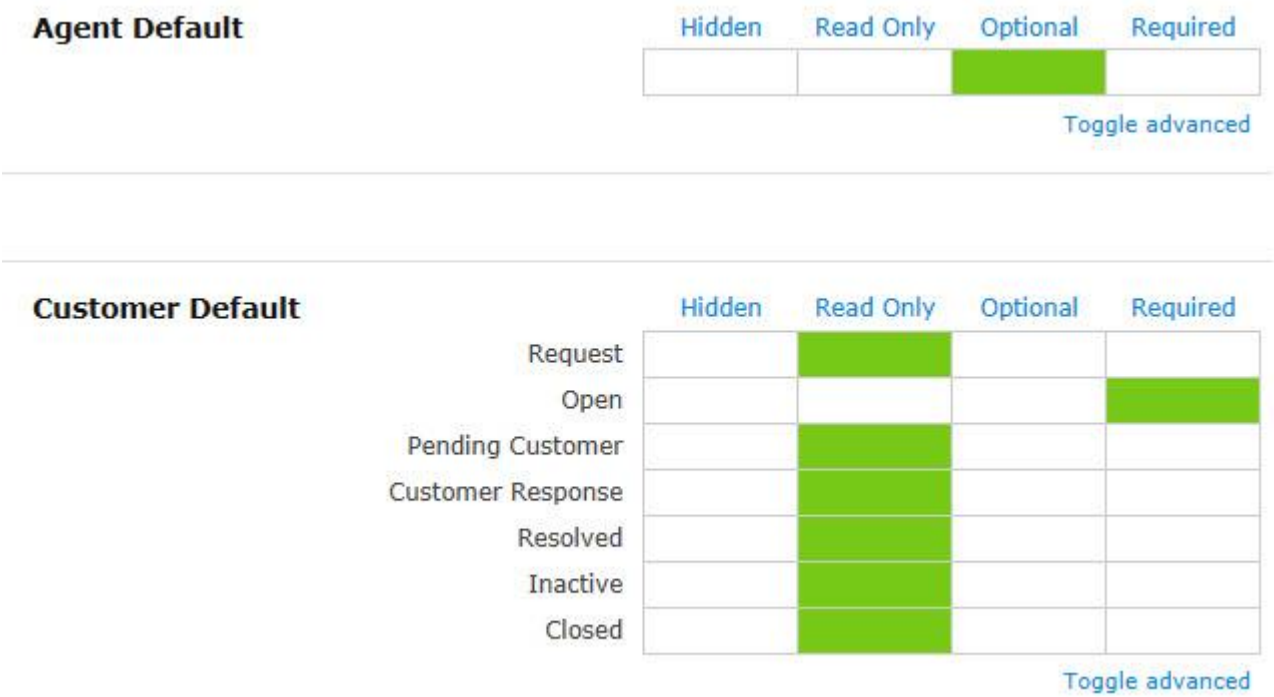
NOTE

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.

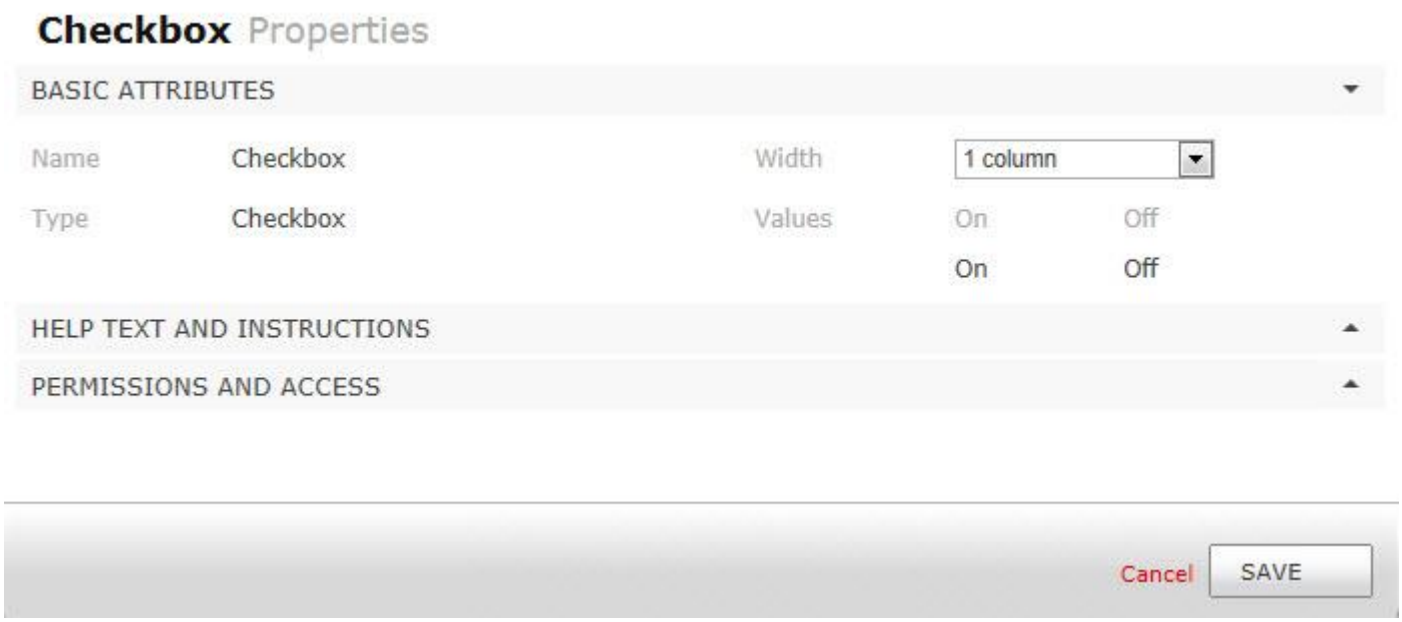
Changing the Field Name

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.

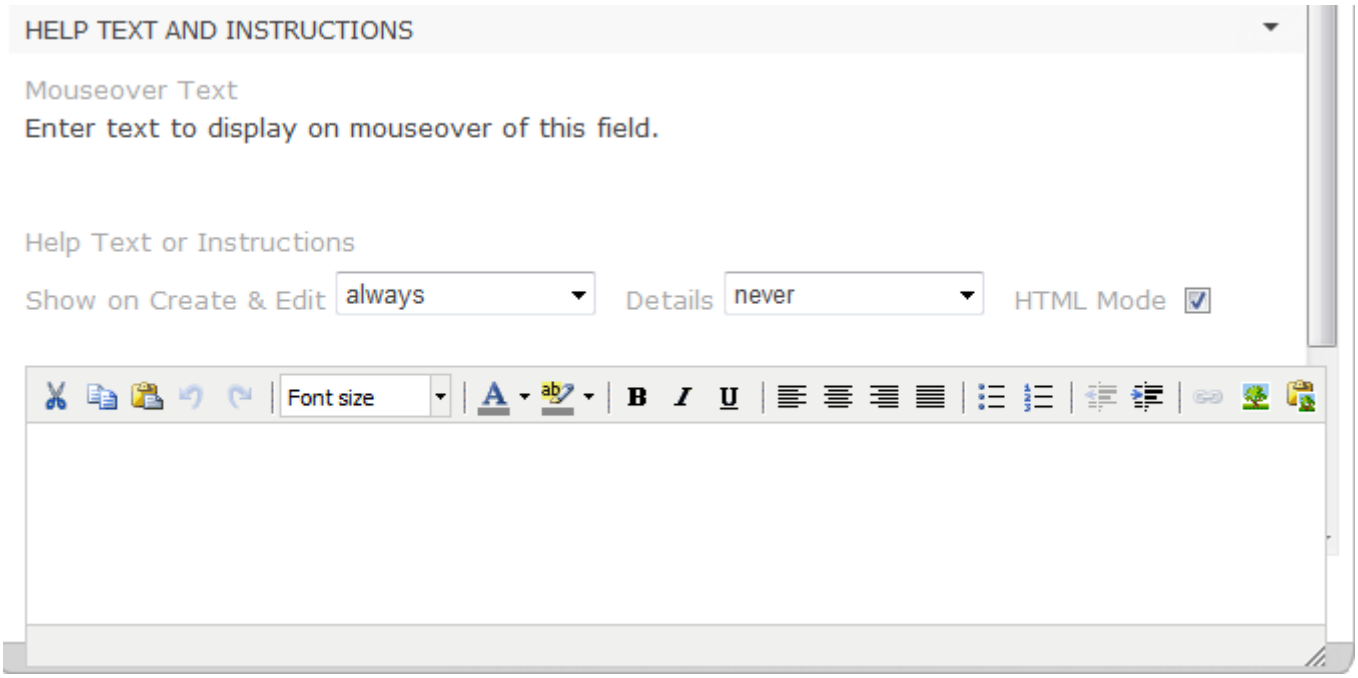


Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **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

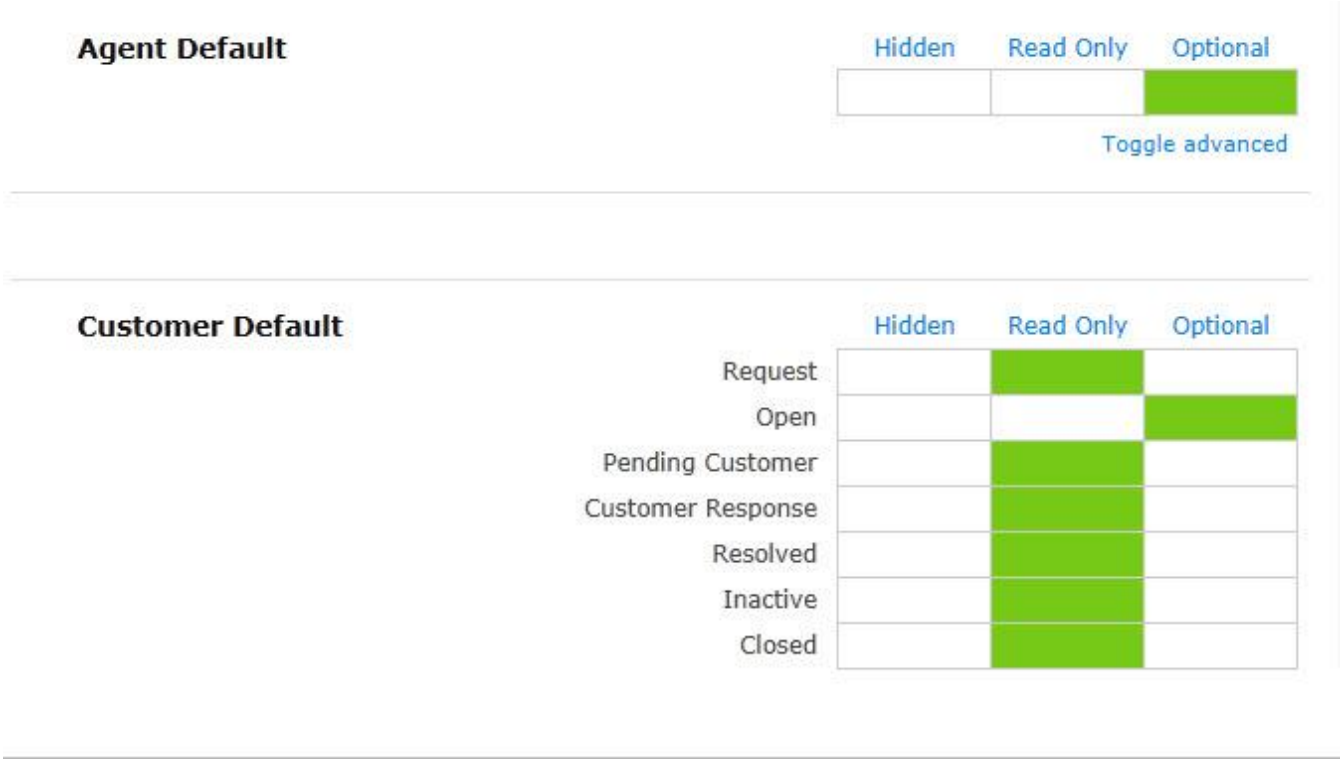
  You might want to require agents to enter information in an issue information field when the issue's status is open, and restrict them from entering information in the field when the issue is closed. So when setting up the Issue Information field, you would set the Agent Default permissions to "Required" 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.

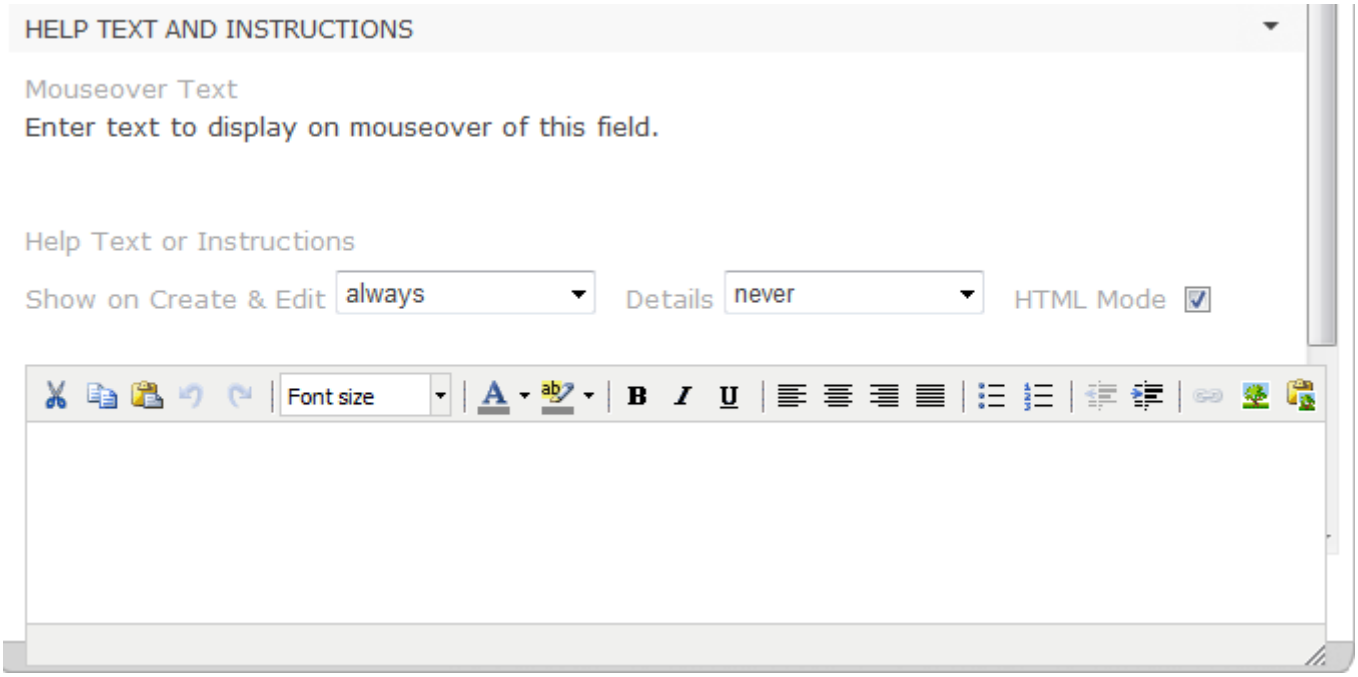
Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **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

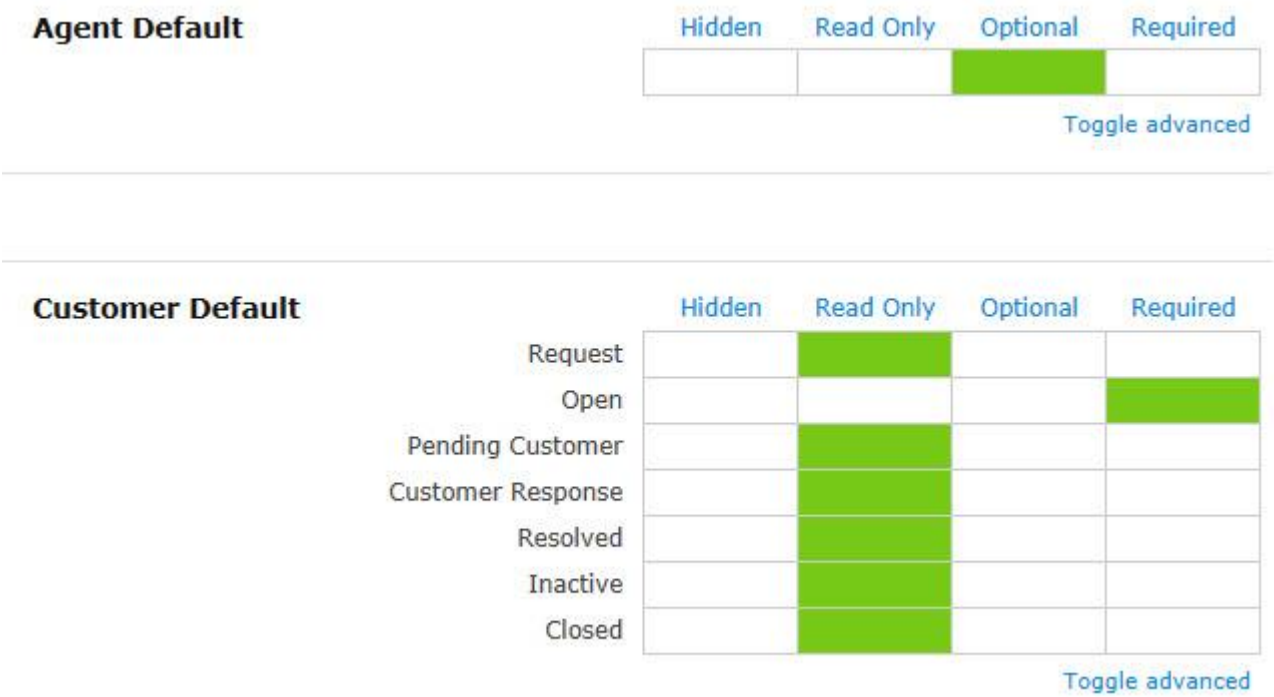
  You might want to require agents to enter information in an issue information field when the issue's status is open, and restrict them from entering information in the field when the issue is closed. So when setting up the Issue Information field, you would set the Agent Default permissions to "Required" 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.

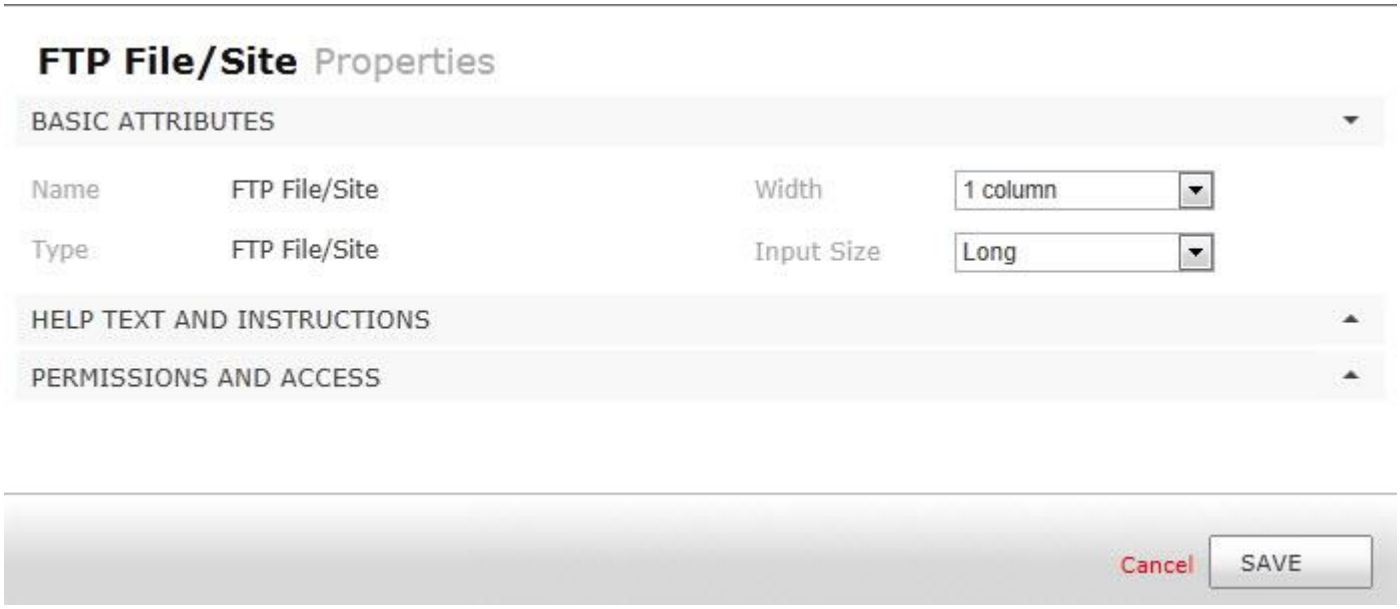
Changing the Field Name

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.



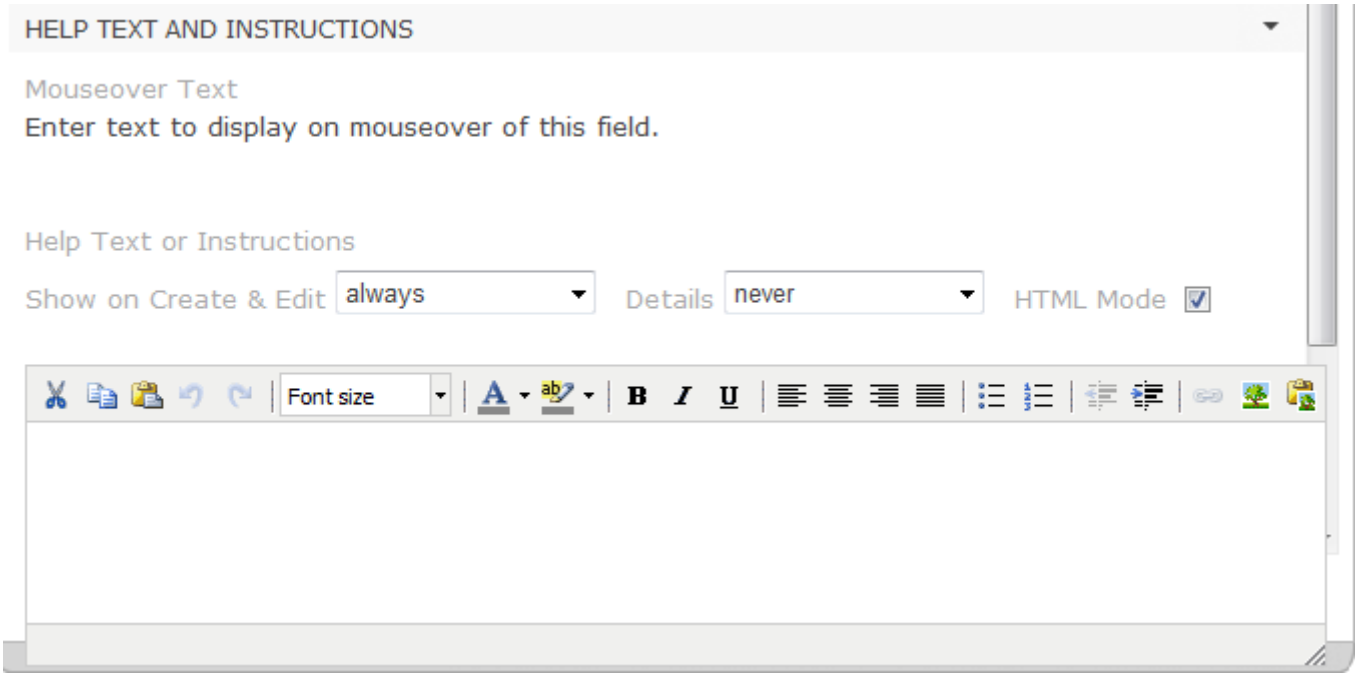
Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **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.
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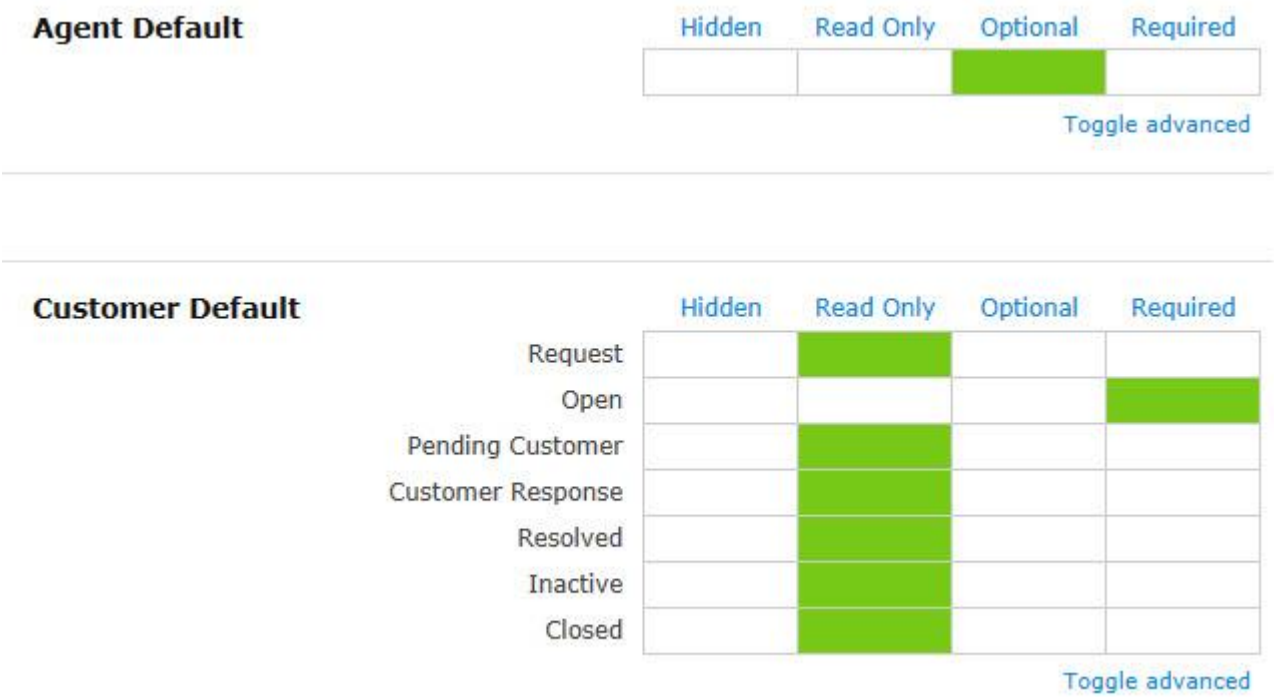
Tip: Click a column heading to apply the permission to all statuses for that column at once.



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.
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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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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.

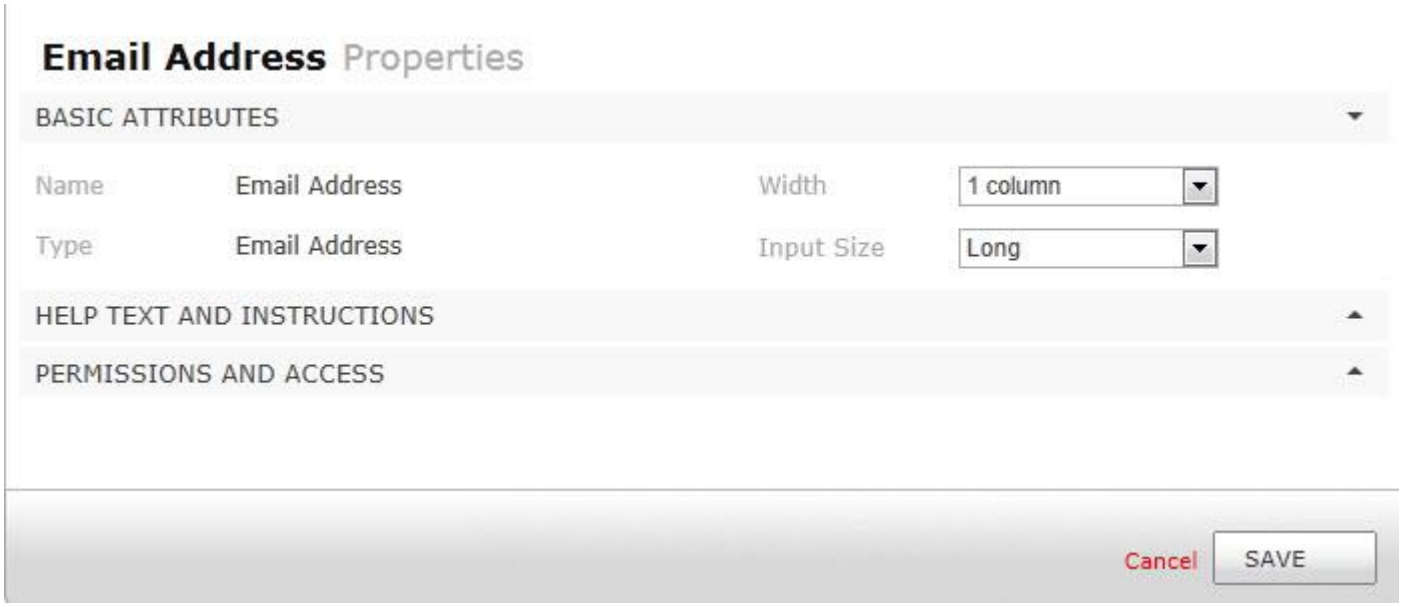
Changing the Field Name

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.



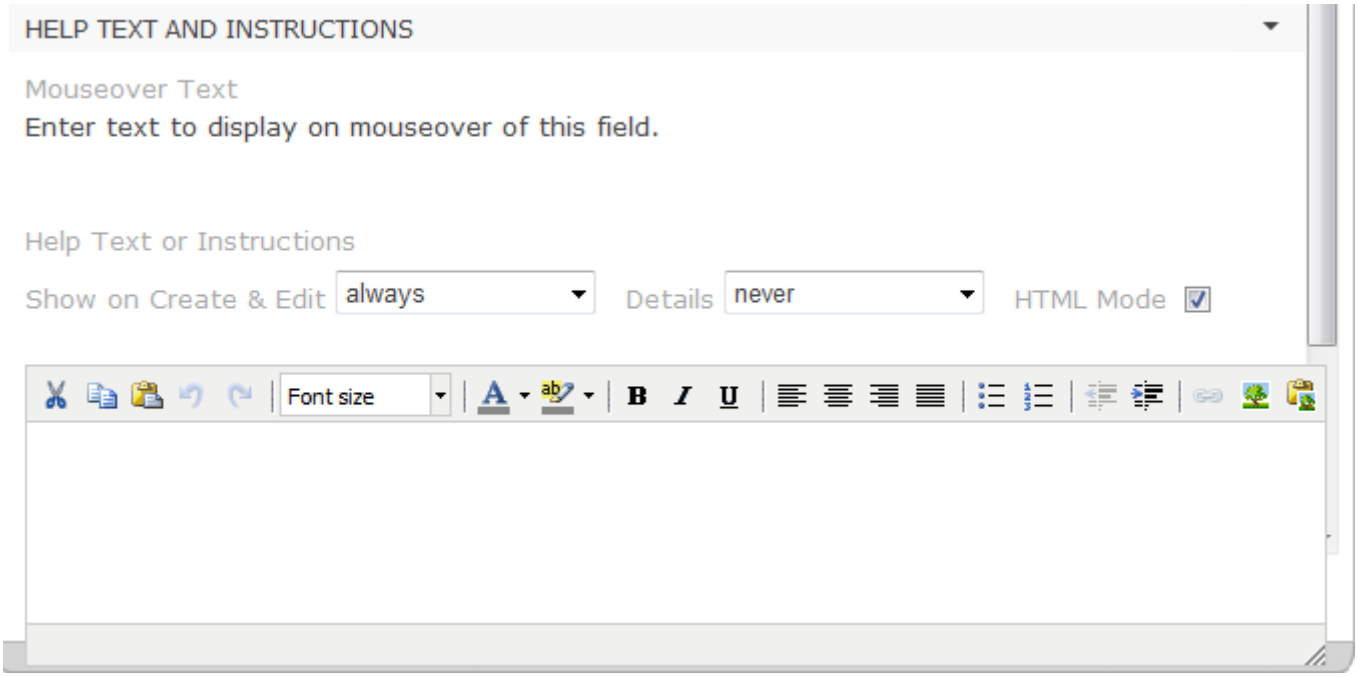
Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **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

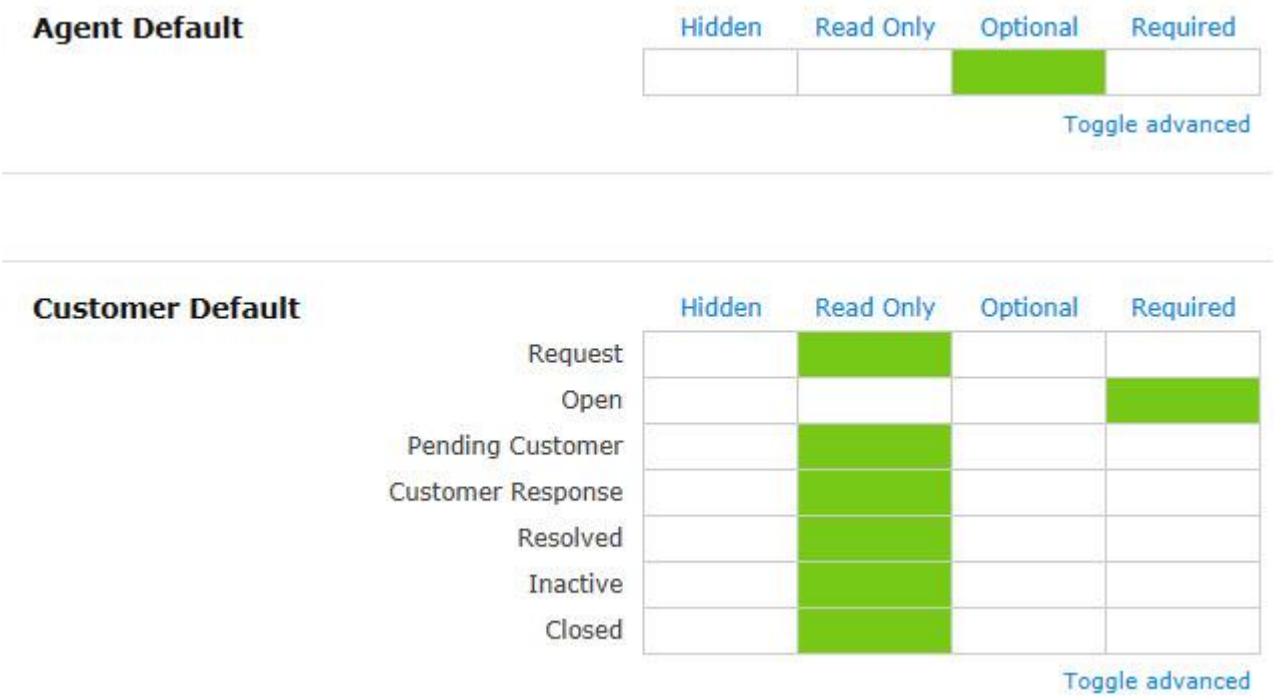
  You might want to require agents to enter information in an issue information field when the issue's status is open, and restrict them from entering information in the field when the issue is closed. So when setting up the Issue Information field, you would set the Agent Default permissions to "Required" 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:

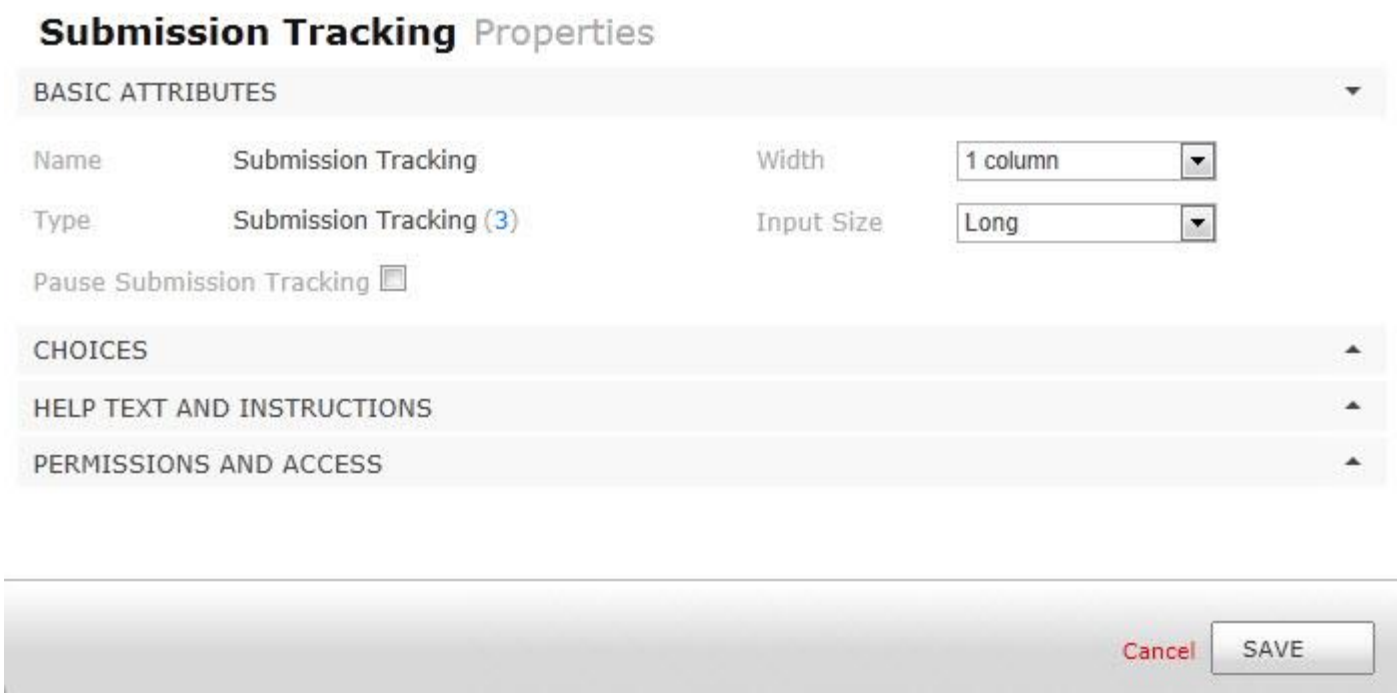
- **Web**—Applies to issues submitted by customers via the Customer Self-service web interface.
- **Web - Auto Suggest** Applies to issues submitted and closed by customers via the Customer Self-service web interface when both the Auto-Suggest Solutions feature and the Submission Tracking feature are 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.

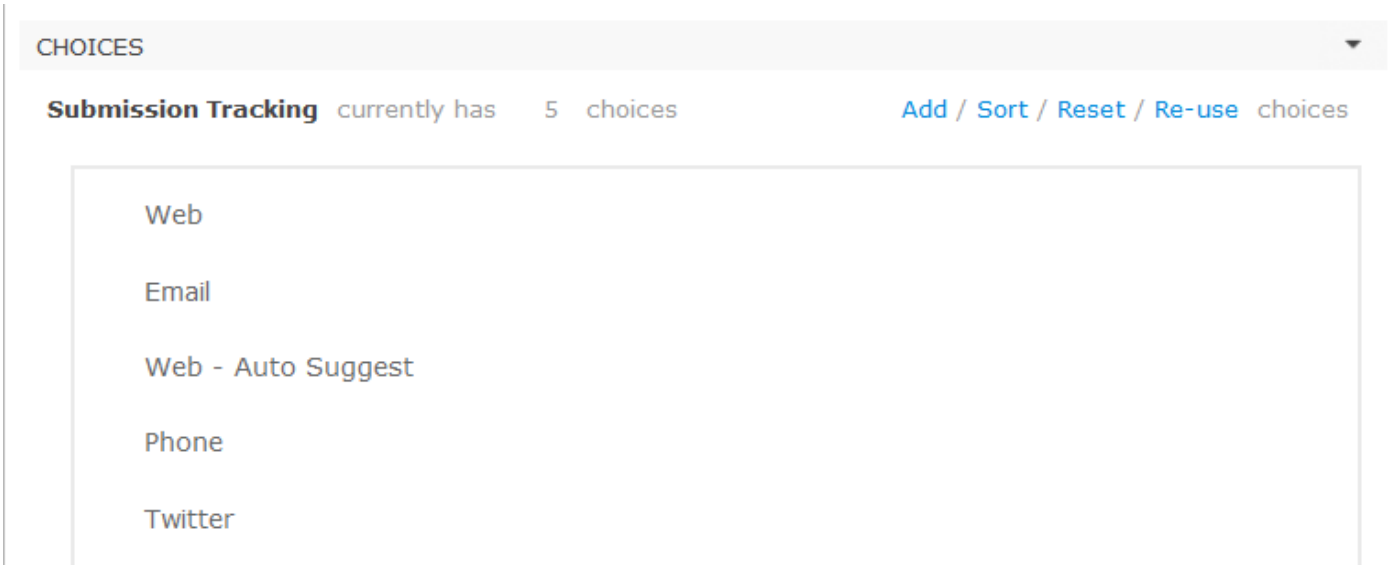


Click a section heading to expand or collapse the section. Enter values into the fields as follows:

- **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.

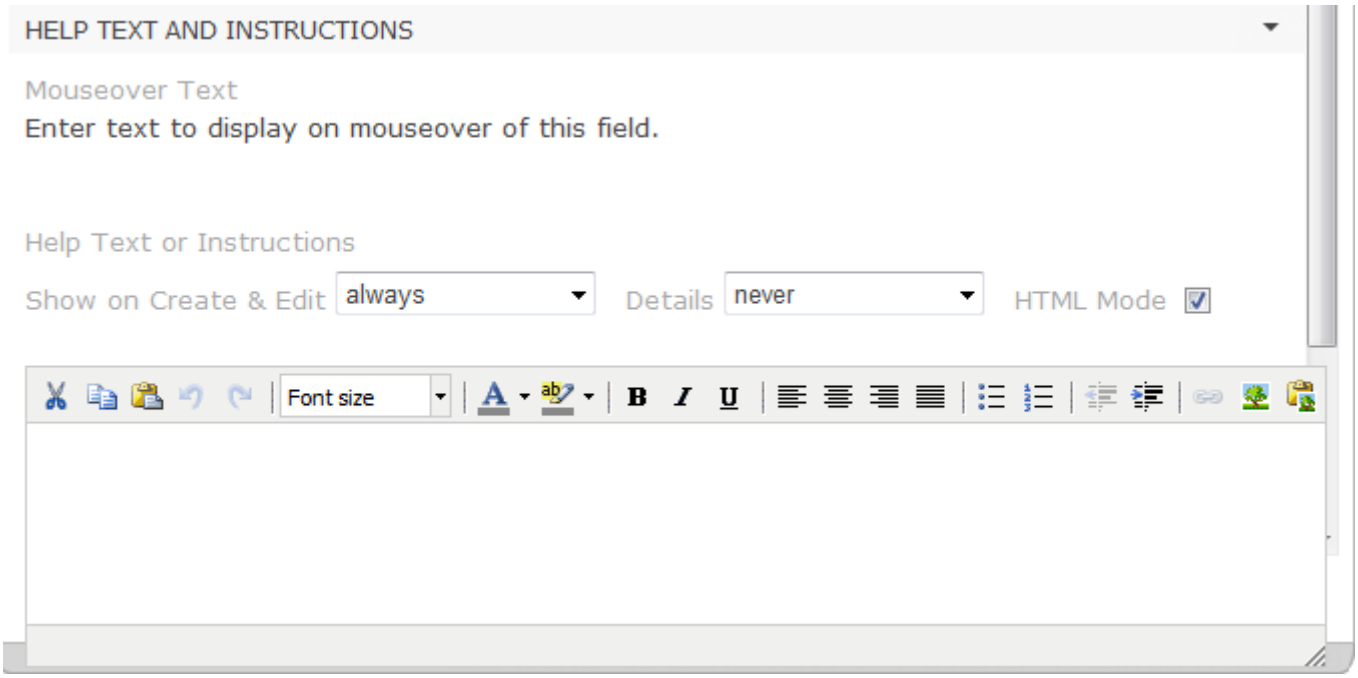


- **Add**—The **Add** link adds values to the field. When you click the Add link, the Add Choices Editor is displayed. Type the values into the field and press Enter after each value. Click the **Add Choices** button when you have entered all of the values. The Add Choices Editor enforces uniqueness; 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

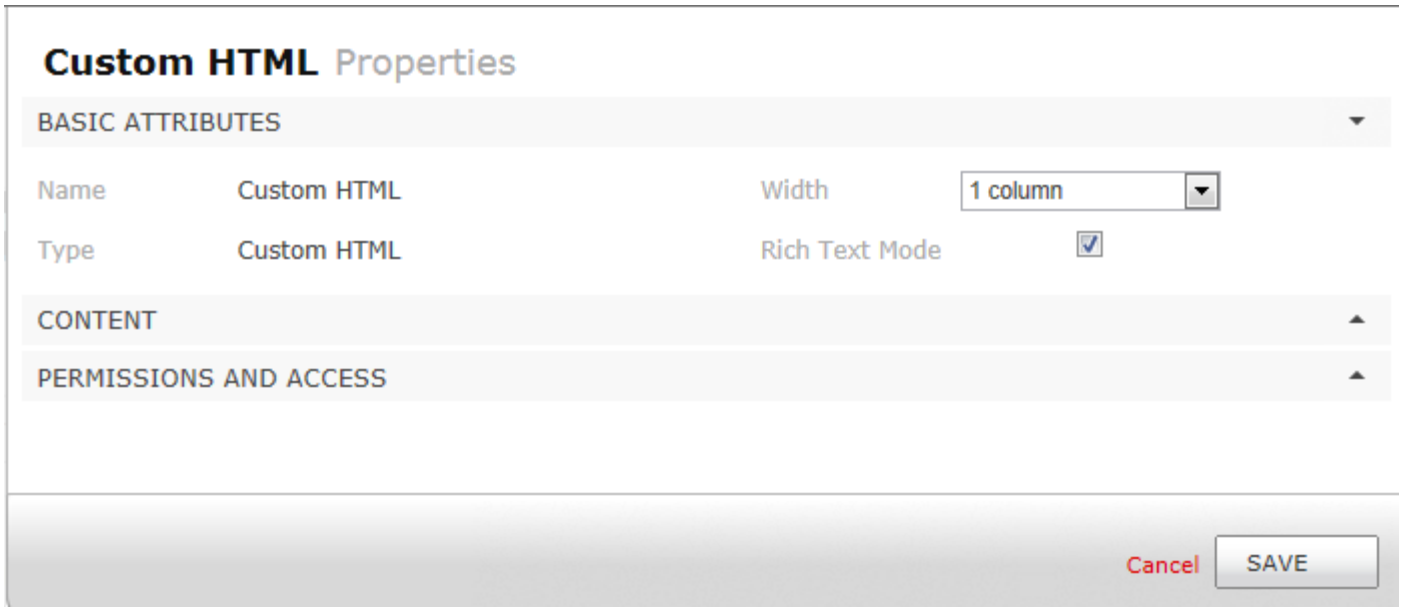
The workspace administrator can include instructions or other information in the Create Issue, Edit Issue, Detail, and Submit Request pages. You can optionally insert HTML or text headers above any field or row of fields, including custom Issue fields, custom Address Book fields, and Attachments.

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.

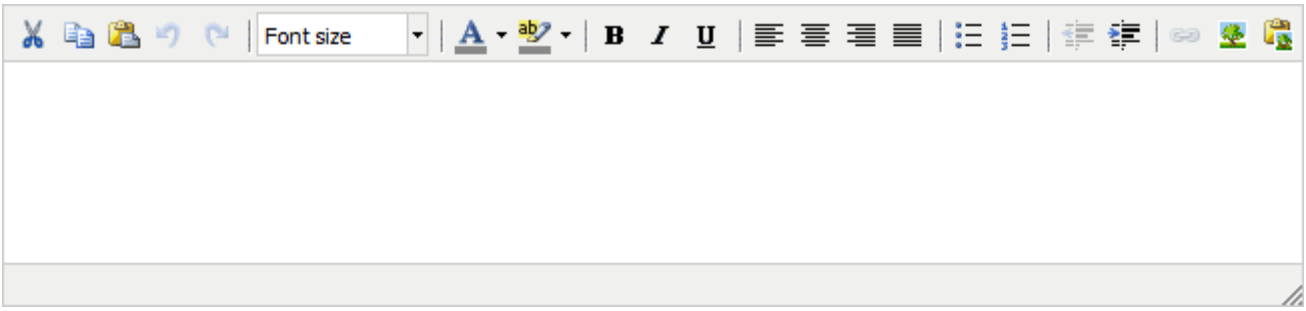
To Insert Custom HTML:

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.

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><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>
```

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

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

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.

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

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:

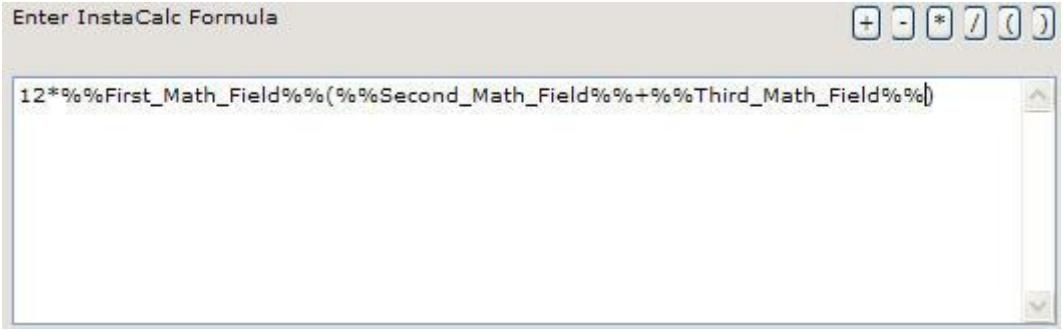
The following is an example of how to enter a mathematical formula:

Select the Result field.

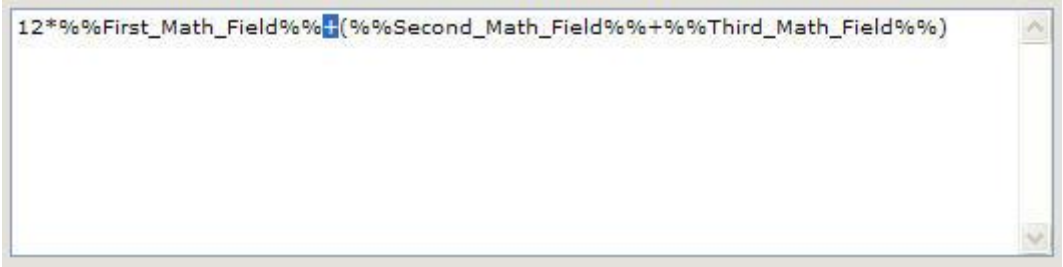
Type 12 and then click the * operator button.

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.

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.

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.

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**[1] 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**[2] 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**.

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[1]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.

[2]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.

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.

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.

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.

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**[3] 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.

[3]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".

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**[4].

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.

[4]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".

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.

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.

Users & 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.

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.

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.

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.

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.

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.

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

- **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 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

1. 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.
2. Ensure that you have created at least one customer account. Incoming mail from external users does not work without this.
3. Select Administration | System | Features | Email from the BMC FootPrints Service Core Toolbar.
4. In the Incoming Email section, click the Configure Incoming Email button.
5. Click **Add** on the Incoming Email Setup for BMC FootPrints Service Core page.
6. 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.

7. 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.
8. 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.

9. Enter the password for the email account (must be entered twice).
10. 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.
11. 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.
12. 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).
13. 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.

Define a From Name for Workspaces with No Incoming Email Address

If you want to specify which workspace is sending a notification email to your customers, but you don't want them to be able to reply to those email messages, you can specify a "From Name" without incoming email.

NOTE

When you don't have an incoming email address setup for a workspace, the system defaults for notifications are used for the reply name and email address. If no system wide default reply address has been specified, replying to an email from BMC FootPrints Service Core will be sent to the agent responsible for sending out the email.

To define which workspace in BMC FootPrints Service Core sends the notification email:

1. From Administration | System | Features | Email, click on "Configure Incoming Email".
2. In the space next to "Support email account id" type "no-incoming". Optionally, you can enter a "reply address" in case you want a place to store replies from your customers. These replies will not be stored in the Issue.
3. In the space next to "From Name" type the name you want to appear when BMC FootPrints Service Core sends an email from this workspace.
4. Select the appropriate workspace from the drop-down Workspace Selection list
5. Type your password and click **Save**.

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:

1. Edit the c:\FootprintsServiceCore\cgi\MRlocalDefs file (using WordPad).
2. Add the following line to the file:

   $CUSTOMER_PREPEND_EMAIL_SUBJECT = 'Customer Response:';

3. 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:

1. Select Administration | System | System Preferences from the BMC FootPrints Service Core Toolbar.
2. To change the size limit for emails (not including attachments), enter a new value in the Maximum Incoming Body Size field (in bytes).
3. After changing the value, click **Save**.
4. 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:

1. Open up a command prompt.
2. 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

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.

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:

1. Select Administration | Workspace | General | Mail Preferences | Configure Email Templates from the BMC FootPrints Service Core Toolbar.
2. Select the column for which you want to create a template: Assignee, Customer, CC or Wireless/Pager.
3. 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.
4. For whichever option you checked, click **Edit**.
5. 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.
6. Use any text or HTML editor to create the email template.

   a. 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.

   b. 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.

7. When you have finished creating the template, save the file.
8. Back in the custom template pop-up window (step 5), use the Browse button to upload the new email template from your local machine.
9. Click **GO**.
10. On the main Contents of Mail screen, click **GO**. Ensure that the box is checked for the template created and uploaded.
11. 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.

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:

1. To:
   - **Create a Workspace filter**, select Administration | Workspace | General | Mail Preferences | Email Filters.
   - **Create a system filter**, select Administration | System | Features | Email | Email Filters.
2. Select one of the four filter types using the radio buttons below the text box.
3. 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
4. Use the radio buttons to switch between the different filter types. Your changes are saved.
5. When you are finished, click **Save**.

   Workspace filters override system filters for that Workspace.
6. 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.

Chapter 13: Configure 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.

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.

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**[5] that contain subtasks are returned.
   - **Include Subtasks**—Subtasks of Master Issues are returned.
   - **Include Global Issues**—**Global Issues**[6] 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

[5] 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.

[6] 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.

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
   ```

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.

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.

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.

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.

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.

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".

Creating Quick Issue Templates

To create a new Quick Issue template:

1. Select Administration | Workspace from the BMC FootPrints Service Core Toolbar, then select Quick Issue under the Automated Tasks section of the Workspace Administration page.
2. 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.
3. 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**.
4. 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.
5. 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.

6. When you are done populating fields, click **Save**.
7. The template is created. The Quick Issue Administration page is displayed. From here, you can edit or delete the template or create new templates.
8. The template appears on the BMC FootPrints Service Core Toolbar for all Agents under the new heading **Quick Issue**.

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:

1. 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).
2. 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.
3. When you are satisfied with the order, click **Save**. The re-ordering is reflected for all users in the Workspace.

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.

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**.

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**.

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.

Chapter 14: Configure Reporting

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**[7]. 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.

[7] 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.

Chapter 15: Configure the Knowledge Base

Knowledge Base Administration

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.

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

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

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.

Chapter 16: Additional Tasks

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).

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.

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.

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.

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.

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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.

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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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