

BMC Remedy IT Service Management Concepts Guide



Supporting

Version 7.6.04 of BMC Remedy Asset Management Version 7.6.04 of BMC Remedy Change Management Version 7.6.04 of BMC Remedy Service Desk

January 2011



Contacting BMC Software

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United States and Canada

 Address
 BMC SOFTWARE INC
 Telephone
 1 713 918 8800
 Fax
 1 713 918 8000

2101 CITYWEST BLVD

HOUSTON TX 77042-2827 USA 1 800 841 2031

Outside United States and Canada

Telephone +01 713 918 8800 **Fax** +01 713 918 8000

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 - operating system type, version, and service pack or other maintenance level such as PUT or PTF
 - system hardware configuration
 - serial numbers
 - related software (database, application, and communication) including type, version, and service pack or maintenance level
- sequence of events leading to the problem
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- Submit a new issue at http://www.bmc.com/support_home.



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About this book

This guide provides a conceptual overview of the applications that make up the BMC Remedy IT Service Management (BMC Remedy ITSM) Suite of applications.

This guide provides information about the following applications in the BMC Remedy ITSM Suite:

- The BMC Remedy Asset Management application
- The BMC Remedy Change Management application
- The BMC Remedy Service Desk application

The applications run on the BMC Remedy Action Request System (BMC Remedy AR System) platform and share a common database. The applications consume data from the BMC Atrium Configuration Management Database (BMC Atrium CMDB) application.

Audience

This guide is intended for anyone who wants to obtain a high-level understanding of the BMC Remedy ITSM applications, including IT leaders and BMC Remedy ITSM application administrators.

Related publications

This section lists the documentation available for BMC Remedy ITSM. It also lists relevant documents for related solutions and products.

Unless otherwise noted, online documentation is available with the product and on the Customer Support website at http://www.bmc.com/support.

Table 1: BMC Remedy ITSM documentation

Title	Document provides	Audience	
BMC Remedy Asset Manag	BMC Remedy Asset Management		
BMC Remedy Asset Management User Guide	Procedures for using the BMC Remedy Asset Management application; includes new features and overview.	Everyone	
BMC Remedy Change Man	agement		
BMC Remedy Change Management User Guide			
BMC Remedy Task Management System	Procedures to configure the Task Management system module.	Administrators	
Administrator's Guide	This guide also includes steps to configure seamless authentication between BMC Remedy Change Management and the other components of the BMC Change and Configuration Management solution.		
BMC Remedy Service Desk			
BMC Remedy Service Desk: Incident Management User Guide	Procedures for using the BMC Remedy Service Desk: Incident Management application; includes new features and overview.	Everyone	
BMC Remedy Service Desk: Problem Management User Guide	Procedures for using the BMC Remedy Service Desk: Problem Management application; includes new features and overview.	Everyone	
BMC Remedy ITSM (shared	d documents)		
BMC Remedy ITSM Configuration Quick Start	A reference card to quickly install and configure applications in the BMC Remedy ITSM Suite.	Administrators	
BMC Remedy IT Service Management Administration Guide	Procedures for configuring the BMC Remedy IT Service Management applications.	Administrators	
BMC Remedy IT Service Management Data Management Administrator's Guide	Procedures for using the Data Management tool that is part of BMC Remedy ITSM Suite.	Administrators	
BMC Remedy IT Service Management Guide to Multi- Tenancy Scenarios for implementing multi-tenancy. It also describes how multi-tenancy is implemented in the BMC Atrium CMDB product and how that implementation relates to multi- tenancy as implemented in the BMC Remedy ITSM applications.		Everyone	
BMC Remedy IT Service Management Installation Guide	Procedures for installing the BMC Remedy IT Service Management applications and solutions, BMC Remedy Service Desk solution (BMC Remedy Incident Management and BMC Remedy Problem Management), BMC Remedy Change Management, and BMC Remedy Asset Management.	Administrators	

Title	Document provides	Audience
BMC Remedy IT Service Management Notification Engine Guide	Description of the major components and process flow of the BMC Remedy IT Service Management Notification Engine.	Administrators
BMC Remedy IT Service Management Release Notes	Information about known issues in each release of BMC Remedy IT Service Management. Also provides a list of new features included with the applications.	Everyone
Help	Help for using and configuring BMC Remedy ITSM, available by clicking Help in the product interface. Available from help links after help is installed.	Everyone

Documentation for products integrated with BMC Remedy ITSM

This section lists the documentation available for solutions and products related to BMC Remedy ITSM.

Table 2: Related product documentation

Title	Document provides	Audience
BMC Atrium Core		
BMC Atrium CMDB Administrator's Guide	Information about configuring the BMC Atrium CMDB application to manage data about your IT environment.	Administrators
BMC Atrium CMDB Common Data Model Diagram	Hierarchical diagram of all classes in the Common Data Model (CDM), including unique attributes and applicable relationships.	Administrators
BMC Atrium CMDB Normalization and Reconciliation Guide	Information about normalizing data in BMC Atrium CMDB and reconciling CIs from different data providers into a single production dataset.	Administrators
BMC Atrium CMDB User's Guide	Information about using BMC Atrium CMDB, including searching for and comparing CIs and relationships, relating CIs, viewing history, and launching federated data.	Users
BMC Atrium Core Concepts and Planning Guide	Information about BMC Atrium CMDB concepts and best practices for planning your BMC Atrium CMDB implementation.	Executives and administrators
BMC Atrium Core Developer's Reference Guide	Information about creating API programs using C and web services API functions and data structures.	Administrators and developers
BMC Atrium Core Installation Guide	Information about installing and configuring BMC Atrium Core features, including BMC Atrium CMDB, BMC Atrium Integration Engine, Product Catalog, and BMC Atrium Impact Simulator.	Administrators

Title	Document provides	Audience
BMC Atrium Core Product Catalog and DML Guide	Information about configuring the Product Catalog and DML, adding products, and creating aliases for products, manufacturers, and categorizations.	Administrators
BMC BladeLogic Client Aut	romation	
BMC BladeLogic Client Automation Configuration Discovery Integration for CMDB Getting Started Guide	Instructions about installing, configuring, and administering the BMC BladeLogic Client Automation Configuration Discovery Integration for CMDB program.	Administrator
BMC BladeLogic Client Automation CMS and Tuner User Guide	Information about administering the Common Management Services (CMS) and tuner infrastructure components of BMC BladeLogic Client Automation.	Administrators
BMC Remedy Action Reque	est System	
BMC Remedy Action Request System Installation Guide	Procedures for installing BMC Remedy AR System.	Administrators
BMC Remedy Action Request System Concepts Guide	Overview of BMC Remedy AR System architecture and features; includes information about add-on products that extend AR System functionality and a comprehensive glossary for the entire BMC Remedy AR System documentation set	Everyone
BMC Remedy Action Request System Configuration Guide	Procedures about configuring AR System servers and clients, localizing, importing and exporting data, and archiving data.	Administrators
BMC Remedy Action Request System: BMC Remedy Approval Server Guide	Topics on installation and configuration of the Approval Server, how to use the Approval Server, and understanding the approval workflow.	Everyone
BMC Remedy Action Request System: BMC Remedy Distributed Server Option Guide	Information about implementing a distributed AR System server environment with BMC Remedy Distributed Server Option (DSO).	Administrators
BMC Remedy Action Request System Database Reference	Contains information about overseeing the interaction between the AR System and specific databases. It also contains information about changing the structure of AR System forms.	Administrators
BMC Remedy Action Request System Form and Application Objects guide	Description of components necessary to build applications in BMC Remedy AR System, including applications, fields, forms, and views.	Developers
BMC Remedy Action Request System Integration Guide	Information about creating, customizing, and maintaining integrations between AR System and external systems.	Administrators and developers
BMC Remedy Action Request System Workflow Objects Guide	Information and procedures for creating, modifying, and maintaining AR System workflow objects, including active links, filters, and escalations.	Administrators and developers

Title	Document provides	Audience
BMC Remedy Email Engine Guide	Information about installing and maintaining the BMC Remedy Email Engine.	Administrators
BMC Remedy Knowledge N	Management	
BMC Remedy Knowledge Management User's Guide	Information about how to access BMC Remedy Knowledge Management from both the web interface and the BMC Remedy AR System interface. It also describes how to author solutions, search for solutions, and manage solutions in the workflow.	Everyone
BMC Service Level Manage	ment	
BMC Service Level Management Installation Guide	Procedures for installing the BMC Service Level Management application.	Administrators
BMC Service Level Management User's Guide	Procedures for using the BMC Service Level Management application; includes new features and overview.	Everyone
BMC Service Level Management Configuration Guide	Procedures for configuring the BMC Service Level Management application.	Administrators
BMC Service Management	Process Model	
BMC Service Management Process Model Best Practice Flows	Best practice work flow for the BMC Remedy IT Service Management processes that are covered by the BMC Service Management Process Model.	Everyone
BMC Service Management Process Model Release Notes	Procedures for installing and configuring BMC Service Management Process Model. Also describes enhancements, fixes, and known issues for the release.	Administrators
BMC Service Management Process Model Role Mapping to BMC Remedy ITSM Suite	List and description of BMC Service Management Process Model roles.	Everyone
BMC Service Request Management		
BMC Service Request Management User's Guide	Procedures for using the BMC Service Request Management application.	Everyone
BMC Service Request Management Administration Guide	Procedures for configuring and administering the application.	Administrators

Searching PDF documents

If you have Adobe Acrobat version 6.0 or later, you can search for text within all of the PDFs that are in the same folder. You do not need to open the files before running your search.

To upgrade your version of Adobe Acrobat, go to http://www.adobe.com.

To search PDF documents in a specific location

- 1 Copy the BMC Remedy ITSM PDF files to a folder.
- 2 Open Adobe Acrobat.
- 3 Choose Edit => Search
- 4 In the Search PDF pane, type the word or phrase to search for.
- 5 Select the **All PDF Documents in** option and browse to the folder containing the PDF files for BMC Remedy ITSM.
- 6 Click Search.
- 7 In the Results window, click a document.

The document opens at the first occurrence of the search term.

8 To navigate to other occurrences of the search term within the document, click a link under the document name. To navigate to occurrences in other documents, click the plus (+) symbol to the left of a document name.

Conventions

This document uses the following special conventions:

- All syntax, operating system terms, and literal examples are presented in this typeface.
- Variable text in path names, system messages, or syntax is displayed in italic text: testsys/instance/fileName
- This document uses a symbol to show menu sequences. For example, Actions => Create Test instructs you to choose the Create Test command from the Actions menu.

Introducing BMC Remedy ITSM

BMC Remedy IT Service Management Suite (BMC Remedy ITSM Suite) provides outof-the-box IT Information Library (ITIL) service support functionality.

BMC Remedy ITSM streamlines and automates the processes around IT service desk, asset management, and change management operations. It also enables you to link your business services to your IT infrastructure to help you manage the impact of technology changes on business and business changes on technology-in real time and into the future. In addition, you can understand and optimize the user experience, balance current and future infrastructure investments, and view potential impact on the business using a real-time service model. All this helps you manage what matters to deliver Business Service Management (BSM).

Each BMC Remedy ITSM application contains the consoles, forms, active links, escalations, flashboards, and so on, needed to execute their basic functions. The applications also use several integrated modules and supporting applications that extend and enhance these basic functions.

ITIL and BMC Remedy ITSM

IT Information Library (ITIL) is the foundation for achieving the goals of the BMC Remedy ITSM applications.

ITIL provides the leading set of best practices for service management. It defines important business processes and provides a flexible well-designed framework that can be tailored to the specific needs of your organization.

ITIL defines a broad set of recommendations that explain effective ways to handle many aspects of IT support and delivery, including asset and configuration management, change management, release management, incident management, and problem management.

BMC Remedy ITSM automates standard ITIL processes out of the box. Extensive configuration options enable you to tailor the applications to the needs of your organization.

Table 3 on page 16 maps ITIL processes to BMC Remedy ITSM applications.

Table 3: ITIL processes and BMC Remedy ITSM applications

ITIL process	BMC Remedy ITSM application
Change management	BMC Remedy Change Management
Release management	BMC Remedy Change Management
Incident management	BMC Remedy Incident Management
Problem management	BMC Remedy Problem Management
Service asset and configuration management	BMC Remedy Asset Management

ITIL describes best practices at a high level. It provides guidance on steps to take, processes, and workflows. Organizations are then free to implement the work-level procedures for daily activities that apply to their requirements. BMC Service Management Process Model (BMC SMPM) illustrates how ITIL processes map to work instructions performed in the BMC Remedy ITSM applications.

Best Practice views of key forms help streamline work to ITIL best practices.

User scenarios

This section describes common BMC Remedy IT Service Management user scenarios that you encounter as IT support staff. Calbro Services user personas help to illustrate the user scenarios. The typical steps described by these user scenarios are in keeping with BMC best practices as outlined by BMC Service Management Process Model (BMC SMPM).

The user scenarios indicate people that are included with sample data. For each of these people, the user name is the person's first name, and the password is **password**.

The user scenarios do not necessarily refer to specific Calbro Services sample data (for information about Calbro Services, see "Calbro Services" on page 16). To follow the user scenarios, in some instances, you might need to create your own sample data (for example, bulk inventory CIs). In addition, you might need to grant additional permissions to certain users.

Calbro Services

In the BMC Remedy ITSM documentation set, a fictional company named Calbro Services helps explain how BMC Remedy ITSM principles and procedures are used in practice.

Although Calbro Services is a fictional company, it is based on research of actual BMC Software customers. Learning how Calbro Services manages common IT Service Management scenarios should prove useful as you use the BMC Remedy ITSM applications in your own environment.

Calbro Services, a large, global company, is headquartered in New York City and publicly traded on the New York Stock Exchange. The company has 27,000 employees in 240 offices located in 20 countries. Table 4 on page 17 describes key business services in Calbro Services.

Table 4: Key business services

Service	Description	
Online banking	500 ATMs in major cities	
WWW presence	Corporate site and online brokerage services	
Discount equity brokerage	Online and storefront services	
Sales force automation	Automated sales activities such as leads, orders, reports, and so on	
Customer support	Support centers in the United States, Europe, and Asia	
Mass marketing	World-wide marketing campaigns aimed at making Calbro Services a household name	

BMC Remedy Asset Management user scenarios

This section describe at a high-level common BMC Remedy Asset Management user scenarios that you typically encounter as IT support staff. The Calbro Services sample data is used to illustrate the user scenarios.

The following user scenarios are provided:

- Purchasing software and assigning a license on page 18
- Scheduling regular maintenance on a network printer on page 19
- Purchasing a laptop for a new employee on page 21
- Investigating inaccurate CI data on page 24
- Making sure that scheduled changes to CIs do not impact business services on page 24

Purchasing software and assigning a license

Calbro Services has an enterprise license for Microsoft Office, which gives all employees access to Microsoft Word, Microsoft Excel, Microsoft Power Point, and Microsoft Outlook. However, because only a few people require Microsoft Visio, this software is purchased only as required.

Allen Allbrook is the Contract Manager for Calbro Services. He maintains the contracts for Microsoft products.

Joe Unser, who works in Human Resources, requires a copy of Microsoft Visio. Allen Allbrook, who is also the configuration administrator and software asset manager, orders Microsoft Visio.

Table 5 on page 18 describes the typical steps involved in this user scenario.

Table 5: Purchasing software and assigning a license

Role	Actions	Explanation
Contract manager	On the Contract Management console, the contract manager creates a software license contract for Microsoft Visio and sets the status to Executed.	Allen Allbrook creates a contract for Microsoft Visio. Because this contract is managed by Backoffice Support, contract users (such as Bob Baxter) can add license certificates as they are purchased.
Configuration administrator	On the Purchasing console, the configuration manager creates a purchase requisition for Microsoft Visio. On the License Certificate tab of the line item, the configuration administrator selects a Per Instance license type and completes the required fields. The configuration administrator submits the purchase requisition for approval.	Allen Allbrook creates a purchase requisition for Microsoft Visio. He specifies details about the license certificate. The manager of the requester is the default approver of the purchase requisition. Note: If Per Instance license types are not available, you must enable the Per Instance license type, as described in the BMC Remedy IT Service Management Administration Guide.
Requester's manager	On Approval Central, the requester's manager selects the purchase requisition and approves it.	The requester's manager must approve the purchase requisition. Note: If no manager is assigned to the requester, you should assign a manager in the People form. For more information, see the BMC Remedy IT Service Management Administration Guide.

Role	Actions	Explanation
Purchasing agent	The purchasing agent creates the purchase order: On the Purchasing console, the purchasing agent searches for orders to place. He views and then places the order.	After the purchase requisition is approved, a purchase order is automatically created and is ready to be placed with the vendor. If the system is configured to auto-receive software products, the license certificate is created when the purchase order is placed on order and is linked to the line item on the purchase order. Note: To set auto-receive, refer to the Configuring BMC Remedy Asset Management section in the BMC Remedy IT Service Management Administration Guide.
Configuration administrator	The configuration administrator receives the item on the purchase order: On the Receiving console, the configuration administrator searches for the purchase order and receives a quantity of one.	If the system is not configured to autoreceive software products, Allen Allbrook receives Microsoft Visio on the purchase order. At this time, the license certificate is automatically created and linked to the line item on the purchase order. This action automatically creates a new CI.
Customer	The customer installs the software.	After Joe Unser installs Microsoft Visio on his computer, discovery software discovers the software. During reconciliation, the CI, which previously had a status of Received, is set to a status of Deployed.
Contract manager	The contract manager runs a license job to assign the license: From the Software Asset Management console, the contract manager accesses the Manage License Jobs console. The contract manager creates a license job for the Per instance license type. On the Manage License Jobs console, the contract manager runs the license job.	Allen Allbrook runs a license job. If a broad license job is already scheduled to run nightly or upon reconciliation, Allen could skip this step. The license job connects the CI to the software license certificate.

Scheduling regular maintenance on a network printer

Calbro Services has a high-speed high-volume network printer on each floor of its offices. These printers require maintenance every six months. The configuration administrator, Allen Allbrook, sets up a maintenance schedule for each of these printers.

Not all data for this example is included with the sample data. You must create the Asset Maintenance change type template and the network printer CI.

Allen selects a "network printer maintenance" change template, so that the appropriate change request is started when maintenance is scheduled. Because this is a pre-approved change, no approval is required, and a technician performs the scheduled work.

After completing the maintenance tasks, the technician changes the status of the schedule to completed.

Note

BMC Remedy Asset Management and BMC Remedy Change Management must be installed to follow this user scenario.

Table 6 on page 20 describes the typical steps involved in this user scenario.

Table 6: Scheduling regular maintenance

Role	Actions	Explanation
Configuration administrator	The configuration administrator creates a maintenance schedule for a network printer: From the Asset Management console, the configuration administrator accesses schedules and creates a new maintenance schedule. The configuration administrator specifies the details of the schedule. He selects a change template for network printer maintenance. To select network printers, he chooses the categorization Hardware => Printer => Network.	Allen Allbrook, the Calbro configuration administrator, needs IT personnel to perform maintenance every six months on a network printer. He sets up a maintenance schedule, selects the change template, and selects the network printers.
Technician	The technician completes the change request to perform maintenance: That technician receives an alert that a change request is assigned (through email, alert, or page). On the Change Management Support console, the technician opens the change request. The technician relates an ad hoc task to the change request and moves the change request through its lifecycle to the Implementation stage. The technician completes maintenance and closes the task. The technician then closes the change request.	When the maintenance schedule comes due, the Asset Maintenance change template is used to create the change request. This template assigns the change request to the correct technician and notifies the technician to complete the maintenance every six months. The technician completes the change request. For more information, see the <i>BMC Remedy Change Management User's Guide</i> .

Role	Actions	Explanation
Technician	The technician indicates that maintenance is complete:	The technician indicates that the maintenance is complete.
	On the Asset Management console, the technician searches for the network printer CI and views it.	
	From the CI form, the technician accesses the schedules and views the network printer maintenance schedule.	
	The technician indicates that the maintenance is complete.	

Purchasing a laptop for a new employee

Calbro Services ensures that new employees are fully functional on their first day of employment. Purchasing a laptop for a new employee is therefore a common task for the purchasing agent at Calbro Services. He must create a purchase requisition and place a purchase order (PO). When the PO is received, BMC Remedy Asset Management automatically generates a new CI and a change request.

The change coordinator can also create a "new employee" change request in which one of the tasks is providing a fully configured laptop to new employees on their first day at Calbro Services.

BMC Remedy Asset Management and BMC Remedy Change Management must be installed to follow this user scenario. If you cannot find the correct CIs in the Calbro sample data, you must create a laptop CI and add it to the inventory to follow this user scenario. For more information about managing CI inventory, especially if you are adding bulk items, see the BMC Remedy Asset Management User's Guide.

Table 7 on page 22 describes the typical steps involved in this user scenario.

Table 7: Purchasing a laptop for a new employee

Role	Actions	Explanation
Configuration administrator	From the Purchasing console, the configuration administrator creates a purchase requisition. The configuration administrator enters the required details. The configuration administrator indicates that installation is needed, and chooses the Configure New Computer change template. To make sure there is enough inventory, the configuration administrator selects the standard configuration, and checks whether the computer system is in inventory. The configuration administrator adds the item to the requisition and submits the requisition for approval.	When the configuration administrator creates the purchase requisition, Allen Allbrook, the manager of the requester, is the default approver of this purchase requisition. Using a change template automatically creates a change request when the ordered laptop is received.
Requester's manager	On Approval Central, the requester's manager selects the purchase requisition and approves it.	The requester's manager must approve the purchase requisition. Note: If no manager is assigned to the requester, you should assign a manager in the People form. For more information, see the BMC Remedy IT Service Management Administration Guide.
Purchasing agent	The purchasing agent creates the purchase order: On the Purchasing console, the purchasing agent searches for orders to place. The purchasing agent views and then places the order.	After the purchase requisition is approved, a purchase order is automatically created and is ready to be placed with the vendor.
Configuration administrator	The configuration administrator receives the item on the purchase order: On the Receiving console, the configuration administrator searches for the purchase order and receives a quantity of one.	This action automatically creates a new CI. If your system is properly configured, a new change request is also created.
Purchasing agent	The purchasing agent views the new CI: On the Asset Management console, the purchasing agent searches for all computers with a status of Received. The purchasing agent finds the laptop CI and views the details, including the financial details.	The original purchase requisition is automatically related to this CI. Note: If the purchasing agent does not have access to the Asset Management console, a configuration administrator can view the CI.

Role	Actions	Explanation
Change coordinator	The change coordinator views the change request: On the Change Management console, the change coordinator searches for all open changes. The change coordinator views the change request for the new laptop.	Mary Mann is the change coordinator for Calbro Services. She views all open Change Requests in the Manager Console view. For more information about using BMC Remedy Change Management, see the BMC Remedy Change Management User's Guide.
Change coordinator	The change coordinator views dates for the change request and performs risk assessment: On the Change form, the change coordinator views the calendar. The change coordinator defines the risk level of the change request.	Mary opens the Change Calendar to see if there are any conflicting change requests or business events. Although the Risk Level had a predefined value, she can perform Risk Assessment to formalize the Risk Level. This type of change request is pre-approved and does not require any formal approvals.
Change coordinator	The change coordinator creates a task and schedules the change request: On the Change form, the change coordinator moves the change request to the Plan & Schedule stage. The change coordinator relates the change request to the Install Laptop task template. The change coordinator assigns the task to the task implementer who is part of Calbro's Backoffice Support Staff. The change manger moves the change request to the Scheduled for Review stage. The change coordinator specifies the scheduled dates and moves the change request to the Implement stage.	Mary creates a task to install or configure the laptop and assigns the task to the task implementer. When the change request reaches the Implement stage, the task moves to Assigned status and the task implementer can start working on the task.
Task implementer	After performing each task, the task implementer closes the tasks: From the Change Management Support console, the task implementer searches for assigned tasks. After performing the task, the task implementer records information about performing the task and changes the status to Closed.	Ian Plyment, the task implementer, completes the task.

Role	Actions	Explanation
Change coordinator	The change coordinator completes the change request: The change coordinator moves the change request to the Closed stage. The change coordinator enters the performance rating and the actual dates of the change.	Mary Mann completes and closes the change request. She enters a performance rating and start and end dates.

Investigating inaccurate CI data

CI data is used by IT personnel throughout Calbro Services. Configuration administrators use CI data for most tasks. Change coordinators analyze the CIs and their relationships before implementing changes. Service Desk personnel use CI data to help resolve incident requests and investigate problems. Accurate CI data is important to their work.

Allen Allbrook, a configuration administrator at Calbro Services, thinks that the data for a computer system might be inaccurate. He wants to view the audit history of the CI, so that he can see all the modifications to this computer system during its history. He can investigate whether the data is no longer accurate by checking the audit history for the CI.

Typically, Allen accesses data stored in BMC Atrium CMDB from the Asset Management console. On the Asset Management console, he searches for the CI and views it. From the CI form, he views the BMC Atrium CMDB audit history.

Making sure that scheduled changes to CIs do not impact business services

The Finance department at Calbro Services processes payroll checks every Thursday. Allen Allbrook, the configuration administrator, wants to make sure that neither the payroll server nor the payroll printer are taken down for maintenance on Thursdays. He sets two blackout schedules to accomplish this – these key services are unavailable for maintenance on any Thursday.

The payroll server is having performance issues and needs more memory. When Mary Mann, the change coordinator, schedules the change request, she sees that the payroll server is unavailable on Thursday. To prevent conflicts, she creates another unavailable time segment, on Monday instead of Thursday.

The Calbro business process has predefined that this type of change request requires standard approvals to move the project forward.

Note

BMC Remedy Asset Management and BMC Remedy Change Management must be installed to follow this user scenario. If you cannot find the correct CIs in the Calbro sample data, you must create a server CI and add it to the inventory to follow this user scenario. For more information about managing CIs, see the BMC Remedy Change Management User's Guide.

Table 8 on page 25 describes the typical steps involved in this user scenario.

Table 8: Scheduling mandatory unavailability for key services

Role	Actions	Explanation
Configuration administrator	The configuration administrator creates <i>unavailability</i> blackout schedules for the payroll server and payroll printer: On the Asset Management console, the configuration administrator searches for the server CI.	Allen specifies that the payroll server and printer server CIs are <i>unavailable</i> every Thursday because of maintenance. During this blackout, these CIs must <i>not</i> be brought down.
	On the CI form, the configuration administrator opens the blackout schedule.	
	The configuration administrator adds a business time segment. The configuration administrator specifies the server CI to be Unavailable. The configuration administrator sets up a weekly recurring duration for Thursdays.	
Change coordinator	The change coordinator creates a change request, using a change template:	Mary uses a predefined change template that supports the business process and accelerates the change request process. It
	On the Change Management console, the change coordinator creates a new change request.	prepopulates fields on the change request with information.
	On the Change form, the change coordinator selects the Server Hard Drive template. The change coordinator completes the required information to finish creating the change request.	

Role	Actions	Explanation
Change coordinator	The change coordinator views dates for the change request and performs risk assessment:	Mary opens the Change Calendar to see if there are any conflicting change requests or business events.
	On the Change form, the change coordinator views the calendar.	Although the Risk Level had a predefined value, she performs Risk Assessment to
	The change coordinator defines the risk level of the change request.	formalize the Risk Level.
Change coordinator	The change coordinator relates the CI to the change request:	Mary creates a server CI unavailability that is related to the change request.
	On the Change form, the change coordinator creates a relationship to the server CI. She specifies the Relationship Type as Upgrades .	
	The change coordinator creates an unavailability relationship.	
	In the Configuration Item Unavailability dialog box, the change coordinator specifies the unavailability type (for example, Scheduled Full) and the scheduled dates.	
Change coordinator	The change coordinator searches for available times to schedule the change request:	Mary finds the next available time to upgrade the payroll server. She schedules the CI unavailability on Monday to avoid conflicts with the Thursday blackout
	On the Change form, the change coordinator uses the Schedule Assist tool to search for available times. The change coordinator views the times when the server CI is unavailable. The change coordinator finds the next available time, based on the duration and available start time.	schedule.
	The change coordinator creates a schedule time segment.	

Role	Actions	Explanation
Change coordinator	The change coordinator creates an <i>unavailability</i> blackout schedule to fix the payroll server:	Mary creates a blackout schedule to upgrade the server CI.
	On the Change Management console, the change coordinator searches for the server CI.	
	From the CI form, the change coordinator accesses blackout schedules.	
	The Change coordinator adds a business time segment. She specifies the server CI to be unavailable on some day other than Thursday (for example, Monday).	
	The change coordinator moves the change request to the Implementation Approval phase.	
Change approver	The change approver approves the Install Hard Drive change request.	Allen Allbrook must approve the change to move it forward to the Scheduled status.
Task implementer	The task implementer performs the tasks: On the Change Management Support console, the task implementer searches for assigned tasks.	Task implementers must complete all three tasks successfully before the change request can be closed.
	The task implementer performs each of the three Upgrade Server Hard Drive tasks and records the work performed.	
Change coordinator	The change coordinator completes the change request: The change coordinator moves the change request to the Closed stage.	Mary completes and closes the change request. She enters the performance rating and start and end dates.
	The change coordinator enters the performance rating and the actual dates of the change.	

BMC Remedy Change Management user scenarios

This section describes at a high-level common BMC Remedy Change Management user scenarios that you typically encounter as IT support staff. The Calbro Services sample data is used to illustrate the user scenarios.

The following user scenarios are provided:

■ "Adding laptop memory" on page 28

- "Upgrading server hardware" on page 29
- "Releasing a new software program" on page 32

Adding laptop memory

Joe Unser is an employee at Calbro Services. To improve the performance of his laptop, he needs 3 GB additional memory added. He submits a request to install memory for his laptop.

The Calbro Services business process has predefined that this type of change request does not require the standard Review and Business Approval processes. Mary Mann is the change coordinator at Calbro Services. Mary schedules and plans the change request. Ian Plyment, who is part of Mary's Front Office Support team, implements the change request.

Table 9 on page 28 describes the typical steps involved in this user scenario.

Table 9: Adding laptop memory

Role	Actions	Explanation
Customer	On the Requester console, the customer creates a service request to install hardware.	Joe Unser, the customer, uses the predefined menus to select the appropriate item and enter more information. His selection drives the predefined process to create the change request. This request is a standard change that is pre-approved and does not require any formal approvals. Note: If Calbro Services has BMC Service Request Management, the business user creates the request from BMC Service Request Management, instead of from the Requester console.
Change manager	The change manager views the change request: On the Change Management console, the change manager searches for all open changes. The change manager views the Install Hardware change request.	Mary Mann, the change manager, logs in and views all open change requests in the Change Management console. This type of change request involves minimal risk. This request is pre-approved and does not require any formal approvals.
Change coordinator	The change coordinator schedules the change request: On the Change form, the change coordinator specifies the scheduled dates.	Mary Mann schedules the change request.

Role	Actions	Explanation
Change coordinator	The change coordinator relates the CI to the change request: On the Change form, the change coordinator searches for the laptop CI and relates it to the change request. The change coordinator specifies the Installs relationship type.	The change coordinator relates the CI to the change. The change coordinator then creates a task to add the laptop memory and assigns the task to the task implementer.
Change coordinator	The change coordinator creates tasks: On the Change Management console, the change coordinator searches for all open change requests and opens the change request. On the Change form, the change coordinator moves the change request to Implementation in Progress. The change coordinator relates the Install Memory task to the change request, and makes sure that it is assigned to the task implementer.	The change coordinator creates a task to add the laptop memory and assigns the task to the task implementer (Ian Plyment).
Task implementer	The task implementer closes the tasks after performing them: From the Change Management console, the task implementer searches for assigned tasks. After performing the task, the task implementer records information about performing the task and changes the status to Closed.	In the Implement stage, the task moves to Assigned status and Ian Plyment, the task implementer, can start working on the task. When the Ian finishes the task, he sets its status to Closed.
Change coordinator	The change coordinator completes the change request: The change coordinator moves the change request to the Closed stage. The change coordinator enters the actual dates of the change.	Mary Mann, the change coordinator, can now close the change request.

Upgrading server hardware

Calbro Services has discovered that a mission-critical server is almost reaching capacity. They must replace the current server with a model that has more capacity. Mary Mann, the change coordinator, schedules and plans the change request. Ian Plyment, who part of Mary's Front Office Support team, then implements the tasks in the change request.

The Calbro business process has predefined that this type of change request requires standard approvals to move the project forward.

Table 10 on page 30 describes the typical steps involved in this user scenario.

Table 10: Upgrading server hardware

Role	Actions	Explanation
Change coordinator	The change coordinator creates a change request from BMC Atrium Impact Simulator: From the Change Management console, the change manager opens Atrium Impact Simulator. The change coordinator adds CIs to the simulator and runs the simulator. The change coordinator then relates a new change request to the CI.	Mary Mann, the change coordinator, runs a simulated impact analysis on the CI. She verifies what devices and applications in the network would be affected if she takes the server offline. Mary then creates a change request from the Atrium Impact Simulator. The CI is automatically related to the change request.
Change coordinator	In the Change form, the change coordinator selects the Install Server Hard Drive template. The change coordinator moves the change request to the next stage and completes the required information.	Mary uses a predefined change template that supports the business process and accelerates the change request process. It prepopulates fields on the change request with information. This change template also includes a predefined Task Group template (Upgrade Server Hard Drive). The Task Group template contains three predefined Tasks Templates that are individual work items.
Change coordinator	The change coordinator schedules the change request and runs collision detection: The change coordinator views the calendar and checks for possible conflicts. The change coordinator enters the scheduled dates. The change coordinator might use the Schedule Assist tool to search for available times. To check whether other change requests are scheduled to work on the CI at the same time, the change coordinator runs Collision Detection.	Mary opens the change calendar to see if there are any conflicting change requests or business events. She uses the Schedule Assist tool to schedule the start and end dates. Mary then determines if this change request collides with other changes.

Role	Actions	Explanation
Change coordinator and change manager	The change coordinator adds task assignments: On the Change form, the change manager relates the Upgrade Server Hard Drive task group template to the change request. The change manager views the details of the task. The change manager views the task flow of the task group. The change manager moves the change request to the Scheduled For Review stage.	Mary adds the task and task assignments. She then views the tasks relates to the change request and makes adjustments if needed. A predefined process is already set up for this type of change, which speeds the planning and process. Mary sees that Ian Plyment has been predefined as the task implementer assigned to work on this change. Mary has additional opportunity to review change plans, schedules, and so on.
Change approver	From Approval Central, the change approver approves the change request.	If approvers are mapped to any approval phases, the change approver must approve the change to move it forward. Otherwise, the change manager can refresh the change request to move it to the next status.
Change manager	The change manager reviews task assignments and makes any necessary changes. The change manager moves the change request to the Implement stage.	When the change request reaches the Implement stage, the task moves to Assigned status and the task implementer can start working on the first task.
Task implementer	The task implementer completes the Backup System task: From the Change Management Support console, the task implementer searches for assigned tasks. The task implementer views the Backup System task, and relates the server CI to the task. After performing the task, the task implementer records information about performing the task and changes the status to Closed.	Ian Plyment, the task implementer, opens the first task in the task group, relates the server CI to it, and then completes the task.
Task implementer	The task implementer completes the Uninstall Hard Drive task: From the Change Management Support console, the task implementer searches for assigned tasks. The task implementer views the Uninstall Hard Drive task, and relates the server CI to the task. After performing the task, the task implementer records information about performing the task and changes the status to Closed.	Ian opens the second task, relates the server CI to it, and then completes the task.

Role	Actions	Explanation
Task implementer	The task implementer completes the Install Hard Drive task:	Ian opens the third task, relates the server CI to it, and then completes the task.
	From the Change Management Support console, the task implementer searches for assigned tasks. He views the Install Hard Drive task, and relates the server CI to the task.	When the last task is closed, the status of the Upgrade Server Hard Drive task group changes to Closed.
	After performing the task, the task implementer records information about performing the task and changes the status to Closed.	
Change coordinator	The change coordinator completes the change request:	Mary completes and closes the change request.
	The change coordinator moves the change request to the Closed stage.	
	The change coordinator enters the actual dates of the change.	

Releasing a new software program

Allen Allbrook, the release coordinator, has created a request to release a new version of the payroll service.

This release is composed of two work items to be rolled out during the Deployment milestone:

- Install a new server.
 - Allen creates a change request to include in the release manifest.
- Train the users on the new payroll service.
 - Since this work item is not a change request that needs to be completed by the Change Management team, Allen instead creates an Activity as part of the manifest.

Mary Mann is the change coordinator.

Depending on how your application administrator has configured phases and exit criteria, the activity and change must be completed in the Deployment milestone before the release request can be closed.

Table 11 on page 33 describes the typical steps involved in this user scenario.

Table 11: Releasing a new software program

Role	Actions	Explanation
Release coordinator	From the Release Management console, the release coordinator creates a release request.	Allen creates a new request to add a new Payroll Service and would like it by September 1, 2009. Release starts at the Initiate milestone. The service will be released in multiple phases.
Release coordinator	On the Release form, the release coordinator creates a new change request and assigns it to the change coordinator. The release coordinator relates the Install Server task to the change request. On the Release form, the release coordinator assigns the activity to the Deployment milestone. The release coordinator can see the change request listed on the manifest of the release.	Allen creates a change request to install the payroll service on a new server as part of the release manifest.
Release coordinator	On the Release form, the release coordinator creates a new activity. The release coordinator assigns this activity to the Deployment milestone. The release coordinator can see the activity listed on the manifest of the release.	Allen creates an activity to train employees on the new payroll service as part of the release manifest. He assigns the activity to Francie Stafford.
Release coordinator	To check whether other change requests are scheduled to work on the same CI, the release coordinator runs collision detection. The release coordinator sets the scheduled, actual, and deployment start and end dates for the release. The release coordinator uses the Schedule Assist tool to search for available time segments. The release coordinator moves the request to the Initiate Approval milestone.	Allen schedules the change request. He then runs the Collision Detection tool to see if there are any conflicting change requests.
Release approver	On the Approval Central console, the release approver approves the request to initiate the release.	If approvers are mapped to any approval phases, the release approver must approve the release to move it forward. Otherwise, the release coordinator refreshes the release request to move it to the next status.
Release coordinator	The release coordinator moves the release to the Planning milestone.	

Role	Actions	Explanation
coordinator	The release coordinator reviews the calendar: The release coordinator sets the request	Allen opens the change calendar to see if there are any conflicting releases, change requests, or business events.
	status to In Progress.	
	The release coordinator views the calendar and makes sure that the release requests are shown in the calendar.	
	On the Release form, the release coordinator adjusts the scheduled start and end dates.	
Activity assignee	On the Release Management console, the activity assignee views assigned activity.	Activity is routed to the Francie Stafford, the activity assignee.
Activity assignee	On the Activity form, the activity assignee attaches the training plan to work information.	Francie schedules a training session on how to use the new payroll application.
Activity assignee	On the Activity form, the activity assignee creates tasks and assigns them to task implementers.	Francie creates tasks to assign the trainers to train Calbro users in Boston, Tokyo, and so on.
Activity assignee	On the Activity form, the activity assignee verifies assignments, adds financial information, and schedules the start and end dates.	Francie adds financial and scheduling information to the activity.
Release coordinator	The release coordinator oversees building the controlled environment before the release goes into production. On the Release form, the release	Allen oversees assembly of CIs needed to create the new payroll service.
	coordinator moves the release request to the Build milestone.	
Release coordinator	The release coordinator moves the release request to the Test milestone.	Allen oversees the testing of the new service, to make sure that the CIs, IT service, or process meets the specifications and requirements.
Release coordinator	The release coordinator moves the release request to the Deployment milestone.	Phased deployment of the new service can start.
Change coordinator	The change coordinator opens the change request and moves it to the Implement stage.	In the Deployment milestone, Mary Mann, the change coordinator, moves the change request through its stages.
	The change coordinator relates tasks to the change requests and assigns the tasks to the task implementer.	

Role	Actions	Explanation
Task implementer	The task implementer closes each task when it is completed: From the Change Management Support console, the task implementer searches for assigned tasks. After performing the task, the task implementer records information about performing the task and changes the status to Closed.	In the Deployment milestone, the task moves to Assigned status and Ian Plyment, the task implementer, can start installing the server. Ian completes the task.
Change coordinator	The change coordinator completes the change request. The change coordinator opens the change request and moves it to the Completed status.	Mary completes the change request to install the server.
Activity assignee	The activity assignee performs activities: On the Release Management console, the activity assignee opens the activity and views the status of the assigned tasks. After all training tasks are finished, the activity assignee changes the status of the activity to Completed.	In the Deployment milestone, the trainers can start training users at different Calbro locations. A training task has its own independent lifecycle and continues on its own path, but all tasks must be finished in order for the activity to be completed.
Release coordinator	The release coordinator completes the release: On the Release form, the release coordinator moves the release request to the Close Down milestone.	Allen completes and closes the release request.

BMC Remedy Incident Management user scenarios

This section describe at a high-level common BMC Remedy Incident Management user scenarios that you typically encounter as IT support staff. The Calbro Services sample data is used to illustrate the user scenarios.

The following incident management scenarios are described:

- "Incident request resolution first call resolution" on page 36
- "Incident request resolution assignment to specialist" on page 37
- "Incident request resolution emergency change request" on page 39

Incident request resolution—first call resolution

This user scenario describes how to resolve an incident request on the first call.

Francie Stafford is a service desk analyst who works on the Calbro Services service desk. She receives a call from Joe Unser, a Calbro Services benefits agents who cannot access one of his key applications, because he is locked out of his user account. Francie creates an incident request, resolves the incident for Joe, and then closes the incident request.

Detailed information about the individual actions mentioned in this user scenario are described in the BMC Remedy Service Desk: Incident Management User's Guide.

Table 12 on page 36 describes the typical steps involved in this user scenario.

Table 12: Incident resolution—first call resolution

Role	Actions	Explanation
Customer	The customer contacts the service desk.	Joe needs to have one of his user accounts unlocked, and calls the service desk to open an incident request.
Service desk analyst	On the Incident console, the service desk analyst registers the incident request record.	Francie Stafford receives Joe's call and, using the BMC Remedy Incident Management Best Practice view, creates a new incident request record. If an applicable template is available, Francie can select the template, which should contain instructions for resolving the incident.

Role	Actions	Explanation
Service desk analyst	On the Incident form, the service desk analyst uses Incident Matching to find a solution. Incident Matching can find records from: Solution records created in BMC Remedy Problem Management Solution records created in BMC Remedy Knowledge Management Similar problem investigations and known errors created in BMC Remedy Problem Management Similar incident requests From the matching record, the service desk analyst determines how to unlock the account.	A template is not available. However, using Incident Matching, Francie is able to unlock Joe's account while he is on the phone. Although by default Incident Matching looks for open incident request, Francie extended the search to looked for closed incident requests.
Service desk analyst and Service desk customer	The service desk analyst works with the customer to determine that the incident request can be closed. On the Incident form, the service desk analyst closes the incident request.	While Joe is still on the phone, Francie asks him to confirm that his account is unlocked and that he can log in to his system. Joe confirms this, so Francie updates the resolution field on the incident request to indicate this. Francie closes the incident request record.

Incident request resolution—assignment to specialist

This user scenario describes how to resolve an incident request by assigning it to a specialist.

Francie Stafford receives a call from Joe Unser, who cannot send documents to his local printer. Francie creates an incident request, but cannot resolve it herself. The incident request is automatically assigned to a specialist, Ian Plyment, who accepts the assignment and restores Joe's printer connection. Ian then closes the incident request.

Detailed information about the individual actions mentioned in this user scenario are described in the BMC Remedy Service Desk: Incident Management User Guide.

Table 13 on page 38 describes the typical steps involved in this user scenario.

Table 13: Incident resolution with assignment to specialist

Role	Actions	Explanation
Service desk customer	The customer contacts the help desk	Joe cannot send documents to his local printer and calls the help desk for assistance.
Service desk analyst	On the Incident console, the service desk analyst registers an incident request record. When the service desk analyst saves the record, the incident request is assigned to the assignment group specified in the template.	Francie Stafford receives Joe's call and, using the BMC Remedy Incident Management best practice view, creates a new incident request record from the applicable template.
Specialist	The specialist accepts the assignment: From the Incident console, the specialist searches for incident requests that are assigned to his support group, but which are not assigned to an individual. The specialist opens an incident request and assigns it to himself.	Ian Plyment is a specialist who works for the support group to which Joe's incident request is assigned. From the Incident console, Ian runs a defined search for all open, unassigned incident requests for his support group. Joe's incident request is one of the records that the search finds. Ian opens the record and accepts the assignment.
Specialist	On the Incident form, the specialist uses Incident Matching to resolve the incident. Any matching incidents, problem investigations, known errors, and solutions appear in the tabs at the bottom half of the dialog box. The specialist selects a solution and resolves the incident by relating it to the solution. This copies the solution from the matching record to the Resolution field of the incident request record.	Ian uses the Incident Matching feature to determine the cause of Joe's incident and resolves it by restoring Joe's printer connection.
Specialist	The specialist completes the incident request. On the Incident form, the specialist resolves the incident and indicates that customer follow-up is required.	Ian is unable to contact Joe directly to determine that his printing service is successfully restored, so he completes the incident request by moving the status to Resolved with a status reason of Customer Follow-Up Required. BMC Remedy Incident Management sends Joe an email asking him to contact the Service Desk to confirm that the incident is resolved. If Joe does not respond within a specific period of time, which is configurable for each installation, the auto close rule moves the incident request's status to Closed.

Incident request resolution—emergency change request

This user scenario describes how to resolve an incident request with an emergency change request.

Joe Unser, a Calbro Services benefits agent, cannot access the local area network. He contacts the Calbro Service desk, and Francie Stafford, a service desk analyst, creates an incident request.

The incident request is assigned to Ian Plyment, a specialist in the support group assigned to Joe's company. Ian determines that Joe's data port is broken, and an emergency change is required to restore Joe's service.

Ian contacts Allen Allbrook, the owner of the service, to let him know that an emergency change is required. Allen assesses the risk and authorizes Ian to perform the work.

Ian then replaces Joe's data port and documents his actions in the incident request. Ian verifies with Joe that he can now access the local area network.

Ian closes the incident request and notifies Mary Mann, the change coordinator, of the emergency change so she can register the change. This ensures everyone can see what was changed, should the emergency change cause other incidents to occur. It also ensures that BMC Atrium CMDB is updated.

Note

BMC Remedy Incident Management and BMC Remedy Change Management must be installed to follow this user scenario.

Detailed information about the individual actions mentioned in this user scenario are described in the BMC Remedy Service Desk: Incident Management User Guide and the BMC Remedy Change Management User Guide.

Table 14 on page 39 describes the typical steps involved in this user scenario.

Table 14: Resolving an incident request with an emergency change

Role	Actions	Explanation
Service desk customer	The customer contacts the service desk.	Joe cannot access the local area network.

Role	Actions	Explanation
Service desk analyst	On the Incident console, the service desk analyst registers the incident request record. The analyst uses Incident Matching to search for a solution. When the specialist does not find a solution, the specialist completes the incident request registration and saves the record. The incident request is assigned to an assignment group as specified in the template.	Francie Stafford receives Joe's call and, using the BMC Remedy Incident Management Best Practice view, creates a new incident request record from the applicable template.
Specialist	The specialist accepts the assignment: On the Incident console, the specialist searches for incident requests that are assigned to his support group, but not to an individual. The specialist opens the customer's incident request and assigns it to himself. In the work details, the specialist specifies that the incident request is being handled according to the emergency change protocol.	Ian Plyment is a specialist working for the support group that supports Joe's company. Ian searches for all open, unassigned incident requests for his support group. Joe's incident request is one of the records found by the search. Ian opens the record and accepts the assignment. Ian investigates Joe's incident request and determines that his data port is broken. The fix requires an emergency change. Ian contacts Allen Allbrook, the owner of the affected service, to tell him this incident request requires an emergency change. Ian also notes this in the Work Detail tab of the incident request. Allen analyzes the risk and impact of the emergency change request and then authorizes Ian to implement the emergency change.
Specialist	The specialist implements the change and records all work in the incident request. The specialist contacts the customer to verify that the affected service has been restored. The specialist closes the incident request.	After the change is implemented and verified, Ian closes the incident request and asks Mary Mann, the change coordinator, to register a change for this emergency change. This ensures everyone can see what was changed, in case the emergency change causes incidents to occur. This also makes sure Allen, the service owner, is informed and BMC Atrium CMDB is updated.

Role	Actions	Explanation
Change coordinator	The change coordinator creates an emergency change request. From the Incident form, the change coordinator creates a change request. This opens the Change Request form and copies information from the incident request record to the change request record.	From Joe's incident ticket, Mary creates the emergency change request. By creating the request from the incident request, much of the information is copied directly from the incident request record to the change request record. This saves time and ensures accuracy. While creating the emergency change request, Mary creates a relationship between Joe's incident request and the emergency change request.

BMC Remedy Problem Management user scenarios

The following sections describe at a high-level common BMC Remedy Problem Management user scenarios that you typically encounter as IT support staff. The Calbro Services sample data is used to illustrate the user scenarios.

The following problem management scenarios are described:

- Problem investigation resolution change request on page 41
- Problem investigation resolution no change request on page 45
- Problem investigation resolution change request roll back on page 47
- Problem investigation at an impasse on page 51

Problem investigation resolution—change request

This user scenario describes how to resolve a problem investigation with a change request.

Bob Baxter, the Calbro problem coordinator, conducts an incident request review on the Calbro Order Processing System (OPS). In the course of the review, Bob discovers that several similar incidents related to the OPS occurred over the past six months. The resulting problem investigation determines that a change to the IT infrastructure is required. A known error is created making a request for change (RFC), which is assigned to Mary Mann, the change coordinator.

The change is approved by Mary, executed and verified by Ian Plyment, the specialist. The status of the Known Error is automatically marked as corrected.

Bob is notified that the change request has been completed. He notes the permanent corrective action in the problem investigation and changes its status to closed.

Note

BMC Remedy Incident Management, BMC Remedy Problem Management, and BMC Remedy Change Management must be installed to follow this user scenario. Detailed information about the individual actions mentioned in this user scenario are described in the BMC Remedy Services Desk: Incident Management User Guide, the BMC Remedy Service Desk: Problem Management User Guide, and the BMC Remedy Change Management User Guide.

Table 15 on page 42 describes the typical steps involved in this user scenario.

Table 15: Resolving a problem investigation with a change request

Role	Actions	Explanation
Problem coordinator	The problem coordinator performs an incident request review: From the Incident console, the problem coordinator creates a custom search that has the following characteristics: Service = OPS	The problem coordinator, Bob Baxter, performs an incident request review on the OPS by querying the Incident Management system for incidents or recent changes related to the OPS. Bob discovers that over the past six months there were several similar incidents related to the OPS.
	■ Impact => 2-Significant/ Large OR 1-Extensive/ Widespread ■ Last Resolved Date >= 07/19/2009	
	Note: For the purpose of this example, assume today's date is 01/19/2010. The Last Resolved Date used in this example, therefore, is six months ago.	
	After running the search, the problem coordinator looks for incident request records that have not yet been linked to a problem investigation.	

Role	Actions	Explanation
Problem coordinator	From one of the incident request records that is related to the OPS server issue, the problem coordinator creates a problem investigation. The incident record's details are copied from the incident request record to the Problem form, and a relationship is created between the problem investigation record and the incident request records. The problem coordinator completes the	Bob wants to determine the root cause of these incidents, so he creates a problem investigation from one of the incident request records. Creating the problem investigation from an incident request record ensures that all of the relevant details are copied over from the incident request to the problem investigation.
Problem coordinator	Problem form. From the Problem form, the problem coordinator creates relationships between the problem investigation and all related incident requests. The problem coordinator creates a relationship between the problem investigation and the OPS server.	Bob then relates the remaining OPS incidents and the OPS CI to the problem investigation.
Problem coordinator	The problem coordinator assigns the problem investigation to the specialist.	Bob assigns the problem investigation to the specialist, Ian Plyment, to conduct a root cause analysis.
Specialist	The specialist accepts the assignment and performs the root cause analysis.	Ian accepts the problem investigation assignment and begins a root cause analysis. During the root cause analysis, he determines the physical server on which the OPS runs needs a memory upgrade and sends his root cause analysis to Bob.
Problem coordinator	The problem coordinator performs the analysis review: The problem coordinator opens the problem investigation and independently verifies that the specialist's assessment of the root cause is correct.	Bob reviews and verifies Ian's analysis. Bob then creates a Known Error, which serves two purposes: to identify the best workaround (temporarily routing the users to a redundant server) and to request a change for the memory upgrade on the primary OPS server.

Role	Actions	Explanation
Problem coordinator	The problem coordinator creates a known error: On the problem investigation form, the problem coordinator sets the Status field to Completed and the Status Reason field to Known Error . This opens the Known Error form and creates a relationship between the known error and the problem investigation. The problem coordinator completes the form. The problem coordinator assigns himself as the problem coordinator. The problem coordinator assigns the change coordinator for the known error assignment.	Bob creates the known error directly from the problem investigation, which transfers all pertinent information to the known error. Bob assigns the known error to Mary Mann, the change coordinator.
Change coordinator	From the Known Error form, the change coordinator creates a change request. This opens the Change Request form and creates a relationship between the known error and the change request. It also copies information from the known error record to the change request record. The change coordinator saves the change request and moves the request through the change request is approved and has a date.	Mary receives the known error and reviews it. She agrees that the change is required and creates a change request from the known error. Mary moves the record through the change request lifecycle.
Change coordinator	The change coordinator assigns the change request to a specialist. The change coordinator adds a task to the change request and relates the CIs to the change request. The change coordinator moves the change request to the Implement stage.	On the change request record, Mary creates a task to implement the change, and assigns the change request to Ian Plyment, the specialist who will perform the work. The coordinator also relates the CI to the change request.
Specialist	The specialist performs the tasks and closes them: On the Change Management Support console, the specialist searches for assigned tasks. The specialist opens the task record and performs the task. Then the specialist records information about performing the task and changes the status of the task to Closed.	Ian implements the change. When he finishes the last task, the system notifies Mary that the tasks are closed.

Role	Actions	Explanation
Change coordinator	The change coordinator completes the change request: From the Change form, the change coordinator moves the change request to the Close stage. The change coordinator enters the performance rating and the actual start	After Mary coordinates the change implementation, she reassigns the known error to Bob for verification.
	and end dates.	
Problem coordinator	The problem coordinator confirms that the change has solved the problem. Then, the problem coordinator sets the status of both the problem investigation and the known error to Closed.	Bob is notified that the change was completed and verifies that it fixed the problem. He then changes the status of the problem investigation and known error to Closed.

Problem investigation resolution—no change request

This user scenario describes how to resolve a problem investigation without a change request.

Bob Baxter, the problem coordinator for the Calbro Services Payroll service, conducts a incident request review on this service. In the course of the review, Bob discovers that multiple incidents related to performance have occurred over the past six months. Bob assigns the problem investigation to a specialist, Ian Plyment. Ian's problem investigation determines that the anti-virus software on the Payroll service server runs a complete scan of the server every ten minutes. Ian reconfigures the antivirus software to run only once an hour. Ian then notifies Bob that he has implemented a corrective action to solve the root cause. Bob verifies the corrective action and closes the problem investigation.

Note

BMC Remedy Incident Management and BMC Remedy Problem Management must be installed to follow this user scenario.

Detailed information about the individual actions mentioned in this user scenario are described in the BMC Remedy Service Desk: Incident Management User Guide and the BMC Remedy Service Desk: Problem Management User Guide.

Table 16 on page 46 describes the typical steps involved in this user scenario.

Table 16: Resolving a problem investigation without a change request

Role	Actions	Explanation
Problem coordinator	The problem coordinator performs an incident request review. From the Incident console, the problem coordinator creates a custom search with the following characteristics: Service = Payroll Impact => 2-Significant/ Large OR 1-Extensive/ Widespread Last Resolved Date >= 07/19/2008 Note: For the purpose of this example, assume today's date is 11/19/2008. The Last Resolved Date used in this example, therefore, is six months ago.	Bob performs an incident request review by searching incident requests registered against the services for which: He is the problem coordinator. That have not yet been linked to a problem investigation. That have been resolved with a workaround.
Problem coordinator	The problem coordinator opens one of the incident request records related to the Payroll service performance issue, and creates a problem investigation. The incident record's details are copied from the incident request record to the Problem form, and a relationship is created between the problem investigation record and the incident request records. The problem coordinator completes the Problem form.	Bob spots a trend — numerous performance-related incidents have been reported against the Payroll service. Bob creates a problem investigation record directly from one of the incident request records. Creating a problem investigation directly from an incident request record transfers all relevant information from the incident request and automatically establishes the relationship between the incident request and the problem investigation.
Problem coordinator	The problem coordinator relates all the related incident requests to the problem investigation.	Bob then relates the other incident requests to the problem investigation.
Problem coordinator	The problem coordinator assigns the problem investigation to a specialist.	After creating the problem investigation, Bob assigns it to the specialist, Ian Plyment.

Role	Actions	Explanation
Specialist	The specialist accepts the assignment and performs the root cause analysis.	Ian accepts the problem investigation assignment and begins a root cause analysis. During the root cause analysis, he determines the anti-virus software on the server runs every ten minutes, which is causing the performance issues. Ian determines the more appropriate frequency for the anti-virus software to run is once an hour.
Specialist	The specialist implements the solution. The specialist changes the problem investigation status to Completed, change the status reason to Enhancement Request, and records details about the investigation.	Because the changes to the anti-virus software configuration do not meet the criteria for the change management process, Ian makes the necessary changes himself and then changes the status of the problem investigation to Completed. To complete the problem investigation, Ian must select a status reason.
Specialist	The specialist notifies the problem coordinator. The specialist confirms that the problem coordinator is set as the assigned problem coordinator. Then the specialist changes the status of the problem investigation to Assigned.	Ian notifies Bob about the results of the problem investigation and the corrective action he performed.
Problem coordinator	The problem coordinator performs the analysis review: On the problem investigation form, the problem coordinator reviews the work information and independently verifies that the changes have corrected the problem.	Bob performs an analysis review and double-checks that the problem has been corrected.
Problem coordinator	The problem coordinator closes the problem investigation: The problem coordinator reviews the problem investigation form to verify that the details are complete. When the problem coordinator is satisfied that the problem investigation form is complete and correct, the problem coordinator changes the status to Closed.	Bob closes the problem investigation.

Problem investigation resolution—change request roll back

This user scenario describes how to resolve a problem investigation by rolling back a change request.

Bob Baxter, the problem coordinator at the Calbro Service Desk, performs an incident request review by searching incident requests registered against the payroll service. He reviews the history of the associated CIs and recognizes a trend in problems that are related to common changes to a specific CI. He creates a change request to roll back changes that affect that CI.

A Request for Change (RFC) is submitted to Mary Mann, the change manager in Front Office Support, for approval.

The change is approved and successfully implemented by Ian Plyment, the Specialist. The change manager creates a Broadcast to alert users. Future incidents are successfully averted.

Note

BMC Remedy Incident Management, BMC Remedy Problem Management, and BMC Remedy Change Management must be installed to follow this user scenario. Detailed information about the individual actions mentioned in this user scenario are described in the BMC Remedy Service Desk: Incident Management User Guide, the BMC Remedy Service Desk: Problem Management User Guide, and the BMC Remedy Change Management User Guide.

Table 17 on page 49 describes the typical steps involved in this user scenario.

Table 17: Rolling back a change

Role	Actions	Explanation
Problem coordinator	The problem coordinator performs an incident request review: From the Incident console, the problem coordinator creates a custom search with the following characteristics: Service = Payroll Impact => 2-Significant/ Large OR 1-Extensive/ Widespread Last Resolved Date >= 07/19/2009 Note: For the purpose of this example, assume today's date is 11/19/2009. The Last Resolved Date used in this example, therefore, is four months ago. The problem coordinator looks for incident request records that have not	Bob performs an incident request review by searching incident requests registered against the payroll service, for which he is the problem coordinator.
	yet been linked to a problem investigation.	
Problem coordinator	The problem coordinator opens an incident request that is related to the payroll service and creates a problem investigation. The incident record's details are copied from the incident request record to the Problem form, and a relationship is created between the problem investigation record and the incident request records. The problem coordinator completes the Problem form.	Bob spots a trend — numerous incidents have been reported against the payroll server CI, which is critical to making that service available. He also discovers that the server recently was the subject of a change. Bob reviews the change related to the server and determines that the recent change to the CI was the root cause of those incident requests. Bob creates a problem investigation record directly from one of the incident request records, which transfers all relevant information from the incident request and automatically establishes the relationship between the incident request and the problem investigation.

Role	Actions	Explanation
Problem coordinator	The problem coordinator creates relationships between the problem investigation and all of the related incident requests.	Bob then relates the other incident request the original change request, and the CI to the problem investigation.
	The problem coordinator creates a relationship between the problem investigation and the original change request that is responsible for triggering the incident requests.	
Problem coordinator	The problem coordinator creates a known error: The problem coordinator sets the Status field to Completed and the Status Reason field to Known Error .	Bob determines that the best way to prevent similar incident requests from recurring is to roll back the original change. To request the rollback, Bob creates a known error from the problem investigation. He assigns the
	This opens the Known Error form and creates a relationship between the known error and the problem investigation.	known error to Mary Mann, the change coordinator.
	The problem coordinator completes information on the form. The problem coordinator enters his name as the assigned problem coordinator. The problem coordinator enters the change coordinator's name as the known error assignee, and sets the status to Assigned.	
Change coordinator	The change coordinator opens the known error record and creates a change request. This opens the Change Request form and creates a relationship between the known error and the change request. It also copies information from the known error record to the change request record.	Mary receives the known error and reviews it. She agrees that the rollback is required and creates a change request from the known error. Mary moves the record through the change request lifecycle. As part of the change request, the change coordinator creates a broadcast alerting users to the incorrect original change and
	The change coordinator completes the required information and saves the change request. The change coordinator moves the change request through the lifecycle until it is approved and the dates are set. To alert users about the rollback, the change coordinator creates a broadcast.	the symptoms in the defective CI. The broadcast mentions the new change and the time when the CI will be unavailable—while the change is being executed. Finally, the broadcast explains that the change was necessary to avoid further incoming related incidents.

Role	Actions	Explanation
Change coordinator	The change coordinator assigns the change request to a specialist. The change coordinator adds a task to the change request. The change coordinator relates the CIs to the change request. The change coordinator moves the change request to the Implement stage.	On the change request record, Mary creates a task to roll back the CI and assigns the change request to Ian Plyment, the specialist who will perform the work. The coordinator also relates the CI to the change request.
Specialist	The specialist closes the tasks after performing them: From the Change Management Support console, the specialist searches for assigned tasks. After performing the task, the specialist records information about performing the task and changes the status to Closed.	Ian rolls back the change to the CI. When he finishes the last task, the system notifies Mary that the tasks are Closed.
Change coordinator	The change coordinator completes the change request: The change coordinator moves the change request to the Closed stage. The change coordinator enters the performance rating and the actual dates of the change.	Mary completes the change request record and removes the broadcast, because it is no longer relevant.
Problem coordinator	The problem coordinator closes the problem investigation and known error: The problem coordinator confirms that the rollback has solved the problem with the payroll server. The problem coordinator opens the problem investigation record and checks that the details are all correct, and then sets the status to Closed. The problem coordinator opens the known error and sets the status to closed. The problem coordinator records a summary of how the known error was resolved.	Bob is notified that the rollback was completed. Bob verifies that the rollback fixed the problem, and then changes the status of the problem investigation and known error to closed.

Problem investigation—at an impasse

This user scenario describes how to indicate a problem investigation at an impasse.

During Bob Baxter's incident request review of the Calbro Payroll service, he discovers also that over the past six months multiple incident requests have been registered related to slow searches against the Payroll service database. Bob assigns the problem investigation to Ian. Ian's problem investigation finds a defect in the database management software that might be corrected by a future patch. Ian notes the root cause, but because a permanent solution in not yet available, he moves the problem investigation status to Pending. Bob performs periodic checks against problem investigations with a status of Pending, to see if permanent solutions have become available.

Note

BMC Remedy Incident Management and BMC Remedy Problem Management must be installed to follow this user scenario.

Detailed information about the individual actions mentioned in this user scenario are described in the BMC Remedy Service Desk: Incident Management User Guide and the BMC Remedy Service Desk: Problem Management User Guide.

Table 18 on page 52 describes the typical steps involved in this user scenario.

Table 18: Indicating a problem investigation at an impasse

Role	Actions	Explanation
Problem coordinator	The problem coordinator opens an incident request record that is related to the Payroll service search issue and creates a problem investigation. The incident record's details are copied from the incident request record to the Problem form, and a relationship is created between the problem investigation record and the incident request records. The problem coordinator completes the Problem form.	Bob spots another trend – numerous incidents have been reported against the Payroll service related to the length of time it takes to run a search against the database. Bob creates a problem investigation record directly from one of the incident request records. Creating a problem investigation directly from an incident request record transfers all relevant information from the incident request and automatically establishes the relationship between the incident request and the problem investigation.
Problem coordinator	The problem coordinator relates all the related incident requests to the problem investigation.	Bob then relates the other incident requests to the problem investigation.
Problem coordinator	The problem coordinator assigns the problem investigation to a specialist.	After creating the problem investigation, Bob assigns it to Ian.
Specialist	The specialist accepts the assignment and performs the root cause analysis.	Ian accepts the problem investigation assignment and begins a root cause analysis. During the root cause analysis, he determines that the problem is with a defect in the database management software. Ian also determines that none of the database management software patches fixes this problem. The problem might be fixed in a future release.
Specialist	The specialist notifies the problem coordinator. The specialist verifies that the problem coordinator is assigned as problem coordinator. The specialist changes the problem investigation status to Assigned.	Ian notifies Bob that he has completed the root cause analysis and determined the problem is with the database management software. He also tells Bob that, currently, no patch from the database software vendor fixes the problem.
Problem coordinator	The problem coordinator performs the analysis review: The problem coordinator reviews the work information recorded on the problem investigation. The problem coordinator independently verifies that the specialist's assessment of the impasse is correct.	Bob performs an analysis review and double-checks that Ian's assessment of the situation is correct.

Role	Actions	Explanation
Problem coordinator	The problem coordinator indicates that the problem investigation is at an impasse. The problem coordinator indicates why no further action can be taken against the investigation and changes the problem investigation status to Pending.	Because no current fix for the root cause is available, Bob determines that the problem investigation is at an impasse.
Problem coordinator	Periodically, the problem coordinator checks the problem investigations with a status of Pending.	Bob performs periodic checks of all problem investigations with a status of Pending to determine if a solution has
	If a solution is now available, the problem coordinator reassigns the problem investigation to a specialist for follow-up and implementation.	become recently available.
	If a solution is still unavailable, the problem coordinator records information about the periodic check.	

Understanding the core applications

This section provides an overview of the core applications included in the BMC Remedy IT Service Management Suite.

BMC Remedy ITSM user interfaces

This section describes the user interfaces for BMC Remedy ITSM, including consoles, Best Practice views, and user interface standards for field labels.

Consoles

Consoles are the main user interface to the BMC Remedy ITSM applications. Two types of consoles are provided: application consoles that provide application-specific functionality, and common consoles that are used across applications.

The common consoles include an Overview console that combines assigned work from all applications into one view, and a Requester console that is focused on the users.

About the IT Home Page

When you start the BMC Remedy IT Service Management Suite, the IT Home Page displays the Overview console by default. However, you can set up what you want to see on the IT Home Page. If you are a system administrator, you can configure the page for all users. Otherwise, you can configure your own user ID to see your views. The following figure illustrates the functional areas of the IT Home Page.

BMC REMEDY IT SERVICE MANAGEMENT Home Page Home Page (±) (±) (±) Ø → × Company Calbro Services ▼ View By Assigned To Me Calbro Services Status ■ Draft Under I... **⊘** → × 0 - × ▼ View By All Company Calbro Services Company Calbro Services • Backlog of Problems - Real Time

Figure 1: IT Home Page and its functional areas

The following table describes each of the functional areas of the IT Home Page.

Functional area	Purpose
Home Page header	
Logout	Click Logout to exit the application.
Breadcrumb bar	The breadcrumb bar helps you keep track of the records you are viewing and helps with navigation. For more information about breadcrumbs, refer to "Navigating consoles, forms, and modules" on page 59.
Global search	Type in a word or a phrase in the search area, and the application will search across multiple forms for records that match your input. For more information about global search, refer to "Using Global search" on page 62.

Functional area	Purpose
Applications	Depending on your permissions and other installed applications, the following links are displayed. Use them to open applications.
	■ Quick Links
	■ AR System Administration
	■ Analytics
	■ BMC Atrium Core
	■ BMC Atrium Integration Engine
	■ Administrator Console
	■ Asset Management
	■ Change Management
	■ Change Management Dashboard
	■ Contract Management
	■ Product Catalog
	■ Foundation Elements
	■ Incident Management
	■ Problem Management
	■ Return On Investment
	Release Management
	■ Requestor Console
	■ Task Management
	Note: When you run your mouse over the applications, you see a second menu. You can select one of those options to go directly to a form. For example, roll
	over Change Management and select Change/Release Calendar . The Calendar screen appears.
Configuration Buttons	Use these buttons to configure your panel display.
Overview console	

Functional area	Purpose
Company and View By	These fields combine to provide a way to indicate the company name and the assigned-to categories filtering the records in the Console List table.
Refresh	This button refreshes the data in the table.
Preferences	This button allows you to set preferences for the console list table. You can remove columns, set refresh intervals, reset and save your preferences.
Console List table	This table lists the different types of requests.

Overview console

The Overview console provides a view of work assigned across multiple applications. For example, if users want to see all incident requests, problem investigations, and tasks assigned to them, they can view them in the Overview console.

The implementation of the Overview console uses a BMC Remedy AR System ARDBC plug-in to provide a consolidated view of all assigned work from data sources in multiple applications without using replication of data or complex SQL views that bypass APIs.

The plug-in architecture is data driven. Configuration forms define how the plug-in is set, including which forms to query, which fields to map to the table field, and an ARDBC form that performs the query.

Application consoles

BMC Remedy Asset Management, BMC Remedy Change Management, and BMC Remedy Service Desk each provide one or more consoles.

The BMC Remedy Asset Management application provides several consoles:

- Asset Management
- Contract Management
- Purchasing
- Software Asset Management (SAM)
- Receiving

BMC Remedy Change Management provides a Change Management console and a Release Management console.

The Change Management console has two views: one focused on the support technician, and one on the manager. The Change Management console also provides the ability to change the support console to focus the work on tasks or change requests.

BMC Remedy Service Desk provides an Incident Management console and a Problem Management console. Each of these consoles provides a single view that is intended for use by service desk analysts and managers.

For more information about the consoles, refer to the application-specific user guides.

Requester console

For organizations that do not install BMC Service Request Management, the Requester console is an interface for users to create and view their requests.

From the Requester console, users can create a request that is submitted to BMC Remedy Change Management or BMC Remedy Incident Management. Depending on how the application is configured, the console might display incident requests and change requests entered on the user's behalf by support staff, in addition to the requests that the user created. Users can also view requests and respond to a survey after the request has been resolved.

Requester console users are typically employees who need assistance from the IT support staff to implement a change or resolve an incident. However, the user *might* not be an employee. Non-employees can also be users because non-registered users can also submit service requests.

Traditionally, after a user made a telephone call to a central help desk, a support staff member logged the request. BMC Remedy Incident Management and BMC Remedy Change Management provide user self-provisioning. Using the Requester console, users can submit, track, and (in some cases) resolve their own requests. BMC Remedy Change Management and BMC Remedy Incident Management are preconfigured to work with the Requester console. However, an organization can decide to make the Requester console unavailable.

Note

BMC Service Request Management, when it is installed, replaces the Requester console.

Navigating consoles, forms, and modules

This section describes how to navigate around BMC Remedy ITSM consoles, forms, and modules.

In most cases, when you open consoles, forms, and modules from the IT Home page, they open inside the IT Home page view. Similarly, if you open a form from a console, the form replaces the console in the view.

If you open a related record from a form, the related record opens in the view that was occupied by the form. For example, if you are working with a problem investigation (the "parent" record) and from the parent record you open a related incident request, the incident request replaces the parent record in the view. If you then open a change request from the incident request, the change request replaces the incident request in the view, and so on. To help you keep track of the records you are viewing and to help with navigation, there is a breadcrumb bar across the top of the view field.

Note

Not all of the consoles, forms, and modules open in the view area. For example, the BMC Remedy AR System Approval Central module opens in a new window. When a console, module, or form opens in a window, it is not added to the breadcrumb bar.

The breadcrumb bar contains links to the records that you opened from the parent record. When you open a record, the breadcrumb trail expands along the breadcrumb bar to the right, with the new link. If there are more than six links in the breadcrumb trail, arrows appear at one or both ends of the bar that let you scroll back and forward on the bar to see links not currently in the view.

The first link in the breadcrumb trail indicates the place from which you started. It can be a console or a form. For example, if you open a change request record directly from the IT Home page, the first link in the breadcrumb trail takes you to the change request.

The last link corresponds to the record currently in the view. If you open a link to the left of the record currently in view, the system truncates the breadcrumb trail to that link. The history is retained, however, so you can use the back and forward arrows in the navigation controls to move through the bar one record at a time. There is also a history of your most recently viewed records, which you can use to move directly to a record. Click the down arrow to open the history list.

The Forward button is only visible after you move back down the breadcrumb bar by opening a link to a record that you previously viewed.

Figure 2: The breadcrumb navigation buttons and bar



If you are viewing a record from the middle of the breadcrumb trail and then branch off to another parent-type record, the system removes the forward breadcrumb trail from the point where you branched off and starts a new history from there, using the new parent-type record as the starting point. For example: You open a problem investigation, then open a related incident request, and from the incident request

you open a related change request. If you go back to the incident request record and then open a second problem investigation, the breadcrumb bar no longer contains a link to the change request. The breadcrumb trail now shows the original problem investigation, the incident request, and the second problem investigation. It then shows any related records that you subsequently open from the second problem investigation.

When you close the parent record, the system removes the breadcrumb history.

What happens to data as I move back and forth on the breadcrumb trail?

If you are entering information into a record and open another record from the breadcrumb trail, the system prompts you to save the work, if you have not done so. If you do not save the information, the system does not preserve it on the record and you must re-enter it later.

If someone updates a record on your breadcrumb trail that is not currently in the view, those changes are visible to you when you open the record again.

How does the breadcrumb trail behave with forms in Search mode?

If you run a search from a form that is in Search mode, the last entry in the breadcrumb trail is the name of the form.

When you open a record from the search results table, that record does not appear in the breadcrumb trail. However, if you drill down through that record to open other related records, those related records *will* appear in the breadcrumb trail.

To return to the originating record, use the history list.

Note

All of the records that you open from a form in Search mode are added to the history list.

To return to the results table, click the name of the form in the breadcrumb trail.

Can I force a second window to open?

If you press the Shift key and then double-click a record entry in any table, the record opens in a second window. Also, if you hold the Shift key and click a link, button, and so on, the form or dialog box associated with the link or button opens in another window.

Note

If there is a record in the history list that you want to open in a second window, press the Shift key and then *double-click* the entry.

If you are working in a new record that has not yet been saved and open a new child type record (task, activity, CI, and so on), the system will open a new window automatically to accommodate the new child record. This prevents the information in the new, unsaved parent record from being lost.

Which consoles, forms, and modules open in a new window?

Not all of the consoles, forms, and modules open in the IT Home page's view. The consoles, forms, and modules in the following list open in a new window. If you open one of these from the IT Home page, any unsaved changes to the IT Home page are lost.

Tip

Before you open any of these consoles, forms, or modules, save the changes to the IT Home page that you want to keep.

- BMC Action Request System Administrator
- Application Administration
- BMC Service Level Management
- Analytics
- Service Management Process Model

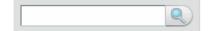
Using Global search

If you have BMC Remedy Knowledge Management installed, you can use the Global search feature. Global search searches across multiple forms for records that match a word or phrase that you type in the search area.

To use Global search

1 In the text field to the right of the breadcrumb bar, type your search string and then click the Search icon.

Figure 3: Global search



2 Locate the record you want in the search results table and double-click it.

The record opens in the viewing area and the system updates the breadcrumb trail with an entry for the record you opened.

As you drill down through the record, each record you open is also added to the breadcrumb trail.

If you want to maintain the contents of the search results table to view later, do not change the text in the Search field. If you do, when you click the Search icon to return to the search results table, the search feature will execute a new search based on the changed content of the Search field.

3 To return to the search results table, click the **Search** icon again.

Special characters and boolean expressions in global search

Global search uses Full Text Search (FTS) to find the search strings in requests and other records. Some characters are used to control the search criteria, as indicated in the following table.

Table 19: Special characters and their results

Special character	Results	Example search string	Example results
11	Performs a phrase search on the terms enclosed in double-quotation marks (")	"firewall blocked"	firewall blocked her accessfirewall blocking my access
,	Find requests that contain any of the specified words	firewall, blocking"firewall, blocking"	 firewall blocks access firewall will block access firewall is not working try blocking his access

Special character	Results	Example search string	Example results
%	Wildcard to extend the search	%fire%	■ backfire
	Note: You do not need to use a wildcard to extend the search for word stems, such as "ed," "s", and "ing," because word stems are automatically included		firefirewall

You can use use boolean expressions in your search. Boolean operators include parentheses (), AND, OR, and NOT. The boolean operators must be specified in upper case; otherwise, they are treated as search strings.

Table 20: Boolean operators and their results

Boolean operator	Results	Example search string	Example results
AND	Find requests that contain all of the specified words and phrases	firewall AND blocking	firewall blocks accessfirewall will block access
OR	Find requests that contain any of the specified words and phrases	firewall OR blocking	 firewall blocks access firewall will block access firewall is not working try blocking his access
NOT	Exclude the specified word or phrase	firewall NOT blocking	firewall is not working
0	group expressions	firewall AND (block, allow)	firewall blocking accessset up firewall to allow access

Global search results reflect both the search terms and the configuration of full text search. Configurable options that affect search results include case sensitivity, the list of ignored words, thesaurus, and stemming. For more information about full text search, see the BMC Remedy Action Request System Configuration Guide.

Best Practice views

BMC Remedy ITSM provides both a Best Practice view and a Classic view for key forms.

The Best Practice view is an improved version of the form. In this view, the fields most commonly used are immediately visible. You can access less frequently used functionality from the tabbed sections of the form or from the links in the navigation pane. For example on the Incident request form, the **Templates** field is included in the Best Practice view to encourage the use of templates.

The Classic view is a view of the form similar to the view provided in earlier releases. This view is provided for customers who are upgrading from earlier versions of BMC Remedy ITSM applications and who have not yet adopted the Best Practice view.

A Best Practice view is available for each of the following forms:

- Change request
- Incident request
- Known error
- Problem investigation
- Release request

Icons used in the interface

This table describes the icons used on the consoles and in the Best Practice view of the application interface.

Table 21: Icon descriptions

Icon	Description
	Detail – Displays detailed information about the field's content. For example, if you click the Detail icon associated with the Customer field, the People form appears with information about the customer whose name appears in the field.

Icon	Description
<u>_</u>	Search —Searches for field contents. This icon is associated with fields that have the ability to open a search dialog box or form.
25	Explore CI – Opens the BMC Atrium Explorer for the CIs selected in the Service and CI fields.
2	Clear field contents – Clears the contents of the field and allows you to make another selection. It does not delete the record.

User interface standards for field labels

On BMC Remedy ITSM forms, field labels provide data entry hints.

Table 22 on page 66 lists the significance of field-label formats and special characters.

Table 22: Significance of field labels for data entry

Field-label format or special characters	Significance for data entry
Bold label followed by an asterisk (*)	Field is required to submit and update the form. Note: If you leave the field blank when you attempt to submit the form, the field is highlighted with a red border.
Field label not bolded	Field is optional.
Italicized label	System-generated value for this field. Typically this field is read-only for the user.
Label followed by a plus sign (+)	Additional functionality is associated with this field. Typically, you access this functionality by pressing Enter. For example, you might press Enter in a field to access a search dialog box or to perform a search based on the value typed into the field. If a field label followed by a plus sign is also bolded, the field is required. Otherwise, the field is optional.

BMC Remedy Asset Management

The BMC Remedy Asset Management application integrates both configuration management and costing into a single program that can manage your company's IT assets from planning to retirement.

The BMC Remedy Asset Management application enables IT professionals to track and manage enterprise configuration items (CIs) – and their changing relationships – throughout the entire asset lifecycle. BMC Remedy Asset Management tracks

contracts, financial costs, software licenses, outage indicators, and more for the CI information stored within the BMC Atrium CMDB application.

Financial information, such as costs, maintenance and leasing information, depreciation schedules, and contracts, can be managed through BMC Remedy Asset Management to help you allocate scarce resources rationally. It also helps to provide audit trails. This information can help companies to reduce the overall cost of providing IT services.

As part of the BMC Remedy ITSM Suite, BMC Remedy Asset Management is integrated with BMC Remedy Service Desk, BMC Remedy Change Management, and BMC Service Level Management, and offers flexibility to support customized business processes.

BMC Remedy Asset Management provides the following capabilities to help reduce the total cost of ownership of your CIs and increase return on investment:

Software license management

Reduces software license overspending and non-compliance through greater accuracy in discovering, tracking, and reallocating software licenses. By automatically linking discovered software configuration items to software license certificates, BMC Remedy Asset Management can report on license compliance and help facilitate license reallocation.

Contract management

Tracks the status, type, terms, conditions, payments, and other information about lease, software, warranty, and maintenance contracts.

Blackout schedules

List available or unavailable times for CIs.

Inventory management

Specifies, tracks, and manages individual CIs and bulk items.

If your environment has BMC Remedy Service Desk or BMC Remedy Change Management installed, you do not need a BMC Remedy Asset Management license to create CIs or to manage CIs (bulk and non-bulk). To modify CI information, you need a BMC Remedy Action Request System fixed or floating license; in addition, your user ID needs either Asset Admin or Asset User permissions. If no BMC Remedy Asset Management license is available, an application administrator can give the Asset Admin or Asset User permission by selecting a license type of "None."

If your environment has BMC Remedy Asset Management installed, you have access to additional CI management capabilities, as well as the other capabilities listed in this section.

Configuration management

Defines standard configurations, or setups, for different people or groups within a company, and maintains the status of the CIs within the configurations.

Lifecycle IT CI management

Uses best practices workflow to handle all phases of the IT CI management life cycle from requisition, purchase, and receipt, to installation and deployment.

Cost module

Consolidates CI costs from procurement to disposition, and allocates and tracks costs to cost centers.

Requisition management

Creates purchase requisitions, manages the approvals of the requisitions, initiates the creation of purchase orders, and manages the receipt of items from suppliers and the creation of the associated CIs.

For more information, see the *BMC Remedy Asset Management User Guide*.

BMC Remedy Asset Management and BMC Atrium CMDB

BMC Remedy Asset Management is tightly integrated with BMC Atrium Configuration Management Database (BMC Atrium CMDB) as the underlying data model. BMC Atrium CMDB stores details about the configuration items (and their relationships) that BMC Remedy Asset Management manages. BMC Remedy Asset Management extends configuration information (CI) data stored in BMC Atrium CMDB and modifies the generic user interface to be more applicable to BMC Remedy ITSM Suite.

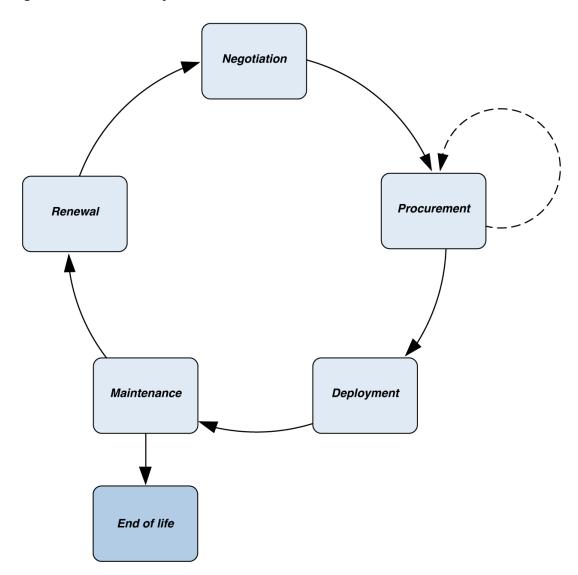
The BMC Atrium CMDB interface is provided with all the BMC Remedy ITSM applications. In the absence of the BMC Remedy Asset Management application, this user interface provides a view into BMC Atrium CMDB so that CIs can be tracked and related to other BMC Remedy ITSM applications. When BMC Remedy Asset Management is installed, the interface is extended to also contain links to specific BMC Remedy Asset Management functionality, such as contracts, depreciation, and procurement.

BMC Atrium CMDB supports the concept of reconciling CIs in a sandbox with the production CIs. This affects the overall structure of how data flows and is related to other data in the BMC Remedy ITSM Suite.

About the software lifecycle

The software lifecycle comprises stages for negotiation, procurement, deployment, maintenance, renewal, and end of life, as illustrated in the figure below.

Figure 4: Software lifecycle



Negotiation

When you plan to procure software from another company, one of the first steps is to negotiate a software license contract with the vendor. If you have BMC IT Business Management suite, you can use the BMC Supplier Management module during the negotiation stage. Refer to the BMC Supplier Management User Guide.

Note

BMC Supplier Management is an add-on license. You must have a BMC IT Business Management suite basic license to use this module.

In BMC Remedy Asset Management, you can use the Contract Management console to track the different types of contracts for each vendor, including software contracts. You can use the Software Contract form to track the terms of the contract, the cost of the contract, and the individual certificates that represent the license purchased. The Software Contract form provides links to extended information about the contract, such as the purchase order, the Definitive Media Library (DML), and the deployed software configuration items (CIs) in BMC Atrium Configuration Management Database (BMC Atrium CMDB).

Procurement

You can use BMC Remedy Asset Management to generate a purchase order for the software, or you can use other procurement software. You can relate the purchase order for the software to the software license certificates, so that you can track the financial information regarding software procurement.

Deployment

When the software arrives, several procedures must be performed to deploy the software, as indicated in the following table.

Table 23: Procedures for deploying software

Procedure	Description
Managing the deployment process	BMC provides several mechanisms to manage the deployment of the software. You can use BMC Remedy Change Management to manage the deployment of software into the IT infrastructure as described in the <i>BMC Remedy Change Management User's Guide</i> . BMC Remedy Change Management tracks the tasks involved in deploying the software, and can help you understand the risks or dependencies on the software. BMC also provides solutions to manage the actual deployment.
Deploying the software to existing systems in the IT infrastructure	BMC Configuration Automation for Clients can manage the deployment of software to existing desktops. It uses policies to enforce that the software is deployed only to the systems entitled to have the software.

Procedure	Description
Managing the bare metal" provisioning of new systems	You can use BMC BladeLogic and BMC Atrium Orchestrator to manage the bare metal provisioning of systems. BMC Atrium Orchestrator integrates with BMC Remedy Change Management to take information about the systems that are being deployed. BMC Atrium Orchestrator works with BMC BladeLogic and with BMC Configuration Automation for Clients to deploy the appropriate software packages to the system.
Accurately populating data into BMC Atrium CMDB	After the software is deployed, BMC discovery products, such as BMC Configuration Automation for Clients and BMC Atrium Discovery and Dependency Mapping (BMC Atrium Discovery), can find the software deployed on the IT infrastructure and populate the data into BMC Atrium CMDB. For information, see the BMC Configuration Automation for Clients Configuration Discovery Integration for CMDB Implementation Guide and the BMC Atrium Discovery and Dependency Mapping: Populating BMC Atrium CMDB. As part of this process, data is normalized and reconciled, as described in the BMC Atrium CMDB Normalization and Reconciliation Guide.
Accurately connecting the software represented in BMC Atrium CMDB to the software license certificate that represents the license agreement for that software	BMC Remedy Asset Management provides dynamic mechanisms to connect the software that has been deployed and represented in BMC Atrium CMDB. License certificates provide a definition of how to find the software in BMC Atrium CMDB and leverage information from the DML, so that the searches are performed using a consistent, normalized set of data. The license engine uses this information to query BMC Atrium CMDB to find the new or updated software that has been deployed, and to connect that software to the appropriate license certificates. If deployed software cannot be related to a certificate, it is treated as an exception for the software asset manager to evaluate and determine the appropriate action.

Maintenance

Maintenance is an ongoing activity. BMC Remedy Asset Management provides a way for you to track the ongoing license compliance for the software. Tracking compliance is rule-based and can vary based on the license agreement for the specific software and specific vendor.

To manage the health of the software, you can use the following BMC products:

- BMC Remedy Service Desk Manage incident requests, problem investigations, and known errors related to the software.
- **BMC monitoring software** Monitor application and server performance using programs such as BMC ProactiveNet Analytics, BMC Performance Manager, and BMC Transaction Management.

- BMC Service Level Management Manage service level agreements related to the software.
- BMC Service Impact Manager Track the impact to the company if the software has issues.

You can use BMC Configuration Automation for Clients to track and understand the usage of software. By understanding usage, you can proactively maintain the deployment of software to allow for the most effective use of the purchased software licenses.

Renewal

When software contracts are nearing expiration, BMC Remedy Asset Management can send notification. BMC Remedy Asset Management provides processes for renewing contracts and for tracking the additional purchase of licenses. The renewal process feeds back into the negotiation process, providing a closed loop vision of the software lifecycle.

End of life

If software is being put through an end-of-life process, you can use BMC Remedy Asset Management to help determine where the software is deployed, which can help you decide whether to upgrade the software to newer or other versions.

Software license management

The software license feature of BMC Remedy Asset Management is designed to automatically link software CIs with the applicable software license certificates.

The License Engine links the software CIs based on the connection details specified for the software license certificate. Connection actions defined on the license type determine the query to connect the software CIs to the software license certificate.

The License Engine updates compliance data for the software license certificate, based on the compliance detail specified for the software license certificate. Compliance actions specify the rules that calculate compliance. Compliance can be calculated based on the software CIs connected to the software license certificate, the computer system on which the software is installed, CIs related to the computer system (such as CPUs), or any data stored in a BMC Remedy AR System form.

Software license management and multi-tenancy

Each software contract and software license applies to the company that you specify on the software contract. The License Engine connects CIs only for that company to the software license. This means that you must specify the Company field in the CI, or configure your discovery product to specify the **Company** field.

Managing jobs that automatically attach CIs to license certificates

The License Engine automatically connects CIs to license certificates, based on company, product information, and answers to connection questions. It also calculates compliance based on answers to compliance questions.

You can schedule the License Engine to run immediately, at a specific time, or after reconciliation.

The License Engine runs only jobs that you create and schedule.

You can manage these jobs from the Manage License Jobs console. From this console, you can also see the results of license job executions.

About certificate groups

Certificate groups consolidate the tracking of license certificates. A master certificate is grouped with individual child license certificates. The CIs are attached to the master certificates. License allocation numbers are attached to the child license certificates.

For example, under the same software contract, you might buy 200 licenses for Microsoft Word. Later, you might buy 100 more licenses. In this example, it does not matter which CI is attached to a specific license certificate. For compliance, it only matters that you do not exceed 300 Microsoft Word instances for the contract.

By grouping license certificates, you gain flexibility in how the license certificates are applied. The number of deployed licenses are computed at the product categorization level and rolled up to reflect the total number of deployed licenses at the certificate level. This is useful when there are multiple product categorizations on a certificate, for example, in case of an upgrade and or downgrade scenario. This computation gives you visibility into the number of deployments per product that each certificate or a group of certificates is supporting.

The number of deployed licenses in the case of grouped certificates is computed at the master level. However, once the number of deployed licenses at the master level is computed, the licenses from the children certificates in the group are used based on the sequencing defined for the children certificates. When the licenses in the first certificate are fully used, the licenses are used from the next certificate in the group, based on the sequence. As a result, only the last certificate can be out of compliance.

The sequencing of children certificates is taken into account while distributing the number of deployed licenses from the master to the children. The distribution function also takes the product categorizations of the certificates into account, when distributing deployed licenses to the children certificates. Accordingly, the certificate that is last in the sequence for a product will be marked out of compliance if the number of deployments exceeds the number of purchased for that product and or certificate.

If you have multiple contracts with different costs for being out of compliance, make sure that the most expensive certificate is allocated first, because only the last certificate can become out of compliance.

Certificate groups help you avoid unnecessary warnings. Consider the preceding Microsoft Word license example. If you do not group the license certificates, you might receive a warning when 190 CIs are attached to the first license certificate. Although you have another license certificate that is valid for 100 instances, the first certificate would be approaching the maximum usage. If, however, you group the certificates, for compliance checks, it is equivalent to having one certificate for 300 instances. You receive a warning only when the last certificate in the sequence approaches being completely allocated.

When a certificate expires, the License Engine checks for compliance. If you have enough licenses remaining in the group, you do not receive a warning. If a license certificate is not part of a group, when it expires, all the related CIs are out of compliance.

Note

When you group license certificates, the connection details from the master license certificate apply. For example, if you group two site licenses, the site specified on the license certificate that you choose as the master certificate is used by the license engine when connecting CIs to the certificate. If you group license certificates for two different sites, such as New York and Boston, this can have unintended results.

BMC recommends that site licenses, if for different sites, should not be grouped.

If you group license certificates that calculate the cost per asset, but the certificates have different costs per asset, you must update the cost on the master certificate.

Software usage

Viewing software usage helps you identify whether software is either over or under utilized in your organization. Software usage information is populated by the BMC Configuration Automation for Clients product.

Based on the information about software usage, you can harvest under-utilized software and plan future purchase and discontinuation of licenses. This information helps companies to comply with audits and to optimize IT expenses.

Procurement

BMC Remedy Asset Management contains a procurement process that controls the full process from requisition and ordering, to receiving and returns.

The procurement process starts with a requisition. Requisitions are requests from users for items to purchase. Attached to a requisition is a set of line items. These line items define each of the individual items to purchase. The requisition provides the processes for pricing line items correctly and getting the appropriate approvals before orders are sent to vendors.

After the requisition is approved and the line items are priced, the appropriate orders are automatically generated. The orders are generated based on the vendors for each of the line items. One order is generated for each vendor, with the appropriate line items attached.

From a data model perspective, the line items are shared between the requisition and the orders generated from that requisition.

When orders are received, the line items are updated with the received value. After all line items are received the order is considered closed. After the orders generated from a requisition are received, the requisition is considered closed.

Related Information

"BMC Remedy Approval Server" on page 160

Contracts

BMC Remedy Asset Management extends the Contract Management module to provide detailed contract functionality for Lease, Warranty, Support, Maintenance, and Software License Management.

Standard configurations

Standard configurations define what type of software or hardware a particular group is entitled to. The configurations are stored in the Configuration form. This form has a header component that describes the configuration and a line item component that describes each of the components (hardware or software) that make up this standard configuration.

Standard configurations functionality is integrated with the BMC Remedy Change Management application to facilitate the procurement process. The standard configuration can be compared with what is available in inventory to determine which items are available and which items need to be procured.

Outages

The BMC Remedy Asset Management application provides a data model of recording planned or unplanned outages against a CI. Scheduled outages automatically generate time segments in the BMC Remedy AR System Business Time module. This information is then made available to the change management process and other processes to record when scheduled outages have been made against a particular CI.

The outage model is also where Service Level Targets are integrated into BMC Remedy Asset Management. Information about service targets that have been defined for a particular CI and the status of those service targets appears on the SLM tab.

Related Information

"BMC Service Level Management" on page 166

Schedules

The BMC Remedy Asset Management application provides a model for defining two different types of schedules: Maintenance Schedules and Audit Schedules. These schedules define time periods in which maintenance or audits need to be done for a particular CI or set of CIs. The schedules also integrate with the BMC Remedy Change Management application to manage the tasks and scheduling of the required maintenance and audits.

BMC Remedy Change Management

Using IT Infrastructure Library (ITIL) best practices, BMC Remedy Change Management provides IT organizations with the ability to manage changes by enabling them to:

- Assess impact, risk, and resource requirements
- Create plans and automate approval functions for implementing changes
- Facilitate the successful distribution of both software and hardware releases while minimizing business impact

The ITIL change management objectives are to make changes in a controlled way, reduce risk to the timely delivery of IT services, and align IT with business objectives. Some best practices focus on the approval of change by the change approval board (CAB).

BMC Remedy Change Management automates the best practices described by ITIL, such as recording all requests for change, classifying them by the possible risk to IT service provision, routing change requests, tracking approvals and rejections, and communicating the details and status of change requests.

BMC Remedy Change Management provides scheduling and task assignment functionality, and reporting capabilities for reviewing performance and improving processes. Because BMC Remedy Change Management is integrated with the BMC Atrium CMDB, it enables you to relate changes to other records, such as configuration items (including services) and incidents.

Using BMC Remedy Change Management in combination with these BMC Remedy ITSM applications enables you to assess the scope of the change, analyze the costs associated with the change (in terms of time and expense), perform impact and risk analysis, and schedule the resources needed to complete the change. Using the BMC Service Level Management application enables you to define service targets and measure the efforts of your support staff as they implement the changes.

BMC Remedy Change Management gives you access to the Task Management System, which is installed and integrated as part of the application.

BMC Remedy Change Management has the following additional features:

- Dependencies between change requests, and a definable sequence with enforcement
- Approval processes for change requests
- Risk and impact analysis
- Cost analysis and management functionality
- Expanded set of predefined reports

For more information, see the BMC Remedy Change Management User Guide.

Change management processes

This section describes the change management processes.

Initiate and record

Initiate and record is the initial stage of the change management process. It focuses on recording the purpose of the change request, and on obtaining the additional information needed to classify and route the request.

The primary sources of change requests are:

- BMC Remedy Problem Management, including the known error feature
- BMC Remedy Incident Management
- BMC Service Request Management

The key features available in BMC Remedy Change Management designed to support this stage of the process include:

- Requester console
- Auto assignment or change requests at the group and individual level
- Release Management
- Support for multi-tier classification using the product and operational catalogs

Best practice change templates

Review and authorize

After the initial request has been submitted, the next logical stage is review and authorize. The purpose of this stage is for the change manager to assess the change request, provide any additional information to add more context, and, if required, initiate the corresponding approval process. This stage acts as the initial filter to determine if the change request should continue to the next stage in the process.

The features in BMC Remedy Change Management designed to support this stage of the process include:

- Change console
- Risk assessment
- Support for relating CIs from the BMC Atrium CMDB
- Change impact analysis
- Integration with the BMC Remedy Approval Server
- Request acknowledgment setting

Plan and schedule

After the change request has been approved for work to begin, the next stage is to plan resources and schedules to ensure minimal impact to the production environment. After the planning and scheduling are complete, the change request goes through another approval process.

The features available in BMC Remedy Change Management designed to support this stage of the process include:

- Change calendar
- Change impact analysis
- Costing (budgeted)
- Schedule Assist
- Collision detection
- Integration with the BMC Remedy Approval Server

- Integration with TMS
 - Task templates
 - Task viewer

Implement

The Implement stage consists of executing against the plan and accomplishing the work.

The features available in BMC Remedy Change Management that are designed to support this stage of the process include:

- Task Management System
- Task phase management
- Task automation
- Effort tracking
- Costing (actual)
- Work info

Complete and close

Complete and close is the final stage of a change request. This stage indicates either that the change request has been completed successfully, or that is was canceled. All the data elements (time, cost, and so on) are rolled up and recorded.

Approval processes provided out-of-the-box

BMC Remedy Change Management ships with default approval processes designed out-of-the-box for global use. These best practice approval processes are already defined for you by default. These processes specify which status occurs next if a request is approved or rejected, or if no approvers are defined.

Table 24: Preconfigured approval processes for BMC Remedy Change Management

Review	
	In the Initiate stage, the out-of-the-box behavior for change requests is that when their Status moves out of Draft status into Request For Authorization status, the Review approval phase starts.
	■ If the change request is approved, the request moves to the Business Approval phase and its Status becomes Request For Change.
	■ If the change request is rejected, its Status changes to Rejected.
	■ If there are no approvers defined for the request (that is, if no approvers are mapped to the Review approval phase), its Status changes to Request For Change and requires the change manager or the change coordinator to move the request forward.
	■ If the Class of the change is Latent, it moves to the Completed status.
Business Approval - No Impact	The Change Ad Hoc approval process is used in the No Impact Business Approval phase with the Change Manager login as the first approver. By default, this Ad Hoc approval process applies only to changes with a Class setting of No Impact. No approver mapping is required to be configured for this phase. When the change moves through the process flow and Change Manager
1	approves the change in the Business Approval - No Impact phase, it then moves to the Scheduled status. You use this process for pre-approved No Impact changes where the change is automatically scheduled after the approval phase is satisfied.
	■ If the change is approved, it moves to the Scheduled status.
	■ If the request is cancelled, it moves to the Cancelled status.
	■ If the request is rejected, its status changes to Rejected.
Business Approval	The Review & Authorize stage focuses on risk assessment and impact analysis. The Business Approval Phase starts when the change request is placed in Request for Change status. The Business Approval phase requires that the business case for the change be approved before it can move forward.
	■ If the change is approved, it moves to the Planning in Progress status.
	■ If no approvers are mapped to the Business Approval phase, the change moves to the Planning in Progress status and requires the change manager or change coordinator to move the change forward.
	■ If the request is cancelled, it moves to the Cancelled status.

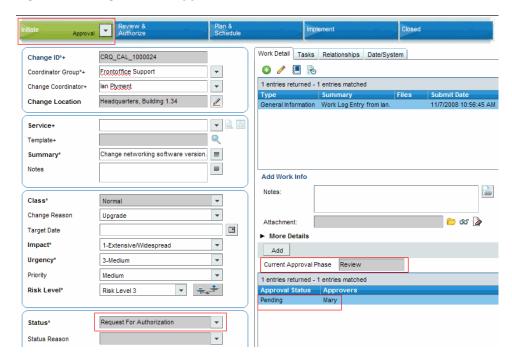
Approval Process (phase)	Definition	
Implementation Approval	In the Plan & Schedule stage, the out-of-the-box behavior for change requests is that the Implementation Approval phase starts when their Status moves into Scheduled For Approval status. At this phase, the system notifies you that the change must be approved before it can be implemented.	
	■ If the change request is approved, its Status becomes Scheduled.	
	■ If there are no approvers defined for the change (that is, if no approvers are mapped to the Implementation approval phase), its Status changes to Scheduled.	
	■ If the change request is rejected, its Status changes to Rejected.	
Close Down Approval	In the Implement stage, the out-of-the-box behavior for change requests is that the Close Down approval phase starts when their Status moves into Completed status (with a status reason of Final Review Required). At this phase, the system notifies you that the request must be approved before it can be closed down.	
	■ If the change request is approved, its Status Reason becomes Final Review Complete. You can then move the request to the Closed stage.	
	■ If the change request is rejected, its Status changes to Rejected.	
	■ If there are no approvers defined for the change (that is, if no approvers are mapped to the Close Down approval phase), its Status is Completed. You can then move the request to the Closed stage.	
	Approval Administrators can globally approve or reject the change request. This may be required if approvers are not available or the CAB makes a decision the requires an urgent approval or rejection of a change request. If the change is globally approved or rejected, the approval status is changed to Closed.	

The read-only Next or Current Approval Phase field displays what approval phase the change is in during its life cycle. The Approvers tab also displays the following important information:

- Approval status
- Signatures of groups and individuals who must approve the change request
- Alternate approvers

Approvals can be generated automatically, based on information captured on the change request. They can also be generated manually on an ad hoc basis.

Figure 5: Change form—Approvers tab



If needed, the application administrator can configure the change request approval workflow according to your organization's business model. This determines which change requests require approval and what kind of approval process they undergo.

Release Management also is installed with default approval processes designed outof-the-box for global use.

Table 25: Preconfigured approval processes for Release Management

Approval Process (phase)	Definition
Initiate	The Initiate phase starts when the release request is placed in Initiation Approval status.
	■ If the release request is approved, the request moves to the Registered status.
	■ If the release request is rejected, its Status changes to Rejected.
	■ If there are no approvers defined for the request (that is, if no approvers are mapped to the Initiate approval phase), its Status changes to Registered and requires the release coordinator to move the request forward.

Approval Process (phase)	Definition		
Planning	The Planning phase starts when the release request is placed in Planning Approval status.		
	■ If the release request is approved, it moves to the In Progress status.		
	■ If no approvers are mapped to the Planning phase, the release request moves to the In Progress status and requires the release coordinator to move the request forward.		
	■ If the request is rejected, it moves to the Rejected status.		
Build	The Build phase starts when the release request is placed in Build Approval status.		
	■ If the release request is approved, it moves to the In Progress status.		
	■ If no approvers are mapped to the Build phase, the release request moves to the In Progress status and requires the release coordinator to move the request forward.		
	■ If the request is rejected, it moves to the Rejected status.		
Test	The Test phase starts when the release request is placed in Test Approval status.		
	■ If the release request is approved, it moves to the In Progress status.		
	■ If no approvers are mapped to the Test phase, the release request moves to the In Progress status and requires the release coordinator to move the request forward.		
	■ If the request is rejected, it moves to the Rejected status.		
Deployment	The Deployment phase starts when the release request is placed in Deployment Approval status.		
	■ If the release request is approved, it moves to the In Progress status.		
	■ If no approvers are mapped to the Deployment phase, the release request moves to the In Progress status and requires the release coordinator to move the request forward.		
	■ If the request is rejected, it moves to the Rejected status.		

Approval Process (phase)	Definition
Close Down	The Close Down phase starts when the release request is placed in Close Down Approval status.
	■ If the release request is approved, it moves to the Completed status.
	If no approvers are mapped to the Close Down phase, the release request moves to the Completed status.
	■ If the request is rejected, it moves to the Rejected status.

Note

You can view the included approval phases on the Status Flow tab of the Approval Process Configuration form. For information about configuring approvals as an administrator for BMC Remedy Change Management, see the BMC Remedy IT Service Management Configuration Guide. For information about working with the BMC Remedy Approval Server as an administrator, see the BMC Remedy Approval Server Guide.

Multiple approvers and multiple approval levels

There can be more than one level of approval, and there can be several approvers on each level. At least one approver on each level must approve the change request before it can be reviewed by the next level of approvers. Approvers can review the actions of previous approvers by viewing their comments and the approval audit trail. Release Management module also

Note

- This information in also applicable for the Release Management module.
- You can configure the approval process to have one or all approvers on each level approve the change request before the change can be reviewed by the next level of approvers. Modify the If Multiple Approvers setting to configure this option. For information about modifying the If Multiple Approvers setting, see the BMC Remedy ITSM Configuration Guide.

The application administrator can also configure the change management chain (parent-child) approval process. If the change is configured for the management chain approval process, the requester's manager is notified.

If the change is approved by all approvers, the approval process is complete and the change moves to the next status. If the change is rejected by any approver, the change is stopped. The change manager or change coordinator can then cancel the change or update it and resubmit it for approval.

Approving the change request can complete the approval or trigger the next step in the approval process. If there are several levels of approvers, your approval can send the approval request to the next approver or if you deny the request the approval process is completed, regardless of whether more approvers are defined. An approval signature cannot be modified after the request has been rejected, and the approval process is finished. If the change request is to be implemented, the change manager must first restart the approval process.

Related Information

"BMC Remedy Approval Server" on page 160

Change calendar

The change calendar is a console for scheduling, managing and monitoring changes, releases as well as the related activities. It is intended to be used by members of the change approval board (CAB), change managers, change coordinators, release managers and others involved in the change and release management process or supporting services.

Some of this information comes from BMC Remedy Change Management and other information comes by referencing objects in the BMC Atrium CMDB. Aided by links to investigative and analysis tools, users can better understand the risk and impact of changes and plan and make better decisions about changes.

The calendar's primary view displays the following information in a calendar-like schedule:

- Related change requests and release requests with their scheduled start and end
- Related business activities and events
- High-risk days, when changes or releases are scheduled

You can drill down from any change request, release request, or business activity to see more detailed information about the item. You can also select filtering criteria to limit the change requests, release requests, and business activities to view.

Registering time segments

Registering time segments in BMC Remedy Change Management works like a calendering system – if you schedule a meeting in a certain conference room, nobody else can reserve the conference room at the same time. Similarly, you can block out

time segments around business events (such as company holidays), categorizations (Operational Category 1, 2, or 3, and location of the change), or CIs. Time segments enable you to define windows of time that you can designate as available or unavailable when working on a change request. An available time segment can specify that a CI is available for use, while an unavailable time segment can be used to schedule planned maintenance.

When you create a change request that modifies a CI – for example, you must replace a mission-critical server – you can schedule a time segment for the CI that shows it is *unavailable* to the rest of the support staff. If another member of the support staff wants that CI to be available, they should schedule their own change in a different time segment.

Time segments enable you to perform the following tasks:

- Search available time segments to schedule the change request.
- Connect the selected time segments to the change request's operational categorization or to a business event based on location.
- Create time segments or use time segments around the associated CIs.
- Select unavailable time segments from the associated CIs to help you plan the Scheduled Start or End Date and time for the change request.
- Select from available time segments from the associated CIs to help schedule work to be done.

For more information about business time and time segments, see the BMC Remedy Action Request System Configuration Guide.

Understanding server time, time zones, and time segments

When adding time segments if the client and the server are in different time zones, all dates and times for the Business Time Segments appear in the adjusted server time. That is, the Start Date, Start Time, End Date, and End Time on the Business Time Segment form, and the time segments date and times that are shown in the table appear in the adjusted server time. Other dates and times on the remainder of the form are in the client's time.

For example, your server is in EST and your client is in PST. Adjusted server time is determined converting the time at the place the Business Time Segment was created to the time at the physical location of the server. For example, if the client is located in PST, and the server is located in CST, the time shown on the server is increased by two hours (to include both MST and PST time zones). Similarly, if the client is located in EST, the time shown on the server is decreased by one hour.

Also, all time segments must be adjusted into the time zone of the client. For example, if the ticket was created in PST, the details need to be adjusted into PST. If a Time Segment for a server was defined in CST, adjust it into PST when creating the time segment for the client.

For more information about adjusting for the time zone differences between the client and the server, see the BMC Remedy Action Request System Configuration Guide.

Change dashboard

The BMC Remedy Change Management Dashboard helps executive users to understand the trends relating to change configuration management, and to take appropriate action to balance the flow. A dashboard view presents a set of metrics or statistics that give a snapshot of the state of the change management process. The CIO is the primary user of this dashboard view.

You have a choice of which statistics to view. You can select criteria that focuses the view on the desired perspective, and you can indicate how far back to view the data. Example statistics are the history of planned and unplanned changes over one or several time ranges, the number of authorized changes over the last week or month, the success rate of changes made for the last thirty days, and a summary of costs of changes over the last fifty changes made.

Release Management module

The Release Management module helps you plan, build, test, and deploy controlled releases into your IT environment. A release is a collection of related authorized changes to an IT service that are tested and introduced into the live environment together.

Release Management includes built-in ITIL best practices to better track and manage change and deployment activities. Release Management includes default support for managing standard release tasks from planning and design, build and configuration, to rollout and acceptance.

With numerous changes occurring daily, Release Management is the key component in ensuring applications are successfully deployed without compromising the integrity or availability of the production environment. Using a systematic and repeatable release process, organizations can achieve greater success rates of change rollout, higher quality of IT service, and accelerated time-to-market.

Well-planned and implemented release management makes a significant difference to an organization's service costs. Effective release management enables the service provider to add value to the business by:

- Better tracking and managing change and deployment activities
- Automatically notifying stakeholders at every phase of the release process
- Contributing to meeting auditable requirements for traceability through service transition
- Delivering changes faster and at an optimum cost and minimized risk
- Assuring that customers and users can use the new or changed service in a way that supports the business goals
- Improving consistency in the implementation approach across the business change, service teams, suppliers, and customers

Each stage can consist of sub-processes to support putting the change on hold or getting approval to move to the next stage. For more details about features that support each stage of Release Management, see the BMC Remedy Change Management User Guide.

Release Management is tightly integrated with the Activity subsystem, which provides the capability to assign specific units of work ("activities") to support staff but that does not require the complexity of a change request.

Working as a release coordinator

The release coordinator in ITIL terminology is typically a member of the support staff who is responsible for the following release tasks:

Table 26: Release coordinator responsibilities

Responsibility	Explanation	
Manages all aspects of the end-to-end release process	Makes sure the build and test environment team and the release team are coordinated. Establishes final release configuration, builds the final release delivery, and tests the final delivery before independent testing.	
Creates releases, change requests, and activities	Creates release manifest that consists of change requests and activities, and reviews the RFCs if they have been passed on from BMC Remedy Change Management. Deals with release, distribution, and installation of packaged software.	
Submits the release request for approval	Whether a release request requires approval is determined by your organization's business rules. The application administrator configures the approval process to determine which approval phases are available for the release request.	

Responsibility	Explanation	
Plans and schedules the release	Organizes and facilitates the CAB meetings; schedules the release request. Determines the impact by assessing the different kinds of risks. Splits the requirements of releases into logical groups that can be handled efficiently by change coordinators. Prepares a business case for a new release when additional funding is needed for its implementation. Schedules people and resources to implement each task.	
Initiates the implementation of releases.	Decides on corrective actions as needed. Estimates the costs of the release request. Coordinates release acceptance, rollout planning, release communications, preparations and training activities, and distribution and installation of releases. Provides management information about Release Management quality and operations.	
Closes release requests	A release request is resolved when all work for the release is completed. Organizes and conducts post-implementation meetings to collect improvement suggestions for future releases.	

The release coordinator is usually responsible for addressing general, day-to-day issues from a personnel and customer satisfaction standpoint.

The release coordinator requires the following permissions and functional roles:

- Release Coordinator functional role is required to be assigned as the Release Coordinator for individual releases.
- Membership in your company's support group is required to create release templates for that group.
- Release User permission is required for access to release and manifest records.
- Release Config permission to setup and modify the Release Module configuration forms.

Milestones in the release request lifecycle

The release request process uses the following business scenario to explain Release Management features and processes. Calbro Services must install a new payroll service by a certain date. The release coordinator initiates a release request to install the new application. To complete the release, the release coordinator must perform the following work items:

- Create a change request to install the server that runs the application
- Create an activity record to train users on the new application

A release request tracks the progress of a release through its entire lifecycle, from the Initiate milestone to the Close Down milestone. The Process Flow Status bar on the Release form steps you through the release process from the Initiate to the Close

Down milestone. It provides a visual mechanism to track the milestones of a release request.

Figure 6: Process Flow Status bar on the Release form



Your application administrator might have configured milestone enforcement in Release Management. Milestone enforcement requires that all change requests and activities must be completed before the release can move to the next milestone.

To work a release request from start to finish, the user roles listed in Table 27 on page 91 are required. Although the responsibilities of these users can vary from organization to organization (and in some organizations, one person can fulfill several roles), they generally include the following roles and functions.

Tip

If the Calbro Services sample data is installed on your server, you can log in to Release Management as these users and follow the use cases with some simple modifications in their permissions.

Table 27: IT Support user roles

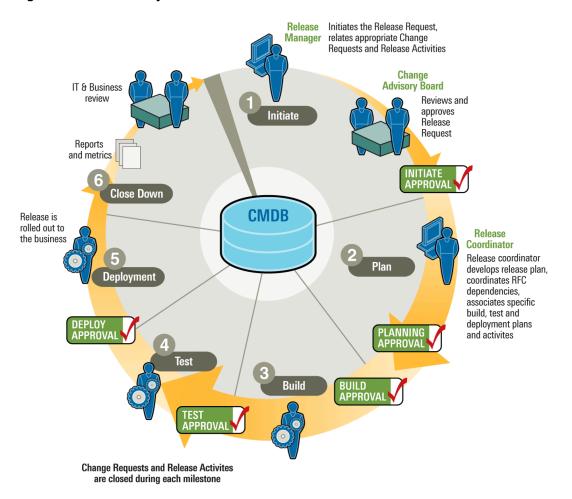
User	Release management role	Function
Allen Allbrook	Release Coordinator	Reviews the RFCs for the services for which he acts as the release coordinator after they have been passed on from Change Management. He organizes and facilitates the CAB meetings for the services for which he acts as the release coordinator. Allen splits the requirements of releases into logical groups that can be handled efficiently by change managers. He prepares a business case for a new release when additional funding is needed for its implementation. He initiates the implementation of releases and decides on corrective actions as needed. Finally, he organizes and conducts post-implementation meetings to collect improvement suggestions for future releases. Note: Make sure that Allen Allbrook has Release Master or Release User permissions.

User	Release management role	Function
Mary Mann	Change Manager	Reviews the risk and impact analysis to make sure that this has been performed thoroughly. Mary makes sure that appropriate actions have been planned to minimize both the risk of failure and the impact on users during change implementations. She makes sure that the timing of planned implementations does not conflict with other planned changes or events. Finally, Mary obtains approval for changes. Mary uses the Change Management Console as the entry point for managing change requests. She opens the change request to handle the specific details of the change request. If Mary is given Release Viewer
		or Release User permissions, she can use the Release Management Console as the entry point for managing release requests. She opens the release request to review the overall details of the release request.
Ian Plyment	Task Implementer	Support staff member who performs the tasks associated with a change request. In this example, Ian's responsibility is to install the new server. Ian performs the install task associated with the
		change request.
Francie Stafford	Activity Assignee	Staff members or groups who perform the activities associated with a release request. For example, a release request to install a new software application might include these activities: Create training materials, Train employees.
		If Francie is given Release Viewer and Activity User permissions, she can use the Activity form to perform the activities that are associated with a change request.

– Note –

Figure 7 on page 93 illustrates the lifecycle of a typical release request. A release usually includes multiple approvals, depending on your business needs.

Figure 7: Release lifecycle



The following section walks you through the milestones of a release request lifecycle. In the Release Management module, a milestone is a significant event in the release project, which includes a major deliverable. For example, when you complete the Initiate milestone, you have successfully created a release request that has been approved by the CAB.

1 **Initiate milestone** – Allen Allbrook the release coordinator creates the release request. When the release must be divided into several changes and activities, Allen can create and schedule these in a release manifest. A manifest provides him a consolidated view of the tasks that the release management team must perform to drive the completion of the change requests and activities required to close the release.

He performs the following actions:

- Creates a change request to install the new server for the payroll service at the Deployment milestone. He assigns the change request to Mary Mann, the change manager.
- Creates an activity to train employees on the new payroll service. He assigns it to Francie Stafford, the activity assignee.

If an unforeseen situation arises that he did not anticipate, he can create or add changes and activities at later milestones.

Note

If your application administrator has configured milestone phases, you can specify that staff must work on their change requests and activities at a certain phase (for example, installing the server at Phase 1 or training users at Phase 5 of the Deployment milestone). But no phases are mapped out-of-the-box for Calbro Services.

He then blocks out a time segment to work on the release by indicating the scheduled start and end dates. Larger projects can include planning all the releases and changes approved for implementation. He then budgets the estimated costs and rolls up the risk levels from all the related change requests. Release Management rolls up of costs, budgets, time, and resources.

Collision detection is automatically run when he saves the release. The Collision Detection tool determines if there are other change requests scheduled to work on the same CI during the same scheduled time, and helps him manage and resolve these potentially harmful conflicting change requests.

Note

If an approver is mapped to the approval phase, the release approver must approve the release request before it can move to the Planning milestone. But no release approvers are mapped out-of-the-box for Calbro Services. Your application administrator must configure them.

2 **Plan milestone** – Allen reviews the release plan. He opens the change calendar and views the current schedule of releases, change requests, and business events for any potential conflicts. He adjusts the start and end dates accordingly.

Allen reviews these requests for change with Mary Mann, the change manager of the service for which the release is to be implemented. Together they divide the requirements of the different RFCs amongst them and they draft a high-level implementation plan that indicates the duration of each change, and the dependencies between these changes. Because there are multiple change requests, they run Collision Detection again. Because they have added change requests, they obtain approval for the release plan.

Francie Stafford the activity assignee plans to add training tasks to the activity that will be implemented in the last deployment phase. Trainers must provide training and user documentation to all Calbro Services staff. She includes costs and attaches a training schedule in the activity.

- 3 **Build milestone** Allen establishes the approach to building the controlled environments before the release goes into production. For example, after the release plan and a change request have been approved, he oversees the final build delivery of the new service. The build milestone assembles the CIs that are needed to create the release package before the service is released.
- 4 Test milestone The release coordinator makes sure that the CIs, IT service, or process meet their specifications and requirements. When all the tests have been completed satisfactorily, the release coordinator seeks approval from BMC Remedy Change Management for the actual deployment.
- 5 **Deployment milestone** Release is rolled out to the business. In this use case, the change request and release activity that make up the release are marked Closed during the deployment milestone:
 - Mary Mann, the change manager, opens each change request and moves it to the Implement stage. She creates the installation task and assigns it to Ian Plyment, the task implementer. He installs the new server. Mary then closes the change request. Mary creates and assigns the tasks for the remaining change requests. After the tasks are performed, Mary closes the change requests.
 - Francie Stafford, the activity assignee, executes the training activity. When all the trainers finish their tasks, she marks the activity as Completed.
- 6 **Close Down milestone** The release request enters the Close Down milestone. Reviewers provide feedback on the effectiveness of the release, and record metrics for deployment to make sure the release met its service targets. Allen verifies there is minimal unpredicted impact to the IT infrastructure and makes sure the users are satisfied with the user documentation and training.

Working with release request approvals

Certain release requests must pass through an approval process before they can be deployed. Approvals can be defined for each milestone of the release request from Initiate to Close Down.

The read-only Approval Phase field shows what approval phase the release is in during its life cycle.

The application administrators configure the approval processes. The process owner determines the approvals based on the policies of the business. They determine which release requests require approval, what kind of approval process the release requests must undergo, and who the approvers are. Support staff and management can add more approvers to the list.

Activities

The Release Management module provides the capability of creating and assigning specific units of work called *activities*. Activities have their own lifecycle with a series of status transitions, for example, Assigned, In Progress, and so on. An activity can include a sequence of tasks. Activities can be used to create a structured sequence of tasks that must be completed to fulfill the release, but these tasks should not be classified as change requests.

For example, you must release a new version of the Calbro payroll application. One of the work items that must be completed in the release cycle is training users on the new payroll application. Because training is not a change request that the Change Management team would complete, you decide instead that training should be an activity that is assigned, tracked, and closed down using the Activity form.

The following sections provide detailed procedures on working with activities and related tasks in the Activity form.

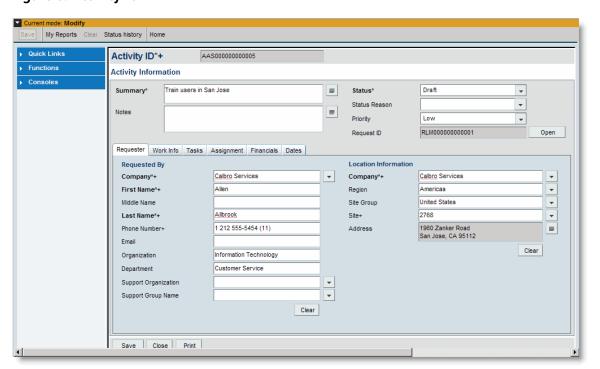


Figure 8: Activity form

You use the Activity form to add a set of activities to a release request. You can track release states and requester information, relate and assign tasks, and enter work log information.

BMC Remedy Service Desk

BMC Remedy Service Desk acts as a single point of contact for user requests, user-submitted incidents, and infrastructure-generated incidents.

An organization must address everyday, immediate incidents to carry out its business. These immediate incidents are the focus of the incident management process. In addition, it is essential to detect, analyze, and resolve problems in the infrastructure.

The BMC Remedy Service Desk consists of two applications:

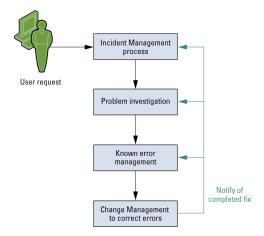
- BMC Remedy Incident Management
- BMC Remedy Problem Management

These ITIL compliant applications automate the incident and problem management processes to enable IT to respond quickly and efficiently to conditions that disrupt critical services.

The incident management process focuses on getting users up and running after disruptions. Figure 9 on page 97 illustrates the incident management process.

The problem management process focuses on determining the root cause of a problem, and on using the change management process to correct the root cause.

Figure 9: Relationship between incident, problem, and change management processes



BMC Remedy Incident Management

The mission of the incident management process is to resolve incident requests as quickly as possible in a prioritized fashion. The BMC Remedy Incident Management module is designed to support this goal.

When dealing with incident requests, BMC Remedy Incident Management is typically initiated in response to a customer call, a service request, or an automated event. An example of an automated event might be an alert from a monitoring system, such as BMC Service Impact Manager (BMC SIM). The primary goal of the incident management process, according to ITIL standards, is "to restore normal service operation as quickly as possible with minimum disruption to the business, thus ensuring that the best achievable levels of availability and service are maintained."

When dealing with incident requests, the following best practices are critical for success:

- Prioritization, so that incidents that cause the organization the most pain, such as lost sales or work stoppage, are fixed first.
 - This approach conserves your resources, and uses them where they are most needed.
- Consistent recording of incident request details. These details are then made available to other applications, such as BMC Remedy Change Management. This means that entries can be searched, analyzed, and communicated throughout the organization.
- Integration with BMC Atrium Configuration Management Database (BMC Atrium CMDB).
 - This information can be used both to resolve the immediate incident and to determine whether other systems might be affected.

Note

An incident is any event that is not part of the standard operation of a service and that causes an interruption to or a reduction in the quality of that service. Normal service operation is the operation of services within the limits specified by the service target. BMC Service Level Management, when integrated with BMC Remedy Incident Management, monitors service targets.

The incident management process also handles customer requests for service, such "I need a new laptop," or "I need access to this network resource." Customers can use BMC Service Request Management to enter service requests. If BMC Service Request Management is not available, your organization can use BMC Remedy Incident Management.

For more information, see the BMC Service Desk: Incident Management User Guide.

Registering incident requests

When a user contacts the service desk with an incident request, you first determine the nature of the request. If the request is about a previously registered request, you query the request and update the user with the current status.

If the request concerns an incident that was resolved, but for which the resolution was not effective, reopen the incident request record and assign the incident to a specialist.

If this is a new incident request, you create an new incident request record by capturing key information about the user and the incident. If possible, you resolve the incident immediately and then complete the incident request, otherwise you make sure the incident request is assigned to the appropriate group.

The following figure provides an overview of the registering incident requests process, as described by the SMPM.

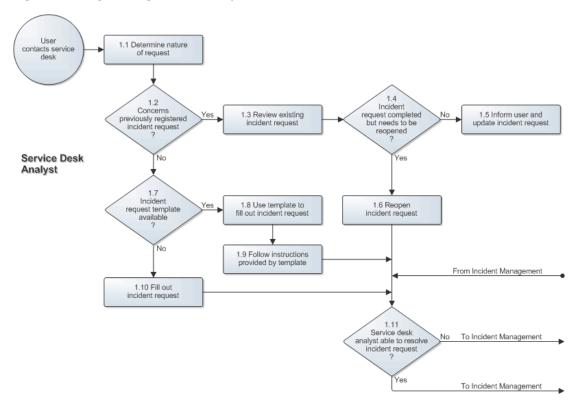


Figure 10: Registering incident requests

BMC Remedy Problem Management

The mission of the problem management process is to minimize the number of incidents. The BMC Remedy Problem Management module supports this goal by

managing problem investigations, known errors, and solution database entries. Problem management can proactively prevent the occurrence of incidents, errors, and additional problems.

Problem investigation

An important ITIL objective is investigating and resolving problems in a continuing effort to cut costs and improve services. A problem investigation helps an IT organization get to the root cause of incidents.

It initiates actions that help to improve or correct the situation, preventing the incident from recurring. For example, if computers are running low on disk space, ideally the problem can be resolved before it becomes an incident.

Problem investigations are usually triggered by either an incident review or by an application such as BMC Event Manager. BMC Event Manager can generate an event about a capacity threshold being reached. This might cause the problem coordinator to create a problem investigation to prevent a capacity shortage from causing outages.

After a problem investigation identifies the cause, this information can result in:

- A known error, which describes the root cause as well as the proposed structural solution to remove the root cause
- A solution entry that describes how to work around the issue

For more information, see the BMC Service Desk: Problem Management User Guide.

Incident request review process

The incident request review is the first process in the problem management lifecycle. You perform incident request reviews periodically, according to your organization's schedule. When performing an incident request review, you analyze incident request information to identify potential problems in the services you are responsible for. This information is most often obtained from the BMC Remedy Incident Management application. However, incident information can also come from specialists who have resolved incident requests with a workaround and who think the incident might recur if the root cause is not removed quickly.

After you identify a problem, create a new problem investigation. You link the problem investigation to the incident requests that were caused by the problem. You can also create a problem investigation from an incident request in the Incident Management application (see the BMC Remedy Service Desk: Incident Management *User Guide* for information about how to do this).

Creating a problem investigation from an incident request automatically creates a relationship between the incident request and the newly created problem.

You then assign the new problem investigation to a specialist for analysis. When assigning the problem investigation, choose a specialist whose skills, availability, and access rights make them the most appropriate person to perform the analysis.

If you find an incident request during the incident request review for which a problem investigation has already been registered, you should link the incident request to the problem investigation.

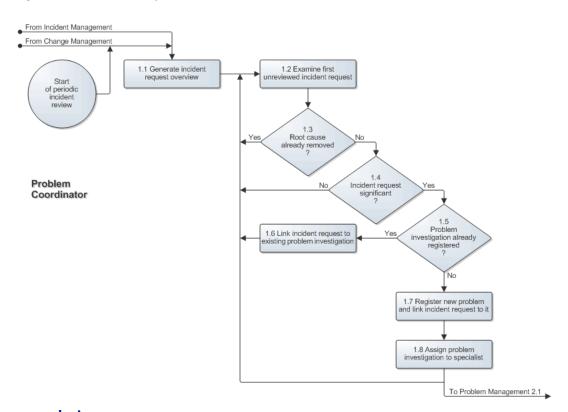


Figure 11: Incident request review

Root cause analysis

After a problem investigation is assigned to you for investigation, you perform a root cause analysis to determine the problem's cause.

If the problem has caused one or more incidents, you first try to find a temporary workaround to restore normal service operation as quickly as possible. If a temporary workaround is available, update the problem investigation record with details about the workaround, including how to implement it. This information can be used later to resolve other incidents caused by the same or similar problems until a structural solution is found and implemented.

After assessing temporary workarounds, begin to investigate the root cause of the problem. After finding the root cause, you update the problem investigation with a description of the root cause.

After determining what is causing the problem, you investigate possible structural solutions. Ensure you add a description of each option to the problem investigation along with a recommendation for the preferred solution.

If you can perform a structural solution, implement the solution and then update the problem investigation with the solution. If the change management process is needed to permanently work around or solve the root cause, ensure you inform the problem coordinator that change management must be involved with the analysis.

If you cannot determine the problem's root cause or cannot propose a structural solution, then record this in the problem investigation along with an explanation.

When you finish the root cause analysis, regardless of the outcome, you must inform the problem coordinator that your work is completed.

Review and update problem investigation 2.3 Propose temporary workaround From Problem Management Reactively identified problem From Availability Management From Capacity Management 2.4 Establish root cause Specialist Could root cause be found Could structural solution 2.6 Propose structural solution be proposed 2.9 Review and update From Problem Management Change 2.10 Implement change and update problem investigation 2.11 Update problem to notify problem coordinate To Problem Management

Figure 12: Root cause analysis

Closing the problem investigation

When you are notified by the specialist that the problem is solved, verify that the problem is solved. After you verify that the problem is solved, close the problem investigation and any associated known errors.

If the change was proposed but not implemented, or if the change did not fix the problem, determine if a different solution for the problem is available. If it is, then you can assign the problem investigation back to the specialist for further analysis, or reassign it to another specialist.

If thorough investigation and analysis reveals that currently there are no practical means to permanently work around or to solve the problem's root cause, update the problem investigation to indicate an impasse. After that, you must periodically reassign the problem investigation to determine if new technology or if a different approach to the problem's root cause can provide a structural solution.

From Problem Management 4.1 Verify structural solution From Change Management From Release Management Has 4.3 Close known error problem been and problem investigation fixed Νo Problem Coordinator New or 4.6 Update problem alternative option(s) to indicate impasse available

Yes

4.5 Assign problem to specialist for reanalysis

To Problem Management From Problem Management

Figure 13: Problem closure

Known error

A known error is a problem that has been successfully diagnosed and for which a permanent solution has been proposed.

After the root cause analysis of a problem investigation is completed and a structural solution has been proposed, a known error is created to request that the proposed solution is implemented. The implementation of the proposed solution is part of the change management process. A known error process can have one of the following results:

A change request to implement the needed fix

4.7 Perform periodic check for new possibilities

■ Closing the known error as an accepted issue, with updates to the knowledge database containing steps to avoid the issue

Solutions database

The solutions database provides a simple repository of potential solutions or workarounds to infrastructure issues. A solution database entry contains information that might be required to provide or restore a service.

The data from the solutions database becomes input into a full knowledge management system with the use of the BMC Remedy Knowledge Management application.

-Related Information

"BMC Remedy Knowledge Management" on page 165

Shared BMC Remedy ITSM application concepts

This section describes application concepts that are common to more than one application.

People

The People structure within the BMC Remedy ITSM applications includes several forms that are primarily accessed through the People form.

The main form (or parent form), People, is used to store an individual's contact information, their organization, and location structures information.

Support groups

Support groups are used to define groupings of back-office staff, based on their skills. Support groups are also used as the initial assignment for a incident, problem, change request, or release request.

■ The Support structure can differ from the organization structure.

- A support staff member can belong to many support groups.
- Vendor support groups can be defined to support external assignment of requests.
- The Support Group role must be specified for information only; there is no associated workflow.

Organization

The organizational structure describes the organizations and departments within a company.

Categorization

Categorization structures in BMC Remedy ITSM are divided into two distinct components: operational categorization and product categorization.

The operational categorization structure is a three-tier structure that helps you to define the work that is being done for a particular incident, problem, known error, change request, release request, or task. This structure is also used to qualify reporting in the system, qualify how groups and support staff get assigned, and route approvals.

Product categorization is a three-tier structure that helps you to define a description of the object or service on which you are performing the work (for example, Hardware, Peripheral Device, Monitor).

Related Information

"BMC Atrium Product Catalog and Definitive Media Library" on page 157

Work information

Work information logs are components that track work history. They replace the work diary fields used in versions of the BMC Remedy ITSM applications earlier than version 7.0.

Each Work Info entry is stored as a separate record in a BMC Remedy AR System form. This approach enables easy reporting and searching of the Work Info entries associated with any particular record.

Each Work Info entry can contain up to three different attachments. The attachments can be associated with the work notes, which results in the attachments being tied to the record. This provides context to the attachments and makes it easy to find them. It also enables unlimited attachments to be associated with any particular record.

The work log system also enables record locking, making records public or hidden, and categorizing the records.

Each application uses a separate work log form, but these separate forms use the same structure and workflow. This disperses the processing of Work Info records to forms that are specific to each application.

ROI flashboards

The ROI console provides a platform from which managers can compare the projected costs expected in various IT service management operations—prior to implementing BMC Remedy ITSM—with the actual costs that are incurred after the installation. This information helps managers determine how much money their operational areas have saved by using the BMC Remedy ITSM applications. This information is displayed in a series of flashboard graphics.

The ROI data is collected by the ROI flashboard component according to:

- The customer company selected by the user from the ROI console
- The date range specified by the user from the ROI console
- A set of parameters that are configured from the Application Administration console by someone with ROI Admin privileges

Some of the information used to configure the flashboards includes numbers used by your organization for creating estimates and projections. If you do not have this information, it typically is available from the appropriate area manager.

KPI flashboards

The KPI flashboards use graphs to show how well various business processes are performing against their key performance indicators (KPIs).

Some KPI flashboards present their information in a gauge style graph. Gauge graphs are divided into three zones, representing the following levels of performance:

■ Normal—represented by the green line, indicating a normal range of performance

- Warning—represented by the yellow line, indicating a normal range of performance, but with a possible breech of the Alert threshold imminent
- Alert—represented by the red line, indicating performance that is in breech of levels deemed acceptable by your organization

When installed, any given KPI flashboard uses its default values for all of your client companies. To reflect your environment more accurately, you must change the default values to reflect the service level agreements in force with your various client companies. If your service level agreements are the same for each client company, you can update only the global configuration records.

Chapter

BMC Remedy ITSM architecture

This section describes the BMC Remedy ITSM architecture, including its relationship to BMC Remedy Action Request System server (BMC Remedy AR System server) and BMC Atrium Core.

A database forms the underlying element of the BMC Remedy ITSM architecture. The BMC Remedy AR System server is on top of the database. BMC Remedy AR System server processes all data entered by BMC Remedy ITSM applications. In addition, the BMC Remedy AR System server is the workflow engine between the BMC Remedy ITSM applications and the database. It also verifies that a user has permission to perform each action, thereby enforcing any access control defined in the applications.

In this capacity, the BMC Remedy AR System server is the interface between the database and the BMC Atrium Core, which includes the Product Catalog and BMC Atrium Configuration Management Database (BMC Atrium CMDB). BMC Atrium CMDB stores information about the configuration items (CIs) in your IT environment and the relationships between them. BMC Atrium CMDB makes this information available to the BMC Remedy ITSM applications and their various shared application components, such as the Task Management System.

The BMC Remedy AR System server also manages the BMC Remedy Approval Server and the BMC Remedy Assignment Engine.

BMC Remedy Approval Server

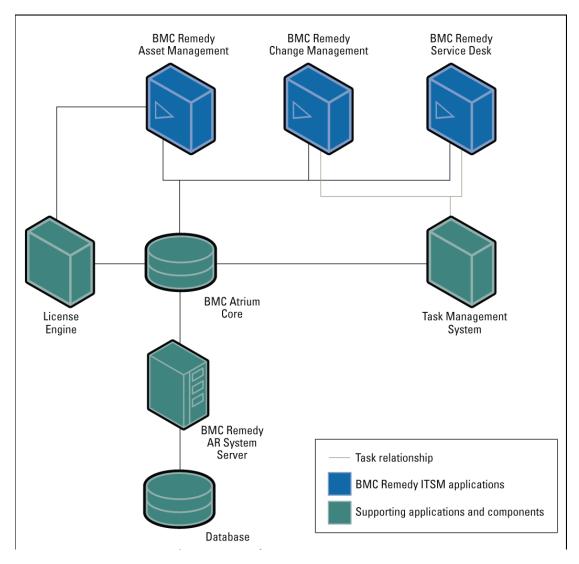
Self-contained, shared module that enables you to automate any approval or signature process. For more information about BMC Remedy Approval Server, see the BMC Remedy Approval Server Guide.

BMC Remedy Assignment Engine

Enables you to automatically assign requests to individuals. For more information about BMC Remedy Assignment Engine, see the BMC Remedy Action Request System Configuration Guide.

The relationships among the database, BMC Remedy AR System server, BMC Atrium Core, shared application components, and the BMC Remedy ITSM applications are illustrated in Figure 14 on page 110.

Figure 14: BMC Remedy ITSM architecture



The relationships among the database, BMC Remedy AR System server, BMC Remedy Approval Server, BMC Remedy Assignment Engine, and the BMC Remedy ITSM applications are illustrated in Figure 15 on page 111.

BMC Remedy **BMC** Remedy **BMC** Remedy Asset Management Change Management Service Desk **BMC** Remedy **BMC Remedy** License Task Management Approval Assignment Engine System Server Engine Task relationship **BMC** Remedy AR System Assignment relationship Server Approvals relationship **BMC Remedy ITSM applications** Supporting applications and components Database

Figure 15: BMC Remedy ITSM relationships

Conceptual organization

The overall organization of the BMC Remedy ITSM Suite has three layers: modules, applications, and supporting subsystems.

The top layer consists of modules that provide the interface to users, such as the Requester console. The Requester console interacts with a back-office application, such as BMC Remedy Incident Management or BMC Remedy Change Management.

Applications include the main BMC Remedy ITSM applications: BMC Remedy Incident Management, BMC Remedy Change Management, BMC Remedy Problem Management, and BMC Remedy Asset Management. These applications contain logic and user interfaces specific to those application areas.

The final layer consists of supporting systems. This common set of systems supports the applications. Supporting systems contain generic logic that is specific to an application's function without embedding functionality from other applications that use its services.

Examples of supporting systems include Task Management System, Cost module, and Contract Management.

The following figure illustrates the relationships among the BMC Remedy ITSM applications and modules.

Applications and modules Requester Console **BMC** Remedy **BMC Remedy BMC Remedy BMC Remedy** Incident Management **Change Management Problem Management Asset Management** BMC Atrium Core BMC Atrium Core **BMC** Atrium Core BMC Atrium Core **BMC Atrium Core** ITSM Foundation BMC SLM BMC SLM BMC SLM Product Catalog Product Catalog Cost Module Release Management ITSM Foundation Activity System Cost Module Cost Module **Product Catalog** License Engine Task Management Cost Module **ITSM Foundation** ITSM Foundation Task Management ITSM Foundation Modules and supporting systems ITSM Foundation Task Management Cost Module Release Management Location CAI ITSM Foundation **BMC Atrium Core** Organization ITSM Foundation **Activity System** Product Catalog Support Groups Cost Module **Product Catalog** Categorizations Task Management **BMC** Atrium Core License Engine Notification Engine ITSM Foundation **BMC SLM**

Figure 16: BMC Remedy ITSM applications and modules

Deployable application structure model

The BMC Remedy AR System platform provides the structural component used in the BMC Remedy ITSM applications to define the deployable application architectural structure. Deployable applications provide functions that support a component architectural model.

These functions are covered in following sections:

- Licensing enforcement
- Encapsulation of permissions
- Definition of entry points
- Ability to import and export as a whole component

Deployable applications are used to wrap each of the different applications and modules that are provided in BMC Remedy ITSM applications.

Deployable applications contain applications, modules, and helper components.

Applications

- BMC Remedy Incident Management (licensed)
- BMC Remedy Problem Management (licensed)
- BMC Remedy Change Management (licensed)
- BMC Remedy Asset Management (licensed)

Modules

- Cost Module (licensed)
- **TMS**
- BMC Remedy Change Management Dashboards (licensed)
- Application Administration Console
- Reporting Console
- Requester console

Helper

- Foundation elements
- Foundation components, such as message boxes and so on
- Site
- Company
- BMC Atrium Product Catalog

Integration model

One of the design requirements for the BMC Remedy ITSM Suite is that all applications and modules must provide defined interfaces for integration purposes. These interfaces abstract the applications that integrate with the applications and modules.

The common model for interface forms is to use display-only forms to manage the creation of records and relationships, and to use join forms to manage queries and modify actions.

BMC strongly recommends that all integrations with BMC Remedy Incident Management, BMC Remedy Problem Management, BMC Remedy Change Management, TMS, and Cost Module go through the provided interface forms. This abstracts any future integration from underlying changes to those applications and modules.

In addition to the interface forms, web services are provided for most of the applications. The web services interfaces are a layer on top of the interface forms, and provide basic define, modify, and query capability to the applications and modules.

For more information about using interface forms and web services, see BMC Remedy IT Service Management Integrations white paper.

Foundation design

The Foundation contains the common forms, workflow, and data that are needed to support the applications.

It also provides a repository for the following data structures used by each BMC Remedy ITSM application:

- Organization
- People
- Support groups
- Categorization (both organizational categorization and general categorization)

Note

With version 7.5, the following structures were moved from BMC Remedy ITSM to **BMC Atrium Core:**

- Company (tenancy definition and external company definition)
- Location
- Categorization (product categorization)

Assignment

The assignment architecture for the BMC Remedy ITSM Suite is based on a twophase concept. The first phase is assignment of the support group; the second phase is assigning the support technician using load balancing technology built into the Assignment Engine.

Phase 1: Support groups

The support group assignment phase is done using BMC Remedy AR System workflow on back-end forms, using four different inputs:

- Organization
- Location
- Operational categorization
- Product categorization

The Assignment form defines the events in which assignment needs to occur. These events are based on the calling application's assignment needs. For example, the BMC Remedy Change Management application requires assignment for the change coordinator and the change manager.

Assignment rules are partitioned based on tenancy that has been defined. Each operating company can have its own set of assignment rules.

Phase 2: Individual Assignment

Individual assignment is done using the Assignment Engine. Assignment rules are provided to support Number of Tickets Assigned, Round Robin, and Capacity process rules.

Number of Tickets Assigned

Assigns the request based on the person who has the lowest number of requests assigned.

Round Robin

Assigns the request to the next person in line.

Capacity

Uses a formula of the number of requests assigned and a capacity factor to determine total capacity, and assigns the request to the user with the lowest capacity rating.

Related Information

"BMC Remedy AR System Assignment Engine" on page 159

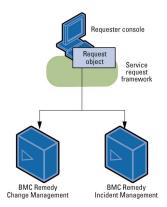
Architecture of the Requester console

If BMC Service Request Management is not available, the Requester console is the customer-facing, user interface of the BMC Remedy Change Management and BMC Remedy Incident Management applications. It is a single entry point where users of these applications can submit a change request or report an incident.

The BMC Service Request Management (BMC SRM) application provides a richer set of features and functions than the Requester console. If BMC SRM is implemented, it is used instead of the Requester console as the customer-facing interface.

The Requester console is supported by the service request framework, which implements the service request component for integration with the BMC Remedy Change Management and BMC Remedy Incident Management applications. The service request entity serves as a bridge and is not designed to be managed by service desk personnel. It is a "slave" to the back-end change request or incident with its lifecycle completely driven by the back-end. The Requester console is the frontend entry point for users to submit requests. Figure 17 on page 117 illustrates the underlying Requester console framework.

Figure 17: Requester console diagram



The Requester console is a simplified interface for users to submit change requests and incident requests. This enables users to submit requests into the system from a single console, without having to access the BMC Remedy Change Management or BMC Remedy Incident Management consoles directly. The targeted audience is non-IT user requesters. For more information, see the BMC Remedy Service Desk: Incident *User Guide* or the *BMC Remedy Change Management User Guide*.

Service request framework

The service request framework provides a bridge between the front-end user requests and the back-end operations. In BMC Remedy ITSM, integrations are implemented to BMC Remedy Change Management and BMC Remedy Incident Management. In addition, the service request framework provides a structure that can be connected to other open back-end solutions.

The service request framework:

- Segments front-end transactions from back-end transactions.
- Acts as a bridge between the Requester console front-end interface and BMC Remedy Change Management and BMC Remedy Incident Management back-end applications.
- Supports synchronization between the front-end interface and back-end object life-
- Establishes a foundation to support integration with back-end applications.
 - Integrates to BMC Remedy Change Management and BMC Remedy Incident Management as the back-end applications.

- Provides a mechanism for establishing field mappings between the request entity and change request or incident, for request creation.
- Provides CAI as a bi-directional communication mechanism for back-end integrations.
- Integrates with BMC Service Level Management for requester-focused service level agreements (SLA) tracking.

Integration between Requester console and BMC Remedy Change Management

The Requester console provides the front-end user interface into the BMC Remedy Change Management application.

The integration:

- Generates change requests.
- Updates change information using the work info record.
- Includes an interface back from the change to the request that is stored in the Requester console.
- Updates the status to the appropriate status of the request, and makes work info entries visible.

The Requester console interacts with BMC Remedy Change Management using the BMC Remedy Change Management interface forms.

Integration between Requester console and BMC Remedy **Incident Management**

The Requester console provides the front-end user interface into the BMC Remedy Incident Management application.

The integration:

- Uses the Requester console to define incident requests.
- Updates incident request information using the work info record.

- Includes an interface back from the incident request to the request that is stored in the Requester console.
- Updates the status of the request to the appropriate status of the request, and makes work info entries visible.

Multi-tenancy model

Multi-tenancy defines who has access to what data on a row-level basis. For example, in a service provider environment a single application might be used by multiple companies, with the data for each company hidden from other companies using that application.

In BMC Remedy ITSM, multi-tenancy is defined using companies. Companies are defined as operating companies and vendor companies, and users are associated with these companies to define their access rights. A user is associated with a company through the People form.

To provide a user with access to data for multiple companies, add more companies to the Access Restrictions list. If a user needs to access data for all companies, you can set the user's access to Unrestricted.

Row-level security

Row-level locking is set at the Company level for BMC Remedy ITSM forms. All child records inherit the tenants of the parents associated with them.

For individual configuration item (CI) records, the tenancy is set by the value in the Company field on the CI, and by the Used by relationship of Company entries associated with the CI.

Implementation of multi-tenancy

The services provided by the BMC Remedy AR System platform are primary to the implementation of multi-tenancy. BMC Remedy AR System enables you to control access to data based on permission groups, and to determine if those permission groups have access to individual rows of data.

BMC Remedy ITSM writes company IDs to a special field (field ID 112). Each data record contains this field, which is normally hidden. For example, when you select the contact and classification companies on the Incident form, workflow updates

field 112 values with the company IDs of the customer company and contact company. For child records, such as the tasks or costs associated with an incident, the tenancy information is passed down from the parent.

While field 112 is populated based on the customer and contact companies of a record, field 60900 is populated based on the support company. The support company is the company of the staff assigned to a ticket, based on the three-tier support group data structure (Support Company, Support Organization, and Support Group). Field 60900 is populated on application forms based on the company that is assigned to that record. For example, on the Incident form, when you assign the incident to a support group, workflow updates field 60900 values with the group ID of the assigned support company. For child records, such as the tasks or costs associated with an incident, field 60900 is passed down from the parent.

After field 112 and field 60900 are populated, any query to BMC Remedy AR System shows only rows of data that a user has permission to see, based on their own permissions and the permissions in field 112 and field 60900.

For more information about multi-tenancy, see the BMC Remedy IT Service Management Guide to Multi-Tenancy.

BMC Remedy ITSM interfaces

BMC Remedy ITSM applications each provide a set of interfaces that can be used for integrations between applications.

BMC Remedy Asset Management interfaces

BMC Remedy Asset Management provides a set of interfaces that other applications can use to integrate with the BMC Remedy Asset Management application.

Interfaces to BMC Remedy Asset Management include interface forms and web services. The BMC Atrium CMDB API can be used for creating, modifying, and deleting CIs and relationships.

For more information, see the BMC Remedy IT Service Management Integrations white paper.

BMC Remedy Change Management interfaces

BMC Remedy Change Management provides a set of interfaces that other applications can use to integrate with the BMC Remedy Change Management application.

These interfaces include a set of BMC Remedy AR System forms that provide the ability to define, query, and modify both change requests and release requests. The interfaces also include web services interfaces that are built on these forms to provide a mechanism for interacting with the BMC Remedy Change Management application using web services. The interfaces, including web services, are available for both the Change Management and Release Management modules. For more information, see the BMC Remedy IT Service Management Integrations white paper.

BMC Remedy Incident Management interfaces

BMC Remedy Incident Management provides a set of interfaces that other applications can use to integrate with the BMC Remedy Incident Management application.

These interfaces include a set of BMC Remedy AR System forms that provide the ability to define, query, and modify incidents. They also include web services interfaces that are built on these forms to provide a mechanism to interact with the BMC Remedy Incident Management application using web services. For more information, see the BMC Remedy IT Service Management Integrations white paper.

BMC Remedy Problem Management interfaces

BMC Remedy Problem Management provides a set of interfaces that other applications can use to integrate with the BMC Remedy Problem Management application.

These interfaces include a set of BMC Remedy AR System forms that provide the ability to define, query, and modify incidents. They also include web services interfaces that are built on these forms to provide a mechanism to interace with the BMC Remedy Problem Management application using web services. For more information, see the BMC Remedy IT Service Management Integrations white paper.

CAI plug-in interfaces

The web service setup for the CAI is a "complex" web service, which means it is made up of multiple components and presented as a single interface.

The two CAI components, CAI:Events and CAI:EventParameters, are defined as a single web service.

Chapter

Preparing to use BMC Remedy IT Service Management

This section provides an overview of information that you need to prepare to use BMC Remedy IT Service Management.

Compatibility information

Before installing BMC Remedy ITSM applications, review the compatibility matrix on the Customer Support website to make sure that your system is compatible with the applications that you are installing.

BMC recommends that you check the websites of the suppliers of the platforms in use at your site to verify that they are still supported. BMC does not support platforms that are no longer supported by the vendor. Carefully read the system requirements for your particular operating system, especially the necessary patch requirements.

To access the compatibility matrix

- 1 Access the Customer Support website at http://www.bmc.com/support.
- 2 Click the Support Login link, and then log in.
- Click the Product Availability & Compatibility link.
- 4 On the Product Availability and Compatibility page, click the BMC Remedy Product Compatibility link.
- 5 Review the product compatibility matrixes for the products that you are installing.

Internationalization and localization

BMC Remedy ITSM is built on BMC Remedy AR System, which is a fully internationalized environment. This environment includes internal support for different character sets and a full suite of features that enable administrators to produce localized applications.

In addition, support is provided for a locale model in which users can specify their language and formatting preferences to have the application delivered in the style that is the most useful to them. This model includes delivering to different users, simultaneously, the same application in multiple languages with different formatting.

Information about localization applies only if your version of the application has been localized.

Data language and display language

If all your users work and communicate using a single language, the data language and display language that they use are the same. However, if you have users in different locations using the same server (for example, users in England, France, and Germany), you must pick a common data language in which the users will enter and search for data. Typically, this data language is the most common across all your user locales.

You can choose only one data language for each application installation, and you select this language during application installation. This requirement guarantees that users in France can find requests created in Germany or England because they are working with data in their common language.

Configuring BMC Remedy ITSM applications

Application administrators use the *Application Administration console* to configure the BMC Remedy ITSM applications.

If you install or load the sample data for BMC Remedy ITSM, you can start using the applications immediately. Sample data is configured for the fictional company Calbro Services. It includes several users, which you can use to become familiar with the applications.

When you are ready to start configuring BMC Remedy ITSM for your organization, start with the Standard Configuration tab on the Application Administration console. The Standard Configuration tab walks you through the steps required to set up a standard configuration. Even if you plan to customize your configuration, you start by first performing a standard configuration.

Some of the custom configuration information depends on other existing information already being in place. For this reason, BMC recommends that you use the Standard Configuration tab to perform as much of the configuration as you can.

After you have configured your system for standard operation, you can continue to customize your configuration. The Custom Configuration tab on the Application Administration console provides access to all of the forms that you can use to configure BMC Remedy ITSM Suite.

For information about configuring BMC Remedy ITSM applications, see the BMC Remedy IT Service Management Administration Guide.

Licensing model

The licensing model includes application-level licenses and user-level licenses. All licenses in the BMC Remedy ITSM Suite of applications are enabled by the deployable application model.

Application-level licenses

Application licenses provide access to the forms that make up an application. Licensing is enabled using the deployable application mechanism in BMC Remedy AR System.

If an application-level license is not applied to BMC Remedy AR System, the forms are not accessible through user clients. This makes user licensing a requirement for importing data into the BMC Remedy ITSM applications.

Application-level licenses are enabled for the main applications provided in the BMC Remedy ITSM Suite. In addition, application-level licenses are required for the BMC Remedy Change Management Dashboard and the Cost modules.

The following table indicates the application licenses required by the BMC Remedy ITSM applications and modules.

Table 28: Applications licenses

License name	Required by
Atrium CMDB Application	All BMC Remedy ITSM applications to access BMC Atrium CMDB
Financial Management Application	Cost module
Asset Management Application	BMC Remedy Asset Management
Change Management Application	BMC Remedy Change Management
Change Management Dashboard Application	BMC Remedy Change Management Dashboard
Incident Management Application	BMC Remedy Incident Management
Problem Management Application	BMC Remedy Problem Management

User-level licenses

BMC Remedy ITSM supports fixed and floating licensing models for users of the licensed applications.

The BMC Remedy ITSM Suite licensing model requires a license (in addition to any required permissions) to modify records in an application. There are no license requirements for submitting data into the system; however, there are permission requirements.

Fixed licensing is a named license that is assigned to a particular user.

Floating licensing is a pool of licenses that is assigned to a set of users. Users take up tokens when they log in to an application, and hold on to those tokens while they are working with the forms in that application. Tokens are released when a user logs off or a system timeout is reached.

The following table indicates the user licenses that are required for modifying records in the BMC Remedy ITSM applications and modules.

Table 29: User licenses

License name	Used to modify records in
Financial User	Cost module
Asset User	BMC Remedy Asset Management
Change User	BMC Remedy Change Management, including the Release Management module
Incident User	BMC Remedy Incident Management

License name	Used to modify records in
Problem User	BMC Remedy Problem Management

Permission model

This section describes the permission model for BMC Remedy ITSM.

Main concepts that support permissions include:

- Abstraction using roles
- Common roles
- Predefined permission groups to support the roles
- User access using support groups
- Functional roles

Abstractions using roles

Because the deployable application model provides a layer of abstraction using roles, the underlying applications and modules in BMC Remedy ITSM can change and control their permission models without affecting how other applications integrate with them.

Roles are provided by the BMC Remedy AR System deployable application model. Roles are defined within the context of a deployable application. Forms and clientside workflow in a deployable application have roles defined for permissions, instead of physical permission groups that users are assigned to.

Permissions are enabled for a user by mapping the physical permission groups that are provided with the BMC Remedy ITSM applications to the roles that the permission groups need to belong to. This enables applications outside of the BMC Remedy ITSM Suite to integrate with BMC Remedy ITSM applications and modules. Customers can also build their own sets of permissions groups to map into the applications and modules.

Common permissions

To simplify and provide commonality among the applications, each application and module provides a common set of permissions. The application or module can extend these permissions for other specific purposes as needed.

The common permissions are:

Viewer

Provides the ability to view data in an application or module, but not to modify data. This permission does not require an application license. Example: Incident Viewer.

Submitter

Provides the ability to complete and submit forms, and can also view data in an application or module. This permission is not applicable to BMC Remedy Asset Management. Example: Incident Submitter.

User

Provides the ability to view, submit, and modify data, based on support group access. Example: Incident User.

Master

Provides the ability to modify any record, regardless of support group. Example: Incident Maser.

Config

Provides the ability to configure the application or module. Example: Incident Config.

Example

Mary Mann is the change manager at Calbro Services. At Calbro Services, they assign the permissions and functional roles recommended in the BMC Service Management Process Model Role Mapping to BMC Remedy ITSM Suite white paper. Mary Mann has the following permissions:

- Infrastructure Change User
- **Incident Viewer**
- Problem Viewer
- Release Viewer
- Contract Viewer
- Asset Viewer

Mary is assigned the functional role of Infrastructure Change Manager.

These permissions mean that Mary can modify infrastructure change requests, but can only view incident requests or problem investigations. Mary uses an application license for BMC Remedy Change Management, but does not use licenses for either BMC Remedy Service Desk or BMC Remedy Asset Management.

Predefined permission groups

The BMC Remedy ITSM applications provide predefined explicit permission groups that map to roles for each of the applications and modules.

These permission groups are also mapped to the appropriate permissions that are needed from the underlying modules. For example, all permissions that require costing data access are mapped to the Cost User permission. This predefined configuration makes it simpler to configure permissions in the application, while still providing the underlying control.

BMC Remedy AR System computed groups are used to enable an easy mapping mechanism. Computed groups enable you to define which groups make up the definition of a group. For example, a computed group is used to define users for each application that have the Cost User permission

Note

Cost User is automatically granted and is not visible in BMC Remedy ITSM.

User access using support groups

Support groups play a primary role in the BMC Remedy ITSM permission model. If a user is a member of a user role, the definition of what records that user can modify is based on whether a record has been assigned to one of the user's support groups.

Example

If a user is in the Incident User role and is a member of the Hardware support group, the user can modify only incident requests that are assigned to the Hardware support group. The user can view other incident requests but cannot modify those incident requests.

Functional roles

Functional roles extend access based on support group. Functional roles are not permission groups, but they are enforced by workflow.

Example

The manager or approver role within a support group provides additional privileges within the BMC Remedy ITSM application functions.

You can have different functional roles for each of the support groups to which you belong. For example, in the Hardware support group, someone can be defined as a manager, but in the Software support group that person might be just a member.

As an example, the following table shows the difference between a person having Change User permission with no functional role compared with having functional roles.

Table 30: Comparison of access restrictions for the Change User permission with and without functional roles

Functional role	Access	Restrictions
None	Almost everything (including the risk compute button, costing, and the calendar) on the Change form	 Limited ways to move from one status to the next. This user does not have access to the states between Request for Change to Scheduled and also cannot close the request. Cannot reassign the change manager and the change coordinator, but can manually reassign the change implementer. Cannot modify the effort logs for the change manager and change coordinator, but can define and delete the entries for the change manager and change coordinator.
Change coordinator	 Same access as user with no functional role Increased ability to move from one status to the next Can close the request 	 Cannot reassign the change manager, but can manually reassign the change coordinator and implementer. Cannot modify the effort logs for the change manager, but can define and delete the entries for the change manager.
Change manager	All functionality	

For more information about functional roles, see the BMC Remedy IT Service Management Administration Guide.

BMC Remedy Asset Management permissions

The following permissions are available in BMC Remedy Asset Management:

Asset Viewer

Provides read access to CI data in BMC Remedy Asset Management.

Asset User

Provides read access to CI data in BMC Remedy Asset Management with the ability to modify CI data that has been related to one or more support groups that are associated with the BMC Remedy Asset Management user. This permission also provides access to the Asset Management Console, Contract Management Console, and Software Asset Management Console.

Asset Administrator

Provides read/write access to CI data in BMC Remedy Asset Management and provides access to the Asset Management Console, Contract Management Console, and Software Asset Management Console.

Asset Config

Provides access to modify BMC Remedy Asset Management forms to configure the following information:

Access to configure contract-related forms in addition to asset configuration

BMC Remedy Asset Management application rules

BMC Remedy Asset Management application settings

CIs

License management

Unavailability priority

This permission does not provide access to purchasing or receiving.

Contract Config

Provides full access to create new contracts and modify them. Provides access to create new contract types.

This permission is needed to create new license types and to configure the License Engine. If there is any other Contract or software license management (SWLM) configuration, this permission also applies. For example, users with this permission can configure any contract-related forms.

Contract Viewer

Provides read access to contracts in BMC Remedy Asset Management.

Contract User

Provides read access to contracts in BMC Remedy Asset Management with the ability to modify contracts that have been related to a support group associated with the contract user. This permission provides access to the Contract Management Console and the Software Asset Management Console.

Contract Administrator

Provides read/write access to contracts in BMC Remedy Asset Management and provides access to the Contract Management Console and the Software Asset Management Console.

Purchasing User

Provides read/write access to purchasing data in BMC Remedy Asset Management and provides access to the Purchasing Console.

Receiving User

Provides read/write access to receiving functionality in BMC Remedy Asset Management and provides access to the Receiving Console.

Viewer permissions do not require a license. For Asset Admin and Asset User, you can either select a license or no license. Limited functionality only is provided without a license. All other permissions require a fixed or floating license for full modify access.

BMC Remedy Change Management permissions

BMC Remedy Change Management includes viewer, submitter, user, master, and config permissions for both Infrastructure Change and Release. It includes viewer, user, and config permissions for Activity. In addition, CM Dashboard User provides access to view BMC Remedy Change Management Dashboard forms.

BMC Remedy Incident Management permissions

BMC Remedy Incident Management includes viewer, user, master, submitter, and config permissions.

BMC Remedy Problem Management permissions

BMC Remedy Problem Management includes viewer, user, master, submitter, and config permissions.

Contract management permission model

Contract Management permission groups are defined as computed groups in the Group form.

Each Contract permission group is mapped to an Asset permission group to support the deployable application functionality. To remove specific users from the computed group, remove the BMC Remedy Asset Management groups for each Contract permission group to make each Contract permission group stand alone.

Cost module permission model

The following permissions are used by the cost module:

Cost Viewer

Can only view cost data.

Cost User

Can add costs.

Cost Manager

Can update and manage the charge back process.

Task Management System permissions

Task Management System (TMS) has the following levels of accessibility:

Task Administrator

Controls template definition, with access to all tasks and task groups.

Task Manager

Can perform task implementer functions and also instantiate task group templates and task templates from the parent object. This permission can also create and update all tasks that are associated with the parent object.

Task Implementer

Can update and work on assigned tasks.

Task Viewer

Can view tasks in read-only mode.

For information about TMS user features, configuration, and administration, see the BMC Remedy Task Management System Administrator's Guide.

CAI plug-in permission model

The Command Automation Interface (CAI) has the Command Event Master role, which by default is mapped to the Command Event Master group and can be granted to users using the People form.

Only users in this group and BMC Remedy AR System administrators can access the CAI forms and update fields on those forms. For implementation of event error handling, integrating applications must have the same group and role mapping.

Chapter

BMC Remedy ITSM plug-ins and modules

This section describes plug-ins and modules used by BMC Remedy ITSM.

Notification Engine

The Notification Engine provides a back-end workflow model for defining which notifications should be sent, based on events in a BMC Remedy ITSM application.

Support staff use the People form to define which notifications they want to receive. Predefined notifications can be turned on or off.

The Notification Engine provides the following primary functions:

- Determines notification recipients (group or individual).
- Specifies the notification text.
- Initiates the notification delivery (BMC Remedy Alert, email, or pager).
- Logs the notification details.

For more information about the Notification Engine, see the BMC Remedy IT Service Management Notification Engine Guide.

Command Automation Interface

The Common Automation Interface (CAI) module provides a common infrastructure that can be shared across applications including BMC Remedy ITSM applications and the BMC Configuration Automation for Clients application.

The CAI provides event delivery to the target applications. CAI is a back-end component that does not provide a front-end user interface. Additional user dialogs can be defined for each integrated component to push data into the CAI forms. The functionality of CAI is based on the current implementation for SRMS framework command events and the requirements of TMS and Data Management.

Table 31 on page 138 lists functionality that CAI provides for each application or module.

Table 31: Functionality provided by the CAI

Application or module	Functionality provided by CAI
Task Management System (TMS)	 Communication with BMC Remedy ITSM applications Integration with the BMC Configuration Automation for Clients application
Service request framework — Support for the Requester console	Communication with BMC Remedy ITSM applications
Data Management	Multi-threading

CAI plug-in

The primary purpose of the CAI plug-in is to transmit events to other back-end applications.

Due to the dynamic nature of the field mappings for each command, and because it is not possible to use workflow to push values to dynamic fields, the CAI plug-in provides a mechanism to dynamically map data to fields. For example, the command to generate a back-end request consists of dynamic field values that can be mapped to any field on the back-end interface forms. Additionally, the CAI plug-in helps address problems that arise with incompatible permission models.

Phases of use with TMS

This section provides an overview of how the CAI module is used by TMS.

Definition phase: Application registration and command definition

Application registration defines the integration attributes to the external applications, such as application name, connection information, and interface form names.

Command definition describes the commands and the command parameters for each integrated component. For example, the Requester console has defined a set of commands for interaction with back-end applications. In TMS, a set of commands is defined for interaction with BMC Configuration Management. In addition, the CAI can include command parameter mappings to the registered applications.

Construction phase: Instantiation of the command definition as events

Command events are instantiated based on the command definitions. The event is constructed using the specific command name, and the command parameter values are populated by the integrated components. CAI provides the form structure and generic workflow for command instantiation. Each integrating component must implement the workflow to control its specific commands.

Execution phase: Event delivery

The mechanism that delivers the command events to the target system depends on the protocol used.

- AR protocol The target is another BMC Remedy AR System application. This plugin generates the appropriate records as specified in target information of the event.
- UR protocol Workflow sets the URL string to the appropriate view field for the browser.

CAI provides the generic event plug-in and each integrating component must implement the workflow to control the invocation of the plug-in, or use specific workflow for the delivery.

License Engine

The License Engine is installed with BMC Remedy Asset Management. The License Engine performs the processing for the software license management feature to connect software configuration items (CIs) with license certificates and to calculate compliance. The License Engine runs as a plug-in.

The user interacts with the License Engine from the License Jobs console (accessed from the Software Asset Management console) by scheduling license jobs to run and reviewing the results. For example, the user might schedule a weekly license job that connects software CIs to the appropriate license certificates. When the license job runs, the software CIs are connected to the appropriate license certificates, and the compliance is calculated. The License Jobs console displays the results of the license job.

An interface in BMC Remedy Asset Management communicates between BMC Remedy Asset Management and the License Engine. The License Engine uses the CMDB API to query BMC Atrium CMDB. The software license type specifies the queries that are used to create the connections and to determine compliance.

For more information about software license management, see the BMC Remedy Asset Management User Guide.

Contract Management

The Contract Management module provides a generic contract for tracking basic contract information and lifecycle. This module is used by BMC Remedy Asset Management and BMC Service Level Management as a basis for their specific definitions of a contract.

Cost module

The Cost module provides functions required by BMC Remedy ITSM Suite applications for management of cost data. The costing model has two components: tracking costs, and charge back calculations and reporting.

Each BMC Remedy ITSM application uses the Cost module to track the costs related to the records in the application. For example, BMC Remedy Incident Management uses the Cost module to track the various costs associated with incident requests.

Costing in BMC Remedy Asset Management

BMC Remedy Asset Management uses the Cost module to track costs associated with CIs.

This integration uses the common cost creation dialog box that is provided by the Cost module. The fields on CI user interface forms integrate with BMC Remedy Asset Management forms to show cost data related with a CI.

BMC Remedy Asset Management also uses the charge back functionality in the Cost module. Charge backs are roll ups of the costs that have been incurred over a period and involved in the various cost centers in a company. The charge back component of the Cost module generates charge back entries, enables the financial manager to make appropriate adjustments to the costs, and generates invoices to be sent to the individual cost centers.

About cost centers

A cost center is an entity used to track cost information within an organization. Many companies use cost centers to group expenses by department (for example, by Engineering or Sales).

Administrators can also set up split cost centers, so that a department can allocate its costs to other departments. You can split costs equally, or specify a percentage for each department involved. For example, a project management department might split its costs equally between an engineering department and a sales department. The project management department is the source cost center, and the engineering and sales departments are the target cost centers. One hundred dollars in costs for the project management department is allocated as \$50 to the engineering department and \$50 to the sales department.

In BMC Remedy Asset Management, you can have only one level of split cost centers. For example, if you split a source cost center called C1 into two target cost centers called C-1 and C-2, you cannot also split C-1 and C-2 into additional target cost centers.

The application administrator can associate a cost center with an employee, a CI or a contract. If BMC Remedy Change Management is installed, the application administrator can associate a cost with a change request. If a cost center is associated with a CI, you can use the cost center to allocate portions of the CI's cost to different departments.

About time periods

Time periods are the regular intervals during which you review costs and create charge-back invoices. You work with the application administrator to configure BMC Remedy Asset Management with the appropriate time periods. Time periods can be set as quarters or months. They can also be set so that you can manually determine the start date and end date for each period.

At the end of the period, the financial manager generates charge-back invoices and closes the period. After the period is closed, cost entries for that period can no longer be used for future charge-backs. As a result, costs are not charged to departments more than once.

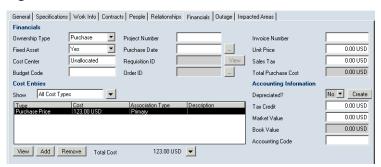
Providing accounting information

Many corporations depend on a finance department to manage and control finances and costs. IT organizations also need accounting information to manage, calculate, and reduce the total cost of ownership for their IT CI portfolio.

Configuration administrators provide CI accounting information in the Financials tab on the CI Information form.

- Use the fields in the Financials tab on the CI Information form to specify the cost center, requisition ID, and other purchasing information.
- Use the Cost Entries table to add costs that are associated with the CI.
- For CI records, use the Accounting Information area to provide information about depreciation, tax credits, market value, and book value.

Figure 18: CI Information form—Financials tab



Working with depreciation

Each year that you own an asset, the asset loses some value until it eventually has no more value to the business. Measuring the loss in value of an asset is called depreciation. Depreciation is a method to allocate the cost of an asset over its estimated useful life. By depreciating your assets, you can take tax deductions for the loss in value.

Note

You can configure depreciation rules by Product Catalog using the Configuration Manager. For more information, see the BMC Remedy IT Service Management Administration Guide.

When you set up a depreciation schedule, and then need to adjust the cost and do a recalculation, the recalculation only takes affect from the current month forward. The system will not go back and recalculate from the beginning. For example, if a depreciation schedule starts on 4/1/09, and you change the Actual Cost on 8/11/09 and recalculate, the recalculation only takes affect from 8/1/09 forward. This is because the previous months are considered already depreciated.

BMC Remedy Asset Management includes the following four methods of depreciation.

Table 32: Methods of depreciation

Depreciation method	Description
Straight-line depreciation	Assets depreciate at a constant value per year. The total depreciation equals the purchase price minus the salvage value. To calculate the annual depreciation, the total depreciation is divided by the estimated useful life of the asset.
Declining balance (150%)	Assets depreciate at a constant rate per year, accelerated by a factor of 150%. In this method of accelerated depreciation, 150% of the straight-line depreciation amount is taken the first year. That same percentage is applied to the undepreciated amount in subsequent years.
Double-declining balance (200%)	Assets depreciate at a constant rate per year, accelerated by a factor of 200%. In this method of accelerated depreciation, double the straight-line depreciation amount is taken the first year. That same percentage is applied to the undepreciated amount in subsequent years.
Sum-of-the-year's digits	Assets lose more of their value early in their lifetime. This method of calculating depreciation of an asset assumes higher depreciation charges and greater tax benefits in the early years of an asset's life.
	In this method of accelerated depreciation, each year of useful life is assigned a value from the total down to 1. The sum of the years of the useful life of an asset is calculated. For example, for 3 useful years, this sum is 6 (3 $+ 2 + 1$). For each year, the asset is depreciated by the year's value divided by the sum. For example, in the first year, it is depreciated by 3 / 6, which is 50%.

To understand depreciation of an asset, you must know the following information:

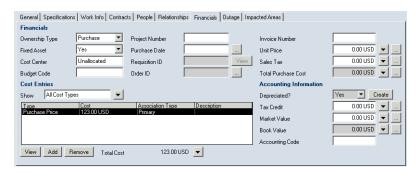
- Initial cost of the asset.
- **Useful life of an asset** How many years you expect the asset to retain value for your business.
- **Book value of an asset** The purchase cost minus the accumulated depreciation.
- **Depreciation** An expense that reduces the value of a long-term tangible asset.
- **Accelerated depreciation** A method of depreciation that enables greater deductions in the earlier years of the life of an asset.
- Salvage value The estimated value that an asset will realize at the end of its useful life.



Use the Financials tab on the CI Information form to track the initial cost and the subsequent depreciation of your assets. Enter the initial price in the **Unit Price** field. If no depreciation information has been specified, the field is set to **No** and the

Create button is visible. Click the Create button to create the depreciation schedule and calculate it. After depreciation has been calculated, the **Depreciated** field is set to **Yes** and the **Create** button is replaced by a **View** button.

Figure 19: CI Information form—Financials tab



Working with charge-backs

To implement charge-backs, IT personnel must plan how to implement charge-backs at their company. They can then work with the application administrator to configure BMC Remedy Asset Management with the appropriate cost centers and time periods.

Configuration administrators specify costs for the current period and they track them against the appropriate cost centers. Costs are also added by purchase requisitions.

When costs are specified for the current period, financial managers review chargebacks, make any necessary adjustments, and print charge-back invoices. Financial managers send the charge-back invoices to the appropriate cost centers for approval, and then send the charge-back information to the accounting department for posting to the general ledger. After the information is received by accounting, financial managers close the current period.

Generating charge-back reports and invoices

After the configuration administrator specifies charge-back costs, the financial manager can generate reports to track information and to find entries that might need to be adjusted.

The financial manager can then make any necessary adjustments and generate invoices to give to the appropriate cost centers. After the invoices are accepted, the financial manager can forward them to the company's accounting department for approval.

The financial manager generates charge-back reports and invoices with the Cost Management Reports dialog box. For all reports, you can change the title of the

report and add a subtitle. For example, if you generate an invoice for a cost center called W1, you might use the following title and subtitle:

Title: Charge-back Invoice for Cost Center W1

Subtitle: Q4 2003

You can also change the currency type that is used to calculate charge-back values. For some reports, you can specify a charge-back percentage to add to the base cost.

After you generate reports, you can view them onscreen, print them, or save the file to another format.

You can generate the following types of reports:

- Charge-back Invoice Provides a detailed list of charges to cost centers, including any charge-back percentage. At the end of each period, you can send this type of report to other departments for approval. Then you can send the final invoice to your company's accounting organization.
 - For each cost center, the invoice lists the category of the asset and the amount charged. For split cost centers, it also provides information about how charges are allocated for source cost centers and target cost centers.
- Charge-back Summary Lists the total charges made to cost centers, including charge-back percentage. For split cost centers, it also provides information about how charges are allocated for source cost centers and target cost centers. This type of report gives the following details: total direct cost, allocation to, and allocation from.
- Cost Incurred from Source Lists the base costs charged to cost centers. This type of report is similar to the Charge-back Summary report, but does not include chargeback percentage.
- Unallocated Report Summarizes costs that have not been billed to any cost center, and lists records that still have the default value of Unallocated in the Cost Center Code field. Before you generate charge-back invoices for each period, you can run this report to determine whether any costs are unallocated. You can then assign these costs to the appropriate cost centers.
- Adjustment Report Lists any adjustments that have been made for the current period. You can run this report to keep a record of your adjustments before you remove adjustments in the Manage Costs form.

If your charge-back entries include split cost centers, you can view information about the split cost centers in the Allocation To and Allocation From rows in the following reports: Charge-back Invoice, Charge-back Summary, and Cost Incurred from Source.

Costing in BMC Remedy Change Management

BMC Remedy Change Management uses the Cost module to track costs associated with change requests and release requests.

The integration uses the common cost creation dialog box that is provided by the Cost module.

Costing in BMC Remedy Incident Management

BMC Remedy Incident Management uses the Cost module to track costs associated with incidents.

The integration uses the common cost creation dialog box that is provided by the Cost module. Fields on the Incident Request form integrate with Cost module forms to show cost data related to an incident.

Task Management System

The primary goal of the Task Management System (TMS) module is to provide a mechanism to support repeatable processes. The result is improved productivity, reduction in novice errors, and a clear way to define business processes.

The TMS module is used to create tasks in both the BMC Remedy Change Management and BMC Remedy Service Desk applications. Support staff can create tasks by using TMS directly. In addition, administrators can create task templates and task group templates that can be used by change, release, and incident management. For problem management, problem analysts can create only ad-hoc tasks directly from TMS.

The TMS module significantly enhances the capability of the task operation. In addition to the predecessor and successor relationship, TMS supports branching and multiple paths, along with data exchange between tasks.

TMS supports integration with external applications, primarily using the Command Automation Interface (CAI) module. TMS supports integration with the BMC Configuration Automation for Clients application through a launch mechanism.

For more information, see the BMC Remedy Task Management System Administrator's Guide.

Task Management System and BMC Remedy Incident Management

The Task Management System (TMS) module provides the ability to track specific tasks that are required to resolve an incident.

The integration with TMS provides the ability to use task templates and to define ad hoc tasks. Tasks are defined in TMS task forms.

Relation of task statuses to change statuses

Tasks, similar to change requests, go through many status transitions as they progress. The status in which a task is generated depends on the status of the parent change request.

This section is an example of the flow changes, approval, task groups, and tasks follow with the out of the box configuration:

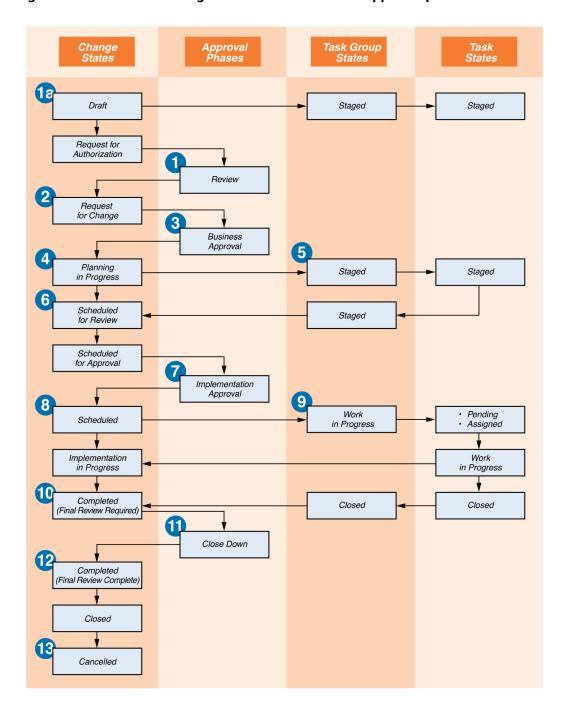


Figure 20: Overview of change and task statuses with approval phases

1 A change request starts in the Draft status. Any related task groups or tasks are in Staged status.

- If a change request is cancelled, the task groups and tasks associated with the change are also cancelled.
- If a task group is cancelled, its tasks are also cancelled. If a request is moved from Cancelled to Draft (Rescheduled Notification), the change manager or change coordinator is notified. The change requester is notified of the rescheduled change.
- 2 The change request moves into the Request For Authorization status and the approval group or approvers are notified that the change request requires approval for the Review phase. Any task groups or tasks are in the Staged status. The Status Reason field is updated to Staging in Progress.
- 3 The change manager or change coordinator is notified when the change request is moved into Request For Change status. The change manager or change coordinator are also notified when the request is moved from Cancelled to Request for Change (Rescheduled Notification).
- 4 The approval group or approvers are notified that the change request requires approval for the Business Approval phase.
- 5 All people assigned to the change are notified when the change request is ready for planning. For taskless changes only, the change implementer is notified. When the status reason of all the tasks is Staging Complete, the change moves to the Schedule For Review status.
- 6 Task implementers are notified that the task group or tasks are set to Staged.
- 7 The change manager or change coordinator is notified when the change request is scheduled for review.
- 8 The approval group or approvers are notified that the change request requires approval for the Implementation Approval phase.
- 9 All people assigned to the change are notified when the change request has been scheduled as a change with no impact. For taskless changes only, the change implementer is notified. Tasks can be set to the Assigned status.
- 10 When change request is moved into the Implementation In Progress status, the task group is set to Work in Progress and the first task is set to Pending or Assigned. The task implementers are notified to start working on tasks. They set the task to Work in Progress when work begins. Task implementers can now update the task information, and start implementing the task.
- 11 After last task is set to Closed, the task group is set to Closed. The change manager, change coordinator, and change requester are notified that the change

request is completed. Workflow enters required information into the Actual Start Date, Actual End Date, and Performance Rating fields.

- 12 The approval group or approvers are notified that the change request requires approval for the Close Down phase.
- 13 The change manager or change coordinator is notified when the final review is completed.
- 14 If change request is cancelled, the requester is notified.

Chapter

BMC Atrium CMDB

BMC Atrium Configuration Management Database (BMC Atrium CMDB) stores information about the configuration items (CIs) in your IT environment and the relationships between them.

Data providers, such as discovery applications, put data into BMC Atrium CMDB, where it is partitioned into separate datasets. This data is then consolidated into a production dataset that you use as the single source of reference for your IT environment. Data consumers, such as the BMC Remedy IT Service Management applications, read data from the production dataset.

BMC Remedy Asset Management and BMC Atrium CMDB

BMC Remedy Asset Management provides views of CIs that focus on the attributes applicable to managing your assets. BMC Remedy Asset Management extends the BMC Atrium CMDB common data model with CI types for Bulk Inventory and for Location.

The following fields and tabs on all CI forms are BMC Remedy Asset Management extensions:

- Company field
- Financials tab
- Outage tab
- Impacted Areas tab

Note

The Financials tab, Outage tab, and Impacted Areas tab are available only if BMC Remedy Asset Management is installed. If BMC Remedy Change Management or BMC Remedy Service Desk is installed without BMC Remedy Asset Management, the asset inventory module provides access to CIs and to the other asset extensions.

Typically, discovery products automatically populate BMC Atrium CMDB. You can manually update CI data from BMC Remedy Asset Management.

Mapping of BMC Remedy Asset Management roles to BMC Atrium CMDB roles

This section maps BMC Remedy Asset Management roles to BMC Atrium CMDB roles.

Users with BMC Remedy Asset Management roles have the equivalent BMC Atrium CMDB roles.

Table 33: Map of BMC Remedy Asset Management roles to BMC Atrium CMDB roles

BMC Remedy Asset Management role	BMC Atrium CMDB role
Asset Viewer and Asset User	CMDB Data View
Asset Admin	CMDB Data Change
Support group permissions	Write Security

BMC Remedy Change Management and BMC Atrium CMDB

From BMC Remedy Change Management, users can search for CIs and relate CIs to release requests, change requests, and tasks. BMC Remedy Change Management integrates with BMC Atrium CMDB by using relationship tables.

BMC Atrium Core provides the Atrium Impact Simulation feature, which users can access from BMC Remedy Change Management. Atrium Impact Simulation provides change impact analysis and "what if" simulation. For more information about Atrium Impact Simulation, see the BMC Remedy Change Management User Guide.

BMC Remedy Incident Management and BMC Atrium CMDB

From BMC Remedy Incident Management, users can search for CIs and relate CIs to an incident.

BMC Remedy Incident Management integrates with the BMC Atrium CMDB using relationship tables.

When BMC Remedy Asset Management is installed, this integration is extended by prompting users to create outages against CIs that they are relating to the incident. The outage data is stored in the BMC Remedy Asset Management database, with relationships created to the incident.

Using a sandbox dataset for CI data

When multiple sources update BMC Atrium CMDB, there must be some control on how that data is updated. Without control, BMC Atrium CMDB can become loaded with unintended data. BMC Atrium CMDB and BMC Remedy Asset Management provide an underlying mechanism to control how your production data is updated. This mechanism is the sandbox dataset.

BMC Remedy Asset Management is installed with the sandbox dataset set to BMC.ASSET.SANDBOX and the production dataset set to BMC ASSET.

An administrator defines what sources of updates have the most appropriate information to load into the production data, and can disable the sandbox. The BMC Remedy IT Service Management Administration Guide describes this procedure.

The user does not make changes directly to production data, unless the sandbox is disabled. When a user modifies data, the data flows through a temporary storage area (the sandbox dataset), and then runs through the Reconciliation Engine. The Reconciliation Engine determines which modified attributes to also modify into the production data.

Note

During reconciliation, some updates might not get updated in the production dataset. The system can be configured to treat another data source as a higher precedence than the data being entered through BMC Remedy Asset Management. If two data sources make updates, the data source with the highest precedence determines the production dataset.

Depending on whether your system is configured with a sandbox dataset, the CI creation process varies slightly.

- If your system is configured with a sandbox dataset, CIs that you create or modify flow through the sandbox dataset. You can choose to wait until the data has been reconciled, or move on to the next CI.
- If your system does not have a sandbox dataset, CI data goes directly into the production dataset.

The role of Company

Company is a primary data structure in the foundation. This structure has two main purposes: tenancy definition and external company definition.

Tenancy refers to how data and rules are partitioned within the BMC Remedy ITSM applications. For example, a company might have two business units that use the BMC Remedy Incident Management application. Each business unit has its own definitions of data, categorizations, assignment rules, and approval rules to make sure that this data is not intermixed.

Tenancy enables you to define the partitions between the two business units and enforce the data level permissions for access. In this example, a company would be defined for each business unit to define partitioning of rules and data.

A primary function of the company data structure in the foundation is to define tenants that use BMC Remedy ITSM applications. This function of company defines both how the application will partition the data and the rules for the application, based on different distinct users of the application.

Business units are one example of partitioning. If you need to partition the data and the rules of the applications, based on individual business units, then you need to define different companies for each business unit.

You can also use the company definition to define other types of companies that are used in the application, such as manufacturers, suppliers, and so on.

Functional differences between company types

BMC Remedy ITSM supports the following company types.

Table 34: Company types

Company type	Description
Customer	An external company for which you provide services
Generic contact	A company that you want to reference on the People form
	A generic contact is used to track information about people for informational purposes. You cannot select a generic contact from within the BMC Remedy ITSM applications.
Operating company	An internal company or business unit for which you provide services
Manufacturer	A company that manufactures a product identified in the Product Catalog
Vendor	A third-party vendor that provides services for you

People cannot be associated to a Manufacturer type of company.

You can associate support groups (and relate people to those support groups) only for the following company types:

- Customer
- Operating company
- Vendor

Only users who are members of support groups can access core BMC Remedy ITSM forms, such as the Incident, Change, Problem, and Asset forms. Even for users who are members of a support group, there are certain exceptions based on the company type. For example, a user who is a member of a vendor company cannot create a change or release, but can be assigned to work on the change either as a change or release coordinator or as a change or release manager.

Customers who request support must belong to either a customer company or an operating company.

Companies can be more than one type. After the company has been created, you can add an additional company type by opening the Company form and selecting the additional company type. When you save your changes, the additional company type is appended to the existing company type.

Company types example

Calbro Services has an IT department that provides support for all employees of both Calbro Services and Company A. Calbro Services is the *operating company*, because some of the employees of Calbro Services are support staff.

Because Company A receives support from the IT department, Company A is customer type of company.

A manufacturer company is specified in the Product Catalog and is a company that manufactures software that is used by Calbro Services. For example, if Calbro Services uses Microsoft Word, Microsoft is the manufacturer.

A company that supplies this product to Calbro Services is a *supplier* company. A company that supplies Microsoft Word licenses to Calbro Services is a supplier.

Both the manufacturer and supplier companies are external entities. They do not have access to the BMC Remedy ITSM applications being used by Calbro Services. The distinction between manufacturer and supplier is crucial for the Software License Management feature provided by BMC Remedy Asset Management.

If Company A requires support for a service that Calbro Services obtains from Company C, then Company C is a *vendor* type of company. Users in support groups for a vendor company can have access to BMC Remedy Service Desk to report incidents and problems.

The location structure

The location structure within the BMC Remedy ITSM applications has a four-tiered data model, where the second and third tiers can be optional (the fourth tier, however, is required). In effect, the data model can be two, three, or four tiers.

The Company field is the first tier, **Region** is the second tier, **Site Group** is the third tier, and **Site** is the fourth tier (where a site is a physical location with a mailing address, such as a building). When you create the location structures, the regions and site groups are used to group sites within a company. Therefore, you must have a list of the sites within a company, and then determine whether regions and site groups are required to arrange the sites in an organized manner that can be used for reporting purposes.

- Sites identify unique physical locations and are associated with one or more companies.
- The **Company** field and **Site** field are required on all request forms.
- Workflow can be defined to any level of the location structure.

BMC Atrium Product Catalog and Definitive Media Library

The Product Catalog provides a normalized reference of software, hardware, and other types of products and their characteristics.

The main purposes of the Product Catalog are to specify which products are allowed in your environment and to define how instances of those products are represented in BMC Atrium CMDB by providing the desired name and categorization values to the Normalization Engine.

The Product Catalog enhances the accuracy of BMC discovery products by uniquely identifying a product, regardless of installed name or location. Any application can use the Product Catalog to identify a single name for a software application and its versions, which in turn supports license compliance and provisioning. The Product Catalog is used to normalize discovered data – both the name and categorization of software products.

The Product Catalog is a library of all the products available to an organization. It defines the products and its attributes, such as name, manufacturer, version, and categories. Before discovery tools create or update CIs in BMC Atrium CMDB, they verify the product information in the Product Catalog.

The Product Catalog includes product characteristics that enhance the accuracy of BMC discovery products by uniquely identifying a package regardless of installed name or location.

The Definitive Media Library (DML) is a subset, or filter, of the Product Catalog that represents software products that are marked as approved for use in an organization. The DML defines the files and suites associated with each product, and it specifies the location of the master copies that are used to install the software products.

The Definitive Hardware Library (DHL) is a subset, or filter, of the Product Catalog that represents hardware products that are marked as approved for use in an organization.

For more information about the Product Catalog and the DML, see the BMC Atrium Core Product Catalog and DML Guide.

BMC Atrium Core permissions

BMC Atrium Core permissions control user access to BMC Atrium CMDB and the Definitive Media Library. The following sections list the available permissions. For additional information about BMC Atrium Core permissions, see the BMC Atrium CMDB Administrator's Guide.

BMC Atrium CMDB permission model

BMC Remedy AR System groups data in the BMC Atrium CMDB to make viewing easy, as follows:

- CMDB Data View (computed group)
- CMDB Data Change (computed group)

The following list describes the BMC Remedy AR System roles:

- CMDB Data View On every class attribute with View permissions
- CMDB Data Change On every class attribute with Change permissions

The following list contains additional BMC Remedy AR System permissions:

- Read Security (dynamic group) On every class attribute with View permissions
- Write Security (dynamic group) On every class attribute with Change permissions
- Assign Group (field 112) On the Request ID with View permissions

These permissions are mapped to roles that are defined for BMC Remedy Asset Management as a deployable application.

Definitive Media Library permissions

The DML-related permissions in the BMC Atrium Product Catalog are as follows:

- Level 1-DSL Administrator Can define and modify product dictionary and software library item definitions.
- Level 2-DSL User Can view product dictionary and software library item definitions.

For more information about these permissions, see the BMC Atrium Product Catalog and DML Guide.

BMC Remedy Action Request System

BMC Remedy IT Service Management Suite is built on BMC Remedy Action Request System (BMC Remedy AR System).

This section describes key BMC Remedy AR System concepts. For additional information, including a glossary of BMC Remedy AR System terms, see the BMC Remedy Action Request System Concepts Guide.

BMC Remedy AR System Assignment Engine

The Assignment Engine is used to automatically determine an assignee for a request, based on a set of rules that you can configure.

Such rules typically include the availability of employees and group membership. The engine can be configured to assign requests to employees either on a roundrobin basis or by load balancing. Load balancing can be further configured by the employee workload capacity or by the number of requests assigned.

If you specify fall-back rules, the assignment engine makes sure that no request goes unassigned, and enables the application to find an available assignee who is best suited to work on the request.

For more information, see the BMC Remedy Action Request System Configuration Guide.

Related Information

"Assignment" on page 115

BMC Remedy Approval Server

The Approval Server enables you to automate approval processes. The Approval Server is used by BMC Remedy Asset Management for purchase requisitions, and by BMC Remedy Change Management for change requests and release requests.

When a BMC Remedy ITSM application triggers an approval process, the Approval Server routes a request to collect signatures within a defined approval process, handling all notifications and requests for more information as it collects each response (approving or rejecting). The Approval Server then reactivates the original application, reporting the result of the approval process. You can have multiple Approval Servers running with multiple BMC Remedy AR System servers on one computer.

BMC Remedy Asset Management uses an ad hoc approval process. BMC Remedy Change Management uses defined best-practice approval processes and ad hoc approval processes.

For more information, see the BMC Remedy Approval Server Guide.

Related Information

- "Procurement" on page 75
- "Multiple approvers and multiple approval levels" on page 85

Development concepts relevant to customizing the BMC Remedy ITSM applications

BMC Remedy ITSM applications are built on BMC Remedy AR System. This enables experienced administrators, workflow developers, and consultants to extend and customize the behavior of the applications to meet the changing needs of your organization and to integrate them with other applications.

BMC offers courses for beginners through advanced workflow developers. For more information, visit BMC education at http://www.bmc.com.

BMC Remedy Service Desk is shipped with predefined processes and rules that support the business model described in this guide, in the BMC Remedy Service Desk: Incident Management User Guide and in the BMC Remedy Service Desk: Problem Management User Guide.

BMC Remedy Asset Management and BMC Remedy Change Management are shipped with predefined approval processes and rules that support the business model described in the BMC Remedy Asset Management User Guide, and the BMC Remedy Change Management User Guide.

If the BMC Remedy Asset Management application as shipped does not meet your needs, you can customize it. Typical customization work includes adding BMC Remedy AR System filters and active links to enhance workflow. BMC recommends that you do not use the BMC Remedy Approval Server forms to define custom rules and processes. Instead, use the advanced configuration options that are available in BMC Remedy ITSM, as described in the BMC Remedy IT Service Management Administration Guide.

If you customize Asset Management, you might also need to extend the BMC Atrium CMDB.

For information about extending the functionality of the applications, access the Customer Support website at http://bmc.com/support

Workflow

In BMC Remedy AR System, workflow refers to operations carried out by active links, filters, and escalations.

Workflow can be triggered by user actions (such as submitting a form or clicking a button), by other workflow, and by time. Workflow acts on the data stored in forms to automate business processes.

Active links

An active link is an action or group of actions performed on the client. Active links are triggered by user actions in a form, such as clicking a button.

They can be used to perform a variety of tasks, such as giving quick responses during data entry and auto-filling fields. For example, an active link can verify a value entered in the Employee ID field of a request and then pull information from the People form to fill in other fields on the request, such as Name, Department, and Phone Number, reducing the time required for support staff to fill out a request.

An active link guide groups active links. Because active link guides run on a client, they can lead the user through the steps necessary to fill in one or more forms. For

example, active link guides can act as subroutines to accomplish common tasks, or can augment training by guiding users through a series of steps.

For more information about active links, see the BMC Remedy Action Request System Workflow Objects Guide.

Filters

A filter is an action or group of actions performed on the BMC Remedy AR System server. Filters are used to enforce business rules and to ensure system and data integrity.

As the server processes a request, the filters associated with that form and action evaluate the data in the request. For example, you can verify the values in a completed form by using a filter to compare them against your business rules and return an error if the request violates any of those rules.

A filter guide is a group of filters that can be used as a subroutine in workflow.

For more information about filters, see the BMC Remedy Action Request System Workflow Objects Guide.

Escalations

An escalation is an action or group of actions performed on the server at specified times or time intervals.

Basically, an escalation is an automated, time-based process that searches for requests that match certain criteria at specified times and takes actions based on the results of the search. For example, an escalation can trigger BMC Remedy AR System to notify the next level of management if an incident request is not assigned to a technician within one hour of submission.

For more information about escalations, see the BMC Remedy Action Request System Workflow Objects Guide.

Field menus

Many character fields provide menus to enable users to make selections conveniently, and help to make sure that data is consistent.

BMC Remedy ITSM uses configurable menus to provide the following benefits:

- Simplified presentation of options within any application form
- Multi-tiered categorizations for classifying incidents, problems, changes, and assets
- Convenient access to predefined reports

For information about configuring menus, see the BMC Remedy Action Request System Form and Application Objects Guide.

Table fields

Table fields enable users to view specific fields and requests from another (supporting) form or from the original form in a spreadsheet format.

Each column title in the table field represents a field from the supporting form, and each row represents an entry from the supporting form. If new entries are made to the supporting form, the user will see them when the table is refreshed. For more information about table fields, see the BMC Remedy Action Request System Form and Application Objects Guide.

Devel	opment	concepts	relevant	to	customizing	the	BMC	Remedy	v ITSM	ap	plications

Applications integrated with BMC Remedy ITSM

BMC Remedy ITSM applications integrate with other BMC applications.

BMC Remedy Knowledge Management

BMC Remedy Knowledge Management can be integrated with BMC Remedy Service Desk to enhance the ability of users to author and search for solutions.

BMC Remedy Knowledge Management includes a comprehensive editor with extensive editing tools and a robust search engine that enables users to search for solutions using natural language or Boolean searches. BMC Remedy Knowledge Management is also tightly integrated with the BMC Remedy Action Request System (BMC Remedy AR System), providing a seamless integration between knowledge management and service management.

BMC Remedy Knowledge Management can improve staff efficiency, customer service and satisfaction, and business service quality. Call center efficiencies can be dramatically improved by providing agents with quick answers and solutions to customer issues. In addition, web-based self-service options allow employees or customers to find their own answers at any time using a natural language search.

For more information, see the BMC Remedy Knowledge Management User's Guide.

Related Information

"Solutions database" on page 104

BMC Service Level Management

BMC Service Level Management enables a service provider, such as an IT organization, a customer support group, or an external service provider, to formally document the needs of its customers or lines of business using service level agreements, and provide the correct level of service to meet those needs.

BMC Service Level Management also provides a means to review, enforce, and report on the level of service provided. It streamlines the communication between a service provider and its customers. Multiple service targets can be defined and monitored, acting as a bridge between IT service support and IT operations. This enables costs to be controlled and helps to provide a consistent level of service in support of a key business service.

For more information, see the BMC Service Level Management User's Guide.

BMC Service Level Management and BMC Remedy Asset Management

BMC Remedy Asset Management integrates with the BMC Service Level Management application to provide service level definitions for outage time. You can configure BMC Service Level Management to provide service level definitions for system availability related to service targets.

When BMC Service Level Management is installed, a tab is enabled on the CI Unavailability form in BMC Remedy Asset Management, showing service targets and milestones that are associated with a CI.

BMC Service Level Management and BMC Remedy Change Management

BMC Remedy Change Management integrates with the BMC Service Level Management application to provide service level definitions for initiation time and completion time for change requests.

When BMC Service Level Management is installed, an SLM status indicator on the Change form is enabled, showing the service targets and milestones that are associated with a change request or release request. The location of this indicator depends on whether you are looking at the Classic view or the Best Practice view. For more information about these views, see the *BMC Remedy Change Management User Guide*.

In addition to the user interface integration, the BMC Remedy Change Management application ties into the definition structure of BMC Service Level Management. BMC Service Level Management has a plug-in architecture for helping users define terms and conditions for a service target, as well as measurements. BMC Remedy Change Management provides a user interface for this BMC Service Level Management plug-in architecture to make it simpler for users to build qualifications using a query-by-example (QBE) model.

BMC Service Level Management and BMC Remedy Incident Management

BMC Remedy Incident Management integrates with the BMC Service Level Management application to provide service level definitions for resolution and response time for incidents.

When BMC Service Level Management is installed, service targets and milestones that are associated with an incident are visible on a tab on the Incident Request form. The location of the tab depends on whether you are looking at the Classic view or the Best Practice view. For more information about these views, see the BMC Remedy Service Desk: Incident Management User Guide.

In addition to the user interface integration, the BMC Remedy Incident Management application also uses the definition structure of BMC Service Level Management. BMC Service Level Management has a plug-in architecture for helping users define terms and conditions for a service target, as well as measurements. BMC Remedy Incident Management provides a user interface for this BMC Service Level Management plug-in architecture to make it simpler for users to build qualifications using a query-by-example (QBE) model.

BMC Service Request Management

BMC Service Request Management enables IT to define offered services, publish those services in a service catalog and automate the fulfillment of those services for their users.

With BMC Service Request Management, users of IT services can help themselves, which reduces the number of requests submitted to the service desk. This reduction enables IT to focus on mission-critical activities, such as resolving incident requests related to service failures and restoring critical services. BMC Service Request Management also enables you to automate workflows for each service, enforcing consistency of process and faster fulfillment of the request.

When BMC Service Request Management is installed, it replaces the Requester console in BMC Remedy ITSM.

For more information, see the *BMC Service Request Management User's Guide*.

BMC Service Management Process Model

BMC Service Management Process Model (BMC SMPM) provides field-proven processes for the BMC Remedy IT Service Management (BMC Remedy ITSM) product portfolio.

These out-of-the-box processes are based on the ITIL best practices and can be customized to fit organization-specific requirements. BMC SMPM enables you to implement a mature service management process quickly with minimum risk of failure. The implementation of the BMC SMPM processes establishes a transparent IT organization capable of responding swiftly to the ever-changing business needs.

BMC SMPM maps ITIL best-practice processes to work instructions for BMC Remedy ITSM applications.

Note

BMC Remedy ITSM users can click the Process Overview link on the BMC Remedy ITSM application consoles (and main forms) to access BMC SMPM.

BMC Dashboards for BSM and BMC Analytics for BSM

BMC Dashboards for Business Service Management (BSM) enables the linking of critical IT process into a dashboard view that provides aggregated performance indicators within a single pane of glass. BMC Analytics for BSM provides point-andclick analysis and advanced reporting across BMC Remedy ITSM and other BMC BSM products.

By providing a consolidated, graphical interface of best-practice IT metrics for BMC Remedy ITSM and other BMC BSM products, BMC Dashboards for BSM delivers highly interactive access to key metrics, thus enabling IT managers who require the right data at the right time to optimize decisions and improve the success of their IT support functions.

BMC Analytics for BSM works within the SAP Business Objects framework and includes out-of-the-box best-practice reports for the BMC Remedy ITSM applications and BMC Atrium CMDB, as well as ad-hoc analysis capabilities to create aggregated reports on metrics and key performance indicators that span all four applications. By combining the BMC applications into a consolidated view, BMC Analytics for BSM enables customers to analyze and understand the IT performance indicators, financial impact, and cost associated with any business service.

BMC BladeLogic Client Automation

BMC BladeLogic Client Automation reduces the complexity and costs of managing desktops, laptops, and handheld devices. It does this through policy-based automation of application management, inventory, software usage tracking, and software harvesting, as well as advanced PC power settings.

By automating the delivery, installation, updating, repair, removal, and management of applications on desktops, laptops, and mobile devices, the product helps departments meet growing service level demands, and reduces business risk associated with application downtime and virus attacks.

By tracking software usage for both physical and virtual applications, BMC BladeLogic Client Automation provides IT departments with visibility into what applications are installed across the enterprise, as well as their usage frequency. This knowledge can help them minimize potential violation issues, reduce software license purchase costs, and increase the use of existing licenses. When the BMC BladeLogic Client Automation product is deployed as part of a larger BMC Remedy Change and Configuration Management solution, it provides vital usage statistics to BMC Remedy Asset Management by means of BMC Atrium Configuration Management Database, to match what is deployed and being used against software contracts stored in BMC Remedy Asset Management.



Glossary

Δ

accelerated depreciation

Any method of depreciation that allows greater deductions in the earlier years of a CI's life cycle. See also "depreciation" on page 179 and "configuration item (CI)" on page 177.

access permission

See "permission group" on page 185.

activity

A unit of work that can be created and assigned as part of the Release Management module. Activities are useful when you must create a structured sequence of tasks that must be completed to fulfill the release. However, these tasks should not be classified as change requests. For example, an activity might be for training users on the new version of an application. Activities have their own lifecycles that include a series of status transitions. An activity can include a sequence of tasks.

activity system

BMC Remedy ITSM system used in the Release Management module that provides the capability to assign specific units of work known as activities. An activity has its own status transition lifecycle but does not require approvals.

Administration console

See "Application Administration console" on page 171.

administrator

See "application administrator" on page 172.

Application Administration console

The main interface for configuring BMC Remedy ITSM applications. The console works like a control panel from which administrators can perform common configuration activities and activities specific to different BMC Remedy ITSM applications and modules.

application administrator

An individual responsible for the management of the BMC Remedy ITSM applications, including setting up forms, setting access rights for users, and creating configurations.

approval

A process that generates electronic signature lines for items that require approval, and tracks who has approved or rejected a given request.

approver

Approvers use BMC Remedy Asset Management to approve or reject requests for the acquisition of new items and for proposed standard configurations. Approvers use BMC Remedy Change Management to approve or reject change requests.

asset manager

See "configuration administrator" on page 176.

assignee

The person assigned the responsibility of working on any of the following activities: change request, incident request, problem investigation, known error, solution database entry, and so on.

assignment

Automatically or manually assigning a group or individual the responsibility of resolving an issue or request. BMC Remedy ITSM applications use the Assignment form for group automatic assignment and the Assignment Engine for individual automatic assignment.

Atrium Explorer

Atrium Core component that enables you search for and view a CI and its relationships.

Atrium Impact Simulator

Atrium Core component that helps you to determine how a change to the availability of an item represented by a CI affects other items.

audit schedule

A schedule used to perform periodic audits that check for differences between the information in the CI database and the CIs that are deployed in the company.

availability service target

A service target that measures the time that an asset or service is available or unavailable. This service target applies specifically to data that is tracked in an application based on BMC Remedy AR System, such as BMC Remedy Asset Management.

B

blackout schedule

Scheduled times when a CI is either unavailable for maintenance (must be operational) or is available for maintenance.

BMC Atrium Configuration Management Database (BMC Atrium CMDB)

An infrastructure built on BMC Remedy AR System and used to build data models and define datasets.

book value

The value of a CI equal to the purchase cost minus the accumulated depreciation.

broadcast message

An application feature that enables users to create messages that can be viewed by the entire organization or by users in specific groups.

BSM

See "business service management (BSM)" on page 173.

bulk inventory

Assets that you order in quantity, such as power cables.

bulk items

Items that are *not* tracked by an individual record for each unit. Bulk items in inventory are tracked by quantities of an item type. For example, items such as cables do not require individual records but rather, one record for a bulk quantity of the specific cable type.

business service management (BSM)

A flexible, comprehensive management approach that links IT resources and business objectives. BSM prioritizes IT activity according to business impact, and enables IT organizations to proactively address business requirements.

C

CAB

See "change advisory board (CAB)" on page 174.

CCM

See "Change and Configuration Management (CCM)" on page 174.

certificate group

Consolidates the tracking of license certificates. A master certificate is grouped with individual child license certificates. The CIs are attached to the master certificates. License allocation numbers are attached to the child license certificates.

change advisory board (CAB)

A group that advises change management on the implementation of significant changes to the IT infrastructure. This group is often made up of representatives from various IT areas and business units.

Change and Configuration Management (CCM)

A BMC Remedy Change Management integration with BMC Configuration Automation for Clients that proactively manages both IT and business-driven changes, protects the IT environment, and verifies that the change was successfully performed. It does this by using planning and decision-making data contained in a dedicated BMC Atrium CMDB.

change authority

The name of a group with the authority to approve changes. This group can also be called the change advisory board. See also "change advisory board (CAB)" on page 174.

change coordinator

A person responsible for creating, planning, implementing, tracking, and closing change requests related to services for a support group. The change coordinator performs the following tasks:

 Assesses requests for change that originated from Incident Management, Problem Management, Release Management, or Continuity Management

- Registers changes as needed to support requests for change.
- Determines the risk and impact for changes.
- Prepares the implementation plan by creating tasks.
- Monitors the progress of changes.

change management

As a concept, the process of planning, scheduling, implementing, and tracking changes to the IT infrastructure, or any other aspect of service, in a controlled manner. By using change management, you can implement approved changes with minimal disruption to the business environment.

change manager

A person responsible for filtering, accepting, and classifying all change requests. The change manager is also responsible for planning and coordinating the implementation of the changes. Sometimes known as a change supervisor.

change request

The controlled process for the addition, modification, or removal of approved, supported, or baselined hardware, networks, software, applications, environments, or systems. A change request can involve multiple change activities.

charge-back

The process of charging departments or cost centers for the IT infrastructure required to support its business processes.

charge-back invoice

A detailed list of charges to cost centers, including any charge-back percentage.

charge-back percentage

A percentage used to calculate charge-back costs.

charge-back report

A report used by a cost manager to track information and find entries that might need to be adjusted.

charge-back summary

The total charges made to cost centers, including charge-back percentage. For split cost centers, it also provides information about how charges are allocated for source cost centers and target cost centers.

CI

See "configuration item (CI)" on page 177.

CI unavailability

The downtime of a CI.

CI unavailability record

The time when a CI is either partially or completely unavailable to perform its required function. CI unavailability records can be broadcast or related to other records.

class

Metadata in the BMC Atrium CMDB that defines a type of object, usually a configuration item (CI) or relationship.

client tier

The architecture level where BMC Remedy AR System clients operate within the multitier system.

CMDB

See "BMC Atrium Configuration Management Database (BMC Atrium CMDB)" on page 173.

Company field

A field in forms in BMC Remedy ITSM that controls multi-tenancy. It shows data only for the companies for which you have permission. See also "multi-tenancy" on page 183.

configuration

Sets of CIs that are required by different groups of people in the company.

configuration administrator

Configuration administrators require an overall view of the CIs for which their support groups are responsible. Some organizations call this role an asset manager.

configuration catalog

A feature of BMC Remedy Asset Management that stores your standard configurations (such as a standard desktop, laptop, server, and so on) for management purposes.

configuration item (CI)

An infrastructure component or an item associated with the infrastructure that is (or will be) under the control of configuration management, for example, a Request for Change. A CI can be complex or simple, large or small. CIs can include entire systems or be a single module or minor component. CIs can also include records of people (users and customers) and locations.

configuration management

The process of maintaining detailed IT inventory records. It involves identifying and defining the CIs in a system, recording and reporting the status of all CIs and requests for change, and verifying the completeness and correctness of all CIs. See also "configuration item (CI)" on page 177.

Configuration Management Database

See "BMC Atrium Configuration Management Database (BMC Atrium CMDB)" on page 173.

contract

A documented relationship between two parties that identifies details about each party, accounting and budget codes, purchase cost, and expiration dates. For service level management, a contract ties one or more SLAs, OLAs, or underpinning contracts to the interested parties. The contract also makes it possible to segment and restrict access to the compliance and service target results so that results can be viewed by contract. See also "service level management (SLM)" on page 190.

contract manager

Contract managers are responsible for managing IT contracts. In some organizations, the contract manager also takes on the role of software asset manager. See also "software asset manager" on page 191.

cost center

An entity tracking cost information within an organization. See also "split cost center" on page 192.

cost management

All of the policies, procedures, and deliverables required to fulfill an organization's costing and charging requirements.

currency code

The three-letter code that represents a currency type, such as USD for United States Dollars.

D

dashboard

Web-based, graphical user interface using flashboards where compliance and service target results can be viewed by service level managers, service delivery managers, other IT professionals, and customers or line of business owners. See also "flashboard" on page 179.

data consumer

An application that works with data in BMC Remedy ITSM. It might view the data or modify it. See also "data provider" on page 178.

data provider

An application that loads data into BMC Remedy ITSM. This is often a discovery application. See also "data consumer" on page 178.

dataset

A logical group of data in BMC Atrium CMDB. A dataset can represent data from a particular source, a snapshot from a particular date, and so on. The dataset used by BMC products for reconciled production data is named BMC Asset.

decision tree

A step-by-step guide set up by an administrator. It guides the user through a questionnaire and, based on the user's answers, completes part of the form for a new incident.

declining balance depreciation

A method of calculating depreciation in which CIs depreciate at a constant rate per year, accelerated by a factor of 150 percent. In this method of accelerated depreciation, 150 percent of the straight-line depreciation amount is taken the first year, and then that same percentage is applied to the undepreciated amount in subsequent years. See also "double-declining balance depreciation" on page 179.

Definitive Media Library (DML)

A central repository of approved product dictionary entries (PDEs). See also "product dictionary entry (PDE)" on page 186.

dependent change request

A change request that must be completed in sequence, as defined by the change manager.

depreciation

The loss of an asset's value resulting from the passage of time.

DML

See "Definitive Media Library (DML)" on page 178.

double-declining balance depreciation

A method of calculating depreciation in which CIs depreciate at a constant rate per year, accelerated by a factor of 200 percent. In this method of accelerated depreciation, double the straight-line depreciation amount is taken the first year, and then that same percentage is applied to the undepreciated amount in subsequent years. See also "declining balance depreciation" on page 178.

down CI

A CI out of service for repairs or not working.

Ε

escalation

A workflow component that searches at specified times or at regular intervals for requests matching a specified condition, and performs specified operations on all matching requests. Escalations are generally used to find records that have exceeded needed business rules or processes, and take appropriate action. They run on the BMC Remedy AR System server.

evergreen contract

A contract that never expires. See also "never ending" on page 183.

F

federated data

Data linked to a CI in the BMC Atrium CMDB, but stored externally. Federated data might represent more attributes of the CI or related information, such as change requests on the CI.

flashboard

A real-time visual monitoring tool that shows you the state of your service operations, warns you about potential problems, and collects and shows trend data.

form

A collection of fields in which information is entered and displayed. The collection of fields represents a record of information in the BMC Remedy AR System. BMC Remedy AR System administrators can define and change the fields and workflow associated with a form. A BMC Remedy AR System application can include many forms.

functional role

A defined role used for notifications and to extend access granted by permission groups.

G

global

A setting that applies changes or defines certain parameters for all companies in a multi-tenancy environment. See also "multi-tenancy" on page 183.

goal

Measurement method that allows you to track the time taken to resolve an issue or track how often an asset or service was available. Goals are used to determine whether service targets are met.

Group coordinator

Group coordinators are responsible for the quality and integrity of the incident management processes and for the work of their support group members. They coordinate the assignment of incident requests to support staff. The group coordinator's other responsibilities include: monitoring incidents; monitoring open incidents requiring assignment; managing the assignment of incidents to the appropriate support groups for resolution; receiving notifications of incident assignments and escalations; facilitating the resolution of escalated incidents in accordance with the escalation policy; ensuring the resolution of incidents within the support group's service targets; ensuring the overall completeness and accuracy of closed incidents; reviewing reports; ensuring that incidents requiring root cause analysis are copied into BMC Remedy Problem Management; managing support group membership; and managing scripts, templates, and decision trees. Note that group coordinators were formerly known as incident managers.

guest user

Users who have not been configured with login information in the People form. Guest users cannot create change requests.

impacted area

Companies, locations, or organizations affected by changes or updates to CIs.

incident

Any event that is not part of the standard operation of a service and that causes an interruption to or reduction in the quality of that service. See also "incident management" on page 181 and "problem investigation" on page 186.

incident management

As a concept, a reactive process typically initiated in response to a customer's call. The primary goal of the incident management process is to restore normal service operation as quickly as possible and with minimum disruption to the business.

Incident manager

See "Group coordinator" on page 180.

incident matching

A search process in BMC Remedy Incident Management that can be used to search for other incidents, problem investigations, known errors, and solution database entries that share some of the same characteristics as the current incident, such as product categorization.

incident owner

The user who records the incident. This user might differ from the current incident assignee. See also "assignee" on page 172.

Information Technology Infrastructure Library (ITIL)

A set of guidelines for the management and provision of operational IT services.

instance

A record in BMC Remedy ITSM. An instance is an object of a particular class. Both CIs and relationships are considered instances.

inventory

The quantity of CIs available.

ISO currency code

See "currency code" on page 177.

ITIL

See "Information Technology Infrastructure Library (ITIL)" on page 181.

K

key performance indicator (KPI)

A data point used to measure whether a performance-monitoring service target meets its goals. See also "service level agreement (SLA)" on page 190.

known error

A problem that has been successfully diagnosed and for which a temporary workaround or permanent solution to the known error has been identified. See also "problem" on page 185 and "workaround" on page 194.

KPI

See "key performance indicator (KPI)" on page 182.

L

License Engine

A component of BMC Remedy Asset Management that performs the processing for the software license management feature to connect software CIs with license certificates and to calculate compliance. The License Engine runs as a plug-in.

license job

A job that runs on the License Engine. The license job specifies the scope of CIs and license certificates that are processed by the license engine.

license type

Provides a set of connection rules, which the License Engine uses to query BMC Atrium Configuration Management Database (BMC Atrium CMDB) and select the appropriate CIs to connect to a software license type. Each license type also provides a set of compliance rules, which the License Engine uses to calculate whether the license is in compliance. See also "software license certificate" on page 191.

life cycle asset management

Managing the life of a CI through its purchase, deployment, and disposal.

M

maintenance schedule

A schedule used to perform maintenance on CIs.

master contract

The overarching contract with a company for which you have additional related contracts. The related contracts can include software licenses, support contracts, and any other type of contract.

multi-tenancy

A feature in BMC Remedy ITSM that uses the Company field to limit access by individuals. The Company field can be used to represent a company, business unit, or other group. The Company field also can be used to control access in a hosted environment. By default, BMC Remedy ITSM applications operate in multi-tenancy mode. See also "single-tenancy" on page 191.

N

navigation pane

An area on the left side of consoles that provides links to functionality and links to other programs.

never ending

Term for a contract that never expires. Also known as an evergreen contract.

New Request Wizard

A simple form for requesters to submit service requests. Requesters use the New Request Wizard interface to submit service requests to IT, which is the only way to submit a service request from the Requester console.

non-bulk CIs

Stand-alone configuration items, for example, a single server or laptop.

notification

A message sent to a user by workflow. Notification can be in the form of an alert, email message, or other method using integrations.

0

OLA

See "operational level agreement (OLA)" on page 184.

On-Duty manager

On-Duty managers take over the responsibility from service owners when the owner is not available to perform the incident escalation handling procedure. In these situations, the onduty manager decides whether an escalated incident must be resolved by implementing an emergency change, by recovering the affected service at its continuity site, or by continuing the resolution of the incident within the incident management process. See also "Service owner" on page 190.

operational catalog

A feature in which operational categories for service requests are defined.

operational categorization

A three-tier hierarchical representation of operations as defined in the Operational Catalog configuration form. This categorization is included in records to specify the range of operations to which a record applies.

operational level agreement (OLA)

An internal agreement used to define and track the level of service provided for an IT organization. An example is an agreement between the network management team and the service desk.

operator

- When creating a search, it is one of a number of functions that enable you to define advanced searches or build qualifications.
- In the Service Management Process Model, it describes a specific Service Desk role. An operator reviews all new events; correlates each new event with other events and with information regarding planned changes and events; registers an incident request for each event that represents an unplanned service degradation or outage, or that represents the first warning of a future service degradation or outage, and ensures that the incident request information is complete and meaningful; resolves as many of the registered incident requests as possible within the limitations of the granted access rights and time constraints; ensures that the registered incident requests, but which cannot be resolved by the operators, are assigned to the most appropriate group for resolution.

outage

See "CI unavailability" on page 176.

Overview console

A central console for BMC Remedy ITSM applications. The console works like a control panel from which users can access all assigned work and perform their primary activities.

P

parent/child contract

A parent, or main, contract that has other children, or subcontracts, associated with it.

PDE

See "product dictionary entry (PDE)" on page 186.

peer change request

A dependent change request that can be completed at the same time as another change request.

peer-to-peer

Devices that are on the same level in an organization's network (for example, two workstations). See also "notification" on page 183.

permission group

A feature of the BMC Remedy ITSM applications that controls what areas of the application a user can access. Each permission group can access only certain areas of the application. A user can belong to more than one permission group.

problem

The root cause of an incident or potential incident. After a resolution or workaround is identified, the problem becomes a solution database entry or known error. See also "incident" on page 181, "known error" on page 182, "solution database" on page 192, and "workaround" on page 194.

Problem coordinator

Problem coordinators are responsible for the quality and integrity of the problem management process. Problem coordinators have full access to problem investigations, known errors, and solution entries assigned to their support groups. Their responsibilities include: reviewing the incident requests that have been related to the services for which they act as the problem coordinator, to help identify problems; ensuring that the problems for which they are

responsible, including the ones that have been identified within the Availability and Capacity Management processes, progress through the problem management process in a timely and prioritized fashion; ensuring that the information entered in the problem investigations and known errors that they manage is accurate and complete; periodically reviewing their problem investigations for which a practical structural solution cannot be found; verifying structural solutions and closing the known errors and problem investigations that they manage. Note that problem coordinators were formerly known as problem managers.

problem investigation

A process that helps an IT organization diagnose the root cause of incidents and potential incidents. It initiates actions that help to improve or correct the situation, preventing the incident from recurring.

problem management

As a concept, a process that identifies the cause of problems and initiates actions that help to improve or correct the situation, preventing an incident from recurring or occurring in the first place. The cause identified by a problem investigation can be documented in a known error or solution database record. See also "incident" on page 181, "known error" on page 182, "solution database" on page 192, and "problem" on page 185.

problem manager

See "Problem coordinator" on page 185.

process flow

Shows the progress of a request as it moves through the stages of its life cycle. It does this within a form, such as an incident request. A diagram shows the stages of the process, as indicated by best practices, rooted in ITIL processes. It indicates the current stage and state of the request. The process flow diagram also serves as a wizard, guiding the user through the life cycle.

product categorization

A five-tier hierarchical representation of products as defined in the Product Catalog configuration form. This categorization is included in records to specify the range of products to which the record applies.

product dictionary entry (PDE)

An entry in the Definitive Media Library that represents the master name of a software application. See also "Definitive Media Library (DML)" on page 178.

R

reconciliation

A feature in BMC Atrium CMDB that, in addition to other tasks, checks for duplicate CI records using the Reconciliation Engine. A CI record marked by the reconciliation process may be deleted by the application administrator. See also "Reconciliation Engine" on page 187.

Reconciliation Engine

A component of the BMC Atrium CMDB. The Reconciliation Engine merges data from different discovery services based on identification and precedence rules.

registered user

A user who has an entry in the People form with an AR System login ID.

relationship

A type of BMC Atrium CMDB class that defines the relationship between two CIs.

release coordinator

A person responsible for coordinating a release. A release coordinator performs the following tasks:

- Initiates the implementation of releases and decides on corrective actions as needed.
- Prepares a business case for a new release when additional funding is needed for its implementation.
- Reviews change requests passed from Change Management.
- Splits the requirements of releases into logical groups that can be handled efficiently by change coordinators.
- Organizes and conducts post-implementation meetings to collect improvement suggestions for future releases.

release management

As a concept, a process that is responsible for planning, scheduling, and controlling the movement of releases to test and live environments. Release management makes sure that the integrity of the live environment is protected and that the correct components are released.

release request

A request to release an authorized colleges changes to an IT service. The changes are tested and introduced into the production environment together.

reminder

A message similar to a BMC Remedy AR System notification, except that you can define the content of a reminder and specify when to send it.

request-based service target

A service target that measures how long a process takes, such as the time to respond to or resolve a service desk request, or the time to respond to or resolve a change request.

requester

A person in the organization who needs assistance from the IT support staff. A requester is usually an employee in the organization who needs to have a change implemented or an incident resolved.

Requester console

The front end for the BMC Remedy Change Management and BMC Remedy Incident Management applications. It provides an easy, user-friendly interface that allows users to quickly submit requests for change or incidents to the two back-end applications, and to view their submitted requests.

residual value

The value you can purchase an item for after its lease expires.

return on investment (ROI)

A method of calculating when the capital cost of implementing a project, product, or service will be recovered through the savings that result from completing the activity. The ROI can be expressed in terms of internal savings, increased revenue from external sources, or some combination of these types of savings. See also "service level agreement (SLA)" on page 190 and "service level management (SLM)" on page 190.

ROI

See "return on investment (ROI)" on page 188.

role

A set of responsibilities, activities, and authorizations, usually within the context of a single application or a business system.

Note

Access to BMC Remedy ITSM applications is based on user roles. Depending on your role in the organization—requester, support, management—you work with a different application (or view) on your desktop.

rolling contract

A contract that automatically renews upon expiration.

root cause

The underlying cause of an IT-related problem experienced by a customer.

row level locking

See "multi-tenancy" on page 183.

S

salvage value

The estimated value that a CI will realize at the end of its useful life. See also "useful life" on page 194.

sandbox dataset

Mechanism that controls how data is updated in BMC Atrium CMDB when the data comes from multiple sources.

BMC Remedy Asset Management is installed with the sandbox dataset set to BMC.ASSET.SANDBOX and the production dataset set to BMC ASSET. See also "dataset" on page 178.

script

Detailed instructions that have been set up by an administrator to prompt users with questions that can assist in resolving or assigning an incident.

service catalog

A list of IT services, default levels, and options.

Service Desk Analyst

Service Desk Analysts are usually first-line support staff. A service desk analyst's responsibilities include: providing an interface between the service owner organization and its

customers; obtaining accurate and complete information from the user when creating the incident request, and doing so efficiently and accurately; resolving as many of their registered incident requests as possible within the limitations of their access rights and their time constraints; ensuring that the incident requests that they have registered, but which they are unable to resolve, are assigned to the most appropriate group for resolution; and validating incident request resolutions with their users. See also "Service owner" on page 190.

service level agreement (SLA)

An agreement between a service provider and its customers or lines of business that formally documents the needs of the customer and makes sure the correct level of service is received from the service provider.

service level management (SLM)

As a concept, the continuous and proactive process of defining, agreeing, monitoring, reporting, and reviewing the performance of IT services to make sure that adequate levels of service are delivered in alignment with business needs and at acceptable cost.

service manager

A manager who uses BMC Remedy Asset Management to create service objects used for interpreting business problems (for example, cost of unavailability of services to a business area).

Service owner

Service owners create and assign incident requests. They also decide whether an escalated incident needs to be resolved by implementing an emergency change, by recovering the affected service at its continuity site, or by continuing the resolution of the incident within the incident management process.

service request

A request for service to the IT organization. Service requests can be requests for change or requests to resolve incidents that impact the user.

Service Request console

See "Requester console" on page 188.

service target

The individual level of service to achieve. A service target includes terms and conditions, goals, costs, and milestones. Examples of service target goals include incident resolution time of 30 minutes, application response time of 4 seconds, and an application being in a state of "OK." See also "availability service target" on page 173 and "request-based service target" on page 188.

single-tenancy

A feature that allows selection of a default company for company fields in BMC Remedy ITSM. Single-tenancy mode is required to give unknown users access to the BMC Remedy ITSM Requester console. See also "multi-tenancy" on page 183.

SLI

See "software library item (SLI)" on page 191.

SLM

See "service level management (SLM)" on page 190.

software asset management

Software asset management is a core component of an overall asset management policy. ITIL in the *Software Asset Management Book* defines software asset management as "all of the infrastructure and processes necessary for the effective management, control and protection of the software assets within an organization, throughout all stages of their lifecycle."

Software Asset Management console

Designed for software asset managers, this console provides views of software license compliance. From this console, the software asset manager can manager software license certificates and can manage jobs that automatically attach CIs to software license certificates.

software asset manager

Software asset managers are responsible for optimizing software assets and for managing compliance with software license contracts. They also evaluate usage of software licenses to make sure that the organization is not over-purchasing licenses.

software library item (SLI)

The physical storage locations of the master copy of a software application and its versions.

software license certificate

Indicates the right to deploy software in your environment.

software license compliance

Keeping track of what software your company has and that it has the legal right to use it.

software lifecycle

The software lifecycle comprises stages for negotiation, procurement, deployment, maintenance, renewal, and end of life.

solution database

A repository that stores reusable solutions to customer product problems in an easy-to-retrieve format.

solution entry

A reusable solution to a customer product problem. This is stored in the solution database.

Specialist

Specialists are usually second-line and third-line support staff. They are considered subject matter experts. Their main responsibility is to provide an accurate analysis and a diagnosis of their assigned incident requests to restore service to the affected users. A specialist's other responsibilities include: resolving incident requests; updating incident requests with relevant information and status changes; escalating incident requests, for which resolutions can be implemented only through the change management process.

split cost center

A cost center that enables a department to split its costs with other departments. For example, a project management group might split its costs with an engineering department and a sales department. The project management department would be a split cost center, and the engineering department and sales department would be target cost centers.

straight-line depreciation

A method of calculating depreciation in which CIs depreciate at a constant value per year. The annual depreciation is calculated by subtracting the salvage value of the CI from the purchase price and then dividing this number by the estimated useful life of the CI.

submitter

A person who reports a problem, makes a request, or enters information into a database. See also "change request" on page 175.

submitter group

One of several special access control groups that the BMC Remedy AR System provides. Users automatically belong to this implicit group for requests they have submitted. See also "assignee " on page 172.

sum-of-the-year's digits depreciation

A method of calculating depreciation in which CIs lose more of their value early in their lifetime. This method of calculating depreciation of a CI assumes higher depreciation charges and greater tax benefits in the early years of a CI's life.

Т

task

A unit of work that needs to be completed as a step in implementing a change request, an incident request, or a problem investigation. In the BMC Remedy Incident Management and BMC Remedy Change Management applications, you can also group a number of activities for requests with a number of actions that need to be completed before the request can be resolved. Your administrator creates task templates and task group templates that you can reuse for the same types of requests. Tasks can be manual or automatic.

task management system (TMS)

A module that is used to create task templates and task group templates. Besides the ability to set up predecessor-successor relationships, TMS supports branching and multiple task paths as well as the data exchange between operations.

TCO

See "total cost of ownership (TCO)" on page 194.

template

- A set of predefined criteria or settings that can be used by many agreements or service targets. See also "service level agreement (SLA)" on page 190.
- A form set up by an administrator that a user can select to complete an incident ticket or a change request with information consistent with the user's support group and the type of incident or change request.

terms and conditions

The terms and conditions of a contract. For service level management, the conditions that specify whether a service target should take effect. For example, the terms and conditions could specify that the service target applies only to incidents in which the priority is urgent and the service is email. Or the service target applies only to a specific set of KPIs. See also "service target" on page 190.

time-based service target

A service target that measures the time taken, for example, to resolve an incident from the time the incident was reported to the time it was resolved. Any time that falls within the "Exclude when" qualification is ignored and not measured.

TMS

See "task management system (TMS)" on page 193.

topology

The pattern of links connecting pairs of nodes of a network.

total cost of ownership (TCO)

A method of calculating all expenses associated with a CI over its lifetime. The calculation considers depreciation, maintenance, staff costs, accommodation, and planned renewal.

U

useful life

The number of years that a depreciable CI is expected to be in use.

W

wildcard

A character that users can type to represent other characters in a search. For example, in search statements in character fields, users can specify wildcards to match single characters, strings, or characters within a range or set.

work info

A record describing work performed.

workaround

A temporary resolution to an incident, problem, or known error.

workflow

The automated set of business processes used to run a company.

In BMC Remedy AR System, workflow also refers to active links, filters, and escalations.



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