



SERENA[®] **RELEASE MANAGER 2.0**

User's Guide

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Welcome to Serena Release Manager

Thank you for choosing Serena Release Manager, the orchestrated solution for application release management that enables you to plan, manage, and automate the deployment of applications into test, pre-production, and production environments with one-click deploy, start-to-finish traceability, and end-to-end visibility.

Audience and Scope This document is intended for personnel who participate in the processes of managing releases using Serena Release Manager.

Before You Begin See the Readme for the latest updates and corrections for this document.

Guide to Serena Release Manager Documentation

The Serena Release Manager documentation set includes the following documents and tutorials.

Document or Tutorial	Description
<i>Serena Release Manager User's Guide</i>	Describes how to use Serena Release Manager to manage application releases. (PDF document)
<i>Serena Release Manager Installation and Configuration Guide</i>	Describes how to install and configure the Serena Release Manager suite of products. (PDF document)
<i>Getting Started with Serena Release Manager</i>	A web-based tutorial that shows you how to get started with Serena Release Manager.
<i>Serena Release Manager Web Services Reference</i>	Provides a reference for the Serena Release Manager Web service syntax. (HTML)

Accessing the Documentation

You can access all documentation and tutorials for the current release of the Serena Release Manager suite through the Serena Release Manager Help system.

When you click the **Help** link in Serena Release Control, the documentation center appears. You can search, use the index, and view the glossary for information on installing, configuring, and using the product. From the Help you can also access the full set of documentation PDFs for the Serena Release Manager suite.

To download documentation and tutorials for current or prior releases of the Serena Release Manager suite, see the Serena Customer Support website [My Downloads page](#).

Chapter 1

Serena Release Manager Concepts

Find out the benefits of using Serena Release Manager to plan, control, and automate the deployment of your releases. Gain an understanding of how Serena Release Manager works, including key concepts and terminology.

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What is Release Management?

Release management is: "The definition, support, and enforcement of processes for preparing software for deployment into production". (Forrester Research, Inc.)

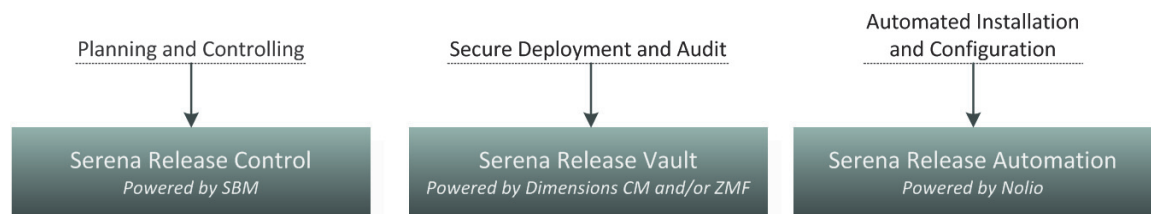
Release management manages the flow of change into production. It is the handoff between development, quality assurance, and production operation teams.

The goal of release management is to deploy application changes into production with high quality and without disrupting the business. But this process is often performed manually and is inefficiently connected to the rest of the application lifecycle, leaving a critical gap between application development and operations as well as creating a backlog of changes that must be made.

Control, Secure, and Automate Your Releases

Serena Release Manager is an integrated suite that helps you with your release management by enabling you to control, secure, and automate your processes.

Serena Release Manager



- **Serena Release Control**, powered by Serena Business Manager, helps you plan and control your application release processes across your enterprise, from definition to deployment.
- **Serena Release Vault**, powered by Dimensions CM for distributed systems and ChangeMan ZMF for IBM z/OS systems, ensures a secure and auditable path to production.
 - Secures source for multiple releases
 - Prevents unauthorized changes
 - Enables full traceability and audit trail
- **Serena Release Automation**, powered by Nolio, automates application installation and configuration tasks.
 - Handles a high volume of tasks
 - Cuts deployment time and cost
 - Reduces deployment errors
 - Handles the complexity of multiple release destinations and configurations

Serena Release Manager Terminology and Relationships

Before you use Serena Release Manager, you should know what the included objects are and how they are related as follows:

- [Primary Object Hierarchy](#)
- [How Integrating Objects Relate to the Hierarchy](#)
- [Process Support Objects](#)
- [Deployment Relationships](#)
- [Putting It All Together](#)

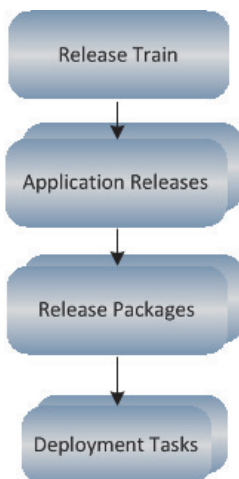


NOTE Terms used throughout this documentation may have slightly different meanings depending on the context. For example, the terms **project**, **environment**, and **application** have specific meanings in each of the products that participate in the Serena Release Manager suite. Please see "[Glossary](#)" on [page 77](#) for more complete contextual information.

Primary Object Hierarchy

The hierarchical relationships between the primary Serena Release Manager objects are shown in the following figure.

Before you use Serena Release Manager, you should know the basic terminology as well as how the primary elements are related.



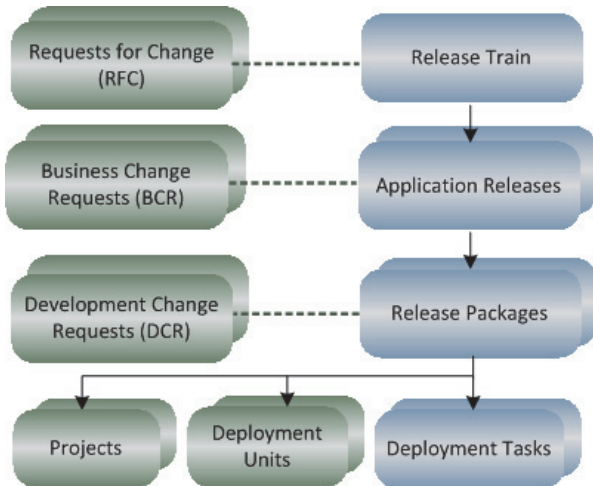
- **Release Trains** provide a published schedule of changes to production. One or more application releases are associated with each release train.
- **Application Releases** represent versions of applications or projects, where the application or project architecture is specified by components. One or more release packages are associated with each application release.
- **Release Packages** represent a portion of IT or service infrastructure normally built, deployed, tested, and released together. Release packages define the set of changes to be deployed and drive the deployment processes. One or more development change requests and deployment units are associated with each release package.
- **Deployment Tasks** are actions to be executed as part of the deployment process to deploy a Release Package into a specific environment. Deployment task types include manual, vault, and automation.

How Integrating Objects Relate to the Hierarchy

Serena Release Manager brings in information from integrating providers as needed to support your release control processes. Providers implemented in the default

implementation include SBM, Serena Service Manager, Dimensions CM, and ChangeMan ZMF. Custom providers can be added by Serena Services or others as documented in the *Serena Release Manager Installation and Configuration Guide*.

Objects that are populated from these integrating providers are as follows.

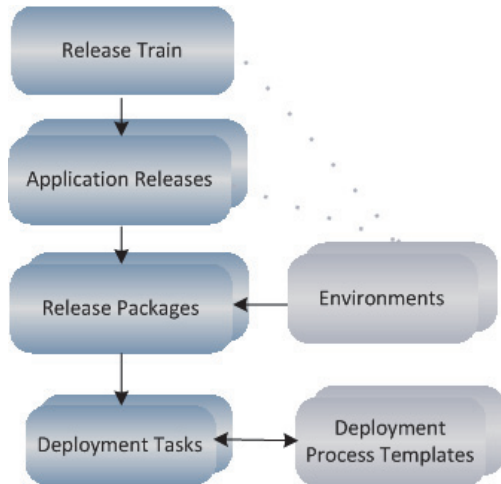


- **Requests for Change** represent operational changes that may affect multiple applications or implement system infrastructure changes within an enterprise. These are associated with release trains and are typically associated with tickets from service management systems such as Serena Service Manager.
- **Business Change Requests** represent customer or business unit change requests that affect specific application releases. They are associated with application releases and are typically associated with tickets from help desk or incident management systems such as Serena Service Manager or other SBM solutions.

- **Development Change Requests** represent delivered changes from the development process and affect specific release packages. They are associated with release packages and are typically associated with tickets from development management systems such as the SBM Change Manager solution or Dimensions CM request management.
- **Projects** are the organizing entity that Serena Release Manager implementation uses to get a collection of related objects and associate them with the primary Serena Release Manager objects. For example, Dimensions CM, SSM, and SBM projects, and ChangeMan ZMF applications (projects) are used to get information on the other integrating objects.
- **Deployment Units** represent a set of deployable components, such as Dimensions CM baselines with build outputs and ChangeMan ZMF change packages.

Process Support Objects

Serena Release Manager includes objects to support your release control processes. They are not part of the primary hierarchy, but are related to them in key ways.



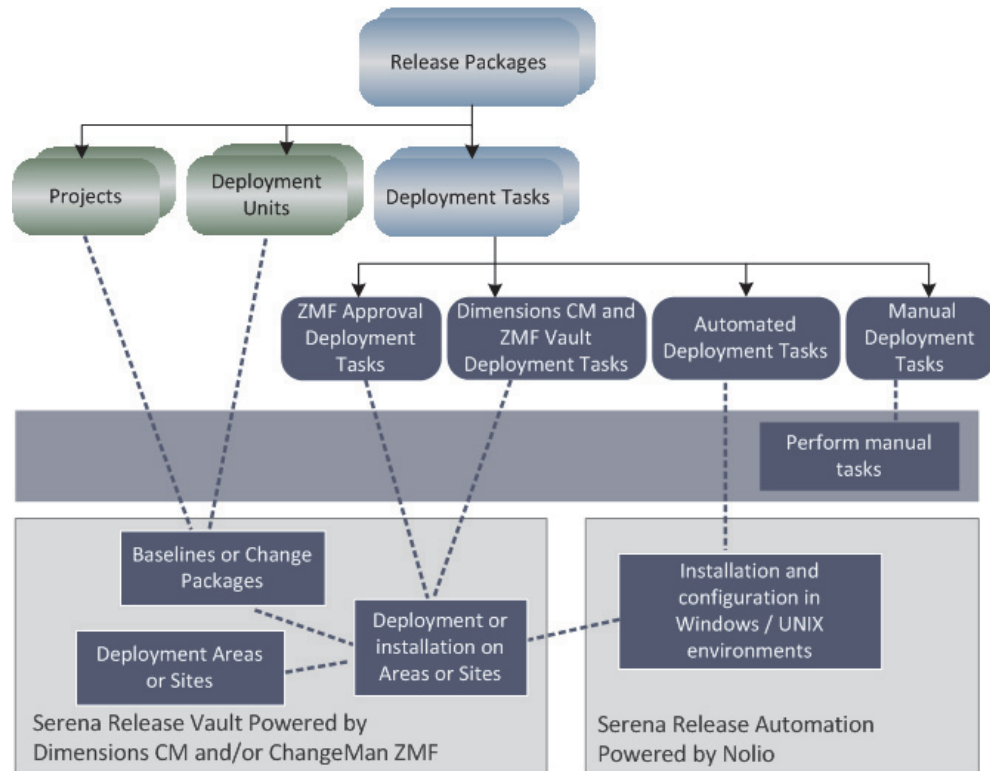
- **Deployment Process Templates** enable you to create and copy sets of deployment tasks for reuse in different stages of release packages in the same or different application releases.
- **Environments** enable you to determine which physical or logical computers or systems are available for a release package deployment.

Deployment Relationships

To secure your release deployment and provide an audit trail of changes, Serena Release Manager uses the release vault features of Dimensions CM and ChangeMan ZMF. To automate your release installation and configuration tasks, the default implementation of Serena Release Manager uses Serena Release Automation, powered by Nolio.

Release Packages point to deployment tasks that integrate with release vault and release automation features of integrating products. These deployment tasks automate deployment, installation, and configuration tasks as part of the deployment process.

The flow of information between release control, release vault, and release automation is shown in the following figure.



Serena Release Vault not only secures the code, it also copies the deployment units to the environments defined for the deployment units. For example, when using Dimensions CM as the Deployment Unit Provider, baselines are copied to the deployment areas defined for stages in the Global Stage Lifecycle.

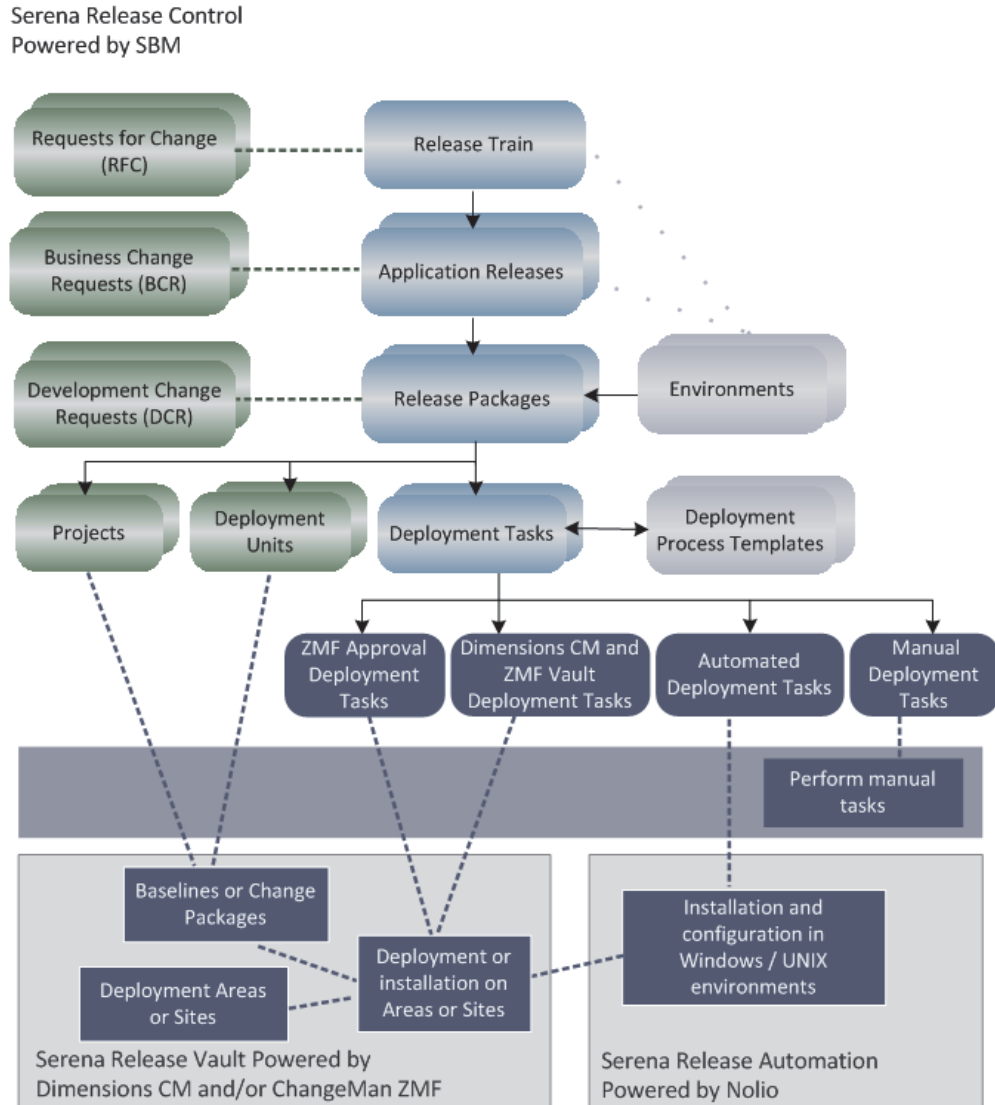
The **release types** and **release stages** define the purpose of the environments where the **deployment units**, such as Dimensions CM baselines and ChangeMan ZMF change packages, are to be copied. The **deployment tasks** define other actions to be done for the deployment, such as approval, vault tasks, and automation tasks. Deployment tasks point to **deployment areas** in Dimensions CM and **sites** in ChangeMan ZMF to specify the exact destinations for the deployment units.

Serena Release Automation does the installation and configuration tasks once the deployment units are deployed to a specified deployment area or site for a release stage. For example, for each stage, it might update the registries, update configuration files, and restart Web services according to the deployment task definitions. Later, once a release has reached the production deployment stage, Serena Release Automation could be used to distribute files from a production environment to a large number of designated servers, updating the registries, updating configuration files, and restarting Web services for all of these.

Putting It All Together

Together, the primary and related objects of Serena Release Manager implement a rich release management solution that is highly configurable and customizable to meet your organization's release management needs. The full default Serena Release Manager

hierarchy and related objects are shown in the following figure.



Who Does What in Serena Release Manager?

In the default implementation of Serena Release Manager, the defined roles are Release Manager and Release Engineer. The Release Manager role has primary ownership in the planning activities and has secondary ownership throughout the lifecycle. The Release Engineer role has primary ownership for the deployment tasks and deployment process templates.

As the release follows the states of the lifecycle, ownership of activities changes based on the roles responsible for various states of the release. The roles can be customized to fit your organization's needs, with ownership at progressive states given to roles that have the responsibility for those states' activities.

Example roles are described in the following table.

Role	Description
Application Owner	A possible role in Serena Release Manager that is the business owner of an application. An application owner is responsible for approving an application release during the planning stage and receives notifications of application release status.
Build Manager	A possible role in Serena Release Manager that performs builds for a release. This role may also be the Installation Manager in some organizations.
Change Manager	A possible role in Serena Release Manager that is responsible for the IT Operations for the systems where the pre-production and production release environments reside. A change manager approves deployment into pre-production and production environments.
Development Manager	A possible role in Serena Release Manager that is responsible for and approves development activities for a release. A development manager would typically be consulted during the release management process and provide approval on the content of a release package.
Installation Manager	A possible role in Serena Release Manager that ensures that the deployment, or installation, of a release is done correctly and completely. An installation manager is assigned manual deployment tasks in Serena Release Manager and is responsible for deployment of request packages into environments. This role may also be the Build Manager in some organizations.
QA Manager	A possible role in Serena Release Manager that is responsible for and approves testing activities for a release.
Release Engineer	The default role in Serena Release Manager that is responsible for the automating the release deployment and resolving any deployment failures. For example, a release engineer may create deployment tasks for release packages. This role may be the Installation Manager or Build Manager in some organizations.
Release Manager	The default role in Serena Release Manager that is responsible for releases within a particular organization. A release manager manages and monitors releases, plans releases in collaboration with development managers, and responds to successes, failures, and other statuses.



NOTE Roles in the default version of Serena Release Manager are Release Manager and Release Engineer. Roles for your organization may be customized and may include different roles than those described here.

Progressing Releases Through Their Lifecycles

Each major aspect of a release, from the Release Train level to the Deployment Task level, has a lifecycle associated with it. The default release process lifecycles in Serena Release Manager are based on typical release workflows.

The states in the lifecycle guide the actions users take in Serena Release Manager as they work with release information. Your workflows will probably look different than the default implementation because most organizations customize the workflows in some way.

The Serena Release Control user interface leads you through the workflow, so you always know the state of the release objects and what actions are pending. To understand the processes underlying Serena Release Manager objects, see the following:

- ["How the Workflows Interrelate" on page 17](#)
- ["Example Release Workflows" on page 18](#)

How the Workflows Interrelate

Serena Release Manager is a hierarchical system, with Release Train as the highest level organizing entity, Application Release next, and so on. Release Packages can optionally participate in the hierarchy or exist standalone. Deployment Tasks are dependent on Release Packages.

The two main dependency relationships among the workflows are restrictions and automations.

Workflow Restrictions

Most of the default workflows allow editing and associating objects to other objects only when items are in the Development or Planning states. For example, you can associate application releases with a release train only when that release train is in the Planning state. You can associate release packages with an application release only when the application release is in the Planning state.

Workflows for Deployment Process Templates are standalone, although deployment process templates populate the deployment tasks for release packages and in that respect have a link to the workflows for both Deployment Tasks and Release Packages. Workflows for environments are completely standalone by default.

Workflow Automations

Many of the workflows are moved to completion states automatically when associated objects are complete. The automation is usually initiated at the lowest level of association and moves up the hierarchy as each level of release activities are completed. For example, after all deployment tasks for a release package reach completion, the release package is marked complete. After all release packages for an application release reach completion, the application release is marked complete. When all application releases for a release train reach completion, the release train is marked complete.

For more details about Serena Release Manager workflow relationships and dependencies, see the *Serena Release Manager Installation and Configuration Guide*, "Workflow Reference" appendix.

Example Release Workflows

The workflows that are implemented in the default version of Serena Release Manager are shown in context with the procedures to which they are related. A reference to each of the workflows is given in the following table.



NOTE The implementation of the workflows in SBM include automatic transitions and states. For simplification, the representation of the workflows in this document shows only those transitions (actions) and states that require user interaction.

For the full SBM workflows for the Serena Release Manager process apps, see the *Serena Release Manager Installation and Configuration Guide*, "Workflow Reference" appendix.

Release Entity	Workflow Reference
Release Train	See Chapter 3, "Actioning Release Trains Through the Workflow" on page 32.
Application Release	See Chapter 3, "Actioning Application Releases Through the Workflow" on page 36.
Release Package	See Chapter 5, "Actioning Release Packages Through the Workflow" on page 49.
Deployment Task	See Chapter 6, "Actioning Deployment Tasks Through the Workflow" on page 60.
Deployment Process Template	See Chapter 6, "Actioning Deployment Process Templates Through the Workflow" on page 68.
Environment	See Chapter 4, "Actioning Environments Through the Workflow" on page 42

Chapter 2

Getting Started with Serena Release Manager

Get started by familiarizing yourself with the user interface.

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Viewing Key Performance Indicators of Releases	21
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Logging In

You should have received a Serena Release Manager URL, username, and password from your Serena Release Manager administrator.

To log in to the Serena Release Manager web client:

- 1 Enter the Serena Release Manager environment URL you received from your administrator. It will look similar to the following:

```
http://rlmhost/tmtrack/tmtrack.dll?shell=rlm
```

The login dialog box appears.

- 2 Enter your username and password and then click Log In.

Upon successful login, your Serena Release Control dashboard appears.

If your login is not successful, please contact your administrator.

Navigating Serena Release Control

The Serena Release Control toolbar gives you access to the primary release control pages, including:

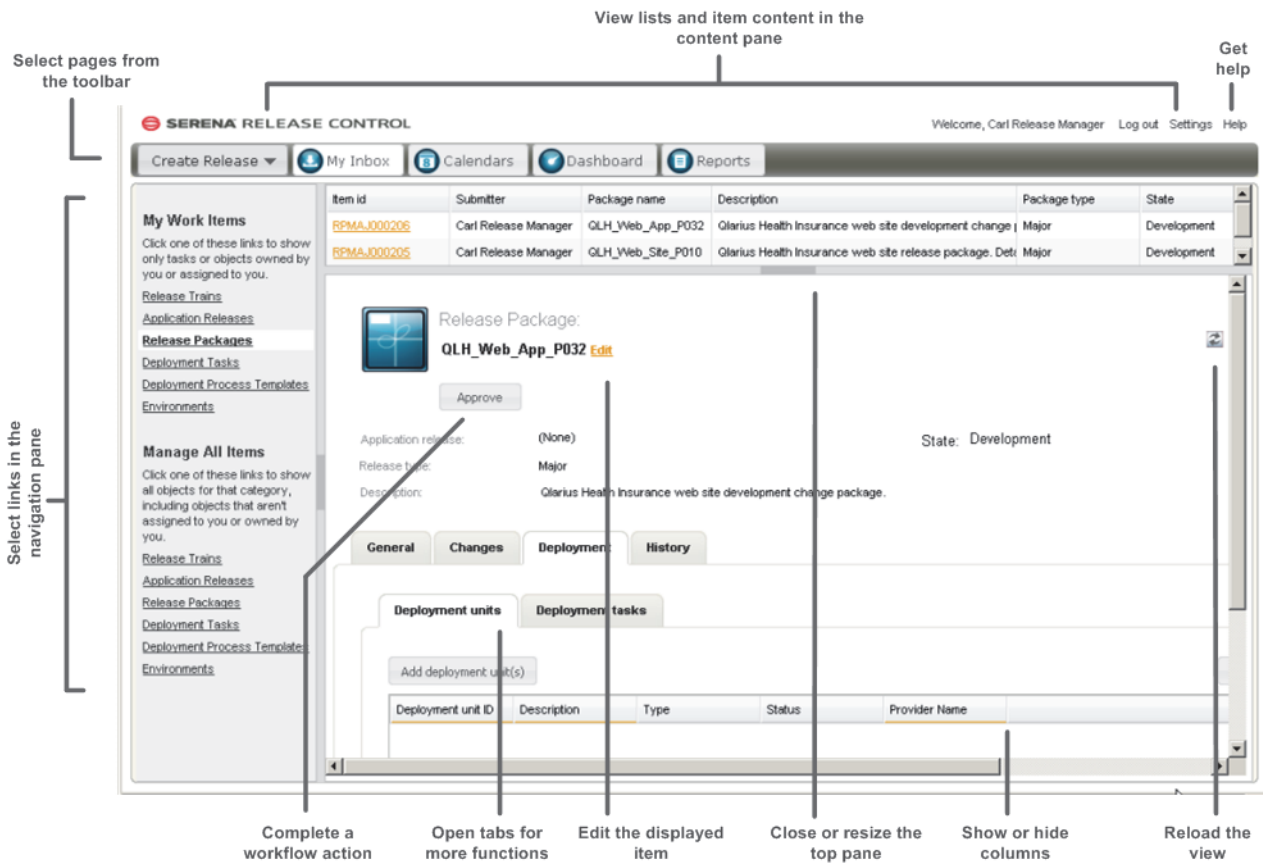
- **Create Release:** Where you create release trains, application releases, and independent release packages
- **My Inbox:** Where you view your release action items
- **Calendars:** Where you view and select the release trains in context of a Gantt-view schedule
- **Dashboard:** Where you view key performance indicators for your releases
- **Reports:** Where you view and add reports on your release management information

You will explore each of these pages as you continue with the product.

The Serena Release Control user interface is organized into pages, views, and dialog boxes.

Typical elements of pages are shown in the following figure.

Dual-pane View



Viewing Key Performance Indicators of Releases

The dashboard shows the key performance indicators for your releases. Serena Release Manager Administrators can select from available reports to display the information most important to release stakeholders in your organization.

Upon login, the dashboard is displayed by default. The report last selected for the dashboard is shown.

An example dashboard report is shown in the following figure.

SERENA RELEASE CONTROL Welcome, Carl Release Manager Log out Settings Help

Create Release ▾ My Inbox Calendars Dashboard Reports

Dashboard 01/19/2012 08:15:04 PM

Release train by type

Application releases by application and type

Deployment task I own

Now showing Deployment 1 - 1 of 1 Sorted by: Project (Hierarchy)

Deployment Project > Manual Task Project

Item ID	Task Name	Task Type	State
I000208	Checkpoint task for RM	Manual	Planned

Requery

package Assigned To Current User

Now showing Release Package 1 - 2 of 2 Sorted by: Project (Hierarchy), Item id

Release Package

Item id	Submitter	Package name	Description	Package type	State
RPMAJ000206	Carl Release Manager	GLH_VWeb_App_P032	Glarius Health Insurance web site development change package.	Major	Deve

Using My Inbox

As you manage and take action on your releases using Serena Release Control, items requiring your attention and those you are authorized to manage are listed on the **My Inbox** page.

You can do the following:

My Work Items: View and manage active work items owned by or assigned to you, such as:

- Release trains that you are planning, updating, or approving
- Application releases that you are planning, updating, or approving
- Release packages that you are developing, approving, or deploying
- Deployment tasks that you are developing, approving, noting as completed, or noting as failed
- Deployment process templates that you are developing, updating, or approving
- Environments that you are commissioning, setting online or offline, or decommissioning

Manage All Items: View and manage all active or inactive items for which you are authorized, such as:

- Release trains

- Application releases
- Release packages
- Deployment tasks
- Deployment process templates
- Environments

Viewing My Inbox Items

To view and take action on items, use the **My Inbox** page.

To view items in your inbox:

- 1 Navigate to the **My Inbox** page.
For items that are assigned to you, use the **My Work Items** selections.
For items that are not assigned to you, but for which you are authorized, use the **Manage All Items** selections.
- 2 Click a link in the navigation pane, such as **Deployment Tasks**.
A list of items for the category you have selected appear in the content pane.
- 3 Click an item ID in the list.
The view of the item is displayed in the lower section of the content pane.



TIPS

- To close the list in the content pane and view only the item details, move your pointer over the middle section of the divider line until you see the pop-up text **Close**, and then click that section of the line.
- To resize the view shown in the content pane window, move your pointer over anywhere on the divider line except the middle section until you see the pop-up text **Resize**, and then click and drag until the window is the size you want.

Getting Help

If you encounter errors in the product or the information you expect does not appear, your user ID may not be assigned the proper role or privileges, or the integrating system may not be communicating properly across the network. Check with your Serena Release Manager administrator or see the *Serena Release Manager Installation and Configuration Guide*, "Troubleshooting" chapter.

Chapter 3

Planning and Controlling Releases

Plan and control application releases with release trains and application releases.

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Publishing Release Trains	31
Actioning Release Trains Through the Workflow	32
Planning Application Releases	33
Publishing Application Releases	35
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Release Train Hierarchy Overview

Release trains provide a published schedule of changes to production. One or more application releases are associated with each release train.

Release trains have types of major, minor, and emergency. The release types are used to at this level to drive release policies on what types of changes may be delivered.

Release trains enable you to most effectively address common release control challenges.

- **Scheduling Simultaneous Application Releases:** You can schedule multiple application releases for optimal time and resource utilization using release trains.
- **Designating and Adjusting Schedules:** You can designate and adjust the schedules of application releases through their association to release trains.
- **Designating and Adjusting the Scope of Change:** You can designate and adjust the scope of an application release by adding release packages to and removing them from application releases.

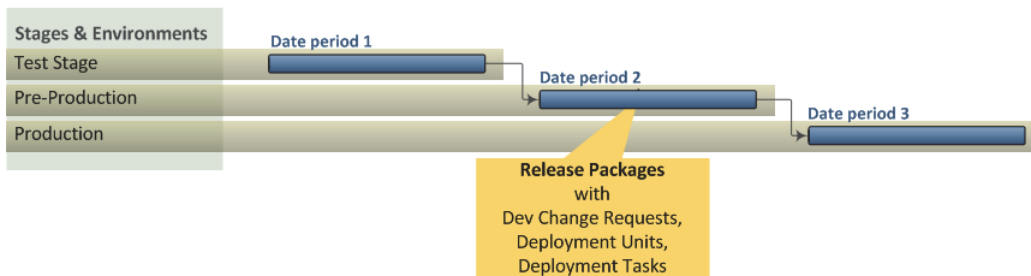
Direct associations with release trains include the following:

- **Requests for Change** represent operational changes that may affect multiple applications or implement system infrastructure changes within an enterprise. These are typically associated with tickets from service management systems such as Serena Service Manager.
- **Application Releases** represent versions of applications or projects, where the application or project architecture is specified by components. One or more release packages are associated with each application release.

The following diagram shows how release packages move through the scheduled stages in two release trains, one of minor release type and the other of major release type.

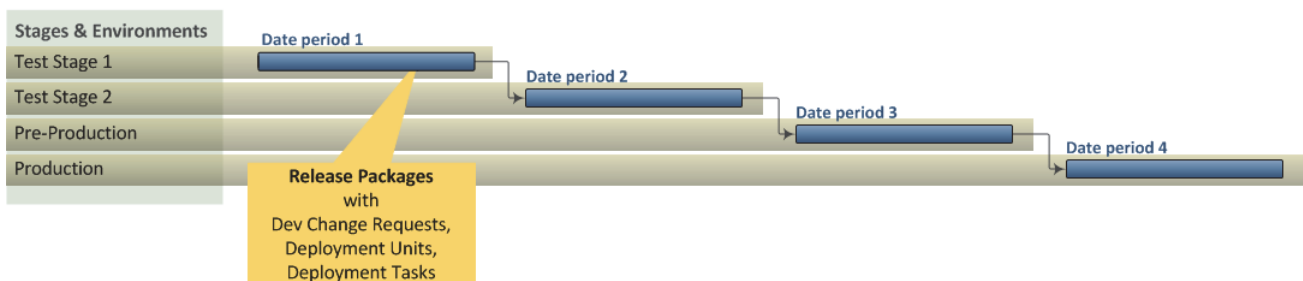
Release Train 1 (Minor) with Requests for Change

Application Releases with Business Change Requests



Release Train 2 (Major) with Requests for Change

Application Releases with Business Change Requests



Planning Release Trains

Release train planning activities include the following:

- "Creating Release Trains" on page 27
- "Viewing and Updating Release Trains" on page 28
- "Adding Release Train Associations" on page 29
- "Copying Release Trains" on page 30
- "Closing Release Trains" on page 31

For all user actions in the default release train workflow, see "Actioning Release Trains Through the Workflow" on page 32.

Creating Release Trains

You can create a release train to begin your release planning and scheduling.

To create a release train:

- 1 Click **Create Release** in the toolbar menu.
The **Create Release** page appears.

2 Select **Release Train**.

The **Create Release Train** form appears.

3 Fill out the dialog box form.

For example, you would fill out the default form as follows:

- Name the release train.
- Designate a release manager for the release train.
- Designate the type of release.
- Set to and from dates for the release train stages.

4 Click **OK**.



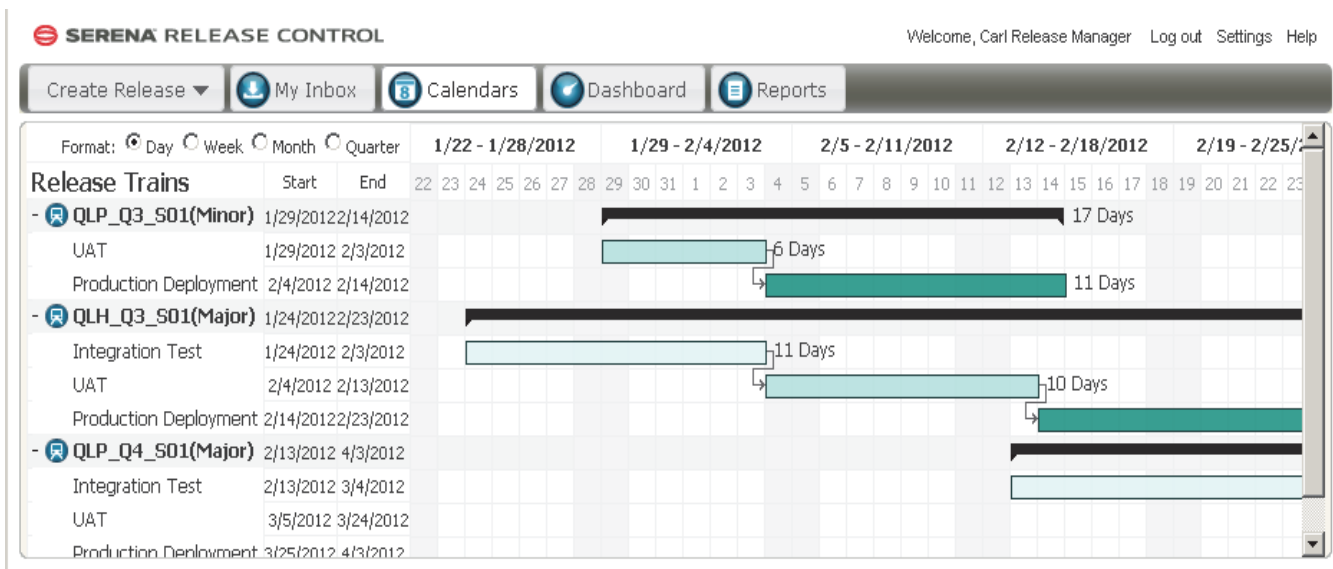
TIP A quick way to set to or from date is to type **Plus n** in the field, where **n** is number of days. This sets the date to the specified number of days from today's date.

Viewing and Updating Release Trains

You can view and select from lists of release trains from **My Inbox**, **Calendars**, and **Reports** pages and from child application releases.

Selecting Release Trains on a Release Calendar

Release train scheduling information is displayed in the Serena Release Control user interface through a visual Gantt-style calendar as shown in the following figure.



The release calendar shows all the release trains that have been created. The display of each release train on the calendar shows the stage schedule for the release train.

You can do the following:

- View a list of release trains with their stage schedules.
- Select a release train to view and work with that particular release train.

- Scroll right in the calendar to see release trains scheduled in the future.
- See the date range for a stage in hover text by moving your cursor over a stage bar in the chart.
- Select time periods of Day, Week, Month, or Quarter by clicking the selections above the calendar.

Selecting Release Trains from Other Pages and Views

From any pages or views that list release trains, you can select a release train to invoke the **Release Train** view. From the **Release Train** view, you can view and edit the release train details and associations.

From the **Release Train** dialog box you can update the dates for stages specified within the release train. You can update schedules only if the release train is in a state in which editing of the schedule is allowed, such as **Planning**.

Adding Release Train Associations

From **My Inbox** and any other pages or views listing release trains, you can select a release train to invoke the **Release Train** view. From this view, you can view and edit the release train details and associations, including the following:

- ["Associating RFCs with Release Trains" on page 29](#)
- ["Associating Application Releases with Release Trains" on page 30](#)

Associating RFCs with Release Trains

When planning release trains, you can associate requests for change with them. RFCs represent operational changes that may affect multiple applications or implement system infrastructure changes within an enterprise. These are typically associated with tickets from service management systems such as Serena Service Manager.

Serena Release Manager identifies and lists the requests for change based on the RFC provider information configured for your system. See the *Serena Release Manager Installation and Configuration Guide* for details.

Adding RFCs to Release Trains

You can add a request for change only when the release train is in a state for which this action is implemented. In the default workflow, a request for change can be added to the release train only when the release train is in Planning.

To associate requests for change with a release train:

- 1 View a release train and select the **Requests For Change** tab.
- 2 Click **Add requests for change**.
- 3 Select one or more requests for change to add to the release train.
- 4 Click **OK**.

Removing RFCs from Release Trains

You can remove a request for change only when the release train is in a state for which this action is implemented. In the default workflow, a request for change can be removed from the release train only when the release train is in Planning.

To remove requests for change from a release train:

- 1 View a release train and select the **Requests For Change** tab.
- 2 Select one or more requests for change.
- 3 Click **Remove requests for change**.
- 4 Click **OK**.

Associating Application Releases with Release Trains

You can add application releases to and remove them from release trains from the release train view.

In the default implementation of Serena Release Manager, associations to release trains can be done only when the release train is in the **Planning** state.

To associate application releases with a release train:

- 1 Navigate to a release train. For example, click **Calendar** in the toolbar menu and select a release train from the **Calendar** page.
- 2 Click **Add application releases**.
- 3 Select one or more application releases to add to the release train.
- 4 Click **OK**.

Copying Release Trains

In many organizations, release trains with a similar makeup of application releases are initiated at regular intervals over time. To make it easier to create items for these in Serena Release Control, you can make a copy of release train information.


You can copy part or all of the release train hierarchy as follows:

- Release train information only
 - Release train and application release information
 - Release train, application release, and release package information
- This excludes development change requests, deployment units, and deployment tasks.

To copy a release train:

- 1 Navigate to a release train. For example, click **Calendars** in the toolbar menu and select a release train from the **Calendars** page.
- 2 Click **Make a copy**.

The copy form appears, pre-filled with information from the source release train.

- 3 Select one of the **Copy Options**, such as:
 - Copy only Release Train
 - Copy all Application Releases
 - Copy all Release Packages
- 4 Change the information in the form as needed for the new release train.
For example, you would usually change identifying information and schedule start and end dates.
- 5 Click **OK**.
The new release train view appears. The initial state is shown as **Copying** and will automatically move to **Planning** when all requested levels of the hierarchy are copied to the new release train.
- 6 Click the **Reload Item** button () to see the updated state.



NOTE The copy processing is done in the background, or asynchronous mode, to allow you to continue working in Serena Release Control while the system is copying a release train hierarchy with many associations.

Closing Release Trains

Release trains are closed when they reach the **Completed** state in their lifecycle. If for any reason the release trains are not successfully completed, you can move them to the **Release Failed** state through the **Release Fail** action. You can include release failure details to document the reason the release failed.

Publishing Release Trains

You can require reviews of release trains before they are published to ensure that the content and schedule is agreed upon and controlled.

For example, when release managers and other stakeholders have finished planning a release train, a Release Manager may send it for review and require formal publishing. Once the release train is in review or published, no changes can be made to it unless it is returned to the **Planning** state.

In the default workflow, you may publish a release train after the schedule is agreed upon and all application release associations are made to support the scope and objectives of the release train. This a way to publish the official plan and control any schedule or content changes.

To publish a release train:

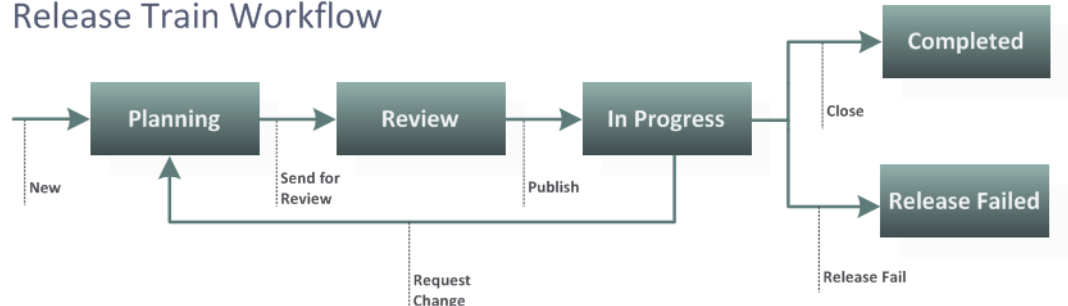
- 1 Navigate to a release train that is in the **Planning** state.
- 2 Click **Publish**.

The release package enters the **In Progress** state and the **Close** and **Release Fail** actions are available to owners, such as release managers.

Actioning Release Trains Through the Workflow

As you work with release trains, you are presented with buttons on the user interface for workflow actions that are available to you. A simplified representation of the default workflow for a release train is shown in the following figure.

Release Train Workflow



The actions that appear here are:

- New (create)
- Send for Review
- Publish
- Close
- Release Fail

For example, after you create a new release train, the release train goes into the **Planning** state, and the **Release Train** dialog box shows the next action, **Send for Review**, as shown in the following figure.

Release Train:
 QLP_Q4_S01 [Edit](#) Send for Review

Copy

Release type: Major State: Planning

Release manager: Carl Release Manager

Code name:

Description: Qlarius Payroll Quarter 4 releases that provide new features and functionality.

Application releases | Planned RFC's | Schedule | History

Add application release(s) Create application release Remove app

When you click **Send for Review**, the release train goes into the **Review** state. A user with the role responsible for review must then publish the release train so that it progresses to the **In Progress** state. The release train remains in the **In Progress** state until it is either reverted back to the planning state for additional changes or progressed to one of the completion states.

The progression to **Passed Testing**, **Failed Testing**, **Deployed**, or **Failed Deployment** is typically done automatically based on the results of deployment tasks associated with a release package.

For information on how the workflows in Serena Release Manager work together, see [Chapter 1, "Progressing Releases Through Their Lifecycles" on page 17.](#)

Planning Application Releases

Application releases represent a version of an application or project, where the application or project architecture is specified by components. An application release may be associated with a single release train and may have one or more release packages associated with it.

Direct associations with application releases include the following:

- **Release Packages** represent a portion of IT or service infrastructure normally built, deployed, tested, and released together. Release packages define the set of changes to be deployed and drive the deployment processes. One or more development change requests and deployment units are associated with each release package.
- **Business Change Requests** represent customer or business unit change requests that affect specific application releases. They are typically associated with tickets from help desk or incident management systems such as Serena Service Manager or other SBM solutions.

Application Release planning activities include the following:

- ["Creating Application Releases" on page 33](#)
- ["Viewing and Updating Application Releases" on page 34](#)
- ["Adding Application Release Associations" on page 34](#)

For all user actions in the default release train workflow, see ["Actioning Application Releases Through the Workflow" on page 36.](#)

Creating Application Releases

You can create an application release for the application you are updating.

To create an application release:

- 1 Click **Create Release** in the toolbar menu.

The **Create Release** page appears.

- 2 Select **Application Release**.

The **Create Application Release** form appears.

- 3 Fill out the dialog box form.

For example, you would fill out the default form as follows:

- Name an application release.
- Designate a version for the application release.
- Designate the status of the release.
- Describe the application release.

- Associate the release with the application to which it belongs.
- 4 Click **OK**.

Viewing and Updating Application Releases

From release trains and any other pages or views that list application releases, you can select an application release to invoke the **Application Release** view. From this view, you can view and edit the application release details and associations.

Adding Application Release Associations

From **My Inbox** and any other pages or views listing application releases, you can select an application release to invoke the **Application Release** view. From this view, you can view and edit the application release details and associations, including the following:

- ["Associating BCRs with Application Releases" on page 34](#)
- ["Associating Release Packages with Application Releases" on page 35](#)

Associating BCRs with Application Releases

When planning application releases, you can associate business change requests with them, which represent customer or business unit change requests that affect specific application releases. They are typically associated with tickets from help desk or incident management systems such as Serena Service Manager or other SBM solutions.

Serena Release Manager identifies and lists the business change requests based on the BCR provider information configured for your system. See the *Serena Release Manager Installation and Configuration Guide* for details.

Adding BCRs to Application Releases

You can add a business change request only when the application release is in a state for which this action is implemented. In the default workflow, a business change request can be added to the application release only when the application release is in Planning.

To associate business change requests with an application release:

- 1 View an application release and select the **Business Change Requests** tab.
- 2 Click **Add business change requests**.
- 3 Select one or more business change requests to add to the application release.
- 4 Click **OK**.

Removing BCRs from Application Releases

You can remove a business change request only when the application release is in a state for which this action is implemented. In the default workflow, a business change request can be removed from the application release only when the application release is in Planning.

To remove business change requests from an application release:

- 1 View an application release and select the **Business Change Requests** tab.
- 2 Select one or more business change requests.
- 3 Click **Remove business change requests**.
- 4 Click **OK**.

Associating Release Packages with Application Releases

You can add release packages to and remove them from application releases from the application release view.

In the default implementation of Serena Release Manager, associations to application releases can be done only when the application release is in the **Planning** state.

You can add release packages to application releases, making them dependent release packages. You can add multiple release packages to an application release, but a particular release package can be associated with only one release of a particular application.

To associate a release package with an application release:

- 1 View an application release.
- 2 Click **Add Release Package**.
- 3 Select a release package to add to the application release.
- 4 Click **OK**.

Publishing Application Releases

You can require reviews of application releases before they are published to ensure that the content is agreed upon and controlled.

For example, when release managers and other stakeholders have finished planning an application release, a Release Manager may send it for review and require formal publishing. Once the application release is in review or published, no changes can be made to its associations.

In the default workflow, you may publish an application release after all release package associations are made to support the scope and objectives of the application release. This is a way to publish the official plan and control any content changes.

To publish an application release:

- 1 Navigate to an application release that is in the **Planning** state.
- 2 Click **Publish**.

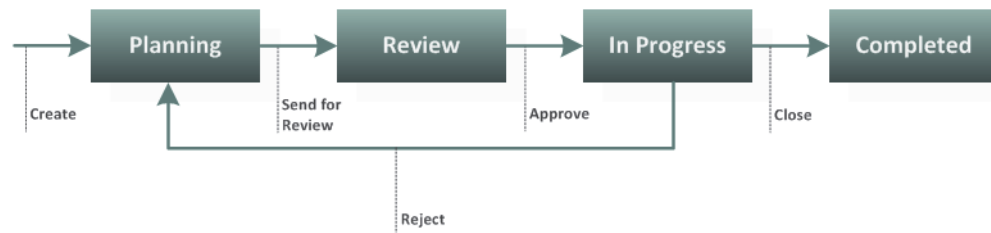
The application release enters the **In Progress** state and the **Close** action is available to owners, such as release managers.

See the simplified default workflow in "Actioning Application Releases Through the Workflow" on page 36.

Actioning Application Releases Through the Workflow

As you work with application releases, you are presented with buttons on the user interface for workflow actions that are available to you. A simplified representation of the default workflow for an application release is shown in the following figure.


Application Release Workflow



The actions that appear here are:


- Create
- Send for Review
- Approve
- Reject
- Close

For example, after you send an application release for review, the application release goes into the **Review** state, and the **Application Release** dialog box shows the next actions to choose from, **Reject** or **Approve**, as shown in the following figure.



Application Release:

QLH_Payroll_Staff [Edit](#)

Release train:	(None)	Code name:	Carmel
Application:	QLH_Payroll_Staff_App 	Version:	3.2.2
Release manager:	Carl Release Manager	Status:	(None)
Description:	Glarius Health Insurance Payroll Staff application version release that provides the following new features and functionality:		

Release packages

Business change requests

History

Item id	Package name	Submit date	State	Description

The application release remains in the **In Progress** state until it is either reverted back to the planning state for additional changes or progressed to one of the completion states.

The progression to **Completed** is typically done automatically when all of the release packages associated with the application release are complete.

For information on how the workflows in Serena Release Manager work together, see [Chapter 1, "Progressing Releases Through Their Lifecycles" on page 17.](#)

Chapter 4

Managing Environments

Configure environments to manage the servers associated with your release train and release package stages.

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Environment Overview

You can include a list of environments in Serena Release Manager so that release managers and release engineers can manage the availability of servers or areas on servers as you work with release trains and release packages.

Environments enable you to add information about your servers. This can be one or more physical or logical computers or systems to which a release package may be deployed.

By using environments, you can get information about which servers are available to use for your release package stages.

You can do the following:

- Create an environment and associate it with a release stage.
- Modify an environment.
- Commission and decommission an environment.
- Set an environment online or offline.
- Check availability of environments

For information on how to check the availability of environments for your release package stages, see [Chapter 8, "Checking Availability of Environments" on page 76](#).



NOTE Documentation on populating the environment server selection field with your organization's servers is in the *Serena Release Manager Installation and Configuration Guide*.

Commissioning Environments

You should create, or commission, environments as needed to support your release stages. To create an environment you submit it, and it goes into the **Commissioned** state.

To create an environment:

- 1** Navigate to the **Environments** page. For example, from **My Inbox | Manage All Items**, click **Environments**.
- 2** Click **Create environment**.
The **Create Environment** dialog box appears.
- 3** Fill out the **Create Environment** form.
For example:
 - a** Enter **Name**.
 - b** Optionally enter a description.
 - c** Select the owner, such as Release Manager, for the environment.
 - d** Select the stage for which the environment may be used.

- e Select one or more servers that the environment represents.
- 4 Click **OK**.
The environment is saved.

Editing an Environment

You can edit an environment only when it is in the **Commissioned** state. You can change any of the environment fields during editing except stage. Editing the environment has no affect on any servers that it represents.

To edit an environment:

- 1 Navigate to an environment.
- 2 Click the edit link beside the view name.
- 3 Modify fields on the form as needed.
- 4 Click **OK**.

Setting Environments Online or Offline

In the default workflow, you may set an environment online to indicate that it is available to be used for release package stages, or you may set it offline to indicate that it is not available to be used for release package stages.

See the simplified default workflow in ["Actioning Environments Through the Workflow"](#) on page 42.

Decommissioning Environments

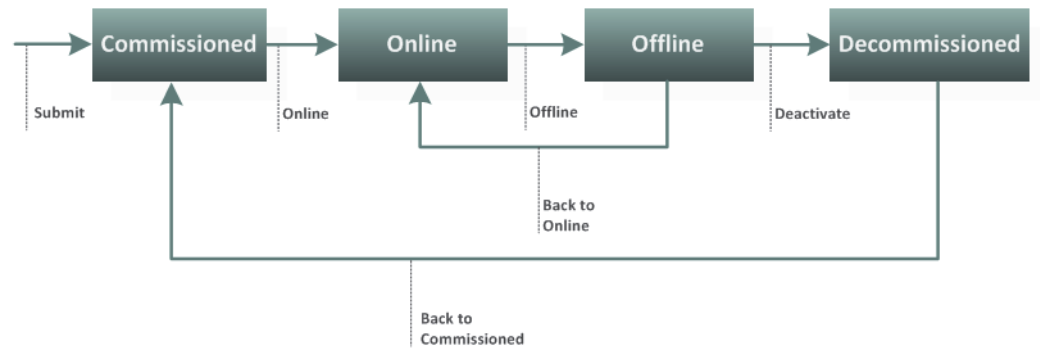
After the environment is no longer needed, you may decide to decommission it. This indicates that the environment is no longer available to be used.

See the simplified default workflow in [Actioning Environments Through the Workflow](#).

Actioning Environments Through the Workflow

As you work with environments, you are presented with buttons on the user interface for workflow actions that are available to you. The default workflow for an environment is shown in the following figure.

Environment Workflow



The actions that appear here are:

- Submit
- Online
- Offline
- Deactivate

For example, after you submit, or create, an environment, the environment goes into the **Commissioned** state, and the environment dialog box shows the next action, **Online**.

When the environment is in the **Online** state, the environment is considered available for use. When you click **Offline**, the environment is considered unavailable for use.

From the **Offline** state you can either click **Back to Online** to return it to online status or click **Deactivate** to decommission it and remove it from the list of available environments.

For information on how the workflows in Serena Release Manager work together, see [Chapter 1, "Progressing Releases Through Their Lifecycles"](#) on page 17.

Chapter 5

Packaging Release Changes

Package release changes using release packages.

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Release Package Overview

Release packages are portions of IT or Service Infrastructure normally built, deployed, tested, and released together. Release packages define the set of changes to be deployed and drive the deployment processes.

One or more development change requests and deployment units are associated with each release package. Deployment tasks are associated with release packages and are executed as part of the release package workflow.

Release packages can be dependent or independent. Dependent release packages are associated with application releases and are part of the release train hierarchy. Independent release packages are standalone objects.

Dependent release packages are associated with application releases. This ensures that the changes included and deployed as part of the release packages have followed the full workflow and approvals needed for the release train and application release of which they are a part.

Using dependent release packages ensures that complete release scheduling and planning processes are followed before deployment to any environments.

Independent release packages enable you to perform hotfix and emergency releases outside of the scope of a release train and application releases.

For example, you may need to do a data fix to a field that had an incorrect date format applied during an upgrade, and rather than initiate a formal release train and application release for this, you could expedite the change by creating an independent release package and sending it through the simpler workflow to deployment.

Independent release packages enable you to deploy urgent or low-impact changes into production quickly while still leveraging the visibility, automated deployment, and audit trail capabilities of Serena Release Manager.



TIP For independent release packages, consider including schedule information at the release package level since these are not associated with release trains.

Direct associations with release packages include the following:

- **Development Change Requests** represent delivered changes from the development process and are typically associated with tickets from development management systems. Examples include SBM incidents or issues, Dimensions CM requests, and Rally defects.
- **Deployment Units** represent a set of deployable components. Examples include Dimensions CM baselines with build outputs, Serena Development Manager development packages, and ChangeMan ZMF change packages.
- **Deployment Tasks** are actions to be executed as part of the deployment process to deploy a release package into a specific environment. Deployment task types include manual, vault, and automation. Within these types are various sub-types.
- **Deployment Process Templates** enable you to create and copy sets of deployment tasks for reuse in different stages, release packages, and applications.

Other attributes that control release packages are as follows:

- **Release Types** are used to determine the stages release packages are deployed through. In the default implementation of Serena Release Manager, release types include major, minor, and emergency.
- **Release Stages** are the gates that the release goes through on its path into production. The default stages provided are integration test, user acceptance test (UAT), and production deployment. A stage may have one or more environments related to it. Releases may be deployed into an environment based on availability.

Developing Release Packages

Release package development activities include the following:

- ["Creating Release Packages" on page 45](#)
- ["Adding Release Package Associations" on page 46](#)

For all user actions in the default release train workflow, see ["Actioning Release Packages Through the Workflow" on page 49](#).

Creating Release Packages

You can create a release package by adding identifying details and associating change objects with it. You can enter the details and some of the associations during creation, then add the remaining associations by viewing the release package and selecting the desired options.

To create a release package:

- 1 From an application release or from the **Create Release** page, select the option to create a release package.

The **Create Release Package** form appears.

- 2 Fill out the dialog box form.

For example, you would fill out the default form as follows:

- Enter a name for the release package according to your organization's naming standards.
- Select the package type.
- Optionally enter a description.
- Designate a schedule for the release package stages.
- Designate the release manager, or owner, for the release package.
- Optionally designate a secondary owner.
- Select development change request projects for the release package.
- Select deployment unit projects for the release package.

- 3 Select one or more development change request projects. These are the projects from which development change requests can be associated with this release package, such as SBM projects for incidents or issues or Dimensions CM projects or streams.

- 4 Select one or more deployment unit projects. These are the projects or streams from which deployment units can be associated with this release package, such as Dimensions CM baselines.
- 5 Click **OK**.



IMPORTANT! You must select your projects for the release package associations, such as development change requests and deployment units, during the creation of the release package.

Adding Release Package Associations

From application releases and any other pages or views listing release packages, you can select a release package to invoke the **Release Package** view. From this view, you can view and edit the release package details and associations, including the following:

- ["Associating DCRs with Release Packages" on page 46](#)
- ["Associating Deployment Units with Release Packages" on page 47](#)
- ["Associating Deployment Tasks with Release Packages" on page 48](#)

Associating DCRs with Release Packages

When creating a release package, you can associate that release package with development change requests, which represent delivered changes from the development process and are typically associated with tickets from development management systems.

Serena Release Manager identifies and lists the development change requests based on the development change request projects that are selected for the release package and any filters on request status that are defined in configuration files. For example, for Dimensions CM you may see only the requests in IN QA, IN PROGRESS, UNDER WORK, and IN TEST statuses.

Adding DCRs to Release Packages

You can add a development change request only when the release package is in a state for which this action is implemented. In the default workflow, the development change request can be added to the release package only when the release package is in Development.

To associate development change requests with a release package:

- 1 View a release package and select the **Development Change Requests** tab.
- 2 Click **Add development change requests**.
- 3 Select a development change request to add to the release package.
- 4 Click **OK**.

Removing DCRs from Release Packages

You can remove a development change request only when the release package is in a state for which this action is implemented. In the default workflow, a development change

request can be removed from the release package only when the release package is in Development.

To remove development change requests from a release package:

- 1 View a release package and select the **Development Change Requests** tab.
- 2 Select one or more development change requests.
- 3 Click **Remove development change requests**.
- 4 Click **OK**.

Associating Deployment Units with Release Packages

You can add deployment units to and remove them from release packages. The deployment unit represents a set of deployable components, such as a Dimensions CM baseline with build outputs or Serena Development Manager development packages.

Serena Release Manager identifies and lists the deployment units based on the deployment unit projects that are selected for the release package and any filters on status that are defined in configuration files. For example, for Dimensions CM you may see only the baselines in VERIFIED, DEPLOYED, and CAPTURED statuses.

Adding Deployment Units to Release Packages

You can add a deployment unit only if there is a transition available based on the state of the release package. In the default workflow, the only state where a deployment unit can be added to the release package is when the release package is in Development.

To associate deployment units with a release package:

- 1 View a release package and select the **Deployment Units** tab.
- 2 Click **Add deployment units**.
- 3 Select one or more deployment units.
- 4 Click **OK**.

Removing Deployment Units from Release Packages

You can remove a deployment unit only if there is a transition available based on the state of the release package. In the default workflow, the only state where a deployment unit can be removed from the release package is when the release package is in Development.

To remove deployment units from a release package:

- 1 View a release package and select the **Deployment Units** tab.
- 2 Select one or more deployment units.
- 3 Click **Remove deployment units**.
- 4 Click **OK**.

Associating Deployment Tasks with Release Packages

To automate and ensure all tasks are executed for your release, you can create sets of deployment tasks to be executed when the release package is deployed to each stage environment.

You can save deployment tasks as deployment process templates so that you can use the same sets of tasks across release packages and across release package stages.

For more information see [Chapter 6, "Automating Deployment Processes" on page 51](#).

Approving Release Packages

You can require approvals to release packages to ensure that the content is agreed upon and controlled.

For example, when Release Engineers have finished developing a release package, a Release Engineer or Release Manager may approve it. Once the release package is in review or approved, no changes can be made to it unless it is returned to the **Development** state.

In the default workflow, you may approve a package after all necessary associations are made to support the deployment, installation, and configuration of the release package deployment units. This a way to ensure that the changes are "frozen" and ready to go through the test and pre-production stages to production.

To approve a release package:

- 1 Navigate to a release package that is in the **Development** state.
- 2 Click **Approve**.

The release package enters the **Ready for Deployment** state and the **Deploy** action is available to owners, such as release engineers.

See the simplified default workflow in "[Actioning Release Packages Through the Workflow](#)" on page 49.

Viewing Release Package Change History

You can view the history of changes to the release package so that you know who changed it, how they changed it, and when they changed it.

To view release package history:

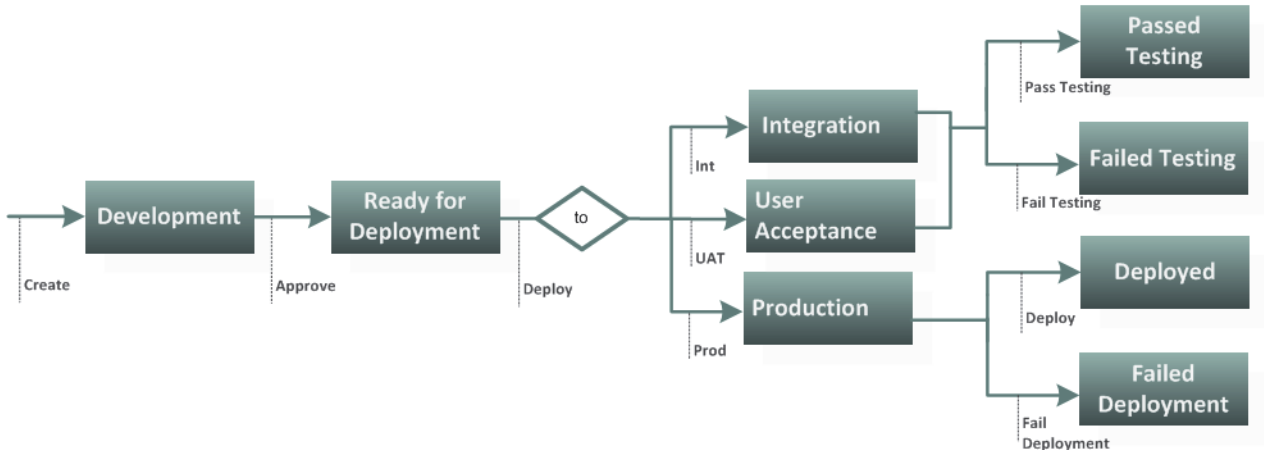
- View a release package and select the **History** tab.

Actioning Release Packages Through the Workflow

As you work with release packages, you are presented with buttons on the user interface for workflow actions that are available to you. The release package workflow is a conditional workflow that allows for default paths for each release type, Major, Minor, and Emergency. The workflow actions available for each release type are the actions needed to support the release stages for that release type.

A simplified representation of the default workflow path for a major release package is shown in the following figure.

Release Package Workflow



The actions that appear here are:

- Create
- Approve
- Deploy

For example, after you approve a release package, the release package goes into the **Ready for Deployment** state, and the release package dialog box shows the next action, **Deploy**, as shown in the following figure.



Release Package:

QLH_Web_Site_P010 [Edit](#)

Deploy

Application release: (None)

State: Ready for Deployment

Release type: Major

Description: Qlarius Health Insurance web site release package. Details of the changes can be found in the associated DC

General

Changes

Deployment

History

Environments

Projects

Schedule

The stage to which the release package is deployed depends on the type of release package and in which stage the release package currently resides.

The progression to **Passed Testing, Failed Testing, Deployed, or Failed Deployment** is typically done automatically based on the results of deployment tasks associated with a release package.

For information on preparing release packages for deployment and deploying them, see [Chapter 6, "Automating Deployment Processes" on page 51](#) and [Chapter 7, "Deploying and Installing Releases" on page 71](#).

For information on how the workflows in Serena Release Manager work together, see [Chapter 1, "Progressing Releases Through Their Lifecycles" on page 17](#).

Chapter 6

Automating Deployment Processes

Configure deployment processes to automate your release deployment, installation, and configuration using deployment tasks and deployment process templates.

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Deployment Task Configuration Overview

You can automate processes for deploying application release components into environments by configuring sets of deployment tasks for your applications.

Deployment tasks are actions to be executed as part of the deployment process to deploy release packages into specific environments as defined by **release stages**, such as Integrated Testing, User Acceptance Testing, and Production Deployment. Deployment tasks:

- Integrate with Dimensions CM and ChangeMan ZMF release vaults for secure deployment of deployment units.
- Integrate with Serena Release Automation to automate installation.

Types of deployment tasks are as follows:

- **Manual deployment tasks** are actions to be executed by people.
- **Approval deployment tasks** integrate with ChangeMan ZMF to support approvals that must be obtained before change packages are deployed.
- **Vault deployment tasks** integrate with Dimensions CM and ChangeMan ZMF for secure deployment of deployment units. Vault deployment tasks move deployment units (baselines or change packages) securely to deployment areas (environments or sites).
- **Automation deployment tasks** integrate with release automation to automate installation and configuration tasks through the release automation software (such as Serena Release Automation) as part of the deployment process.



NOTE Your Serena Release Manager administrator configures integrating system information for release vault and release automation. Configuration details are documented in the [Serena Release Manager Installation and Configuration Guide](#).

Planning Deployment Tasks

As part of the deployment task planning, you can associate deployment tasks to release package stages by creating them as part of the release package associations, or you can create them as part of deployment process templates and then apply them to release package stages.

The specification of the deployment tasks is the same whether you create them in a release package or in a deployment process template view.

You can specify manual, approval, vault, and automation tasks that will be executed upon deployment of your release package to a specific stage.

Tasks can be assigned sequence numbers to control the order of execution. The sequence numbers are handled as follows:

- By default the sequence number is set to 0. If you do not overwrite the sequence number, the task is initiated immediately after the deployment of the release package to the stage with which the task is associated.

- Sequentially ordered tasks are executed in order.
- Tasks with the same sequence number are executed in parallel. For example, if several tasks have sequence number 3, all of those tasks are initiated when all tasks with sequence number 2 are complete.

Deployment task planning includes the following:

- "Creating Manual Deployment Tasks" on page 53
- "Creating ChangeMan ZMF Approval Deployment Tasks" on page 54
- "Creating Dimensions CM Vault Deployment Tasks" on page 55
- "Creating ChangeMan ZMF Vault Deployment Tasks" on page 57
- "Creating Automation Deployment Tasks" on page 58
- "Deleting Deployment Tasks" on page 59
- "Re-ordering Deployment Tasks" on page 59

Creating Manual Deployment Tasks

Certain actions necessary to deployment may need to be executed manually as part of the deployment process.

You can create manual tasks needed to deploy a release package into a specific stage (environment).

You can do the following:

- Associate the task to a release package stage.
- Specify a sequence number for the task.
- Specify which manual task is required.
- Specify owners for the task.

The sequence number is used to specify order of execution of the tasks associated with a request package. The manual deployment task is specific to a single stage.

To create a manual deployment task:

- 1 From a release package or deployment process template view, navigate to the **Deployment tasks** tab.
- 2 Select a stage for which this task will be executed.
- 3 Click **Create Task**.

The **Create Deployment Task** dialog box appears.

- 4 In **Task Type**, select **Manual**.

The **Task Type: Manual** form appears in the dialog box.

- 5 Fill out the **Manual** form.

For example:

- a Enter **Task name** and **Sequence number**.
- b Select the primary and secondary owners for the task.

- c Optionally enter a description.
- 6 Click **OK**.
- The manual task is saved. It must be manually executed according to its sequential order when the release package to which it is associated is deployed to the specified stage.

Creating ChangeMan ZMF Approval Deployment Tasks

Approval deployment tasks integrate with ChangeMan ZMF to ensure all necessary approvals are given before a change package is deployed.

You can create an approval deployment task used to approve the deployment of a deployment unit for a release package into a particular stage environment.

You can do the following:

- Associate the task to a release package stage.
- Specify a sequence number for the task.
- Specify which deployment unit, or ZMF change package, to approve.
- Specify which approvers in the ZMF approver list must approve the deployment of the selected deployment unit.
- Specify owners for the task.

The sequence number is used to specify order of execution of the tasks associated with a request package. The vault deployment task is specific to a single stage.

To execute a vault deployment task for deployment of files stored in the ZMF vault, Serena Release Manager needs information on the approvers for each release stage.

Creating Approval Deployment Tasks

To create an approval deployment task:

- 1 From a release package or deployment process template view, navigate to the **Deployment** tab and then select the **Deployment tasks** tab.

- 2 Select a stage for which this task will be executed.

- 3 Click **Create Task**.

The **Create Deployment Task** dialog box appears.

- 4 In **Task Type**, select **ChangeMan ZMF approval**.

The **Task Type: Approval** form appears in the dialog box.

- 5 Fill out the **Approval** form.

For example:

- a Enter **Task name** and **Sequence number**.
- b Optionally enter a description.
- c Click **Get units** to refresh the list of deployment units, or ZMF change packages, stored in the vault and then select a deployment unit.

- d Click **Get approvers** to refresh the list of approvers for the selected deployment unit, and then select an approver.
- e Select the primary and secondary owners for the task.

NOTE When you create a deployment task for a deployment process template, you may not be prompted for some of the details. These should be added later when you add the deployment tasks to a release package.

- 6 Click **OK**.

Example of Approval Deployment Tasks

This example explains how you could set up ZMF deployment tasks using three levels of promotion approvers, one for each of the default release stages in Serena Release Manager.

Promotion Level Approver

- 10 – INT Integration Test Approver
- 20 – UAT UAT Approver
- 30 – PAT PAT Approver

Release Package Deployment Configuration

For every Major release package, you can configure the release packages to have the following deployment tasks.

Stage: Integration Test

- 1 ZMF Deployment Task for promotion 10 – INT environment
- 2 Manual validation task
- 3 ZMF Approval Task for Integration Test Approver

Stage: User Acceptance Test

- 1 ZMF Deployment Task for promotion 20 – UAT environment
- 2 Manual validation task
- 3 ZMF Approval Task for UAT Approver

Stage: Production Acceptance Test

- 1 ZMF Deployment Task for promotion 30 – PAT environment
- 2 Manual validation task
- 3 ZMF Approval Task for PAT Approver

Creating Dimensions CM Vault Deployment Tasks

Vault deployment tasks integrate with Dimensions CM and ChangeMan ZMF to secure deployment of deployment units.

If you are using a Dimensions CM vault, you can create a vault deployment task used to deploy a deployment unit, or baseline, for a release package into a particular stage environment.

You can do the following:

- Associate the task to a release package stage.
- Specify a sequence number for the task.
- Specify which deployment units, or baselines, to deploy.
- Specify the stage in the GSL to which the deployment applies.
- Specify the deployment area, or environments, to which to deploy.
- Specify owners for the task.

The sequence number is used to specify order of execution of the tasks associated with a request package. The vault deployment task is specific to a single stage.

To execute a vault deployment task for deployment of files stored in Dimensions CM, Serena Release Manager needs information on the Dimensions CM stage and deployment area.

To create a Dimensions CM vault deployment task:

- 1 From a release package or deployment process template view, navigate to the **Deployment** tab and then select the **Deployment tasks** tab.

- 2 Select a stage for which this task will be executed.

- 3 Click **Create Task**.

The **Create Deployment Task** dialog box appears.

- 4 In **Task Type**, select **Vault**.

The **Task Type: Vault** form appears in the dialog box.

- 5 Fill out the **Vault** form.

For example:

- a Enter **Task name** and **Sequence number**.
- b Click **Get units** to refresh the list of deployment units, or baselines, stored in Dimensions CM, and then select a deployment unit.
- c Click **Get stages** to refresh the list of stages for the selected deployment unit, and then select a stage.
- d Click **Get areas** to refresh the list of deployment areas for the selected stage.
- e Select the primary and secondary owners for the task.
- f Optionally enter a description.

NOTE When you create a deployment task for a deployment process template, you may not be prompted for some of the details. These should be added later when you add the deployment tasks to a release package.

- 6 Click **OK**.

The vault task is saved. It will be executed according to its sequential order when the release package to which it is associated is deployed to the specified stage.



NOTE If Dimensions CM is used as your deployment unit provider, baselines are displayed for selection only if they are in release mode and are in one of the statuses defined by your Serena Release Manager administrator.

For more information, see the *Serena Release Manager Installation and Configuration Guide*.

Creating ChangeMan ZMF Vault Deployment Tasks

Vault deployment tasks integrate with Dimensions CM and ChangeMan ZMF to secure deployment of deployment units.

If you are using a ChangeMan ZMF vault, you can create a vault deployment task used to deploy a deployment unit, or ZMF change package, for a release package into a particular stage site.

You can do the following:

- Associate the task to a release package stage.
- Specify a sequence number for the task.
- Specify which deployment units, or change packages, to deploy.
- Specify the sites, or LPARS, to which to deploy.
- Specify the deployment area, or promotion level, to which the deployment applies.
- Specify owners for the task.

The sequence number is used to specify order of execution of the tasks associated with a request package. The vault deployment task is specific to a single stage.

To execute a vault deployment task for deployment of files stored in ChangeMan ZMF, Serena Release Manager needs information on the ChangeMan ZMF site and promotion level.

To create a ChangeMan ZMF vault deployment task:

- 1 From a release package or deployment process template view, navigate to the **Deployment** tab and then select the **Deployment tasks** tab.
- 2 Select a stage for which this task will be executed.
- 3 Click **Create Task**.
The **Create Deployment Task** dialog box appears.
- 4 In **Task Type**, select **Vault**.
The **Task Type: Vault** form appears in the dialog box.
- 5 Fill out the **Vault** form.
For example:
 - a Enter **Task name** and **Sequence number**.

- b** Optionally enter a description.
- c** Click **Get units** to refresh the list of deployment units, or change packages, stored in ChangeMan ZMF, and then select a deployment unit.
- d** Click **Get sites** to refresh the list of sites for the selected deployment unit, and then select a site.
- e** Click **Get areas** to refresh the list of promotion levels for the selected site, and then select an area.
- f** Select the primary and secondary owners for the task.

NOTE When you create a deployment task for a deployment process template, you may not be prompted for some of the details. These should be added later when you add the deployment tasks to a release package.

6 Click **OK**.

The vault task is saved. It will be executed according to its sequential order when the release package to which it is associated is deployed to the specified stage.



NOTE If ChangeMan ZMF is used as your deployment unit provider, change packages are displayed for selection only if they are in one of the categories defined by your Serena Release Manager administrator.

For more information, see the *Serena Release Manager Installation and Configuration Guide*.

Creating Automation Deployment Tasks

Automation deployment tasks integrate with Serena Release Automation to automate installation and configuration tasks.

You can create a Serena Release Automation task, which is used to deploy a deployment unit for a release package into a particular stage.

You can do the following:

- Associate the task to a release package stage.
- Specify a sequence number for the task.
- Specify which process to execute.
- Specify owners for the task.

The sequence number is used to specify order of execution of the deployment tasks. The automation deployment task is specific to a single stage.

To execute an automation deployment task for installation and configuration of files through Serena Release Automation, Serena Release Manager needs information on the applications, environments, process, and servers.

To create an automation deployment task:

- 1** From a release package or deployment process template view, navigate to the **Deployment** tab and then select the **Deployment tasks** tab.
- 2** Select a stage for which this task will be executed.

3 Click **Create Task**.

The **Create Deployment Task** dialog box appears.

4 In **Task Type**, select **Automation**.

The **Task Type: Automation** form appears in the dialog box.

5 Fill out the **Automation** form.

For example:

a Enter **Task name** and **Sequence number**.

b Click **Get application** to refresh the list of applications stored in Serena Release Automation and then select an application.

c Click **Get environment** to refresh the list of environments for the selected application and then select one or more environments.

d Click **Get process & servers** to refresh the list of processes and servers for the selected environments.

e Select the primary and secondary owners for the task.

f Optionally enter a description.

6 Click **OK**.

The automation task is saved. It will be executed according to its sequential order when the release package to which it is associated is deployed to the specified stage.

Deleting Deployment Tasks

You can delete one or more deployment tasks from a release package.

To delete deployment tasks from a release package:

- 1** From a release package or deployment process template view, navigate to the **Deployment** tab and then select the **Deployment tasks** tab.
- 2** Select a task.
- 3** Click **Delete task**.

Re-ordering Deployment Tasks

After you have specified the deployment tasks and their sequence numbers, you may decide that the tasks should be done in a different order than you originally specified. You can re-order these as needed by overtyping the numbers or by using drag and drop.

To re-order tasks in a release package:

- 1** From a release package or deployment process template view, navigate to the **Deployment** tab and then select the **Deployment tasks** tab.
- 2** Click **Re-order tasks**.
- 3** To explicitly specify the number, click the number in the sequence number column and overtype with the number you want.

- 4 To re-order using drag and drop, do the following:
 - a Move your pointer over the **Drag** column icon (☰) for the item you want to re-order.
 - b When you see the move symbol above the icon (⊕), click and hold the icon as you drag the item to the desired position.
 - c Release the item in the desired position.
The items are automatically renumbered according to the new positioning.
- 5 Click **OK**.

Executing Deployment Tasks

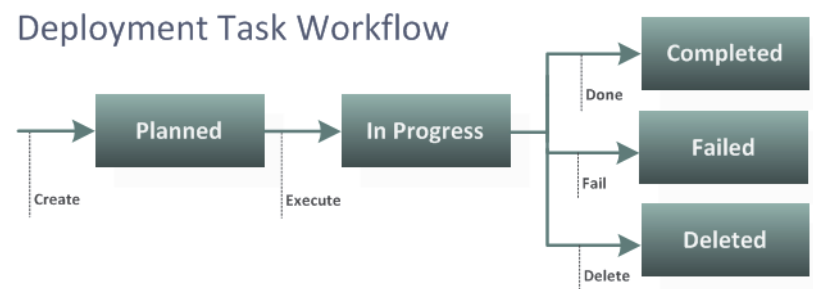
Deployment tasks are executed automatically when the release package stage to which they are associated is reached and any preceding deployment tasks in the sequentially designated order are completed.

For more information, see [Chapter 7, "Deploying and Installing Releases"](#) on page 71.

Actioning Deployment Tasks Through the Workflow

As you work with deployment tasks, you are presented with buttons on the user interface for workflow actions that are available to you. There are separate workflows for each type of task.

The default workflow for a manual deployment task is shown in the following figure.



The actions that appear here are:

- Create
- Execute
- Done
- Fail
- Delete

For example, after you execute a manual deployment task, the deployment task goes into the **In Progress** state, and the deployment task dialog box shows the next available actions, **Done**, **Fail**, and **Delete**, as shown in the following figure.

Deployment Task:
Checkpoint task for RM

Release Package: [RPMAJ000205:QLH_Web_Site_P010](#) Task Type: Manual State: In Progress

Stage: Integration Test Sequence number: 2

Description: The release manager must take a checkpoint before the rest of the tasks can be initiated

History

You should click **Done** if the manual task has successfully been completed or **Fail** if the manual task has not been successfully completed. **Delete** is also available for deployment tasks that are still active but which are no longer needed to deploy a release package.

Other Deployment Task Type Workflows

The workflows for non-manual deployment tasks are similar to that of the manual deployment task except that the **Done** and **Fail** actions are done automatically based on the results of the task execution in Release Vault or Release Automation.

For approval, vault, and automation tasks, the progression to **Completed** or **Failed** is typically done automatically based on the execution results of the deployment tasks.

For information on how the workflows in Serena Release Manager work together, see [Chapter 1, "Progressing Releases Through Their Lifecycles" on page 17.](#)

Deployment Process Template Overview

You can save deployment tasks for reuse through deployment process template.

Deployment process templates enable you to create and copy sets of deployment tasks for reuse in different stages, release packages, and applications.

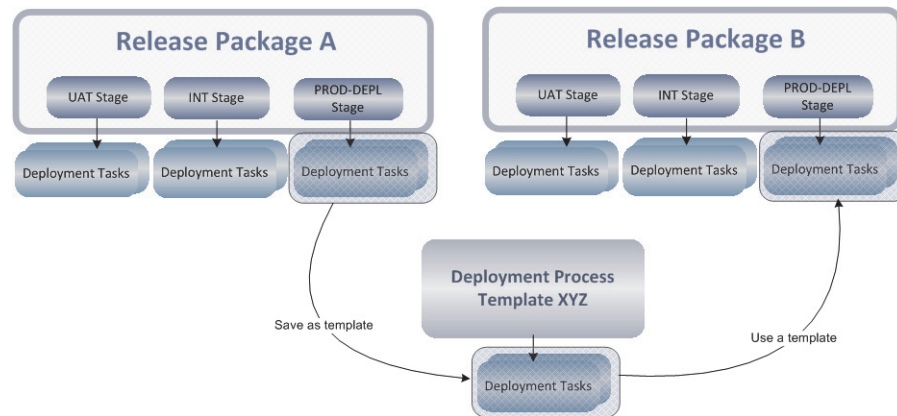
By using deployment process templates, you can more easily implement and standardize release deployment processes and ensure that the required set of deployment tasks are applied at each relevant stage of the release.

By setting up the templates ahead of time, you can more effectively plan the deployment processes. Applying deployment process templates to release packages ensures more consistency across release packages and saves time over setting up the same or similar deployment tasks separately for each release package.

You don't have to set up the deployment process templates ahead of time. Once you have set up deployment tasks for a release package stage, you can save them to a deployment process template to be used for other stages of that release package or for other similar release packages.

How Are Deployment Process Templates Applied?

The following diagram shows how deployment tasks are saved in deployment process templates and applied to a stage of a release package. This lets you plan and configure approved processes and apply them consistently to release package stages from one application release to another.



Developing Deployment Process Templates

Deployment process templates enable you to group a number of deployment tasks and make them available for reuse. Reuse may be within the same release package, in which you want to apply the same set of tasks to a different stage, or you may reuse the set of tasks to a different release package.

Deployment tasks in a deployment process template can be re-ordered using a graphical sort function, enabling you to control the order of execution as is appropriate for each stage.

You can do the following:

- Create a deployment process template standalone and then apply it to release package stages.
- Create a deployment process template from the set of deployment tasks associated with particular stage of a release package.
- Save a copy of a deployment process template.
- Modify a deployment process template.
- Re-order deployment tasks within a deployment process template.

Deployment process template development includes the following:

- ["Creating Deployment Process Templates" on page 63](#)
- ["Adding Deployment Tasks to a Deployment Process Template" on page 64](#)
- ["Copying a Deployment Process Template" on page 64](#)
- ["Saving As a Deployment Process Template" on page 65](#)
- ["Editing a Deployment Process Template" on page 65](#)
- ["Retiring Deployment Process Templates" on page 65](#)

Creating Deployment Process Templates

You should create deployment process templates as needed to support your deployment processes. You can create deployment process templates with all new deployment tasks or you can create deployment process templates from existing deployment tasks in a release package.

Creating Deployment Process Templates by Creating New Tasks

To create a deployment process template with new tasks:

1 Navigate to the **Deployment Process Templates** page. For example, from **My Inbox | Manage All Items**, click **Deployment Process Template**.

2 Click **Create template**.

The **Create Template** dialog box appears.

3 Fill out the **Create Template** form.

For example:

a Enter **Template name**.

b Select the application to which the deployment process template applies.

c Select the stage for which the template applies.

d Select the owner, such as Release Engineer, for the template.

e Optionally enter a description.

4 Click **OK**.

The deployment process template is saved.

Creating Deployment Process Templates Based on Existing Deployment Tasks

You can create a new deployment process template from deployment tasks in a release package.

The **save as** transfers all existing deployment task field information to the new item. You may edit any field before saving the new item. This enables you to save deployment tasks that you have created for a different stage.

The **Save as** creates new instances of all deployment tasks associated with the original deployment process template and links them to the new deployment process template.

The **Save as** is available from any state of the release package.

To create a deployment process template from existing tasks:

1 Navigate to a release package that has the deployment tasks you want to reuse.

2 Select the stage that has the deployment tasks you want to reuse.

3 Click **Save as template**.

The **Save as template** dialog box appears.

4 Fill out the **Save as template** form.

For example:

- a Enter the new template name in the **Rename Template** field.
 - b Select the application to which the deployment process template applies.
 - c Select the stage for which the template applies.
 - d Select the owner, such as Release Engineer, for the template.
 - e Optionally enter a description.
- 5 Click **OK**.
- The deployment process template is saved.

Adding Deployment Tasks to a Deployment Process Template

You can add one or more deployment tasks to a deployment process template.

To add deployment tasks to a deployment process template:

- 1 Select the deployment process template to which you want to add a task.
- 2 Click **Add task**.
- 3 Enter information to create the task as documented in ["Planning Deployment Tasks" on page 52](#).

Copying a Deployment Process Template

You can create a new deployment process template from an existing deployment process.

The copy transfers all existing field information to the new item. You may edit any field before saving the new item. This enables you to save deployment tasks that you have created for a different application or for a different stage, whereas an edit only allows you to change the application.

The copy creates new instances of all deployment tasks associated with the original deployment process template and links them to the new deployment process template.

The copy is available from any state of the deployment process template.

To copy a deployment process template:

- 1 Navigate to a deployment process template that you want to copy.
 - 2 Click **Copy**.
- The **Make a copy** form appears.
- 3 Fill out the copy form.

For example:

- a Enter the new template name in the **Rename Template** field.
- b Select the application to which the deployment process template applies.
- c Select the stage for which the template applies.

- d Select the owner, such as Release Engineer, for the template.
 - e Optionally enter a description.
- 4 Click **OK**.

The new deployment process template is saved.

Saving As a Deployment Process Template

You can create a new deployment process template from deployment tasks in a release package. See "[Creating Deployment Process Templates Based on Existing Deployment Tasks](#)" on page 63.

Editing a Deployment Process Template

You can change any of the deployment process template fields during editing except stage.

Editing the deployment process template has no affect on any deployment tasks already applied to release packages.



TIP You can save a copy of the deployment process template for a different stage. See "[Copying a Deployment Process Template](#)" on page 64.

To edit a deployment process template:

- 1 Navigate to a deployment process template.
- 2 Click the edit link beside the view name.
- 3 Modify fields on the form as needed.
- 4 Click **OK**.

Retiring Deployment Process Templates

After the deployment process template is no longer needed, you may decide to retire it.

To retire a deployment process template:

- 1 Navigate to a deployment process template that is in the **Available** state.
- 2 Click **Retire**.

The deployment process template is no longer available to be used.

Approving Deployment Process Templates

Before you can use a deployment process template to apply deployment tasks to release package stages, you must make the deployment process template available through actions required by the Deployment Process Template workflow.

See the simplified default workflow in "Actioning Deployment Process Templates Through the Workflow" on page 68.

In the default workflow, you may send a deployment process template for review and have it approved before it is applied to release packages.

To send a deployment process template for review:

- 1 Navigate to a deployment process template that is in the **Development** state.
- 2 Click **Send for review**.

The deployment process template enters the **Review** state and the **Approve** action is available to approvers.

To approve a deployment process template:

- 1 Navigate to a deployment process template that is in the **Review** state.
- 2 Click **Approve**.

The deployment process template enters the **Available** state and the **Retire** action is available to owners, such as release engineers.

Using Deployment Process Templates to Apply Deployment Tasks

Once you have developed your deployment process template and it has been approved and made available for use, you can apply it to release package stages to propagate your deployment tasks.

You can do the following:

- Apply a deployment process template to a release package.
- View the release packages that use a particular deployment process template.
- View the deployment process template to which a deployment task belongs.
- View the stage to which a deployment process template belongs.

Applying a Deployment Process Template to a Release Package

You can use a deployment process template in a release package to implement and standardize your release deployment processes. You first create the deployment process template for a specific stage and then apply it that stage in a release package.

In the default implementation of Serena Release Manager, if a deployment process template is in the **Available** workflow state, it can be accessed from each stage that is available for a release package.

For example, when you attempt to use a deployment process template for the INT stage of a release package, you can see and select from only those deployment process templates that are in the **Available** state and are associated with the INT stage.

See "Approving Deployment Process Templates" on page 65.



CAUTION! When you use a template for a release package stage, any existing deployment tasks for that stage are overwritten by the deployment tasks from the deployment process template.



TIP Plan ahead by creating your deployment tasks in deployment process templates first. Consider putting all possible tasks that will be needed for each stage of a particular application in deployment process templates. You can then apply them to the release package stages and tailor the deployment tasks at the release package level as needed.

To use a deployment process template:

- 1 Navigate to the release package for which you want to use the deployment process template.
- 2 Select the **Deployment Tasks** tab.
- 3 Select the stage to which you want to apply the template's deployment tasks.
- 4 Click **Use a template**.
The **Use a template** dialog box appears with a list of available deployment process templates.
- 5 Select a deployment process template from the list.
- 6 Click **OK**.

Viewing Release Packages That Use this Deployment Process Template

You can view release packages to which a deployment process template is applied.

To view release packages for a deployment process template:

- 1 Navigate to the deployment process template.
- 2 Click **Release packages**.
A list appears with information on all release packages to which this deployment process template has been applied.

Viewing the Deployment Process Template for a Task

A deployment task can belong to only one deployment process template. You can see the deployment process template to which a deployment task belongs.

To see the deployment process template to which a task belongs:

- 1 Navigate to the deployment task for which you want deployment process template information.
If the deployment task is associated with a deployment process template, a template name appears in the Deployment Process Template field.

Viewing the Stage to Which a Deployment Process Template Belongs

A deployment process template is associated with a specific release stage, such as UAT or INT. You can see the stage to which a deployment process template belongs through the user interface.

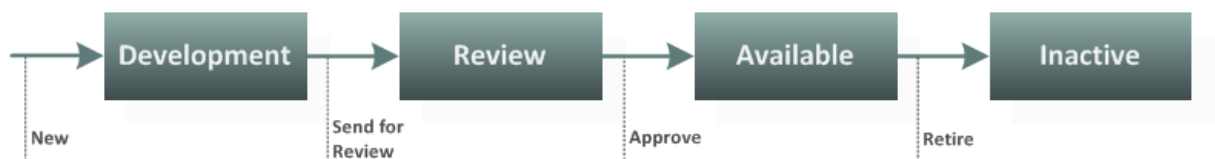
To see the stage to which a deployment process template belongs:

- Navigate to a list of deployment process templates.
 - The stage name appears in the Stage column.
- Navigate to the deployment process template view.
 - The stage template name appears in the Stage field.

Actioning Deployment Process Templates Through the Workflow

As you work with deployment process templates, you are presented with buttons on the user interface for workflow actions that are available to you. The default workflow for a deployment process template is shown in the following figure.

Deployment Process Template Workflow



The actions that appear here are:

- New
- Send for Review
- Approve
- Retire

For example, after you create a deployment process template, the deployment process template goes into the **Development** state, and the deployment process template dialog box shows the next action, **Send for Review**.

When the deployment process template is in the **Development** state, designated owners create deployment tasks for a stage of the application release. Once you click **Send for Review**, the deployment process template is ready to be approved.

If you need to change the deployment tasks associated with the deployment process template, you'll need to click **Back to Development**, make the changes while it is in the Development state, and again click **Send for Review** to have the additional changes reviewed.

The designated reviewer clicks **Approve** to approve the deployment process template and it becomes **Available**. In this state, it can be applied to a release package, so that its associated deployment tasks are copied to the corresponding stage of the release package.

When a deployment process template is no longer in use in your organization, you can click **Retire** to make it inactive and remove it from the list of available templates.

For information on how the workflows in Serena Release Manager work together, see [Chapter 1, "Progressing Releases Through Their Lifecycles" on page 17](#).

Chapter 7

Deploying and Installing Releases

Deploy your release packages to execute defined deployment tasks.

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Deploying Release Packages

Deployment includes all the activities that make a software system or application available for use in an environment, including the physical movement of files, execution of commands, and configuration of environment settings.

Deployment in Serena Release Manager is done at the release package level. Release packages are deployed when they reach the state in the lifecycle in which deployment is initiated. In the default workflow, this state is reached when the **Deploy** action is requested.

The deployment tasks associated with a release package stage are executed when you deploy the release package to that stage. The default release package workflow is shown in Chapter 5, "Actioning Release Packages Through the Workflow" on page 49.



NOTE Depending on your organization's processes you may be able to deploy the release package independently of an application release, or you may be required to associate the release package to an application release before you deploy it.

To deploy a release package:

- 1 Select a release package that is in a state that is ready to deploy.
- 2 Click **Deploy**.

The release package is deployed and installed into the first stage deployment area. Since this is a major release, the first stage is INT.

This is where integration testing takes place. When the testing is completed, the release is ready to deploy to the next stage.

Upon successful execution, vault and automation deployment tasks move into the Completed state. Manual deployment tasks must be moved into Completed or Failed state by the task owner through the associated user interface actions.

If a vault or automation deployment task process fails for any reason during execution, the deployment task moves into the Failed state and is listed in the current owner's inbox, where the owner can take corrective action.

Deployment Task Execution

Once initiated by deployment of the release package, deployment task execution depends on the sequential ordering and the type of task: vault, automation, or manual. In the default implementation of Serena Release Manager, vault deployment tasks initiate pre-configured actions in your release vault, automation deployment tasks initiate pre-configured actions in Serena Release Automation, and manual tasks document and enforce any tasks that must be done manually before a release package can be deployed.

Vault and Automation Deployment Task Execution

Upon successful execution, vault and automation deployment tasks automatically move into the Completed state.

If a vault or automation deployment task process fails for any reason during execution, the deployment task moves into the Failed state and is listed in the current owner's inbox, where the owner can take corrective action.

Manual Deployment Task Execution


Manual deployment tasks must be moved into **Done** or **Failed** state by the task owner through the associated user interface actions. A manual task must be manually done or deleted before the release package to which it is associated can be deployed to the specified stage or before the next deployment task in the sequence can be executed.

Verifying Release Deployment

Deployment tasks may initiate actions on many environments, and these actions may involve a number of integrating products. Depending on how many tasks must be executed and how long each takes to complete, the deployment process may take a significant amount of time.

The status for deployment tasks tells you information about the progress. By default, the status tells whether the task is in progress, complete, or failed.

To verify that deployment is successful:

- 1 In the release package dialog box, click the **Reload Item** button () to refresh your view and see the latest status of a task.

Any status messages generated by the deployment task processes are shown in the **Activity Log** tab of the release package.

Status Logs and Notifications

Any status messages generated by the deployment task processes are shown in the **Activity Log** tab of the release package.

You can use a notification rule for successful or failed automation tasks to send e-mail messages to any Serena Release Manager users who should be aware of the release deployment status.

Viewing the Activity Log for Deployment Results

You can view the deployment results for release packages through the **Activity Log** tab.

To view deployment results:

- 1 View a release package.
- 2 Select the **Activity Log** tab.

If your deployment task fails and you are unable to determine the cause through the Activity Log or notification message, see your Serena Release Manager administrator. Information on troubleshooting is in the *Serena Release Manager Installation and Configuration Guide* "Troubleshooting" chapter.

Viewing Release Deployment History

Select the **History** tab in a release package to view the deployment history for that release package.

You can also view deployment task information through the **My Inbox** page and create and run custom reports in the **Reports** page. See [Chapter 8, "Reporting On Release Progress and History"](#) on page 75 for more information on reporting.

Chapter 8

Reporting On Release Progress and History

Run reports to track the progress of releases through their lifecycles and review historical release information.

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Viewing and Running General Reports

At any point in the release management process you can report on current or historic information.

To select and run reports:

- 1 Select a link in the navigation pane, such as **Release Train**.
A list of reports for the selected category appears in the content pane.
- 2 Click a report in the list to run the report; enter query information if prompted.
The list of items that meet the report criteria appear in the content pane.



NOTE A list of general reports that are provided in the default implementation of Serena Release Manager and advice on creating and updating reports are given in the *Serena Release Manager Installation and Configuration Guide*.

Checking Availability of Environments

You can check the availability of servers for your release packages through the following:

- List all servers defined to Serena Release Manager through the **Environments** page.
- Report on the number of servers at a particular release train or release package stage.

For details on managing environments, see [Chapter 4, "Managing Environments"](#) on page 39.

Using Serena Dashboard for Metrics

If your organization uses the Serena Dashboard, you can run reports on Serena Release Manager data as well as on the data in related Serena orchestrated ALM suites, such as Serena Development Manager. For documentation and demonstrations, see the Serena Dashboard [documentation](#).

Glossary

Application	<p>In Serena Release Manager, a program or system in computers or devices that addresses some problem as a whole. Some types of applications are commercial websites, batch and online business systems, and packaged software. Examples: an online teller system for a bank, an online music store, an accounting system.</p> <p>In Serena Release Automation, a high-level design construct whose design and ultimate execution allow achieving a fully-automated implementation of a server-based system.</p> <p>In ChangeMan ZMF, a user software project or domain being implemented. Named and defined by the application administrator; can be a mnemonic. User restrictions are set for it. Type in the exact name of the application in an application, or select from a list of applications by typing a pattern, or use masking. Possible References: APPL, PROJECT, LOCAL.</p>
Application Owner	<p>A possible role in Serena Release Manager that is the business owner of an application. An application owner is responsible for approving an application release during the planning stage and receives notifications of application release status.</p>
Application Release	<p>Represents a version of an application or project, where the application or project architecture is specified by components. One or more release packages are associated with each application release.</p>
Approval	<p>An action taken by an authorized user to progress an entity in a logical workflow. Approvals are typically required at states in the workflow that require expert review before the associated objects proceed to the next state.</p>
Architecture	<p>In Serena Release Automation, a generic design of a possible physical configuration for the implementation of an application.</p>
Area	<p>See Deployment Area.</p>
Automation Deployment Task	<p>A type of deployment task that integrates with release automation to automate installation and configuration tasks through the release automation software (such as Serena Release Automation) as part of the deployment process.</p>
Build Manager	<p>A possible role in Serena Release Manager that performs builds for a release. This role may also be the Installation Manager in some organizations.</p>
Business Change Request (BCR)	<p>Represent customer or business unit change requests that affect specific application releases. They are associated with application releases and are typically associated with tickets from help desk or incident management systems such as Serena Service Manager or other SBM solutions.</p>
Change Manager	<p>A possible role in Serena Release Manager that is responsible for the IT Operations for the systems where the pre-production and production release environments reside. A change manager approves deployment into pre-production and production environments.</p>

Change Request	See Business Change Request (BCR) , Development Change Request (DCR) , and Request for Change (RFC) .
Change Package	In ChangeMan ZMF, a group of changes to user software. Three levels include simple, super/complex, and participating, made up of members of partitioned data sets such as JCL, source code, copybooks, and so on.
Calendar	The visual representation of release trains and their schedules in Serena Release Manager.
Deployment	The activities that make a software system or application available for use in an environment, including the physical movement of files, execution of commands, and configuration of environment settings.
Deployment Area	Represents the server or environment to which deployment units are copied during deployment.
Deployment Process Template	Enables you to create and copy sets of deployment tasks for reuse in different stages, release packages, and applications.
Deployment Task	In Serena Release Manager, an action to be executed as part of the deployment process to deploy a release package into a specific environment. Deployment task types include manual, vault, and automation.
Deployment Unit (DU)	In Serena Release Manager, represents a set of deployable components, such as a Dimensions CM baseline with build outputs or a ChangeMan ZMF change package.
Development Change Request (DCR)	In Serena Release Manager, represents delivered changes from the development process and are typically associated with tickets from development management systems. For example, these may be Dimensions CM requests or SBM tickets used to manage development processes.
Development Manager	A possible role in Serena Release Manager that is responsible for and approves development activities for a release. A development manager would typically be consulted during the release management process and provide approval on the content of a release package.
Emergency Change Package	In ChangeMan ZMF, unplanned change packages that are scheduled for installation outside of normal business hours. Emergency change packages are automatically assigned a shorter approval list.
Emergency Release Package	In Serena Release Manager, a release type for unplanned release trains or release packages that must be expedited through the minimum required release stages. In the default implementation, emergency release packages are deployed only to the Production Deployment stage. See Release Type .
Environment	In general, a physical computer and operating system on which software resides; for example, a Windows or UNIX server. In Serena Release Manager, represents one or more physical or logical computers or systems to which a release package may be deployed. In Serena Release Automation, one of any number of real, physical implementations of a specific architecture that was designed for the application.

Global Stage Lifecycle	<p>In Dimensions CM, the lifecycle that items follow that controls which versions are included in configurations and builds of the project or stream. This lifecycle is defined for the base database. Deployment areas for a project/stream can be associated with these stages so that item files are copied to those areas when they are deployed to the corresponding stage.</p>
Incident	<p>An item in the Incident Management SBM solution. An incident may be mapped to a Serena Release Manager Development Change Request (DCR).</p>
Installation	<p>In ChangeMan ZMF, the process of either updating the production libraries, or in the case of temporary change packages, concatenating the temporary production libraries before the current production libraries.</p> <p>Change packages are turned over to the ZMF installation scheduler after the final approval. For change packages that have a manual scheduler, ZMF submits the first installation job as soon as the last approval is entered, regardless of the installation date on the ZMF calendar.</p>
Installation Manager	<p>A possible role in Serena Release Manager that ensures that the deployment, or installation, of a release is done correctly and completely. An installation manager is assigned manual deployment tasks in Serena Release Manager and is responsible for deployment of request packages into environments.</p> <p>This role may also be the Build Manager in some organizations.</p>
Integration Test (INT)	<p>Testing of all application release components together to ensure that the application release's functions properly as a whole. This testing typically follows unit testing in a testing lifecycle.</p> <p>In the default implementation of Serena Release Manager, Integration Test is also a stage in release train and release package schedules.</p>
Issue	<p>An item in the Issue Defect Management (IDM) SBM solution. An issue may be mapped to a Serena Release Manager Development Change Request (DCR).</p>
Item	<p>In general, a software entity or object that can be listed or selected.</p> <p>In SBM, primary items, such as issues and incidents, are records that are tracked by an application. Primary items are organized in projects, which are assigned to a workflow. You submit primary items into a specific project, and those items follow the project's workflow to completion.</p> <p>In Dimensions CM, an object that represents the physical implementation of an application component. For example, an item in a software application could be source code, an executable file, a specification, or a user guide. An item in a website could be an HTML file, a script, or an image file.</p>
Lifecycle	<p>The set of states and rules for transitions between states defined for a particular object type.</p>
Major Release Package	<p>In Serena Release Manager, a release type for release trains or release packages that require the maximum release stages. In the default implementation, major release packages are deployed through the INT, UAT, and Production Deployment stages.</p> <p>See Release Type.</p>

Manual Deployment Task	A type of deployment task. An action to be executed by a person as part of the deployment process.
Minor Release Package	<p>In Serena Release Manager, a release type for release trains or release packages that require only some of the release stages. In the default implementation, minor release packages are deployed only to the UAT and Production Deployment stages.</p> <p>See Release Type.</p>
Pre-Production	<p>The environments to which production-ready application releases are deployed and held before deployment to production. Pre-production can be thought of as final staging or production readiness.</p> <p>In the default implementation of Serena Release Manager, Pre-Production is also a stage in release train and release package schedules.</p>
Process	In Serena Release Automation, a high-level sequence of planned activity involving one, multiple, or all components of an application.
Production	The environments to which production-ready application releases are ultimately deployed. Production can be thought of as live or real-time environments.
Production Deployment	A stage in release train and release package schedules in the default implementation of Serena Release Manager.
Product Test	<p>Testing of a product's features and functionality. This testing typically follows unit testing in a testing lifecycle.</p> <p>In the default implementation of Serena Release Manager, Product Test is also a stage in release train and release package schedules.</p>
Project	In general, a project is an organizing entity made up of a collection of related objects.
Promotion Level	In ChangeMan ZMF, manages test libraries. For example, promotion Level 10 could be defined for Integration Testing, promotion Level 20 could be defined for User Acceptance Testing, and promotion Level 30 could be defined for Production Readiness Testing.
QA Manager	A possible role in Serena Release Manager that is responsible for and approves testing activities for a release.
Release	See Application Release .
Release Automation	The part of release management that automates application installation and configuration tasks. In the default implementation of Serena Release Manager, the release automation is done using Serena Release Automation.
Release Calendar	See Calendar .
Release Control	The part of release management that controls the processes. In the default implementation of Serena Release Manager, release control is powered by Serena Business Manager (SBM).

Release Engineer	<p>The default role in Serena Release Manager that is responsible for the automating the release deployment and resolving any deployment failures. For example, a release engineer may create deployment tasks for release packages.</p> <p>This role may be the Installation Manager or Build Manager in some organizations.</p>
Release Management	<p>The management of defining and deploying versions of applications into production environments. The activities of release management include defining, scheduling, monitoring, changing, provisioning, and analyzing history of multiple releases deployed into production environments.</p>
Release Manager	<p>The default role in Serena Release Manager that is responsible for releases within a particular organization. A release manager manages and monitors releases, plans releases in collaboration with development managers, and responds to successes, failures, and other statuses.</p>
Release Package	<p>A portion of IT or Service Infrastructure normally built, deployed, tested, and released together. Release packages define the set of changes to be deployed and drive the deployment processes.</p>
Release Schedule	<p>See Release Train.</p>
Release Stage	<p>Gate that the release goes through on its path into production. Typical stages in a release are integration test (INT), user acceptance test (UAT), and production deployment (PROD). A stage may have one or more environments related to it. Releases may be deployed into an environment based on availability.</p>
Release Train	<p>Provides a published schedule of changes to production. One or more application releases are associated with each release train.</p>
Release Type	<p>Drives release policies on what types of changes may be delivered for release trains and determines the stages release packages are deployed through. In the default implementation of Serena Release Manager, release types include major, minor, and emergency.</p> <p>See also Release Stage.</p>
Release Vault	<p>The part of release management that secures and bundles the deliverables of changed components. In the default implementation of Serena Release Manager, the provided release vaults are Dimensions CM and ChangeMan ZMF.</p>
Request	<p>In Dimensions CM, an object used to report a defect, suggest an enhancement, or detail other work for a particular product. Requests can include external files (such as requirements or specification documents) as attachments. A request may be mapped to a Serena Release Manager Development Change Request (DCR).</p> <p>See also Request for Change (RFC), Business Change Request (BCR), and Development Change Request (DCR).</p>
Request for Change (RFC)	<p>In Serena Release Manager, represent operational changes that may affect multiple applications or implement system infrastructure changes within an enterprise. These are associated with release trains and are typically associated with tickets from service management systems such as Serena Service Manager.</p> <p>In Serena Service Manager, a formal proposal for a change to the IT infrastructure.</p>

Server	<p>A computer that manages centralized data storage or network communications resources. A server provides and organizes access to these resources for other computers linked to it. (American Heritage Science Dictionary)</p> <p>In Serena Release Automation, the actual physical machines on which a Web-based application will ultimately run.</p>
Server Type	<p>In Serena Release Automation, an abstract representation of a server specified for a particular architecture.</p>
Site	<p>In ChangeMan ZMF, locations where change packages are stored. These are typically IBM z/OS LPARs, either local or remote.</p>
Software Application	<p>See Application.</p>
Stage	<p>In Serena Release Manager, a Release Stage.</p> <p>In Dimensions CM, a stage in the Global Stage Lifecycle.</p>
State	<p>A key part of a Serena Business Manager (SBM) workflow. States are positions that a primary item, such as a release package, resides in while moving through a process workflow. States can also be considered a stopping point along a workflow's path.</p>
Status	<p>A measure of where an item is in relation to a preset goal. For a release train, status is the lowest status of the application releases associated with it. Release managers manually set the status for application releases. Release package status is automatically set by Serena Release Manager based on movement of the release package through underlying SBM states.</p>
Status Indicator	<p>A visual representation of status, such as green for on schedule, yellow for schedule at risk, and red for behind schedule.</p>
System	<p>Depending on the context, can refer to a software application, to an environment, or both.</p>
Unit Testing	<p>Testing of individual or groups of similar components of a software application as part of the development process. This testing is typically done by software engineers who are developing the components and is done before the components are considered complete and packaged for deployment (baselined).</p>
User Acceptance Test (UAT)	<p>Testing of an application release by key users to evaluate the application release's compliance with its specified user requirements. This testing typically follows system testing in a testing lifecycle.</p> <p>In the default implementation of Serena Release Manager, UAT is also a stage in release train and release package schedules.</p>
Vault Deployment Task	<p>A type of deployment task that integrates with a release vault, such as Dimensions CM or ChangeMan ZMF, for secure deployment of deployment units. For example, Dimensions CM vault deployment tasks move baselines securely to environments.</p>
Workflow	<p>In Serena Release Manager and SBM, a collection of states, transitions, and fields that define an organization's tracking process.</p>

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