

SERENA® Development Manager 1.2

Installation and Configuration Guide

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Welcome to Serena Development Manager

Thank you for choosing Development Manager to plan and control your development.

Serena Business Manager (Powered by Serena Business Manager) enables you to plan, control, and automate all your development processes from definition to quality assurance and release approval with start-to-finish traceability and end-to-end visibility across distributed environments.

Audience and

Scope

This document is intended for personnel who participate in the processes of managing development using Serena Development Manager.

Before You Begin

See the Readme for the latest updates and known issues.

Contacting Technical Support

Serena provides technical support for all registered users of this product, including limited installation support for the first 30 days. If you need support after that time, contact Serena Support at the following URL and follow the instructions:

http://www.serena.com/support

Language-specific technical support is available during local business hours. For all other hours, technical support is provided in English.

Platform Support

For details of supported server and client platforms, third party integrations, and Serena Integrations, see the Serena Release Plan for Serena Development Manager at:

http://support.serena.com/Roadmap/Product.aspx?sel=DEV MANAGER

From the Products list, select Development Manager, then click on the 1.1 release. From here you can display supported platforms and integrations.

Demonstrations

Demonstrations of Serena product features can be viewed at the following public Web site:

http://courseware.serena.com

Guide to Serena Development Manager Documentation

The Serena Development Manager documentation set includes the following manuals and tutorials.

Manual or Tutorial	Description
Serena Development Manager Installation and Configuration Guide	Describes how to install and configure the Serena Development Manager suite of products. (PDF manual)
Serena Development Manager Getting Started Guide	Gives an overview of Serena Development manager (PDF manual).
Serena Development Manager Connector for HP Quality Center / ALM	Describes how to configure and use the Development Manager web services that interact with HP Quality Center.
Serena Development Manager Web Services Reference	Provides Information on the web services provided for Development Manager.
Development Manager Connector for HP Quality Center Web Service Reference	Provides Information on the web services provided for the QC connector for Development Manager.
Serena Development Manager Readme	Provides information about platform requirements and known issues for Development Manager.

The following installation and configuration manuals are referenced in this document.

Manual or Tutorial	Description
Serena Business Manager Readme	Provides information about platform requirements and known issues for Serena Business Manager.
Serena Business Manager Installation and Configuration Guide	Provides information on installing SBM and creating a database. Database and Web server configuration information is also provided. (PDF manual)
Serena Business Manager Composer Guide	Provides details on using SBM Composer to create the tables, fields, workflows, orchestrations, and other design elements comprised in process apps. Information about saving, versioning, importing, and exporting process apps is also provided. This document is intended for individuals who want to design and maintain process apps. (PDF manual)
Serena Business Manager Application Administrator Guide	Provides information on using Application Administrator to deploy process apps to runtime environments and to promote configured applications from one environment to another. (PDF manual)
Serena Business Manager System Administrator Guide	Provides information on configuring and administering the SBM Application Engine. Instructions for managing projects, user accounts, system settings, and authentication are included. (PDF manual)

Manual or Tutorial	Description
Serena Business Manager Licensing Guide	Explains how to manage licenses for Serena Business Manager. License types are discussed, along with instructions for installing and using the Serena License Manager. This guide is intended for administrators who will install and implement Serena Business Manager. (PDF manual)
Serena Business Manager User's Guide	Provides information about the SBM User Workspace and is intended for end users. Instructions on using the SBM User Workspace, including the robust reporting feature in SBM, are included. To ease the process of providing a copy for every user in your system, the Serena Business Manager User's Guide is provided in PDF and can be accessed from the Product Information tab of the About page in the SBM User Workspace. (PDF manual)
Serena Dimensions CM Installation Guides for Windows and for UNIX	Describes how install and configure Dimensions CM for the respective platforms. (PDF manuals)
Serena Dimensions CM Administrator's Guide	Describes how to administer the Dimensions CM tool. (PDF manual)
Serena Dimensions CM and RM Installing the Serena License Manager	Describes installing the Windows version of SLM. (PDF manual)
Serena Dimensions CM User's Guide	A user guide to the Dimensions CM Client Tools. (PDF manual)
Serena Dimensions CM Process Modeling Guide	Describes how to configure the process model using the Administration Console. (PDF manual)
Serena Business Manager Connector for HP Quality Center Implementation Guide	Describes how to configure and use the SBM connector for HP Quality Center. (PDF manual)
Serena Requirements Manager Installation and Configuration Guide	Describes how to install and configure the Serena Requirements Manager suite of products. (PDF manual)
Serena Requirement Managers Getting Started Guide	Gives an overview of Serena Requirements Manager (PDF manual).
Serena ALM Dashboard Installation and Configuration Guide	Describes how to install and configure the Serena ALM Dashboard reporting tool. (PDF manual)

Access the documentation and tutorials for the Serena Development Manager suite through the Serena Help server at http://help.serena.com/alm/dvm/index.html.

Chapter 1

Installation Prerequisites and Planning

This chapter tells you what you need to do before installing Serena Development Manager. To help you plan, it provides an installation checklist for gathering the required information before you start your installation.

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Start Here

This document provides you with information to help streamline and simplify the Serena Development Manager installation.

What is Serena Development Manager?

Serena Development Manager is a component of the Serena Application Lifecycle Management (ALM) product line. Serena Development Manager enables you to control your key software development efforts, track source code changes, define application projects, manage source code testing, and release approvals.

It consists of:

- Serena® Business Manager (SBM) a product that enables you to create process applications that pull and manage information and work-tracking items from different sources. It can be used to manage business processes, including access to other Web services and third-party applications.
- **Serena Development Control**, the component of Serena Development Manager that integrates SBM with the other products in the suite.
- Serena[®] Dimensions[®] CM, a software source control, configuration and management tool. This is the developer's primary tool. It enables you to manage your source versions and builds for Development Manager.

It can also include the following optional components:

Serena SBM Connector for HP Quality Center / ALM, is a set of web services that is used in orchestration applications. This Orchestrated workflow also uses SBM and QC Connector web services. It enables you to use HP Quality Center / ALM for defects and to test issues.

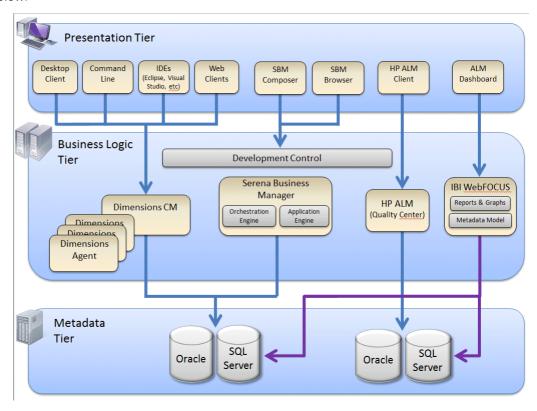
You may also be installing the following components to work in conjunction with Serena Development Manager:

- Serena Requirements Manager, A Serena Orchestrated ALM Product that enables you to manage and approve requirements that are then used to generate development change requests in Development Manager.
- **Serena Dashboard**, a reporting tool that enables you to produce comprehensive graphs, metrics, and views of your ALM processes from different data sources. It provides a set of out-of-box graphs and metrics and enables you to customize them or create your own.

For an overview of Serena Development Manager, see the Getting Started Guide.

Serena Development Manager Architecture

The overall architecture of Serena Development Manager is illustrated in the diagram below.



Installation Overview

This guide takes you through the installation, from pre-installation requirements to post-installation configuration. This section gives an overview of what you need to do to carry out the installation of Serena Development Manager.

There are a number of different possible scenarios, depending on whether you are upgrading an existing version of Serena Development Manager, and whether you will be also using Serena Requirements Manager. These situations require different configuration steps to be carried out. These are described in "Installation Scenarios" on page 28.

The steps in a new installation of Development Manager are as follows:

- 1 Install Serena License Manager, which manages the licenses for Serena Development Control and Serena Dimensions CM.
- 2 Install Serena Business Manager, which is the platform on which Serena Development Control runs.
- 3 Install Serena Development Control, which enables you to plan and control your development changes. This also installs the Serena Connect for HP Quality Center, which enables you to optionally use HP Quality Center.

- **4** Install Dimensions CM, which enables you to control your source code and development packages.
- **5** Optionally, if you wish to use HP Quality Center:
 - **a** If not already installed, install HP Quality Center, which enables you to track defects and monitor quality testing.
 - **b** Download and install the Quality Center modules on the SBM Server. For details, see Installing and Registering Quality Center Modules in the *Development Manager Connector for HP Quality Center / ALM Implementation Guide*
- **6** Optionally, if you want to use the Serena Dashboard for reporting purposes, install the components for the Serena Dashboard. For details see the *ALM Dashboard Installation and Configuration Guide*.

Preparing for the Installation

For a smooth and successful installation and configuration of the Serena Development Manager suite, prepare by gathering the information specified in the following sections.

- "Software Compatibility Requirements" on page 12
- "Database Requirements" on page 13
- "System Requirements" on page 14
- "Installation Planning Checklists" on page 14
- "Installation Planning for SBM Connector for HP Quality Center / ALM Integration" on page 14
- "Installing and Configuring the Serena Dashboard" on page 15

Before installing any of the products in the Serena Development Manager suite, please see their respective installation and configuration guides.

Software Compatibility Requirements

Supported versions of the products in the Serena Development Manager suite are specified in the product roadmap located at:

http://support.serena.com/Roadmap/Product.aspx?sel=DEV_MANAGER

From the Products list, select Development Manager, then click on the 1.1 release. From here you can display supported platforms and integrations.

Before beginning the installation, make sure you have the correct versions of the software to install along with the documentation for those versions.

Preparing for Serena Product Installation

Before you install the Serena Development Manager suite of products, make sure you have completed the prerequisites as follows:

Serena Business Manager

Before you install Serena Business Manager, please see the "Pre-installation Checklist" section of the *Serena Business Manager Installation and Configuration Guide*.

Serena Development Control

You must complete the installation for Serena Business Manager before beginning the installation for Serena Development Control.

If you are installing the Development Manager Connector for HP Quality Center, you will need to install:

- · HP Quality Center, version 10 or later
- The Quality Center modules. For details, see Installing and Registering Quality Center Modules in the Development Manager Connector for HP Quality Center / ALM Implementation Guide

Dimensions CM

Development Manager R1.1 requires Serena Dimensions CM 12.2.



NOTE If upgrading from a previous version of Dimensions CM, you will need to carry out some changes to the process model. Please contact Serena Support for details.

Serena License Manager

You need to install Serena License Manager to license and run Serena Business Manager and Dimensions CM. See "Installing Serena License Manager" on page 18.

Common Supporting Files

The installer for Serena Development Control automatically installs additional supporting software, such as a common Tomcat Web server.

Database Requirements

Before beginning the installation, you must have database systems installed and ready as follows:

Serena Business Manager

Serena Business Manager requires one of the following databases: Oracle or SQL Server. For details of required versions see the Supported Platforms tab at:

http://support.serena.com/roadmap/ product.aspx?sel=TEAMTRACK_10.1

or

http://support.serena.com/roadmap/
Product.aspx?sel=TEAMTRACK 2009 R4.03

Serena Dimensions CM

Dimensions CM requires one of the following databases: Serena-Supplied Runtime, Oracle, or SQL Server. For details of required versions see the Supported Platforms tab at:

http://support.serena.com/roadmap/ Product.aspx?sel=PVDIMENSIONS 12.2

System Requirements

This section includes references to the system requirements for each of the products installed as part of the Development Manager suite.

You should determine your organization's specific needs using the detailed documentation for SBM, Dimensions CM, and Quality Center as follows:

Product	System Requirements Location	
Serena Business Manager	"Hardware Requirements" in <i>Serena Business Manager</i> Installation and Configuration Guide	
Serena Development Manager	The Serena Business Manager requirements above address the requirements for Serena Development Control.	
Serena Dimensions CM	See the Dimensions CM 12.2 Release Plan page.	
	 See the Dimensions CM Readme 	
Quality Center	Ensure that you are running a supported version of Quality Centre, as indicated in the <i>Serena Development Manager Readme</i> .	

Installation Planning Checklists

Checklists and prerequisites worksheets for the installation and configuration are provided in the Serena Business Manager and Dimensions CM installation documentation. These include port numbers, IP addresses and hostnames of various servers, and DB names and information.

Installation Planning for SBM Connector for HP Quality Center / ALM Integration

For pre-requisites for the Quality Center integration, see the *Development Manager Connector for HP Quality Center / ALM Implementation Guide.* For HP Quality Center ALM consult your product documentation.

If you are using the Development Manager Connect for Quality Center, you will need to have HP Quality Center installed, and download and install the Quality Center modules on the SBM Server before running the Development Control Installer. For details, see Installing and Registering Quality Center Modules in the *Development Manager Connector for HP Quality Center / ALM Implementation Guide*. There are also some post-installation steps you will need to carry out.

Installing and Configuring Serena Requirements Manager

Serena Requirements Manager is a separately licensed option. For pre-requisites, installation and configuration details, see the *Serena Requirements Manager Installation and Configuration Guide*.

Installing and Configuring the Serena Dashboard

The Serena Dashboard is a separately licensed option. For pre-requisites, installation and configuration details, see the *ALM Dashboard Installation and Configuration Guide*.

Chapter 2

Installation

This chapter leads you through an installation of all of the components of Serena Development Manager.

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Installation Order

Make sure you have completed your planning and performed the installation prerequisites documented in the preceding chapter.

Use the installation checklist and worksheets to help guide you through the installation processes.

The installation should proceed in the following order given unless you have the experience and necessity to do otherwise.

- 3 "Installing Serena License Manager" on page 18.
- 4 "Installing Serena Business Manager" on page 19.
- 5 "Installing Dimensions CM" on page 19.
- 6 "Installing Serena Development Control" on page 20.

Installing Serena License Manager

You must install Serena License Manager to license and run Serena Business Manager and Dimensions CM. You apply the licenses for all of the products installed for the Serena Development Manager suite as part of the post-installation configuration. See "Applying Licenses" on page 33.

Existing Serena License Manager Systems

If you already have an installation of Serena License Manager, you do not need to install a new system for Serena Development Manager. You do need to do the following:

- Ensure that you are running a supported version of Serena License Manager as indicated in the Serena Development Manager Readme.
- After installing the rest of the products in the suite, follow the post-installation configuration instructions for applying licenses.



CAUTION! Do not attempt to adapt the existing SBM Process apps to use with Serena Development Manager. You should use the process apps supplied with Serena Development Control.

Please continue to "Installing Serena Business Manager" on page 19.

New Serena License Manager Systems

Follow the instructions on installing Serena License Manager in either the Dimensions CM or Serena Business Manager documentation.

Documentation References

Complete documentation on installing Serena License Manager is in the following documents:

- Serena Business Manager Licensing Guide
- Serena Dimensions CM and RM Installing the Serena License Manager

Installing Serena Business Manager

Serena Business Manager must be installed before you can install Serena Development Control.

Existing Serena Business Manager Systems

If you already have an installation of Serena Business Manager to which you plan to add Serena Development Control, you do not need to install a new system for Serena Development Manager. You do need to do the following:

- Ensure that you are running a supported version of SBM as indicated in the Serena Development Manager Readme.
- If you have installed the Development Manager sample data with a previous version of SBM, it is advisable to remove it before upgrading. See "Removing the Sample Data from an Existing Installation" on page 76.
- After installing the rest of the products in the suite, follow the post-installation configuration instructions for SBM.

Please continue to "Installing Serena Development Control" on page 20.

New Serena Business Manager Systems

Before you install Serena Business Manager, please see the "Pre-installation Checklist" section of the *Serena Business Manager Installation and Configuration Guide*.

Documentation References

Complete documentation on installing Serena Business Manager is in the *Serena Business Manager Installation and Configuration Guide*.

Installing Dimensions CM

Existing Dimensions CM Systems

If you already have an installation of Dimensions CM that you plan to use as the Serena Dimensions CM, you do not need to install a new system for Serena Development Manager.

This version of Serena Development Manager requires Dimensions CM 12.2 in order for Dimensions CM to provide the correct process model. It is possible to upgrade a Dimensions CM 12.1 installation to 12.2, but you will need to carry out some changes to the process model. Please contact Serena Support for details.

You do need to do the following:

- Ensure that you are running a supported version of Dimensions CM as indicated in the Serena Development Manager Readme.
- If you have installed the Development Manager sample data with a previous version of Dimensions CM, it is advisable to remove it before upgrading. See "Removing the Sample Data from an Existing Installation" on page 76.
- If you want to use Single Sign On (SSO) you will need to make sure it is enabled for Dimensions CM. For configuring SSO if not already enabled, see *Dimensions CM Support for SSO* in the *Dimensions CM Administrator's Guide*.
- After installing the rest of the products in the suite, follow the post-installation configuration instructions for Dimensions CM.

New Dimensions CM Systems

Before you install Dimensions CM, please see the "Fresh Installation Checklist" section of the *Dimensions CM Installation Guide for Windows* or the *Dimensions CM Installation Guide for Unix*.

If you want to use Single Sign On (SSO) you should install SBM and the SSO server and then enable SSO during the installation of Dimensions CM to point Dimensions CM to the SSO server.

Documentation References

- Complete documentation on installing Dimensions CM is in the *Dimensions CM Installation Guide for Windows* and the *Dimensions CM Installation Guide for Unix*.
- Complete documentation on configuring SSO is in the *Dimensions CM Administrator's Guide* in "Dimensions CM Support for SSO".

Installing Serena Development Control

The Serena Development Control installer copies necessary files to the SBM installation directory path. The files copied include the Java war files and the SBM solution file. Serena Development Control needs to be installed on the machine where the SBM Server is installed in order to import the solution file. It is recommended for performance reasons,

however, that the Development Manager web services be installed on the server where Dimensions CM is installed.



NOTES

If you are using the Development Manager Connect for Quality Center, you will need to have HP Quality Centre installed, and download and install the Quality Center modules on the SBM Server before running the Development Control Installer. For details, see Installing and Registering Quality Center Modules in the *Development Manager Connector for HP Quality Center / ALM Implementation Guide*. There are also some post-installation steps you will need to carry out.

When installing Development Control via Remote Desktop access to a Windows 2003 system, installation may fail if you include the Connector to Quality Center option. To avoid this issue, run Remote Desktop in Console or Administration mode by running one of the following commands:

mstsc /admin

or

mstsc /console

There is sample data provided with Development Manager that consists of Dimensions CM sample data and SBM sample data. These sets of data are interrelated in that the items/objects in the SBM data and Dimensions CM data reference each other. You can install one or the other, or both sets of data.

- If you require the Dimensions CM sample data, you need to run the Development Control installer on the server on which you have installed Dimensions CM.
- If you require the SBM sample data, this will need to be installed when you run the Development Control installer on the SBM server.



NOTE This option is not selected by default, so you will have to select a custom install and make sure the option is selected.

If you are upgrading an existing installation of Development Manager, the installer will perform the upgrade. You will also need to perform some of the configuration steps described in the configuration section. For details, see "Upgrading an existing installation of Development Manager to 1.2" on page 28



NOTE If you have installed the sample data for SBM or Dimensions CM, you will need to remove these databases before running the installer for Development Manager 1.2. See "Removing the Sample Data from an Existing Installation" on page 76.

To install Serena Development Control:

1 On the SBM Server, run the installer executable, Development Control.exe or Development Control 64-bit.exe depending on your server type.

You may be asked to install Windows Installer 4.5, in which case:

- a Click Install.
- **b** When asked if you want to reboot your machine, reply **Yes**.

The Welcome page appears.

2 Click Next.

The License page appears.

3 Confirm and click Next.

The Destination Folder page appears.

4 Accept or change the destination folder. This should be the location where SBM is installed. For example if SBM is installed in C:\Program Files\Serena\SBM, it should be:

C:\Program Files\Serena\Solutions\Development Control

5 Click Next.

The Setup Type page appears.



NOTE If you want to install the sample SBM data, this option is deselected by default. To install this option, you will need to:

- Run this installer on the machine on which the local Oracle or SQL database serving the SBM instance is installed.
- Choose Custom, and select the SBM Sample Data option.

The SBM sample data can only be installed on Oracle 11gR2 and MSSQL 2008 R2.

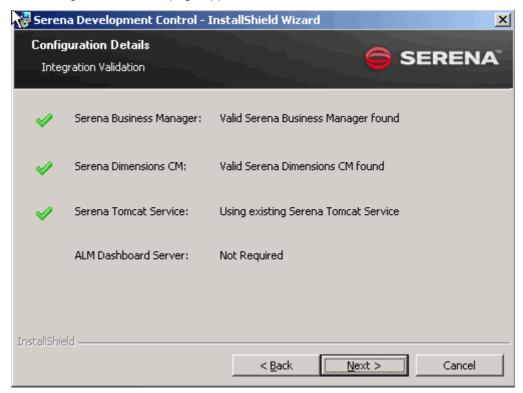
If you want to change any of the options to be installed:

- a Select Custom.
- **b** Click Next.



- **c** On the Custom Setup page, select or deselect the required item(s).
- 6 Click Next.

7 The Configuration Details page appears...



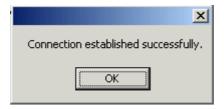
The installer checks whether a valid version of SBM and the Serena common Tomcat Web server are installed. It installs Tomcat if needed.

8 Click Next.

9 If you are installing on the server where Dimensions CM is installed, and you have not deselected the CM Sample Data option, the Connection Details page appears asking you for the Details of the Dimensions database server.



- Select the Type of database you are using, and enter the login credentials for the Admin User. If you have selected Oracle, also enter the credentials for the pcm_sys user.
- 11 Click Test Connection to test the connection. Click OK on the message box.



12 Click Next.

If you are installing on the server where SBM is installed, and you have selected the Development Manager Sample Data option, the Connection Details page appears asking you for the details of the SBM database server.

a Select the Type of database you are using, and enter the login credentials for the Admin User.

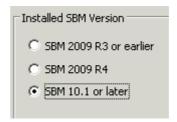


- **b** Click **Test Connection** to test the connection.
- c Click Next.
- **13** The *Ready to Install* page appears.
- 14 Click Install.

A page appears informing you files are being copied.

If you have chosen to install the Quality Centre connector, after a short time, a Welcome to the InstallShield Wizard for Serena Connector for HP Quality Centre appears.

- a Click Next.
- **b** Accept the License agreement and click Next.
- **c** Select the version of SBM that you have installed.



- d Click Next.
- e On the *Ready to Install Program* page, click **Install**.
- f Some files are copied and then an InstallShield Wizard Completed page appears.

g Click Finish.

15 Click Finish.

Serena Development Control creates the following file and folders under the Serena Development Control installation directory path. For example:

..\Program Files (x86)\Serena\Solutions\Development Control\

\solution (contains the solution file)

\war (contains the DevManager.war file)

com.serena.dvm.sbm.shell.zip (contains the custom UI for Development Manager)

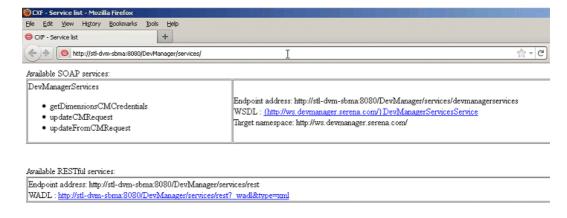
The installer does the following:

- Copies the DevManager.war file to the Tomcat Web server and restarts Tomcat
- If you have selected this option, the installer creates a database for the sample data for Dimensions CM. The database/connection string is dvm_demo@dim10.
- If you have selected this option, the installer creates a database for the sample data for SBM. The database name is *dvm_sample*.

To check that DevManager is installed into Tomcat, enter the URL:

http://<severname>:8080/DevManager/services/

in a web browser.



Chapter 3

Development Manager System Configuration

This chapter tells you how to configure your system after you have completed installing all of the products in the Serena Development Manager suite. This enables the communication between the products within Serena Development Manager.

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System Configuration Overview

Installation Scenarios

There are a number of scenarios for how you want to install Development Manager 1.2.

See the following sections according to whether you are upgrading of performing a clean install:

- "Upgrading an existing installation of Development Manager to 1.2" on page 28
- "Performing a new installation of Development Manager 1.2" on page 29

See the following sections according to how you will be using Development Manager:

- "Installing Development Manager and Requirements Manager at the Same Time" on page 29
- "installing Development Manager Without Installing Requirements Manager" on page
 29
- "Installing Requirements Manager without installing Development Manager" on page
 29
- "Installing Development Manager when you Have Previously Installed a Stand-alone Version of Requirements Manager." on page 29
- "Installing Requirements Manager when you Have Previously Installed a Stand-alone Version of Development Manager 1.2." on page 30

These sections give a high-level view of which steps to carry out for each of these scenarios.

Upgrading an existing installation of Development Manager to 1.2

If you have installed the sample data for SBM or Dimensions CM, you will need to remove these databases before running the installer for Development Manager 1.2. See "Removing the Sample Data from an Existing Installation" on page 76.

The installer will upgrade your existing installation to Development Manager 1.2.

You will also need to undeploy the previous versions of the process apps. For details, see "Undeploying Previous Versions of the Process Apps" on page 34.

If you want to save the data and settings for one or more applications from your existing installation, you can perform the following steps:

- **a** Make a backup of the database you are using with Development Manager 1.1, for example DB_1.
- **b** Restore this as another database, for example DB_2.
- **c** Undeploy the 1.1 version of the application and Promote the 1.2 version of the same application.
- **d** Create a connection to the new database DB_2 and connect to it using Serena System Administrator.
- **e** Import the required data from DB_2 to DB_1. In this case all the project settings and data from the previous version will be saved.

You will then need to carry out the configuration steps described in the sections below, taking note of the section "Which Process Apps Should I Promote and Deploy?" on page 40:

- "Importing the Files for the Development Manager UI" on page 31
- "Import and Promote the Snapshots" on page 30.

You will need to be aware of the issues "Create Dev CR Button not Appearing After Upgrade" on page 87, and "Error Promoting Dev Change Requests Snapshot" on page 88.

- "Configure the Process Applications" on page 30
- "Configuring the Sample Data (Optional)" on page 31

Performing a new installation of Development Manager 1.2

After carrying out the installation, carry out the steps described in "Overview of Configuration Steps" on page 30 below, taking note of the section "Which Process Apps Should I Promote and Deploy?" on page 40. Then, depending on

Installing Development Manager and Requirements Manager at the Same Time

After performing the steps above for either Upgrading an existing installation of Development Manager to 1.2 or Performing a new installation of Development Manager 1.2, you will then need to carry out the steps described in "Configuring a Stand-Alone Development Manager Installation" on page 77.

installing Development Manager Without Installing Requirements Manager

After performing the steps above for either Upgrading an existing installation of Development Manager to 1.2 or Performing a new installation of Development Manager 1.2, you will then need to carry out the steps described in "Configuring a Stand-Alone Development Manager Installation" on page 77.

Installing Requirements Manager without installing Development Manager

For details, see the Serena Requirements Manager Installation and Configuration Guide.

Installing Development Manager when you Have Previously Installed a Stand-alone Version of Requirements Manager.

After performing the steps above for either Upgrading an existing installation of Development Manager to 1.2 or Performing a new installation of Development Manager 1.2, you will then need to carry out the steps described in:

- "Configuring an Existing Stand-alone Requirements Manager Installation for use with Development Manager" on page 83.
- "Configuring a Stand-Alone Development Manager Installation" on page 77.

Installing Requirements Manager when you Have Previously Installed a Stand-alone Version of Development Manager 1.2.

For details of installing Requirements Manager, see the *Serena Requirements Manager Installation and Configuration Guide*.

Overview of Configuration Steps

The steps that need to be performed on the SBM and Dimensions CM installations to configure Serena Development Control can be summarized as follows:



NOTE Some of the procedures that are carried out in SBM may be different depending on whether you are using SBM 10.1 or a previous version. Consult the appropriate user documentation for the version of SBM that you are using, in particular, the SBM System Administrator Guide.

- Perform the steps to import the files relating to the changes to the SBM UI for Serena Development Manager. See "Importing the Files for the Development Manager UI" on page 31.
- Apply Licenses. For details, see "Applying Licenses" on page 33.
- Update the connection details for the web services. See "Updating the Connection Details in the Web Services" on page 33.

Import and Promote the Snapshots

- Check the privileges for the Admin user in SBM and update if necessary. For details, see "Checking the Admin User Privileges" on page 34.
- Import the Solution File in SBM Application Administrator. For details, see "Importing and Promoting the Serena Development Control Snapshots" on page 35.
- Promote the snapshots. For details, see "Promoting the Snapshots" on page 41.
- Deploy the process apps. For details, see "Deploying the Process Apps" on page 44

Set Privileges

- Set Administrator privileges to update the auxiliary tables. For details, see "Configuring Administrative Owners" on page 46.
- Create the "connector" user and set all privileges in SBM and Dimensions CM. For details, see "Configuring Administrative Owners" on page 46.
- Make sure all roles in the projects are assigned to at least one user. For details, see "Creating and Assigning the Users" on page 47.

Configure the Process Applications

- Update the Endpoints for the environment. See "Updating the Endpoints" on page 50.
- Update the connection details. "Updating the Connection Details in the Workflows" on page 51.
- Update the application links in the event mappings. See "Updating the Application Links in the Event Mappings" on page 54

- If the SBM and Development Manager web services are not installed on the same machine, you need to reconfigure the REST Grids. See "Reconfiguring the REST Grids" on page 55.
- Republish the changes you have made, see "Republish the Process Apps" on page 60.

Configure Dimensions CM

- Configure Dimensions CM for ALF events. See "Configuring Dimensions CM" on page 60.
- Enter the connection details for Dimensions CM in the auxiliary table. See "Entering the Connection Details for Dimensions CM" on page 62.
- Make sure the members of the Build team have the BUILD ENGINEER role. See "Assign Build Engineer Role" on page 63.
- Make sure the Development Engineer role is assigned to the last transitions in the TASK lifecycle. See "Assign Development Engineer Role to TASK Lifecycle Transitions" on page 65.
- Check that Dimensions CM and Quality Center are connecting to Serena Development Control. See "Checking the Configuration" on page 69.

Configuring the Sample Data (Optional)

If you have chosen to install the sample data you will need to update Development Manager to access the sample database and carry out some configuration steps. For details, see "Configuring the Sample Data" on page 71.

Configuring SBM for Serena Development Control

Serena Development Control is a a collection of process applications that run in SBM. Before you can use Serena Development Control, you must configure it as documented in this section.

Importing the Files for the Development Manager UI

The installer includes files that provide changes to the SBM-based UI to provide a user-friendly look and feel for Development Manager. You will need to add them to the database by performing the following steps.



NOTE These steps need to be performed immediately after completing the Development Manager installation.

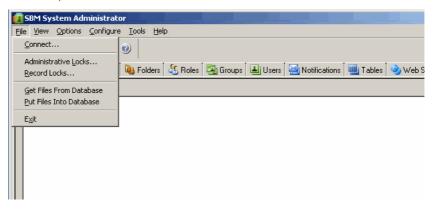
Importing the Development Manager UI Files

- 1 Stop the Serena Common JBoss and IIS:
 - a Open SBM Configurator: Serena | Serena Business Manager | SBM Configurator

b Select the **Manage Services** tab on the left



- c Click the Stop buttons for Serena Common JBoss and IIS.
- 2 Update database with the new images and settings:
 - a Open SBM system Administrator.
 - **b** Select File | Put Files Into Database.



c Click **OK** in the dialog box.

The files and templates are imported.

3 Start the Serena Common JBoss and IIS:

Open SBM Configurator, Select **Manage Services**, and click the **Start** buttons for Serena Common JBoss and IIS.

- 4 Clear your browser cache completely.
- It is also advisable to refresh the template cache by entering the following URL in your browser:

http://<hostname>/tmtrack/
 tmtrack.dll?AdminPage&command=ClearTemplateCache

6 To view the Development Manager UI, use the following URL

http://<hostname>/tmtrack/tmtrack.dll?shell=dvm

Applying Licenses

Before you can use the Serena products in a production environment, you must apply licensing. If you are evaluating the products, temporary licensing is available.

Use the following methods to apply licenses for the Serena Development Manager suite of products.

- Serena Development Control: Use Serena License Manager to apply licenses for Serena Development Control.
- Serena Dimensions CM: Use Serena License Manager to apply licenses for Serena Dimensions CM.

Documentation References

- Complete documentation on applying licenses for Serena Development Control, an SBM process app, is in the Serena Business Manager Installation and Configuration Guide.
- Complete documentation on applying licenses for Serena Dimensions CM is in the Serena Dimensions CM Administrator's Guide in "Administering Your Licenses and the License Server".

Updating the Connection Details in the Web Services

1 Under the Tomcat installation, locate the connections.xml file:

For a default installation, this will be under:

- C:\Program Files\Serena\common\tomcat\6.0\webapps\DevManager
 \WEB-INF\classes
- 2 Edit connections.xml
- 3 Change the connection details to match your Dimensions CM server using the example below:

```
<dbConnection>dim10</dbConnection>
```

```
<dbName>dvm_demo</dbName>
```

<password>serviceuserpassword</password>

<server>localhost</server>

<username>SERVICEUSER</username>Note that if you are using SSO, you do not specify the username and password.

4 Restart Tomcat.

Importing and Promoting the Snapshots

Checking the Admin User Privileges

In order to carry out these tasks, you need to check that the user you are using for the administrative tasks has the necessary permissions to deploy and undeploy applications, import solutions, view and edit process applications. Use the SBM System Administrator to ensure that these privileges are granted. The Admin user should have these privileges by default. For details, see the *Serena Business Manager System Administrator Guide*

Undeploying Previous Versions of the Process Apps

If you are upgrading from a previous version of Development Manager, you will need to undeploy the existing process apps before deploying the new ones.



NOTE Undeploying a process app will delete all of its content and data. If you want to save this data, see the steps described in "Upgrading an existing installation of Development Manager to 1.2" on page 28.

In order to do this:

1 Open the SBM Application Repository:

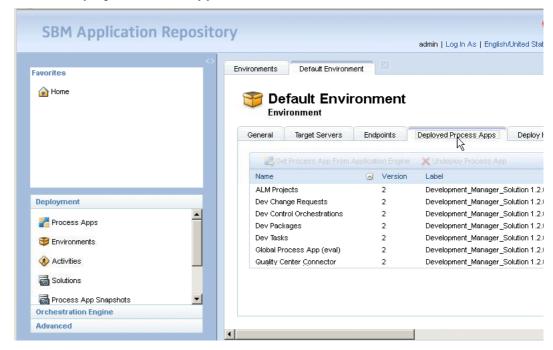
Select Start | Serena | Serena Business Manager | SBM Application Repository or

If you are using a version of SBM prior to 10.1, this is called SBM Application Administrator.

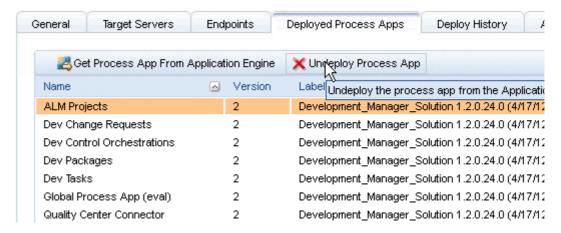
Select Environments.

Select the environment to which you had previously deployed the process apps.

Select the **Deployed Process Apps** tab.



Select a process app and click Undeploy Process App.



Click OK to confirm.

Repeat this for the other process apps.

Importing and Promoting the Serena Development Control Snapshots

The Serena Development Control Application is packaged as an SBM solution file which includes the following:

- Runtime configuration information
- Reports
- Notifications

Auxiliary table information

There are eight process applications included:

- Dev Control Orchestrations
- Dev Tasks
- Dev Change Requests
- ALM Projects
- Dev Packages
- Quality Center Connector
- Global Process App (eval)
- Requirement Approval Management

The following procedures are documented here to help you through the Development Manager-specific configuration process. For detailed documentation on promoting process apps, see the *Serena Business Manager Application Administrator Guide*.



NOTE The procedures here that are carried out in SBM are described in relation to SMB 2009 R4.03. In SBM 10.1 the Application Administrator is now called the Application Repository. The steps however, will be much the same.

To use the application, you must import the solution to SBM as follows:

1 Open SBM Application Repository:

Select Start | Serena | Serena Business Manager | SBM Application Repository or

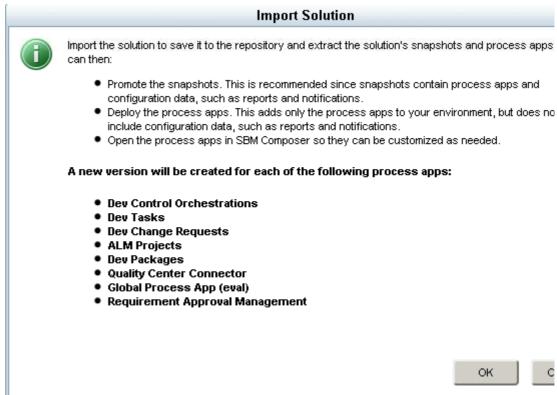
If you are using a version of SBM prior to 10.1, this is called SBM Application Administrator.

- 2 Enter your login details.
- 3 Click **Solutions** in the navigation pane under **Deployment**.

The solution pack is listed.



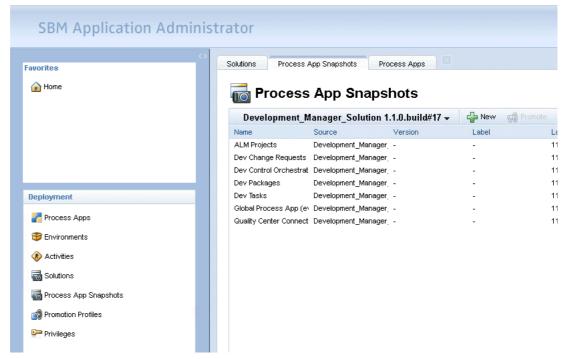
4 Click the **Import** button to import the solution file and extract the solution's snapshots and process apps.



An Import Solution dialog box appears, explaining which snapshots and process apps will be imported with the solution.

5 Click OK.

Selecting the name of the solution and clicking **Open Snapshots** shows the eight process app snapshots:



Creating a Default Environment

You will need to create an environment for your Serena Development Control process application unless you are promoting it into an existing environment. If you wish to use an existing environment, you can skip this section.

After you create the environment, you must set up a BPEL engine and SBM event manager for that environment.

To create the default environment:

- 1 From the SBM Application Administrator navigation pane, click Environments.
- 2 Click New above the list.

The New Environment dialog appears.

- **3** Fill out the form for the new environment as follows:
 - a Enter a name and description.
 - **b** For Composer, select **Enable Deployment**.
 - **c** Under Application Engine Server, enter a name and description.
 - **d** In the URL, change the server to *localhost* and specify the port number for the server. For example:

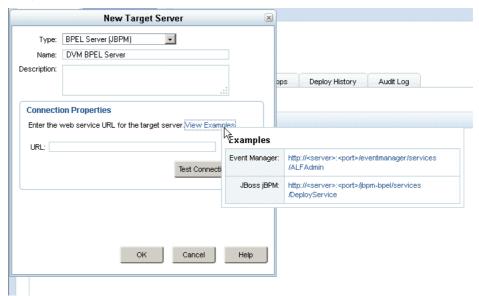
http://localhost:80/gsoap/gsoap ssl.dll?sbminternalservices72

- 4 Click Test Connection to test the connection.
- 5 Click OK to save the environment.

To set up the target servers, the BPEL engine and the event manager:

- 1 Select the new default environment and then select the Target Servers tab.
- 2 Click New.
- **3** The New Target Server dialog appears.
- 4 Fill out the form as follows:
 - a In the Type field, select BPEL Server (JBPM).
 - **b** Name the server, for example: DVM BPEL Server.
 - **c** Enter the URL using *localhost* as the hostname.

Port 8085 is the default, unless you specified a different port in the Configurator for your JBOSS server.





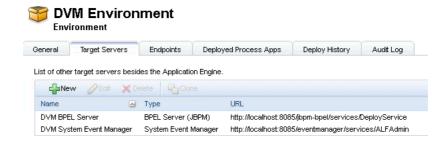
TIP Above the URL field, click **View Examples** and select from the examples. In the URL field, change the hostname and port.

d Click Test Connection to test the connection.



e Click OK.

5 Repeat Step 2 to Step 4 above for SBM Event Manager, with Type set to System Event Manager.



Which Process Apps Should I Promote and Deploy?

The following sections describe how to promote and deploy the required process apps for the implementation of Development Manager and/or Requirements Manager that you will be using. Note that promoting differs from deployment because it transfers environment-specific data such as roles, assignments, reports etc. For details of promoting and deploying, see the SBM Application Repository Guide.

Because there are shared process apps between Requirements Manager and Development Manager, you should not necessarily promote and deploy all of the process app snapshots contained in the solution file.

- If you are installing Development Manager and **not** intending to install Requirements Manager, promote and deploy all of the eight process apps.
- If you have installed Requirements Manager already, then:
 - When you promoted the Requirements Manager process apps, you should **not** have promoted:
 - Dev Change Requests
 - · Dev Packages
 - Dev Tasks

which you will now be promoting from the Development Manager solution file.

- During promotion of the Development Manager process apps do **not** promote:
 - · Requirements Approval Management
 - ALM Projects

which you should already have promoted from the Requirements Manager solution file.

- If you are installing Development Manager first and are then going to install Requirements Manager:
 - During promotion of Development Manager process apps do **not** promote:
 - Requirements Approval Management
 - which you will subsequently be promoting from the Requirements Manager solution file.
 - During promotion of Requirements Manager process apps do **not** promote:

· ALM Projects

which you will be promoting from the Development Manager solution file.

Also consult the *Requirements Manager Installation and Configuration Guide* for this information.

Promoting the Snapshots

You must promote each of the eight snapshots.

To promote a snapshot:

- 1 Click Solutions in the navigation pane.
- 2 Select the solution and click Open Snapshots.

The list of snapshots appears.

3 Select a process app and click Promote.

The Summary page appears.

4 Click on the Destinations field.



The Destinations page appears.

- **5** Select the environment you created above.
- 6 Click Next.

The Entities page appears.

Promote

Entities

Dev Change Requests (saved) from Development_Manager_Solution 1.2.0.31.0

Select the entities to promote to the destination.

Applications

Entities of 'Dev Change Requests'

Projects: All

Notifications: All

Notification Rules: Referenced

Reports: All

Auxiliary Table Data: All

Transition Group Restrictions: User Field Selections: User Field Selections: V

✓ Merge conflicts

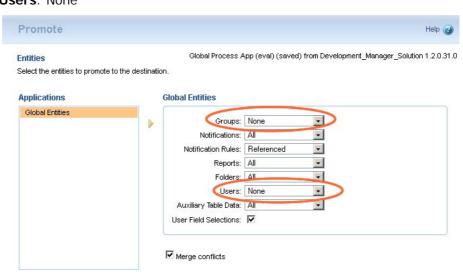
Make sure the option Merge Conflicts is selected.

■ For the *Dev Change Request* process app, if you are upgrading a previous version of Development Manager:

This has a predefined project that is created as an example. This project could cause a conflict during promotion, so if you do not need this project, or the promotion fails because of this project, you should select **None** for **Projects** for this process app. For details, see "Error Promoting Dev Change Requests Snapshot" on page 88.

• For the Global Process App (eval) only, select:

Groups: None **Users**: None



7 Click Next.

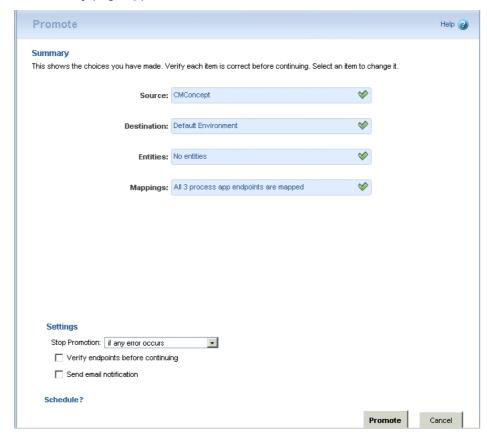
The Mapping page appears.



NOTE For the Dev Control Orchestrations snapshot, make sure the correct endpoint is selected if you have already installed RQM:

- a Click the Choose Destination Endpoints button.
- **b** Select rtmService (not rtmService_2)
- 8 Click Done.

The Summary page appears.



Note: Make sure Verify endpoints before continuing is not checked.

9 Click Promote.

The Promotion Started page appears.

- **10** Click Show Activities or View Log to see the results.
- 11 Repeat Step 3 thru Step 10 for each snapshot.

Deploying the Process Apps



IMPORTANT! It is necessary to deploy the process apps in the following order:

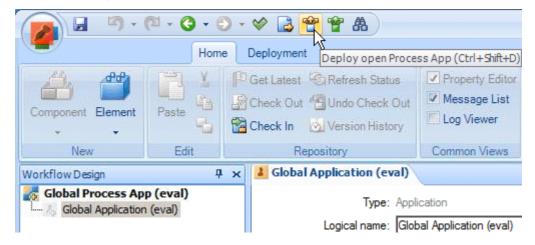
- 1 Global Process App (eval)
- 2 Dev Change Requests
- 3 Requirement Approval Management
- 4 ALM Projects
- 5 Dev Tasks
- 6 Dev Packages
- 7 Dev Control Orchestrations
- 8 Quality Center Connector



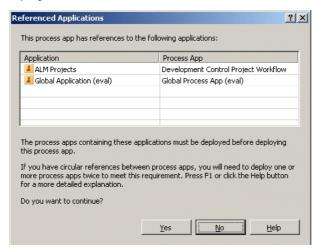
NOTES If you are installing a stand-alone version of Development Manager (you are not using Requirements Manager) perform the steps described in "Hiding the Requirements Manager-related Forms" on page 78 and "Removing Requirements Manager-related Columns from Report Definitions" on page 79

To deploy a process app:

- 1 Open SBM Composer
- 2 Open the Process App.
- 3 Click the Deploy button on the toolbar.



You may receive a message informing you that certain process apps need to be deployed first.

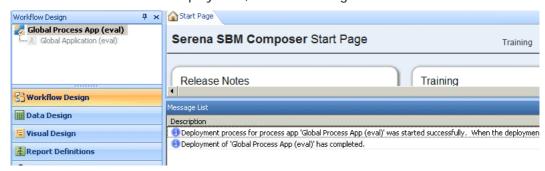


If you have already deployed the applications mentioned, click Yes.

4 In the Deploy Process App menu, select the environment you created above



- **5** Click Deploy.
- 6 To view the status of the deployment, see the message list.



You can also use the Deploy and Quick Deploy buttons on the toolbar.



7 Check in the elements of the process app by right-clicking it and selecting Check In. Click OK in the Check In dialog box.

For further details of working with process apps, see the SBM Composer Guide.

Setting Privileges



NOTES The procedures here that are carried out in SBM are described in relation to SMB 2009 R4.03. In SBM 10.1, these steps are carried out in a web-based System Administrator. Consult the appropriate user documentation for SBM 10.1, in particular, the SBM System Administrator Guide.

Configuring Administrative Owners

You must select a specific user as owner for the connection details for the Development Manager orchestrations that connect SBM and Dimensions CM. This user needs to be created in both SBM and Dimensions CM and must have full administrative privileges in both SBM and Dimensions CM. By default, the user *dmsys* has the necessary privileges in Dimensions CM, but you may wish to use the user *serviceuser* since this is the default in the orchestrations. If the connection user is not dmsys, you will need to perform the steps described in, "Setting Privileges for the Connection User" on page 67.

To configure the connector user:

- Open the SBM System Administrator.
- **2** Select the Users tab.
- **3** Select the connector user (for example serviceuser).
- 4 Select Edit.
- 5 On the Privileges tab, select the Table tab and select all privileges for the following tables:
 - Baselines
 - CM Connection
 - Quality Connector
- 6 On the Administration tab, select the tables tab, and select all privileges for the tables.
- 7 Select the System tab below.

8 Select Global Administration and click OK.

Creating and Assigning the Users

Each role in each application must have at least one user assigned to it for the applications to function. To make the initial checking of the configuration of Development Manager more straightforward, you can assign these roles to a single administrative user, such as Bill Admin. The projects are:

- Dev Tasks Project
- ALM Projects
- Dev Change Requests Project
- Dev Package Project

For the example scenarios you need to set up the following users and assign the corresponding roles in each of the projects for which those roles exist. Note that if you are installing the SBM sample data for Development Manager, these users will already exist in that database:

Mira: Project Manager

Matt: Business Analyst

■ Kaci: Product Owner

Josh: Development Manager

Emma: Development Engineer

Amy: Build Manager

Alexander: Build Engineer

Dinesh: QA Manager

Ashley: QA Engineer

Dave: Release Manager

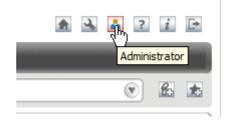
Oscar: Release Engineer

serviceuser: Administrator

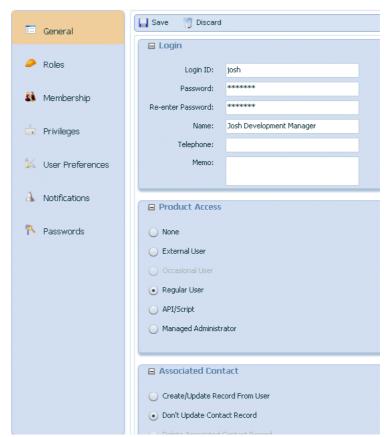
For example, using SBM 10.1, You would carry out the following steps for user Josh:

1 Log into SBM Administrator by entering the following URL in a browser http://<hostname>/tmtrack/tmtrack.dll?shell=dvm

2 Click the Administrator button in the toolbar

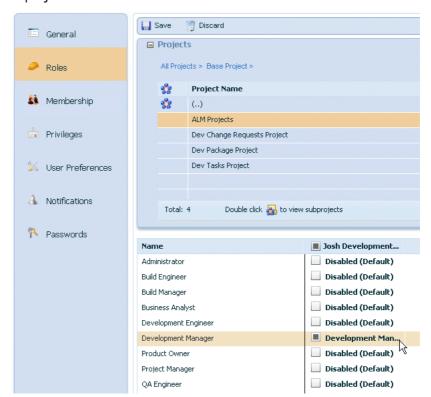


3 Click Users in the main window.



4 Click Add, and enter the details for the user, selecting the option Regular User.:

- 5 Click Save.
- 6 Double-click the name of the user.
- 7 Select Roles.
- 8 Double-click Base Project.



9 Select a project and select the role in the list below.

- Repeat the previous step for each of the projects where the role is listed.
- 11 Click Save.

Documentation References

- Complete documentation on promoting process apps in SBM is in the Serena Business Manager Application Administrator Guide in "Promoting Process Apps".
- Complete documentation on managing roles in SBM is in the *Serena Business Manager System Administrator Guide* in "Managing User Accounts".

Configuring the Process Applications

This section describes how to configure an out-of-the-box default example. The details may be different depending on how you are customizing Development Manager for your processes.

The data that is imported with the snapshots includes a product called QLARIUS, and projects called JAVA_BRANCHA_STR, and MAINLINE_JAVA_STR.

If you are using the default QLARIUS product in Dimensions CM this will contain the correct data. If you are using a different product and/or projects, you will need to make sure it exists in Dimensions CM.



IMPORTANT! When deploying the process apps you need to do so in the following order:

- 1 Global Process App (eval)
- 2 Dev Change Requests
- 3 Requirement Approval Management
- 4 ALM Projects
- 5 Dev Tasks
- 6 Dev Packages
- 7 Dev Control Orchestrations
- 8 Quality Center Connector

If you receive an error when deploying a process app it is likely that it contains references to another process app that needs to be deployed before it.



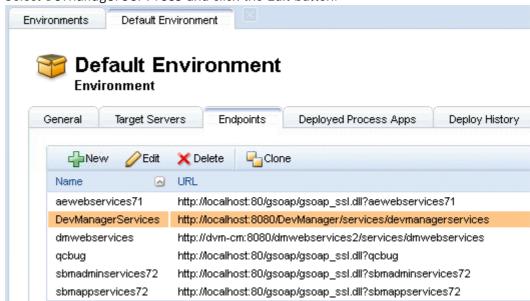
CAUTION! If you deploy a process app that contains a Web service, and the defining .wsdl file contains an incorrect service location for the environment to which you deployed, you need to edit the endpoint in Application Repository to point to the correct service location and then redeploy the process app so the changes can take effect. (You may also want to get the latest changes back to SBM Composer.)

If you then clone the environment and deploy the same process app to the cloned environment using default settings, the new deployment will not use the existing endpoints that you edited; it will instead create new endpoints with similar names. These new endpoints will contain the service location from the defining .wsdl file, so you need to edit them (as you did in the original environment) to point to the correct service location for the Web service. (Alternatively, you can edit the deployment in the **Deploy Options** dialog box in SBM Composer to use the correct endpoints and delete the duplicate ones.) In either case, you need to redeploy the process app to the cloned environment so these changes can take effect.

Updating the Endpoints

- 1 From the SBM Application Administrator navigation pane, click Environments.
- **2** Select the environment you used for the promotions.
- 3 Select the Endpoints tab.

Some endpoints need to be changed to reference the SBM server name and port number you are using. The dmwebservices endpoint needs changing to reference the Dimensions CM server.



Select DevManagerServices and click the Edit button.

Change the server name to your SBM server, and the port number to the one you are using (default is 8080).

Repeat the same steps for aewebservices, dmwebservices (the server name will be the Dimensions CM server) and for qcbug if you are using Quality Center.

Deploy the Process Apps

Whenever you update an endpoint, you need to deploy the corresponding process apps. These are:

- aewebservices71:
 - · Dev Control Orchestrations
 - · Dev Change Requests
 - · Dev Tasks
 - · Dev Packages
- DevManagerServices:
 - · Dev Control Orchestrations
- dmwebservices:
 - · Dev Control Orchestrations
- qcbug:
 - QC Connector

Updating the Connection Details in the Workflows

The connection details for SBM in various places in the process apps may need to be updated to reference the server and login credentials that you will be using.

The existing settings are:

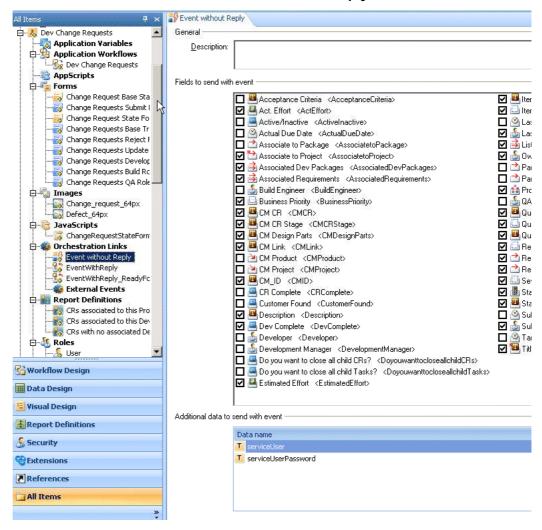
- User name: serviceuser
- Password: serviceuserpassword
- Host or Sever name: localhost, or blank (defaults to localhost)

The values that you will need to enter are the user name and password for the connection user if these are different, and the name of the SBM server if this is not *localhost*.

You need to update the Event without Reply orchestration links and some of the orchestration workflows.

To update the Orchestration Links

- Open SBM Composer.
- 2 Open a process app, for example Dev Change Requests.
- 3 Under Orchestration Links, select Event without Reply.

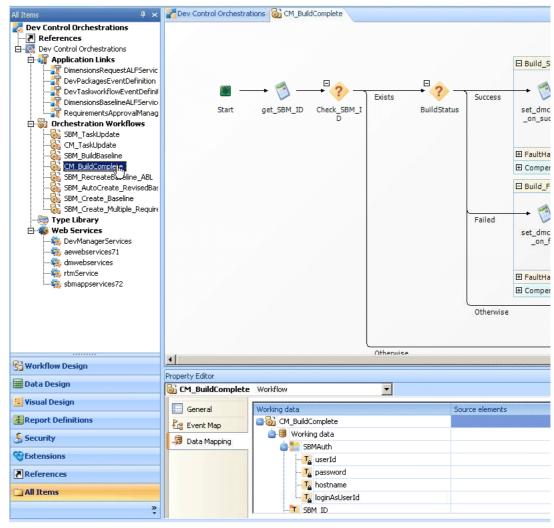


- 4 Edit the Additional data to send with event to change the **serviceUser** and **serviceUserPassword** to the values you are using
- **5** Repeat this for each of the orchestration workflows in each process app where there are connection details and each *Event without Reply* orchestration link that is present. Note that the fields appearing may be different for different workflows.

To update the Orchestration Workflows:

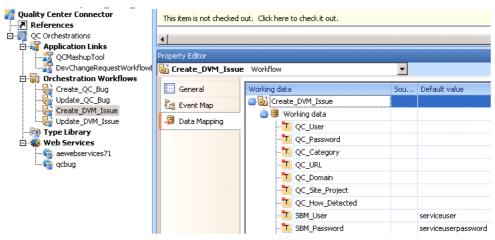
The orchestration workflows that may need updating are:

- Dev Control Orchestrations Process App
 - CM_BuildComplete
- Quality Center Connector
 - Create_DVM_Issue
 - Update_DVM_Issue
- **1** Open the Dev Control Orchestrations process app.
- 2 Under Orchestration Workflows, select CM_BuildComplete
- 3 Select **Data Mapping** in the Property Editor.
- 4 Under SBMAuth are fields for the authentication details for the SBM server



- 5 Under SBMAuth, change the default values to the actual server name (if not localhost) and user credentials you will be using:
 - userId: The connection user. if not serviceuser

- password: The password for the connection user
- hostname: The name of the SBM server. (If this is blank, localhost will be assumed.)
- 6 Open the Quality Center Connector process app.
- 7 Under Orchestration Workflows, select Create_DVM_Issue.



- 8 Update the values for **SBM_User**, and **SBM_Password** to the values for the connection user.
- **9** Repeat this for the *Update DVM_Issue* orchestration workflow.

Deploy each process app when you have completed the updates.

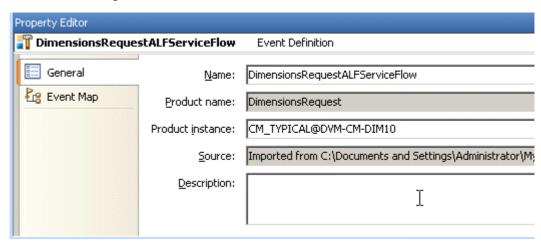
Updating the Application Links in the Event Mappings



NOTES When making these updates, you will need to check out the orchestration workflows and not just the application links.

- 1 Open SBM Composer.
- 2 Open the Dev Control Orchestrations process app.
- **3** Under Application Links, select DimensionsRequestALFServiceFlow.
- **4** Select the General tab in the Property Editor.

5 Change the Product Instance field to match the Dimensions CM database, server, and connection string.



- **6** Select the DimensionsBaselineALFServiceFlow application link, and repeat the above edits.
- **7** Deploy the process apps.

Reconfiguring the REST Grids

If the SBM and Development Manager web services are not installed on the same machine, the URLs for the following REST grids need to be reconfigured to reference the server where the web services are installed, since the default is *localhost*:

- RESTgetcmproducts
- RESTgetprojects
- RESTBaselineTypes
- RESTBaselineTemplate
- RESTDesignParts
- RESTgetconfigurations
- RESTgetareas

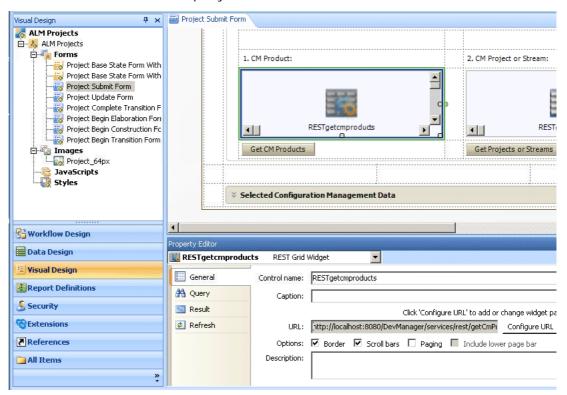
The steps described below need to be carried out for the following REST grids in the following forms:

- ALM Projects Process App
 - · Project Submit Form
 - RESTgetcmproducts
 - RESTgetprojects
 - Project Update Form
 - RESTgetcmproducts
 - RESTgetprojects
- Dev Package Process App

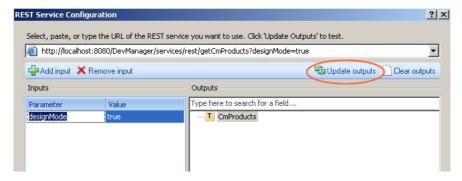
- · Build Baseline Form
 - RESTgetconfigurations
 - RESTgetareas
- Create Baseline Form
 - RESTBaselineTypes
 - RESTBaselineTemplate
 - RESTDesignParts

To reconfigure the REST grids:

- 1 In SBM Composer, open the ALM Projects Workflow.
- 2 Select Visual Design.
- 3 Under forms, select Project Submit Form.
- **4** Select the REST grid widget RESTgetcmproducts.
- 5 Select **General** in the Property Editor.



- 6 Click Configure URL.
- 7 Change the server name to the name of your server where the web services are installed, and the port number to the correct port (default is 8080). For example:
 - http://dvm-cmserver:8080/DevManager/services/rest/getCmProducts Make sure the temporary parameter designMode is set to *true*.

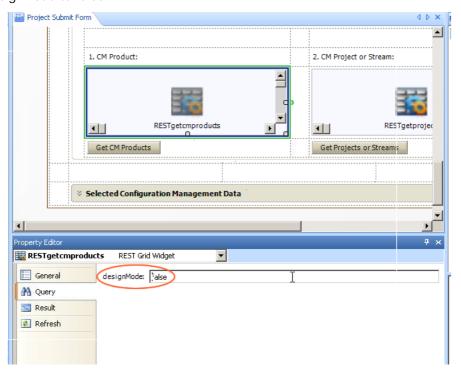


8 Click Update Outputs.

9 Click OK.

Note that you can test the change using the **Preview** button to preview the Transition Form.

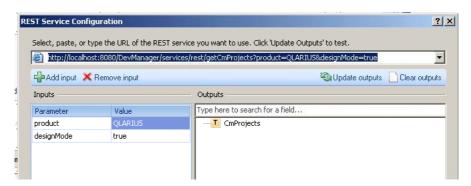
10 Before deploying the process application, set the designMode parameter back to false. To do this, select the Query tab in the Property Editor and change the value of designMode to *false*.



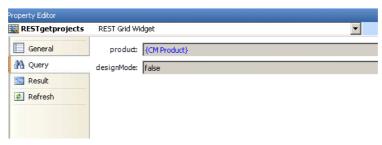
11 Repeat this for RESTgetprojects.

Set the URL, for example:

http://dvm-cmserver:8080/DevManager/services/rest/getCmProjects



When setting the designMode parameter as per step Step 10, set the product to {CM Product}



- 12 Under forms, select Project Update.
- **13** Repeat Step 4 thru Step 10 for the two REST grids RESTgetcmproducts and RESTgetcmprojects.
- **14** Select Project Assign to RM.
- **15** Redeploy the process application.
- **16** Open the Dev Packages Workflow.
- 17 Under forms, select the Create Baseline Form.
- **18** Perform Step 4 thru Step 10 to set the URLs as per the corresponding examples for:
 - RESTBaselineTypes:

http://dvm-cmserver:8080/DevManager/services/rest/
 getCmBaselineTypes

■ RESTBaselineTemplate

http://dvm-cmserver:8080/DevManager/services/rest/
 getCmBaselineTemplates

RESTDesignParts

http://dvm-cmserver:8080/DevManager/services/rest/
 getCmDesigParts

- 19 Select the Build Baseline Form.
- **20** Perform Step 4 thru Step 10 for to set the URLs as per the corresponding examples for:
 - RESTgetconfigurations:

http://dvm-cmserver:8080/DevManager/services/rest/getCmBuildConfigurations

RESTgetareas:

http://dvm-cmserver:8080/DevManager/services/rest/
 getCmBuildAreas

When setting the designMode parameter as per step Step 10, set the product to {CM Product}, the project to {CM Project} and buildConfiguration to {Baseline Build Configuration}.

Republish the Process Apps

Make sure you redeploy and republish any changes you have made to each of the process applications you have changed.

Configuring Dimensions CM

So that Serena Development Control can get the information from Serena Dimensions CM, you must configure the information for your specific environment.

Configuring Dimensions CM for ALF Events

So that Serena Development Control can receive information from Serena Dimensions CM, you must update the Dimensions CM configuration settings with the necessary Application Lifecycle Framework (ALF) server information.

This is connecting SBM with Dimensions CM through ALF. Serena Development Control will get the information through SBM.

To update the Dimensions CM configuration ALF event settings:

- **1** On the Dimensions CM server, navigate to the Dimensions CM installation directory. For example:
 - ..\Program Files\Serena\Dimensions 12.2\CM
- 2 Update the dm.cfg file to add or update ALF variables as follows:

DM_ALF_ENDPOINT is pointing to the correct SBM ALF Event Manager

Example

dm.cfg entry:

Updating the ALF Events Configuration Settings

So that Serena Development Control can receive information from Serena Dimensions CM, you must update the ALF configuration settings with the necessary information.

To update the Dimensions CM configuration settings:

- 1 Navigate to the Dimensions CM installation directory. For example:
 - ..\Program Files\Dimensions\12.1\CM\dfs
- **2** Update the ALF_EVENTS_CONFIG.XML file to specify your Dimensions CM database name, and project name.

Example

ALF_EVENTS_CONFIG.XML

```
<!--
             Specify a specific database-->
 <Database>
              Example database name specification
     <!--
     <base database id>@<server>-<db connection>
     (using the wildcard character "*")-->
             <Name>CM_TYPICAL@*-Dim10</Name>
     <!--Specify one or more projects-->
     <Projects>
      <!--Specify a specific project-->
      <Project
         <!-- Example project name specification
         oject-spec> -  oject-id>:oject-id>
         (using the wildcard character "*")-->
             <Name>QLARIUS:*</Name>
       <!--Specify one or more object classes-->
       <Objects>
<!-- Specify a specific object class -->
```

Entering the Connection Details for Dimensions CM

The Development Manager applications use an auxiliary table to store the details for the Dimensions CM log in credentials. You will need to enter your specific details.

- 1 Log into SBM Administrator by entering the following URL in a browser http://<hostname>/tmtrack/tmtrack.dll?shell=dvm
- 2 Click the Administrator button in the toolbar



- 3 Click Manage Auxiliary Data in the main window.
- 4 Select the CM Connection table.



5 Click the **Details** button to edit the existing entry in the table.



- **6** Specify the connection details for your Dimensions CM instance:
 - Title: Leave this as CM Production
 - dbName: The Dimensions CM database name
 - dbConnection: The Dimensions CM database connection string
 - server: The name of the server where Dimensions CM is installed
 - username: The connection user.



NOTE This must be in caps.

- password: The password for the connection user
- 7 Click the **Update** button.

Assign Build Engineer Role

In the default application, members of the Build team need to have the role of BUILD ENGINEER assigned. The Build Manager, AMY, and the Development Engineer EMMA need to be authorised to be delegated the role BUILD ENGINEER with Capability SECONDARY in Dimensions CM.

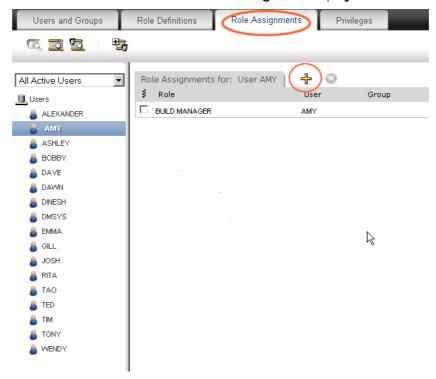
To do this:

1 Open the Dimensions CM Administration Console as a member of the Administration group, for example dmsys:

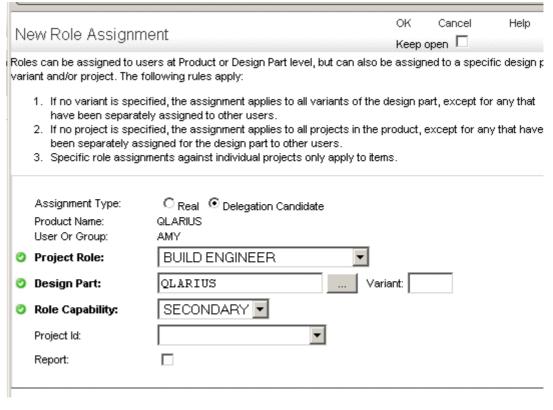
In a browser, enter for example the URL

http://dvm cmserver:8080/adminconsole

2 Under Users and Roles, select Role assignments | By user



3 Select the user and select the Add button



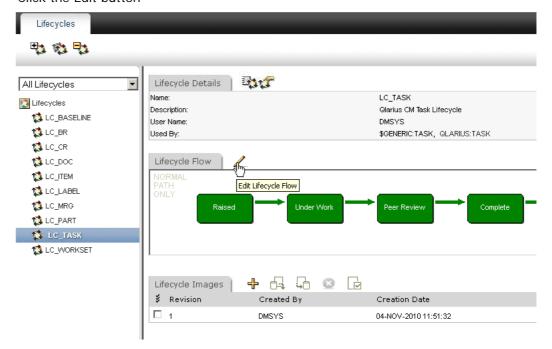
- 4 Set the following values:
 - **Assignment Type**: Delegation Candidate.
 - Project Role: BUILD ENGINEER

- Design Part: The top level design part for the project, for example QLARIUS
- Role Capability: Secondary
- 5 Click OK.

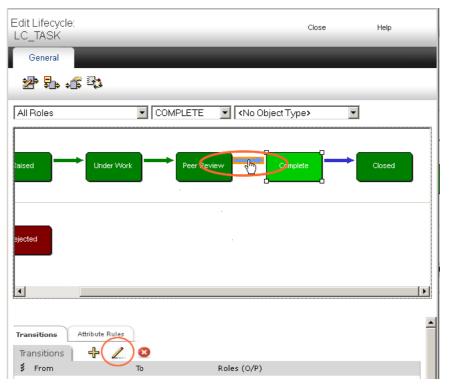
Assign Development Engineer Role to TASK Lifecycle Transitions

The transitions in the TASK lifecycle in Dimensions CM to *Complete* and *Closed* need to have DEVELOPMENT ENGINEER assigned as a Pending role.

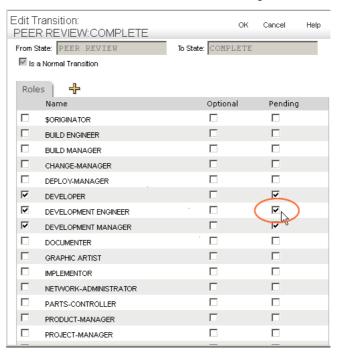
- 1 Under Configuration Object Management, select Lifecycles.
- **2** Select LC_TASK.
- 3 Click the Edit button



4 Select the Complete state and select the transition arrow from Peer review to Complete

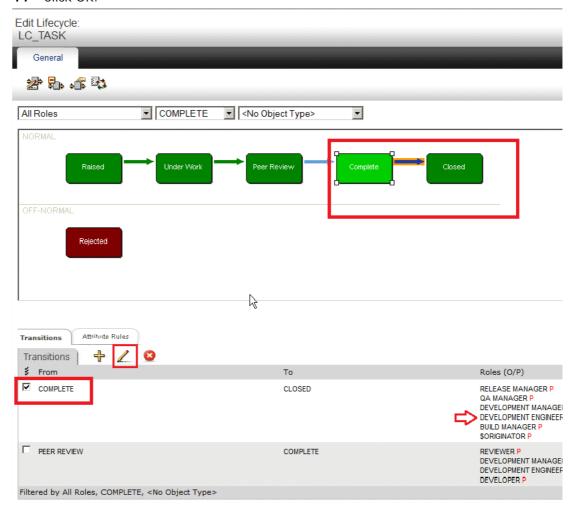


- **5** Click the Edit button on the Transitions tab.
- **6** Select DEVELOPMENT ENGINEER and select the Pending check box



- 7 Click OK.
- 8 Select the transition arrow from Complete to Closed

- 9 Click the Edit button on the Transitions tab.
- 10 Select DEVELOPMENT ENGINEER and select the Pending check box
- 11 Click OK.

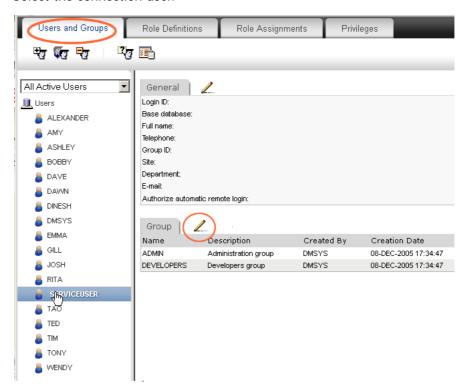


Setting Privileges for the Connection User

In Dimensions CM, the user *dmsys* has the necessary roles and privileges to work with Development Manager. If you are using a different connection user you will need to make sure this user is assigned the same groups and roles as *dmsys*.

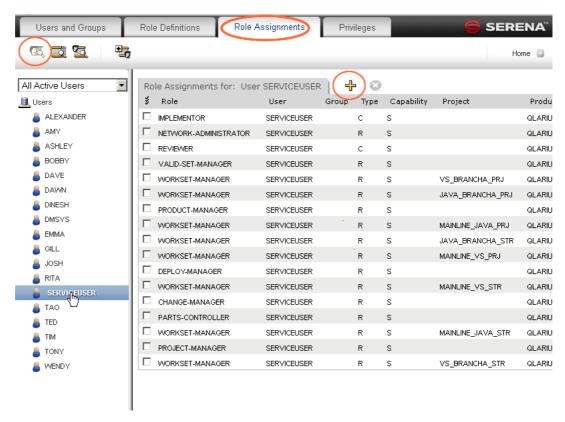
- 1 Open the Administration Console.
- 2 Select Users and Groups.

3 Select the connection user.



- **4** Click the Edit button and in the Edit User dialog, add the groups ADMIN and DEVELOPERS.
- **5** Click the Role Assignments Tab.
- 6 Click the Users button on the toolbar.
- **7** Select SERVICEUSER.

8 Click the Add button.



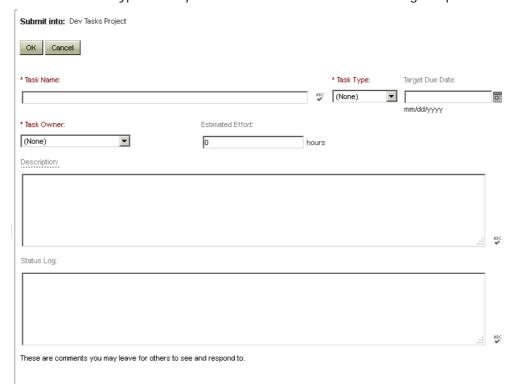
9 Add the same role assignments as are assigned for user DMSYS.

Checking the Configuration

To check the configuration is working, you can verify that items created in SBM create the corresponding items in Dimensions CM, and optionally, HP Quality Centre. For more detail about these steps, see the *Serena Development Manager Getting Started Guide*.

To test the creation of tasks:

- **1** Open the SBM User Workspace by entering:
 - http://<hostname>/tmtrack/tmtrack.dll?shell=dvm
 - In a Web browser
- **2** as the relevant user, for example josh (Development Manager) or mira (Project Manager).
- **3** Create a project of type *Innovation*. (You need to log in as Mira to do this).
- 4 Make sure you have selected a value for CmProduct and CmProject. To do this you will need to log in as Josh after you have created the project and edit it to select values for CmProduct and CmProject
- 5 Create a dev change request of type *Defect* related to the this project. (You need to log in as Josh to do this)



6 Create a Task of type *Development* related to the above dev change request.

7 Select the CM tab. The value of the field CM_ID should contain the corresponding request ID from Dimensions CM. You may need to wait for a period and exit and reselect the Task



- 8 Return to the parent CR.
- **9** Select the Quality Integration tab. If you are using Quality Centre, the value of the field **Quality CR**should contain the corresponding value from QC.



- **10** Move the CR to Complete.
- 11 Create a Dev Package and associate it with the dev change request created above.
- **12** Create a standard baseline for the Dev Package.
- **13** After the processing is complete, the **Current Baseline** field should contain the ID of the Dimensions CM baseline.

Configuring the Sample Data

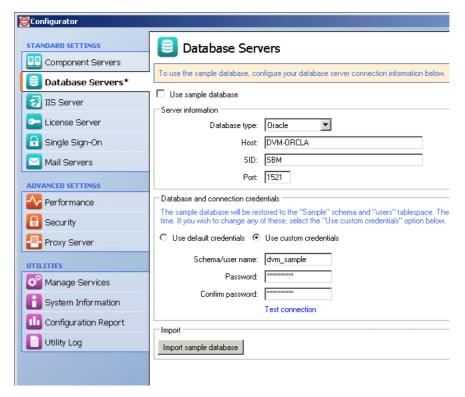
The sample data provided with the Development Control installer contains a Sample ALM Project with associated Dev Change Requests, Tasks, and Dev Packages. The Dimensions CM Data contains tasks that are linked to the tasks in Development Manager.

If have chosen to install this sample data, there are a number of steps required to configure Development Manager to connect to and use the sample data.

Changing the Database Connection

You need to change SBM to connect to the sample database.

- Open SBM Configurator.
- 2 Select Database Servers.

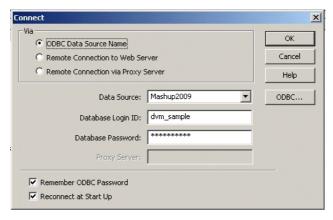


- 3 Uncheck Use sample database.
- 4 Select **Use custom credentials** and set the following values:
 - Schema/user name: dvm_sample

■ Password: dvm_sample



- **5** Click Test Connection to test the connection.
- 6 Click **Apply**, and click **Yes** in the dialog box.
- **7** Open SBM System Administrator.
- 8 Select File | Connect.



For Oracle:

- Set **Database Login Id**: dvm_sample
- Set Database Password: dvm_sample

For MSSQL:

- Select the Data Source (If it does not exist, you will need to create it)
- Set Database Login Id: Your DB admin user name
- Set Database Password: The admin password
- 9 Click OK.

Configuration Steps

Update the CM Connection Table

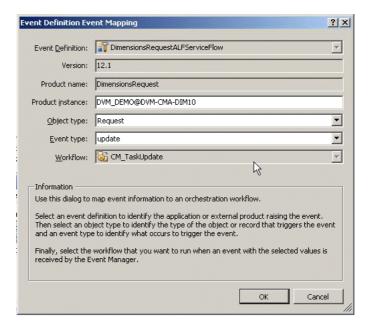
Perform the steps described in "Entering the Connection Details for Dimensions CM" on page 62 setting the database name to *dvm_demo*.

Update the Endpoints

If your sample SBM database is not installed on *localhost*, you will need to perform the steps described in "Updating the Endpoints" on page 50 for *dmwebservices* to set your server details.

Update the application links in the event mappings.

The Database name needs to be updated in the event mappings. See "Updating the Application Links in the Event Mappings" on page 54, using DVM_DEMO as the database name.



Update the REST GRIDS

If the web services for Development Manager are not installed on the same server as SBM, you will need to update the REST grids, See "Reconfiguring the REST Grids" on page 55.

Update the ALF Events configuration

Perform the steps described in "Configuring Dimensions CM for ALF Events" on page 60.

In the ALF_EVENTS_CONFIG.XML file, the database needs to be set to DVM_DEMO.

Assigning Roles

If you are using MSSQL, the user groups are not present for the sample database. In this case you will need to assign the necessary roles for the users to enable them to use the applications using SBM Administrator. For details, see "Creating and Assigning the Users" on page 47.

Set up the Service User in Dimensions CM

On the Dimensions CM server machine, create the OS user SERVICEUSER with the correct serviceuserpassword. Also make sure the other Development Manager OS users (amy, josh, alexander, etc.) exist on this machine.

Update the Dev Manager connection.xml file

You need to update the connection.xml file to change the database name. For details, See "Updating the Connection Details in the Web Services" on page 33.

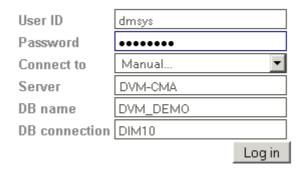
Change the connection details to match your Dimensions CM server using the example below:

Updating the Default Build Areas

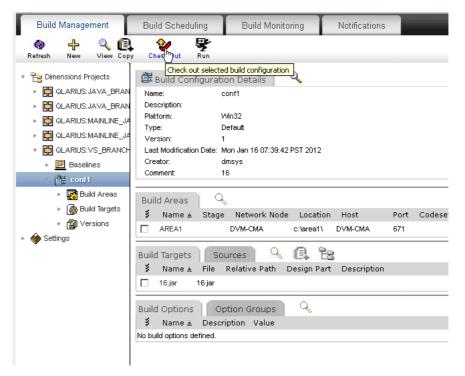
If you need to perform a build using the sample database you will need to update the default build area(s) you are using.

- 1 Open the Administration Console. Make sure you are connecting to the correct database:
 - a On the login page, select Manual for Connect to.

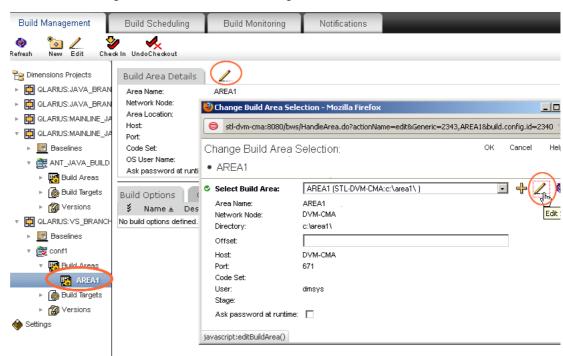
b Enter DVM_DEMO for the **DB** name



- 2 Under Distributed Development, select Build Administration.
- **3** Select the project/stream.
- 4 Select the build configuration.
- 5 Click the Checkout button in the toolbar

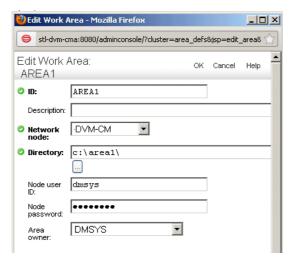


- **6** Select the area.
- 7 Click the Edit button next to Build Area Details.



8 In the Change Build Area Selection dialog box, click the Edit button.

In the Edit Work Area dialog box, change the user to dmsys, and the password to the dmsys password



- 10 Click OK, and click OK in the Change Build Area Selection dialog box.
- 11 Click the Check in button in the toolbar.

Removing the Sample Data from an Existing Installation

If you have installed the sample data for SBM or Dimensions CM, you will need to remove these databases, or create new databases to install them into, before running the installer

for Development Manager 1.2. Carry out the steps below according to the database server you are using.

Removing the SBM Sample Data

Oracle:

Either:

run the command:

```
>>sqlplus system/manager@SBM
```

Then in the command window, remove the database using the command:

```
remove user dvm_sample:
DROP USER dvm_sample cascade;
DROP USER dvm demo rept cascade;
```

Before doing this, make sure the user dvm_sample is not connected.

MSSQL:

1 Using any tool, connect to the database as "sa"

For example you can use "Microsoft SQL Server Management studio"

2 Remove the sample database, for example dvm_sample

Removing the Dimensions CM sample data

Either:

Run the command:

```
>>DMDBA system/manager@DIM10
```

Where system is the admin database user, manager is the password, and DIM10 is the database where the sample data is installed.

Then in the command window, remove the database using the command:

```
SYSTEM> DLDB dvm_demo
```

Type YES when asked.

Create new database, for example DIM_DEMO and install the new data into it.

Configuring a Stand-Alone Development Manager Installation

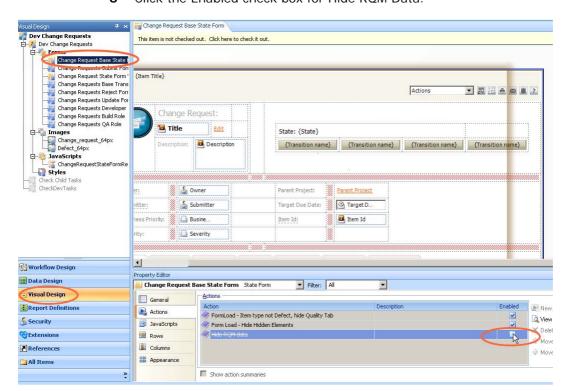
If you are configuring an installation of Development Manager that does not include Requirements Manager, you need to make some changes to the process apps to exclude the Requirements Manager components from the SBM user workspace. These changes consist of:

Hiding a number of Requirements Manager-related forms by enabling the rule Hide RQM data. These forms are:

- Dev Change Requests:
 - · Change Request Base State Form
 - Change Requests Submit Form
 - Change Requests Update Form
- ALM Projects:
 - Project Submit Form
 - Project Update Form
- Dev Packages:
 - Dev Packages Base State Form
- Removing the Requirements Manager-related columns from certain report definitions. These reports are:
 - Dev Change Requests:
 - · CRs associated to this Project
 - · CRs associated to this Dev Package
- Removing the Requirements Manager-related columns from the above reports in the SBM workspace.
- Removing the Viewers Role from the Requirements Manager Project.

Hiding the Requirements Manager-related Forms

- 1 Open SBM Composer.
- 2 Open a process app, for example Dev Change Requests.
- **3** Select Visual Design.
- 4 Under Forms, select Change Request Base State Form.
- **5** Select Actions in the Property Editor.



6 Click the Enabled check box for Hide RQM Data.

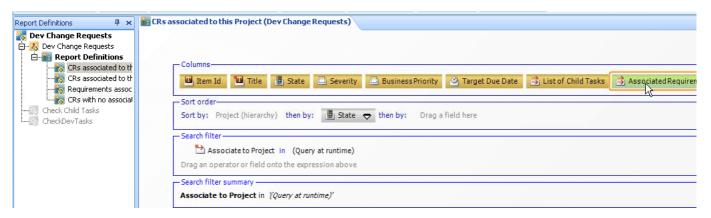
- 7 Repeat Step 4 thru Step 6 for:
 - Change Requests Submit Form
 - Change Requests Update Form
- 8 Repeat Step 2 thru Step 6 for:
 - ALM Projects:
 - · Project Submit Form
 - · Project Update Form

Deploy the Process Apps after completing these steps.

Removing Requirements Manager-related Columns from Report Definitions

- 1 Open SBM Composer.
- 2 In SBM Composer, open a process app, for example Dev Change Requests.
- 3 Select Report Definitions.
- 4 Select CRs associated to this Project.

5 Right click the column Associated Requirements, and select Delete.

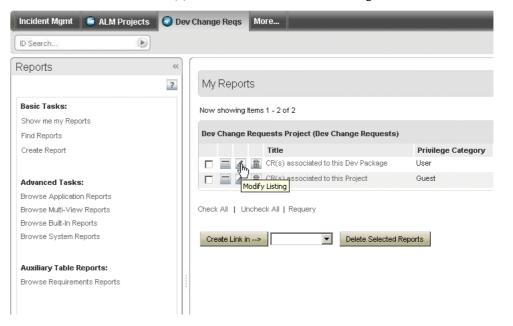


6 Repeat the above steps for CRs Associated to this Dev Package.

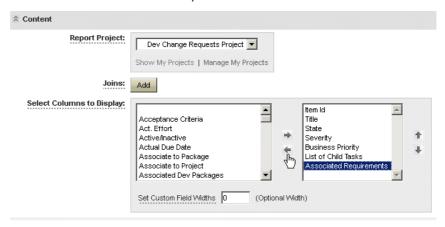
Deploy the Process Apps after completing these steps.

Removing Requirements Manager-related Columns from Reports

- 1 Open the SBM User Workspace by entering: http://<hostname>/tmtrack/tmtrack.dll?shell=dvm In a Web browser
- 2 Log in as Admin.
- 3 Select the Dev Change Requests Project.
- 4 Select Reports.
- **5** Click the Edit button for CR(s) associated to this Dev Package



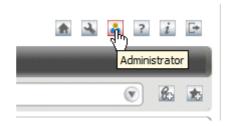
6 Remove the column Associated Requirements.



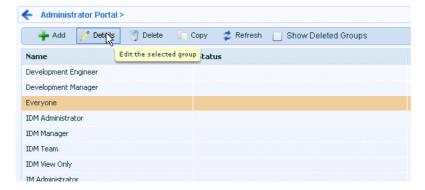
7 Repeat these steps for the report *CR(s)* associated to this *Project*.

Removing the Viewers Role from the Requirements Manager Project

- 1 Log into SBM Administrator by entering the following URL in a browser http://<hostname>/tmtrack/tmtrack.dll?shell=dvm
- 2 Click the Administrator button in the toolbar



- 3 Select Groups.
- 4 Select Everyone and click Details.



5 Select Roles.

Administrator Portal > Groups > Discard 📙 Save General ■ Projects All Projects > Base Project > Roles 🗱 🙆 Project Name Membership ALM Projects Dev Tasks Project Privileges Dev Change Requests Project Notifications Total: 6 Double click 🌄 to view subprojects Disabled (Default) Business Analysts Disabled (Default) Dev Managers Disabled (Default) QA Managers **✓** Enabled Viewers

6 Under Projects, select RQM.

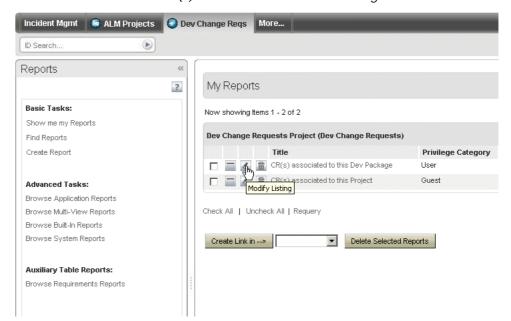
- 7 Select the *Viewers* role and uncheck **Enabled**.
- 8 Click Save.

Adding Requirements Manager-related Columns from Reports

Open the SBM User Workspace by entering: http://<hostname>/tmtrack/tmtrack.dll?shell=dvm In a Web browser

Total: 6

- 2 Log in as Admin.
- **3** Select the Dev Change Requests Project.
- 4 Select Reports.



5 Click the Edit button for CR(s) associated to this Dev Package

- **6** Add the column *Associated Requirements*.
- **7** Repeat these steps for the report *CR(s)* associated to this *Project*.

Deploy the Process Apps after completing these steps.

Configuring an Existing Stand-alone Requirements Manager Installation for use with Development Manager

If you have configured an installation of Requirements Manager that did not include Development Manager, you will have previously carried out the steps described in the *Serena Requirements Manager Installation and Configuration Guide* to hide certain Development Manager features from the SBM user workspace. You will therefor need to reverse those changes in order to include the Requirements Manager components in an integration between Development Manager and Requirements Manager. You will also need to update the endpoint for the rtmService in the Dev Control Orchestrations process app.

You will need to make the following changes to the process apps:

- Dev Control Orchestrations process app:
 - Update the endpoint for the rtmService for the Dimensions RM server details.
- ALM Projects process app:

Disable the rule *Hide DVM data* for the following forms:

- Project Base State Form With Child Transitions
- Project Base State Form Without Child Transitions
- · Project Submit Form

- Project Update Form
- Requirement Approval Management process app:
 - Approval Process: Enable the *Distribute* transition.

Setting the Correct Endpoint for rtmService

After you have completed Installing and configuring RQM you need to edit the endpoint for rtmService in the Dev Control Orchestrations process app and redeploy it.

- 1 Open SBM Application Repository
- 2 Select Process Apps on the left.
- 3 Select the Dev Control Orchestration App process app and click the **Deploy** button
- 4 Click in the Destination field.
- 5 Select the environment and click Next.
- 6 On the Mappings page, click the Choose Destination Endpoint button to choose the correct endpoint (not rtmService_2).
- **7** Perform steps 6 thru 9 for the RM to RQM Connector.

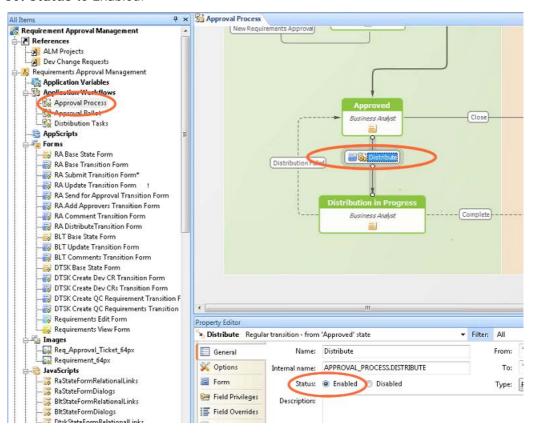
Unhiding the Development Manager-related Forms

- 1 Open SBM Composer.
- **2** Open the ALM Projects process app.
- 3 Select Visual Design.
- 4 Under Forms, select *Project Base State Form With Child Transitions*.
- **5** Select **Actions** in the Property Editor.
- **6** Uncheck the Enabled check box for *Hide DVM Data*.
- **7** Repeat this for:
 - Project Base State Form Without Child Transitions
 - Project Submit Form
 - Project Update Form
- **8** Deploy the process app after completing these steps.

Enabling the Distribute transition for the Approval Process Application Workflow

- 1 Open SBM Composer.
- 2 Open the Requirement Approval Management process app.
- **3** Select the *Approval Process* application workflow.

- 4 Select the *Distribute* transition.
- **5** Set **Status** to Enabled.



6 Deploy the process app after completing these steps.

Troubleshooting

The following section describes a number of issues you may encounter when installing, configuring, or using Serena Development Manager. These are:

Installation Issues

- "Test Connection fails for Sample Data for Oracle if User Expiration error received" on page 86
- "An error Should be Displayed if Attempting to Install SBM Sample Data for remote MSSQL" on page 87
- "QC Connector Does not Install when Using Remote Desktop" on page 87

Upgrading Issues

- "Upgrade from DVM 1.1 to DVM 1.2 not Updating the Version of Development Manager" on page 87
- "Create Dev CR Button not Appearing After Upgrade" on page 87
- "Error Promoting Dev Change Requests Snapshot" on page 88

- "Promoting Snapshots Fails after Upgrade to DVM 1.2" on page 88
- "Installation Interrupted Error on Upgrade when an Already Installed Component is deselected" on page 89

Development Control Issues

- ""Please Contact Your Administrator" Message Appears on Forms" on page 90
- "QC Integration not Working on 64-bit Machine" on page 90
- "Privilege Error when Transitioning a Defect Dev Change Request" on page 91
- "Build of Baselines Fails in Dimensions CM for CM Sample Data" on page 91
- "REST Grids not Working for SBM 10.1 when Using Firefox with SSO" on page 91
- "Admin User Does not have Group Privileges for SBM Sample Data for SBM 10.1" on page 92
- "Actioning a Task in Dimensions CM to Complete Does not Transition the Task in SBM to Complete." on page 92

Configuration Issues

- "Error When Deploying Process Apps" on page 92
- "The Development Manager User Interface is not Being Displayed" on page 95
- "Error Promoting Global Process Apps when Upgrading an Existing Development Manager Installation" on page 93
- "Groups and Users Unassigned from Projects when Upgrading an Existing Development Manager Installation" on page 93
- "User Groups Missing for Sample Database on MSSQL" on page 93
- "New Endpoints Created After Deploying Process Apps" on page 93
- "There is an Access Denied failure when Attempting to Create an Item" on page 96
- "The REST Grids are not Returning Values" on page 97
- "TASK requests are not Being created in CM When Creating Dev Tasks" on page 97
- "A Baseline Cannot be Created from a Dev Package" on page 97
- "The Dev Control Orchestrations Process Application Doesn't Handle Events from the Dev Tasks Process Application" on page 97
- "The Dev Control Orchestrations Process Application Doesn't Handle Events from the ALM Projects Process Application" on page 98
- "The Dev Control Orchestrations Process Application Doesn't Handle Events from the Dev Packages Process Application" on page 99

Installation Issues

Test Connection fails for Sample Data for Oracle if User Expiration error received

When running the Development Control installer with either the Dimensions CM or SBM sample data selected for Oracle, the test connection fails if the password is due to expire within 7 days.

You will need to make sure that the Oracle user will not receive this expired password warning in order to complete the installation.

An error Should be Displayed if Attempting to Install SBM Sample Data for remote MSSQL

When running the Development Control installer and choosing to install the sample data for SBM using a remote MSSQL database, the installer allows the process to continue. This option is not actually supported, and the installation should not complete successfully.

You will need to run the installer on the machine where MSSQL is installed, selecting the option to install the SBM sample data using the Custom install option. See "Installing Serena Development Control" on page 20.

QC Connector Does not Install when Using Remote Desktop

When installing Development Control via Remote Desktop access to a Windows 2003 system, installation may fail if you include the Connector to Quality Center option. To avoid this issue, run Remote Desktop in Console or Administration mode by running one of the following commands:

mstsc /admin
or
mstsc /console

Upgrading Issues

Upgrade from DVM 1.1 to DVM 1.2 not Updating the Version of Development Manager

If you have run the installer for DVM 1.2 on an existing version of DVM 1.1, and the installed version is still 1.1, it is likely that the installer has not completed because of a failure in installing/upgrading the QC connector, causing it to roll back the installation.

In this case the solution is to:

- Uninstall the QC connector.
- **2** Rerun the DVM 1.2 installer with the QC connector option included.

This will successfully update the installation.

Create Dev CR Button not Appearing After Upgrade

There is a problem where, after upgrading to DVM 1.2 from a previous version, the **Create Dev CR** button does not appear on the Change Requests tab for an ALM project. This can be remedied by using the following steps:

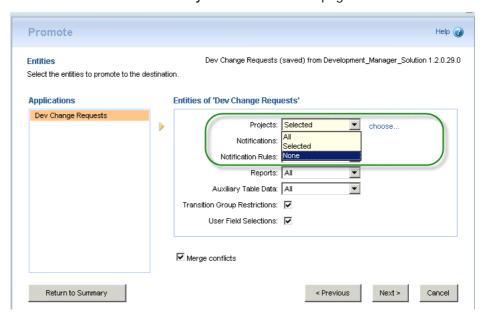
- 1 Open SBM Composer.
- **2** Deploy the *Dev Change Requests* process app.
- **3** Deploy the *ALM Projects* process app.

Error Promoting Dev Change Requests Snapshot

On promoting the Dev Change Requests snapshot after upgrading to DVM 1.2 from a previous version, the promotion may fail with the following error appearing in the log file:

Import: Incoming project already exists at this level. Name: 'Dev Change Requests Project', Existing UUID: '60b85e4d-b11a-47c8-9f2c-66674945a733

The solution is to select None for Projects on the Entities page of the Promote wizard.



Promoting Snapshots Fails after Upgrade to DVM 1.2

When performing an upgrade to Development Manager 1.2, promoting snapshots may fail with an error in the log file such as:

ERROR -- Cannot deploy BPEL definition for process model alf/ 9c629f6d-0686-41d5-a41a-1c079ba973fa/ - 500: could not execute query. ORA-00923: FROM keyword not found where expected. Failed to complete the deployment to server "Default BPEL Server" at 4/23/12 12:18 PM.

The following steps should resolve the problem:

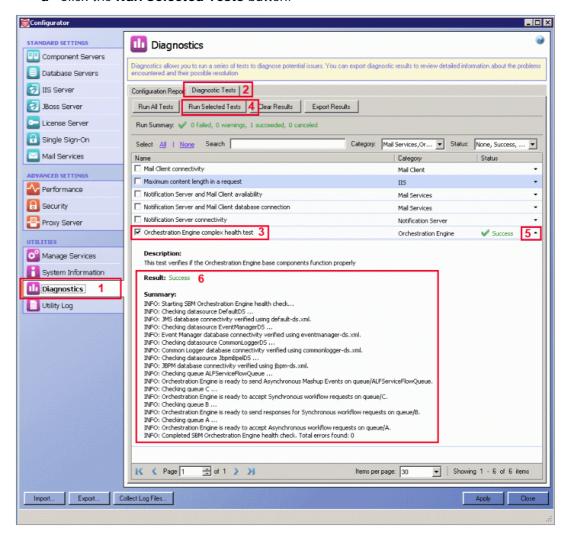
- **1** Open SBM Configurator.
- 2 Restart the Serena Common JBOSS service.
- **3** Do one of the following:
 - If you are using SBM 10.1:

Make sure that the file:

C:\Program
Files\Serena\SBM\Common\jboss405\server\default\log\sbm_oe_he
alth.log

Doesn't contain any errors.

- If you are using SBM 10.1.1.1:
- a Select Diagnostics
- **b** Click the **Diagnostic Tests** button.
- c Select Orchestration Engine complex health test.
- d Click the Run Selected Tests button.



- 4 If there are errors found from either of the above, stop and restart Serena Common JBOSS.
- **5** Promote the snapshots.

Installation Interrupted Error on Upgrade when an Already Installed Component is deselected

If upgrading an installation and deselecting an option that was previously installed, the installer fails. You will need to run the installer without deselecting an already installed component.

Development Control Issues

"Please Contact Your Administrator" Message Appears on Forms

If you experience a problem where the message Please Contact Your Administrator keeps appearing on various forms, it is likely that a report that is being used in an embedded report widget is missing. This will cause the error to appear, and not cleared for a period of time, thus appearing on other pages. The solution is to make sure all reports exist and that the widgets are properly calling them.

To check that the reports are set up correctly:

- 1 In the user environment view an item (almproj,devcr,devpack,tasks,ram,etc)
- 2 View each tab that has an embedded report.
 - If you see the report showing data, or even it you just see the columns and there is no data, then that report is setup correctly
 - if the report is not there and it says something like *This report may be deleted, you do not have permissions to see this report*, or any other error message, then the report has not been set up correctly.

To create a report with a reference name:

- 1 Go to the process application (in the SBM user environment) where the report lives (For example, if the report is *All CR's in a Project* then you want the CR tab.)
- 2 Click reports in the bottom left
- **3** Click on browse application reports
- **4** Find the name of the report that is missing.
- 5 (For example for CR's associated to a Project look for "CRs associated to this project")
- 6 Click the Edit button.
- 7 Click Save As.
- 8 Copy and paste the reference name from the comment into the **Reference Name** field.
- **9** Give the report a unique name (for example, change "CRs" to "CR(s)")
- **10** Save the report.

QC Integration not Working on 64-bit Machine

If on a 64-bit installation, having created a Dev CR of type *Defect*, and having submitted it to *Approve*, there is no value in the Quality CR field, and there is an error in SBM Composer: "Access is denied." It is likely that you need to carry out the post-installation steps described in the *Serena Development Manager Connector for HP Quality Center / ALM Implementation Guide*.

See Post-Installation Steps for 64-bit QC Connector in Chapter 2 of that guide.

Privilege Error when Transitioning a Defect Dev Change Request

If you receive an error saying that the user does not have the privilege to view the auxiliary table, you will need to grant the view privilege to the Quality Connector auxiliary table to any users that need to perform the necessary transitions (e.g. Josh the development manager, Alexander the build engineer).

- 1 In SBM Application Administrator, Select Users.
- 2 Select the user.
- 3 Select Privileges.
- 4 Select Table.
- **5** Under Tables, select *Quality Connector*.
- 6 Under Grant Privileges, select View.
- 7 Click the Save button.

Build of Baselines Fails in Dimensions CM for CM Sample Data

When attempting to perform a build for a baseline using the sample database (dvm_demo) for Dimensions CM for a baseline using the default build areas, the build fails with the message:

Build failed. Error: Failed to authenticate to the build agent (STL-DVM-CMA:671) (check password)

To overcome this problem, perform the steps described in "Updating the Default Build Areas" on page 74.

REST Grids not Working for SBM 10.1 when Using Firefox with SSO

There is a problem when using a REST grids for SBM 10.1 when using Firefox with SSO configured. For example when clicking Get CM Products for an ALM Project the action fails with a message such as:

Unknown error received from http://stl-dvm-sbma/sbmproxy/
 xhp?url=http%3A%2F%2Flocalhost%3A8080%2FDevManager%2Fservices%2F
 rest%2FgetCmProducts%3FdesignMode%3Dfalse&xslfile=xml2json.xslt
 (404)

It is necessary to increase the value of the maxHttpHeaderSize attribute to 16K (16,384) for the 8080 connector value of Tomcat that is hosting the Development Manager REST Services.

1 Edit the file server.xml in the folder \conf under the Tomcat installation.

For example:

C:\Program Files\Serena\common\tomcat\6.0\conf\server.xml

- 2 Locate the string <Connector port=8080...
- **3** Add or change the entry for maxHttpHeaderSize and set it to 16384.

For example:

Admin User Does not have Group Privileges for SBM Sample Data for SBM 10.1

When using SBM 10.1, the Admin user for the SBM sample database does not have access to any groups in the Web Administrator. The solution to this is to create a user with Remote Administration privileges, and use this user to grant the privileges for the groups for the Admin user.

- 1 Open SBM System Administrator and select the Users tab.
- 2 Add a new User as a Managed Administrator.
- **3** On the Privileges tab, make sure Remote Administration is selected.
- **4** Save the details and log out.
- **5** Log in as the user you created above.
- **6** On the Users tab, select the Amin user and select Edit.
- 7 Select Administration and select Groups.
- **8** Select all the groups and click OK.

Actioning a Task in Dimensions CM to Complete Does not Transition the Task in SBM to Complete.

When actioning a task request from Peer Review to Complete in Dimensions CM and delegating the Development Engineer role (for example to user Amy) the corresponding task in SBM is not transitioned to Complete in SBM.

To remedy this, the transition in the TASK lifecycle in Dimensions CM needs to have DEVELOPMENT ENGINEER assigned as a Pending role. For details, see "Assign Development Engineer Role to TASK Lifecycle Transitions" on page 65.

Configuration Issues

Error When Deploying Process Apps

If you receive an error in SBM Composer when deploying a process app:

Unexpected exception during DefinitionUtilities.ExportDefinition

It is likely that the process app contains references to another process app that needs to be deployed before it. The process apps need to be deployed in the order specified below:

- 1 Global Process App (eval)
- 2 Dev Change Requests
- 3 Requirement Approval Management
- 4 ALM Projects
- 5 Dev Tasks
- 6 Dev Packages
- 7 Dev Control Orchestrations
- 8 Quality Center Connector

Error Promoting Global Process Apps when Upgrading an Existing Development Manager Installation

If you are upgrading a previous installation of Development Manager, you may receive an error in SBM Application Administrator when promoting the *Global Process App (eval)* process app.

This problem can be overcome by setting the following values on the Global Entities page of the Promote Wizard.

Groups: NoneUsers: None

Groups and Users Unassigned from Projects when Upgrading an Existing Development Manager Installation

When upgrading an existing installation of Development Manager, you may find that some groups and users are unassigned from projects after promoting snapshots.

This problem can be overcome by setting the following values on the Global Entities page of the Promote Wizard.

Groups: NoneUsers: None

User Groups Missing for Sample Database on MSSQL

If you are using MSSQL, the user groups are not present for the sample data. In this case you will need to assign the necessary roles for the users to enable them to use the applications using SBM Administrator. For details, see "Creating and Assigning the Users" on page 47.

New Endpoints Created After Deploying Process Apps

When you have redeployed the process apps, for example after updating the application links in the Event Mappings as described in the post-installation steps, you may find that duplicate endpoints have been created, such as

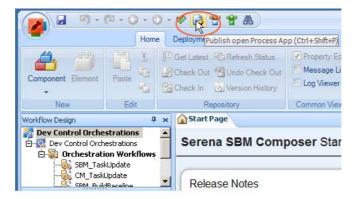
dmwebservices_2
DevManagerServices 2

This results in an error in SBM Composer such as:

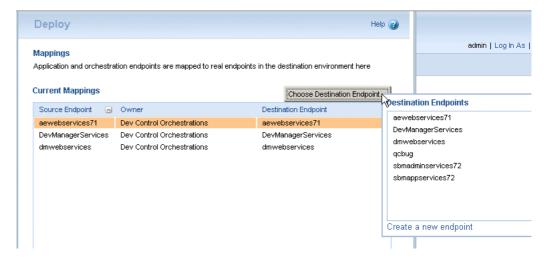
The Orchestration Engine cannot send the Web service request at service step CM_Create_Standard_Baseline to the endpoint ...

The solution is to use SBM Application Administrator to perform the deployments.

- 1 Open each process app in SBM Composer
- 2 Click the Publish button in the toolbar



- 3 In the Publish Process App dialog box, select Allow others to deploy this version of the process app and click Publish.
- **4** Open SBM Application Administrator by entering http://localhost:8085/mashupmgr/in a browser.
- 5 Select **Process Apps** on the left.
- 6 Select a process app and click the **Deploy** button
- 7 Click in the Destination field.
- 8 Select the environment and click Next.
- **9** Check that the list of endpoints is correct.



- 10 Click Done and complete the deployment.
- 11 Repeat Step 6 thru Step 10for the other process apps.

The Development Manager User Interface is not Being Displayed

The User Interface for Development Manager should have a blue and grey color scheme when you log in using the URL:

```
http://<hostname>/tmtrack/tmtrack.dll?shell=dvm
```

If when accessing the Development Manager Application, the standard SBM interface is displayed, it is probably the result of not applying the steps described in "Importing the Files for the Development Manager UI" on page 31. This needs to be done immediately after running the installation.

If the correct User Interface is not being displayed you will need to perform the following steps:

- Open the zip file \Solutions\Development Control\com.serena.dvm.shell.zip, in the Serena installation folder, for example:
 - C:\Program Files\Serena\Solutions\Development Control
 \com.serena.dvm.shell.zip
- 2 Extract the bin and template folders to the Application Engine folder, for example:
 - C:\Program Files\Serena\SBM\Application Engine
 - Click Yes to all to overwrite the files
- 3 Perform the steps described in "Importing the Files for the Development Manager UI" on page 31
- **4** Open the SBM Development Manager application by entering:
 - http://<hostname>/tmtrack/tmtrack.dll?shell=dvm
 In a Web browser
- 5 If the stylesheet is not refreshing you may need to refresh them manually:

a Right click on the browser window, and select View Page Source

```
File
    Edit
        View
             Help
<html>
  <head>
    <title>Serena Software, Inc. (http://www.serena.com)</title
    <meta http-equiv="Content-Type" content="text/html; charset</pre>
    <script type="text/javascript" src="javascript/utilities 3r
    <LINK REL="StyleSheet" href("tmtrack.dl1?StdPage&amp; Templa
    <script language=javascript>
      var userID = "8";
      var app = "Application";
      var currentSolution = 4;
      var external = false;
      var dll = "tmtrack.dll?";
      var exit = "Exit";
      var favRoot = -50;
      var pubRoot = -1;
      var kbRoot = -2;
      var linksRoot = -51;
      var reauthenticate = false;
4
```

b Click on the link for the stylesheet.

This will open the .css file from the cache.

- **c** In the stylesheet window, select **View** | **Reload** or press F5.
- d Close and reopen SBM Development Manager.

There is an Access Denied failure when Attempting to Create an Item

If a process is attempting to create an item, and there is an error, for example "[ERROR] Access Denied," in the log, and the item is not created, then it is likely that you do not have access privileges for the connector user. Carry out the following steps:

- 1 Open the SBM System Administrator.
- 2 Select users.
- 3 Select the connector user (for example DMSYS) and click Edit.
- 4 Select the Administration tab.
- 5 Select Global Administration and click OK.

The REST Grids are not Returning Values

Check whether:

- 1 The Development Manager web services is running.
- **2** You have configured the Development Manager web services correctly.
- **3** If SSO is enabled, ensure that the user you are using in SBM also exists in Dimensions CM.
- 4 Make sure the SBM services JBOSS and IIS have been restarted, using SBM configurator for example.

TASK requests are not Being created in CM When Creating Dev Tasks

- **1** Deploy the Dev Control Orchestrations process app.
- 2 Restart the server.

If this does not work, check whether you are using the connector account (for example dmsys). You should not be using the connector account to create items in SBM, it is reserved for connecting only.

A Baseline Cannot be Created from a Dev Package

If when trying to create a baseline from a dev package, no baseline gets created in Dimensions CM, and the following appears in the Windows Event Viewer:

Error occurred in file:

'.\WSInvoker.cpp', line 1287.

Error mapping data with field 'Baseline Build Configuration'

you can resolve the event viewer error by unlocking the event definition.

Do the following:

- 1 In SBM Composer open the Dev Packages application.
- 2 Show Extensions.
- 3 Expand Orchestration Links.
- **4** Click on *Event without Reply*.
- 5 Check the item out.

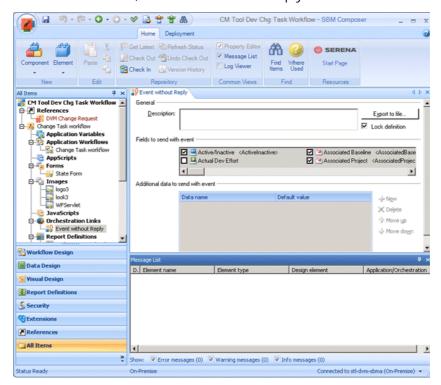
Ensure that **Lock definition** (on the right-hand side) is **not** checked.

6 Check in the item and re-deploy.

The Dev Control Orchestrations Process Application Doesn't Handle Events from the Dev Tasks Process Application

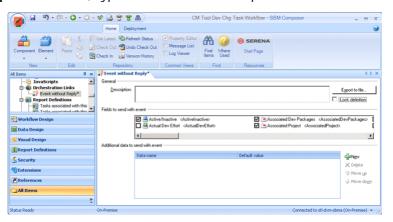
You need to recreate ChangeTaskworkflowEventDefinition:

1 In SBM Composer, Open the Dev Tasks process application.



2 Under Orchestration Links, select Event without Reply.

- 3 Uncheck Lock definition.
- 4 Click **Export to file...**, type the file name and export the Orchestration link to a file.



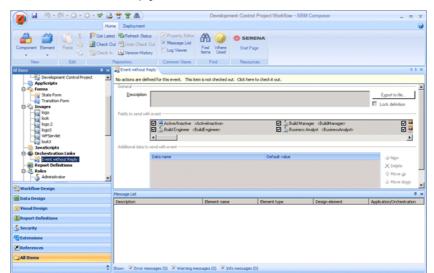
- 5 Click Yes to automatically lock the definition
- **6** Check in the item and re-deploy.

The Dev Control Orchestrations Process Application Doesn't Handle Events from the ALM Projects Process Application

In this case, you need to recreate

 ${\tt DevelopmentControlChangeRequestWorkflowEventDefinition}.$

- 1 In SBM Composer, open the ALM Projects process application.
- 2 Select **Orchestration Links**. Links can be exported from here.



3 Select the *Event without reply* orchestration link.

- 4 Uncheck Lock definition.
- 5 Click **Export to file...**, type the file name and export the Orchestration link to a file.



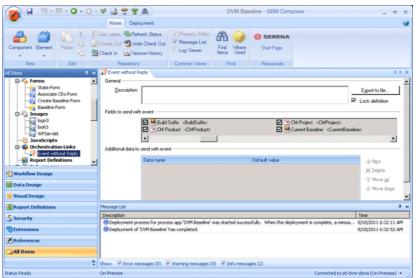
6 Check in the item and re-deploy.

The Dev Control Orchestrations Process Application Doesn't Handle Events from the Dev Packages Process Application

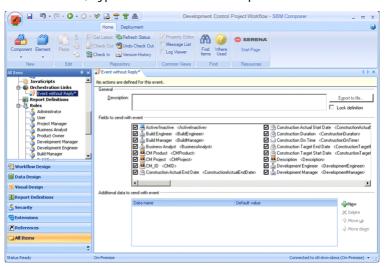
You need to recreate DVMBaselineEventDefinition.

- 1 In SBM Composer, open the ALM Projects process application.
- 2 Select Orchestration Links. Links can be exported from here.

3 Select the *Event without reply* orchestration link.



- 4 Uncheck Lock definition.
- 5 Click **Export to file...**, type the file name and export the Orchestration link to a file.



6 Check in the item and re-deploy.