SERENA®

DIMENSIONS® RM 12.3.1

Integration Guide for Enterprise Architect

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Publication date: October 2015

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Preface

This document describes the Serena® Dimensions® RM integration with SparxSystems® Enterprise Architect.

The instructions in this document outline how to link Dimensions RM requirements to Enterprise Architect artifacts. These instructions assume that you are familiar with Enterprise Architect. If not, consult the documentation provided by SparxSystems. These instructions also assume that you know how to manipulate Dimensions RM project information. If not, consult the *Serena Dimensions RM User's Guide* and the *Serena Dimensions RM Administrator's Guide*.

These instructions assume that both Enterprise Architect is already installed on your system and Dimensions RM is available in your network environment. See the *Serena Dimensions RM Installation Guide* for information on installing Dimensions RM.

The instructions in this document are provided by Serena Software, Inc. for illustrative purposes only. The instructions have been verified only for Enterprise Architect 12 as made available to Serena. Other versions of Enterprise Architect may integrate with Dimensions RM in a similar manner, or a different manner, or not at all.

Serena makes no representations or warranties regarding Enterprise Architect, that the instructions are valid, or that the instructions are applicable to any other version of Enterprise Architect.

The instructions do not replace the documentation provided by SparxSystems for Enterprise Architect. The documentation for Enterprise Architect should be your primary source of information regarding Enterprise Architect.

Objective

The purpose of this book is to describe how to integrate Dimensions RM with SparxSystems Enterprise Architect.

Audience

This document is intended for members of project teams who use Dimensions RM to create, manage, and track requirements and Enterprise Architect for modelling.

Related Documents

Title	Description
Serena® Dimensions® RM Browser User's Guide	Guide to creating, managing, and tracking requirements during the lifecycle of a project.
Serena® Dimensions® RM Administrator's Guide	Guide to configuring, managing, and administering projects and users.
Serena® Dimensions® RM Installation Guide	Guide to installing Dimensions RM.

Contacting Serena 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 intersolv Support at the following URL and follow the instructions:

http://support.serena.com

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

You can use the Serena Support Web page to:

- Report problems and ask questions.
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http://support.serena.com/Download/Default.aspx

Integrating Dimensions RM and Enterprise Architect

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Prerequisites

In order to integrate Dimensions RM and Enterprise Architect, the following conditions have to be met:

- Dimensions RM is installed, running and available in the network environment.
- You have the support tools (e.g. RM Manage) installed.
- Enterprise Architect is installed.
- On the machine running Enterprise Architect, .NET framework 4.0 is installed.
- The Dimensions RM add-in for Enterprise Architect is installed.

Configuring Dimensions RM

In order to integrate Dimensions RM and Enterprise Architect, you need a class which represents the Enterprise Architect model. In this guide, the class to be linked is named *Model*, but you can use any name you like.

To create the Model class in Dimensions RM, follow these steps:

1. Start the Class Definition tool.
2. Right-click the background.
3. From the shortcut menu, select `Add Class | Model`.
4. Enter a name (e.g. *Model*) and press **Enter**.
5. Double-click the *Model* class.
6. Double-click the **Model** attribute.
7. Select the **Text** tab.
8. Ensure that the **HTML Formatting** box is selected and click **OK**.
9. Create these Alpha-Numeric attributes:
   - EA_GUID
   - EA_Project
   - EA_Type
   - Model_Version
10. Click **OK**.
11. Save the class definition.
12. Create links between the *Model* class and the requirement classes you want to link to.

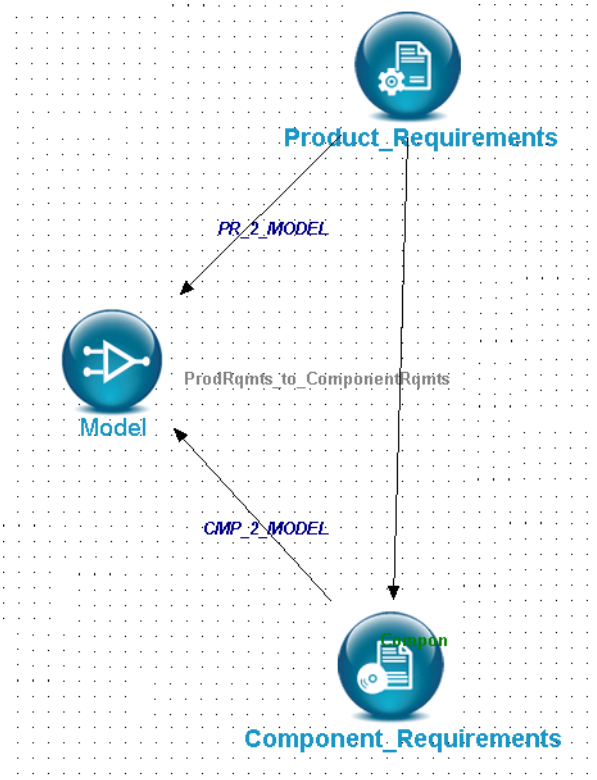

Figure 1-1. Linked Classes in Dimensions RM Class Definition

For further information about creating classes and links, refer to *Dimensions RM Administrator's Guide*.

Configuring the Dimensions RM Add-In for Enterprise Architect

The current version supports creation and linking of requirements with elements from Enterprise Architect.

CAUTION! All linking and unlinking of requirements and artifacts **must** be done through the add-in. If you create a link directly in Dimensions RM, Enterprise Architect will not recognize this link and vice-versa. This also applies when unlinking.

Settings

In order to integrate Dimensions RM and Enterprise Architect, the add-in needs to be configured.

To configure the add-in, follow these steps:

1 Open Enterprise Architect.

2 Expand the `EXTENSIONS` menu in Enterprise Architect and select `Dimensions RM | Settings`. This opens the *Settings* dialog.

3 Configure the **Dimensions RM Connection** settings by filling out these fields:

- **Server**: The URL to the web server. The URL is in this format: `http://<SERVER NAME>:<PORT>`
  Example: `http://rmserver:8080`
- **User Name**: The user name for connecting to Dimensions RM.
- **Password**: The password associated to the user name.
- **Database**: The database in which the project resides.
- **Project**: The project you want to use, e.g. RMDEMO.
- **Class**: The name of class which references Enterprise Architect, e.g. *Model*. This is the class you created in chapter "Configuring Dimensions RM" on page 8.

4 Check if the data you entered are correct, by clicking the **Validate** button at the bottom of the window.

5 Configure the **Enterprise Architect** settings, by filling out these fields:

- **Temp Image Folder**: Specifies the location where the exported diagram files from Enterprise Architect are stored before they are uploaded to Dimensions RM.
- **Interconnection Port**: Specifies the port under which Enterprise Architect elements can be opened directly from the Dimensions RM web page.

CAUTION! The port needs to be identical for all Enterprise Architect installations as the port is used for the web link from Dimensions RM's *Model* class to Enterprise Architect's model. Changing the port makes the web links unusable.

- **System Output**: If selected, provides logging to the System Output view of Enterprise Architect.
- **Dimensions RM Requirement Read-Only**: If selected, Dimensions RM requirements are read-only in Enterprise Architect. This prevents that requirements can be changed from the Enterprise Architect project.

6 Click **OK**.

TIP In order to check if your **Connection** and **Enterprise Architect** settings are correct, click **Validate**.

Marking a Package for Requirements

In order to link to Dimensions RM requirements, Enterprise Architect needs a package which contains the requirements from Dimensions RM.

To mark a package, follow these steps:

1 Open Enterprise Architect.

2 In Project Browser, create or select a package, e.g. *Serena Requirements*..

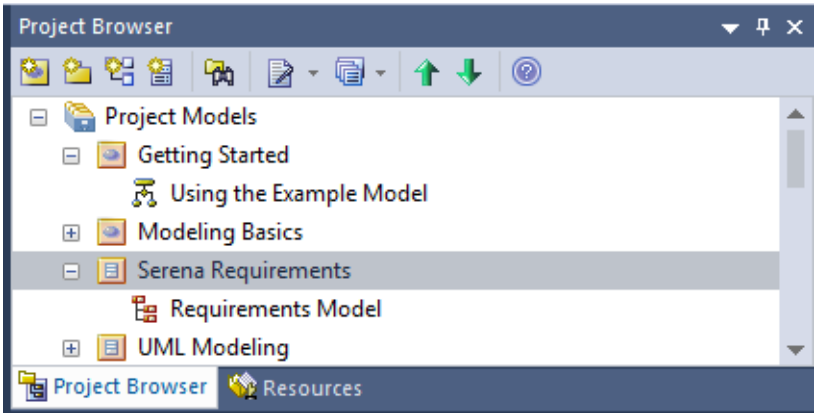

Figure 1-2. Project Browser with selected package.

3 Expand the **EXTENSIONS** menu in Enterprise Architect and select **Dimensions RM | Mark Requirement Package**.

NOTE The package for requirements needs to be marked for each Enterprise Architect project.

Using the Integration

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Linking Requirements and Artifacts

In the following chapters, artifact refers to an Enterprise Architect artifact and requirement refers to a Dimensions RM requirement.

A link is a connection between an artifact and a requirement. When creating a link, a copy of the artifact is created in Dimensions RM and a copy of the requirement is created in the package for requirements in Enterprise Architect.

CAUTION! Do not link requirements in the package for requirements with any Enterprise Architect artifact as these links will be removed when refreshing the requirement or artifact.

Linking to an Existing Requirement

Linking of Requirements is done in the Project Browser. To link an Enterprise Architect artifact and a requirement, follow these steps:

1 Open Enterprise Architect.

2 In Project Browser, right-click the Enterprise Architect artifact you want to link to a Dimensions RM requirement.

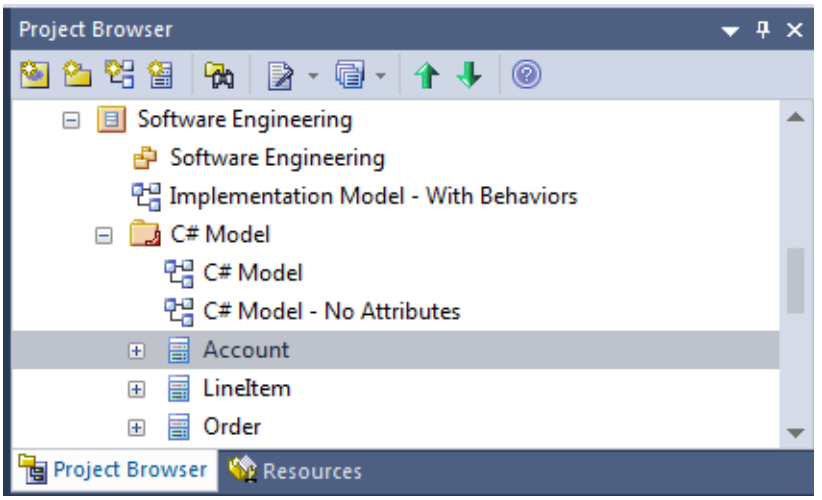

Figure 2-1. Project Browser with selected artifact

3 From the shortcut menu, select `Dimensions RM | Link Requirement`. This opens the **Link Requirement** dialog.

4 Select the requirement you want to create the link to.

TIP To quickly find a requirement, you can choose any or all of these options:

- Enter the name or part of it or a complete requirement ID into the search box.
- You can choose a class.
- You can choose a collection.

After making your choice, click **Search**.

5 Click **Add Link**. This starts the linking process. This creates a copy of the artifact in Dimensions RM and links it with the requirement. When the link process is completed the **Link Requirement** the requirement is marked with and the Dimensions RM requirement appears in the *Serena Requirements* package you configured in chapter "Marking a Package for Requirements" on page 10.

Creating and Linking a Requirement

To simplify the process of creating a requirement and linking it to an artifact, you can perform these actions in one step within Enterprise Architect.

To create and link the requirement, follow these steps:

1 Open Enterprise Architect.

2 In Project Browser, right-click the artifact you want to link the new requirement to.

3 In the shortcut menu, select `Dimensions RM | Create & Link`. This opens the **Create Requirement** dialog.

4 In the **Class** box, select the class of the requirement you wish to create.

5 Fill out the form as required.

6 Click **Create & Link**. This starts the process and closes the dialog.

Unlinking Requirements

If a link between a requirement and an artifact is no longer required, it can be removed from within Enterprise Architect. Note that this does not remove the artifact nor the requirement.

To unlink an artifact and a requirement, follow these steps:

1 Open Enterprise Architect.

2 In Project Browser, right-click the artifact you want to unlink.

3 In the shortcut menu, select `Dimensions RM | Unlink Requirement`. This opens the **Unlink Requirement** dialog.

4 From the list of requirements, select the requirement you want to unlink.

5 Click **Delete Link**.

Refreshing Artifacts and Requirements

When working with Dimensions RM and Enterprise Architect it is common that data change in the requirement or in the artifact. When modifying an artifact, the copy in Dimensions RM needs to be updated. A modification of a requirement requires an update of the copy in Enterprise Architect.

Refreshing a model artifact updates all attributes in the model class in Dimensions RM with the attribute values of the artifact.

Refreshing a requirement updates all attribute values in the requirement in Enterprise Architect with the attribute values of the linked Dimensions RM requirement. Any Dimensions RM requirement which has been linked to an artifact in Dimensions RM will be copied to the package for requirements if it does not already exist.

In both cases, the links between the artifact and the requirement are updated by copying the links from Dimensions RM to Enterprise Architect. If links were deleted in Dimensions RM, they will also be deleted in Enterprise Architect.

CAUTION! Any link between a requirement in the package for requirements and an artifact which was not created through the Dimensions RM add-in for Enterprise Architect will be removed when refreshing the requirement or artifact.

To refresh data of an artifact or requirement, follow these steps:

1 Open Enterprise Architect.

2 In Project Browser, right-click the package, artifact, or requirement you want to refresh.

3 Select `Dimensions RM | Refresh` from the shortcut menu.

The refresh is executed as a background task, which allows you to continue working with Enterprise Architect. Note that changes are not incorporated immediately. Progress information is written to the System Output tab **Dimensions RM**. Refresh is completed when a status message starting with **Finished Synchronisation...** is shown.

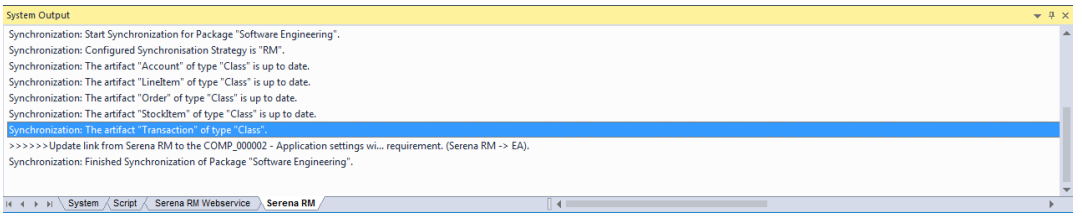

Figure 2-2. System Output tab Dimensions RM with status messages

TIP To open the artifact, double-click the corresponding report line (see Figure 2-2).

Importing Requirements

For reference, requirements from Dimensions RM can be imported into the package for requirements of Enterprise Architect. For further information about the package, see chapter "Marking a Package for Requirements" on page 10.

To import requirements, follow these steps:

1. Open Enterprise Architect.
2. In Project Browser, right-click the package for the requirements.
3. From the shortcut menu, select `Dimensions RM | Import Requirements`. This opens the **Import Requirements** dialog.
4. Select class and/or collection from the **Class** and **Collection** boxes.
5. Click **Search**. This lists all requirements to be imported.
6. If you want to overwrite previously imported requirements, select the **Overwrite existing requirements** check box.
7. Click **Import**.
8. Confirm the **Import Requirements** dialog to start importing the requirements.

NOTES

- **Import** imports all requirements in the list. To limit the number of requirements to be imported, add them into a collection. For further information about collections, see chapter *"Managing Requirements in a Collection"* in *RM Browser User's Guide*.
- **Import** does not overwrite (update) an existing requirement. To update a requirement see chapter "Refreshing Artifacts and Requirements" on page 16.

Publishing Models

Publishing Models is suggested if you want to work with artifacts in Dimensions RM. Publishing a model copies the artifacts from Enterprise Architect to Dimensions RM. To publish a model, follow these steps:

1. Open Enterprise Architect.
2. In Project Browser, right-click an artifact.
3. From the shortcut menu, select `Dimensions RM | Publish_Model`. This starts the publishing process. To check the status, open the System Output window.

Opening Requirements or Artifacts in Dimensions RM

When working in Enterprise Architect, sometimes it may become necessary to work with the Dimensions RM requirement. You can open a requirement from your package for requirements if the associated artifact exists in Dimensions RM. To open the requirement in Dimensions RM, follow these steps:

1. Right-click a requirement or artifact.
2. Select `Dimensions RM | Open in Dimensions RM`.

Opening Artifacts in Enterprise Architect

When working in Dimensions RM, sometimes it may become necessary to work with the Enterprise Architect artifact. To open an Enterprise Architect artifact from Dimensions RM, follow these steps:

1. Ensure that Enterprise Architect is running.
2. You need to have access to the project file at the same path specified in the link.
3. Open the requirement in Dimensions RM. This opens the **Edit Attributes** dialog.
4. Expand the section which holds the description attribute. By default, this is the **Standard Attributes** section.
5. Click the **Open in Enterprise Architect** link. You find it within the description attribute, underneath each model diagram.

NOTE Depending on your browser settings, a new tab or window will open and close. After the tab or window has closed, you can change to Enterprise Architect to access the artifact.