



SERENA[®] **DIMENSIONS[®] CM 14.3.2**

**Dimensions CM Connect for
Serena Business Manager User's Guide**

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Chapter 1

Introduction

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About Dimensions CM Connect for SBM

The synchronizer service replicates requests between Dimensions CM and Serena Business Manager. This document will help you to configure and use the service.

The Synchronizer Service

The synchronization between SBM and Dimensions CM is carried out by the Synchronizer service, *MashupsDMSyncService*. The synchronizer processes every link that you create in Dimensions CM Connect for SBM as follows:

- 1 Selects all items in the SBM project that have been changed or created since the last synchronization, and match the field restrictions that have been specified.
- 2 Looks for the corresponding Dimensions request. If it does not exist, creates the request in Dimensions with the mapped fields. If there is a corresponding request, the Synchronizer does the following:
 - Compares and update the values of the mapped attributes. A time stamp is kept of the last synchronization. If the history of either the attribute or the field is greater than the time stamp of the last synchronization, the value is updated. If both values have changed since the last synchronization a conflict is raised and e-mails are sent to the specified users. The Synchronizer administrator then uses Dimensions or SBM to resolve the conflict with Dimensions or SBM values.
 - Compares and updates the status if the owner of the new status is SBM, otherwise raises a conflict or warning.
 - Copies attachments from SBM to Dimensions when a new Dimensions request is created from a SBM issue, or when attachments have been modified.
 - If any error occurs when updating Dimensions, an e-mail is sent.
- 3 Selects all requests in Dimensions that have been changed or created since the last synchronization, and matches the attribute restrictions that have been specified.
- 4 Looks for corresponding SBM items. If there is no corresponding item, creates the item in SBM. If there is a corresponding item, the Synchronizer does the following:
 - Compares and updates the attribute values of the mapped fields. A time stamp is kept of when the last synchronization was done. If the history of either the attribute or the field is greater than the time stamp of the last synchronization, the value is updated. If both values have changed since the last synchronization a conflict is raised and e-mails are sent to the specified users. The SBM Synchronizer administrator then uses Dimensions or SBM to resolve the conflict with Dimensions or SBM values.
 - Compares and updates the status if the owner of the new state is Dimensions, otherwise raises a conflict or warning.
 - If any error occurs when updating SBM, an e-mail is sent.
- 5 Repeats these steps at each predefined synchronization interval.

Chapter 2

Installation and Pre-requisites

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Operating System Requirements

Dimensions CM Connect for SBM may be installed on all Windows platforms that support Dimensions clients. A Dimensions client installation must be performed on the same system as Dimensions CM Connect for SBM. Dimensions and SBM servers may be on any supported platform. For details see the appropriate Readme files and installation guides.

A web browser is required to view the online help.

Installing Dimensions CM Connect for SBM

You must upgrade the Dimensions Connect for SBM integration when you upgrade a Dimensions server to a new version. If not the integration may not work as expected with supported versions of SBM.

To install Dimensions CM Connect for SBM:

- 1 To run the installer do one of the following:
 - If you downloaded the software, unzip the file to a suitable directory, and run setup.exe.
 - If you have the media kit, insert *DVD One* into your DVD drive and follow the directions to locate and run the installer.
- 2 On the Welcome page of the installation wizard click **Next**.
- 3 Read the End User Licence Agreement, select **I accept the terms of the End User Licence Agreement**, and click **Next**.
- 4 On the Start Copying Files page review the settings and click **Next**.
- 5 On the InstallShield Wizard Complete page optionally select **Yes, I want to read the Readme file**, and click **Finish**.



NOTE The integration may break after completing a Desktop client installation. If this happens, an error message will suggest reinstalling, but that will not resolve the problem. Instead, you must reboot the Dimensions server to restore the integration to proper functioning.

Pre-Requisites

Dimensions Server & Integration Installations

To use the latest version of Dimensions with the supported versions of Serena Business Manager, you must upgrade both the server and the integration installations to the current version of Dimensions.

Dimensions User

You must identify the Dimensions user ID that will be used by the synchronizer service.



IMPORTANT! The ID of the Dimensions user that will be used by the synchronizer service must precisely match the full user name in Dimensions. For example, if the user ID is *dmsys*, then the full name of the user must be *dmsys* as well. If the ID and full name do not match, then synchronization actions taken by the Dimensions user ID are unnecessarily added back to the corresponding SBM issue. These actions then incorrectly appear as user comments in SBM.

The Dimensions user must have a license available from Serena License Manager.

This user ID should also be reserved for the synchronization only. Do not use this User ID for any other activities, as this may result in synchronization failures.

SBM User

You must identify the SBM user ID that will be used by the synchronizer.



IMPORTANT! This SBM user ID must have a license available from a Serena License Manager installation.

This user ID should also be reserved for the synchronization only. Do not use this User ID for any other activities, as this may result in synchronization failures.

Roles and Privileges

You must have the following roles and privileges to run Dimensions CM Connect for SBM:

■ Dimensions CM

Dimensions users must have one of the following:

- All the roles on the workflow of the request type that is to be synchronized.
- The Change-Manager role.

■ SBM

SBM users must have the workflow-related privileges for the SBM projects used by the integration.

The administrator setting up the integration also requires the Connect using the API privilege (this privilege is not required by ordinary users).

Dimensions Published Views

You must install the published views into any Dimensions base database that you will use in a link. For information, see your Dimensions administrator.

Serena Business Manager Issue IDs

If you are mapping items from multiple Serena Business Manager projects to Dimensions, you must ensure that the item IDs for all issues from all projects are unique. By default, the **Use Parent Project's Sequence Numbers** setting is selected. If you keep this default, then all items will have unique IDs.

Licensing Requirements

The synchronizer requires one Dimensions CM license, and one SBM license. When installing and configuring your Dimensions and SBM implementations, take care to reserve one license each for the CM and SBM users that are used by the synchronizer.

Chapter 3

Setting Up Dimensions CM Connect for SBM

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Overview

Before you can use Dimensions with Serena Business Manager, you must configure the IDM tools connections from the Dimensions Administration Console. Complete the steps in this chapter once both Dimensions and SBM are fully installed.

Configuring Authentication of the SBM Server

Dimensions CM Connect for SBM establishes a connection to an SBM server using HTTP basic authentication. Before setting up the connector verify that the SBM server allows authentication.

For *SBM 10.1.2 and earlier*:

- 1 In the SBM Administrator select Options | Settings | Server | Authentication.
- 2 Select the option **Accept Info from Browser / Header**.

For *SBM 10.1.3 and later*:

- 1 In the SBM Configurator select Authentication | General.
- 2 If the option **User sessions are managed by** is set to *SBM Session Cookies* select the option **Allow legacy access for Remote Administration and API**.

If *Single Sign-On* or *HTTP Basic Authentication* are selected no changes are necessary.

Launching the Dimensions CM Connect for SBM Administration Console

To launch the Dimensions CM Connect for SBM Administration Console, choose Start | Programs | Serena | Dimensions CM <version> | Mashups | Dimensions CM for Mashups.

Restarting the Synchronizer Service

The sections below describe how to create and edit connections and links. After you have made any changes, you must restart the Synchronizer service for the changes to take affect.

To restart the Synchronizer service:

- 1 From the Start menu choose Programs | Control Panel | Administrative Tools | Services. The location of the Services utility may vary depending what version of Windows you are using. The Services utility opens.
- 2 In the Name column right click MashupsDMSyncService and select Restart.
- 3 Close the Services utility.

Setting Up SBM Fields

Before you run the Synchronizer to setup a new link, create the following fields in work flows assigned to projects used by the integration. In SBM Composer, add these fields from the Data Design view for your workflow. See the SBM Composer documentation for more information. The **XML Element Name** column tells you the name of the element that corresponds to each of these fields, in the XML file that stores mapping information for the integration. You do NOT need to add these element names anywhere in your workflow, just the values in the **SBM Database Field Name**, **SBM Field Type**, **Length**, and **Description** columns.

SBM Database Field Name	SBM Field Type	Length	Description	Element Name in
DMISSUEID	Text (fixed length)	50	The field where the Dimensions request ID is entered.	doc
DMSYNCTIME	Text (fixed length)	50	The time the SBM item was last synchronized with Dimensions.	timestamp
DMSYNCSTATUS	Text (fixed length)	50	The status of the corresponding Dimensions request.	status
DMLINK	Text (fixed length)	50	The name of the link.	link
DMUSER	Text (fixed length)	50	The Dimensions user who last updated the corresponding request.	user

Serena recommends that you use the SBM field names listed above. If you change the field names, you must edit those values in the <TTFIELDS> section in the following XML file:

```
<DM_ROOT>\Serena\Dimensions
  <version>\CM\Integrations\Mashups\TTDmInt.xml
```

For example:

```
<TTFIELDS>
  <doc value="DMISSUEID"/>
  <timestamp value="DMSYNCTIME"/>
  <status value="DMSYNCSTATUS"/>
  <link value="DMLINK"/>
  <user value="DMUSER"/>
</TTFIELDS>
```



CAUTION! Only change the values of the XML elements, not their names.

Managing Connections

Using the Dimensions Connector for SBM Admin Console, you can create new connections to Dimensions databases and SBM servers. You can also edit and delete existing connections.

Creating a Dimensions Connection

Use the New Dimensions Connection dialog box to create a new connection to a Dimensions database.

To create a Dimensions connection:

- 1 Launch the Connect Admin Console. Choose Start | Programs | Serena | Dimensions CM <version> | Mashups | Dimensions CM for Mashups.
- 2 Choose Action | New Serena Dimensions Connection. The New Dimensions Connection dialog box appears.
- 3 For **Server Host Name** type the name of a Dimensions server, for example, *win-dev*.
- 4 For **Database Setup - Remote Connection String** type the database connection string, for example, *dev*.
- 5 For **Database Login ID (Base database)** type the Dimensions base database name, for example, *intermediate*.
- 6 For **User ID** enter the Dimensions user name, for example, *dmsys*.



IMPORTANT! The ID of the Dimensions user that will be used by the synchronizer service must precisely match the full user name in Dimensions. For example, if the user ID is *dmsys*, then the full name of the user must be *dmsys* as well. If the ID and full name do not match, then synchronization actions taken by the Dimensions user ID are unnecessarily added back to the corresponding SBM issue. These actions then incorrectly appear as user comments in SBM.

The Dimensions user must have a license available from Serena License Manager.

This user ID should also be reserved for the synchronization only. Do not use this User ID for any other activities, as this may result in synchronization failures.

- 7 For **User Password** type the password for the user ID.
- 8 To test the connection click Test Connection. If the connection succeeds the following message is displayed:

Successfully connected to Dimensions

If the connection fails, do the following:
 - Check the connection parameters that you specified.
 - Check that the Dimensions Listener you are trying to connect to is running.
- 9 To save the connection click Save Connection (you can only save a connection if it was connected successfully). The connection appears in the Dimensions Connections field.

Creating an SBM Connection

Use the New SBM Connection dialog box to create a new connection to an SBM server.

To create an SBM connection:

- 1 Choose Action | New SBM Connection. The New SBM Connection dialog box appears
- 2 For **Host** type the name of a SBM server.



NOTE The default SBM server port number is 80. If your SBM server is running on a different port, you must specify the port number. For example:
<SBM server name>:9090

- 3 For **User ID** type a SBM user ID that the link will connect and synchronize as.



IMPORTANT! The SBM user must have a license available from Serena License Manager.

This user ID should also be reserved for the synchronization only. Do not use this User ID for any other activities, as this may result in synchronization failures.

- 4 For **User Password** type the password for the user ID.
- 5 To test the connection click Test Connection. If the connection succeeds the following message is displayed:

Successfully connected to SBM

Click OK.

If the connection fails, do the following:

- Check the connection parameters that you typed.
- Check that the SBM server is running.

- 6 To save the connection click Save Connection (you can only save a connection if it was connected successfully). The connection appears in the Connections field.

Editing a Connection

Use the Edit Connection dialog box to edit the user ID and password for an existing SBM or Dimensions connection. You cannot change any other connection parameters.

To edit a connection:

- 1 Select the SBM or Dimensions connection that you want to edit. Click **Edit**.
- 2 For **User ID** type a user ID that is registered on the SBM server or the Dimensions base database.



IMPORTANT! The ID of the Dimensions user that will be used by the synchronizer service must precisely match the full user name in Dimensions. For example, if the user ID is *dmsys*, then the full name of the user must be *dmsys* as well. If the ID and full name do not match, then synchronization actions taken by the Dimensions user ID are unnecessarily added back to the corresponding SBM issue. These actions then incorrectly appear as user comments in SBM.

- 3 For **User Password** type the password for user ID that you entered above.
- 4 To test the connection click Test Connection. If the connection fails, do the following:
 - Check the connection parameters that you specified.
 - Check that the SBM server or Dimensions Listener is running.
- 5 Click Save Connection.

Deleting a Connection

You can delete the following:

- A single connection.
- All SBM connections.
- All Dimensions connections.

To delete a connection:

- 1 Select the SBM or Dimensions connection that you want to delete.
- 2 Click the Delete button next to the **Connections** fields.

To delete all SBM connections:

Click the **Delete All** button next to the SBM Connections field.

To delete all Dimensions connections:

Click the **Delete All** button next to the Dimensions Connections field.

Setting up a New Link

Use the Link Setup Wizard to set up a new link between a Dimensions database and an SBM server. The wizard has three pages that are described in the following sections:

[Setting up a Link between a Dimensions Product and an SBM Project](#) (see below).

["Mapping Dimensions Lifecycle Status to SBM States" on page 18.](#)

["Mapping Attributes" on page 21.](#)

Setting up a Link between a Dimensions Product and an SBM Project

On page one of the Link Setup Wizard you set up a link between the following:

- A Dimensions product, request type, and design part.
- An SBM project.

To set up a link between a Dimensions product and an SBM project:

- 1 In the Dimensions CM Connect for SBM Admin Console, choose Action | New Link.
- 2 From the SBM **Connection** list select a connection to an SBM server.
- 3 For **Project**, expand the project tree and select a project from which you want to synchronize SBM items. To include all sub-projects below the selected project, select the **Include Subprojects** check box. To only synchronize items from the selected project, do not select the **Include Subprojects** check box.
- 4 (Optional) To restrict which SBM items spawn Dimensions requests, select an SBM field restriction. If you select a value, only those items that match the value will spawn requests.
 - a In the **Field Restriction** field click **Edit**. The SBM Field Restriction dialog box appears.
 - b From the **Field Name** list select a field.
 - c From the **Field Value** list select a value for the field.
 - d Click OK.
- 5 From the Dimensions **Connection** list select a connection to a Dimensions server.
- 6 From the **Product** list choose a product from the Dimensions base database.
- 7 From the **Request Type** list choose a Dimensions request type.
- 8 For **Design Part**, expand the design part tree and select the design part from which you want to synchronize requests. To include all sub-design parts below the selected design part, select the **Include Subdesignparts** check box. To only synchronize requests from the selected design part, do not select the **Include Subdesignparts** check box.
- 9 (Optional) To restrict which Dimensions requests spawn SBM items, specify a Dimensions attribute restriction. If you specify a value, only those requests that match the value will spawn items.

- a In the **Attribute Restriction** field click **Edit**. The Dimensions Attribute Restriction dialog box appears.
 - b From the **Attribute Name** list select an attribute.
 - c From the **Attribute Value** list select a value for the attribute.
 - d Click OK.
- 10** Click Next. For information about using page 2 of the Link Setup Wizard, see the next section.

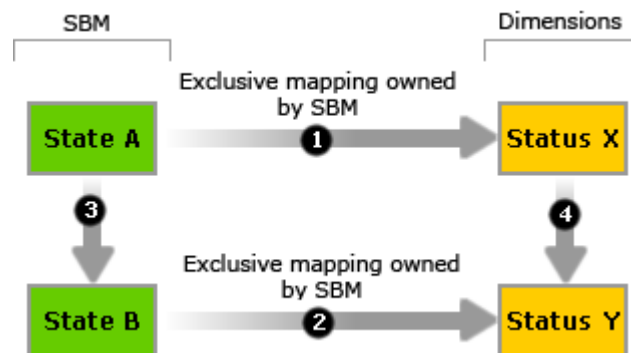
Mapping Dimensions Lifecycle Status to SBM States

On page two of the Link Setup Wizard you map the Dimensions lifecycle statuses of the selected request type to SBM states.

A mapping can be owned by Dimensions, SBM, or both (either application can control the next change in status). There are two ways that you can restrict a mapping that is owned by a single application, exclusive or non-exclusive:

■ Exclusive

With an exclusive mapping only the application that owns the mapping can action to the mapped status. For example:

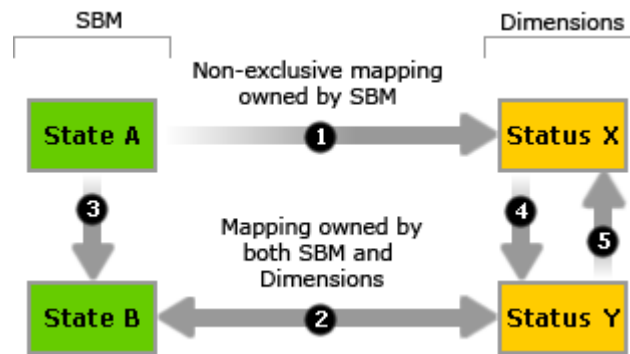


Step	Description
1	SBM state A is mapped to Dimensions status X. The mapping is owned exclusively by SBM.
2	SBM state B is mapped to Dimensions status Y. The mapping is owned exclusively by SBM.
3	If an SBM user actions an item from state A to B, the corresponding Dimensions request is automatically synchronized and actioned from status X to Y.
4	If a Dimensions user actions a request from X to Y, a warning is raised because the mapping from B to Y is owned exclusively by SBM.

■ Non-Exclusive

A non-exclusive mapping is less restrictive than an exclusive mapping. When an application that does not own a mapping actions to a mapped status, synchronization occurs and a warning is raised, but the action is effectively ignored. Non-exclusive

mapping allows the application that does not own a mapping to action to that status without raising a conflict. For example:



Step	Description
1	SBM state A is mapped to Dimensions status X. The mapping is owned by SBM but is non-exclusive.
2	SBM state B is mapped to Dimensions status Y. The mapping is owned by both SBM and Dimensions therefore both applications can control a change in status.
3	If an SBM user actions an item from state A to B, the corresponding Dimensions request is automatically synchronized and actioned from status X to Y.
4	If a Dimensions user actions a request from status X to Y, the corresponding SBM item is automatically synchronized and actioned from state A to B.
5	Because the mapping from state A to status X is owned by SBM but is non-exclusive, if a Dimensions user actions a request from status Y back to X a warning is raised and synchronization occurs, but the corresponding SBM item is not actioned from state B back to A.

To map a Dimensions lifecycle status to an SBM state:

- 1 From the **Dimensions Status** list select a lifecycle status.
- 2 From the **SBM Status** list select the SBM state that you want to map to the Dimensions status
- 3 To select the application that will own the mapping and control the next change in status, from the **Initiator** list select one of the following:
 - Dimensions
 - SBM
 - Both (either application can control the next change in status)



NOTE If you are going to submit items in SBM and requests in Dimensions, you must select Both for the first status in each workflow.

-
- 4 If this mapping is exclusive, select **Is Exclusive**.



NOTE If Initiator is set to Both this option is not applicable as both applications can action to the mapped status and cause synchronization to occur.

- 5 Click Map. The status mapping is added to the Existing Status Mapping list.
- 6 To map another pair of states, repeat steps 1—5.
- 7 To delete a mapping, select it in the **Existing Status Mapping** list and click **Remove**. To delete all mappings click **Remove All**.
- 8 Click **Next**. For information about using page 3 of the Link Setup Wizard, see the next section.

Mapping Attributes

On page three of the Link Setup Wizard you map Dimensions request attributes to SBM item fields. For information about guidelines and restrictions when mapping attributes see [page 23](#).



NOTE

Before you map attributes check that Keep History is enabled for all mapped Dimensions request attributes. Do the following:

- 1 In the Dimensions Administration Console, in the Configuration Object Management cluster, under Object Type Definitions, click Requests.
- 2 In the navigation area click the request type for the link you are creating.
- 3 In the content area, on the Attributes tab, select an attribute and click Edit Attribute. The Edit Attribute dialog box appears.
- 4 In the Local Properties field check that the Keep History check box is selected.

The screenshot shows the 'Local properties' dialog box with the following fields and values:

- User prompt:** Title
- Attribute type:** Single Value (dropdown menu)
- Display width (in chars.):** 80 (range: 1 to 240)
- Display height (in no. of lines):** 1 (range: 1 to 24)
- Display order:** (empty field)
- Default value:** (empty field)
- Help message:** Enter Title/Short descrip
- Keep history:** ☒ (highlighted with a blue border)

- 5 Click OK.
- 6 Repeat steps 3—5 for all Dimensions attributes of this request type that are to be mapped.

To map attributes:

- 1 From the list of SBM fields, select a value.
- 2 From the **Dimensions Attribute** list select a value.
- 3 From the **Direction** list select one of the following:
 - Both: Values are synchronized in both directions.
 - DMTT: Values are synchronized from Dimensions to SBM.
 - TTDM: Values are synchronized from SBM to Dimensions.
- 4 To map the values, click Map. The mapping is added to the Existing Mapped Fields list.
- 5 To map another pair of attribute and field values, repeat steps 1—4.

-
- 6 To check that you have mapped all mandatory Dimensions request attributes and SBM item fields, click **Verify**. The names of mandatory attributes and fields that you have not mapped are displayed. To map a mandatory attribute or field, repeat steps 1–4.
 - 7 For each mapping that has multiple values, you must map the different values of the attribute and field pair:
 - a Select the mapping in the Existing Mapped Fields list and click **Value Mapping**. The Value Mapping dialog box appears.
 - b From the list of SBM values, select a value.
 - c From the **Dimensions Values** list select a value.
 - d Click **Map**. The mapping is added to the **Mappings** list.
 - e To delete a mapping, select it in the Mappings list and click **Remove**. To delete all mappings click **Remove All**. When you remove a mapping, its values are repopulated in the SBM and Dimensions lists.
 - f Click **OK**.
 - 8 To delete an attribute mapping, select it in the **Existing Mapped Fields** list and click **Remove**. To delete all attribute mappings click Remove All. When you remove a mapping, its values are repopulated in the SBM and Dimensions lists.
 - 9 To start a synchronization, click the **Sync Projects** button.
 - 10 (Optional) To refresh the values in both lists, click **Refresh**.
 - 11 To specify e-mail settings for notifications about conflicts and errors, do the following:
 - For **SMTP Server** type the name of an e-mail server where the e-mail account that you want to use is located.
 - For **Account Name** type the name of an account on the e-mail server.
 - For **Password** type the password for the account name.
 - For **Email Address** type the e-mail address where notifications will be sent.
 - 12 For **Auto-Sync Setting** type the interval in minutes that SBM and Dimensions data is automatically synchronized.
 - 13 Click Finish.

Restrictions and Guidelines when Mapping Attributes

The following guidelines and restrictions apply when you map attributes:

- You only need to map values that are different.
- You must map all the mandatory attributes of the Dimensions request type.
- Only map the Dimensions attribute DETAILED_DESCRIPTION to an SBM text field.
- Only map summation fields from SBM to Dimensions.
- You cannot map multi-block Dimensions attributes.
- Dimensions attributes that you map must not require Electronic Signature Support (they should not be defined as *sensitive*).
- You can map journal fields only from SBM to the Dimensions Action Description field.
- You can map Memo fields from SBM to Dimensions but they will be truncated to the maximum length of the Dimensions text attribute.
- File attachments, notes, and URLs are synchronized in both directions, though you can only create notes and URLs in SBM. Notes are named TTNotexxxx.txt where xxxx is the internal note ID in SBM. This ensures that notes with the same title can be synchronized.
- For each mapping that has multiple values, you must map the different values of the attribute and field pair. For example, if you map the Dimensions attribute *Severity* to the SBM field *Severity*, you need to map the Dimensions values for *Severity* to the corresponding SBM values.
- Unless a value is explicitly mapped, the same value is assumed on the target database.
- You can only map multi-selection and multi-relational fields in SBM to multi-value attributes in Dimensions.
- You cannot map sub-relational fields in SBM.
- You can map Dimensions delegate roles to user fields in SBM. For example, to map the Dimensions user who was delegated the role Developer, to the SBM user field DEVELOPER, map the (artificial) Dimensions attribute DELEGATE-DEVELOPER to the SBM user field DEVELOPER.
- If you map an SBM selection or multi-selection field to the Dimensions attribute DESIGN_PART:
 - Dimensions requests are created in the mapped design part.
 - SBM items are created with the values for the mapped field corresponding to the design part of the request.

If you map a single selection field, the first design part is used. Changes that you subsequently make in Dimensions are reflected in SBM, and vice versa. Serena recommends setting up value mapping for field mapping so that you do not need to display the full design part specification in SBM.

- You can synchronize the Action Description field to and from Dimensions but not to the same field in SBM. For example:
 - **SBM to Dimensions:** You can map an SBM Journal or Memo field to the Dimensions Action Description field. The name of the Dimensions attribute that you need to map is '`--> ACTION_DESCRIPTION`'. This mapping takes the text from SBM and adds a new Dimensions Action Description with that text. The following comment is then written back to the mapped SBM field:

Serena Connect for TT Synchronized

- **Dimensions to SBM:** You can map an SBM Memo field to the Dimensions Action Description field. The name of the Dimensions attribute that you need to map is '`<-- ACTION_DESCRIPTION`'. This mapping takes all the action descriptions from the Dimensions request that were not entered by the user running Dimensions CM Connect for SBM (that is, not action descriptions that originated in SBM), and replaces the text in the SBM field with the new text.

To parse the action description for entries that were done by the user running Dimensions CM Connect for SBM, the browse template for the synchronized request type must have the following line before each action description entry (see the template in the Payroll:IRR):

```
<br>Action: %action_number% by %user_name% on %date% %time%
```

- You can map an SBM single selection field to a Dimensions project (use the Dimensions attribute `DIMENSIONS_PROJECT`). If the field is set in SBM, the Dimensions request will be related to the given project. If the field is unset, the Dimensions request will be unrelated from any project. If a Dimensions request is related to a project, the value will be set on that SBM field.

To map an SBM project to a Dimensions project, set the default value for the SBM single selection field that is mapped to the Dimensions project to the appropriate value.

- You can map the Elapsed Time field and/or Time of Day field to a character or number attribute. The mapping takes the display value of the SBM field and tries to set it on the Dimensions attribute. In the other direction (Dimensions to SBM), to ensure that the SBM field can accept that value, check that the value in Dimensions is entered in the correct format. If it is not, the synchronization of that field will fail.

For date fields the SBM value is read as the display value (Dimensions CM Connect for SBM takes the time zone setting of the user running the integration in SBM). This is the value that is entered into Dimensions. To avoid confusion, the time zone setting of the user running Dimensions CM Connect for SBM should be the same as the setting on the Dimensions server.

Editing or Removing a Link

Use the Links dialog box to edit or remove links, or resolve link warnings.

Removing Links

You can remove a single link, or all links.

To remove a link:

- 1** Choose Action | Edit Links.
- 2** Select the link that you want to remove.
- 3** Click Remove and click Yes to confirm.

To remove all links:

- 1** Choose Action | Edit Links.
- 2** Click Remove All and click OK to confirm.

Editing Attribute Mappings

Use the Attributes Mapping dialog box to edit the Dimensions attribute and SBM field mappings for an existing link. For information about guidelines and restrictions when mapping attributes see [page 23](#).



NOTE

Before you map attributes check that Keep History is enabled for all mapped Dimensions request attributes. Do the following:

- 1 In the Dimensions Administration Console, in the Configuration Object Management cluster, under Object Type Definitions, click Requests.
- 2 In the navigation area click the request type for the link you are creating.
- 3 In the content area, on the Attributes tab, select an attribute and click Edit Attribute. The Edit Attribute dialog box appears.
- 4 In the Local Properties field check that the Keep History check box is selected.

The screenshot shows a 'Local properties' dialog box with the following fields:

- User prompt:** Title
- Attribute type:** Single Value (dropdown)
- Display width (in chars.):** 80 (1 to 240)
- Display height (in no. of lines):** 1 (1 to 24)
- Display order:** (empty field)
- Default value:** (empty field)
- Help message:** Enter Title/Short descrip
- Keep history:** ☒ (highlighted with a blue border)

- 5 Click OK.
- 6 Repeat steps 3—5 for all Dimensions attributes of this request type that are to be mapped.

To edit an attribute mapping:

- 1 Choose Action | Edit Links.
- 2 Select a link and click Edit Attributes Mapping. The Attribute Mapping dialog box appears.
- 3 To delete a mapping, select it in the Existing Mapped Fields list and click Remove. To delete all mappings click Remove All. When you remove a mapping, the values are repopulated in the SBM and Dimensions lists.
- 4 (Optional) To refresh the values in the SBM and Dimensions lists, click Refresh.

- 5 To add a new mapping, do the following:
 - a From the **SBM Field** list select a value.
 - b From the **Dimensions Attribute** list select a value.
 - c From the **Direction** list select one of the following:
 - Both: Values are synchronized in both directions.
 - DMTT: Values are synchronized from Dimensions to SBM.
 - TTDM: Values are synchronized from SBM to Dimensions.
 - d To map the values, click Map. The mapping is added to the Existing Mapped Fields list.
- 6 To check that you have mapped all mandatory attributes of the Dimensions request type, click Verify. The names of mandatory attributes that you have not mapped are displayed. To map a mandatory attribute, repeat step 5.
- 7 For each mapping that has multiple values, you must map the different values of the attribute and field pair:
 - a Select the mapping in the Existing Mapped Fields list and click Value Mapping. The Value Mapping dialog box appears.
 - b From the **SBM Values** list select a value.
 - c From the **Dimensions Values** list select a value.
 - d Click Map. The mapping is added to the Mappings list.
 - e To delete a mapping, select it in the Mappings list and click Remove. To delete all mappings click Remove All.
 - f Click OK.
- 8 To start a synchronization, click the **Sync Projects** button.
- 9 To specify e-mail settings for notifications about conflicts and errors, do the following:
 - For **SMTP Server** type the name of an e-mail server where the e-mail account that you want to use is located.
 - For **Account Name** type the name of an account on the e-mail server.
 - For **Password** type the password for the account name.
 - For **Email Address** type the e-mail address where notifications will be sent.
- 10 For **Auto-Sync Setting** type the interval in minutes that SBM and Dimensions data is automatically synchronized.
- 11 Click OK.

Editing Status Mappings

Use the Status Mapping dialog box to edit the mapping of Dimensions lifecycle statuses to SBM states for an existing link. For more details about status mapping concepts, see [page 18](#).

To edit a status mapping:

- 1 Choose Action | Edit Links.
- 2 Select a link and click Edit Status Mapping. The Status Mapping dialog box appears.
- 3 To delete a mapping, select it in the Existing Status Mapping list and click Remove. To delete all mappings click Remove All.
- 4 To add a new mapping, do the following:
 - a From the **Dimensions Status** list select a lifecycle status.
 - b From the **SBM Status** list select the SBM state that you want to map to the Dimensions status you selected above.
 - c To select the initiating application that controls the next change in status, from the **Initiator** list select one of the following:
 - Dimensions
 - SBM
 - Both (either application can control the next change in status)
 - d If this mapping is exclusive, select **Is Exclusive**.
 - e Click Map. The mapping is added to the Existing Status Mapping list.
- 5 To map another pair of states, repeat step 4.
- 6 Click OK.



NOTE If you are going to submit items and requests from both SBM and Dimensions, you must select Both for the first status in each workflow.

Editing SBM Field Restrictions

Use the SBM Field Restriction dialog box to change, or remove, the parameters that restrict which SBM items spawn Dimensions requests. If you specify a value, only those items that match the value will spawn requests.

To edit an SBM field restriction:

- 1 Choose Action | Edit Links.
- 2 Select a link and click Edit TT Restriction. The SBM Field Restriction dialog box appears.
- 3 From the **Field Name** list select a field. To remove a restriction, select the empty entry in this list.

- 4 From the **Field Value** list select a value for the SBM field. If you did not select a field name, this field has no value.
- 5 Click OK.

Editing Dimensions Attribute Restrictions

Use the Dimensions Attribute Restriction dialog box to change, or remove, the parameters that restrict which Dimensions requests spawn SBM items. If you specify a value, only those requests that match the value will spawn items.

To edit a Dimensions attribute restriction:

- 1 Choose Action | Edit Links.
- 2 Select a link and click Edit DM Restriction. The Dimensions Attribute Restriction dialog box appears.
- 3 From the **Attribute Name** list select an attribute. To remove a restriction, select the empty entry in this list.
- 4 From the **Attribute Value** list select a value for the attribute. If you did not select an attribute name, this attribute has no value.
- 5 Click OK.

Chapter 4

Tips and Troubleshooting

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Request or Item not Synchronized

If a Dimensions request or SBM item is not synchronized, check that any updates to the request or item are performed by user who is different from the user who is running the synchronization. For a request or item to be synchronized, it must be created by a user who is not running the synchronization. You should reserve the user ID that is used by the synchronizer for that purpose only. Do not use that user ID for any other activities.

Dialog Boxes take a Long Time to Load

If your SBM database contains many projects and/or fields, the following dialog boxes may take a long time to load:

- Link Setup Wizard
- Edit Attributes Mappings
- Edit Status Mappings

Specifying the SBM Server Port

The default SBM server port is 80. If your SBM server is running on a different port, you must specify the port number when you create a connection to that server. For example:

<SBM server name>:9090

Required Fields Missing from SBM Project

If you get a error message similar to the one below, you have not created the SBM fields required for the synchronization:

```
Could not get list of new and updated TeamTrack items
The record list with the 'select TTT_ISSUES.TS_ID,
      TTT_ISSUES.TS_ISSUEID, TTT_ISSUES.TS_TITLE, ... ' select
      statement could not be read from the 'Issues' table.
(TTexc456)
Too few parameters. Expected 1.
Could not get all TT items.
```

For details about creating the fields in the SBM project, see [page 13](#).

Customizing the Amount of Information sent by Email

To customize the amount of information sent by email when a synchronization occurs, set the appropriate log level. In the configuration file, in the <LINK> element, add the following tag:

```
<loglevel value="4"/>
```

where 'value' can be between 1 and 4, with 4 being the most verbose.

For example:

```
<LINKS>
  <LINK name="1">
    <loglevel value="4" />
  </LINK>
</LINKS>
```

Forcing a Synchronization

To force the integration to synchronize a particular defect, set the value of the SBM field DMSYNCTIME to 'Failed'.

Limiting Synchronization Comments in SBM Issues

The ID of the Dimensions user that will be used by the synchronizer service must precisely match the full user name in Dimensions. For example, if the user ID is *dmsys*, then the full name of the user must be *dmsys* as well. If the ID and full name do not match, then synchronization actions taken by the Dimensions user ID are unnecessarily added back to the corresponding SBM issue. These actions then incorrectly appear as user comments in SBM.

Configuring Batch Size for SBM Items

When the synchronizer runs, the new and updated SBM items are returned via a number of batch calls to the server. You can set the number of items returned in each batch by setting either of the following environment variables on the synchronizer machine. The default limit is 200.

- For SBM:
MASHUPS_RECORD_LIMIT <number>
For example:
MASHUPS_RECORD_LIMIT 50
- For Serena TeamTrack:
TEAMTRACK_RECORD_LIMIT <number>
For example:
TEAMTRACK_RECORD_LIMIT 50

Integration Breaks after Installing Desktop Client

The integration may break after completing a Desktop client installation. If this happens, an error message will suggest reinstalling, but that will not resolve the problem. Instead, you must reboot the Dimensions server to restore the integration to proper functioning.

SBM Server Rejects HTTP Basic Authentication

If the following error message is displayed when you test a new SBM connection, check that the SBM server allows HTTP basic authentication (see [page 12](#)):

```
Error: could not connect to Serena Business Mashups!  
Authentication failed. No user information.;  
TSServer::Send: Initial retCode from Server was0;  
...
```