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Preface

This documentation provides the installation and configuration instructions for Omni Designer. This manual is intended for developers and administrators of Omni-Insurance.

How This Manual Is Organized

This manual includes the following chapters:

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<th>Contents</th>
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<td>Provides an overview and getting started information for Omni Designer.</td>
</tr>
<tr>
<td>2 Installing Omni Designer Plugin</td>
<td>Describes how to install the Omni Designer Plugin.</td>
</tr>
<tr>
<td>3 Omni Designer Usage Considerations</td>
<td>Describes several usage considerations for Omni Designer regarding table functionality, validation, and open editors.</td>
</tr>
<tr>
<td>4 Using the Omni Designer Project Explorer</td>
<td>Describes how to use the Omni Designer Project Explorer when creating and configuring Omni Designer Project components.</td>
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<td>5 Using the Repository Explorer</td>
<td>Describes how to use the Repository Explorer in Omni Designer to manage repository servers, users and groups, and shared projects.</td>
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<td>6 Using the Project Editor</td>
<td>Describes how to use the Project editor in Omni Designer to manage projects.</td>
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<td>7 Using the Input Data Model Editor</td>
<td>Describes how to use the Input Data Model Editor in Omni Designer to manage Input Data Models.</td>
</tr>
<tr>
<td>8 Using the Subject Editor</td>
<td>Describes how to use the Subject Editor in Omni Designer to manage Subjects.</td>
</tr>
<tr>
<td>9 Linking (Referencing) Subjects</td>
<td>Describes how to link a subject from an existing project.</td>
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<tr>
<td>10 Configuring Reference Data</td>
<td>Describes how to configure reference data using Omni™ Designer.</td>
</tr>
<tr>
<td>11 Remediation Rules</td>
<td>Describes how to define remediation rules using Omni™ Designer.</td>
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Describes how to export and import projects in Omni Designer.

Describes how to define and configure dimensions in Omni Designer.

Describes how to define and configure measures in Omni Designer.

Describes how to define and configure content types in Omni Designer.

Describes how to use the Properties tab in Omni Designer to view the properties for all configurable components and entities of your Omni Designer Project.

### Documentation Conventions

The following table lists and describes the documentation conventions that are used in this manual.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>THIS TYPEFACE</strong> or <strong>this typeface</strong></td>
<td>Denotes syntax that you must type exactly as shown.</td>
</tr>
<tr>
<td><strong>this typeface</strong></td>
<td>Represents a placeholder (or variable), a cross-reference, or an important term. It may also indicate a button, menu item, or dialog box option that you can click or select.</td>
</tr>
<tr>
<td>underscore</td>
<td>Indicates a default setting.</td>
</tr>
<tr>
<td>Key + Key</td>
<td>Indicates keys that you must press simultaneously.</td>
</tr>
<tr>
<td>{}</td>
<td>Indicates two or three choices. Type one of them, not the braces.</td>
</tr>
<tr>
<td></td>
<td>Separates mutually exclusive choices in syntax. Type one of them, not the symbol.</td>
</tr>
<tr>
<td>Convention</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td>...</td>
<td>Indicates that you can enter a parameter multiple times. Type only the parameter, not the ellipsis (...).</td>
</tr>
<tr>
<td>.</td>
<td>Indicates that there are (or could be) intervening or additional commands.</td>
</tr>
</tbody>
</table>

### Related Publications

Visit our Technical Content Library at [https://techsupport.informationbuilders.com/public/tc-library.html](https://techsupport.informationbuilders.com/public/tc-library.html). You can also contact the Publications Order Department at (800) 969-4636.

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Help Us to Serve You Better

To help our consultants answer your questions effectively, be prepared to provide specifications and sample files and to answer questions about errors and problems.

The following table lists the environment information that our consultants require.

<table>
<thead>
<tr>
<th>Platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
</tr>
<tr>
<td>OS Version</td>
</tr>
<tr>
<td>JVM Vendor</td>
</tr>
<tr>
<td>JVM Version</td>
</tr>
</tbody>
</table>

The following table lists additional questions to help us serve you better.

<table>
<thead>
<tr>
<th>Request/Question</th>
<th>Error/Problem Details or Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the problem arise through a service or event?</td>
<td></td>
</tr>
<tr>
<td>Provide usage scenarios or summarize the application that produces the problem.</td>
<td></td>
</tr>
<tr>
<td>When did the problem start?</td>
<td></td>
</tr>
<tr>
<td>Can you reproduce this problem consistently?</td>
<td></td>
</tr>
<tr>
<td>Describe the problem.</td>
<td></td>
</tr>
<tr>
<td>Describe the steps to reproduce the problem.</td>
<td></td>
</tr>
<tr>
<td>Specify the error messages.</td>
<td></td>
</tr>
<tr>
<td>Request/Question</td>
<td>Error/Problem Details or Information</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Any change in the application environment: software configuration, EIS/database configuration, application, and so forth?</td>
<td></td>
</tr>
<tr>
<td>Under what circumstance does the problem not occur?</td>
<td></td>
</tr>
</tbody>
</table>

The following is a list of error and problem files that might be applicable.

- Input documents (XML instance, XML schema, non-XML documents)
- Transformation files
- Error screen shots
- Error output files
- Trace files
- Custom functions and agents in use
- Diagnostic Zip
- Transaction log

**User Feedback**

In an effort to produce effective documentation, the Technical Content Management staff welcomes your opinions regarding this document. Please use the Reader Comments form at the end of this document to communicate your feedback to us or to suggest changes that will support improvements to our documentation. You can also contact us through our website, [https://techsupport.informationbuilders.com/public/connections.html](https://techsupport.informationbuilders.com/public/connections.html).

Thank you, in advance, for your comments.

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Getting Started With Omni Designer

This section provides an overview and getting started information for Omni Designer.

**In this chapter:**

- Omni Designer Components Configuration Overview

---

**Omni Designer Components Configuration Overview**

This section describes the user experience design (UX) and principles for Omni Designer.

**Design Principles**

The following guidelines are used:

- **Ease of use takes precedence over functionality.** Omni Designer allows you to build relatively complex mastering solutions with relative ease.

- **No programming.** The user interface guides you through complex activities without expecting you to enter a code or write scripts. Additionally, the language used by the user interface should not be technically oriented, but use normal syntax and constructs.

- **Reduce time to build by a factor of 4.** Similar to building in 6 weeks instead of 6 months, Omni Designer removes the complexity (without significant loss of functionality) to enable quick deployment.

**Project Bundles**

A project bundle is a set of different types of information required by different subsystems in the run-time or the UI applications. The information, or metadata, does not have a common schema across those subsystems, as each subsystem has a discreet set of capabilities and operations which need to be configured.

The project bundle has its own metadata which is richer than the runtime metadata, and is organized differently. When a project bundle is deployed into runtime, the metadata is transformed into the runtime format, and stripped of all the UI-specific information.
Sharing and Collaboration

The following additional design principles are prevalent in Omni Designer:

- **Bundles and Components can be shared.** Omni Designer can be installed locally with a local runtime for testing and debugging. However, Omni Designer strongly supports a central development server where projects and components can be stored and used by multiple users in multiple projects or a repository. You can also use the App Store where everyone can build and share projects and components.

- **Collaborative working.** Larger projects require multiple users to work simultaneously on the same project, allowing the use of real-time collaborative development of an MDM application. This is not the same as sharing components.

Shared components require features such as referential integrity, or the ability to know when something has changed, whereas collaborative working requires change control and locking.
Chapter 2

Installing Omni Designer Plugin

This section describes how to install the Omni Designer Plugin.

In this chapter:

☐ Install the Omni Designer Plugin
☐ Uninstalling the Omni Designer Plugin
☐ Creating a New Omni Designer Project
☐ Omni Designer and Eclipse Localization

Install the Omni Designer Plugin

Note: If a previous version of the Omni Designer Plugin was already installed, then you must first uninstall the older version and then install the new Omni Designer Plugin version.

1. Open your Eclipse environment.
2. Click Help in the menu bar, and then select Install New Software.
The Install dialog box opens and shows the Available Software pane, as shown in the following image.

3. Click Add to add the installation file.

The Add Repository dialog box opens, as shown in the following image.

4. Click Archive and navigate to the location of the Omni Designer .zip file.

5. Click OK.
You are returned to the Install dialog box (Available Software pane), as shown in the following image.

6. Click **Select All** to select all files that are required for the installation and then click **Next**.
The Install Details pane opens, as shown in the following image.

7. Click Next.
The Review Licenses pane opens, as shown in the following image.

8. Select *I accept the terms of the license agreement* and then click *Finish*.

After the Omni Designer plugin installation process has completed, you are prompted to restart your Eclipse environment, as shown in the following image.

9. Click Yes to restart your Eclipse environment.
Uninstalling the Omni Designer Plugin

This section describes how to uninstall the Omni Designer Plugin.

Procedure: How to Uninstall the Omni Designer Plugin

1. Open your Eclipse environment.
2. Click Help in the menu bar, and then select About.
   
   The About Eclipse dialog box opens, as shown in the following image.

   ![About Eclipse dialog box](image)

3. Click Installation Details.
The Eclipse Installation Details dialog box opens, as shown in the following image.

4. Select *Omni Designer Tools* from the list of installed software and then click *Uninstall*. The Uninstall Details pane opens, as shown in the following image.
5. Click *Finish*.

After the Omni Designer uninstallation process has completed, you are prompted to restart your Eclipse environment, as shown in the following image.

![Software Updates](image)

6. Click *Yes* to restart your Eclipse environment.

You must now delete all data pertaining to the previous installed version of Omni Designer plug-in.

7. Navigate to the .emfstore folder (located at the workstation where the Omni Designer plug-in was installed) and delete all of its contents.

   **Note:** Do not remove the .emfstore folder while your Eclipse instance with Omni Designer plugin is opened and running, otherwise problems with loading emfstoreClient.keystore will appear. To resolve these issues, restart Eclipse.

You can now open and use a clean Eclipse workspace.

**Creating a New Omni Designer Project**

There are several ways you can create a new Omni Designer Project:

- In Omni Designer, click *File* in the menu bar, select *New*, and then click *Omni Designer Project*.

- In Omni Designer, click the drop-down next to the *New* icon in the upper left corner, and select *Omni Designer Project*.

- In the Omni Designer Project Explorer tab in the left pane, right-click an empty space, select *New*, and then click *Omni Designer Project* from the context menu.
The Omni Designer Project dialog box opens, as shown in the following image.

To create a new Omni Designer Project, you must first specify a valid project name (required), provide a brief description (optional), and then click Finish.

The following are considerations related to the Project name (field) validation:

- A project name is required.
- A project name can consist of up to 64 characters in length.
- All special characters are allowed in a project name.
- Multiple projects with identical project names (case insensitive) cannot be created.
- Extra spaces at the beginning, the end, and between words in a project name are trimmed.
The following are considerations related to the Description (field) validation:

- A description is optional.
- A description can consist of up to 1,024 characters.
- All special characters are allowed in a description.
- Extra spaces at the beginning and at the end of a description are trimmed. However, extra spaces between words in a description are allowed.

Omni Designer projects are sorted in alphabetical order in the Project Explorer.

The project list appears per workspace. Once you switch to another workspace, the Omni Designer Project created within the new workspace will appear.

**Omni Designer and Eclipse Localization**

Omni Designer provides Localization support for French, Spanish, and German languages. To enable these languages in Omni Designer, you need to:

1. Create a shortcut for the eclipse.exe file.
2. Right-click the shortcut and select **Properties** from the context menu.
3. At the end of the Target string, add one of the following commands for the specific language:

   - For French specify: `-nl fr`
   - For Spanish specify: `-nl es`
To localize your Eclipse environment:

1. Navigate to the Help/Install New Software section in your Eclipse environment.
2. Click Add.
3. In the Location field, enter the following URL:
   
   http://download.eclipse.org/technology/babel/update-site/R0.13.1/kepler

4. Click OK.
5. Expand *Babel Language Pack for eclipse*, and then select your preferred language. The following image shows a sample language pack in a foreign language.

![Image of Babel Language Pack](image)

6. Click **Next** to continue Installation.

7. Select the *I accept the terms of the license agreement* radio button, and then click **Finish** to continue installation.
Omni Designer Usage Considerations

This section describes several usage considerations for Omni Designer regarding table functionality, validation, and open editors.

In this chapter:
- Table Functionality
- Validation
- Open Editors
- Wizard Rules
- Viewing Problems

Table Functionality

When you are adding a new row in a table, the row is selected and the focus is set in the Name field or the most significant field in the row.

The Create button is always enabled, as shown in the following image. If a table is empty, the Delete button is disabled, but becomes enabled after at least one item is created.

![Table Functionality Image]

After you delete a row, the preceding row is automatically selected.

When you single-click on a row (any cell), the row becomes selected and the focus is not set on any specific cell. To edit any value in this row, you need to perform an additional click on a specific cell.

Text values are updated. As a result, any extra spaces are trimmed after the focus is removed from a row.

All columns are sortable.
You can change the order of rows by selecting the required row and using the Move Up or Move Down buttons.

Tables are not sorted by default. As a result, the Move Up and Move Down buttons are enabled, but the Reset Sorting button is disabled.

When a column is sorted, the Reset Sorting button is enabled, but the Move Up and Move Down buttons are disabled. When Reset Sorting is clicked, the Reset Sorting button is disabled, but the Move Up and Move Down buttons are enabled.

All column widths can be resized. Horizontal and/or vertical scroll bars appear whenever a table is too large to be displayed in the window.

If a row is not selected, a check box becomes selected after double-clicking it (a single click is responsible for row selection, while double-clicking selects the check box). If a row is selected, a single click is enough to select the check box.

**Validation**

Validation functions the same way for the Omni Designer Project Editor, all Omni Designer editors, and project/property views.

If a value does not meet specific validation rules that have been defined, the value is marked with a red cross icon. When you mouse over such a cell or field, a tooltip displays a corresponding error message. With regards to an incorrect or failed node in the Omni Designer Project Explorer, the node is also marked with a red cross icon, but a tooltip is not displayed. You can also view error messages in the Problems tab.

After you correct an issue, the red cross icon next to the specific component and the corresponding error row in the Problems tab are removed.

**Open Editors**

If you try to open an editor for the same node twice, a second instance of the editor does not open. The active window and executable is moved to the editor that is already opened.

If you delete a node, the opened editor for this node will close automatically. If you delete an Omni Designer Project, Input Data Model, or Parent Subject, then the editors for all child nodes are automatically closed.
Wizard Rules

Warning messages in the wizard are displayed with corresponding warning icons and allow you to proceed with a specific process flow (for example, navigation buttons are enabled).

Error messages are displayed with an Error icon and do not allow you to continue the process until some conditions are satisfied (for example, the navigation button becomes disabled).

If an error dialog box appears while working with the wizard (for example, Error OnFinish for a stopped Development Server), after closing the error, the wizard should remain opened.

Viewing Problems

Each error that appears in Omni Designer should have a corresponding description when viewing problems.
Chapter 4

Using the Omni Designer Project Explorer

This section describes how to use the Omni Designer Project Explorer when creating and configuring Omni Designer Project components.

In this chapter:

- Using the Project Explorer
- Understanding the Default Project Structure
- Validation Rules for Input Data Models and Subject Names
- Validation Rules for Reference Data
- Validating General Entity Names
- Understanding the Context Menu
- Moving Nodes in the Omni Designer Navigator

Using the Project Explorer

The Project Explorer uses the default Eclipse environment buttons such as Collapse, Save, Link with Editor, and so on.

The Save button in the Project Explorer behaves in the following way:

- The Save button is disabled when the following criteria occurs:
  - Project Explorer is empty or contains clean projects (without changes).
  - A project with changes is not selected.
  - Multiple Projects are selected (changes are present but not in all selected projects).

- The Save button will be enabled when the following criteria occurs:
  - A project with changes or any of the elements of the project are selected.
  - Multiple projects are selected (changes should be present in all selected projects).
The Project Explorer is the part of application in which all projects with all their components are displayed. The components are grouped by a logical predefined set of categories.

**Understanding the Default Project Structure**

The Omni Designer Project Explorer is the part of an application in which all projects with all their components are displayed. The components are grouped by a logical predefined set of categories. The following list describes the project structure fundamentals.

- A new project is created with the default structure.
- Each root item (Input Data Models, Reference Data Models, and Remediation Rules) from the default structure cannot be deleted.

- New child items can be added to root items. For example, an Input Data Model node can be added to the Input Data Models item.
Each new input data model is created simultaneously with the root subject. It is not possible to create additional root subjects.

The input data model and root subject have the same name. In other words, when you rename an input data model, the root subject is renamed as well, and vice versa.

New subjects can be added to the root subject. Also, a new subject can be added to newly created subjects, and so on. There is no capacity limit for the input data model structure.

New static reference data can be added to the Reference Data Models item.

New dynamic reference data models can be added by publishing a subject (selecting Publish as Reference Data for the subject).

The Remediation Rules item contains the following default child items:

- State Machines
- Custom Actions

New child elements can be added to any of those items.
Validation Rules for Input Data Models and Subject Names

The following list describes the validation rules for input data models and subject names.

- When an input data model or subject is added, its name is set to empty and it is marked with a red icon, as well as all of its parent nodes. The appropriate error messages are displayed in the Problems tab. When the input data model or subject is renamed, the red icons near the current node and all its parent nodes disappear.

- If you create two subjects with the same name within one project (even in different input data models), these subjects will be marked with a red icon in the Omni Designer Project Explorer and the appropriate error message will be displayed in the Problems tab.

- If you create two input data models with the same name within one project, those input data models will be marked with a red icon in the Omni Designer Project Explorer and the appropriate error message will be displayed in the Problems tab.

- If some subject fields have invalid data, the subject is also marked with a red icon.

- If the input data model or subject is marked with a red icon, all of its parents are marked with a red icon as well.

- Subjects and input data model names are case insensitive.

- All special characters are allowed.

- Extra spaces at the beginning and end of a name are stripped.

Validation Rules for Reference Data

The following list describes the rules for reference data.

- When a static reference data model is added, its name is set to empty and it is marked with a red icon, as well as all of its parent nodes. The appropriate error messages are displayed in the Problems tab. When the reference data is renamed, the red icons near the current node and all its parent nodes disappear.

- If there are two reference data models with the same name, both models will be marked with a red icon in the Omni Designer Project Explorer and the appropriate error message is displayed in the Problems tab.

- Dynamic reference data subjects can have identical names, but they will not be validated.
Validating General Entity Names

The following list describes the rules for entity objects.

- All entity objects should start with a lowercase letter.
- Consist of lowercase letters, digits, and underscores.
- Special characters, spaces, and uppercase letters are not permitted.

Understanding the Context Menu

Context menus with specific content are displayed for different nodes in the Omni Designer Project Explorer, depending on whether the project has been shared, and the specific item or multiple items that have been selected.

Context Menu Options for a New Project

The context menu for the created (not shared and not checked out) Omni Designer Project has the following options:

- **Share.** A project can be shared with the localhost server or another server so users can make a copy (check out project) and work with that copy at their own computer.
After you select the *Share* option, you will be asked to select a server to host the share, as shown in the following image.

![Select a Repository Service](image1)

To share a project, select a server and click *OK*. If you are not logged in to this server, an additional dialog message to log in appears.

If you are logged in, a confirmation dialog appears.

![Share succeeded](image2)

The project is then shared with the selected server and appears in the Repository browser.
The following image shows the context menu for a closed Omni Designer project.

- **Undo.** The last change that was made in a project (after the last commit or sharing) can be canceled using this option or by pressing Ctrl+Z. A corresponding option from the Eclipse menu can also be used for this.

  Once the project is committed or shared, changes cannot be canceled. If changes were not made (for example, new Project), then the *Undo* option is disabled.

- **Redo.** The last change that was undone using the *Undo* option in a project (after the last commit or sharing), can be returned using this option or by pressing Ctrl+Y. A corresponding option from the Eclipse menu also can be used for this.

  If changes were not undone, the *Redo* option is disabled.

- **Revert All Operations.** All changes that were made in a project (after the last commit or sharing) can be canceled using this option. Once the project is committed or shared, changes cannot be canceled. If changes were not made, then the *Revert All Operations* option is disabled.

  After selecting this option, a confirmation message appears, as shown in the following image.
Delete. This option removes a project and all of its content from the Omni Designer Project Explorer. After selecting this option, a confirmation message appears, as shown in the following image.

Export project. This option is used to export a project in an XMI file. The following dialog appears:

The project name is predefined in the file name field. The At (@) character and version were added for shared or checked out projects. The XMI extension is set by default and cannot be changed.

To export a project, select a location to save the file, update the filename, and click Save.
A confirmation message appears, as shown in the following image.

The XMI file is saved in a selected location and can be imported to the Omni Designer Project Explorer by any user.

- **Import project from XMI File.** This option is used to import a project from an XMI file to the Omni Designer Project Explorer. The following dialog appears:
Select the XMI file with the exported project and click Open. The Omni Designer Project window appears, as shown in the following image.

The name of the exported project is predefined in the Project name field. The At (@) character and version were added for shared or checked out projects. You can change and add any description you wish, then click Finish.

The following confirmation message appears.

The project is imported to the Omni Designer Project Explorer. The whole project structure and data are recovered. Imported projects can be used as any created project.
- **Import project from XMI/UML Data Model.** This option is used to import projects from the XMI/UML data model to Omni Designer. The following dialog shows the imported Omni Designer project.

![Import Omni Designer Project](image)

- **Import project from Release Bundle.** This option is used to import projects from a Repository Service.
When you select this option, you will need to select a Repository Service, as shown in the following image.

![Select a Repository Service](image)

After you click Import, navigate to and select the bundle and click Open.

- **Close project.** This option is used to close the project (archive). If the project has some validation errors, they will disappear from the Problems tab after closing the project. The errors will reappear in the Problems tab after opening the project again.

  Once the Omni Designer project is closed and all of its panels are hidden, they will be available again after reopening the Omni Designer project. The Properties tab for the closed project contains the information section with the non-editable Name and Description fields of the project. A closed project can be deleted or opened.

- **Manage Source Systems.** This option is used for managing source systems. It will open Project Properties (Project Editor) on the Source Systems tab.

- **Properties.** This option will open Project Properties (Project Editor) on the General tab. Properties can also be opened by pressing the F3 key. Project Properties (Project Editor) also contains Source Systems and Release Management tabs.
Context Menu Options for a Shared Project

The following list describes the context menu options for shared projects.

- **Commit.** This option is enabled and can be performed for saving changes you made with a project (for example, Create, Rename, and Delete subjects or Input Data Models). Once changes are made, a committed version of the project is updated and displayed near the Project name in the Omni Designer Project Explorer. After additional commits, the version is automatically increased. If no changes were made, then the **Commit** option is disabled.
**Update.** This option is used for updating a project and synchronizing it to the latest version. For example, if there are several users working on the same project (one is a shared project and the other is checked out), and a user made and committed changes to the shared project, clicking Update will update the checked out version.

The Update window appears, as shown in the following image.

To update the project, select a version and click OK.

**Update To Version.** Similar to Update, this version updates multiple shared project versions and prompts you to select which version you would like your project updated to.
After selecting *Update To Version*, the following window appears.

![Image of Version Selection Window]

Select a version to update your project to and click OK.

- **Create Branch.** This option creates a new branch for the current project and provides possibilities to make different changes in a separate branch. If no changes were made, then the *Create Branch* option is disabled.
After selecting this option, the Create Branch window appears, as shown in the following image.

Enter a new branch name in the Name field and click OK.

- **Merge with Branch.** This option merges (incorporates) the version of your project with the created branch and combines your project with changes made in the branch. If no changes were made, then the *Merge with Branch* option is disabled.
After selecting *Merge with Branch*, the Branch Selection window appears, as shown in the following image.

![Branch Selection Window](image)

To merge with a branch, select a branch from the list and click *OK*.

- **Show History.** This option opens the History browser tab at the bottom of Eclipse and displays all changes regarding new versions or branches, as shown in the following image.

![History Browser Tab](image)

- **Generate Project Bundle.** This option opens a dialog to release a project. For more information, see *Using the Repository Explorer* on page 71.
Associate. This option opens the Associate with DQ Project option allowing you to associate Omni Designer projects with an available DQ Project. For more information, see Data Quality Projects on page 104.

Check for Updates. This option verifies an associated DQ Project for updates on the development server. This option is disabled if the Omni Designer project is not associated with a DQ Project, and becomes enabled for an associated Omni Designer Project. For more information, see Data Quality Projects on page 104.

Check for Static Content. This option verifies an associated DQ Project on the Repository service for existing (or non-existing) static content (for example, a folder containing cleansing, matching, merging, or remediation content). This option is disabled if the Omni Designer Project is not associated with the DQ Project, and became enabled for the associated Omni Designer project. For more information, see Data Quality Projects on page 104.

Other options from the context menu for shared projects (for example, Undo, Revert All Operations, and Delete) work in the same way as projects that are not shared.
Context Menu Options for the Input Data Models Node

The following list describes the context menu options.

- **Input Data Model.** This option is used for creating new Input Data Models for the current project.

- **Open.** This option is used to open the Input Data Models editor to function with dimensions and measures.

- **Paste.** This option is used for pasting previously copied input data models into the input data models of the current project. You can paste input data models copied from the same project, as well as those copied from a different project.

  The Paste option is disabled if there are no copied or cut input data models in the clipboard. The Ctrl+V key button or the corresponding option from the Eclipse menu can also be used for the Paste option as well.
- **Show History.** The Show History option works in the same way that is listed in context menu for the shared Omni Designer project. The option is available only if the project is shared.

- **Import from CVS.** This option enables you to create an Input Data Model by importing a CVS file. When you select this option, the Select Data Source dialog box opens, as shown in the following image.
You can select a flat file from the list, or create one by clicking the Create new Flat File Data Source. The Create Connection Profile dialog box opens, as shown in the following image.

![Create Connection Profile dialog box](image)

**Create Connection Profile**

Enter the profile information.

- **Name:** CVImport
- **Description (optional):**

---

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Enter a name for the connection profile and click Next. The Define Folder or a File URI dialog box opens, as shown in the following image.

Select a home folder or enter a file URI and click Finish to import the CVS as a Input Data Model.

**Context Menu Options for Specific Input Data Models**

The following list describes the Input Data Models.

- **Open.** The input data model and other subjects can be opened in the editor using either the Open option from the context menu, the F3 key on your keyboard, or by double-clicking the requested input data model or subject.

- **Rename.** The input data model can be renamed in line using this option or by pressing the F2 key on your keyboard. If you rename the input data model, then the root subject will be also be renamed to the same name.

  You can rename the item you wish and then press the enter key. The name of input data model is changed.
❑ **Cut.** The cut option copies the input data model with all subjects and simultaneously removes it without confirmation.

You can also press Ctrl+X on your keyboard or select the corresponding option from the Eclipse menu.

❑ **Copy.** The Copy option copies input data models with all subjects.

You can also press Ctrl+C on your keyboard or select the corresponding option from the Eclipse menu.

❑ **Delete.** The Delete option removes the input data model with all subjects without confirmation.

You can also press the Delete key on your keyboard or select the corresponding option from the Eclipse menu.

❑ **Show History.** The Show History option works the same way as listed in the context menu for the shared Omni Designer project. This option is available only if the project is shared.

![Context Menu Options for a Subject](image)

**Context Menu Options for a Subject**

The context menu of the root subject and regular subject are identical.
The following image shows the context menu options for a root subject.

Notice that the context menu for the root subject does not contain the Cut and Delete options.
The following list describes the context menu of the subject.

- **New Subject.** The Subject option is used for creating a new child subject for the selected parent subject.

- **Open.** The subject can be opened in an editor using the Open option from context menu, the F3 key, or by double-clicking the required subject you wish.

- **Rename.** The subject can be renamed in line using this option or by pressing F2. If you rename the root subject, then the parent Input Data Model will be also renamed to the same name. After selecting this option, the cursor will be set in the field of the selected item.

  ![Project Explorer](image)

  After renaming an item, press Enter.

  The name of the subject is changed.

- **Cut.** The Cut option copies and deletes the subject with all child subjects (if any) and simultaneously moves them to the Clipboard. This option is disabled for the root subject.

  You can also press Ctrl+X or select the corresponding option from the Eclipse menu.

- **Copy.** The Copy option copies the subject with all child subjects (if any).

  You can also press Ctrl+C or select the corresponding option from the Eclipse menu.

- **Copy Single Element.** This option copies the subject without any child subjects (if any).

  You can also press Ctrl+Alt+C as an alternative.

- **Paste.** The Paste option is used for pasting previously copied subjects (with or without child subjects) to the current subject. You can paste subjects copied within the same Input Data Model and project, as well as those copied outside of the current Input Data Model and current Project.
Previously copied root subjects can be pasted as a regular subject.

The Paste option is disabled if there are no copied or cut subjects in the Clipboard. You can also press Ctrl+V or select the corresponding option from the Eclipse menu.

After pasting the subject to another Input Data Model, fields with Reference and Inherited data types are updated. The Reference values are changed to empty.

- **Delete.** The Delete option deletes the subject(s) from the project. This option is not available for the root subject.

  You can also press the Delete key or select the corresponding option from the Eclipse menu.

- **Link Subject.** This option is used to link other subjects with all their children subjects as a local subject (restricted copy). The option is available for any subject including a root subject.

- **Publish as Reference Data.** This option is used to publish the subject with all of its child subjects as the Dynamic Reference Data. The option is available for any subject including root subjects.

  The Delete key and the corresponding option from the Eclipse menu can be used for the Copy option as well.

- **Show History.** This option works the same way as mentioned in the context menu for shared Omni Designer projects.

**Context Menu Options for Reference Data Models**

You can select the following options from the context menu for Reference Data Models:

- **New Static Reference Data.** This option is used for creating new static reference data for the current project.

- **Paste.** The Paste option is used for pasting a previously copied Reference Data Model to the Reference Data Models of the current project. You can paste a Reference Data Model that is copied from the same project or that is copied from another project.

  **Note:** The Paste option is disabled if there is no copied/cut Reference Data Model in the clipboard. You can also press Ctrl+V as a shortcut or select Paste from the Eclipse menu.

- **Show History.** The Show History option performs the same way as mentioned in the context menu for a shared Omni Designer project. This option is available only if a project is shared.
**Pasting Static Reference Data**

After selecting *Paste*, the Paste Static Reference Data window appears if reference data was copied or cut from a project with at least one source system. The Manage Source System dialog manages moving source system values.
The following table describes the column parameters for Paste Static Reference Data.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include</td>
<td>Select the check box if you want to keep values of the source system in a project where you are pasting reference data. By default, the check box is cleared if there are no values of this source system in the current reference data. However, it is selected by default if there are any values of this source system in the current reference data. If you clear the check box for the source system that has values, the following message appears at the top of the window: Values of excluded source systems will be lost in target location. If the check box is not cleared, the whole row will be disabled.</td>
</tr>
<tr>
<td>Source System</td>
<td>Name of source system project where you used the Cut command or copied the current reference data from.</td>
</tr>
<tr>
<td>Action</td>
<td>Contains a drop-down list with the following two options to choose from.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Replace. The current source system values will be displayed in a pasted reference data as values of another source system of the target project. The source system of the target project needs to be selected in the Replace column.</td>
</tr>
<tr>
<td>Replace</td>
<td>Contains a drop-down list of source systems available in the project where you pasted reference data. The Replace option is enabled only if you select the Replace option from the drop-down list of the Action column.</td>
</tr>
</tbody>
</table>

The Finish button is disabled if there is at least one row with the Include check box selected without an Action option, or the Replace option selected with no source system for replacement. In both cases, the appropriate cells are marked with validation icons and the following warning message appears at the top of the window: All required values must be set.
If reference data was copied or cut from a project without any source systems, then the current dialog does not appear.

Pasting multiple static reference data is allowed only for Static Reference Data from the same Project.

**Pasting Dynamic Reference Data**

This section contains the following options for selection:

- **Link to existing Subject.** This option allows you to link Dynamic Reference Data to another Subject without copying either the source Input Data Model or Subject.
After selecting this option, click Next, and then a list of Subjects with names similar to the source Subject appears, as shown in the following image.

You can see all existing Subjects in the target Project Input Data Models and Subjects by selecting the Show all Subjects check box. The Search field becomes enabled where can find any Subject by name.
After selecting a Subject, click Next to change the Reference Data for matching.

The following table lists and describes the column parameters.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference Subject</td>
<td>Displays a list of subjects for specific selected parent subjects from the previous step.</td>
</tr>
<tr>
<td>Reference Data</td>
<td>Reference Data which is being pasted.</td>
</tr>
<tr>
<td>Key Field</td>
<td>Field which will be set as a key field in the new pasted Dynamic Reference Data Model.</td>
</tr>
</tbody>
</table>

Mappings from the Reference Data column will be copied to the corresponding Reference Subject. Reference Data values, which are not set, will be lost and new ones will be created instead.

You can also set Key Field on the same Wizard (The Finish button is enabled whether Key Field is set or not).

The link to the existing Subject Dynamic Reference Data will appear after clicking Finish.
- **Copy entire Input Data Model.** This option allows you to copy Dynamic Reference Data with an entire Input Data Model whether or not the root or child subject was published.

  After selecting this option, click Next, which will then allow you to change the Reference Data for matching (Reference Data and Key Field columns are set automatically with source values).

  Mappings from the Reference Data column will be copied to the corresponding Reference Subject. Reference Data values, which are not set, will be lost and new ones will be created instead.

  Using the same Wizard, you can set the Key Field (the Finish button is enabled regardless if Key Field is set or not).

  The Dynamic Reference Data will appear in the target project after clicking *Finish*, and a new Input Data Model will be created.

- **Create new Data Model from Subject branch.** This option allows you to copy Dynamic Reference Data and create a new Input Data Model from the Subject branch.

  After selecting this option, click Next, which will then allow you to change the Reference Data for matching (Reference Data and Key Field columns are set automatically with source values).

  Mappings from the Reference Data column will be copied to the corresponding Reference Subject. Reference Data values, which are not set, will be lost and new ones will be created instead.

  Using the same Wizard, you can set the Key Field (the Finish button is enabled regardless if Key Field is set or not).

  The Dynamic Reference Data will appear in the target project after clicking *Finish*, and a new Input Data Model will be created.

- **Add to existing Subject.** This option allows you to copy Dynamic Reference Data with a corresponding Subject branch.

  After selecting this option, click Next, which will then show a list of Input Data Models and Subjects existing in the target Project.

  The Search field is enabled which allows you to find any Subject by name.

  After selecting a Subject, click Next to change the Reference Data for matching.

  Mappings from the Reference Data column will be copied to the corresponding Reference Subject. Reference Data values, which are not set, will be lost and new ones will be created instead.
Using the same Wizard, you can set the Key Field (the Finish button is enabled regardless if Key Field is set or not).

The Dynamic Reference Data with a corresponding Subject branch will appear after clicking Finish.

If Reference Data was copied from a project that contains Source Systems, then the last screen of the wizard will contain the above options and work the same way as pasting Static Reference Data.
Context Menu Options for Specific Reference Data Models

Right-clicking a Reference Data Model displays a context menu, as shown in the following image.

![Context Menu]

The following list describes each option in this context menu.

- **Open.** The Reference Data settings editor for static reference data model can be opened in the editor using the Open option from context menu, pressing F3, or by double-clicking the required reference data model.

- **Rename.** The Reference Data Model can be renamed in line or by pressing F2. If you rename the Reference Data Model, then the root subject will be also renamed to the same name.

  To rename the item you wish, select the Rename option, enter a new name of the item, and press Enter.

- **Cut.** The Cut option copies and deletes the Reference Data Model and simultaneously moves them to the Clipboard.

  You can also press Ctrl+X or select the corresponding option from the Eclipse menu.

- **Copy.** The Copy option copies the Reference Data Model.

  You can also press Ctrl+C or select the corresponding option from the Eclipse menu.

- **Delete.** The Delete option deletes the subject(s) from the project.

  You can also press the Delete key or select the corresponding option from the Eclipse menu.
Show History. Functions the same way that was mentioned in the context menu for a shared Omni Designer project. The Show History option is available only if the project is shared.

Context Menu Options for Multiple Selected Nodes

A context menu appears for the same and different Omni Designer Project Explorer items selected together (using Shift or Ctrl keyboard keys). Standard options for selected items are available in the menu. Options that can be applied to all selected items simultaneously are enabled in the context menu (for example, Delete).
Options that cannot be applied to all, are disabled (for example, Rename, Show History, and so on).

![Image of project explorer]

**Cutting, Copying, and Pasting for Multiple Selected Subjects**

The Cut and Copy options are not available for two or more selected subjects. You can use the *Copy Single Element* option for several selected subjects to copy them or drag and drop the subjects to move them. Note that nodes move together with their children elements, but the *Copy Single Element* option copies elements without any child subjects.

**Moving Nodes in the Omni Designer Navigator**

Using the drag-and-drop feature, you can move the following entities in Omni Designer Navigator:

- Input Data Models to another project. You can use the drag-and-drop (move) features in the same way as cutting and pasting. For more information, see *Context Menu Options for the Input Data Models Node* on page 51.

- Reference Data Model to another project. You can use the drag-and-drop (move) features in the same way as cutting and pasting. For more information, see *Context Menu Options for the Input Data Models Node* on page 51.

- Subjects
Subjects are moved together with all their children. However, root subjects cannot be moved to another place. Also, any parent subject cannot be moved to their child subject.

Grouped subjects cannot be moved simultaneously.

Subjects within the same Input Data Model can be moved to change their parent nodes from one Input Data Model to another (even to an Input Data Model from a different project). After moving the subject, the Input Data Model fields with Reference and Inherited data types are updated. Reference values are changed to empty.
Using the Repository Explorer

This section describes how to use the Repository Explorer in Omni Designer to manage repository servers, users and groups, and shared projects.

In this chapter:

- Repository Explorer Components Configuration Overview
- Exploring the Repository Explorer Context Menu for a Repository Server (User is Not Logged In)
- Exploring the Repository Explorer Context Menu for a Repository Server (User is Logged In)
- Exploring the Repository Explorer Context Menu for Projects
- Exploring Available Functions for Shared Projects Only for Projects That Were Unshared
Repository Explorer Components Configuration Overview

The Repository Explorer is opened by default with the Omni Designer perspective, as shown in the following image.

The Repository Explorer contains a list of all available repository services, which you can manage as required.

The Repository Explorer is structured as follows:

1. Repository Explorer toolbar, which consists of the following elements:
   - **Refresh.**
     
     The Refresh button is used to renew the Repository Explorer to the latest version, reflecting any changes that have been made.
   
   - **Add Service.**
The New Repository icon is used to add a new repository server, as shown in the following image.

To indicate the URL, the following fields must be provided:

- **Host.** The machine name where the Repository Service is running.
- **Path.** The name of the application (for example, com.iwaysoftware.omni.designer.repositoryservice).
- **Port.** The port where the Repository Service is running.

The Protocol drop-down list contains the HTTP protocol. HTTPS protocols will be added in a later release.

You can create a service using your local machine (localhost) or a remote machine by specifying the appropriate URL and port.

- **Minimize.**
  The Minimize icon is used to minimize the Repository Explorer viewing area.
Maximize.

The Maximize icon is used to maximize the Repository Explorer viewing area.

2. The main Omni Designer Repository Explorer tab.

Exploring the Repository Explorer Context Menu for a Repository Server (User is Not Logged In)

If you have not logged into any defined repository server, all repository servers that are listed in the Repository Explorer have the following context menu options:

- **Login**
- **Delete Repository**
- **Server Properties**

Login

The *Login* context menu option allows you to log in to a repository server. However, you must first ensure that the repository server is started. If you do not log in to a repository server, but want to share a project or commit an action, you are prompted to log in to the repository server.
After you right-click a defined repository server, for example, *EMFStore (generated entry)*, and select *Login* from the context menu, the Authentication required dialog box opens, as shown in the following image.

![Authentication required dialog box](image)

Provide a valid user name and password for your repository server and click *OK*.

**Note:** You can select the *Save Password* check box to login next time without having to reenter the password.

If the user name and/or password are incorrect, a corresponding error message is displayed.

**Delete Repository**

The *Delete Repository* context menu option allows you to delete a repository server.

**Note:** Before you can delete a repository server, you must ensure that all shared projects that are associated with the repository server are either:

- Deleted from the Repository Explorer and Omni Designer Project Explorer.
  - or
- Unshared in the Omni Designer Project Explorer.
After you right-click a defined repository server, for example, *Omni Designer Repository*, and select *Delete Repository* from the context menu, the Confirm deletion dialog box opens, as shown in the following image.

Click *OK* to confirm.

A warning dialog appears, asking you to confirm the action, as shown in the following image.

Click *OK* again, to confirm and delete the selected repository server.
Server Properties

The Server Properties context menu option opens the Server properties tab where you can edit or change the Name, Host, Path, and Protocol of Service fields, as shown in the following image.

![Server Properties Tab](image)

Connection properties for the selected repository server are displayed. Click Finish to accept any changes made in the Server Details dialog box.

Exploring the Repository Explorer Context Menu for a Repository Server (User is Logged In)

If you have logged into a defined repository server that is listed in the Repository Explorer, then the following context menu options are available for the repository server:

- Logout
- Manage Users/Groups
- Delete Repository
Logout

The *Logout* context menu option allows you to log out from a repository server to which you are connected.

Manage Users/Groups

The *Manage Users/Groups* context menu option allows you to:

- Create users and groups.
- Delete users and groups.
- Import users and groups.
- Change passwords for users.
- Assign new users to groups or projects.
After you right-click a defined repository server and select *Manage Users/Groups* from the context menu, the User Management dialog box opens, as shown in the following image.
New users and groups can be imported from a CSV file or LDAP in the Import new users dialog box, as shown in the following image.

Exploring the Repository Explorer Context Menu for Projects

If you have logged into a defined repository server that is listed in the Repository Explorer, then the following context menu options are available for any shared project that is associated with the repository server:

- **Checkout**
- **Checkout Branch**
- **Project Properties**
Delete Project

Checkout

The Checkout context menu option allows you to make a copy of a shared project. The checked out project is then created in the Omni Designer Project Explorer. All available actions that are described for a project in the Omni Designer Project Explorer can also be applied for the checked out project (for example, Commit, Update, Update To Version, Create Branch, and Merge With Branch).
After you right-click a shared project and select Checkout from the context menu, the Create new project dialog box opens, as shown in the following image.

The name of the shared project is pre-populated in the Project name field, which you can change as required. To checkout the selected shared project, click Checkout.

**Checkout Branch**

The Checkout Branch context menu option allows you to check out a separate branch of a shared project. All available actions that are described for a project in the Omni Designer Project Explorer can also be applied for the checked out project (for example, Commit, Update, Update To Version, Create Branch, and Merge With Branch).
After you right-click a shared project and select *Checkout Branch* from the context menu, the Checkout Branch dialog box opens, as shown in the following image.
The name of the shared project is pre-populated in the Name field, which you can change as required. After you click OK, the Checkout Branch dialog box opens, which provides a list of available branches, as shown in the following image.

![Checkout Branch dialog box](image)

Select an available branch from the list and then click Checkout.

**Project Properties**

The *Project Properties* context menu option opens the Project Information dialog box, which allows you to view the properties that are associated with the shared project.

**Delete Project**

The *Delete Project* context menu option allows you to delete a shared project from the selected repository server.
After you right-click a shared project, for example, *iWay Project*, and select *Delete Project* from the context menu, the Delete dialog box opens, as shown in the following image.

Click *OK*.

A warning dialog appears, asking you to confirm our action.

Click *OK* again to confirm and delete the shared project from the repository server, as shown in the following image.
Exploring Available Functions for Shared Projects Only for Projects That Were Unshared

It is important that all data related to a previously shared project (and those related to the recently removed data from Development Server) such as DQ Plans, Project Bundles, and Actions (Embedded actions) should be removed. Corresponding Editors (for example, IDM Editor/DQ Plans tab, Project Properties/Release Management, State Machine graph/Palette, and the Properties View) should be updated to view for unshared Projects. After reopening these pages, the appropriate view for unshared Projects should appear, as shown in the following image.
Using the Project Editor

The Project editor opens as a window after you double-click a project or right-click a project and select Properties from the context menu. The Project editor contains three tabs:

- General tab
- Source Systems tab
- Release Management tab

This section describes how to use the Project editor in Omni™ Designer to manage projects.

**In this chapter:**

- Using the General Tab
- Using the Source Systems Tab
- Using the Release Management Tab

**Using the General Tab**

The General tab contains the following fields:

- **Project name.** You can enter a value into this field which will be saved and automatically updated in Omni Designer Navigator.

- **Description.** You can enter a value into this field which will be saved and automatically updated in Omni Designer Navigator. This field will be empty if the project is checked out or imported.

The project name and description field validation rules are the same as when the project is created. Extra spaces are removed only after the project editor is reopened.
Using the Source Systems Tab

The Source Systems tab shows a list of created Identifiers to choose from. You can also create, delete, and/or reorganize them. The following image shows the Source Systems tab.

The Delete button is disabled by default and is only enabled after a field is selected.

The following table lists and describes the columns that are available in the Source Systems tab.

<table>
<thead>
<tr>
<th>Column Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier</td>
<td>The Identifier column consists of a text field where you are required to input a value that must contain up to 128 characters in length and may consist of alphabetical characters, numbers, and special symbols.</td>
</tr>
<tr>
<td>Name</td>
<td>The Name column consists of a text field where you are required to input a value that must contain up to 128 characters in length and may consist of alphabetical characters, numbers, and special symbols. The value can only be one word since extra spaces are removed before, between, and after words.</td>
</tr>
<tr>
<td>Description</td>
<td>Inputting text into the Description column is optional. The field supports values up to 128 characters in length, which may consist of alphabetical characters, numbers, and special symbols.</td>
</tr>
</tbody>
</table>
To create a Source System, click Create. A new empty row will appear.

To edit a Source System, select any value you wish to edit, and then make any changes you wish.

To delete a Source System, select the row and click Delete.

After making changes in this table, the Reference Data Editor will be immediately updated. A new empty column will be added for newly created Source Systems. The column name will be identical to the Source System name. The appropriate column name will appear when the Source System name is updated. The column will disappear from the mappings table if the Source System is deleted.

**Using the Release Management Tab**

The Release Management tab contains the following information:

- **Releases.** The table shows a complete list of all releases for the current project including releases for branches. It also displays information about the project location and version from which the bundle was generated, as well as the current bundle status.

  The Releases table contains the following columns:

  - **Release number.** The value defined when the release bundle was generated.
  - **Source.** The name of the version from which the project was created.
  - **Version.** The version of the project.
  - **User.** (TBD)
  - **Create date.** The date and time when the release was generated.
  - **Release notes.** Notes that were entered when the release bundle was generated.
  - **Status.** (TBD)

- **History.** The History link functions the same way as the History context menu option in Omni Designer Project Explorer.

- **Releasing.**
Versioning. All links in the Versioning section functions the same way as the corresponding context menu options in Omni Designer Project Explorer.

When there is no project to share, the following message appears.

**Project is not shared. Release management is not available. Please share the project first.**

The share link in the message opens the sharing dialog window.

### Configuring the Development Server

After performing all of the steps described in this document, you will be able to generate release bundles and see existing release bundles.

### Development Server URL Configuration

To configure the URL to the development server for the Omni Designer plug-in:

1. Open your Eclipse workspace.
2. Navigate to the following folder:

   ```
   metadata/.plugins/com.ibi.id.httpclient
   ```

3. Edit the `devserver.properties` file.
4. Add or edit the `devserver.url` property to indicate the development server location. For example:

   ```
   devserver.url=http://localhost:8886/com.ibi.id.devserver
   ```

5. Save the `devserver.properties` file.
Generating Release Bundles

To generate a release bundle for a project, click the *Generate project bundle* link on the Release Management tab of the Project Editor or from the project context menu.

The Release bundle generation dialog box opens, as shown in the following image.

The following parameters appear:

- **Release Number.** You can use the three numeric selectors to indicate a release number. Only integer values are allowed. Values 0 through 100 are acceptable. If you enter a value more than 100, all digits except the first two (or three if the value it 100) are removed.

- **Development Stage.** A drop-down list containing three values to select from (Alpha, Beta, and RC) and a numeric selector where only integer values are allowed from 0 through 100 only.

- **Release Notes.** An optional text area which supports up to 2048 characters.

If you generate release bundle for the first time, you current project will have all numeric values set to 0 by default and *Alpha* selected in the Development Stage drop-down list.

If you have not generated a release bundle for the first time, then the Release Number and Development Stage sections of your project will be set to the values of the previous release and numeric value by default. Additionally, the Development Stage section will be selected with a red plus icon. When you place the pointer over the value, a tool tip with an error message appears, as shown below:

*Selected release number should be greater than existing one.*
You can also view the error message in the Problems tab. After correcting this number to a value greater than one or correcting any other value of the Release Number and/or Development Stage to a value greater than one, then the validation icon and corresponding row in the Problems tab will disappear.

If you change values in the Release Number and Development Stage so that whole versions of the release will be lower than the version of the previous release, then the corresponding field(s) will be marked with a validation icon and all messages pertaining to the version and values will be displayed in the Problems tab.

If a field does not meet the validation rules or requirements, then the Generate button becomes disabled.

Click Generate to generate a release bundle for your project.

A release bundle is generated for the current project. Zip files with project bundles are created in the SVN repository. A new row is added to Releases section in the Release Management page with the appropriate information.

If there are any problems with generating a Release Bundle (for example, if you receive a no connection to server message), a dialog with the corresponding error will appear. Error messages will also be displayed in the Error log.

If there any uncommitted changes in the project, you will not be able to generate a release bundle. A Warning message appears, as shown in the following image.

Once you successfully share the project, the operation will proceed.
If a project contains validation error, the following message appears, and you will have to cancel the operation and fix the validation issues first.

The validity of the project is also checked on the Development Server.

A project bundle is generated for the current project .zip file with project bundle created in the development server. A new row is added to the release table on the Release Management page with the proper information. If you have issues generating a Project bundle (for example, no connection to the service), an error message will appear and be displayed in the Error log.
Using the Input Data Model Editor

The Input Data Model Editor opens as a window after you double-click an Input Data Model item or right-click an Input Data Model and select Open from the context menu. The Input Data Model Editor contains the Model View tab.

This section describes how to use the Input Data Model Editor in Omni™ Designer to configure and manage Input Data Models.

**In this chapter:**

- Using the Model View Tab
- Using the Promotions Tab
- Using and Managing DQ Components
- Merging DQ Plans
- Non-Mastered Data Models
Using the Model View Tab

The Model View tab consists of a graphical tool component and a palette, as shown in the following image.

![Graphical Tool Image]

Graphical Tool

The Input Data Model Editor provides you with a graphical tool for laying out your subjects. The root subject is displayed in green and other subjects are displayed in gray on the graph.

The width and length of the graph changes in relation to the quantity of subjects and their relationship. Subject squares do not overlap. Horizontal and/or vertical scrolls appear when the graph is too big to be displayed in a window.

When the name of the subject does not fit into the standard length of the subject field, the text is truncated and an ellipsis (...) is displayed instead of the remaining characters. When the mouse pointer pauses over the field, the whole subject name is displayed.

When changes are made with subjects (add/ rename/ remove), they are immediately reflected on the graph (without reopening the Input Data Mode Editor).

Double-click a subject in the graph to open the Subject Editor.
Context Menu Options For Subjects in the Graphical Tool

When you right-click a subject, a context menu appears. This menu is almost identical to the menu in Omni Designer Project Explorer for the current object. It consists of the following options:

- New Subject
- Open
- Show in Project Explorer
- Cut
- Copy
- Copy Single Element
- Paste
- Delete
- Link Subject

The Rename option works slightly different from the Omni Designer Project Explorer option. When it is selected, the cursor is set in the Subject field and you can edit the name of the subject.

In the graph, the only option not available in the context menu of Omni Designer Project Explorer is Show in Project Explorer. After selecting this option, the appropriate node is selected in the subject of the graph in Omni Designer Project Explorer.

You can go to the context menu of the subject to see how other options work.

Moving Subjects in the Graphical Tool

Subjects can change parents using the drag-and-drop feature. The subject is moved (or dragged) together with all their children. However, the root subject cannot be moved to another place. Additionally, a parent subject cannot be moved to its child.

Several selected subjects cannot be moved simultaneously.

Subjects can be moved from one Input Data Model to another (even to the Input Data Model of another project). However, two Input Data Model Graph editors need to be opened side-by-side at the same time. After moving the subject to another Input Data Model field, the Reference and Inherited data types are updated. The Reference values are changed to empty. Promotions for subjects moved to another Input Data Model are deleted.
Palette

The palette is an expandable component of the Input Data Model Editor. It is located on the right side of the editor as a separate section. The Objects section of the palette contains Subject and Link Subject icons. The palette can be hidden by clicking the arrow on the left border of the palette section.

You can drag-and-drop the Subject icon to add a new subject element as a child of a root or simple subject. Once the subject is added to the Model View, a new unnamed Subject is represented in the graph, and will be added to Omni Designer Project Explorer in the same location as the project tree.

Using the Promotions Tab

The Promotions tab allows you to promote individual records from a sub-collection to the parent node.

The following table describes the columns that are available in the Promotions tab.

<table>
<thead>
<tr>
<th>Column Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>When you click on this field, a dialog box appears asking you to select a subject from a list of available subjects available in an Input Data Model project.</td>
</tr>
<tr>
<td>Position</td>
<td>A drop-down list where you must select one of the following values (Required): First, Last</td>
</tr>
<tr>
<td>Field</td>
<td>A drop-down list of fields containing subject promotions. Required.</td>
</tr>
<tr>
<td>Column Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Operator</td>
<td>A drop-down list containing the following values (Required):</td>
</tr>
<tr>
<td></td>
<td>- Equals</td>
</tr>
<tr>
<td></td>
<td>- NotEquals</td>
</tr>
<tr>
<td></td>
<td>- StartsWith</td>
</tr>
<tr>
<td></td>
<td>- NotStartsWith</td>
</tr>
<tr>
<td></td>
<td>- GreaterThan</td>
</tr>
<tr>
<td></td>
<td>- LessThan</td>
</tr>
<tr>
<td></td>
<td>- GreaterThanOrEquals</td>
</tr>
<tr>
<td></td>
<td>- LessThanOrEquals</td>
</tr>
<tr>
<td></td>
<td>- Contains</td>
</tr>
<tr>
<td></td>
<td>- NotContains</td>
</tr>
<tr>
<td></td>
<td>- EndsWith</td>
</tr>
<tr>
<td></td>
<td>- NotEndsWith</td>
</tr>
<tr>
<td>Value</td>
<td>The Value column consist of a text field where you are required to input a value that must contain up to 255 characters in length and may consist of alphabetical characters, numbers, and special symbols. The value can only be one word since extra spaces are removed before, between, and after words. Required.</td>
</tr>
</tbody>
</table>
The following image shows the Promotions tab.

![Promotions Tab Image]

**Procedure:** How to Add a Promotion

To add a Promotion:

1. Click Create.
The Subject Selection dialog box appears where a list of all subjects of the current Input Data Model is displayed by default in the Matching Items field, as shown in the following image.

2. Enter the first character(s) to search for subjects to select.
   You can use the " ? " (any character) and " * " (any string) to search as well. Searching is case insensitive. Subjects that match the search query are displayed in the Matching items list. The matched string is in bold for subjects that it finds. If you have already created a Promotion for a subject, this subject will not be searchable on the list.

3. Select a subject and then click OK.
   The new line is added to Promotions table with the selected subject. The Position and Operator columns now contain the first values from the available list. You will need to provide the information in the Field and Value columns.

4. To edit a Promotion, click on any field and change it accordingly.

5. To delete a Promotion, select a row and click Delete.
Automatically Updating Promotions After Making Changes

When changes are made to subjects that have promotions or fields selected in promotions, changes are reflected in the Promotions table immediately (without reopening the Input Data Mode Editor).

If a subject is deleted or renamed from the project promotions, it is also deleted or renamed respectively in the Promotions table.

When a field is renamed or deleted from a subject promotion (which has the field selected), it is also automatically renamed or removed respectively in the Promotions table.

Using and Managing DQ Components

The DQ Components table is available only for shared projects. When a project is not shared, the following message appears:

Project is not shared. Adding/Importing a new DQ Plan functionality is not available. Please share the project first.

When you click on the share link, the sharing dialog opens.
After sharing the project, the DQ Components pane appears, as shown in the following image.

The following plans are available for the entire Input Data Model:

- Cleansing
- Matching
- Merging
- Remediation

You can manage these plans on the DQ Components section of the Input Data Model Editor. They are displayed in the table as columns.

<table>
<thead>
<tr>
<th>Column Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>You cannot modify this column, which is used for cleansing, matching, and merging. Remediation values will be available depending on the created DQ Plan.</td>
</tr>
<tr>
<td>Name on Data Storage</td>
<td>Unchangeable</td>
</tr>
<tr>
<td>Display Name</td>
<td>The display name is required and can be modified.</td>
</tr>
<tr>
<td>Description</td>
<td>Adding a description is optional and will match the short description in the Properties tab.</td>
</tr>
</tbody>
</table>

You can create or import many Cleansing DQ Plans for one Input Data Model. There are no restrictions for the quantity of Cleansing DQ Plans.
You can also create or import many Matching Plans for one Input Data Model. However, if there are multiple Matching Plans for one Input Data Model, the Type cells of the Matching Plans will be marked as invalid in the DQ Components table, and the Input Data Model will be marked with validation in the Project Explorer.

You will not be able to import Merging and Remediation DQ plans.

You can remove any of the DQ plans by selecting **DQ Plan** and clicking **Delete** or pressing Delete on your keyboard.

**Data Quality Projects**

You can create and import DQ plans only for Omni Designer Projects that are associated with Data Quality (DQ) Projects.

After a selected Omni Designer Project is shared, you will see the **Associate** option in the Omni Designer Project context menu, after selecting **DQ Project**, as shown in the following image.

If the project is shared, you can associate it with any DQ Project from the development server. If the Omni Designer project is associated with the DQ Project, then the **Check for updates** and **Check for static content** buttons will be enabled, which allows you to update to the latest version of the DQ Project.
After sharing the Omni Designer Project, you can create a new DQ Project, as shown in the following image.

There are two ways to associate an Omni Designer Project with a DQ project:

1. From context menu by right-clicking on the Omni Designer Project.

2. Open a DQ Components page and then click Create. If the Omni Designer Project was not previously associated, you will be prompted to associate it with a DQ Project.
A message asking you to confirm the project association is displayed, as shown in the following image.

If you click Yes or selected the Associate with DQ Project option from the context menu, the Associate Project wizard opens, as shown in the following image.
If you are associating an Omni Designer Project for the first time, you will not see any selections in this dialog and the Finish button will be disabled.

You can click Finish only after a project has been selected from the list.

The Associate Project wizard also supports filtering. If you many projects, then you can filter through them by typing the name of the project in the field, as shown in the following image.
After an association with a DQ Project is completed, the Omni Designer Project includes additional information about the associated DQ Project in the Properties tab, as shown in the following image.

You can also associate an Omni Designer Project to another DQ Project even if the Omni Designer Project is already associated to some project on the development server. However, in this case, the following message is displayed:

*Project is already associated. If you associate to another DQ Project, then all added DQ Plans will be removed.*
In the event that the development server is not started or could not be reached, the list of projects will be empty and the following message is displayed:

*Development server could not be reached at the moment. Open Error Log to see more details.*

If the project is already associated, the list will exclude the current associated DQ Project, showing only the different ones. The description of the wizard will also change to contain the information of the projects that are currently associated. When finished, the final confirmation dialog will be shown.

You will then be able to re-associate the Omni Designer Project to another DQ Project at any time. In this case, all DQ Plans added to the project within the previously associated DQ Project will be removed from the DQ Plans Grid.

While associating the Omni Designer Project to the DQ Project, the DQ Project will be verified through the consistency of static files. If the DQ Project does not contain any static files, then the DQ Project will be automatically added and committed.

To see the DQ Project structure template, navigate to \\webapps\\com.iwaysoftware.omni.designer.repositoryservice\\WEB-INF\\classes\\templates\\dqproject.

You can also open com.iwaysoftware.omni.designer.repositoryservice.war and navigate to WEB-INF\\classes\\templates\\dqproject.

All structures contained in this folder should be identical, similar to the SVN/GIT DQ Project after the first association.

A notification dialog will appear if there are no DQ Projects on the Development Server.

If there are no connections to the Development Server (Tomcat or Bridge is not started or not started correctly), then the following error message will appear:

*Failed to retrieve DQ Projects due to an error. Connection to http://localhost:8888 refused. Open Error Log to see more details.*

### Checking for Updates to the DQ Project

Updating the DQ Project to the latest version checks whether the new version of the DQ Project exists on the Development Server. If it does, then it will update to the latest version and show the status. Viewing Properties will be updated as well.

- **Missing DQ Plans.** If some DQ Plans (created in the Input Data Model) do not exist anymore on the Development Server in the new version of the DQ Project, then the following message will appear:
DQ Project version has been updated to '74'. Some artifacts do not exist anymore. Refer to validation problems view for more details.

Plans will not be removed automatically from the grid. Instead, the plans will be indicated as missing, and the corresponding tooltip will be displayed. Errors will be shown when viewing Problems.

- **Missing DQ Project.** If the DQ project does not exist anymore (for example, it exists in the specific revision, but is missing in the current revision on the Development Server because the DQ Project is removed or renamed), then the following warning dialog will be displayed:

![Warning dialog]

The project will be updated to new version where the DQ project is missing. The following image shows this information in the Property column:

![Property column]

Use validations to detect missing DQ projects and indicate them as messages in the problems view. Creating DQ Plans will be disabled, but you can use the Undo action to clear missing projects.

If the current DQ project version is the latest one, then the following message dialog appears:

**The current associate DQ project is up-to-date. You do not need to update.**

If the current DQ project version is not the latest one, then the following message dialog appears.
The current associate DQ project is not up-to-date.

Checking for updates can be also performed while creating a new DQ Plan.

If the DQ Project version was updated, you can proceed to the Add DQ Plan wizard and create a new DQ Plan. After clicking Finish, a new version notification dialog appears, and the project will automatically be updated to the latest version. A new DQ Plan is added, and missing DQ Plans will be highlighted in the grid.

Checking for Static Content

When checking for static content, a check is performed whether missing content exists or not, and prompts you to generate the missing content or update the DQ project. When generating project bundles, the server will also check for missing content. If it is missing, the server will automatically add it to project bundle zip file, but not to the DQ project on SCM.

Using the Add Plan Wizard

To add a Plan to the Input Data Model, click the Create button on the table.
In the Add plan window that appears, select a plan type and a creation method, as shown in the following image.

Using an Existing Plan

You can use an existing plan after importing one from the data storage.

However, if a DQ Plan is associated to an older version while a newer version exists in the Designer Repository Service, you will be notified accordingly.
Once you have selected a plan, click Next.
When a plan is selected, you can change the Display Name that appears, and then optionally provide a description in the Short Description or Long Description fields. Adding a display name is mandatory and will be highlighted with validation. The Next button will be available once a display name is provided.

You will not be able to add new parameters or delete/change existing parameters in the imported DQ Plan.

The Create Plan wizard page that appears contains a table with the following columns:

- Name
- Type
- Value
The Name and Type columns are disabled, but the parameter value can be set according to the chosen parameter type. The text field can be modified for each type except Field type. The Value parameter is required, and the Finish button is available even if the Value field is not set.

Creating a New DQ Plan

If a Project is associated with a DQ Project, and you wish to create a new DQ Plan, click Create. The Add DQ Plan wizard opens.

If a Project is not associated, the Associate Project dialog appears after clicking Create, where you can associate it with a DQ Project. After association, when you click Finish, the Add DQ Plan wizard will appear.

After selecting the Create New DQ Plan method, a window appears where you must create a name for the Data Storage (name that will be saved on developer server) and add its parameters.
Verifying Missing Plans or Projects

If a plan or project is missing and it is updated to the latest version (check for updates is performed), the following error will appear with all of its options disabled, as shown in the following image:

![Create a DQ Plan error message](image)

If a plan or project is associated with another plan or project, but the plan or project is missing or does not exist from the Repository Service (is renamed or removed in the new version), the following validation error appears, and the Next button will be disabled, as shown in the following image:

New DQ Plan cannot be created because associated DQ project does not exist on Development Server.

Note: You can create plans only for a Committed Project with the Valid Input Data Models node.
If the project is not committed or the Input Data Models node contains invalid changes, then the following error message will be displayed, and the buttons in the dialog box will be disabled, as shown in the following image.

The Plan name is required. If there is no Plan Name, the Next button will be disabled and the Name field will be highlighted with validation.

The Plan name should not match with a name already existing in the Repository Service. If a name matches and exists, an error message will appear. Additionally, the Next button will be disabled, and the Name field will be highlighted with validation.
Adding Parameters are required. DQ Plans cannot be created without parameters.

You can add parameters manually or use Auto-mapping. Auto-mapping is available for Cleansing and Matching DQ plans.

When you click Finish, the DQ Plan is added to the Input Data Model (displayed in the DQ Components table), and it is created on the Repository Service. You can use the newly created DQ Plan to add it to another Input Data Model or add it to the same Input Data Model again.
If you click the *Auto-mapping* button, the Fill parameters dialog appears, as shown in the following image.

The *Select all* and *Deselect all* buttons allow you to select or deselect all fields from the current subject.
When creating parameters, select the check box next to the subject and fields you need. By default, all fields will be selected within the subject that you choose, as shown in the following image.
If at least one field for a subject is cleared, the check box in the Tree view will be changed to a filled-in square, as shown in the following image.
After clicking *Finish*, parameters for selected subjects and fields will be created and displayed in the parameters table. The appropriate parameters types will also be set.
Mappings for the created parameters will also be set, as shown in the following image.

You can change the parameter names and mappings.
The following table lists and describes the plan parameter types:

<table>
<thead>
<tr>
<th>Parameter Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleansing</td>
<td>- String</td>
</tr>
<tr>
<td></td>
<td>- Integer</td>
</tr>
<tr>
<td></td>
<td>- Long</td>
</tr>
<tr>
<td></td>
<td>- Float</td>
</tr>
<tr>
<td></td>
<td>- Boolean</td>
</tr>
<tr>
<td></td>
<td>- Date</td>
</tr>
<tr>
<td></td>
<td>- Datetime</td>
</tr>
<tr>
<td>Matching</td>
<td>- String</td>
</tr>
<tr>
<td>Merging</td>
<td>The plan parameter types will be taken from the Subject fields data types.</td>
</tr>
</tbody>
</table>

**Mapping Values**

When you double click a Value field from the properties pane, the Value Selector dialog opens. There are two options you can use to set the Value.

- The *Value* radio button allows you to map either the Value entered into the field, or the field from the Input Data Model. The Subject fields section will show the fields that matches the type of the parameter, except for the parameter with the String type. If the Type is String, all field will be visible.
The **Field** radio button allows you to select any field from the entire Input Data Model if the Plan parameter contains no value. If other parameters contain values, then you will be able to select a new field that belongs to one of the Subjects from the longest path or from any Subject under the last Subject of the longest path, as shown in the following image.
All of the fields from all of the Input Data Model subjects from the Instance Model and corresponding data types can be selected. If you open the Field selector for the Integer Plan type, then you will only see fields with an exact Integer data type. You must select the subject from the tree of subjects that belong to the current Input Data Model and Field.

If you select a Reference-type field, a drop-down list containing the attributes `omniCode` and `omniCodeSet` appears below the Subject fields section. You can select one of these attributes to enable the Finish button.

**Mapping Simple Parameters Without Collections**

All mapped values must be from a single branch of the Input Data Model subject tree.
You can set the Value in the following ways:

- By selecting the Value radio button (which enables the text field but disables the Value Selector field) and entering the corresponding data.
- By selecting the Field radio button (selected by default, which disables the value text field but enables the Value Selector field). You will need to select a subject from the tree of subjects of the current Input Data Model and Field. All fields of the Input Data Model subjects from the Instance Model and corresponding data types can be selected.

If you open the Value Selector for the String parameters type and select a subject, then it will not matter what the field type is.

If you open the Value Selector for the Integer/Long/Float/Boolean/Day/Daytime parameters type, you will only see fields that have the same data type that were selected by the parameters type.

Only one validation rule is applied for format. The length should be less than 255 characters.
The Attribute drop-down list will be enabled for selected fields with the Reference data type. However, it is not enabled for Field data types containing String, Integer, Long, Float, Boolean, Day, and Daytime.
Mapping Complex Parameters With Collections

You can only select subjects from the Input Data Model that contains the following criteria:

- **Collection depth.** The number of ‘/’ occurrences in the column name or the depth of the collection on the DQ service request.

- **Subject depth.** The depth of the subject in the Data Model tree with a root subject having the depth 0.

  - At least one item in every collection is mapped from the same depth (for example, collection depth = subject depth of the mapped column).

  - Mappings on the collection cannot be from subjects with greater depth than the collection depth.

  - Values can be mapped only from a single branch of the data model (for example, values can be mapped from parents of the subject used in the first rule).

  - The collection branches and data model branches must match. When mapping a collection value where either the parent collection or child collection value is already mapped (for example, mapping values for an address/src_street while address/bells/src_order is already mapped or vice-versa), the Data Model branch selected by the already mapped service is considered pre-selected for the value being mapped, and must be accounted for.
Merging DQ Plans

When importing existing DQ Plans from the development server, the Configuration wizard should only show the Name and Type of parameters, without giving you options to select a value, as shown in the following image.

When creating a new merging DQ Plan, all fields from the current input data model should appear (with the type of String) in the first wizard page. The grid should not be editable. The parameter names should be collection-like, for example, {path}/.../{field}, skipping the root subject. For instance, when you have the following structure from party, patient, address, to street, then the name of the parameter will be patient/address/street.
The *Specify parameter values* page should not appear at the end of wizard.
A parameters section for Merging DQ Plan properties should not contain a Value column, as shown in the following image.

![Repository Browser](image)

**Non-Mastered Data Models**

A non-mastered data model is a data model which is not related to mastering. This means that functionalities related to mastering will be unavailable for a non-mastered data model.
To make current data models non-mastered, open the Properties for the current Input Data Model, click the Options tab and select the *This is a non-mastered data model* check box, as shown in the following image.
The Master view will be unavailable in the Graph and toggling between the Instance and Master view will not be displayed in the toolbar, as shown in the following image.

Promotions will also be disabled since the Master Fields can be used as Promotion fields.
In the subject editor, the Master Model tab will not be shown. All created Master fields and Master references will be deleted after selecting the *This is a non-mastered data model* check box in the Properties for the current Input Data Model, as shown in the following image.

If you clear the *This is a non-mastered data model* check box in the Properties of the current Input Data Model, the ability to toggle between the instance and the Master view will be enabled, as well as the Master Model tab appearing in the Subject Editor. However, only Master References will be displayed in the Master Model tab. All Master Fields will be deleted irretrievably.

Only subjects can be linked between non-mastered and mastered Input Data Models.

If you have linked Input Data Models before one of them became mastered or non-mastered, the linked subjects will be unlinked and not have any relations to the source Input Data Model.
Using the Subject Editor

The Subject Editor opens as a window after you double-click a Subject. The Subject Editor contains the following tabs:

- Instance Model tab
- Master Model tab
- Dimensions

The Instance Model and Master Model tabs display a table view, which allows you to manage fields in the selected Subject. This section describes how to use the Subject Editor in Omni™ Designer.

In this chapter:

- Using the Instance Model Tab
- Using the Master Model Tab
- Using the Reference Data Selector Wizard
- Using the Identifier Selector Wizard

Using the Instance Model Tab

The Instance Model tab allows you to manage fields in the Instance Model table for each selected Subject, as shown in the following image.
The Instance Model tab contains a table with the following columns:

- **Required.** Check box that is cleared by default.

- **Name.** You can modify the information in this column.

  The following validation rules apply to the Name column:

  - Required.
  - Can contain up to 128 characters.
  - All special characters are forbidden.

- **Data Type.** Drop-down list which contains the following values:

  - String
  - Integer
  - Long
  - Float
  - Double
  - Boolean
  - Date
  - Datetime
  - Reference
  - Identifier

- **Reference Value.** Depending on the value selected in the Data Type drop-down list:

  - If any of the String, Integer, Double, or Date data types are selected, then the Reference Value cell for the specific field is disabled.

  - After clicking on one of the subject fields under Reference Value, if Reference is selected in the Data Type drop-down list, then the Reference Data Selector window will appear.

  - After clicking on one of the subject fields under Reference Value, if the Identifier value is selected in the Data Type drop-down list, the Identifier Selector window will appear. You must select a subject from the list of input Data Models of the current project. Search field will also be enabled on the form.
8. Using the Subject Editor

- **Content Type.**

- **Description.** You can provide a description for each Subject in this column.

  The following validation rules apply to the Description field:

  - Optional
  - Can contain up to 256 characters.
  - All special characters are allowed.
  - Extra spaces at the beginning and at the end of paragraphs are removed. However, extra spaces between words are permitted.

The following five buttons also appear:

- **Create**

- **Delete.** Disabled by default, but becomes enabled once you have selected a field.

- **Move Up.** Disabled by default, but becomes enabled once you have at least two fields and the second field is selected.

- **Move Down.** Disabled by default, but becomes enabled once you have at least two fields and last field is not selected.

- **Reset Sorting.** Becomes enabled once you sort any column.

To add a new field, click **Create**.

A new record in the table appears with the check box cleared for Required. The Name and Description fields will be empty while Data Type and Reference Value are disabled by default.

To edit a field, click on any cell or press Enter on the keyboard and change it.

To delete a field, select any cell or row in the table and click **Delete** or press Delete on the keyboard.
Using the Master Model Tab

The Master Model tab is similar to Instance Model tab and includes all fields from the Instance Model in addition to a few extra fields. Fields copied from the Instance Model cannot be modified in the Master Model and are therefore disabled from use.

The Master Model tab contains a table with the following columns:

- **Include.** The Include column shows which fields will be displayed in the drop-down list of the Promotion tab for a selected subject. Selected check boxes of the Subject will be displayed in Promotion tab. The check box is cleared by default for all fields including those copied from the Instance Model.

- **Required.** Check boxes in this column are cleared by default. Values for fields that were copied from the Instance Model are also copied into the Master Model.

- **Name.** You can modify the information in this column.

  The following validation rules apply to the Name column:

  - **Required.**
  
  - Can contain up to 128 characters.
  
  - All special characters are allowed.
  
  - Whole one-word names only. Extra spaces at the beginning, end, and between words are removed.
- **Data Type** A drop-down list which contains the following values:
  - String
  - Integer
  - Long
  - Float
  - Double
  - Boolean
  - Date
  - Datetime
  - Reference
  - Identifier

- **Reference Value.** Depending on the value selected in the Data Type drop-down list:
  - If any of the String, Integer, Double, or Date data types are selected, the Reference Value cell for the specific field is disabled.
  - After clicking on one of the subject fields under Reference Value, if Reference is selected in the Data Type drop-down list, the Reference Data Selector window will appear.
  - After clicking on one of the subject fields under Reference Value, if the Identifier value is selected in the Data Type drop-down list, the Identifier Selector window will appear. You must select a subject from the list of input Data Models of the current project. Search field will also be enabled on the form.

- **Content Type.** A drop-down list which contains the values that have been created or uploaded. For example:
  - SSN
  - Email
  - Company/LegalForm
  - Country
  - DateAsString
✓ Phone
✓ USA State
✓ PersonName

✓ Description. You can provide a description for each Subject in this column.

The following validation rules apply to the Description field:

✓ Optional
✓ Can contain up to 256 characters.
✓ All special characters are allowed.
✓ Extra spaces at the beginning and at the end of paragraphs are removed. However, extra spaces between words are permitted.

The Master Model tab also contains the Create and Delete buttons.

Fields created in the Master Model tab are displayed in the Instance Model tab.

Adding, updating, and removing fields functions the same way as those in the Instance Model tab.

Using the Reference Data Selector Wizard

The Reference Data Selector Wizard opens when you click on a Reference Value field of a Reference data type in the Instance or Master Model table. It is used to select Reference values for the appropriate field.

The Reference Data Selector Wizard consists of the following parameters and buttons:

✓ Search field to quickly find the required reference data.
- Project Explorer with all available reference data models and their reference subjects.

After clicking Next, a second dialog window appears where you must select the fields for the parent nodes of the selected Reference subject.

The Finish button becomes available after selecting a Static Reference Data option.

On the second dialog window, a table that consists of the following categories appears:

- **Reference Data Node.** All Reference Data parent nodes of the selected Reference Data subject.

- **Field.** Drop-down lists of subject fields where you are required to select reference data. The only fields that appear are those that have the Include option selected.
The following image shows the Reference Data Selector page.

![Reference Data Selector](image)

**Editing a Reference Value For a Reference Data Type**

The Reference Data Selector can be used in the following methods:

- Setting a new reference value
- Changing an existing reference value

When you click on a selected Reference Value, the Reference Data Selector Wizard appears. On the first page of the wizard, you can change the current reference data that is selected or you can leave the current selection and move to the next page where you can edit or change any of the previously chosen fields and parent nodes. After clicking **Finish**, all changes will be applied to the Reference Value.

If the selected Reference Data is removed or is moved within the same Reference Data model to another Reference Data model or to another project, it is also removed in the Instance and Master model tables. The Reference Value is selected with a red validation symbol and the appropriate message appears as a tool tip in the Problems tab. You must select a new Reference Data using the same wizard. The process is the same as selecting a new Reference Data for the first time.

If the selected Reference Data is moved to another parent within the same Reference Data Model due to reorganizing appropriate subjects in the Input Data Model (for example, City moved from Province to Region), the Reference Value will have a red validation symbol along with the newly displayed or updated value in the Field drop-down list.

If the previously selected parent node is removed (for example, Country field is removed), there will be no preselected values on the second page for this parent.
Using the Identifier Selector Wizard

The Identifier Selector Wizard opens when you click the Reference Value for the field with the Identifier data type in the Instance or Master model table. This is a one-to-one relationship of current subjects.

The Identifier Selector Wizard consists of only one screen. The following elements appear:

- Search field to quickly find the requested reference data.
- Project Explorer with all available input data models and their subjects.

Editing a Reference Value For an Identifier Data Type

The Reference Data Selector can be used in the following methods:

- Setting a new reference value
- Changing an existing reference value

When you click on a selected Reference Value, the Reference Data Selector Wizard appears. On the first page of the wizard, you can change the current reference data that is selected. Or, you can leave the current selection and move to the next page where you can edit or change any of the previously chosen fields and parent nodes. After clicking Finish, all changes will be applied to Reference Value.

If the selected Reference Data is removed or is moved above within the same Reference Data model to another Reference Data model, or to another project, it is removed in the Instance and Master model tables as well. Reference Value is selected with a red validation symbol and the appropriate message appears as a tool tip in the Problems tab. You must select a new Reference Data using the same wizard. The process is the same as selecting a new Reference Data for the first time.

If a subject contains an Identifier data type, and its reference value is not selected, the reference value will be saved but the project reference value is deleted from its child nodes.

If a subject contains an Identifier data type, and its selected reference value is moved within the project or out of the project, the reference value is saved.

If you copy a subject containing an Identifier data type and its selected reference value its children node, the new copy of the child subject will be selected as the reference value.
Linking Subjects From an Existing Project

You can link subjects from an existing project.

The following image shows the Link Subject wizard.

When linking, subject names will be copied from the original. You can rename the linked subject, but the name of the original subject must be displayed in the graph.

You can change the descriptions of the linked subject.
When you link subjects that contain child subjects, they will be linked as well. You cannot unlink just one child subject of a linked subject. Additionally, you cannot add new child subjects to linked subjects.

Linked subjects and their child subjects will be marked in the Graph and in the Project Explorer with a parallelogram.

You can link any subject of the current Input Data Model, including root subjects and parent subjects to the current subject. Linked parent subjects will be shown as a hidden node where no attributes/properties can be changed. Such subjects will be shown without children nodes. If this occurs, linking current subjects should be excluded.

You can link subjects that have already been linked.

However, you cannot add, edit, or remove any subject fields. To make any of these changes, you must first unlink the subject. The only value that you can change without unlinking it, is the Reference Value in the Inherited data type.

You can publish linked subjects as Reference Data. You cannot publish hidden subjects.

If there are any changes with the original linked subjects, the subject will be automatically updated without notifications.

If the field of the original subject has a Reference or Identifier data type, then the Reference Value is preserved in the linked subject.

To cut and paste, copy and paste, or move the linked subject to another location, you must first unlink the subject.

Options that are prohibited for the linked subject will be disabled in its context menu.

Editors for linked subjects look similar to regular subjects. All information is disabled except for the Reference Value in the event of an Inherited data type.

Properties for linked subjects contain the same tabs as other subjects. However, only the following general properties can be updated:

- Name
- Short description
- Long description

All information in other tabs is disabled except the Reference Value for the inherited data type.
When you unlink the subject, it becomes a regular subject without any relation to a linked subject, and all attributes can be modified. The unlink action will be enabled only for the root linked subject (subject above the linked subject structure). You will have the following two options:

- **Unlink single local subject.** Unlinks only the top linked subject but its children stays without changes.

- **Whole link subject tree.** Unlinks the whole subject tree.
Chapter 10

Configuring Reference Data

Any Input Data Model can be published as a reference data source. You can also create reference data definitions manually. There are two types of reference data, static and dynamic.

This section describes how to configure reference data definitions using Omni™ Designer.

In this chapter:

- Configuring Static Reference Data
- Configuring Dynamic Reference Data

Configuring Static Reference Data

The Static Reference Data Editor allows you to manage mappings for reference values.

The Static Reference Data Editor contains three buttons:

- Create
- Delete
- Manage Source Systems
The following table lists and describes the columns that are available in the Static Reference Data Editor.

<table>
<thead>
<tr>
<th>Column Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference Value</td>
<td>The Reference Value column consists of a text field and is required. The specified value in this field can have a maximum length of 256 characters. The value also can contain alphabetical characters, numbers, and special characters. Extra spaces at the beginning and at the end are trimmed. However, extra spaces between words are allowed.</td>
</tr>
<tr>
<td>Default Mappings</td>
<td>The Default Mappings column consists of a text field and is required. The specified value in this field can have a maximum length of 256 characters. The value also can contain alphabetical characters, numbers, and special characters. Extra spaces at the beginning and at the end are trimmed. However, extra spaces between words are allowed.</td>
</tr>
<tr>
<td>&lt;Source System Name&gt;</td>
<td>The &lt;Source System Name&gt; column consists of a text field and reflects the name of your defined source system. The specified value in this field can have a maximum length of 256 characters. The value also can contain alphabetical characters, numbers, and special characters. Extra spaces at the beginning and at the end are trimmed. However, extra spaces between words are allowed.</td>
</tr>
</tbody>
</table>

To add a new mapping, click Create. A new record in the table will appear with empty field values.

To edit a mapping value, click any cell in the table and change the existing value according to your requirements.

To delete a mapping, select a row and click Delete.

To create, update, or remove a source system, click Manage Source Systems.

A Source Systems tab is opened.
After making any changes in the Source Systems table, the Reference Data Editor will be updated immediately. New empty columns will be added for newly added Source Systems. Column names will correspond with Source System names. Appropriate column names will be updated when the Source System name is updated. Columns will be deleted from the mappings table if the Source System is removed. If the Source System is deleted, then the mappings related to these Source Systems (which have set Source values) will also be removed from the table.

**Configuring Dynamic Reference Data**

To create a Dynamic Reference Data Model, you must publish an appropriate subject as reference data by selecting *Publish as Reference Data* from the context menu of the subject.

After performing this action, a new Reference Data Model is created under the Reference Data Models node. The name of the created model is the name of the published subject. Reference data for the published subject and all child subjects are created under the model node. The structure of the Reference Data Model duplicates the structure of part of the Input Data Model that was published.

Adding new subjects, removing or renaming existing ones in published subjects or their children, are reflected in the Reference Data Model tree.

**Notes:**

- After moving a published subject, Reference Data is removed.
If you move a subject (that is a part of the Dynamic Reference Data Model) to another parent, but within this Reference Data Model, then all mappings are lost.

You can publish the same subject multiple times as required.

You can change the name of the Reference Data Model, but cannot change its structure without changing the subject’s structure of the Input Data Model.

**Reference Data Settings Editor**

When you double-click the Dynamic Reference Data Model or select Open from the context menu for this node, the Reference Data Settings Editor is opened.
The editor allows you to choose a key field for every reference subject, as shown in the following image.

![Reference Data Editor Image]

The Reference Data Editor contains a table with three columns:

- **Reference Subject.** (Not editable.) Displays the reference data subjects tree. The tree can be expanded or collapsed. By default, the tree is collapsed.

- **Key Field.** (Required.) Drop-down lists with Master Model fields of appropriate subjects (that have been published as current reference data). Only fields that have the Include check box selected and do not have a data type set to Reference are available here.

- **Unique.** Displays as a check box.

**Dynamic Reference Data Editor**

The Dynamic Reference Data Editor can be opened for any Reference Data Subject from the Dynamic Reference Data Model. It appears and functions absolutely the same.
Chapter 11

Remediation Rules

This section describes how to define remediation rules using Omni™ Designer.

In this chapter:

- Remediation Rules Components Configuration Overview
- Importing State Machines
- Adding New Transitions to the Graph
- Changing Transition States and Sources
- Ticket Types Editor
- Customizing Actions

Remediation Rules Components Configuration Overview

The advanced remediation portal supports two different types of remediation tickets:

- State Machines
- Project Action (Custom Actions)

In the Omni Designer pane, you can navigate through the nodes to create rules for any subjects and set unique names for each ticket. You can have multiple State Machines and Project Actions.

Each rule can be applied to several subjects, but one subject cannot have several rules.

When double-clicking on the State Machines node, an editor containing the following tabs appear:

- **Ticket Types.** Manages the types of tickets. The following image shows the Ticket Types tab depicting the Name and Description columns. Each name should be unique.
Mapping. Maps the Ticket Types and Input Data Models to the State Machines. It consists of three drop-down columns, as shown in the following image:

- **Ticket Type.** A drop-down list containing the values specified in the Ticket Types tab and a default *any* value.
- **Input Data Model.** Contains the available current project Input Data Models and a default *any* value.
- **State Machine.** Contains the available current project State Machines.

State Machines can be mapped:

- To Input Data Models, for any ticket type.
- To a specific ticket type for any Input Data Model.
- To a specific ticket type and specific Input Data Model.

State machines can also be defined as being for any ticket type and any Input Data Model.
The following image shows a newly created Remediation Rule graph.

**Importing State Machines**

Importing State Machines can be performed from .SCXML files. To do so, right-click on the State Machines node in the Project Explorer and select *Import State Machine* from the context menu.
After importing, you will be able to work with imported State Machines in the State machine editor, as shown in the following image.

In the editor above, you can create states which will have the following parameters:

- **Name**
- **Type**

There are three types of states:

- **Starting**
- **Regular**
- **Final**

There can only be one starting state, but you can have multiple regular and final states.

You can also add Transitions which will have the following parameters:

- **Name**
- **Options (Event/Type)**
- **Condition (some script)**

The parameters above should appear on the graph. Conditions are shown as tooltips when the pointer hovers over the transition curve.
You can edit the parameters of states and transitions. Transitions from one state cannot point to the same state. However, you cannot import states or transitions from the Data Storage or the App Store.

Rules become invalid if there is any state without a transition or a transition without a target (state).

Invalid States and Transitions are marked with Validation popup statements in the workbench, as shown in the following image.

![Image of State Machine with Validation Popup Statements]

Tooltips with corresponding errors are displayed, as shown in the following image.

![Image of State Machine with Tooltips and Errors]

States can have the following groups of actions displayed as a tree:

- On Entry
On Exit

Images for actions are displayed as action icons. The label for project actions have different colors than actions from the server. Each action contains a Delete option in the context menu.

You can also switch between State types. The option to switch is available from the State context menu by right-clicking on the workbench and selecting Switch Type, as shown in the following image.

The State Type can also be selected in the Type tab when viewing Properties, as shown in the following image.

You can drag and drop State Machines to change their position. Changed positions of states should be saved and displayed after reopening, importing, or exporting.

Clicking on the Refresh Graph Layout button in the Eclipse toolbar refreshes the graph and relocates all states to the default position.
Adding New Transitions to the Graph

The Transition object is a drag-and-drop node that can be found in the Tools section of the palette, as shown in the following image.

To select a source state, drag the New Transition object to a state, as shown in the following image.
After the object has been moved, you must select a target state, as shown in the following image.

**Changing Transition States and Sources**

1. Select a transition line, as shown in the following image.
2. Drag the transition line to any state, as shown in the following image.

The appropriate state process is changed.

Once the line has moved to another state, the target of the transition line changes, as shown in the following image.
The transition process is the same if you wish to change the source line, as shown in the following image.

Like changing the transition state, you can drag the source line.

The following image shows the graph with a new source line.

**Cutting, Copying, and Pasting States**

You can cut, copy, and paste states. When copying to the same project, make sure all actions are copied with it.

When pasting to another project:

- Show the dialog box with a list of all other actions pasted. Near each action, a list of operations should be available.
The following list describes the Copy, Reference, and Skip operations that become available:

- **Copy.** Copies a chosen custom action to the pasting project.

- **Reference.** Creates a linked Custom action referenced to the original Custom action (the one in copied state). Each project (copy and paste) must be shared on the same development server. If not, an error message will appear in a dialog box, and the Finish button will be disabled. If the copied project has uncommitted changes, the Commit dialog box will appear after clicking Finish.

- **Skip.** Removes actions from the copied state.

The following list describes the Copy and Skip operations that are available for the Embedded actions:

- **Copy.** Each project (copy and paste) must be shared. If not, an error message appears in a dialog box and the Finish button becomes disabled.

  Upon clicking Finish, the development server will check to see if you are logged in. If not, the Log-in dialog will open.

  If projects are shared on the same server, you can just copy an action as is.

  If projects are shared on different servers, check whether a copied action exists on the server of the Paste Project. If it is not, you must show appropriate message and skip the action.

- **Skip.** Removes the action from the copied state.

The following list describes the Copy, Reference, and Skip operations that are available for the Linked actions.

- **Copy.** Copies a chosen custom action to the pasting project (similar to linking the original Custom Action to the pasting project). If it is the same project that Action is Linked from, you can just attach the original Custom action to the state.

  If it is the same project that Action is Linked from, but contains another version or branch, then create a Custom Action called actionName_version_branch and attach it to the state.

  Each project (copy and paste) must be shared on the same development server. If they are not, an error message will appear in the dialog box, and the Finish button will be disabled.

- **Reference.** Creates a Linked action referenced to the original Linked action (the one in copied state).
Skip. Removes the action from the copied state.

Ticket Types Editor

The Ticket Types editor allows you to add or delete new Ticket Types, as well as specify the name and description for each of them.

You can open the Ticket Types editor by double-clicking or right-clicking the Ticket Types node and selecting Open.

The following image shows the Ticket Type editor.

The names of the Ticket Types cannot be duplicated. If you set a name which already exists, both names will be highlighted with error symbols.

Customizing Actions

Each action has Name and Icon attributes. Project Actions also have a Script attribute.

To add actions to state, you must drag and drop actions from the palette to the graph.

Viewing Project Actions

Project Actions you create are stored locally.

The Project Actions are created in the Project Explorer, under the Custom Actions node of the Remediation Rules. After double-clicking a Project Action, a Java Script editor opens for editing the script of the Project Action.
In the graph palette, all Project Actions should be displayed under the Custom Actions section. The Action icon is displayed by the name of the action. You can drag and drop Project Actions to any state’s On Entry or On Exit section.

When viewing the properties, an extra tab icon is available if you wish to change the icon of the action.

**Viewing Embedded Actions**

Action descriptions are stored in the Configuration files of the server. You can use the endpoint to retrieve those actions together with other action types, display names, and short descriptions (currently, long descriptions are not available since there is no place to display them in palette). The Action list corresponds to the list from the Remediation Services of a specific version.

Actions are displayed in the Action palette as a list (for the StateMachine Editor). The items contain icons corresponding to the icon type and are loaded automatically when the editor is first opened for a project. The icons will be retrieved from the cache when the editor is reopened. The Action list is stored per Eclipse session and will have to be loaded again each time the editor is opened. Actions are similar to artifacts in that their availability can be tracked. You can also click the refresh button in the top right corner of the panel.

A progress notification appears in the palette whenever the palette is loading. You can press Reload if the following error message appears inside the palette:

*Actions could not be loaded from the server.*

The drag-and-drop feature is also enabled. When an action object is added to a graph, the name and short description from the action is brought along with it.

When viewing properties, the original name is displayed in a separate tab, similar to the Project Action, but it is not editable. All other properties can be edited.

**Linking Remote Project Actions**

The Linked Project Action option enables an action from a shared project to be linked and used on another project. Both projects must be on the same development.
If the selected project is not shared, the Link Remote Project Action option in the Custom Actions context menu will not appear, as shown in the following image.

Once the project is shared, the Link Project Action will appear in the Custom Actions context menu, as shown in the following image.

You can only link project actions when a project is shared with the same development server as the selected project. Each entity will have a shared property enabled by default, which means only those entities can be shared.
When you click *Link Remote Project Action* from the context menu, the corresponding Link Action wizard opens with a list of all Omni Designer projects shared with the same development server, as shown in the following image.

You can link an Action only from a project that is checked out from the server to the local workspace and does not contain any uncommitted changes, and no validation errors. A Linked Remote Project Action (Linked Project Action) does not depend on the local project, so a local project can safely be removed after an Action was linked. Information about Linked Remote Project Action (Linked Project Action) such as global project ID, version, and branch, will be stored in a wrapped object. This information helps to identify an Action on the server.

The following will be copied from the original Action:

- Name
- Long/short description
- Icon
- Script
- Shared properties

You can also link the Linked Remote Project Actions, and change the name, long/short descriptions, shared flags, and icons of a Linked Project Action.
The Linked Remote Project Action should be selected in the graph. You can also use a linking icon and show it in the tree or Project Explorer if possible.

You can also be notified if there are any changes to the original Action. Changes can be applied to a Linked Remote Project Action through an update (specific update), when viewing the Artifacts page implementation.

Viewing properties are the same as for Project Actions. On a separate tab, you can show information about the source project, version, name, and short/long description. They cannot be edited.

**Cutting, Copying, Pasting, and Moving Custom Actions**

Cutting, copying, and pasting actions will work only from the Project Explorer. Currently, in this release, you cannot cut, copy, and paste from the edits since cutting, copying, and pasting of fields and plans, etc., are not supported. However, you can still make multiple cutting, copying, and pasting processes.

Moving Actions is the same as cutting and pasting, but you can move only within the Project Explorer. Making multiple moves are enabled.
Chapter 12

Exporting and Importing Projects

This section describes how to export and import projects in Omni Designer.

In this chapter:

- Exporting
- Importing

Exporting

You can export a project as an XMI file or Project Bundle. In the first case, a context menu option is available. The Export as XMI file operation will serialize the entire data model together with references to artifacts (not actual artifacts) to a file. The removal of references will be performed during the import to handle situations where you can take the XMI file from a Project Bundle and import it.
There is no context menu option available to export a project as a Project Bundle. Instead, there is a Version link in the table of the bundle for a project, as shown in the following image.

![Release Management](image)

Both actions will open a file chooser dialog to select a new location.

**Importing**

You can import a project from an XMI file, from an XMI/UML data model, or from a Release Bundle.

An XMI file is a raw reflection of the data model used by Omni Designer. XMI/UML is a specific format that is processed in a custom way and transformed to the Omni Designer project data model. A Release Bundle is a zip file containing an Omni Designer project data model. Corresponding context menu items are available for these options.

These options will open a file chooser dialog box to select the input file and a wizard to specify project-specific information. To import a Release Bundle, you will need select a Repository Service first.

The same validation rules are applied as during the initial project creation.
Chapter 13

Dimensions

This section describes how to define and configure dimensions in Omni Designer.

In this chapter:

- Dimensions Editor page
- Dimensions Graph
- Dimensions Linking
- Dimensions Expressions
- Context Menu for Dimensions and Conditions and the Button Pad
- Cut/Copy/Paste/Move Conditions

Dimensions Editor page

To open the Dimensions Editor, double-click the Input Data Models node, or right-click on the node and select Open, or press F3 on your keyboard.
The Dimensions Editor page contains a table with three columns: Name, Default State, Description. The following five buttons also appear: Create, Delete, MoveUp, MoveDown, and Reset sorting.

The Delete, MoveUp, MoveDown, and Reset Sorting buttons are disabled by default.

The MoveUp button becomes enabled once you have at least two fields and the second field is selected.

The MoveDown button becomes enabled once you have at least two fields and the last field is not selected.

The Reset sorting button becomes enabled after you have sorted any column.

- **Name.** An editable text field.
  
The following validation rules are applicable to the Name field:

  - **Required.**
  
  - **Up to 128 characters.**
- Special characters are not allowed.

- **Default State.** A drop-down list with False and True options. False is set by default.

- **Description.** An editable text field.

  The following validation rules are applicable to the Description field:

  - Not required.
  - Up to 256 characters.
  - All special characters are allowed.
  - Extra spaces at the beginning and at the end are trimmed, but extra spaces between words are allowed.

To add a new Dimension, click **Create**.

A new record in the table will appear with empty **Name** and **Description** fields. Default State is set to False by default.

To edit a Dimension, click any cell and change it.

To delete a dimension, select a row and click **Delete**.

**Dimensions Graph**

To open the Dimensions Graph for a subject, open a subject editor and switch to the Dimensions tab. Dimensions should first be created.
The Dimensions Graph consists of the Graph view and Palette. Dimensions are displayed in Dimensions section of the Palette.

The Palette contains five sections:

- Main section
- Dimensions
- Objects
- Existing rule
- Measures

The Main section contains two elements with icons:

- **Select.** To select nodes in Dimensions Graph;
- **Marquee.** To select several nodes in Dimensions Graph simultaneously.

The Dimensions section contains created dimensions.
The Objects section contains the following elements:

- **AND.** A logical operator.
- **OR.** A logical operator.
- **Rule.** Enables you to create a new rule for a dimension.

The Existing rules section will contain created rules.

The Measures section contains created measures.

To add dimension to a subject, you should drag and drop a dimension node from Dimensions section to the graph.

Dimensions are not displayed in Dimensions section after adding them to the graph. If a dimension was deleted from the graph, it reappears in Dimensions section.

The message: "Drag & drop rules from the palette. "Default state: '...'" is displayed in the dimension node a until logical operator/rule is added to the dimension node.

To create a structure with logical operators and rules, you should drag and drop appropriate nodes from the Palette to the Dimensions Graph.

You can create a conditions structure for a dimension consisting of just one rule, as shown in the following image.
You can also create a conditions structure for a dimension containing multiple elements, as shown in the following image.
Rules added to the Dimension Graph from the Objects section are automatically added to the Existing rules section. You can use Existing rules for all created dimensions, but only in a subject where rules have been created. For a new rule that is added to the Dimensions Graph, inline renaming is automatically activated. After renaming, new rule’s name is set in the Existing rule section and in the Properties view.

The Dimensions Graph can be opened in Source view or in Cleansed view. Source/Cleansed view toggle is available on the Eclipse toolbar. Source and Cleansed views are two independent editors and you can work with these editors only separately.

**Dimensions Linking**

**Linked Dimensions**

Linked Dimensions are created with a linked subject. The Dimensions Graph for linked subject looks like the regular Dimensions Graph but it cannot be edited. Linked dimensions are displayed with a special decorator.

![Diagram showing Linked Dimensions]

Rules for linked dimensions are not displayed in the Existing rules section in the Palette. You can add dimensions to the Dimensions Graph for a linked subject and perform the usual operations with them (add/delete conditions, create/edit/delete rules, expressions, etc.). An added dimension is displayed as a regular dimension.
Unlinked Dimensions

Linked dimensions can be unlinked. After unlinking, dimensions are displayed as regular dimensions and can be edited (but still cannot be deleted). Unlinked rules are displayed in the Existing rules section of the Palette. To unlink a dimension, select the *Unlink Dimension* option from the context menu or from the Button Pad of the dimension’s node.

After unlinking, created Expressions can be edited/deleted.

Link Dimension Back Action

The Link Dimension Back Action option is used to revert all changes made in an unlinked dimension and pull in the changes made in the original dimension.
After the Link Dimension Back Action, an unlinked dimension is returned to the linked state. If the original dimension was deleted, an unlinked dimension will also be deleted.

To perform Link Dimension Back, select the option from the context menu or from the Button Pad of the dimension node.

**Dimensions Expressions**

Dimensions Expressions are conditions for a specific rule. If at least one of the conditions (expressions) is satisfied, the whole rule takes the state (True or False) specified in the expression. Otherwise, the rule takes the state specified in the Default State drop-down.

The main idea of Expressions in rules is to give you the ability to configure rules, which are used for calculation-specific Dimensions.

**Expression Builder Dialog Box**

To open the Expression Builder dialog box for a specific rule, double-click the rule node.

The Expression Builder Dialog contains a grid with State, Field, Operator, and Value columns. The control buttons for the grid are standard: Create, Delete, Move Up/Down, and Reset sorting. There is a Default State drop-down with True and False options under the grid. The False option is set by default. At the right bottom corner, there are Save and Cancel buttons.
To create a new Expression, click the Create button. The new Expression will be displayed in the grid.

The **State** cell contains a drop-down with False (set by default) and True options.

The **Field** cell contains a drop-down with a list of subject fields and system fields (for the Cleansed view).

The **Operator** cell contains a drop-down with a list of the following operators: Equals, NotEquals, StartsWith, NotStartsWith, GreaterThan, LessThan, GreaterThanOrEquals, LessThanOrEquals, Contains, NotContains, EndsWith, and NotEndsWith. The Default operator is Equals.

The **Value** cell is a text field without any validation.

The Default state option should be changed (and will be calculated) if no Expressions have been created.
After the Expression has been created, a validation decorator is displayed in the Field cell. Select a field from the Field drop-down. The Save button will be disabled until validation problems are resolved.

Clicking Save creates the Expression and closes the Expression Builder Dialog.

If Expression Builder is opened for a rule created in Cleansed view, system fields become available.

A list of system fields:

- id
- source_name
- source_instance_id
- source_instance_id_name
- status
- status_reason
- source_status_code
- source_created_date
Expression Builder Dialog Box for Linked Dimensions

The Expression Builder dialog box for a linked Dimension displays a grid with the created Expressions for a rule, but without the ability to edit the Expressions. The Create, Delete, and Move Up/Down buttons are not present.

Context Menu for Dimensions and Conditions and the Button Pad

The context menu for regular Dimensions contains the following options:

- Paste (disabled by default)
- Delete

Paste option will be enabled if a condition or rule is stored on the clipboard.
The Context menu for linked Dimension contains the following options:

- Paste (disabled)
- Delete (disabled)
- Unlink Dimension

The context menu for unlinked Dimension contains the following options:

- Paste (disabled)
- Delete (disabled)
- Link Dimension Back
The context menu for logical operators (AND, OR) contains the following options:

- Cut
- Copy
- Paste (disabled by default)
- Delete
- Move Up
- Move Down

The Paste option will be enabled if the condition or rule is stored on the clipboard.

The Move Up and Move Down options will be enabled according to the position of the logical operator in the Dimensions node.
The context menu for rules contains the following options:

- Rename
- Cut
- Copy
- Delete
- Move Up
- Move Down

The Move Up and Move Down options will be enabled according to the position of the logical operator in the Dimensions node.

In the context menu for linked conditions, all options are disabled.

The Button Pad of the Dimensions node is a useful tool for quick access to the main options of the Dimensions node.

The Button Pad for a regular Dimension contains only the Delete button.
The Button Pad for a linked Dimension contains Delete (disabled) and Unlink Dimension buttons.

The Button Pad for an unlinked Dimension contains Delete (disabled) and Link Dimension Back buttons.

**Cut/Copy/Paste/Move Conditions**

Cut/Copy/Paste and Move options for conditions can be performed only within the same subject. Other cases are disabled. Cut/Copy/Paste can be done using Ctrl+Z, Ctrl+X, and Ctrl+C combinations.

If a Dimensions node contains just a rule, only logical operators can be pasted.

Pasting subjects/Input Data Models with dimensions to another project is disabled.
Measures are actual values, which depend on the state of a rule(s) added to a specific dimension. This section describes how to define and configure measures in Omni Designer.

**In this chapter:**

- Measures Editor
- Measures in the Dimensions Graph
- Context Menu for Measures
- Measures in Linked Dimensions

**Measures Editor**

To open the Measures Editor, double-click the Input Data Model’s node, or right-click and select Open, or press F3 and switch to the Measures tab.

The Measures Editor contains a grid with three columns: Name, Units, and Description, and five buttons: Create and Delete, Move Up, Move Down, and Reset sorting.

The Delete, Move Up, Move Down and Reset Sorting buttons are disabled by default.

The Move Up button becomes enabled once you have at least two fields and at least the second field is selected.

The Move Down button becomes enabled once you have at least two fields and the last field is not selected.

The Reset sorting button becomes enabled once you sorts any column.

- **Name.** An Editable text field.

  The following validation rules are applicable to the Name field:

  - Required.
  - Up to 128 characters.
  - Special characters are not allowed.
- **Units.** An Editable text field.
   
   The following validation rules are applicable to the Units field:
   
   - Required.
   - Up to 256 characters.
   - All special characters are allowed.

- **Description.** An Editable text field.

   The following validation rules are applicable to the Description field:
   
   - Not required.
   - Up to 256 characters.
   - All special characters are allowed.
   - Extra spaces at the beginning and at the end are trimmed, but extra spaces between words are allowed.

**To add new Measure:**

Click Create.

A new record will appear in the grid with empty Name and Description cells. The Default state will be False.

**To Edit Measure,** Click on any cell and change it.

**To Delete Measure,** Select the row and click Delete, or press Delete on your keyboard.
### Measures

<table>
<thead>
<tr>
<th>Name</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue_Impact</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Item_Cost</td>
<td>USD</td>
<td></td>
</tr>
<tr>
<td>Production_Capacity</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Units_Sold</td>
<td>units</td>
<td></td>
</tr>
</tbody>
</table>
Measures in the Dimensions Graph

Measures that are created are displayed in the Measures section of the Palette. A Measures section is also the part of each Dimension’s node.

The message "Drag & drop measures from the palette" will be displayed until at least one Measure is added to a specific dimension.

To add a Measure to a dimension, drag and drop it from the Palette. Only one specific Measure can be added to a specific dimension. Otherwise, a forbid icon will appear.

Long Measure names, values, and units will be truncates with an ellipsis (...). Full name/value/units will be displayed in the tooltip.
The default value for each added measure is 0.0.

You can change a value by double-clicking an added measure slowly or by using the Edit option from the context menu.
For measure value editing, only digits are permitted, but values like 10.234 or 34E±345 can be set.

Measures from the dimension node can be deleted by pressing the Delete key or by using the Delete option from a context menu.

**Context Menu for Measures**

The context menu for Measures contains four options:

- Edit
- Delete
- Move up
- Move Down

For Measures in Linked Dimensions, all four options are disabled.

**Measures in Linked Dimensions**

Measures in linked Dimensions (Linked Measures) are displayed in non-editable mode (grayed out). You cannot edit, delete, or change measure positions.

You can not add Measures from the Palette to Linked Dimensions.
If Dimension was unlinked, you can add, delete, or change measure positions throughout dimension node.
Chapter 15 Content Types

This section describes how to define and configure content types in Omni Designer.

In this chapter:

- Content Types Editor
- Content Types in the Subject Editor

Content Types Editor

To open the Content Types Editor, double-click an Input Data Models node, right-click and select Open, or press F3 and switch to the Content Types tab.

The Content Types Editor contains a grid with three columns: Name, Data Types, and Description, and six buttons: Create and Delete, Move Up, Move Down, Reset sorting, and Update Content Types.

The Move Up button becomes enabled once you have at least two Content Types and at least the second Content Type is selected.

The Move Down button becomes enabled once you have at least two Content Types and the last Content Type is not selected.

The Reset sorting button gets enabled once you have sorted any column.

- **Name.** An editable text field.
  
The following validation rules are applicable to the Name field:
  
  - Required.
  - Up to 128 characters.
  - Special characters are not allowed.

- **Data Types.**
  
  - Required
  
  - On double-click, the Data Type Selector wizard is opened.

- **Description.** An editable text field.
The following validation rules are applicable to the Description field:

- Not required.
- Up to 256 characters.
- All special characters are allowed.
- Extra spaces at the beginning and at the end are trimmed, but extra spaces between words are allowed.

**To add new Content Type:**

Click *Create*.

A new record will appear in the grid with empty Name, Data Types, and Description cells.

**To Edit Content Type Name/Description,** click an appropriate cell and change it.

**To Delete Content Type,** select a row and click *Delete* or press Delete on the keyboard.

**To set/change Data Types** for a specific Content Type, click the Data Types cell, select from the drop-down list, and click *Finish*.

You can select any Data Types for a specific Content Type.

Different Content Types can contain the same Data Types.
To upload predefined Content Types from the Repository Service, click **Update Content Types**. These Content Types are called System Content Types.

To work with System Content Types, the project must be shared. Otherwise, after clicking **Update Content Types**, the Select a Repository Service dialog will appear.

In addition, you should be logged in to the Repository Service. Otherwise, the Login to Repository Service dialog will appear.
Uploaded Content Types will be displayed as grayed and you will not be able to delete or edit them. There is the only one case when you can delete Content Types uploaded from the Repository Service, if Content Types do not exist on the Repository Service anymore. Such Content Types will be validated in the grid and the Delete button will be enabled for them.

Content Types in the Subject Editor

In the Subject Editor, the Content Types column is available with a list of Content Types created and uploaded from the Repository Service. To assign a Content Type to a specific field, select it from the list of available Content Types.

After generating a Project Bundle and deploying it to OmniGen, system and custom content types will be available for use in Omni Designer.
Using the Properties Tab

This section describes how to use the Properties tab in Omni Designer to view the properties for all configurable components and entities of your Omni Designer Project.

In this chapter:

- Properties Tab Components Configuration Overview
- Viewing Project Properties
- Viewing General Properties
- Viewing Instance Model Properties
- Viewing Master Model Properties
- Viewing Plan Properties
- Viewing Source System Properties
- Viewing Reference Data Mapping Properties
- Viewing Reference Data Setting Properties
- Viewing Release Bundles Properties
- Viewing Remediation Rules Properties
- Viewing Properties for the Server and Remote Projects
- Viewing Properties for Dimensions

Properties Tab Components Configuration Overview

The Properties tab is a part of the Omni Designer perspective. Information is displayed in this tab when an entity or component is selected in the Project Explorer on the left pane or in a table.

All fields that are available within the various Omni Designer editors are also available in the Properties tab. Some additional information, which may be absent within the various Omni Designer editors, can be found in the Properties tab. If you change a value in the Properties tab and switch to another view or press Enter, the information is saved and it is automatically updated in the corresponding Omni Designer editor and/or Project Explorer. Similarly, if you change a value in the Project Explorer or an Omni Designer editor, the information is automatically updated in the Properties tab.
Field validation rules are the same as in other Omni Designer editors. If a value that is entered in a field is not valid, the field is marked with a red cross icon. When you mouse over such a field, a tool tip displays a corresponding error message. You can also view any error messages in the Problems tab. After you correct an issue in a field, the red cross icon next to the specific component and corresponding error row in the Problems tab are removed.

**Viewing Project Properties**

The Project Properties only contains the General tab. Data is displayed in a table.

The following list describes the parameters of the Project Properties.

- **Project name.** Provide a name in this text field.
- **Description.** Provide a description in this text field. It is not saved after exporting or importing, sharing or checking out.

**Note:** The project name and description field validation rules are the same as when the projects were created.

- **Shared.** Appears whether or not a project is shared. A true value appears if projects are shared or checked out.
- **Last updated.** Displays the date when a project was shared, checked out, or updated.
- **Contains changes.** Appears if the project has committed changes or not (except changing project name and description).
- **Location.** Displays the current project location (trunk or exact branch).
- **Current version.** Displays the current version of the project.

Once changes are made or projects are committed, the Properties panel will be automatically refreshed and display the updated information.
Viewing General Properties

The Properties tab is available for all nodes in Omni Designer Navigator and for all entities displayed in tables.

The following parameters are displayed in the General section of the Properties tab:

- **Name.** You can add a name for most entities. However, it is disabled for Reference Data Subject, Promotion, and the Mapping row in the Reference Data Setting editor. The Promotion name is the name of the subject in which the promotion is created. The Mapping name is the reference value. The Reference Data Setting name is the Reference subject name. The Plan name is the display name.

  The following validation rules apply when adding names to the Name field.

  - Adding a name is required.
  - The name can consist of up to 128 characters.
  - All special characters are permitted.
  - Validation rules for identical names are the same as those found in the Omni Designer Project Explorer. Entities in tables do not have validation for identical names.
  - Extra spaces at the beginning, end, and between words are removed.

- **Short Description.** The following validation rules apply when adding a description to the Short Description field.

  - Adding a description is optional.
  - A description can consist of up to 256 characters.
• All special characters are permitted.
• Extra spaces at the beginning and at the end of sentences are removed, but extra spaces between words are permitted.

• **Long Description.** The following validation rules apply when adding a description to the Long Description field.

  • Adding a description is optional.
  • A description can consist of up to 1024 characters.
  • All special characters are permitted.
  • Extra spaces at the beginning and at the end of sentences are removed, but extra spaces between words are permitted.

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**Viewing Instance Model Properties**

When you select any field in the instance model table, all information available for the field is displayed in the Properties pane.

The Properties pane for an Instance Model field contains the following tabs:

• **General.** The General tab is identical and standard for all entities. For more information, see *Viewing General Properties* on page 205.

• **Options.** The Options tab contains the following check boxes:
  • Required
The Type tab contains the Data Type drop-down list and a Reference Value field, as shown in the following image.

The fields that appear depends on which data type is selected. The Data Type drop-down list consists of the following elements:

- **String.** If String is selected, the following validation fields appear:
  - **MaxLength.** Optional numerical values only. Acceptable values are from 0 up to the max integer value of 2147483647.
  - **ContentType.** A drop-down provides access to the available Content Types.
The following image shows the Type tab.

- **Integer.** If *Integer* is selected from the Data Type drop-down list, the following validation fields appear:
  - **Default Value.** Optional numerical values only. Acceptable values are from the minimum value of -2147483648 up to the max integer value of 2147483647.
  - **Min Value.** Optional numerical values only. Acceptable values are from the minimum value of -2147483648 up to the max integer value of 2147483647.
  - **Max Value.** Optional numerical values only. Acceptable values are from the minimum value of -2147483648 up to the max integer value of 2147483647.

- **Long.**

- **Float.** If *Float* is selected from the Data Type drop-down list, then the following constraints become available:
  - **Precision.** Positive integers limited by the product. The default are 15 and 3.
  - **Scale.** Positive integers limited by the product. The default are 15 and 3.
  - **Content Type.** A drop-down provides access to the available Content Types.

- **Double.** If *Double* is selected from the Data Type drop-down list, the following validation fields appear:
  - **Precision.** Positive integers limited by the product. The default are 15 and 3.
  - **Scale.** Positive integers limited by the product. The default are 15 and 3.
  - **Content Type.** A drop-down provides access to the available Content Types.

- **Date.** If *Date* is selected from the Data Type drop-down list, the following validation fields appear:
**Default Value.** Optional value that can contain up to 255 characters. It can consist of alphabetical characters, numbers, and special symbols.

**Min Value.** Optional value that can contain up to 255 characters. It can consist of alphabetical characters, numbers, and special symbols.

**Max Value.** Optional value that can contain up to 255 characters. It can consist of alphabetical characters, numbers, and special symbols.

**Format Pattern.** Optional value that can contain up to 255 characters. It can consist of alphabetical characters, numbers, and special symbols.

- **Datetime.**

- **Reference.** If *Reference* is selected from the Data Type drop-down list, then a Reference Value field and a Change button becomes available. After clicking *Change*, the Reference Data Selector wizard appears.

- **Identifier.** If *Identifier* is selected from the Data Type drop-down list, then the a Reference Value field and a Change button becomes available. After clicking *Change*, the Identifier Selector wizard appears.

**Note:** There are no field constraints for Integer, Long, Date, and DateTime.
Viewing Master Model Properties

The Master Model properties is identical to the Instance Model properties, except for the addition of the Merge Rules tab instead of the Cleansing Plans tab, as shown in the following image.

The Options tab consists of the following check boxes:

- Include (not available in Instance Model)
- Required
- Deprecated
- Key
- Hidden

Status and Identity options are not available for the master model.

Fields that cannot be edited in the master model table are disabled in the properties. Only the Include check box value can be changed for such fields (as it can be changed in a table).
Viewing Plan Properties

When you select a plan from the Plans table, information pertaining to a selected entity is displayed in the Properties tab.

The Plan properties consist of the following tabs:

- **General.** The General tab is identical and standard for all entities. The Name field is the display name.

- **Attributes.** The Attributes tab contains the following fields: Only Type is editable.
  - Type
  - Name on Data Storage
  - Revision
  - Project

You can customize your entry for the Type field.

- **Parameters.** The Parameters tab contains the Parameters table with the following columns:
  - Name
  - Type
  - Value

  The Value column is customizable and can be edited the same way as the Add Plan wizard. Your cannot add or remove plans from the table. The Move Up and Move Down buttons are also not be available for this table.

Viewing Source System Properties

After selecting a Source System from the Source Systems table, all information according to the entity is displayed in the Properties tab.

The Source Systems pane contains the following tabs:

- **General.** The General tab is identical and standard for all entities. For more information, see Viewing General Properties on page 205.

- **Identifier.** The Identifier tab consists of the Identifier field and requires a value up to 128 characters. The value may contain alphabetical characters, numbers, and special characters. Extra spaces at the beginning and end of sentences are removed, but extra spaces between words are permitted.
The following image shows the Identifier tab.

![Identifier tab](image)

**Viewing Reference Data Mapping Properties**

When you select a mapping in the Static Reference Data Editor, all information pertaining to the selected entity is displayed in the Properties tab. The Reference Data Mapping properties contains the following tabs:

- **General.** The General tab is identical and standard for all entities. For more information, see [Viewing General Properties](#) on page 205.

- **Value and Mappings.** The Value and Mapping tab contains the following fields:

  - **Reference Value.** The Reference Value field requires a value up to 256 characters. The value may contain alphabetical characters, numbers, and special characters. Extra spaces at the beginning and end of sentences are removed, but extra spaces between words are permitted.

  - **Default Mappings.** The Default Mapping field requires a value up to 256 characters. The value may contain alphabetical characters, numbers, and special characters. Extra spaces at the beginning and end of sentences are removed, but extra spaces between words are permitted.
The following image shows the Value and Mappings tab.

- **Source Systems’ Values.** The Source Systems’ Values tab contains the following columns:
  - **Source System.** The names of all source systems available for the project are displayed in this column. Extra spaces at the beginning and end of sentences are removed, but extra spaces between words are permitted. A new row is added for every newly added source system. If source system is removed, then the appropriate row is removed in the table.
  - **Value.** The mapping values of each source system can be managed and customized in this column. The input text requires a value up to 256 characters. The value may contain alphabetical characters, numbers, and special characters. Extra spaces at the beginning and end of sentences are removed, but extra spaces between words are permitted.
The following image shows the Source Systems’ Values tab.

![Source Systems’ Values Tab](image)

**Viewing Reference Data Setting Properties**

When you select a setting in the Dynamic Reference Data Settings table or any Dynamic Reference Data Node in the Omni Designer Project Explorer, all information pertaining to the entity is displayed in the Properties tab.

The Reference Data Setting Properties contains the following tabs:

- **General.** The General tab is identical and standard for all entities. For more information, see [Viewing General Properties](#) on page 205.

- **Attributes.** The Attributes tab contains the following fields:

  - **Reference Subject.** Displays the reference data subjects tree. The tree can be expanded or collapsed. By default it is collapsed.

  - **Key Field.** A required drop-down list with Master Model fields of the appropriate subject (which has been published as current reference data). Only fields that have the Include check box selected and are not of the Reference Data Type are available here.

  - **Unique.** Check box.
The following image shows the Attributes tab.

Viewing Release Bundles Properties

When you select any Release Bundle in the Release Management tab, all of the information related to this entity is displayed in the Properties tab.
The Properties tab for a selected Release Bundle contains only the General subtab. It looks different from the General properties for other entities. Data is displayed in a table that includes the following rows, as shown in the following image.

- **Release number.** Value defined when the Release Bundle was generated.
- **Source.** Branch name (or just trunk).
- **Version.** Version of the release bundle.
- **User.** User connected to the repository service.
- **Created date.** Date and time when the Release Bundle was generated.
- **Release notes.** Notes entered when the Release Bundle was generated.
- **Source.** Branch name (or just trunk).
- **Status.**

### Viewing Remediation Rules Properties

This section describes the Remediation Rules properties.
Viewing State Machine Properties

When you select any State Machine, all information for it is displayed in the Properties View. The Properties of the State Machine contains the General tab, as shown in the following image.

Viewing State Properties

When you select any State in the State Machine graph, all information for this state type is displayed when you view the Properties tab.

The State Properties contains the following tabs:

- **General.** The General tab is identical and standard for all entities. For more information, see Viewing General Properties on page 205.
**Type.** In the Type tab, the State Type drop-down list allows you to modify the State type, and contains the following state types:

- Start
- Regular
- Final

If there are several states with the Start type, then each invalid state will be highlighted with a red indicator.

**Viewing Transition Properties**

When you select any transition in the State Machine graph, all information for the transition is displayed in the Properties.
The Transition Properties contains the following tabs:

- **General.** The General tab is identical and standard for all entities. However, the Name field is disabled. The value displayed in the Name field is pre-populated from the Event field entered in the Option tab, as shown in the following image.

![State Machine Properties](image)

For more information, see *Viewing General Properties* on page 205.

- **Options.** The Options tab contains the Event field and the Type drop-down list with the following options:
  - None
  - Internal
  - External
The following image shows the Options tab.

**Condition.** The Condition tab consists of the text editor, as shown in the following image.

**Viewing Action Properties**

When you select any action in the State action section, all information for this action is displayed in the Properties.

The Action Properties contain the following tabs:

- **General.** The General tab is identical and standard for all entities. For more information, see *Viewing General Properties* on page 205.
Options. The Options tab contains the Icon drop-down list of all available icons, which can be selected for any action, as shown in the following image.

Viewing Linked Remote Project Action Properties

When you select any Linked Remote Project action from the Project Explorer or the State action section, all information for it is displayed in the Properties.

General. The General tab is identical and standard for all entities. The Name, Long Description, and Short Description are copied from the original Action but you can change it after linking. For more information, see Viewing General Properties on page 205.

Options. The Options tab contains the Icon drop-down list of all available icons, which can be selected for any action.

Original. The Original tab contains the following information:

- Name
- Long Description
- Short Description
- Icon
All those fields are disabled and cannot be edited, as shown in the following image.

- **Source.** The Source tab contains information regarding the original project where the Action was taken from. For example, Project name, Project ID, Branch, and Version. All those fields are disabled and cannot be edited.

Viewing Properties for the Server and Remote Projects

Properties for the Server and Remote Projects consist of only the General tab.
The following image shows the properties for the Server.

![Properties for Server](image1)

The following image shows the properties for the Remote Project.

![Properties for Remote Project](image2)

The General tab is identical and standard for all entities. You cannot edit any properties from the table.

**Viewing Properties for Dimensions**

When you select any dimension in the Dimensions Editor page, all information relating to the selected dimension is displayed in the Properties tab.

The following Properties for Dimensions contain two tabs:

- **General.** Consists of the following fields:
  - Name
  - Short Description
  - Long Description
The Short and Long Description fields are empty by default, as shown in the following image.

- **Default State.** Contains a drop-down list with the following state options:
  - True
  - False (set by default)

Changes made in the Properties tab will be displayed in the Dimensions Editor page, except in the Long Description.
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