

iWay

Omni[™] Designer User's Guide Integration Edition

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Contents

This documentation provides the installation and configuration instructions for Omni[™] Designer Integration Edition. This manual is intended for developers and administrators of Omni-Gen[™] Integration Edition.

How This Manual Is Organized

This manual includes the following chapters:

	Chapter/Appendix	Contents
1	Getting Started With Omni Designer	Provides an overview and getting started information for Omni Designer.
2	Installing Omni Designer Plugin	Describes how to install the Omni Designer Plugin.
3	Omni Designer Usage Considerations	Describes several usage considerations for Omni Designer regarding table functionality, validation, and open editors.
4	Using the Omni Designer Project Explorer	Describes how to use the Omni Designer Project Explorer when creating and configuring Omni Designer Project components.
5	Using the Repository Explorer	Describes how to use the Repository Explorer in Omni Designer to manage repository servers, users and groups, and shared projects.
6	Using the Project Editor	Describes how to use the Project editor in Omni Designer to manage projects.
7	Using the Input Data Model Editor	Describes how to use the Input Data Model Editor in Omni Designer to manage Input Data Models.
8	Using the Subject Editor	Describes how to use the Subject Editor in Omni Designer to manage Subjects.
9	Exporting and Importing Projects	Describes how to export and import projects in Omni Designer.
10	Content Types	Describes how to define and configure content types in Omni Designer.

	Chapter/Appendix	Contents
11	Using the Properties Tab	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.

Convention	Description
THIS TYPEFACE	Denotes syntax that you must type exactly as shown.
or	
this typeface	
this typeface	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.
<u>underscore</u>	Indicates a default setting.
Key + Key	Indicates keys that you must press simultaneously.
8	Indicates two or three choices. Type one of them, not the braces.
	Separates mutually exclusive choices in syntax. Type one of them, not the symbol.
	Indicates that you can enter a parameter multiple times. Type only the parameter, not the ellipsis ().
	Indicates that there are (or could be) intervening or additional commands.

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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.

Platform	
Operating System	
OS Version	

JVM Vendor	
JVM Version	

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

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

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

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Thank you, in advance, for your comments.

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Chapter

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 solutions with relative ease.
- □ No programming. The user interface guides you through complex activities without expecting you to enter 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 run-time metadata, and is organized differently. When a project bundle is deployed into runtime, the metadata is transformed into the run-time 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 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.



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.

🖨 Install		_	
Available Software Select a site or enter the location of a site.			
Work with: ⁰ bype or select a site	Find more software by working with the <u>"Ava</u>	✓ V	Add <u>es"</u> preferences.
type filter text			
Name Image: Select All Deselect All	Version		
Details			ŝ
Show only the latest versions of available software Group items by category Show only software applicable to target environment C Contact all update sites during install to find required software	✓ Hide items that are already installed What is <u>already installed</u> ?		
0	< Back Next >	Finish	Cancel

3. Click Add to add the installation file.

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

🖨 Add Re	epository	×
Name:		Local
Location:	jar:file:/C:/omnigen/eclipse-plugins/com.iwaysoftware.or	Archive
?	ОК	Cancel

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.

🖨 Install					
Available	Software				
Check the i	tems that you wish to install.				
Work with:	com.iwaysoftware.omni.designer.updatesite - jar:file:/C:/omnigen	/eclipse-plugins/com	.iwaysoftware.omni.d	lesigner.updates 🗸	Add
		Find more software	by working with the	"Available Software Site	<u>s"</u> preferences.
type filter te	đ				
Name		Version			
> 🗹 💷 🤇	Imni Designer				
Select Al	Deselect All 1 item selected				
Details					
					â.
Show only	the latest versions of available software	Hide items that a	re already installed		
Show only	is by category	what is <u>already ins</u>	caneo:		
Contact a	I update sites during install to find required software				
-					
?		< Back	Next >	Finish	Cancel
U.S.		Duck	THEAT P		Carroer

- 6. Click Select All to select all files that are required for the installation and then click Next.
- 7. On the Install Details pane opens, click Next.
- 8. On the Review Licenses pane, 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.



3. Click Installation Details.

The Eclipse Installation Details dialog box opens.

- 4. Select *Omni Designer Product* from the list of installed software and then click *Uninstall*. The Uninstall Details pane opens.
- 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.



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 plugin 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.

📧 Omni Desigr	ner Project			_		×
New Omni Designer Project						
😣 Project name	must not be empty					
Project name:						
Description:						^
						~
?			Finish		Cance	el

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: -n1 fr
 - □ For Spanish specify: -n1 es

Security	Detai	s	Previous Version	
General		rtcut	Compatibility	
Dom:	niDesigner - Sl	hortcut		
arget type:	Application			
arget location:	OmniDesigner			
arget:	\omnigen\Om	niDesigner\()mniDesigner.exe ·	
Start in: C:\omnigen\OmniDesigner				
hortcut key:	None			
Run:	Normal window \checkmark			
comment:				
Open File Loo	cation	hange Icon	. Advanced	

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.

🖲 Installierer	n	- 6	
Verfügbare Wählen Sie	Software die Elemente aus, die Sie installieren möchten.		
Work with:	epository - http://download.eclipse.org/technology/babel/upo	date-site/R0.13.1/kepler 👻 Hinzufü	gen
	Find more software by working with the <u>"W</u>	ebsites mit verfügbarer Software" pref	erences.
Filtertext ein	geben		
Name		Version	^
▷ □ 000 B ▷ □ 000 B △ □ 000 B	abel Language Packs for birt abel Language Packs for datatools abel Language Packs for eclipse B Babel Language Pack for eclipse in Albanian (0.1%)	4.3.0.~20151128095134	
	 Babel Language Pack for eclipse in Arabic (67.24%) Babel Language Pack for eclipse in Basque (54.42%) Babel Language Pack for eclipse in Basque (74.42%) 	4.3.0.v20151128095134 4.3.0.v20151128095134	
•	Babel Language Pack for eclipse in Bulgarian (0.46%) III	4.3.0.720151128095134	•

- 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.

÷	🕂 Create 🐹 Delete 🕆 Move Up 🕂 Move Down 🔗 Reset sorting					
	Required	Name	Data Type	Reference Value	Content Type	Description

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.



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
- 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:**
 - Deroject 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.
- □ The root item (Input Data Models) 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.

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.
- **u** 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.

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.



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

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 the Revert All Operations option, a confirmation message appears.

- **Delete.** This option removes a project and all of its content from the Omni Designer Project Explorer. After selecting the *Delete* option, a confirmation message appears.
- □ Import Project from XMI File. This option is used to import a project from an XMI file to the Omni Designer Project Explorer.

From the Open dialog box, select the XMI file with the exported project and click *Open*. The Omni Designer Project window opens.

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

A confirmation message displays.

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.

From the Open dialog box, select the XMI file with the exported project and click *Open*. The Omni Designer Project window opens.

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

A confirmation message displays.

□ Import Project from Release Bundle. This option is used to import projects from a Repository Service.

When you select this option, the Select a Repository Service dialog box open, where you will need to select a Repository Service.

Log in to the Repository Service, if not already connected.

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

Export Project. This option is used to export a project in an XMI file. The Save As dialog box opens.

The project name is predefined in the file name field. The At (@) character and version are 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 file name, and click Save.

A confirmation message appears.

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

□ **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.

□ **Properties.** This option will open Project Properties (Project Editor) on the General tab. Properties can also be opened by pressing the F3 key.

Context Menu Options for a Shared Project

The following list describes the additional context menu options that appear 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.

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.

Select a version to update your project to 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.



- **Other.** Creates a new branch or merges the version of the project with the created branch.
 - □ **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.

Rew Bra	nch	_		×
Branch				
Please ente	r a <mark>Branch n</mark> a	ame.		
Name:	[
Existing bra	nches for the	e current Project		
frunk v	,0	e current Project.		
?		Create	Cance	el 🛛

Type 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.

Merge with a Branch -		×
Branch selection		
Please select a Branch you want to merge into your Project.		
i∳ trunk v.1		
Merge	Cance	el

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

Generate Project Bundle. This option opens a dialog box to release a project. For more information, see Using the Repository Explorer on page 49.

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 image shows the context menu for the Input Data Models node.

📲 Project Explorer 🖾			
E	5	ui	
✓ → Project1 v.0 [trunk]			
💑 Input Data Models			
✓ 🗟 Project2	.	New Input Data Model	
💑 Input Data Models		Open	F3
	Ē	Paste	Ctrl+V
		Show History	
		Import from	>

The following list describes the context menu options.

- New 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.
- □ **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 the 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* icon. The Create Connection Profile dialog box opens, as shown in the following image.

💽 New Flat File Data S	ource Profile					100		×
Create Connection Enter the profile inform	Profile							\$
Name:	CVSImport							
Description (optional):								
				_				
(?)		< Back	Next >		Finish		Cance	el

Type 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.

📧 New Flat File Data So	ource Profile	12		×
Define Folder or a Select a folder that con	File URI tains the flat files or enter an URI for the flat file.			\$
Select home folder: Enter file URI:	C:\omnigen\OmniGenData\input\csv		Browse	2 ▼
Select <u>c</u> harset:	UTF-8			~
Select flatfile style:	CSV			~
 ✓ Use first line <u>a</u>s colun ☐ Use second line as <u>d</u>a ☐ Use trailing nu<u>l</u> colunt 	nn name indicator. ata type indicator. mns.	I	est Conne	ection
?	< <u>B</u> ack <u>N</u> ext > <u>F</u> i	nish	Cance	I

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

Context Menu Options for Specific Input Data Models

The following list describes the Input Data Models context menu options.

- **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 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.

Properties 🔄 History Browser 🛛			
History for Item			
Changes	Branches	Commit Message	Author and Date
 Scal revision IHEAD, HEAD: trunk, BASE] *Version 2 Version 1 Version 0 	o local trunk trunk trunk	non mastered data model non mastered data model Initial commit	[super @ 2020-02-06, 07:36] [super @ 2020-01-16, 12:14] [super @ 2020-01-10, 11:01]

Context Menu Options for a Subject

The following image shows the context menu options for a root subject.



The following image shows the context menu for a regular subject.

៉ៃ Project Explorer 🖾		E 🕏 🖻 🗸 🗖		
🗸 🗟 Project1				
🗸 💑 Input Data I	Mode	ls		
🗸 💑 Item				
🥥 ltem				
V 🗟 Project2 v.0 [tru	¢	New Subject		
ésé input butu i		Open		F3
		Rename		F2
		Сору		Ctrl+C
	Þ	Copy Single Element	C	Ctrl+Alt+C
	Ē	Paste		Ctrl+V
	-	Link Subject		
			1	

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

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.

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

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).

	Open	F3
	Rename	F2
of	Cut	Ctrl+X
Þ	Сору	Ctrl+C
Þ	Copy Single Element	Ctrl+Alt+C
Ē	Paste	Ctrl+V
×	Delete	Delete

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.
- □ 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).



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

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 Add Service icon is used to add a new repository server, as shown in the following image.

Add the De	signer Repository Servi	ce –		×
Designer Ro Specify Design	epository Service ner Repository Service o	Details letails.		
Name:	Service 1			
Protocol :	http 🗋			~
Host:	localhost			
Path:	com.iwaysoftwar	e.omni.designer.repo	sitoryservice	
Port :	9516	•		
?		Add Service	Cance	:1

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.

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

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 r	equired		×
Login to Reposit	tory Service sername and password.		
Username:	super		
Password:	•••••		
Save password:			
?	Login	Canc	el

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, *Project1*, and select *Delete Repository* from the context menu, a confirmation message appears.

Click OK to confirm.

A warning message appears, asking you to confirm the action.

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

Properties

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

📋 localhost 🛛	
General	
Name:	localhost
Protocol :	http ~
Host:	localhost
Path:	com.iwaysoftware.omni.designer.repositoryservice
Port :	9516

Connection properties for the selected repository server are displayed. To accept the changes you made in the dialog box, click outside of the active pane.

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
- Properties

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.

Groups Users	Project:	Project1			
Project1 [1] Project2 [0]	Name	Project1			
	Version:	1			
	Participants	5			
	Name	Description default server admin (superuser)	Role Server Admin		
			Add	Rem	ove

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.

📧 Import new	/ users				×
Choose you	r import source				
Choose your in	nport source.				
	t CSV file				
O cora anipor					
0	< Rack	Nevts	Finish	Canc	al
\odot	N DOCK	INEXL >	TIMSO	Canc	CI

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
- Delete

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, and so on).

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.

📧 Omni Design	er Project	_	- [×
Checkout Om	ni Designer Project				
Set name and d Project.	escription for checked out Om	ini Designer			
Project name:	Project3				
Description:				,	
	1				
					~
?		Checkout	(Cancel	

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, and so on).

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.

📧 Omni Desigr	ner Project					_		×
Checkout Bra	unch Omr	ni De:	signer	Proje	ct			
Set name and d Project.	escription	for che	cked out	Omni	Designer			
Project name:	Project3							
Description:								~
								~
?	< Back		Next >		Checkou	t	Cano	el

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.

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

Delete

The *Delete* context menu option allows you to delete a shared project from the selected repository server.

After you right-click a shared project, for example, *Customer*, and select *Delete* from the context menu, the Delete confirmation message appears.

Click OK.

A warning message appears, asking you to confirm your action.

Click OK again to confirm and delete the shared project from the repository server.

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 the following tabs:

General tab

Chapter

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 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 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.** The user connected to the repository service.
- **Create date.** The date and time when the release was generated.
- **Release notes.** Notes that were entered when the release bundle was generated.
- Status.
- □ **History.** The History link functions the same way as the History context menu option in Omni Designer Project Explorer.
- **Releasing.** Generates a project bundle to release the project.
- ❑ **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.

Generating Project Bundles

To generate a project 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.

Project Bundle Genera	ation	×
Release Number:		
Development Stage:	Alpha V 2	
Release Notes:	The next changes have been included in this release.	< >
	Generate Cancel	

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

If you have not generated a project 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 a message appears, as shown below:

Selected release number should be greater than existing one.

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 project bundle for your project.

A project bundle is generated for the current project. The Zip file with the project bundle is created in the repository defined in the Omni-Gen Installation Wizard step for the Source Code Management (SCM) repository type. 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 project bundle (for example, if you receive a *no connection to server* message), a dialog box with the corresponding error will appear. Error messages will also be displayed in the Error log.

If there are any uncommitted changes in the project, a warning message appears, and you will not be able to generate a project bundle.

Once you successfully share the project, the operation will proceed.

If a project contains a validation error, a warning 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 Model View Tab

Chapter

The Model View tab consists of a graphical tool component and a palette, as shown in the following 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
- 🛛 Сору
- 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 Subject Editor

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

Instance Model tab

The Instance Model tab displays 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 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.

+ (Create 💥 De	lete 🛛 😚 Move Up 🛛 🖓 Move Down	S Reset s	ort	ing			
	Required	Name	Data Type		Reference Value	Content Type		Description
1		item_name	Date	×		<empty> v</empty>	~	The typically used name for an item.
2		item_short_desc	String	v		<empty> v</empty>	~	The short textual description or name for an item.
3		item_long_desc	String	v		<empty> v</empty>	1	The long textual description for an item.
4		key_item_ind	Datetime	v		<empty> v</empty>	1	A Yes/No flag identifying whether ar products tracked by the company.
5		item_base_uom	String	¥		<empty> v</empty>	1	The standard/base unit of measure for a product.
6		item_base_price	Float	۷		<empty> v</empty>	1	The base price for a base unit of f measure of a product.
7		item_sku	String	٧		<empty> v</empty>	1	The stock keeping unit for a product.
8		item_barcode	String	۷		<empty> v</empty>	1	The bar code for a product.
9		item_gtin	String	۷		<empty> v</empty>	1	The global trade item number for a product.
10		item_eff_dt	Datetime	۷		<empty> v</empty>	1	The date that a product became effective.
11		item_eol_dt	Date	۷		<empty> v</empty>	1	The end of life date for a product.
12		item_base_cost	Float	۷		<empty> v</empty>	1	The base cost amount for an item.

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

- **Required.** Check box that is not selected, 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
- 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 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.** See Content Types.
- **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 buttons also appear:

- **Create.** Adds a new field.
- **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 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 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 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.



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.

ases							
elease number	Source	Version	User	Created date	Release notes	Status	
0.0.Alpha.0	trunk	0	super	Fri, 10 Jan 2020 11:01:43			
.0.Alpha.2	trunk	0	super	Thu, 16 Jan 2020 11:42:42			
0.0.Alpha.3	trunk	1	super	Thu, 16 Jan 2020 12:14:34			

General Release Management

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.


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.

÷	Create 🕱 Delete 🛛 😚 Move Up 🍕	ာ Move Down မြ	🎙 Reset sorting 📔 🦑 Update	Content Types		
	Name	Data Types		Description		
1	SSN	Integer	Data Type Selector	_		×
2	Lastname	String				_
3	Firstname	String	Data Type Selector			
			Select Data Types.			
			String			
			Integer			
			Long			
			Float			
			Double			
			Boolean			
			Date Date			
			Datetime			
			?	Finish	Cance	
			Ŭ			

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.

÷	Create 💥 De	elete 😚 Move Up 🛛 🕂 Move Down	🔗 Reset s	orti	ng			
	Required	Name	Data Type		Reference Value	Content Typ)e	Description
1		item_name	Date	¥		<empty></empty>	¥	 The typically used name for an item.
2		item_short_desc	String	\checkmark		<empty></empty>	¥	 The short textual description or name for an item.
3		item_long_desc	String	\checkmark			¥	 The long textual description for an item.
4		key_item_ind	Datetime	\mathbf{v}		<empty> Custom Content Type Lastname Custom Content Type Firstname a base unit of measure of a product.</empty>		tifying whether ar products tracked by the company.
5		item_base_uom	String	\checkmark				nt Type Lastname Int Type Firstname
6		item_base_price	Float	\checkmark				a base unit of of measure of a product.
7		item_sku	String	¥		<empty></empty>	¥	 The stock keeping unit for a product.
8		item_barcode	String	\checkmark		<empty></empty>	¥	 The bar code for a product.
9		item_gtin	String	\checkmark		<empty></empty>	¥	 The global trade item number for a product.
10		item_eff_dt	Date	\mathbf{v}		<empty></empty>	¥	 The date that a product became effective.
11		item_eol_dt	Date	\mathbf{v}		<empty></empty>	¥	 The end of life date for a product.
12		item_base_cost	Float	\mathbf{v}		<empty></empty>	¥	 The base cost amount for an item.

After generating a Project Bundle and deploying it to Omni-Gen, 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 Release Bundles Properties
- U Viewing Properties for the Server and Remote Projects

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 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.

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

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

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

Propertie	es 🛛		[] ~ □
	Version		^
General	✓ Info		
	Description		
	Name	Project2	
	✓ Versions		
	Contains changes	true	
	Current version	2	
	Last updated	Thu, 16 Jan 2020 11:41:08	
	Location	trunk	
	Shared	true	
			×
	<		>

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.

🔲 Properti	Properties 🕱							
General	Name:	1						
	Short Description:							
			~					
	Long Description:							
			× .					

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

□ Name. You can add a name for most entities.

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.
- **L** 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.

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 79.
- **Options.** The Options tab contains the following check boxes:
 - Required
 - Deprecated

🔲 Properties 🔀						
General	Required:	\checkmark				
Options	Deprecated:					
Туре						

Type. The Type tab contains the Data Type drop-down list and a Reference Value field, as shown in the following image.

□ Properties 🛛						
General	Data Type:	String	~			
Options	Max Length:					
Туре	Content Type:	<empty></empty>	~			

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:

Max Length. Optional numerical values only. Acceptable values are from 0 up to the max integer value of 2147483647.

Content Type. A drop-down provides access to the available Content Types.

□ **Integer.** If *Integer* is selected from the Data Type drop-down list, the following validation field appears:

Content Type. A drop-down provides access to the available Content Types.

□ **Long.** If *Long* is selected from the Data Type drop-down list, the following validation field appears:

Content Type. A drop-down provides access to the available Content Types.

□ **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.

Boolean. If *Boolean* is selected from the Data Type drop-down list, the following validation field appears:

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 field appears:

Content Type. A drop-down provides access to the available Content Types.

Datetime. If *Datetime* is selected from the Data Type drop-down list, the following validation field appears:

Content Type. A drop-down provides access to the available Content Types.

□ Identifier. If *Identifier* is selected from the Data Type drop-down list, then 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 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.

Project1	23							
Releas	Release Management							
Release	5							A History
			Difference berrier and a berrier					
Relea	se number	Source	Version	User	Created date	Release notes	Status	made in the Project.
								-
								Releasing
								Generate Project Bundle to release the Project.
								Versioning
								Source Commit to check in the changes to your
								version control.
								Update the Project to pull changes from repository.
								Update To Version to pull out concrete changes Prior to version for pull out concrete changes
								or Project version from repository.
								Create Branch to generate a separate sideline based on changes to be checked in.
								Merre With Pranch to combine surrent version
								with existing branch changes.
<								>
General Re	elease Manag	gement						
Properti	es 🛙							M V P E
General	Property					Value		
General	v Info							
	Description							
	Name		Project1					
	✓ Version	ns						
	Contains changes		false					
	- Cu	rrent version				1 Wed 12 Eek 2020 00:04:00		
	La	ration				wed, ic rep 2020 09/04/00		
	<					C. ST. T.		>

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 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.

	Propertie	s 🛙	
Ge	eneral	Property	Value
		✓ Info	
		Name	localhost
		URI	http://localhost:9516/com.iwaysoftware.omni.designer.repositoryservice

The following image shows the properties for the Remote Project.

🔲 Propertie	🔲 Properties 🛛 🔂 🔽 🗖							
General	Property Value							
	✓ Info							
	Description							
	Global Id	_vKCPAEjeEeqxcPD6KrVShQ						
	Name	Project1						

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

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