erwin Data Intelligence

Mapping Management Guide

Release v12.0
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Managing Mappings

Managing Mappings

This section walks you through managing source to target mappings in the Mapping Manager.

Mapping Manager is the core of erwin Data Intelligence (erwin DI), where you do the following:

- Source to target mappings using the Metadata Catalogue
- Associate crosswalks to mappings using the Code Mapping Catalogue
- Associate reference data to mappings using the Reference Table Catalogue
- Associate requirements to mappings using the Specification Artifact Catalogue
- Create new mapping versions
- Specify test cases

Once mappings are approved for coding, ETL developers can export them as coding requirements. They can also export the mappings to XML and automatically generate ETL/ELT jobs for ETL tools, such as Informatica PowerCenter, IBM DataStage, Microsoft SQL Server SSIS, and so on.

For further information on accessing and using the Mapping Manager, refer to the Using Mapping Manager topic.
Using Mapping Manager

To access the Mapping Manager, go to Application Menu > Data Catalog > Mapping Manager. The Mapping Manager dashboard appears:

### UI Section Function

1-Workspace Mappings
   - Use this pane to browse and work on projects and mappings.

2-Central Pane
   - Based on your selection in the browser pane, use this pane to view or work on the data.

3-Mapping Manager Dashboard
   - Use this pane to view statistics related to mappings and projects.

4-Published Mappings
   - Use this pane to view and export details of published mappings.

Managing mappings involves the following:

- Creating and managing mapping specifications
- Analyzing mappings
- Associating mappings
- Publishing and creating mapping versions
- Exporting mapping specifications
Creating and managing test cases for mappings
Viewing mapping manager dashboard
Creating and Managing Mapping Specifications

After defining systems and uploading metadata in the Metadata Manager, you can create mapping specifications. The Mapping Manager offers multiple ways to create mapping specifications. This section walks you through building metadata driven source to target mapping specifications and enterprise standards to manage them.

Creating and managing mapping specifications involves:

- Creating projects
- Defining transformations
- Creating maps
- Adding transformations and lookup details
- Updating mapping specifications manually
- Uploading mapping specifications in XML format
- Specifying XPath in mapping specifications
- Setting column order and column visibility
- Updating additional mapping information
- Branching and merging maps
- Deleting maps
- Viewing workflow logs
Creating Projects

Projects store and group maps in a hierarchy, Projects > Mappings. You can create an ETL tool-specific project and specify its details, such as project description, project manager, business sponsor, cost center, and IT sponsor.

To create projects, follow these steps:

1. Go to **Application Menu > Data Catalog > Mapping Manager**.

2. In the **Workspace Mappings** pane, right-click the **Projects** node.

![Create Project dialog](image)

3. Click **Create Project**.

   The Create Project page appears.
4. Enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field descriptions.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Name</td>
<td>Specifies the name of the project.</td>
</tr>
<tr>
<td></td>
<td>For example, Data Lake Migration.</td>
</tr>
<tr>
<td></td>
<td>For more information on naming conventions, refer to the Best Practices</td>
</tr>
<tr>
<td></td>
<td>section.</td>
</tr>
<tr>
<td>Description</td>
<td>Specifies the description of the project.</td>
</tr>
<tr>
<td></td>
<td>For example: The project contains the mapping specifications for the sales</td>
</tr>
<tr>
<td></td>
<td>data migration.</td>
</tr>
<tr>
<td>Project Manager Name</td>
<td>Specifies the project manager's name.</td>
</tr>
<tr>
<td></td>
<td>For example, John Doe.</td>
</tr>
<tr>
<td>Business Sponsor Name</td>
<td>Specifies the business sponsor of the project.</td>
</tr>
<tr>
<td></td>
<td>For example, ABC Consulting Services.</td>
</tr>
<tr>
<td>Project ETL</td>
<td>Specifies the ETL tool assigned to the project.</td>
</tr>
<tr>
<td></td>
<td>For example, Informatica Pseudocode.</td>
</tr>
<tr>
<td>Cost Center</td>
<td>Specifies the cost center of the project.</td>
</tr>
<tr>
<td></td>
<td>For example, Finance and Accounting.</td>
</tr>
<tr>
<td>IT Sponsor Name</td>
<td>Specifies the IT sponsor of the project.</td>
</tr>
<tr>
<td></td>
<td>For example, XYZ IT Services.</td>
</tr>
</tbody>
</table>
Creating Projects

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable display of Transformation without pseudocode</td>
<td>Specifies whether the transformation is displayed without pseudocode. Switch Enable display of Transformation without pseudocode on (✓) to display transformation without pseudocode.</td>
</tr>
</tbody>
</table>

5. Click **Save and Exit**.

A new project is created and added to the project tree.

Once a project is created, you can enrich it further by:

- **Adding supporting project documents**
- **Assigning users to the project**
- **Configuring extended properties**
- **Creating Tasks**
- **Creating subject areas**
- **Creating maps**
- **Tagging projects**

You can also manage a project by using the options available on right-clicking the project.

Managing projects involves:

- **Uploading legacy maps**
- **Export mappings**
- **Export change logs**
- **Viewing reports**
- **Sharing links**
- **Deleting projects**
- **Viewing workflows**
Adding Documents

You can add supporting documents, such as text files, audio files, video files, document links, and so on to a project.

To add documents to projects, follow these steps:

1. In the **Workspace Mappings** pane, click a project.
2. Click the **Project Documents** tab.
3. Click **+**. The Add Project Document page appears.
4. Enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field descriptions.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Name</td>
<td>Specifies the name of the physical document being attached to the project.</td>
</tr>
<tr>
<td></td>
<td>For example, Project Details.</td>
</tr>
<tr>
<td>Document Reference</td>
<td>Specifies the name of the reference document.</td>
</tr>
<tr>
<td></td>
<td>For example, Wikipedia pages.</td>
</tr>
<tr>
<td>Reference Number</td>
<td>Specifies the reference number of the reference document.</td>
</tr>
<tr>
<td></td>
<td>For example, KB_230145.</td>
</tr>
<tr>
<td>Document Owner</td>
<td>Specifies the document owner's name.</td>
</tr>
<tr>
<td></td>
<td>For example, John Doe.</td>
</tr>
<tr>
<td>Document Object</td>
<td>Drag and drop or use to browse and select the document.</td>
</tr>
<tr>
<td>Document Link</td>
<td>Specifies the URL of the document.</td>
</tr>
<tr>
<td></td>
<td>For example, <a href="https://drive.google.com/file/d/1/2sC2_SZIyeFKI70On-b5YkMBq4ptA7jh5/view">https://drive.google.com/file/d/1/2sC2_SZIyeFKI70On-b5YkMBq4ptA7jh5/view</a></td>
</tr>
<tr>
<td>Description</td>
<td>Specifies the description of the document.</td>
</tr>
<tr>
<td></td>
<td>For example: The document is to keep a record of description and data</td>
</tr>
<tr>
<td></td>
<td>dictionary of the system.</td>
</tr>
<tr>
<td>Approval Required Flag</td>
<td>Specifies whether the document requires approval or not.</td>
</tr>
<tr>
<td></td>
<td>Select the <strong>Approval Required Flag</strong> check box to select the document</td>
</tr>
<tr>
<td></td>
<td>status.</td>
</tr>
<tr>
<td>Document Status</td>
<td>Specifies the status of the document.</td>
</tr>
<tr>
<td></td>
<td>For example, In Progress.</td>
</tr>
<tr>
<td></td>
<td>Select the status of the document from the drop down. This field is</td>
</tr>
<tr>
<td></td>
<td>available only when the <strong>Approval Required Flag</strong> check box is selected.</td>
</tr>
</tbody>
</table>

5. Click 

The project document is saved in the Project Documents Grid.
Once a supporting document is added, use the following options:

**Information (ℹ️)**

Use this option to view the document information.

**Download (⬇️)**

Use this option to download the document.

**Edit (✏️)**

Use this option to update the document details.

**Delete (✗)**

Use this option to delete the document that is not required.
Assigning Users

You can assign one or more members of your team to a project. Team members assigned to a project have write access to all mappings under it. Ensure that the roles assigned to the users have the required permissions.

To assign users, follow these steps:

1. In the **Workspace Mappings** pane, click a project.
2. Click the **Project Users** tab.

   The Project Users page appears.

3. Click 

   The Assign Project Users page appears.

4. Select user IDs under User ID list-box and move them to Assigned Users list-box using the arrows ( or ). Similarly, to change existing user assignment, select user IDs
Assigning Users

under Assigned Users list-box and move them back to User ID list-box using the arrows (← or →).

You cannot assign users with Administrator role to projects.

5. Click 📋.

The selected users are assigned to the project.

Use the following options to work on the project users list:

Information (ℹ️)

Use this option to view project user details, such as telephone number, company, and the assigned responsibility.

Edit (📝)

Use this option to update project user details, such as assigned role and assigned responsibility.

Delete (❌)

Use this option to remove a user from the project users list.
Assigning Roles

You can assign one or more roles to a project. Users assigned to these roles get write access to all the mappings in the project. Ensure that the roles have the required permissions to access the Mapping Manager.

To assign roles, follow these steps:

1. In the **Workspace Mappings** pane, click a project.
2. Click the **Project Roles** tab.

   The Project Roles page appears.

3. Click ![+](https://example.com). The Assign/Unassign Roles page appears.
4. Select the required roles.

5. Click 🗂️.

The selected roles are assigned to the project.

You can view the users assigned to roles. To view Role Users, click View.

For example, the following Role Users page displays the users assigned to the Data Owner_RO role.
## Assigning Roles

<table>
<thead>
<tr>
<th>User ID</th>
<th>User Full Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ksriddhar</td>
<td>Kartik Sridhar</td>
</tr>
<tr>
<td>srahim</td>
<td>Syed Rahim</td>
</tr>
</tbody>
</table>
Configuring Extended Properties

You can configure user-defined project properties under the Extended Properties tab. First, you need to set up a form and then use it to configure the user-defined extended properties.

To configure extended properties of projects, follow these steps:

1. In the **Workspace Mappings** pane, click a project.
2. Click the **Extended Properties** tab.
3. Click **Configure**.
Configuring Extended Properties

The Extended Properties Configuration page contains the following sections:

- **Field Controls**: Use this pane to get the required UI elements.
- **Configure Form**: Use this pane to design forms using the UI elements available in the Field Controls pane.
- **Properties**: Use this pane to view the properties of the UI element selected in the Configure Form pane.

4. Click **Edit**. Then, double-click or drag and drop the required UI elements from the Field Controls pane to the Configure Form pane.

5. Select UI elements, one at a time, and configure their properties in the Properties pane.

![Extended Properties Configuration](image)

The available properties differ based on the type of UI element.

Refer to the following table for property descriptions:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Published</td>
<td>Switch <strong>Published</strong> to <strong>ON</strong> to publish the field.</td>
</tr>
<tr>
<td>Field</td>
<td>Specifies the field label.</td>
</tr>
</tbody>
</table>
### Configuring Extended Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td>Specifies the type of the field.</td>
</tr>
<tr>
<td></td>
<td>To select field types, double-click the corresponding <strong>Value</strong> cell.</td>
</tr>
<tr>
<td></td>
<td>For example, Date Picker.</td>
</tr>
<tr>
<td><strong>Dependencies</strong></td>
<td>Defines the pick list that can be used as controlling fields. It works only with the Reference Data Manager connector.</td>
</tr>
<tr>
<td></td>
<td>To define pick list, select the fields from the drop down option.</td>
</tr>
<tr>
<td><strong>Configure Values</strong></td>
<td>Specifies the connectors for the field.</td>
</tr>
<tr>
<td></td>
<td>To enter option values, click <strong>Configure Values</strong>.</td>
</tr>
<tr>
<td></td>
<td>Use the following options:</td>
</tr>
<tr>
<td></td>
<td>▪ <strong>Default connector</strong>: Use this option to enter option values manually or using an MS Excel file.</td>
</tr>
<tr>
<td></td>
<td>▪ <strong>Reference Data Manager</strong>: Use this option to pull option values from reference tables in the Reference Data Manager.</td>
</tr>
<tr>
<td><strong>Mandatory</strong></td>
<td>Specifies whether the field is mandatory.</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Specifies the field description.</td>
</tr>
<tr>
<td></td>
<td>To enter field descriptions, double-click the corresponding <strong>Value</strong> cell.</td>
</tr>
<tr>
<td><strong>Visible in Extended Properties</strong></td>
<td>Switch <strong>Visible in Extended Properties</strong> to ON to make it visible on the Extended Properties tab.</td>
</tr>
<tr>
<td><strong>Order</strong></td>
<td>Specifies the order of the field on the Extended Properties tab.</td>
</tr>
<tr>
<td></td>
<td>To enter the order number, double-click the corresponding <strong>Value</strong> cell.</td>
</tr>
<tr>
<td></td>
<td>You can also drag and move fields in the Configure Form pane to change their order.</td>
</tr>
</tbody>
</table>

6. Click **Save**.

The form is saved, and is available on the **Extended Properties** tab.
Configuring Extended Properties

You can download extended properties in the XLSX format and use it as a template to import extended properties. To download extended properties, on the Extended Properties tab, click Export To Excel.
Default Connector

When you configure extended properties using UI elements, such as combo box, radio button, and list, you also need to configure their option values. You can use the default connector to import option values from an MS Excel file or enter them manually.

To configure option values using the default connector, follow these steps:

1. In the **Configure Form** section, click the required UI element.
   
   Ensure that you are in edit mode.

2. In the **Properties** section, click **Configure**.
   
   The Connectors page appears.

3. On the **Connectors** page, ensure that the Default Connector option is selected. Then, click **Next**.
   
   The `<UI_Element> Options page appears. For example, if the UI element is Combo Box, the Combo Box Options page appears.
4. Use the following options:

**Add**

Use this option to enter text and value manually.

**Import Excel**

Use this option to import options from MS Excel files.

5. After configuring option values, click Save.

To add option values manually, follow these steps:

1. Click Add.

2. Enter values to the Text and Value fields.
   
The Text corresponds to options whereas the Value corresponds to underlying value of an option. You can add as many values as needed.
3. Click **Save**.

The option values appear in the UI element under the Configure Form section.

To import option values from MS Excel files, follow these steps:

1. Click **Import Excel**.

   The Upload Excel page appears.
2. Click **Choose File** and select the required MS Excel file.

The Upload Excel page appears. It displays the data in the MS Excel file.

![Upload Excel](image)

**Note**: 1. Empty FIELD pairs are ignored.
    2. Duplicate FIELD pairs are ignored.
    3. Slash(\) FIELD pairs are ignored.
    4. FIELD pair with more than 200 characters are ignored.

3. Double-click the **Select Column To Import** cell in the required column.

The available options appear.

![Select Column To Import](image)
4. Select the appropriate option.

Field corresponds to options and Value corresponds to value of an option. You can import multiple columns. Use Clear Selection to undo the selection.

5. Click 🔄.

The <UI_Element> Options page appears. It displays the imported columns. You can delete a row that is not required. To delete rows, click a row and then click Delete.

6. Click Save.

The option values appear in the UI element under the Configure Form section.
Reference Data Manager

When you configure extended properties using UI elements, such as combo box, radio button, and list, you also need to configure their option values. You can use the Reference Data Manager connector to import option values from tables in the Reference Data Manager.

To configure option values using reference data manager connector, follow these steps:

1. In the **Configure Form** section, click the required UI element.
   Ensure that you are in edit mode.

2. In the **Properties** section, click **Configure**.
   The Connectors page appears.

3. On the **Connectors** page, click **Reference Data Manager** and then click **Next**.
   The Reference Data Manager page appears. It displays the reference folders in the Connector View pane.
4. In the **Connector View** pane, expand a reference folder and select a reference table.

The Parameters pane displays the columns in the reference table. You can also click Preview to view the data in the reference table.
5. In the **Parameters** pane, click the radio button next to the required column. You can select the controlling field from the drop down option. Ensure that you define the required dependencies in the Properties pane and that the option values for controlling field are configured using the same reference column.

6. Click **Finish**.

The Extended Properties Configuration page appears.
7. Under the **Properties** section, switch **Load on Startup** to **ON**.

8. Click **Save**.

The option values are configured. For example, in the following form the List of Cities is the controlling field for Selected City. Both the fields get their option values from the same reference column.
Importing from Excel

You can import user-defined project properties from an XLSX file. You can either use an existing XLSX file or download an extended properties file from a project. Ensure that the XLSX file follows the correct template.

To import extended properties from XLSX files, follow these steps:

1. On the **Extended Properties** tab, click **Import From Excel**.
   The Upload Excel page appears.

2. Click **Choose File**.

3. Browse and select the XLSX file.

4. Click ✆.
   The Upload Excel page appears. It displays the data in the XLSX file.

5. Double-click the **Select Column To Import** cell in the required column.
   The available options appear.
6. Select an appropriate option.
   
   For example, if you select Field, then the selected column is imported as Field.
   
   Similarly, you can also select the Value, Type, and Parentfield columns. Ensure that you at least select a Field column.

7. Click ✿.

   The extended properties are imported.
Adding Tasks

To improve productivity and collaboration, you can create tasks related to mapping projects. These tasks may be to-do tasks, access requests, or issues. With Action Center Settings, you can manage task types.

To add tasks, follow these steps:

1. In the **Workspace Mappings** pane, click a project.
   
   The Mapping Summary page appears.

![Mapping Summary](image)

2. Click the **My Action Center** tab.
   
   The My Action Center tab opens. It displays a list of all tasks related to the project.
3. Click 📌.

A list of task types appears. You can add or delete a task type from this list using **Action Center Settings**.

4. Click the required task type.

The Create New Task page appears.
5. Enter appropriate values in the fields. Refer to the following table for field descriptions.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task is being created on Asset</td>
<td>Specifies the asset for which the task is created. This field autopopulates with the project name.</td>
</tr>
<tr>
<td>With Task Type as</td>
<td>Specifies the task type. For example, To do Task.</td>
</tr>
<tr>
<td>Name</td>
<td>Specifies the name of the task. By default, it autopopulates with a name in the fol-</td>
</tr>
</tbody>
</table>
Adding Tasks

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>following format: Project_&lt;Project_Name&gt;. You can edit it and rename the task. For example, Test Mappings.</td>
</tr>
<tr>
<td>Description</td>
<td>Specifies a description of a task. For example: Test all the mappings and record the effort required.</td>
</tr>
<tr>
<td>Important</td>
<td>Specifies whether the task is important</td>
</tr>
<tr>
<td>Due</td>
<td>Specifies the due date of the task. Use ☐ to set the due date.</td>
</tr>
<tr>
<td>Assign Users</td>
<td>Specifies the users assigned to the task. You can assign DI and BU users from the list. For example, Richard Cooper.</td>
</tr>
<tr>
<td>External user emails</td>
<td>Specifies the email ID of external users. For example, <a href="mailto:chris.harris@quest.com">chris.harris@quest.com</a></td>
</tr>
</tbody>
</table>

6. Click ☐.

The task is created and saved. Use ☐ to edit the task details and attach relevant documents.

**Chat**

Use the Chat tab to send messages to the assigned and external users of a task.

On the Chat tab, enter your message in the text box and use the following options:

**Assigned**

Use this option to send messages to the assigned users.

**External Users**

Use this option to send messages to external users.

Users are notified via Messaging Center.
### Adding Tasks

You can manage a task using the options available on the task list. **Managing a task** involves:

- Marking tasks complete
- Viewing task details
- Editing task details
- Disabling notifications
- Downloading Chat
- Sharing chat
- Marking tasks as pending
- Deleting tasks

With the My Action Center tab, you can filter and search tasks based on its status and assignments. For more information on search and filter mechanisms, refer to the **Filter and Search** topic.

### Configuring Task Types

You can configure task types to categorize tasks. By default, three task types, To-Do Task, Request Access, and Issue are available. You cannot edit or delete these task types.

To configure task types, follow these steps:

1. In the utility section, click ![Task Management Icon]

   The Task Type Configuration pane appears. It displays a list of available task types.
2. In the Add New Task Type box, enter a new task type in the space provided and click +.

The task type is added in the list of available tasks.
For example, in the following image, a task type, Schedule Job is added.
Use the following options to manage task types:

**Edit (✏️)**

Use this option to edit the task type.

**Delete (🗑️)**

Use this option to delete a task type.
Managing Tasks

Managing tasks involves:

- Marking tasks complete
- Viewing task details
- Editing task details
- Disabling notifications
- Downloading Chat
- Sharing chat
- Marking tasks as pending
- Deleting tasks

To mark tasks complete, on the task list, for the required task, click the radio button.

The task is moved to the list of completed task.

For example, in the following image, the task, Add Business rule is marked complete.

To manage tasks, follow these steps:

1. In the task list, for the required task, click ✅.

   The available options appear.
2. Use the following options to work on tasks:

**View Task Details**

Use this option to view task details. These details include task name, description, assigned assets, attached documents, and so on.

**Edit Task Details**

Use this option to update task details.

**Disable Notification**

Use this option to stop receiving notifications related to a task. By default, notifications are enabled, and users assigned to task receive notifications.

**Download Chat as Text**

Use this option to download chat related to a task in the TXT format.

**Send Chat as Email**

Use this option to share the chat related to a task via an email. Click **Send Chat as Email**.

The Email Selection page appears. It displays a list of users assigned to the task.
Select the required users, and then click 💌. An email is sent to the selected users.

**Mark as Pending**

This option is available for a completed task. Use this option to mark a task as pending.

To delete a task, in the task list, for the required task, click 🗑.

 lett You can delete a task only if you have created the task.
Creating Subject Areas

Subject areas provide one more level of grouping for mapping specifications. You can create a subject area within a project or within another subject area. Ensure that the subject area names are unique under each project.

Subject Areas

To create subject areas, follow these steps:

1. In the Workspace Mappings pane, right-click a project.

2. Click New Subject Area.

The Add Subject page appears.
3. Enter the **Subject Name** and **Subject Description**.

   For example:

   - **Subject Name**: Members.
   - **Subject Description**: This subject area is created to arrange the mappings logically.

   You can use additional fields and define UI labels in [Language Settings](#).

4. Click ![Enter](#).

   The subject area is saved and added to the project.

**Nested Subject Areas**

You can create subject areas within another subject area. These subject areas are called nested subject areas.

To create nested subject areas, follow these steps:
Creating Subject Areas

1. In the **Workspace Mappings** pane, right-click a subject area.

2. Click **New Subject Area**.

   The Add Subject page appears.
3. Enter the **Subject Name** and **Subject Description**.

   You can use additional fields and define UI labels in Language Settings.

4. Click ![Add Subject]

   A subject area is created under the subject area.

   Once a subject area is created, you can enrich it further by Tagging Subjects.
Managing Subject Areas

Managing subject areas involves:

- Deleting
- Reordering

To manage subject areas, follow these steps:

1. In the **Workspace Mappings** pane, right-click a subject area.

![Workspace Mappings Pane]

2. Use the following options:

**Delete Subject Area**

Use this option to delete subject areas that are not required.

**Reorder Subject Areas**

Use this option to reorder subject areas. To reorder subject areas, click **Reorder Subject Areas**.

The Subject for `<Project_Name>` page appears.
Managing Subject Areas

To order subject areas, from the **Order By** list, select one of the following options:

- **Ascending Order**: Select this option to order in ascending alphabetical order.
- **Descending Order**: Select this option to order in descending alphabetical order.
- **Custom Order**: Select this option to order in custom order.

To sort subject areas, from the **Sort Subjects By** list, select one of the following options:

- **Subject Name**: Select this option to sort by subject name.
- **Created By**: Select this option to sort by the users who created subject areas.
- **Created Date**: Select this option to sort by created date.
- **Modified By**: Select this option to sort by the users who modified subject areas.
- **Modified Date**: Select this option to sort by the modified date.
Managing Projects

Managing projects involves:

- Uploading legacy maps
- Export mappings
- Export change logs
- Viewing reports
- Sharing links
- Deleting projects
- Viewing workflows

To manage projects follow these steps:

1. In the **Workspace Mappings** pane, right-click a project.

   The available options appear.
2. Use the following options:

   **Upload Legacy Maps**
   Use this option to upload maps in the XLSX format. Ensure that you use the required template.

   **Export All**
   Use this option to download the required maps in a project.

   **Export Change Log**
   Use this option to download change logs of all the maps in a project.

   **Reports**
   Use this option to download various reports related to a project.

   **Share Link**
   Use this option to share link of a project with your team members.

   **Delete Project**
   Use this option to delete a project.

   **View Workflow**
   Use this option to view workflow status of a project.
Defining Transformations

Transformations specify rules that derive values from source columns to get the required values in target columns. You can define enterprise-level and project-level transformations. These transformations can be used as business rules and extended business rule transformations in mapping specifications. Ensure that you define transformations for the same ETL option as that of your mapping project.

To define transformations, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, click any one of the following:
   - **Transformations node**: Click this option to define enterprise-level transformations.
   - **Transformations node under a project**: Click this option to define project-level transformations.

For example, if you click the Transformations node, then the Transformation Details page appears.

3. Click .

The Transformation Rule Editor page appears.
4. Enter or select appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field descriptions.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Published</td>
<td>Switch <strong>Published</strong> on to publish the transformation.</td>
</tr>
<tr>
<td>Transformation Name</td>
<td>Specifies a unique name of the transformation. For example, ASCII.</td>
</tr>
<tr>
<td>Scope</td>
<td>Specifies the projects to which the transformation can be applied. For example, All Projects.</td>
</tr>
<tr>
<td>ETL Option</td>
<td>Specifies the ETL option. For example, Informatica Pseudocode. You can configure ETL option list and add or remove an ETL option from the list.</td>
</tr>
</tbody>
</table>
### Defining Transformations

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replace Transformation Name with Pseudocode</td>
<td>Switch <strong>Replace Transformation Name with Pseudocode</strong> on ( ) to replace the transformation name with pseudocode.</td>
</tr>
<tr>
<td>Pseudocode</td>
<td>Specifies the pseudocode for the transformation. Enter a pseudocode or use Ctrl + Space keys to select a pseudocode. For example, To_date(mm/dd/yyyy,1231,9999).</td>
</tr>
<tr>
<td>Intended Use</td>
<td>Specifies the objective of the transformation. For example: Data governance rule - use on projects.</td>
</tr>
</tbody>
</table>

5. Click ![Submit button](submit_icon.png).

A new transformation is added on the Transformations Details page.

You can upload transformations in bulk using an MS Excel file.

Once a transformation is defined, you can manage it using the options available on right-clicking the transformation. Managing Transformations involves:

- Editing transformations
- Running impact analysis
- Viewing history
Configuring Transformation Library

You can create transformations for the following ETL options:

- DataStage Pseudocode
- BODS Pseudocode
- SSIS Pseudocode
- Informatica Pseudocode
- ODI Pseudocode
- Talend Pseudocode

This ETL options list forms the Transformation Library and is configurable. You can add or remove an ETL option from the ETL options list.

To configure transformation library, follow these steps:

1. In the **Workspace Mappings** pane, click the **Transformations** node.
   
   The Transformation Details page appears.

2. Click 📸.

   The ETL Settings page appears.
3. Switch an `<ETL_Option>` key to ON to add the corresponding ETL option to the Transformation Library.

   For example, switch **BODS Pseudocode** to ON to add BODS Pseudocode to the Transformation Library.

4. Click Save.

   ETL options are added to the ETL Option list.
Configuring Transformation Library

Transformation Rule Editor

Published
OFF

Transformation Name*

Scope
All Projects

ETL Option
BODS Pseudocode
SSIS Pseudocode
Informatica Pseudocode
ODI Pseudocode
Talend Pseudocode

Pseudocode

Intended Use

Note: Press 'Ctrl + Space' to select Transformations
Uploading Transformations

Uploading Transformations

You can upload transformations in bulk using an MS Excel file. You can either use an existing MS Excel file or a template to upload transformations. Ensure that the MS Excel file follows the correct template.

To upload transformations, follow these steps:

1. In the **Workspace Mappings** pane, click the **Transformations** node. The Transformation Details page appears.

2. Click **Upload**. The Upload Transformations page appears.

3. Drag and drop or use **folder icon** to browse and select the MS Excel file. You can use a template to upload transformations. For more information on downloading templates, refer to the **Downloading Templates** section.

4. Click **Upload**. The file is uploaded, and transformations are added to the Transformation Details page.
Uploading Transformations

Downloading Templates

To download templates, follow these steps:

1. In the **Workspace Mappings** pane, right-click the **Transformations** node.

2. Click **Download Template**.

   The template is downloaded in the XLSX format. You can update the MS Excel file with the required transformations.
Managing Transformations

Managing transformations involves:

- Editing transformations
- Deleting transformations
- Running impact analysis
- Viewing history

To manage transformations, follow these steps:

1. In the **Workspace Mappings** pane, click the **Transformations** node.

   The Transformation Details page appears.

2. Select the required row and right-click it.

   The available options appear.
3. Use the following options:

**Edit Transformation Details**
Use this option to edit transformation details, such as transformation name and its scope.

**Delete**
Use this option to delete the selected transformation.

If a transformation is already used in a Mapping Specification, it is still visible under it. However, it is not available for future use.

**Impact Analysis Report**
Hover over Impact Analysis Report and use the following options to view impact analysis of transformations:

**Default Search**: Use this option to view the impact analysis report of the selected transformation.

**Advanced Search**: Use this option to select multiple transformations and view their impact analysis report.

For example, the following image displays the impact analysis of a transformation.
History

Use this option to view activity logs of a transformation. For example, the following image displays the history of a transformation.
<table>
<thead>
<tr>
<th>#</th>
<th>Transformation Name</th>
<th>Pseudocode</th>
<th>Intended Use</th>
<th>Created By</th>
<th>Created Date Time</th>
<th>Last Modified By</th>
<th>Last Mod Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FLOOR</td>
<td></td>
<td>ETL Built-In Transformation: Record handling and processing role for all projects. Return the largest integer less than or equal to the numeric value you pass to this function. For example, if you pass 3.14 to FLOOR, the function returns 3. If you pass 3.98 to FLOOR, the function returns 3. Likewise, if you pass -3.17 to FLOOR, the function returns -4.</td>
<td>Administrator</td>
<td>2018-09-14 10:39:48,937</td>
<td>Administrator</td>
<td>2020-16:23</td>
</tr>
</tbody>
</table>
Creating Maps

You can create maps under a project or subject area. You can perform source to target mappings and create mapping specifications in maps. These mapping specifications facilitate your data integration project.

To create maps, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, right-click a project or subject area.
   For example, when you right-click a project the available options appear.

3. Click New Map.
   The Create a New Mapping page appears.
4. Enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field descriptions.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mapping Name</td>
<td>Specifies the mapping specification name.</td>
</tr>
<tr>
<td></td>
<td>For example, EDW_PROD_IDS_Benefits_Detail.</td>
</tr>
<tr>
<td></td>
<td>For more information on naming conventions, refer to the Best Practices section.</td>
</tr>
<tr>
<td>Mapping Version</td>
<td>Specifies the version of the mapping specification.</td>
</tr>
<tr>
<td></td>
<td>This field is autopopulated.</td>
</tr>
<tr>
<td></td>
<td>For example, 1.00.</td>
</tr>
<tr>
<td></td>
<td>For more information on configuring version display of maps, refer to the Configuring Version Display topic.</td>
</tr>
<tr>
<td>Sync Source</td>
<td>Specifies whether source metadata syncs with the mapping.</td>
</tr>
</tbody>
</table>
Creating Maps

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metadata</td>
<td>Switch <strong>Sync Source Metadata</strong> to <strong>ON</strong> to sync source metadata with the mapping.</td>
</tr>
<tr>
<td>Sync Target Metadata</td>
<td>Specifies whether target metadata syncs with the mapping.</td>
</tr>
<tr>
<td></td>
<td>Switch <strong>Sync Target Metadata</strong> to <strong>ON</strong> to sync target metadata with the mapping.</td>
</tr>
<tr>
<td>Mapping Description</td>
<td>Specifies the description of the mapping.</td>
</tr>
<tr>
<td></td>
<td>For example: This is a map between EDW source and IDS target systems.</td>
</tr>
<tr>
<td>Mail Comments</td>
<td>Specifies the mail comments, which can be sent to the project users through an email notification.</td>
</tr>
<tr>
<td></td>
<td>For example: Source and target have identical columns, hence they can be mapped using auto-map technique.</td>
</tr>
<tr>
<td></td>
<td>For more information on configuring notifications, refer to the <a href="#">Configuring Notifications</a> topic.</td>
</tr>
</tbody>
</table>

5. Click **Finish** or **Proceed with Auto Map**.

When you click Finish, a map is created and saved in the mappings tree. You can create a mapping specification under the map using **drag and drop method** or **graphical design**.
When you click Proceed with Auto Map, you can create mapping specification using auto-map technique.
Also, You can assign one or multiple tags to maps. For more information on tagging maps, refer to the Tagging Maps topic.
Drag and Drop

You can map source metadata with target metadata and create mapping specifications using the drag and drop method. This method is useful even when source column names are different from target column names. After mapping source to target, you can set the target update strategy and enter a description about the strategy.

Creating Mapping Specifications

To create mapping specifications using drag and drop method, follow these steps:

1. In the **Workspace Mappings** pane, click a map.

   By default, the Mapping Specification tab opens.

   ![Mapping Specification grid]

2. Click 🇧🇷.

   You can now edit the Mapping Specification grid.

3. Drag source table or column from the **Metadata Catalogue** pane and drop in the **Mapping Specification** grid.

   Ensure that you drop source tables or columns under the respective columns.

   You cannot drop source systems or environments in the Mapping Specification grid.

Ensure that you drop target tables or columns under the respective columns.

You cannot drop target systems or environments in the Mapping Specification grid.

5. Click ✪. The mapping specification is saved.

Setting Target Update Strategy

To set the target update strategy, follow these steps:

1. Expand the Additional Mapping Information pane.

   This pane is available at bottom of the central pane when you click a map in the Workspace Mappings pane.

2. Click the Target Update Strategy tab.
3. Click 🔍.

4. Click the required strategy, enter **Update Strategy Description**, and click ✗.

The target update strategy is set.

You can enrich a mapping specification by:

- Adding transformation and lookup details
- Associating code cross walks (code mappings)
- Associating reference tables
- Linking requirements

After creating a mapping specification, you can analyze a mapping specification. **Analyzing mapping specifications** involves:

- Generating virtual preview of target
- Previewing data
- Performing table gap analysis
- Performing column gap analysis
- Running impact analysis
- Running lineage analysis
- Running end to end lineage
Drag and Drop

- Opening business view
- Viewing mapping statistics
Graphical

You can use the Graphical Designer tab to map source metadata with target metadata and create mapping specifications. This method is useful even when source column names are different from target column names.

After mapping source to target, you can set the target update strategy and enter a description about the strategy.

Creating Mapping Specifications

To create mapping specifications graphically, follow these steps:

1. In the **Workspace Mappings** pane, click a map.

   By default, the Mapping Specification tab opens.

   ![Mapping Specification Tab](image)

2. Click the **Graphical Designer** tab.

   The following page appears.

   ![Graphical Designer Tab](image)

3. Click 📐.
4. Drag source table from the **Metadata Catalogue** pane and drop on the **Graphical Designer** tab.

5. On the **Graphical Designer** tab, click the source table and specify it **As Source**.

6. Drag target table from the **Metadata Catalogue** pane and drop on the **Graphical Designer** tab.

7. On the **Graphical Designer** tab, click the target table and specify it **As Target**.
8. Use the following options to map source with target:

- If the source and target have same column names, click **Auto Map**.

The source and target columns are mapped.

- If the source and target have different column names, then drag your mouse from a source column to the required target column.

The source and target columns are mapped.

9. Click **Save**.

The mapping specification is saved.
Graphical

**Setting Target Update Strategy**

To set the target update strategy, follow these steps:

1. Expand the **Additional Mapping Information pane**.
   
   This pane is available at bottom of the central pane when you click a map in the Workspace Mappings pane.

2. Click the **Target Update Strategy** tab.

3. Click .

4. Click the required strategy, enter **Update Strategy Description**, and click .

   The target update strategy is set for the mapping specification.

You can enrich a mapping specification by:

- Adding transformation and lookup details
- Associating code cross walks (code mappings)
- Associating reference tables
- Linking requirements

After creating a mapping specification, you can analyze a mapping specification. Analyzing mapping specifications involves:

- Generating virtual preview of target
- Previewing data
Graphical

- Performing table gap analysis
- Performing column gap analysis
- Running impact analysis
- Running lineage analysis
- Running end to end lineage
- Opening business view
- Viewing mapping statistics
Auto-Map

Starting erwin Data Intelligence (erwin DI) v12.0, you can use the auto-map feature to create mapping specifications even when source and target column names do not match. With this feature, you can view recommended matches for a source column and select the most appropriate target column.

Creating Mapping Specifications

To create mapping specifications using auto-map, follow these steps:

1. In the **Workspace Mappings** pane, right-click a project or subject area.
   The available options appear.
   
   ![Workspace Mappings with New Map option]

2. Click **New Map**.
   The Create New Mapping page appears.
3. Enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. For field description, refer to the Creating Maps topic.

4. Click Proceed with Auto Map.

The Auto Map Source & Target Objects page appears.

5. Drag the target table from the Metadata pane and drop it in the Target Object(s) box. You can add more than one target tables.
6. Drag source table from the Metadata pane and drop it in the **Source Object(s)** box.

You can add more than one source tables.

7. Click 🔄.

The Auto Mapping Preview Grid displays a list of recommended matches (target columns) for each source column based on maximum matching score. In case the recommended match is not suitable, you can evaluate more recommendations and **assign targets manually**.
8. Use the following options to manage the auto-map recommendations:

**Ranking Threshold**
Use this option to set the threshold for match scores. Matches with scores below this threshold do not appear as recommendations. By default, it is set at \( \geq 50\% \), which means that matches with scores below 50\% are not recommended.

**Number of Recommendations**
Use this option to limit the number of recommendations. By default, it is set to \( \leq 50 \), which means that number of recommended matches cannot exceed 50.

**Maximize (🗹)**
Use this option to maximize or minimize the Auto Mapping Preview Grid.

**Delete Orphan Sources (🗑️)**
Use this option to delete source attributes that are not mapped.

**Delete Orphan Targets (🗑️)**
Use this option to delete target attributes that are not mapped.
**Auto-Map**

**Add Transformations**

Use this option to add transformations for the auto map. You can add business rule, extended business rule transformation, look up reference column, lookup on, and trans look up condition.

**Add Group**

Use this option to add a mapping group to perform other mappings.

**Rename Mapping Group**

Use this option to rename a mapping group.

**Delete Group**

Use this option to delete a mapping group. To delete a mapping group, click the mapping group and then click **Delete Group**.

**Create a distinct Mapping for every Group**

Use this option to create distinct mapping for every group.

9. **Click Finish**.

A new map is created and saved under the Mappings tree. All the auto-maps in the multiple mapping groups appear in the same sequence in the Mapping Specification grid.

![Mapping Specification grid](image)

**Assigning Targets Manually**
Auto-Map

In the Auto Mapping Preview Grid, the **Total Recommendations** column displays the number of mapping recommendations. To view the recommendations for required rows, click the corresponding number.

The Total Recommendations on page appears. It displays the recommended matches for the source column. By default, a match with the highest score is selected.

For example, the following image displays the recommended matches for a source column, EmployeeID.

You can reject the default match and select another recommended match. To select a match, click the required radio button, and then click **Assign As Target**.

### Setting Target Update Strategy

To specify target update strategy, follow these steps:

1. Expand the **Additional Mapping Information** pane.
   
   This pane is available at the bottom of the central pane on clicking a map in the Workspace Mappings pane.

2. Click the **Target Update Strategy** tab.
3. Click \( \text{Click} \).

4. Click the required strategy, enter **Update Strategy Description**, and click \( \text{Click} \).

The target update strategy is configured.

**Adding Transformations**

You can add transformations to an auto-map and specify whether it is applicable to exact match, orphan source, orphan target, or all the rows.

To add transformations in auto-maps, follow these steps:

1. Under the **Auto Mapping Preview Grid**, click \( \text{click} \).

   The Auto Map Transformation page appears.

2. Click \( \text{click} \).

   A row is added to the grid.

3. Double-click the cell under the **Key** column and select the required transformation.
4. Double-click the cell under the **Value** column and select a value.

You can use transformations created under the Transformations node only for Business Rule. For other transformations, enter the required value.

5. Use the following options:

   **Exact Match**
   
   Use this option to apply the transformation on the exactly matched rows in the Auto Mapping Preview Grid.

   **Orphan Source**
   
   Use this option to apply the transformation on the orphan source rows in the Auto Mapping Preview Grid.

   **Orphan Target**
   
   Use this option to apply the transformation on the orphan target rows in the Auto Mapping Preview Grid.

   **All**
   
   Use this option to apply the transformation on every row in the Auto Mapping Preview Grid.

6. Click ![button]

The transformations are added to the auto map.

You can enrich a mapping specification by:
Auto-Map

- Adding transformation and lookup details
- Associating code cross walks (code mappings)
- Associating reference tables
- Linking requirements

After creating a mapping specification, you can analyze a mapping specification. Analyzing mapping specifications involves:

- Generating virtual preview of target
- Previewing data
- Performing table gap analysis
- Performing column gap analysis
- Running impact analysis
- Running lineage analysis
- Running end to end lineage
- Opening business view
- Viewing mapping statistics
One to Many and Many to Many Mapping Specifications

You can map multiple source columns to a single or multiple target columns to create a mapping specification. After creating the mapping specification, you can set the target update strategy and enter a description about the strategy.

Creating Mapping Specifications

To create one to many or many to many mapping specifications, follow these steps:

1. In the Workspace Mappings pane, click a map.
   
   By default, the Mapping Specification tab opens.

2. Click .

3. Switch to ON.
   
   The append mode is enabled. You can now drop multiple columns from the Metadata Catalogue pane in one row of the Mapping Specification grid.

4. Drag one or multiple source columns from the Metadata Catalogue pane in the Mapping Specification grid under the Source Columns Name column.
   
   You can use Ctrl key to select multiple columns in the Metadata Catalogue pane.
One to Many and Many to Many Mapping Specifications

5. Drag single or multiple target columns from **Metadata Catalogue** in **Mapping Specification** under the **Target Columns Name**.

6. Click 🌟.

The mapping specification is saved.

You can view the mapping specification on the **Graphical Designer** tab to view the graphical representation of the one to many mappings.

---

**Setting Target Update Strategy**

To set target update strategy, follow these steps:

1. Expand the **Additional Mapping Information** pane and click the **Target Update Strategy** tab.

2. On the **Target Update Strategy** tab, click 📊.

---
3. Click the required strategy, enter **Update Strategy Description**, and click 

4. Click 

The source to target mapping is saved.

You can enrich a mapping specification by:

- Adding transformation and lookup details
- Associating code cross walks (code mappings)
- Associating reference tables
- Linking requirements

After creating a mapping specification, you can analyze a mapping specification. **Analyzing mapping specifications** involves:

- Generating virtual preview of target
- Previewing data
- Performing table gap analysis
- Performing column gap analysis
- Running impact analysis
- Running lineage analysis
- Running end to end lineage
- Opening business view
- Viewing mapping statistics

One to Many and Many to Many Mapping Specifications
Adding Transformation and Lookup Details

You can add transformation and lookup details to a mapping specification in the Mapping Specification grid.

Adding transformation details involves setting up:

- Business rule
- Extended business rule transformation

Ensure that you define business rules under the Transformations node for the same ETL Option as the Project ETL. For more information on defining business rules, refer to the Defining Transformations section.

Adding lookup details involves setting up:

- Trans lookup condition
- Lookup reference column
- Lookup on

Ensure that you scan the required table in the Metadata Manager to set trans lookup condition.

Adding Transformation Details

To add business rules to mapping specifications, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, click a map.
   
   By default, it opens the Mapping Specification tab.
3. Right-click the header menu of the **Mapping Specification** grid.

4. Select the **Business Rule** check box.

   The Business Rule column is now available in the Mapping Specification grid.

5. Click 📊.

   You can now edit the Mapping Specification grid.

6. Double-click the cell under the **Business rule** column for the required source column.

   The available transformations appear.
7. Select a business rule.

You can add business rules for multiple source columns.

8. Click .

The business rules are added to the mapping specification.

To add extended business rule transformations, follow these steps:

1. Right-click the header menu of the **Mapping Specification** grid.

2. Select the **Extended Business Rule Transformation** check box.
Adding Transformation and Lookup Details

The Extended Business Rule Transformation column is now available in the Mapping Specification grid.

3. Click 🌐.

You can now edit the Mapping Specification grid.

4. Click 🌐.

The available options appear.

5. Select the **Extended Business Rule** check box.

6. In the **Mapping Specification** grid, double-click the cell under the **Extended Business rule Transformation** column for the required source column.

The Extended Transformation Rule Editor page appears.

7. Select a pseudocode based on the Project ETL.

   For example, if the Project ETL is Informatica then select Informatica Pseudocode.
8. Press Ctrl + Space keys.

The available transformations appear.

If the required transformation is not available in the list, use to create and update the transformations list.

9. Double-click the required transformation.

You can use to replace the transformation name with the pseudocode.

10. Click .

The extended business rule transformation is added to the source column. You can add extended business rule transformation to multiple source columns. You can also
configure UI labels for user defined fields. For more information on configuring UI labels, refer to the Configuring Language Settings topic.

Adding Lookup Details

To add lookup details in mapping specifications, follow these steps:

1. Right-click the header menu of the mapping specification grid.


3. Drag the required table from the Metadata Catalogue pane and drop it under the Trans Lookup Condition column for the required source column.

A SQL query populates.

Once trans lookup condition is set for the source column, you can add lookup reference column and lookup on.
To add lookup reference column, double-click the cell under the Lookup Reference Column column and select the required option.

To add lookup on, double-click the cell under the Lookup On column and select the required option.

4. Click 🟢.

The lookup details are added in the Mapping Specification. You can add lookup details for multiple source columns.

Alternately, you can add transformation and lookup details to a mapping specification graphically. For more information about adding transformation and lookup details graphically, refer to the Graphical Designer topic.
Graphical Designer

You can add transformation and lookup details to a mapping specification on the Graphical Designer tab.

Adding transformation details involves setting up:

- Business rule
- Extended business rule transformation

Ensure that you define business rules under the Transformations node for the same ETL Option as the Project ETL. For more information on defining business rules, refer to the Defining Transformations section.

Adding lookup details involves setting up:

- Trans lookup condition
- Lookup reference column
- Lookup on

Ensure that you scan the required table in the Metadata Manager to set trans lookup condition.

Adding Transformation Details

To add business rules graphically, follow these steps:

1. Click the Graphical Designer tab.
2. Click 📝.
   
   You can now edit the mapping specification graphically.
3. Click the mapping link of the required column and expand the Properties pane.
4. Expand the Transformation Details pane.
5. Double-click the **Value** cell for **Business Rule** and select the required value.

6. Click ![button](button.png).

   The business rule is added to the mapping link. You can add business rules for multiple mapping links.

To add extended business rule transformations graphically, follow these steps:

1. On the **Graphical Designer** tab, Click ![button](button.png).

   The available options appear.

2. Select the **Extended Business Rule** check box.
3. Click the mapping link of the required column and expand the **Transformation Details** pane.

4. Double-click the **Value** cell for **Extended Business Rule Transformation**. The Extended Transformation Rule Editor page appears.

5. Select the pseudocode based on the Project ETL. For example, if the Project ETL is Informatica then select Informatica Pseudocode.
6. Press Ctrl + Space keys.

The available transformations appear.

7. Double-click the required transformation.

You can use the T icon to replace transformation name with pseudocode.

8. Click the icon.

The extended business rule transformation is added to the mapping link. You can add extended business rule transformations to multiple mapping links.
Adding Lookup Details

To add lookup details graphically, follow these steps:

1. On the **Graphical Designer** tab, click the mapping link of the required column and expand the **Properties** pane.

2. Expand the **Lookup Details** pane.

3. Drag the required table from the **Metadata Catalogue** pane and drop it for **Trans Lookup Condition**.
Once the lookup condition is set, you can add lookup reference column and lookup on.

To add lookup reference column, double-click the cell for **Lookup Reference Column** and select the required option.

To add lookup on, double-click the cell against **Lookup On** and select the required option.

4. Click ![].

The lookup details are added to the mapping specification. You can add lookup details for multiple mapping links.
Updating Mapping Specifications Manually

After creating a mapping specification, you can update the mapping specification manually. However, we recommend that you use the manual method case by case on exception basis.

To update mapping specifications manually, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, click a map.
   By default, it opens the Mapping Specification tab.
   
3. Click .
   You can now edit the Mapping Specification grid.
4. Select a row (use Ctrl key to select multiple rows) and right-click the cell.
5. Use the following options:

**Check All Rows**
Use this option to select the check boxes under the Status column for the selected rows.

Right-click the header menu of the mapping specification grid and select the **Status** check box, to make Status column visible in the mapping specification grid.

**Uncheck All Rows**
Use this option to unselect the check boxes under the Status column for the selected rows.

**Clear Source Details**
Use this option to clear source details in the mapping specification grid.

**Clear Target Details**
Use this option to clear target details in the mapping specification grid.

**Clear Source & Target Details**
Use this option to clear source and target details in the mapping specification grid.
Updating Mapping Specifications Manually

**Clear Cell**

Use this option to clear the cell.

**Delete Row(s)**

Use this option to delete the selected rows.

**Extended Properties**

Use this option to configure Extended Properties.

**Share Link**

Use this option to copy or share the URL of the mapping specification.

To update cell values, double-click a cell and update its values.
Uploading Mapping Specifications in XML

You can upload a mapping specification to a project in the XML format. You can either use an existing XML file or export it from a suitable project. Ensure that the XML file follows the correct template. For more information on exporting a mapping specification in XML, refer to the Proprietary XML Format topic.

To upload mapping specifications in the XML format, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, right-click a project.
3. Click Upload XML.

The Upload Mapping Manager XML page appears.
4. Drag and drop or use to browse and select the XML file.

The Upload Mapping Manager XML page appears.
5. Enter **Mail Comments** and click ![icon].

   The Mapping Specification is uploaded successfully.

   If you have enabled notifications, project users receive notification emails and mail comments from the administrator's email ID. For more information on configuring notifications, refer to the [Configuring Notifications](#) topic.
Specifying XPath in Mapping Specifications

XPath is a potential path expression in XML documents. Hence, if you have imported source or target metadata from XSD files then it is important to specify XPath. You can specify XPath in a mapping specification for source and target columns.

To specify XPath in mapping specifications, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, click a map.
   By default, it opens the Mapping Specification tab.
3. Right-click the header menu and select the Target XPath and Source XPath check boxes.
Specifying XPath in Mapping Specifications

The Target XPath and Source XPath columns are now visible in the Mapping Specification grid.

4. Click 🖼.

5. Double-click cells under the **Target XPath** and **Source XPath** columns to enter the required XPath.

6. Click 📋.

The Xpath is specified in the Mapping Specification.

![Mapping Specification Grid](image)
Setting Column Order and Visibility

You can set the column order and visibility in Mapping Specifications and personalize the Mapping Specification grid. This helps you work efficiently.

Column Order

To set the column order in mapping specifications, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, click a map.
   By default, the Mapping Specification tab opens.
3. Click the required column header, drag and drop the column at the required place.
   The Mapping Specifications can be exported with the new column order.
   
   ![Column ordering in Mapping Specifications are not saved and gets reset.]

Column Visibility

To set the column visibility, follow these steps:

1. In the Mapping Specification grid, click .
   The Header Menu page appears.
2. Expand the respective nodes.

3. Select the required columns.

4. Close the **Header Menu** page.
   
The selected columns are visible in the Mapping Specification grid.

To reset column ordering and visibility click 🔄.
### Updating Additional Mapping Information

You can update additional mapping information in the Additional Mapping Information pane with respect to the following tabs:

<table>
<thead>
<tr>
<th>Tab</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Map Spec Overview</td>
<td>Under this, you can update the following for a mapping specification:</td>
</tr>
<tr>
<td></td>
<td>- Specification name</td>
</tr>
<tr>
<td></td>
<td>- Version label</td>
</tr>
<tr>
<td></td>
<td>- State name and sub-state name</td>
</tr>
<tr>
<td></td>
<td>- Source and target metadata sync</td>
</tr>
<tr>
<td></td>
<td>- Job Name XRef</td>
</tr>
<tr>
<td>Source Extract SQL</td>
<td>Under this, you can update:</td>
</tr>
<tr>
<td></td>
<td>- SQL Query relevant to a mapping specification</td>
</tr>
<tr>
<td></td>
<td>- SQL Query Description</td>
</tr>
<tr>
<td>Target Update Strategy</td>
<td>Under this, you can set your target update strategy as per your data integration requirements.</td>
</tr>
<tr>
<td>Testing Notes</td>
<td>Under this, you can add relevant testing notes with respect to a mapping specification.</td>
</tr>
<tr>
<td>Map Specs Docs</td>
<td>Under this, you can upload relevant documents.</td>
</tr>
<tr>
<td>Assignment</td>
<td>Under this, you can assign a mapping specification to multiple users.</td>
</tr>
<tr>
<td>Specification Artifacts</td>
<td>Under this, you can link additional specification artifacts relevant to a mapping specification.</td>
</tr>
<tr>
<td>Level of Effort</td>
<td>Under this, you can record planned level of effort and actual level of effort in creating mapping and ETL process.</td>
</tr>
<tr>
<td>Change Log</td>
<td>This tab can be enabled in Mapping Manager Settings. Under this, you can capture change logs of a mapping specification.</td>
</tr>
<tr>
<td>Release Information</td>
<td>Under this, you can view release information of a mapping.</td>
</tr>
<tr>
<td>My Action</td>
<td>Under this, you can collaborate with other users on a task.</td>
</tr>
</tbody>
</table>
Updating Additional Mapping Information

<table>
<thead>
<tr>
<th>Tab</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center</td>
<td></td>
</tr>
<tr>
<td>User Defined Tabs (1-5)</td>
<td>There are five user defined tabs that can be used by you with your own UI</td>
</tr>
<tr>
<td></td>
<td>labels.</td>
</tr>
<tr>
<td>Extended Properties</td>
<td>Under this, you can extend properties of a mapping specification by creating</td>
</tr>
<tr>
<td></td>
<td>custom forms.</td>
</tr>
</tbody>
</table>

To access the Additional Mapping Information pane, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, click a map.

   The central pane displays the Mapping Specification grid. The Additional Mapping Information pane is available at the bottom of the central pane.

3. Click the Additional Mapping Information pane.
   You can use ◀ or ► to navigate across the pane.
### Updating Additional Mapping Information

#### Map Spec Overview

<table>
<thead>
<tr>
<th>Map Id</th>
<th>Specification Name</th>
<th>Map Specification Version</th>
<th>Version Label</th>
<th>State Name</th>
<th>Sync Source Metadata</th>
<th>Job Name XRef</th>
<th>Source Extract SQL</th>
<th>Target Update Strategy</th>
<th>Testing Notes</th>
<th>Map Spec Docs</th>
</tr>
</thead>
<tbody>
<tr>
<td>98</td>
<td>BugTrial</td>
<td>1.00</td>
<td></td>
<td>Approved</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Workflow Status: Preliminary Draft
Updating Map Spec Overview

You can update the Map Spec Overview tab and update various aspects of a mapping specification that includes:

- Specification name and its description
- Version label
- Mapping states and sub-states
- Syncing metadata with a mapping specification
- Job name XRef

To update the Map Spec Overview tab, follow these steps:

1. In the Additional Mapping Information pane, on the Map Spec Overview tab, click 

   ![Image Icon]
2. Select or enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field descriptions.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specification Name</td>
<td>Specifies the mapping specification name. For example, EDW_PROD_IDS_Benefits_Detail. For more information on naming conventions, refer to the Best Practices section.</td>
</tr>
<tr>
<td>Version Label</td>
<td>Specifies the version label of the mapping specification. For example, EDW_PROD_IDS_Benefits_Detail (Alpha). For more information on configuring version display of maps, refer to the Configuring Version Display topic.</td>
</tr>
<tr>
<td>State Name</td>
<td>Specifies the mapping state of the mapping specification.</td>
</tr>
</tbody>
</table>
### Updating Map Spec Overview

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>For example, In Progress. For more information on configuring mapping states, refer to the <a href="#">Configuring Mapping State Settings</a> topic.</td>
</tr>
<tr>
<td>Sub State Name</td>
<td>Specifies the sub-state of the mapping specification. For example, Needs Approval. For more information on configuring mapping sub-states, refer to the <a href="#">Configuring Mapping State Settings</a> topic.</td>
</tr>
<tr>
<td>Sync Source Metadata</td>
<td>Switch Sync Source Metadata to <strong>ON</strong> to sync source metadata with the mapping specification.</td>
</tr>
<tr>
<td>Sync Target Metadata</td>
<td>Switch Sync Target Metadata to <strong>ON</strong> to sync target metadata with the mapping specification.</td>
</tr>
<tr>
<td>Job Name XRef</td>
<td>Specifies the equivalent ETL mapping name. For example, ErwinDIS931.</td>
</tr>
<tr>
<td>Description</td>
<td>Specifies the description for the mapping specification. For example: This is a map between EDW source and IDS target systems.</td>
</tr>
</tbody>
</table>

You cannot edit Map Id, Workflow Status, and Map Specification Version.

For more information on workflow status, refer to the [Managing Mapping Manager Workflows](#) topic.

3. Click 

   The fields on the Map Spec Overview tab are updated.
Updating Source Extract SQL

You can keep a record of multiple source extract SQL and its description. You can also update it as per your requirements.

To update source extract SQL, follow these steps:

1. In the Additional Mapping Information pane, click the Source Extract SQL tab.

   The Source Extract SQL tab appears.

2. click 

   ![Source Extract SQL Tab]

   ![Editor View]

   ![SQL Query]
3. Enter **SQL Query** and **SQL Query Description**.

   For example:
   
   - **SQL Query**: Select * from dbo.RM_Resource
   
   - **SQL Query Description**: The query extracts the data from dbo.RM_Resource table.

4. Click 

   The Source Extract SQL is updated.
Setting Target Update Strategy

You can set the way target metadata is updated when you map source to target. You can update the strategy any time as per your requirement.

To set target update strategy, follow these steps:

1. In the **Additional Mapping Information** pane, click the **Target Update Strategy** tab.

2. Click \( \text{ } \).

3. Click the appropriate update strategy from the options and enter **Update Strategy Description**.

   For example:
Setting Target Update Strategy

- **Update strategy**: Insert else Update
- **Update Strategy Description**: Insert the source column value to a blank target column else update the target column value with the source column value.

4. Click 

The Target Update Strategy is set.
Updating Testing Notes

You can keep a record of testing notes related to a mapping specification and specify test results as:

- Un-specified
- Pass
- Fail
- Needs analysis

To update testing notes, follow these steps:

1. In the Additional Mapping Information pane, click the Testing Notes tab.

2. Click the pencil icon.

![Testing Notes interface](image)
3. Click the appropriate option for test results and enter **Testing Notes**.

   For example:
   - **Test results**: Pass
   - **Testing Notes**: The mapping specification passed the testing and it is ready for the ETL process.

4. Click 𝘣.*

   The Testing Notes are updated.
Adding Mapping Specification Documents

You can add supporting documents, such as text files, audio files, video files, document links, and so on, to a mapping specification.

To upload mapping specification documents, follow these steps:

1. In the Additional Mapping Information pane, click the Map Spec Docs tab.

2. Click 

3. Enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field descriptions.
### Field Name | Description
---|---
Document Name | Specifies the name of the physical document being attached to the mapping specification. For example, Mapping Details.
Document Object | Drag and drop document files or use ![Drag and Drop](https://via.placeholder.com/15) to select and upload document files.
Document Owner | Specifies the document owner's name. For example, John Doe.
Document Link | Specifies the URL of the document. For example, [https://drive.google.com/file/d/1/2sC2_SZIyeFKI7OOn-b5YkMBq4ptA7jhg5/view](https://drive.google.com/file/d/1/2sC2_SZIyeFKI7OOn-b5YkMBq4ptA7jhg5/view)
Description | Specifies the description of the document. For example: The document has information about the mapping details.
Approval Required Flag | Specifies whether the document requires approval. Select the Approval Required Flag check box to select the document status.
Document Status | Specifies the status of the document. For example, In Progress. Select the status of the document from the drop down. This field is available only when the Approval Required Flag check box is selected.


The mapping specification document is added.
Assigning Mapping Specifications to Users

You can assign a mapping specification to your team members in the following capacities:

- Mapping Designer
- Mapping Approver
- Mapping ETL Developer
- Mapping Tester

By default, the user that creates the mapping specification is the Mapping Designer. You can re-assign another user as the Mapping Designer.

To assign mapping specifications to users, follow these steps:

1. In the Additional Mapping Information pane, click the Assignment tab.

2. Click .
3. Enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field descriptions.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mapping Designer</td>
<td>Specifies the User Full Name and User ID of the Mapping Designer. For example, Jane Doe(janedoe).</td>
</tr>
<tr>
<td>Mapping Approver</td>
<td>Specifies the User Full Name and User ID of the Mapping Approver. For example, John Doe(jdoe).</td>
</tr>
<tr>
<td>Mapping ETL Developer</td>
<td>Specifies the User Full Name and User ID of the Mapping ETL Developer. For example, John Denver(jdenver).</td>
</tr>
<tr>
<td>Mapping Tester</td>
<td>Specifies the User Full Name and User ID of the Mapping Tester. For example, Michael Samuel(M.Samuel).</td>
</tr>
<tr>
<td>Status</td>
<td>Specifies the status of the user's task. For example, Pending Review.</td>
</tr>
<tr>
<td>Email</td>
<td>The Email check boxes populate as you select corresponding users.</td>
</tr>
</tbody>
</table>
Assigning Mapping Specifications to Users

<table>
<thead>
<tr>
<th><strong>Field Name</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Select</strong></td>
<td>Select the check boxes to send email notifications to the corresponding users about the mapping assignment and change in mapping status.</td>
</tr>
<tr>
<td></td>
<td>For more information on configuring email notifications, refer to the <a href="#">Configuring Notifications</a> topic.</td>
</tr>
<tr>
<td><strong>Distribution/CC List</strong></td>
<td>Enter a comma-separated list of email IDs that should receive the email notification about the assignment.</td>
</tr>
<tr>
<td></td>
<td>For example, <a href="mailto:ab.dav@xyz.com">ab.dav@xyz.com</a>, <a href="mailto:cal.kai@xyz.com">cal.kai@xyz.com</a></td>
</tr>
<tr>
<td></td>
<td>The email notification is sent from the administrator's email ID.</td>
</tr>
<tr>
<td><strong>Custom Notes</strong></td>
<td>Specifies custom notes about the mapping assignment.</td>
</tr>
<tr>
<td></td>
<td>For example: John Denver is the Mapping ETL Developer of the mapping specification.</td>
</tr>
<tr>
<td><strong>Assignment Changes</strong></td>
<td>Specifies the changes in the mapping assignment. The information in this field is system-generated.</td>
</tr>
<tr>
<td></td>
<td>For example: User Administrator - Default System User(Administrator) has been assigned to the mapping on 2020-01-12 19:58:15.815.</td>
</tr>
</tbody>
</table>

4. Click ![Submit](submit_icon.png).

The mapping specification is assigned to the users.
Linking Additional Specification Artifacts

The Requirements Manager captures functional requirements of a data integration project using Specification Artifacts. You can link these specification artifacts with mapping specifications.

To link specification artifacts with mapping specifications, follow these steps:

1. In the Additional Information pane, click the Specification Artifacts tab.

2. Click 📝.
3. In the right pane, expand the **Specification Artifact Catalogue** pane and drag and drop the required specification under the **Specification Artifacts** tab.

4. Click 🔄.

   The specification artifact is linked.
Recording Level of Effort

You can record and compare planned level of effort with the actual level effort spent on creating and managing mapping specifications.

To record the level of effort, follow these steps:

1. In the Additional Mapping Information pane, click the Level of Effort tab.

2. Click .

3. Enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field descriptions.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Sub-Fields</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned Level of Effort</td>
<td>Mapping Effort</td>
<td>Specifies the planned mapping effort in days.</td>
</tr>
<tr>
<td></td>
<td>ETL Effort</td>
<td>Specifies the planned ETL effort in days.</td>
</tr>
<tr>
<td></td>
<td>0.0 Days</td>
<td>For example, 12.0 days.</td>
</tr>
</tbody>
</table>
## Recording Level of Effort

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Sub-Fields</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes</td>
<td>Notes</td>
<td>For example, 10.5 days.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Specifies notes about the planned level of effort. For example: Planned level of effort took all the project requirements into account.</td>
</tr>
<tr>
<td>Actual Level of Effort</td>
<td>Mapping Effort</td>
<td>Specifies the actual mapping effort in days. For example, 12.0 days.</td>
</tr>
<tr>
<td></td>
<td>ETL Effort</td>
<td>Enter the actual ETL effort in days. For example, 9.5 days.</td>
</tr>
<tr>
<td></td>
<td>Notes</td>
<td>Specifies the notes about the actual level. For example: Actual level of effort were lesser than the planned level of effort.</td>
</tr>
</tbody>
</table>

4. Click 🗒️.

The level of effort tab is recorded.
**Viewing Change Logs**

A change log is a record of changes made in a Mapping Specification grid. You can view these changes on the Change Log tab. By default, this tab is disabled. You can enable it under Change Log Settings. For more information, refer to the [Configuring Change Log Settings](#) topic.

To view the change logs of the mapping specifications, in the **Additional Information** pane, click the **Change Log** tab.

The change logs of the mapping specification appears.
Viewing Release Information

The release, migration, and audit-related information of a mapping specification are available on the Release Information tab. For more information on releases, refer to the Release Manager section.

To view release information of mapping specifications, in the Additional Mapping Information pane, click the Release Information tab.

The release information of the mapping specification appears.
Adding Tasks

To collaborate on mappings you can create tasks depending on your requirement. By default, you can create to-do tasks, access requests, or issues. Apart from these task types, you can configure custom task types via Task Type Configuration.

To add tasks, follow these steps:

1. In the **Additional Mapping Information** pane, click the **My Action Center** tab.
   
   The My Action Center tab opens. It displays a list of all tasks related to the map.

2. Click \( \text{+} \).
   
   A list of task types appears.
3. Click the required task type.

The Create New Task page appears.
Adding Tasks

4. Enter appropriate values in the fields. Refer to the following table for field descriptions.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task is being created on Asset</td>
<td>Specifies the asset for which the task is created.</td>
</tr>
<tr>
<td></td>
<td>This field autopopulates with the map name.</td>
</tr>
<tr>
<td>With Task Type as</td>
<td>Specifies the task type.</td>
</tr>
<tr>
<td></td>
<td>For example, To do Task.</td>
</tr>
<tr>
<td>Name</td>
<td>Specifies the name of the task.</td>
</tr>
<tr>
<td></td>
<td>By default, it autopopulates with a name in the following format: Mapping_&lt;Map_Name&gt;. You can edit it and rename the task.</td>
</tr>
<tr>
<td></td>
<td>For example, Test Mappings.</td>
</tr>
<tr>
<td>Description</td>
<td>Specifies a description of a task.</td>
</tr>
<tr>
<td></td>
<td>For example: Test all the mappings and record the effort required.</td>
</tr>
<tr>
<td>Important</td>
<td>Specifies whether the task is important</td>
</tr>
<tr>
<td>Due</td>
<td>Specifies the due date of the task.</td>
</tr>
<tr>
<td></td>
<td>Use 📅 to set the due date.</td>
</tr>
<tr>
<td>Assign Users</td>
<td>Specifies the users assigned to the task.</td>
</tr>
<tr>
<td></td>
<td>You can assign DI and BU users from the list.</td>
</tr>
<tr>
<td></td>
<td>For example, Richard Cooper.</td>
</tr>
<tr>
<td>External user emails</td>
<td>Specifies the email ID of external users.</td>
</tr>
<tr>
<td></td>
<td>For example, <a href="mailto:chris.harris@quest.com">chris.harris@quest.com</a></td>
</tr>
</tbody>
</table>

5. Click 📝.

The task is created and saved. Use 📝 to edit the task details and attach relevant documents.

**Chat**

Use the Chat tab to send messages to the assigned and external users of a task.
Adding Tasks

On the **Chat** tab, enter your message in the text box and use the following options:

**Assigned**

Use this option to send messages to the assigned users.

**External Users**

Use this option to send messages to external users.

Users are notified via Messaging Center.

You can manage a task using the options available on the task list. **Managing a task** involves:

- Marking tasks complete
- Viewing task details
- Editing task details
- Disabling notifications
- Downloading Chat
- Sharing chat
- Marking tasks as pending
- Deleting tasks

With the My Action Center tab, you can filter and search tasks based on its status and assignments. For more information on search and filter mechanisms, refer to the [Filter and Search](#) topic.
Adding Tasks

Configuring Task Types

With My Action Center, you can configure task types to collaborate on miscellaneous tasks. By default, three task types, To-Do Task, Request Access, and Issue are available. These task types cannot be edited or deleted.

To configure task types, follow these steps:

1. On the **My Action Center** tab, click 

   The Task Type Configuration page appears. It displays a list of available task types.

   ![Task Type Configuration](image)

   The Task Type Configuration page appears. It displays a list of available task types.

2. Enter a new task type in the space provided, and then click 

   The task type is added in the list of available tasks.

   For example, in the following image, a task type, schedule job is added in the Task Types list.
Adding Tasks

3. Use the following options to manage task types:

**Edit (📝)**

Use this option to edit the task type.

**Delete (☐)**

Use this option to delete a task type.

Managing Tasks

Managing tasks involves:

- Marking tasks complete
- Viewing task details
- Editing task details
- Disabling notifications
- Downloading Chat
Adding Tasks

- Sharing chat
- Marking tasks as pending
- Deleting tasks

To mark tasks complete, on the task list, for the required task, click the radio button. The task is moved to the list of completed task.

For example, in the following image, the task, Add Business rule is marked complete.

To manage tasks, follow these steps:

1. In the task list, for the required task, click .

   The available options appear.
Adding Tasks

2. Use the following options to work on tasks:

**View Task Details**

Use this option to view task details. These details include task name, description, assigned assets, attached documents, and so on.

**Edit Task Details**

Use this option to update task details.

**Disable Notification**

Use this option to stop receiving notifications related to a task. By default, notifications are enabled, and users assigned to task receive notifications.

**Download Chat as Text**

Use this option to download chat related to a task in the TXT format.

**Send Chat as Email**

Use this option to share the chat related to a task via an email. Click **Send Chat as Email**.

The Email Selection page appears. It displays a list of users assigned to the task.
Adding Tasks

Select the required users, and then click ✉️. An email is sent to the selected users.

**Mark as Pending**

This option is available for a completed task. Use this option to mark a task as pending.

To delete a task, in the task list, for the required task, click 🗑️.

⚠️ You can delete a task only if you have created the task.
Configuring Extended Properties

You can configure user-defined properties of a mapping specification under the Extended Properties tab.

First, you need to set up a form and then use it to configure the user-defined extended properties.

To configure extended properties of mapping specifications, follow these steps:

1. In the Additional Mapping Information pane, click the Extended Properties tab.

2. Click Configure.
The Extended Properties Configuration page contains the following sections:

- **Field Controls**: Use this pane to get the required UI elements.
- **Configure Form**: Use this pane to design forms using the UI elements available in the Field Controls pane.
- **Properties**: Use this pane to view the properties of the UI element selected in the Configure Form pane.

3. Click **Edit**. Then, double-click or drag and drop the required UI elements from the Field Controls pane to the Configure Form pane.

4. Select UI elements, one at a time, and configure their properties in the Properties pane.

The available properties differ based on the type of UI element.

Refer to the following table for property descriptions:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Published</td>
<td>Switch Published to ON to publish the field.</td>
</tr>
<tr>
<td>Field</td>
<td>Specifies the field label.</td>
</tr>
</tbody>
</table>
# Configuring Extended Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>To change the field labels, double-click the corresponding <strong>Value</strong> cell. For example, Mapping Specification Approved On.</td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td>Specifies the type of the field. To select field types, double-click the corresponding <strong>Value</strong> cell. For example, Date Picker.</td>
</tr>
<tr>
<td><strong>Dependencies</strong></td>
<td>Defines the pick list fields that can be used as controlling fields. It works only with the Reference Data Manager connector. To define pick list fields, select the fields from the drop down option.</td>
</tr>
<tr>
<td><strong>Configure Values</strong></td>
<td>Specifies the connectors for the field. To enter option values, click <strong>Configure Values</strong>. Use the following options:</td>
</tr>
<tr>
<td></td>
<td>- <strong>Default connector</strong>: Use this option to enter option values manually or using an MS Excel file.</td>
</tr>
<tr>
<td></td>
<td>- <strong>Reference Data Manager</strong>: Use this option to pull option values from reference tables in the Reference Data Manager.</td>
</tr>
<tr>
<td><strong>Mandatory</strong></td>
<td>Specifies whether the field is mandatory.</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Specifies the field description. To enter field descriptions, double-click the corresponding <strong>Value</strong> cell.</td>
</tr>
<tr>
<td><strong>Visible in Extended Properties</strong></td>
<td>Switch <strong>Visible in Extended Properties</strong> to <strong>ON</strong> to make it visible on the Extended Properties tab.</td>
</tr>
<tr>
<td><strong>Order</strong></td>
<td>Specifies the order of the field on the Extended Properties tab. To enter the order number, double-click the corresponding Value cell. You can also drag and move fields in the Configure Form pane to change its order.</td>
</tr>
</tbody>
</table>

5. Click **Save**.
Configuring Extended Properties

The form is saved and is available on the Extended Properties tab.

You can download extended properties in the XLSX format and use it as a template to import extended properties. To download extended properties, on the Extended Properties tab, click Export To Excel.
Default Connector

When you configure extended properties using UI elements, such as combo box, radio button, and list, you also need to configure their option values. You can use the default connector to import option values from an MS Excel file or enter them manually.

To configure option values using the default connector, follow these steps:

1. In the **Configure Form** section, click the required UI element.
   Ensure that you are in edit mode.

2. In the **Properties** section, click **Configure**.
   The Connectors page appears.

3. On the **Connectors** page, ensure that the Default Connector option is selected. Then, click **Next**.
   The `<UI_Element>` Options page appears. For example, if the UI element is Combo Box, the Combo Box Options page appears.
4. Use the following options:

- **Add**
  
  Use this option to enter text and value manually.

- **Import Excel**
  
  Use this option to import options from MS Excel files.

5. After configuring option values, click **Save**.

To add option values manually, follow these steps:

1. Click **Add**.
2. Enter values to the Text and Value fields.
   
   The Text corresponds to options whereas the Value corresponds to underlying value of an option. You can add as many values as needed.
3. Click Save.

The option values appear in the UI element under the Configure Form section.

To import option values from MS Excel files, follow these steps:

1. Click Import Excel.

The Upload Excel page appears.
2. Click Choose File and select the required MS Excel file.

The Upload Excel page appears. It displays the data in the MS Excel file.

3. Double-click the Select Column To Import cell in the required column.

The available options appear.
Default Connector

4. Select the appropriate option.

Field corresponds to options and Value corresponds to value of an option. You can import multiple columns. Use Clear Selection to undo the selection.

5. Click 🔄.

The `<UI_Element>` Options page appears. It displays the imported columns. You can delete a row that is not required. To delete rows, click a row and then click **Delete**.

6. Click **Save**.

The option values appear in the UI element under the Configure Form section.
Reference Data Manager

When you configure extended properties using UI elements, such as combo box, radio button, and list, you also need to configure their option values. You can use the Reference Data Manager connector to import option values from tables in the Reference Data Manager.

To configure option values using reference data manager connector, follow these steps:

1. In the **Configure Form** section, click the required UI element.
   Ensure that you are in edit mode.

2. In the **Properties** section, click **Configure**.
   The Connectors page appears.

3. On the **Connectors** page, click **Reference Data Manager** and then click **Next**.
   The Reference Data Manager page appears. It displays the reference folders in the Connector View pane.
4. In the **Connector View** pane, expand a reference folder and select a reference table.

The Parameters pane displays the columns in the reference table. You can also click Preview to view the data in the reference table.
5. In the **Parameters** pane, click the radio button next to the required column.
   You can select the controlling field from the drop down option. Ensure that you define the required dependencies in the Properties pane and that the option values for controlling field are configured using the same reference column.

6. Click **Finish**.
   The Extended Properties Configuration page appears.
7. Under the **Properties** section, switch **Load on Startup** to **ON**.

8. Click **Save**.

The option values are configured. For example, in the following form the List of Cities is the controlling field for Selected City. Both the fields get their option values from the same reference column.
Importing from Excel

You can import user-defined properties of a mapping specification from an XLSX file. You can either use an existing XLSX file or download a extended properties file from a mapping specification. Ensure that the XLSX file follows the correct template.

To import extended properties from XLSX files, follow these steps:

1. On the Extended Properties tab, click Import From Excel.

   The Upload Excel page appears.

2. Click Choose File.

3. Browse and select the XLSX file.

4. Click 🔄.

   The Upload Excel page appears. It displays the data in the XLSX file.

5. Double-click the Select Column To Import cell in the required column.

   The available options appear.
6. Select an appropriate option.

For example, if you select Field, then the selected column is imported as Field.
Similarly, you can also select the Value, Type, and Parentfield columns. Ensure that you at least select a Field column.

7. Click 🔄.

The extended properties are imported.
Branching and Merging Maps

Branching a map enables multiple users to work on a mapping specification. You can create multiple branches of a parent map depending on the number of users. Different users can work on these branches and make changes in the mapping specification. These branches can then be merged into the parent map.

Branching and merging maps involves:

- Branching maps
- Merging changes into parent maps
**Branching Maps**

Branching a map means copying the map and pasting it in another subject area or a project. The copied map acts as a child map and the original map is called the parent map.

To branch maps, follow these steps:

1. Go to **Application Menu > Data Catalog > Mapping Manager**.
2. In the **Workspace Mappings** pane, right-click a map and hover over the **Copy Map**.
3. Click **Copy Selected**.
4. Right-click the **Mappings** node under the required project or subject area.
5. Click Paste.

The mail comments page appears.

6. Enter Mail Comments and click

The map is copied successfully into the subject area or the project. You can rename the child map and modify as needed. For example, you can change the reference
Branching Maps

table, business rule, or add or remove columns. For more information on renaming mappings, refer to the Updating Map Spec Overview topic.

If you enable notifications in Mapping Manager Settings, project users receive an email notification when the map is copied to a project. For more information on configuring notifications, refer to the Configuring Notifications topic.
Merging Changes into Parent Maps

After making the required changes in a child map you can merge it with a parent map. You can also notify project users about the merge through email notifications.

To merge child maps with parent maps, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.

2. In the Workspace Mappings pane, right-click a parent map.

3. Click Merge Mapping.

   The Merge Map page appears.
4. Select a child map.

5. Click ➔.

The Merge Map page shows the changed data with respect to the parent map.
Merging Changes into Parent Maps

6. Use the following options:

**Overwrite existing version**
Use this option to overwrite the existing version.

**Create New Version**
Use this option to create new version of the parent map.

7. Enter relevant Mail Comments.

8. Click 📭.

The child map is merged with the parent map.

If you enable notifications in the Mapping Manager Settings the project users receive mail comments through an email notification. For more information on configuring notifications, refer to the Configuring Notifications topic.
Deleting Maps

You can delete maps that are not required in a project. You can also opt to delete all the versions of a map.

To delete maps, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.

2. In the Workspace Mappings pane, select a map or multiple maps.
   You can use shift key to select multiple maps.

3. Right-click the selection.

4. Click Delete Mapping(s).

   The Delete Mappings-Selected Mappings List page appears.
5. Use the following options:

**Remove Mapping from Current Selection (x)**
Use this option to remove mappings from the current selection.

**Delete all Versions**
Use this option to delete all versions of the mappings.

**Delete Current Version**
Use this option to delete current version of the maps.
Viewing Workflow Logs

A default workflow, Mapping_Manager_Default_Workflow is assigned to all projects in the Mapping Manager. You can also create a workflow and assign it to your project. For more information on assigning workflow to projects, refer to the Managing Mapping Manager Workflows section.

You can view the flow of actions of the workflow assigned to a map. Along with other information, the workflow displays the current state of the map in the workflow.

To view workflow logs, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, click a map.
   By default, the Mapping Specification tab opens.

3. Click the Workflow Log tab.
   The workflow log of the map appears. The current workflow stage blinks in the diagram.
Use the following options:

**User Comments**

Use this option to view users and their comments in each stage.

**Expand/Hide Users and Roles**

Use this option to view or hide users and roles assigned to workflow stages.

**Collapse/Expand Roles**

Use this option to switch between the collapsed and expanded roles view. This option is enabled when you are in the Expand Users and Roles view.

**Collapse/Expand Users**

Use this option to switch between the collapsed and expanded users view. This option is enabled when you are in the Expand Users and Roles view.

**Export Image**

Use this option to download the workflow in the JPG format.
Analyzing Mappings

This section walks you through the multiple ways of analyzing source to target mappings.

Analyzing mappings involves:

- Data preview
  - Generating virtual preview of target
  - Previewing data through Metadata Catalogue
- Gap analysis
  - Performing table gap analysis
  - Performing column gap analysis
- Impact analysis
  - Running impact analysis for tables and columns
- Lineage analysis
  - Running dual, forward, or reverse lineage analysis
  - Running end to end lineage
- Business view
- Mapping statistics
Generating Virtual Preview of Targets

When you create a mapping specification, source column values undergo modifications based on the applied transformations. These modified values are updated in target columns based on the target update strategy. You can generate a virtual preview of targets to view the updated target columns.

Mapping specifications involving multiple source or target systems do not support virtual preview of targets.

To generate a virtual preview of targets, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.

2. In the Workspace Mappings pane, click a map.

   The Mapping Specification grid appears.

3. Click 📋.

   Mapping Preview page appears, displaying the virtual preview of the target based on the source and transformations.
Mapping preview is currently supported for RDBMS only. Here is the list of transformation supported in Mapping Preview:

CONCAT, LTRIM, RTRIM, TRIM, CEIL, FLOOR, RPAD, LPAD, ROUND, SQRT, SUBSTR, UPPER, LOWER, TRUNC, SIN, COS, TAN, SINH, TANH, REVERSE, IS_DATE, IS_NUMBER, IS_SPACES, ISNULL, IIF, ISEMPTY, NVL, DECODE.

You can download the mapping preview details in the XLSX format. To download the mapping preview details, click 🗄️.
Previewing Data

You can preview data in a table using the Metadata Catalogue pane. You can also enter SQL queries to preview the required data in the database.

To preview data from databases, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, click a project.

The Metadata Catalogue pane appears on the right.

3. In the Metadata Catalogue pane, right-click a table and hover over Preview Data.
4. Click any one of the following:

**Preview 100 Records**
Click this option to preview the first 100 records.

**Preview 1000 Records**
Click this option to preview the first 1000 records.

**Advanced Preview**
Click this option to preview data based on a SQL query.

For example, if you click **Preview 100 Records**, then the User Credentials page appears.

![User Credentials](image)

5. Enter **User Name** and **Password** to connect with the database.

You can preview the data based on the options you selected.

![Previewing Data](image)
If you use Advanced Preview then you need to enter a SQL query in the space provided and click to preview the data.

```
SELECT CAT_DIALOG_TAB_ID, CAT_DIALOG_PROFILE_ID, CAT_DIALOG_TABLE, CAT_DIALOG_TABLE_PROPERTIES, CREATED_BY, CREATED_DATE_TIME, LAST_MODIFIED_BY, LAST_MODIFIED_DATE_TIME
FROM di:CAT_DIALOG_TAB
```

<table>
<thead>
<tr>
<th>Preview Data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>System Name</strong>: A_System</td>
<td></td>
</tr>
<tr>
<td><strong>Environment Name</strong>: A_Environment</td>
<td></td>
</tr>
<tr>
<td>CAT_DIALOG_TAB_ID</td>
<td>CAT_DIALOG_PROFILE_ID</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
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<tr>
<td>9</td>
<td>9</td>
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<tr>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>
Performing Table Gap Analysis

You can perform a table gap analysis and find:

- Tables not being used in mappings
- Tables existing on mapping without valid source or target

You can perform table gap analysis at the following levels:

- System
- Environment
- Table

To perform table gap analysis, follow these steps:

1. Go to **Application Menu > Data Catalog > Mapping Manager**.
2. In the **Workspace Mappings** pane, click a project.
   
   The Metadata Catalogue pane appears on the right.

3. In the **Metadata Catalogue** pane, you can right-click a:
   
   - **System**: Use this option to run the analysis on all the tables under a system.
   - **Environment**: Use this option to run the analysis on all the tables under an environment.
   - **Table**: Use this option to run the analysis on a table.

For example, the following image displays the available options when you right-click a system.
4. Click **Table Gap Analysis**.

The Table Gap Analysis page appears.
5. Select projects and mappings.

6. Click ✓.

The Table Gap Analysis Report for the selected projects and mappings appears.
### Table Gap Analysis

**Development Team**

#### Table Gap Analysis Report

**Table Gap Analysis Result For PROJECT(S) : AdventureWorks Migration**

<table>
<thead>
<tr>
<th>#</th>
<th>System Name</th>
<th>Environment Name</th>
<th>Table Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Erix_Sales</td>
<td>Integration</td>
<td>dbo.RM_RESOURCE</td>
</tr>
<tr>
<td>2</td>
<td>Erix_Sales</td>
<td>Integration_Target</td>
<td>dbo.RM_RESOURCE</td>
</tr>
<tr>
<td>3</td>
<td>Erix_Sales</td>
<td>N_Environment</td>
<td>dbo.RM_PROJECT</td>
</tr>
<tr>
<td>4</td>
<td>Erix_Sales</td>
<td>N_Environment</td>
<td>dbo.RM_RESOURCE</td>
</tr>
</tbody>
</table>

#### Tables not being used on any mapping

<table>
<thead>
<tr>
<th>#</th>
<th>System Name</th>
<th>Environment Name</th>
<th>Table Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Erix_Sales</td>
<td>Integration</td>
<td>dbo.RM_RESOURCE</td>
</tr>
<tr>
<td>2</td>
<td>Erix_Sales</td>
<td>Integration_Target</td>
<td>dbo.RM_RESOURCE</td>
</tr>
<tr>
<td>3</td>
<td>Erix_Sales</td>
<td>N_Environment</td>
<td>dbo.RM_PROJECT</td>
</tr>
<tr>
<td>4</td>
<td>Erix_Sales</td>
<td>N_Environment</td>
<td>dbo.RM_RESOURCE</td>
</tr>
</tbody>
</table>

#### Tables existing on Mapping without valid Source (or) Target

<table>
<thead>
<tr>
<th>#</th>
<th>System Name</th>
<th>System Env Name</th>
<th>Table Name</th>
<th>Project Name</th>
<th>Map Name</th>
<th>Usage</th>
</tr>
</thead>
</table>

No Records Found
Performing Column Gap Analysis

A column gap analysis enables you to find:

- Columns not existing in mappings
- Source columns existing on mappings without valid target
- Target columns listed on mappings without business rule and source column

You can perform column gap analysis at the following levels:

- System
- Environment
- Table

To perform column gap analysis, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, click a project.
   
   The Metadata Catalogue pane appears on the right.

3. In the Metadata Catalogue pane, you can right-click a:
   
   - System: Use this option to run the analysis on all the columns under a system.
   - Environment: Use this option to run the analysis on all the columns under an environment.
   - Table: Use this option to run the analysis on all the columns under a table.

   For example, the following image displays the available options when you click a system.
4. Click **Column Gap Analysis**.

The Column Gap Analysis page appears.
5. Select projects and mappings.

6. Click ✓.

The Column Gap Analysis Report for the selected projects and mappings appears.
Performing Column Gap Analysis

Column Gap Analysis Report

<table>
<thead>
<tr>
<th>System Name</th>
<th>Environment Name</th>
<th>Table Name</th>
<th>Column Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Env_x_Sales</td>
<td>Integration_TapX</td>
<td>Int.RESOURCE</td>
<td>RESOURCEID</td>
</tr>
<tr>
<td>Env_x_Sales</td>
<td>Integration_TapX</td>
<td>Int.RESOURCE</td>
<td>RESOURCEID</td>
</tr>
<tr>
<td>Env_x_Sales</td>
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<td>Int.RESOURCE</td>
<td>RESOURCEID</td>
</tr>
<tr>
<td>Env_x_Sales</td>
<td>Integration_TapX</td>
<td>Int.RESOURCE</td>
<td>RESOURCEID</td>
</tr>
<tr>
<td>Env_x_Sales</td>
<td>Integration_TapX</td>
<td>Int.RESOURCE</td>
<td>RESOURCEID</td>
</tr>
</tbody>
</table>

Source Columns existing in Mapping without valid Target (with or without RH) or Target Columns based on Mapping without RH (Without Source Col)

<table>
<thead>
<tr>
<th>System Name</th>
<th>Environment</th>
<th>Table Name</th>
<th>Column Name</th>
<th>Project Name</th>
<th>Map Name</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No Records Found
Running Impact Analysis

A technical asset may act as a source, target, or both in mappings. After mapping source metadata with target metadata, you can run impact analysis on the technical assets. The impact analysis helps you understand upstream and downstream dependencies of technical assets and impacts linked to business assets. It helps you assess the impact of transformations and source or target-level changes.

Also, view lineages based on selected asset and export impact analysis.

You can run impact analysis at the following levels:

- System
- Environment
- Table
- Column
Running Lineage Analysis

After mapping source metadata with target metadata, you can run the lineage analyzer on the mapping through the Mapping Specification grid. The generated data lineage report helps you trace the data’s origin, its transformations, and its destination after source to target mappings.

You can run the lineage at the following levels:

- **System**
- **Environment**
- **Table**
- **Column**
System

You can run forward and reverse lineage analysis to trace metadata at the system level. Forward lineage analysis generates lineage with the system as source. And, reverse lineage analysis generates lineage with the system as target. The Dual-Combined View lineage analysis generates a lineage, which includes both forward and reverse lineage.

This topic walks you through the following:

- **Viewing Lineage**
- **Working on Lineage**

Viewing Lineage

To run lineage at the system level, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, click the required mapping.

The Mapping Specification grid appears.

3. Select a row.
4. Right-click a system and hover over **Lineage Analyzer**.

The options available for Lineage Analyzer appear.

<table>
<thead>
<tr>
<th>#</th>
<th>Target System Name</th>
<th>Target Environment Name</th>
<th>Target Table Name</th>
<th>Target Column Name</th>
<th>Target Column Data Type</th>
<th>Target Column Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SQLTechPubs</td>
<td>SQLTechPubs</td>
<td>dbo.Customers</td>
<td>CustomerID</td>
<td>nchar</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>SQLTechPubs</td>
<td>SQLTechPubs</td>
<td>dbo.Customers</td>
<td>CompanyName</td>
<td>nvarchar</td>
<td>40</td>
</tr>
<tr>
<td>3</td>
<td>SQLTechPubs</td>
<td>SQLTechPubs</td>
<td>dbo.Customers</td>
<td>ContactName</td>
<td>nvarchar</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>SQLTechPubs</td>
<td>SQLTechPubs</td>
<td>dbo.Customers</td>
<td>Address</td>
<td>nvarchar</td>
<td>80</td>
</tr>
</tbody>
</table>

5. Hover over any one of the following:
   - **Forward**: Use this option to view forward lineage.
   - **Reverse**: Use this option to view reverse lineage.
   - **Dual - Combined View**: Use this option to view combined forward and reverse lineage.

For example, when you hover over Forward, All Projects and By Project appear as options.
6. Use the following options:

**All Projects**

Use this option to include all the projects in lineage analysis.

**By Project**

Use this option to select projects for lineage analysis.
By default, all projects are selected. Clear the check boxes for the projects that are not required. Then, click . The system’s forward lineage is generated based on the options you selected. Similarly, you can generate reverse, and dual lineage for a system. By default, the lineage appears in Graphical View.

7. You can click **Graphical View** or **Grid View** to switch between them:

- **Graphical View**: The graphical view displays the lineage of a system in a graphical format. Selecting a system on the graphical view displays its properties in the Node Properties pane and Legends. On the Node Properties pane, click to view the selected object’s properties
System in a new window.

- **Grid View:** The grid view displays the lineage of a system in a tabular format. You can view the source and target system associated with the selected system.

8. Use the following options to work on the lineage in graphical view:

   **Options (📸)**

   Use this option to view lineage types, business properties and customizations options. For more information on lineage options, refer to the [Working on](#)
On the lineage, expand a system node, and select an environment to view its lineage path. The environment is highlighted in orange color, its forward lineage path appears in red, and its reverse lineage path appears in blue. Systems that are not part of a lineage path disappear.
Right-click a path around the selected object to highlight its path of the source or target in the lineage.

Working on Lineage

Lineage of a system shows how metadata moves through systems. It provides a summary of environments used as source and target in a graphical view. Also, it gives you information about the systems and environments involved in the lineage.

Use the following options to work on lineage:

Forward Lineage

Use this option to view forward lineage of the system.

Reverse Lineage

Use this option to view reverse lineage of the system.
Dual Lineage

Use this option to view dual lineage, which includes both forward and reverse lineage of the system.

Sensitivity Indicator

Use this option to view sensitivity of the environments in the lineage. You can expand a system node to view sensitive environments. The sensitive system and environments are indicated using 🔒.
Logical Name

Use this option to view expanded logical names of the tables and columns in an environment in the lineage. You can expand a system node to view environments and tables.

For example, the following image displays the table's logical name in the lineage.

Expanded Logical Name
System

Use this option to view expanded logical names of the tables and columns in an environment in the lineage. You can expand a system node to view environments, tables, and columns. For more information, on configuring extended properties of a system, refer to the System topic.

For example, the following image displays the table's expanded logical name in the lineage.

![Image of expanded logical names]

DQ Tool Score

Use this option to view the data quality score of the environments, tables, and columns in the lineage. You can expand a system node to view data quality scores for environments, tables, and columns.

For example, the following image displays the data quality score in the lineage.

![Image of data quality score]
Auto Layout

Use this option to rearrange the layout of the lineage automatically. For example, the following image displays the rearranged object layout with respect to the previous screenshot.
Overview Lineage

Use this option to view the lineage excluding systems and environments that do not exist in the Metadata Manager. When this option is switched off, the views include systems and environments, that do not exist in the Metadata Manager.

For example, the following image displays lineage excluding assets that do not exist in Metadata Manager.
Overview Pane

Use this option to remove the lineage overview pane from the graphical view.
Environment

You can run forward and reverse lineage analysis to trace metadata at the environment level. Forward lineage analysis generates lineage with the environment as source. And, reverse lineage analysis generates lineage with the environment as target. The Dual-Combined View lineage analysis generates a lineage, which includes both forward and reverse lineage.

This topic walks you through the following:

- **Viewing Lineage**
- **Working on Lineage**

Viewing Lineage

To run lineage at the environment level, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, click the required mapping.
   The Mapping Specification grid appears.

3. Select a row.
4. Right-click an environment and hover over **Lineage Analyzer**.

The options available for Lineage Analyzer appear.

<table>
<thead>
<tr>
<th>#</th>
<th>Target System</th>
<th>Target Environment Name</th>
<th>Target TableName</th>
<th>Target Column Name</th>
<th>Target Column Data Type</th>
<th>Target Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SQLTechPubs</td>
<td>SQLTechPubs</td>
<td>dbo.Customers</td>
<td>CustomerID</td>
<td>nchar</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>SQLTechPubs</td>
<td>SQLTechPubs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>SQLTechPubs</td>
<td>SQLTechPubs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>SQLTechPubs</td>
<td>SQLTechPubs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Hover over any one of the following:

- **Forward**: Use this option to view forward lineage.
- **Reverse**: Use this option to view reverse lineage.
- **Dual - Combined View**: Use this option to view combined forward and reverse lineage.

For example, when you hover over Reverse, All Projects and By Project appear as options.
6. Use the following options:

**All Projects**

Use this option to include all the projects in lineage analysis.

**By Project**

Use this option to select projects for lineage analysis.
Environment

By default, all projects are selected. Clear the check boxes for the projects that are not required. Then, click

The environment’s reverse lineage is generated based on the options you selected. Similarly, you can generate forward, and dual lineage for an environment. By default, the lineage appears in Graphical View.

![Reverse Lineage: SQLTechPubs → SQLTechPubs](image)

7. You can click **Graphical View** or **Grid View** to switch between them:

- **Graphical View**: The graphical view displays the lineage of the environment in a graphical format. Selecting an environment on the graphical view displays its properties in the Node Properties pane and Legends. On the Node Properties pane, click 📊 to view the selected object's properties in a new window.

![Graphical View](image)

- **Grid View**: The grid view displays the lineage of the environment system in a tabular format. You can view the source and target system associated with the
8. Use the following options to work on the lineage in graphical view:

Options (🔧)

Use this option to view lineage types, business properties and customizations options. For more information on lineage options, refer to the Working on Lineage section.

Export to Image (⎙)
Environment

Use this option to download the lineage view as an image, in the .jpg format. Ensure that you expand the required nodes in a lineage before downloading the lineage image.

Export to PDF (PDF)

Use this option to download the lineage report in the .pdf format. Ensure that you expand the required nodes in a lineage before downloading the lineage report as PDF.

Export to Excel (Excel)

Use this option to download the lineage report in the .xlsx format. Ensure that you expand the required nodes in a lineage before downloading the report.

On the lineage, expand a system node, and select a table to view its lineage path. The environment is highlighted in blue color, its forward lineage path appears in red, and its reverse lineage path appears in blue. Systems and environments that are not part of a lineage path disappear.

Right-click a path around the selected object to highlight its path of the source or target in the lineage.

Working on Lineage

Lineage of an environment shows how metadata moves through environments. It provides a summary of tables used as source and target. Also, it gives information about the environments and tables involved in the lineage.

Use the following options to work on lineage:

Forward Lineage
Environment

Use this option to view forward lineage of the environment.

Reverse Lineage

Use this option to view reverse lineage of the environment.

Dual Lineage

Use this option to view dual lineage, which includes both forward and reverse lineage of the environment.
**Environment**

![Diagram of lineage environment mapping]

**Sensitivity Indicator**

Use this option to view sensitivity of the environments in the lineage. You can expand the environment node to view sensitive tables. The sensitive assets are indicated using 🔒.

![Diagram showing sensitivity indicator]

**Logical Name**

Use this option to view expanded logical names of the tables and columns in an environment in the lineage. You can expand a system node to view environments and tables.

For example, the following image displays the table's logical name in the lineage.
Environment

Expanded Logical Name
Use this option to view expanded logical names of the tables and columns in an environment in the lineage. You can expand a system node to view environments, tables, and columns.

For example, the following image displays the table's expanded logical name in the lineage.

DQ Tool Score
Use this option to view the data quality score of the environments, tables, and columns in the lineage. You can expand a system node to view data quality scores for environments, tables, and columns.

For example, the following image displays the data quality score in the lineage.
Environment

Auto Layout

Use this option to rearrange the layout of the lineage automatically. For example, the following image displays the rearranged object layout with respect to the previous screenshot.

Overview Lineage

Use this option to view the lineage excluding systems and environments that do not exist in the Metadata Manager. When this option is switched off, the views include systems and environments, that do not exist in the Metadata Manager.

For example, the following image displays lineage excluding assets that do not exist in Metadata Manager.
Overview Pane

Use this option to remove the overview pane from the graphical view.
Table

You can run forward and reverse lineage analysis to trace metadata at the table level. Forward lineage analysis generates lineage with the table as source. And, reverse lineage analysis generates lineage with the table as target. The Dual-Combined View lineage analysis generates a lineage, which includes both forward and reverse lineage.

This topic walks you through the following:

- Viewing Lineage
- Working on Lineage

Viewing Lineage

To run lineage at the table level, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, click the required mapping. The Mapping Specification grid appears.
3. Select a row.
4. Right-click a table and hover over **Lineage Analyzer**.

   The options available for Lineage Analyzer appear.

<table>
<thead>
<tr>
<th>#</th>
<th>Target System Name</th>
<th>Target Environment Name</th>
<th>Target Table Name</th>
<th>Target Column Name</th>
<th>Target Column Data Type</th>
<th>Target Column Length</th>
<th>Target Precis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SQLTechPubs</td>
<td>SQLTechPubs</td>
<td>dboCustomers</td>
<td>CustomerID</td>
<td>nchar</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>SQLTechPubs</td>
<td>SQLTechPubs</td>
<td>dbo.Customers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>SQLTechPubs</td>
<td>SQLTechPubs</td>
<td>dbo.Customer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>SQLTechPubs</td>
<td>SQLTechPubs</td>
<td>dbo.Customer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Hover over any of the following:

   - **Forward**: Use this option to view forward lineage.
   - **Reverse**: Use this option to view reverse lineage.
   - **Dual - Combined View**: Use this option to view combined forward and reverse lineage.

   For example, when you hover over Dual - Combined View, All Projects and By Project appear as options.
6. Use the following options:

**All Projects**

Use this option to include all the projects in lineage analysis.

**By Project**

Use this option to select projects for lineage analysis.

By default, all projects are selected. Clear the check boxes for the projects that are not required. Then, click "".
The table's dual lineage is generated based on the options you selected. Similarly, you can generate forward, and reverse lineage for tables. By default, the lineage appears in Graphical View.

7. You can click **Graphical View** or **Grid View** to switch between them:

- **Graphical View**: The graphical view displays the lineage of the table in a graphical format. Selecting a table on the graphical view displays its properties in the Node Properties pane and Legends. On the Node Properties pane, click 📊 to view the selected object's properties in a new window. For more information on updating table properties, refer to the [Updating Table Properties](#) topic.
**Grid View**: The grid view displays the lineage of the table in a tabular format. You can view the source and target system associated with the selected system.

8. Use the following options to work on the lineage in graphical view:

**Options (****)**

Use this option to view lineage types, business properties and customizations options. For more information on lineage options, refer to the [Working on] Mapping Management Guide 222
Export to Image (🔗)

Use this option to download the lineage view as an image, in the .jpg format. Ensure that you expand the required nodes in a lineage before downloading the lineage image.

Export to PDF (🔗)

Use this option to download the lineage report in the .pdf format. Ensure that you expand the required nodes in a lineage before downloading the lineage report as PDF.

Export to Excel (🔗)

Use this option to download the lineage report in the .xlsx format. Ensure that you expand the required nodes in a lineage before downloading the report.

On the lineage, expand a table node, and select a column to view its lineage path. The column is highlighted in blue color, its forward lineage path appears in red, and its reverse lineage path appears in blue. The assets that are not part of a lineage path disappear.
Click a path around the selected object to highlight its path of the source or target in the lineage.

**Viewing Transformations**

Transformations between columns are indicated using 🔄 in the lineage. Hover over 🔄 to view transformation rules for the columns on a pop-up. Or, click the path between the columns to highlight it to view detailed transformations between them in the Transformation Details pane.
You can expand the transformation node to view the transformation details that includes Business Rule, Extended Business Rule, Trans lookup Condition, Lookup On, and more relevant properties.

**Working on Lineage**

Lineage of a table shows how metadata moves through tables. It provides a summary of columns used as source and target. Also, it gives you information about the technical and business properties of columns involved in the lineage.

Use the following options to work on lineage:

**Forward Lineage**

Use this option to view forward lineage of the table.
Reverse Lineage

Use this option to view reverse lineage of the table.
Table

Use this option to view dual lineage, which includes both forward and reverse lineage of the table.

Sensitivity Indicator

Use this option to view sensitivity of the table in the lineage. You can expand the table node to view sensitive columns. The sensitive assets are indicated using 🔒.
Logical Name

Use this option to view expanded logical names of the tables and columns in an environment in the lineage. You can expand a system node to view environments and tables.

For example, the following image displays the table's logical name in the lineage.
Expanded Logical Name

Use this option to view expanded logical names of the tables and columns in an environment in the lineage. You can expand a system node to view environments, tables, and columns. For more information on configuring extended properties of tables, refer to the Table topic.

For example, the following image displays the table's expanded logical name in the lineage.
DQ Tool Score

Use this option to view the data quality score of the environments, tables, and columns in the lineage. You can expand a system node to view data quality scores for environments, tables, and columns.

For example, the following image displays the data quality score in the lineage.
Auto Layout

Use this option to rearrange the layout of the lineage automatically. For example, the following image displays the rearranged object layout with respect to the previous screenshot.
Overview Lineage

Use this option to view the lineage excluding systems and environments that do not exist in the Metadata Manager. When this option is switched off, the views include systems and environments, that do not exist in the Metadata Manager.

For example, the following image displays lineage excluding assets that do not exist in Metadata Manager.

Overview Pane

Use this option to remove the lineage overview pane from the graphical view.
Column

You can run forward and reverse lineage analysis to trace metadata at the column level. Forward lineage analysis generates a lineage with the column as source. And, reverse lineage analysis generates a lineage with the column as target. The Dual-Combined View lineage analysis generates a lineage, which includes both forward and reverse lineage.

This topic walks you through the following:

- Viewing Lineage
- Working on Lineage

Viewing Lineage

To run lineage at the column level, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, click the required mapping.

The Mapping Specification grid appears.

3. Select a row.
4. Right-click a column and hover over **Lineage Analyzer**.

The options available for Linear Analyzer appear.

5. Hover over any one of the following:
   - **Forward**: Use this option to view forward lineage.
   - **Reverse**: Use this option to view reverse lineage.
   - **Dual - Combined View**: Use this option to view forward and reverse lineage of the column combined together.

For example, when you hover over the Reverse, All Projects and By Project appear as options.
6. Use the following options:

**All Projects**

Use this option to include all the projects in lineage analysis.

**By Project**

Use this option to select projects for lineage analysis.

By default, all the projects are selected. Clear the check boxes for the projects that are not required. Then, click ![check mark].

The column’s reverse lineage is generated based on the options you selected. Similarly, you can generate forward, and dual lineage for columns. By default,
the lineage appears in Graphical View.

7. You can click **Graphical View** or **Grid View** to switch between them:

- **Graphical View**: The graphical view displays the lineage of the column in a graphical format. Selecting a column on the graphical view displays its properties in the Node Properties pane and Legends. On the Node Properties pane, click 📦 to view the selected object's properties in a new window. For more information on updating column properties, refer to the [Updating Column Properties](#) topic.
**Grid View:** The grid view displays the lineage of the environment system in a tabular format. You can view the source and target system associated with the selected system.

<table>
<thead>
<tr>
<th>#</th>
<th>Info</th>
<th>Source System Name</th>
<th>Source Environment Name</th>
<th>Source Table Name</th>
<th>Source Column Name</th>
<th>Target System Name</th>
<th>Target Environment Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>TABLEAU</td>
<td>PRESENTATION LAYER</td>
<td>Account</td>
<td>Aod Atn Status</td>
<td>SQLTechPubs</td>
<td>SQL TechPubs</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>SQLTechPubs</td>
<td>SQLTechPubs</td>
<td>dbo.Customers</td>
<td>CustomerID</td>
<td>Oracle</td>
<td>TechPubs</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Oracle</td>
<td>TechPubs</td>
<td>APPROVESYS.WLM_CLA</td>
<td>SOFIER_PLAN</td>
<td>Salesforce</td>
<td>TechPubs</td>
</tr>
</tbody>
</table>

8. Use the following options to work on the lineage in graphical view:

**Options (🛠️)**

Use this option to view lineage types, business properties and customizations options. For more information on lineage options, refer to the [Working on Column Mapping Management Guide](#).
Column

Lineage section.

Export to Image (Image)
Use this option to download the lineage view as an image, in the .jpg format. Ensure that you expand the required nodes in a lineage before downloading the lineage image.

Export to PDF (PDF)
Use this option to download the lineage report in the .pdf format. Ensure that you expand the required nodes in a lineage before downloading the lineage report as PDF.

Export to Excel (Excel)
Use this option to download the lineage report in the .xlsx format. Ensure that you expand the required nodes in a lineage before downloading the report.

On the lineage, expand a table node, and select a column to view its lineage path. The column is highlighted in blue color, its forward lineage path appears in red, and its reverse lineage path appears in blue. Assets that are not part of a lineage path disappear.
Right-click a path around the selected object to highlight its path of the source or target in the lineage.

**Viewing Transformations**

Transformations between columns are indicated using 🔥 in the lineage. Hover over 🔥 to view transformation rules for the columns on a pop-up. Or, click the path between the columns to highlight it to view detailed transformations between them in the Transformation Details pane.
You can expand the transformation node to view the transformation details that includes Business Rule, Extended Business Rule, Trans lookup Condition, Lookup On, and more relevant properties.

**Working on Lineage**

Lineage of a column shows how metadata moves through columns. It provides a summary of columns used as source and target. Also, it gives information about technical and business properties of columns involved in the lineage.

Use the following options to work on lineage:

**Forward Lineage**

Use this option to view forward lineage of the column.
Reverse Lineage

Use this option to view reverse lineage of the column.
Dual Lineage

Use this option to view dual lineage, which includes both forward and reverse lineage of the column.

Sensitivity Indicator

Use this option to view sensitivity of the columns in the lineage. You can expand the environment node to view sensitive columns. The sensitive assets are indicated using 🔒.
Logical Name

Use this option to view expanded logical names of the tables and columns in an environment in the lineage. You can expand a system node to view environments and tables.

For example, the following image displays the table's logical name in the lineage.
Expanded Logical Name

Use this option to view expanded logical names of the tables and columns in an environment in the lineage. You can expand a system node to view environments, tables, and columns. For more information on configuring extended properties of columns, refer to the Column topic.

For example, the following image displays the table's expanded logical name in the lineage.
DQ Tool Score

Use this option to view the data quality score of the environments, tables, and columns in the lineage. You can expand a system node to view data quality scores for environments, tables, and columns.

For example, the following image displays the data quality score in the lineage.
**Auto Layout**

Use this option to rearrange the layout of the lineage automatically. For example, the following image displays the rearranged object layout with respect to the previous screenshot.

![Auto Layout Diagram](image)

**Overview Lineage**

Use this option to view the lineage excluding systems and environments that do not exist in the Metadata Manager. When this option is switched off, the views include systems and environments, that do not exist in the Metadata Manager.

For example, the following image displays lineage excluding assets that do not exist in Metadata Manager.
Overview Pane

Use this option to remove the lineage overview pane from the graphical view.
Running End to End Lineage

You can run end to end lineage analysis at project level and trace the data between any two mapping projects. The end to end lineage report can be drilled down further to trace intermediate stages of data.

To run end to end lineage at project level, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, right-click the required source project. The available options appear.
3. Click End to End Lineage.
The Select Target page appears.

4. Select a target subject or a target project.

5. Click ✓.
Running End to End Lineage

The End to End Lineage Summary page appears. You can drag and arrange column positions on the page for better visibility.

Use the following options to work on the End to End Lineage Summary page:

**Navigate**

Use ➡️ or⬅️ to navigate.

**Expand (겠습니다)**

To expand the lineage summary, use ⏪. The expanded summary shows the intermediate stages of data.
Running End to End Lineage

**Reset Column Ordering**

Use this option to reset the column order on the page.

**Export**

Use this option to export the lineage summary in the XLSX format.
Opening Business View

You can open a concise view of mappings with an ability to instantly generate lineage and impact analysis. It is an alternate view for both workspace and published maps and more suitable for business users.

To open business view of mappings, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, right-click a map.
   - The available options appear.
3. Click Mapping Alternate View.
   - The Mapping Summary page appears. It has two sections, Mapping Details and Mapping Specifications.
Mapping Details

It displays mapping details that includes mapping specification name, version, target update strategy, and lists of target and source tables.

Mapping Specification

It displays the Mapping Specification grid with source and target details.

Under the Mapping Details and Mapping Specification sections, you can click a <Table_Name> or <Column_Name> to view their respective details.

Table Details

To view table details, on the Mapping Summary page, click <Table_Name>. The Table Details page appears. By default, the Impact Analysis tab opens. You can view direct, indirect, and other impacts of the table.

For more information on impact analysis, refer to the Running Impact Analysis topic.
You can click the following tabs to work on the Table Details page:

- **Data Lineage**: This tab displays the forward and reverse lineage of the table. For more information on lineage of tables, refer to the Table topic.

- **Extended Properties**: This tab displays the extended properties configured for the table. For more information on configuring extended properties, refer to the Extending Table Properties topic.

- **Table Properties**: On this tab, you can view the table properties. For more information on table properties, refer to the Updating Table Properties topic.

- **Columns**: This tab displays a list of columns in the table.

- **Workflow Log**: This tab displays the workflow log of the table. For more information on configuring workflows, refer to the Using Workflow Manager section.

- **Data Quality**: On this tab, you can preview and profile the data in the table. For more information on previewing and profiling data, refer to the Previewing Data topic.
Opening Business View

- **Documents**: On this tab, you can view or add documents related to the table.

- **Test Specifications**: On this tab, you can view the test cases related to the table. For more information on test cases, refer to the [Creating Test Cases](#) topic.

**Column Details**

To view column details, on the Mapping Summary page, click `<Column_Name>`. The Column Details page appears. By default, the Impact Analysis tab opens. You can view direct, indirect, and other impacts of the column. For more information on impact analysis, refer to the [Running Impact Analysis](#) topic.

You can click the following tabs to work on the Column Details page:

- **Data Lineage**: This tab displays the forward and reverse lineage of the column. For more information on lineage of columns, refer to the [Column](#) topic.

![Column Details Tab](image)
**Extended Properties:** This tab displays the extended properties configured for the column. For more information on configuring extended properties, refer to the [Extending Column Properties](#) topic.

**Column Properties:** This tab displays the column properties. For more information on column properties, refer to the [Updating Column Properties](#) topic.

**Workflow Log:** This tab displays the workflow log of the column. For more information on configuring workflows, refer to the [Using Workflow Manager](#) section.

**Valid Values:** This tab displays the codesets assigned to the column as valid values. For more information on assigning codesets to columns, refer to the [Assigning Codesets to Columns](#) topic.

**Documents:** This tab displays the uploaded documents related to the column.
Viewing Mapping Statistics

You can view mapping statistics and view the following information about mapping specifications:

- Total rows
- Number of target tables
- Targets not mapped
- Sources not mapped
- Business rules
- Lookups

To view mapping statistics, follow these steps:

1. Go to **Application Menu > Data Catalog > Mapping Manager**.
2. In the **Workspace Mappings** pane, click the required map.
   
   The Mapping Specification grid appears.

3. Click 📊.

   The mapping statistics are shown with hyperlinks.
You can click the required hyperlinks to get the detailed information.
Associating Mappings

This section walks you through the process of associating mappings with the following:

- Code Mappings or Code Crosswalks
- Reference Tables
- Requirements

It involves:

- [Link](#) Associating code maps with data item mappings
- [Link](#) Associating reference tables with mappings
- [Link](#) Linking requirements with mappings
Associating Code Maps with Data Item Mappings

A code map can be associated with a data item mapping to standardize data across the organization. These code maps are maintained in Codesets Manager. For more information on codesets and code mappings, refer to the Using Codesets Manager section.

Before associating a code map with data item mappings, ensure that you publish the code map.

Publishing Code Maps

To publish code maps, follow these steps:

1. Go to Application Menu > Data Catalog > Codeset Manager > Codeset Mappings.
2. In the Code Mappings Workspace pane, right-click a code map.
   
   The available options appear.

3. Click Publish.
   
   The Publish Codeset Map page appears.
4. Enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field descriptions.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codeset Map Name</td>
<td>Specifies the name of the code map. For example, Gender Crosswalk.</td>
</tr>
<tr>
<td>Codeset Map Version</td>
<td>Specifies the new version of the code map. For example, 1.02.</td>
</tr>
<tr>
<td>Codeset Map Description</td>
<td>Specifies the description about the code map. For example: The codeset map is the code mappings between the two codesets, Misc Gender Codes and Gender.</td>
</tr>
<tr>
<td>Map Version Label</td>
<td>Specifies the version label of the code map. For example, Beta.</td>
</tr>
<tr>
<td>Map Changed Description</td>
<td>Specifies the description about the changes made in the code map. For example: Code values were updated.</td>
</tr>
<tr>
<td>Publish Environment</td>
<td>Specifies the environment where the code map is being published. For example, test. You can create publish environments in Enterprise Codesets.</td>
</tr>
</tbody>
</table>
Associating Code Maps with Data Item Mappings

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For more information on creating publish environments, refer to the Publishing Codesets topic.</td>
</tr>
</tbody>
</table>

5. Click 📜.

The code map is published and it can be found in the Published Code Mappings pane under the selected Publish Environment.

A new version of the code map is created under the Mappings tree.

A published code map can be associated with a mapping in the Mapping Manager. The published code map is available under the Code Mappings Catalogue.

**Associating Code Maps**

To associate published code maps with data item mappings, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, click the required map.
3. Click \(\text{Click}\).

4. In the **Mapping Specification** grid, right-click the header menu.

5. Select the **CSM Mapping** check box.

   The CSM Mapping Column appears in the Mapping Specification grid.

6. In the right pane, expand **Code Mapping Catalogue**.

7. Drag the code map into the **Mapping Specification** grid and drop it under the **CSM Mapping** column for the required row.
8. Click 📄.

The code map is associated with the data item mappings.
Associating Reference Tables with Mappings

Reference data sets the permissible values for other data fields. To standardize your data, you can associate a reference table with mappings. Ensure that you publish the required reference table before associating it with mappings.

To associate reference tables with Mappings, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, click a map.

   The Mapping Specification grid appears.

3. Click .
4. Right-click the header menu.

5. Select the Reference Table check box.
Associating Reference Tables with Mappings

The Reference Table column appears in the Mapping Specification grid.

6. Drag the reference table from **Reference Table Catalogue** and drop it on the required row under the **Reference Table** column.

You can associate multiple source columns with the reference tables.

7. Click ![button]

The reference table is associated with the mappings.
Linking Requirements to Mappings

To ensure enterprise-wide traceability, you can link your functional requirements to data mappings.

To link functional requirements to mappings, follow these steps:

1. Go to **Application Menu > Data Catalog > Mapping Manager**.
2. Click a mapping.
   
   The mapping opens in the detailed view.

   ![Mapping Manager](image)

3. On the **Mapping Specification** tab, right click the grid header.
   
   A list of header columns appears.
4. Scroll down the list and select the **Specification Artifact** check box. The specification Artifact column becomes visible on the Mapping Specification tab.

5. In the right pane, click **Specification Artifact Catalogue**.

6. Expand the project that contains the required specification.

7. Drag and drop the specification on the **Specification Artifacts** column in the required row.

8. Click ![Link](image)

Requirements are linked to the selected mapping.
Publishing and Creating Versions of Mappings

This section walks you through the process of publishing mappings to corresponding source or target production environments. Production environments of the source and the target are defined in the Metadata Manager. You can also create new versions of the mappings while archiving the older versions.

It involves:

- Creating versions of maps
- Base-lining Projects
- Comparing two different mapping versions
- Publishing mappings
- Restoring archived maps as active
Creating Versions of Maps

You can create new version of maps and track history of changes made in the mapping specification. You can also notify and send mail comments to all the project users about the creation of new version. For more information on notifying project users, refer to the Configuring Notifications topic.

To create versions of maps, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, right-click a map. The available options appear.
Creating Versions of Maps

4. Enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field descriptions.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mapping Name</td>
<td>Specifies the mapping specification name.</td>
</tr>
<tr>
<td></td>
<td>For example, EDW_PROD_IDS_Benefits_Detail.</td>
</tr>
<tr>
<td>Mapping Version</td>
<td>Specifies the new version of the mapping specification.</td>
</tr>
<tr>
<td></td>
<td>For example, 1.02.</td>
</tr>
<tr>
<td>Mapping Description</td>
<td>Specifies the description about the mapping.</td>
</tr>
<tr>
<td></td>
<td>For example: This is a map between EDW source and IDS target systems.</td>
</tr>
<tr>
<td>Version Label</td>
<td>Specifies the version label of the mapping specification.</td>
</tr>
<tr>
<td></td>
<td>For example, Beta.</td>
</tr>
<tr>
<td></td>
<td>For more information on configuring version display of mapping specifications, refer to the Configuring Version Display topic.</td>
</tr>
<tr>
<td>Changed Description</td>
<td>Specifies the description of the changes made in the mapping specification.</td>
</tr>
<tr>
<td></td>
<td>For example: A business rule for a source column was added.</td>
</tr>
<tr>
<td>Mail Comments</td>
<td>Specifies the mail comments, which can be sent to the project users through an email notification.</td>
</tr>
<tr>
<td></td>
<td>For example: Target update strategy is not updated.</td>
</tr>
</tbody>
</table>
Creating Versions of Maps

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For more information on configuring notifications, refer to the Configuring Notifications topic.</td>
</tr>
</tbody>
</table>

5. Click).

A new version of the map is created and the previously active version moves under the archive folder.

Archived maps are in read-only mode and cannot be edited.
Base-lining Projects

Base-lining a project brings all maps in the project to the same version. You can base-line all the maps in a project and record change description and notify all the project users and send mail comments to them.

To base-line projects, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, right-click a project.
   
   The available options appear.

3. Click New Baseline.
   
   The New Baseline page appears.
4. Enter **Version Label**, **Change Description**, and **Mail Comments**.

For example:

- **Version Label** - Beta.
  
  For more information on version display, refer to the [Configuring Version Display](#) topic.

- **Change Description** - Business rule for all the source column was changed to ASCII.

- **Mail Comments** - The target update strategy needs to be updated.
  
  For more information on notifying project users, refer to the [Configuring Notifications](#) topic.

5. Click ![Submit Button](#).

The project is base-lined and all the maps in the project now have the same version. Project users receive email notifications about the base-lining and mail comments, if you enable notifications for it. For more information on configuring notifications, refer to the [Configuring Notifications](#) topic.
Comparing Two Different Mapping Versions

You can use the advanced mapping comparison ability to quickly and efficiently compare any two mapping versions. You can view the changes on a row by row basis and improve your debugging ability.

To compare two different mapping versions, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, select two mapping versions.
   
   ![Use shift keys to select the two mapping versions.]

3. Right-click the selection.
   
   The available options appear.

4. Click Compare To.
   
   The Compare To page appears. All the changes are highlighted in red color in the comparison report.
Comparing Two Different Mapping Versions

To exclude exporting common rows in the report, select **Exclude Common Rows Export**.

Use the following options to export the comparison report:

- To export the report in the PDF format, click 📄.
- To export the report in the XLSX format, click 📊.
- To export the report in the HTML format, click 📂.
Publishing Mappings

You can publish a map on an effective date and enter publishing notes for a record. Before publishing mappings, ensure that the source and the target environments have their corresponding production environments.

Publishing Mappings

To publish mappings, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, right-click a map.
3. Click Publish Map.

The Publish Map page appears.
4. Enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field descriptions.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mapping Name</td>
<td>Specifies the mapping specification name. For example, EDW_PROD_IDS_Benefits_Detail. It is autopopulated and you cannot edit this field.</td>
</tr>
<tr>
<td>Mapping Version</td>
<td>Specifies the version of the mapping specification. For example, 1.00. It is autopopulated. For more information on configuring version display of maps, refer to the <a href="#">Configuring Version Display</a> topic.</td>
</tr>
<tr>
<td>Version Label</td>
<td>Specifies the version label of the mapping specification. For example, EDW_PROD_IDS_Benefits_Detail (Alpha). For more information on configuring version display of maps, refer to the <a href="#">Configuring Version Display</a> topic.</td>
</tr>
<tr>
<td>Effective Date</td>
<td>Use 📅 to enter the effective date of publishing. For example, 04/02/2020.</td>
</tr>
</tbody>
</table>
### Publishing Mappings

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change Description</td>
<td>Specifies the description for changes made in the mapping specification.</td>
</tr>
<tr>
<td></td>
<td>For example: Business rule was modified from ABORT to ASCII for the source</td>
</tr>
<tr>
<td></td>
<td>column ID.</td>
</tr>
<tr>
<td>Publish Notes</td>
<td>Specifies the publish notes about the mapping specification.</td>
</tr>
<tr>
<td></td>
<td>For example: The mapping specification is approved for publishing on 1 Feb</td>
</tr>
<tr>
<td></td>
<td>2020.</td>
</tr>
</tbody>
</table>

5. Click 📜.

The mapping is published on the effective date and saved in the **Published Mappings** pane. The source and the target environments in the published mapping are updated to their corresponding production environments. All previously published versions of the same mapping are stored in the History folder. A published mapping cannot be edited.

A new version of the mapping is automatically created in **Workspace Mappings** that can be edited.

To view published map details, in the **Published Mappings** pane, click the `<Mapping_Name>`.

The business view of the mapping appears which can be used to run impact analysis, lineage analysis, and data quality etc. For more information on business view, refer to the **Opening Business View** topic.
Updating Publishing Details

To update publishing details of published maps, follow these steps:

1. In the **Workspace Mappings** pane, right-click the required project.

The available options appear.
Publishing Mappings

2. Click **Edit Published Maps**.

   The Edit Publish Mappings page appears. You can use **Filter by Effective Date** to filter the mappings based on the effective publishing date.

   ![Edit Publish Mappings](image)

3. In the **Publish Tree** pane, select the required published map.

   Now, you can update Publish Notes and Effective Date.

4. Click **Publish Notes**.

   The publishing details of the map is updated.
Restoring Archived Maps As Active

When you create a new version of a map, the older version is archived. The archived map is in read-only mode and cannot be edited. You can restore an archived map as an active map and work on the map.

To restore archived maps as active, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.
2. In the Workspace Mappings pane, right-click the required archived map.

The Restoring Archived Mapping as Active page appears.
3. Enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field descriptions.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mapping Name</td>
<td>Specifies the mapping specification name. For example, EDW_PROD_IDS_Benefits_Detail.</td>
</tr>
<tr>
<td>Mapping Version</td>
<td>Specifies the new version of the mapping specification. For example, 1.02.</td>
</tr>
<tr>
<td>Mapping Description</td>
<td>Specifies the description of the mapping. For example: This is a map between EDW source and IDS target systems.</td>
</tr>
<tr>
<td>Version Label</td>
<td>Specifies the version label of the mapping specification. For example, Beta. For more information on configuring version display of mapping specifications, refer to the Configuring Version Display topic.</td>
</tr>
<tr>
<td>Changed Description</td>
<td>Specifies the description of the changes made in the mapping specification. For example: A business rule for a source column was added.</td>
</tr>
<tr>
<td>Mail Comments</td>
<td>Specifies the mail comments which can be sent to the project users.</td>
</tr>
</tbody>
</table>
### Restoring Archived Maps As Active

<table>
<thead>
<tr>
<th><strong>Field Name</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mappings</td>
<td>through an email notification. For example: Target update strategy is not updated. For more information on configuring notifications, refer to the Configuring Notifications topic.</td>
</tr>
</tbody>
</table>

4. Click ![button](image)

The archived map is restored as a new version and the existing active map is archived.
Exporting Mapping Specifications

This section walks you through the process of exporting mapping specifications. Once the mappings are approved for coding requirements like ETL Jobs, SQL Scripts, Python Code, Spark Code, DDL Scripts, or Stored Procedures then you can export them.

You can export mapping specifications to:

- the proprietary XML format
- generate ETL jobs
Proprietary XML Format

Once the mappings are approved for coding, you can export the mappings as coding requirements in the XML format.

To export mapping specifications into proprietary XML format, follow these steps:

1. Go to **Application Menu > Data Catalog > Mapping Manager**.
2. In the **Workspace Mappings** pane, click a map.
3. Click 📧.

   The Mapping Specification grid appears.

   ![Mapping Specification Grid](image)

   The Export Window page appears.
4. Select **Mapping Manager XML** and click `[ ]`.

5. Click `[ ]`.

6. Select the required mappings and click `[ ]`.

The following notification appears.
7. Click the **Download file** hyperlink.

   A ZIP file is downloaded. Unzip this file to use the mapping specification in the XML format.
ETL Jobs

Once the mappings are considered 'approved for coding', you can export the mappings as coding requirements to automatically generate ETL/ELT jobs. The ETL jobs can be generated for tools, such as Informatica PowerCenter, IBM DataStage, Microsoft SQL Server SSIS, and Talend.

1. Go to Application Menu > Data Catalog > Mapping Manager.

2. In the Workspace Mappings pane, click the required map. The Mapping Specification grid appears.

3. Click . The Export Window page appears.
4. Click the ETL Engineering tab.

5. Select the required ETL tool and click \( \uparrow \).

The Multi Mapping page appears.
ETL Jobs

6. Select the mapping and click [1].

The following notification appears.

7. Click the **Download File** hyperlink.

The mapping specification is exported.
Creating and Managing Test Cases for Mappings

You can create test cases for testing data mappings and ETL processes in the Mapping Manager for:

- Projects
- Mappings

The test cases created at project-level apply to all the mappings created under the project. Whereas, map-level test cases apply to particular map.

Creating and managing test cases involves:

- Creating test cases
- Adding validation steps
- Adding documents
- Managing test cases
Creating Test Cases

In the Mapping Manager, you can define test cases at:

- **Project-level**
- **Map-level**

At the project-level, you can create multiple test cases. Whereas, at the map-level, you can create a single test case.

**Creating Project-Level Test Cases**

To create project-level test cases, follow these steps.

1. Go to **Application Menu > Data Catalog > Mapping Manager > Workspace Mappings**.
2. Expand a project and click the **Test Case** node.
   - The Test Case Summary page appears.
3. Click **+**.
   - The Add New Test Case page appears.

Test cases created for a project are also applicable to the mappings under a project.
4. Enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field descriptions.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Case Name</td>
<td>Specifies the name of the test case. For example, Verifying the Completeness of Source Metadata.</td>
</tr>
<tr>
<td>Test Case Label</td>
<td>Specifies the unique label for the test case. For example, Source Metadata.</td>
</tr>
<tr>
<td>Type of Testing</td>
<td>Specifies the type of testing. For example, Metadata Testing.</td>
</tr>
<tr>
<td>Test SQL Script</td>
<td>Specifies the SQL script required in the test execution. For example, select * from dbo.ADS_ASSOCIATIONS.</td>
</tr>
<tr>
<td>Description</td>
<td>Specifies the test objective in brief. For example: The objective of the test case is to verify the completeness of source metadata.</td>
</tr>
<tr>
<td>Expected Result</td>
<td>Specifies the expected result of the test case in detail. For example: The source table should have 50 columns.</td>
</tr>
<tr>
<td>Actual Result</td>
<td>Specifies the actual test result after the execution of the test.</td>
</tr>
</tbody>
</table>
Creating Test Cases

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>For example:</td>
<td>The source table has 39 columns.</td>
</tr>
<tr>
<td>Testing Comments</td>
<td>Specifies the testing comments about the test case.</td>
</tr>
<tr>
<td>For example:</td>
<td>The source metadata was scanned from a Sql Server database.</td>
</tr>
</tbody>
</table>

5. Click **Save and Exit**.

The test case is created and added to the **Test Cases** node.

Creating Map-Level Test Cases

To create map-level test cases, follow these steps.

1. Go to **Application Menu > Data Catalog > Mapping Manager > Workspace Mappings**.

2. Click a mapping and click the **Test Specification** tab.

   It displays the existing project-level test cases.

3. Click **+**.

   The Add New Test Case page appears.
4. Enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field descriptions.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Case Name</td>
<td>Specifies the name of the test case. For example, Verifying the Completeness of Source Metadata.</td>
</tr>
<tr>
<td>Test Case Label</td>
<td>Specifies the unique label for the test case. For example, Source Metadata.</td>
</tr>
<tr>
<td>Priority</td>
<td>Specifies the priority of the test case. For example, High. Priority for business rules and functional test cases can be medium or higher.</td>
</tr>
<tr>
<td>Type of Testing</td>
<td>Specifies the type of testing. For example, Metadata Testing.</td>
</tr>
<tr>
<td>Extendable</td>
<td>Specifies whether the test case is visible even when this map is archived. A map is archived whenever you create a new version of the map.</td>
</tr>
<tr>
<td>Test SQL Script</td>
<td>Specifies the SQL script required in the test execution. For example, select * from dbo.ADS_ASSOCIATIONS.</td>
</tr>
</tbody>
</table>
## Creating Test Cases

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Specifies the test objective in brief. For example: The objective of the test case is to verify the completeness of source metadata.</td>
</tr>
<tr>
<td>Expected Result</td>
<td>Specifies the expected result of the test case in detail. For example: The source table should have 50 columns.</td>
</tr>
<tr>
<td>Actual Result</td>
<td>Specifies the actual test result after the execution of the test. For example: The source table has 39 columns.</td>
</tr>
<tr>
<td>Testing Comments</td>
<td>Specifies the testing comments about the test case. For example: The source metadata was scanned from a Sql Server database.</td>
</tr>
<tr>
<td>Test Case Status</td>
<td>Specifies the status of the test case. For example, Passed.</td>
</tr>
<tr>
<td>Approved</td>
<td>Specifies whether the test case is approved.</td>
</tr>
</tbody>
</table>

5. Click **Save and Exit**.

The test case is added under the Test Specification tab.

Once a test case is created, you can enrich it by:

- Adding validation steps
- Adding documents

**Managing test cases** involves:

- Updating test case status
- Approving test cases
- Exporting test cases
- Deleting test cases
Adding Validation Steps

You can add multiple validation steps to the test cases at:

- **Project-level**
- **Map-level**

You can also specify actual and expected results for each validation step.

### Adding Validation Steps to Project-Level Test Cases

To add validations to project-level test cases, follow these steps.

1. In the **Workspace Mappings** pane, expand a project and click the **Test Case** node. The Test Case Summary pane appears.

2. Click +.

   The Add Validation Steps page appears.
3. Enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field descriptions.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Validation Step Type</td>
<td>Specifies the type of validation step. For example, Data Check.</td>
</tr>
<tr>
<td>Step Name</td>
<td>Specifies the unique name of the step. For example, Validating Number of Columns.</td>
</tr>
<tr>
<td>Description</td>
<td>Specifies the description of the validation step. For example: This step validates the number of columns in the source metadata.</td>
</tr>
<tr>
<td>Expected Result</td>
<td>Specifies the expected result in detail. For example: The source table, dbo.ADS_ASSOCIATIONS should have 50 columns.</td>
</tr>
<tr>
<td>Actual Result</td>
<td>Specifies the actual test result after the execution of the test. For example: The source table contains 50 columns.</td>
</tr>
<tr>
<td>Test Step Comments</td>
<td>Specifies the comments about the step. For example: The source metadata was scanned from a Sql Server</td>
</tr>
</tbody>
</table>
Adding Validation Steps

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>database.</td>
<td></td>
</tr>
</tbody>
</table>

4. Click **Save**.

The validation step is added to the test case.

Adding Validation Steps to Map-Level Test Cases

To add validations to map-level test cases, follow these steps.

1. In the **Workspace Mappings** pane, expand a project and click a mapping.
2. Click the **Test Specification** tab.
3. Double-click a map-level test case.

The Test Case Summary pane appears.

4. In the bottom pane, click the **Validation Steps** tab.

The Validation Steps tab appears.
5. Click ![add](add). The Add New Step page appears.

6. Enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field descriptions.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step Name</td>
<td>Specifies the unique name of the step.</td>
</tr>
</tbody>
</table>
### Field Name Description

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Validation Step Type</td>
<td>Specifies the type of the validation step.</td>
</tr>
<tr>
<td>Step Status</td>
<td>Specifies the status of the step.</td>
</tr>
<tr>
<td>Description</td>
<td>Specifies the description about the validation step.</td>
</tr>
<tr>
<td>Expected Result</td>
<td>Specifies the expected result in detail.</td>
</tr>
<tr>
<td>Actual Result</td>
<td>Specifies the actual test result after the execution of the test.</td>
</tr>
<tr>
<td>Expected Result</td>
<td>Enter the expected result in detail, including the error-message that is displayed on screen.</td>
</tr>
<tr>
<td>Test Step Comments</td>
<td>Specifies the comments about the step.</td>
</tr>
</tbody>
</table>

7. Click **Save**.

The validation step is added to the test case.
Adding Documents

You can add supporting documents such as text files, audio files, video files, and so on to a test case at:

- **Project-level**
- **Map-level**

Adding Documents to Project-Level Test Cases

To add documents to project-level test cases, follow these steps.

1. In the **Workspace Mappings** pane, click the **Test Cases** node of a project.

   The Test Case Summary pane appears.

2. In the bottom pane, click **Document Upload** and click ![Document Upload](image).

   The Add Test Case Document page appears.
3. Enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field descriptions.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Name</td>
<td>Specifies the name of the added document to the test case. For example, Source Metadata Details.</td>
</tr>
<tr>
<td>Document Object</td>
<td>Drag and drop document files or use ![Drag icon] to select and upload documents.</td>
</tr>
<tr>
<td>Document Owner</td>
<td>Specifies the document owner's name. For example, John Doe.</td>
</tr>
<tr>
<td>Document Link</td>
<td>Specifies the URL of the document. For example, <a href="https://drive.google.com/file/d/1sC2_SZlyeFKI7OOn-b5YkBq4ptA7jhg5/view">https://drive.google.com/file/d/1sC2_SZlyeFKI7OOn-b5YkBq4ptA7jhg5/view</a></td>
</tr>
<tr>
<td>Intended Use Description</td>
<td>Specifies the intended use of the document. For example: The document has information about the source metadata.</td>
</tr>
<tr>
<td>Approval Required Flag</td>
<td>Specifies whether the document requires approval. Select the <strong>Approval Required Flag</strong> check box to select the doc-</td>
</tr>
</tbody>
</table>
Adding Documents

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Status</td>
<td>Specifies the status of the document. For example, In Progress. This field is available only when the Approval Required Flag check box is selected.</td>
</tr>
</tbody>
</table>

4. Click **Save**.

The document is added to the test case and saved under the Document Upload tab.

Once a supporting document is added, use the following options:

**Preview**

Use this option to preview the document.

**Edit**

Use this option to update the document details.

**Delete**

Use this option to delete the document that is not required.

Adding Documents to Map-Level Test Cases

To add documents to map-level test cases, follow these steps.
Adding Documents

1. In the **Workspace Mappings** pane, click a mapping and click the **Test Cases** node of a project.

2. Double-click a map-level test case.

   The Test Overview page appears.

3. Click the **Document Upload** tab.

4. Click .
Adding Documents

The Add Test Case Document page appears.

5. Enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field descriptions.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Name</td>
<td>Specifies the name of the physical document being attached to the test case.</td>
</tr>
<tr>
<td></td>
<td>For example, Source Metadata Details.</td>
</tr>
<tr>
<td>Document Object</td>
<td>Drag and drop document files or use to select and upload document files.</td>
</tr>
<tr>
<td>Document Owner</td>
<td>Specifies the document owner's name.</td>
</tr>
<tr>
<td></td>
<td>For example, John Doe.</td>
</tr>
<tr>
<td>Document Link</td>
<td>Specifies the URL of the document.</td>
</tr>
<tr>
<td></td>
<td>For example, <a href="https://drive.google.com/file/d/2sC2_SZIyeFKI7OOnb5YkMBq4ptA7jhg5/view">https://drive.google.com/file/d/2sC2_SZIyeFKI7OOnb5YkMBq4ptA7jhg5/view</a></td>
</tr>
<tr>
<td>Intended Use Description</td>
<td>Specifies the intended use of the document.</td>
</tr>
<tr>
<td></td>
<td>For example: The document has information about the source metadata.</td>
</tr>
</tbody>
</table>
### Adding Documents

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval Required Flag</td>
<td>Specifies whether the document requires approval. Select the <strong>Approval Required Flag</strong> check box to select the document status.</td>
</tr>
<tr>
<td>Document Status</td>
<td>Specifies the status of the document. For example, In Progress. This field is available only when the <strong>Approval Required Flag</strong> check box is selected.</td>
</tr>
</tbody>
</table>

6. Click **Save**.

   The document is added to the test case.

Once a supporting document is added, use the following options:

- **Preview**
  - Use this option to preview the document.

- **Edit**
  - Use this option to update the document details.

- **Delete**
  - Use this option to delete the document that is not required.
Managing Test Cases

Managing project-level or map-level test cases involve:

- Updating test cases
- Exporting test cases
- Deleting test cases

Managing Project-Level Test Cases

To update project-level test cases, follow these steps:

1. In the Workspace Mappings pane, click the Test Cases node.
2. In the Test Case Summary pane, click the required test case.
3. In the Test Case Overview tab, click .
4. Update the necessary information.
   For more information on fields, refer to Creating Test Cases topic.
Managing Test Cases

To export a test case, click the test case in the Test Case Summary pane, and click export.

To delete a test case, click the test case in the Test Case Summary pane, and click delete.

Managing Map-Level Test Cases

To update map-level test case, follow these steps:

1. In the Workspace Mappings pane, click a map and click the Test Specification tab.

2. Click update.

The Map and Test Cases Status page appears. You can update test case status in the Test Cases Grid and Map Test Status in the bottom pane.
Managing Test Cases

To approve map-level test cases, follow these steps:

1. In the **Workspace Mappings** pane, click a mapping, and click the **Test Specification** tab.

   ![Workspace Mappings]

2. Click ☑️.

   The Approved Test Cases page appears.

   ![Approved Test Cases]

3. Select the check box against the test case under the **Approved** column.

4. Click **Save**.

To export a test case, click the test case in the **Test Case Summary** pane, and click ✎️.

To delete a test case, click the test case in the **Test Case Summary** pane, and click ✗️.
Viewing Mapping Manager Dashboard

The Mapping Manager Dashboard displays metrics that help you analyze and track your projects and mappings. It presents this information using charts and graphs.

To access Mapping Manager Dashboard, follow these steps:

1. Go to Application Menu > Data Catalog > Mapping Manager.

2. Click the Mapping Manager Dashboard pane.

   The Mapping Manager Dashboard appears.
It displays the following panes:

- **Statistics**: It displays a snapshot of statistics related to mapping projects.
- **Mapping Summary**: It displays the number of mappings in each project.
- **Mapping Status**: It displays the number of mappings in each mapping state.
- **Proactive Impact Analysis - Truncation Impacts**: It displays the number of instances of source truncation in each project.
- **Project Overview**: It displays the number of subjects, mappings, and assigned users in each project.
- **Mapping Classification**: It displays the number of active, archived, and published mappings in each project.
- **Mapping Assignments**: It displays the number of designers, approvers, developers, and testers assigned to mappings.
- **Sources/Targets Not Mapped**: It displays the number of sources and targets not mapped in each project.
- **Test Case Status**: It displays the number of test cases under a test case status.
- **Project Test Cases**: It displays the number of test cases in each project.
- **User Test Cases**: It displays the number of test cases created by each user.
Statistics

The Statistics pane displays the total number of projects, subjects, mappings, source tables, target tables, possible truncations, and users. For example, in the following image there are sixteen projects, eighty-six mappings, forty-four source tables, forty-six target tables, eighty-four possible truncations, and four users.

You can click the hyperlink to view further details. For example, if you click the hyperlink for the Target Tables. The Target Table Details page appears.

Mapping Summary

The Mapping Summary pane displays the number of mappings in each project in a pie chart. To open the chart in the Dashboard View, click the pie-chart.
Each slice of the pie chart corresponds to a project. You can drill down and view detailed information in the list format. To view detailed information about mappings in a project, click a slice. The Details View tab opens. It displays project name, subject name, map name, and map version.
Mapping Status

The Mapping Status pane displays the number of mappings under each mapping state in a pie chart. By default there are two mapping states, In Progress and Approved. You can create your own mapping states depending on your requirements. For more information on creating mapping states, refer to the Configuring Mapping State Settings topic.

To open the chart in the Dashboard View, click the pie chart.
Each slice corresponds to a mapping state. You can drill down and view detailed information in the list format. To view detailed information about maps in a mapping state, click a slice of the pie-chart.
Proactive Impact Analysis - Truncation Impacts

The Proactive Impact Analysis - Truncation Impacts pane displays the number of instances where the target column length is smaller than the source column length in each project in a pie-chart. To open the chart in the Dashboard View, click the pie chart.
Each slice of the pie chart corresponds to a project. You can drill down and view detailed information in the list format.

To view detailed information about truncated sources in a project, click a slice of the pie chart. The Details View tab opens. It displays project name, subject name, map name, source and target column names.
Project Overview

The Project Overview pane displays the number of subjects, mappings, and assigned users in each project in a bar graph. To open bar graph in the Dashboard View, click the bar graph.

Each set of three bars corresponds to a project. You can view detailed information in the list format. To view the Detailed information about mappings, subjects, or assigned users of a project click the corresponding bar. For example, if you click the mappings bar then the Mappings tab opens.
To view a list of subjects, click the **Subjects** tab.

To view a list of the assigned users, click the **Assigned Users** tab.

**Mapping Classification**

The Mapping Classification pane displays the number of active, archived, and published mappings in each project in a bar graph. To open the bar graph in the Dashboard View, click the bar graph.
Each set of three bars corresponds to a project. You can drill down and view detailed information. To view detailed information about status of mappings in a project, click a bar. The Details View tab opens. It displays project name, subject name, map name, map version, and status.
Mapping Assignments

The Mapping Assignments pane displays the number of designers, approvers, developers, and testers assigned to mappings in each project in a bar graph. For more information on mapping assignments, refer to the Assigning Mapping Specifications to Users topic.

To open the bar graph in the Dashboard View, click the bar graph.

Each set of three bars corresponds to a project. You can drill down and view detailed information in the list format. To view detailed information about mapping assignments in a pro-

Mapping Management Guide
Viewing Mapping Manager Dashboard

ject, click a bar. The Detail View tab opens. It displays project name, subject name, map name, assigned user's full name, and assignment status.

<table>
<thead>
<tr>
<th>#</th>
<th>Project Name</th>
<th>Subject Name</th>
<th>Map Name</th>
<th>Map Description</th>
<th>Assign Full Name</th>
<th>Responsible Assignee</th>
<th>Assignee Status</th>
<th>Last Modified By</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>erwinDIS</td>
<td>Data Integrity</td>
<td>Administrative</td>
<td>Mapping C</td>
<td>Not Started</td>
<td>Administrator</td>
<td>Administrator</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>erwinDIS</td>
<td>Salesforce</td>
<td>Administrative</td>
<td>Mapping C</td>
<td>In Progress</td>
<td>Administrator</td>
<td>Administrator</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>erwinDIS</td>
<td>BugBlast</td>
<td>Testing for: Sara Cjha</td>
<td>Mapping A</td>
<td>Not Started</td>
<td>Administrator</td>
<td>Administrator</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>erwinDIS</td>
<td>BugBlast</td>
<td>Testing for: Admin</td>
<td>Mapping C</td>
<td>In Progress</td>
<td>Administrator</td>
<td>Administrator</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>erwinDIS</td>
<td>BugBlast</td>
<td>Testing for: Jane Doe</td>
<td>Mapping E</td>
<td>Not Started</td>
<td>Administrator</td>
<td>Administrator</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>erwinDIS</td>
<td>BugBlast</td>
<td>Testing for: Public - Dev</td>
<td>Mapping C</td>
<td>Not Started</td>
<td>Administrator</td>
<td>Administrator</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>erwinDIS</td>
<td>TechPubs</td>
<td>TechPubs - Admin</td>
<td>Mapping C</td>
<td>In Progress</td>
<td>Administrator</td>
<td>Administrator</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>erwinDIS</td>
<td>erwinSales</td>
<td>Administrative</td>
<td>Mapping C</td>
<td>In Progress</td>
<td>Administrator</td>
<td>Administrator</td>
<td></td>
</tr>
</tbody>
</table>

Sources/Targets Not Mapped

The Sources/Targets Not Mapped pane displays the number of sources and targets not mapped in each project in a bar graph. To open the bar graph in the Dashboard View, click the bar graph.
Each set of two bars corresponds to a project. You can drill down and view detailed information in the list format. To view the detailed information about sources and target not mapped in a project, click a bar. The Details View tab opens. It displays project name, map name, and target and source details.
Test Case Status

The Test Case Status pane displays the number of test cases under a test case status in a pie chart. To open the chart in the Dashboard View, click the pie chart.
Each slice of the pie chart corresponds to a test case status. You can drill down and view detailed information in the list format. To open the detailed information about test cases, click a slice. The Details View tab opens. It displays project name, map name, and test case names.

<table>
<thead>
<tr>
<th>#</th>
<th>Project Name</th>
<th>Subject Name</th>
<th>Map Name</th>
<th>Test Case Id</th>
<th>Test Case Name</th>
<th>Test Case Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lineage Demo</td>
<td></td>
<td></td>
<td>3</td>
<td>ETL Testing</td>
<td>Alpha</td>
</tr>
<tr>
<td>2</td>
<td>Lineage Demo</td>
<td></td>
<td>Account Table</td>
<td>4</td>
<td>Account_Table</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>erwinDIS</td>
<td></td>
<td></td>
<td>1</td>
<td>Validating sc</td>
<td>Alpha</td>
</tr>
</tbody>
</table>
Project Test Cases

The Project Test Cases pane displays the number of test cases in each project in a pie-chart. To open the chart in the Dashboard View, click the pie chart.

Each slice in the pie chart corresponds to a project. You can drill down and view detailed information in the list format.

To view the detailed information about test cases in a project, click a slice of the pie chart. The Details View tab opens. It displays project name, subject name, map name, test case ID, test case name, and test case label.
User Test Cases

The User Test Cases pane displays the number of test cases created by each user in a pie-chart. To open the chart in the Dashboard View, click the pie chart.

Each slice of the pie chart corresponds to a user. You can drill down to view detailed information in the list format.

To view the detailed information about test cases created by a user, click a slice of the pie-chart. The Details View tab opens. It displays project name, subject name, map name, test case ID, test case name, and test case label.