GUIDE

erwin Data Intelligence

User Guide 15.0

Quest

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Review support maintenance programs and offerings.

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Access the erwin support site and click Sign in to register for product support.

Accessing Technical Support

For your convenience, erwin provides easy access to "One Stop" support for erwin Data Intelligence (erwin DI), and includes the following:

- Online and telephone contact information for technical assistance and customer services
- Information about user communities and forums
- Product and documentation downloads
- erwin Support policies and guidelines
- Other helpful resources appropriate for your product

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Introduction

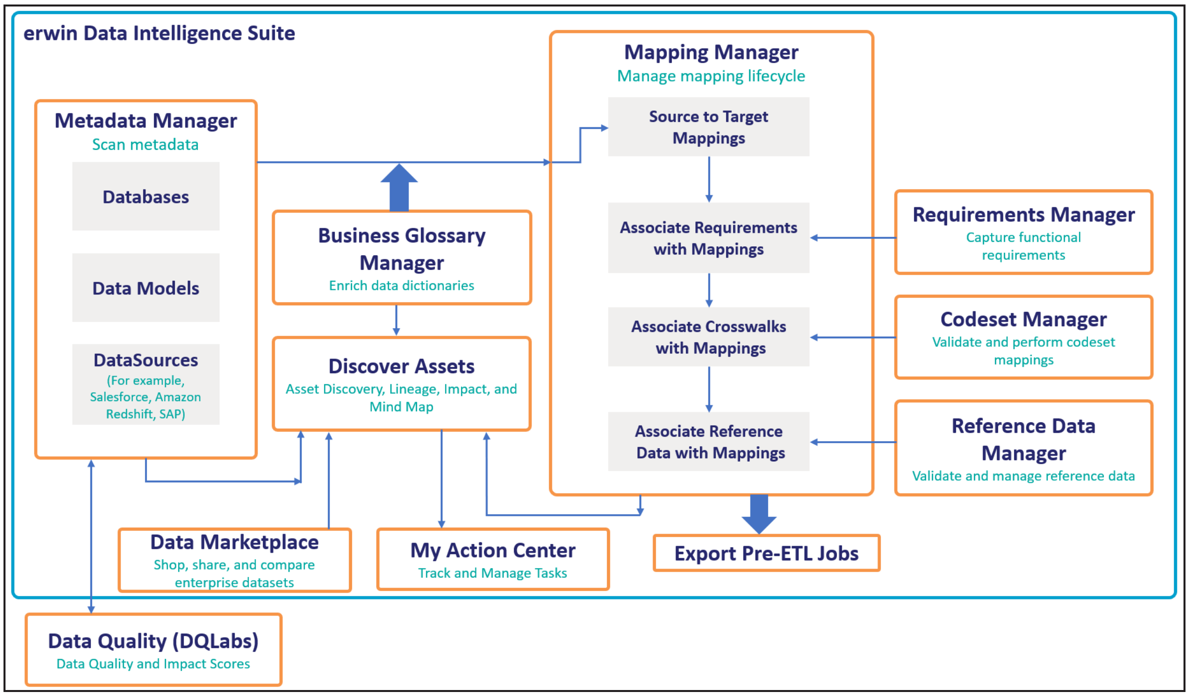
erwin Data Intelligence (erwin DI) is a unified platform for data professionals that offers metadata-driven framework to:

- **Discover data**: Identify metadata from isolated data management sources.
- **Harvest data**: Automate metadata collection from the isolated data management sources, and consolidate it into a single source.
- **Discover assets**: Search, discover, access, and analyze assets across the organization.
- **Structure and deploy data sources**: Connect physical metadata to specific data models, business terms, definitions, and reusable design standards.
- **Analyze metadata**: Analyze the harvested data to understand its attributes and relation to business.
- **Map data flows**: Identify data integration possibilities, and track its flows and transformations.
- **Govern data**: Develop a governance model to manage standards, policies, and best practices, and associate them with physical assets.
- **Socialize data**: Empower stakeholders with role-based data availability in one place.
- **erwin Data Marketplace**: Shop, share, and compare enterprise datasets at a centralized location. Create and manage datasets, view insights, raise data literacy, and ensure governance.
- **Data Quality**: Data quality analysis provides in-depth analysis of your environments, tables, and columns.

This section introduces you to erwin DI architecture, its user interface (UI), and the tasks that you can accomplish using it.

Architecture

To get you started with erwin Data Intelligence (erwin DI), this topic gives you an overview of erwin DI architecture and its modules. The following diagram shows a high-level architecture and data flow.



The following sequence gives a high-level understanding of how the modules interact in a typical data integration project:

1. Scan metadata from data sources.
2. Connect your environment with erwin Data Quality and get data quality for technical assets.
3. Create business assets and associate them with technical assets.
4. Create marketplace assets, set up associations, and add tasks.
5. Add tasks to collaborate with team members.
6. Tag your assets for asset discovery and sensitivity.

8. Analyze lineage, impact, and mind maps.
9. Capture functional requirements.
10. Associate requirements with mappings.
11. Define codesets and perform code crosswalks (mappings).
12. Associate code crosswalks with mappings.
13. Validate and manage reference data.
14. Associate reference data with Mappings.
15. Generate code for:
    - ETL jobs
    - SQL scripts
    - Python code
    - Spark code
    - DDL scripts
    - Stored procedures

erwin DI consists feature rich modules that are categorized as core and add-on modules.

- Core modules perform the major functions of erwin DI offering.
- Add-on modules offer additional functions on top of the core functions.

The following table gives an overview of modules and their functions.

Module	Type	Function
Discover Assets	Core	Use Discover Assets for asset (technical, business, and mapping assets) discovery, lineage, mind maps, impact analysis, and tasks.
My Action Center	Core	Use My Action Center to track and manage tasks for better collaboration with team members.
Resource Manager	Core	Use the Resource Manager to add application users and create roles for them here. You can also manage access-level per-

Module	Type	Function
		missions.
Metadata Manager	Core	Use the Metadata Manager to harvest source or target metadata from a data source. You can run impact and lineage analysis to have better control on a data integration project.
Mapping Manager	Core	Use the Mapping Manager to perform source to target mappings. You can also link code mapping objects, reference data objects, and requirements to the mappings.
Business Glossary Manager	Core	Use the Business Glossary Manager to create, manage, and collaborate on common business vocabulary across the organization. You can also view lineage maps to understand how semantic definitions are related to physical data dictionaries, data mappings, and data lineages. Business Glossary Manager is core module of erwin DI, and it is available as an add-on.
Data Marketplace	Core	Use the Data marketplace to create, manage, share, and compare enterprise datasets and other marketplace assets at a centralized location.
Codeset Manager	Add-On	Use the Codeset Manager to manage your enterprise and legacy codesets. You can perform code mappings (crosswalks) and manage them.
Reference Data Manager	Add-On	Use the Reference Data Manager to manage your reference data (tables). You can run validation rules on the reference data and perform data quality checks. Further, you can associate codesets with the reference data.
Requirements Manager	Add-On	Use the Requirements Manager to standardize functional requirements documentation. Further, you can link requirements with data mappings.
Test Manager	Add-On	Use the Test Manager to manage test specifications created under Metadata Manager and Mapping Manager.

Module	Type	Function
Release Manager	Add-On	Use the Release Manager to release data mappings, database objects, and release notes to standardize the release process.
Reports Manager	Add-On	Use the Reports Manager to create statistical reports and evaluate your team's productivity.
Workflow Manager	Add-On	Use the Workflow Manager to manage Business Glossary Manager, Metadata Manager, and Mapping Manager workflows. You can also create custom workflows and monitor their execution.
Data Quality	Add-On	Use DQLabs to profile and analyze your metadata and gain in-depth knowledge on key data quality parameters such as DQ Score. Then, you can view these data quality parameters for environments, tables, and columns in erwin DI.
Enterprise Tags	Add-On	Use Enterprise Tags to classify and organize all business assets, technical assets, and mapping assets.

For more information on erwin DI's user interface, refer to the User Interface topic.

User Interface

To get you started with using erwin Data Intelligence (erwin DI), this topic walks you through the erwin DI User Interface (UI), its components, and their functions.

Once you have installed erwin DI, follow these steps to access and use it:

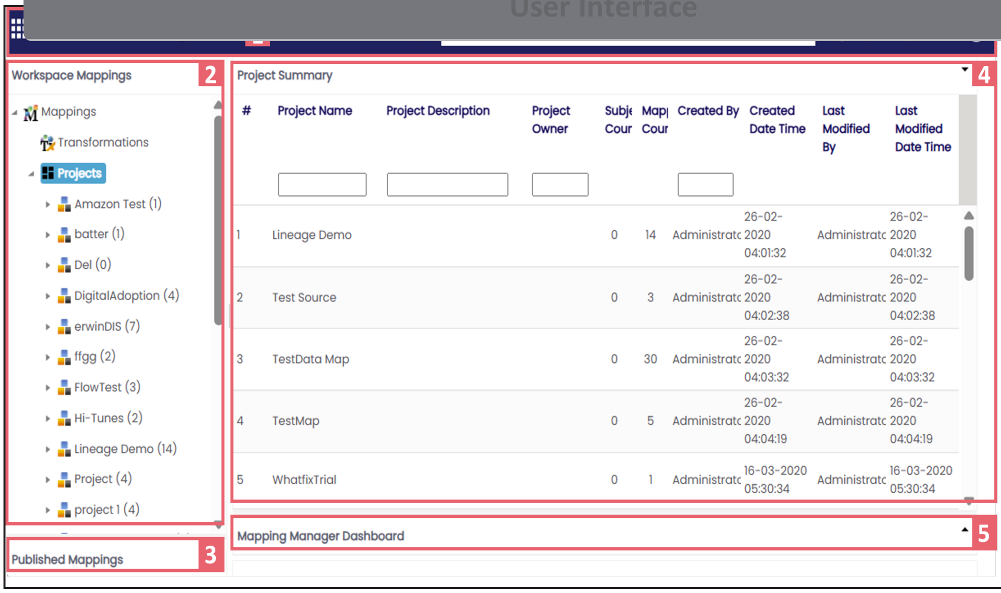
1. Start erwin DI.

   The Login page appears and displays the license information link at the bottom of the page.

2. Enter your credentials.
3. Select the **I accept & agree to the terms of the Software Transaction Agreement** check box.
4. Click **Sign In**.

After a successful login, the following page appears.
Alternatively, you can setup a Single Sign-On (SSO) for login. For more details on configuring SSO, refer to the SSO Configuration Guide.

By default, the landing module is set to the Mapping Manager. You can change this under your account settings.

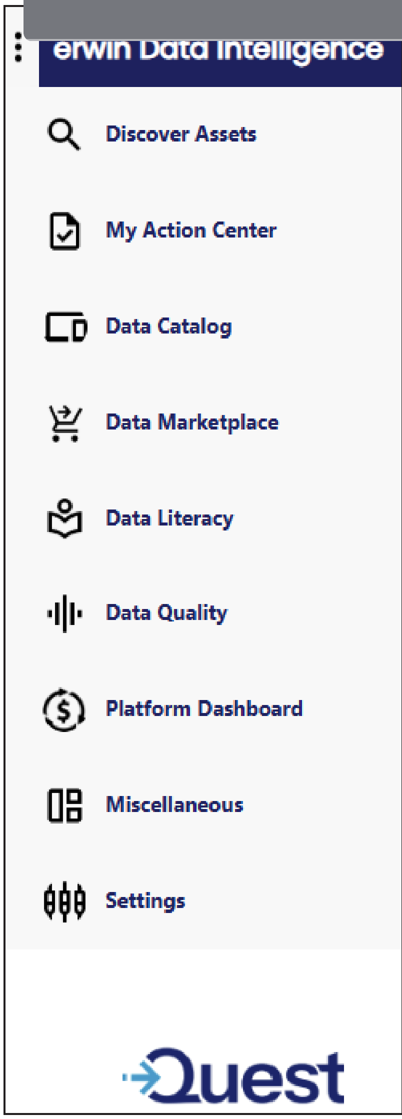


UI Section	Function
1-Navigation Pane	**Application Menu**: Click this icon to access modules of erwin DI. For more information, refer to the Application Menu section.
	Messaging Center: Click this icon to view notifications and messages.
	Search: Use this feature to search for a keyword based on the module that you are working in.
	Search Options: Click this icon to set the search criteria.
	Help: Click this icon to access the context sensitive help.
	Bookshelf: Click this icon to access the erwin DI bookshelf.
	Options: Click this icon to manage your profile options. • **Suggestions**: Share your suggestions in the User Community. • **My Settings**: Change your language preference and password. For more information, refer to the My Settings section.

UI Section	Function
	• **My Dashboard**: View your activity report and mapping assignments. • **My Profiles**: View your profiles. • **My Workflow Queue**: View and update your workflow queues. • **About us**: View version information about your erwin DI app. • **Logout**: Log out of the application.
2-Workspace Mappings	Use this pane to browse and work on different projects and mappings.
3-Published Mappings	Use this pane to browse through published mappings and export them, if needed.
4-Central Pane	Based on your selection in the Workspace Mappings pane, use this pane to view or work on the data.
5-Mapping Manager Dashboard	Use this pane to view statistics related to mappings and projects in the Mapping Manager.

Application Menu

To access the Application Menu, click .



The Application Menu classifies the functional modules in different categories. Select a category to view its modules. Refer to the following table for a list of categories and their relevant modules.

Category	Modules
Discover Assets	• Discover Assets
My Action Center	• My Action Center

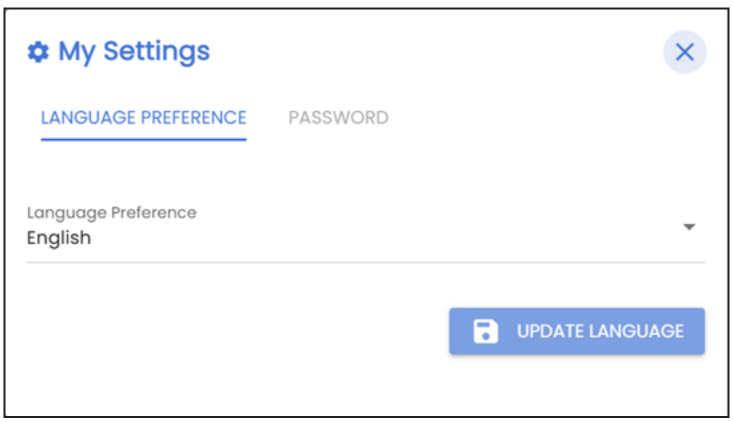
Category	Modules
Data Catalog	▪ Resource Manager ▪ Metadata Manager ▪ Mapping Manager ▪ Codeset Manager ▪ Reference Data Manager ▪ Requirements Manager ▪ Release Manager ▪ Test Manager
Data Marketplace	▪ Data Marketplace
Data Literacy	▪ Business Glossary Manager ▪ AIMatch
Data Quality	▪ Data Quality
Platform Dashboard	▪ Platform Dashboard
Miscellaneous	▪ Enterprise Tags ▪ Reporting Manager ▪ Workflow Manager ▪ Download Template ▪ Plugins ▪ Automation Framework
Settings	▪ Mapping Manger ▪ Metadata Manager ▪ Codeset Manager ▪ Release Manager

Category	Modules
	• Test Manager • Requirements Manager • Business Glossary Manager • Miscellaneous • License Key • Plugins

My Settings

To access settings, go to **Options** > **My Settings**.

The My Settings page appears. By default, the Language Preference tab opens.



Use the following tabs to update language and password:

Language Preference

Select your preferred language from the **Language Preference** dropdown menu and click **Update Language**.

Password

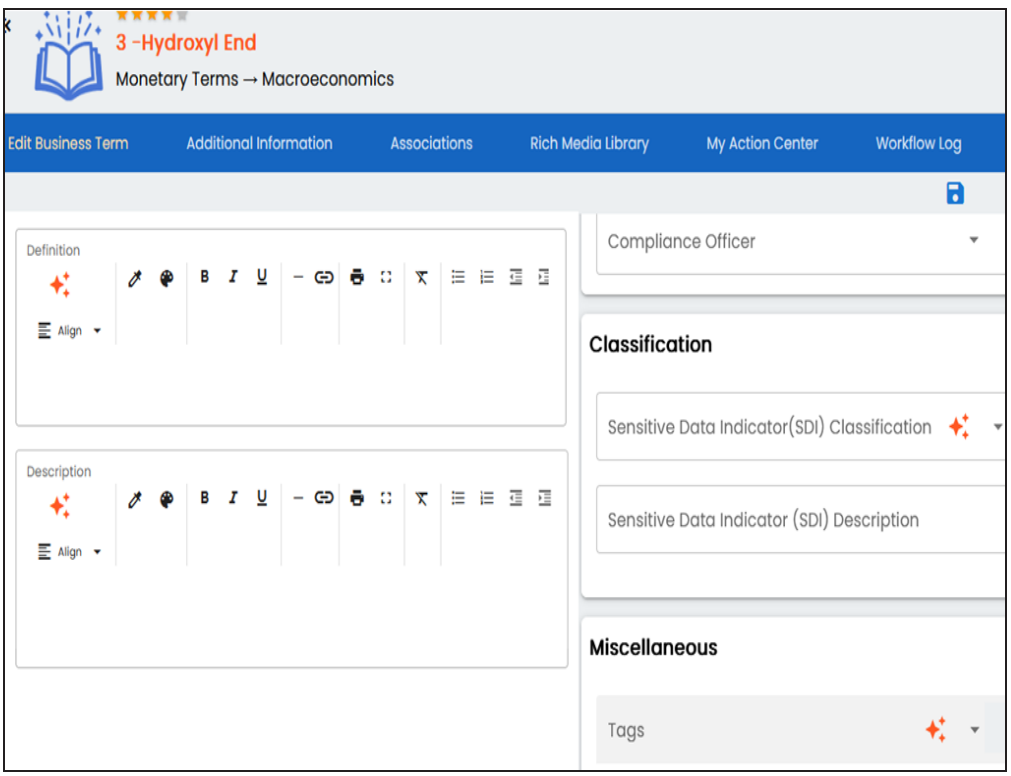
you can use the **Reset** button to clear all the password fields.

erwinAI Inline Assist

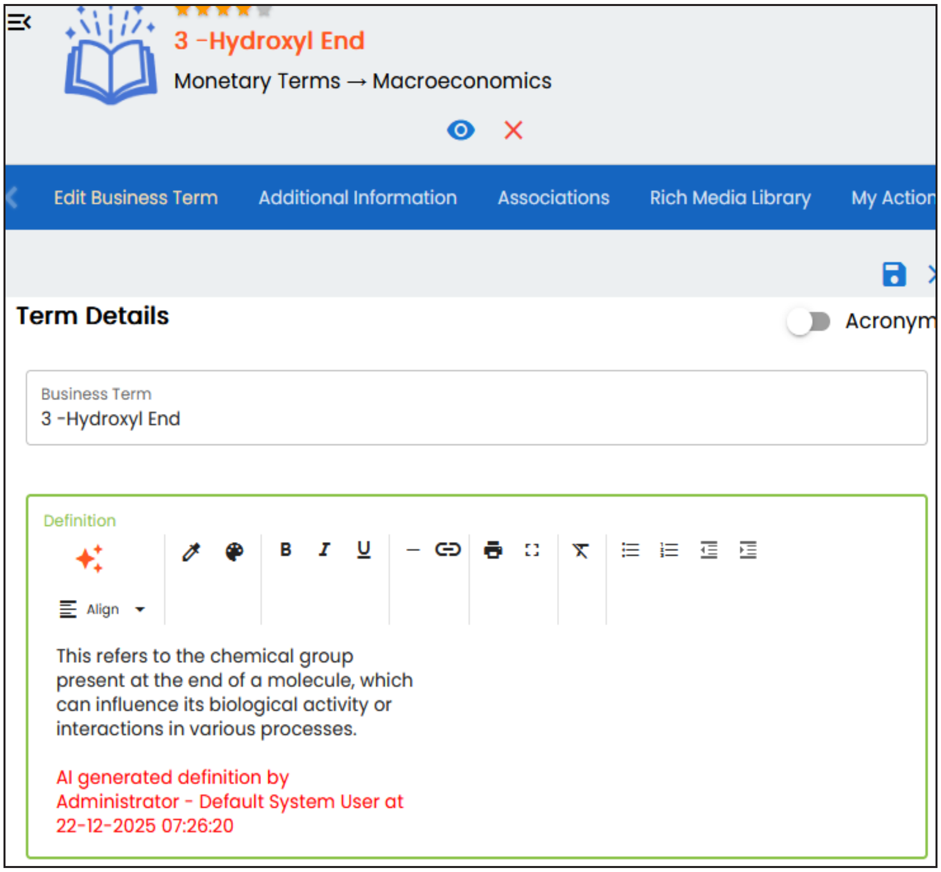
erwinAI Inline Assist integrates generative AI into Business Glossary Manager, Metadata Manager, and Data Marketplace to help you quickly generate and enrich asset details.

To use erwinAI Inline Assist, ensure that your administrator has enabled this feature for you. Once enabled, the erwinAI icon ( ) appears next to supported fields, such as Definition, Description, Notes, Logical Name, Comments, SDI Classification, and Tags across business assets, marketplace assets, tables, and columns. Simply click in any supported field to generate AI-powered content instantly.

For example, the screenshot below shows the erwinAI icon ( ) for supported fields in a business term.



When you click ✦ in the Definition field, it generates a definition and marks it as AI-generated.



Quick Start

This section gives a quick hands-on experience of erwin Data Intelligence (erwin DI). It walks you through the operations that you would perform regularly and helps you understand Metadata Management, Mapping Management, Data Literacy, Data Governance, and Life Cycle Management.

The following are the tasks that you would be performing regularly in a data integration project.

Resource Management

Creating Roles

Creating Users and Assigning Roles

Metadata Management

Creating Systems

Creating Environments

Scanning Metadata

Performing Lineage Analysis

Performing Impact Analysis

Data Literacy

Creating Business Terms

Defining Associations for Business Terms

Reference Data Management

Categorizing Codesets and Defining Code Values

Publishing Codesets

Creating Code Crosswalks (Mappings)

Life Cycle Management

Mapping Management

erwinAI

Creating Roles

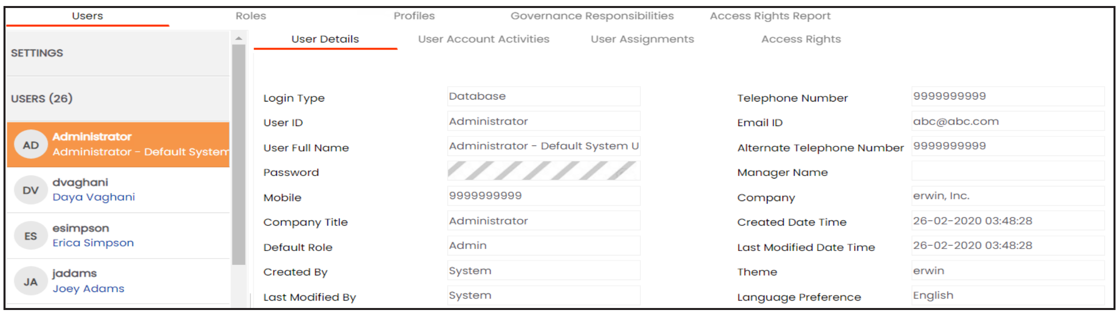
Use roles to assign access-level permissions to users. While few roles are available by default in erwin DI, you can create custom roles.

The Administrator role is system-generated and you cannot edit or delete it.

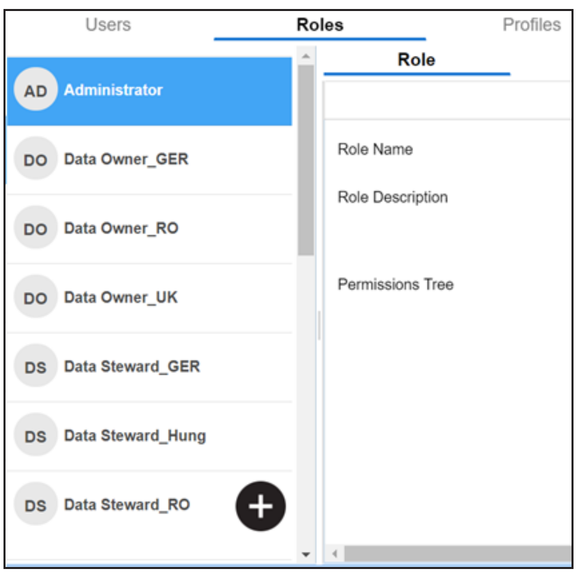
To create roles, follow these steps:

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

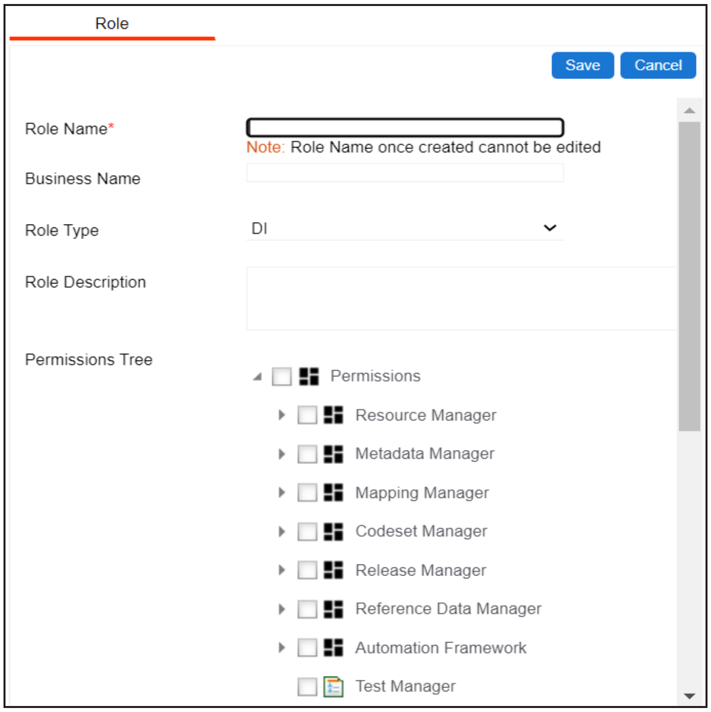
   The Resource Manager page appears. By default the Users tab opens.

2. Click the **Roles** tab.

The Role 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.

Tab	Description
Role Name	Specifies the user-defined role name. For example, Data Steward_AsiaPacific.
Business Name	Specifies the user-defined business name. For example, Data_Steward_Mapping.
Role Type	Specifies the role type • **DI**: Indicates that the role is available only for a Data Intelligence (DI) user • **BU**: Indicates that the role is available only for a Business User (BU)

Tab	Description
Role Description	Specifies the role description. For example, This role has access to the Resource Manager and Mapping Manager.

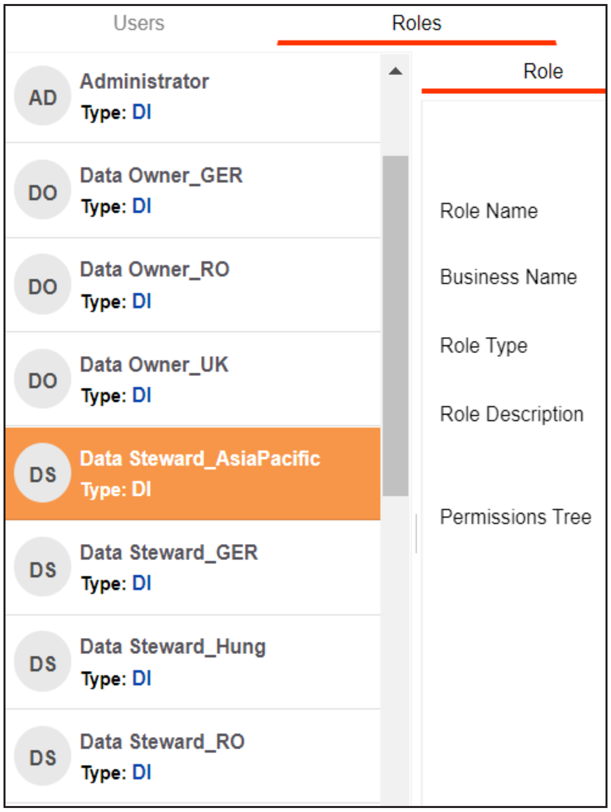
5. Under the **Permissions Tree** section, select the check boxes corresponding to the modules and the permission objects for which you want to grant access to the role.

   DI users have access to all the available permission options. Whereas BU users have access to a subset of permissions. Refer to the following table for the description of the Permission options and the access rights available to the BU users.

Permission Options	Description	BU User Access Permissions
Modules	Specifies the modules accessible to the role, such as Metadata Manager, Mapping Manager, Data Marketplace, and other relevant modules based on your role	Access to only these module options and a limited selection of permissions within these modules: Resource Manager, Metadata Manager, Mapping Manager, Codeset Manager, Reference Data Manager, Reporting Manager, Data Marketplace, Business Glossary Manager, Discover Assets, and My Action Center.
Reviews	Specifies the add, view, update, and delete review options	Yes
Settings	Specifies the access to settings for the modules, license key, and miscellaneous configurations	Access to a limited selection of permissions
Lineage	Specifies the lineage access with a list of metadata properties	Yes

Permission Options	Description	BU User Access Permissions
Master Access	Specifies the permission object for master access	No
Proposed Asset	Specifies a list of permission options for managing business and marketplace assets	Access to a limited selection of permissions
My Settings	Specifies a list of permission options for Language Preference, Password and User Tokens	Access to a limited selection of permissions
AI Chat Bot	Specifies the permission object for erwinAI bot access Available with version 15.1	No
erwinAIAssistant	Specifies the permission object for erwinAI Assistant access Available starting with version 15.2	No
erwinAIInline Assist	Specifies the permission to access erwinAI Inline Assist for business assets, marketplace assets, and technical assets (tables and columns)	No

6. Click **Save**.



Once roles are created, you can create users and assign roles to them. For more information on managing resources, refer to the Resource Manager section.

Creating Users and Assigning Roles

Users are used to grant members of your team access to erwin DI and your projects. While a few users are available by default, you can create users for your organization using the Resource Manager. While you create users, you also assign them roles to define their access-level permissions.

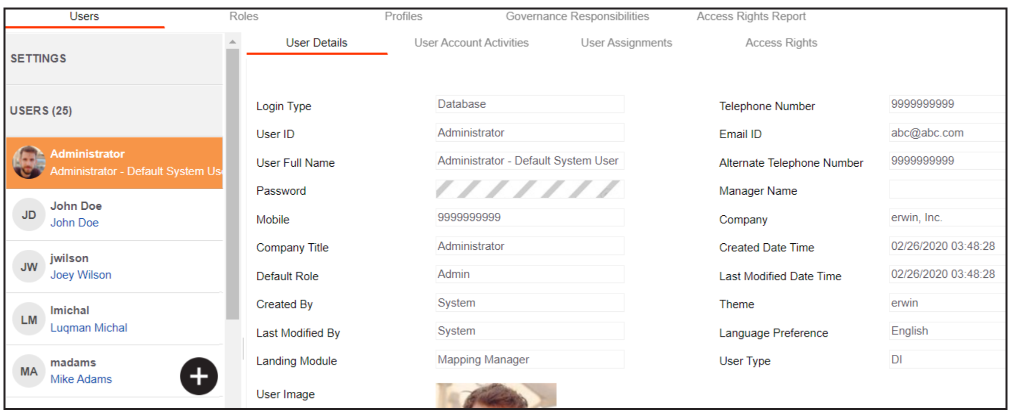
When you upgrade from 11.5 or lower app version, the Business User Portal (BUP) users migrate to the latest erwin DI version as BU user type.

> The Administrator user is available by default and you cannot edit or delete this user.

To create users, follow these steps:

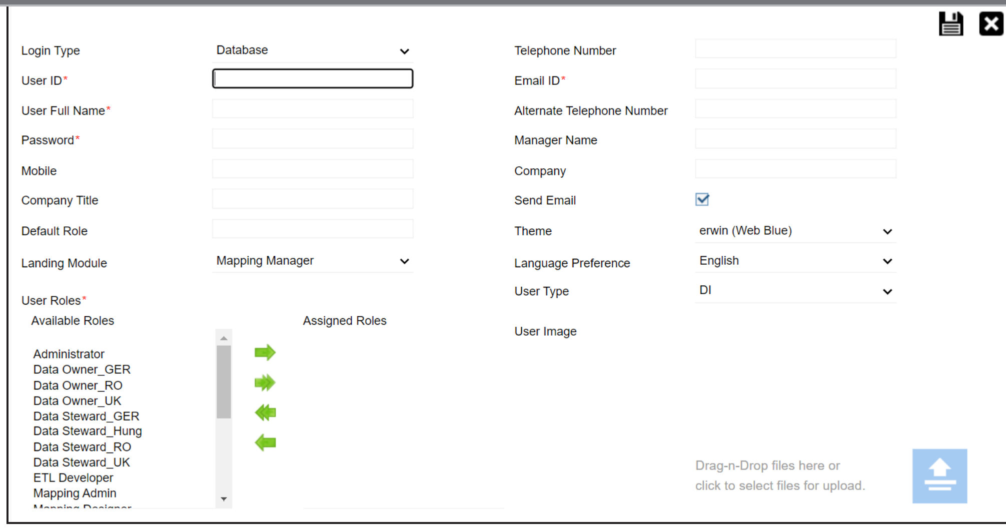
1. Go to **Application Menu** > **Data Catalog** > **Resource Manager**.

   By default, the Users tab opens.

2. Click .

   The New User page appears.



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

The fields marked with an asterisk (*) is mandatory.

Field Name	Description
Login Type	Specifies whether the user type is Database, LDAP (Lightweight Directory Access Protocol), SAML (Security Assertion Markup Language), or NON LOGIN. For example, Database. - **Database**: Select this option if the user authentication is through the credentials created in the Resource Manager. - **LDAP**: Select this option if the user authentication is through a directory server, such as MS Active Directory, OpenLDAP or OpenDJ. - **SAML**: Select this option if the user authentication is through SAML attributes. For more details on configuring SSO, refer to the SSO Configuration Guide.

Field Name	Description
	- **NON LOGIN**: Select this option if the user is not required to log on to the application.
User ID*	Specifies the user name of the user to log on to erwin DI. For example, lmichal.
User Full Name*	Specifies the user's full name. For example, Luqman Michal.
Password*	Specifies the password to log on to erwin DI. For example, Luqman@1. The administrator provides a default password, which can be changed later. The administrator can also enforce a password policy. For more information on enforcing password policy, refer to the Configuring Settings topic.
Mobile	Specifies the user's valid mobile number. For example, +658374414288.
Company Title	Specifies the user's company title or designation. For example, Data Administrator.
Default Role	Specifies the default role of the user. For example, Data Steward_RO.
Landing Module	Specifies the landing module for the user. For example, Mapping Manager. The Landing Module is the first page displayed when a user logs in.
User Roles*	Select roles under Available Roles list-box and move them to Assigned Roles list-box using the arrows (or). Similarly, to change existing role assignment, select roles under Assigned Roles list-box and move them back to Available Roles list-box using the arrows (or). For adding a new role under the Available Roles list-box, refer to the

Field Name	Description
	Creating Roles topic. You can assign the Legacy Data Steward role to a user. This enables you to assign this user as a Data Steward in the Metadata Manager and Reference Data Manager.
Telephone Number	Specifies the valid telephone number of the user. For example, 1-800-783-7946.
Email ID*	Specifies the user's email address. For example, l.michal@mauris.edu
Alternate Telephone Number	Specifies the user's valid alternate telephone number. For example, 1-802-456-7946.
Manager Name	Specifies the name of the user's reporting manager. For example, John Doe.
Company	Specifies the name of the user's company. For example, ABC Consulting Services.
Send Email	Specifies whether to send email to the user's email ID. Select the Send Email check box to send an email notification to the user's email ID. For more information on configuring notifications, refer to the Configuring Notifications topic.
Theme	Specifies the theme for the user to set the appearance of erwin DI. By default, it is set to erwin (Web Blue).
Language Preference	Specifies the language preferred by the user. For example, English. For more information on language settings, refer to the Configuring Language Settings topic.
User Type	Specifies the user type. - **DI**: Indicates the user type is Data Intelligence (DI), and the

Field Name	Description
	users have access to DI, and BU modules • **BU**: Indicates that the user type is Business User (BU), and the users have access to BU module
User Image	Specifies the physical image file being attached to the user. Drag and drop a user's image file or click to select and upload the image file.

4. Click .

   A new user is created and added to the Users list.

For more information on managing resources, refer to the Resource Manager section.

Creating Systems

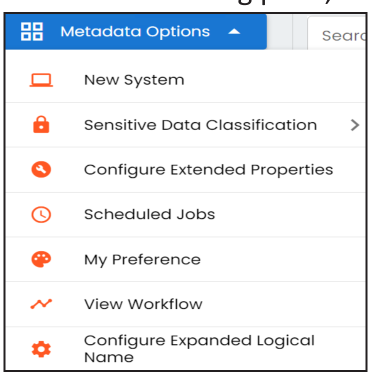
You can harvest (scan) metadata from data sources in the Metadata Manager. The scanned metadata is stored in a hierarchical manner (System > Environment > Table > Column) in the Data Catalog.

A System can contain multiple environments and in a typical data integration project a system can be a source or target type. You can create a system and specify data steward, system owner, and its business purpose etc.

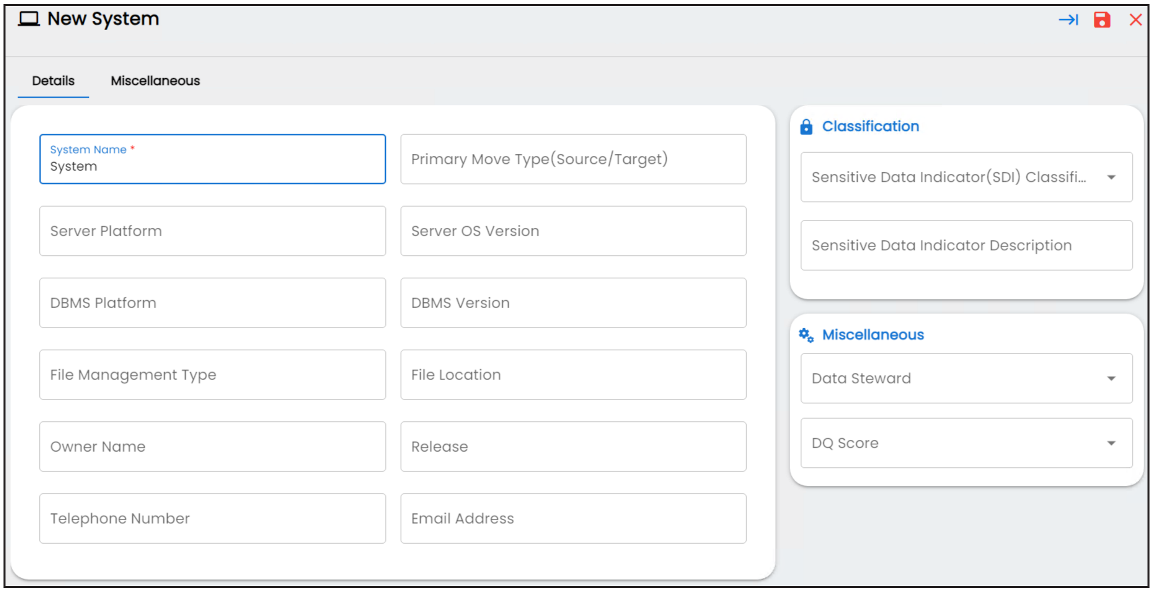
Apart from creating systems, you can manage other system configurations using **Metadata Options** available in the top-right corner.

To create systems, follow these steps:

1. Go to **Application Menu** > **Data Catalog** > **Metadata Manager** > **Explore**.
2. In the Data Catalog pane, click **Metadata Options**.



3. Click **New System**.



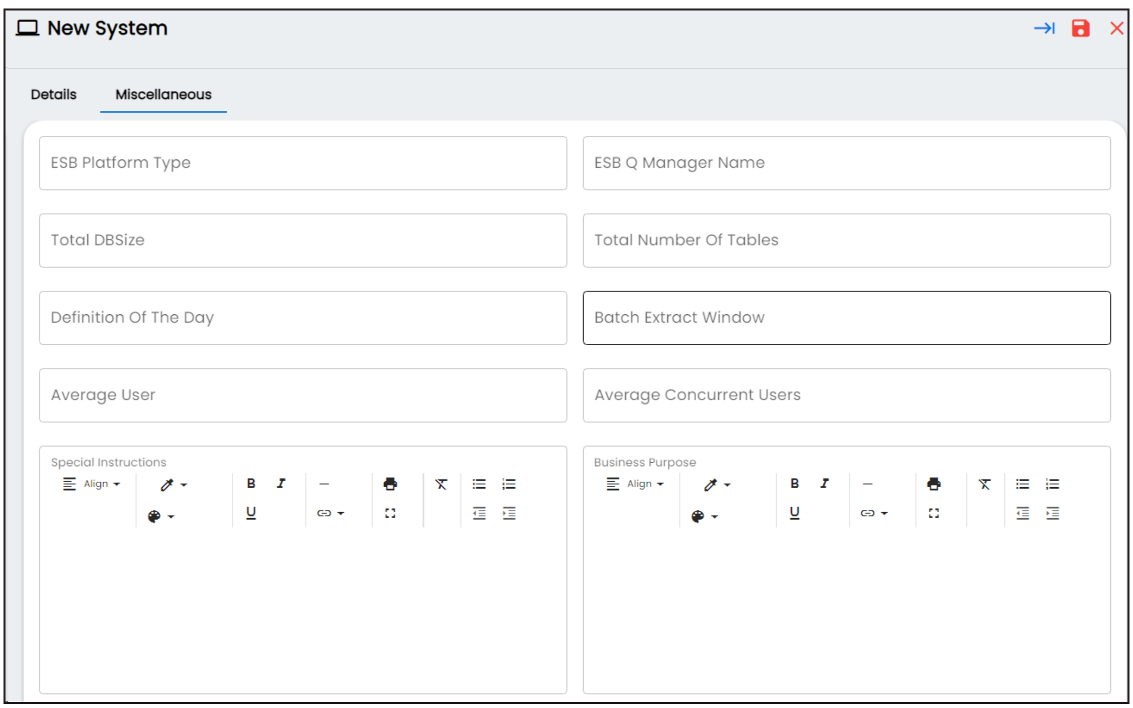
4. Enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field descriptions.

Field Name	Description
System Name	Specifies the physical name of the system. For example, Enterprise Data Warehouse. For more information on naming conventions, refer to the Best Practices section.
Server Platform	Specifies the server platform of the system. For example, Windows.
DBMS Platform	Specifies the DBMS platform of the system (if the system is an RDBMS source). For example, SQL Server.
File Management Type	Specifies the file management system (if the system is a file-based source). For example, MS Excel.

Field Name	Description
Owner Name	Specifies the full name of the system owner. For example, Talon Smith.
Telephone Number	Specifies the telephone number of the system owner. For example, 1-800-783-7946.
Primary Move Type (Source/Target)	Specifies whether the system is source, target, or both. Valid values are: · Source · Target · Both
Server OS version	Specifies the OS version of the system's server. For example, Windows Server 2012 R2.
DBMS Version	Specifies the DBMS version of the system (if the system is an RDBMS source). For example, SQL Server 2017.
File Location	Specifies a file path (if the system is a file-based source). For example, C:\Users\Talon Smith\erwin\Mike - Target System
Release	Specifies the system release including the point release number. For example, Oracle 18c.
Email Address	Specifies the system owner's email address. For example, talon.smith@mauris.edu
Sensitive Data Indicator (SDI) Classification	Specifies the sensitivity classification of the system. Also, you can add multiple classifications to the system. For example, PHI, Confidential. For more information on configuring Sensitive Data Indicator (SDI) classifications, refer to the Configuring Sensitivity Classifications topic.
Sensitive Data	Specifies the description of the SDI classification.

Field Name	Description
Indicator Description	
Data Steward	Specifies the name of the data steward responsible for the system. For example, Jane Doe. Users assigned with the Legacy Data Steward role appear as drop down options. You can assign this role to a user in the Resource Manager. To assign data steward, select a data steward from the drop down options.
DQ Score	Specifies the overall data quality score of the system. For example, High (7-8). For more information on configuring DQ scores, refer to the Configuring Data Profiling and DQ Scores topic.

5. Click the **Miscellaneous** tab or click .



datory. Refer to the following table for field descriptions.

Field Name	Description
ESB Platform Type	Specifies the enterprise platform bus type (if the system is an ESB source). For example, Mule.
ESB Q Manager Name	Specifies the ESB queue manager's name of the system (if the source is an ESB). For example, John Doe.
Total DBSize	Specifies the total physical size of the database. For example, 198 GB.
Total Number of Tables	Specifies the total number of tables associated with the system. For example, 300.
Definition of the Day	Specifies the definition of the system at the end of the day. For example: Extraction of details from the source system is complete.
Batch Extract Window	Specifies the daily batch extract window of the system. For example: Batch extract from the source system is scheduled at 3:30 P.M. everyday.
Average User	Specifies the average number of system users. For example, 30.
Average Concurrent Users	Specifies the average number of concurrent system users. For example, 15.
Special Instructions	Specifies any special instructions or comments about the system. For example: The system acts as a source for creating the mapping specification.
Business Purpose	Specifies the business objective of the system. For example: This is a source system to store Sales metadata of the organization for a data integration project.

A new system is created.

Alternatively, before saving this system, you can add a new environment and configure the connections. To setup an environment, click to view the New Environment page.

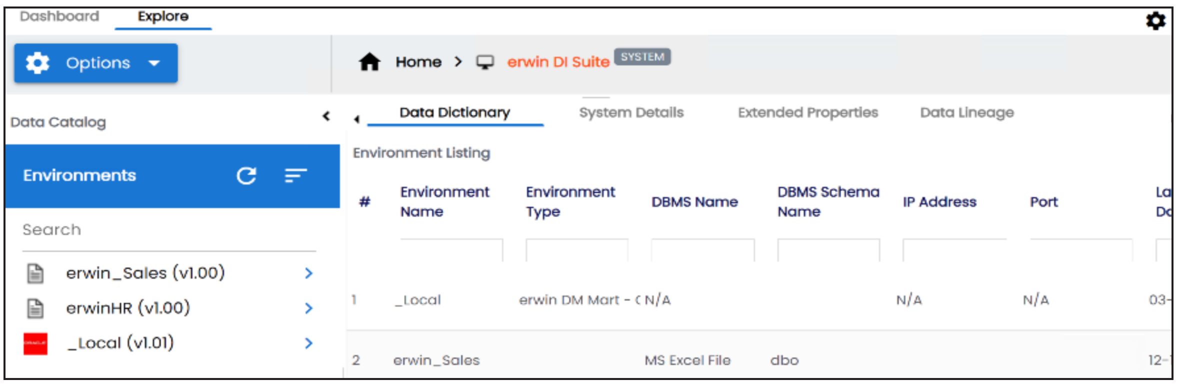
Once a system is created, you can create environments under it and scan metadata from different database types. For more information on managing metadata, refer to the Metadata Manager section.

Creating Environments

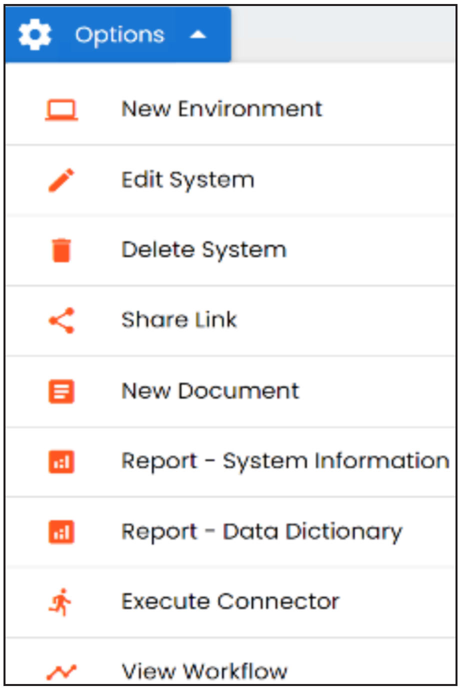
After creating a system in the Metadata Manager, you can create environments under the system. An environment can be created for different database types and flat files by fulfilling prerequisites and providing the connection parameters.

1. Go to **Application Menu** > **Data Catalog** > **Metadata Manager** > **Explore**.
2. In the Asset Catalog pane, hover over the system card and click .

   The system details page appears and displays available environments in the Data Catalog pane.

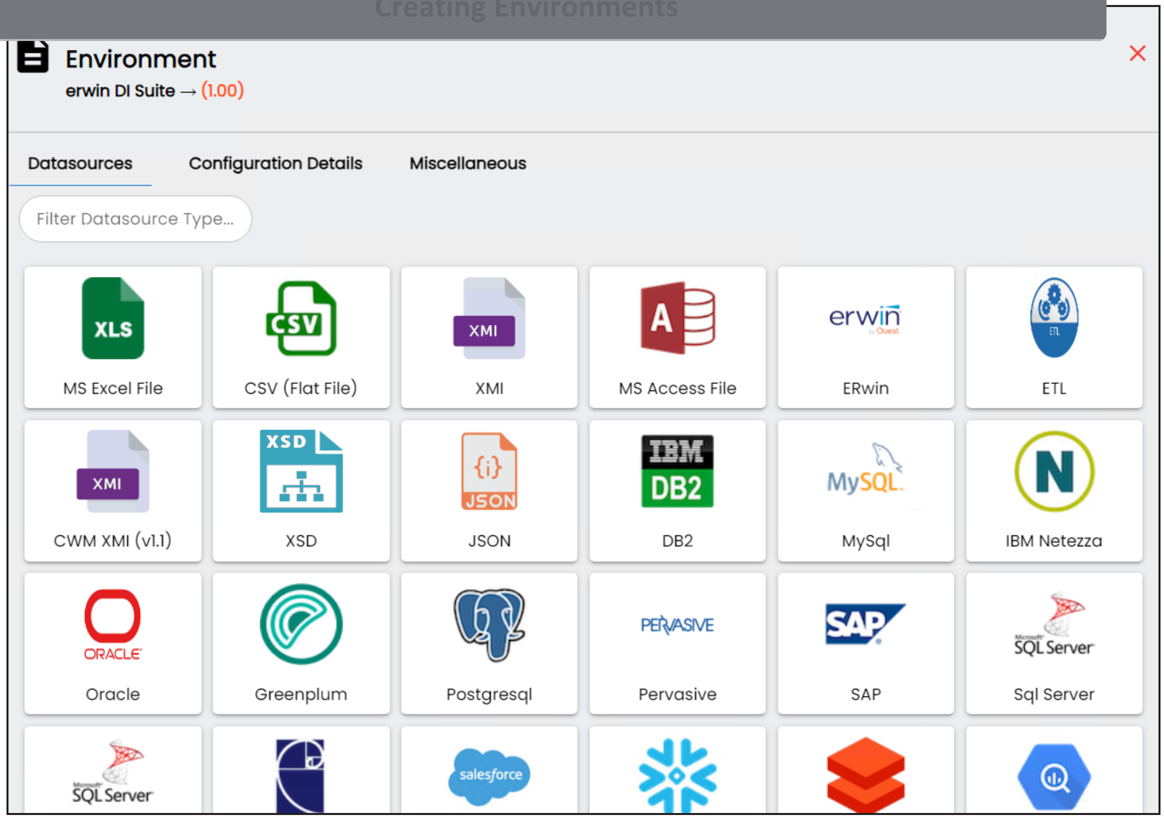


The available options appear.

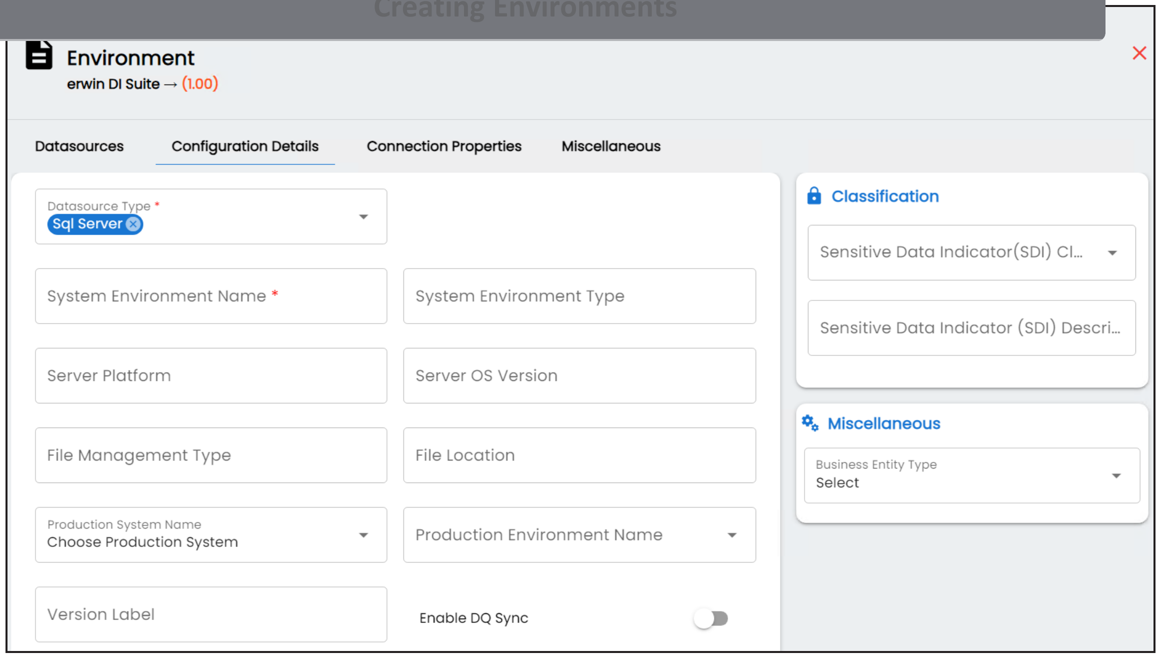


4. Click **New Environment**.

   The New Environment page appears and displays supported database in the Data-sources tab.



5. Click a datasource, the Configuration Details tab appears.
   The screenshot below displays connection details for Sql Server. The connection details vary based on database selection.



Alternatively, enter a keyword in the search bar to search for datasources.

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
Datasource Type	Specifies the datasource (database) type from where you wish to scan metadata. You can change the datasource type using the drop down list. For example, Sql Server. Depending upon your choice of database type, you need to provide additional fields in the **Connection Properties** tab. For SQL Server (Windows Authentication), Sybase, HP Vertica, and Neteeza databases, the TestConnectionQuery option is selected by default to validate the internal connection. The system displays exceptions if this option is not selected.

Field Name	Description
	There are no additional fields for XSD file.
System Environment Name	Specifies the unique name of the environment. For example, EDW-Test. The environment name supports - (hyphen), ((opening parenthesis),) (closing parenthesis), / (slash), # (), . (full stop), [] (left and right square brackets), ! (exclamation mark), + (plus), % (percentage), ~ (tilde), ; (semicolon), , (comma), = (equals sign), ^ (circumflex accent), and {} (left and right curly brackets) as special characters. For more information on naming conventions, refer to the Best Practices section.
System Environment Type	Specifies the type of the environment. For example, development, test, or production.
Server Platform	Specifies the server platform of the environment. For example, Windows.
Server OS Version	Specifies the OS version of the environment's server. For example, Windows Server 2012 R2.
File Management Type	Specifies the file management system (if the environment is a file-based source). For example, MS Excel.
File Location	Specifies a file path (if the environment is a file-based source). For example, C:\Users\Jane Doe\erwin\Mike - Target System
Production System Name	Specifies the system name being associated with the environment as the production system. For example, Enterprise Data Warehouse.
Production Environment Name	Specifies the environment name being associated with the environment as the production environment. For example, EDW-PRD.

Field Name	Description
Version Label	Specifies the version label of the environment to track change history. For example, Alpha. For more information on configuring version display, refer to the Configuring Version Display of the Environments topic.
Enable DQ Sync	Specifies whether to sync data quality analysis results from DQLabs. To view data quality analysis, ensure that you have configured DQLabs connection setting in erwin DI. For more information, refer to the Configuring Data Profiling topic. Data quality analysis is available for environments using Oracle, Salesforce, Snowflake, MySQL, MSSQL, Hadoop, and PostgreSQL database types.
Sensitive Data Indicator (SDI) Classification	Specifies the sensitivity data indicator (SDI) classification of the environment. Also, you can add multiple classifications to the environment. For example, PHI, Confidential. For more information on configuring SDI classifications, refer to the Configuring Sensitivity Classifications topic.
Sensitive Data (SDI) Indicator Description	Specifies the description of the SDI classification.
Business Entity Type	Specifies the database type of business entity.

6. Click →| to navigate to the Connection Properties tab.
   Different datasource types have different prerequisites and connection parameters. See the list below for datasource type and its connection parameters:
   - SQL Server - via SQL or Window authentication mode
   - Oracle and Oracle RAC

- Snowflake
- Google BigQuery
- MS Dynamics CRM (and other datasources)
- SAP ECC R/3 and IS-U Metadata via JCO Driver
- Databricks
- Salesforce

7. Click to test the connection.

   If the connection with database is established successfully then a success message pops up.

8. Click to save and continue to **Miscellaneous** tab.

   Or, click to save and exit.

9. On the Miscellaneous tab, 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
Intended Use Description	Specifies the description about the objective of the environment. For example: The environment contains the source metadata for the data integration project.
Environment Notes	Specifies relevant notes about the environment. For example: The environment uses Sql Server as database to scan the metadata.
Approval Instructions	Specifies any instructions for the environment's approval. For example: The environment must contain 50 tables from erwin DI database.

10. Click to save and exit.

    A new environment is created.

database type.

Different database types have different prerequisites and connection parameters:

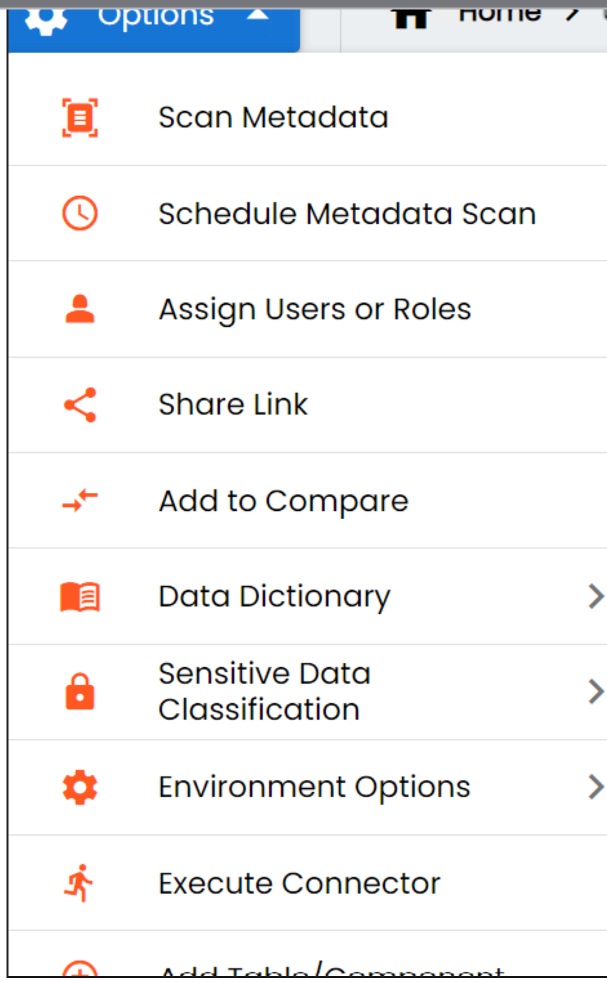
- SQL Server - via SQL or Window authentication mode
- Oracle and Oracle RAC
- MySQL
- Snowflake
- MS Dynamics CRM
- SAP ECC R/3 and IS-U Metadata via JCO Driver

Scanning Metadata

After creating systems and environments, the next logical step is to scan source and target metadata. Ensure that the environment database type and connection parameters are correct and that the environment can establish a connection with the database.

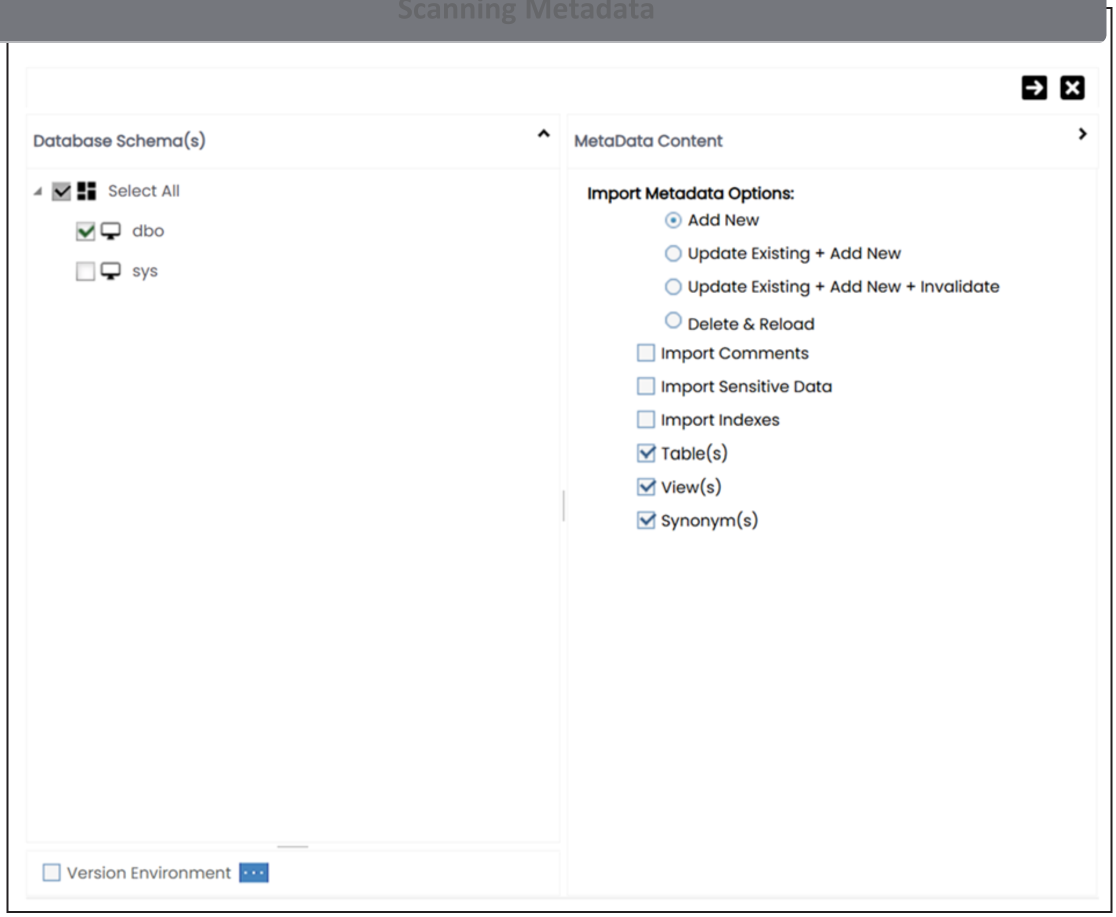
To scan source or target metadata, follow these steps:

1. Go to **Application Menu** > **Data Catalog** > **Metadata Manager** > **Explore**.
2. On the Explore tab, click an environment tile.
3. Click **Options**.
   The available options appear.



4. Click **Scan Metadata**.

   The <Data_Base> Metadata Scan-Step1 page appears. For example, if it is the SQL Server environment, then the SqlServer Metadata Scan - Step1 page appears.



5. In the **Database Schema(s)** pane, select the database schemas.
6. In the **Metadata Content** pane, select the appropriate **Import Metadata Options**.

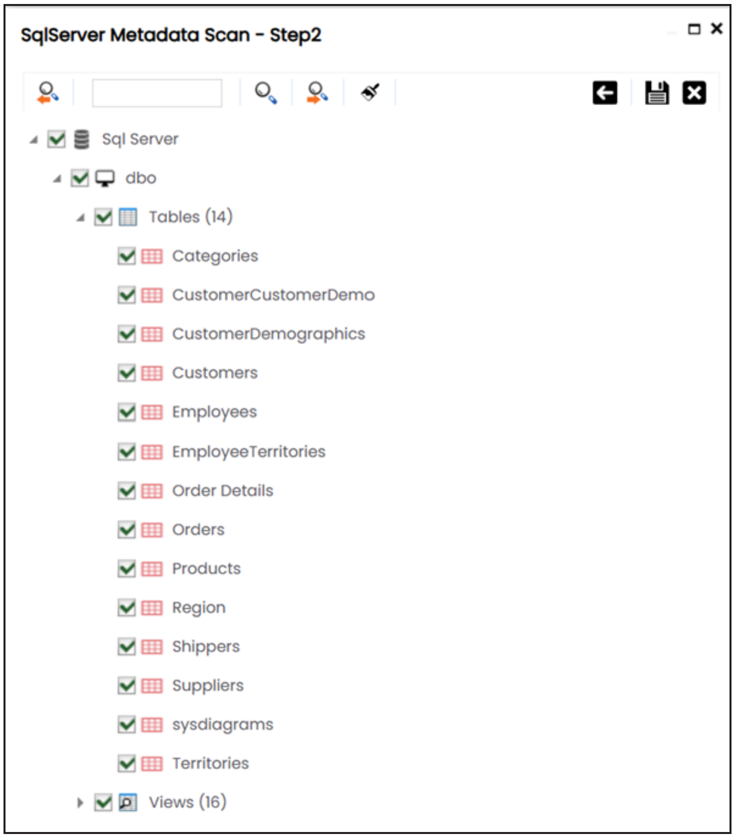
   Refer to the following table for the descriptions of the metadata import options.

Import Metadata Options	Description
Add New	This option adds new objects to the existing object list. The existing metadata is not updated.
Update Existing + Add New	This option adds new objects to the existing list and updates the existing metadata at the same time.

Import Metadata Options	Description
Update Existing + Add New + Invalidate	This option adds new objects to the existing list, updates existing ones, and invalidates the table/column during the scanning process.
Delete & Reload	This option deletes all existing metadata and scans only the new objects that have been selected.
Import Comments	Select the checkbox to import comments.
Import Sensitive Data	Select the checkbox to import sensitivity classification of the metadata from the data source. This option is available for SQL, Oracle, and Snowflake environments.
Import Indexes	Select the checkbox to import indexes of the metadata from the data source. In addition to the listed datasources, this option is available when the datasource is set to Others. This option is available for SQL, Oracle, and MySQL environments.
Table(s)	Select the checkbox to import Tables.
View(s)	Select the checkbox to import Views.
Synonym(s)	Select the checkbox to import Synonyms.
Version Environment	Select the checkbox to create a version of the environment.
Skip Empty Cells	Select the checkbox to skip blank cells in the data source from overwriting existing values during import. This option is available only when you select the Update Existing + Add New or Update Existing + Add New + Invalidate option.

7. Click .

The <Database_Name> Metadata Scan Step-2 page appears. It pulls up the objects selected in Metadata Scan Step-1, such as Tables, Views, and Synonyms.



8. Select the required objects.
9. Click .

The metadata is scanned successfully and saved under the environment node.

For more information on managing metadata, refer to the [Metadata Manager](#) section.

You can also import metadata from:

- MS Excel File
- JSON
- CSV (Flat File)

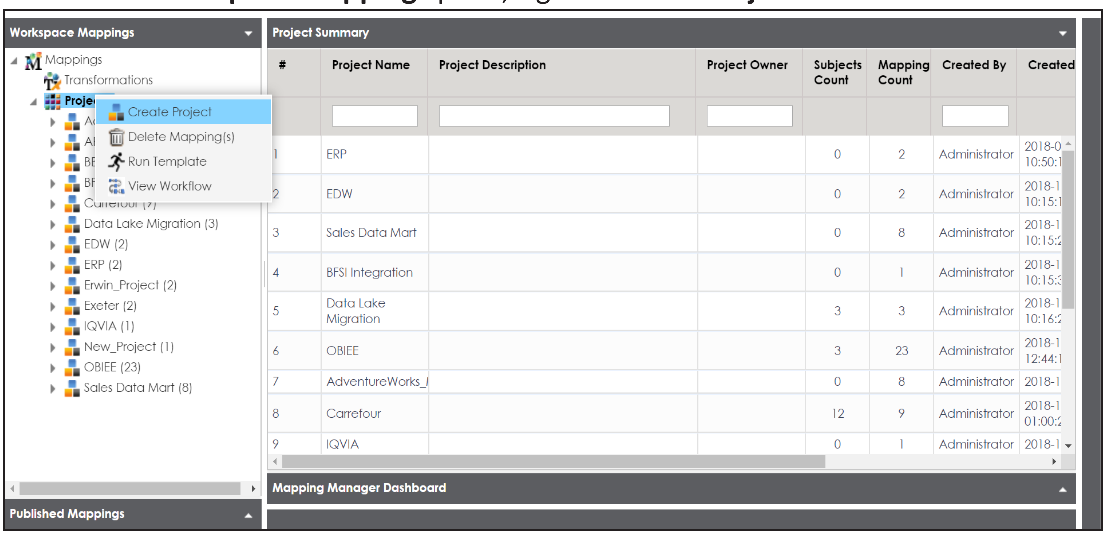
- MS Access File
- XSD

Creating Maps

Maps are categorized under projects and a project can have multiple maps. The maps are stored in a hierarchical manner, Projects > Mappings. Source to target mappings are performed in maps. You can create maps under a new or existing projects.

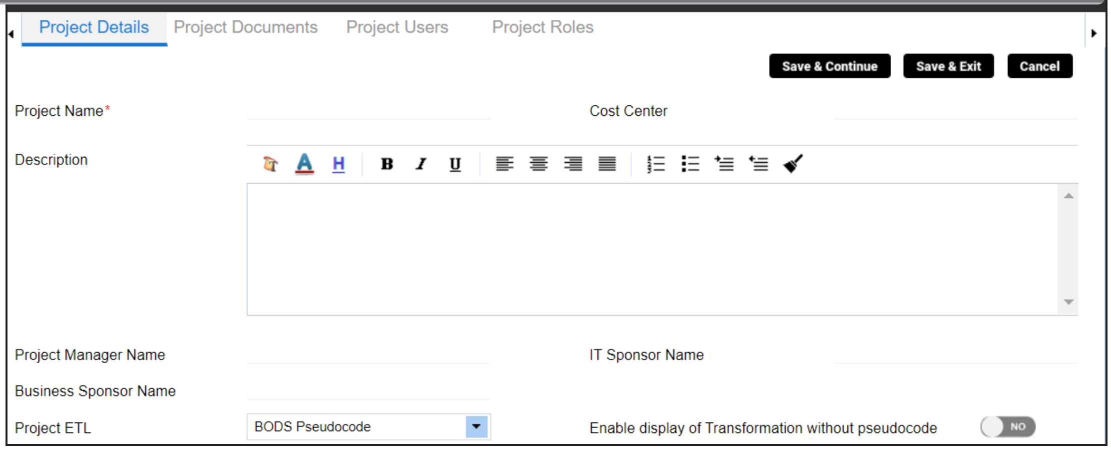
To create maps under a new project, follow these steps:

1. Go to **Application Menu** > **Data Catalog** > **Mapping Manager**.
2. Under the **Workspace Mappings** pane, right-click the **Projects** node.



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.

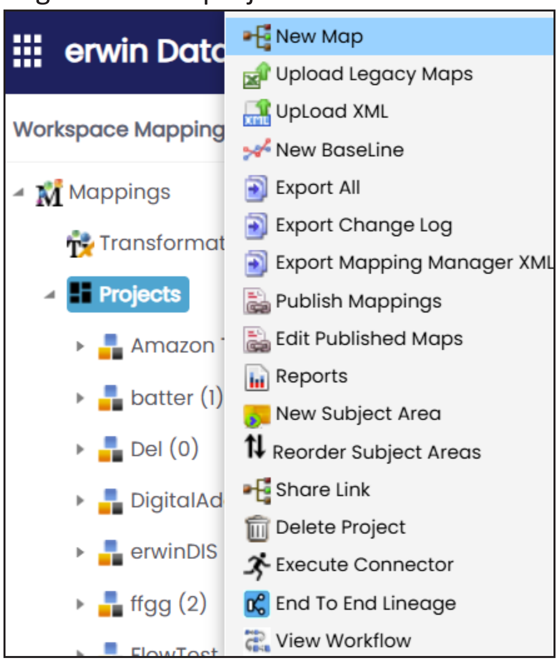
Field Name	Description
Project Name	Specifies the name of the project. For example, Data Lake Migration. For more information on naming conventions, refer to the Best Practices section.
Description	Specifies the description of the project. For example: The project contains the mapping specifications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

Field Name	Description
IT Sponsor Name	Specifies the IT sponsor of the project. For example, XYZ IT Services.
Enable display of Transformation without pseudocode	Specifies whether the transformation is displayed without pseudocode. Switch **Enable display of Transformation without pseudocode** to **Yes** to display transformation without pseudocode.

5. Click **Save and Exit**.

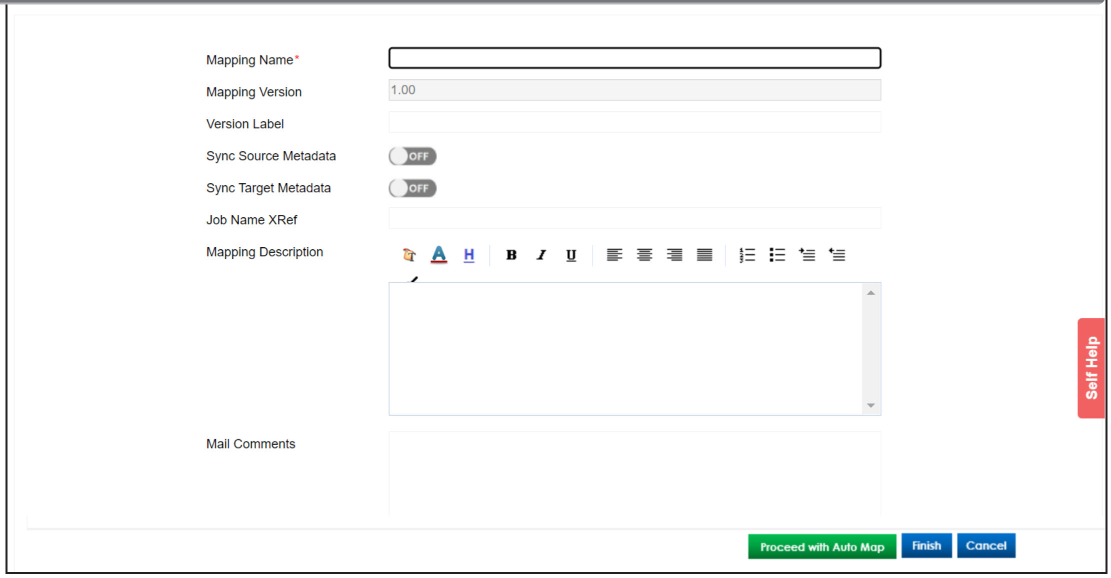
   A new project is created and stored in the project tree.

6. Right-click the project.



7. Click **New Map**.

   The New Mapping Wizard appears.



8. 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
Mapping Name	Specifies the mapping specification name. For example, EDW_PROD_IDS_Benefits_Detail. For more information on naming conventions, refer to the Best Practices section.
Mapping Version	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 Configuring Version Display topic.
Sync Source Metadata	Switch **Sync Source Metadata** to **ON** to sync source metadata with the mapping.
Sync Target Metadata	Switch **Sync Target Metadata** to **ON** to sync target metadata with the mapping.

Field Name	Description
Mapping Description	Specifies the description about the mapping. For example: This is a map between EDW source and IDS target systems.
Mail Comments	Specifies the mail comments, which can be sent to the project users through an email notification. For example: Source and target have identical columns, hence they can be mapped using auto-map technique. For more information on configuring notifications, refer to the Configuring Notifications topic.

9. Click **Finish**.

   A new map is created and saved under the map tree.

For more information on performing source to target mappings, refer to the Creating and Managing Mapping Specifications section.

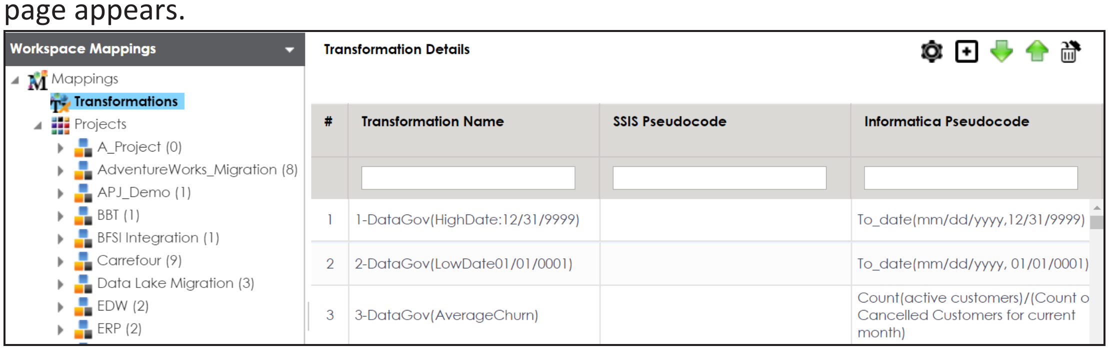
Defining Transformations

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:

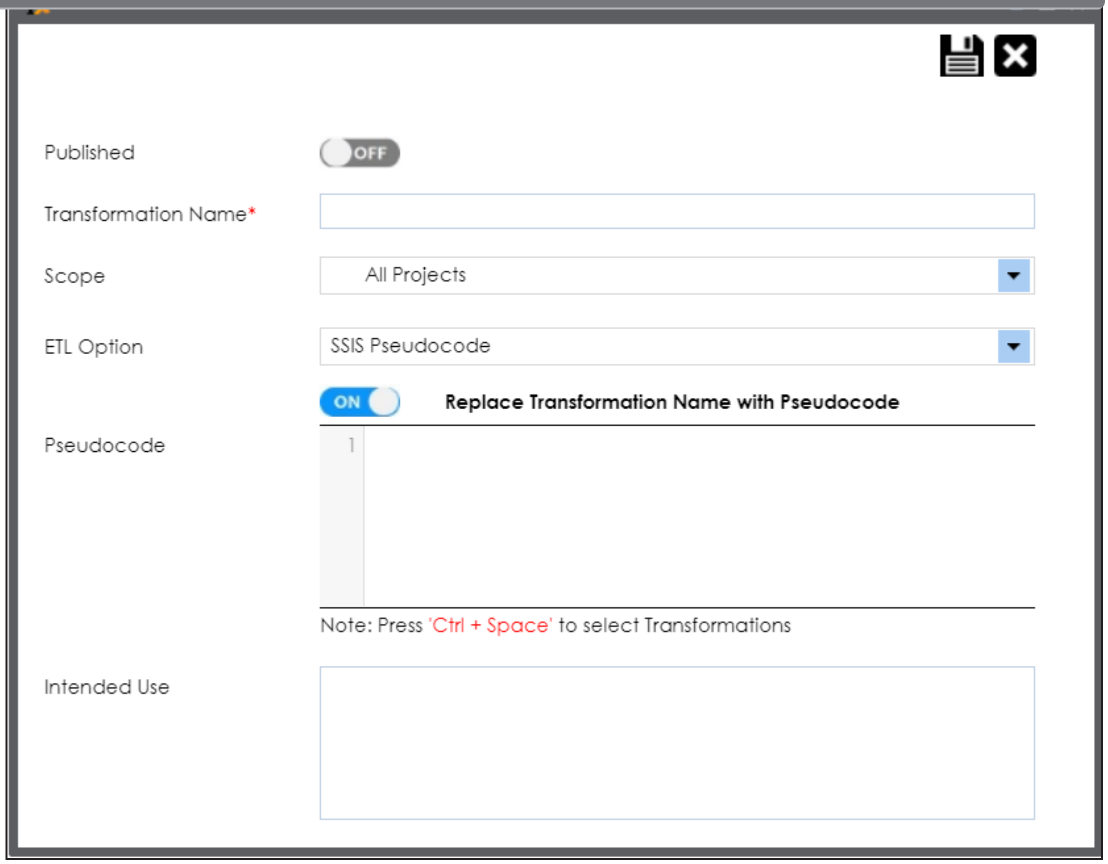
1. Go to **Application Menu** > **Data Catalog** > **Mapping Manager**.
2. In the **Workspace Mappings** pane, click any one of the following:
   - **Transformations node**: Click this option to define enterprise-level transformations.
   - **Transformations node under a project**: Click this option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

Field Name	Description
Published	Switch **Published** on ( ) to publish the transformation.
Transformation Name	Specifies a unique name of the transformation. For example, ASCII.
Scope	Specifies the projects to which the transformation can be applied. For example, All Projects.
ETL Option	Specifies the ETL option.

Field Name	Description
	For example, Informatica Pseudocode. You can configure ETL option list and add or remove an ETL option from the list.
Replace Trans-formation Name with Pseudocode	Switch **Replace Transformation Name with Pseudocode** on (ON) to replace the transformation name with pseudo-code.
Pseudocode	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).
Intended Use	Specifies the objective of the transformation. For example: Data governance rule - use on projects.

5. Click .

   A new transformation is added on the Transformations Details page.

For more information on transformations, refer to the Defining Transformations section.

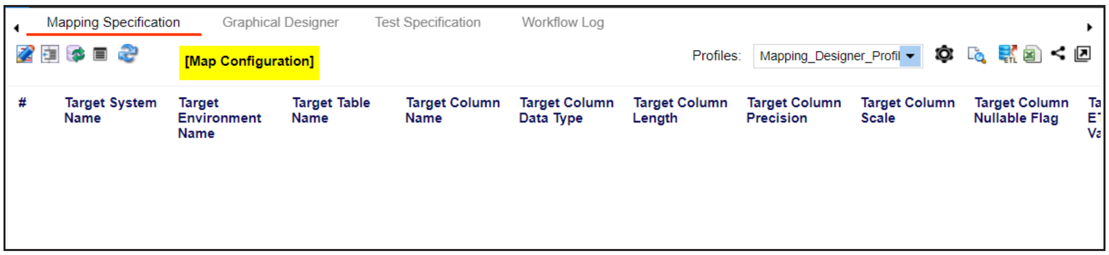
Mapping Source and Target

You can create mapping specifications using drag and drop method, 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.

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

1. Under the **Workspace Mappings** pane, click the required map.

   By default, it opens the Mapping Specification tab.

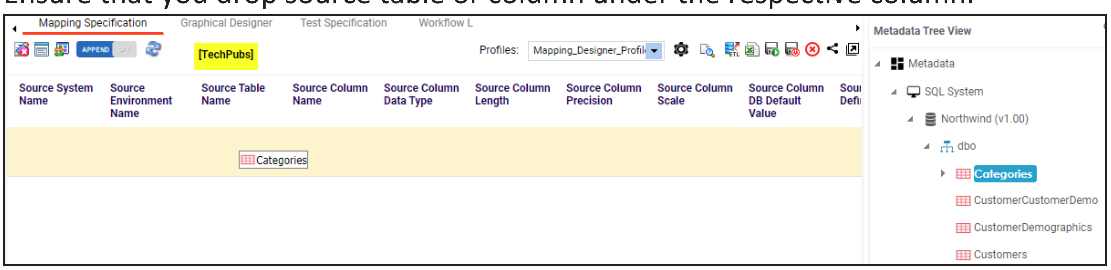


2. Click  .

   You can now, edit the Mapping Specification tab.

3. Drag source table or column from **Metadata Tree View** and drop in **Mapping Specification**.

   You cannot drop source system or source environment in Mapping Specification. Ensure that you drop source table or column under the respective column.



4. Drag target table or column from **Metadata Tree View** and drop in **Mapping Specification**.

   You cannot drop target system or target environment in Mapping Specification. Ensure that you drop target table or column under the respective column.

3. Click .

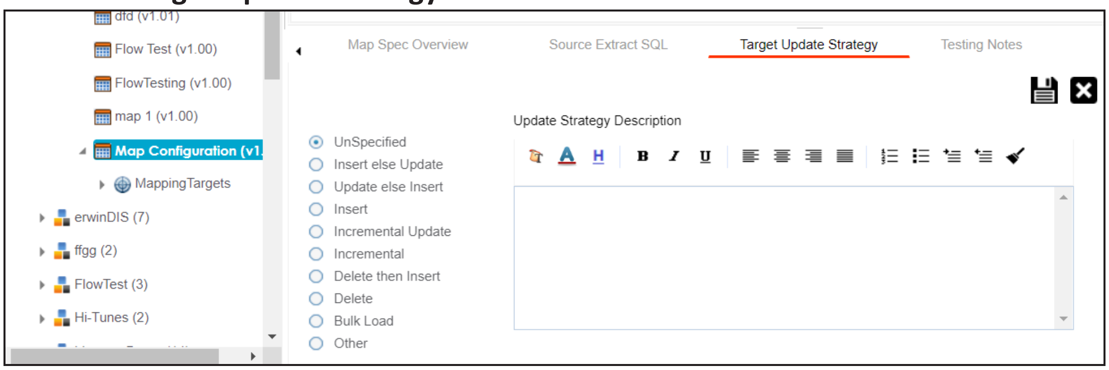
   The mapping specification is saved.

To set the target update strategy, follow these steps:

1. Expand the **Additional Mapping Information** pane.

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

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



3. In the **Target Update Strategy** tab, 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 specification involves:

- Generating virtual preview of target
- Previewing Data
- Performing table gap analysis

- Running impact analysis
- Running lineage analysis
- Running end to end lineage
- Opening business view
- Viewing mapping statistics

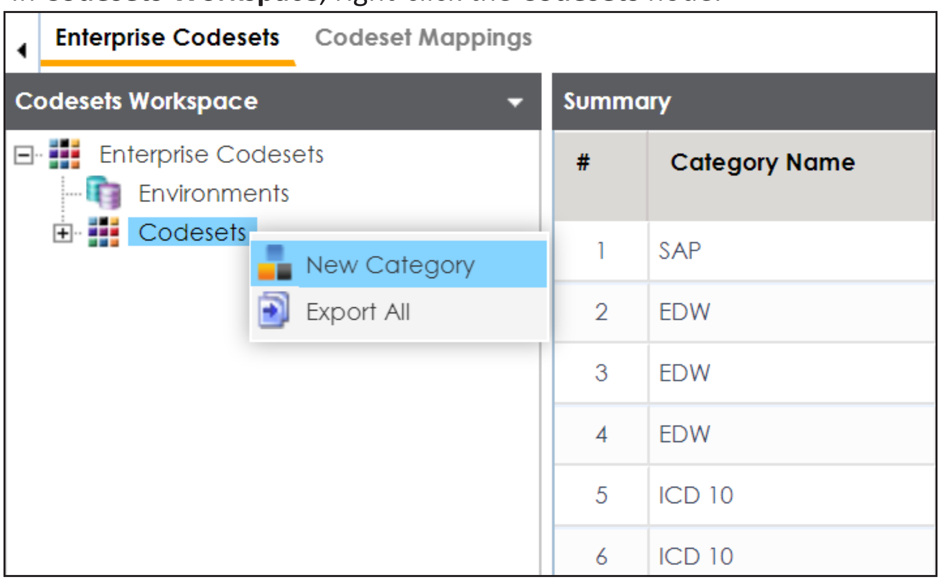
Categorizing Codesets and Defining Code Values

You can create and manage codesets in Codesets Manager. Its workspace has two sections, Enterprise Codesets and Codeset Mappings. You can categorize and define codesets in the Enterprise Codesets section, while you can create codeset crosswalks (mappings) in the Codeset Mappings section.

Before defining codesets, you need to create categories to hold the codesets.

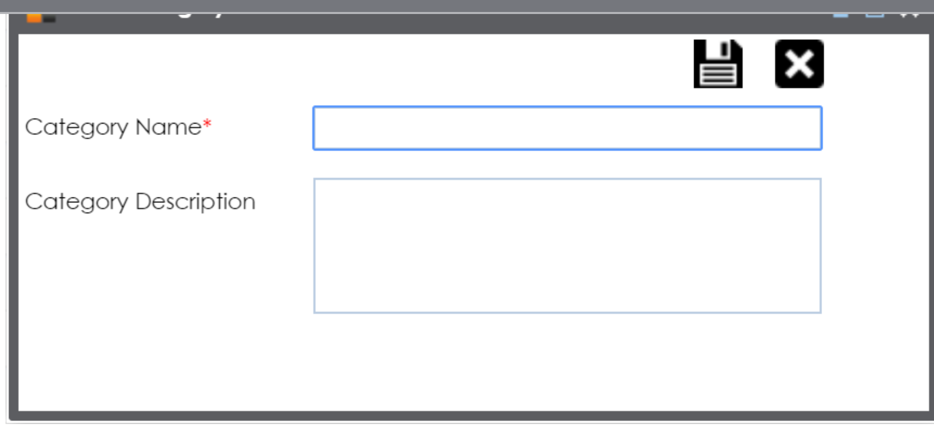
To create categories, follow these steps:

1. Go to **Application Menu** > **Data Catalog** > **Codeset Manager**.
2. In **Codesets Workspace**, right-click the **Codesets** node.



3. Click **New Category**.

   The New Category page appears.



4. Enter **Category Name** and **Category Description**.

   For example:

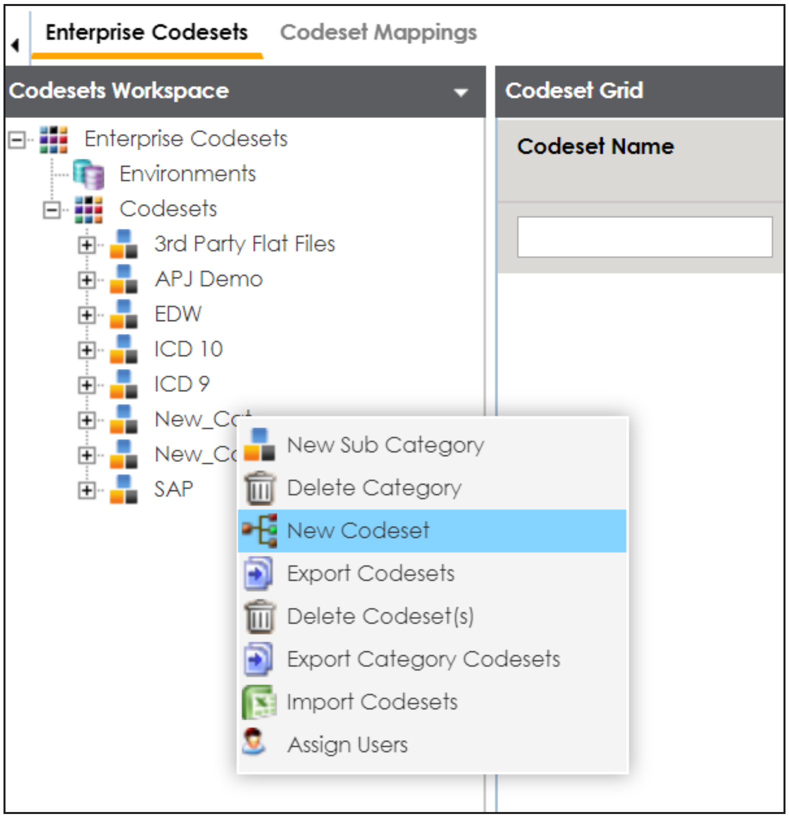
   - Category Name - EDW
   - Category Description - This category contains three codesets, Country Codes, Gender, and Marital Status.

5. Click .

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

After creating a category, you can define codesets, which are stored inside the category.

To define codesets, follow these steps:



2. Click **New Codeset**.

   The New Codeset page appears.

3. Enter **Codeset Name** and **Codeset Description**.

   For example:

- Codeset Description - This codeset has code names and code values for four countries.

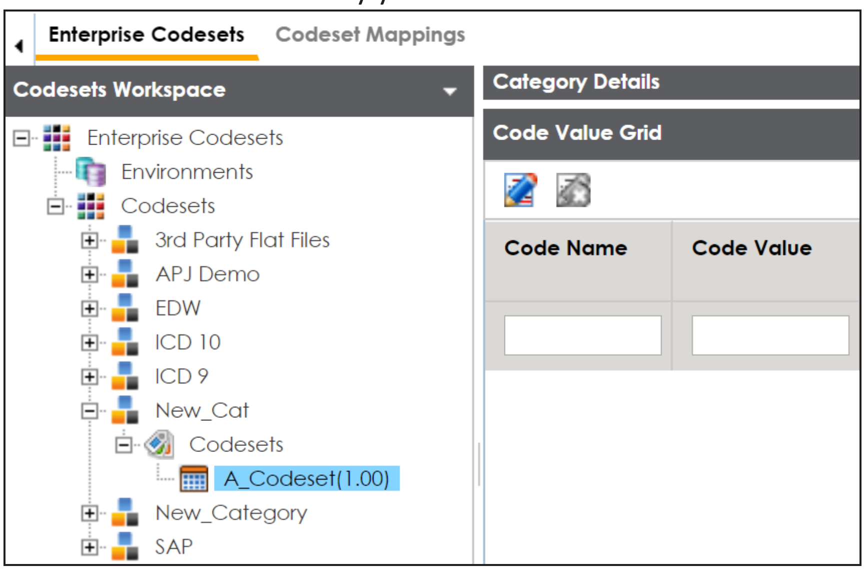
4. Click .

   A codeset is created and stored in the codesets tree.

We can populate code values in codesets by scanning the database.

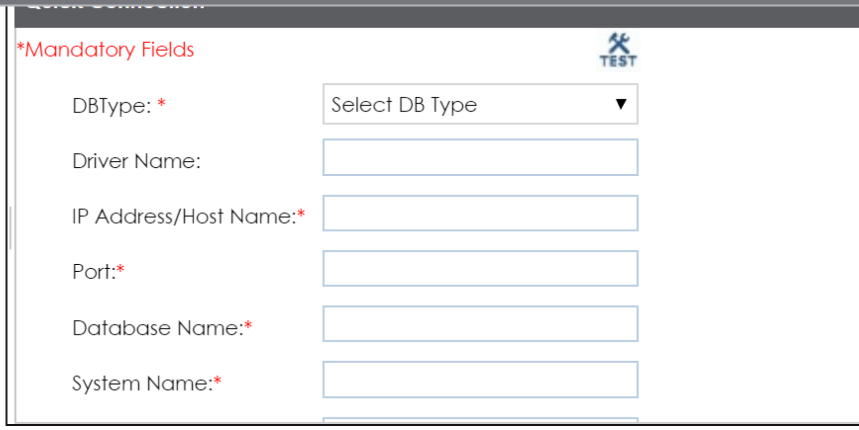
To populate code values in codesets via DB scan, follow these steps:

1. Click the codeset created by you.



2. In **Code Value Grid**, click .

3. Click and expand the **Quick Connection** pane.



4. Enter appropriate values in the fields (connecting parameters). Fields marked with a red asterisk are mandatory. Refer to the following table for field description.

Field Name	Description
DBType	Specifies the database type. For example, Sql Server. Select the database type from which you wish to scan codes.
Driver Name	Specifies the JDBC driver name for connecting to the database. For example, com.microsoft.sqlserver.jdbc.SQLServerDriver It is autopopulated depending on the DB type. You can also update the driver name.
IP Address/Host Name	Specifies the IP address or server host name of the database. For example, localhost.
Port	Specifies the port to connect with the database. For example: 1433 is the default port for a Sql Server database type.
Database Name	Specifies the database name being used to connect to the code-set. For example, ErwinDIS931.

Field Name	Description
System Name	Specifies the name of the system related with the codeset. For example, EDW. The name of the system should be same as provided in Metadata Manager.
System Envir-onment Name	Specifies the name of the environment related with the codeset. For example, EDW-DEV. The name of the environment should be same as provided in Metadata Manager.
User Name	Specifies the user name to connect with database. For example, sa.
Password	Specifies the password to connect with database. For example, goerwin@1.
URL	Specifies the full JDBC URL that is used to establish a con-nection with the database. For example, **jdbc:sqlserver://SERVER_ NAME:PORT#;data-baseName=DatabaseName** It is autopopulated based on the other parameters.

5. Click to test the connection.

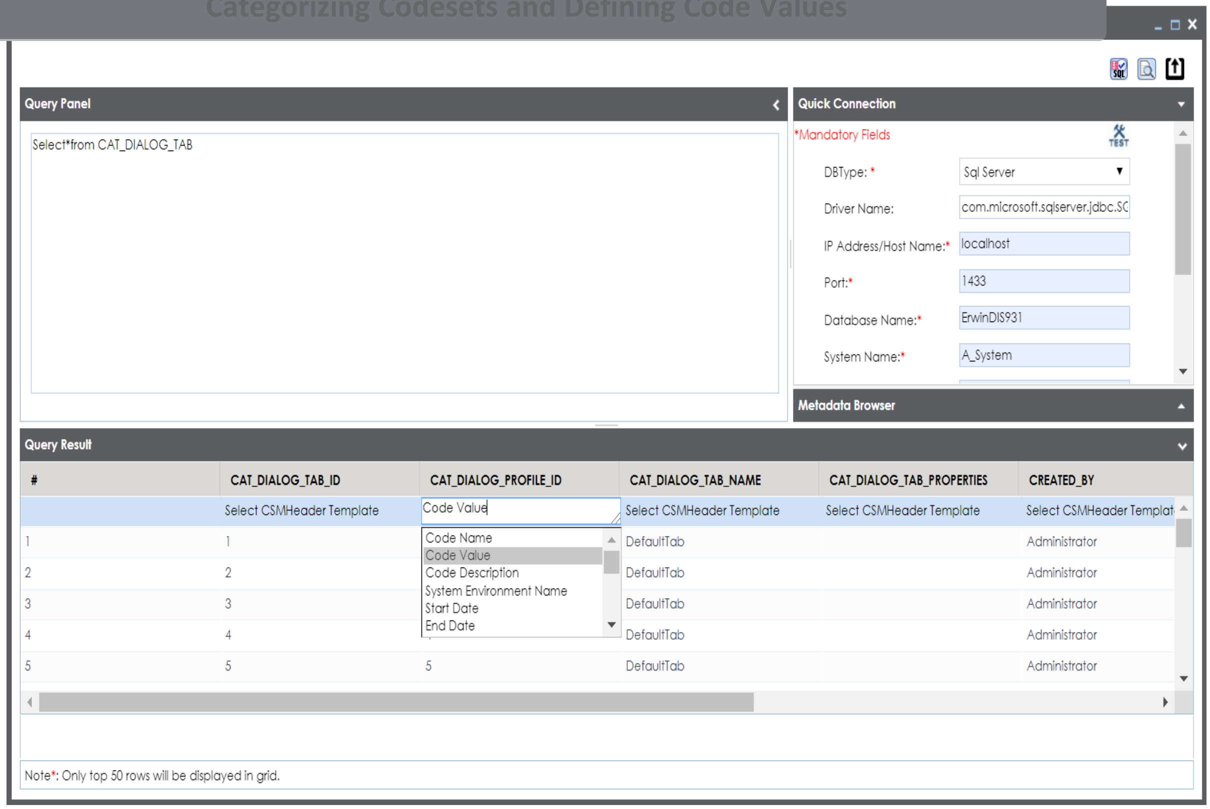
   If connection is established then a success message pops up.

6. Write a query in the **Query Panel** and click to validate the query.

7. Click to preview the query result.

8. Double-click the **Select CSMHeader Template** cell of the required column.

   The columns of the Code Value Grid appears as an option list.



9. Select the required **Code Value Grid** column.

> You can select multiple columns from the data base.

10. Click to import the selected columns in the **Code Value Grid**.

    The selected columns are imported in the Code Value Grid.

You can also enter codes in the Code Value Grid:

- Manually
- Using MS Excel files

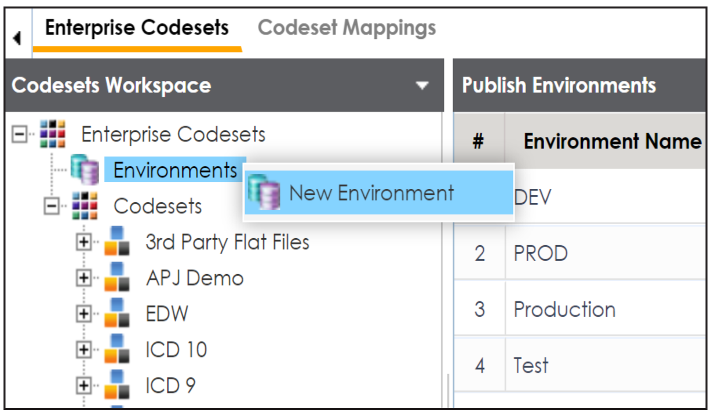
For more information on maintaining codesets, refer to the Maintaining Enterprise Codesets section.

Publishing Codesets

You can publish your codesets to an environment. To publish the codesets, ensure that you have created and setup an environment.

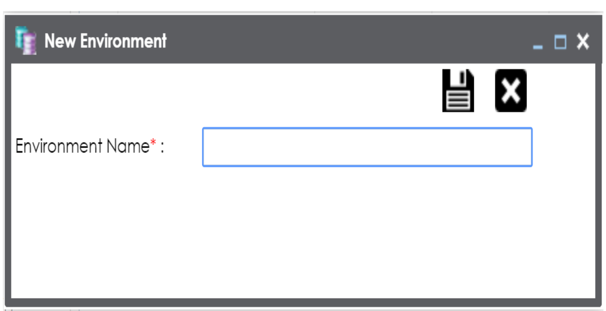
To create publish environments, follow these steps:

1. Go to **Application Menu** > **Data Catalog** > **Codeset Manager**.
2. In the **Codesets Workspace** pane, right-click the **Environments** node.



3. Click **New Environment**.

   The New Environment page appears.



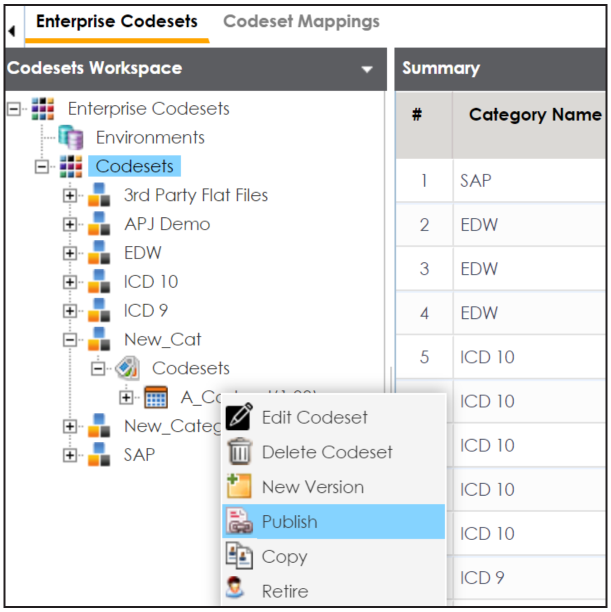
4. Enter **Environment Name**.

3. Click .

    A new publish environment is created and saved in the Publish Environments pane.

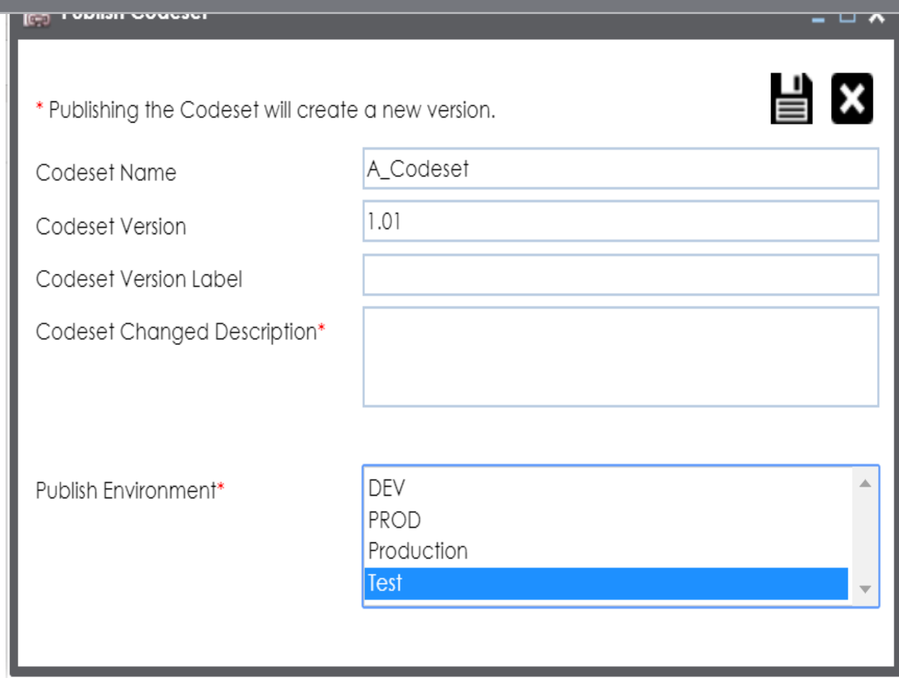
To publish codesets, follow these steps:

1. Go to **Application Menu** > **Data Catalog** > **Codeset Manager**>.
2. In the **Codesets Workspace** pane, right-click a codeset.



3. Click **Publish**.

    The Publish Codesets page appears.



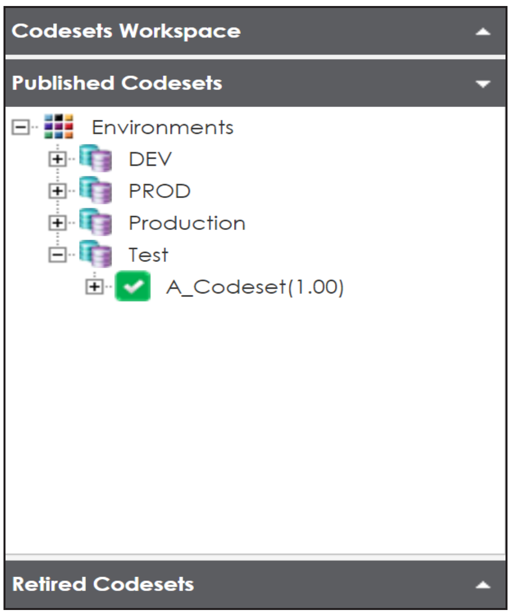
4. Enter appropriate values in the fields. Fields marked with a red asterisk are mandatory. Refer to the following table for field description.

Field Name	Description
Codeset Name	Specifies the name of the codeset which is being published. For example, Country Codes. It autopopulates with the codeset name and cannot be edited.
Codeset Version	Specifies the new version of the codeset. For example, 1.03. It autopopulates with the new version and cannot be edited.
Codeset Version Label	Specifies the version label of the codeset. For example, Beta.
Codeset Changed Description	Specifies the description about the changes in the codeset. For example: Code Value for CANADA was changed to

Field Name	Description
	CAN.
Publish Environment	Specifies the publish environment to which the codeset is being published. For example, Production.

5. Click .

   The codeset is published successfully and the published codesets move under Published Codesets pane.



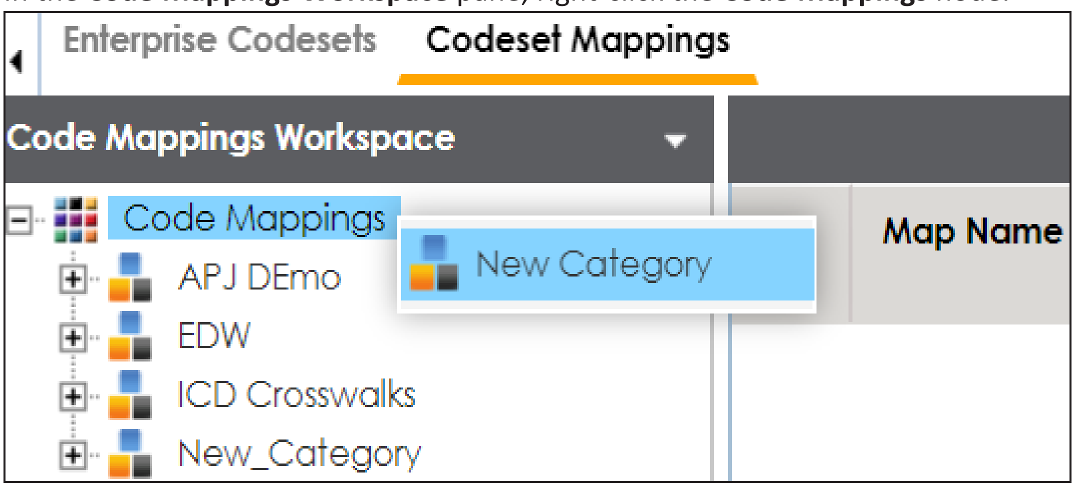
Creating Code Crosswalks (Mappings)

You can create code crosswalks (mappings) for the source and target codesets in Codeset Manager. These codesets can have the same or different code values. Using the Auto-Map functionality, you can map codesets having same code values. Codesets having different code values can be mapped using the drag and drop method.

A category can hold multiple code maps. Code maps are stored in a hierarchical manner, Category > Mappings. You can also create sub-categories under a category to provide one more level of categorization to mappings.

To create a category, follow these steps:

1. Go to **Application Menu** > **Data Catalog** > **Codeset Manager** > **Codeset Mappings**.
2. In the **Code Mappings Workspace** pane, right-click the **Code Mappings** node.



3. Click **New Category**.

   The New Category page appears.

4. Enter **Category Name** and **Category Description**.

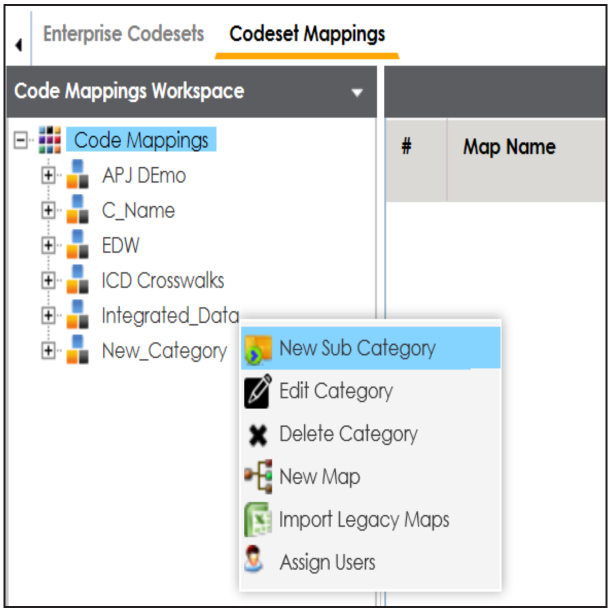
   For example:

   - **Category Name**: EDW
   - **Category Description**: This category contains two code mappings, Gender Crosswalk and Marital Status Crosswalk.

5. Click .

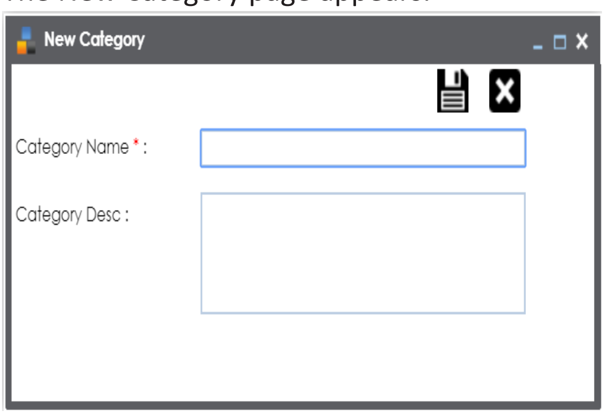
   A new category is created and saved under the category tree.

To create sub-categories under a category, follow these steps:



2. Click **New Sub Category**.

   The New Category page appears.



3. Enter **Category Name** and **Category Description**.

   For example:

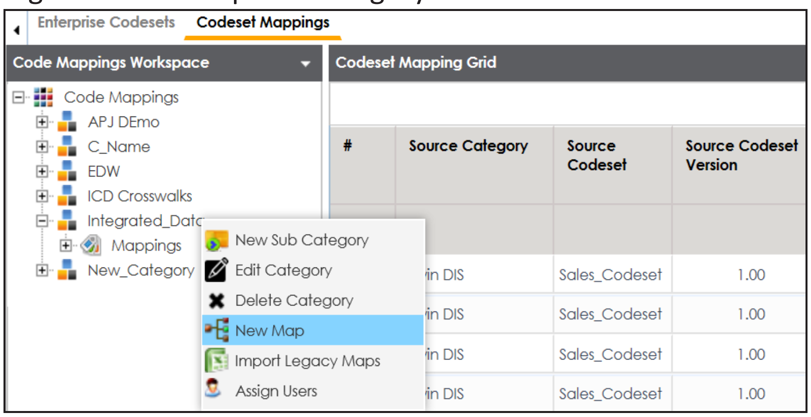
   - Category Name - EDW-Finance
   - Category Description - This sub-category contains two code mappings, Gender Crosswalk and Marital Status Crosswalk.

A new sub-category is created and saved under the sub-category tree.

You can use Auto-Map functionality to map source and target codesets having same code values.

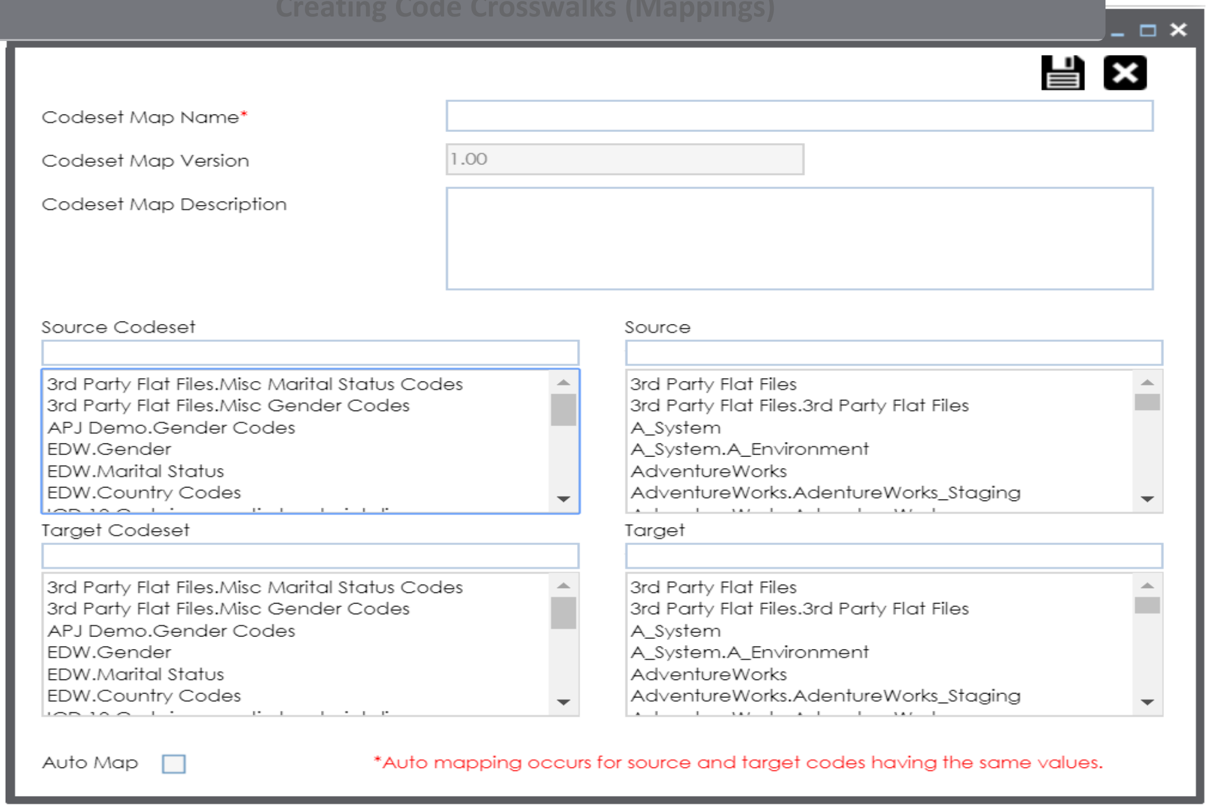
To create code mappings when source and target codesets have same code values, follow these steps:

1. Right-click the required category.



2. Click **New Map**.

   The New Codeset Map page appears.



3. Enter **Codeset Map Name** and **Codeset Map Description**.

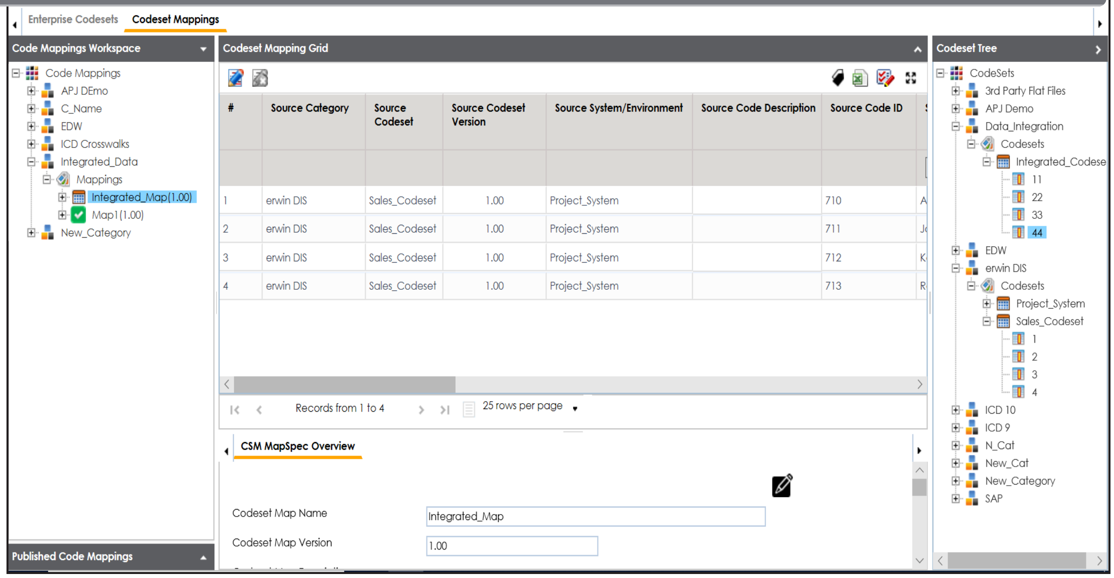
   For example:

   - Codeset Map Name - Gender Crosswalk
   - Codeset Map Description - The codeset map is the code mappings between the two codesets, Misc Gender Codes and Gender.

4. Select the **Source Codeset/System** and **Target Codeset/System**.

5. Select the Auto Map check box and click .

   A new code mapping is created and source and target codesets are mapped in the Codeset Mapping Grid.

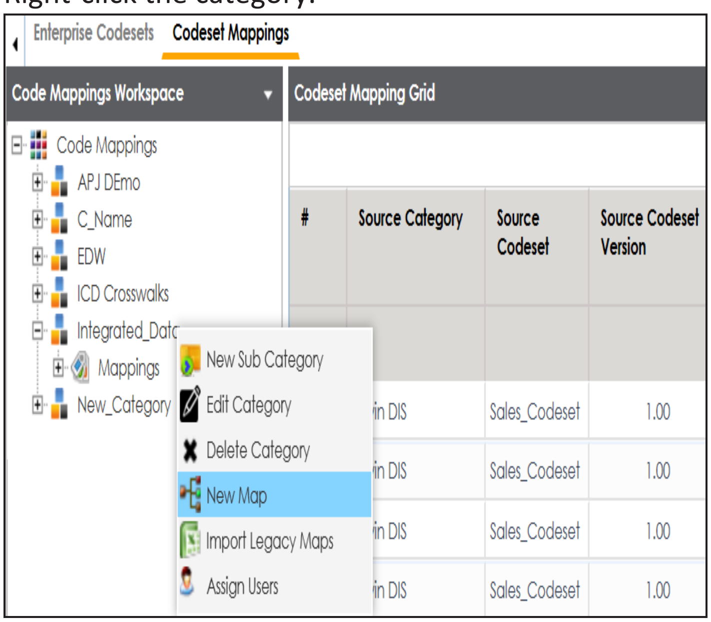


6. Click  to validate the code mapping.

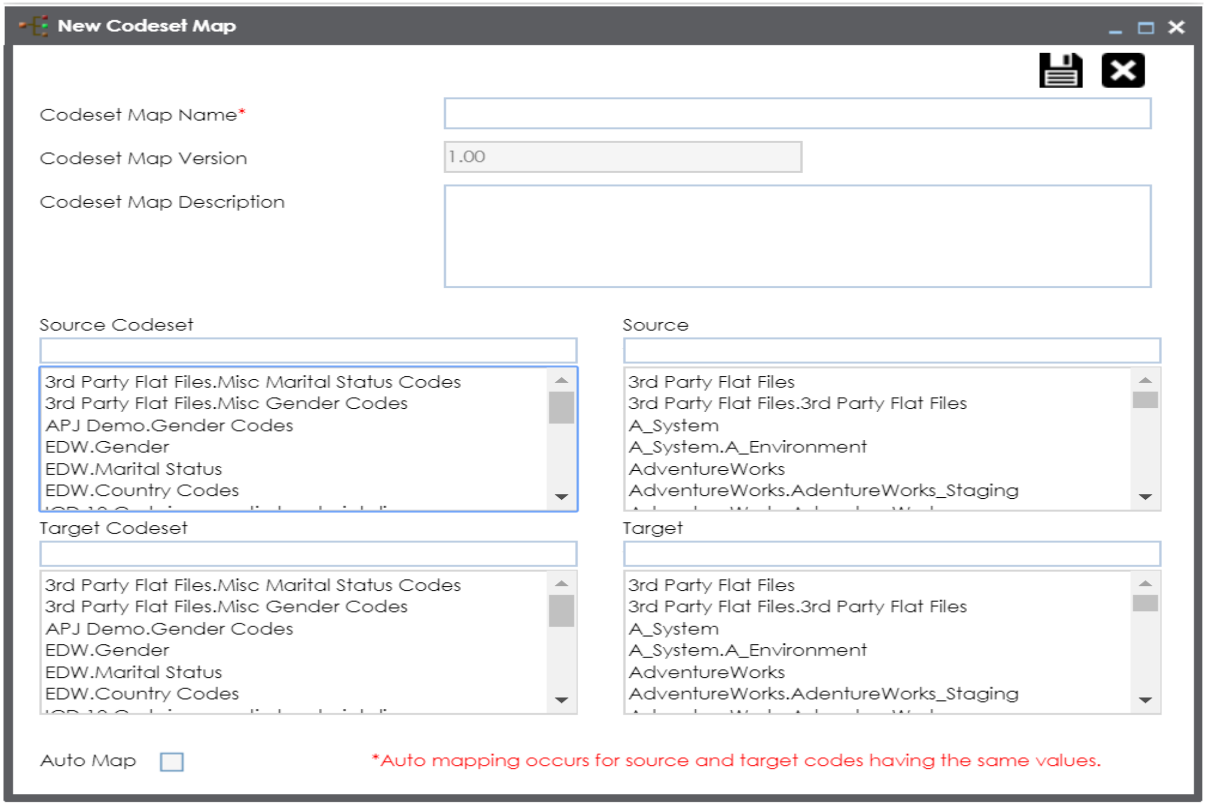
You need to use drag and drop method to map codesets having different code values.

To create code mappings when source codesets and target codesets have different code values, follow these steps:

1. Right-click the category.



The New Codeset Map page appears.



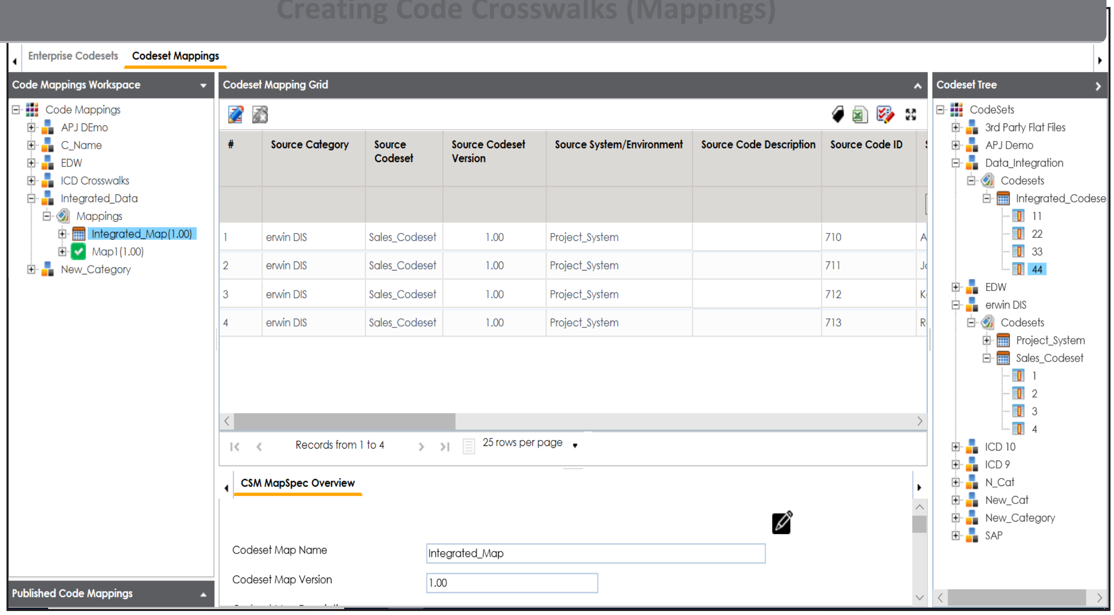
3. Enter **Codeset Map Name** and **Codeset Map Description**.

   For example:

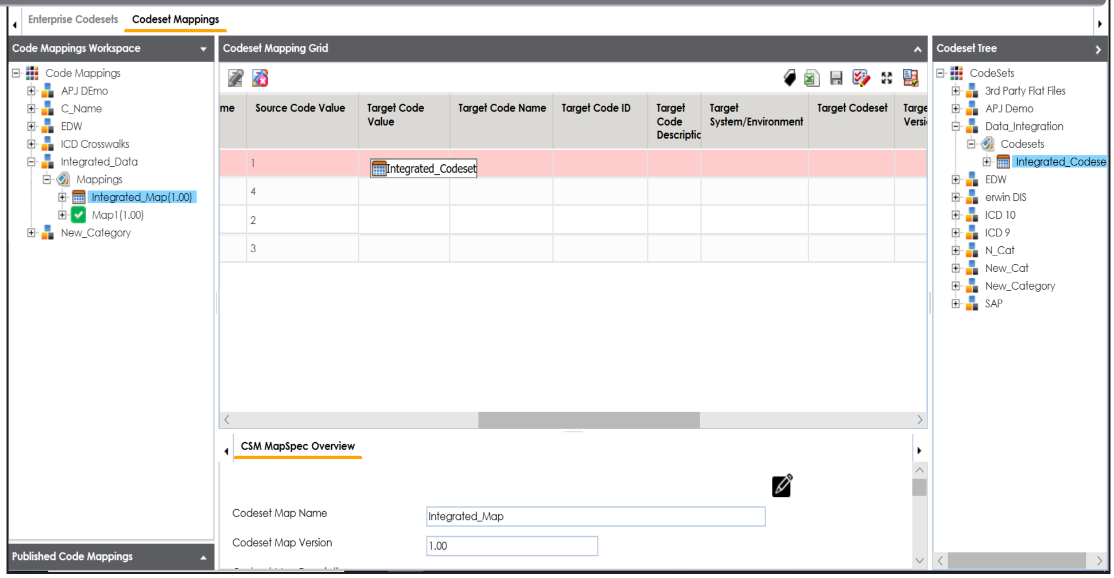
   - Codeset Map Name - Gender Crosswalk
   - Codeset Map Description - The codeset map is the code mappings between the two codesets, Misc Gender Codes and Gender.

4. Select the Source Codeset/System.
5. Click .

   The source codesets details are updated in the Codeset Mapping Grid.



6. Click  .
7. Scroll to right of the Codeset Mapping Grid to see the Target Code Value column.
8. In **Codeset Tree**, expand the target category and the Codesets node.
9. Drag and drop the target codeset into the Code Set Mapping Grid under the Target Code Value column.



10. Click .

    The code mappings are successfully saved.

11. Click to validate the code mapping.

    The code map is validated. Ensure that all the required codes are mapped.

    Use the following options:

    Export

    To download the code map details in .xlsx format, click .

    Extend Mapping Grid

    To extend the Codeset Mapping Grid, click .

Associating Code Mappings 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 Codeset Manager section.

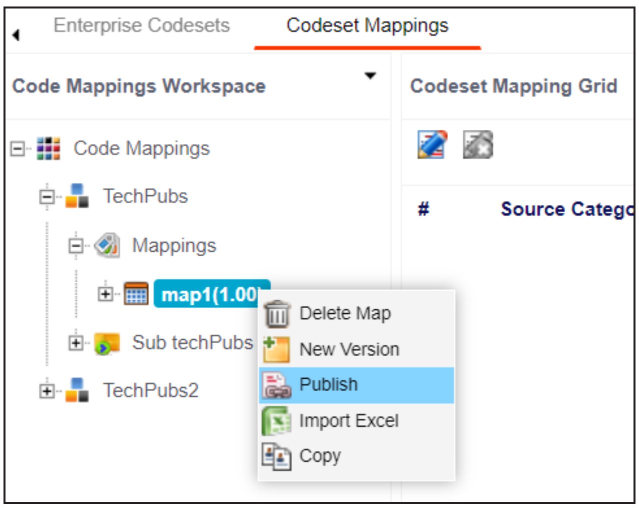
Before associating a code map with data item mappings, ensure that you publish the code map.

Publishing Code Maps

To publish code maps, follow these steps:

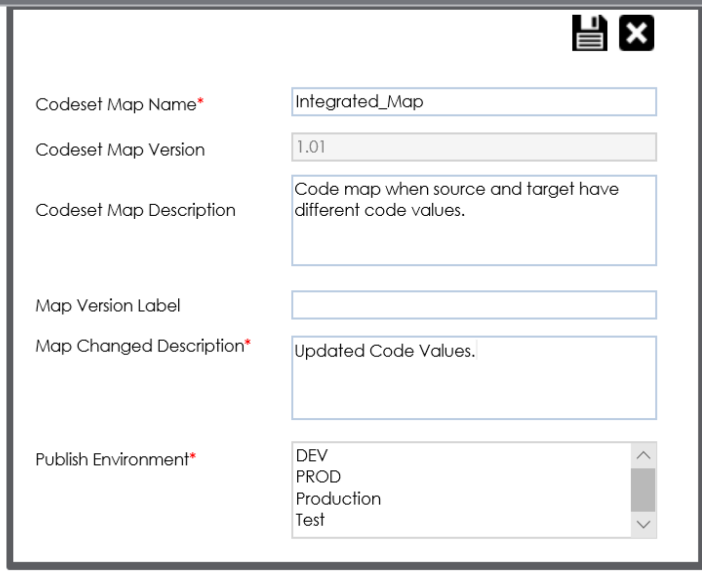
1. Go to **Application Menu** > **Data Catalog** > **Codeset Manager** > **Codeset Mappings**.
2. In the **Code Mappings Workspace** pane, right-click a code map.

   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.

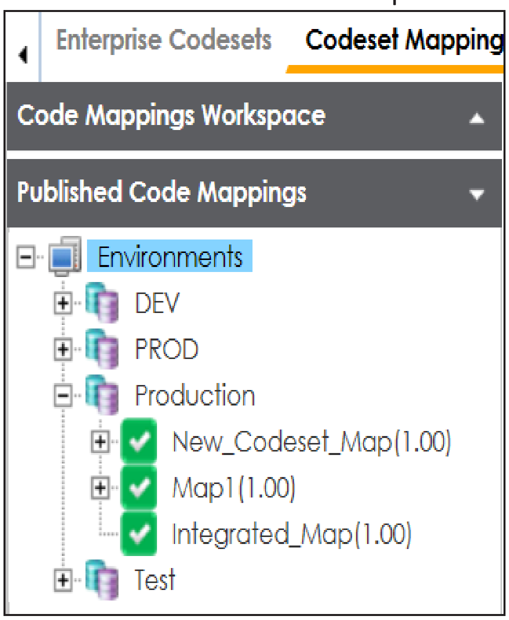
Field Name	Description
Codeset Map Name	Specifies the name of the code map. For example, Gender Crosswalk.
Codeset Map Version	Specifies the new version of the code map. For example, 1.02.
Codeset Map Description	Specifies the description about the code map. For example: The codeset map is the code mappings between the two codesets, Misc Gender Codes and Gender.
Map Version Label	Specifies the version label of the code map. For example, Beta.
Map Changed Description	Specifies the description about the changes made in the code map. For example: Code values were updated.
Publish Environment	Specifies the environment where the code map is being published.

Field Name	Description
	For example, test. You can create publish environments in Enterprise Codesets. For more information on creating publish environments, refer to the Publishing Codesets topic.

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.

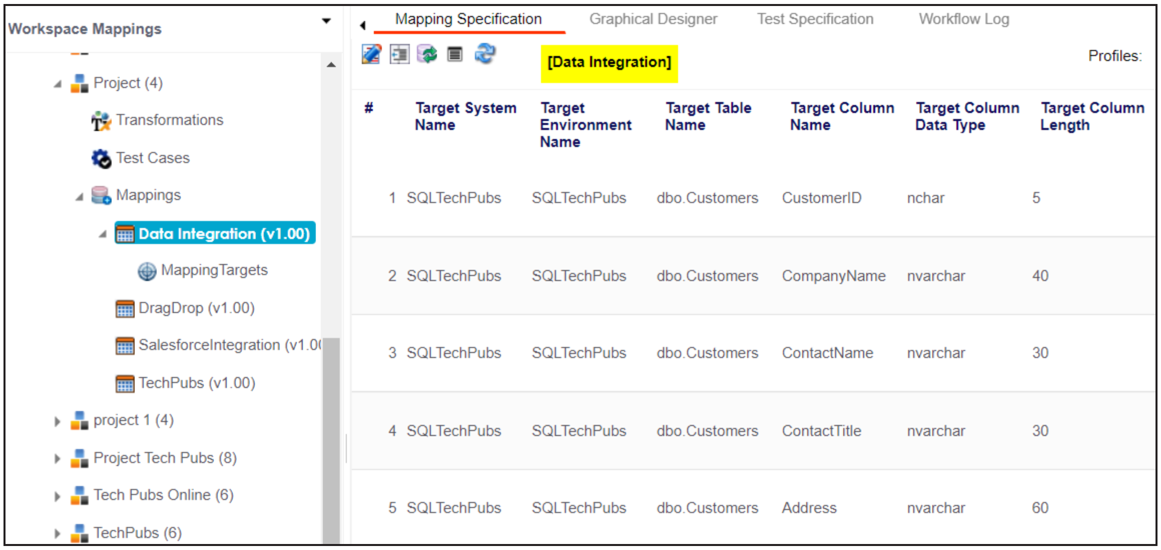


A published code map can be associated with a mapping in the Mapping Manager. The published code map is available under the Code Mappings Catalog.

Associating Code Maps

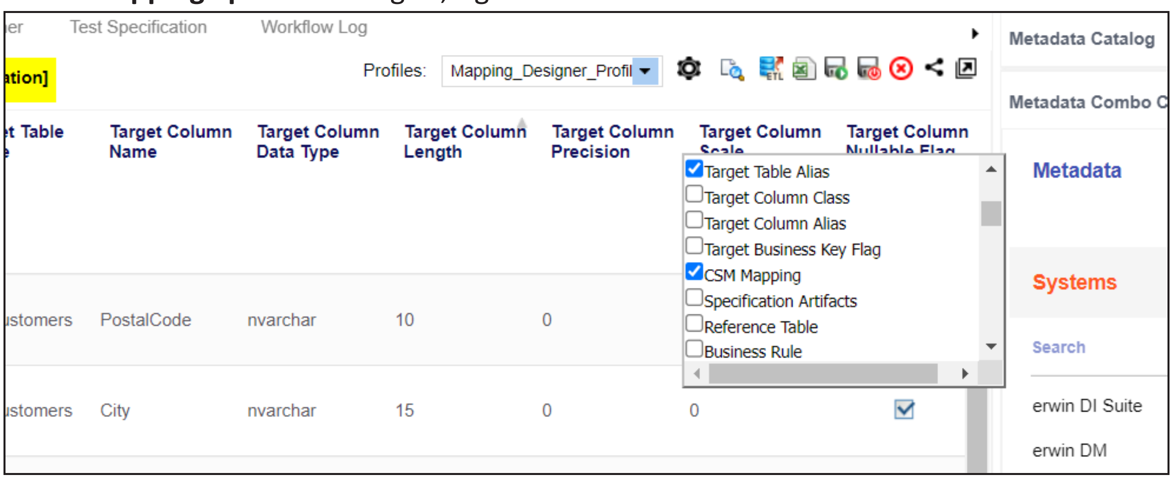
To associate published code maps with data item mappings, follow these steps:

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



3. Click  .

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 Catalog**.

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

6. Click .

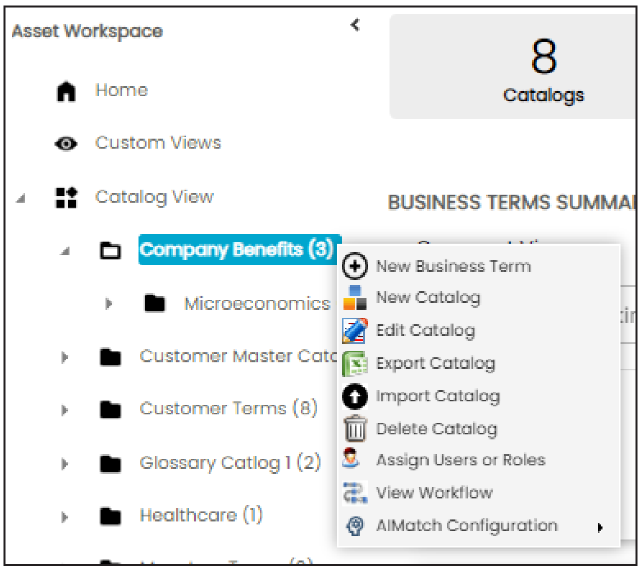
   The code map is associated with the data item mappings.

Creating Business Terms

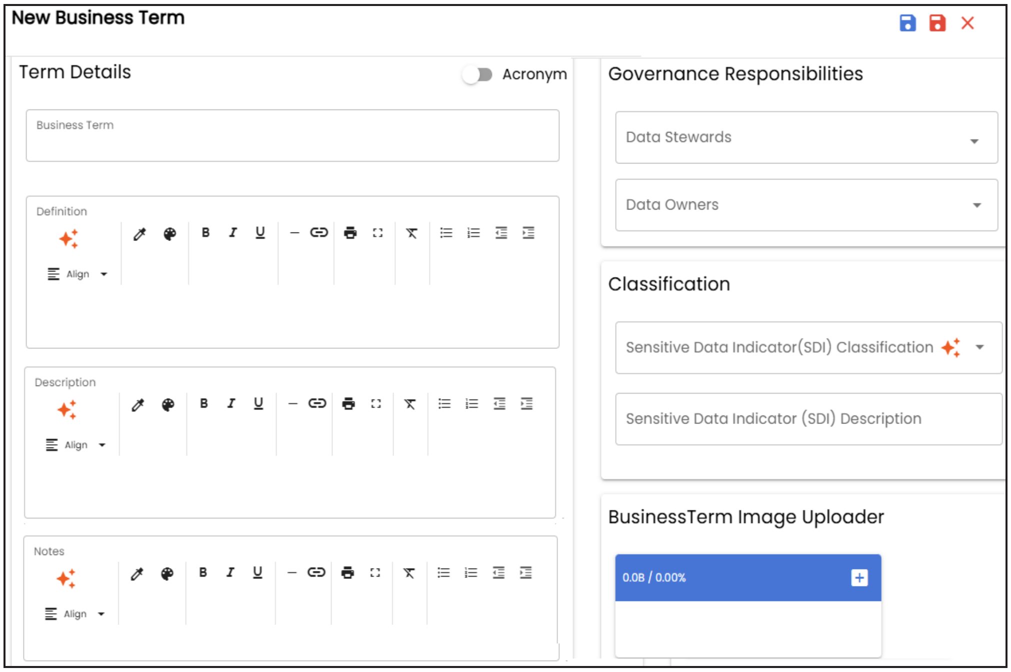
Business terms are globally defined terms that represent your business terminology usage. Using business terms, you can maintain a common business vocabulary across your organization. You can create business terms in new or existing catalogs. For more information about catalogs, refer to the Creating Catalogs topic.

To create business terms, follow these steps:

1. Go to **Application Menu** > **Data Literacy** > **Business Glossary Manager** > **Explore**.
2. Go to the **Business Terms** tab.
   The Workspace switches to the business terms view.
3. In the **Asset Workspace** pane, right-click a catalog.



The New Business Term page appears.



5. Enter appropriate values to the fields. Fields marked with a red asterisk are mandatory.

   Refer to the following table for field descriptions.

Field Name	Description
Acronym	Specifies whether the business term is an acronym.
Business Term	Specifies the name of the business term. For example, Account.
Definition	Specifies the definition of the business term. For example: An Account contains data for a party. You can manually enter a definition or click to generate it automatically.

Field Name	Description
Description	Specifies the description of the business term. For example: Account contains data for posting, payments, debt recovery, and taxes. You can manually enter a description or click to generate it automatically.
Notes	Specifies the reference notes, if any. For example: The data for posting, payments, debt recovery, and taxes was imported from the Account.xlsx file. You can manually enter notes or click to generate them automatically.
Governance Responsibilities	Specifies the users assigned with data governance responsibilities for the business assets. For more information, refer to Updating Data Governance.
Classification	Specifies the sensitive data indicator (SDI) classification of the business term. Also, you can add multiple SDI classifications to a business term. You can manually add classifications or click to generate them automatically. For example, PHI. For more information on configuring SDI classifications, refer to the Configuring Sensitive Data Indicator Classifications topic. By default, this field is enabled for business terms. For more information on enabling sensitivity fields, refer to the Configuring Asset Details topic.
Business Term Image Uploader	Drag and drop a picture of business term or click to browse and upload a picture.

6. Click .
   A business term is created and added to the catalog.

action for review or approval. For more information, refer to the Managing Business Glossary Workflows topic.

Once, a business term is created you can set up associations for business terms.

You can also create Business Policies, Business Rules, and other business assets in the Business Glossary Manager. For more information on creating business assets, refer to the Business Glossary Manager section.

Setting Up Associations for Business Terms

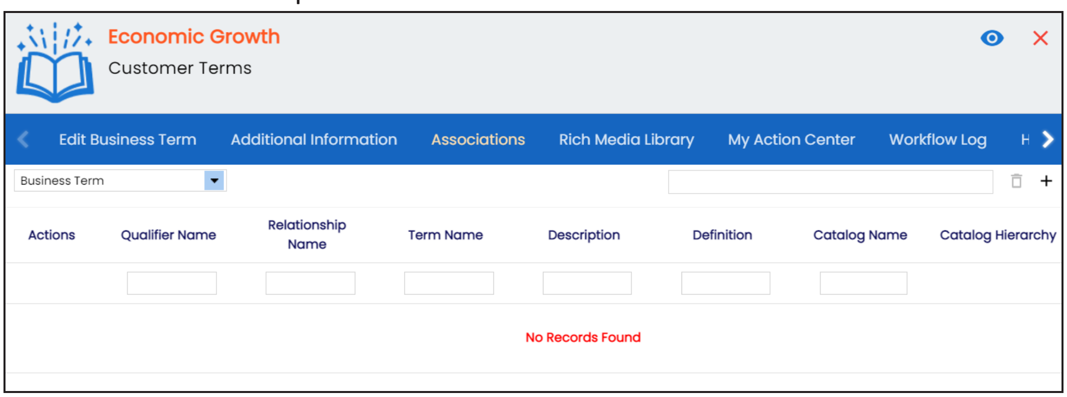
By default, you can associate business terms with business assets (business policies and other business terms) and technical assets (columns, environments, and tables). You can control the available asset types for association using the Business Glossary Manager settings page. For more information, refer to the configuration topic.

To set up associations, follow these steps:

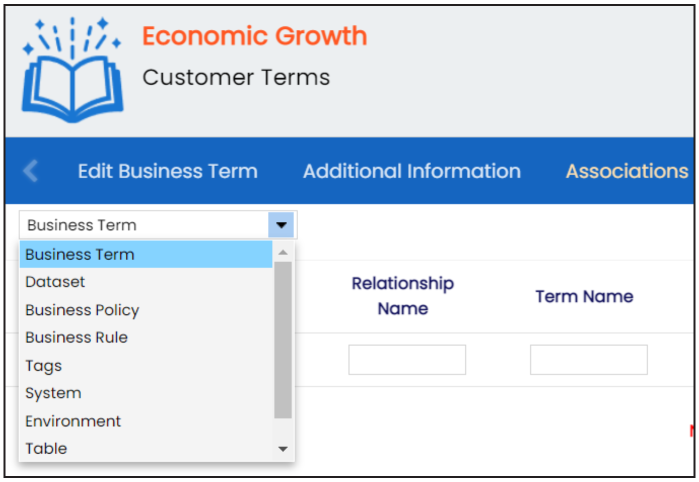
1. On the **Compact View** tab, click .

   Alternatively, on the **Grid View** tab, under the **Options** column, click . Then, click **Associations**.

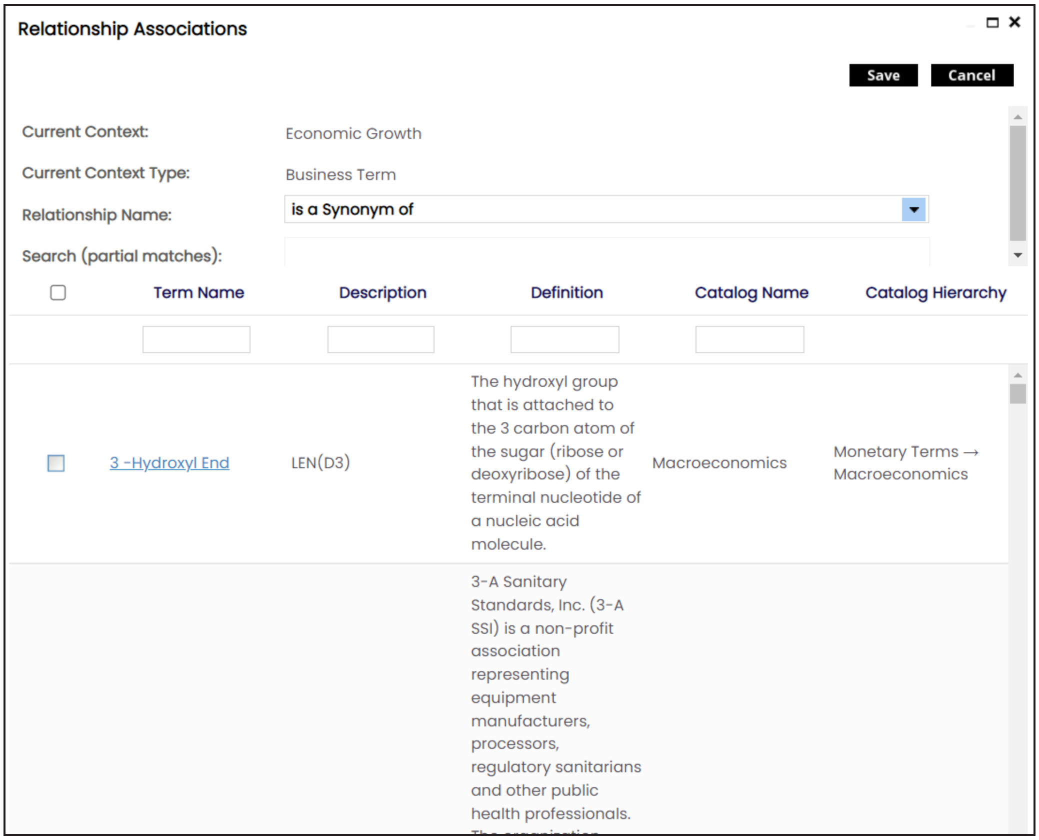
   The Associations tab opens in edit mode.

tables) list, select an asset type to associate with the business term.



3. Click +.
   The Relationship Associations page appears. Based on the asset type that you select, it



4. Select assets to associate with your business term.
   If you know the asset name, use the Search (partial matches) field to look up for it.
5. Click **Save**.
   The selected assets are associated with the business term and added to the list of associations.
   You can define as many associations as required.

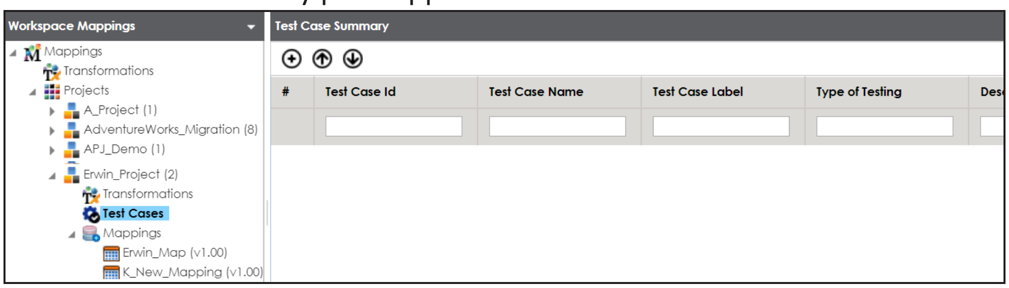
Creating Test Cases

You can create multiple test cases at project level and, record expected and actual results. Using these test cases, you can test data mappings and ETL process. You can also manage test cases as per your requirements.

To create test cases, follow these steps:

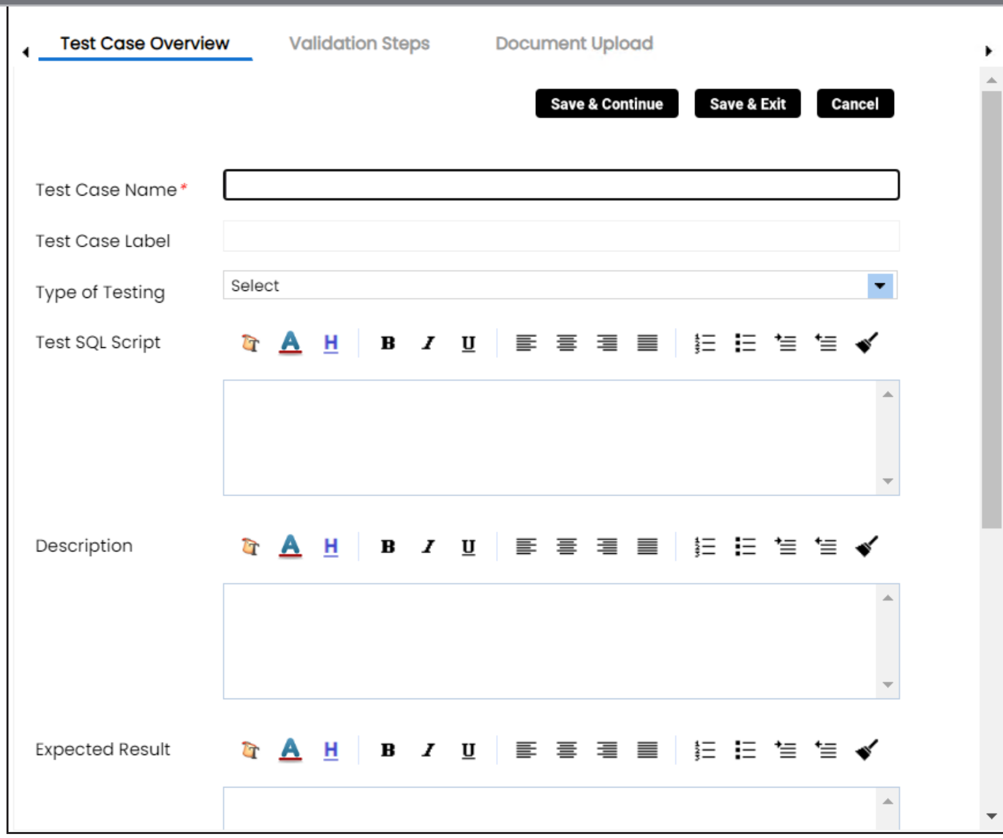
1. In the **Workspace Mappings** pane, expand a project.
2. Click the **Test Cases** node.

   The Test Case Summary pane appears.

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.

Field Name	Description
Test Case Name	Specifies the name of the test case. For example, Verifying the Completeness of Source Metadata.
Test Case Label	Specifies the unique label for the test case. For example, Source Metadata.
Type of Testing	Specifies the type of testing. For example, Metadata Testing.
Test SQL	Specifies the SQL script required in the test execution.

Field Name	Description
Script	For example, select * from dbo.ADS_ASSOCIATIONS.
Description	Specifies the test objective in brief. For example: The objective of the test case is to verify the completeness of source metadata.
Expected Result	Specifies the expected result of the test case in detail. For example: The source table should have 50 columns.
Actual Result	Specifies the actual test result after the execution of the test. For example: The source table has 39 columns.
Testing Comments	Specifies the testing comments about the test case. For example: The source metadata was scanned from a Sql Server database.

5. Click **Save and Exit**.

   The test case is created and saved under the **Test Cases** node.

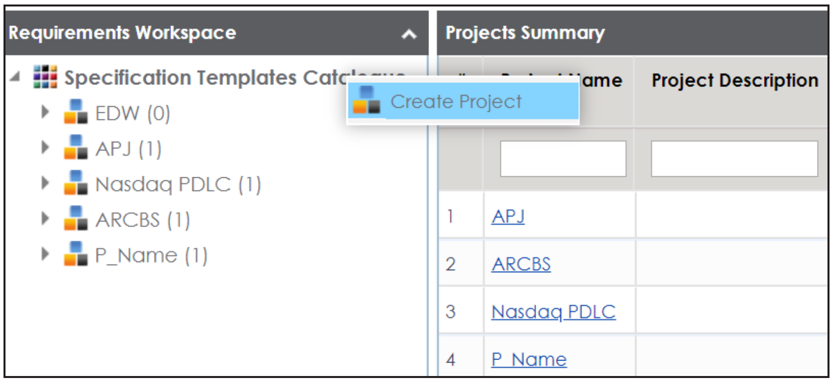
For more information on test cases, refer to the Creating and Managing Test Cases topic.

Documenting Requirements

You can document functional requirements in a standardized manner in Requirements Manager. It is an agile and collaborative platform to create customized requirements templates.

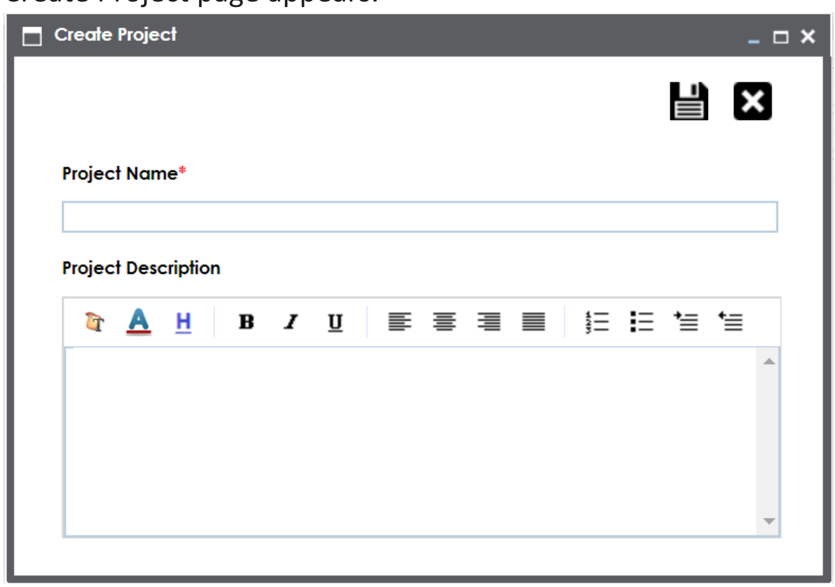
To document your requirements in standard templates, follow these steps:

1. Go to **Application Menu** > **Data Catalog** > **Requirements Manager** > **Requirements Workspace**.
2. Right-click the **Specification Templates Catalogue** node.



3. Click **Create Project**.

   Create Project page appears.



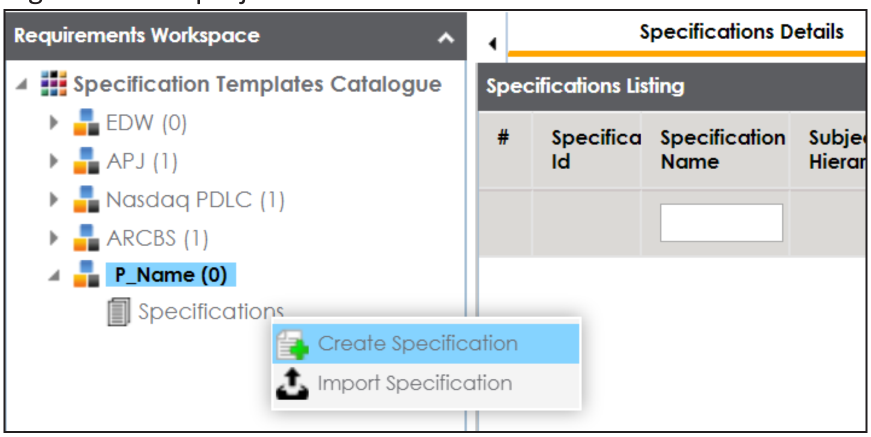
For example:

- Project Name - Nasdaq PDLC
- Project Description - This project captures functional and business requirements of the data migration project.

5. Click .

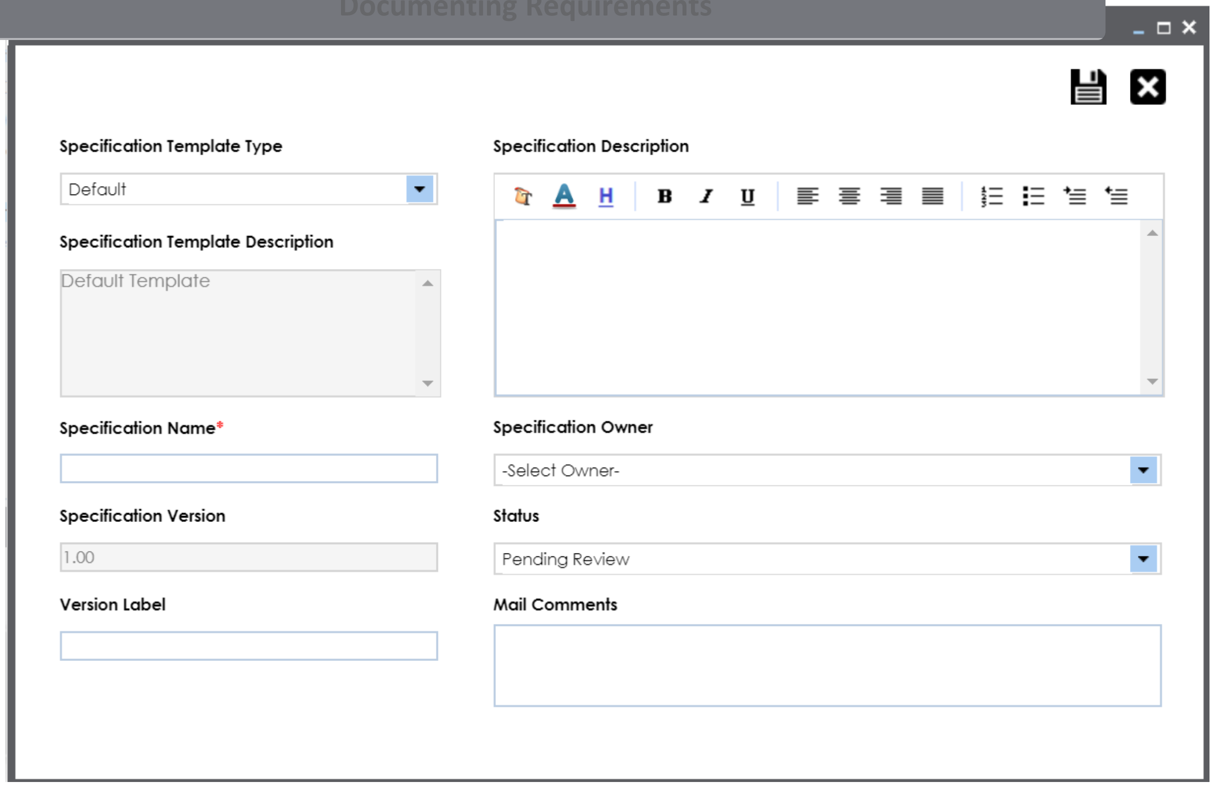
   A new project is created and stored in the project tree.

6. Right-click the project node.



7. Click **Create Specifications**.

   Create Specifications page appears.



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

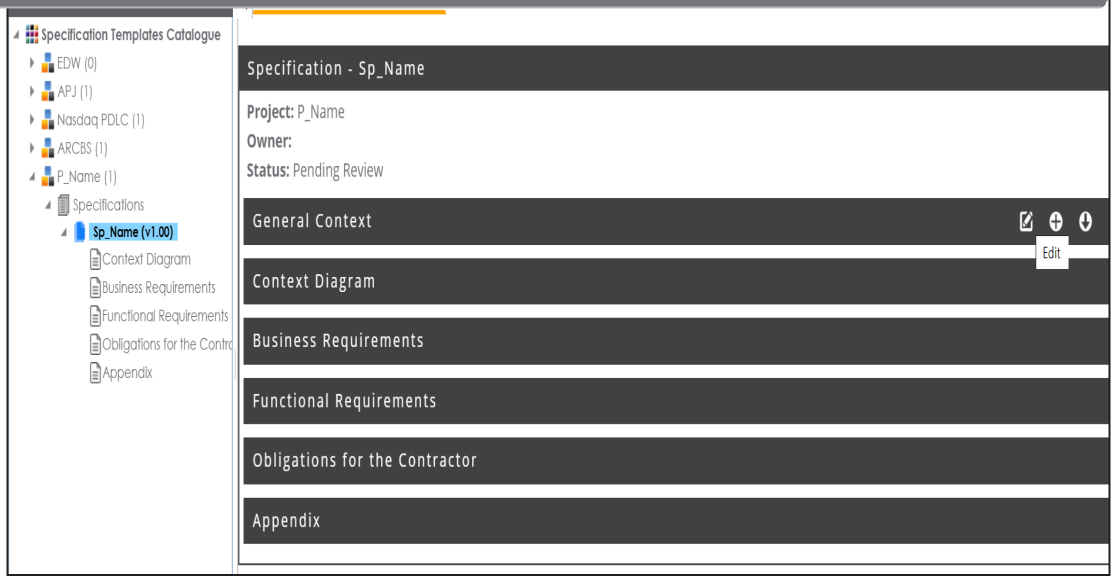
Field Name	Description
Specification Template Type	Specifies the template of the specification. For example, Health Migration Template. You can create templates and add artifacts to templates in the Requirements Manager Settings.
Specification Template Description	Specifies the description about the specification template. For example: The Health Migration Template is to capture functional and business requirements of the data migration project.
Specification Name	Specifies the name of the specification. For example, OrganMatch.

Field Name	Description
Specification Version	Specifies the version of the specification. For example, 1.01. The specification version is autopopulated. For more information on configuring version display of specifications, refer to the Configuring Version Display topic.
Version Label	Specifies the version label of the specification. For example, Beta. For more information on configuring version display of specifications, refer to the Configuring Version Display topic.
Specification Description	Specifies the description about the specification. For example: The specification uses the Health Migration Template to capture functional and business requirements of the data migration project.
Specification Owner	Specifies the specification owner's name. For example, Jane Doe.
Status	Specifies the status of the specification. For example, Pending Review.
Mail Com-ments	Specifies the mail comments, which are sent to the project users. For example: The specification uses the Health Migration Template. For more information on configuring email notifications, refer to the Configuring Email Settings topic.

9. Click .

   A new specification is created and stored in the specifications tree. The specifications tree is nested under the project node.

10. Document your requirements in the **Specification Overview** page.



Specification Overview page depends on the **Specification Template Type** selected while creating the specification.

11. Click .

The artifact is saved.

For more information on creating specifications and documenting requirements, refer to the Requirements Manager section.

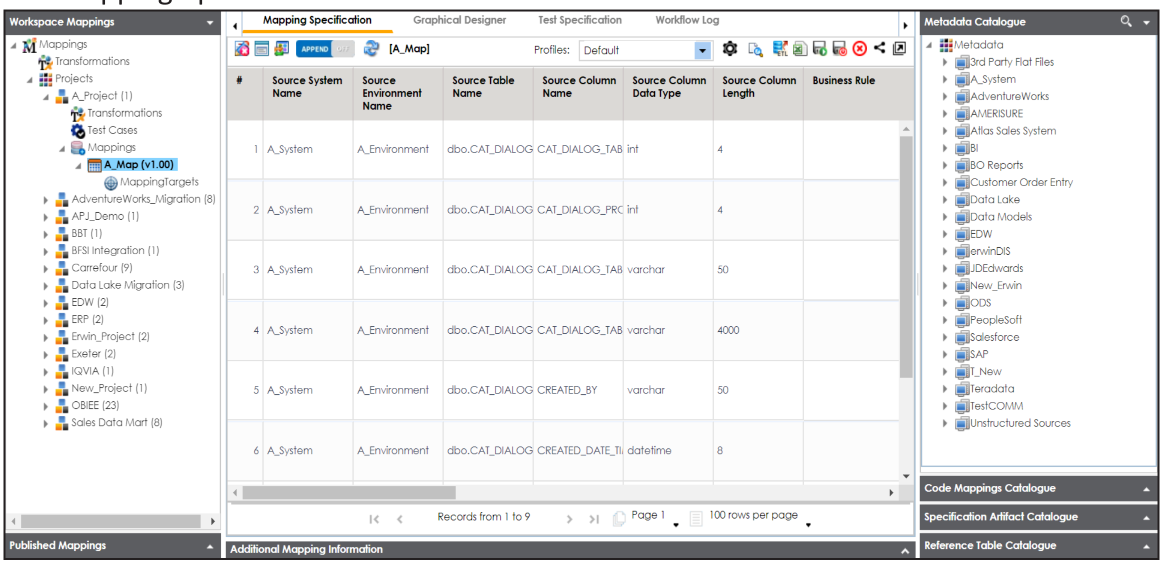
Linking Requirements to Mappings

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

To link functional requirements to mappings, follow these steps:

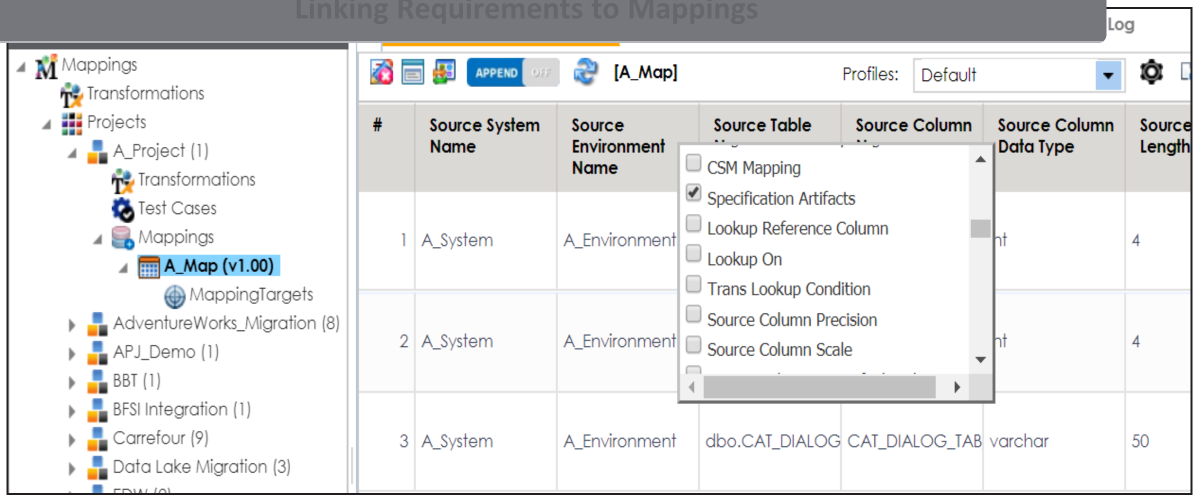
1. Go to **Application Menu** > **Data Catalog** > **Mapping Manager**.
2. Click a mapping.

   The mapping opens in the detailed view.



3. On the **Mapping Specification** tab, right click the grid header.

   A list of header columns appears.



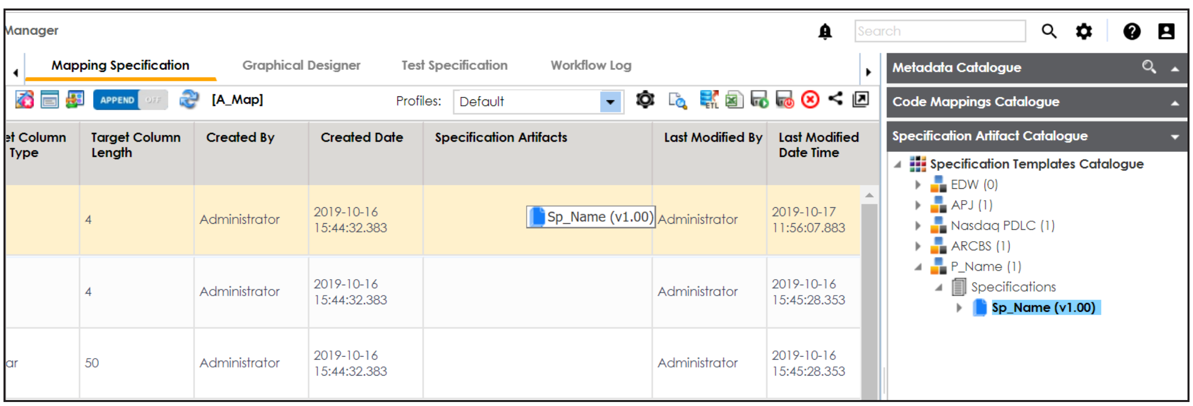
4. Scroll down the list and select the **Specification Artifact** check box.

   The specification Artifact column becomes visible on the Mapping Specification tab.

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

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 .

   Requirements are linked to the selected mapping.

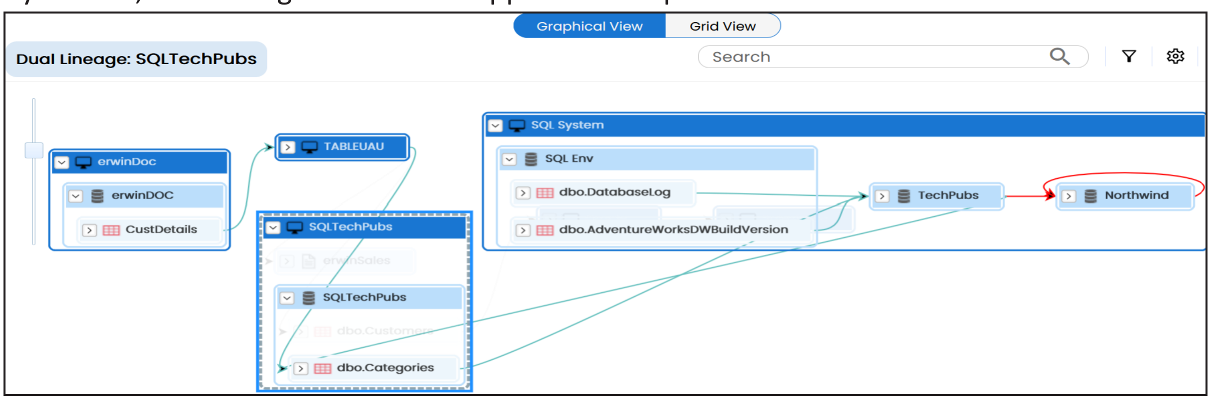
Running Lineage Analysis

After mapping source metadata with target metadata, you can run the lineage analyzer in Metadata Manager. You can run forward, reverse, and dual lineage analysis to trace metadata at the system, environment, table, and column level.

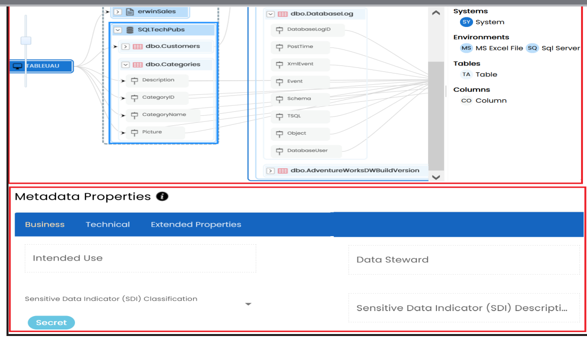
Forward lineage analysis generates lineage with the table as source. And reverse lineage analysis generates lineage with the table as target. The Dual lineage analysis generates a lineage, which includes both forward and reverse lineage.

This topic walks you through the steps to run lineage at the table level as an example.

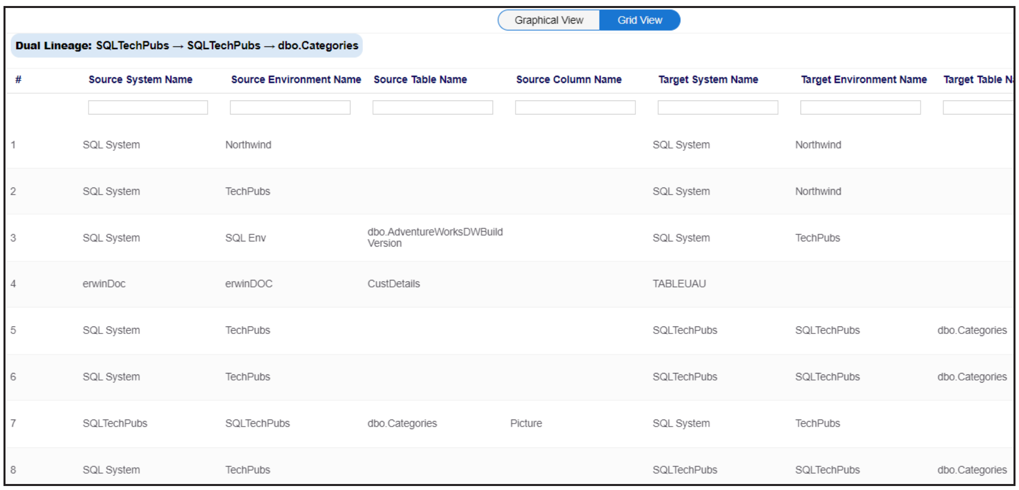
To run lineage at the table level, follow these steps:

1. Go to **Application Menu** > **Data Catalog** > **Metadata Manager**.
2. In the **Data Catalog** pane, click the required table.
3. In the right pane, click the **Data Lineage** tab.
   By default, dual lineage of the table appears in Graphical View.
   

4. 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 Legends. Hovering over a table displays an ❶ icon. Clicking this icon opens the object's properties.



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



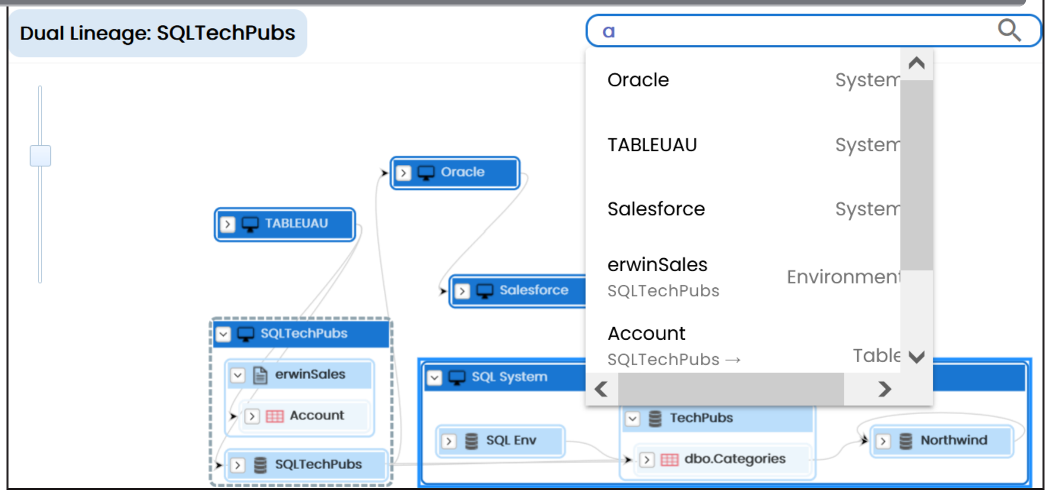
#	Source System Name	Source Environment Name	Source Table Name	Source Column Name	Target System Name	Target Environment Name	Target Table N
1	SQL System	Northwind			SQL System	Northwind	
2	SQL System	TechPubs			SQL System	Northwind	
3	SQL System	SQL Env	dbo.AdventureWorksDWBuild Version		SQL System	TechPubs	
4	erwinDoc	erwinDOC	CustDetails		TABLEUAU		
5	SQL System	TechPubs			SQLTechPubs	SQLTechPubs	dbo.Categories
6	SQL System	TechPubs			SQLTechPubs	SQLTechPubs	dbo.Categories
7	SQLTechPubs	SQLTechPubs	dbo.Categories	Picture	SQL System	TechPubs	
8	SQL System	TechPubs			SQLTechPubs	SQLTechPubs	dbo.Categories

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

Search (🔍)

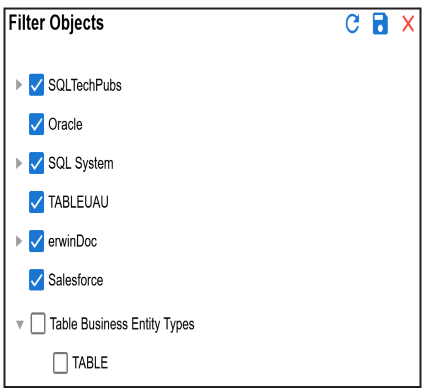
Use this option to search for tables that you want to see on the lineage.

As you type in the search box, a list of related tables that are available on the lineage appears.

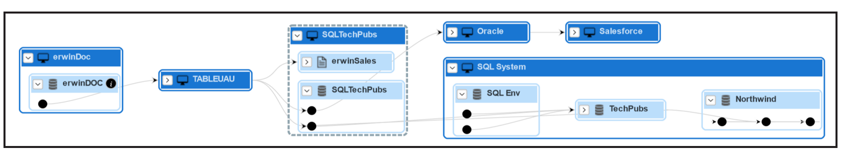


Filter Objects ( )

Use this option to filter and display required tables in the lineage view.

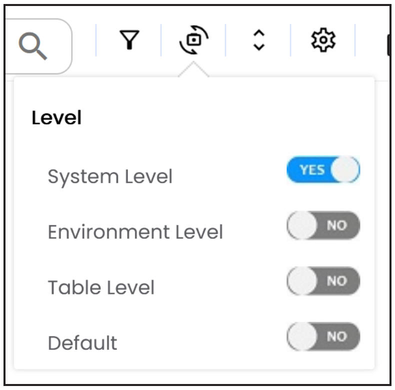


The unselected objects are replaced with black dots on the lineage diagram.



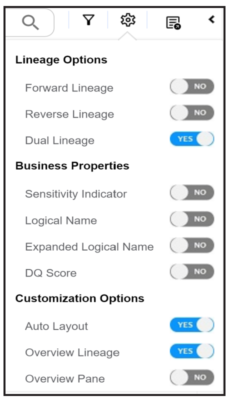
Switch View ( )

Double-click an object to see Switch View option. Use this option to switch the level of objects displayed and see the system, environment, or table in which



Options ( )

Use this option to view lineage types, business properties and customizations options. For more information on lineage options, refer to the running lineage analysis on Table topic.



Export ( )

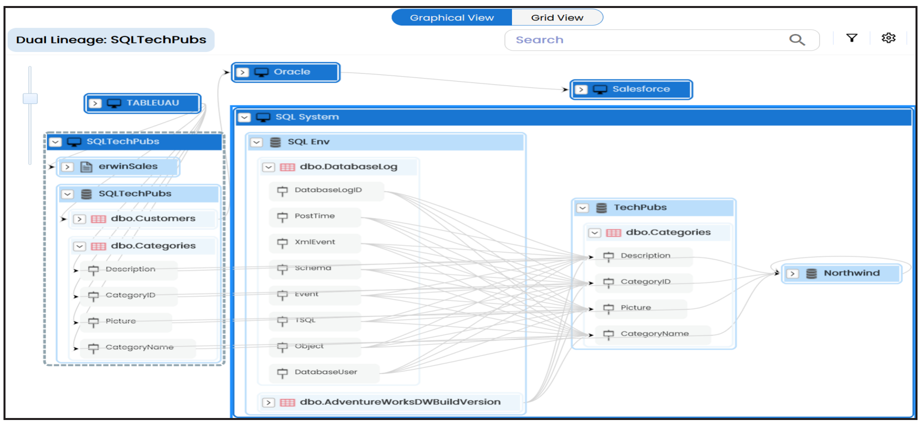
Use this option to export the lineage. Click and use the following options:

- **Image ( )**: Use this option to download the lineage as an image, in the .JPG format. Ensure that you expand the required nodes in a lineage before downloading the lineage as image.

format. Ensure that you expand the required nodes in a lineage before downloading the lineage report as PDF.

- **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.

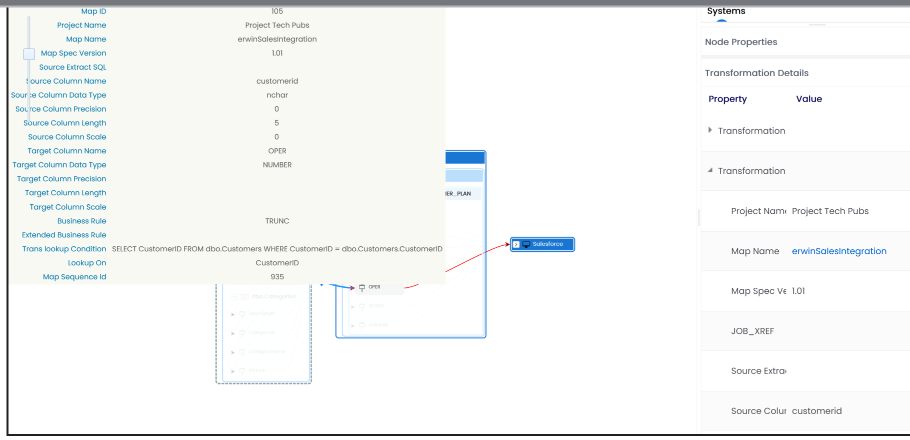
On the lineage, expand a table node, and select a column to view its lineage path. The column is highlighted in blue color, its forward lineage path appears in red, and its reverse lineage path appears in blue. The assets that are not part of a lineage path disappear.



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.

You can also run the lineage at the following levels:

- System
- Environment
- Column

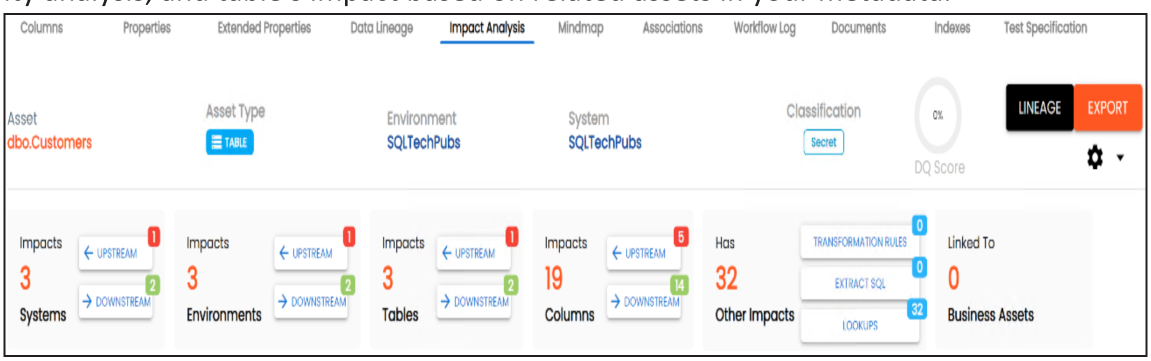
For more information on performing lineage analysis in Metadata Manager, refer to the Running Lineage Analysis section.

Running Impact Analysis

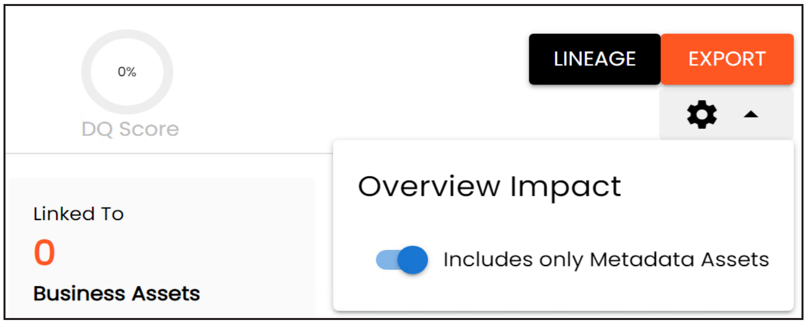
After mapping source metadata with target metadata, you can run impact analysis on the technical assets that form the mappings. Impact analysis helps you understand upstream and downstream dependencies of technical assets. It helps you assess the impact of transformations and source or target-level changes.

This topic walks you through the steps to view impact analysis of a table. Similarly, you can view impact of a column, system, and environment.

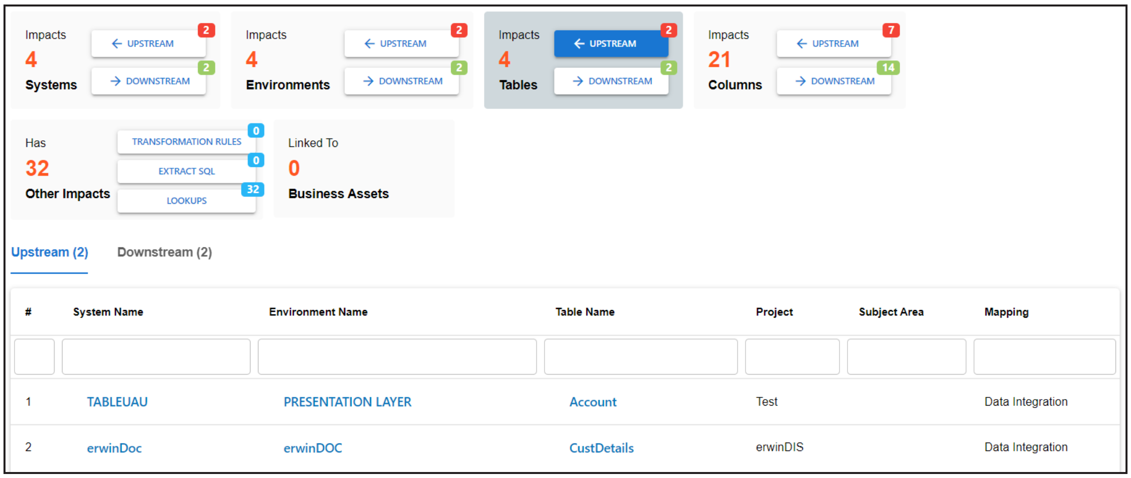
To run impact analysis at table level, follow these steps:

1. Go to **Application Menu** > **Data Catalog** > **Metadata Manager** > **Explore**.
2. On the Explore tab, click an environment tile to see its details.
3. In the **Data Catalog** pane, click a table.
4. Click the **Impact Analysis** tab.
   Impact analysis of the table appears.
   It displays the asset hierarchy, sensitivity data indicator (SDI) classification, data quality analysis, and table's impact based on related assets in your metadata.
   

   Alternatively, click to switch the **Overview Impact** option **ON** to exclude non-existent systems and environments from the impact analysis. When this option is switched off, the view includes systems and environments that do not exist in the Metadata

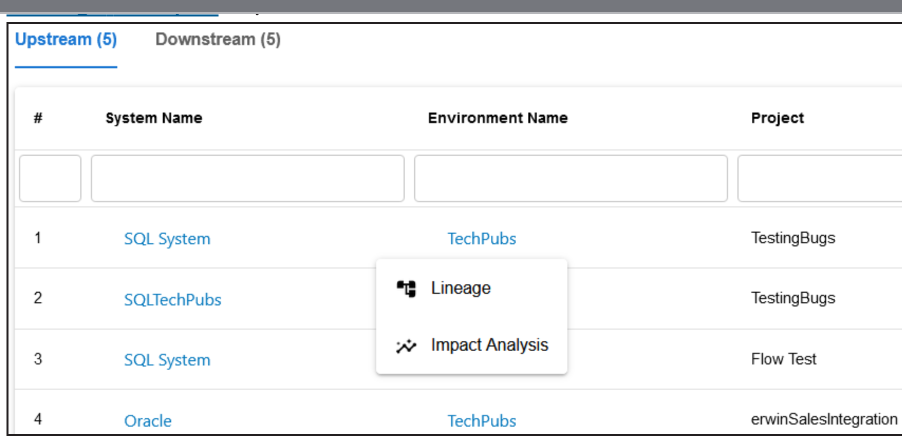


5. On the Tables card, click **Upstream**.
   The upstream dependencies of the environment appear in a grid format.



   Similarly, you can view downstream dependencies on the Downstream tab.

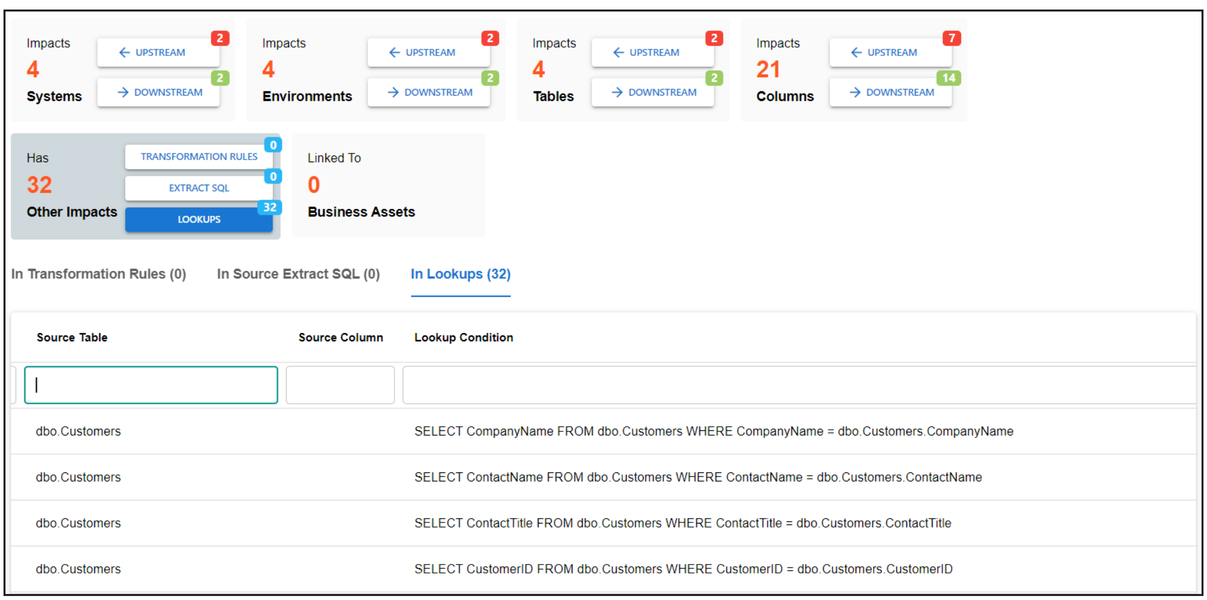
6. On the Upstream or Downstream tab, click an asset to view its lineage or impact analysis. For more information on running lineage analysis on assets, refer to the Running



Use the Other Impacts tile, and click one of the following to view them:

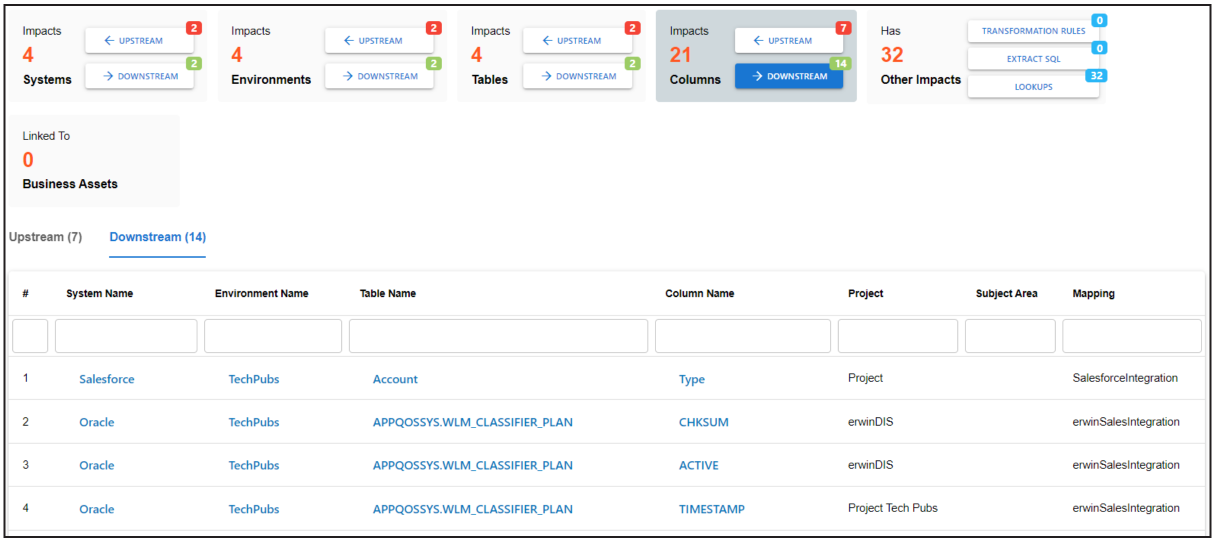
- Business rules
- Source Extract SQL
- Lookups

For example, the image below displays the In Lookups tab with lookup conditions that impacts the asset type. Also, you can switch between In Source Extract SQL and In Business Rules tabs to view relevant impacts.



Y

from selected tablet's perspective. For example, the image below displays upstream column dependencies from the table's perspective.



Additionally, use the following options:

Lineage

Use this option to view lineage based on the asset type.

Export

Use this option to export the impact analysis in the XLSX format.

For more information on performing lineage and impact analysis in the Metadata Manager, refer to the Running Impact and Lineage Analysis section.

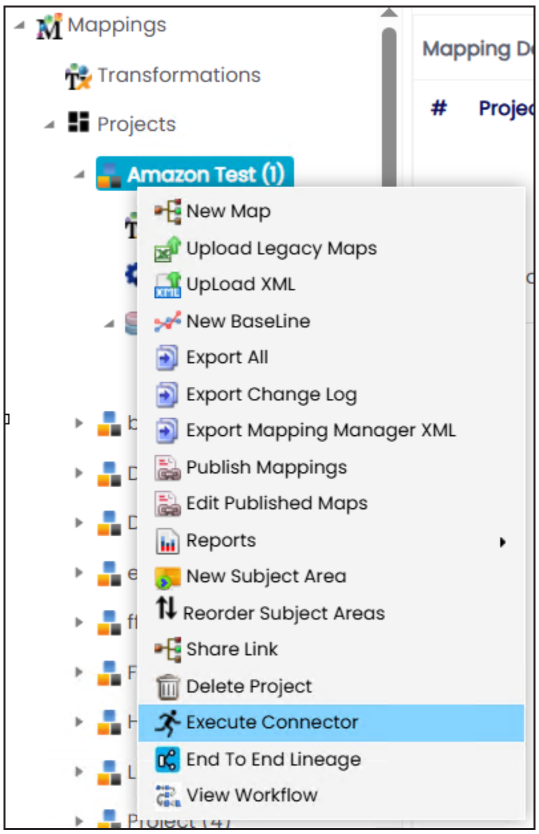
You can also run impact analysis in the Mapping Manager on:

- Any source/target table
- Any source/target column

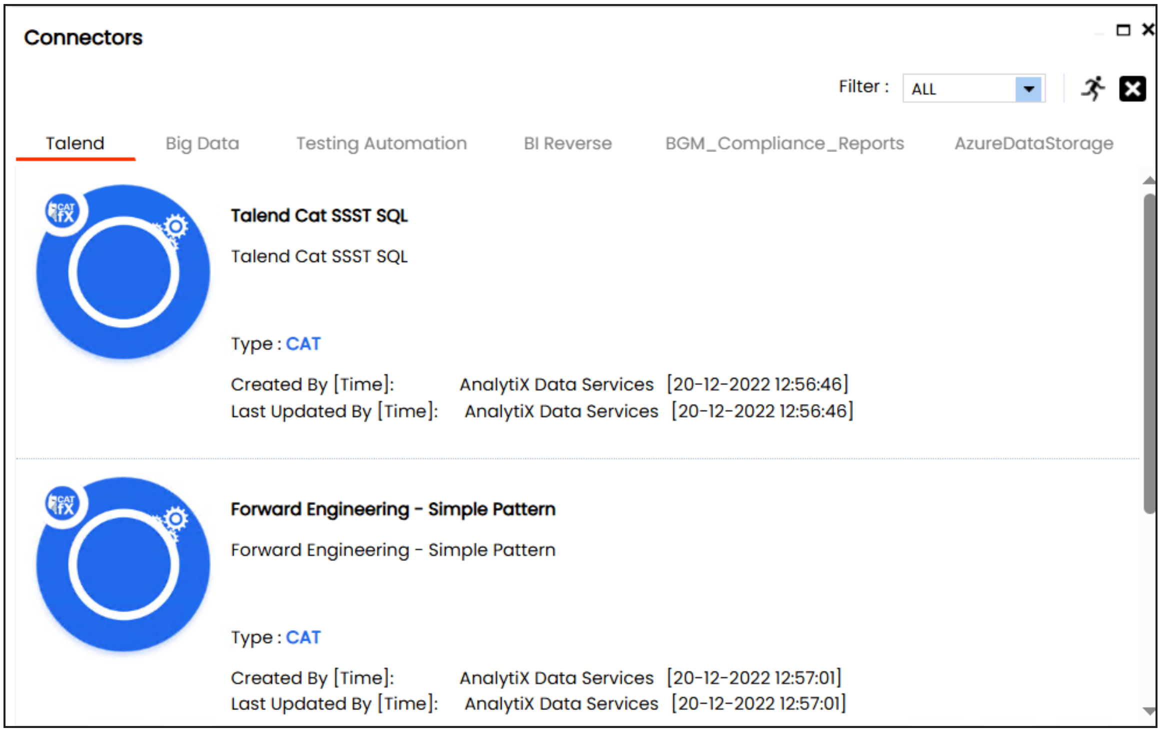
Exporting Mapping Specifications to ETL Tools

Once the mappings are considered 'approved for coding', you can export the mappings as coding requirements to automatically generate ETL/ELT jobs for tools, such as Informatica PowerCenter, IBM DataStage, Big Data, and Talend.

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

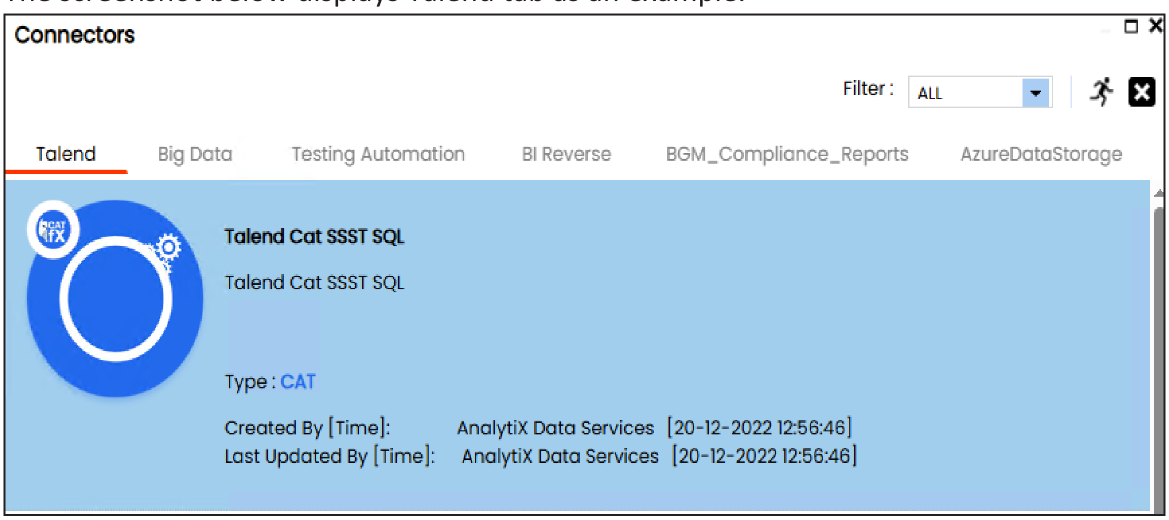


The Connectors page appears.

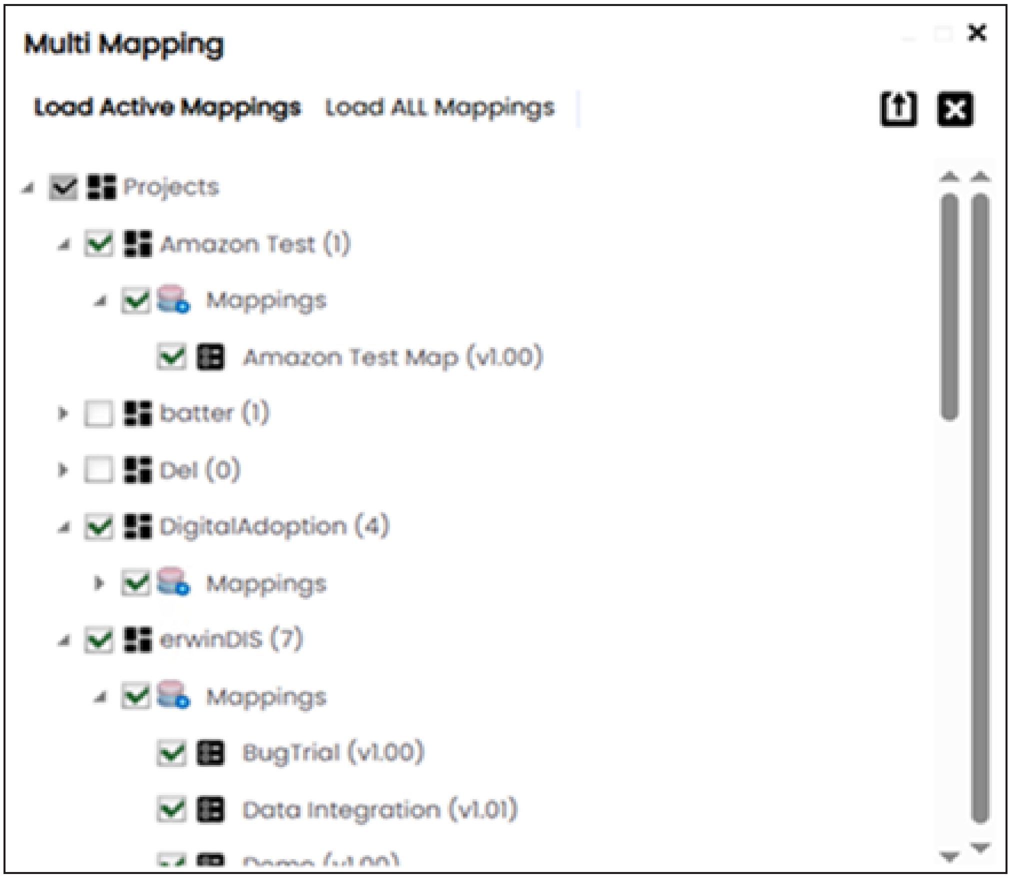


4. On the Connectors page, go to relevant tab based on the export requirements and select an ETL tool.

   The screenshot below displays Talend tab as an example.

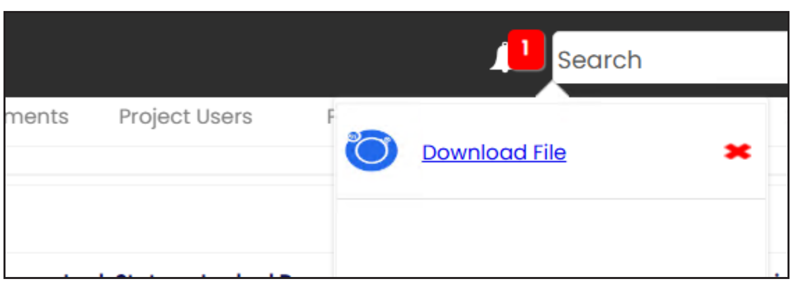


The Multi Mapping page appears.



6. Select the required mappings and click .

   The following notification appears.



Selected projects and maps are exported and downloaded as a ZIP file. Unzip this file to use mapping specifications in the TXT format.

Using erwinAI Bot

erwinAI is a generative AI bot that automatically generates definitions for undefined business terms and classifications for unclassified columns. You can use suggested prompts or enter custom ones. After results are generated, you can evaluate them and choose to submit or regenerate, maintaining a human-in-the-loop workflow.

You can access the bot from the Discover Assets, Metadata Manager, or Business Glossary Manager modules.

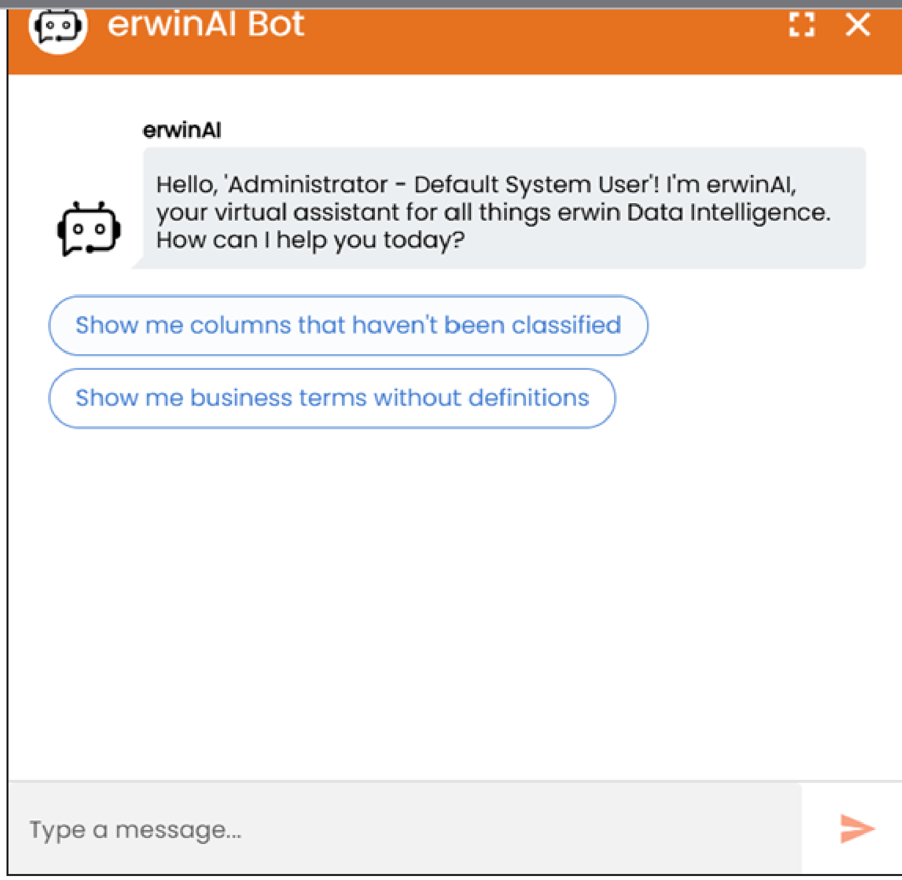
> erwinAI Bot is available in version 15.1. Ensure that your administrator has enabled erwinAI for you.

Generating Classifications

To generate classifications, follow these steps:

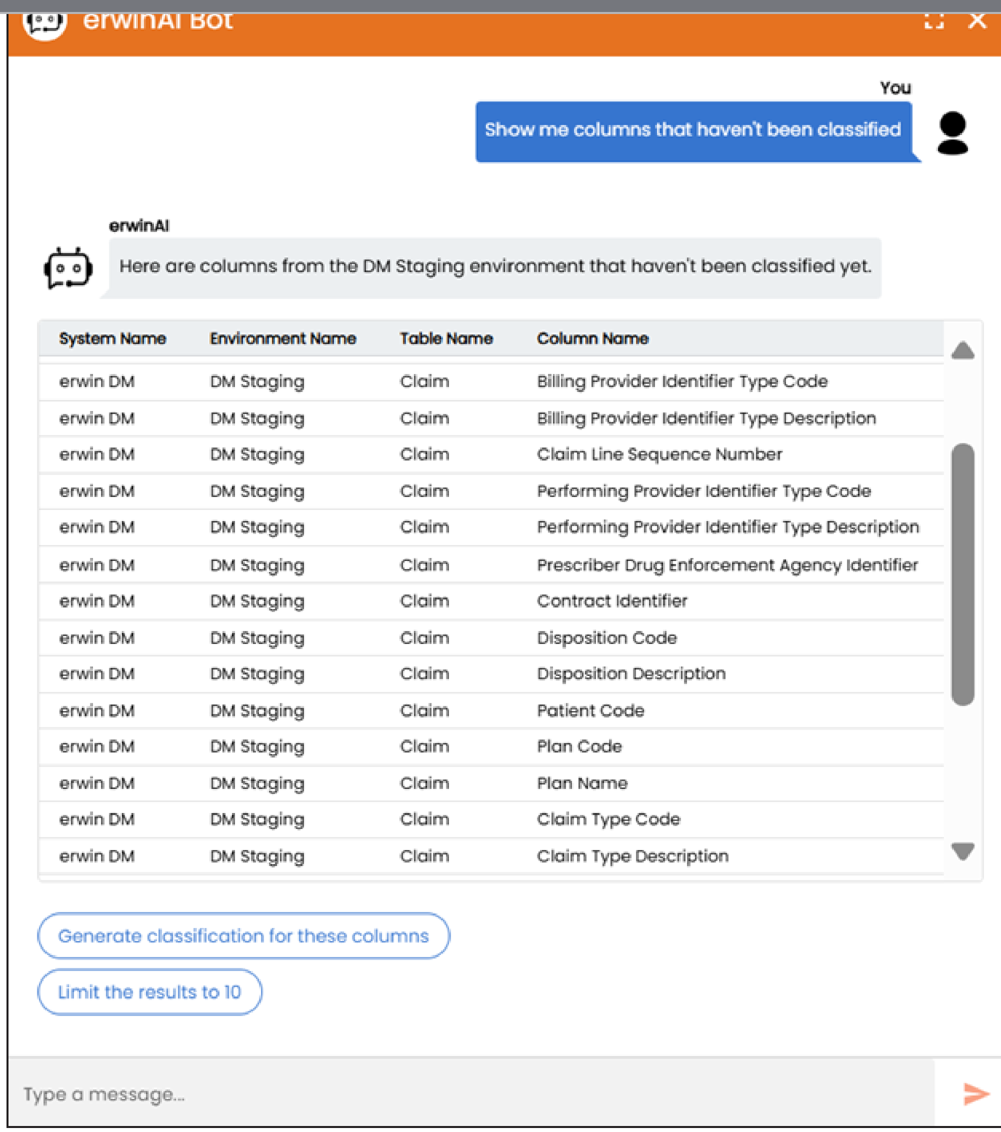
1. Go to one of the following dashboards:
   - Discover Assets
   - Data Catalog > Metadata Manager
   - Data Literacy >Business Glossary Manager
   - Data Literacy > Data Marketplace
2. In the bottom right corner, click .

   The erwinAI bot opens.



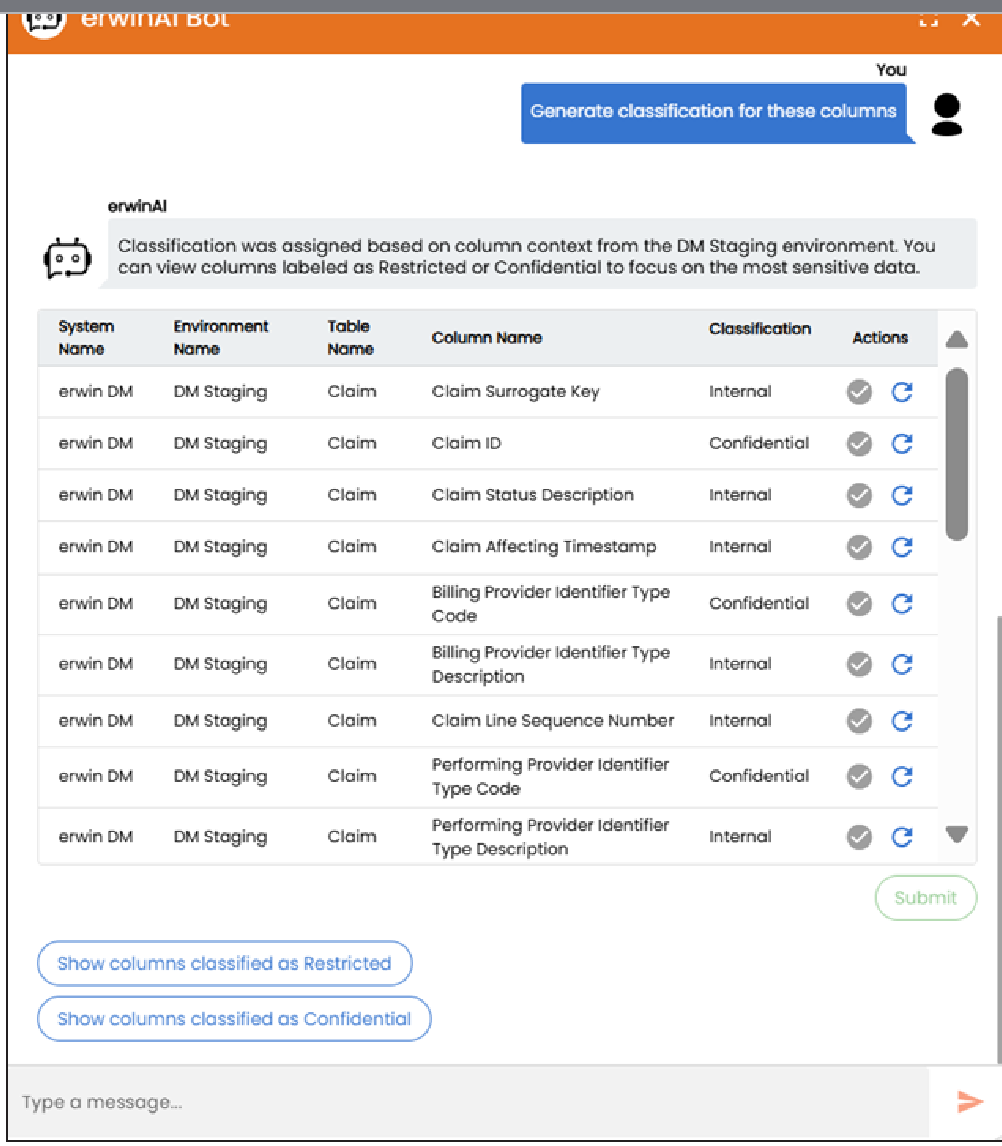
3. Click **Show me columns that haven't been classified** or enter your custom prompts.

   The bot displays the unclassified columns.



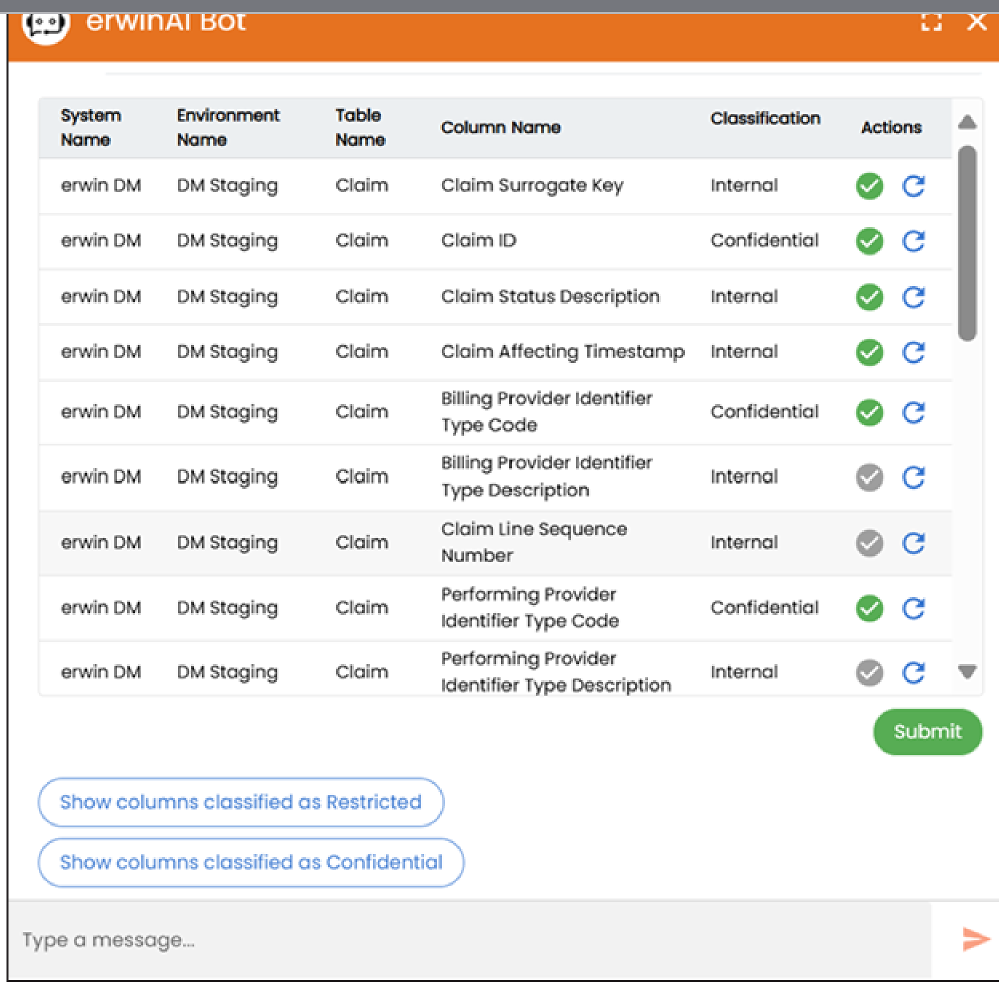
System Name	Environment Name	Table Name	Column Name
erwin DM	DM Staging	Claim	Billing Provider Identifier Type Code
erwin DM	DM Staging	Claim	Billing Provider Identifier Type Description
erwin DM	DM Staging	Claim	Claim Line Sequence Number
erwin DM	DM Staging	Claim	Performing Provider Identifier Type Code
erwin DM	DM Staging	Claim	Performing Provider Identifier Type Description
erwin DM	DM Staging	Claim	Prescriber Drug Enforcement Agency Identifier
erwin DM	DM Staging	Claim	Contract Identifier
erwin DM	DM Staging	Claim	Disposition Code
erwin DM	DM Staging	Claim	Disposition Description
erwin DM	DM Staging	Claim	Patient Code
erwin DM	DM Staging	Claim	Plan Code
erwin DM	DM Staging	Claim	Plan Name
erwin DM	DM Staging	Claim	Claim Type Code
erwin DM	DM Staging	Claim	Claim Type Description

4. To generate classifications, click **Generate classification for these columns**.



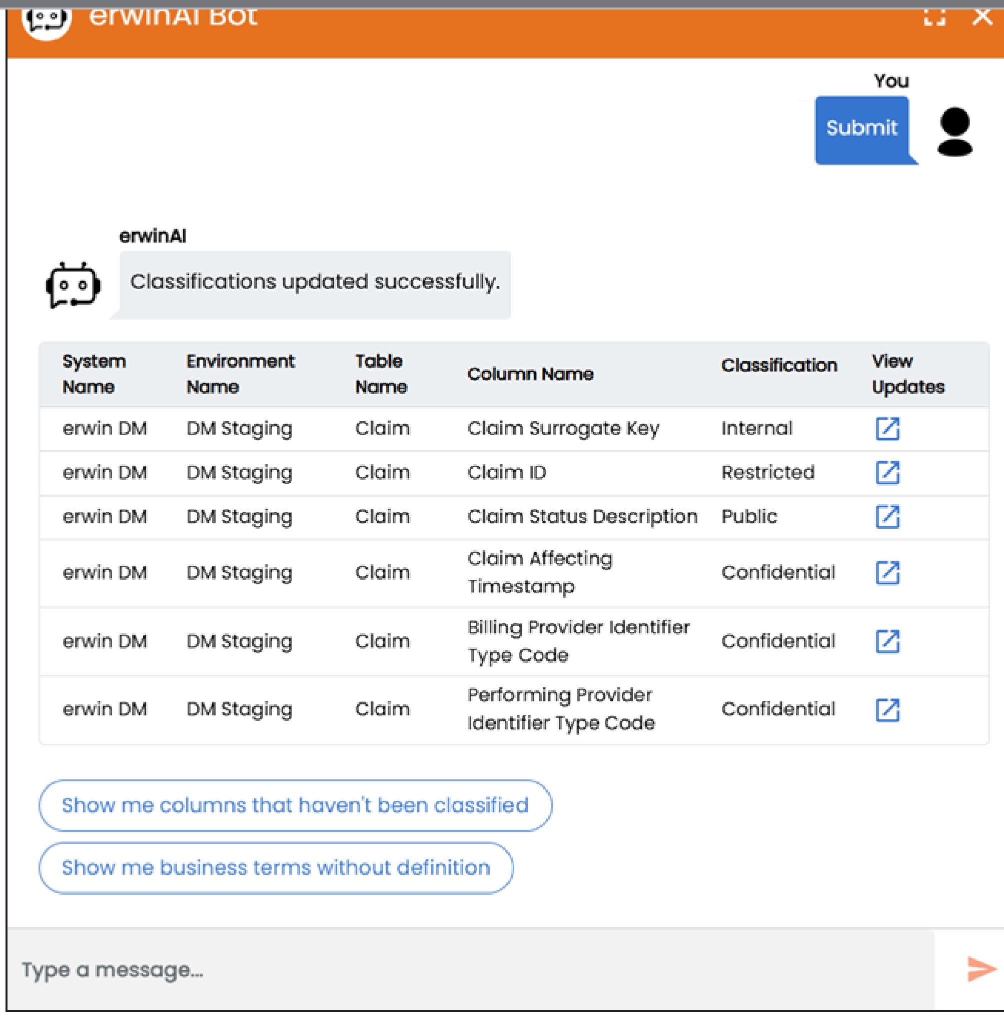
You can also filter your results using the suggested prompts or entering custom prompts.

5. Under Actions, click ✔ to confirm the respective classification or ↻ to regenerate.



6. After confirming the required classifications, click **Submit**.

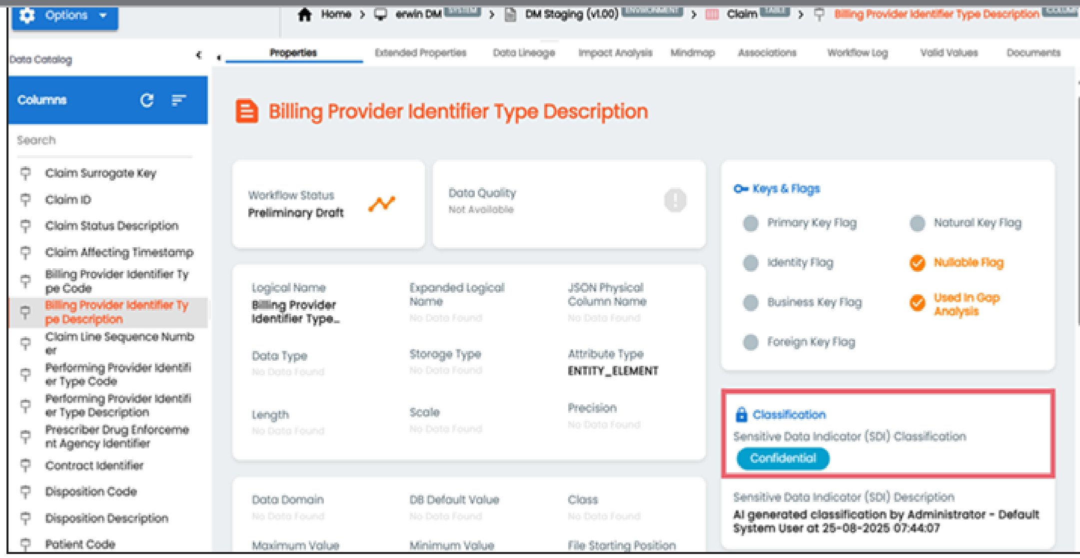
   Classifications are updated successfully.



System Name	Environment Name	Table Name	Column Name	Classification	View Updates
erwin DM	DM Staging	Claim	Claim Surrogate Key	Internal	
erwin DM	DM Staging	Claim	Claim ID	Restricted	
erwin DM	DM Staging	Claim	Claim Status Description	Public	
erwin DM	DM Staging	Claim	Claim Affecting Timestamp	Confidential	
erwin DM	DM Staging	Claim	Billing Provider Identifier Type Code	Confidential	
erwin DM	DM Staging	Claim	Performing Provider Identifier Type Code	Confidential	

7. Under View Updates, click next to the column you want to view.

   The Properties tab for the selected column opens, showing the updated classification.

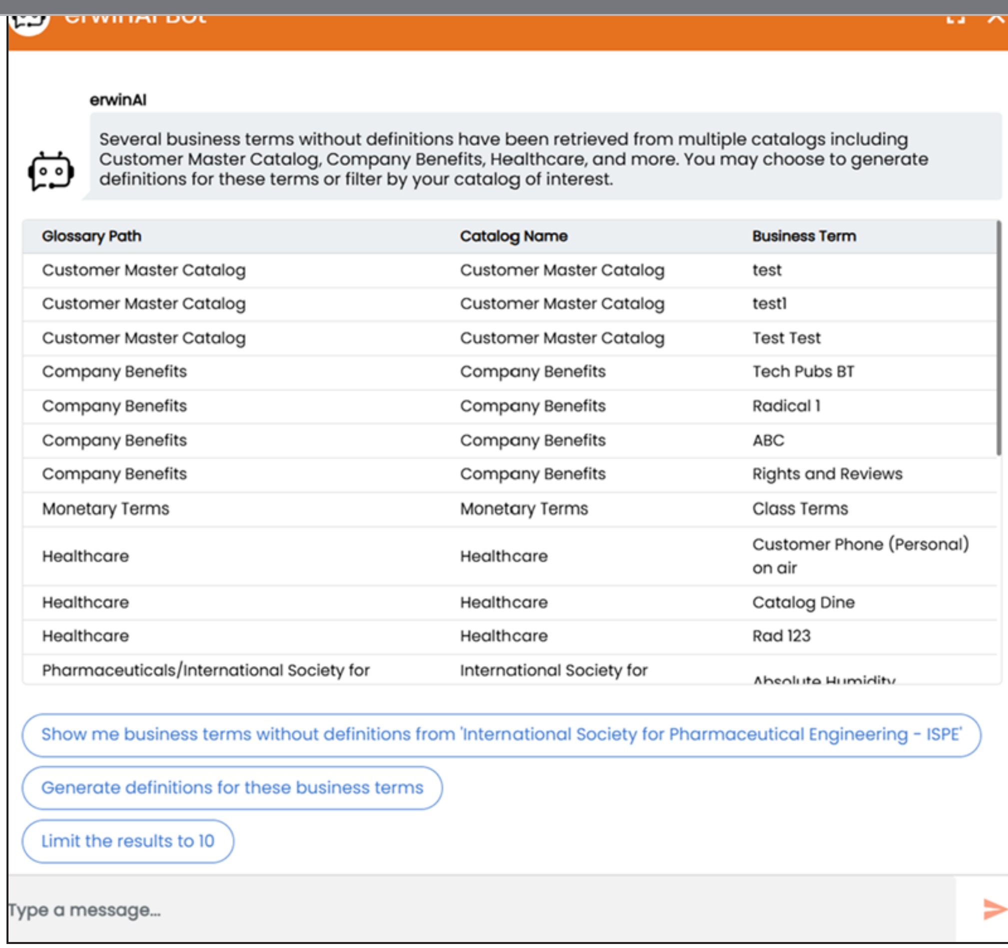


Generating Definitions

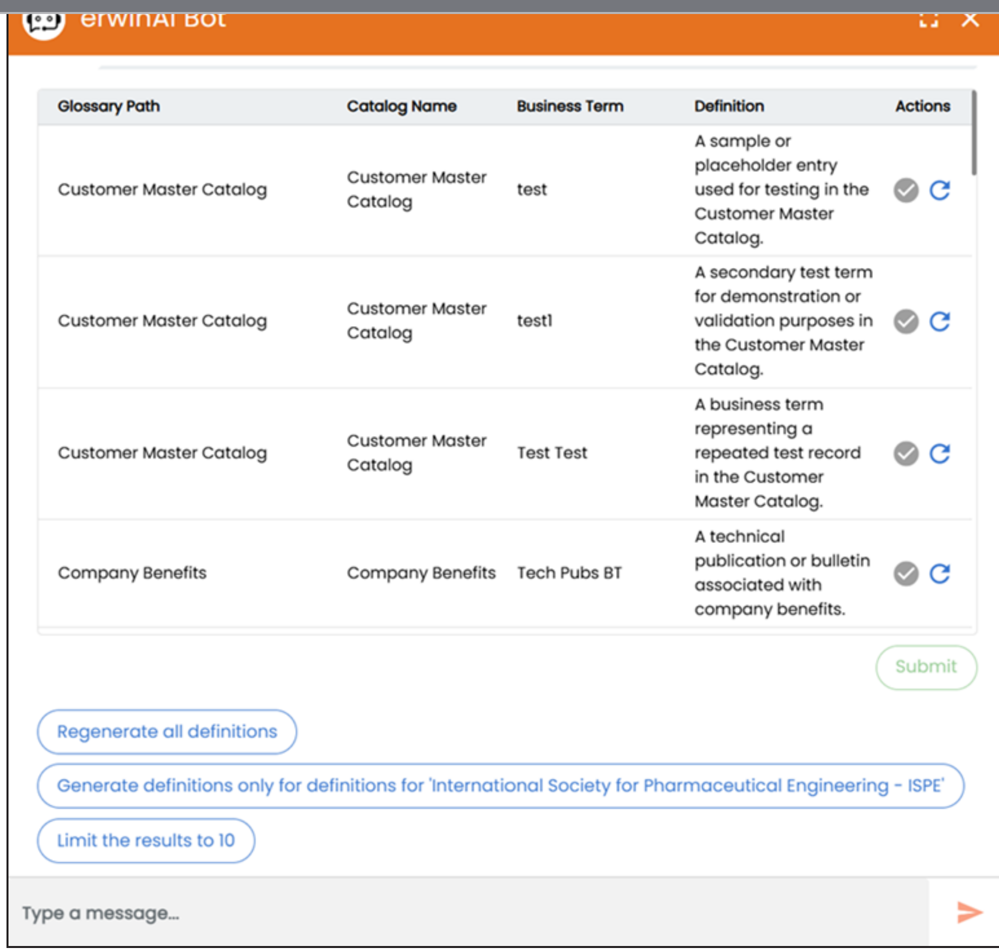
To generate definitions, follow these steps:

1. In the erwinAI Bot pane, click **Show me business terms without definition**.

   The bot displays undefined business terms.

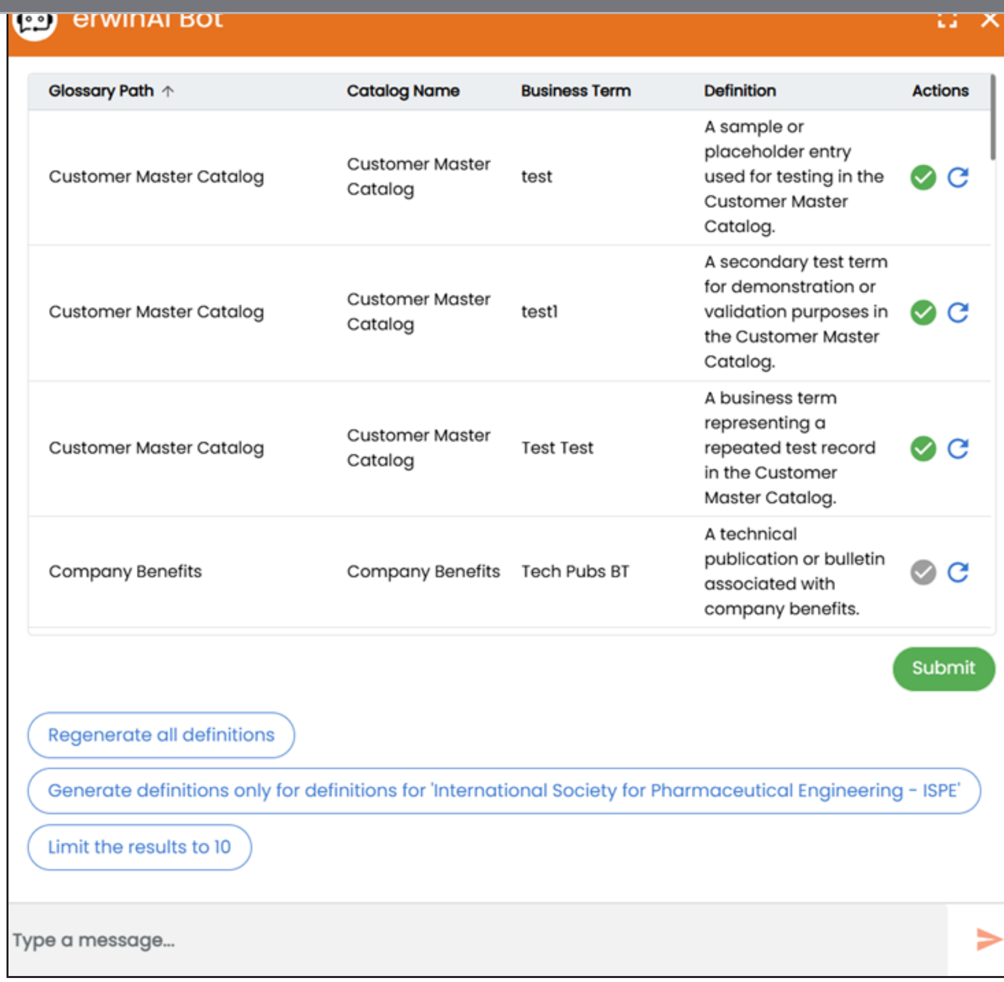


2. To generate definitions, click **Generate definitions for these business terms**.



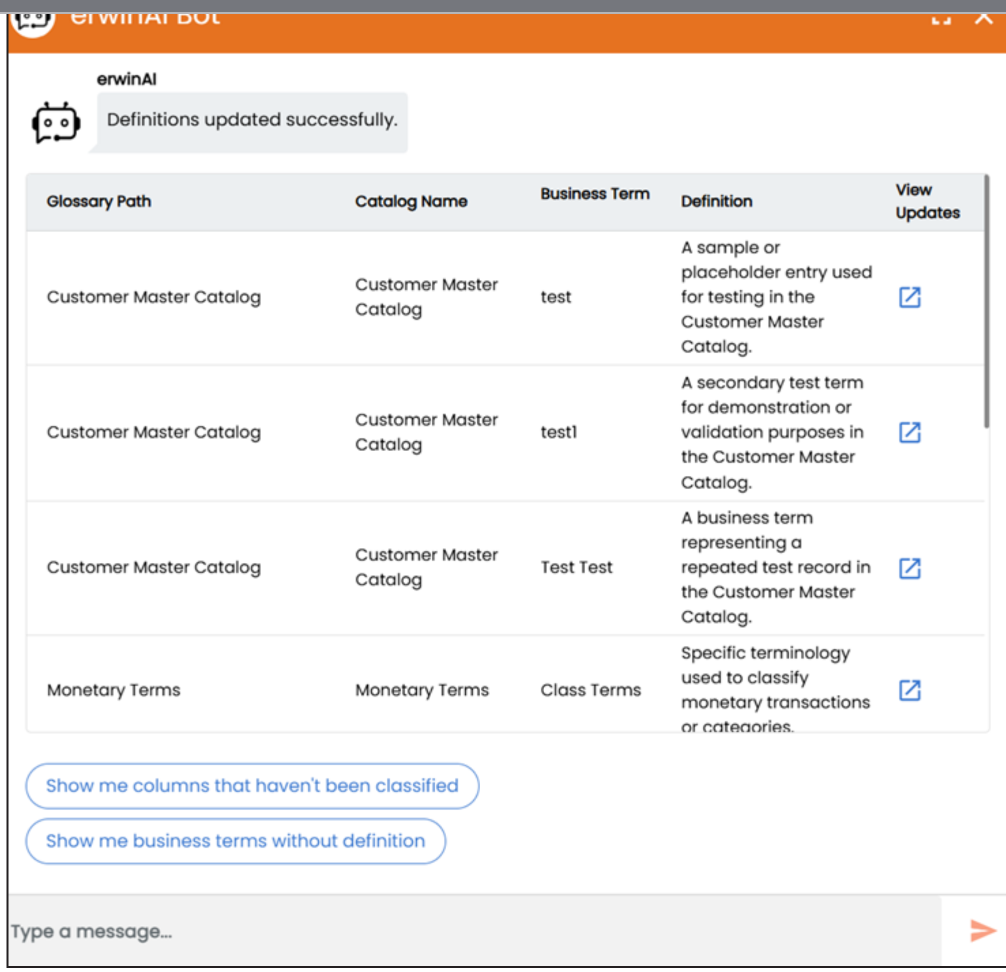
You can also filter your results using the suggested prompts or entering custom prompts.

3. Under Actions, click to confirm the respective definition or to regenerate.

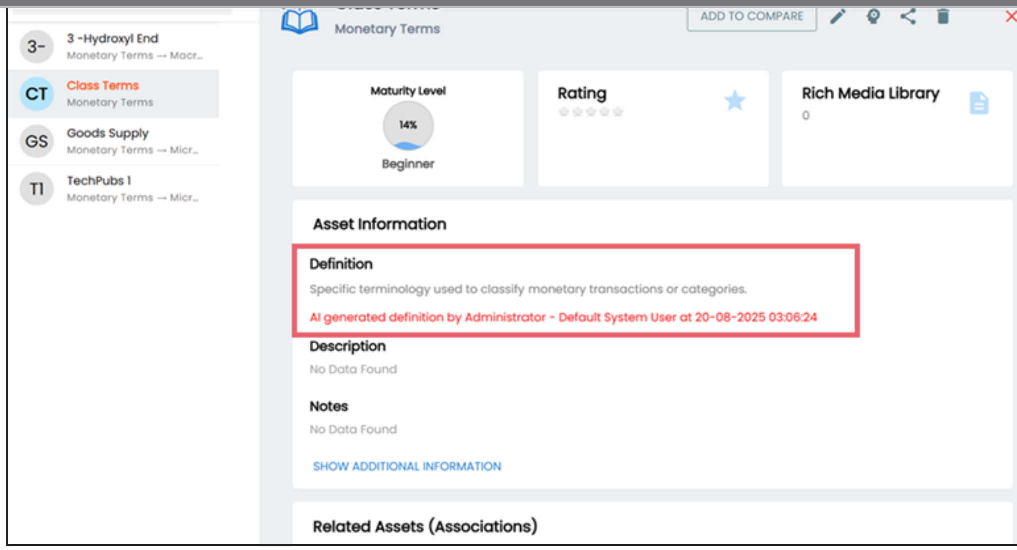


4. After confirming the required definitions, click **Submit**.

   Definitions are updated successfully.



5. Under View Updates, click next to the business term you want to view.
6. The business term page opens, showing the updated definition.



You can continue the process or close the erwinAI bot.