# erwin Data Intelligence Suite

# Metadata Management Guide

Release v10.0

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### Contents

Legal Notices	
Contents	
Managing Metadata	
Using Metadata Manager	11
Creating Systems	
Editing Systems	
Exporting System Information	
Uploading Documents	
Viewing Workflows	
Associating Systems	
Configuring Expanded Logical Name	
Deleting Systems	
Creating and Managing Environments	
Creating Environments	
SQL Server	
Prerequisites	
Privileges	
JDBC Driver Details	
TLS Connection Details	
JDBC Connection Parameters	
Oracle	51
Prerequisites	

JDBC Driver Details	51
TLS Connection Details	51
JDBC Connection Parameters	
MySQL	56
Prerequisites	
JDBC Driver Details	
TLS Connection Details	
JDBC Connection Parameters	
Snowflake	61
Prerequisites	61
JDBC Driver Details	61
TLS Connection Details	61
JDBC Connection Parameters	
MS Dynamics CRM	
Prerequisites	
JDBC Driver Details	66
TLS Connection Details	67
JDBC Connection Parameters	
SAP	71
Privileges	71
Prerequisites	71
JDBC Driver Details	71
TLS Connection Details	72

JCO Connection Parameters	72
Assigning Users	
Managing Environments	77
Uploading Documents	
Cloning Environments	
Viewing ER Diagram	
Viewing Workflow Logs	
Associating Environments	94
Configuring Business Properties	
Configuring Expanded Logical Name	
Scanning and Managing Metadata	
Scanning Metadata	
Importing Metadata from MS Excel	
Importing Metadata from JSON	115
Importing Metadata from CSV	118
Importing Metadata from XMI	
Importing Metadata from MS Access File	
Importing Metadata from XSD	
Adding Tables Manually	
Deleting Tables	
Scheduling Metadata Scans	
Updating Table Properties	
Updating Column Properties	

Validating Data	148
Assigning Codesets to Columns	
Viewing Sensitive Data Dashboard	
Viewing Workflow Logs of Tables	
Viewing Workflow Logs of Columns	
Associating Tables	
Associating Columns	
Versioning Environments	
Comparing Environments	
Downloading Data Dictionaries	171
Updating Data Dictionary	174
Viewing Data Dictionary Report	177
Performing Impact and Lineage Analysis	
Impact Analysis at Column Level	
Impact Analysis at Table Level	
Performing Impact Analysis at Environment Level	
Lineage Analysis at Table Level	
Lineage Analysis at Column Level	
Previewing Data	
Profiling Data at Table Level	
Configuring Extended Properties	
Extending System Properties	
Extending Environment Properties	

Extending Table Properties	
Extending Column Properties	

### **Managing Metadata**

This section walks you through the metadata management. Metadata management is done via Metadata Manager. It involves scanning metadata from a data source and storing it in a central repository.

You can preview the data, profile it, generate pattern summary report and provide data quality score.

After performing source to target mappings in the Mapping Manager, you can run Forward or Reverse lineages and perform impact analysis in the Metadata Manager.

## **Using Metadata Manager**

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

Catalogue	< Me	tadata :	Summary				
ensitive Data	^ 4	Data	Dictionary Configure Extended Properties Se	cheduled Jobs			
etadata 3rd Party Flat Files			System	Business Purpose	# of Environments	Created By	Created Date
A_System							
AdventureWorks AMERISURE			L				
Atlas Sales System		1	3rd Party Flat Files		2	Administrator	2018-09-14 11:19:56.147
B_System		2	A_System		1	Administrator	2019-10-15 14:50:45.137
BI		3	AdventureWorks		2	Administrator	2018-10-19 06:10:01.99
BO Reports		4	AMERISURE		1	Administrator	2019-07-16 08:33:33.123
Customer Order Entry Data Lake		5	Atlas Sales System		1	Administrator	2018-10-05 10:07:15.243
Data Models		6	B_System	Right Pai	ne	Administrator	2019-10-23 12:35:28.06
EDW			BI		1	Administrator	2018-10-05 10:13:14.443
erwinDIS JDEdwards			BO Reports		1	Administrator	2018-09-14 11:29:19.937
MANTA					2		
Nasdaq Data Asset Register		9	Customer Order Entry		1	Administrator	2018-10-05 10:08:44.793
New_Erwin		10	Data Lake		2	Administrator	2018-10-05 10:17:43.6
New_System		11	Data Models		3	Administrator	2018-10-05 10:09:42.433
ODS PeopleSoft		12	EDW		2	Administrator	2018-09-14 11:21:16.583
Salesforce		13	erwinDIS	Source system for the Data integration project.	3	Administrator	2019-04-16 14:15:59.147
SAP		14	JDEdwards		1	Administrator	2018-10-05 10:03:25.23
Scotia T_New System		15	MANTA	Dest it	ė.	Administrator	2019-04-09 05:24:49.153
121011			Nasdag Data Asset Register	Pagination	Bar	Administrator	2018-12-13 03:56:34.553
Teradata Catalogue					3		
Trial UNE		17	New_Erwin	ic c Records from 1 to 25 S SI	2 Page 1 🖕 📄 25 rows p	Administrator	2019-09-12 17:12:38.86

UI Section	lcon	Function
System Cata- logue		Use this pane to browse through your metadata which is stored in an hierarchical manner, System > Environment > Table > Column.
Right Pane		Use this pane to view or work on the data based on your selection in the System Catalogue.
Pagination Bar	> > I K < 20 rows per page • Page 1 •	Use this bar to navigate through the metadata displayed on the Right Pane.
Metadata		Expand this pane, to view consolidated reports on system

UI Section	lcon	Function
Manager		overview, system usage in mappings, system summary,
Dashboard		and sensitive data indicators.

Managing metadata involves the following:

- Creating and managing systems
- Creating and managing environments
- Scanning metadata from data sources
- Creating new versions of environments
- Downloading and updating data dictionary
- Performing impact and lineage analysis
- Previewing and profiling data
- <u>Configuring Extended Properties</u>

### **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 System Catalogue. To store the scanned metadata, you need to create a system.

A System is the highest node in the System Catalogue and it can contain multiple environments.

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.

To create systems, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the **System Catalogue** pane, right-click the **Metadata** node.

DATA INTELLIGENCE SUITE	Netadata N	۸anc	ager
System Catalogue	<	Me	etadata Summary
🔒 Sensitive Data	<b>^</b>	•	Data Dictionary Configure Exter
Metc Metc Mew System			rstem
🕨 🗐 A 🔯 Configure Expanded	d Logical N	lame	e
🕨 🗐 A 🚉 View Workflow			
Anas sales system		1	1 3rd Party Flat Files
▶ ■ BI		2	2 AdventureWorks
BO Reports			
Customer Order Entry		3	3 AMERISURE
🕨 🔲 Data Lake		4	4 Atlas Sales System
Data Models			

#### 3. Click New System.

The New System page appears.

ቯ New System					>
↓ System Details Miscellaneo	us			Next	Save & Exit Cancel
System Name*			Primary Move Type(Source/Target)		
Data Steward	-Select Data Steward-		DQ Score	Select	¥
Business Purpose	🕅 <u>А</u> <u>Н</u> В <i>I</i> <u>U</u>	E = 3	≣ 1≣ 1≣ 1≣ 1		
					*
Server Platform			Server OS Version		
DBMS Platform			DBMS Version		
File Management Type			File Location		
Owner Name			Release		
Telephone Number			Email Address		

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
	Specifies the physical name of the system.
System Name	For example, Enterprise Data Warehouse.
System Name	For more information on naming conventions, refer to the <b>Best</b>
	Practices section.
	Specifies the name of the data steward responsible for the sys-
	tem.
Data Steward	For example, Jane Doe.
	For more information on configuring list of data stewards, refer
	to the <u>Configuring Data Stewards</u> topic.
	Specifies the business objective of the system.
Business Purpose	For example: This is a source system to store Sales metadata of
	the organization for a data integration project.
Server Platform	Specifies the server platform of the system.
	For example, Windows.

Field Name	Description			
	Specifies the DBMS platform of the system (if the system is an			
DBMS Platform	RDBMS source).			
	For example, SQL Server.			
File Management	Specifies the file management system (if the system is a file-			
Туре	based source).			
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	For example, MS Excel.			
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.			
	Specifies whether the system is source, target, or both.			
	Valid values are:			
Primary Move Type (Source/Target)	<ul> <li>Source</li> </ul>			
	<ul> <li>Target</li> </ul>			
	<ul> <li>Both</li> </ul>			
	Specifies the overall data quality score of the system.			
DQ Score	For example, High (7-8).			
	For more information on configuring DQ scores, refer to the			
	Configuring Data Profiling and DQ Scores topic.			
Server OS version	Specifies the OS version of the system's server.			
	For example, Windows Server 2012 R2.			
	Specifies the DBMS version of the system (if the system is an			
DBMS Version	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			
	Specifies the system release including the point release num-			
Release	ber.			
	For example, Oracle 18c.			

Field Name	Description
	Specifies the system owner's email address.
Email Address	For example, talon.smith@mauris.edu

5. Click **Miscellaneous** and 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
	Specifies the enterprise platform bus type (if the system is an ESB
ESB Platform Type	source).
	For example, Mule.
	Specifies the ESB queue manager's name of the system (if the
ESB Q Manager Name	source is an ESB).
Marrie	For example, John Doe.
Total DBSize	Specifies the total physical size of the database.
	For example, 198 GB.
Total Number of	Specifies the total number of tables associated with the system.
Tables	For example, 300.
	Specifies the definition of the system at the end of the day.
Definition of the day	For example: Extraction of details from the source system is com-
	plete.
Batch Extract Win-	Specifies the daily batch extract window of the system.
dow	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 Con-	Specifies the average number of concurrent system users.
current Users	For example, 15.
	Specifies any special instructions or comments about the system.
Special Instructions	For example: The system acts as a source for creating the map-
	ping specification.

6. Click Save and Exit.

A new system is created and added under the system tree.

Once a system is created, you can <u>create environments</u> and scan metadata from different database types.

You can also manage the system in the following ways:

- Editing Systems
- Exporting System Information
- Uploading Documents
- Viewing the Assigned Workflow
- Associating Systems
- Configuring Expanded Logical Name of Tables/Columns
- Deleting Systems

### **Editing Systems**

You can update a system by editing it.

To edit systems, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, right-click the system to be edited.
- 3. Click Edit System.

The Edit System page appears.

Edit System				_ = ×
				<b>A</b>
System Name*	erwinDIS	Primary Move Type(Source/Target)	Source	
Data Steward	janedoe 🔻	DQ Score	High (7-8)	
Business Purpose	<u>а н</u> в <i>и</i> ≡	E # # #   E E E E E # # <b>&lt;</b>		
	Source system for the Data integration	n project.		
			-	
Server Platform	Linux	Server OS Version	Ubuntu 18.04.1	
DBMS Platform	SQL server	DBMS Version	MS Sql Server 2018	
File Management Type		File Location		
ESB Platform Type	Mule	ESB Q Manager Name		
Total DBSize	1100MB	Total Number Of Tables	50	
Definition Of The Day		Batch Extract Window		
Average User		Average Concurrent Users	2	]
Special Instructions	<u>а н</u> в <i>и</i> ≡	E 🗃 🔳 🗄 🗄 🖆 🖆 🖌		
				<b>•</b>

- 4. Update any field as desired.
- 5. Click

The system is updated.

### **Exporting System Information**

You can export system information report in the following formats:

- HTML
- PDF
- MS Excel
- MS Word
- Rich Text Format

To export system information, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the **System Catalogue** pane, right-click the desired system.

	DATA INTELLIGENCE SUITE Metadata M	۸anage	r	
Syste	m Catalogue 🛛 🔾	<b>ا</b>	Data Dictionary Syste	m Details Associations
	AMERISURE	Enviro	nment Listing	
►	B_System	#	Environment Name	Environment Type
►	BI			
►	■BO Reports			
►	Customer Order Entry			
►	🗐 Data Lake	1	Data_Migration	Production
►	Data Models	2	erwinDIS	test
►	EDW	3	erwinDIS1	test
▶	New Environment			
	Nasdac 22 Edit System			
	New_Er Delete System			
	ODS Report - System Informati	on		
	People: Report - Data Dictionary			
►	Salesfoi 🛠 Run Template			
►	SAP 🗴 Configure Expanded Log	ical Nar	me	
►	Scotia View Workflow			
►	T_New			
	Teradata			

3. Click Report - System Information.

The System Information Report page appears displaying, System Details, System Environment details, and System Document Details.

							-		_
		Select System: EFM	rinDIS		▼ Expo	rt: 🎱			RTF
	System Inform	ation Report							
									_
vinDIS		Primary Move Type (S	ource/Target):	Source					
1edoe		Special Instructions:							
urce system for the Data integratio	on project.	Server OS Version:		Ubuntu 18.04.1					
nux		DBMS Version:		MS Sql Server 2	018				
<u>)</u> L server		File Location:							
		ESB Q Manager Name							
ule		Total Number Of Tabl	25:	50					
		End of Day Definition:							
00MB		Average Users:							
		Owner Full Name:							
		Email Address:							
Environment Type 1	Data Steward D:	tabase Name	Database Type	P Address	Port	User N	ame		
,					1433	83			
est			SqlServer I	ocalhost	1433	sa			
0 0 0 0	avironment Type 1	avironment Type Data Steward Data to Fredorica Steward Data to Fredorica Steward Data Steward	dele Special Tartructions : are system for the Data integration project. Server OS Version: are system for the Data integration project. Betwee OS Version: are system for the Data integration project. Betwee OS Version: are system for the Data Stevard Database Name the Data Stevard Database Name the ErviaD15931	Average Users:	de Special Instructions: Ubunt 16.04.1 arce system for the Data integration project. Server OS Version: Ubunt 16.04.1 arc DBMS Version: MS Sql Server 2 betwee Statement Special Instructions: SSB Q Manager Name: SSB Q Manager N	dole Special Instructions: area system for the Data integration project. area system for the Data integration project. area you be defined by the special Instructions: area you be defined by the special Specia	de Special Instructions: Under Special Instruction: Under Inst	de pecial Instructions: area system for the Data integration project. area system for the Data integration project. area ystem for the Data integration project. Area ystem for the Data integration project. Area ystem for the Data integration project. Bab Stever 2018	de Special Instructions: area system for the Data integration project. area system for the Data integration project. Area Server OS Version: MS Sql Server 2018

4. Use the following options:

#### Select System

You can select a system to generate its System Information Report.

### Export to HTML (

To export the system information report in HTML format, click 3.

### Export to PDF (1)

To export the system information report in PDF format, click 1

### Export to Excel (🕙)

To export the system information report in .xlsx format, click 🕙.

### Export to Word (🕋)

To export the system information report in .docx format, click 🕮.

### Export to RTF ()

To export the system information report in .rtf format, click i.

### **Uploading Documents**

You can upload relevant documents at system level and describe its intended use.

You can also specify:

- Document name
- Document owner
- Document link
- Document status

To upload documents at system level, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, right-click a system.

	DATA INTELLIGENCE SUITE Metade	ata Ma	nager				
Syster	n Catalogue	< .	Data Diction	ary	System Details	Associations	Mind Map 3
			.				
►	🗐 Atlas Sales System						
►	■B_System				Γ	erwinDIS	
►	BI		System Name		e	ervviriDi3	
►	BO Reports		Data Steward		i	anedoe	
►	Customer Order Entry				6		
►	Data Lake		Business Purpose	e		Source system for the	Data integration p
►	🗐 Data Models						
►	EDW						
►							
►	JDEdward New Environment						
►	MANTA 😑 New Document						
►	🗐 Nasdaq 🛛 🏹 Edit System						
►	New_Erwi 💼 Delete System				-		
►	New_Syst	ormati	00		l	Linux	
►			011			SQL server	
►	PeopleSo 📗 Report - Data Dicti	onary					
►	🗐 Salesforce 🏞 Run Template			nt Type	[		
►	SAP 🗴 Configure Expande	ed Logi		71			
►	Scotia View Workflow			e	1	Mule	
►	T_New	_	T     000		Г	1100MB	
•	Teradata		Total DBSize			TIOUND	

3. Click New Document.

The Upload Document page appears.

Edit Document			
System Document Name*	erwinDIS	System Document Owner	Samuel
System Document Object	Drag-n-Drop files here or click to select files for upload.	Document Link	https://erwin.com/
Intended Use Description	Image: A matrix and the second sec	5 注 Ξ Ξ 注 Ξ Ξ ¥	* *
Approval Required Flag	V	Document Status	Ready For Review 🔻
Created By Last Modified By	Administrator Administrator	Created Date Time Last Modified Time	12/27/2019 13:20:14 12/27/2019 13:20:14

4. 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
System Docu-	Specifies the name of the physical document being attached to the system.
ment Name	For example, Source System Details.
System Docu-	Drag and drop document files or use ≐ to select and upload doc-
ment Object	ument files.
System Docu-	Specifies the document owner's name.
ment Owner	For example, John Doe.
Document Link	Specifies the URL of the document. For example, https://drive.google.com/file/l/2sC2_SZIyeFKI7OOn- b5YkMBq4ptA7jhg5/view
Intended Use Description	Specifies the intended use of the document. For example: The document is to keep a record of system description and its data dictionary.
Approval Required Flag	Specifies whether the document requires approval. Select the <b>Approval Required Flag</b> check box to select the document status.
Document	Specifies the status of the document.
Status	For example, In Progress. This field is available only when the

Field Name	Description
	Approval Required Flag check box is selected.

### 5. Click

The document is uploaded and saved under the System Documents tab.

DATA INTELLIGENCE SUITE	etadata N	۸anaş	ger					A Search		९ 🗘	08	8
System Catalogue	<	•	Data Dictionary	System Details	Associations Mind M	ap System Documer	nts Extended Pro	perlies Conf	igure Extended P	troperties S	cheduled J	obs 🖡
Atlas Sales System     B_System	•		Document Link	Document Status	Document Owner	Intended Use Description	Created By	Created Date	Modified By	Modified Date	Options	
<ul> <li>IBI</li> <li>IBO Reports</li> <li>ICustomer Order Entry</li> <li>ICustomer Acke</li> </ul>	4		https://erwin.com/	Ready For Review	Samuel	Source System, catalog overview	Administrator	2019-12-27 13:20:14.997	Administrator	2019-12-27 13:26:55.747	1	-0
<ul> <li>Data Models</li> <li>EDW</li> </ul>												
Imania     Imania												
New_System	- 11											

6. Use the following options:

Preview (🔼)

You can preview the document for your information. To preview the document, click 1.

Edit 🖍)

To edit the document details, click 🖍.

Delete (📧)

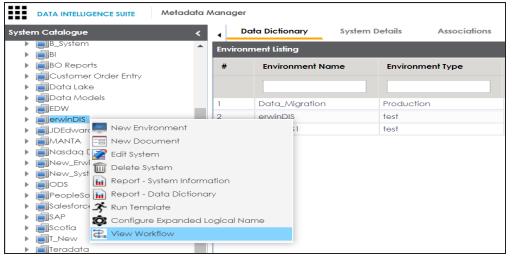
To delete the uploaded document, click 🔯.

### **Viewing Workflows**

You can view the assigned workflow to systems. A workflow assigned to a system is applicable to all the environments. For more information on managing metadata manager workflows, refer to the Managing Metadata Manager Workflows section.

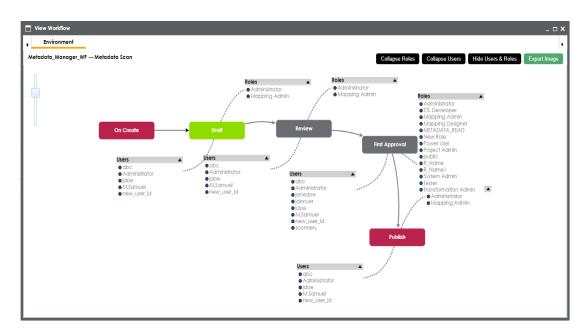
To view the workflow assigned to systems, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, right-click a system.



#### 3. Click View Workflow.

The assigned workflow appears with users and roles corresponding to each stage of the workflow.



4. Use the following options:

#### **Collapse Roles/Expand Roles**

You can collapse roles or expand roles for all the stages using this toggle button.

#### **Collapse Users/Expand Users**

You can collapse users or expand users for all the stages using this toggle button.

#### Hide Users & Roles/Expand Users & Roles

You can hide users and roles or expand users and roles for all the stages using this toggle button.

#### **Export Image**

You can download the workflow image in .jpg format using this button.

### **Associating Systems**

You can associate systems with business assets, systems, environments, tables, and columns. You can also view mind map and association statistics.

You need to ensure that:

- Business assets are enabled. You can add new business assets and enable them in the Business Glossary Manager Settings.
- Relationship between system and the asset type is defined. You can define associations and relationships in the Business Glossary Manager Settings.

To associate system with asset types, follow these steps:

- 1. Under the **System Catalogue** pane, click the desired system and click the **Associations** tab.
- 2. Select the asset type from the drop down.

DATA INTELLIGENCE SUITE	Metadata Mar	nager				Ą	Search	९ 🗘 🛛	8
System Catalogue	۲ ،	Data Dictionary	System Details	Associations	lind Map System Docum	ments Extended Properties	Configure Extended P	roperlies Schedule	ed Jobs
🔒 Sensitive Data 🔺 🏭 Metadata		Business Term Business Term	Χ •						î +
Srd Party Flat Files     A_System     AdventureWorks     AAVERISURE	- 10	DATA DOMAIN Table	rm Name	Descriptio	n Definition	Catalog Name	Catalog Hierarchy	Data Steward	
Afta: Soles System  Soles System  Soles System  Soles System  Soles Soles  Soles Soles Soles  Soles Soles Soles  Soles Soles Soles  Soles Soles Soles Soles  Soles Soles Soles Soles  Soles Soles Soles Soles  Soles Soles Soles Soles  Soles Soles Soles Soles  Soles Soles Soles Soles  Soles Soles Soles Soles  Soles Soles Soles Soles  Soles Soles Soles Soles Soles  Soles Soles Soles Soles Soles  Soles Soles Soles Soles Soles Soles  Soles Soles Soles Soles Soles Soles  Soles Soles Soles Soles Soles Soles  Soles Soles Soles Soles Soles Soles  Soles Soles Soles Soles Soles Soles Soles Soles Soles Soles Soles Soles  Soles Soles Soles Soles So					No Reco	rds Found			

3. Click +.

Current	Context:	Erwin_Sales					
Current	Context Type:	System					
Relation	ship Name:	ls associate	ed with			-	
Search (	partial matches):						
	Term Name	Description	Definition	Catalog Name	Catalog Hierarchy	Data Steward	
	3rd Party Preference Option Code		Records the option the Customer has chosen not to be offered products from 3rd Party's e.g. selling	Customer Management	Customers Business → Customers Business As Is → Information → Customer Management	janedoe	
	44900		Incision and drainage of appendiceal abscess; open	DATA ELEMENTS	NASDAQ HEALTHCARE - IMP 1 → DATA ELEMENTS	N/A	

- 4. Select the Relationship Name, and the asset type.
- 5. Click Save.

The asset is added to the system.

DATA INTELLIGENCE SUITE	Metadata N	lanager						A Sec	rch Q	¢ 0 🛛 🛛
System Catalogue	<	•	ata Dictionary	System D	etails Associations	Mind Map	System Documents Extende	ed Properties Con	figure Extended Properties	Scheduled Jobs
🔒 Sensitive Data 4 🏭 Metadata	^	Busin	iess Term	•						î +
Image: State of the second secon	- 1		Actions	Relationshir Name	Term Name	Description	Definition	Catalog Name	Catalog Hierarchy	Data Steward
AdventureWorks     AMERISURE     Atlas Sales System							Records the option the		Customers Business →	•
<ul> <li>B_System</li> <li>BI</li> <li>BO Reports</li> </ul>			í	is associated with	3rd Party Preference Option Code		Customer has chosen not to be offered products from 3rd Party's e.g. selling	Customer Management	Customers Business As Is → Information → Customer Management	janedoe
Gustomer Order Entry     Gata Lake     Gata Models     GEDW     GEV										
Erwin_Sales_Target     ErwinDIS										

6. Use the following options under **Actions**:

### Edit Association (🖍)

Use this option to edit the association.

### Delete Association ( $\overline{\mathbf{D}}$ )

Use this option to delete the association.

To view mind map, follow these steps:

1. Under the System Catalogue pane, click the system.

#### 2. Click the Mind Map tab.



3. Use the following options to work on the mind map:

#### Expand (+) / Collapse (-)

To drill the mind map further, hover over the nodes, use (-) to collapse and use (+) to expand.

#### Export

Use this option to download the mind map to .xlsx format or .jpg format.

#### Settings

Layout: Select the layout as normal or orthogonal.Custom Relations: Select the check box to display custom relations.Show Relationships: Select the check box to display relationships.

#### Filter

Use this option to filter components of the mind map based on asset types or relationships.

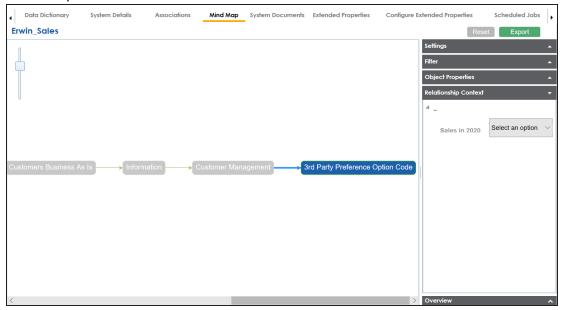
#### **Object Properties**

It displays the association statistics of the system.

#### **Relationship Context**

Use this option to view the relationship context as defined under the **Extended Properties** in Business Glossary Manager Settings for the relationship between the system and the asset type.

To view the relationship context, click the connection between the asset type and the system.



#### **Overview**

Use this option to view the overview diagram of the mind map.

### **Configuring Expanded Logical Name**

You can update the expanded logical name for multiple tables/columns by scheduling a configuration job. The job updates the expanded logical name based on the table/column name, associated business term's name, and the associated business term's definition.

**Note**: You should configure expanded logical name of tables and columns after scanning metadata.

You can run the job at both, system and environment levels:

- **System level**: The expanded logical name is applied to all the tables and columns under the system. This includes all the environments under the system.
- Environment level: The expanded logical name is applied to all the tables and columns under the environment.

For example, consider a scenario where you want to schedule a job to configure the expanded logical name of a table, RM\_Resource and a column, Resource\_ID. The parameters of the job are a business term catalog that has a business term, Resource, its definition, Sales Representative, and a splitter, Underscore (\_). Refer to the following table to understand the parameters and their values:

Entity	Value	Comment
Splitter (spe- cified while scheduling the job)	_(Underscore)	
Table Name	RM_Resource	Here, the part after the underscore (splitter), Resource, matches the Business Term. Therefore, it will be replaced with the business term definition and the part before the under- score, RM, will be retained in the expanded logical name.
Column Name	Resource_ID	Here, the part before the underscore, Resource, matches with the Business Term. Therefore, it will be replaced with the busi- ness term definition and the part after the underscore, ID will be retained in the expanded logical name.
Business	Resource	This should match with a part of the table and column names

Entity	Value	Comment			
Term		above.			
		In the updated expanded logical name, this will replace the part of the table/column name that matches the business term name. That is:			
Business Term Defin- ition	Sales Rep- resentative	<ul> <li>For the table, RM will be retained and Resource will b replaced with Sales Representative.</li> </ul>			
		<ul> <li>For the column, ID will be retained and Resource will be replaced with Sales Representative.</li> </ul>			
Expanded Logical Name	<blank></blank>	Expanded logical name is formed from the business term defin- ition and part of table or column names.			

After the job runs successfully, the expanded logical name of the table and column is updated as mentioned in the following table:

Entity	Expanded Logical Name	Comment
Table	-	Here, RM retained from the table name and Sales Representative
	resentative	is added from business term definition.
Column	Sales Rep-	Here, ID is retained from the column name and Sales Rep-
Column	resentative ID	resentative is added from business term definition.

To configure expanded logical name, follow these steps:

1. Right-click a system or environment.



2. Click Configure Expanded Logical Name.

The Configure Expanded Logical Name page appears.

Configure Expanded Logical Name	_ 🗆 🗙
Catalogs	<b>₩</b> X
Business Terms     Catalog_Name (2)     Cutalog_Name (2)     ELN (1)     NASDAQ HEALTHCARE - IMP 1 (19)     NASDAQ HEALTHCARE - IMP 2 (19)     NASDAQ HEALTHCARE - IMP 2 (19)     NASDAQ OPT 3 (2)	
Splitter	
_(underscore)	
Job Name*	
Administrator1580049338831	
Interval	
Once	
Schedule Job On* 🕓 Local 💿 Server	
01-26-2020 20:05	~

3. Select or 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
Catalogs	Select the catalog containing the desired business term.
Splitter	Select appropriate splitter based on the table name or column name.
Job Name	A default job name is autopopulated. You can modify it and enter a job name.
Interval	Select an interval of the job. Interval sets the frequency of the job. For example: If you set the interval every week then the job will be executed every week.
Local or Server	<ul> <li>Select the machine whose clock decides the time of the scheduled scan.</li> <li>Local: Refers to your local machine.</li> <li>Server: Refers to the machine where erwinDIS has been deployed.</li> </ul>
Schedule Job On	Select date and time of the execution of the job.
Notify Me	Turn the <b>Notify Me</b> to <b>ON</b> to receive a notification email about the sched- uled job.
Notification Email	This field is autopopulated with your email ID. You receive email noti- fications about the scheduled job from the Admin Email ID, configured in the Email Settings. For more information on configuring Admin Email ID, refer to the <u>Configuring Email Settings</u> topic.
CC List	Enter a comma-separated list of email IDs that should receive the job notification.

## 4. Click 💾.

The job is scheduled and added to the Scheduled Jobs list on the **Scheduled Jobs** tab.

DATA INTELLIGENCE SUITE Metao	lata Manager	Dictionary Sy:	stem Details Asso	ciations M	ind Map	System Docum	ents Extended		rch gure Extended	Properties Sch	@ eduled Jo	bs
Metadata	^ Schedule	d Jobs										
Image: Second Seco	ib Type	Environment Name	Scheduled Objects	Previous Fire Time	Next Fire Time	Job State	Created By	Created Date Time	Last Modified By	Last Modified Date Time	Edit	Dele
AMERISURE     Atlas Sales System												
	tadata janded jical me	Erwin_Sales	All Environments		01-27-2020 12:04	NORMAL	Administrator	2020-01-27 12:03:11.498	Administrator	2020-01-27 12:03:11.498	1	Ĺ
Customer Order Entry     Data Lake												
<ul> <li>Data Models</li> <li>EDW</li> </ul>												
Envin_Sales												
▲ ■ Integration (v1.00) dbo.RM_RESOURCE												
Fintegration_Target (v1.00)           Fintegration_Target (v1.00)												

You can edit the job using  $\checkmark$  or delete it using  $\overline{\mathbb{II}}$ .

The job is executed at the scheduled time and the expanded logical names of tables and columns are updated.

Columns Table Prope	rties Associations	Mind Map	Data Quality	Documents	Extended Properties	Indexes	Impact Analysis	Forward Lineage
- Technical Properties								
Table Name	dbo.RM_RESOURCE				Environment Name	Integra	tion	
System Name	Erwin_Sales				No of Rows	4		
Synonym Reference					FileType			
					Workflow Status	Draft		
- Business Properties								
Data Steward	janedoe				Logical Table Name	Resource	Ce	
Table Definition	Tab Def				Expanded Logical Name	e RM Sale	es Representative	
Table Comments	Sales resource 2020				Used In Gap Analysis	$\checkmark$		
Table Class	Table_Class				Table Alias	SALESR	ESOURCE	
DQ Score	Very High (9-10)							

Column Properties	Associations Mind Ma	p Documents	Impact Analysis	Forward Lineage	Reverse Lineage	Extended Properties V	alid Values
Workflow Status	Draft						
– Business Properties –							
Data Steward	janedoe			Logical Column N	ame Res	ource ID	
Column Definition	represents resource	ID		Expanded Logica	Name	es Representative ID	
Column Comments	Column ID as per 20	020		Used In Gap Analy	/sis		
Sensitive Data Indicator (SDI) Flag							
Sensitive Data Indicator (SDI) Classification	Confidential			Sensitive Data Ind (SDI) Description	cator Sen	sitive Data that if compromised	lc
Column Class	Column_Class			Column Alias	RES	OURCEID	
DQ Score	Very High (9-10)			Business Key Flag			

**Note**: You can use this job to update the expanded logical name only once. Alternately, you can update expanded logical names under <u>table properties</u> and <u>column</u> <u>properties</u>.

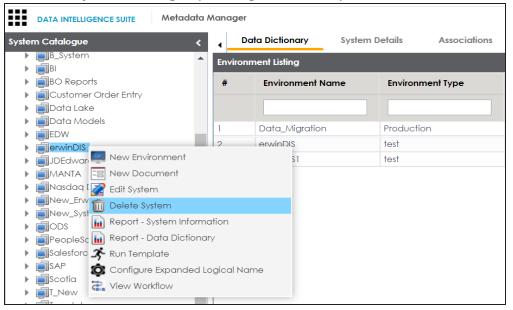
### **Deleting Systems**

You can delete unwanted systems which are not required anymore.

**Note**: You can not delete a system with one or more environments under it. Ensure that you delete all the environments under it before you delete a system.

To delete systems, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, right-click the system to be deleted.



3. Click Delete System.

A warning message appears.

4. Click Yes.

The system is deleted.

# **Creating and Managing Environments**

Metadata is stored and categorized into systems and environments. Multiple environments are contained in a system. Whereas environments can denote a database, flat file, data models, etc. Environments contain database objects like Tables, Views, Synonyms, etc.

You can create environments under a system and scan metadata from a data source by providing connection parameters in the environment.

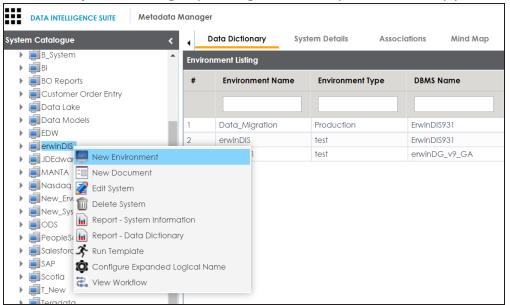
Creating and managing environments involves:

- Creating environments
- Assigning users to environments
- Managing environments
- Uploading documents
- Cloning environments
- Viewing ER diagrams
- Viewing workflow logs
- Associating Environments
- Configuring Business Properties
- Configuring Expanded Logical Name of Tables/Columns

# **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 ful-filling prerequisites and providing the connection parameters.

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the **System Catalogue** pane, right-click the system created by you.



#### 3. Click New Environment.

The New Environment page appears.

System Environment Name* System Environment Type* Data Steward Select Data Steward Apply To All Tables & Columns Server Platform
Data Steward
Apply To All Tables & Columns
Server Platform
Server OS Version
File Management Type Please Select DataBase Type
File Location
Production System Name Choose Production System 🔹
Production Environment Name
Version 1.00
Version Label
Associated Business Term
DQ Score -Select DQ Score-
DataBase Type* -Select DataBase-

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	
	Specifies the unique name of the environment.	
System Envir-	For example, EDW-Test.	
onment Name	For more information on naming conventions, refer to the <u>Best</u>	
	Practices section.	
System Envir-	Specifies the type of the environment.	
onment Type	For example, development, test, or production.	
	Specifies the name of the data steward responsible for the envir-	
	onment.	
Data Steward	For example, Jane Doe.	
	For more information on configuring data steward list, refer to the	
	Configuring Data Stewards topic.	
Server Plat-	Specifies the server platform of the environment.	
form	For example, Windows.	
Server OS Ver-	Specifies the OS version of the environment's server.	

Description	
For example, Windows Server 2012 R2.	
Specifies the file management system (if the environment is a file- based source). For example, MS Excel.	
Specifies a file path (if the environment is a file-based source). For example, C:\Users\Jane Doe\erwin\Mike - Target System	
Specifies the system name being associated with the environment as the production system. For example, Enterprise Data Warehouse.	
Specifies the environment name being associated with the envir- onment as the production environment.	
For example, EDW-PRD.	
Specifies the version label of the environment to track change history. For example, Alpha. For more information on configuring version display, refer to the <u>Con-</u> <u>figuring Version Display of the Environments</u> topic.	
Specifies the overall data quality score of the environment. For example, High (7-8). For more information on configuring DQ scores, refer to the <u>Con-</u> figuring Data Profiling and DQ Scores topic.	
Specifies the database type. For example, Sql Server. Select the type of database from where you wish to scan metadata. Depending upon your choice of database type you need to provide additional fields (connection parameters) appearing on the right hand side. <b>Note</b> : There are no additional fields for MS Excel File, and XSD.	

5. Click 🕅 to test the connection.

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

6. Click Save and Exit.

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

Once an environment is created, you can scan source or target metadata from the 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

# **SQL Server**

You can create two types of SQL Server environment:

- SQL authentication
- Windows authentication

Both the environments have same:

- Prerequisites
- Privileges
- JDBC driver details
- TLS connection details

There is a small difference between the two modes in JDBC connection parameters.

#### **Prerequisites**

Pre-requisite steps for establishing successful connection:

- 1. Creation of dedicated service account for erwin with Metadata Read-only privileges in SQL Server Database
- 2. Firewall connection open between SQL Server and erwin DI Suite application server
- 3. Opening of SQL Server database port to accept connections from erwin DI Suite application server

## **Privileges**

Following are the privileges given to service account for:

- Metadata scanning: Grant view definition on Schema
- Data preview: Db\_datareader

# **JDBC Driver Details**

SQL Server JDBC driver is out of box packaged with erwin DI Suite application. Hence, no JDBC driver configuration is required from end user standpoint.

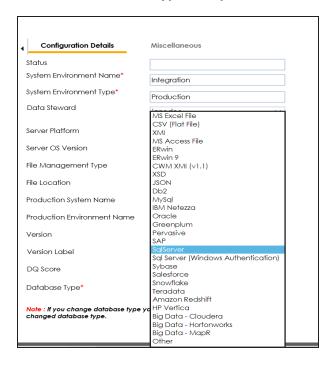
# **TLS Connection Details**

- The SQL Server JDBC driver supports connection via TLS 1.2.
- The TLS protocol parameter needs to be added to JDBC URL string to ensure that the connection is via TLS. Otherwise, the source database will reject any incoming request in non-TLS mode.
- JDBC URL being used to connect via TLS: jdbc:sqlserver://SERVER\_NAME:PORT#;databaseName=AdventureWorks;sslProtocol=TLSv1.2
- Additional parameters to configure (if needed): integratedSecurity=true;encrypt=true;trustServerCertificate=true;

# **JDBC Connection Parameters**

To enter SQL Server (SQL authentication) connection parameters, follow these steps:

1. Select the Database Type as SqlServer while creating the environment.



When you select database type as Sql Server, the following connection parameters appear on the right hand side.

Driver Name*	com.microsoft.sqlserver.jdbc.SQLServe	
DB/MS Name/DSN*		
P Address/Host Name*	ErwinDIS931	
	localhost	
Port	1433	
Jser Name*	sa	
'assword*	•••••	
	Save Password	
lrl*	jdbc:sqlserver://localhost:1433;datab	
DB/MS Instance Schema	DBO	9
Connection Pool Type*	HIKARICP $\lor$	
Number of Partitions*	2	
Ainimum Connections Per Partitions*	3	
Maximum Connections Per Partitions*	5	
Options		
		Q

2. Enter appropriate values in the fields (connection parameters). The fields marked with a red asterisk are mandatory.

Field Name	Description
Driver Name	Specifies the JDBC driver name for connecting to the database.
Driver Name	For example, com.microsoft.sqlserver.jdbc.SQLServerDriver
DDMC	Specifies the SQL Server database name being used to connect to the
DBMS	environment.
Name/DSN	For example, ErwinDIS931.
IP Address/Host	Specifies the IP address or server host name of the database.
Name	For example, localhost.
	Specifies the port to connect with the database.
Port	1433 is the default port for a Sql Server database type. You can
	change it, if required.
Lisor Nama	Specifies the SQL Server (Service Account) user name.
User Name	For example, sa.
Deserverd	Specifies the SQL Server (Service Account) password.
Password	For example, goerwin@1.
	Specifies the full JDBC URL that is used to establish a connection with
	the database.
URL	For example, jdbc:sqlserver://SERVER_NAME:PORT#;data-
	baseName=DatabaseName
	It is autopopulated based on the other parameters.
	Specifies the schema of the database.
DBMS Schema	Use this option to select multiple or narrow down to single schema.
	For example, DBO.
Connection	Specifies the connection pool type being used to connect via JDBC.
Pool Type	For example, HIKARICP and BONECP.
Number of Dor	Specifies the number of partitions of the database.
Number of Par- titions	It is autopopulated with default number of partitions. You can edit
	and provide the number of partitions as desired. For example, 2.

Field Name	Description
Minimum Con-	Specifies the minimum connections per partitions of the database.
nections Per	It is autopopulated with default minimum connections per partitions.
Partitions	You can edit and provide the minimum connections per partitions as
	desired. For example, 3.
Maximum Con-	Specifies the maximum connections per partitions of the database.
nections Per	It is autopopulated with default maximum connections per partitions.
Partitions	You can edit and provide the maximum connections per partitions as
	desired. For example, 5.

3. Click to use database options.

The Database Options page appears displaying the different options available.

Database Options _ D		
Кеу	Value	
Transaction Isolation	TRANSACTION_READ_COMMITTED	
Read Only	false	
Auto Commit	true	
Test Connection Query		
Include Synonyms (Only Oracle)	false	
Scan Nested Synonyms	false	
Query Batch Limit	999	
Oracle Enable SSL Connection	false	
Oracle Wallet Location		
Oracle PKI Provider Position	3	
Oracle SSL Server DN Match	false	

4. Use the database options in the following way:

# Key (🗹)

To use a key, select the corresponding check box.

#### Value

To set the value of the selected key, double-click the corresponding cell under the **Value** column and select the appropriate value from the drop down. ок (🗹)

To save the database options, click  $\checkmark$ .



To enter SQL Server (Window authentication) connection parameters, follow these steps:

1. Select the Database Type as Sql Server (Windows Authentication).

Configuration Details	Miscellaneous
Status	
System Environment Name*	Integration
System Environment Type*	Production
Data Steward	MS Excel File
Server Platform	CSV (Flat File) XMI
Server OS Version	MS Access File ERwin
File Management Type	ERwin 9 CWM XMI (v1.1)
File Location	XSD JSON
Production System Name	Db2 MySql IBM Netezza
Production Environment Name	Oracle Greenplum
Version	Pervasive SAP
Version Label	SqlServer SqlServer (Windows Authentication)
DQ Score	Sybase Salesforce
Database Type*	Snowflake Teradata Amazon Redshift
Note : If you change database type yo changed database type.	
	Other

When you select database type as Sql Server (Windows Authentication), the following connection parameters appear on the right hand side.

Driver Name*	net.sourceforge.jtds.jdbc.Driver	
DBMS Name/DSN*	ErwinDIS931	
IP Address/Host Name*	localhost	
Domain		
User Name*	sa	
Password*		
	Save Password	
Url*	jdbc:jtds:sqlserver://localhost/ErwinDls	
DBMS Instance Schema	DBO	2
Connection Pool Type*	HIKARICP ~	
Number of Partitions*	2	
Minimum Connections Per Partitions*	3	
Maximum Connections Per Partitions*	5	
Options		<u>ھ</u>
		Ŷ

2. Enter appropriate values in the fields (connection parameters). The fields marked with a red asterisk are mandatory.

Field Name	Description	
Driver	Specifies the JDBC driver name for connecting to the database.	
Name For example, com.microsoft.sqlserver.jdbc.SQLServerDriver		
DBMS	Specifies the SQL Server database name being used to connect to the	
Name/DS-	environment.	
N	For example, ErwinDIS931.	
IP Address/H- ost Name	Specifies the IP address or server host name of the database. For example, localhost.	
Domain	Specifies the network domain name on which database resides. For example, U-DOM1.	
Port	Specifies the port to connect with the database. 1433 is the default port for a Sql Server database type. You can change it, if required.	

Field Name	Description	
User	Specifies the SQL Server (Service Account) user name.	
Name	For example, sa.	
Deens	Specifies the SQL Server (Service Account) password.	
Password	For example, goerwin@1.	
	Specifies the full JDBC URL that is used to establish a connection to the database.	
URL	It is autopopulated based on the other parameters.	
	jdbc:jtds:sqlserver://SERVER_NAME:PORT#;data-	
	baseName=DatabaseName;domain=DomainName;useNTLMv2=true;	
DBMS	Specifies the schema for the database.	
Schema	Use this option to select multiple or narrow down to single schema.	
Schema	For example, DBO.	
Con- nection Pool Type	Specifies the connection pool type being used to connect via JDBC. For example, HIKARICP and BONECP.	
Number of	Specifies the number of partitions for the database.	
Number of Partitions	It is autopopulated with default number of partitions. You can edit and provide the number of partitions as desired. For example, 2.	
Minimum Con- nections Per Par- titions	Specifies the minimum connections per partitions for the database. It is autopopulated with default minimum connections per partitions. You can edit and provide the minimum connections per partitions as desired. For example, 3.	
Maximum Con- nections Per Par- titions	Specifies the maximum connections per partitions for the database. It is autopopulated with default maximum connections per partitions. You can edit and provide the maximum connections per partitions as desired. For example, 5.	

3. Click to use database options.

Database Options _ C :		
Кеу	Value	
Transaction Isolation	TRANSACTION_READ_COMMITTED	
Read Only	false	
Auto Commit	true	
Test Connection Query		
Include Synonyms (Only Oracle)	false	
Scan Nested Synonyms	false	
Query Batch Limit	999	
Oracle Enable SSL Connection	false	
Oracle Wallet Location		
Oracle PKI Provider Position	3	
Oracle SSL Server DN Match	false	

The Database Options page appears displaying the different options available.

4. Use the database options in the following way:

# Key (🗹)

To use a key, select the corresponding check box.

#### Value

To set the value of the selected key, double-click the corresponding cell under the **Value** column and select the appropriate value from the drop down.

ок (🗹)

To save the database options, click  $\checkmark$ .

# Oracle

You can create Oracle environment and can also enable RAC/Service to:

- Use Oracle cluster database
- Capture Oracle Service name in DSN field

Before creating an Oracle environment, you should take a note of the following:

- Prerequisites
- JDBC driver details
- TLS connection details
- JDBC connection parameters

## **Prerequisites**

Prerequisite steps for establishing successful connection:

- Creation of dedicated service account for erwin with Metadata read-only privileges in Oracle database
- Firewall connection open between Oracle and erwin DI Suite application server
- Oracle Database port opened to accept connections from erwin DI Suite application server

## **JDBC Driver Details**

Oracle JDBC driver is out of box packaged with erwin DI Suite application. Hence, no JDBC driver configuration is required from end user standpoint.

## **TLS Connection Details**

 Oracle JDBC 8 driver provides native TLS 1.2 support and upgrading the driver to JDBC 8 will provide the necessary resolution.  Once the product is upgraded to the oracle JDBC 8 driver, TLS connectivity can be ensured by setting a few system parameters and also adding TLS parameters to the JDBC URL string to support connectivity using TLS 1.2

URL Format: jdbc:oracle:thin:@<Ip Address>:<Port>/< service name>+TLS params

### **JDBC Connection Parameters**

To enter Oracle connection parameters, follow these steps:

1. Select Database Type as Oracle while creating the environment.

Configuration Details	Miscellaneous
Status	
System Environment Name*	Integration
System Environment Type*	Production
Data Steward	MS Excel File
Server Platform	CSV (Flat File) XMI MS Access File
Server OS Version	ERwin ERwin 9
File Management Type	CWM XMI (v1.1) XSD
File Location	JSON Db2
Production System Name	MySql IBM Netezza
Production Environment Name	Oracle Greenplum Pervasive
Version	SAP
Version Label	SqlServer Sql Server (Windows Authentication) Sybase
DQ Score	Salesforce Snowflake
Database Type*	Teradata Amazon Redshift HP Vertica
Note : If you change database type yo changed database type.	Big Data - Cloudera Big Data - Hortonworks
RAC / Service Name	Big Data - MapR Other

Note: You can select the RAC/Service check box to :

- Use Oracle cluster database
- Capture Oracle Service name in DSN field

The following connection parameters appear on the right hand side.

Driver Name*	oracle.jdbc.driver.OracleDriver	
DBMS Name/DSN*	ErwinDIS931	
IP Address/Host Name*	localhost	
Port	1521	
User Name*	sa	
Password*	•••••	
	🗹 Save Password	
Url*	acle:thin:@localhost:1521/ErwinDIS931	
DBMS Instance Schema	DBO	
Connection Pool Type*	HIKARICP ~	
Number of Partitions*	2	
Minimum Connections Per Partitions*	3	
Maximum Connections Per Partitions*	5	
Options		Ô

2. Enter appropriate values in the fields (connection parameters). The fields marked with a red asterisk are mandatory.

Field Name	Description
Driver Name	Specifies the JDBC driver name for connecting to the database.
Driver Name	For example, oracle.jdbc.driver.OracleDriver
DBMS	Name of the Oracle Service – SID or TNS Service Name.
Name/DSN	For example, ErwinDIS931.
IP Address/Host	Enter the IP address or server host name.
Name	For example, 10.32.445.21
	Specifies the port to connect with the database.
Port	1521 is the default port for the Oracle database. User can change it, if required.
	Enter the Oracle (Service account) user name.
User Name	For example, erwinuser.
Password	Enter the Oracle (Service account) password.
Password	For example, goerwin@1.
URL	It is autopopulated based on the other parameters.

Field Name	Description
	For example, jdbc:oracle:thin:@ <ip address="">:<port>/&lt; service</port></ip>
	name>
	Specifies the name of the database schema.
DBMS Instant Schema	For example, DBO.
Selicina	Use this option to select multiple or narrow down to single schema.
Compation	Specifies the connection pool type being used to connect via JDBC.
Connection Pool Type	For example, HIKARICP and BONECP.
1 oor 1 ypc	Select the appropriate connection pool type.
Number of Par-	Specifies the number of partitions of the database.
titions	It is autopopulated with default number of partitions. You can edit
	and provide the number of partitions as desired. For example, 2.
Minimum Con-	Specifies the minimum connections per partitions of the database.
nections Per	It is autopopulated with default minimum connections per partitions.
Partitions	You can edit and provide the minimum connections per partitions as
	desired. For example, 3.
Maximum Con-	Specifies the maximum connections per partitions of the database.
nections Per	It is autopopulated with default maximum connections per partitions.
Partitions	You can edit and provide the maximum connections per partitions as
	desired. For example, 5.

3. Click to use database options.

The Database Options page appears displaying the different options available.

Database Options	_ <b>_</b> ×
	Solution
Кеу	Value
Transaction Isolation	TRANSACTION_READ_COMMITTED
Read Only	false
Auto Commit	true
Test Connection Query	
Include Synonyms (Only Oracle)	false
Scan Nested Synonyms	false
Query Batch Limit	999
Oracle Enable SSL Connection	false
Oracle Wallet Location	
Oracle PKI Provider Position	3
Oracle SSL Server DN Match	false

4. Use the database options in the following way:

# Key (🗹)

To use a key, select the corresponding check box.

#### Value

To set the value of the selected key, double-click the corresponding cell under the **Value** column and select the appropriate value from the drop-down.

ок (🗹)

To save the database options, click  $\checkmark$ .

# **MySQL**

You can create MySQL environment by providing the necessary connection parameters. Before creating a MySQL environment, you should take a note of the following:

- Prerequisites
- JDBC driver details
- TLS connection details
- JDBC connection parameters

## **Prerequisites**

Prerequisite steps for establishing successful connection:

- Creation of dedicated service account for erwin with Metadata read-only privileges in MySQL database
- Firewall connection open between MySQL and erwin DI Suite application server
- MySQL Database port opened to accept connections from erwin DI Suite application server

## **JDBC Driver Details**

MySQL JDBC driver is out of box packaged with erwin DI Suite application. Hence, no JDBC driver configuration is required from end user standpoint.

# **TLS Connection Details**

- The MySQL JDBC driver supports connection via TLS 1.2. The TLS protocol parameter needs to be added to JDBC URL string to ensure that the connection is via TLS.
- JDBC URL being used to connect via TLS: jdbc:mysql://IPADDRESS:3306/DATABASENAME ?useSSL=true &enabledTLSProtocols=TLSv1.2

# **JDBC Connection Parameters**

To enter MySQL connection parameters, follow these steps:

1. Select Database Type as MySQL while creating the environment.

Configuration Details	Miscellaneous
Conligoration Details	Miscelidneous
Status	
System Environment Name*	Integration
System Environment Type*	Production
Data Steward	MS Excel File
	CSV (Flat File) XMI
Server Platform	MS Access File
Server OS Version	ERwin ERwin 9
File Management Type	CWM XMI (v1.1) XSD
File Location	JSON Db2
	MySql
Production System Name	IBM Netezza
Production Environment Name	Oracle Greenplum
Version	Pervasive
*6131011	SalServer
Version Label	Sal Server (Windows Authentication)
DQ Score	Sybase Salesforce
	Snowflake
Database Type*	Teradata
	Amazon Redshift
	HP Vertica
Note : If you change database type yo changed database type.	Big Data - Cloudera Big Data - Hortonworks
2	Big Data - MapR
	Other

The following connection parameters appear on the right hand side.

Driver Name*	com.mysql.jdbc.Driver
DBMS Name/DSN*	ErwinDIS931
P Address/Host Name*	localhost
Port	3306
Jser Name*	sa
'assword*	•••••
	Save Password
Jr <b>i</b> *	jdbc:mysql://localhost/ErwinDIS931
Connection Pool Type*	HIKARICP
Number of Partitions*	1
Ainimum Connections Per Partitions*	3
Maximum Connections Per Partitions*	5
Options	
Maximum Connections Per Partitions*	

2. Enter appropriate values in the fields (connection parameters). The fields marked with a red asterisk are mandatory.

Field Name	Description
Driver Name	Specifies the JDBC driver name for connecting to the database.
	For example, com.mysql.jdbc.Driver
DBMS	Enter the MySQL database name.
Name/DSN	For example, ErwinDIS931.
IP Address/Host	Enter the IP address or server host name.
Name	For example, 10.32.445.21
	Specifies the port to connect with the database.
Port	3306 is the default port for the MySQL database. You can change it, if required.
	Enter the MySQL (Service account) user name.
User Name	For example, erwinuser.
Password	Enter the MySQL (Service account) password.
Password	For example, goerwin@1.

Field Name	Description
URL	Specifies the full JDBC URL that is used to establish a connection with the database. It is autopopulated based on the other parameters. For example, jdbc:mysql://IPADDRESS:3306/DATABASENAME
Connection Pool Type	Specifies the connection pool type being used to connect via JDBC. For example, HIKARICP and BONECP.
Number of Par- titions	Specifies the number of partitions of the database. It is autopopulated with default number of partitions. You can edit and provide the number of partitions as desired. For example, 1.
Minimum Con- nections Per Partitions	Specifies the minimum connections per partitions of the database. It is autopopulated with default minimum connections per partitions. You can edit and provide the minimum connections per partitions as desired. For example, 3.
Maximum Con- nections Per Partitions	Specifies the maximum connections per partitions of the database. It is autopopulated with default maximum connections per partitions. You can edit and provide the maximum connections per partitions as desired. For example, 5.

3. Click to use database options.

The Database Options page appears displaying the different options available.

Database Options	_ <b>_</b> ×
	Solution
Кеу	Value
Transaction Isolation	TRANSACTION_READ_COMMITTED
Read Only	false
Auto Commit	true
Test Connection Query	
Include Synonyms (Only Oracle)	false
Scan Nested Synonyms	false
Query Batch Limit	999
Oracle Enable SSL Connection	false
Oracle Wallet Location	
Oracle PKI Provider Position	3
Oracle SSL Server DN Match	false

4. Use the database options in the following way:

# Key (🗹)

To use a key, select the corresponding check box.

#### Value

To set the value of the selected key, double-click the corresponding cell under the **Value** column and select the appropriate value from the drop down.

ок (🗹)

To save the database options, click  $\checkmark$ .

# Snowflake

You can create Snowflake environment by providing the necessary connection parameters. Before creating a Snowflake environment, you should take a note of the following:

- Prerequisites
- JDBC driver details
- TLS connection details
- JDBC connection parameters

# **Prerequisites**

Prerequisite steps for establishing successful connection:

- Creation of dedicated service account for erwin with Metadata read-only privileges in Snowflake database
- Snowflake Database ports 443 and 80 should be opened via firewall to accept connections from erwin DI Suite application server

# **JDBC Driver Details**

Currently Snowflake JDBC driver is not packaged with erwin DI Suite application. Download the <u>Snowflake JDBC driver here</u>.

Once downloaded, place the snowflake drivers at the following location on the erwin DI Suite application server:

\Apache Software Foundation\<Tomcat X.X>\webapps\erwinDISuite\WEB-INF\lib

# **TLS Connection Details**

The Snowflake packaged JDBC driver version 3.1.X and above implement TLS v1.2 providing the latest security patches on the protocol. So, you will not need to set any additional properties. The connection will use TLS 1.2 encryption by default.

 Add SSL Parameter in Connection String (if required): jdbc:snowflake://<accountname>.snowflakecomputing.com/ ?warehouse=DataWarehouseName&db=DatabaseName&schema= SchemaName&ssl=on

# **JDBC Connection Parameters**

To enter Snowflake connection parameters, follow these steps:

1. Select Database Type as Snowflake while creating the environment.

Status System Environment Name* Integra System Environment Type* Produc Data Steward	tion
System Environment Type* Produce	tion
Produc	
Data Staurad	tion
MS Exc	el File
Server Platform X/MI	,
Server OS Version ERwin	cess File
	, (MI (v1.1)
File Location JSON Db2	
Production System Name MySql IBM Ne	tezza
Production Environment Name Oracle Green	olum
Version Pervasi SAP	
	ver (Windows Authentication)
DQ Score Sybase Salesfo	rce
Database Type* Snowfile Terado	ta
Note : If you change database type you have a state of the set of	in Redshift tica ta - Cloudera ta - Hortonworks ta - MapR

The following connection parameters appear on the right hand side.

Driver Name*	net.snowflake.client.jdbc.SnowflakeD	
DBMS Name/DSN*	ErwinDIS931	
P Address/Host Name*	localhost	
Port	443	
User Name*	sa	
Password*	•••••	
	Save Password	
Ud*	jdbc:snowflake://localhost:null/?db=E	
DBMS Instance Schema	DBO	
Connection Pool Type*	HIKARICP ~	
Number of Partitions*	1	
Minimum Connections Per Partitions*	3	
Maximum Connections Per Partitions*	5	
Options		Ô
		Ŷ

2. Enter appropriate values in the fields (connection parameters). The fields marked with a red asterisk are mandatory.

Field Name	Description	
Driver	Specifies the JDBC driver name for connecting to the database.	
Name	For example, com.snowflake.client.jdbc.SnowflakeDriver	
DBMS	Enter the Snowflake database name.	
Name/DSN	For example, AW2012_DV.	
IP Address/Hos- t Name	Enter <accountname>.snowflakecomputing.com For example, analytixds.us-east-1.snowflakecomputing.com</accountname>	
Port	Specifies the port to connect with the database. 443 is the default port for the Snowflake database. You can change it, if required.	
User Name	Enter the Snowflake (Service account) user name. For example, shawn.	
Password	Enter the Snowflake (Service account) password. For example, goerwin@1.	

Field Name	Description	
	Specifies the full JDBC URL that is used to establish a connection with the database.	
	It is autopopulated based on the other parameters.	
	For example,	
URL	jdb-	
	c:snowflake:// <accountname>.snowflakecomputing.com/</accountname>	
	?warehouse=DataWarehouseName&db=DatabaseName&	
	schema=SchemaName	
DBMS Specifies the schema of the database.		
Instance	Use this option to select multiple or narrow down to single schema.	
Schema		
Connection Specifies the connection pool type being used to connect via J		
Pool Type	For example, HIKARICP and BONECP.	
Number of	Specifies the number of partitions of the database.	
Partitions	It is autopopulated with default number of partitions. You can edit and	
Fartitions	provide the number of partitions as desired. For example, 1.	
Minimum	Specifies the minimum connections per partitions of the database.	
Connections	It is autopopulated with default minimum connections per partitions.	
Per Par-	You can edit and provide the minimum connections per partitions as	
titions desired. For example, 3.		
Maximum	Specifies the maximum connections per partitions of the database.	
Connections	It is autopopulated with default maximum connections per partitions.	
Per Par-	You can edit and provide the maximum connections per partitions as	
titions	desired. For example, 5.	

3. Click to use database options.

The Database Options page appears displaying the different options available.

Database Options	_ <b>_</b> ×
	Solution
Кеу	Value
Transaction Isolation	TRANSACTION_READ_COMMITTED
Read Only	false
Auto Commit	true
Test Connection Query	
Include Synonyms (Only Oracle)	false
Scan Nested Synonyms	false
Query Batch Limit	999
Oracle Enable SSL Connection	false
Oracle Wallet Location	
Oracle PKI Provider Position	3
Oracle SSL Server DN Match	false

4. Use the database options in the following way:

# Key (🗹)

To use a key, select the corresponding check box.

#### Value

To set the value of the selected key, double-click the corresponding cell under the **Value** column and select the appropriate value from the drop down.

ок (🗹)

To save the database options, click  $\checkmark$ .

# **MS Dynamics CRM**

You can create MS Dynamics CRM environment by providing the necessary connection parameters.

Before creating a MS Dynamics CRM environment, you should take a note of the following:

- Prerequisites
- JDBC driver details
- TLS connection details
- JDBC connection parameters

#### **Prerequisites**

Prerequisite steps for establishing successful connection:

- Creation of dedicated service account for erwin with Metadata read-only privileges in MS Dynamics CRM database
- CRM Server IP Address should be mapped with Host Names in the file called "Hosts" which is available in the location - C:\Windows\System32\drivers\etc
- Generate CRM Domain trusted Certificate in erwin application server using InstallCert.java and place the generated "jssecacerts" file in the location - C:\Program Files\AdoptOpenJDK\jdk-XXX\jre\lib\security

**Reference**: <u>https://www.mkyong.com/webservices/jax-ws/sun</u>-certpathbuilderexception-unable-to-find-valid-certification-path-to-requested-target/

## **JDBC Driver Details**

The MS Dynamics CRM JDBC driver is not packaged with erwin DI Suite application. Hence, customers needs to use the jdbc driver available at their end for MS Dynamics CRM (CDATA, Progress etc.)

You can download CDATA driver from the URL mentioned below.

Download URL: https://www.cdata.com/drivers/dynamicscrm/download/

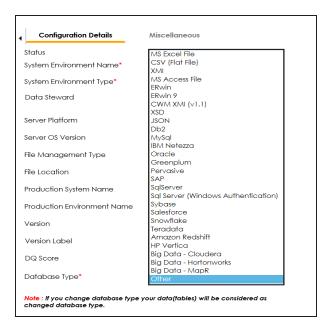
**Location to configure the JDBC driver**: Once downloaded, the MS Dynamics CRM drivers should be placed in the following path in erwin application server: \Apache Software Found-ation\<Tomcat X.X>\webapps\erwinDISuite\WEB-INF\lib and restart the Tomcat.

## **TLS Connection Details**

The CDATA MS Dynamics CRM driver uses SSL by default, so you will not need to set any additional properties. The connection will use TLS 1.2 encryption.

#### **JDBC Connection Parameters**

To enter MS Dynamics CRM connection parameters, follow these steps:



1. Select Database Type as Other while creating the environment.

The following connection parameters appear on the right hand side.

Driver Name*	cdata.idbc.dvnamicscrm.DvnamicsC	
DBMS Name/DSN*	Northwind	
P Address/Host Name*	10.1.50.225	
Port	1433	
User Name*	lgadde@erwin123.onmicrosoft.com	
Password*	•••••	
	Save Password	
Url*	jdbc:dynamicscrm:user=lgadde@erwi	
DBMS Instance Schema	DynamicsCRM	9
Connection Pool Type*		
Number of Partitions*	1	
Winimum Connections Per Partitions*	3	
Maximum Connections Per Partitions*	5	
Options		Ô
		~

2. Enter appropriate values in the fields (connection parameters). The fields marked with a red asterisk are mandatory.

Field Name	Description	
	Specifies the JDBC driver name for connecting to the database.	
Driver Name	For example, cdata.jdbc.dynamicscrm.DynamicsCRMDriver	
DBMS	Enter the MS Dynamics CRM Database Name.	
Name/DSN	For example, CRM.	
IP Address/Host	Enter the IP Address or Host Names of MS Dynamics CRM server.	
Name	For example, 10.45.21.123	
	Specifies the port to connect with the database.	
Port	443 is the default port for MS Dynamics CRM. You can change it, if required.	
	Enter the MS Dynamics CRM (Service account) user name.	
User Name	For example, domain\erwinuser.	
Password Enter the MS Dynamics CRM (Service account) password.		

Field Name	Description	
	For example, goerwin@1.	
	Specifies the full JDBC URL that is used to establish a connection with the database.	
	It is autopopulated based on the other parameters.	
URL	For example, jdb- c:dynamicscrm:User=UserName;Password=XXX;URL= <ms dynamics<br="">CRM URL&gt;;</ms>	
	<b>Note</b> : If user trying to connect CRM online version, then append the following value to above mentioned connection string	
	CRM Version=CRM Online;	
DBMS Instance	Specifies the schema of the database.	
Schema	For example, DynamicsCRM.	
Connection	Specifies the connection pool type being used to connect via JDBC.	
Pool Type	For example, HIKARICP and BONECP.	
Number of Par-	Specifies the number of partitions of the database.	
titions	It is autopopulated with default number of partitions. You can edit and provide the number of partitions as desired. For example, 1.	
Minimum Con	Specifies the minimum connections per partitions of the database.	
Minimum Con- nections Per Partitions	It is autopopulated with default minimum connections per partitions. You can edit and provide the minimum connections per partitions as desired. For example, 3.	
Maximum Con-	Specifies the maximum connections per partitions of the database.	
nections Per	It is autopopulated with default maximum connections per partitions.	
Partitions	You can edit and provide the maximum connections per partitions as desired. For example, 5.	

# 3. Click to use database options.

The Database Options page appears displaying the different options available.

Database Options	_ <b>_</b> ×
Кеу	Value
Transaction Isolation	TRANSACTION_READ_COMMITTED
Read Only	false
Auto Commit	true
Test Connection Query	
Include Synonyms (Only Oracle)	false
Scan Nested Synonyms	false
Query Batch Limit	999
Oracle Enable SSL Connection	false
Oracle Wallet Location	
Oracle PKI Provider Position	3
Oracle SSL Server DN Match	false

4. Use the database options in the following way:

# Key (🗹)

To use a key, select the corresponding check box.

#### Value

To set the value of the selected key, double-click the corresponding cell under the **Value** column and select the appropriate value from the drop down.

ок (🗹)

To save the database options, click  $\checkmark$ .

# SAP

You can create SAP environment by providing the necessary connection parameters.

Before creating a SAP environment, you should take a note of the following:

- Privileges
- Prerequisites
- JDBC driver details
- TLS connection details
- JDBC connection parameters

#### **Privileges**

Privileges given to service account:

- User type = System
- User group = SUPER
- Authorization profile = S\_DDIC

## **Prerequisites**

Prerequisite steps for establishing successful connection:

- Creation of dedicated service account for erwin with Metadata read-only privileges in SAP system
- Open Firewall connection between SAP and erwin DI Suite application server
- Get the SAP System Number and Client details

#### **JDBC Driver Details**

The SAP JCO driver is not packaged with erwin DI Suite application. Hence, customer must get the JCO driver from their respective SAP team and deploy the same in erwin application server.

#### The following sapjco files are required:

- Sapjco.jar
- Sapjco3.dll

#### Location to place these files

- Copy sapjco.jar into webinf/lib folder
- Copy sapjco3.dll copy into windows/system32 folder

**Note**: The tool connects to the SAP system directly using SAP JCO drivers and not to SAP backend database.

#### **TLS Connection Details**

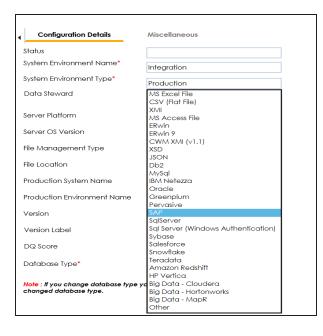
In order to use SSL with the JCO, we will need to:

- Set up the SAP system for SSL (SNC setup)
- Create a certificate (X509) for the user
- Pass the user as \$X509CERT\$ (check JCO doc)
- Pass some key from the cert as passwd in the JCO

### **JCO Connection Parameters**

To enter SAP connection parameters, follow these steps:

1. Select Database Type as SAP while creating the environment.



The following connection parameters appear on the right-hand side.

System Number*		24
Client*		800
P Address/Host N	ame*	10.1.50.59
Field Delimiter*		, [Comma]
User Name*		sapuser
Password*		
		Save Password
Delete and Reloa	d	
Existing CSV File		
CSV File		n-Drop files here or

2. Enter appropriate values in the fields (connection parameters). The fields marked with a red asterisk are mandatory.

Field Name	Description
System Number	Specifies the SAP System Instance Number (range 0-99).
System Number	For example, 24.
Client	Specifies the SAP Client number (range 000-999).
Client	For example, 800.
IP Address/Host	Specifies the IP address or server host name of the database.
Name	For example, 192.168.100.200
User Name	Specifies the SAP (Service account) username.
User Name	For example, sapuser.
Password	Specifies the SAP (Service account) password.
Passworu	For example, goerwin@1.
CSV File Upload	Browse the CSV file which contains name of SAP tables to be har-
	vested.
Field Delimiter	Select the required delimiter.
	For example: , [Comma].

# **Assigning Users**

You can assign users to an environment and provide them read / write access to all the tables and columns in the environment.

To assign users to environments, follow these steps:

1. Right-click the desired environment.



2. Click Assign Users.

ŧ	Assign/Unassign User	User ID	User Full Name	Assigned Roles
1		mboggs	Mike Boggs	ETL Developer
2		Cyrus	Cyrus	Mapping Designer
3		ks123	kartik sridhar	Mapping Designer
4		abc	qwerty	Mapping Admin
5		janedoe	Jane Doe	Power User
6		public	public - Default System User	public
7		mread	mread	METADATA_READ
8		sconnery	Sean Connery	Power User
9		new_user_id	Robert Wilson	Mapping Admin
10		jdenver	John Denver	Power User

3. Select the check box to assign the user to the environment.

Note: You can select multiple check boxes.

4. Click

The users are assigned to the environment.

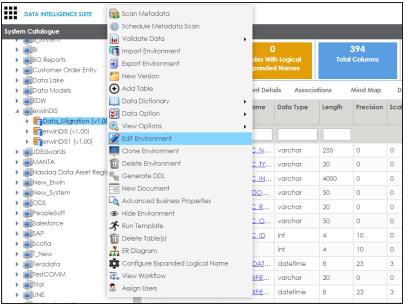
# **Managing Environments**

Managing Environments involves:

- Editing environments
- Importing metadata from different environments
- Deleting environments

To edit environments, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, right-click the desired environment.



3. Click Edit Environment.

The Edit Environment page appears.

Edit Environment				_ 🗆 ×
			<b>&gt;</b>	N 💾 🗙
Configuration Details	Miscellaneous			,
Status	Pending Review			· · · ·
System Environment Name*	Data_Migration	Driver Name*	com.microsoff.sqlserver.jdbc.SQLServe	
System Environment Type*	Production	DBMS Name/DSN*	ErwinDIS931	
Data Steward	jdoe 🔻	IP Address/Host Name*	localhost	
Server Platform	🗹 Apply To All Tables & Columns	Port	1433	
Server OS Version		User Name*	sa	
File Management Type		Password*		
File Location			Save Password	
		Uri*	jdbc:sqlserver://localhost:1433;databo	
Production System Name	erwinDIS 🔹	DBMS Instance Schema	,	
Production Environment Name	erwinDIS 🔻	Connection Pool Type*	DBO	9
Version	1.00	Number of Partitions*	HIKARICP V	
Version Label			2	
DQ Score	Select DQ Score	Minimum Connections Per Partitions*	3	
Database Type*	SglServer 🔻	Maximum Connections Per Partitions*	5	
		Options		tÔ:
Note : If you change database type changed database type.	your data(tables) will be considered as			Ť
- "				

- 4. Update the environment.
- 5. Click

The environment is updated.

**Note**: Status of an environment is displayed according to the workflow assigned to the environment. For more information on assigning workflow to environments, refer to the <u>Managing Metadata Manager Workflows</u> section.

You can update an environment by importing metadata from another environment. You can also create a version of the environment while importing the metadata.

To import metadata from an environment, follow these steps:

1. Right-click the desired environment.



2. Click Export Environment.

The environment is exported in .amp format.

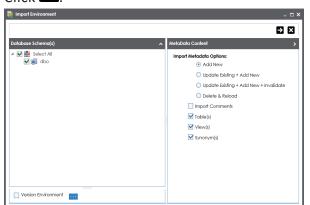
3. Right-click the desired environment where you want to import it.



4. Click Import Environment.



- 5. Drag and drop or use 😑 to browse the exported .amp file.
- 6. Click 1



7. Select Schemas and appropriate import metadada options.

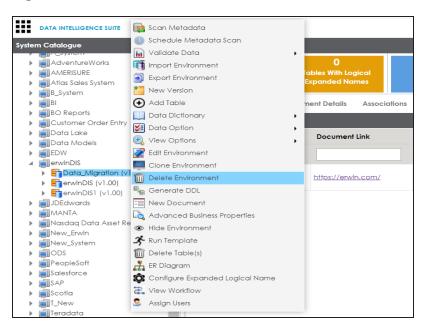
**Note**: Select the **Version Environment** check box to create version of the environment.

- 8. Click **>**.
- 9. Select the tables and click

The environment is updated.

To delete environments, follow these steps:

1. Right-click the desired environment.



2. Click Delete Environment.

The Delete Environment page appears.

Delete Environment _	<b>×</b>
Do you want to Delete?	
<ul> <li>Current Version</li> </ul>	
<ul> <li>All Versions</li> </ul>	

3. Use the following options:

### **Current Version**

Select Current Version to delete the current version.

**All Versions** 

Select All Versions to delete all versions of the environment.

4. Click 🛗.

Warning message appears.

5. Click Yes.

The environment's current or all versions are deleted depending on the selection.

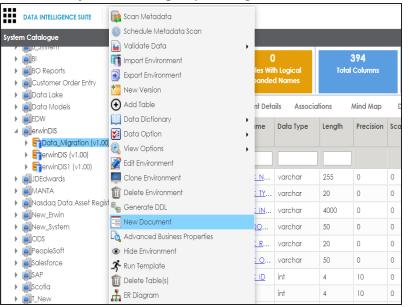
# **Uploading Documents**

You can upload documents at environment level and specify:

- Document name
- Document owner
- Document link
- Document status

To upload documents at environment level, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, right-click an environment.



3. Click New document.

The Environment Documents page appears.

Environment Documents		Li ×
Document Name*		
Document Owner Document Object	Drag-n-Drop files here or click to select files for upload.	
Document Link		
Description	⋧ <u>⋏</u> ⊎ в∡⊻ ≋≡≡≡≒≡≡	<b>*</b>
		Ţ
Approval Required Flag		

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
	Specifies the name of the physical document being attached to the
Document Name	environment.
	For example, Source Environment Details.
Document	Drag and drop document files or use ≐ to select and upload doc-
Object	ument files.
Document	Specifies the document owner's name.
Owner	For example, John Doe.
	Specifies the URL of the document.
Document Link	For example, https://drive.google.com/file/l/2sC2_SZIyeFKI7OOn-
	b5YkMBq4ptA7jhg5/view
	Specifies the description about the document.
Description	For example: The document has information about the environment
	details.
Approval	Specifies whether the document requires approval.
Required Flag	Select the Approval Required Flag check box to select the doc-
	ument status.

Field Name	Description		
	Specifies the status of the document.		
Document Status	For example, In Progress.		
	This field is available only when the <b>Approval Required Flag</b> check		
	box is selected.		

# 5. Click

The document is uploaded and saved under the Documents tab.

DATA INTELLIGENCE SUITE Metadata Manag	ler					🏚 Search		९ 🗘	0 🖻 🖪
System Catalogue < Statis	stics								^
BI     BO Reports     Customer Order Entry	50 Total Tables	0 Tables With Logical Expanded Names	<b>394</b> Total Columns	0/394 Columns With Log Expanded Nam		55/394 tal Primary Key Columns	48/3 Total Fore Colu	ign Key	
	Data Dictionary Env	ironment Details Associ	ations Mind Map	Data Quality	Documents	Impact as Sour	ce Impacta	Target Extend	ed Properties
EDW     Envir	onment Documents								
	Document Link	Document Status	Document Owner	Intended Use Description	Created By	Created Date	Modified By	Modified Date	Options
JDEdwards									
MANTA     Masdaq Data Asset Register     New_Erwin	https://erwin.com/	Ready For Review	Samuel	Document refers to the details of data migration project.	Administrator	2019-12-31 16:27:53.167	Administrator	2019-12-31 16:27:53.167	🔁 🖌 🗙
Breadstate     Best Control of the service of									

6. Use the following options under the **Options** column:

### Preview

You can preview the document for your information. To preview the document, click 2.

Edit 🖍)

To edit the document details, click 🖍.

Delete (📧)

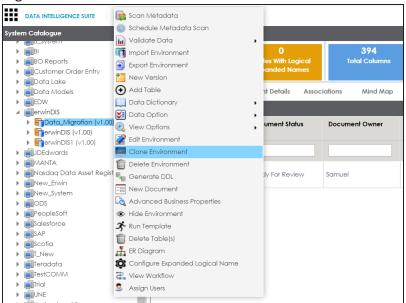
To delete the uploaded document, click **X**.

# **Cloning Environments**

You can clone an environment under a system and use the same or different connection parameters in the cloned environment. The cloned environment is saved under the system.

To clone environments, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, expand the required system.
- 3. Right-click an environment.



4. Click Clone Environment.

The New Environment Cloning page appears.

💻 New Environment Cloning			*	_ = ×
Configuration Details	Miscellaneous			,
System Environment Name* System Environment Type*	Data_Migration1 Production	Driver Name* DBMS Name/DSN*	com.microsoft.sqlserver.jdbc.SQLServe	
Data Steward	jdoe 🔻	IP Address/Host Name*	localhost	
Server Platform	🗹 Apply To All Tables & Columns	Port	1433	
Server OS Version		User Name*	sa	
File Management Type		Password*	•••••	
File Location		Url*	Save Password	
Production System Name	erwinDIS 🔹	DBMS Instance Schema	jdbc:sqlserver://localhost:1433;databc	
Production Environment Name	erwinDIS 🔹	Connection Pool Type*		0))
Version	1.00	Number of Partitions*		
Version Label		Minimum Connections Per Partitions*	3	
DQ Score	Select DQ Score 🔹	Maximum Connections Per Partitions*	5	
Database Type*	SqlServer 🔻	Options		ŵ
				•

5. 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
Custom Fault	Specifies the unique name of the environment.
System Envir- onment	For example, EDW-Test.
Name	For more information on naming conventions, refer to the <b>Best</b>
	Practices section.
System Envir-	Specifies the type of the environment.
onment Type	For example, development, test, or production.
	Specifies the name of the data steward responsible for the envir-
	onment.
Data Steward	For example, Jane Doe.
	For more information on configuring data steward list, refer to the <u>Con</u> -
	figuring Data Stewards topic.
Server Plat-	Specifies the server platform of the environment.
form	For example, Windows.
Server OS	Specifies the OS version of the environment's server.

Field Name	Description
Version	
File Man-	Specifies the file management system (if the environment is a file-
agement	based source).
Туре	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	Specifies the system name being associated with the environment as
System	the production system.
Name	For example, Enterprise Data Warehouse.
	Specifies the version label of the environment to track change history.
Version Label	For example, Alpha.
	For more information on configuring version display, refer to the <u>Con</u> -
	figuring Version Display of the Environments topic.
	Specifies the overall data quality score of the environment.
DQ Score	For example, High (7-8).
	For more information on configuring DQ scores, refer to the <u>Con</u> -
	figuring Data Profiling and DQ Scores topic.
	Specifies the database type.
	For example, Sql Server.
Database	Select the type of database from where you wish to scan metadata.
Туре	Depending upon your choice of database type you need to provide addi-
	tional fields (connection parameters) appearing on the right hand side.
	Note: There are no additional fields for MS Excel File, and XSD.

6. Click  $\bigotimes$  to test the connection.

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

7. Click 💾.

The environment is cloned and the cloned environment is saved under the system.

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

# Viewing ER Diagram

You can view entity relationship (ER) diagram at environment level and export it in .jpg format.

Note: You can view ER diagram after scanning or importing metadata in an environment.

To view entity relationship diagram, follow these steps:

1. Under the System Catalogue pane, right-click an environment.



2. Click ER Diagram.

ER-Diagram	_ a X
erwinDIS $ ightarrow$ Data_Migration (v1.01)	Export Image
	^
dbo ADS_WORKFLOW_STAGE	
DESCRIPTION (varchar, 4000,0,0)     E     CONTRACT, 2000,0,0     E	
dbo.AD5_MODULES	
dbo.ADS_WORKFLOW_STAGE_ROLE ▲         ① MODULE_NAME (varchar_255,0,0)                𝒫 WFS_ID (bigint.80,19)          ▲	
P ROLE_ID (varchar, 100,0,0)	
	dbo.ADS_WORKFLOW_TRIGGER_ACTION
dbo.ADS_WORKFLOW_FOLDER	WFTA_ID (bigint,8,0,19)
dbo.CSM_MAP_CODESETS	NAME (varchar,255,0,0)     TITLE (varchar,255,0,0)
CSM_IMAP_CODESETS_ID (bigint_80,19)	DESCRIPTION (unrelian 4000.0.0)
CSM_MAP_ID (bigint,8,0,19)     dbo.CSM_CODESET_ID (bigint,8,0,19)     dbo.CSM_CODESET_PUBLISH_HISTORY	ſ
CSM_CODESET_ID (bigint,8,0,19)     GSM_CODESET_VERSION (decimal,9,2,16)     dbo.CSM_CODESET	▲ U

3. Click Export Image to download ER diagram in .jpg format.

The ER diagram is exported.

# **Viewing Workflow Logs**

You can view workflow logs of environments in the Metadata Manager.

It involves viewing:

- Current workflow log status of an environment
- Users and roles assigned to all the stages of the workflow
- Comments entered by users while moving the object to the next stage of the workflow

You can also export the workflow log image.

To view workflow log of environments in the Metadata Manager, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Expand the desired system.
- 3. Click the desired environment.

The following page appears.

stem Catalogue 🗸	Stati	stics									
Sensitive Data Metadata Metadata Metadata PrwinDIS Servin DIS (v1.00)		50 Total Tables		0 es With Logical unded Names	<b>390</b> Total Columr	ns Colum	0/390 ns With Logical nded Names	55/390 Total Primary Columns			
	۹ <sup>n</sup>	ents Impact	as Source	Impact as Target	Extended Proper	rties Scheduled	Jobs Confi	gure Extended Prop	erties	Workflow L	og
	#	Table Name	Table Type	Logical Table Name	Table Expanded Logical Name	Table Associated Term	Table Workflow Status	Column Name	Data Type	Length	Precisi
	1	dbo.ADS_ASS	TABLE				Draft	D	bigint	8	19
	2	dbo.ADS_ASS	TABLE				Draft	SOURCE OBJE	bigint	8	19
	3	dbo.ADS_ASS	TABLE				Draft	SOURCE OBJE	bigint	8	19
	4	dbo.ADS_ASS	TABLE				Draft	TARGET OBJE	bigint	8	19
	5	dbo.ADS_ASS	TABLE				Draft	TARGET OBJE	bigint	8	19
	6	dbo.ADS_ASS	TABLE				Draft	RELATIONSHIP	bigint	8	19
	7	dbo.ADS FORM	TABLE				Draft	<u>F ID</u>	bigint	8	19
	8	dbo.ADS_FORM	TABLE				Draft	FORM NAME	varchar	250	0
	9	dbo.ADS_FORM	TABLE				Draft	DESCRIPTION	varchar	4000	0

### 4. Click Workflow Log.

The current workflow log status of the environment is shown.

DATA INTELLIGENCE SUITE	Metadata N	Nanager			4	Search	९ 🏚	0	8
System Catalogue	<	Statistics							^
<ul> <li>Sensitive Data</li> <li>Metadata</li> <li>merwinDIS</li> <li>merwin_DIS (v1.00)</li> </ul>		50 Total Tables	0 Tables With Logical Expanded Names	<b>390</b> Total Columns	0/390 Columns With Logical Expanded Names	55/390 Total Primary Key Columns			* •
		nents Impact as S	ource Impact as Target	Extended Properties	Scheduled Jobs Cont	igure Extended Properties	Workflo	w Log	•
		Metadata_Manager_WF →	Metadata Scan		Collapse Roles Co	llapse Users Expand Use	rs & Roles	Export Im	iage
		On Create		ci	Review	First Approval			<b>1</b>

### Note: The current workflow stage blinks in the diagram.

- 5. To view the user and the comments entered by the user while moving it to the next stage, hover over *Solare*.
- 6. To view users and roles assigned to all the stages, click **Expand Users and Roles**.
- 7. To download the workflow log image, click **Export Image**.

# **Associating Environments**

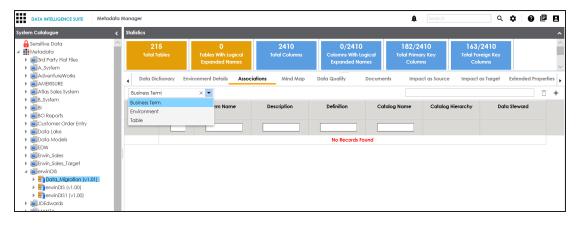
You can associate environments with business assets, systems, environments, tables, and columns. You can also view mind map and association statistics.

You need to ensure that:

- Business assets are enabled. You can add new business assets and enable them in the Business Glossary Manager Settings.
- Relationship between environment and the asset type is defined. You can define associations and relationships in the Business Glossary Manager Settings.

To associate environments with asset types, follow these steps:

- 1. Under the **System Catalogue** pane, click the desired environment and click the **Associations** tab.
- 2. Select the asset type from the drop down.



3. Click +.

						Save Cano	el			
Current	Context:	Data_Migrat	ion							
Current	Context Type:	Environment	Environment Is associated with							
Relation	ship Name:	is associate								
Search (	 (partial matches):									
	Term Name	Description	Definition	Cataloa Name	Cataloa	Data Steward				
	Territoria	Description	Deminon	calaiog name	Hierarchy	balablemala				
	3rd Party Preference Option Code		Records the option the Customer has chosen not to be offered products from 3rd Party's e.g. selling	Customer Management	Customers Business → Customers Business As Is → Information → Customer Management	janedoe				
	44900		Incision and drainage of appendiceal abscess; open	DATA ELEMENTS	NASDAQ HEALTHCARE - IMP 1 → DATA ELEMENTS	S. N/A				
			Incision and		NASDAQ	-				

4. Select the Relationship Name, and the asset.

### 5. Click Save.

The asset is added to the environment.

DATA INTELLIGENCE SUITE Metadata	a Manage	r					ê Sear	ch Q	* 0 8 8
System Catalogue 🗸	Statisti	CS							
Sensitive Data  Metadata  Sensitive Party Flat Files  Sen		215 Total Tables		0 es With Logical anded Names	2410 Total Columns	0/2410 Columns Wilh Logical Expanded Names	182/2410 Total Primary Key Columns	163/2410 Total Foreign Key Columns	
AdventureWorks     AMERISURE     Atlas Sales System	•	Data Dictionary	Environment	Details Associa	tions Mind Map	Data Quality Docume	ents Impact as So	urce Impact as Target	Extended Properties
B_System			•						î +
<ul> <li>BI</li> <li>BO Reports</li> <li>Customer Order Entry</li> <li>Data Lake</li> </ul>		Actions	Relationshir Name	Term Name	Description	Definition	Catalog Name	Catalog Hierarchy	Data Steward
Data Models     EDW     Erwin_Sales     Erwin_Sales_Target		/ 1	is associated with	3rd Party Prefere Option Code		Records the option the Customer has chosen not to be offered products from 3rd Party's e.g. selling	Customer Management	Customers Business → Customers Business As Is → Information → Customer Management	janedoe
Erwin_Sales_Target     eminols     eminols     effection(v1.01)     effection(v1.01)     effection(v1.00)     effection(v1.00)						Party's e.g. selling		Management	janedoe

6. Use the following options under **Actions**:

# Edit Association (

Use this option to edit the association.

### Delete Association ( $\overline{\mathbf{D}}$ )

Use this option to delete the association.

To view mind map, follow these steps:

### 1. Click the Mind Map tab.

DATA INTELLIGENCE SUITE Metad	data N	anager						A Search		Q	¢	01	9 8
System Catalogue	<	Statistics											^
Sensitive Data  Metadata  Matadata  Matadata  A_System	^	215 Total Tables	0 Tables With Logico Expanded Names		2410 Total Columns	0/24 Columns Wil Expanded	th Logical	182/2410 Total Primary Key Columns	163/2410 Total Foreign P Columns				~
AdventureWorks     AMERISURE		Data Dictionary E	nvironment Details A	Associations	Mind Map	Data Quality	Document	s Impact as Source	Impact as Targ	get	Extende	ed Prop	erties ,
		Data_Migration								Rese	t	Export	
BI   BO Reports	L								Settings Filter				<u> </u>
Customer Order Entry     Data Lake	L								Object Properti	es.			-
Data Models      EDW	L								Data_Migra			6	^
Envin_Sales		U							Object Path		erwinDI	3	
<ul> <li>Erwin_Sales_Target</li> <li>erwinDIS</li> </ul>									Object Type		Environr	ment	
Data_Migration (v1.01)		Data_Migration	BT BT	Custom	ers Business	Customore	s Business As	Is hformation	Association Sta	tistics			
<ul> <li>EperwinDIS (v1.00)</li> <li>EperwinDIS1 (v1.00)</li> </ul>		Data_Wigration		Custom	ers Dusiriess	Customers	s dusiness As		Legend	-	<u> </u>		
JDEdwards     JMANTA     Nasdag Data Asset Register	l								<ul> <li>Environme</li> <li>Business</li> </ul>				
▶ 🗐 New_Erwin													
Image: System     Image:													
Peoplesott     Salesforce     SAP									Relationship Ca	ontext			
<ul> <li>Scotia</li> </ul>	$\sim$	<						>	Overview				^

2. Use the following options to work on the mind map:

### Expand (+) / Collapse (-)

To drill the mind map further, hover over the nodes, use (-) to collapse and use (+) to expand.

### Export

Use this option to download the mind map to .xlsx format or .jpg format.

#### Settings

Layout: Select the layout as normal or orthogonal.Custom Relations: Select the check box to display custom relations.Show Relationships: Select the check box to display relationships.

### Filter

Use this option to filter components of the mind map based on asset types or relationships.

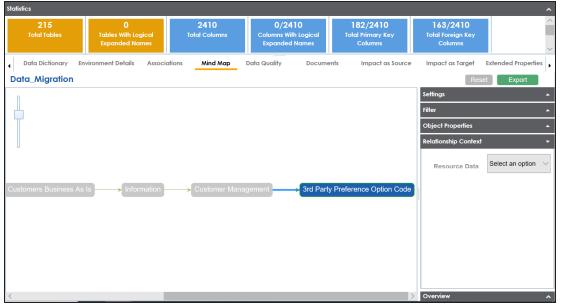
### **Object Properties**

It displays the association statistics of the environment.

### **Relationship Context**

Use this option to view the relationship context as defined under the **Extended Properties** in Business Glossary Manager Settings for the relationship between the environment and the asset type.

To view the relationship context, click the connection between the asset type and the environment.



### Overview

Use this option to view the overview diagram of the mind map.

# **Configuring Business Properties**

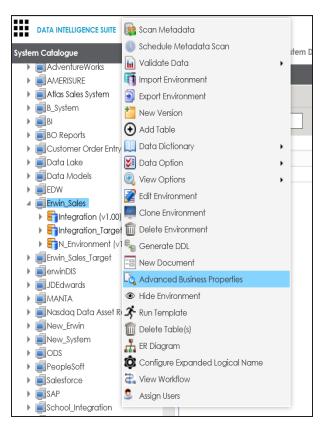
You can configure business properties of all the tables and columns under an environment.

You can also configure business properties at table level and update business properties of a table and business properties of its columns.

**Note**: You can configure business properties only after importing/scanning metadata into an environment.

To configure business properties at environment level, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, right-click an environment.



3. Click Advanced Business Properties.

The Advanced Business Properties page appears.

1	System / Environment / Table / Column Name	System Description	Business Purpose	Intended Use	Table Definition	Table Comments	Logical Table Name	Table Class
	4 Sintegration (1.00)							
					Tab Def	Sales resource 2020	Resource	Table_Class
	RESOURCEEMAIL							

- 4. Double-click cells to enter business properties of tables and columns.
- 5. Click to apply changes.
- 6. Click 💾.

The business properties of all the tables and columns under the environment are updated.

To configure business properties at table level, follow these steps:

- DATA INTELLIGENCE SUITE Metadata Manager System Catalogue Columns Table Prop 4 BO Reports Customer Order Entry Technical Properties 🕨 🗐 Data Lake Table Name ▶ 🗐 Data Models ▶ 🗐 EDW System Name ▲ Intervin\_Sales ▲ 🛐 Integration (∨1.00) Synonym Reference dbo.RM\_RESOURCE Environment (v1.00) 🛄 Data Dictionary Þ Erwin\_Sales\_Target Column Ordering Þ ▶ ■erwinDIS 🔩 Generate DDL JDEdwards Advanced Business Properties ▶ ■ MANTA 🕨 🗐 Nasdaq Data Asset Register 🛠 Run Template ▶ 🗐 New\_Erwin 前 Delete Table(s) New\_System 🚉 View Workflow Image: Table Class PeopleSoft ▶ **■**Salesforce
- 1. Under the **System Catalogue** pane, right-click a table.

2. Click Advanced Business Properties.

The Advanced Business Properties page appears.

			Intended Use	Table Definition	Table Comments	Logical Table Name	Table Class
D							
Integration (1.00)							
				Tab Def	Sales resource 2020	Resource	Table_Class
RESOURCENAME							
RESOURCEDESC							
RESOURCEEMAIL							
	Integration (1.00)  Indo.RM_RESOURCE  Integration (1.00)  RESOURCED  RESOURCEDAME  RESOURCEDESC  RESOURCEDESC  RESOURCECELLPHONE  RESOURCECOMPHONE	Integration (1.00)  Inte		Integration (1.00)     Image: Constraint of the second of th	Integration (1.00)     Image: Constraint of the constraint	Intercation (1.00)     Image: Constraint of the constraint	Intercation (1.00)     Intercation (1.00)     Intercation (1.00)     Intercation (1.00)     Intercation (1.00)     Intercation (1.00)     Resource (

- 3. Double-click cells to enter table and column properties.
- 4. Click 💾 to apply changes.
- 5. Click 💾.

The business properties of the table and its columns are updated.

# **Configuring Expanded Logical Name**

You can update the expanded logical name for multiple tables/columns by scheduling a configuration job. The job updates the expanded logical name based on the table/column name, associated business term's name, and the associated business term's definition.

**Note**: You should configure expanded logical name of tables and columns after scanning metadata.

You can run the job at both, system and environment levels:

- **System level**: The expanded logical name is applied to all the tables and columns under the system. This includes all the environments under the system.
- Environment level: The expanded logical name is applied to all the tables and columns under the environment.

For example, consider a scenario where you want to schedule a job to configure the expanded logical name of a table, RM\_Resource and a column, Resource\_ID. The parameters of the job are a business term catalog that has a business term, Resource, its definition, Sales Representative, and a splitter, Underscore (\_). Refer to the following table to understand the parameters and their values:

Entity	Value	Comment
Splitter (spe- cified while scheduling the job)	_(Underscore)	
Table Name	RM_Resource	Here, the part after the underscore (splitter), Resource, matches the Business Term. Therefore, it will be replaced with the business term definition and the part before the under- score, RM, will be retained in the expanded logical name.
Column Name	Resource_ID	Here, the part before the underscore, Resource, matches with the Business Term. Therefore, it will be replaced with the busi- ness term definition and the part after the underscore, ID will be retained in the expanded logical name.
Business	Resource	This should match with a part of the table and column names

Entity	Value	Comment
Term		above.
		In the updated expanded logical name, this will replace the part of the table/column name that matches the business term name. That is:
Business Term Defin- ition	Sales Rep- resentative	<ul> <li>For the table, RM will be retained and Resource will be replaced with Sales Representative.</li> </ul>
		<ul> <li>For the column, ID will be retained and Resource will be replaced with Sales Representative.</li> </ul>
Expanded Logical Name	<blank></blank>	Expanded logical name is formed from the business term defin- ition and part of table or column names.

After the job runs successfully, the expanded logical name of the table and column is updated as mentioned in the following table:

Entity	Expanded Logical Name	Comment
Table	RM Sales Rep-	Here, RM retained from the table name and Sales Representative
Table	resentative	is added from business term definition.
Column	Sales Rep-	Here, ID is retained from the column name and Sales Rep-
Column	resentative ID	resentative is added from business term definition.

To configure expanded logical name, follow these steps:

1. Right-click a system or environment.



2. Click Configure Expanded Logical Name.

The Configure Expanded Logical Name page appears.

Configure Expanded Logical Name	_ 🗆 🗙
Catalogs	
Business Terms     Business and Management (54)     Catalog_Name (2)     Cutalog_Name (2)     Cutalog_Name (2)     Cutalog_Name (2)     Cutalog_Name (2)     Cutalog_Name (2)     Cutalog_Name (2)     NASDAQ HEALTHCARE - IMP 1 (19)     NASDAQ HEALTHCARE - IMP 2 (19)     New_Catalog (3)     NSDQ OPT 3 (2)	
Splitter	
_(underscore)	
Job Name*	
Administrator1580049338831	
Interval	
Once 💌	
Schedule Job On* 📀 Local 💿 Server	
01-26-2020 20:05	$\sim$

3. Select or 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
Catalogs	Select the catalog containing the desired business term.
Splitter	Select appropriate splitter based on the table name or column name.
Job Name	A default job name is autopopulated. You can modify it and enter a job name.
Interval	Select an interval of the job. Interval sets the frequency of the job. For example: If you set the interval every week then the job will be executed every week.
Local or Server	<ul> <li>Select the machine whose clock decides the time of the scheduled scan.</li> <li>Local: Refers to your local machine.</li> <li>Server: Refers to the machine where erwinDIS has been deployed.</li> </ul>
Schedule Job On	Select date and time of the execution of the job.
Notify Me	Turn the <b>Notify Me</b> to <b>ON</b> to receive a notification email about the sched- uled job.
Notification Email	This field is autopopulated with your email ID. You receive email noti- fications about the scheduled job from the Admin Email ID, configured in the Email Settings. For more information on configuring Admin Email ID, refer to the <u>Configuring Email Settings</u> topic.
CC List	Enter a comma-separated list of email IDs that should receive the job notification.

# 4. Click 💾.

The job is scheduled and added to the Scheduled Jobs list on the **Scheduled Jobs** tab.

DATA INTELLIGENCE SUITE Metad	ata Manager	Dictionary Sys	stem Details Asso	ciations M	ind Map	System Docum	ents Extended		rch gure Extended	Properties Sch	<b>a</b> duled Jo	obs
Metadata	^ Schedule	d Jobs										
A_System     A_System     AdventureWorks	ıb Type	Environment Name	Scheduled Objects	Previous Fire Time	Next Fire Time	Job State	Created By	Created Date Time	Last Modified By	Last Modified Date Time	Edit	Dele
AMERISURE     Atlas Sales System												
B_System     BI     BO Reports	tadata janded jical me	Erwin_Sales	All Environments		01-27-2020 12:04	NORMAL	Administrator	2020-01-27 12:03:11.498	Administrator	2020-01-27 12:03:11.498	1	Í
Customer Order Entry     Data Lake												
<ul> <li>Data Models</li> <li>EDW</li> </ul>												
Erwin_Sales												
✓ ■ Integration (v1.00) Integration (v1.00)												
Entegration_Target (v1.00)       Fintegration_Target (v1.00)												

You can edit the job using  $\checkmark$  or delete it using  $ar{\mathbbmath{\mathbbm m}}$  .

The job is executed at the scheduled time and the expanded logical names of tables and columns are updated.

Columns Table Prope	rties Associations	Mind Map	Data Quality	Documents	Extended Properties	Indexes	Impact Analysis	Forward Lineage
- Technical Properties								
Table Name	dbo.RM_RESOURCE				Environment Name	Integra	tion	
System Name	Erwin_Sales				No of Rows	4		
Synonym Reference					FileType			
					Workflow Status	Draft		
- Business Properties								
Data Steward	janedoe				Logical Table Name	Resource	ce	
Table Definition	Tab Def				Expanded Logical Name	e RM Sale	es Representative	
Table Comments	Sales resource 2020				Used In Gap Analysis			
Table Class	Table_Class				Table Alias	SALESR	esource	
DQ Score	Very High (9-10)							

Column Properties	Associations Mind Map	Documents	Impact Analysis	Forward Lineage	Reverse Lineage	Extended Properties Vo	alid Values
Workflow Status	Draft						
– Business Properties —							
Data Steward	janedoe			Logical Column N	ame Res	ource ID	
Column Definition	represents resource IE	)		Expanded Logica	l Name Sale	es Representative ID	
Column Comments	Column ID as per 202	0		Used In Gap Anal	ysis 🗹		
Sensitive Data Indicator (SDI) Flag							
Sensitive Data Indicator (SDI) Classification	Confidential			Sensitive Data Ind (SDI) Description	icator	sitive Data that if compromised	с
Column Class	Column_Class			Column Alias	RES	OURCEID	
DQ Score	Very High (9-10)			Business Key Flag			

**Note**: You can use this job to update the expanded logical name only once. Alternately, you can update expanded logical names under <u>table properties</u> and <u>column</u> <u>properties</u>.

### Scanning and Managing Metadata

Metadata Manager enables you to scan source and target metadata from different Databases, Data Models, Flat Files etc. Connectivity parameters are different for different data sources. You can also schedule a metadata scan and the metadata is scanned at the scheduled time.

The metadata scan adds data dictionary, table properties, and column properties which can be validated and updated. Codesets can be assigned to a column as valid values. Tables and columns can be associated with business assets, systems, environments, tables, and columns. You can also assign workflows to tables and columns using the Workflow Manager and view workflow logs.

Scanning and managing metadata involves:

- Scanning metadata from data sources
- Adding tables manually
- Deleting tables
- Scheduling metadata scans
- Updating table properties
- Updating column properties
- Validating data
- Assigning codesets to columns
- Viewing workflow logs of tables
- Viewing workflow logs of columns
- Associating tables
- Associating columns

### **Scanning Metadata**

After creating system and environment, the next logical step is to scan source/target metadata. You can also import metadata from MS Excel file, JSON, CSV (Flat File), XMI, MS Access File, and XSD.

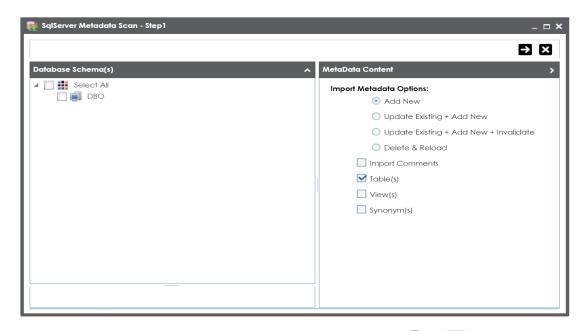
To scan source or target metadata, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the **System Catalogue** pane, expand the system created by you.
- 3. Right-click the Environment node created by you.

DATA INTELLIGENCE 🙀 Scan Metadata					Ą	Searc	h	Q	\$ 08
System Catalogue									^
Sensitive Data  Metadata  Metadata  A an A System  Metadata  Meta			0 s With Logical nded Names	<b>0</b> Total Columr	ıs		0/0 ns With Logical nded Names		* •
		Environmen Table Type	t Details Data Logical Table Name	Quality Doct Table Expanded Logical Name	uments Table Associo		act as Source Table Workflow Status	Impact as Column	Extend Data Type
BO Reports Concerning Clone Environment	P								
Data Models     Derere Erwinonmeni     Data Models     Derere Erwinonmeni     Derere Erwinonmeni     Derere Erwinonmeni     Derere Erwinonmeni									
IDEdwards     Ide Environment									
Image: System     Image: System       Image: System     I	L								
🕨 🗐 Salesforce 🛛 🧕 Assign Users									← →

4. Click Scan Metadata.

Metadata Scan-Step 1 wizard appears.



5. Select appropriate **Import Metadata Options** by selecting  $\bigcirc$  or  $\mathbf{N}$ .

Import Metadata Options	Description
Add New	This option adds new objects to the existing object list. Existing metadata is not refreshed.
Update Existing + Add New	This option adds new objects to the existing list and at the same time the existing metadata is also refreshed.
Update Existing + Add New + Inval- idate	This option adds new objects to the existing list, refreshes exist- ing and invalidate 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 check box to import comments.
Table(s)	Select the check box to import Tables.
View(s)	Select the check box to import Views.
Synonym(s)	Select the check box to import Synonyms.

Note: If you are scanning the metadata for the first time, then select Add New.

- 6. Select the appropriate **Database Schema** check box.
- 7. Click  $\blacksquare$  to move to next step.

Metadata Scan Step-2 Wizard appears. It pulls up the objects selected in Metadata Scan Step-1 like Tables, Views and Synonyms.

👽 SqlServer Metadata Scan - Step2	_ 🗆 ×
Q Q A	⋲⋓
	<u>^</u>
dbo	
Tables (175)	
▶ [1 - 50]	
► [51 - 100]	
► [101 - 150]	
▶ [151 - 175]	
ADS_WORKFLOW_ASSIGNMENT_V	
ADS_WORKFLOW_NODE_ROLE_V	
ADS_WORKFLOW_NODE_V	
ADS_WORKFLOW_STATUS_V	
APPENDED_MAP_SPEC_RCRDS_V	
IMPACT_ANALYSIS_SUMMARY_V	
MAP_SPEC_NUMLENGTH_RCDS_V	
	·

- 8. Select the objects to be imported by selecting the appropriate check box.
- 9. Click 💾.

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

You can also import metadata from:

- MS Excel File
- JSON
- CSV (Flat File)
- XMI
- MS Access File
- XSD

### **Importing Metadata from MS Excel**

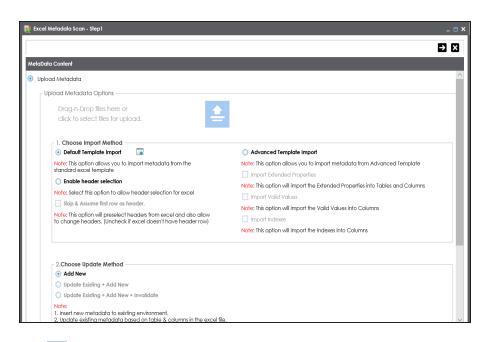
You can import metadata from MS Excel files after creating a MS Excel environment.

To import metadata from MS Excel files, follow these steps:

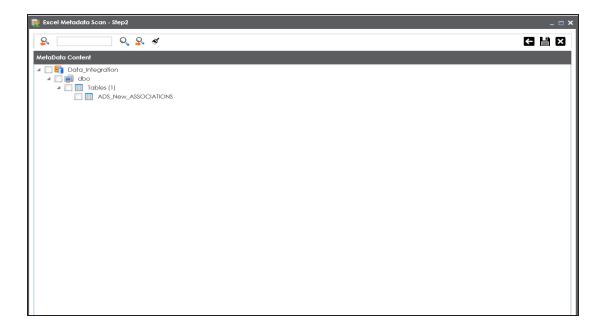
1. Under the System Catalogue pane, right-click a MS Excel environment.



2. Click Scan Metadata.



- 3. Use 😑 or drag and drop the MS Excel file.
- 4. Choose an import method.
- 5. Choose an update method.
- 6. Click **>**.



- 7. Select the tables to import them.
- 8. Click 💾.

The metadata is scanned and saved in the environment.

### **Importing Metadata from JSON**

You can import metadata from JSON files after creating a JSON environment.

To import metadata from JSON files, follow these steps:

1. Under the **System Catalogue** pane, right-click a JSON environment.



2. Click Scan Metadata.

🧱 JSON Metadata Scan -	Step1	_ 🗆 ×
JSON Schema : *	Drag-n-Drop files here or click to select files for upload.	⇒ X
Data File (JSON) :	Drag-n-Drop files here or click to select files for upload.	
O Delete & Reload	+ Add New + Invalidate	ient
Import Model Type	• Logical	

- 3. Use 📤 or drag and drop the JSON Schema file.
- 4. Use 😑 or drag and drop the Data File JSON.
- 5. Choose a scan option:

#### Add New

Select this option to insert new metadata to the environment.

#### Update Existing + Add New

Select this option to update existing metadata based on table and columns in the JSON file.

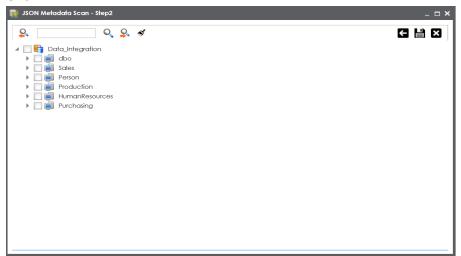
#### Update Existing + Add New + Invalidate

Select this option to update existing metadata. It will not delete the existing metadata.

#### **Delete & Reload**

Use this option to delete all business properties and data dictionary stored as metadata for this environment.

- 6. Choose the Import Model Type.
- 7. Click 之



8. Select the schema and tables to import them.

# 9. Click 💾.

The metadata is scanned and saved in the environment.

### **Importing Metadata from CSV**

You can import metadata from CSV files after creating a CSV environment.

To import metadata from CSV files, follow these steps:

1. Under the **System Catalogue** pane, right-click a CSV environment.



2. Click Scan Metadata.

🥫 CSV Metadat	a Scan - Step1	_ 🗆 ×
		→×
MetaData Cont	ent	
Delimiter File :	Drag-n-Drop files here or click to select files for upload.	
File Path(s):		
_ Scan Op	ions	
Add Ne		
	) Existing + Add New ) Existing + Add New + Invalidate	
O Delete		
	cking this will Delete All Business Properties and Data Dictionary values stored as metadata for this E	nvironment

- 3. Use 😑 or drag and drop the Delimiter File.
- 4. Enter the file path.
- 5. Choose a scan option:

#### Add New

Select this option to insert new metadata to the environment.

#### Update Existing + Add New

Select this option to update existing metadata based on table and columns in the JSON file.

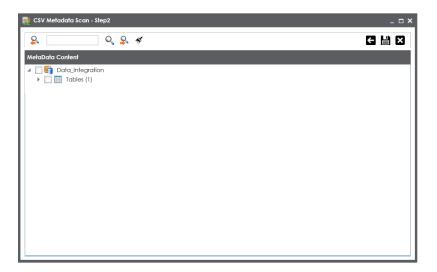
#### Update Existing + Add New + Invalidate

Select this option to update existing metadata. It will not delete the existing metadata.

#### Delete & Reload

Use this option to delete all business properties and data dictionary stored as metadata for this environment.

6. Click **D**.



- 7. Select the tables to import them.
- 8. Click 💾.

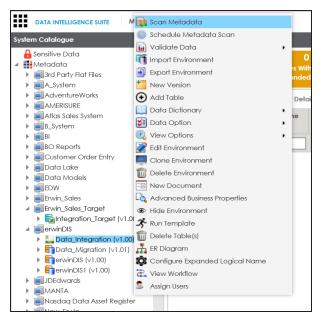
The metadata is scanned and saved in the environment.

### **Importing Metadata from XMI**

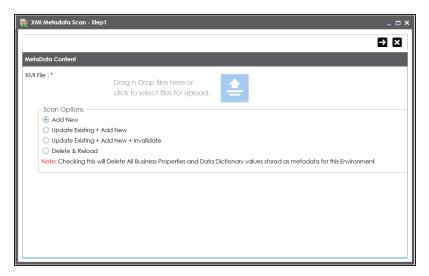
You can import metadata from XMI files after creating a XMI environment.

To import metadata from XMI files, follow these steps:

1. Under the System Catalogue pane, right-click a XMI environment.



2. Click Scan Metadata.



- 3. Use 😑 or drag and drop the XMI file.
- 4. Choose an update method.
- 5. Choose a scan option:

#### Add New

Select this option to insert new metadata to the environment.

#### Update Existing + Add New

Select this option to update existing metadata based on table and columns in the JSON file.

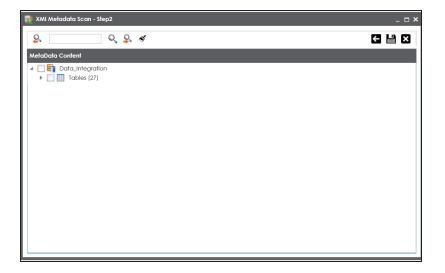
#### Update Existing + Add New + Invalidate

Select this option to update existing metadata. It will not delete the existing metadata.

#### Delete & Reload

Use this option to delete all business properties and data dictionary stored as metadata for this environment.

6. Click **>**.



- 7. Select the tables to import them.
- 8. Click

The metadata is scanned and saved in the environment.

### **Importing Metadata from MS Access File**

You can import metadata from MS Access files after creating a MS Access environment.

To import metadata from MS Access files, follow these steps:

1. Under the System Catalogue pane, right-click a MS Access environment.



2. Click Scan Metadata.

taData Content Drag-n-Drop files here or click to select files for upload.	ÐØ
Drag-n-Drop files here or	
Scan Options	
Update Existing + Add New	
O Update Existing + Add New + Invalidate	
O Delete & Reload	
Note: Checking this will Delete All Business Properties and Data Dictionary values stored as metadata for	this Environment

- 3. Use 😑 or drag and drop the MS Access file.
- 4. Choose an update method.
- 5. Choose a scan option:

#### Add New

Select this option to insert new metadata to the environment.

#### Update Existing + Add New

Select this option to update existing metadata based on table and columns in the JSON file.

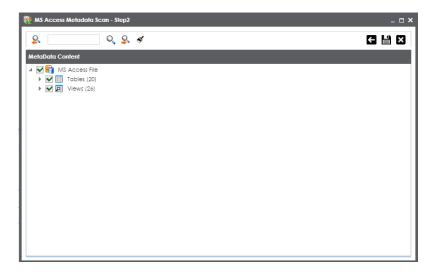
#### Update Existing + Add New + Invalidate

Select this option to update existing metadata. It will not delete the existing metadata.

#### Delete & Reload

Use this option to delete all business properties and data dictionary stored as metadata for this environment.

6. Click **>**.



- 7. Select the tables to import them.
- 8. Click 💾.

The metadata is scanned and saved in the environment.

### **Importing Metadata from XSD**

You can import metadata from XSD files after creating a XSD environment.

To import metadata from XSD files, follow these steps:

1. Under the **System Catalogue** pane, right-click a XSD environment.



2. Click Scan Metadata.

XSD Metadata Scan - St	ep1	_ ¤ ×
Metadata File (XSD) : *	Drag-n-Drop files here or click to select files for upload.	
Data File (XML) :	Drag-n-Drop files here or click to select files for upload.	<b></b>
O Delete & Reload	+ Add New + Invalidate	Dictionary values stored as metadata for this Environment

- 3. Use 😑 or drag and drop the Metadata File with .xsd extension.
- 4. Use 😑 or drag and drop the Data File with .xml extension.
- 5. Choose a scan option:

#### Add New

Select this option to insert new metadata to the environment.

#### Update Existing + Add New

Select this option to update existing metadata based on table and columns in the JSON file.

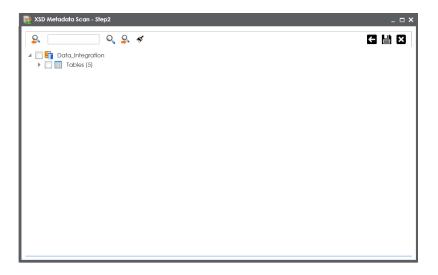
#### Update Existing + Add New + Invalidate

Select this option to update existing metadata. It will not delete the existing metadata.

#### Delete & Reload

Use this option to delete all business properties and data dictionary stored as metadata for this environment.

6. Click **>**.



- 7. Select the tables to import them.
- 8. Click 💾.

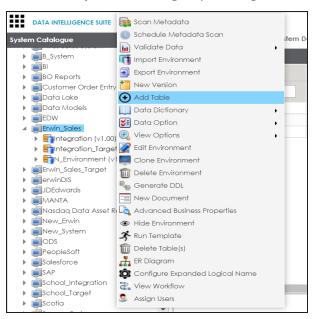
The metadata is scanned and saved in the environment.

### **Adding Tables Manually**

You can add tables in an environment manually and enter technical and business properties of a table. You can also use User Defined Fields to enter additional properties of a table. UI labels of user defined fields can be configured in Language Settings.

To add tables in environments manually, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, right-click an environment.



3. Click Add Table.

The Add New Table page appears.

Technical Properties -			<u>^</u>
able Name *		Environment Name Integration	
System Name	Erwin_Sales	No of Rows	
Synonym Reference		FieType	
Business Properties —	-Select Data Steward-	Logical Table Name	
Table Definition		Expanded Logical Name	
Table Comments		Table Alias	
Table Class	Select 🔻	Used In Gap Analysis	
DQ Score	Select •		

4. Enter or select appropriate values in the fields. Refer to the following table for field description.

Field Name	Sub-Field	Description
	Table Name	Specifies the physical name of the table. For example, Account or Currency.
	System Name	Specifies the physical name of the system under which the table exists. For example, Enterprise Data Warehouse. It cannot be edited.
Technical Properties	Synonym	Specifies the synonym reference of the table. For example, Sales_Rep_Information. It gets its value while scanning the metadata. You cannot enter it manually.
	Environment Name	Specifies the physical name of the environment under which the table exists. It cannot be edited. For example, EDW-Test.

Field Name	Sub-Field	Description
	No of Rows	Specifies the total number of rows in the table.
	INO OF ROWS	For example, 100.
		Specifies the workflow status of the table.
		For example, draft.
	Workflow Status	By default, Metadata_Manager_Default_Workflow_1 is assigned to all the tables in the Metadata Manager. You can create and re-assign a workflow to all the tables in an envir- onment. For more information on workflow status, refer to the <u>Assigning Workflows to Tables</u> topic.
		Specifies the name of the data steward responsible for the table.
	Data Ste- ward	For example, Jane Doe.
Business	waru	For more information on configuring list of data stewards, refer to the <u>Configuring Data Stewards</u> topic.
Properties	Table Defin-	Specifies the definition of the table.
	ition	For example: The table contains five columns with emp ID column as the primary key.
	Table Com-	Specifies comments about the table.
	ments	For example: The table contains details of the employees.
		Specifies the table class property.
	Table Class	For more information on configuring table class, refer to <u>Con</u> - figuring Table and Column Class topic.
		Specifies the overall data quality score of the table.
	DQ Score	For example, High (7-8).
		For more information on configuring DQ scores, refer to the <u>Configuring Data Profiling and DQ Scores</u> topic.
	Logical	Specifies the logical name of the table.
	Logical Table Name	For example, if the physical name of a table is DIM_Cus- tomer, then the logical name of the table is Customer Dimen-

Field Name	Sub-Field	Description
		sion.
		Specifies the expanded logical name of the table.
	Expanded Logical Name	For example, if the physical name of a table is RM_Resource, then the expanded logical name of the table is RM Sales Rep- resentative.
	Nume	You can configure expanded logical name of tables in bulk at system and environment level.
	Used in Gap	Specifies whether the table is being used as part of a gap ana- lysis to check table usage in mappings.
	Analysis	Select the check box if the table is used in gap analysis. For more information on performing table gap analysis, refer to the <u>Performing Table Gap Analysis</u> topic.
	Table Alias	Specifies the alias name of the table. For example, Sales_Representative_Table.

## 5. Click 💾.

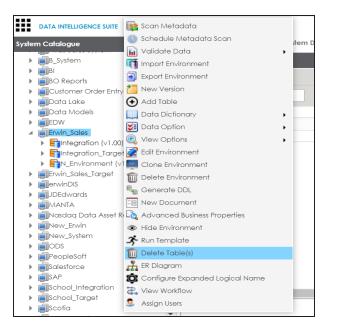
The table is added to the environment.

### **Deleting Tables**

You can delete tables from an environment after importing or scanning metadata from a data source.

To delete tables from environments, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, right-click an environment.



3. Click Delete Table(s).

The DeleteTables page appears.

4. Select tables and click 🛗.

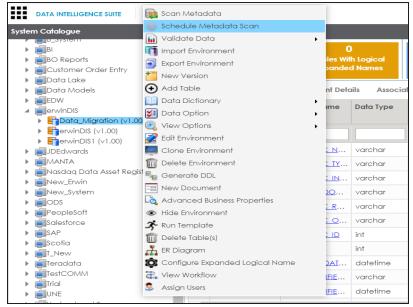
The selected tables are deleted from the environment.

### **Scheduling Metadata Scans**

You can schedule a metadata scan only if either schema is selected or the environment is scanned at least once.

To schedule a metadata scan, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, right-click an environment.



3. Click Schedule Metadata Scan.

The Job Scheduler page appears.

Iob Scheduler		_ 🗆 X
	Schedule	Cancel
Job Name* :	Administrator157189	7953959
Interval :	Once	-
Schedule Job On* :	10-24-2019 11:49	
<ul> <li>Import Metadata</li> <li>Add New</li> <li>Update Existing +</li> <li>Delete &amp; Reload</li> <li>Import Comments</li> <li>Table(s)</li> <li>View(s)</li> <li>Synonym(s)</li> <li>Version</li> </ul>	Add New	r
Notify Me : Notification Email : CC List :	ON O abc@abc.com	
Note* : Please provide	e CC List with comma	(,) separated values

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
	Specifies the job name.
Job Name	For example, Administrator1585030550001.
	This field autopopulates with a job name. You can edit it and enter a dif-

Field Name	Description
	ferent job name.
Interval	Specifies the frequency of the job.
	For example, Every Week.
Schedule	Set the date and time of the job using 🥅.
Job On	For example, 03-24-2020 11:45.
Local or Server	<ul><li>Select the machine whose clock decides the time of the scheduled scan.</li><li>Local: Refers to your local machine.</li></ul>
Server	<ul> <li>Server: Refers to the machine where erwinDIS has been deployed.</li> </ul>
	<ul> <li>Add New: This option adds new objects to the existing object list. Existing metadata is not refereshed.</li> </ul>
	<ul> <li>Update Existing + Add New: This option adds new objects to the existing list and at the same time the existing metadata is also refreshed.</li> </ul>
Import Metadata	<ul> <li>Delete &amp; Reload: This option deletes all the existing metadata and scans only the new objects that have been selected.</li> </ul>
Options	Import Comments: Select the check box to import comments.
	<ul> <li>Table(s): Select the check box to import Tables.</li> </ul>
	View(s): Select the check box to import Views.
	Synonym(s): Select the check box to import Synonyms.
	Version: Select the check box to create a new version of the envir-
	onment. To enter version label and change description, click 🛄.
	Turn the <b>Notify Me</b> to <b>ON</b> to receive a job notification.
Notify Me	For more information on configuring notifications, refer to the <u>Con</u> - figuring Notifications on Scanning Metadata topic.
Notification	This field is autopopulated with your email ID. You receive email noti-
Email	fications about the scheduled job from the administrator's email ID. For more information on configuring the administrator's email ID, refer to

Field Name	Description
	the Configuring Email Settings topic.
CC List	Enter a comma-separated list of email IDs that should receive email noti- fications about the scheduled job.
	For example, ab.dav@xyz.com, cal.kai@xyz.com

#### 5. Click Schedule.

The metadata scan is scheduled and the scheduled job appears in the **Scheduled Jobs** tab.

DATA INTELLIGENCE SUITE Metada	ıta N	lanager									Ą	Search		C	•	0	٨	8
System Catalogue	<	Statistics																^
Sensitive Data     Metadata     Ji Arty Rat Files     AcSystem	•	215 Total Tables		0 With Logical ded Names	Tot	2410 Tal Columns	0/24 Columns W Expanded	th Logical	182/2410 Total Primary Ke Columns		163/24 Total Foreig Colum	n Key		- DQ Score				* *
AdventureWorks     AMERISURE		Mind Map	lata Quality	Documents	In	mpact as Source	Impact as T	arget Exter	nded Properties S	chedule	<b>d Jobs</b> C	onfigure Exter	nded Pro	operties	W	orkflow L	og	•
<ul> <li>Atlas Sales System</li> </ul>		Scheduled Jobs																£j.
<ul> <li>Image: B_System</li> <li>Image: BI</li> <li>Image: BO Reports</li> </ul>		o Name Job	Гуре S	icheduled Objects	5	Previous Fire Time	Next Fire Time	Job State	Created By	Creat	ed Date Time	Last Modifie By		ast Modified ime	l Date	Edit	De	elete
<ul> <li>Customer Order Entry</li> </ul>																		
<ul> <li>Data Lake</li> <li>Data Models</li> <li>EDW</li> </ul>		ninistrator157786047 Meta	data Scan D	BO			01-01-2020 12:10	NORMAL	Administrator	2020-0 12:05:		Administrat		020-01-01 2:05:37.286		1		Û

6. Use the following options:

Edit 🖍

To edit the scheduled job, click 🖍.

Delete (🔟)

To delete the scheduled job, click  $\widehat{I}$ .

The metadata is scanned at the scheduled time and the environment is updated.

**Note**: If you have opted to create new version of the environment, then a new version is created and the old version is archived.

### **Updating Table Properties**

Table properties are classified as technical properties and business properties. You can also define your own new properties using user defined fields.

To update Table Properties, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the **System Catalogue** pane, click a table.

The following page appears.

Senditive Data Sendit	DQ Score
Molacida       O/8       O/8       O/8       O/8       D       D       Score         A Aystern A Aystern A Aversitie       A Aversitie       B       Columns With Logical Expanded Manual       Total Princips Key Columns       Total Foreign Key Columns       D       Score         A Adversitie       A Adversitie       Column Name       Column Column Storage Type       Length       Column Definition       Column Comments       Nalible       Primary       SDI Flag       Creat         B       Column Name       Column       Column       Column Storage Type       Length       Column Definition       Column Comments       Nalible       Primary       SDI Flag       Creat         Column Name       Column Column Column Storage Type       Length       Column Definition       Column Comments       Na       Na       Adversion         Column Name       Column Column Column Storage Type       Length       Column Definition       Column Comments       Na       Na       Adversion         Column Column Column Column Column Column Column Storage Type       Length       Column Definition       Column Na       Na       Na       Adversion         EDV       Column Mame       Column Column Column Column Storage Type       Length       Column Storage Type       Length       Column Storage </th <th>DQ Score</th>	DQ Score
Start Party Rot Files       8       0/8       0/8       0/8       100       D0 Score         Adventive Works       Adventive Works       Adventive Works       Columns With Logical Expanded Names       Total Privacy Key Columns       Total Foreign Key Columns       D0 Score	DQ Score
A.Sistem         Total Columns	DQ Score
Addessides system       Ad	s Nullable Primary SDI Flag Created By Ci
Image: Space System         Dots Unictionary           B3         Space	is Nullable Primary SDI Flag Created By Cr
B       System       I       Network       Column       Column       Column       Storage Type       Length       Column Definition       Column Comments       Nullable       Pimary       Stol Reg       Column         So Concorts       So Concorts <t< td=""><td>is Nullable Primary SDI Flag Created By Cr</td></t<>	is Nullable Primary SDI Flag Created By Cr
Bit	
Alias         Class         Name         Datatype         Find         Find         Key Find	
Customer Order Entry         Customer	
Data Models         1         NEW_MARK         Value	
EDW         2         CHANGE_USE         varchar         4000         N         N         A dm           Code_Nubrotion (v1.00)         3         OLD_NAME         varchar         100         Y         N         N         A dm           db:xP0.05C_UDCOUMEN         4         CREATED_BY         varchar         100         N         N         N         A dm           db:xP0.05C_USCDOUMEN         5         CREATED_BY         varchar         100         N         N         N         A dm           db:xP0.05C_USCDUCKT_SYNEMS         5         CREATED_DATE         dotefill         8         N         N         N         A dm	
Image: winDis         Image: State in the control of the control	N N N Administrator 20
Data Migration (V1.00)         3         OLD NAME         varchar         100         Y         N         Adm           db.0F0.JECI_DEOUCHENEN         4         CREATED_BY         varchar         100         N         N         N         Adm           db.0F0.JECI_DEOUCHENEN         5         CREATED_BY         varchar         100         N         N         N         Adm           db.0F0.JECI_ESOURCEL         5         CREATED_DATE         dateli         8         N         N         N         Adm	N N N Administrator 20
Index.PRO.RECI_DOCUMEN         4         CREATED_BY         varchor         100         N         N         Adm           Index.PRO.RECI_RESOURCE         5         CREATED_DATE         datefil         8         N         N         N         Adm	Y N N Administrator 20
do.PROJECT_SYSTEMS 5 CREATED_DATE dotefi 8 N N N Adm	N N N Administrator 20
do.PROJECT_SYSTEMS	N N N Administrator 20
I GODANGLATEURT 7 MODIFIED_DATE dotefi 8 Y N N Adm	Y N N Administrator 20
dbo.RDM_COLUMN_COD 8 FOLDER_HIERA varchar 4000 Y N N Adm	

3. Click the Table Properties tab.

The table properties page appears.

DATA INTELLIGENCE SUITE Metadata Man	ager						<b>A</b> Sear	ch	९ 🗘 (	98
System Catalogue 🗸 📢	Columns Table Prop	erties Associations	Mind Map Dat	a Quality Documents	Extended Properties	Indexes	Impact Analysis	Forward Lineage	Reverse Lineage	Tes 🖡
Sensitive Data  Metadata	Technical Properties							b	Î	*
	System Name	dbo.RDM_CHANGE_HIST	ORY		Environment Name	Data_M	igration			
Atlas Sales System     B_System     B_Signature	Synonym Reference				FileType Workflow Status					
BO Reports     Entry					worknow status	Draft				
Data Lake     Data Models     EDW	Business Properties Data Steward	jdoe			Logical Table Name					
infermination     image: state of the s	Table Definition				Expanded Logical Nam	e				
dbo.PROJECT_DOCUMEN	Table Comments				Used In Gap Analysis					
dbo.PROJECT_SYSTEMS dbo.QA_STATUS_CODE	Table Class				Table Alias					
dbo.RDM_CATEGORY	200000									
dbo.RDM_COLUMN_COD dbo.RDM_PUBLISH_ENVIR(	User Defined Fields									
dbo.RDM_REF_FOLDER_US dbo.RDM_REF_TAB_COL_\	User Defined-1			User Defi	ned-6			*		
dbo.RDM_REF_TAB_COL_\ dbo.RDM_REF_TAB_COLU dbo.RDM_REF_TAB_COLU dbo.RDM_REF_TAB_PUBLIS										
doo.RDM_REF_IAB_POOLS doo.RDM_REF_IAB_USERD doo.RDM_REF_IABLE_USEF										
				Y				Y		*

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

Field Name	Sub-Field	Description
		Specifies the physical name of the table.
	Table Name	For example, Account or Currency.
Technical Properties	System Name	Specifies the physical name of the system under which the table exists. For example, Enterprise Data Warehouse. It cannot be edited.
		Specifies the synonym reference for the table.
	Synonym	It gets its value while scanning the metadata. You cannot enter it manually.
	Reference	For example, Sales_Rep_Information.
	Environment	Specifies the physical name of the environment under which

Field Name	Sub-Field	Description
		the table exists.
	Name	For example, EDW-Test.
		It cannot be edited.
	No of Rows	Specifies the total number of rows in the table.
		For example, 100.
		Specifies the workflow status of the table.
		For example, draft.
	Workflow	By default, Metadata_Manager_Default_Workflow_1 is
	Status	assigned to all the tables in the Metadata Manager. You can
		create and re-assign a workflow to all the tables in an envir-
		onment. For more information on workflow status, refer to
		the <u>Assigning Workflows to Tables</u> topic.
	Data Ste- ward	Specifies the name of the data steward responsible for the table.
Dursinger		For example, Jane Doe.
Business Properties		For more information on configuring list of data stewards,
roperties		refer to the Configuring Data Stewards topic.
	Table Defin-	Specifies the definition of the table.
	ition	For example: The table contains five columns with emp ID
		column as the primary key.
	Table Com-	Specifies comments about the table.
	ments	For example: The table contains details of the employees.
		Specifies the table class property.
	Table Class	For more information on configuring table class, refer to Con-
		figuring Table and Column Class topic.
		Specifies the overall data quality score of the table.
	DQ Score	For example, High (7-8).
		For more information on configuring DQ scores, refer to the
		Configuring Data Profiling and DQ Scores topic.

Field Name	Sub-Field	Description
		Specifies the logical name of the table.
	Logical	For example, if the physical name of a table is DIM_Cus-
	Table Name	tomer, then the logical name of the table is Customer Dimen- sion.
		Specifies the expanded logical name of the table.
	Expanded Logical Name	For example, if the physical name of a table is RM_Resource, then the expanded logical name of the table is RM Sales Rep- resentative.
	Name	You can configure expanded logical name of tables in bulk at system and environment level.
	Llood in Con	Specifies whether the table is being used as part of a gap ana- lysis to check table usage in mappings.
	Used in Gap Analysis	Select the check box if the table is used in gap analysis.
	/ marysis	For more information on performing table gap analysis, refer
		to the <u>Performing Table Gap Analysis</u> topic.
	Table Alias	Specifies the alias name of the table.
		For example, Sales_Representative_Table.

## 6. Click

The table properties are updated.

You can use user defined fields with different UI labels. For more information on using UI labels for user defined fields, refer to the <u>Configuring Language Settings</u> topic.

You can also hide or display user defined fields. For more information on hiding or displaying user defined fields, refer to the <u>Displaying User Defined Fields</u> topic.

### **Updating Column Properties**

Column properties are classified as technical properties and business properties. You can also define your own new properties using user defined fields.

To update Column Properties, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, click a column.

The Column Properties page appears.

	DATA INTELLIGENCE SUITE	Metad	ata Manager					ţ	Search	ৎ 🗘	Ø	8
	Catalogue	< 1	Column Properties Assoc	ciations Mind Map	Documents	Impact Analysis	Forward Lineage	Reverse Lineage	Extended Properties	Valid Values		w,
- + I	AdventureWorks AdventureWorks	<b>^</b>	Technical Properties ——								Ø	*
- F [	Atlas Sales System		Column Name	RDM_CATEGORY_ID			Data Type	big	int			
- + I	B_System BI BO Reports		Data Domain				Storage Type					
. ≯i	Customer Order Entry		Precision	19			Length	8				
. ≯i	Data Lake Data Models EDW		DB Default Value				Scale	0				
- A (	erwinDIS		Nullable Flag				Identity Flag	$\checkmark$				
	Data_Migration (v1.0 dbo.PROJECT_DC dbo.PROJECT_RE		Natural Key Flag				Percent Null Value					
	dbo.PROJECT_SYS		Foreign Key Flag				Primary Key Flag	$\checkmark$				
	dbo.QA_STATUS_(     dbo.RDM_CATEG     RDM_CATEGC		Foreign Key Column Name				Foreign Key Table I	Name				
	RDM_CATEGC		Minimum Value				ETL Default Value					
	DESCRIPTION		File Starting Position				Maximum Value					
	CREATED_BY		Workflow Status	Draft								
	MODIFIED_BY											
	MODIFIED_DA dbo.RDM_CHANC		Business Properties									
	dbo.RDM_COLUN		Data Steward	jdoe			Logical Column No	ame				
4	•											*

### 3. Click 🖉.

The Edit Column Properties page appears.

dit Column Properties				-
Technical Properties				
Column Name *	RDM_CATEGORY_ID	Data Type	bigint	
Data Domain		Storage Type		
Precision	19	Length	8	
DB Default Value		Scale	0	
Nullable Flag		Identity Flag		
Natural Key Flag		Percent Null Value		
oreign Key Flag		Primary Key Flag		
oreign Key Column Name		Foreign Key Table Name		
Ainimum Value		ETL Default Value		
ile Starting Position		Maximum Value		
Norkflow Status	Draft			
Business Properties				
Data Steward	jdoe 🔻	Logical Column Name		
Column Definition		Expanded Logical Name		

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

Fields	Description
Column Name	Specifies the physical name of the column. For example, Object_ID.
Data Domain	Specifies the data domain values for the column. For example, data domain of a Gender column is M and F.
Precision	Specifies the precision of the column. For example: 5, the number 123.45 has a precision of 5 and a scale of 2.
	Specifies the default value of the column in the database. For example, True.
Nullable Flag	Specifies whether the column allows null values. Select the check box if the column allows null values.
Natural Key Flag	Specifies whether the column is a natural key. Select the check box if the column is a natural key.

Fields	Description
Foreign Key	Specifies whether the column is a foreign key.
Flag	Select the check box if the column is a foreign key.
Foreign Key	Specifies the actual column name where the column is listed as a PK (in
Column	case the current column being an FK).
Name	For example, ID.
Minimum	Specifies the minimum value of the column.
Value	For example, minimum value of ID column can be 424.
File Starting Position	Specifies the starting position in the file.
	Specifies the workflow status of the column.
	For example, draft.
Workflow	By default, Metadata_Manager_Default_Workflow is assigned to all the
Status	columns in the Metadata Manager. You can create and re-assign a
	workflow to all the columns in a table. For more information on the
	workflow status, refer to the <u>Assigning Workflows to the Columns</u> topic.
Data Type	Specifies the physical data type of the column.
	For example, varchar.
Storage Type	Specifies the storage type of the column.
	For example, row store/column store in the case of SAP systems.
	Specifies the physical length of the column.
Length	For example, if the column datatype is char(5), then its physical length
	is 5.
Scale	Specifies the physical scale of the column.
	For example: The number 123.45 has a precision of 5 and a scale of 2.
Identity Flag	Specifies whether the column is used as an identity flag.
	Select the check box if the column is used as an identity flag.
Percent Null	Specifies the percentage of null values in the column.
Value	For example, 10%.
Primary Key	Specifies whether the column is a primary key.

Fields	Description
Flag	Select the check box if the column is used as the primary key.
Foreign Key	Specifies the actual table name where the column is listed as a PK (in
Table Name	case of the current column being an FK).
ETL Default Value	Specifies the default ETL value of the column during the load process.
Maximum	Specifies the maximum value of the column.
Value	For example, maximum value of ID column can be 1503.
	Specifies the data steward responsible for the column.
Data Ste-	For example, Jane Doe.
ward	For more information on configuring list of data stewards, refer to the <u>Configuring Data Stewards</u> topic.
Column	Specifies the definition of the column.
Definition	For example: The column is a primary key that allows 5 alpha-numeric characters.
Caluma Cam	Specifies the comments about the column.
Column Com- ments	For example: The column provides unique identification of employee in the employee table.
Sensitive Data Indic- ator (SDI) Flag	Specifies whether the column contains sensitive data. Select the check box to categorize the data in the column as sensitive.
Sensitive	Specifies the SDI classification of the column.
Data Indic- ator (SDI) Classification	Select the appropriate SDI classification like confidential, internal only, public, or restricted. You can configure SDI classification in <u>Metadata</u> Manager settings.
	Specifies the column class property.
Column Class	Select a column class. For more information on configuring column class, refer to the <u>Configuring Table and Column Class</u> topic.
	Specifies the overall data quality score of the column.
DQ Score	For example, High (7-8).

Fields	Description									
	For more information on configuring DQ scores, refer to the Con-									
	figuring Data Profiling and DQ Scores topic.									
Logical	Specifies the logical name of the column.									
Column	For example, if the physical name of the table is CUST_ID_NUM, then									
Name	the logical name of the table is Customer Identification Number.									
	Specifies the expanded logical name of the column.									
Expanded	For example, if the physical name of the column is Resource_ID, then									
Logical	the logical name of the .									
Name	You can also configure expanded logical name of columns in bulk at <u>sys</u> -									
	tem and <u>environment</u> level.									
	Specifies whether the column is being used in a gap analysis for usage									
	in mappings.									
Used in Gap Analysis	Select the check box if the column is used in the gap analysis.									
Anarysis	For more information on performing column gap analysis, refer to the									
	Performing Column Gap Analysis topic.									
Sensitive	Specifies the description of the sensitive data classification of the									
Data Indic-	column.									
ator (SDI)	For example: The column contains sensitive data and it is for internal									
Description	use only.									
Column Alias	Specifies the alias name of the column.									
Column Allas	For example, Resource_ID.									
Business Key	Specifies whether the column is a business key.									
Flag	Select the check box if the column is a business key.									

# 5. Click 💾.

The column properties are updated.

You can use user defined fields with different UI labels. For more information on using UI labels for user defined fields, refer to the <u>Configuring Language Settings</u> topic.

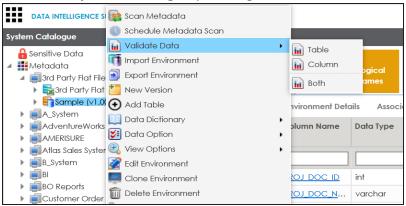
You can also hide user defined fields in the Column Properties tab. For more information on hiding user defined fields, refer to the <u>Displaying User Defined Fields</u> topic.

# **Validating Data**

You can validate the data in the environment at table and column levels. The data is validated against the forms (Table Properties or Column Properties) associated with the environment. The forms can be created, configured, and associated with environments in the Form Validation Settings.

To validate data, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, right-click an environment.



- 3. Hover over Validate Data.
- 4. Use the following options:

## Table

To validate tables in the environment, click Table.

## Column

To validate columns in the environment, click Column.

## Both

To validate tables and columns both, click **Both**.

The data is validated.

The columns or tables which fail mandatory field criterion are marked with red.

The columns or tables which fail regular expression criterion are marked with orange.

For more information, on creating, configuring, and associating forms (Table Properties and Column Properties), refer to the <u>Configuring Form Validation Settings</u> section.

🗖 Va	lidate Data - Column (3rd Party Flat Files/Sample)			_ 🗆 ×
● Mc	andatory 😑 Regular Expression Failed		Expo	rt to Excel Cancel
<u>ا</u>	Columns			•
#	Entities	Attributes	Column Alias	
1	dbo.PROJECT_DOCUMENT_TEMPLATES	PROJ DOC ID	•	
2	dbo.PROJECT_DOCUMENT_TEMPLATES	PROJ DOC NAME	•	
3	dbo.PROJECT_DOCUMENT_TEMPLATES	PROJ DOC INTEDED USE DESCR	•	
4	dbo.PROJECT_DOCUMENT_TEMPLATES	PROJ DOC TYPE	•	
5	dbo.PROJECT_DOCUMENT_TEMPLATES	REQD FLAG	•	
6	dbo.PROJECT_DOCUMENT_TEMPLATES	PROJ DOC REF NUMBER	•	
7	dbo.PROJECT_DOCUMENT_TEMPLATES	PROJ DOC OWNER	•	

5. Click **Export to Excel** to export the validations.

The validation report is downloaded in .xlsx format.

# **Assigning Codesets to Columns**

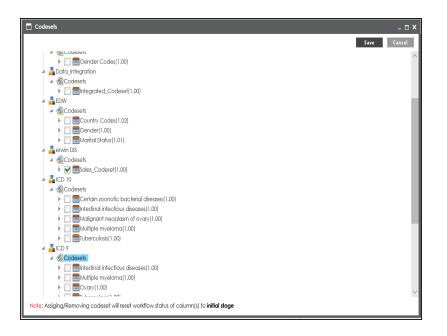
You can create codesets in the Codeset Manager and assign them to a source or target column as valid values. You can also export the valid values in MS Excel format.

To assign codesets to columns, follow these steps:

- 1. Under the **System Catalogue** pane, click a column.
- 2. Click the Valid Values tab.

DATA INTELLIGENCE SUITE Metadata N	lanager						) Searc	h (	2 🗘 🖉 🗐 🖪
System Catalogue 🗸	Associ	ations Mind /	Map Docume	ents Impact Analysis	Forward Lineage	Reverse Lineage	Extended Propert	ies Valid Values	Workflow Log
🔒 Sensitive Data 🔨								Assign/Remove Codesets	Export to Excel
Metadata							_		
<ul> <li>Image: Image and the second sec</li></ul>	#	Code Name	Code Value	Code Description	System Name/Environment	Codeset Name	Version	Published Flag	Category Hierarchy
▶ ■A_System					Name/Environment				
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▶ ■ AMERISURE									
Atlas Sales System						No Re	ecords Found		
▶ ■B_System									
▶ ■BI									
BO Reports									
Customer Order Entry									
🕨 🗐 Data Lake									
<ul> <li>Data Models</li> </ul>									
▶ ■EDW									
✓ ■ Erwin_Sales									
✓ ■ Integration (v1.00)									
dbo.RM_RESOURCE									
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3. Click Assign/Remove Codesets .



4. Select the codesets and click Save.

	Export to Excel
	ory Hierarchy
Image: Constraint of the state of	
1 Admin 1 Project_System Sales_Codeset 1.00 N erwin DI	
	IS
2 Joe Villers 4 Project_System Sales_Codeset 1.00 N erwin DI	IS
3 Kartik Sridhar 2 Project_System Sales_Codeset 1.00 N erwin DI	IS
4 Resource_Name 3 Project_System Sales_Codeset 1.00 N erwin D	IS

The codesets are saved under the Valid Values tab.

5. Click Export to Excel to download the valid value grid in .xlsx format.

For more information on managing codesets, refer to the <u>Maintaining Enterprise</u> <u>Codesets</u> section.

# **Viewing Sensitive Data Dashboard**

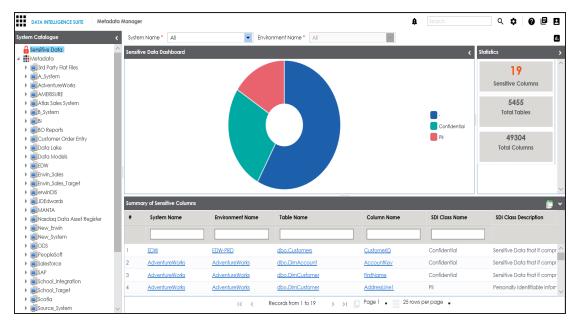
You can select an appropriate Sensitive Data Indicator (SDI) classification for a column while updating column properties. You can also add SDI class as per your requirements in the Metadata Manager Settings. For more information on updating column properties, refer to the Updating Column Properties topic.

The Metadata Manager enables you to view Sensitive Data Dashboard displaying summary and statistics of sensitive columns.

To view sensitive data dashboard, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, click Sensitive Data.

The Sensitive Data Dashboard page appears and you can also view Summary of Sensitive Columns.



Use System Name and Environment Name to filter the statistics and summary of the sensitive columns. A summary and statistics of sensitive columns of the selected environment are displayed.

# **Viewing Workflow Logs of Tables**

You can view workflow logs of a table in the Metadata Manager.

It involves viewing:

- Current workflow log status of the table
- Users and roles assigned to all the stages of the workflow
- Comments entered by users while moving the table to the next stage of the workflow

You can also export the workflow log image.

To view workflow log of tables in the Metadata Manager, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, click a table.

The following page appears.

Sensitive Data	Stati	stics											
Metadata								_					
▲ ■erwinDIS		6 Total Colum		0.1	0/6		1/6		0/				- 1
Gerwin_DIS (v1.00)      Mode.ADS ASSOCIATIONS		Total Colum	ins	Coll	mns With Logical Exp Names	anaea	Total Primary Key Col	umns	Total Foreign (	key Columns			- 1
dbo.ADS_ASSOCIATIONS													
dbo.ADS_KEY_VALUE	Date	Dictionary											
dbo.ADS_KEY_VALUE_OBJE	Duit				_				_				
dbo.ADS_MM_VERSION	#	Column Name	Column Alias	Column Class	Logical Column		Column Storage Type	Length	Column Definition	Column Comments		Primary	
dbo.ADS_MODULES			Alias	Class	Name	Datatype					Flag	Key Flag	
dbo.ADS_OBJECT_CODESE													
dbo.ADS_OBJECT_TO_OBJI													
dbo.ADS_PROFILES	1	ID				bigint		8			N	Y	Ν
dbo.ADS_PROFILES_DETAIL	2	SOURCE_OBJE				bigint		8			Ν	Ν	Ν
dbo.ADS_WORKFLOW	3	SOURCE_OBJE				bigint		8			N	N	N
dbo.ADS_WORKFLOW_ASC	4	TARGET OBJE				bigint		8			N	N	N
dbo.ADS_WORKFLOW_ASS	4	-											
dbo.ADS_WORKFLOW_NOI	5	TARGET_OBJE				bigint		8			Ν	Ν	Ν
dbo.ADS WORKFLOW NOI	6	RELATIONSHIP				bigint		8			N	N	Ν
dbo.ADS_WORKFLOW_NOI													
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dbo.ADS_WORKFLOW_STA													
dbo.ADS_WORKFLOW_STA													
dbo.ADS_WORKFLOW_TRIC													
dbo.AMM_DATATYPE_CON													

3. Click the Workflow Log tab.

The current workflow log status of the selected table is shown.

Note: The current workflow stage blinks in the diagram.

DATA INTELLIGENCE SUITE Metadata	ı Manager						) Search		९ 🗢 🛛	
ystem Catalogue 🗸	d Map	Data Quality Documents	Extended Properties	Indexes	Impact Analysis	Forward Lineage	Reverse Lineage	Test Specification	Workflow Log	<u>,</u>
🔒 Sensitive Data 🔺	Metadata	_Manager_WF $\rightarrow$ Table_Workflow				Collapse Rol	es Collapse Users	Expand Users & F	toles Export In	mage
Metadata										
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dbo.ADS_ASSOCIATIONS										
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dbo.ADS_MODULES										
dbo.ADS_OBJECT_CODESE						-				
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dbo.AMM_DATATYPES										
	1									_
	Log Summo	ary								X

- 4. To view the user and the comments entered by the user while moving it to the next stage, hover over *Solare*.
- 5. To view users and roles assigned to all the stages, click **Expand Users and Roles**.
- 6. To download the workflow log image, click **Export Image**.

# **Viewing Workflow Logs of Columns**

You can view workflow logs of a column in the Metadata Manager.

It involves viewing:

- Current workflow log status of the column
- Users and roles assigned to all the stages of the workflow
- Comments entered by users while moving the table to the next stage of the workflow

You can also export the workflow log image.

To view workflow log of columns in the Metadata Manager, follow these steps:

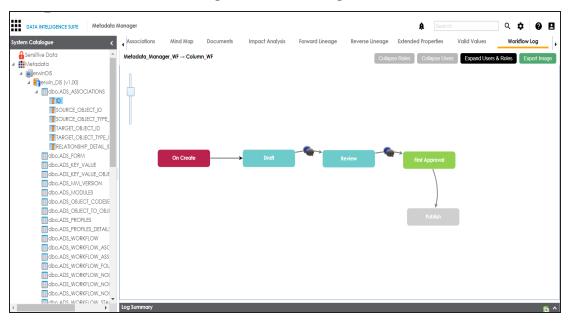
- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, click a column.

The following page appears.

DATA INTELLIGENCE SUITE Metadata Ma	inager			ê Search	< \$ Ø₿
System Catalogue 🖌	Associations Mind Map	Documents Impact Analysis	Forward Lineage Reverse Lineage Exten	ded Properties Valid Values	Workflow Log
🔒 Sensitive Data 🔺					
🔺 🌉 Metadata	_ Technical Properties				£
⊿ i erwinDIS	Column Name	ID	Data Type	bigint	
⊿ 🔤erwin_DIS (∨1.00)	Colonintanio	ID		bigini	
dbo.ADS_ASSOCIATIONS	Data Domain		Storage Type		
ID ID			0 ,1		
SOURCE_OBJECT_ID	Precision	19	Length	8	
SOURCE_OBJECT_TYPE_					
TARGET_OBJECT_ID	DB Default Value		Scale	0	
TARGET_OBJECT_TYPE_I					
RELATIONSHIP_DETAIL_I	Nullable Flag		Identity Flag	$\checkmark$	
dbo.ADS_FORM					
dbo.ADS_KEY_VALUE	Natural Key Flag		Percent Null Value		
dbo.ADS_KEY_VALUE_OBJE					
dbo.ADS_MM_VERSION	Foreign Key Flag		Primary Key Flag	<b>▼</b>	
dbo.ADS_MODULES					
dbo.ADS_OBJECT_CODESE	Foreign Key Column Name		Foreign Key Table No	ame	
dbo.ADS_OBJECT_TO_OBJI					
dbo.ADS_PROFILES	Minimum Value		ETL Default Value		
dbo.ADS_WORKFLOW	File Starting Position		Maximum Value		
dbo.ADS_WORKFLOW_ASC	File starting Position		Maximum value		
dbo.ADS_WORKFLOW_ASS	Workflow Status	Pendina Final Approval			
dbo.ADS_WORKFLOW_FOL	WORNOW SIGIOS	Penaing Final Approval			
dbo.ADS WORKFLOW NOI					
dbo.ADS_WORKFLOW_NOI	– Business Properties –				
dbo.ADS_WORKFLOW_NOI					
dho ads workei ow sta	Data Steward		Logical Column Nan	ne	· · · · · · · · · · · · · · · · · · ·
	1				· · · · · · · · · · · · · · · · · · ·

3. Click the Workflow Log tab.

The current workflow log status of the selected column is shown.



**Note**: The current workflow stage blinks in the diagram.

- To view the user and the comments entered by the user while moving it to the next stage, hover over .
- 5. To view users and roles assigned to all the stages, click **Expand Users and Roles**.
- 6. To download the workflow log image, click **Export Image**.

# **Associating Tables**

You can associate tables with business assets, systems, environments, tables, and columns. You can also view mind map and association statistics.

You need to ensure that:

- Business assets are enabled. You can add new business assets and enable them in the Business Glossary Manager Settings.
- Relationship between table and the asset type is defined. You can define associations and relationships in the Business Glossary Manager Settings.

To associate table with asset types, follow these steps:

- 1. Under the **System Catalogue** pane, click the required table and click the **Associations** tab.
- 2. Select the asset type from the drop down.

DATA INTELLIGENCE SUITE Metadata	Mai	nager						Ą	Search	۹ 🗘	0	9 8
System Catalogue 🗸	•	Columns	Table Properties	Associations	Mind Map	Data Quality	Documents	Extended Properties	Indexes Imp	act Analysis Fa	rward Line	eage 🖡
Sensitive Data		Business Term	× •								1	î +
✓ ▲ Metadata	l H	Business Term										
Image: Second Seco		Environment		rm Name	Description	Defini	hon	Catalog Name	Catalog Hierarchy	Data Stew	ard	
AdventureWorks	18	System										
AMERISURE												
Atlas Sales System						No	Records Found					
▶ B_System							Accords rooma					
▶ 🗐 BI												
BO Reports												
Customer Order Entry												
🕨 🗐 Data Lake												
<ul> <li>Data Models</li> </ul>												
▶ ∎EDW												
Erwin_Sales												
Erwin_Sales_Target												
erwinDIS Figure 100 (v1.01)												
dbo.ADS_ASSOCIATIONS												
dbo.ADS_FORM												
dbo.ADS_KEY_VALUE												

# 3. Click **+**.

The Relationship Associations page appears.

Current	Context:	dbo.ADS_AS	SOCIATIONS								
Current	Context Type:	Table									
Relation	ship Name:	is associate	is associated with								
Search (	(partial matches):										
	Term Name	Description	Definition	Catalog Name	Catalog Hierarchy	Data Steward					
	3rd Party Preference Option Code		Records the option the Customer has chosen not to be offered products from 3rd Party's e.g. selling	Customer Management	Customers Business → Customers Business As Is → Information → Customer Management	janedoe					
_	44900		Incision and drainage of appendiceal abscess; open	DATA ELEMENTS	NASDAQ HEALTHCARE - IMP 1 → DATA ELEMENTS	N/A					
					NASDAQ						

- 4. Select **Relationship Name**, and the asset type.
- 5. Click Save.

The asset is added to the table.

DATA INTELLIGENCE SUITE M	etadata Ma	anager						A Sec	arch Q	* 088
System Catalogue	<	•	Columns	Table Properties	Associations	Mind Map Data Qu	ality Documents Ex	tended Properties	Indexes Impact Analys	is Forward Lineage
🔒 Sensitive Data 4 🏭 Metadata	^	Busin	iess Term	-						i +
Garty Flat Files     Garty Flat Files			Actions	Relationshir Name	Term Name	Description	Definition	Catalog Name	Catalog Hierarchy	Data Steward
AdventureWorks     AMERISURE										
<ul> <li>Atlas Sales System</li> <li>B_System</li> <li>BI</li> <li>BO Reports</li> </ul>			/ Ō	is assoclated with	3rd Party Preference Option Code		Records the option the Customer has chosen not to be offered products from 3rd Party's e.g. selling	Customer Management	Customers Business → Customers Business As Is → Information → Customer Management	janedoe
<ul> <li>ierwinDIS</li> <li>ipData_Migration (v1.01)</li> <li>idbo.ADS_ASSOCIATIC</li> <li>dbo.ADS_FORM</li> </ul>										
dbo.ADS_KEY_VALUE										

6. Use the following options under **Actions**:

# Edit Association (🖍)

Use this option to edit the association.

Delete Association ( $\mathbf{\overline{D}}$ )

Use this option to delete the association.

To view mind map, follow these steps:

## 1. Click the Mind Map tab.

DATA INTELLIGENCE SUITE Metadata Manager	¢	Search	Q	¢ 0 🗉	2
System Catalogue < Columns Table Properties Associations Mind Map Data Quality Doc	uments Extended Properties	Indexes	Impact Analys	sis Forward Lineage	•
Sensitive Data dbo.ADS_ASSOCIATIONS			R	eset Export	
Metadata     Matadata     Marty Rat Files			Settings		
▶ ■A_System			-		2
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▶ ■B_System			-	•	
▶ ■BI			Object Path	erwinDIS/Data_Migr	ĸ
Gustomer Order Entry			Object Type	Table	
			Association Statistic	cs	
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dbo.ADS_OBJECT_CODESE					
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dbo.ADS_PROFILES					
dbo.ads_profiles_detail:			Relationship Conte	vt	Í
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		>	Overview		

2. Use the following options to work on the mind map:

## Expand (+) / Collapse (-)

To drill the mind map further, hover over the nodes, use (-) to collapse and use (+) to expand.

## Export

Use this option to download the mind map to .xlsx format or .jpg format.

#### Settings

Layout: Select the layout as normal or orthogonal.Custom Relations: Select the check box to display custom relations.Show Relationships: Select the check box to display relationships.

## Filter

Use this option to filter components of the mind map based on asset types or relationships.

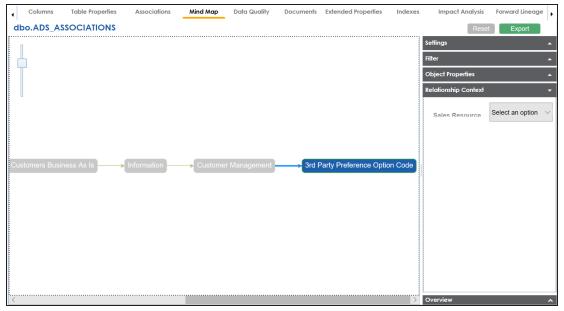
## **Object Properties**

It displays the association statistics of the system.

## **Relationship Context**

Use this option to view the relationship context as defined under the **Extended Properties** in Business Glossary Manager Settings for the relationship between the table and the asset type.

To view the relationship context, click the connection between the asset type and the table.



## Overview

Use this option to view the overview diagram of the mind map.

# **Associating Columns**

You can associate columns with business assets, systems, environments, tables, and columns. You can also view mind map and association statistics.

You need to ensure that:

- Business assets are enabled. You can add new business assets and enable them in the Business Glossary Manager Settings.
- Relationship between column and the asset type is defined. You can define associations and relationships in the Business Glossary Manager Settings.

To associate column with asset types, follow these steps:

- 1. Under the **System Catalogue** pane, click the desired column and click the **Associations** tab.
- 2. Select the asset type from the drop down.

DATA INTELLIGENCE SUITE Metad	data Manager				Ą	Search	९ 🌣 🛛	88
System Catalogue	Column Properties	Associations Mind M	Nap Documents	Impact Analysis	Forward Lineage Re	verse Lineage Extend	ed Properties Valid V	alues 🕨
Sensitive Data     Metadata     Matadata     mailard Party Flat Files	Business Policy Business Policy	× 💌	Description	Definition	Catalog Name	Catalog Hierarchy	Data Steward	î +
A_System     AdventureWorks	Business Term System					country	Durd Steward	
AMERISURE     Attas Sales System     Attas Sales System				No Records Fo	ound			
BI     BO Reports								
Eustomer Order Entry     EData Lake     EData Models								
EDW     Envin_Sales								
Integration (v1.00)     Image: dbo.RM_RESOURCE     RESOURCED								
RESOURCENAME RESOURCEDESC								

3. Click +.

						Save Cano	e				
Current	Context:	RESOURCEID									
Current	Context Type:	Column									
Relation	ship Name:	is associate	is associated with								
Search	(partial matches):										
	Policy Name	Description	Definition	Catalog Name	Catalog Hierarchy	Data Steward					
	Employee Identification Code Format		Coae is 10 characters long of format aannnnnnaaaa where the first two characters are	Internal Org Policies	Internal Org Policies	N/A					
	Employee moves international location		The employee will receive a new Identification Code if they move country	Internal Org Policies	Internal Org Policies	N/A					
			fiscal policy is the use of government			•					

- 4. Select Relationship Name, and asset type.
- 5. Click Save.

The asset is added to the column.

DATA INTELLIGENCE SUITE Metada	ıta Manager						ê Sear	ch C	
System Catalogue	< 4 Co	lumn Propertie	s Associati	ons Mind Map	Documents Imp	act Analysis Forward	Lineage Reverse Lir	neage Extended Proper	ties Valid Values
🔒 Sensitive Data 4 📑 Metadata	^ Busin	ess Policy	•						ā +
Image: Imag		Actions	Relationshir Name	Policy Name	Description	Definition	Catalog Name	Catalog Hierarchy	Data Steward
AdventureWorks     AMERISURE									
<ul> <li>Image: Solar System</li> <li>Image: System</li> <li>Image: Solar System</li> <li>Image: Solar System</li> <li>Image: Solar System</li> </ul>	•	/ Ō	is associated with	Employee Identification Code Format		The Employee ID Code is 10 characters long of format aannnnnaaaa where the first two characters are	Internal Org Policies	Internal Org Policies	N/A
dbo.RM_RESOURCE									

6. Use the following options under **Actions**:

# Edit Association (🖍)

Use this option to edit the association.

Delete Association ( $\mathbf{\overline{D}}$ )

Use this option to delete the association.

To view mind map, follow these steps:

## 1. Click the Mind Map tab.

DATA INTELLIGENCE SUITE Metadata	ı Manager						🌲 🛛 Search	۹	. 🗘 🛛 🖉 🗏	
stem Catalogue 🗸	Column Properties	Associations	Mind Map	Documents	Impact Analysis	Forward Lineage	Reverse Lineage	Extended Propert	lies Valid Value	es
Sensitive Data	RESOURCEID							Re	eset Export	
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<ul> <li>A_System</li> </ul>										
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<ul> <li>Data Lake</li> <li>Data Models</li> </ul>										-
EDW								Table	0	_
Erwin_Sales		→ BP -	> Internal	Org Policies	> Employee Id	dentification Code Fe	ormat	Column	0	
Integration (v1.00)	RESOURCEID							Business Policy	1	
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Integration_Target (v1.00)										
Environment (v1.00)										
Erwin_Sales_Target										
erwinDIS     IDEdwards										_
								Relationship Conte	xt	
	11							Overview		

2. Use the following options to work on the mind map:

## Expand (+) / Collapse (-)

To drill the mind map further, hover over the nodes, use (-) to collapse and use (+) to expand.

## Export

Use this option to download the mind map to .xlsx format or .jpg format.

## Settings

Layout: Select the layout as normal or orthogonal.Custom Relations: Select the check box to display custom relations.Show Relationships: Select the check box to display relationships.

## Filter

Use this option to filter components of the mind map based on asset types or relationships.

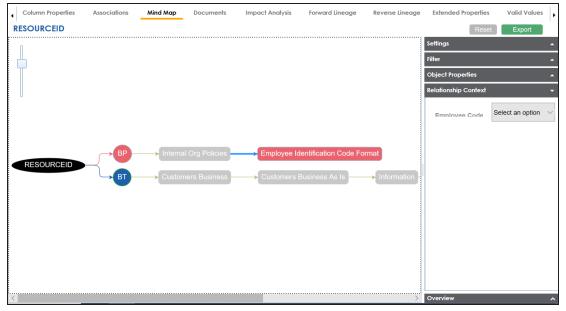
## **Object Properties**

It displays the association statistics of the column.

## **Relationship Context**

Use this option to view the relationship context as defined under the **Extended Properties** in Business Glossary Manager Settings for the relationship between the column and the asset type.

To view the relationship context, click the connection between the asset type and the column.



## Overview

Use this option to view the overview diagram of the mind map.

# **Versioning Environments**

You can create versions of an environment and keep a legacy of old metadata. You can also track changes by comparing the two versions of the environment.

To create new versions of environments, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the **System Catalogue** pane, right-click the required environment.

DATA INTELLIGENCE SUITE	🕞 Scan Metadata							Ą			0	•	08
stem Catalogue	🕔 Schedule Metadata Scan	100											
	📊 Validate Data	•		_									i i i i i i i i i i i i i i i i i i i
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Image: Second Seco	Export Environment		s With Logical	Total Colum		umns With wanded N		Total Primary I Columns	ley	Total Forei Colun			- 1
A A_System	1 New Version	Expo	inded Names		E	(panaea N	Names	Columns		Colun	nns		
A_Environment (v1.00)	Add Table	onmer	t Details Data (	Quality Doc	uments I	mpact as !	Source	Impact as Target	Extended P	roperties	Scheduled	lobe	Config
<ul> <li>AdventureWorks</li> </ul>	Data Dictionary	•	il beruits build v	godiny Doc	omenia	inpuci us i	300100	Impact as raiger	Extended I	ropenies	Schedoled	1003	Coming
AMERISURE	Stata Option	lype	Logical Table	Table Expanded	Table		Workflow	Column Name	Data Type	Length	Precision	Scale	Default
Atlas Sales System	View Options		Name	Logical Name	Associated Te	rm Status	s						
B_System B_Environment (v1.00)		•						1		1			
B_Environment (V1.00)	Z Edit Environment	-								-			
BO Reports	Clone Environment					Draft		CAT DIALOG	int	4	10	0	
Customer Order Entry	🔟 Delete Environment					Draft		CAT DIALOG ID	int	4	10	0	
Data Lake	🖣 Generate DDL					Draft		CAT DIALOG	varchar	50	0	0	
Data Models	Rew Document					Draft		CREATED BY	varchar	50	0	0	_
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erwinDIS	Hide Environment					Draft		CREATED DAT	datetime	8	23	3	
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<ul> <li>Assdaq Data Asset Registe</li> <li>New_Erwin</li> </ul>						Draft		CAT DIALOG	int	4	10	0	
<ul> <li>mew_erwin</li> <li>mew_system</li> </ul>	ER Diagram												
	R View Workflow					Draft		CAT DIALOG	int	4	10	0	
PeopleSoft	Assign Users					Draft		CAT DIALOG	varchar	50	0	0	
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Teradata	- Tx												€ →
<ul> <li>Interaction</li> </ul>	• U×												

## 3. Click New Version.

The New Version page appears.

New Version		_ = ×
		<b>Ľ</b> X
Environment Name*	A_Environment	
Version	1.01	
Version Label		
Change Description*	@r <u>A</u> <u>H</u> B <i>I</i> <u>U</u> ≡ ≡ ≡ ≡ ⊑ !≡ !≡	*≣ *≣ ✔
		*
		~

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
Environment	Specifies the name of the environment.
Name	For example, EDW-Test.
Version	Specifies the new version of the environment.
Version	For example, 1.02.
	Specifies the version label of the environment.
Version	For example, Beta.
Label	For more information on configuring version display of environments,
	refer to the Configuring Version Display topic.
Change	Specifies the description of the changes made in the environment.
Description	For example: A new table, EMP_Details was added in the environment.

# 5. Click 💾.

A new version of the environment is created and stored in the environment tree.

The old version of the environment is archived. You can also <u>compare the two ver</u>sions of the environment.

# **Comparing Environments**

You can compare any two environments in the Metadata Manager.

To compare two environments, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the **System Catalogue** pane, expand the desired system.
- 3. Select the two environments.

Note: Use CTRL Key to select two environments.

DATA INTELLIGENCE SUITE	🕞 Scan Metadata					<b>ģ</b>			९ 🌣	0 E
em Catalogue	🕓 Schedule Metadata Scan	18								
	📊 Validate Data	•								
dbo.MT_DEFINITION	import Environment		0	298		0/298	16/298			
dbo.OBJECT_CONFIG	Export Environment		es With Logical anded Names	Total Columr		mns With Logical banded Names	Total Primary Columns	Key		
dbo.OBJECT_DOCUM	New Version	Exp	andea Names		EX	Janaea Names	Colomins			
dbo.PLUGINS	Add Table	ime	nt Details Data G	uality Doci	uments In	ipact as Source	Impact as Target	Extended P	roperties	Schedu
dbo.PROJECT	Data Dictionary	•								
dbo.PROJECT_DOCU	Pata Cation	pe	Logical Table Name		Table	Table Workflow	Column Name	Data Type	Length	Precis
dbo.ADS_WORKFLOW	View Options		Name	Logical Name	Associated Terr	n status				
DOURDS_WORKI LOW	Z Edit Environment									
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			hhhh				PostTime	datetime	8	23
Atlas Sales System	🝳 Advanced Business Properties									0
B_System	Hide Environment		hhhh				<u>DatabaseUser</u>	sysname	256	0
<b>■</b> BI	🕉 Run Template		hhhh				Event	sysname	256	0
BO Reports	m Delete Table(s)		hhhh				<u>Schema</u>	sysname	256	0
Customer Order Entry	Compare Environments		hhhh				Object	sysname	256	0
🗐 Data Lake	ER Diagram		hhhh					nvarchar	4000	0
Data Models	View Workflow						ISQL	nvarchar		
e erwinDIS			hhhh				XmlEvent	xml	4000	0
JDEdwards	S Assign Users		Account Dim				AccountKey	int	4	10
	• 🕎									< ₽

## 4. Click Compare Environments.

The Compare Environments page appears displaying table level changes.

	Compare Environments								_ 🗆 ×
•	Table Level Changes	Column Level Changes							*
#	Change Description	System Name	Environment	Table	Definition	Logical Name	Expanded Logical Name	Associated Business Term	Comments
1	Table Logical Name , Table Comments	AdventureWorks	AdentureWorks_Sto	dbo.DatabaseLog					
2	Table Logical Name , Table Comments	AdventureWorks	AdventureWorks	dbo.DatabaseLog		hhhh			ш
3	Table Logical Name	AdventureWorks	AdentureWorks_Sto	dbo.DimAccount					
4	Table Logical Name	AdventureWorks	AdventureWorks	dbo.DimAccount		Account Dimension			

5. Click Column Level Changes.

Column level changes are displayed.

6. Click 1 to download the comparison report.

The comparison report is downloaded in the .xlsx format.

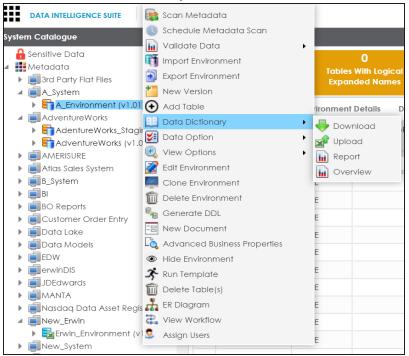
# **Downloading Data Dictionaries**

Once the metadata is scanned and stored in the repository, you can instantly view and export data dictionary at the environment and table level.

Downloading the data dictionary at environment level will include definitions of all the tables and columns available in the selected environment.

To download data dictionaries at environment level, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, expand the desired system node.
- 3. Right-click the environment whose data dictionary is to be downloaded.
- 4. Hover over Data Dictionary.



## 5. Click Download.

The Data Dictionary-Download Options page appears.

It gives you two options: Default Template Download and Advanced Template Download.

6. Refer to the following table to select an appropriate template.

Option	Description
Default	This options allows to download data dictionary with default template. The
Template	default template will include technical properties and business properties
Download	for tables and columns. The default template cannot be customized.
Download	untermetion like Indevec Lummery and Extended Dreparties for Lables and

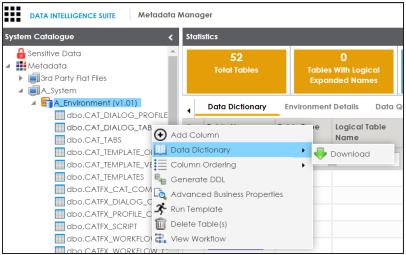
7. Click 🛃.

Data dictionary is downloaded in .xlsx format.

Downloading the data dictionary at table level will include the definitions of the selected table and its columns.

To download data dictionaries at table level, follow these steps:

- 1. Under the **System Catalogue** pane, right-click the desired table.
- 2. Hover over Data Dictionary.



3. Click Download.

The data dictionary of the selected table is downloaded in .xlsx format.

You can also <u>view data dictionary report</u> at system level and <u>update data dictionary</u> at environment level.

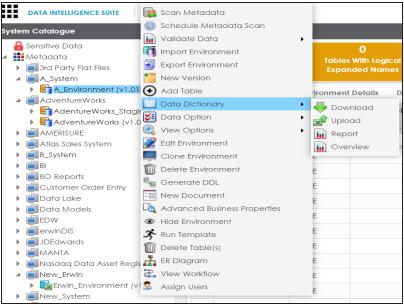
# **Updating Data Dictionary**

Updating data dictionary at environment level involves:

- 1. Downloading the data dictionary in .xlsx format
- 2. Updating the data data dictionary in the .xlsx file
- 3. Uploading the data dictionary

To update data dictionaries at environment level, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, right-click an environment.
- 3. Hover over Data Dictionary.



4. Click Download.

The Data Dictionary-Download Options page appears.

It gives you two options: Default Template Download and Advanced Template Download.

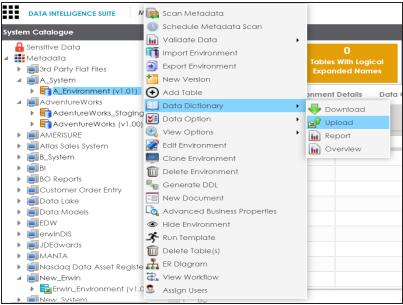
5. Refer the following table to select the appropriate template.

Option	Description
Default	This options allows to download data dictionary with default template. The
Template	default template will include technical properties and business properties
Download	for tables and columns. The default template cannot be customized.
Advanced	This option allows you to download data dictionary with advanced tem- plate. The advanced template allows you to add or exclude additional information like Indexes Summary and Extended Properties for Tables and
Tomplato	plate. The advanced template allows you to add or exclude additional
Download	information like Indexes Summary and Extended Properties for Tables and
Download	Indexes, Valid Values and Extended Properties for columns.

6. Click 🛃.

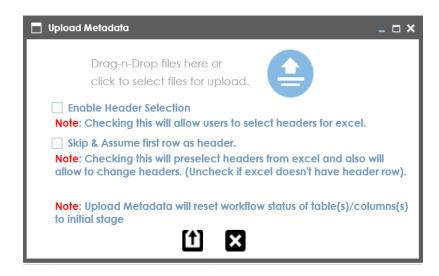
Data dictionary is downloaded in .xlsx format.

- 7. Update the data dictionary manually in the same sheet.
- 8. Right-click the environment where data dictionary is to be uploaded.
- 9. Hover over Data Dictionary.



## 10. Click Upload.

The Upload Metadata page appears.



- 11. Drag and drop the updated data dictionary sheet or use ≐ to upload the sheet.
- 12. Click 1.

The data dictionary is updated at the environment level.

# **Viewing Data Dictionary Report**

You can view a data dictionary report at system level. All environments under a system are included in the report and the report can be exported in :

- HTML
- PDF
- MS Excel
- MS Word
- RTF

**Note**: It is meaningful to view data dictionary report after scanning metadata into an environment.

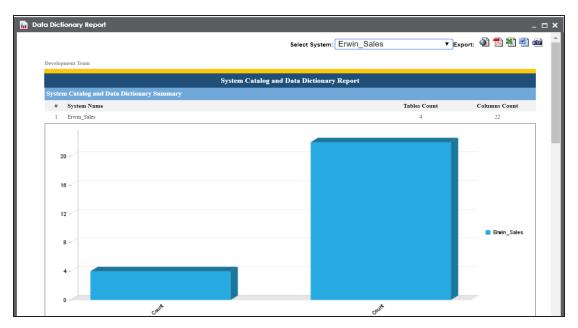
To view data dictionary at system level, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, right-click a system.

	DATA INTELLIGENCE	SUITE Metadata N	\anager				
Syster	m Catalogue	<	Metadat	a Summary			
) 	Data Models	•	↓ Da	ta Dictionary	Configure		
	Erwin_Sales	New Environment New Document					
	JDEdwards MANTA	ilai	ilat Files				
	New_Erwin	۶W	∍Works				
	ODS PeopleSoft	E ame ; Sy	E ; System				
	Salesforce	View Workflow	7	BI			
) 	School_Target		8	BO Reports	Reports		

3. Click Report - Data Dictionary.

The System Catalog and Data Dictionary Report appears.



4. Use the following options:

HTML () To export the report in HTML, click ). PDF () To export the report in PDF, click ). MS Excel () To export the report in .xlsx, click ). MS Word () To export the report in MS Word, click ). RTF ()

# **Performing Impact and Lineage Analysis**

Impact and lineage analysis can be done after you perform source to target mappings in the Mapping Manager. Impact analysis reports can be generated at environment, table or column level. You can run lineage analysis (forward and reverse) on a particular table or column to determine its upstream and downstream dependencies.

Impact analysis involves performing:

- Impact analysis at column level
- Impact analysis at table level
- Impact analysis at environment level

Lineage analysis involves performing:

- Lineage analysis at table level
- Lineage analysis at column level

# **Impact Analysis at Column Level**

You can run impact analysis on a column and export the analysis in .xlsx and .pdf format.

You can also view its:

- Direct impact
- Indirect impact
- Other impact

To perform impact analysis on columns, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the **System Catalogue** pane, click a column.
- 3. Click the Impact Analysis tab.

The Impact Analysis page appears showing the Direct Impact.

	-				_					
DATA INTELLIGENCE SUITE Metadat	ta Manag	ger					Ą		Q	\$ 0 E
System Catalogue	< 1	Column Properties	Documents	Impact Analysis	Forward Lineage	Reverse Lineage	Extended Properties	Valid Values	Workflow Log	
<ul> <li>AdventureWorks</li> </ul>	*									🐴 📆
AMERISURE										<b>*</b>
<ul> <li>Atlas Sales System</li> </ul>	Sum	Summary - Direct Impact < Summary - Indirect Impact <							Audit Information	
B_System									Audit	Information
▶ 🗐BI					2 2			Upstream Impact		
<ul> <li>         BO Reports     </li> </ul>					2			Downstream Impact	Created By	Administrator
<ul> <li>              Eustomer Order Entry      </li> </ul>				As Source	1			In Business Rule	Created	10/05/2018
🔺 🗐 Data Lake				As Target		0 0		In Source Extract SQL	Time	10:17:56
▲ Encloudera HDFS (v1.00)		2			0				Modified By	Administrator
categories						Indirect Impact		In Lookups	Modified	10/05/2018
customers									Time	10:17:56
customer_id		Direct Impact	Indirect Impac	t Other Impacts						
Customer_fname			•							
customer_Iname	AS S	ource								
🔲 customer_email		Project Name	Mapping Name	Target Information					Business Rule	,
customer_password										
customer_street				Column	Table	Environ	ment S	ystem		
customer_city	1	Data Lake	Load_Customers	CustomerID	dbo.Customers	EDW-PRI	D EC	WC	DirectMove	
customer_state	- L	Migration	Eodd_Costoniais	000101110112	000.00310111013	CONTINU	·		Discimore	
Customer_zipcode										
departments crater_items										
order_items	As T	arget								
products	<u></u>	aigei	_						_	
<ul> <li>products</li> <li>Twitter Feeds (v1.00)</li> </ul>	#	Project Name	Mapping Name	Source Information Business Ru						•
<ul> <li>         Data Models     </li> </ul>				Column	Table	Environ	ment S	ystem		
▶ ∎EDW		Data Lake								
Image:	1	Migration	Load_Customers	CustomerID	dbo.Customers	COE	Ci	ustomer Order Entry	DirectMove	
<ul> <li>JDEdwards</li> </ul>	2	ERP	Test	CustomerID	dbo.Customers	COE	Q	ustomer Order Entry	DirectMove	
MANTA										

4. Use the following options:

## **Indirect Impact**

To view indirect impact, click Indirect Impact.

### **Other Impacts**

To view other impacts, click **Other Impacts**.

### Export

To download the impact analysis, click 🐿 or ங.

## **Impact Analysis at Table Level**

Once you are done with mappings in Mapping Manager, you can perform impact analysis on the metadata (table level). The Metadata Manager enables you to perform end to end impact analysis.

To perform impact analysis in the Metadata Manager, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the **System Catalogue** pane, click a table.
- 3. Click Impact Analysis.

Impact analysis report is displayed where Direct Impact as source and as target are shown.

DATA INTELLIGENCE SUITE Metada	ta Manager				🏚 Search	۹	¢ 0 1
stem Catalogue	Columns	Table Properties Data Quality	Documents Extended Prope	erties Indexes	Impact Analysis Forward Lineage	Reverse Lineage	Test Specifie
A Sensitive Data	*						1
Metadata							
<ul> <li>i3rd Party Flat Files</li> </ul>	Summary - Direc	t Impact 🗸	Summary - Indirect Impact			Audit Inform	ation
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<ul> <li>AdventureWorks</li> </ul>			1 1		Upstream Impact	Created By	Administrator
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<ul> <li>Atlas Sales System</li> </ul>	1	As Target			In Business Rule	Created Time	09/12/2019 17:13:30
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<ul> <li>CDS</li> <li>PeopleSoft</li> <li>Salesforce</li> <li>SAP</li> </ul>			Table	Environment	System		
ODS     ODS     OpeopleSoft     Salesforce	<ul> <li># Project No</li> <li>1 Erwin_Project</li> </ul>		Table dbo.ADS_ASSOCIATIONS	Environment erwinDIS	System erwinDIS		ABS

4. Click Indirect Impact to view Indirect Impact, .

The Indirect Impact page appears. You can analyze upstream impact and downstream impact.

DATA INTELLIGENCE SUITE Metadata em Catalogue		Columns Table	Properties Data Quality I	Documents Extended Proper	lies Indexes Impo	ct Analysis Forward Linea	ige Revi	Q erse Lineage	Test Specif
Customer Order Entry									*
<ul> <li></li></ul>	Sumr	nary - Direct Impact	<	Summary - Indirect Impact			<	Audit Inform	ation
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forwinDIS     forwinDIS     forwards						Downstream Imp		Created By	Administrato
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SOURCE_OBJECT_TYPE_	*	Project Name	Mapping Name	Source Table	Source Environment/System	Target Table	Target Er	vironment/Sy	/stem
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New_System									
ODS     PeopleSoft									
Salesforce									
▶ <b>∭</b> SAP	Dow	nstream Impact							
Scotia									
<ul> <li>T_New</li> <li>Teradata</li> </ul>	#	Project Name	Mapping Name	Source Table	Source Environment/System	Target Table	larget Er	ivironment/Sy	stem
	1	Erwin_Project	Erwin_Map	dbo.ADS ASSOCIATIONS	erwinDIS/erwinDIS	dbo.ADS New ASSOCIATIO	Erwin_Env	ironment/Ne	v_Erwin
UNE									
Unstructured Sources     YOD									

You can also perform:

- Impact Analysis at Environment Level.
- Impact Analysis at Column Level.

# **Performing Impact Analysis at Environment Level**

You can perform impact analysis on an environment and analyze its impact as:

- Source
- Target

You can also export the impact analysis in .xlsx format.

To perform impact analysis at environment level, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, click an environment.
- 3. Click Impact as Source to analyze the impact as source,.

The following page appears, showing all the instances where the selected environment was used as source.

Bill     Bill     Customer Order Enfry     Customer Croder Enfry     Customer Croder Enfry     Customer Croder Enfry     Project Name     Mapping Name     Target Details     Environment Name      Data Undek      Data      Data      D	DATA INTELLIGENCE SUITE Metadat	Manager	🏚 Search 🔍 🗘 🗭 🖪
<sup>6</sup> Cold Tables <sup>7</sup> Cold Tables	System Catalogue	Statistics	^
Bell	AdventureWorks     AdventureWorks     AdventureWorks	6 0 30 0/30 Total Tables Tables With Logical Total Columns Columns With Logical	Total Primary Key Total Foreign Key
Cutatomer Crider Strifty Cutatomer Cutatomer Cutatomer Crider Strifty Cutatomer Cutatomer Cutatomer Cutatomer Cutatomer	<ul> <li>■B_System</li> <li>■BI</li> </ul>	A Data Dictionary Environment Details Data Quality Documents Impact as Source	· · · · · · · · · · · · · · · · · · ·
Image: Project Name     Mapping Name     Target Defails       Image: Project Name     Image: Project Name     Image: Project Name       Image: Project Name     Image: Project Name     Image: Project Name       Image: Project Name     Image: Project Name     Image: Project Name       Image: Project Name     Image: Project Name     Image: Project Name       Image: Project Name     Image: Project Name     Image: Project Name       Image: Project Name     Image: Project Name     Image: Project Name       Image: Project Name     Image: Project Name     Image: Project Name       Image: Project Name     Image: Project Name     Image: Project Name       Image: Project Name     Image: Project Name     Image: Project Name       Image: Project Name     Image: Project Name     Image: Project Name       Image: Project Name     Image: Project Name     Image: Project Name       Image: Project Name     Image: Project Name     Image: Project Name       Image: Project Name     Image: Project Name     Image: Project Name       Image: Project Name     Image: Project Name     Image: Project Name       Image: Project Name     Image: Project Name     Image: Project Name       Image: Project Name     Image: Project Name     Image: Project Name       Image: Project Name     Image: Project Name     Image: Project Name <t< td=""><td></td><td></td><td>2</td></t<>			2
Effective Feeds (v1.00)     EDeda Nodels     Edea Nodels		# Project Name Mapping Name	Target Details
Image: Constraint of the second of the se	<ul> <li>Further Feeds (v1.00)</li> </ul>		Environment Name
Improvincitis     1     AdventureWorks_/Migration     DimProduct     AdventureWorks       Improduct     2     Data Loke Migration     EDW-PRD       Improduct     2     Data Loke Migration     EDW-PRD       Improduct     2     Data Loke Migration     EDW-PRD       Improduct     3     DomProduct     EDW-PRD       Improduct     3     EDW-State     EDW-PRD       Improduct     4     EDW-State     EDW-PRD       Improduct     5     EDW-State     EDW-State       Improduct     5     EDW-State     EDW-State       Improduct     5     EDW-State     EDW-State       Improduct     5     EDW-State     EDW-State       Improduct     6     EDW-State     EDW-State       Improduct     5     EDW-State     EDW-State </td <td></td> <td></td> <td></td>			
IDEdwards     2     Data Lake Migration     Load_Customers     EDW-PRD       Image: AMIA     Image: Amia Customers     EDW-PRD       Image: Amia Customers </td <td></td> <td>1 AdventureWorks_Migration DimProduct</td> <td>AdventureWorks</td>		1 AdventureWorks_Migration DimProduct	AdventureWorks
		2 Data Lake Migration Load_Customers	EDW-PRD
	<ul> <li>Mardaq Data Asset Register</li> <li>Mardag Re</li></ul>		

4. Click **Impact as Target** to analyze the impact as target.

The following page appears showing all the instances where the selected environment was used as target.

DATA INTELLIGENCE SUITE Metadata	Manage	r				â Sec		० 🏚	0
Catalogue <	Statisti	cs							
A_System AdventureWorks AVERISURE Atlas Sales System		<b>6</b> Total Tables	0 Tables With Logical Expanded Names	<b>30</b> Total Columns	<b>0/30</b> Columns With Logical Expanded Names	0/30 Total Primary Key Columns	0/30 Total Foreign Key Columns		
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BI BO Reports Customer Order Entry									
Data Lake	#	Project Name		Mapping Name		Source Details			
Twitter Feeds (v1.00)						Environment Name			
Data Models									
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			<	Records from 1 to 2	> >  25 row	s per page			

5. Click it to download the analysis.

The analysis is downloaded.

You can also perform:

- Impact analysis at table level
- Impact analysis at column level

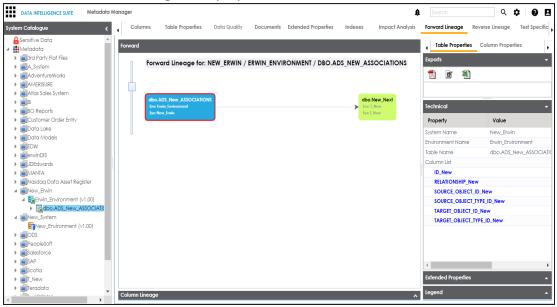
## Lineage Analysis at Table Level

Once you are done with source to target mappings in the Mapping Manager, you can perform lineage analysis on a particular table/column. The Metadata Manager allows you to perform end to end forward and backward lineage analysis to determine the upstream and downstream dependencies.

To perform lineage analysis at table level in the Metadata Manager, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the **System Catalogue** pane, click a table.
- 3. Click Forward Lineage to perform forward lineage analysis.

End to end forward lineage is displayed.



4. Click Reverse Lineage to perform reverse lineage analysis.

End to end reverse lineage is displayed.

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Metodolo     Metodolo     Mexerse     Ackystem     A	System Catalogue 🗸	Columns Table Properties Data Quality Documents Extended Properties	Indexes Impact Analysis	Forward Lineage Rev	verse Lineage Test Specific
▲       Mindodda       Exports         ▲       Add-wintureWorks       Add-wintureWorks         ▲       Add-wintureWorks       Add-wintureWorks         ▲       Add-wintureWorks       Bod Add-wintureWorks         ▲       Add-wintureWorks       Bod Add-sites System         ■       Bill Charlows       Bod Adds         ■       Bill Charlows       Bod Adds         ■       Bill Charlows       Bod Adds         ■       Bill Charlows       Bill Charlows         ■       Bill Charlows <td></td> <td></td> <td></td> <td>Table Properties</td> <td>Column Bronortics</td>				Table Properties	Column Bronortics
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<ul> <li>AvARENSURE</li> <li>Addas Sales System</li> <li>Bo Reports</li> <li>Customer Order Entry</li> <li>Customer Order Entr</li></ul>		Reverse Lineage for NEW_ERWIN / ERWINELITY ROUMENT / DBO.ADS_	NEW_A33OCIATION3		
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Impact Loke       System Name       New_Ewin         Impact Nodels       Environment Name       Environment         Impact Nodels       Environment Name       Environment         Impact Nodels       Environment Name       Environment         Impact Nodels       Impact Name       Environment         Impact Nodels       Impact Name       Environment         Impact Name       Environment       Impact Name         Impact Name       Environment (v1.00)       Impact Name         Impact Name       En		Sys: New_Erwin	DIS	Deemark (	Value
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				Extended Properties	
				Extended Properties	A
Column Lineage		Column Lineage	^	Legend	

You can also perform lineage analysis at column level.

# Lineage Analysis at Column Level

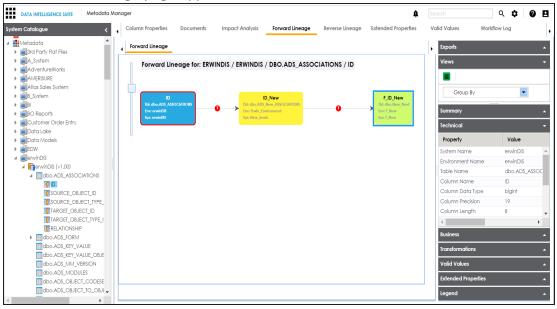
You can perform forward and reverse lineage analysis on a column. You can also export the lineage analysis in the following format:

- .pdf
- .jpg
- .xlsx

To perform lineage analysis at column level, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the System Catalogue pane, click a column.
- 3. Click Forward Lineage to perform forward lineage analysis on the selected column.

The Forward Lineage page appears.



4. Click Reverse Lineage to perform reverse lineage analysis on the selected column.

The Reverse Lineage page appears.

DATA INTELLIGENCE SUITE Metadata M	nager		ŧ	Search	1	२ 🌣 🛛 🛛	
System Catalogue <	Column Properties Documents Impac	t Analysis Forward Lineage	Reverse Lineage Extended Properties	Valid	Values Workflo	v Log	
BO Reports	Reverse Lineage			,	Exports		•
	Reverse Lineage for: T_NEW/T_NE	ID_New 05. New, ASSOCIATIONS Fervicement	ID Betwork MS, ASSOCIATIONS Increased BS Systematic Research States Stat		Views Group By Group By Croup By Summary Technical Property System Name Environment Name Column Name Column Data type Column Precision	Value T_New T_New dbo.New_N F_ID_New bight 19	•
Impacted with the served served      Impact and the served served served      Impact and served      Impact and served      Impact and served      Impact and served					Column Length  Column Length Business Transformations Valid Values Extended Properties Legend	8	• • • •

5. Expand the **Export** node on right pane and click the appropriate format of the report to download the lineage analysis.

The lineage report is downloaded.

## **Previewing Data**

You can preview data at table level using SQL queries. Data previewing capability at table level enables you to view data instantly and profile the data. You can also schedule a data profiling job

and view data profiling summary report at the scheduled time.

To view table data, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the **System Catalogue** pane, click a table.
- 3. Click the **Data Quality** tab.

DATA INTELLIGENCE SUITE Metadata Meta	, The second sec	olumns	Table Prop	erties	Association	ns Mi	nd Map	Data Quality	Docum	ients Exte	nded Properti	ies Index		🏚 🛛 Se mpact An	arch alysis Fo	rward Li	Q 🗘 🛛 🗗 ineage Reverse Lineage
Metadata arr Party Flat Files A. System	↓ Dat	ta Profiling	g Data Profil	e Statistic:	Preview	Data			Data Profiling	Summary R	eport Dat	a Profiling Pat	tern Summa	iry Report	Profile D	ata	Dashboard
Ac-System	•		Column Name	DQ Score	Column Dataype	Length	Locked?	Job State	Total Rows		% Distinct Values	Repeated Values	_	% Nulls	Min Value	Max Valu	 DQ Score
■ B_System ■ BI																	
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4. Click the **Preview Data** tab.

The User Credentials page appears. For more information on enforcement of user credentials, refer to the Enforcing Credentials for Data Access or Preview topic.

DATA INTELLIGENCE SUITE Metado	afa Manager	A Search	Q 🗘 🖉 🖻 🖻
stem Catalogue	Columns Table Properties Associations Mind Map Data Quality Documents Extended Properties Indexes	Impact Analysis F	forward Lineage Reverse Lineage Tes
Metadata	Data Profiling Data Profile Statistics Preview Data		
3rd Party Flat Files			
A_System			
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AMERISURE			
<ul> <li>Atlas Sales System</li> </ul>			
B_System			
i      i      i     i     i     i			
BO Reports			
<ul> <li>Customer Order Entry</li> </ul>	🗖 User Credentials 💶 🗖 🗙		
🕨 🗐 Data Lake			
🕨 🗐 Data Models	Note:Validate User credentials to proceed 🏾 🔿 🗙		
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dbo.ADS_DBJECT_TO_OB.			
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5. Enter credentials to connect with the database.

Data at table level can be viewed. You can use SQL Editor to execute a SQL query to preview data.

DATA INTELLIGENCE SUITE Metadata	Manager				) Search	९ 🗘 🖉 🖻
atalogue 🗸	Columns Table	Properties Associations Mind	i Map Data Quality Document:	Extended Properties Indexe	es Impact Analysis Forward Lin	eage Reverse Lineage Te
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3rd Party Flat Files	Type your SQL Query here					_
A_System	Type your soit guery nere					
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Atlas Sales System	ID	SOURCE_OBJECT_ID	SOURCE_OBJECT_TYPE_ID	TARGET_OBJECT_ID	TARGET_OBJECT_TYPE_ID	RELATIONSHIP_DETAIL_ID
B_System BI						
BO Reports	15	813	28	808	28	
Customer Order Entry						1
Data Lake	16	813	28	817	28	1
🗐 Data Models	17	813	28	823	28	1
EDW erwinDIS	18	813	28	825	28	1
Berwinds A Bata_Migration (v1.01)	19	813	28	827	28	1
dbo.ADS_ASSOCIATIONS	20	813	28	828	28	1
dbo.ADS_FORM						
dbo.ADS_KEY_VALUE	21	9	36	3	35	7
dbo.ADS_KEY_VALUE_OBJ	22	9	36	4	35	7
dbo.ADS_MM_VERSION dbo.ADS_MODULES	23	9	36	5	35	7
dbo.ADS_OBJECT_CODES	24	9	36	6	35	7
dbo.ADS_OBJECT_TO_OB.	25	9	36	7	35	7
dbo.ADS_PROFILES						
dbo.ADS_PROFILES_DETAIL	26	9	36	1	35	7
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dbo.ADS_WORKFLOW_NC 🔻		K	Records from 1 to 25	>	s per page	
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You can also profile data at table level and provide data quality score.

### **Profiling Data at Table Level**

You can assess your data quality by profiling the data at table level. You need to schedule a data profiling job and provide the data quality score by assessing the data quality.

To profile data at table level, follow these steps:

- 1. Go to Application Menu > Data Catalog > Metadata Manager.
- 2. Under the **System Catalogue** pane, click a table.
- 3. Click Data Quality.

The Data Profiling page appears.

talogue <	1	columns ata Profilin	Table Prop		Association s Preview		nd Map	Data Quality	Docum	ients Exte	nded Properti	ies Indea	xes i	mpact And	alysis Por	ward Li	neage Reverse Lineage
adata rd Party Flat Flles System	1		g	e oranone.	, nenen	bala			Data Profiling	Summary F	Report Dat	a Profiling Pat	tern Summ	ary Report	Profile D	ata	Dashboard
dventureWorks MERISURE dlas Sales System	•		Column Name	DQ Score	Column Dataype	Length	Locked?	Job State	Total Rows	Distinct Values	% Distinct Values	Repeated Values	Nulls	% Nulls	Min Value	Max Valu	 DQ Score
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ata Models	3		SOURCE_OBJI	_	bigint	8	a		0	0	0%	0	0	0%			
DW rwinDIS	4		TARGET_OBJE		bigint	8	a		0	0	0%	0	0	0%			0
Data_Migration (v1.01)	5		TARGET_OBJE		bigint	8	a		0	0	0%	0	0	0%			Profiled Columns
dbo.ADS_ASSOCIATIONS	6		RELATIONSHIP	-	bigint	8	a		0	0	0%	0	0	0%			
dbo.ADS_FORM dbo.ADS_KEY_VALUE dbo.ADS_KEY_VALUE_OBJ dbo.ADS_MM_VERSION dbo.ADS_MODULES				_													0 Total Rows
dbo.ADS_OBJECT_CODES dbo.ADS_OBJECT_CODES dbo.ADS_OBJECT_TO_OB. dbo.ADS_PROFILES dbo.ADS_PROFILES_DETAIL																	0 Unique Values
dbo.ADS_WORKFLOW dbo.ADS_WORKFLOW_AS dbo.ADS_WORKFLOW_AS dbo.ADS_WORKFLOW_FO dbo.ADS_WORKFLOW_FO dbo.ADS_WORKFLOW_NC																Þ	0 Nulls

- 4. Select columns.
- 5. Click the **Profile Data** button.

The User Credentials page appears. For more information on enforcement of user credentials, refer to the Enforcing Credentials for Data Access or Preview topic.

DATA INTELLIGENCE SUITE Metadata	Manager													<b>ģ</b> S			९ 🗘 🖉 ।	٥
	4 C	olumns	Table Prop	erties	Association	s Mi	nd Map	Data Quality	Docum	ients Exte	ended Propert	ies Inde	Xes	Impact Ar	alysis Fo	rward Li	neage Reverse Lineage	1
Sensitive Data	. d Da	ta Profilin	<b>g</b> Data Profil	e Statistic:	s Preview [	Data												
Metadata 3rd Party Rat Files									Data Profiling	Summary F	Report Dat	la Profiling Pa	ttern Summ	narv Report	Profile D		Dashboard	
A_System									_				_		Min Value			
AdventureWorks			Column Name	DQ Score	Column Dataype	Length	Locked?	Job State	lotal Kows	Values	% Distinct Values	Repeated Values	NUIIS	% Nulls	Min Value	Valu		
AMERISURE Atlas Sales System																		
B_System																		
BI		_					0										6	
BO Reports		$\checkmark$	ID	-	bigint	er Creder	100		0		<b>×</b>			0%			Total Columns	
Customer Order Entry	2	$\checkmark$	SOURCE_OBJ	-	big' 🗖 🕶	er oreaer					<b>u</b> ~ 1%			0%				
Data Models	3	$\checkmark$	SOURCE_OBJ	-	big' Note:V	alidate Us	er credentic	ils to proceed		X	0%	0	0	0%			0	
EDW	4	$\checkmark$	TARGET_OBJE	_	bigʻ User N	ame* :					0%			0%			U Profiled Columns	
erwinDIS a	5		TARGET_OBJE		bigi						1%	0	0	0%			rioned colornits	
Data_Wigration (V1.01)     dbo.ADS_ASSOCIATIONS	6		RELATIONSHIP		Passwi	ord* :					0%			0%				
dbo.ADS_FORM																	0	
dbo.ADS_KEY_VALUE																	Total Rows	
dbo.ADS_KEY_VALUE_OBJ					_													
dbo.ADS_MODULES																		
dbo.ADS_OBJECT_CODES																	0	
dbo.ADS_OBJECT_TO_OB.																	Unique Values	
dbo.ADS_PROFILES																		
dbo.ADS_PROFILES_DETAIL dbo.ADS_WORKFLOW																	0	
dbo.ADS_WORKFLOW_AS																	Nulls	
dbo.ADS_WORKFLOW_AS																		
dbo.ADS_WORKFLOW_FO																Þ		
dbo.ADS_WORKFLOW_NC																	0	
			Records from 1	0 6 01 6													Repeated Values	

6. Enter credentials to connect with the database.

The Job Scheduler page appears.

) Job Scheduler		_ 0
		Schedule Cancel
Job Name* :	Administrator1571918485354	
Interval :	Once	
Schedule Job On* :	10-24-2019 17:31	
	🔵 Local 💿 Server	
Data Profile Prefere	ences	
🗹 Total Values	🗹 Minimum Value	Most Frequent Patterns
☑ Distinct Values	🗹 Maximum Value	Least Frequent Patterns
Repeated Values	🗹 Most Frequent Value	
Null Values	🗹 Least Frequent Value	
Notify Me :	ON	
Notification Email :	abc@abc.com	
CC List :		
Note* : Please provide	CC List with comma(,) separa	ated values

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

Option	Description
	Specifies the job name.
Job Name	For example, Administrator1585030550001.
	This field autopopulates with a job name. You can edit it and enter a dif- ferent job name.
	Specifies the frequency of the job.
	Valid values are:
laten el	<ul> <li>Once</li> </ul>
Interval	<ul> <li>Every Day</li> </ul>
	<ul> <li>Every Week</li> </ul>
	<ul> <li>Every Month</li> </ul>
Scheduled	Set the date and time of the job using 🥅.
Job On	For example, 03-24-2020 11:45.
	Select the machine whose clock decides the time of the scheduled scan.
Local or Server	<ul> <li>Local: Refers to your local machine.</li> </ul>
	<ul> <li>Server: Refers to the machine where erwinDIS has been deployed.</li> </ul>
	Select the corresponding check boxes to give your data profile pref- erences in the profile grid report.
	<ul> <li>Total Values: Select the check box to display the total number of rows in the selected columns.</li> </ul>
	<ul> <li>Distinct Values: Select the check box to display the number of dis- tinct values in the selected columns.</li> </ul>
Data Profile Preferences	<ul> <li>Repeated Values: Select the check box to display the number of repeated values in the selected columns.</li> </ul>
	<ul> <li>Null Values: Select the check box to display the number of null values in the selected columns.</li> </ul>
	<ul> <li>Minimum Value: Select the check box to display the minimum value in the selected columns. You can enable or disable analysis of minimum value for character data. For more information on</li> </ul>

Option	Description
	this, refer to the Configuring Data Profiling and DQ Scores topic.
	<ul> <li>Maximum Value: Select the check box to display the maximum value in the selected columns. For more information on this, refer to the <u>Configuring Data Profiling and DQ Scores</u> topic.</li> </ul>
	<ul> <li>Most Frequent Value: Select the check box to display the most fre- quent values in the selected columns.</li> </ul>
	<ul> <li>Least Frequent Value: Select the check box to display the least fre- quent values in the selected columns.</li> </ul>
	<ul> <li>Most Frequent Patterns: Select the check box to display the most frequent patterns in the selected columns. For more information on this, refer to the <u>Configuring Data Profiling and DQ Scores</u> topic.</li> </ul>
	<ul> <li>Least Frequent Patterns: Select the check box to display the least frequent patterns in the selected columns. For more information on this, refer to the <u>Configuring Data Profiling and DQ Scores</u> topic.</li> </ul>
	Switch Notify Me to ON to receive email notification.
	For more information on this, refer to the <u>Configuring Notification on Pro-</u> filing Data topic.
	This field is autopopulated with your email ID.
	If you enable notifications in the <u>Metadata Manager Settings</u> , you can receive email notifications from the <u>administrator's email ID</u> about the scheduled job.
CC list	Enter a comma-separated list of email IDs that should receive email noti- fications about the scheduled job.
	For example, ab.dav@xyz.com, cal.kai@xyz.com

### 8. Click Schedule.

The data profiling job is scheduled.

The data profiling job is completed at the scheduled time and the job state changes to **COMPLETED**.

DATA INTELLIGENCE SUITE Metado		-	Columns	Table Prop		Associatio		ind Map	Data Quality	Deeum	anta Eula	nded Propert	ies Index		🛕 🤄	arch	rward Lir	Q ✿ Ø ■
n Catalogue	< .	1						na map _	Daia Quality	Docom	ienis Exie	nded riopen	ies inder	(62 1	mpuci An	arysis roi	I WOI'O LII	neage Reverse Lineage
Sensitive Data Wetadata	<u> </u>	۹ <u>D</u>	ata Profilin	g Data Profil	e Statistic	s Preview	Data											
3rd Party Flat Files										Data Profiling	Summary B	Report Dat	a Profiling Pat	tern Summ	arv Report	Profile D	ata	Dashboard
A_System													_	_				
AdventureWorks		*		Column Name	DQ Score	Column Datavpe	Length	Locked?	Job State	Total Rows	Distinct Values	% Distinct Values	Repeated Values	Nulls	% Nulls	Min Value	Max Valu	
AMERISURE				Name	score	Dalaype					values	values	values		NUIIS		Valu	DQ Score
Atlas Sales System																		
B_System																		
BI		1		D		bigint	8	a	COMPLETE	60	60	100%	0	0	0%	15		6
BO Reports					-	•											- 1	Total Columns
Customer Order Entry Data Lake		2		SOURCE_OBJ	-	bigint	8	6	COMPLETE	C 60	11	18%	8	0	0%	5	1	
Data Models		3		SOURCE_OBJ	_	bigint	8	a	COMPLETE	E 60	2	3%	2	0	0%	28		
EDW		4		TARGET_OBJE		bigint	8	a	COMPLETE	60	47	78%	12	0	0%	1	19	6
erwinDIS	-		-			-		_				077						Profiled Columns
Data_Migration (v1.01)		5		TARGET_OBJE	-	bigint	8	a	COMPLETE		5	8%	4	0	0%	2		
dbo.ADS_ASSOCIATIONS		6		RELATIONSHIP	-	bigint	8	a	COMPLETE	E 60	6	10%	5	0	0%	1		
dbo.ADS_FORM																		60
dbo.ADS_KEY_VALUE																		Total Rows
dbo.ADS_KEY_VALUE_OBJ dbo.ADS_MM_VERSION																		
dbo.ADS_MODULES																		
dbo.ADS_OBJECT_CODES																		60
dbo.ADS_OBJECT_TO_OB.																		Unique Values
dbo.ADS_PROFILES																		
dbo.ADS_PROFILES_DETAIL																		
dbo.ADS_WORKFLOW																		0
dbo.ADS_WORKFLOW_AS																		Nulls
dbo.ADS_WORKFLOW_AS																		
dbo.ADS_WORKFLOW_FO		€															•	
dbo.ADS_WORKFLOW_NC		-1		Records from 1	to 4 of 4													12
•				Courties Ironn 1	10 0 01 0													Repeated Values

9. Use the following options:

**Data Profiling Summary Report** 

To view data profiling summary, click **Data Profiling Summary Report**.

Data Profiling Summary           STATISTICAL SUMMARY for enviroDIS Data_Migration           215         1         2410         6         60         60         0         12	
215         1         2410         6         60         60         0         12	
215         1         2410         6         60         60         0         12	
TOTAL TABLES         PROFILED TABLES         TOTAL COLUMNS         PROFILED COLUMNS         TOTAL ROWS         UNIQUE VALUES         NULLS         REPEATED VALUES	
bo ADS_ASSOCIATIONS	
Column Name DQ Score Column I angle Length Total Rows Distinct Values Values Values Nulls Nulls % Nulls Min Value Max Value Most Frequent Least Frequent Column Values	uent
D bigint 8 60 60 100.0% 0 0 0.0% 15 234 15 15	
SOURCE_OBJECT_ID bigint 8 60 11 18.0% 8 0 0.0% 5 1017 9 137	
SOURCE_OBJECT_TYPE_ID bigint \$ 60 2 3.0% 2 0 0.0% 28 36 28 36	
rarGeT_OBJECT_ID bigint \$ 60 47 78.0% 12 0 0.0% 1 193871 2 \$17	
ranget_OBJECT_TYPE_ID         bigint         \$         60         5         \$.0%         4         0         0.0%         2         36         28         2	
RELATIONSHIP_DETAIL_ID         bigint         8         60         6         10.0%         5         0         0.0%         1         7         1         5	

Data Profiling Summary page appears.

#### **Data Profiling Pattern Summary**

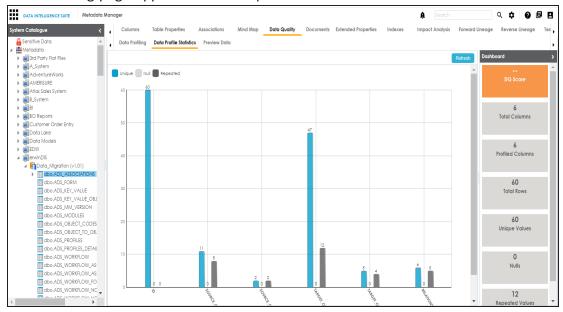
To view data profiling pattern summary report, click Data Profiling Pattern

Summary Report. The Data Profiling Pattern Summary page appears.

Data Profiling Patterns Summary		
	Export: 藰 🔁 🕙 🖷	) 📾
Data Profiling Pattern Summary		
ID		
Most Frequent Patterns		
Pattern	Count	
NNN	39	
NN	21	
.east Frequent Patterns		
Pattern	Count	
NN	21	
NNN	39	
SOURCE_OBJECT_ID		
Most Frequent Patterns		
Pattern	Count	
NNN	28	
N	21	
NNNN	8	
NN	3	
Least Frequent Patterns		
Pattern	Count	
NN	3	
NNN	8	
N	21	
NNN	28	

#### **Data Profile Statistics**

To view data profile statistics, click **Data Profile Statistics**. The following page appears with data profile statistics.



Click DQ Score to update data quality score. The Update DQ Score page

#### appears.

🗖 Update DQ Score			_ 🗆 ×
		Save	Cancel
DQ Score	Select DQ Score		-

Select DQ Score and click Save. The DQ Score is updated.

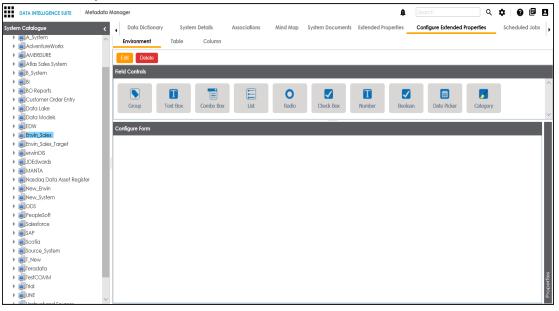
# **Configuring Extended Properties**

You can configure extended properties at System level for three objects:

- Environments: Extended properties configured at system level for environments are applicable to all the environments under the system.
- Tables : Extended properties configured at system level for tables are applicable to all the tables under the system.
- Columns: Extended properties configured at system level for columns are applicable to all the columns under the system.

To configure extended properties at system level, follow these steps:

1. Under the **System Catalogue** pane, click the desired system and click the **Configure Extended Properties** tab.



The Configure Extended Properties tab contains the following sections:

- Field Controls: This pane displays the available UI elements.
- **Configure Form**: Use this pane to design forms using the available UI elements in the **Field Controls** pane.

- **Properties**: This pane displays the properties of the selected UI element in the **Configure Form** pane.
- 2. Use the following tabs:

#### Environment

Select this tab to configure extended properties for environments under the selected system.

#### Table

Select this tab to configure extended properties for tables under the selected system.

#### Column

Select this tab to configure extended properties for columns under the selected system.

- 3. Click Edit and double-click or drag and drop the required UI elements from the Field Controls pane to the Configure Form pane.
- 4. Select UI elements, one at a time, and configure their properties in the **Properties** pane.

↓ Data Di	ctionary Sys	stem Details	Associations	Mind Map	System Documents	Extende	ed Properties	Configure E	tended Properties	s Scheduled Jo	bs 🕨
Environm	ent Table	Column									
Save	Cancel Delete										
Field Control	s										
	-					-					^
				0		T				-	
Group	Text Box	Combo Box	List	Radio	Check Box	Number	Boolea	n Date	Picker Cate	gory	$\sim$
Configure Fo	rm						Properties				
		Check Bo	x 🗌				Property		Value		
							Published				
		Check Box	(1 🗌				Field		Check Box1		
							Туре		Check Box		
							Dependencies		Type or click h	nere	-
						-	Configure Value	9S	Configure		
							Description				
							Visible in Extend	ed Properties			
							Order		2		
									d cell to update the oupdate its propert		

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

Property	Description							
Published	Toggle the switch to <b>ON</b> to publish the field.							
Field	Double-click the corresponding Value cell to change the label of							
rielu	the field.							
Туро	Double-click the corresponding Value cell to select different types							
Туре	of the field.							
	Click <b>Configure Values</b> to enter option values. You can use:							
Configure Values	Default connector: It enables you to enter options manually.							
	Reference Data Manager : It enables you to pull the data							
	from reference tables in the Reference Data Manager.							
Mandatory	Select the check box to make the field mandatory in the form.							
Description	Double-click the corresponding Value cell to enter a description of							
Description	the field.							
Visible in Exten-	Toggle the switch to ON to make it visible.							
ded Properties								
Order	Displays the order of the field. You can drag and drop the field in							
	the <b>Configure Form</b> pane to change its order.							

Refer to the following table for property descriptions:

#### 5. Click Save.

The form is saved and it is available under the Extended Properties tab of the selected object (Environment, Table, or Column).

To use the form, follow these steps:

- 1. Under the **System Catalogue** pane, click the desired object (Environment, Table, or Column).
- 2. Click the Extended Properties tab.

DATA INTELLIGENCE SUITE Metadate	Manager	🛕 Search 🔍 🗘 🕼 🖪
System Catalogue 🗸	Statistics	^
Sensitive Data     Metadata     Metadata     Matrix Rat Files     Starty Flat Files	1         0         6         0/6           Total Tables         Tables With Logical Expanded Names         Total Columns         Columns With Logical Expanded Names	1/6 0/6 Total Frimary Key Columns Columns
Sample (v1.00)     A_System	Quality Documents Impact as Source Impact as Target Extended Properties Schedul	ed Jobs Configure Extended Properties Workflow Log
AdventureWorks     AMERISURE     Atlas Sales System	Configura Edit Delete Form Values	Import From Excel Expert To Excel
	First Anoroval Select an option	~
	Final Approval Select an option	~

3. Click Edit and use the form.

Statistics								
1 Total Tables	<b>0</b> Tables With Logical Expanded Names	<b>6</b> Total Columns		0/6 ns With Logical nded Names	1/6 Total Primary Key Columns	<b>0/6</b> Total Foreign Key Columns		<
Quality Docume	ents Impact as Source	Impact as Target	ended Pro	perfies Schedu	led Jobs Configure E	xtended Properties	Workflow Log	•
Save Cancel								
Form Values								
		First A	noroval	Select an option Satisfactory Unsatisfactory				
		Final A	oproval	Select an option				$\sim$

4. Click Save.

You can also configure extended properties specific to:

- Systems
- Environments
- Tables

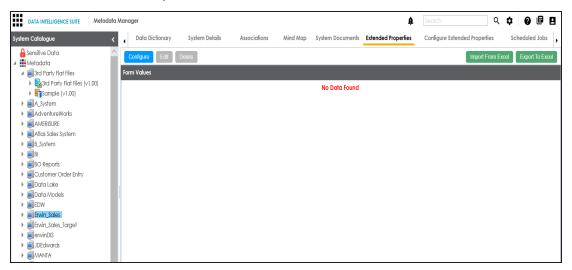
<u>Columns</u>

# **Extending System Properties**

You can configure and use extended properties specific to a system.

To configure system specific extended properties, follow these steps:

- 1. Under the **System Catalogue** pane, click the desired system.
- 2. Click the Extended Properties tab.



3. Click Configure.



The Extended Properties Configuration page contains the following sections:

- Field Controls: This pane displays the available UI elements.
- Configure Form: Use this pane to design forms using the available UI elements in the Field Controls pane.
- Properties: This pane displays the properties of the selected UI element in the Configure Form pane.
- 4. Click **Edit** and double-click or drag and drop the required UI elements from the **Field Controls** pane to the **Configure Form** pane.
- 5. Select UI elements, one at a time, and configure their properties in the **Properties** pane.
- 6. Click Save.

The form is saved under the Extended Properties tab.

# **Extending Environment Properties**

You can configure and use extended properties specific to an environment. To configure environment specific extended properties, follow these steps:

- 1. Under the **System Catalogue** pane, click the desired environment.
- 2. Click the Extended Properties tab and click Configure.

Extended Prop	perties Configu	ration								_ = ×
Edit Delete										
Field Controls	_	_		_	_	_	_	_	_	^
	Τ	T		0		T			<b>7</b>	^
Group	Text Box	Combo Box	List	Radio	Check Box	Number	Boolean	Date Picker	Category	
Configure Form										~
										ties
										Properties

The **Extended Properties Configuration** page contains the following sections: **Field Controls**: This pane displays the available UI elements.

**Configure Form**: Use this pane to design forms using the available UI elements in the **Field Controls** pane.

**Properties**: This pane displays the properties of the selected UI element in the **Con-figure Form** pane.

- 3. Click Edit and double-click or drag and drop the required UI elements from the Field Controls pane to the Configure Form pane.
- 4. Select UI elements, one at a time, and configure their properties in the Properties

pane.

5. Click Save.

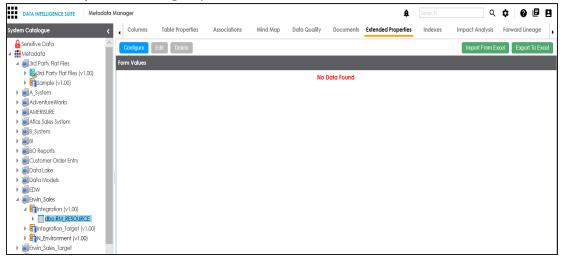
The form is saved under the Extended Properties tab.

# **Extending Table Properties**

You can configure and use extended properties specific to a table.

To configure table specific extended properties, follow these steps:

1. Under the System Catalogue pane, click the desired table.



2. Click the Extended Properties tab and click Configure.

Extended Properties Configuration		_ ¤ ×
Edit Delete Field Controls		
Group Text Box Combo Box	List Radio Check Box Number	Boolean Date Picker Category
Configure Form		Properties

The **Extended Properties Configuration** page contains the following sections: **Field Controls**: This pane displays the available UI elements.

**Configure Form**: Use this pane to design forms using the available UI elements in the **Field Controls** pane.

**Properties**: This pane displays the properties of the selected UI element in the **Con-figure Form** pane.

- 3. Click **Edit** and double-click or drag and drop the required UI elements from the **Field Controls** pane to the **Configure Form** pane.
- 4. Select UI elements, one at a time, and configure their properties in the **Properties** pane.
- 5. Click Save.

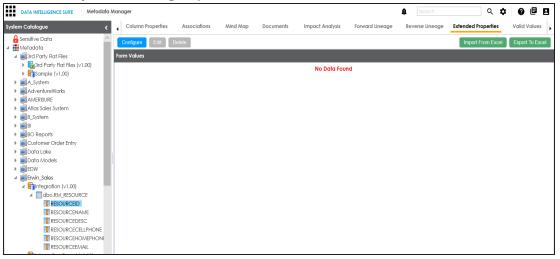
The form is saved under the **Extended Properties** tab.

# **Extending Column Properties**

You can configure and use extended properties specific to a column.

To configure column specific extended properties, follow these steps:

1. Under the **System Catalogue** pane, click the desired column.



2. Click the Extended Properties tab and click Configure.

Extended Prop		ration			-				-	-	_ 🗆 ×
Field Controls											
Group	Text Box	Combo Box	List	O Radio	Check Box	<b>T</b> Number	Boolean	Date Picker	Category		
Configure Form											
											erties
											Properties

The **Extended Properties Configuration** page contains the following sections: **Field Controls**: This pane displays the available UI elements.

**Configure Form**: Use this pane to design forms using the available UI elements in the **Field Controls** pane.

**Properties**: This pane displays the properties of the selected UI element in the **Con-figure Form** pane.

- 3. Click **Edit** and double-click or drag and drop the required UI elements from the **Field Controls** pane to the **Configure Form** pane.
- 4. Select UI elements, one at a time, and configure their properties in the **Properties** pane.
- 5. Click Save.

The form is saved under the **Extended Properties** tab.