erwin

DM

erwin DM 101 Series

Episode 2

Unlocking the Secrets of Your Data Structures

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erwin DM

Quest®
Where Next Meets Now.

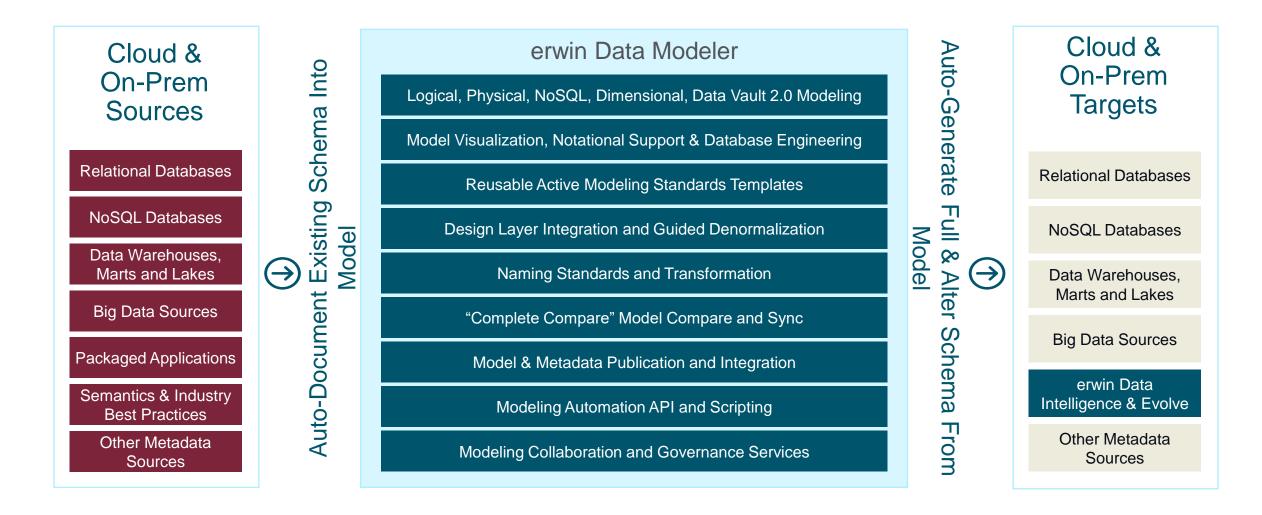# Agenda

Introduction to erwin Data Modeler 14.1

- Overview of features and capabilities

- Native support for 33 data structures

- Benefits of seamless integration and analysis

Topics for Discussion:

- Configuration of Erwin DM Reverse Engineering

- Effective sharing among modelers

- Utilization of Reverse Engineering Options

- Inferring keys and relationships within the data

- Model Details and Layout

- Best practices for model organization

- Generating a PDF Report

- Steps to create comprehensive documentation

Single Tool for Data Modeling & Design

Quest®

Cloud & On-Prem Sources

- Relational Databases
- NoSQL Databases
- Data Warehouses, Marts and Lakes
- Big Data Sources
- Packaged Applications
- Semantics & Industry Best Practices
- Other Metadata Sources

Auto-Document Existing Schema Into Model →

erwin Data Modeler

- Logical, Physical, NoSQL, Dimensional, Data Vault 2.0 Modeling
- Model Visualization, Notational Support & Database Engineering
- Reusable Active Modeling Standards Templates
- Design Layer Integration and Guided Denormalization
- Naming Standards and Transformation
- "Complete Compare" Model Compare and Sync
- Model & Metadata Publication and Integration
- Modeling Automation API and Scripting
- Modeling Collaboration and Governance Services

Auto-Generate Full & Alter Schema From Model →

Cloud & On-Prem Targets

- Relational Databases
- NoSQL Databases
- Data Warehouses, Marts and Lakes
- Big Data Sources
- erwin Data Intelligence & Evolve
- Other Metadata Sources

Broad DBMS Support and 3rd Party Integration

Import Bridges *from* Vendor Tools

Data & Object Modeling

Data Integration (EAI, ETL, EII)

Business Intelligence (OLAP, Reporting)

Metadata Transformation & Exchange

Export Bridges *to* Vendor Tools

Data & Object Modeling

Data Integration (EAI, ETL, EII)

Business Intelligence (OLAP, Reporting)
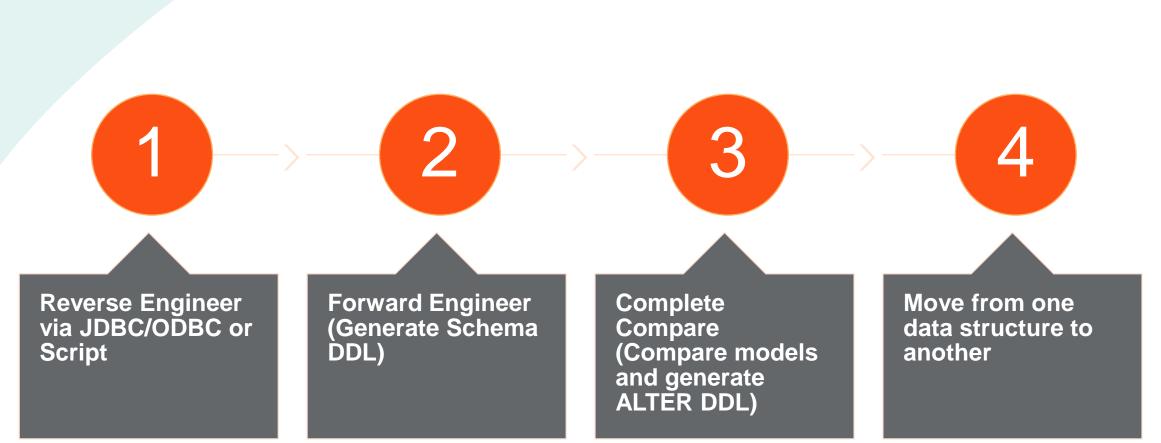
erwin DM Native Support

Database Name	Type	Version	Notes
AlloyDB	Relational	1.1	
ArangoDB	NoSQL	3.x	
Avro	Big Data	1.x	
Amazon Keyspaces	NoSQL		
Azure Synapse	Big Data		
Cassandra	NoSQL	3.x/4.x	
Couchbase	NoSQL	6.x	
		7.x	
Databricks	Big Data		
Db2 for i	Relational	5.x/6.x/7.x	
Db2 LUW	Relational	9.5	
		9.7/10.x	
		11.1	
Db2 z/OS	Relational	8.1	
		9.1/10/11	
		12	
DynamoDB	NoSQL		
Google BigQuery	Big Data		
Hive	Big Data	2.1.x	Refer to the Limitations in Hive topic.
Informix	Relational	10.x/11.x/12.x	
JSON	Big Data	1.x	
MariaDB	Relational	10.4.x	
MongoDB	NoSQL	4.x	
MySQL	Relational	8.x	MySQL 8.0.23 is certified for Amazon Aurora.
Neo4j	NoSQL	4.2.x	
		4.3.x	

Database Name	Type	Version	Notes
Netezza	Relational	7.2	
ODBC	Relational	2.x	
		3.x	
Oracle	Relational	12c r2	
		18c	
		19c	
		21c	
Parquet	Big Data	2.x	
Progress	Relational	9.x/10.x/11.x	The erwin Data Modeler 64-bit version is not verified for the Progress 9.x/10.x database.
PostgreSQL	Relational	12.x-16.x	PostgreSQL 9.6.21, 9.6.24, 10.16, 10.20, 11.11, and 11.14 are certified. PostgreSQL 11.8 is certified for Amazon Aurora.
Redshift	Relational	1	
SAP ASE	Relational	15.x/16	
SAP IQ	Relational	15.x/16	
SAS	Relational		
SQL Server	Relational	2012	
		2014	
		2016/2017	
		2019/2022	
		Azure	
Snowflake	Relational		
Teradata	Relational	14.1	
		15.x/16.x	

What is Native Support in erwin DM?

1 Reverse Engineer via JDBC/ODBC or Script

2 Forward Engineer (Generate Schema DDL)

3 Complete Compare (Compare models and generate ALTER DDL)

4 Move from one data structure to another

Quest

Setting up your workspace

Where Next Meets Now.

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help

Zoom Normal | Themes | Table | Column | Primary Key | Keys | Comment | Icon | Order | Panes | StatusBar | Shadows | Page Grid | Manage Windows | Cascade Windows | Horizontal Split | Vertical Split

Display Level | Window

Model Explorer

Model | Subject Area

Action Log

Details | Summary

Advisories

Overview

For Help, press F1

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help

Options

Display Level

Zoom Normal | Themes | Table | Column | Primary Key | Keys | Comment | Icon | Order | Panes | StatusBar | Shadows | Page Grid | Manage Windows | Cascade Windows | Horizontal Split | Vertical Split

Window

Model Explorer

Model | Subject Area

Action Log

Details | Summary

Advisories

Overview

File   Home   Diagram   Project Explorer   Model   Mart   Actions   Tools   Help

Options

Zoom
Normal   Themes   Table   Column   Primary
Key   Keys   Comment   Icon   Order   Panes   ☑ StatusBar   Manage   Cascade   Horizontal   Vertical
☐ Shadows   Windows   Windows   Split   Split
☐ Page Grid
Display Level   Window

Model Explorer

Model   Subject Area

Action Log

Details   Summary

Advisories

Overview

or Help, press F1

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help

Options

View ribbon:

Zoom Normal | Themes | Table | Column | Primary Key | Keys | Comment | Icon | Order

Display Level

StatusBar
Shadows
Page Grid

Manage Windows | Cascade Windows | Horizontal Split | Vertical Split

Window

Panes dropdown menu:

	Panes	
✓	Explorer Pane	Ctrl+E
✓	Action Log Pane	Ctrl+L
✓	Advisories Pane	Ctrl+D
✓	Overview Pane	
	Bulk Editor Pane	Ctrl+B
	Properties Pane	Ctrl+R
	Objects Count Pane	Ctrl+J
	Project Explorer Pane	

Model Explorer

Model | Subject Area

Action Log

Details | Summary

Advisories

Overview

Windows Options

Reverse Engineer to create a Logical/Physical Data Model

Where Next Meets Now.

File | Home | View | Diagram | Project Explorer | Model | Mart | **Actions** | Tools | Help

Options ▾

Transformations | Complete Compare | Manage Snapshots | Design Layers ▾ | Target Database | Database Connection | Reverse Engineer | Reverse Engineer Configuration | Schema... | Alter Script... | Check Model | Templates...

Database

Forward Engineer

Model Explorer 📌 ✕

◀ ▶ 🔍 🗑 ⊞ 🌐

New Model ✕

Type

○ Logical   ○ Physical   ● Logical/Physical   ○ Match template

Target Server

☐ Match template target server

Database: [SQL Server ▾]   Version: [2019/2022 ▾]

Predefined List: [▾]

Template

[<Default> ▾] 📥 📤

☐ Preserve the template binding

[Next]   [Cancel]

📄 Model   📑 Subject Area

Action Log

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help

Transformations | Complete Compare | Manage Snapshots | Design Layers | Target Database | Database Connection | Reverse Engineer | Reverse Engineer Configuration | Schema... | Alter Script... | Check Model | Templates...

Model Explorer

- Model_3
  - Annotations
  - Data Vault 2.0
  - Datatype Standards
  - Default Values
  - Domains
  - Entities
  - ER Diagrams
  - Model Sources
  - Naming Standards
  - Relationships
  - Subject Areas
  - Themes
  - Validation Rules

Model3 : ER_Diag...

ER_Diagram_164

Reverse Engineering Wizard

Overview
Reverse Engineering options overview

Overview
Connection
Schemas
Tables
Option Set
Detailed Options
Scheduler
erwin Project

Reverse Engineer From

◉ Database   ○ Script File

File: [   ] Browse...

Overview

Welcome to the Reverse Engineering Wizard!

The **Reverse engineering** wizard walks you through the process of reverse engineering a model from a physical database. You can customize the operation for a target database of your choice using the several option sections available.

Connection: Use this section to connect to your database.

Schemas: Use this section to select schemas from the list of available schemas in the database.

Tables: Use this section to select a subset of tables for reverse engineering.

Option Set: page lets you customize the Reverse Engineer option set.

Detailed Options: Use this section to configure detailed reverse engineering options, such as NSM options, objects to be reverse engineered, primary keys and relations inference, physical and logical name case conversions, and trigger inclusion.

Scheduler: Use this section to configure the model and mart location for the reverse engineering job being scheduled.

< Back | Next > | OK | Cancel | Help

File   Home   View   Diagram   Project Explorer   Model   Mart   **Actions**   Tools   Help

Transformations   Complete Compare   Manage Snapshots   Design Layers   Target Database   Database Connection   Reverse Engineer   Reverse Engineer Configuration   Schema...   Alter Script...   Check Model   Templates...

Model Explorer

Model_3
- Annotations
- Data Vault 2.0
- Datatype Standards
- Default Values
- Domains
- Entities
- ER Diagrams
- Model Sources
- Naming Standards
- Relationships
- Subject Areas
- Themes
- Validation Rules

Model3 : ER_Diag

Reverse Engineering Wizard

Connection
Configure database connection options

Overview	
Connection	
Schemas	
Tables	
Option Set	
Detailed Options	
Scheduler	
erwin Project	

Database   SQL Server 2019/2022

Authentication Database Authentication

User Name   sa

Password

Parameters	Value
Connection Type	Use Native Connection
Server:	localhost
Database	PublicationModel
Use Encrypted Connection	☐

Connect   Disconnect   API Connection String

Recent Connections:

PublicationModel (SQL Server) on localhost using sa
PublicationModel (SQL Server 2019/2022) on localhost using sa
WideWorldImporters (SQL Server 2019/2022) on localhost using sa

< Back   Next >   OK   Cancel   Help

ER_Diagram_164

Model   Subject Area

Action Log

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help

Transformations | Complete Compare | Manage Snapshots | Design Layers | Target Database | Database Connection | Reverse Engineer | Reverse Engineer Configuration | Schema... | Alter Script... | Check Model | Templates...

Model Explorer

- Model_3
  - Annotations
  - Data Vault 2.0
  - Datatype Standards
  - Default Values
  - Domains
  - Entities
  - ER Diagrams
  - Model Sources
  - Naming Standards
  - Relationships
  - Subject Areas
  - Themes
  - Validation Rules

Model3 : ER_Diag...

ER_Diagram_164

Reverse Engineering Wizard

Connection
Configure database connection options

Overview	
Connection	
Schemas	
Tables	
Option Set	
Detailed Options	
Scheduler	
erwin Project	

Database | SQL Server 2019/2022
Authentication | Database Authentication
User Name | sa
Password | ••••••••

Parameters	Value
Connection Type	Use Native Connection
Server:	localhost
Database	PublicationModel
Use Encrypted Connection	☐

Connect | Disconnect | API Connection String

Recent Connections:

PublicationModel (SQL Server) on localhost using sa
PublicationModel (SQL Server 2019/2022) on localhost using sa
WideWorldImporters (SQL Server 2019/2022) on localhost using sa

< Back | Next > | OK | Cancel | Help

Model | Subject Area

Action Log

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help

Transformations | Complete Compare | Manage Snapshots | Design Layers | Target Database | Database Connection | Reverse Engineer | Reverse Engineer Configuration | Schema... | Alter Script... | Check Model | Templates...

Model Explorer

- Model_3
  - Annotations
  - Data Vault 2.0
  - Datatype Standards
  - Default Values
  - Domains
  - Entities
  - ER Diagrams
  - Model Sources
  - Naming Standards
  - Relationships
  - Subject Areas
  - Themes
  - Validation Rules

Model3 : ER_Diag...

ER_Diagram_164

Reverse Engineering Wizard

Connection
Configure database connection options

- Overview
- **Connection**
- Schemas
- Tables
- Option Set
- Detailed Options
- Scheduler
- erwin Project

Database	SQL Server 2019/2022
Authentication	Database Authentication
User Name	sa
Password	●●●●●●●●

Parameters	Value
Connection Type	Use Native Connection
Server:	localhost
Database	PublicationModel
Use Encrypted Connection	☐

Connect | Disconnect | API Connection String

Recent Connections:

PublicationModel (SQL Server 2019/2022) on localhost using sa
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WideWorldImporters (SQL Server 2019/2022) on localhost using sa

< Back | Next > | OK | Cancel | Help

Model | Subject Area

Action Log

Ready | Non-Mart Model | SQL Server 2019/2022 | 100%

erwin DM - Model3

File | Home | View | Diagram | Project Explorer | Model | Mart | **Actions** | Tools | Help

Options ▾

Transformations | Complete Compare | Manage Snapshots | Design Layers ▾ | Target Database | Database Connection | Reverse Engineer | Reverse Engineer Configuration | Schema... | Alter Script... | Check Model | Templates...

Model Explorer

- Model_3
  - Annotations
  - Data Vault 2.0
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  - Domains
  - Entities
  - ER Diagrams
  - Model Sources
  - Naming Standards
  - Relationships
  - Subject Areas
  - Themes
  - Validation Rules

Model3 : ER_Diag...

ER_Diagram_164

Reverse Engineering Wizard

Schemas
This page allows the user to select available schema list.

- Overview
- Connection
- **Schemas**
- Tables
- Option Set
- Detailed Options
- Scheduler
- erwin Project

☐ System Objects

Available Schemas: Enter filter text

- db_accessadmin
- db_backupoperator
- db_datareader
- db_datawriter
- db_ddladmin
- db_denydatareader
- db_denydatawriter
- db_owner
- db_securityadmin
- dbo
- guest
- INFORMATION_SCHEMA

Selected Schemas:

Items: (12)   Items: (0)

< Back | Next > | OK | Cancel | Help

Properties

Model | Subject Area

Action Log

Ready | Non-Mart Model | SQL Server 2019/2022 | 100%

File   Home   View   Diagram   Project Explorer   Model   Mart   **Actions**   Tools   Help   Options

Transformations   Complete Compare   Manage Snapshots   Design Layers   Target Database   Database Connection   Reverse Engineer   Reverse Engineer Configuration   Schema...   Alter Script...   Check Model   Templates...

Model Explorer

- Model_3
  - Annotations
  - Data Vault 2.0
  - Datatype Standards
  - Default Values
  - Domains
  - Entities
  - ER Diagrams
  - Model Sources
  - Naming Standards
  - Relationships
  - Subject Areas
  - Themes
  - Validation Rules

Model3 : ER_Diag...

ER_Diagram_164

Model   Subject Area

Action Log

Reverse Engineering Wizard

Schemas
This page allows the user to select available schema list.

- Overview
- Connection
- **Schemas**
- Tables
- Option Set
- Detailed Options
- Scheduler
- erwin Project

☐ System Objects

Available Schemas: [Enter filter text]

- db_accessadmin
- db_backupoperator
- db_datareader
- db_datawriter
- db_ddladmin
- db_denydatareader
- db_denydatawriter
- db_owner
- db_securityadmin
- guest
- INFORMATION_SCHEMA

Selected Schemas:

- dbo

Items: (11)   Items: (1)

< Back   Next >   OK   Cancel   Help

File   Home   View   Diagram   Project Explorer   Model   Mart   Actions   Tools   Help   Options

Transformations   Complete Compare   Manage Snapshots   Design Layers   Target Database   Database Connection   Reverse Engineer   Reverse Engineer Configuration   Schema...   Alter Script...   Check Model   Templates...

Model Explorer

- Model_3
  - Annotations
  - Data Vault 2.0
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  - ER Diagrams
  - Model Sources
  - Naming Standards
  - Relationships
  - Subject Areas
  - Themes
  - Validation Rules

Model3 : ER_Diag...

ER_Diagram_164

Reverse Engineering Wizard

Tables
Select a subset of tables for reverse engineering.

- Overview
- Connection
- Schemas
- **Tables**
- Option Set
- Detailed Options
- Scheduler
- erwin Project

Available Tables: *Enter filter text*

- Auth
- Bk_Ordr
- Book
- Book_Retrun
- Book_YTD_Sls
- BookAuth
- Crd_Card
- Crd_Chk
- Cust
- Disc
- Emp
- Job
- Mony_Ordr
- Ordr_Itm
- Ordr_Ship
- Personal_Chk
- Pmt
- Publshr
- Publshr_Logo
- Purchase_Ordr
- Reporting_Structure
- Rgn
- Rylty
- Rylty_Hist

Items: (26)

Selected Tables:

Items: (0)

< Back   Next >   OK   Cancel   Help

Model   Subject Area

Action Log

Ready   Non-Mart Model   SQL Server 2019/2022   100%

File Home View Diagram Project Explorer Model Mart **Actions** Tools Help Options ▾

Transformations | Complete Compare | Manage Snapshots | Design Layers | Target Database | Database Connection | Reverse Engineer | Reverse Engineer Configuration | Schema... | Alter Script... | Check Model | Templates...

Model Explorer

- Model_3
  - Annotations
  - Data Vault 2.0
  - Datatype Standards
  - Default Values
  - Domains
  - Entities
  - ER Diagrams
  - Model Sources
  - Naming Standards
  - Relationships
  - Subject Areas
  - Themes
  - Validation Rules

Model Subject Area

Model3 : ER_Diag

ER_Diagram_164

Reverse Engineering Wizard

Tables
Select a subset of tables for reverse engineering.

- Overview
- Connection
- Schemas
- **Tables**
- Option Set
- Detailed Options
- Scheduler
- erwin Project

Available Tables: Enter filter text

Selected Tables:

- Auth
- Bk_Ordr
- Book
- Book_Retrun
- Book_YTD_Sls
- BookAuth
- Crd_Card
- Crd_Chk
- Cust
- Disc
- Emp
- Job
- Mony_Ordr
- Ordr_Itm
- Ordr_Ship
- Personal_Chk
- Pmt
- Publshr
- Publshr_Logo
- Purchase_Ordr
- Reporting_Structure
- Rgn
- Rylty
- Rylty_Hist

Items: (0)   Items: (26)

< Back   Next >   OK   Cancel   Help

Action Log

Ready   Non-Mart Model   SQL Server 2019/2022   100%

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help

Options

Transformations | Complete Compare | Manage Snapshots | Design Layers | Target Database | Database Connection | Reverse Engineer | Reverse Engineer Configuration | Schema... | Alter Script... | Check Model | Templates...

Model Explorer

- Model_3
  - Annotations
  - Data Vault 2.0
  - Datatype Standards
  - Default Values
  - Domains
  - Entities
  - ER Diagrams
  - Model Sources
  - Naming Standards
  - Relationships
  - Subject Areas
  - Themes
  - Validation Rules

Reverse Engineering Wizard

Detailed Options
Configure detailed reverse engineering options.

Overview
Connection
Schemas
Tables
Option Set

Detailed Options

NSM Options

Glossary CSV File: [   ]   Browse...

Reverse Engineer

Infer

☐ Primary Keys

☐ Relations

From

○ Indexes

○ Names

Case Conversion of Logical Names
◉ None   ○ lower   ○ UPPER   ○ Mixed

☐ Include Generated Triggers

< Back | Next > | OK | Cancel | Help

Model | Subject Area

Action Log

Ready

Non-Mart Model

SQL Server 2019/2022

100%

File | Home | View | Diagram | Project Explorer | Model | Mart | **Actions** | Tools | Help

Transformations | Complete Compare | Manage Snapshots | Design Layers | Target Database | Database Connection | Reverse Engineer | Reverse Engineer Configuration | Schema... | Alter Script... | Check Model | Templates...

Model Explorer

- Model_3
  - Annotations
  - Data Vault 2.0
  - Datatype Standards
  - Default Values
  - Domains
  - Entities
  - ER Diagrams
  - Model Sources
  - Naming Standards
  - Relationships
  - Subject Areas
  - Themes
  - Validation Rules

Model | Subject Area

Reverse Engineering Wizard

Scheduler
Configure the model and mart location for the reverse engineering job.

- Overview
- Connection
- Schemas
- Tables
- Option Set
- Detailed Options
- **Scheduler**
- erwin Project

Scheduler Options

☐ Scheduler

Model: [   ] Browse...

☐ Mart Folder: [   ] Browse...

☐ Complete Compare

Output File: [   ] Browse...

◉ File ○ Mart ☐ Using Latest Version ☐ Save To Mart

Target Model: [   ] Browse...

Option Set: [Speed Option Set   ] Browse...

Compare Level: [Logical/Physical   ]

[< Back] [Next >] [OK] [Cancel] [Help]

ER_Diagram_164

Action Log

erwin DM - Model3

File   Home   View   Diagram   Project Explorer   Model   Mart   **Actions**   Tools   Help

Transformations | Complete Compare | Manage Snapshots | Design Layers | Target Database | Database Connection | Reverse Engineer | Reverse Engineer Configuration | Schema... | Alter Script... | Check Model | Templates...

Model Explorer

- Model_3
  - Annotations
  - Data Vault 2.0
  - Datatype Standards
  - Default Values
  - Domains
  - Entities
  - ER Diagrams
  - Model Sources
  - Naming Standards
  - Relationships
  - Subject Areas
  - Themes
  - Validation Rules

Model   Subject Area

Reverse Engineering Wizard

erwin Project
Configure the model for erwin Project.

Overview
Connection
Schemas
Tables
Option Set
Detailed Options
Scheduler
erwin Project

erwin Project Options

☐ erwin Project

Model Name: [   ]

Location: [   ]

< Back | Next > | OK | Cancel | Help

Model3 : ER_Diag

ER_Diagram_164

Action Log

Ready   Non-Mart Model   SQL Server 2019/2022   100%

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help

Transformations | Complete Compare | Manage Snapshots | Design Layers | Target Database | Database Connection | Reverse Engineer | Reverse Engineer Configuration | Schema... | Alter Script... | Check Model | Templates...

Database | Forward Engineer

Logical

Model Explorer

- Model_3
  - Annotations
  - Data Vault 2.0
  - Datatype Standards
  - Default Values
  - Domains
  - Entities
  - ER Diagrams
  - Model Sources
  - Naming Standards
  - Relationships
  - Subject Areas
  - Themes
  - Validation Rules

Model | Subject Area

Model3 : ER_Diagram_164 *

Reverse Engineer from Database

Reverse Engineer

Retrieving info for Table: Publshr_Logo

Cancel

ER_Diagram_164

Action Log

Ready | Non-Mart Model | SQL Server 2019/2022 | 100%

Model layout

Where Next Meets Now.

A closer look at the model

erwin DM - [Model_3 : ER_Diagram_164 *]

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help

Options

Transformations | Complete Compare | Manage Snapshots | Design Layers | Target Database | Database Connection | Reverse Engineer | Reverse Engineer Configuration | Schema... | Alter Script... | Check Model | Templates...

Database | Forward Engineer

Physical

Model Explorer

Model_3
- Model_3
  - Aggregates
  - Always Encrypted Keys
  - Annotations
  - Application Roles
  - Assemblies
  - Asymmetric Keys
  - Certificates
  - Credentials
  - Cryptographic Providers
  - Data Movement Rules
  - Data Movement Sources
  - Data Vault 2.0
  - Database Audit Specificati...
  - Database Encryption Keys
  - Database Roles
  - Databases
  - Datatype Standards
  - Default Values
  - Domains
  - ER Diagrams
  - External Data Sources
  - External File Formats
  - External Languages
  - External Libraries
  - Files
  - Fulltext Catalogs
  - Fulltext Stoplists
  - Functions
  - Logins
  - Model Sources
  - Naming Standards
  - Partition Functions
  - Partition Schemes
  - Permissions

Model | Subject Area

Model_3

Purchase_Ordr
Ordr_Nbr
Stor_Id
Ordr_Dt
Pmt_Trm
Cust_Id

Ordr_Nbr
Itm_Seq_Nbr
Book_Rtrn_Dt

ayment_View
Card_Nbr
rd_Card_Amt
Mony_Ordr_Nbr
Mony_Ordr_Amt
hk_Nbr
hk_Amt
ust_Frst_Nam
ust_Lst_Nam
Ordr_Nbr
Ordr_Dt

Ordr_Itm
Ordr_Nbr
Itm_Seq_Nbr
Ordr_Qty
Book_Id
Disc_Typ
Ordr_Disc_Amt
Ordr_Prc

Ordr_Ship
Ordr_Ship_Id
Ordr_Nbr
Itm_Seq_Nbr
Blng_Addr
Ship_Addr
Ship_Stat
Shed_Ship_Dt
Del_Dt
Del_Time
Carrier

Bk_Ordr
Ordr_Ship_Id
Ordr_Nbr
Itm_Seq_Nbr
Reschd_Ship_Dt

ersonal_Chk
hk_Nbr
hk_Acct_Nbr
hk_Bnk_Nbr
hk_Dvr_Lic_Nbr
hk_Amt
Pmt_Nbr

Rylty_Hist
Rylty_Hist_Id
Ordr_Nbr
Itm_Seq_Nbr
Rylty_Pmt_Dt
Rylty_Pmt_Amt
Rylty_Payee

Disc
Disc_Typ
Lo_Qty
Hi_Qty
Disc_Pct

Order_View
Stor_Nam
Ordr_Nbr
Ordr_Dt
Book_Nam
Ordr_Qty
Ordr_Disc_Amt
Ordr_Prc

Book_YTD_Sl
Book_Id
Yr_To_Dt_Sls
Yr_To_Dt_Sls

Book
Book_Id
Book_Nam
Book_Typ
Publshr_Id
MRSP_Prc

ER_Diagram_164

File   Home   View   Diagram   Project Explorer   Model   Mart   Actions   Tools   Help   Options

SQL Server Table 'Ordr_Itm' Editor

Enter filter text

Physical Name	Schema		External	SQL Server Table Type	Durability		Physical Only	Generate As Type
Job	dbo	▼	☐	Disk Based	Schema And Data	▼	☐	☐
Mony_Ordr	dbo	▼	☐	Disk Based	Schema And Data	▼	☐	☐
Ordr_Itm	dbo	▼	☐	Disk Based	Schema And Data	▼	☐	☐
Ordr_Ship	dbo		☐	Disk Based	Schema And Data		☐	☐

General   Partitions   ChangeDataCapture   DataCompression   Validation   Permission   Statistics   Business Terms Mapping   Comr

▲ **Name**	
Name	Ordr_Itm
Physical Name	%EntityName()
Harden Strategy	Inherit
▲ **Storage Locations**	
Filegroup	PRIMARY
Text Image	
Filestream Filegroup	
Filestream Partition Scheme	
▲ **Change Tracking Options**	
Change Tracking	Disable
Track Columns Updated	-- -- --
▲ **Table Options**	
Lock Escalation Type	Table
Vardecimal Storage Format	False
▲ **File Table Options**	
Filetable Directory	
Filetable Collate Filename	
Filetable Primary Key Constraint Name	
Filetable Streamid Unique Constraint Name	
Filetable Fullpath Unique Constraint Name	

Close   Cancel

Details...

Physical

Ordr_Nbr
Itm_Seq_Nbr
Book_Rtrn_Dt

Ordr_Itm

Ordr_Nbr
Itm_Seq_Nbr

Ordr_Qty
Book_Id
Disc_Typ
Ordr_Disc_Amt
Ordr_Prc

Ordr_Ship

Ordr_Ship_Id
Ordr_Nbr
Itm_Seq_Nbr

Blng_Addr
Ship_Addr
Ship_Stat
Shed_Ship_Dt
Del_Dt
Del_Time
Carrier

Bk_Ordr

Ordr_Ship_Id
Ordr_Nbr
Itm_Seq_Nbr

Reschd_Ship_Dt

ylty_Hist

lylty_Hist_Id

Ordr_Nbr
m_Seq_Nbr
ylty_Pmt_Dt
ylty_Pmt_Amt
ylty_Payee

Disc

Disc_Typ

Lo_Qty
Hi_Qty
Disc_Pct

Book_YTD_Sl

Book_Id

Yr_To_Dt_Sls
Yr_To_Dt_Sls

Book

Book_Id

Book_Nam
Book_Typ
Publshr_Id
MBSP_Prc

Model   Subject Area   ER_Diagram_164

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help

Transformations | Complete Compare | Manage Snapshots | Design Layers | Target Database | Database Connection | Reverse Engineer | Reverse Engineer Configuration | Schema... | Alter Script... | Check Model | Templates...

Database | Forward Engineer

Microsoft Sans | 10 | Physical

Model Explorer

- Model_3
  - Aggregates
  - Always Encrypted Keys
  - Annotations
  - Application Roles
  - Assemblies
  - Asymmetric Keys
  - Certificates
  - Credentials
  - Cryptographic Providers
  - Data Movement Rules
  - Data Movement Sources
  - Data Vault 2.0
  - Database Audit Specificati...
  - Database Encryption Keys
  - Database Roles
  - Databases
  - Datatype Standards
  - Default Values
  - Domains
  - ER Diagrams
  - External Data Sources
  - External File Formats
  - External Languages
  - External Libraries
  - Files
  - Fulltext Catalogs
  - Fulltext Stoplists
  - Functions
  - Logins
  - Model Sources
  - Naming Standards
  - Partition Functions
  - Partition Schemes
  - Permissions

Model | Subject Area

Model_3 | ER_Diagram_164

Purchase_Ordr

Ordr_Nbr

Stor_Id
Ordr_Dt
Pmt_Trm
Cust_Id

Ordr_Nbr
Itm_Seq_Nbr
Book_Rtrn_Dt

ayment_View

Card_Nbr
rd_Card_Amt
Mony_Ordr_Nbr
Mony_Ordr_Amt
Chk_Nbr
Chk_Amt
Cust_Frst_Nam
Cust_Lst_Nam
Ordr_Nbr
Ordr_Dt

Ordr_Itm

Ordr_Nbr
Itm_Seq_Nl

Ordr_Qty
Book_Id
Disc_Typ
Ordr_Disc_
Ordr_Prc

Context menu:
- Table Properties...
- Column Properties...
- **Index Properties...**
- XML Index Properties...
- Spatial Index Properties...
- ColumnStore Index Properties...
- Trigger Properties...
- Stored Procedure Properties...
- Function Properties...
- Script Properties...
- Delete
- Go To Model Explorer
- Display Level
- Collapse
- Expand
- Hide
- Hide Neighborhood
- Unhide
- Unhide All
- Override Fonts and Colors...
- Reset Object to Automatic Sizing
- Copy Theme and Overridden Styles

Bk_Ordr

Ordr_Ship_Id
Ordr_Nbr
Itm_Seq_Nbr

Reschd_Ship_Dt

Rylty_Hist

Rylty_Hist_Id

Ordr_Nbr
Itm_Seq_Nbr
Rylty_Pmt_Dt
Rylty_Pmt_Amt
Rylty_Payee

ersonal_Chk

Chk_Nbr
Chk_Acct_Nbr
Chk_Bnk_Nbr
Chk_Dvr_Lic_Nbr
Chk_Amt
Pmt_Nbr

Order_View

Stor_Nam
Ordr_Nbr
Ordr_Dt
Book_Nam
Ordr_Qty
Ordr_Disc_Amt
Ordr_Prc

Book_YTD_Sl

Book_Id

Yr_To_Dt_Sls
Yr_To_Dt_Sls

Book

Book_Id

Book_Nam
Book_Typ
Publshr_Id
MBSP_Prc

erwin DM - [Model_3 : ER_Diagram_164 *]

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help

Options

SQL Server Table 'Ordr_Itm' Editor

Enter filter text

Physical Name	Schema	External	SQL Server Table Type	Durability	Physical Only	Generate As Type
Job	dbo	☐	Disk Based	Schema And Data	☐	☐
Mony_Ordr	dbo	☐	Disk Based	Schema And Data	☐	☐
Ordr_Itm	dbo	☐	Disk Based	Schema And Data	☐	☐
Ordr_Ship	dbo	☐	Disk Based	Schema And Data	☐	☐

Permission | Statistics | Business Terms Mapping | Comment | Volumetrics | SQL | Style | Icon | Object Creation Order | Where

```
CREATE TABLE [Ordr_Itm]
(
        [Ordr_Qty]        smallint  NULL ,
        [Ordr_Nbr]        int  NOT NULL ,
        [Book_Id]         char(9) COLLATE SQL_Latin1_General_CP1_CI_AS  NOT NULL ,
        [Itm_Seq_Nbr]       int  NOT NULL ,
        [Disc_Typ]        varchar(4) COLLATE SQL_Latin1_General_CP1_CI_AS  NULL ,
        [Ordr_Disc_Amt]     decimal(7,2)  NULL ,
        [Ordr_Prc]        decimal(7,2)  NULL ,
        PRIMARY KEY  NONCLUSTERED ([Ordr_Nbr] ASC,[Itm_Seq_Nbr] ASC),
        FOREIGN KEY ([Disc_Typ]) REFERENCES [Disc]([Disc_Typ]),
        FOREIGN KEY ([Ordr_Nbr]) REFERENCES [Purchase_Ordr]([Ordr_Nbr]),
        FOREIGN KEY ([Book_Id]) REFERENCES [Book]([Book_Id])
)
ON "PRIMARY"
WITH
(
        DATA_COMPRESSION = NONE
)
go


ALTER TABLE [Ordr_Itm]
DISABLE CHANGE_TRACKING
go
```

Details...

Close | Cancel

Physical

Ordr_Nbr
Itm_Seq_Nbr
Book_Rtrn_Dt

Ordr_Itm

Ordr_Nbr
Itm_Seq_Nbr

Ordr_Qty
Book_Id
Disc_Typ
Ordr_Disc_Amt
Ordr_Prc

Ordr_Ship

Ordr_Ship_Id
Ordr_Nbr
Itm_Seq_Nbr

Blng_Addr
Ship_Addr
Ship_Stat
Shed_Ship_Dt
Del_Dt
Del_Time
Carrier

Bk_Ordr

Ordr_Ship_Id
Ordr_Nbr
Itm_Seq_Nbr

Reschd_Ship_Dt

ylty_Hist

ylty_Hist_Id

Ordr_Nbr
m_Seq_Nbr
ylty_Pmt_Dt
ylty_Pmt_Amt
ylty_Payee

Disc

Disc_Typ

Lo_Qty
Hi_Qty
Disc_Pct

Book_YTD_Sl

Book_Id

Yr_To_Dt_Sls
Yr_To_Dt_Sls

Book

Book_Id

Book_Nam
Book_Typ
Publshr_Id
MRSP_Prc

Model | Subject Area

ER_Diagram_164

Transfor

Model E

Properties

erwin DM - [Model_3 : ER_Diagram_164 *]

File | Home | View | Diagram | Project Explorer | Model | Mart | **Actions** | Tools | Help

Transformations | Complete Compare | Manage Snapshots | Design Layers | Target Database | Database Connection | Reverse Engineer | Reverse Engineer Configuration | Schema... | Alter Script... | Check Model | Templates...

Model Explorer

- External Data Sources
- External File Formats
- External Languages
- External Libraries
- Files
- Fulltext Catalogs
- Fulltext Stoplists
- Functions
- Logins
- Model Sources
- Naming Standards
- Partition Functions
- Partition Schemes
- Permissions
- Relationships
- Resource Pools
- Schemas
- Script Templates
- Sequences
- Server Audit Specifications
- Server Audits
- Stored Procedures
  - reptq1
    - Permissions
  - reptq2
- Subject Areas
- Symmetric Keys
- Synonyms
- Tables
- Themes
- Trigger Templates
- Triggers
- User Ids
- Validation Rules
- Views

Model | Subject Area

SQL Server Stored Procedure 'reptq1' Editor

Enter filter text

Name	Schema	Type	Attach To New	Use Alter Syntax	Generate
reptq1	dbo	Model Level	☐	☐	☑
reptq2	dbo	Model Level	☐	☐	☑

General | Code | **Expanded** | Permission | Comment | Object Creation Order | Where Us

Expanded Code (Read Only):

```
CREATE PROCEDURE dbo.reptq1

AS BEGIN
   select
     case when grouping(pub_id) = 1 then 'ALL'
               else pub_id end as pub_id, avg(price) as
   from titles
   where price is NOT NULL
   group by pub_id with rollup
   order by pub_id;
END;
```

Close | Cancel

Details...

Physical

Ordr_Nbr
Itm_Seq_Nbr
Book_Rtrn_Dt

Ordr_Itm

Ordr_Nbr
Itm_Seq_Nbr

Ordr_Qty
Book_Id
Disc_Typ
Ordr_Disc_Amt
Ordr_Prc

Ordr_Ship

Ordr_Ship_Id
Ordr_Nbr
Itm_Seq_Nbr

Blng_Addr
Ship_Addr
Ship_Stat
Shed_Ship_Dt
Del_Dt
Del_Time
Carrier

Bk_Ordr

Ordr_Ship_Id
Ordr_Nbr
Itm_Seq_Nbr

Reschd_Ship_Dt

Disc

Disc_Typ

Lo_Qty
Hi_Qty
Disc_Pct

yalty_Hist

ylty_Hist_Id

rdr_Nbr
n_Seq_Nbr
ylty_Pmt_Dt
ylty_Pmt_Amt
ylty_Payee

Book_YTD_Sl

Book_Id

Yr_To_Dt_Sls
Yr_To_Dt_Sls

Book

Book_Id

Book_Nam
Book_Typ
Publshr_Id
MRSP_Prc

ER_Diagram_164

erwin DM - [Model3 : ER_Diagram_164 *]

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help | Options

Transformations | Complete Compare | Manage Snapshots | Design Layers | Target Database | Database Connection | Reverse Engineer | Reverse Engineer Configuration | Schema... | Alter Script... | Check Model | Templates...

Database | Forward Engineer

Forward Engineer Schema Generation Wizard

Schema Generation Preview
This page provides a preview of the Forward Engineer Schema Generation.

- Overview
- Option Selection
- Summary
- Owner Override
- Table Filter
- **Preview**

```sql
1
2   CREATE TABLE [Auth]
3   (
4       [Auth_Id]            char(9)  COLLATE SQL_Latin1_General_CP1_CI_AS   NOT  NULL ,
5       [Auth_Lst_Nam]       varchar(25) COLLATE SQL_Latin1_General_CP1_CI_AS   NOT NULL ,
6       [Auth_Frst_Nam]      varchar(15) COLLATE SQL_Latin1_General_CP1_CI_AS   NULL ,
7       [Auth_Phn_Nbr]       int   NULL ,
8       [Auth_Addr]          varchar(25) COLLATE SQL_Latin1_General_CP1_CI_AS   NULL ,
9       [Auth_Cty]           varchar(20) COLLATE SQL_Latin1_General_CP1_CI_AS   NULL ,
10      [Auth_St]            varchar(4) COLLATE SQL_Latin1_General_CP1_CI_AS   NOT NULL ,
11      [Auth_Zip_Cd]        varchar(9) COLLATE SQL_Latin1_General_CP1_CI_AS   NULL ,
12      [Cntrct]             smallint  NULL
13  )
14  go
15
16  CREATE TABLE [Bk_Ordr]
17  (
18      [Reschd_Ship_Dt]     datetime  NULL ,
19      [Ordr_Ship_Id]       char(9) COLLATE SQL_Latin1_General_CP1_CI_AS   NOT NULL
20          CONSTRAINT [DF__Bk_Ordr__Ordr_Sh__25869641]
21              DEFAULT  212,
22      [Ordr_Nbr]           int   NOT NULL ,
23      [Itm_Seq_Nbr]        int   NOT NULL
24  )
25  go
26
27  ALTER TABLE [Bk_Ordr]
28      WITH CHECK ADD CONSTRAINT [area_codes_1160276702] CHECK  ( [Ordr_Ship_Id]=201 OR [Ordr_Ship_Id]=
29  go
30
31  CREATE TABLE [Book]
```

< Back | Next > | Generate | OK | Cancel | Help

or Help, press F1 | Non-Mart Model | SQL Server 2019/2022 | 52%

Add a new diagram

Where Next Meets Now.

File   Home   View   Diagram   Project Explorer   Model   Mart   **Actions**   Tools   Help   Options ▾

Transformations | Complete Compare | Manage Snapshots | Design Layers | Target Database | Database Connection | Reverse Engineer | Reverse Engineer Configuration | Schema... | Alter Script... | Check Model | Templates...

Database   Forward Engineer

Physical ▾

Model Explorer

◀ ▶ 🔍 🗑 📇 📋

- 📄 Model_3
  - Aggregates
  - Always Encrypted Keys
  - Annotations
  - Application Roles
  - Assemblies
  - Asymmetric Keys
  - Certificates
  - Credentials
  - Cryptographic Providers
  - Data Movement Rules
  - Data Movement Sources
  - Data Vault 2.0
  - Database Audit Specificati...
  - Database Encryption Keys
  - Database Roles
  - Databases
  - Datatype Standards
  - Default Values
  - Domains
  - ER Diagrams
  - External Data Sources
  - External File Formats
  - External Languages
  - External Libraries
  - Files
  - Fulltext Catalogs
  - Fulltext Stoplists
  - Functions
  - Logins
  - Model Sources
  - Naming Standards
  - Partition Functions

📄 Model   Subject Area

Model3 ✕

Model 'Model_3' Editor

General | Defaults | RI Defaults | History Options | Definition | UDP | History | Notes | Extende ◀ ▶

Type: Logical / Physical   Target Server And Version: SQL Server 2019/2022

▲ **Model Information**

| Name | New Model |
| Author | |

▲ **Notation**

| Logical Notation | Information Engineering ▾ |
| Physical Notation | IDEF1x ▾ |

▲ **Modeling Features**

Is Dimensional	☐
Data Vault 2.0	☐
Data Movement	☐

Close   Cancel

Details...

File Home View Diagram Project Explorer Model Mart Actions Tools Help

Options

ER Diagram 'ER_Diagram_164' Editor

Edit ER Diagrams in: New Model

Name	View Mode	Auto-populate
ER_Diagram_164	Physical	☑

Enter filter text

General | Members | Relationships | Layout | Display | Entity | Table | View | Relationship | Page Setup | Page Setup Margins | Definition | Where Used | UDP

☑ Automatically populate from Model

Available Objects

Name
There are no items to show.

Included Objects

Name	Type
Auth	Table
Bk_Ordr	Table
Book	Table
Book_Retrun	Table
Book_YTD_Sls	Table
BookAuth	Table
Crd_Card	Table
Crd_Chk	Table
Cust	Table
Disc	Table
Emp	Table
Job	Table
Mony_Ordr	Table
Order_View	View

Close Cancel

Details...

erwin DM - [New Model : ER_Diagram_164 *]

Objects
Relationship Paths

Hide
Hide Neighborhood

Unhide All

ER Diagram 'ER_Diagram_164' Editor

Edit ER Diagrams in: New Model

Enter filter text

Name	View Mode	Auto-populate
ER_Diagram_164 New	Physical	☑

General | Members | Relationships | Layout | Display | Entity | Table | View | Relationship | Page Setup | Page Setup Margins | Definition | Where Used | UDP

Available Objects

☑ Automatically populate from Model

Included Objects

Name
There are no items to show.

Name	Type
Auth	Table
Bk_Ordr	Table
Book	Table
Book_Retrun	Table
Book_YTD_Sls	Table
BookAuth	Table
Crd_Card	Table
Crd_Chk	Table
Cust	Table
Disc	Table
Emp	Table
Job	Table
Mony_Ordr	Table
Order_View	View

Close   Cancel

Details...

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help

Objects
Hide
Unhide All

Relationship Paths
Hide Neighborhood

ER Diagram 'ER_Diagram_773' Editor

Edit ER Diagrams in: | New Model

Name	View Mode	Auto-populate
ER_Diagram_164	Physical	☑
ER_Diagram_773	Physical	☐

Enter filter text

General | Members | Relationships | Layout | Display | Entity | Table | View | Relationship | Page Setup | Page Setup Margins | Definition | Where Used | UDP

☐ Automatically populate from Model

Available Objects

Name
Auth
Bk_Ordr
Book
Book_Retrun
Book_YTD_Sls
BookAuth
Crd_Card
Crd_Chk
Cust
Disc
Emp
Job
Mony_Ordr

Included Objects

Name	Type
There are no items to show.	

Close | Cancel

Details...

Action Log

For Help, press F1 | Non-Mart Model | SQL Server 2019/2022 | 100%

File   Home   View   Diagram   Project Explorer   Model   Mart   Actions   Tools   Help

Options ▾

ER Diagram 'Logical' Editor

Edit ER Diagrams in: 📄 New Model

Name	View Mode	Auto-populate
ER_Diagram_164	Physical	☑
Logical	Logical	☑

General Members Relationships Layout Display Entity Table View Relationship Page Setup Page Setup Margins Definition Where Used UDP

☑ Automatically populate from Model

Available Objects

Name
There are no items to show.

Included Objects

Name	Type
Auth	Table
Bk_Ordr	Table
Book	Table
Book_Retrun	Table
Book_YTD_Sls	Table
BookAuth	Table
Crd_Card	Table
Crd_Chk	Table
Cust	Table
Disc	Table
Emp	Table
Job	Table
Mony_Ordr	Table
Ordr_Itm	Table

Close   Cancel

Details...

Action Log

For Help, press F1   Non-Mart Model   SQL Server 2019/2022   100%

erwin DM - [New Model : Logical *]

File　Home　View　Diagram　Project Explorer　Model　Mart　Actions　Tools　Help

Options

Objects
Relationship Paths

Hide
Hide Neighborhood

Unhide All

ER Diagram 'ER_Diagram_164' Editor

Edit ER Diagrams in:　New Model

Name	View Mode	Auto-populate
ER_Diagram_164	Physical	☑
Logical	Logical	☑

Enter filter text

General　Members　Relationships　Layout　Display　Entity　Table　View　Relationship　Page Setup　Page Setup Margins　Definition　Where Used　UDP

☑ Automatically populate from Model

Available Objects

Name
There are no items to show.

Included Objects

Name	Type
Auth	Table
Bk_Ordr	Table
Book	Table
Book_Retrun	Table
Book_YTD_Sls	Table
BookAuth	Table
Crd_Card	Table
Crd_Chk	Table
Cust	Table
Disc	Table
Emp	Table
Job	Table
Mony_Ordr	Table
Order_View	View

Close　Cancel

Details...

ER Diagram 'ER_Diagram_164' Editor

Edit ER Diagrams in: New Model

Name	View Mode	Auto-populate
Physical	Physical	☑
Logical	Logical	☑

General | Members | Relationships | Layout | Display | Entity | Table | View | Relationship | Page Setup | Page Setup Margins | Definition | Where Used | UDP

☑ Automatically populate from Model

Available Objects

Name
There are no items to show.

Included Objects

Name	Type
Auth	Table
Bk_Ordr	Table
Book	Table
Book_Retrun	Table
Book_YTD_Sls	Table
BookAuth	Table
Crd_Card	Table
Crd_Chk	Table
Cust	Table
Disc	Table
Emp	Table
Job	Table
Mony_Ordr	Table
Order_View	View

Close | Cancel

Details...

Action Log

For Help, press F1   Non-Mart Model   SQL Server 2019/2022   100%

Diagram Layout

Where Next Meets Now.

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help

Options

New Diagram | Delete Diagram | Diagrams... | Align Left | Align Center | Align Right | Align Top | Align Middle | Align Bottom | Space Horizontally | Space Vertically | Group | Ungroup | Hierarchical | Orthogonal | Tree | Circular | Symmetric | Objects | Relationship Paths | Layout In Place | Hide | Hide Neighborhood | Unhide | Unhide All

Diagram | Alignment | Group | Layout | Hiding

Logical

Model Explorer

- New Model
  - Annotations
  - Data Vault 2.0
  - Datatype Standards
  - Default Values
  - Domains
  - Entities
  - ER Diagrams
  - Model Sources
  - Naming Standards
  - Relationships
  - Subject Areas
  - Themes
  - Validation Rules

New Model

Auth
Auth_Id

Book
Book_Id

Cust
Cust_Id
Cust_Frst_Nam

Emp
Emp_Id

Ordr_Ship
Ordr_Ship_Id

Personal_Chk

Publshr
Publshr_Id

Purchase_Ordr

Reporting_Structure

Stor_Nam
Stor_Id
Stor_Nam
Stor_Addr
Stor_Cty

Model | Subject Area

Physical | Logical

Action Log

For Help, press F1 | Non-Mart Model | SQL Server 2019/2022 | 100%

erwin DM - [New Model : Logical *]

File   Home   View   Diagram   Project Explorer   Model   Mart   Actions   Tools   Help   Options

New Diagram   Delete Diagram   Diagrams...
Align Left   Align Center   Align Right   Align Top   Align Middle   Align Bottom
Space Horizontally   Space Vertically
Group   Ungroup
Hierarchical   Orthogonal   Tree   Circular   Symmetric
Objects   Relationship Paths   Layout In Place
Hide   Hide Neighborhood   Unhide
Unhide All

Diagram   Alignment   Group   Layout   Hiding

Logical

Model (Ctrl+Num /)
Zoom Model to fit the Window

Model Explorer

New Model

New Model
- Annotations
- Data Vault 2.0
- Datatype Standards
- Default Values
- Domains
- Entities
- ER Diagrams
- Model Sources
- Naming Standards
- Relationships
- Subject Areas
- Themes
- Validation Rules

Rgn
Rgn_Id
Rgn_Area
Rgn_Desc

Stor_Nam
Stor_Id
Stor_Nam
Stor_Addr
Stor_Cty
Stor_St
Stor_Zip_Cd
Rgn_Id (FK)

Cust
Cust_Id
Cust_Frst_Nam
Cust_Lst_Nam
Cust_Stret_Addr
Cust_Cmpy_Nam
Cust_Cty
Cust_St
Cust_Zip_Cd
Cust_Phn_Area_Cd
Cust_Phn_Nbr
Cust_Fax_Area_Cd
Cust_Fax_Nbr

Publshr
Publshr_Id
Publshr_Nam
Publshr_Addr
Publshr_Cty
Publshr_St
Publshr_Zip_Cd

Purchase_Ordr
Ordr_Nbr

Disc

Publshr_Logo

Book
Book_Id
Book_Nam

Auth
Auth
Auth

Model   Subject Area

Action Log

Zoom Model to fit the Window   Non-Mart Model   SQL Server 2019/2022   100%

Physical   Logical

Create a PDF Report

Where Next Meets Now.

This page is a screenshot of the erwin DM (Data Modeler) application interface showing a logical data model.

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help

Naming Standards | Naming Standards Compliance | Manage Name Hardening | Model Naming Options | Datatype Standards | Volumetrics | Add-Ins | Current | Selected... | Report Designer | Query Tool | erwin DM Scheduler | Objects Count | Object Browser | Project Explorer | Options | Customize Spell Checker | Import... | Export...

Naming | | | | Diagram Picture | | | Bridges

Model Explorer

New Model
- Annotations
- Data Vault 2.0
- Datatype Standards
- Default Values
- Domains
- Entities
- ER Diagrams
- Model Sources
- Naming Standards
- Relationships
- Subject Areas
- Themes
- Validation Rules

erwin Report Designer

File | Edit | View | Export | Help

Report Explorer

Templates 'Default' (0 reports)

Drag a column header here to group by that column.

There are no items to show.

Reports

For Report Help, press F1

Model | Subject Area

Physical | Logical

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help

Naming Standards | Naming Standards Compliance | Manage Name Hardening | Model Naming Options | Datatype Standards | Volumetrics | Add-Ins | Current | Selected... | Report Designer | Query Tool | erwin DM Scheduler | Objects Count | Object Browser | Project Explorer | Options | Customize Spell Checker | Import... | Export...

Naming | Diagram Picture | Bridges

Logical

Model Explorer

New Model

- Annotations
- Data Vault 2.0
- Datatype Standards
- Default Values
- Domains
- Entities
- ER Diagrams
- Model Sources
- Naming Standards
- Relationships
- Subject Areas
- Themes
- Validation Rules

New Model

erwin Report Designer

File | Edit | View | Export | Help

New Report
Add Existing Report...
New Solution
Open Solution...
Open Pinned Reports...
Save Solution As...
Save All
Close
Print...
Print Preview
Print Setup...
Recent File

Reports

Drag a column header here to group by that column.

There are no items to show.

For Report Help, press F1

Model | Subject Area

Physical | Logical

For Help, press F1 | Non-Mart Model | SQL Server 2019/2022 | 47%

File   Home   View   Diagram   Project Explorer   Model   Mart   Actions   Tools   Help   Options

Naming Standards | **Naming Standards Compliance** | **Manage Name Hardening** | **Model Naming Options** | **Datatype Standards** | **Volumetrics** | **Add-Ins** | **Current** **Selected...** | **Report Designer** | **Query Tool** | **erwin DM Scheduler** | **Objects Count** | **Object Browser** | **Project Explorer** | **Options** | **Customize Spell Checker** | **Import... Export...**

Naming   Diagram Picture   Bridges

Logical

Model Explorer

New Model
- Annotations
- Data Vault 2.0
- Datatype Standards
- Default Values
- Domains
- Entities
- ER Diagrams
- Model Sources
- Naming Standards
- Relationships
- Subject Areas
- Themes
- Validation Rules

New Model

erwin Report Designer

File   Edit   View   Export   Help

New Report
Add Existing Report...
New Solution
Open Solution...
Open Pinned Reports...
Save Solution As...
Save All
Close
Print...
Print Preview
Print Setup...
Recent File

Reports

Open pinned reports from disk...

Drag a column header here to group by that column.

There are no items to show.

Model   Subject Area

Physical   Logical

For Help, press F1   Non-Mart Model   SQL Server 2019/2022   47%

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help

Options

Naming Standards | Naming Standards Compliance | Manage Name Hardening | Model Naming Options | Datatype Standards | Volumetrics | Add-Ins | Current | Selected... | Report Designer | Query Tool | erwin DM Scheduler | Objects Count | Object Browser | Project Explorer | Options | Customize Spell Checker | Import... | Export...

Naming | Diagram Picture | Bridges

Logical

Model Explorer

New Model

- New Model
  - Annotations
  - Data Vault 2.0
  - Datatype Standards
  - Default Values
  - Domains
  - Entities
  - ER Diagrams
  - Model Sources
  - Naming Standards
  - Relationships
  - Subject Areas
  - Themes
  - Validation Rules

New Model

erwin Report Designer

File | Edit | View | Export | Help

Report Explorer

Templates 'Def

Pinned Reports

Report Repository: | C:\Users\AMcGover\AppData\Local\erwin\Data Modeler\10.00\Report | Browse

Report Categories : | Mart Administrative Reports ▾ | Refresh

Mart Administrative Reports
Mart Model Reports
Mart Model Validation Reports
Model Reports
Model Validation Reports
NoSQL Reports

Sample Report	
Active Users.erpt	8:52
Count of Objects in M	8:52
Library Model Report.	8:52
List of profiles and corresponding permissions.erpt	09/08/2023 18:52
Locks on Catalogs.erpt	09/08/2023 18:52
Mart Users.erpt	09/08/2023 18:52
Model Versions.erpt	09/08/2023 18:52
Models.erpt	09/08/2023 18:52
Number of Entities in Model.erpt	09/08/2023 18:52
Permissions By Library.erpt	09/08/2023 18:52
Permissions By Model.erpt	09/08/2023 18:52
Profiles assigned to each user.erpt	09/08/2023 18:52
User Permissions.erpt	09/08/2023 18:52
User Sessions.erpt	09/08/2023 18:52

OK | Cancel

Reports

For Report Help, press F1

Model | Subject Area

Physical / Logical

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help

Options

Naming Standards | Naming Standards Compliance | Manage Name Hardening | Model Naming Options | Datatype Standards | Volumetrics | Add-Ins | Current | Selected... | Report Designer | Query Tool | erwin DM Scheduler | Objects Count | Object Browser | Project Explorer | Options | Customize Spell Checker | Import... | Export...

Naming | Diagram Picture | Bridges

Logical

Model Explorer

New Model
- Annotations
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- Relationships
- Subject Areas
- Themes
- Validation Rules

New Model

erwin Report Designer

File | Edit | View | Export | Help

Report Explorer

Templates 'Def

Pinned Reports

| Report Repository: | C:\Users\AMcGover\AppData\Local\erwin\Data Modeler\10.00\Report | Browse |
| Report Categories : | Model Reports | Refresh |

Sample Report	Date Modified
Column Reports-Column Name-Attribute Name.erpt	09/08/2023 18:52
Column Reports-Column-Domain.erpt	09/08/2023 18:52
Column Reports-Logical and Physical Column Information.erpt	09/08/2023 18:52
Column Reports-Physical Only Columns.erpt	09/08/2023 18:52
Current Diagram membership - Logical.erpt	09/08/2023 18:52
Current Diagram membership - Physical.erpt	09/08/2023 18:52
Data Source Mapping.erpt	09/08/2023 18:52
Diagram Picture Report.erpt	09/08/2023 18:52
Domain Reports - Domains.erpt	09/08/2023 18:52
Domain Reports - Logical Domains.erpt	09/08/2023 18:52
Domain Reports - Physical Domains.erpt	09/08/2023 18:52
Domain Reports - Physical Domain-Validation Column.erpt	09/08/2023 18:52
Domain Reports-Domain Definition.erpt	09/08/2023 18:52
Domain Reports-Physical Domain-Default Validation - Column.erpt	09/08/2023 18:52
Entity Reports - Entities Attributes.erpt	09/08/2023 18:52

OK | Cancel

Reports

For Report Help, press F1

Model | Subject Area

Physical | Logical

For Help, press F1 | Non-Mart Model | SQL Server 2019/2022 | 47%

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | **Tools** | Help

Options

Naming
Naming Standards | Naming Standards Compliance | Manage Name Hardening | Model Naming Options | Datatype Standards | Volumetrics | Add-Ins | Current | Selected... | Report Designer | Query Tool | erwin DM Scheduler | Objects Count | Object Browser | Project Explorer | Options | Customize Spell Checker | Import... | Export...

Diagram Picture | Bridges

Logical

Model Explorer

New Model
- Annotations
- Data Vault 2.0
- Datatype Standards
- Default Values
- Domains
- Entities
- ER Diagrams
- Model Sources
- Naming Standards
- Relationships
- Subject Areas
- Themes
- Validation Rules

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erwin Report Designer

File | Edit | View | Export | Help

Report Explorer

Templates 'Def

Pinned Reports

Report Repository: | C:\Users\AMcGover\AppData\Local\erwin\Data Modeler\10.00\Report | Browse

Report Categories : | Model Reports | Refresh

Sample Report	Date Modified
Column Reports-Column Name-Attribute Name.erpt	09/08/2023 18:52
Column Reports-Column-Domain.erpt	09/08/2023 18:52
Column Reports-Logical and Physical Column Information.erpt	09/08/2023 18:52
Column Reports-Physical Only Columns.erpt	09/08/2023 18:52
Current Diagram membership - Logical.erpt	09/08/2023 18:52
Current Diagram membership - Physical.erpt	09/08/2023 18:52
Data Source Mapping.erpt	09/08/2023 18:52
Diagram Picture Report.erpt	09/08/2023 18:52
Domain Reports - Domains.erpt	09/08/2023 18:52
Domain Reports - Logical Domains.erpt	09/08/2023 18:52
Domain Reports - Physical Domains.erpt	09/08/2023 18:52
Domain Reports - Physical Domain-Validation Column.erpt	09/08/2023 18:52
Domain Reports-Domain Definition.erpt	09/08/2023 18:52
Domain Reports-Physical Domain-Default Validation - Column.erpt	09/08/2023 18:52
Entity Reports - Entities-Attributes.erpt	09/08/2023 18:52

OK | Cancel

Reports

For Report Help, press F1

Model | Subject Area

Physical | Logical

This is a screenshot of the erwin DM (Data Modeler) application interface.

Main Menu Bar: File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help

Tools Ribbon:
Naming Standards | Naming Standards Compliance | Manage Name Hardening | Model Naming Options | Datatype Standards | Volumetrics | Add-Ins | Current | Selected... | Report Designer | Query Tool | erwin DM Scheduler | Objects Count | Object Browser | Project Explorer | Options | Customize Spell Checker | Import... | Export...

Naming | Diagram Picture | Bridges

Model Explorer panel:
- New Model
  - Annotations
  - Data Vault 2.0
  - Datatype Standards
  - Default Values
  - Domains
  - Entities
  - ER Diagrams
  - Model Sources
  - Naming Standards
  - Relationships
  - Subject Areas
  - Themes
  - Validation Rules

erwin Report Designer window:
File | Edit | View | Export | Help

Report Explorer:
- Templates 'Default' (1 reports)
  - Diagram P...

Context menu:
- Properties...
- Delete
- Run
- Run Top 100 Rows
- Export to TEXT
- Export to HTML
- Export to PDF
- Expand All
- Collapse All

Drag a column header here to group by that column.

There are no items to show.

Reports

For Report Help, press F1

Physical | Logical

Model | Subject Area

File Home View Diagram Project Explorer Model Mart Actions Tools Help

Options

Naming Standards | Naming Standards Compliance | Manage Name Hardening | Model Naming Options | Datatype Standards | Volumetrics | Add-Ins | Current | Selected... | Report Designer | Query Tool | erwin DM Scheduler | Objects Count | Object Browser | Project Explorer | Options | Customize Spell Checker | Import... | Export...

Naming   Diagram Picture   Bridges

Logical

Model Explorer

New Model ✕

New Model
- Annotations
- Data Vault 2.0
- Datatype Standards
- Default Values
- Domains
- Entities
- ER Diagrams
- Model Sources
- Naming Standards
- Relationships
- Subject Areas
- Themes
- Validation Rules

erwin Report Designer

File Edit View Export Help

Report Explorer

Templates 'Default' (1 r...
   Diagram Picture Rep...

Select Subject Area and Diagram

Please specify subject area and diagram:

- New Model
  - ER Diagrams
    - Logical
    - Physical
  - Subject Areas

Scale value for selected diagram: [   ] %

Save as type [EMF   ▼]   OK   Cancel

Reports

For Report Help, press F1

Model   Subject Area

Physical Logical

File | Home | View | Diagram | Project Explorer | Model | Mart | Actions | Tools | Help

Options

Naming Standards | Naming Standards Compliance | Manage Name Hardening | Model Naming Options | Datatype Standards | Volumetrics | Add-Ins | Current | Selected... | Report Designer | Query Tool | erwin DM Scheduler | Objects Count | Object Browser | Project Explorer | Options | Customize Spell Checker | Import... | Export...

Naming | Diagram Picture | Bridges

Logical

Model Explorer

New Model | X

New Model
- Annotations
- Data Vault 2.0
- Datatype Standards
- Default Values
- Domains
- Entities
- ER Diagrams
- Model Sources
- Naming Standards
- Relationships
- Subject Areas
- Themes
- Validation Rules

erwin Report Designer

File | Edit | View | Export | Help

Report Explorer

Templates 'Default' (1 r
- Diagram Picture Rep

Select Subject Area and Diagram

Please specify subject area and diagram:

- New Model
  - ER Diagrams
    - ☐ Logical
    - ☑ Physical
    - ☐ Subject Areas

Scale value for selected diagram: 40 %

Save as type: EMF

OK | Cancel

Reports

For Report Help, press F1

Model | Subject Area

Physical | Logical

For Help, press F1 | Non-Mart Model | SQL Server 2019/2022 | 47%

Physical

Entity/Table "Auth"	
Table Name	Auth

Entity/Table "Bk_Ordr"	
Table Name	Bk_Ordr

Entity/Table "Book"	
Table Name	Book

Entity/Table "Book_Retrun"	
Table Name	Book_Retrun

Entity/Table "Book_YTD_Sls"	
Table Name	Book_YTD_Sls

Entity/Table "BookAuth"	
Table Name	BookAuth