erwin Data Modeler

Release Notes

Release 12.0

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erwin Data Modeler Editions

The following editions of erwin Data Modeler are available:

Academic Edition

Standard Edition

Workgroup Edition

Navigator Edition

This *Release Notes* details new features, enhancements, updates, and known issues for all editions of erwin Data Modeler.

The features of erwin Data Modeler that are available to you depend on the edition that you are using. For more information about the differences between versions, click one of the Edition links.

Standard Edition

erwin Data Modeler Standard Edition provides all the data modeling features used by Data Architects, Data Administrators, and Application Administrators, but does not include any workgroup modeling capabilities. You can use this edition as a standalone modeling tool, and as a Workgroup Edition client that can access and work with data models stored in a mart. When you enable data movement or dimensional modeling features, it provides a tool for assisting Data Administrators and Capacity Managers design data warehouses. Partners can use the API to create add-on solutions to erwin Data Modeler.

Workgroup Edition

erwin Data Modeler Workgroup Edition provides all the data modeling features used by Data Architects and also includes workgroup modeling capabilities used by Database Administrators, Application Administrators, and Application Owners. It provides conflict resolution, versioning, security and standardization for multi-user modeling. Workgroup modeling operates in a client/server environment so processing is shared between the user client workstation and the server where the models are stored. Users access the stored models through a client, such as erwin Data Modeler. Models are held in a platform and network independent database or mart that resides on a central server, using Microsoft SQL Server, Oracle, or PostgreSQL as the host database.

The key features of erwin Data Modeler Workgroup Edition include:

Web-based administrator (erwin Mart Administrator)

Helps the administrator administer the Mart. The administrator creates the Mart database, installs and configures erwin Mart Administrator before users can connect to the Mart. erwin Mart Administrator is hosted on a web server and is accessed through an Internet browser.

Model change impact analysis

Provides a change summary showing the impact of changes and the history of the affected model objects, allowing you to select which changes to apply to the model repository.

Version management

Lets Data Architects store, access and analyze the history of a model and the changes made to it, lock down specific versions, run difference reports between versions, and seamlessly roll back models to previous states as required.

Concurrent model access with optional model locking

Allows multiple users to concurrently work on a given model without compromising the integration and integrity of their parallel efforts.

Workgroup Edition

The administrator installs the program and initializes the database on the DBMS server. The administrator also has the responsibility of setting up the library structure in which models are organized, and assigning security profiles to users. Administration overhead is relatively low and proportional to the number and activity level of the users. After a model is saved to the database, control of who can work on the model and how changes are saved to the model is handled by security, making it possible for workgroups to work on large models without confusion. erwin Data Modeler Workgroup Edition supports many security and administrative features related to its multiuser capabilities and the client/server environment in which it operates. For this reason, routine management is usually performed by a dedicated administrator. Administrators can find detailed information regarding their tasks and responsibilities in the erwin Data Modeler Workgroup Edition Administration Guide.

You can also use erwin Data Modeler Navigator Edition as a client. Read-only access is permitted to data models, so your workgroup can use this client to share information with others without the risk that unauthorized changes might be saved to the mart.

Navigator Edition

erwin Data Modeler Navigator Edition provides a cost-effective way to provide read-only access to models built with erwin Data Modeler for viewing and analysis. This edition does not permit you to make any changes to models.

The key features of erwin Data Modeler Navigator Edition include:

Read-only access

Read-only access is provided to models created by erwin Data Modeler and it can also be used as a Workgroup Edition client for viewing a data model stored in a mart. Use the Navigator Edition to easily share model information without the risk of unauthorized changes to a model.

Navigation and Viewing

Provides those who need to view models, but not update them, full navigation and viewing of data models.

Reporting and Publication

Offers reporting and printing capabilities that generate in a variety of formats, including HTML and PDF.

Academic Edition

The Academic Edition is a time-limited edition and includes a limited number of features from the main product. It is designed to help students to learn creating simple data models.

Sample Model

When you install erwin Data Modeler, two sample models, eMovies and PublicationSystemSample are installed. Use these models as examples to learn data modeling and to learn how to use the tool.

These models are available in the following folder:

```
<install folder>\erwin\Data Modeler r9\BackupFiles\Samples\Standard
```

If you access the sample model from the install folder, you must run the data modeling tool as an administrator to open the eMovies model.

eMovies

The business requirements of this model are as follows:

- Manage employee details
- Manage store details
- Manage movie details
- Manage copies of movies
- Manage customer details
- Maintain movie rental details for customers
- Record payment details for rented movies
- Display the credit status of customers
- Generate invoices for customers
- Display overdue details for customers
- Search for customers
- Search for movies that are rented based on the rented date, customer phone number, employee number, or movie number

Apart from entities, attributes, and relationships, this model serves as an example for the following features:

- Domains
- Logical Model
- Subject Area
- Annotation
- Key Groups
- ER Diagrams
- Naming Standards Object
- Data Type Standards Object
- Themes
- Validation Rules

PublicationSystemSample

The PublicationSystemSample model provides an example of a book publication company.

The business requirements of this model are as follows:

- Diagrams
  The Diagrams can be easily shared with other project team members by exporting them to .EMF format during project analysis. The diagrams also support project communication using the Report Designer and different diagram presentation options while viewing models in the erwin Web Portal.
- Documentation
  This object serves as an example for the following features:
  - Model
  - Diagram
  - Subject Area
  - Entity
  - Attribute

- Theme override options
- Diagram Annotations

New Features and Enhancements

Following new features and enhancements are available in erwin Data Modeler (DM) and erwin Mart Server 12.0.

ArangoDB

Amazon Keyspaces

Neo4j

Parquet

Databricks

DynamoDB

Couchbase

Google BigQuery

PostgreSQL

MongoDB: Schema Validation

Central Scheduler

Cassandra: Deriving Models and Advanced Denormalization

Git Integration

Oracle: View and Materialized View Enhancement

Azure Synapse: Table Constraint Enhancement

Snowflake Enhancements

Diagramming: Hide and Unhide Diagram Nodes

Data Vault

Productivity and UI Enhancements

erwin Mart Server

DM Connect for DI Support

API: ISCPersistenceUnit::ReverseEngineerScript

Third Party Tools

The list includes a brief description and wherever relevant, a reference to more information about each feature.

ArangoDB

erwin DM now supports ArangoDB 3.8 and above as a target database.

For information on supported objects and data types, refer ArangoDB support summary.

Amazon Keyspaces

erwin DM now supports Amazon Keyspaces as a target database.

For information on supported objects and data types, refer Amazon Keyspaces support summary.

Neo4j

erwin DM now supports Neo4j 4.2.x and 4.3.x as target databases.

For information on supported objects and data types, refer Neo4j support summary.

Parquet

erwin DM now supports Parquet 2.x as target database.

For information on supported objects and data types, refer Parquet support summary.

Databricks

erwin DM now supports Databricks as target database.

For information on supported objects and data types, refer Databricks support summary.

DynamoDB

erwin DM now supports DynamoDB as target database.

For information on supported objects and data types, refer DynamoDB support summary.

Couchbase

erwin DM now supports Couchbase 7.x as a target database.

For information on supported objects and data types, refer Couchbase support summary.

Google BigQuery

erwin DM now supports Google BigQuery as a target database.

For information on supported objects and data types, refer Google BigQuery support summary.

PostgreSQL

erwin DM is also certified for PostgreSQL versions 9.6.24, 10.20, 11.14, 12.9 and 13.5.

MongoDB: Schema Validation

erwin DM now supports schema validation for fields in a table based on the selected data type. The scripts are not generated if the data in the fields are not inline with the data type. You can exclude validations for one or more fields in a table when you generate a script for forward engineering and reverse engineering. For more information, refer to MongoDB: Schema Validation topic.

Central Scheduler

You can now use erwin DM Scheduler to schedule reverse engineering jobs centrally on a local or a remote instance of erwin Data Modeler. You can configure multiple remote machines as servers and set up jobs to run in parallel on these servers. The Central Scheduler saves time and provides you with an improved performance by distributing reverse engineering jobs across multiple servers. For more information, refer to the Scheduling Jobs topic.

Apart from this, in case of models on erwin Mart, you can now run the Complete Compare process as part of reverse engineering. This enables you to compare the reverse engineering result with the model in your mart. In case of differences, you can save the updates as the latest version of your model in the mart. For more information, refer to the Setting Reverse Engineering Options topic.

Cassandra: Deriving Models and Advanced Denormalization

You can now perform advanced denormalization when you derive a Cassandra model. This feature provides you with options to do a manual or automatic denormalization.

- Use the auto-denormalization option to merge tables with the target table automatically.
- Use the manual denormalization option to selectively merge columns from source tables to target tables.

For more information, refer to the advanced denormalization topic.

Git Integration

You can now connect to a Git repository hosted on GitLab or GitHub. This allows you to push forward engineering scripts for an Online Mart Model to the Git repository. Working with Git repositories enables you to utilize Git features for version control, collaboration with team members and many others. For information on connecting to Git, refer to the Connecting to Git Repositories topic.

Oracle: View and Materialized View Enhancement

For Oracle models with views and materialized views that have JOINS, GROUP BY and CTE clauses and/or wildcards, you can now run Reverse Engineering from Script (RES) without hampering the resulting model. For complex views and materialized views, you now have an option to add their DDL statements on the editor and commit to your models. For more information, refer to the Edit the User Defined SQL Code topic.

Azure Synapse: Table Constraint Enhancement

For Azure Synapse models, you can now process Table Constraints via Reverse Engineering from Script (RES).

Snowflake Enhancements

erwin DM 12.0 brings the following enhancements to the Snowflake database:

- Object Tagging: You can tag Snowflake objects using the Tags feature.
- Reverse engineering enhancements: Snowflake Reverse Engineering Wizard adds filters for objects such as Tables, Views, and Materialized Views for the schema.
- Key-Pair Authentication: Snowflake now supports user based key pair authentication while using JDBC connection method for reverse and forward engineering.

Diagramming: Hide and Unhide Diagram Nodes

For complex models with many nodes in the diagram, you can now selectively view or hide the nodes. Thus, decluttering the model diagram and making it easier to work on. For more information, refer to the Hide or Unhide Nodes topic.

Data Vault 2.0 Support

erwin DM now supports model-level and table-level rollback function for Data Vault models. Additionally, the Data Vault Component Type selector is now available only when the model is configured to be a Data Vault model.

For more information, refer to the Data Vault topic.

Productivity and UI Enhancements

Several additions and enhancements have been implemented to improve erwin DM's productivity and usage experience. These enhancements are:

- Copy Neighborhood: You can now selectively copy the immediate neighbors of a node in your diagram and use them in other models.
- Object Browser: A new tab, <Object> Info has been added for all databases. It displays tables, records, collections, documents, JSON Objects, and nodes, in your model or in the selected object along with the counts based on database. Apart from this, for Couchbase and Neo4j models, database-specific tabs have been added:
  - The Couchbase tab displays global indexes and full text indexes along with their counts.

    - The Neo4j tab displays global indexes and global constraints along with their counts.
- Denormalization and deriving models now creates new models instead of overwriting source models.
- You can now access the columns of a table via the table editor instead of having to open the column editor explicitly. Use the icon on the table editor.
- A new display level, Graph ( ), has been added to facilitate easier switch for graph databases.
- You can now generate picture reports of a single or multiple diagrams in one sub-mission in the following formats:
    - Enhanced Metafiles (.emf)
    - PNG (.png)
    - JPG (.jpg)
    - SVG (.svg)
    - PDF (.pdf)

erwin Mart Server

erwin Mart Server has undergone several enhancements as follows:

- You can now test LDAP connections using the erwin Mart Configuration screen.
- Session timeout has been updated to 30 minutes.
- Special characters support has been updated.
- Configuration to use IIS and SSL has been updated.

DM Connect for DI Support

The DM Connect for DI feature has undergone several enhancements as follows:

- The REDB process now stores the database connection parameters into your environment in erwin Data Intelligence Suite (erwin DI Suite). For more information, refer DM Connect for DI guide.
- You can now run jobs immediately using the Run Now feature. For more information, refer to the Add Jobs topic.
- erwin Mart permissions have been updated. For more information, refer to the erwin DM Connect for DI Permissions topic.
- Support for DM Connect for DI has been upgraded to support:
  - all new databases
  - erwin Data Intelligence Suite (DI Suite) v10.2, v11.0, and v11.1

API: ISCPersistenceUnit::ReverseEngineerScript

You can now perform the Reverse Engineering from Script (RES) process via API.

Third Party Tools

Support for third-party tools has been upgraded as follows:

- Tomcat has been upgraded from v9.0.45 to v9.0.52.
- erwin Mart Server now uses AdoptOpenJDK (build 16.0.1+9)

System Information

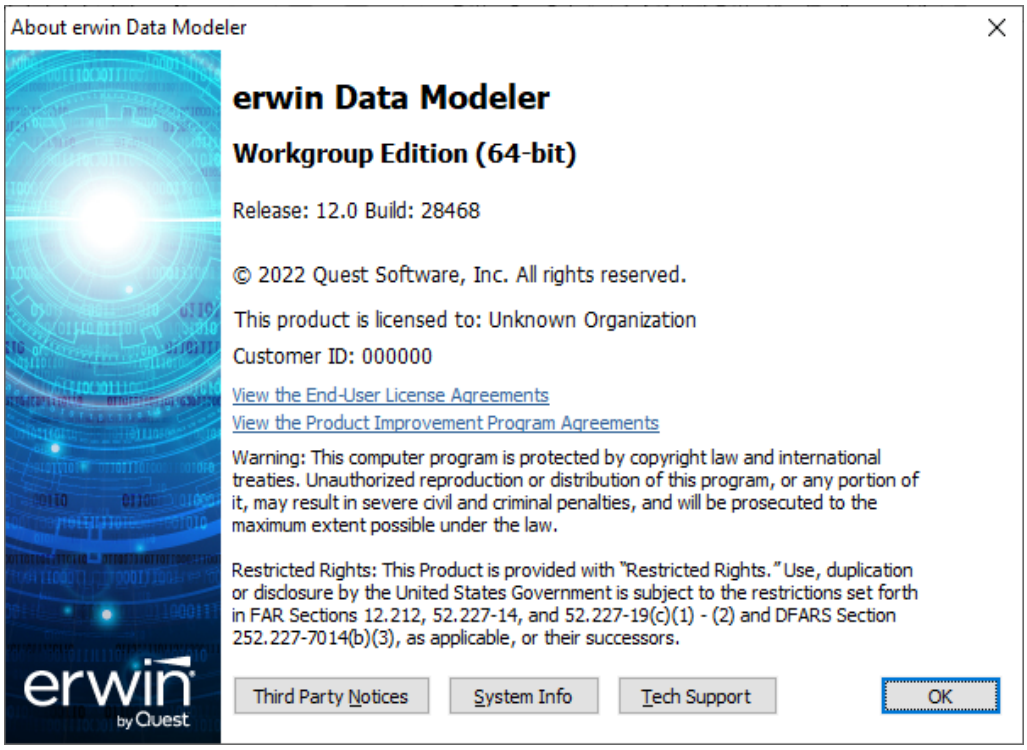
Review the following system information before installing and using the product.

This section contains the following topics

Release Numbering Scheme in erwin Data Modeler
Operating System Support
System Requirements
Administrative Privileges Required
Supported Target Databases
erwin Data Modeler Workgroup Edition Requirements
erwin Data Modeler Navigator Edition Requirements

Release Numbering Scheme in erwin Data Modeler

Information about the release is displayed in the *About erwin Data Modeler* dialog using the following release numbering scheme:



Release indicates the main (GA) release number and the second number (if available) indicates the patch or service pack number of the main release. Build indicates the build number of the product. For example, "Release: 12.0 Build: 28468" on the above screen indicates Release 12, Build 28468.

Operating System Support

To run erwin Data Modeler it is recommended that you have the latest version of one of the operating systems installed:

- Microsoft Windows 8.1
- Microsoft Windows 10
- Microsoft Windows 11
- Microsoft Windows Server 2012, R2
- Microsoft Windows Server 2016
- Microsoft Windows Server 2019
- Microsoft Windows Server 2022

As a best practice, always upgrade your operating system to its latest available version.

System Requirements

You can use any of the following combinations to install erwin Data Modeler, the Mart database, and the MartServer application:

- Install erwin Data Modeler, the Mart database, and the MartServer application on the same computer.
- Install erwin Data Modeler, the Mart database, and the MartServer application on different computers.
- Install erwin Data Modeler and the Mart database on one computer, and install the MartServer application on a different computer.
- Install erwin Data Modeler on one computer, and install the Mart database and the MartServer application on a different computer.

Ensure that you always install the MartServer application on the Windows operating system.

erwin Data Modeler

This topic includes the system requirements for the computers on which you plan to install erwin Data Modeler, the Mart database, and the MartServer application.

The following requirements must be met or exceeded for erwin Data Modeler to install and run correctly:

- Microsoft-based workstation, Intel Dual Core processor or equivalent
- 5 GB available hard drive space
- 4 GB RAM minimum; more is recommended for larger models

Ensure that your screen resolution is 1024 x 768 or higher. Also, ensure that your display settings are always set to 100%. If your screen resolution is less than the minimum supported, some portions of the screen will not be visible.

erwin Mart Server

The following requirements must be met or exceeded for the computer on which you install the MartServer application:

Hardware requirements (based on physical hardware performance, not a virtual environment):

- 2 GHZ or higher dual core processor
- 4 GB RAM (8 GB or more for large marts)
- 10 GB of disk space or more as required to support your specific mart

Operating system requirements:

- Microsoft Windows 8.1
- Microsoft Windows 10
- Microsoft Windows 11
- Microsoft Windows Server 2012, R2
- Microsoft Windows Server 2016
- Microsoft Windows Server 2019
- Microsoft Windows Server 2022
- Microsoft .NET Framework 4.0 and above
- All current Microsoft Windows critical updates

Database:

- Microsoft SQL Server 2014 SP3, 2016 SP2, or certified versions 2017 and 2019, Microsoft SQL Azure 12, and Amazon RDS SQL Server 2019.
- Oracle 12c r2, 18c, 19c, and 21c
- PostgreSQL through version 9.6.2 or certified versions such as 9.6.21, 9.6.24, 10.16, 10.20, 11.11, 11.14, 12.6, 12.9, 13.2, 13.5, and 14.1. Additionally, use PostgreSQL certified version 11.8 for Amazon RDS and Amazon Aurora.

The erwin Mart Administrator web client meets the following requirements:

Supported browsers:

- Microsoft Edge v97 or newer
- Mozilla Firefox v91 or newer
- Google Chrome v97 or newer
- Apple Safari 15 or newer

Ensure that your screen resolution is 1024 x 768 or higher. If your screen resolution is less than the minimum supported, some portions of the screen will not be visible.

Administrative Privileges Required

Ensure that you have administrative privileges in the following scenario:

- **erwin Data Modeler**: The installation process for erwin Data Modeler (DM) writes to the registry and system folders. If you install, upgrade, or remove erwin DM without Administrative privileges, all files may not be installed or upgraded, causing problems while running the software.

Supported Target Databases

The application supports or is compatible with the following target databases:

- ArangoDB (3.x)
- Avro (1.x)
- Amazon Keyspaces
- Azure Synapse
- Cassandra (3.x/4.x)
- Couchbase (6.x, 7.x)
- Databricks
- Db2 for i (5.x/6.x/7.x)
- Db2 for LUW (9.5, 9.7/10.x, 11.1)
- Db2 for z/OS (8.1, 9.1/10/11, 12)
- DynamoDB
- Google BigQuery
- Hive (2.1.x)

  Refer to the Limitations in Hive topic.

- Informix (10.x/11.x/12.x)
- JSON (1.x)
- MariaDB (10.4.x)
- MongoDB (4.x)
- MySql (8.x)
  Use MySQL certified version 8.0.23 for Amazon Aurora.
- Neo4j (4.2.x, 4.3.x)
- Netezza (7.2)

- ODBC/Generic (2.0, 3.0)
- Oracle (12c r2, 18c, 19c, 21c)
- Parquet (2.x)
- PostgreSQL (9.6.x/10.x/11.x)
  Versions 9.6.21, 9.6.24, 10.16, 10.20, 11.11, 11.14, 12.6, 12.9, 13.2, and 13.5 are certified. Additionally, use PostgreSQL certified version 11.8 for Amazon RDS and Amazon Aurora.
- Progress (9.x/10.x/11.x)
- Redshift (1.0)
- SAP ASE (15.x/16)
- SAP IQ (15.x/16)
- SAS (stabilized support)
- Snowflake
- SQL Server (2012, 2014, 2016/2017, 2019, Azure)
- Teradata Database (14.10, 15.x/16.x)

The erwin Data Modeler 64-bit version is not verified for the Progress 9.x/10.x database.

Limitations in Hive

The following list summarizes the limitations in pure Hive (connection to Hive database directly):

- Reverse engineering from database processing is slow due to the absence of system tables. The required information is retrieved by manual parsing methods instead of a query language.
- User-defined functions are not supported.
- Retrieval of version information using the Hive command is not supported.
- A few index properties, such as deferred rebuild option, idxProperties, and Null Defined As are not supported.

erwin Data Modeler Workgroup Edition Requirements

If you plan to use erwin Data Modeler Workgroup Edition, review the following requirements to ensure your workgroup environment is set up properly.

More information:

Administrator Server System Requirements

DBMS Requirements

Client Workstation Requirements

Administrator Server System Requirements

The disk space required for the administrative files used to create and manage the database is separate from the disk space required to accommodate models on the server where the database is located. Greater CPU speed, and more RAM and disk space result in better performance.

DBMS Requirements

Before you install erwin Data Modeler to use a MartServer in a workgroup environment, ensure that you are using a supported DBMS as your host server. This release supports the following host DBMSs:

- Oracle 12c r2, 18c, 19c, and 21c
- Microsoft SQL Server 2014 SP3, 2016 SP2, or certified versions 2017 and 2019, and Microsoft SQL Azure 12.
- PostgreSQL through version 9.6.2 or the certified versions 9.6.21, 10.16, and 11.11. Additionally, use PostgreSQL certified version 11.8 for Amazon RDS and Amazon Aurora.

To create, update, or delete a mart in erwin Data Modeler Workgroup Edition, you must have the following database rights:

- Microsoft SQL Server 2014 SP3, 2016 SP2, or certified versions 2017 and 2019 you must be the database owner (dbo).

  The dbo is no longer required to have the sysadmin role. The SQL Server 2012, 2014, 2014 SP1, 2016, 2016 SP1, 2016 SP2, 2017, and 2019 TRUSTWORTHY database property is no longer required for the mart. After you install this product, you can optionally reset this property to OFF.

- For Oracle, you must be the database schema owner and have the DBA role.

Before you install Mart on the server, verify that the DBMS environment is prepared for the installation, and that the server system requirements meet at least the minimum specifications. At least one user with administrative privileges is available on the DBMS.

The dbo role for Microsoft SQL Server is necessary only during the installation or upgrade. You can strip the installer of the dbo role after the installation or upgrade is complete.

For more information about preparing the DBMS environment, see the erwin Data Modeler Workgroup Edition Implementation and Administration Guide.

Client Workstation Requirements

You must install erwin Data Modeler on each client workstation that needs to access the Mart Server to connect to the Mart. It is recommended that client workstations have at least 4 GB of RAM.

You can install erwin Data Modeler Navigator Edition as a client for erwin Data Modeler Workgroup Edition.

In a workgroup environment, erwin Data Modeler can connect to the Mart Server with the same release version.

erwin Data Modeler Navigator Edition Requirements

If you plan to use erwin Data Modeler Navigator Edition, review the following requirements to ensure your environment is set up properly.

Support for erwin Data Modeler Navigator Edition

erwin Data Modeler Navigator Edition is enabled for use with a mart-enabled version of erwin Data Modeler (Workgroup Edition). Consult with your mart administrator for a GUEST user permission to access models in erwin Data Modeler Workgroup Edition.

You must use a supported DBMS. This release supports the following host DBMSs:

- Oracle 12c r2, 18c, 19c, and 21c
- Microsoft SQL Server 2014 SP3, 2016 SP2, or certified versions 2017 and 2019, and Microsoft SQL Azure 12
- PostgreSQL through release 9.6.2, certified on PostgreSQL 9.6.21, 10.16, 11.11. Additionally, use PostgreSQL certified version 11.8 for Amazon RDS and Amazon Aurora.

Installation Considerations for erwin Data Modeler Workgroup Edition

Review the following installation considerations before installing the product. For more information about the installation process for a workgroup environment, see the erwin Data Modeler Workgroup Edition Implementation Guide.

This section contains the following topics

erwin Data Modeler and Mart Release Numbers

Microsoft SQL Server 2005 onward Permissions

Specify Use of Foreign Characters With Microsoft SQL Server

erwin Data Modeler and Mart Release Numbers

You must install a Mart or must upgrade to a Mart that is of the same release number as erwin DM. For example, install or upgrade to an r9.5.0 Mart when you install or upgrade to erwin DM r9.5.0. Using different versions of erwin DM and Mart may lead to unexpected results including corruption of the Mart database or the models. Therefore, we recommend that you install the same release of the Mart and erwin DM.

Microsoft SQL Server 2005 onward Permissions

For SQL Server 2005 onward, you only need to have public assigned to save to the mart. However, when the repository is on a SQL Server 2005 or above instance, you need to have the bulkadmin permission designated as well. The ability to do bulk inserts (which was permitted by public, previously) is no longer part of the public permission. You must explicitly define this permission or when you attempt to save a model to a new mart instance created using a SQL Server 2005 or above database, an error "You do not have permission to use the bulk load statement." is returned.

Specify Use of Foreign Characters With Microsoft SQL Server

For Microsoft SQL Server modify your registry settings to have certain foreign language characters in your models recognized.

Follow these steps:

1. Click Run on the Start menu.
2. Enter *regedit*.

   The Registry Editor opens.
3. Verify or add the following registry entry:

   [HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\MSSQLServer\Client\DB-Lib]

   "AutoAnsiToOem"="ON"

   "UseIntlSettings"="ON"
4. Click File, Exit.

   Your configuration is set to recognize foreign language characters in your models.

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Installation Considerations for erwin Data Modeler Navigator Edition

Review the following installation considerations before installing the product. See the erwin Data Modeler Navigator Edition User Guide for more information about the installation process.

This section contains the following topics

Silent Install

Silent Install

This product does not provide an unattended or silent install.

General Considerations for Using erwin Data Modeler Workgroup Edition

The following sections contain general information you should know before using erwin Data Modeler in a workgroup environment.

This section contains the following topics

Model Display in the Difference Reconciliation Dialog
Uninstalling erwin Data Modeler Workgroup Edition

Model Display in the Difference Reconciliation Dialog

In a workgroup modeling environment, two users may check out and make changes to the same model. The first user may make changes to the model and save the changes to the mart. When the second modeler makes changes and saves them to the mart, the Difference Reconciliation dialog is displayed. You use features in this dialog to view the differences on the object level, the more detailed property level, or search the text of the comparison lists.

In the Difference Reconciliation dialog, the model in the left pane is the current model that you are checking in to the mart. The model in the right pane is the version of the model already in the mart.

Uninstalling erwin Data Modeler Workgroup Edition

You can use the Windows uninstall utility to uninstall erwin Data Modeler. However, when you uninstall erwin Data Modeler in a workgroup environment, the mart database remains intact. To remove the database from your computer, delete the mart database first, and then uninstall erwin Data Modeler.

General Considerations for Using erwin Data Modeler Navigator Edition

The following sections contain general information you should know before using erwin Data Modeler Navigator Edition.

This section contains the following topics

Model Display in the Difference Reconciliation Dialog

Help Files

Model Display in the Difference Reconciliation Dialog

In a workgroup modeling environment, two users may check out and make changes to the same model. The first user may make changes to the model and save the changes to the mart. When the second modeler makes changes and saves them to the mart, the Difference Reconciliation dialog is displayed. You use features in this dialog to view the differences on the object level, the more detailed property level, or search the text of the comparison lists.

In the Difference Reconciliation dialog, the model in the left pane is the current model that you are checking in to the mart. The model in the right pane is the version of the model already in the mart.

Help Files

The context sensitive online help in erwin Data Modeler Navigator Edition is identical to the online help in erwin Data Modeler. This means that the online help may discuss capabilities such as saving a model that is not possible in the erwin Data Modeler Navigator Edition product.

Known Issues

This section contains the known issues that you should review before using the application.

NoSQL- nested structure models-harvesting to erwin Web Portal is not supported

erwin Mart - Cassandra: Exporting Cassandra model into DI Suite displays the Column Definition value in Column Comments

FE: The Thick option is not saved on the Edit Options page in the Preview

erwin Mart - Azure SQL: The Settings and DI Configuration tabs do not display password

MySQL RE: Column Format and Storage Memory options are not retrieved

Switching JDBC connection from one target DBMS to the other produces error

Azure Synapse REDB: Same View\Materialized View with same name and different schemas REDB produces unexpected results

UI: erwin DM Crashes on Creating an Object with Max Length and Deleting

FE Options Selected in Custom Option Set are not Retained

RedShift FE - Few functions do not execute from erwin DM FE Wizard

Redshift REC - Comments are Truncated at 65536 Characters

RedShift REC - The properties are not retrieved for library object in RedShift

RedShift REC-Column Values need to Follow the Exact Order According to Partition Specification

Redshift REC - Performance is Slow in Redshift for REDB Process

Db2 z/OS-ESX-1015,190110 Messages are Displayed on Copy-pasting a Table that has a Period Clause

NSM P to L: Derive PO Model to LO with NSM Template Attached

erwin Data Modeler cannot Connect to erwin Mart Server on Host Machine

Netezza REC- Comments are Truncated at 1024 Characters

SQL 1105 Error

Model and Version Name Limit on Oracle

.Net Requirement

Report on Glossary Words Includes Extra Characters

Updating Profile Description from Notepad
Unwanted Result Rows in Report
DSM Logical to SQL Server 2012
Report Designer Functions for a Large Model
Subject Area Picture Report not Generated
Incorrect UDP in UDP Report
Invalid Column Node for Db2 LUW Model in View Report
Mart Server Name in Korean
Generating Reports with Korean Characters in User Name
Error While Creating a Profile Using Special Characters in Mart Administrator
File IO: For a Parent or Child Table with Multiple Child Tables, Other Child FK Attributes are Highlighted on Mouse Hover on One Relationship
Owner Name not Displayed while Sorting a Guided Editor's list of Objects
Google BigQuery: Row Access Policies are not retrieved after REDB

NoSQL- Nested Structure Models-Harvesting to erwin Web Portal is not Supported

Harvesting NoSQL nested structure models to erwin Web Portal is not supported.

erwin Mart - Cassandra: Exporting Cassandra Model into DI Suite displays the Column Definition Value in Column Comments

The export of a Cassandra model into erwin DI Suite using DM connect for DI is displaying unwanted values in erwin DI Suite. After the export, the Column Definition value is displayed in the Column Comments.

FE: The Thick Option is not Saved in the Preview

Forward engineering with any database does not save the following options available in the **Preview** > **Edit Options** > **Editor**:

- Thick
- Automatic reload of externally modified files

erwin Mart - Azure SQL: The Settings and DI Configuration Tabs do not Display Password

The Settings and DI Configuration tabs do not display user password in the erwin Mart that is configured with Azure SQL.

MySQL RE- Column Format and Memory Storage Options are not Retrieved

Properties that are saved in the Show statement are not retrieved in the Column editor after Reverse Engineering MySQL.

Switching JDBC Connections from one Target DBMS to Other Produces Error

For RE connection there are two issues:

- There is no error message when JDBC is not connected to the database.
- There is an error when JDBC conncetion is switched from one target DBMS to the other.

Azure Synapse REDB: View or Materialized View with Same Name and Different Schemas REDB Produces Unexpected Results

For a View\Materialized View with same name and different schemas REDB does not work as expected.

UI: erwin DM Crashes on Creating an Object with Max Length and Deleting

erwin DM crashes when an object is created with maximum length name and deleted.

FE Options Selected in Custom Option Set are not Retained

Options selected in forward engineering custom option set are not retained appropriately for MariaDB, Snowflake, SQL Server 2019, SQL Azure, and Azure Synapse databases.

RedShift FE - Few functions do not execute from erwin DM FE Wizard

Due to a limitation in the driver, few SQL language functions do not execute in DB from erwin DM FE wizard. However, the same functions work in the DB client.

Redshift REC - Comments are Truncated at 65536 Characters

Due to an ODBC restriction, all comments are limited to 65536 characters. In addition to this, retrieval of large number of characters in comments or SQL text, requires one to change the following under ODBC settings > Data Type Options:

- Increase the value of Max Varchar.
- Clear the Use Unicode option.

To retrieve the maximum length of the object names, select the Use Unicode option. At a time, you can choose to either retrieve large number of characters in comments/SQL text or object names.

Redshift REC - Properties of Library Object are not Retrieved

Due to unavailability of system tables to store library properties, the properties of a Redshift Library object are not retrieved.

RedShift REC-Column Values need to Follow the Exact Order According to Partition Specification

Column values are retrieved only according to the column order defined in the Partition By clause. To ensure that column name and column values correctly map to each other, follow the column order defined in the Partition By clause in the Create statement.

Redshift REC - Performance is Slow in Redshift for REDB Process

The time taken for an REDB process on a Redshift database depends on the network speed and the geographical location of your database instance.

The following table shows the results for a database with 200 tables, 250 views, and other supported objects:

Network Speed	With all options in RE Option Set	Without Partition Element option (Default option set)	Without external tables (Unselect 'S3BucketObjects' option)
50 Mbps	4 Hours	3 Hours	2 Hours
1 Gbps	1 Hour	14 Minutes	4 Minutes

As a best practice, use the default option set when not working on Partitions.

Db2 z/OS-ESX-1015,190110 Messages are Displayed on Copy-pasting a Table that has a Period Clause

While copy-pasting a Db2 z/OS table that has a period clause from one model to another, ESX-1015,190110 messages are displayed. Also, the period clause properties are not retained and are disabled on the UI.

NSM P to L: Derive PO model to LO with NSM Template attached

While deriving a PO model; that does not have NSM objects, to LO model, if you attach an NSM template, a List NSM Option Objects dialog is displayed. If you do not select an object here, although the model will be derived, naming standards will not be applied.

erwin Data Modeler cannot Connect to erwin Mart Server on Host Machine

erwin Data Modeler (DM) cannot connect to the erwin Mart Server (MS) on an erwin Mart Server host machine. This happens because the client application version is different from the erwin MS version. To counter this issue, do the following:

1. Open Internet Explorer.
2. Click Internet options.
3. Go to the Security tab.
4. Set security level to low.
5. Click Sites.
6. Add http://machine-name:18170/MartAdmin/ or http://ip address:18170/MartAdmin/
7. Try to connect the Mart from erwin DM with IP address or machine name.

API-Related Features do not Work on a Windows 2008 R2 SP1 Machine

On a Windows 2008 R2 SP1 machine, a bug in the operating system causes an access violation, due to which, API-related features (MITI, and erwin Spy) do not work.

Netezza REC- Comments are Truncated at 1024 Characters

Due to an SQL text retrieval restriction on Netezza side, all comments are limited to 1024 characters.

SQL 1105 Error

When you are upgrading to the current release on Microsoft SQL Server in a workgroup environment, during the mart conversion process, you may get the message "Sql 1105" if you run out of free hard disk space during the process.

Stop the conversion process, and either free or add hard disk space. Delete the already created r9 tables and then re-attempt the conversion.

Model and Version Name Limit on Oracle

In a workgroup environment, when you save a model to an Oracle mart, the model name must be less than 130 characters. If you exceed the 130 character limit, the model will not save. Because the version name is derived from the model name (for example, <ModelName>:<version number> by <UserName> on <VersionCreateDate>), you should use model names considerably less than 130 characters in length to avoid problems with saving a model version.

.Net Requirement

The current release requires .NET 4.7.1 to be installed on your system. If you do not have it installed, the erwin Data Modeler installation will attempt to install it. After you install the .NET framework, you must restart the computer to make the changes take effect.

Report on Glossary Words Includes Extra Characters

Suppose a report is generated on a model that includes an NSM object. If the glossary words are included in the report, extra characters appear for all glossary words.

Updating Profile Description from Notepad

In the erwin Mart Administrator Profile Management page, suppose the description is copied and pasted from a Notepad file and is saved. The updated description displays syntax (\n) as well.

Unwanted Result Rows in Report

In a Subject Area report, suppose the Subject Area name is included in the report and the diagram name is specified at run time. The report lists all Subject Areas instead of the Subject Area that corresponds to the selected diagram.

DSM Logical to SQL Server 2012

Suppose a Logical/Physical SQL Server 2012 model is attached with a DSM object that is active. Suppose a new Logical Definition for the Number domain is created and mapped to SQL Server 2012 and Date is selected for domain. If the newly created Logical Definition is applied to a column in a model, and if the physical view is seen, the data type is still displayed as Number.

Report Designer Functions for a Large Model

Generating reports is a memory intensive process and when the data set is very large, the process uses the maximum memory. When the maximum memory is consumed, a warning message informs you that the application might stop responding if you continue processing the report. If you choose to continue to run the report and the memory is completely used, the program might stop responding. If you choose not to continue, the report execution is terminated.

To resolve this problem, you can generate multiple small reports with fewer properties.

Subject Area Picture Report not Generated

There is a limitation on the size of a diagram report that you can generate--the maximum size is 1900 x 1440. Suppose you create a Subject Area report for a large model using Report Designer, and export the report to HTML. If you click the diagram in the HTML report, it does not open.

To resolve this problem, reduce the zoom level of the model to reduce the picture size and then generate the report.

Incorrect UDP in UDP Report

Suppose you want to generate a report on the UDPs using Report Designer. Suppose you have already created a UDP report template and generated the report for a different model. If you close the model, open another model, and use the same template to generate the UDP report, then the report includes the UDP name from the previous model. In the result grid, the column heading shows the UDP name of the previous model, while the UDP value is of the current model. In addition, the properties of the Report Explorer also shows the UDP name of the previous model. However, the Report Properties dialog shows the correct UDP name.

Invalid Column Node for Db2 LUW Model in View Report

In a Db2 LUW model, suppose a nickname table and a view exist and a Column Option level UDP is added to a column. If a View report is generated using the Report Designer, the Column Option node is available for View. If a user selects the Column Option node, the UDP is not included in the report for the selected column.

Mart Server Name in Korean

Suppose that you provide the Mart Server machine name in the Korean language (Korean characters) and configure the Mart Server. If you try to connect to the Mart from erwin DM and you provide the Korean language name for Server Name, the following message appears:

```
The client application version is different from the Mart Server version. Install the same version of the application and the Mart Server and then try.
```

If you try to log in to erwin Mart Administrator by using the Korean language name, it does not display.

Generating Reports with Korean Characters in User Name

Suppose that you have initialized a Mart with a user name that has Korean characters. You connect to the Mart with this user name and generate a report on Mart users (click Tools, Mart Reports, Global Reports, Users). The report is not generated and the message, You can not connect. Incorrect log on parameters is displayed. (The actual message is displayed in the Korean language. The message provided here is the translated message.)

Error While Creating a Profile Using Special Characters in Mart Administrator

When you create a profile in Mart Administrator using special characters such as !@#$%^&*()_+={}:"-<>?|/.,;'\[], and space, you will get one of the following error messages repeatedly and the Mart Administrator hangs.

```
Illegal Group
```

or

```
500 The call failed on the server; see server log for details
```

or

```
String index out of Range:1
```

To avoid this error, create a profile without using the special characters. When the Mart Administrator hangs, refresh the Mart Administrator.

File IO: For a Parent or Child Table with Multiple Child Tables, Other Child FK Attributes are Highlighted on Mouse Hover on One Relationship

If one parent/child entity has multiple children with different relationship lines, the migrated attributes in all child tables are highlighted on hovering the mouse on any one of the relationship lines.

For r7.x models being upgraded to r9.8, the work around for this is as follows:

On the Model Upgrade Wizard, go to the Subject Area tab and select the "Apply a default theme for all the diagram check box and continue with the process.

Owner Name not Displayed while Sorting a Guided Editor's list of Objects

For Hive and Teradata the owner is a database and not an owner or schema. Therefore, while attempting to sort a guided editor (for example, Subject Area Editor) list of objects by Owner_Name + Object_Name, the owner name is not displayed.

Google BigQuery - Row Access Policies are not retrieved after REDB

Due to unavailability of metadata or python API, the row access policies are not retrieved after REDB for Google BigQuery.

Fixed Issues

This section includes the list of fixed issues in erwin Data Modeler and erwin Mart Server 12.0.

Issues Fixed in this Release

Issues Fixed in this Release

The following issues have been fixed in erwin Data Modeler and erwin Mart Server 12.0:

Issue Number	Issue Description
128086	Postgre SQL: The column name for the comment section is based on the quotes in DDL Script.
126340	Netezza: The alter scripts are not generated as expected.
123707	RES-1 error: Syntax Error - Line 1, Offset 24 DATE while reverse engineering from Snowflake DBMS
122796	Complete compare will not reconcile differences with multiple role names in a table.
130536	Forward Engineering: The indexes are not generated without a table for SQL Server (2016/2017/2019).
130502	Report Designer: The application crashes when you run a Diagram Report after minor changes.
130550	Report Designer: Report is not available for Attributes/Columns/Physical Order.
125910	erwin DM: The Subject Area Report displays incorrect diagram.
135975	Reverse engineering an Oracle 12 C script is time consuming and fails for most objects.
132469	Forward Engineering: Index syntax missing the Database Name for the referenced Table.
133127	Attribute Definitions are inherited from the Domain in erwin DM 2020 R2 SP1, but same macro fails in 2020 R2 SP2.
125925	Mapping from a Logical to Netezza is incorrect for many datatypes.
134998	Reverse Engineering from DB2 z/OS 12 databases - Tables are created twice when all the Column Labels are present in one syntax instead of different syntax.
134867	Netezza: Unable to display physical columns with Distribution Key Columns List in Netezza.
135337	Reverse Engineering from MySQL 8 Script fails for specific script

Issue Number	Issue Description
	and, also adds quotes during Reverse Engineering process which creating incorrect syntax during Forward Engineering.
136300	erwin DM shuts down when changes are made in the Object Browser.
136979	erwin DM crashes and displays continuous error messages, when you replace a word in NSM glossary.
135972	Reverse Engineering fails on Azure Synapse script.
134129	erwin DM 2021R1 does not allow user name with period as special character.
131786	EMF files generated from erwin DM 2020 R1 SP1 are converted into JPG/PDF format, but it is incorrect (fuzzy) in erwin DM 2020 R2 SP2.
131325	Complete Compare with Database crashes when the Allow Demand Loading checkbox is on for DB2/LUW 10.
132874	Issue with HTML Report subject area.
134457	Foreign Key Unification functionality does not work.
117817	Bulk Editor: Unable to update Domain Parent after an import from a .CSV file.
4916939	Reverse Engineering from SQL Server does not handle spaces in Schema names. It removes them resulting in missing objects.
4915351	No delimit Identifier quotes are generated for PostGreSQL.
4914473	Forward Engineering Netezza / SQL Server 2016/17, 2019: Column Comments are not generated if the Create Table option is deselected.
4914633	Reverse Engineering Oracle packages are slow.
4930512	The Owners field for reverse engineering the DB2 zOs 12 is grayed out.
4930986	Reverse Engineering index and partition syntax was not possible.
4922865	Create Trigger DDL option does not include the schema name from domain.
135972	Azure Synapse: The table-level constraints are not supported.

Issue Number	Issue Description
135959	Oracle: View and Materialised view is not created with table name, columns using reverse engineering from script and database.
4934821	Themes Editor: Relationship lines and line colors are not consistent.
4914584	Reverse engineering DB2 DDL crashes in 2021R1.
4917778	Report Designer: Running diagram report for a derived logical only model and exporting as HTML crashes.
4921171	Reverse engineering from a script for DB2 for i which has IDENTITY clause results in a crash.
4953249	DB2 z/OS unable to generate Create Index with include column statement.
4945573	RE from MySQL 8.0.23: Tables are not being retrieved during REDB.
4944632	Reverse Engineering from Teradata: Table selection works like a wildcard. Also, the SQL Trace file shows v2.0 instead of the selected version.
4934677	[Oracle][ODBC][Ora]ORA-01722: invalid number: This error is displayed when you RE from Oracle 12cR2.
4976920	AL is unable to generate Sequences for DB2 z/OS 12.
4958755	MS Azure Blob Storage: Unable to click any models in the pop up window and does not display models.
4938389	Azure Synapse: Pre- and Post Scripts are not generated during FE.
4994571	Oracle: "The constraint names are missing" error is displayed after upgrading models from 9.5.2 to 2020R1. This issue does not occur with DB2 models.
4952899	SQL Server: Drop Temporal Table syntax is missing the Drop History Table syntax during alter script generation.
4987319	Reverse engineer a Db2 script crashes.
4989675	Data Source Menu: Options are missing in the Model Editor.
4963171	Reverse engineering from DB2 z/OS v 12.x does not handle multiple Synonyms for Views.

Issue Number	Issue Description
4962143	When reverse engineering JSON schema, the order fields within an object is not preserved.
4928127	RE from Oracle brings Index order incorrectly.
4950681	MongoDB: Reverse engineering JSON file for MongoDB causes error.
4976477	AVRO Union datatype fails: Reverse Engineer a JSON/AVRO file, and then during Forward Engineering a Schema, the Fields in the source file not displayed.
4925788	PostgreSQL FE: DDL does not generate Alter statement for Constraint.
4922865	Domain schema are not updated when you import file using the bulk editor.
4917660	RES/REDB Oracle: View objects are retrieved as User Defined SQL with incorrect syntax.
4916897	The GRANT statements are not generated for a Netezza model.
4914166	SCAPI: Reverse Engineer and Report Designer fails using VBA.
4945052, 4948863	Reverse Engineering a Snowflake does not Reverse Engineer Tables with lower or Mixed case.
4941374	After the patch fixes DE10360 and LH1-I36, the FE Schema Preview crashed when you click Close button.
4912270	Reverse engineering from Oracle script fails due to Reserved Words.
4928040	DB2 LUW: Forward engineering generates Foreign Key Constraints even for Logical Only Relationships
4925754	Reverse Engineered model crashes during Preview, after upgrading to 2021 R1.
4943736	Copy and paste objects from one diagram to another creates duplicate objects.
4925983	Snowflake FE: Create Stream statement is missing the schema names in 2021R1
4982973	DB2: Trigger Delimiter appends to '!!' instead of ';'.

Issue Number	Issue Description
4975016	MongoDB: Cannot use 'Copy theme and Overridden Styles' across fields that are within or outside a collection.
4950494	RE from Teradata results in a crash.
4974619	Reverse Engineering Oracle script results in syntax errors.
4982080	Oracle: Cannot reset inheritance for a single Table in a model with Oracle as the target database.
4917731	Multi-tiered Supertype/Subtype Auto Roll-Up does not Roll-Up ALL Entities
4984844	Model Explorer: Parent Relations and Child Relations nodes are displayed in the Model Explorer.
4923874	PostgreSQL and Redshift: Logical datatype TIMESTAMP is mapped to DATE in physical datatype.
4942492	Unable to add dashboard to erwin Mart Administrator.
10200, 131556	erwin Mart Administrator: Search is not working in the Catalog Manager
4924838	Reverse engineering from MariaDB results in a crash.
4972008	2021R1: New LDAP users are unable to log in from erwin DM to Mart and displays the error "invalid user and password"
4972008	Mart Server: Imported LDAP User Group is not display in the search.
4967680	Azure Synapse syntax does not create Column Store Index within the Create Table syntax.
5017134	MongoDB: Database name is not appended to the Collection name in reverse engineered tables.
5017135	MongoDB: Database name can not be appended to the Collection in a Diagram.
5007318	Open 2019 R1 model in 2021 R1 and the table owners show in the display.
5002054	Few models display model errors on opening after upgrading from 9.8 to 2021 R1.
4993225	PostgreSQL: FE options not working for Domains. Also, User

Issue Number	Issue Description
	Defined Datatype check box is missing.
4988049	Upgrading Oracle Mart: Entity owners are not display in the mart report for pre existing models
4969916	Alter Script - Snowflake generates Alter Table statement when a data type is changed.
4963592	Snowflake: RE does not bring in Views, and creates empty boxes with new SQL.
5021199	Snowflake - Cloning syntax appends the Schema name creating incorrect syntax
4918467	Reverse Engineering from DB2 z/OS v 12.x fails for many clauses.
4958167	RE from Snowflake results in a crash, if Views have 'Stream' clause.
4924242	Oracle datatypes are not supported. Check Model display errors.

Appendix

This section contains the following topics:

Third Party Software Acknowledgment

Third Party Software Acknowledgment

The following license agreements are available in the Release Notes\Data Modeler Release Notes folder in erwin Bookshelf:

- Tomcat 9.0.52
- Oracle 11G JDBC driver 11.1.0.6
- AdoptOpenJDK (build 16.0.1+9)
- Microsoft .NET Framework 4.7.1
- OpenSSL 1.1.1k
- TLS 1.2