erwin Data Modeler

Feature Tour

Release 2019 R2

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Introduction

The Feature Tour guide walks Data Architects, Data Administrators, Application Administrators, Database Administrators, and Partners through the features introduced in erwin Data Modeler 2019 R2 release.

The features and enhancements introduced in this release are:

- erwin Data Modeler UI Facelift
- erwin DM Scheduler
- Productivity Enhancements
- Query Tool
- Licensing
- DBMS Support

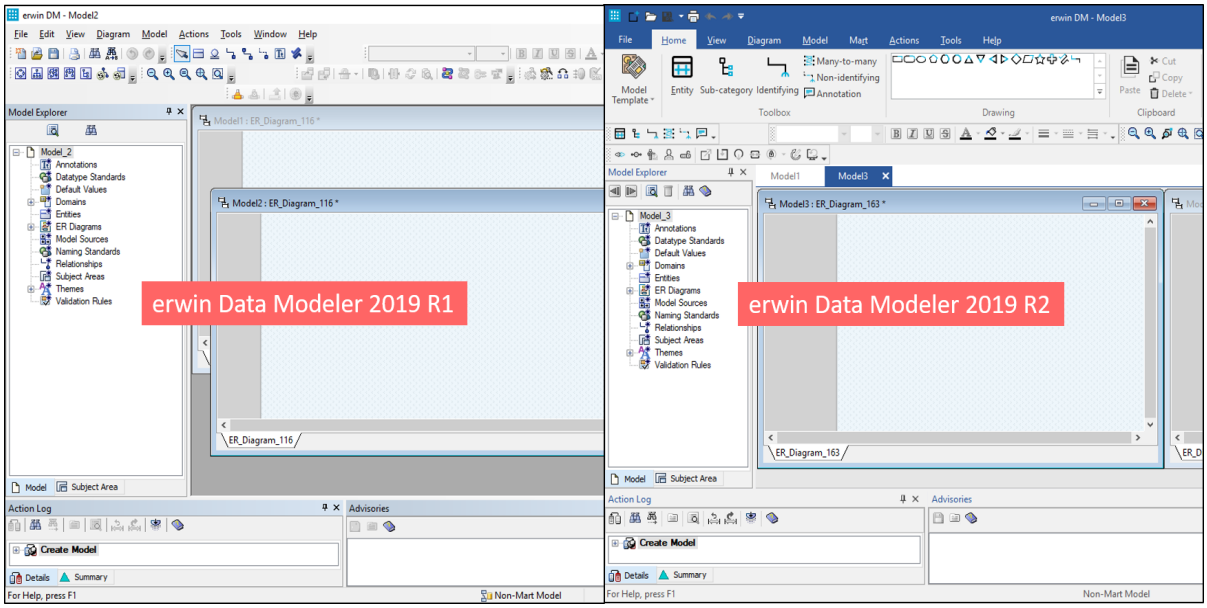
For additional information about a feature, in erwin Data Modeler, click Help on the toolbar or press F1 to navigate to the online help.

erwin Data Modeler UI Facelift

erwin Data Modeler (DM) 2019 R2 comes with a brand new Microsoft Office-like ribbon-based user interface (UI). The revamped UI offers a modern, tabbed view of erwin DM's functions and uses graphical buttons to represent them. Other offerings of the new UI include:

- A Quick Access Toolbar
- UI themes, font size, and component direction setting
- Tabbed diagram window arrangement

The following picture gives you an idea of the difference in the UI appearance between 2019 R2 and earlier versions of erwin DM:



Apart from the enhancements mentioned above, the placement of several functions has been rearranged on the ribbon (earlier, menu). Also, the icons representing several of them have been updated to reflect a modern look.

For more information about the changes, refer to the following sections:

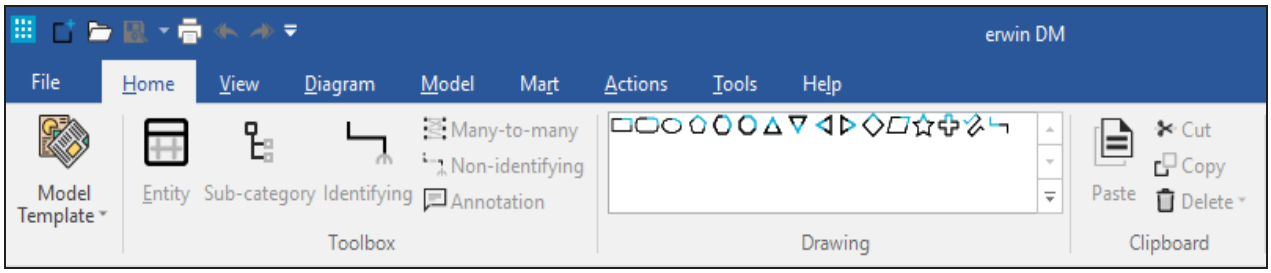
- Ribbon
- Quick Access Toolbar
- Options to set Style, Font, and Component Direction
- Tabbed Diagram Window
- Vertical Split Window Arrangement
- Target Database Selection
- Toolbar Icons

UI Components

The following components of erwin Data Modeler's (DM) are either new or have undergone a facelift:

Ribbon

The ribbon (earlier, menu) is a collection of all the functions and actions of erwin DM. These functions and actions are categorized into tabs and represented graphically using icons.



The following table shows the mapping between erwin DM 2019 R1 menu and erwin DM 2019 R2 ribbon:

Component	2019 R1 Location on Menu	2019 R2 Location on Ribbon/Toolbar
Model Templates	File	Home
erwin DM NoSQL	File > erwin Edge	Tools > Launch erwin DM NoSQL
Mart components	File > Mart	Mart
Editing options	Edit	Home
Toolbox toolbar	View > Toolbars	Home
Logical Model	View	Display Toolbar
Physical Model	View	Display Toolbar
Windows	View > Windows	View > Panes
Vertical Split	NA	View > Vertical Split
Review Changes	Actions	Mart
Manage Name Hardening	Actions	Tools
Model Naming Options	Actions	Tools

Component	2019 R1 Location on Menu	2019 R2 Location on Ribbon/Toolbar
Query Tool	NA	Tools
erwin DM Scheduler	NA	Tools
Customize	Tools	Quick Access Toolbar
Manage Windows	Window	View
Cascade	Window	View
Tile	Window	View
Arrange Icons	Window	View
Diagram selector	Window	Editor pane-toggle using model specific tabs.

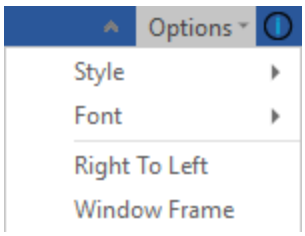
Quick Access Toolbar

The Quick Access Toolbar (Standard)is located at the top-left corner of the workspace.

It contains a group of shortcut buttons for common tasks, such as creating, opening, saving, and printing a model; and undo / redo actions.

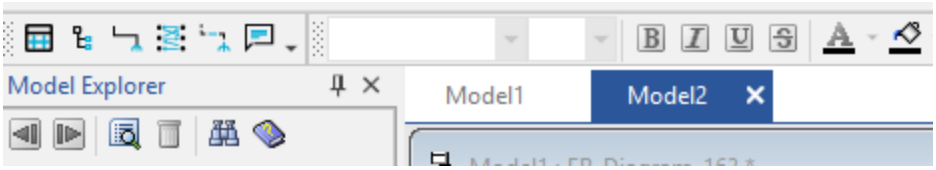
Options to set Style, Font, and Component Direction

The Options button is located at the top-right corner of the workspace and enables you to manage the appearance of erwin DM user interface (UI) . You can set the color scheme, font size, panes and controls, and window size of erwin DM using these options.



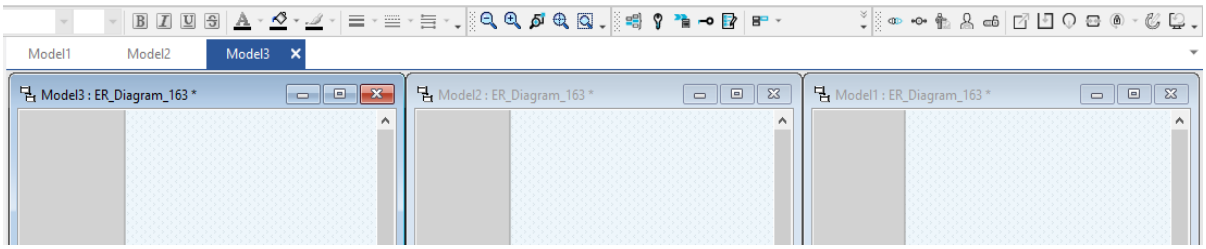
Tabbed Diagram Window

In case of multiple open models, the diagram window displays all the models in a tabbed view.



Vertical Split Window Arrangement

The Vertical Split option is located on the View tab of the ribbon. It arranges all the open models vertically, side-by-side.



Target Database Selection

Apart from the usual option to change the Target Database, an additional, quick option is located on erwin DM's status bar.

Clicking the database name opens the erwin Data Modeler -- Target Server dialog box.

Toolbar Icons

As part of the facelift, several icons used in erwin Data Modeler (DM) have been updated. While ribbon icons have self-explanatory labels, toolbar icons have tooltips. To make it easier for you to adapt, the following table lists the updated toolbar icons:

Toolbar	Icon	Function
Toolbox The icons available on the Toolbox toolbar depend on the selection you make on Display toolbar > Logical/Physical Selector.		Create table
		Create view
		Create identifying relationship
		Create non-Identifying Relationship
		Create an annotation
		Create complete sub-category
		Create many-to-many relationship
Zoom		Set Zoom to 100%

Toolbar	Icon	Function
Display		Switch to table display level
		Switch to primary key display level
		Switch to column display level
		Switch to keys display level
		Switch to comment display level

Toolbar	Icon	Function
Mart		Connect to mart
		Disconnect from mart
		Launch Catalog Manager
		Launch Session Manager
		Change password
		Open mart model
		Save mart model
		Save as mart model
		Merge model
		Lock mart model
		Review changes made to mart model
		Refresh mart model

Toolbar	Icon	Function
Layout		Perform a circular layout
		Perform a hierarchical layout
		Perform an orthogonal layout
		Perform a symmetric layout
		Perform a tree layout
		Reset relationship paths
		Reset objects to automatic sizing
		Preserve layout

erwin DM Scheduler

One of the major features of erwin Data Modeler (DM) is its capability to reverse engineer from databases. However, while a reverse engineering (RE) process runs, the other features of erwin DM are unavailable for use. Also, to configure and run another RE process while one RE process is running, one needs to wait until the first process is complete.

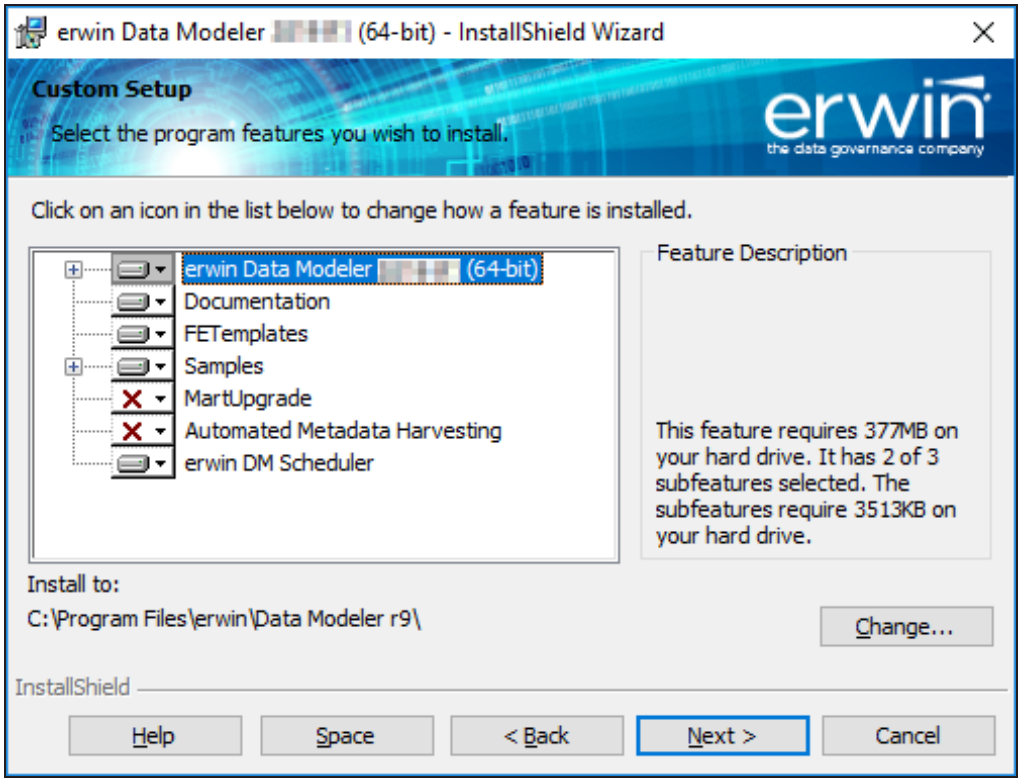
erwin DM Scheduler enables you to run reverse engineering (RE) jobs without stopping you from using erwin Data Modeler (DM) for other tasks. It enables you to schedule RE jobs in advance. Thus, improving the original capability of reverse engineering. These jobs then run as scheduled, without the need to monitor them. A live log keeps you updated about the job status.

Additionally, you can configure the scheduler to save reverse engineered models to a pre-defined location on your device as well as on the Mart.

Note: You need administrative privileges to be able to use erwin DM Scheduler.

For more information about erwin DM Scheduler and its capabilities, refer to its documentation.

erwin DM Scheduler is one of the components in erwin Data Modeler (DM) installer.



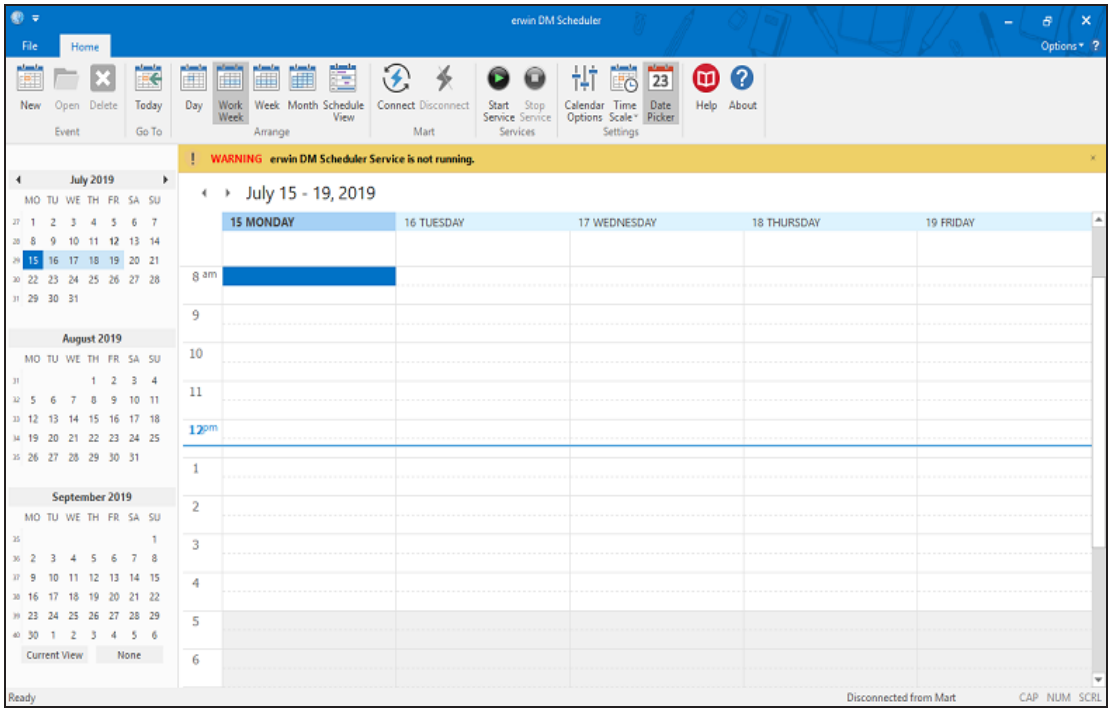
Note: You can install either erwin DM Scheduler or Automated Metadata Harvesting.

Installing this component adds erwin DM Scheduler Service to erwin Data Modeler under the Tools tab.

Scheduling Jobs

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

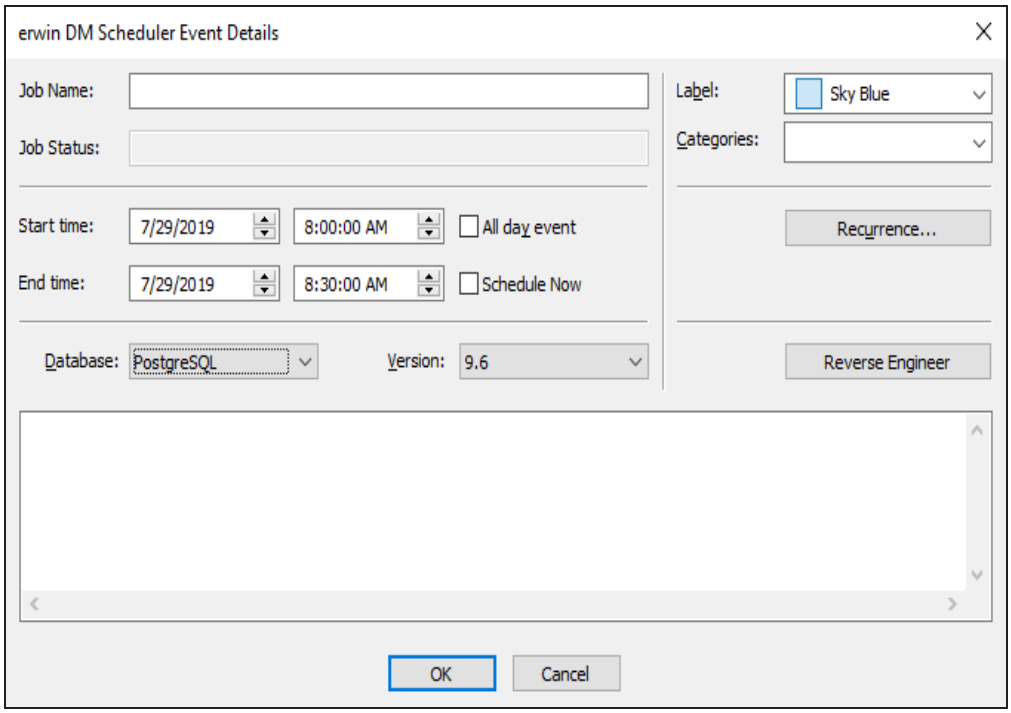
1. Start erwin Data Modeler (DM).
   Note: To be able to use the Scheduler, ensure that you run the DM as an administrator.
2. On the ribbon, click the **Tools** tab.
3. Click **erwin DM Scheduler**.
   This opens the Scheduler in a new window. By default, the erwin DM Scheduler Service is stopped.



4. On the Home tab, in the Services group, click **Start Service**.
   This starts erwin DM Scheduler Service.

5. Create an event in one of the following ways:
   - On the ribbon, under the Home tab, click **New**.
   - In the Calendar view, double-click a time slot under the day of your choice.
   - In the Calendar view, right-click a time slot under the day of your choice and click **Add new event**.

   The erwin DM Scheduler Event Details dialog box opens.



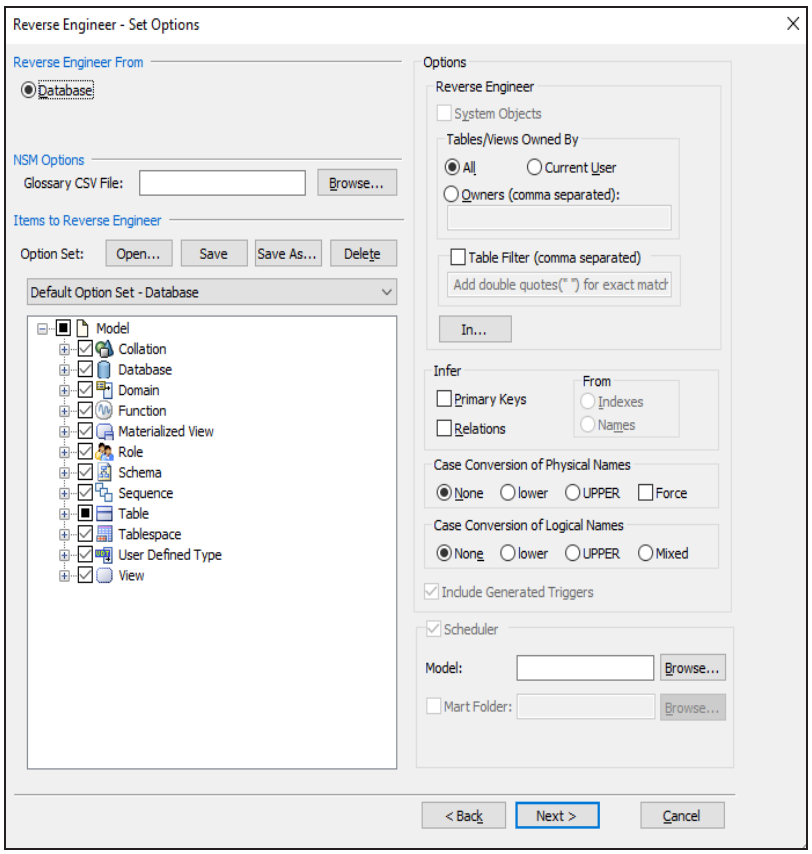
6. Enter a **Job Name**.
7. Select the **Start Time** and **End Time**.
   Alternatively, to schedule an all day RE job, select the **All day event** check box .
   Also, to schedule an RE job on the current date and time, select the **Schedule Now** check box.
   Note:
   - Jobs are run serially. Hence, schedule a reasonable job duration. Ensure that you consider the DB, its size, and the approximate job duration of the current

jobs, and then schedule a new job accordingly.

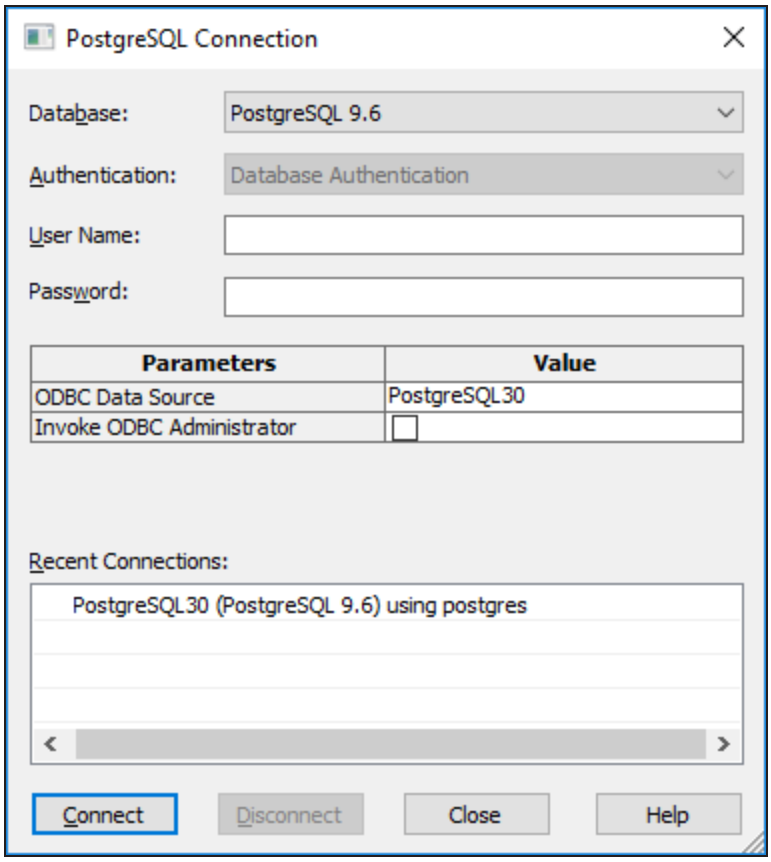
- Also, in case of multiple jobs scheduled at the same time with the Schedule Now option, it randomly selects a job to run. Therefore, it is recommended that you do not schedule multiple jobs to run at the same time.

8. Select the **Database** to reverse engineer from and its version.
   Note: If you set Redshift as the database, ensure that you do the following:
   1. On the ODBC Data Source Administrator dialog box, go to the **System DNS** tab.
   2. Select the Redshift data source and click **Configure**. The Amazon Redshift ODBC Driver DSN Setup dialog box opens.
   3. Under Encrypt Password For, ensure that the **All Users of This Machine** check box is selected.
9. To set reverse engineering options, click **Reverse Engineer**.
   The Reverse Engineer - Set Options dialog box is displayed. For more information,

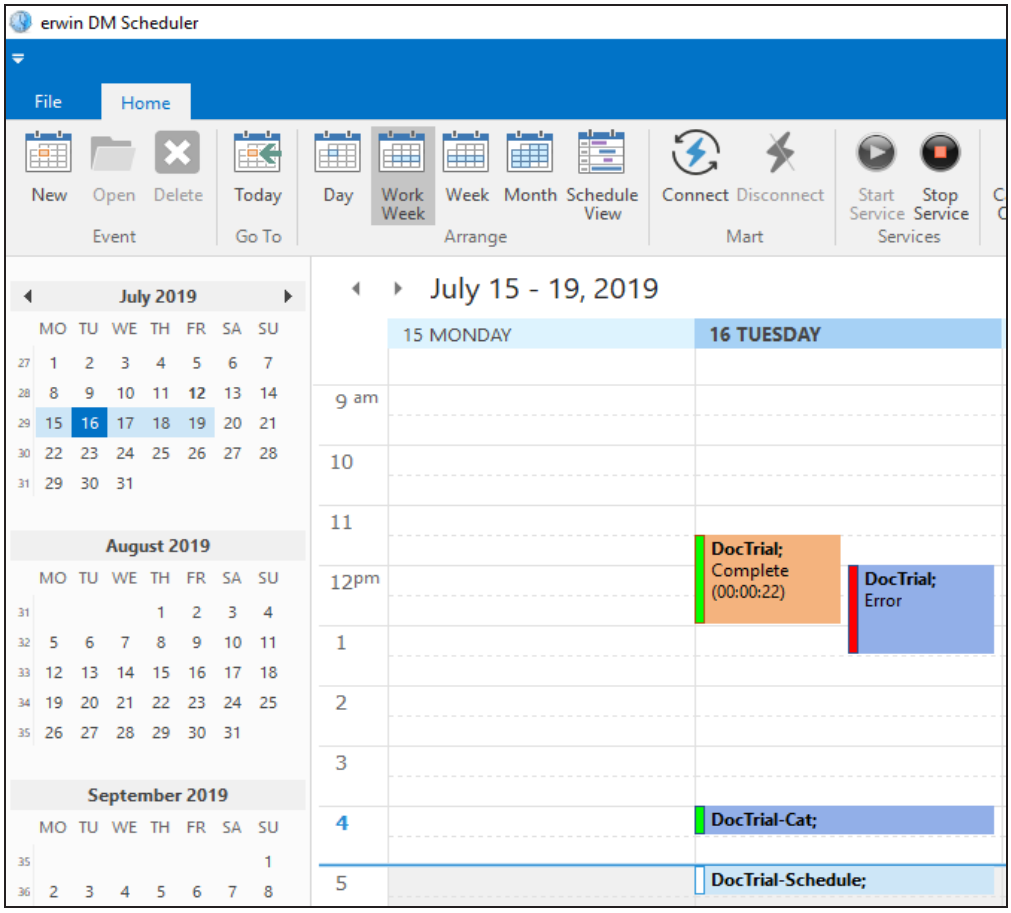
refer to the Setting Reverse Engineering Options topic.



10. Select the appropriate options and click **Next**.
    The DBMS Connection dialog box is displayed.



11. Enter your credentials and click **Connect**.
12. Click **OK**.
    Your RE job is scheduled. It runs as configured, and the job status and its event log is displayed.



Depending on the settings you make and the job duration that you set, the job tile displays the following information about the job:

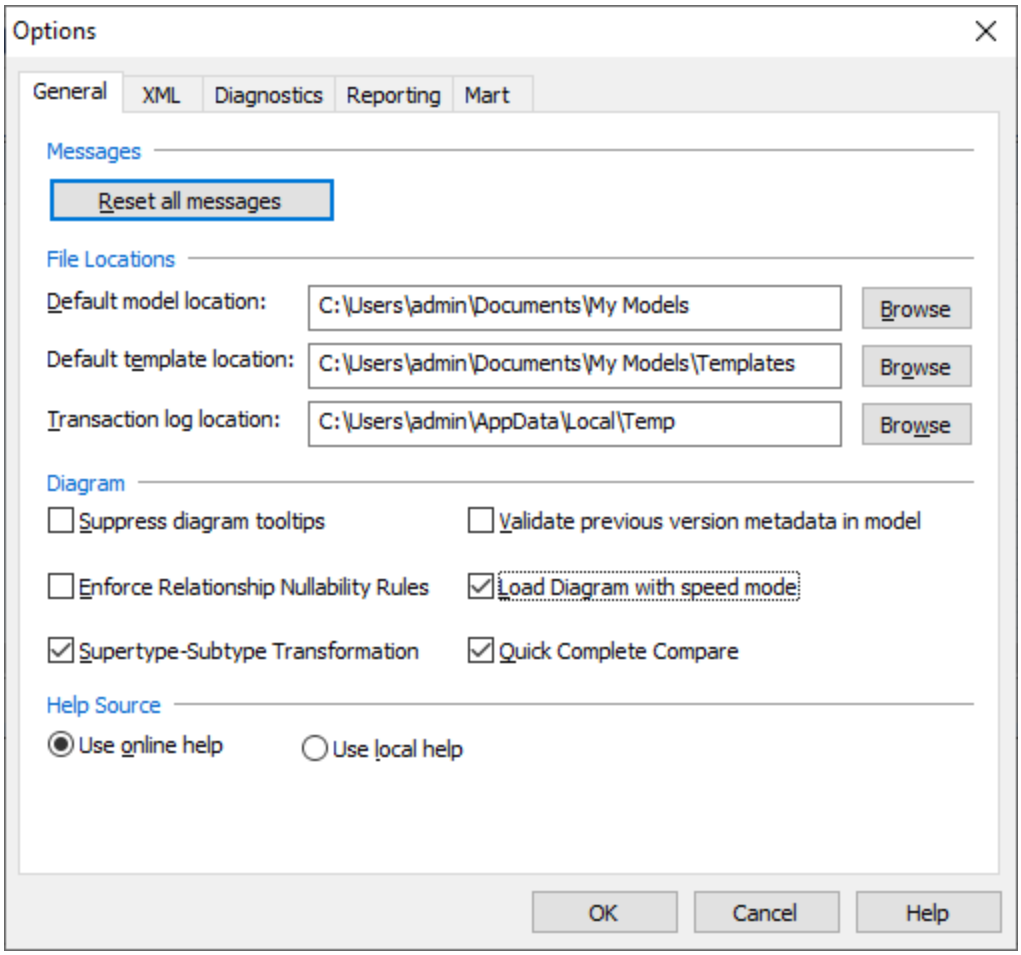
- Name
- Status
- Start and end times
- Run time

Productivity Enhancements

Several enhancements have been implemented to improve productivity and usage experience as follows:

- Load Diagram with speed mode
- Supertype-Subtype Transformation
- Quick Complete Compare

These options are available on the **Tools** > **Options** dialog box.



Load Diagram with Speed Mode

The Load Diagram with speed mode option lets you bypass relationship-related diagram rendering. Thus, accelerating the diagram load process.

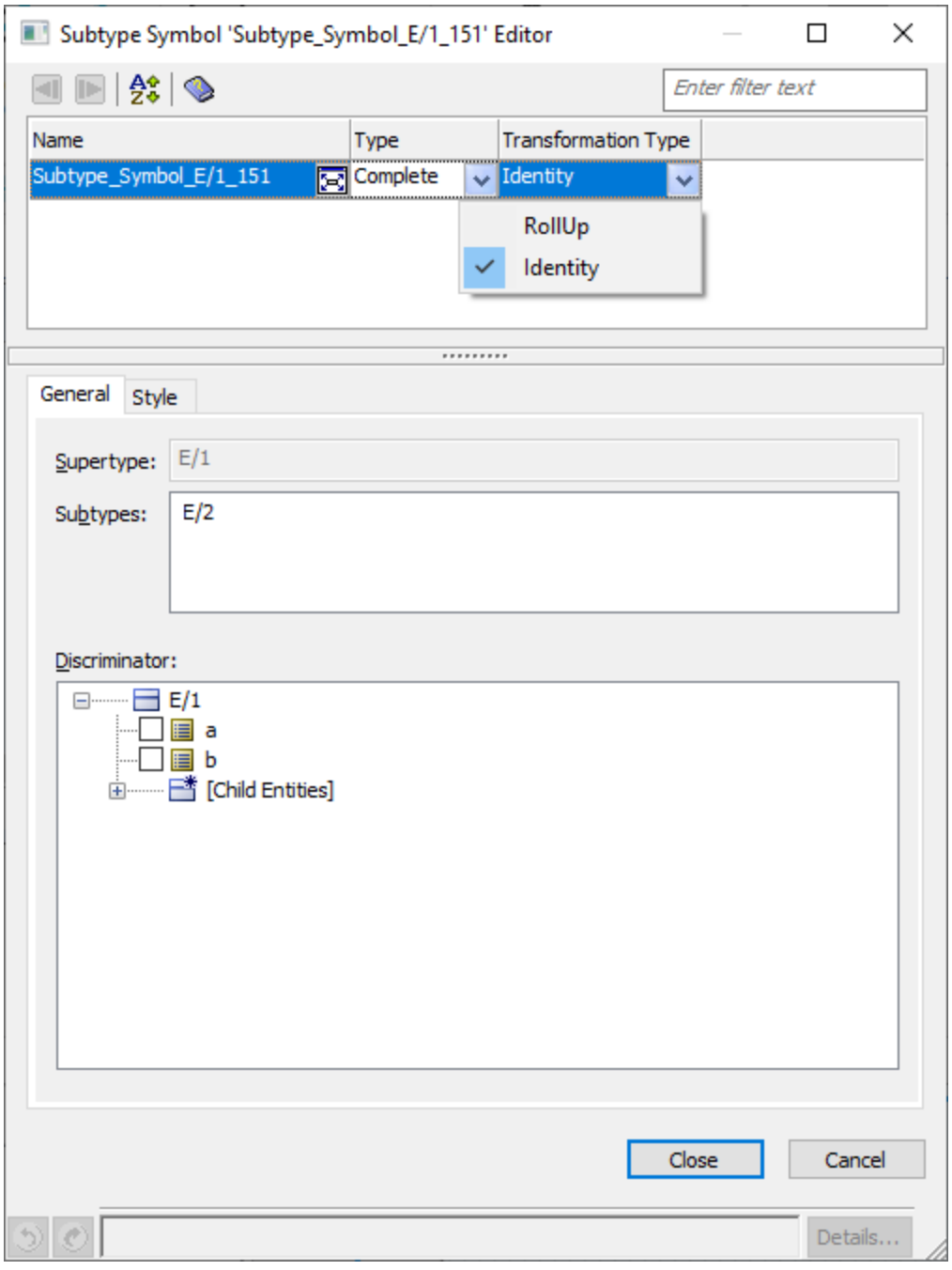
Note: Using this option opens the model with an improper layout. Run the layout operation (Orthogonal Layout) manually after the model is loaded.

Supertype-Subtype Transformation

The Supertype-Subtype Transformation option enables you to run SuperType-SubType Rollup Transformation on the Physical side of the model. For this option to take effect, do the following:

1. In erwin Data Modeler, on the **Tools** tab, click **Options**.
   The Options dialog box opens.
2. In the Diagram section, select **Supertype-Subtype Transformation**.
3. Click **OK**.

4. On the Logical side of your model, right-click the Subtype symbol and click **Properties**. The Subtype Symbol Editor opens.



5. Under Transformation Type, select **RollUp**.

6. Click **Close**.
   Supertype-subtype rollup transformation is applied on the Physical side of your model.

Note: For an already transformed target entity, any newly added non-key attributes in the child entity on Logical side are not rolled-up automatically. To roll-up the new attributes, rerun the roll-up action as follows:

1. On the Attribute Editor, clear the **Logical Only** check box and click **Close**.
2. On the Subtype Symbol Editor of the attribute, set the **Transformation Type** to **RollUp** and click **Close**.

Quick Complete Compare

The Quick Complete Compare option lets you to bypass the hidden properties comparison. Thus, accelerating the complete compare process.

Query Tool

The Query Tool provides a convenient way to execute SQL SELECT queries against a model in erwin Data Modeler (DM), a model in a mart, or against a database catalog. You can execute a query against the objects and properties in the model, the metadata defining those objects and properties, and the action log that records the changes that are made to your model during the modeling session.

To access the Query Tool, do the following:

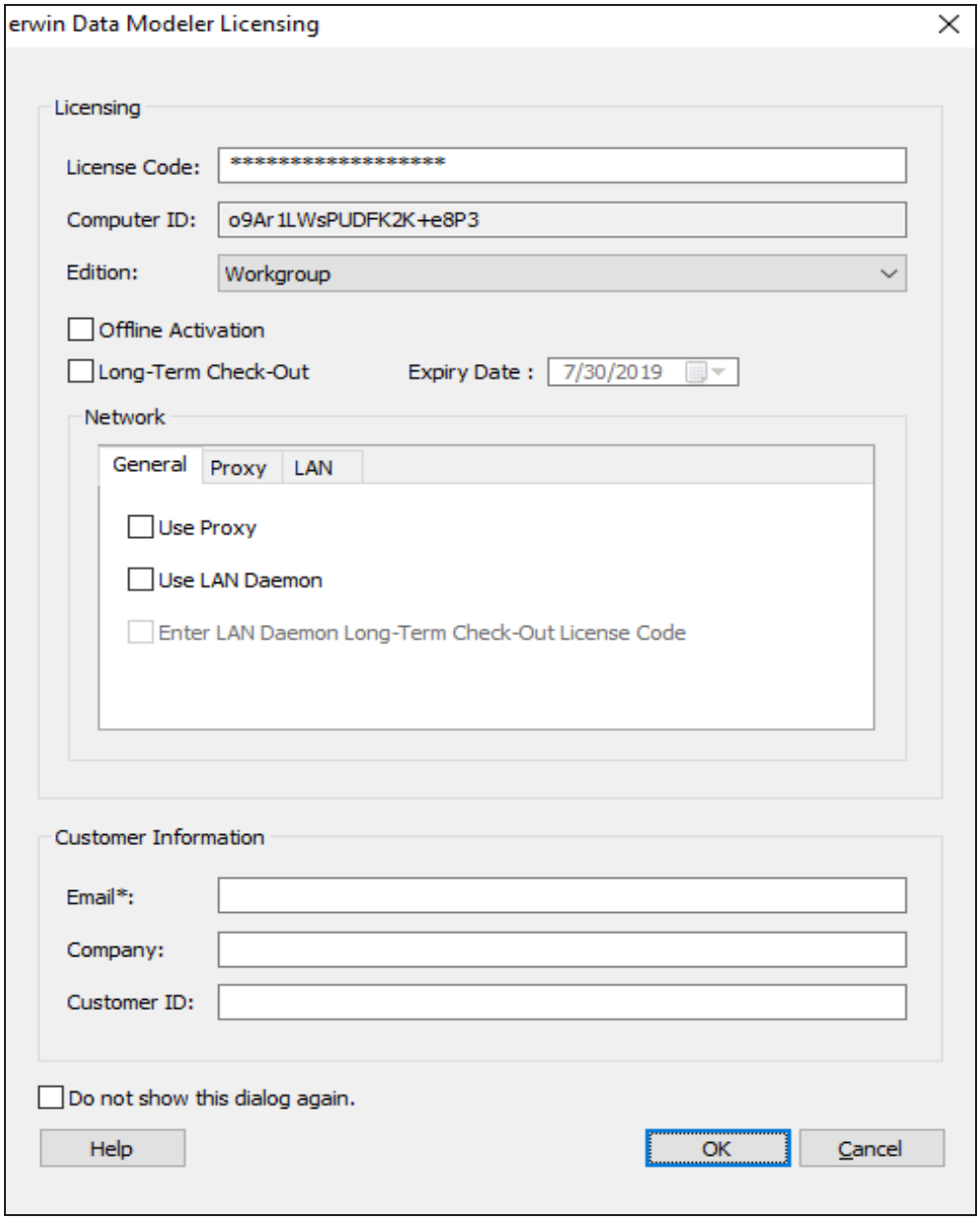
1. Start erwin Data Modeler (DM).
2. On the ribbon, click the **Tools** tab.
3. Click (**Query Tool**).
4. Enter your query in the **Query** box, or click the paste button on the toolbar to paste a query from another source.
   Note: Before you can execute a query you must be connected to erwin ODBC or to a database.
   - Click **Execute** on the toolbar.
     The results of query execution are displayed in the Results box.

For more information about the Query Tool, refer to its documentation.

Licensing

erwin Licensing allows you to check out your cloud-based concurrent licenses for a long term.

When you first open erwin Data Modeler (DM), the erwin Data Modeler Licensing dialog box opens.



Here, select **Long-Term Check-Out** and set the **Expiry Date**.

Other than the above update, following enhancements have been made to Licensing:

- Optional network domain name and subnet IP-based usage restrictions
- erwin Data Modeler edition-based licensing

Contact your license administrator to configure these.

DBMS Support

erwin Data Modeler (DM) now supports Redshift 1.0 and DB2 LUW 11.1 as target databases. Also, erwin DM and erwin Mart Server (MS) are now certified to work with Microsoft SQL Server 2019.

Redshift Object Support

- CTAS
- Databases
- Functions
- Groups
- Libraries
- Permissions
- Schemas
- Tables
- Users
- Views

For more information, refer to the Redshift Property Editors topic.

DB2 LUW Object Support

- Storage Group object support has been added
- Table properties have been updated to support organization types and period definition
- Column properties have been updated to support new data types and constraints
- Materialized query table support has been updated to include Replication as a method of maintaining query options

For more information, refer to the DB2 LUW Property Editors topic.