

# Toad® Data Modeler 6.2

## Release Notes

Tuesday, May 30, 2017

These release notes provide information about the Toad® Data Modeler release.

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## About Toad Data Modeler

Toad Data Modeler helps organizations create, maintain and document their database systems with an easy-to-use graphical interface into new or existing database structures. Toad Data Modeler enables users to reverse engineer database structures, update models, design and generate SQL, compare models and generate alter scripts, create HTML or RTF reports, in addition to versioning of database designs and creation of to-do lists.

Toad Data Modeler 6.2 is a minor release, with enhanced features and functionality. See [New features](#) and [Resolved issues](#) for more information.

Toad Data Modeler is released in 32-bit and 64-bit versions. The 64-bit version of the application has a significantly higher memory limit which should resolve several common issues incl. out of memory errors, which occurred when working with complex models.

However, in order to reverse engineer databases that require a client you need a corresponding version of the client, i.e. 32-bit or 64-bit.

# New in Toad Data Modeler 6.2

## General features

### Support for Git

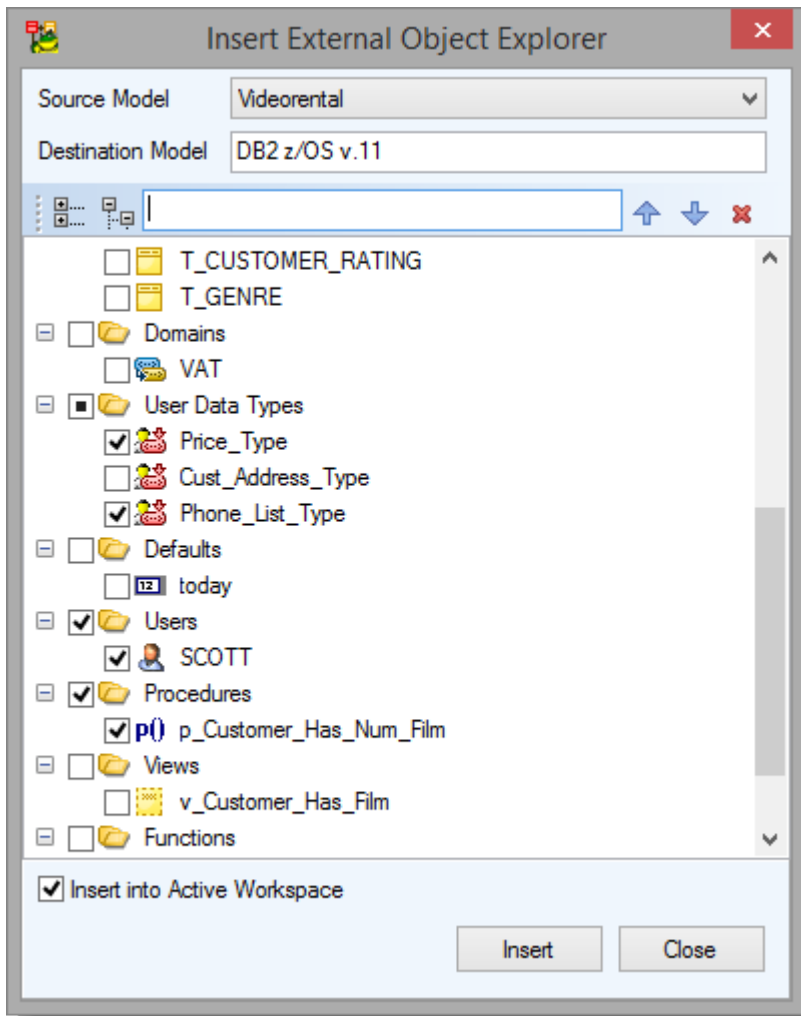
- Configure Toad Data Modeler to work with Git in **Options | Application | Version Control System**
- Set paths to your Git client and working directory for your repository
- Clone a remote repository easily after setting path to the remote repository, user name and password
- The values set here will be your default values for setting up new repositories in Toad Data Modeler
- The Git commands are displayed in **Application View** toolbar when you work with a model that is tracked



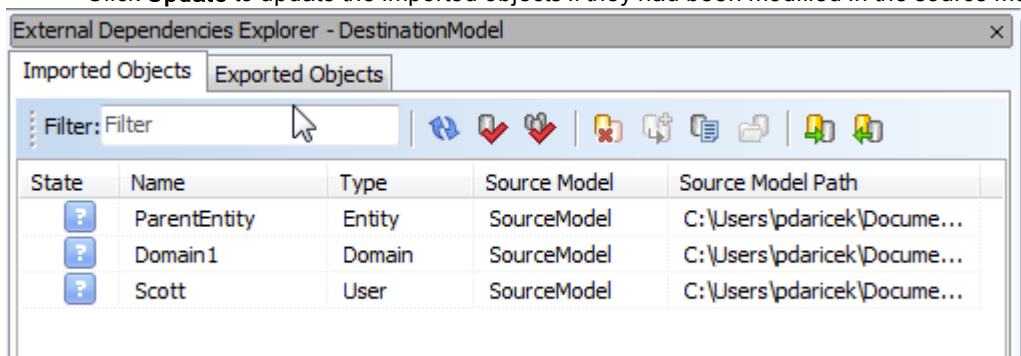
Button	Description
<b>Version Control System Settings</b>	Opens <b>Options</b> page where you can set the <b>Version Control System</b> preferences
<b>Refresh</b>	Refreshes file status in Toad Data Modeler
<b>Add to Index</b>	Adds the file to the list of tracked files
<b>Remove from Index</b>	Remove the file from the list of tracked files
<b>Commit</b>	Commits the changes
<b>Push</b>	Pushes the committed changes into the remote repository
<b>Pull</b>	Pulls the current state from the remote repository
<b>Fetch</b>	Fetches information about the current state of the remote repository
<b>Information</b>	Displays information about the commit and its author
<b>History Browser</b>	Allows you to browse different versions of the file, merge and compare them and create change script

### External Objects

- External objects are objects dynamically linked from another model
- Right-click a model in **Model Explorer** or **Application View** and select **External Sources** to import external objects

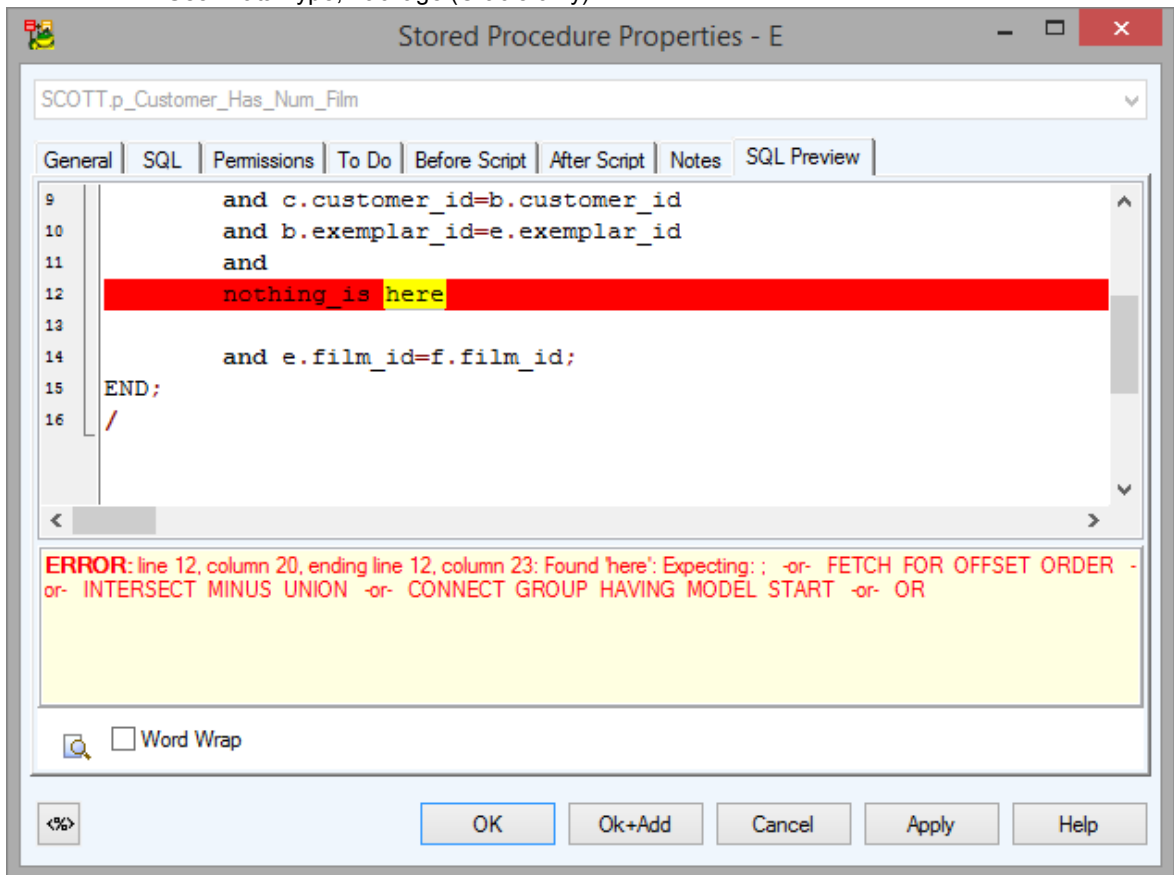


- Select the source model to import from and check objects you want to use in your destination model
- Select **Window | External Dependencies Explorer** to manage imported and exported objects
- Click **Update** to update the imported objects if they had been modified in the source model

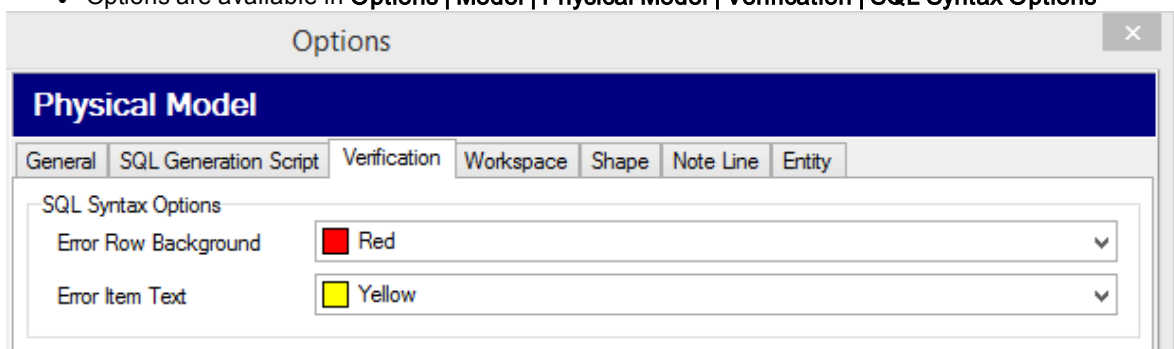


## Syntax Validity

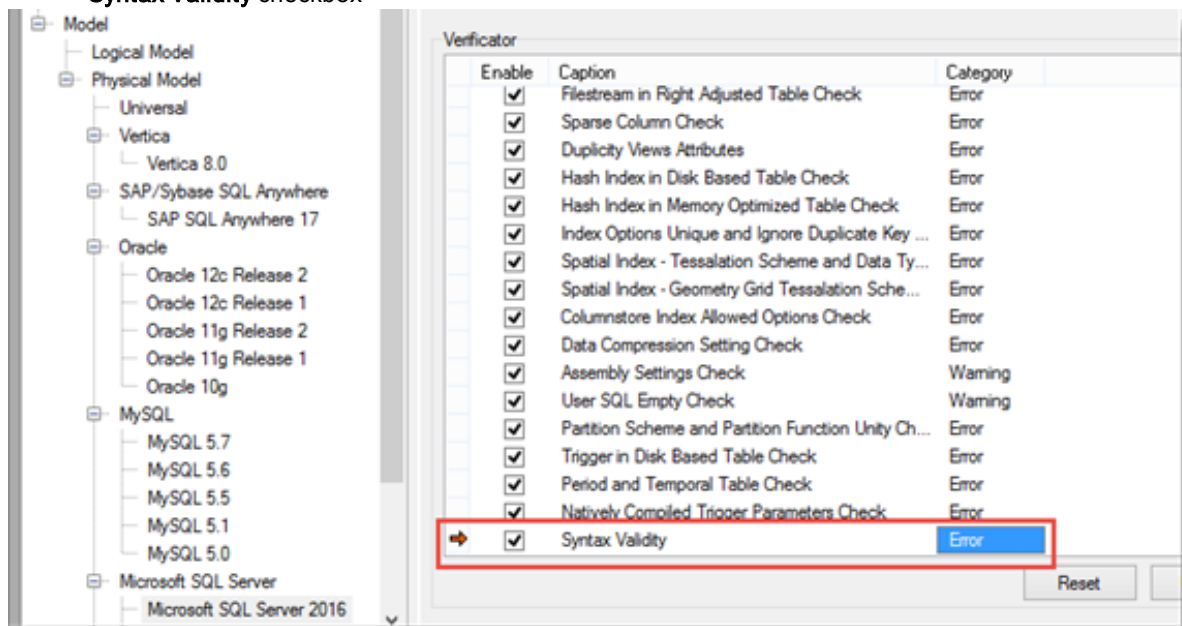
- **SQL Preview** tab now highlights errors in SQL script syntax
- Select **Model | Verify Model** in the main Toad Data Modeler toolbar and then the **Verification Settings**
- Check Syntax Validity to perform syntax checks in **SQL Preview** for the following objects:
  - Procedure, Function, View, Materialized View
  - User Data Type, Package (Oracle only)



- Options are available in **Options | Model | Physical Model | Verification | SQL Syntax Options**



- Syntax validity check may be disabled in **Settings | Options | Model | Physical Model | <database> | Syntax Validity** checkbox



## Database features

### Support for Oracle 12c Release 2

- The latest Oracle 12c Release 2 is now supported as a physical model, during report generation and DDL script generation

### Support for SAP SQL Anywhere 17

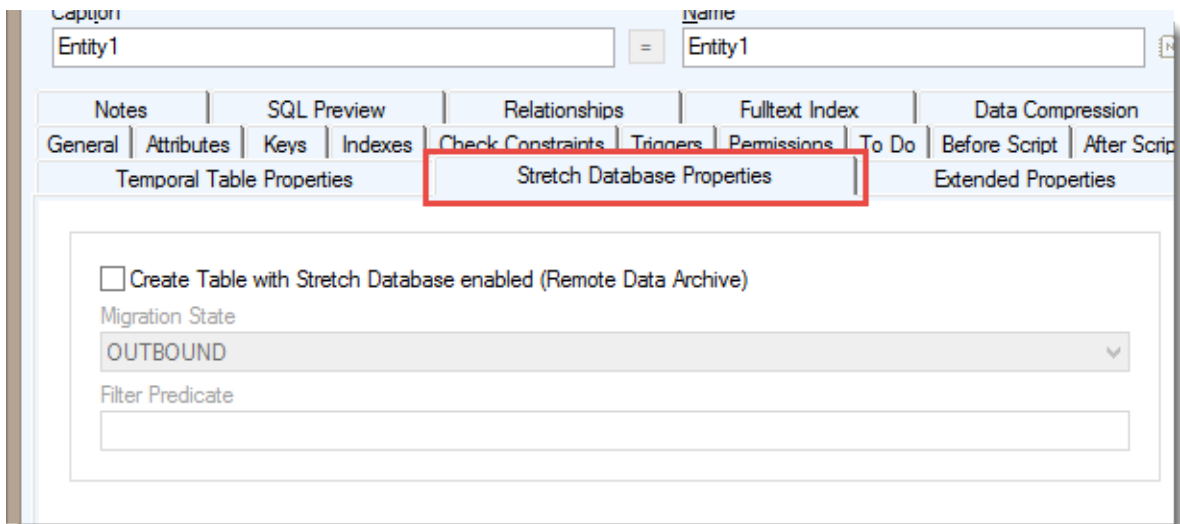
- The latest SAP SQL Anywhere 17 is now supported as a physical model, during report generation and DDL script generation

### Support for MySQL 5.7

- **Change Script Generation** now supports the following MySQL 5.7 changes:
  - Support for generated columns for ALTER TABLE
  - Support for multiple TRIGGERS

### Support for SQL Server 2016

- Support for Stretch Database (REMOTE\_DATA\_ARCHIVE) in SQL Server 2016
- To create a Table for remote data archive see **Entity Properties | Stretch Database Properties**



**i** NOTE: REMOTE\_DATA\_ARCHIVE is not supported for Memory Optimized Tables.

- Enhanced support for history tables:
  - Set **System Versioning** in **Entity Properties | Temporal Table Properties tab**

## Support for PostgreSQL 9.5

- Change Script Generation** now supports the following PostgreSQL 9.5 changes:

DDL	New Syntax
CREATE SEQUENCE	IF NOT EXISTS
CREATE MATERIALIZED VIEW	IF NOT EXISTS Support for SET and RESET of storage parameters log_autovacuum_min_duration, toast.log_autovacuum_min_duration (integer)
CREATE TABLE	Support for SET and RESET of storage parameters log_autovacuum_min_duration, toast.log_autovacuum_min_duration (integer)
CREATE INDEX	IF NOT EXISTS BRIN method Support for SET and RESET of pages_per_range parameter in WITH section Support for SET and RESET of new GIN method parameter gin_pending_list_limit in WITH section
CREATE FOREIGN TABLE	INHERITS

## Support for Vertica Database

- You now can work with models of Vertica Database 8.0

## Support for Microsoft Azure SQL Database

- Azure SQL Database V12 is now supported
- Performance of Script Generation and Alter Script Generation is now much quicker

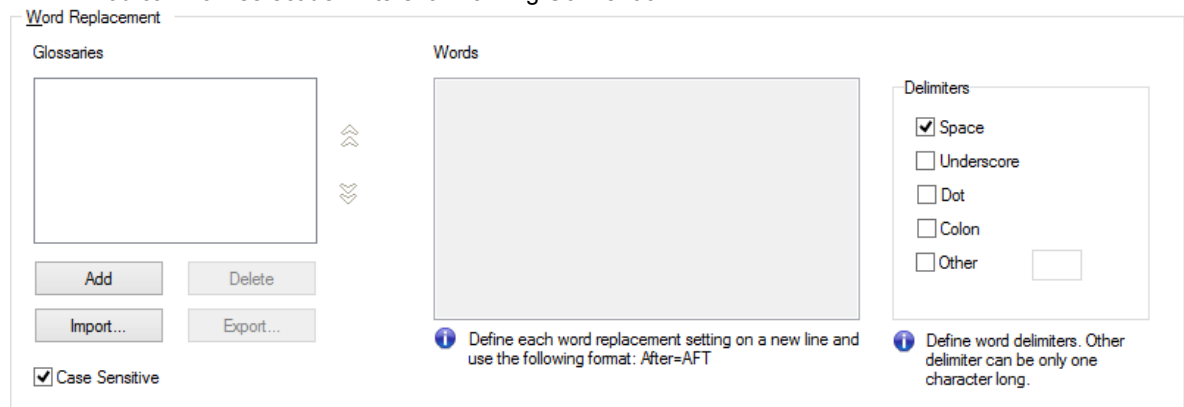
	Duration in Toad Data Modeler 6.2	Duration in Toad Data Modeler 6.1	Improvement
<b>Small model*</b>	<b>1 second</b>	31 seconds	31 times
<b>Large model*</b>	<b>3 seconds</b>	43 seconds	14 times

\*Small/large model: 135/540 entities, 544/2176 attributes, 26/104 relationships, 55/220 views

## Enhancements

### Naming Convention Enhancements

- You now can turn case sensitivity off (by default it is on) for Word Replacement
- To set **Case Sensitivity** check or uncheck **Tools | Naming Convention | Settings | Glossary | Word Replacement**
- You can now select delimiters for Naming Convention



### Exporting Views to Excel

- Support for exporting Views to Excel has been implemented
- The following table illustrates the modified properties:

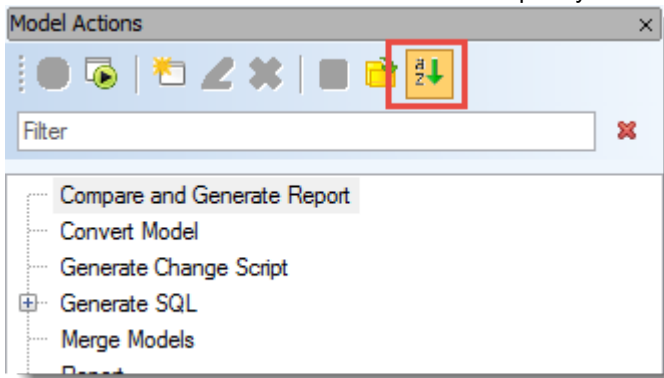
Modification	Property type	Properties
Unlocked	String	Alias Where Having

		SQL
		Comment
		Note
		BeforeS
		AfterS
		Boolean GenerateSQLOnly
		SelectViewsInText
Locked	List	Attributes
		From
		Order
		Group

- Aliases of entities and attributes are in columns “From” or “Attributes” in a format: “Object AS alias” in an exported file

## Model Actions Enhancements

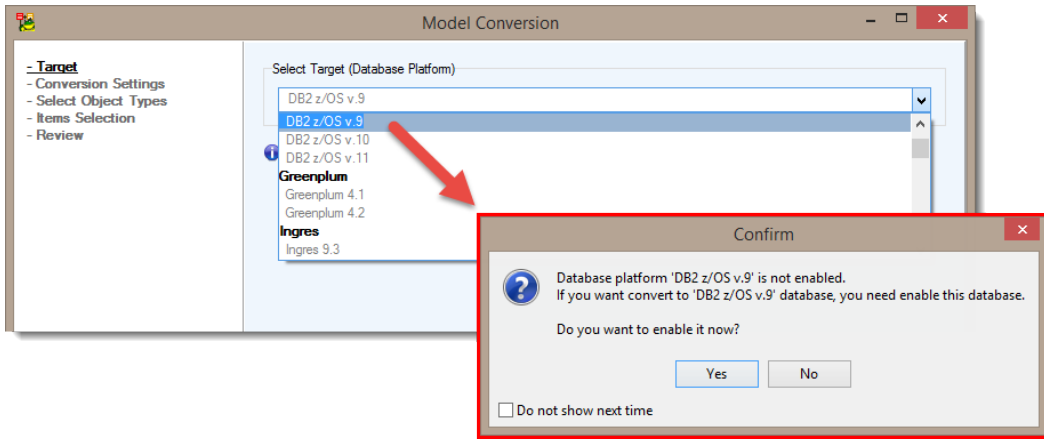
- You now can sort **Model Actions** alphabetically or by default (Nature Order)
- You now can **Filter** in **Model Actions** to quickly find what you are looking for



## Model Conversion Enhancements

- You now can enable disabled databases directly from **Model Conversion Wizard**



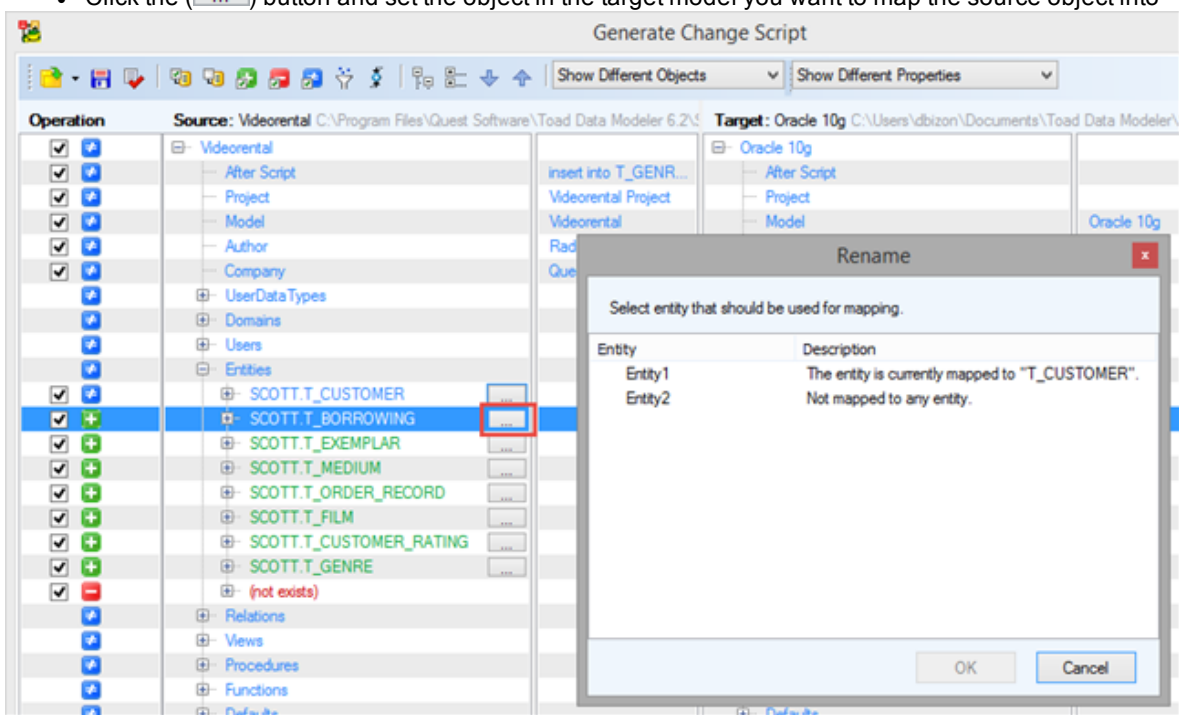


## Splitting Files in DDL Generator

- It is now possible to output to several files in Toad Data Modeler DDL Generator
- To enable check **Split Output File** in **Model | DDL Script Generation | Run** or **Edit Default Settings**

## Mapping Attributes and Entities

- Now you can easily map entities and their attributes in **Change Script Generation** and **Merge Model** wizards
- Click the (....) button and set the object in the target model you want to map the source object into



## Deprecated Features

- Support of Microsoft Azure SQL Database V2 has been deprecated

## Resolved issues

The following is a list of issues addressed in this release.

Resolved Issue	Issue ID
Issue when GRANT statements were generated for unchecked schemas was fixed	2585/3628069-1
Primary keys are now included in table definitions when system_versioning is on	2606
Added support for exporting Views to Excel and CSV	2582/3625126-1
Added support for selecting delimiters in Word Replacement	2572/3536502-1
It is now possible to sort alphabetically in Model Actions window	2471
It is now possible to turn of Case Sensitivity off in Word Replacement	2573/3536502-1
You now can split generated DDL into more files	1897/3131260-1
It is now possible to map renamed entities and attributes in Sync & Compare Wizard	1338/2875889-1
Gradients are now printed correctly	2591/3625114-1
Edit Model Action now displays correct values of Generate Order List for Oracle11g R2 models	2674
It is now possible to add a folder with compress/archive flags to a project	2758
Run Only One Instance of Application setting now works as expected	2896/ 3860203-1
A new confirmation dialog to overwrite Object Type settings in was created for Change Script Generation, Sync Wizard, Report / Alter Report, Reverse Engineering and others	2897/3860214-1
An error during a PDF report generation was fixed	2915/3870493-1
Error when changing a datatype during conversion of a physical model from Oracle into PostgreSQL was fixed	2833, 3119/3964938-1, 3790032-1
A new Default values column was added to the Attribute tab in Entity properties	3156/3964938-2
An issue when TDM was installed using an account with administrator permissions and then could not be launched with non-admin users was fixed	3105/3960423
It is now possible to easily convert the whole Gallery from an older format	3027/3909241-1
An error ORA-00904 on trying to reverse engineer Oracle 9i: was fixed	2986/3900630-1
Microsoft JScript runtime error during generation of indexes Change Script in MySQL 5.6 was fixed	2945/3879943-1

Resolved Issue	Issue ID
Quick Search was implemented for Model Action Manager	2551
Reverse Engineering can now be run from JSCRIPT (CreateCSStringHashLists has been made available)	2594
You now can enable disabled databases directly from Model Conversion Wizard	1930
Change Script Generation is now available for MySQL 5.7	2316
New history table settings in Entity Properties   Temporal Table Properties tab were implemented	2704
Change Script functionality has been implemented for PostgreSQL	2315

## Known issues

The following is a list of issues, including those attributed to third-party products, known to exist at the time of release.

Issue	Issue ID
When using DPI settings higher than 125%, grids in dialogs are not scaled correctly	2044

## System requirements

Before installing Toad Data Modeler 6.2, ensure that your system meets the following minimum hardware and software requirements.

### Hardware requirements

Requirement	Details
Processor	1 GHz or faster 32-bit (x86) or 64-bit (x64) CPU. For Toad Data Modeler 64-bit version, a 64-bit CPU is required.
Memory	Minimum 1 GB, 4 GB recommended
Hard disk space	Minimum 400 MB, 1 GB recommended

### Software requirements

Requirement	Details
Operating system	Microsoft Windows 10 (64-bit)

Requirement	Details
	Microsoft Windows 8.1 PRO (64-bit) Microsoft Windows 8 PRO (64-bit) Microsoft Windows Server 2012 (64-bit) Microsoft Windows Server 2008 R2 (64-bit) Microsoft Windows Server 2008 (32-bit or 64-bit)* Microsoft Windows 7 (32-bit or 64-bit)* Microsoft Windows Vista (32-bit or 64-bit)* *For Toad Data Modeler 64-bit version, only 64-bit version of the operating system can be used.

**i** | Note: Microsoft .NET Framework version 3.5 is required on first application start.

## Virtual appliances

Review the following information about using Toad Data Modeler in virtual environments:

Requirement	Details
Application	Toad Data Modeler has been tested for support on the Citrix XenApps 6.5 Server.
Desktop (VDI)	Problem during print on virtual printer - The problem occurs only in case of print from local machine (all printers from local machine are visible on vWorkspace). If the virtual printer is installed on Workspace directly, the problem doesn't occur.
Server	Oracle VM 3.0 Toad Data Modeler has been tested with VMware Server 2 running on Windows 7.

Toad Data Modeler may work correctly in virtual environments other than the tested ones. In case of virtual servers, support for Toad Data Modeler is provided on the basis of supported operating systems.

## Cloud database services

Toad Data Modeler supports the following cloud-based database services:

- Oracle Database as a Service

## Upgrade and compatibility

It is not possible to open models created in Toad Data Modeler 6.2 in versions earlier than 6.0.

Version 5.2 introduced new system of relationship lines. Models created in version 5.1 and lower are automatically converted to the newer format. Backup your models prior to opening them in version 5.2 or higher.

Do not open and re-save models originally created in a higher version of Toad Data Modeler in a lower version of Toad Data Modeler.

# Supported database platforms

## Supported model types

- Logical
- Universal
- Physical

## Supported databases

- IBM® DB2® z/OS® 9, 10, 11
- IBM® DB2® LUW 9, 9.5, 9.7, 10.1, 10.5
- IBM® DB2® UDB v. 8 (LUW)
- Greenplum Database® 4.1, 4.2
- Ingres 9.3, 10.0
- Microsoft® Access® 2000-2003, 2007-2010
- Microsoft® Azure® SQL Database V12
- Microsoft® SQL Server® 2000, 2005, 2008, 2012, 2014, 2016
- MySQL 5.0, 5.1. 5.5, 5.6, 5.7
- Oracle® 9i, 10g, 11g R1, 11g R2, 12c R1, 12c R2
- PostgreSQL 8.1, 8.2, 8.3, 8.4, 9.0, 9.1, 9.2, 9.3, 9.4, 9.5
- SQLite 3.7
- SAP® SQL Anywhere 17
- SAP® ASE 16.0
- Sybase® ASE 12.5, 15, 15.7
- Sybase® IQ 15.2
- Sybase® SQL Anywhere 11
- Teradata 13
- Vertica Database 8.0
- Other (Universal Model)



Note: For more information about the level of support please see **Help**, section **Introduction | Supported Databases**.

# Product licensing

## *To activate a purchased commercial license*

1. Open Toad Data Modeler.
2. Select Help | Licensing.

# Getting started with Toad Data Modeler 6.2

## Upgrade and installation instructions

The Toad Data Modeler release package contains the following products:

- Installation file of Toad Data Modeler (MSI)
- Product Documentation, including:
  - Release Notes (PDF)
  - Installation Guide (PDF)

### **Installation Instructions**

Refer to Toad Data Modeler [Installation Guide](#) for installation instructions.

## Additional resources

If applicable, point to related references, provide a list of corresponding documents, videos, or identify the community where additional information can be obtained. Otherwise, delete this section.

Additional information is available from the following:

- [Online product documentation](#)
- [Toad World community](#)

## Globalization

This section contains information about installing and operating this product in non-English configurations, such as those needed by customers outside of North America. This section does not replace the materials about supported platforms and configurations found elsewhere in the product documentation.

This release is Unicode-enabled and supports any character set. In this release, all product components should be configured to use the same or compatible character encodings and should be installed to use the same

locale and regional options. This release is targeted to support operations in the following regions: North America, Western Europe and Latin America, Central and Eastern Europe, Far-East Asia, Japan.

The release is localized to the following languages: Chinese (Simplified), Chinese (Traditional), Czech, Hebrew, Italian, Portuguese (Brazil), Russian, Spanish.

This release has the following known capabilities or limitations: Localized support for HTML and RTF/PDF reports in several languages will be distributed via TDM Community.

Available dictionaries: Chinese (Simplified and Traditional), Czech, Hebrew, Hindi, Punjabi, Russian, Spanish, Brazilian Portuguese and Italian

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- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product



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