ApexSQL Model

Version 2019.x

Release Notes and Requirements

System requirements

Hardware	Dual Core 2.0 GHz CPU 4 GB memory 101 MB disk space
SQL Server	SQL Server 2005 and higher Azure SQL Database Amazon RDS for SQL Server
Add-in integration	SQL Server Management Studio 2012 and higher ^[2] Visual Studio 2010 and higher ^[2]
os	Windows 7 SP1/Windows Server 2008 R2 SP1 and higher
Software	.NET Framework 4.7.2 or higher
Permissions and additional requirements	Windows user account with administrative privileges See Minimum permissions required to install and use ApexSQL products See Minimum SQL Server permissions for ApexSQL Developer tools See Remote access for SQL Server instance

^[1] See <u>Supported systems</u> for exact version support

Supported Software

 $^{^{[2]}}$ You can use the latest full-featured backwards compatible SQL Server Management Studio for free. $\underline{\text{Click here}}$

Windows version								
Windows 7 SP1 & Windows Server 2008 R2 SP1	Windows Server 2012	Windows 8.1 & Windows Server 2012 R2	Windows 10 & Windows Server 2016	Windows Server 2019				
~	~	~	~	~				

SQL Server version (3)									
	2005 200	2008	.008 2012	2014	2016	2017		2019 CTP 3	
						Windows	Linux [2]	Windows	Linux [2]
ApexSQL Model	~	~	~	~	~	~	~	~	~

SQL Server edition ¹³								
				Azure SQL				
	Express	Standard	Enterprise	Single Database, Elastic Pool	Managed Instance	Amazon RDS for SQL Server		
ApexSQL Model	~	~	~	~	~	~		

Visual Studio add-in integration								
	2010	2012	2013	2015	2017	2019		

ApexSQL Model	~	~	~	~	~	~

SQL Server Management Studio add-in integration							
	2012	2014	2016	17	18		
ApexSQL Model	~	~	~	~	~		

^[2] Tested on Ubuntu 16.04

Getting Started

For further information about installation and getting started, please check the <u>Quest Knowledge Base</u> or ApexSQL Getting Started.

Release Notes (release history)

Release: 2019.02.0169 Date: March 13, 2020

Fixes:

- "View database state permission denied in database "database name". The user does not
 have permissions to perform this action" error is encountered when trying to open a
 database without permissions to access the master database with the Active Directory
 authentication type
- "Cannot use 'Authentication' with 'Integrated Security'" error is encountered when using the Execute now command for the create database process without permissions to access the master database with the Active Directory authentication type
- "Invalid database selected. Select existing database" error is encountered when using the
 Execute now command for the update database process without permissions to access the
 master database with the Active Directory authentication type

^[3] Including Amazon EC2, Google Compute Engine, and Azure Virtual Machine cloud computing SQL Server instances

Known issues:

"Azure Active Directory MFA Authentication is not supported" error is encountered when
using the Execute now for the Create database, Compare to a database or Update database
features with the Active Directory – Universal with MFA support authentication

Release: 2019.01.0162

Date: December 06, 2019

Enhancements:

• SQL Server 2019 support

- Constraint customization
- Create a model from a snapshot
- Export selected part of a diagram as image
- Generate SQL script from a model
- Index customization is added in the Edit table dialog
- Import only selected objects from database to model
- Profiles for table customization
- Show/hide tables on diagrams

Fixes:

- "Could not load file or assembly" error is encountered when right mouse button is pressed on the File name template text box in the Output tab from the Options window
- "Cannot open database AdventureWorks2012 requested by the login. The login failed" error is encountered when creating a model for an offline database
- The application cannot be integrated into any SQL Server Management Studio or Visual Studio version through the silent installation
- All SQL Server Management Studio and Visual Studio versions are checked by default in the integration step of the application installation wizard
- The uninstall confirmation message box appears is shown when the /verysilent and /suppressmsgboxes switches are used
- The application cannot be integrated into any SQL Server Management Studio or Visual Studio version when the silent installation is initiated through CLI switches
- "Table wasn't found" error is encountered when deleting the table from the Object browser and then using the Undo button to bring back the table and try to edit the same table
- The Undo function does not work after deleting Schema objects from the Object browser
- Right-click context menu will not work on any object if object is browsed within the group
- When a relation between tables is unchecked in the Object browser panel nothing happens
- The table is shown in the Object browser panel, although it was not created in the model diagram
- Multiple groups with the same name can be created

Changes:

 The application now only loads schemas and tables when using the Create model from a database feature, instead of all objects from a loaded database

Known issues:

• "Azure Active Directory MFA Authentication is not supported" error is encountered when using execute now for create database, compare to a database or update database options with the Active Directory – Universal with MFA support authentication

Release: 2018.04.0113 Date: June 21, 2019

Changes:

 Software Transaction Agreement is added as a new step in the installation wizard and updated in accordance with https://www.quest.com/legal/sta.aspx

Release: 2018.04.0104 Date: May 22, 2019

Fixes:

- "Index was outside the bounds of the array" error is encountered when the saved project file is opened with a double-click on it
- "Requested value 'Compact orthogonal' was not found" error is encountered when the model saved in the compact orthogonal layout is opened
- "Requested value 'Direct orthogonal' was not found" error is encountered when the model saved in the direct orthogonal layout is opened
- "Object reference not set to an instance of an object" error is encountered when the OK button is clicked in the Connection options dialog after changing value for timeout options
- Data type settings cannot be changed under the Data type column in the Add table window
- The add-in doesn't integrate with SQL Server Management Studio 18 GA version

Release: 2018.03.0090 Date: February 12, 2019

Fixes:

Data type column in the Add table window must be used only with predefined data types

Changes:

 ApexSQL parent menu of the add-in is now located under the Extensions main menu in Visual Studio 2019

Release: 2018.02.0088

Date: December 27, 2018

Enhancements:

- SQL Server 2019 CTP 2.0 support
- SQL Server Management Studio integration support
- Visual Studio integration support
- Azure SQL Database– Managed instance support
- Active Directory support for:
 - Password authentication
 - o <u>Integrated authentication</u>
 - Universal with MFA support authentication
- New error handling and send logs functionality
- Improved application installer with a dark theme
- New application icon
- Create database from model:
 - Create script
 - Create database
- Update existing database:
 - Create synchronization script
 - Update database
- Update existing database in one click
- Create DDL script from existing model
- Compare model to database via ApexSQL Diff
- Compare model to snapshot via ApexSQL Diff
- Document model via ApexSQL Doc
- Add notes on database diagram
- Model categories to group models visually
- Customizable output script header and footer are added under the Output tab in the Model options window
- Customizable arguments for updating database via ApexSQL Diff are added under the Output tab in the Model options window
- Schema customization is added in the Table design window
- Table style options are added in the Options window
- Printer friendly option added
- Convert colored group to text option is added in Print window
- Added status bar information:
 - Groups number
 - Server name
 - Project version
 - Unsaved changes indicator
- Project level options:

- Associated database
- Project version
- Application output options on project level
- Improved table design/display options:
 - Background color is following themes
 - Syntax highlighting option for data types and keys is added
 - Icons for keys are added
 - PK separator option is added
 - Options for customizing header are added
 - o Options for customizing displayed columns are added
 - o Option for customizing nullable column name
- Improved design of groups on diagram with styles
- Improved print options to be more user friendly
- Search feature is improved
- Added schemas in search feature
- Added groups in search feature
- Option for creating backup of a database before update database is added under the Output tab in the Options window
- Option for creating rollback script before update database is added under the Output tab in the Options window
- Option for creating snapshot before update database is added under the Output tab in the Options window

Fixes:

- Print preview is not refreshed when an option is changed in the Print options window
- Image of an empty diagram can be exported
- Snapshot of an empty diagram can be exported
- ApexSQL Diff not installed message is shown when update/create process is started instead before starting it
- There is no information about ApexSQL Diff trial period expired when forward engineering action is initiated
- Models in dark theme aren't printer friendly

Changes:

- ApexSQL Model is now free and has no editions
- The application now requires Microsoft .NET framework 4.7.2
- Reverse engineer feature is now Create model feature
- Forward engineering feature is separated into:
 - Create database feature
 - Update database feature
- Custom task feature has been removed
- Excessive icons reduced from table displays
- Print preview is improved to follow application themes
- Regions are removed and will be improved for ApexSQL Model 2019

Known issues:

- Backups are created in the same location, even when the location is changed, until the application is restarted
- ApexSQL Model 2018 R2 isn't backward compatible with R1. See <u>this</u> article for information on upgrading models

Release: 2018.01.0050 Date: May 10, 2018

Features:

- High DPI and 4K resolution support
- Applied concepts of Visual Language Dictionary for Visual Studio for iconography, imagery, colors, menus, fonts, formatting and other GUI elements
- Supports SQL Server 2005 or higher, Azure SQL Database and Amazon RDS for SQL Server
- Database modeling
- Data model diagrams
- Forward engineering
- Reverse engineering
- Model history navigation
- Object grouping options
- Diagram layout customization
- Edge routing customization
- Autosave models
- Snapshot models
- Export model diagrams into BMP, JPEG and PNG formats
- Print model diagrams
- Export model as snapshot
- Create executable custom tasks
- Customizable keyboard shortcuts
- GUI themes