ApexSQL® Refactor 2021.x

Release Notes

These release notes provide information about the ApexSQL® Refactor 2021.x which is a major release.

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About ApexSQL Refactor

ApexSQL Refactor is a SQL Server Management Studio and Visual Studio formatting and refactoring add-in for SQL Server with nearly 200 formatting options and 15 refactors such as table partitioning, safe rename, wildcard expansion and more.

New Features

This version of ApexSQL Refactor introduces the following new features, enhancements or deprecations:

Changes:

- The application is now part of the ApexSQL Fundamentals Toolkit for SQL Server bundle and requires activation.

Getting Started

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

System requirements

Before installing or upgrading Short Product Name Version, ensure that your system meets the following minimum hardware and software requirements.

Hardware	Dual Core 2.0 GHz CPU 4 GB memory 91 MB disk space
SQL Server	SQL Server 2005 and higher [1] Azure SQL Database [1] Amazon RDS for SQL Server [1]
Add-in integration	SQL Server Management Studio 2012 and higher [2] Visual Studio 2010 and higher [1]
OS	Windows 7 SP1/Windows Server 2008 R2 SP1 and higher [1]
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 Supported systems for exact version support

[2] You can use the latest full-featured backwards compatible SQL Server Management Studio for free. Click here

Supported platforms

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 [4]									
	2005	2008	2012	2014	2016	2017		2019 CTP 3	
						Windows	Linux [3]	Windows	Linux [3]
ApexSQL Refactor	✔	✔	✔	✔	✔	✔	✔	✔	✔

SQL Server edition [4]						
	Express	Standard	Enterprise	Azure SQL Database		Amazon RDS for SQL Server
				Single Database, Elastic Pool	Managed Instance	

ApexSQL Refactor	✔	✔	✔	✔	✔	✔

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

SQL Server Management Studio add-in integration					
	2012	2014	2016	17	18
ApexSQL Refactor	✔	✔	✔	✔	✔

[3] Tested on Ubuntu 16.04

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

Product licensing

ApexSQL offers 2 types of licenses:

1. Individual license

For applications licensed per user, an individual license is for the use of a single user only. This means that only 1 user can use 1 license. If there are multiple users, multiple licenses are needed.

For applications licensed per instance, an individual license is to be used on a single SQL Server instance only. If there are multiple instances, multiple licenses are needed.

2. Enterprise license

An enterprise license can be activated on an unlimited number of instances and can be used by an unlimited number of users, without geographical limitations.

Release History (release notes)

Release:	2021.01.0445
Date:	November 02, 2020

Changes:

- The application is now part of the ApexSQL Fundamentals Toolkit for SQL Server bundle and requires activation

Release:	2020.05.0430
Date:	October 08, 2020

Fixes:

- 155007: "Switch 'pr' is not recognized" error is encountered when using the /pr switch for formatting SQL script from the CLI

Release:	2020.04.0423
Date:	August 25, 2020

Fixes:

- The Qualify object names feature generates an invalid SQL script when the Case expression is present in the Select statement

Changes:

- Error handling and send logs functionality has been modified

Release:	2020.03.0414
Date:	June 09, 2020

Fixes:

- "Unexpected error occurred. Object reference not set to an instance of an object" error is encountered when the Command line interface switches are used

Release:	2020.02.0413
Date:	May 28, 2020

Enhancements:

- Application telemetry now collects anonymous data on the use and performance of applications and application component
- ApexSQL Updater is added for configuring advanced updating settings of all installed ApexSQL products

Fixes:

- The commented block of code cannot be uncommented when the Ctrl+K, Ctrl+U keyboard shortcut is used within SQL Server Management Studio
- The End keyword does not indent properly when the Indent Begin and End blocks option is checked under the Flow control tab of the Options window

Release:	2020.01.0406
Date:	December 26, 2019

Enhancements:

- Active Directory support for:
  - Integrated authentication
  - Universal with MFA support authentication for SQL Server Management Studio 18 and Visual Studio 2019
- SQL Server 2019 new syntax for SQL code formatting support for:
  - Resumable index operations
  - Edge constraint cascade delete actions
  - Register external languages
  - Hybrid buffer pool
  - Optimize_for_sequential_key

Fixes:

- "Object reference not set to an instance of an object" error is encountered when the Options command is initiated from add-in main menu in Visual Studio 2019
- The right-click context menu has a 3 seconds delay until is shown when used on a trigger in Object Explorer
- Visual Studio 2019 stops working when a new query editor is opened
- The Safe rename feature does not work when one table has several foreign key relationships
- The Availability database drop-down box cannot be highlighted when the Ctrl + U keyboard shortcut is used within SQL Server Management Studio 2016 and higher
- The default shortcut for the Edit.MakeUppercase command does not work when used within SQL Server Management Studio 2016 and higher
- "SQL syntax error" error is encountered when formatting code that has the Datetime2 data type
- "SQL syntax error" error is encountered when formatting code that has the Within group clause

- Incorrect formatting of the Case expression when either the When or Then expression have a negative value

Release:	2018.08.0364
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:	2018.08.0360
Date:	May 21, 2019

Fixes:

- The add-in doesn't integrate with SQL Server Management Studio 18 GA version if the host application was not started at least once

Release:	2018.07.0359
Date:	May 04, 2019

Fixes:

- The add-in doesn't integrate with SQL Server Management Studio 18 GA version

Release:	2018.06.0356
Date:	February 12, 2019

Fixes:

- SQL scripts in the preview changes window of the Options dialog are obfuscated for all formatting tabs when the Obfuscation tab is clicked and the Save button is clicked to exit
- The application installer does not check if the .NET Framework 4.7.2 is installed on the operating system

Changes:

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

Release:	2018.05.0350
Date:	December 26, 2018

Enhancements:

- CLI switches:
  - Code obfuscation [/obf]
  - Formatting script [/frs]
  - Specify profile for formatting [/pr]
  - Input script location [/is]
  - Output script location [/os]
  - Output script name [/on]
- Visual Studio 2019 integration support

Fixes:

- The Indent BEGIN and END blocks option under the Flow control tab of the Options dialog add the extra BEGIN and END block when in stored procedure the begin atomic block exist
- The values in the Schema combo box of the Encapsulate code dialog can be entered
- The schemas in the Schema drop down box of the Encapsulate code dialog are missing when the connection is established to an Azure SQL Database
- A SQL syntax error occurs when in the SQL Odbc scalar function, the Truncate statement is present
- A SQL syntax error occurs when formatting a code that has the At time zone clause
- SQL Server Management Studio stops working when the Wrap lines longer than option under the Formatting tab of the Options dialog is used
- The Wildcard expansion feature does not work for the tables that have 'at' alias

Changes:

- The application now requires Microsoft .NET Framework 4.7.2

Release:	2018.04.0337
Date:	November 05 , 2018

Enhancements:

- SQL Server 2019 CTP 2.0 support
- SQL Server Management Studio 18 integration support

Fixes:

- The "Remove unnecessary brackets" option under the Formatting tab of the Options dialog removes brackets around the SQL exit keyword
- The user defined profile name changes to ApexSQL predefined profile when click the Reset button of the Options dialog
- The "Indent BEGIN and END blocks" option under the Flow control tab of the Options dialog does not work

- The same SQL code with the same formatting profile formats differently when two times in a row is clicked on the Format SQL command
- The names of the hosts in the host integration step are cutoff on high DPI and 4K resolution
- Shortcuts key combination settings are not visible under the Shortcuts tab of the Options dialog on high DPI and 4K resolution
- SQL script becomes invalid after it has been formatted using the Obfuscate SQL command from the main add-in menu and the SQL script has 'GO' that signals the end of a batch
- A SQL syntax error occurs after formatting a code containing any of the following:
    - system_time clause,
    - page,
    - uncommitted,
    - any
- The "Add spaces around operators" option under the Arithmetic tab of the Options dialog does not add spaces around + sign when it used as SQL string concatenation
- SQL Server Management Studio stops working after connecting to a SQL Server Analysis Services instance
- SQL Server Management Studio stops working after connecting to a SQL Server Reporting Services instance

Release:	2018.03.0331
Date:	September 21, 2018

Enhancements:

- New error handling and send logs functionality
- Improved application installer with a dark theme
- New application icon

Fixes:

- "An error occurred while showing the application updater" message is shown on SQL Server Management Studio startup when the add-in is installed alongside ApexSQL Search
- Replace one-to-many relationship dialog freezes for one second or longer when typing in the Associative table name text box
- The "Always use statement terminator" option under the Formatting tab of the Options dialog adds an extra semicolon after the SQL Return keyword
- The "System functions" option under the Capitalization tab of the Options dialog does not format the SQL Isnull function
- The Format SQL objects feature does not create a SQL script when in the object grid the stored procedure is selected and the Create script is pressed
- The SQL Json function is enclosed with square brackets when the "Enclose columns in brackets" option under the Formatting tab of the Options dialog is enabled
- The user-defined shortcuts under the Shortcuts tab of the Options dialog are set to the default values after restarting SQL Server Management Studio or Visual Studio

Release:	2018.02.0322
Date:	June 29, 2018

Enhancements:

- Active Directory – Password authentication support
- Azure SQL Database syntax support for format SQL:
  - maxsize,
  - edition,
  - service_objective

Fixes:

- The "Safe rename cannot be applied to the selected object" message is shown when Visual Studio SQL Server Object Explorer context menu Safe rename command is used to rename a column or a parameter
- The Unused variables and parameters command highlights the wrong part of the code when the cursor is placed in the middle of the SQL script
- The SQL xlock and rowlock keywords are enclosed in brackets when the "Enclose identifiers in brackets" option under the Formatting tab of the Options dialog is enabled
- The "Add spaces around operations" option under the Arithmetic tab of the Options dialog puts all code in one line when is checked
- The SQL nolock keyword is capitalized with the wrong option under the Capitalization tab of the Options dialog
- The "Keep empty lines before/after comments" option under the Formatting tab of the Options dialog remove empty line before line comment when checked
- The inline comments are always moved to the complete left in the SQL script when using any of the formatting profiles
- The "Remove empty lines" option under the Formatting tab of the Options dialog does not remove empty lines below line comments
- The "Don't format operations less than" option under the Logical tab of the Options dialog puts SQL code after inline comments
- The options under the Where in values tab do not work when in the SQL code a SQL Delete statement is used
- The "Formatting profiles with duplicate names exist" message is shown when adding a new profile or when saving changes to an existing one

Release:	2018.01.0300
Date:	March 29, 2018

Enhancements:

- 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
- GUI themes:
    - Light,
    - Blue,
    - Dark
- Azure SQL Database syntax support for format SQL:
    - add secondary,
    - data_source,
    - elastic_pool,
    - failover,
    - migration_state

Fixes:

- The "Insert empty line between each statement" option under the Formatting tab of the Options dialog does not work after If/End statement
- The SQL trim function is enclosed with brackets when the "Enclose identifiers in brackets" or "Enclose columns in brackets" option under the Formatting tab of the Options dialog is enabled
- An archive larger than 5 MB is attached to a default email client when the Send logs command is clicked under the Resource sub-menu of the application main menu
- A SQL syntax error occurs after formatting a code containing any of the following:
    - abort_after_wait,
    - buffer pool extension,
    - columnstore_archive,
    - cryptographic provider,
    - encrypted,
    - firstrow,
    - hadr cluster,
    - history_retention_period,
    - max_iops_per_volume,
    - max_outstanding_io_per_volume,
    - min_iops_per_volume,
    - persist_sample_percent,
    - rebuild partition,
    - system_time

Changes:

- The application now requires Microsoft .NET Framework 4.7.1

About us

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- Engage in community discussions
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Legend

CAUTION: A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.

IMPORTANT, NOTE, TIP, MOBILE, or VIDEO: An information icon indicates supporting information.