

# ApexSQL® Enforce 2019.x

## Release Notes

These release notes provide information about the ApexSQL® Enforce 2019.x which is a patch release.

Topics:

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## About ApexSQL Enforce

ApexSQL Enforce is a best practices enforcement tool for SQL Server database objects and scripts. It comes with an integrated editor featuring code auto-complete for writing custom rules and has more than 100 out of the box rules covering SQL best practices, naming conventions, potential configurations and more.

## New Features

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

**Fixes:**

- 198602: "Object reference not set to an instance of an object" error message is shown on SQL Server Management Studio startup after the add-in installation

# 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.

<b>Hardware</b>	Dual Core 2.0 GHz CPU 3 GB memory 114 MB disk space
<b>SQL Server</b>	SQL Server 2005 and higher <sup>[1]</sup> Azure SQL Database <sup>[1]</sup> Amazon RDS for SQL Server <sup>[1]</sup>
<b>Add-in integration</b>	SQL Server Management Studio 2012 and higher <sup>[2]</sup> Visual Studio 2010 and higher <sup>[1]</sup>
<b>OS</b>	Windows 7 SP1/Windows Server 2008 R2 SP1 and higher <sup>[1]</sup>
<b>Software</b>	<a href="#">.NET Framework 4.7.2</a> or higher
<b>Permissions and additional requirements</b>	Windows user account with administrative privileges  See <a href="#">Minimum permissions required to install and use ApexSQL products</a>

	<p>See <a href="#">Minimum SQL Server permissions for ApexSQL Developer tools</a></p> <p>See <a href="#">Remote access for SQL Server instance</a></p>
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[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 <sup>[4]</sup>									
	2005	2008	2012	2014	2016	2017		2019 CTP 3	
						Windows	Linux <sup>[3]</sup>	Windows	Linux <sup>[3]</sup>
ApexSQL Enforce	✓	✓	✓	✓	✓	✓	✓	✓	✓

SQL Server edition <sup>[4]</sup>
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	Express	Standard	Enterprise	Azure SQL Database		Amazon RDS for SQL Server
				Single Database, Elastic Pool	Managed Instance	
ApexSQL Enforce	✓	✓	✓	✓	✓	✓

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

SQL Server Management Studio add-in integration					
	2012	2014	2016	17	18
ApexSQL Enforce	✓	✓	✓	✓	✓

<sup>[3]</sup> Tested on Ubuntu 16.04

<sup>[4]</sup> 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 Notes [\(release history\)](#)

Release: 2019.02.0296

Date: February 12, 2021

### Fixes:

- 198602: "Object reference not set to an instance of an object" error message is shown on SQL Server Management Studio startup after the add-in installation

Release: 2019.01.0293

Date: December 17, 2019

### Enhancements:

- [SQL Server 2019 support](#)

### Fixes:

- The application cannot be uninstalled if any version of SQL Server Management Studio is running, even though the application is not integrated in it
- The application cannot be uninstalled if any version of Visual Studio is running, even though the application is not integrated in it
- The application can be uninstalled, even when the application GUI is running

Release: 2018.07.0283

Date: August 14, 2019

### Fixes:

- SQL Server Management Studio stops working when the Run best practices command from the right-click context menu in Object Explorer panel is clicked for SQL Server Reporting Services

## Changes:

- Rule descriptions are now more detailed and descriptive
- The following rules have been deprecated:
  - APX1098 - "Execute statement"
  - APX1142 - "Nolock hint"
  - APX1279 - "Schema name not specified"
  - APX1290 – "Set offsets"

Release: 2018.06.0276

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: 2018.06.0272

Date: May 30, 2019

## Fixes:

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

Release: 2018.05.0266

Date: March 06, 2019

## Enhancements:

- [Visual Studio 2019 integration support](#)

## Changes:

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

Release: 2018.04.0263

Date: January 31, 2019

## Enhancements:

- SQL Server 2019 CTP 2.0 support
- [SQL Server Management Studio 18 integration support](#)

- [New error handling and send logs functionality](#)
- [Improved application installer with a dark theme](#)
- [New application icon](#)
- Multi violations per rule is added

Fixes:

- The "Open log" option in the main ribbon doesn't work
- "StartIndex cannot be less than zero" error is encountered when the Cancel button is clicked on in the Process rulebase dialog
- ApexSQL Enforce is closed when empty space in the Output file name field of the Options dialog is selected and a new tag is added
- ApexSQL Enforce is closed when the OK button in the Process rulebase window is clicked on without SQL Server selection
- "StartIndex cannot be less than zero" error is encountered when the "Save as batch" option is clicked on without previously checked rules
- ApexSQL Enforce is opened in the Community edition when the "Extend evaluation" option is clicked on

Changes:

- The application now requires Microsoft [.NET Framework 4.7.2](#)

Release: 2018.03.0244

Date: July 19, 2018

Fixes:

- "Do you want to install .NET Framework 4.7.1" message is shown when installing the app via CLI using /VERYSILENT and /SUPPRESSMSGBOXES switches
- The Rule column filter in the Resultset grid does not show filtered objects
- "Unexpected error occurred." error is encountered when running rules against a database with the user who only has the db\_owner permission
- The HTML report exporting option settings in the stand-alone application are not remembered
- All databases from the chosen Server are checked for permissions when rules are run against one database
- Required permissions are checked for all existing databases on the chosen SQL Server
- The following rules fail if the condition is met:
  - "Statement without TRY...CATCH"
  - "Use of @, @@, or @@ as Transact-SQL identifiers"
  - "Space separator for table hints"
  - "Schema name not specified"
  - "Missing primary key"
  - "Missing clustered index"

Release: 2018.02.0230

Date: May 17, 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](#)
- Ignore options for object pairs, objects and script block
- Support for SQL Server Management Studio 2012 integration and higher
- Support for Visual Studio 2010 integration and higher
- Project file can now be saved as a batch file
- CLI switches:
  - Run all rules from the selected rulebase [/rar]
  - Specify the ignore file path [/if:arg]
  - Run only checked rules [/rcr:arg]
- In the Result summary form the following is now available:
  - Graphical representation of the resultset
  - Detailed rule execution results by category and type
- Added more than 30 new rules

#### Fixes:

- The application remains in the Community edition even after it has been activated with the appropriate key
- The "Object reference not set to an instance of an object" error is encountered when running a set of rules against a database with no relevant objects
- Running rules is disabled in the Standard edition
- The "There are no active rules in the current rulebase" error is encountered when running rules from the ApexSQL rulebase via CLI if there are no previously selected rules in the application
- The application repeatedly asks for the activation key when it is started on an Amazon EC2 instance after the virtual machine resources were deallocated and allocated again
- The "ApexSQL Enforce is not installed" error is encountered during the ApexSQL DevOps toolkit Review step execution
- The installation of a new version does not delete the previous one from the Control panel

#### Changes:

- Threshold options are moved to the Threshold tab in the Options dialog
- The CLI return code for pass is now set to zero when running rules via CLI
- The CLI return code for failure on processed database is changed from 101 to 102
- The application now requires Microsoft .NET Framework 4.7.1
- The Rulebase grid is now grouped by Category column and sort by the Severity column
- The Resultset grid is now grouped by the Result column and sort by the Severity column



- All rules now have the descriptive message for the failure reason
- Rulebase now can be run unattended on both databases and SQL scripts
- The Rulebase Object explorer pane is grouped by the Common statements and the Objects

Release: 2018.01.0137

Date: November 14, 2017

Features:

- Supports SQL Server 2005 or higher, Azure SQL Database and Amazon RDS for SQL Server
- Run rules against scripts or databases
- Write new rules in C# and VB.NET
- Modify existing rules
- Code auto-complete in the internal editor
- Categorize rules
- Import rules into rulebases
- Compare two rulebases including individual rules
- Generate and run Fix SQL scripts
- Detailed rule execution results summary
- Command line interface
- Community, Standard and Professional editions
- HTML resultset reports
- XML resultset export
- GUI themes

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Technical support is available to Quest customers with a valid maintenance contract and customers who have trial versions. You can access the Quest Support Portal at <https://support.quest.com>.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- 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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Attn: LEGAL Dept

4 Polaris Way

Aliso Viejo, CA 92656

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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.