

# ApexSQL DevOps Toolkit – Web dashboard

Version 2018.x

Release Notes and Requirements

## System requirements

ApexSQL DevOps toolkit	
<b>Hardware</b>	Dual Core 2.0 GHz CPU 4 GB memory
<b>SQL Server</b>	SQL Server 2005 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 <a href="#">ApexSQL Build 2018 R4</a> <sup>[3]</sup> <a href="#">ApexSQL Data Diff 2018 R6</a> <sup>[3]</sup> <a href="#">ApexSQL Diff 2018 R5</a> <sup>[3]</sup> <a href="#">ApexSQL Doc 2018 R4</a> <sup>[3]</sup> <a href="#">ApexSQL Enforce 2018 R6</a> <sup>[3]</sup> <a href="#">ApexSQL Generate 2018 R4</a> <sup>[3]</sup> <a href="#">ApexSQL Mask 2019 R2</a> <sup>[3]</sup> <a href="#">ApexSQL Script 2018 R4</a> <sup>[3]</sup> <a href="#">ApexSQL Trigger 2018 R3</a> <sup>[3]</sup> <a href="#">ApexSQL Unit Test 2018 R4</a> <sup>[3]</sup>
<b>Note</b>	The number of ApexSQL tools required is based on how extensive a CI/CD workflow pipeline is and how many steps it includes  <a href="#">Source control integration available</a> for Azure DevOps <sup>[4]</sup> , Git <sup>[5]</sup> , Mercurial <sup>[5]</sup> , Subversion <sup>[5]</sup> and Perforce <sup>[5]</sup>

<b>Permissions and additional requirements</b>	<p>Windows user account with administrative privileges</p> <p>See <a href="#">Minimum permissions required to install and use ApexSQL products</a></p> <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> <p>See <a href="#">How to setup image based database provisioning</a></p>
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### Azure DevOps Server (TFS) / Azure DevOps Services plug-in

<b>Hardware</b>	214 KB disk space
<b>Software</b>	<a href="#">TFS 2015 Update 2</a> or higher, <a href="#">Azure DevOps Services</a>

### Bamboo plug-in

<b>Hardware</b>	1.65 MB disk space
<b>Software</b>	<a href="#">Atlassian Bamboo 6.6.3</a> or higher

### Jenkins plugin

<b>Hardware</b>	5.8 MB disk space
<b>Software</b>	<a href="#">Jenkins 2.138</a> or higher

### Octopus Deploy step templates

<b>Hardware</b>	32 KB disk space
<b>Software</b>	<a href="#">Octopus v2018.9.11</a> or higher
PowerShell scripts	
<b>Hardware</b>	500 KB disk space
<b>Software</b>	<a href="#">PowerShell 5.0</a> <a href="#">NuGet 3.5.0</a> or higher
TeamCity plug-in	
<b>Hardware</b>	16.3 MB disk space
<b>Software</b>	<a href="#">TeamCity 10.0</a> or higher
Web dashboard	
<b>Hardware</b>	164 MB disk space
<b>Software</b>	Internet Explorer 11 or higher Edge build 14393 or higher Chrome 50 or higher Mozilla Firefox 50 or higher Opera 40 or higher
<b>Port</b>	TCP port 5019 (http) and 4443 (https) on ApexSQL DevOps toolkit - Web Dashboard web server (configurable)

<sup>[1]</sup> See [Supported systems](#) for exact version support

<sup>[3]</sup> The minimum required version

<sup>[4]</sup> Azure DevOps Server (TFS) <sup>[5]</sup> / Azure DevOps Services

<sup>[5]</sup> Up to the latest version

## Supported Software

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>
<a href="#">ApexSQL DevOps toolkit</a>	✓	✓	✓	✓	✓	✓	✓	✓	✓

SQL Server edition <sup>[4]</sup>						
	Express	Standard	Enterprise	Azure SQL Database		Amazon RDS for SQL Server
				Single Database, Elastic Pool	Managed Instance	
<a href="#">ApexSQL DevOps toolkit</a>	✓	✓	✓			

Source control systems					
	Azure DevOps <sup>[6]</sup>	Git <sup>[7]</sup>	Mercurial <sup>[7]</sup>	Perforce <sup>[7]</sup>	Subversion <sup>[7]</sup>
<a href="#">ApexSQL DevOps toolkit</a>	✓	✓	✓	✓	✓

<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

<sup>[6]</sup> Azure DevOps Server (TFS) <sup>[7]</sup> / Azure DevOps Services

<sup>[7]</sup> Up to the latest version

## Getting Started

For further information about installation and getting started, please check the [Quest Knowledge Base](#) or [ApexSQL Getting Started](#).

## Release Notes [\(release history\)](#)

### ApexSQL DevOps toolkit - Web dashboard

Release:	2018.15.0176
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:	2018.15.0173
Date:	May 31, 2019

### Enhancements:

- Exclude tables from auditing

## Fixes:

- "Trying to replace existing file" Installation error is encountered when upgrading application version and the service is still active
- Folder browser for project files in all steps that use it does not refresh automatically when folder content is updated
- Notify step does not get executed when any of the previous steps in the pipeline fails
- Package step always fails when TFS is used as source control input for the pipeline and static data is included
- Package step does not generate outputs when the "Include output in package" option is not checked
- Pipeline configuration changes are not discarded when navigating away from the configuration view without saving
- Pipeline execution status remains in progress indefinitely when opening the pipeline configuration during execution
- Publish step is unable to use package file when the file was generated in previous executed step of the same pipeline
- Source control browser in data source configuration is unable to navigate to database project when the project is located in subfolder path
- Sync step always fails when Source Control data source type is used as source and "Include output in package" option is checked

## Changes:

- The ApexSQL Enforce rulebase file is now mandatory for the Review step
- The ApexSQL Trigger project file is now mandatory for the Audit step

Release:

2018.13.0168

Date:

April 23, 2019

## Enhancements:

- Mask sensitive data

## Fixes:

- "Could not find a part of the path" error is encountered when using local administrator for service startup while domain user is logged on windows session in installation wizard

- "Padding is invalid and cannot be removed" error is encountered when using non-alphanumerical and special characters for the application user's password in installation wizard

Release:

2018.11.0160

Date:

March 22, 2019

## Enhancements:

- Provision a database
- Backup database
- Compare production database with source control
- Validate schema changes
- Format and obfuscate SQL code
- Include custom PowerShell script

## Fixes:

- "Selected path for sync script doesn't exist" error encountered when using the NuGet data source as Deploy step source created as output of the previous Sync step executed in the same pipeline
- Sync step fails when using as source a streamed NuGet data source created as output of the previous Package step executed in the same pipeline
- Creating new application user with the Administrator role results in assigning the User role

## Changes:

- Data sources are represented and created by interactive icons, same as pipeline steps

Release:

2018.07.0145

Date:

December 25, 2018

## Enhancements:

- Navigating away from the General options page now displays confirmation dialogue in case changes are not saved
- Pipeline configuration changes can now be saved or discarded with Save and Cancel buttons

- The Audit step now automatically excludes tables with existing auditing triggers from new triggers implementation
- Syntax in the additional parameters text field is now highlighted

## Fixes:

- The Customer service link under the About tab lead to the wrong page
- The Bottom part of all displayed pages cannot be reached when scrolled down
- Deploy step shows success status even when the synchronization process fails
- Editing SQL script data source goes to blank view and creates duplicate data source after save
- "Unable to find package" error is encountered when using NuGet as a data source in the Sync and Deploy steps
- Unable to automatically use database script folder as data source in the Build step due to missing folder path definition
- Cached data from a source control repository remains indefinitely in the application's source control working folder
- Summary display window resets to minimum size after changing views
- Session timeout value is not stored with Save as my defaults option
- Output folder path under the General options is not restored to default when the ApexSQL defaults button is clicked

## Changes:

- Breadcrumb navigation link now displays "Edit pipeline" text instead of pipeline name when editing an existing pipeline
- The view mode toggle option is now streamlined in the Pipeline and Data sources view
- Source and target database connection fields are no longer mandatory when project file is included in a step configuration
- The text labels that show a pipeline trigger type are replaced with icons
- Execution button now has Scheduled label for the Pipeline with On schedule type trigger
- Execution button now has Pending commit label for the Pipeline with On commit type trigger
- Schema sync step is now Sync step
- Data sync step is now Sync data step
- Default installation folder is now changed to 'C:\Program Files\ApexSQL\ApexSQL DevOps toolkit'
- Default execution output folder path is now changed to '%AppData%\ApexSQL\ApexSQL DevOps toolkit'
- Default projects folder path is now changed to 'MyDocuments\ApexSQL\ApexSQL DevOps toolkit dashboard\Projects'

Release:



2018.05.0120

Date:

November 01, 2018

## Enhancements:

- Application session timeout behavior is added with the session timeout settings in general options
- Custom user name can be created now for initial application account creation in installation wizard
- Execution summary with SQL Server messages is created after Deploy step execution
- Pipeline execution summary now includes individual summary details from step executions

## Fixes:

- "Cannot create '%project\_file\_path%' because a file or directory with the same name already exists" error is encountered when including ApexSQL Diff project file in Schema sync step
- "Could not connect to server" error is encountered when configuring Team Foundation Server hosted repository with custom collection name as Source control type data source
- "Define script data source for schema and data synchronization of the selected database" error is encountered when using only schema/data synchronization script
- "Invalid filename: sqlcmd.exe" error is encountered when executing Schema and Data synchronization scripts simultaneously in Deploy step
- Application reverts to Light theme on new login
- Application opens Home page when direct page URL is used
- Application account password is not encrypted in the application install log
- Deploy step does not execute the synchronization scripts when they are used as data source
- Deploy step remains "In progress" status indefinitely when Schema synchronization script is missing as input
- Deploy step fails when used with Data sync step in the same pipeline while the Data sync step is first enabled and then disabled in two consecutive pipeline executions respectively
- Incorrect formatting of execution summary texts when shown in summary view window
- Missing application shortcuts in Start menu and Desktop
- Resources links are opened in the current browser tab and application session ends
- Schema changes cannot be deployed when using the script data sources for the Deploy step
- Step execution outputs remain in default location after changing the output folder path in general options view

## Changes:

- Removed the "open details" text in the link for opening pipeline summary
- Visual styles in control combo boxes have been changed

Release:

2018.04.0076

Date:

October 11, 2018

## Enhancements:

- [Improved application installer with a dark theme](#)
- [New application icon](#)

## Changes:

- ApexSQL CI/CD toolkit – Web dashboard name is changed into ApexSQL DevOps toolkit – Web dashboard

Release:

2018.01.0052

Date:

July 02, 2018

## Fixes:

- Populate step always overrides fill row number settings saved in the ApexSQL Generate project file

Release:

2018.01.0051

Date:

June 12, 2018

## Features:

- Standalone graphical web user interface
- Continuous integration
  - Build a SQL Server database directly from source control and optionally include static data
  - Fill empty tables with synthetic data
  - Integrate trigger-based audit trails and reporting into change sensitive database objects
  - Generate full or differential documentation for the SQL Server database
  - Test SQL Server database using unit tests

- Enforce database best practices by reviewing, detecting and fixing issues
  - Create a clean database package for easy deployment
  - Publish package to a designated NuGet feed
- Continuous delivery
  - Compare SQL Server database schemas and create a script for schema synchronization
  - Compare SQL Server static data and create a script for data synchronization
  - Push schema and data changes to a target database
- Archive all output files in a central folder
- Fill empty tables with synthetic data
- Support for multiple data source types:
  - SQL Server database
  - Source control (Git, Mercurial, Perforce, Team Foundation Server, Subversion)
  - SQL script
  - Script folder
  - NuGet package (local or feed)
- Automatically create rollback scripts
- Predefined user roles
- Per user CI/CD pipeline access
- [Visual themes](#)