

# ApexSQL® Audit 2021.x

# Release Notes

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

### Topics:

- About ApexSQL Audit
- New features
- Getting Started
- System requirements
- Supported platforms
- Product licensing
- Release History
- About us

# **About ApexSQL Audit**

ApexSQL Audit is a SQL Server auditing and compliance tool with a wide range of features for auditing access, changes, and security on SQL Server instances, databases, and objects. It audits queries, DDL and DML operations, security events (authentication changes, permissions changes, and attempted logins), events on stored procedures and functions, and provides out-of-the-box compliance templates such as HIPAA, GDPR, PCI. ApexSQL Audit saves captured information in a centralized auditing repository and provides comprehensive reports.

# **New Features**

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

# **Enhancements:**

- Reconstruct raw audit data using web API calls
- · Repository maintenance schedule to optimize performances while viewing and managing audit data
- Report previews and export performance increased up to 900%
- Interactive search option for the report filters

- 188361: Sensitive columns are not audited when a SELECT statement does not include a schema name reference
- 209651: Active traces pile up on the file system when queries with 5k+ characters in length are being processed in parallel by the auditing agent
- 208782: Saving audit configuration is not successful when the logins filter contains SQL Server login accounts
- 208572: Saving audit configuration is not successful when using advanced filters and the login filter is defined to contain custom string
- 209440: Trace files being accumulated due to internal thread-race error in specific case
- 208170: Improved application logging to include more granular information for auditing agent startup events
- 197755: SQL Server event is not captured when the login account creating the event is member of a nested Active Directory group
- 201647: SQL Server event is not captured when the login account creating the event is newly added to an audited Active Directory group
- 201648: Extended event session configuration changes audited logins list to an Active Directory group name when the central Server Side Components service is restarted
- 202867: "The specified database size limit is greater than the size of data source" message is shown in the database split summary when the process exceeds 30 seconds timeout
- 203615: Auditing agent does not automatically establish connection with auditing SQL Server instance when logon server is unavailable at machine start-up
- 203616: Timeout value in agent auditing properties dialog is not applied as a running timeout when the agent is reading audit data from session files
- 200269: Auditing filter configuration is not applied when total character size of filter conditions exceeds 3000 characters
- 200270: Auditing data is not collected when the text data filter condition is used with advanced filters via extended events
- 198238: "Destination array was not long enough. Check destIndex and length, and the array's lower bounds." error is encountered with parser and trace files cannot be processed when a specific query with brackets and aliases runs on a SQL Server
- 196929: Trace files are moved to quarantine when more than 10.000 unique audited queries are
  executed in a batch
- 194590: Missing parent checkbox to select all instances in the Apply to many dialogue for SQL server audit configuration
- 203622: Automatic auditing template in the Options window can be changed by a user with the reader role when the filter item label is clicked
- 213886: Application is forcibly closed when an imported custom data alert containing email recipients is selected with the mouse click
- 214026: Alert history shows no alert notifications when time-range filter is used
- 214025: Data collecting agent does not release occupied RAM memory when processing highly transactional SQL Server instances
- 206164: Auditing reports show Success status for executed queries that failed on SQL Server when Extended Events data collection method is used
- 209052: Report filters and output show duplicated server name when SQL Instance is configured via FQDN and is audited using Extended Event technology
- 208154: Login filters are not applied on auditing configuration when gMSA is used for central process
- 105045: Missing column statistics events do not contain text data details when shown in generated reports
- 210403: "invalid token for impersonation it cannot be duplicated" error is encountered in the Central instance configuration installation process when the application losses and re-establishes connection to central host during the process

- 210536: Central instance initialization process lasts extensively long after archiving when alerts history contains more than 50K records
- 210128: Using shift+click action does not select multiple items
- 155936: Send logs does not collect the re-rolled (archive) log files from the file system
- 214369: Automatic databases auditing configuration is not applied against SQL Server instances configured to include\(\frac{\pmathbf{Y}}{2}\)exercises expectages.
- 161967: Access list items are placed in separate cells when a report is exported into CSV format
- 163664: Alert rule configuration does not have "state" condition available in the alert configuration wizard
- 164289: The ENABLE TRIGGER statement is shown as the Alter trigger operation in generated reports
- 164290: The DISABLE TRIGGER statement is shown as the Alter trigger operation in generated reports
- 165141: Selected tables will be deselected in the Before-after configuration tab when the search is used in the table list
- 165173: Duplicate alert will be created when importing system alert rules from exported xml
- 167875: "Accessing from local not possible" message is shown without enough information when Browse for folder is initiated for the remote agent configuration
- 179533: Missing information for failed archiving when an existing archive used as data source cannot be opened
- 182294: Text data does not show object name for the SELECT statement in the export document when the object is placed within brackets ("[]")
- 190967: The "Row type" field is randomly formatted in exported file for Before-After events
- 191557: Scheduled report fails to complete when archiving is started at the same time
- 191885: Application stops responding when group checkbox is used for the column listing in the sensitive column view
- 191897: "Username and password are incorrect or provided user permissions are insufficient" message is shown when gMSA account for remote auditing agent is updated
- 192379: The Additional drop-down menu in the Configure tab remains active when the Advanced filters are selected and popup message is shown
- 192389: The SELECT INTO statement is captured as Alter schema operation when run on SQL 2012
- 194326: The "State" filter item is not shown in generated report header when used
- 214505: Internal event log showing that a session file is sent to quarantine do not include the time
  details
- 214878: Missing information in application logs about text data parsing errors
- 198777: The CREATE SEQUENCE statement is not being audited when the Trace technology is used
- 199042: Extended Event sessions are not created when audited database contains brackets in the name ("[]")
- 200149: Sensitive column access event is not audited when sensitive columns are queried using column concatenation
- 202224: Database files for central repository database are not moved to new location when the
  option to archive old database is used in the central instance configuration dialogue
- 202562: Object names are duplicated in the reporting filters when object reference in query text data uses different letter capitalization
- 204005: SOX compliance standard does not include Backup/Restore Server-level operations
- 204908: Unused allocated space is not released when archiving process is finished
- 205330: Database auditing filters are not correctly applied when configuring the auditing policy for database objects and the objects are grouped by schema and type
- 214368: The refresh status instead of stopped status icon is displayed in the server tree for SQL Servers when GUI is restarted after stopping the auditing for that instance
- 161718: The "Trial period expired" message is not removed when the product is activated
- 164632: "The internal error -2" message is shown when the drive root path is chosen to create a temporary files location on
- 178153: The CREATE TABLE statement is captured and shown in reports twice when Extended Events technology is used and the table name string contains a T-SQL reserved word
- 192382: The report exported in XLSX format exceeds page size width when opened with Excel
- 192385: The Before-After filter conditions are duplicated in advanced filters when the view is switched to another tab and switched back to the Before-After tab

- 192390: The CREATE TABLE statement is captured as Alter schema operation when run on SQL 2012
- 201368: The text data with single line size is not visible in records shown when the report preview is generated
- 203936: Send log process cannot be completed when the message that an audited server is unreachable pops up
- 207709: The hostname from which a user changed Auditing filters is missing in the configuration change even when the internal report is generated
- 213238: Missing indicator for the parent check box that some child items are selected in the "Apply to many" databases dialogue when the pre-checked database exists in the child item list

The default value for SQL text data length is set to 512 characters

# **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	Quad-core 2.0 GHz CPU 8GB memory 1GB disk space <sup>[6]</sup> (for starting the Central repository database - disk space requirements depend on the amount of audited data and can go to TB for some environments)
SQL Server	SQL Server 2005 and higher [1]
os	Windows 7 SP1/Windows Server 2008 R2 SP1 and higher [1]
Port	TCP port 64561 and 60408 on all SQL Server instances (configurable)
Software	.NET Framework 4.7.2 or higher SQL Server 2008 or higher [1], for the Central repository database

Note	SQL Server Express edition is not recommended for the Central repository database, due to the database size limitation
Permissions and additional requirements	Windows user account with administrative privileges
	Central repository database must be located on the central ApexSQL Audit instance See ApexSQL Audit - Permissions and requirements

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

# **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	201	.7	2019 CTP 3	
					= - <b></b>	Windows	Linux [3]	Windows	Linux [3]

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

ApexSQL Audit	~	~	~	~	~	~		~	
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SQL Server edition (4)									
	Express Stan			Azure SQL	Amazon RDS				
		Standard	Enterprise	Single Database, Elastic Pool	Managed Instance	for SQL Server			
ApexSQL Audit	~	~	~						

<sup>[1]</sup> Central repository requires SQL Server 2008 or greater. SQL Server Express edition is not recommended due to the database size limitation

# **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: 2021.01.2082

Date: December 15, 2021

<sup>[2]</sup> Tested on Ubuntu 16.04

#### **Enhancements:**

- Reconstruct raw audit data using web API calls
- Repository maintenance schedule to optimize performances while viewing and managing audit data
- Report preview and export performance increased up to 900%
- Interactive search option for the report filters

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Release: 2020.04.2038 Date: Nov 06, 2020

#### **Enhancements:**

- Added configuration settings for extended sessions for auditing data collection management
- Detailed report metadata is now available in the report header in the export file
- Apply auditing configuration to multiple SQL Server instances and databases

#### Fixes:

- 178163: The Drop trigger event is shown twice in reports when using the Extended Events data collection method
- 182827: The Create trigger event is shown twice in reports when using the Trace data collection method
- 182828: The Alter trigger event is shown twice in reports when using the Trace data collection method
- 182829: The Drop trigger event is shown twice in reports when using the Trace data collection method.
- 183534: Additional storage space is consumed during upgrade installation when structural changes are introduced into central repository database
- 186429: "Empty name is not legal" error is encountered, and application closes when the field for report name is left empty
- 186430: The e-mail recipient list is not shown in the summary info of the schedule archiving wizard
- 187123: The SQL Server connectivity monitor system alert performs SQL connection checks to the passive node in fail-over cluster environment
- 187166: The path for the central repository database file in the central instance setup dialogue always reverts to default when custom path is chosen
- 188362: Advanced filters for before-after auditing are not saved when landing to another tab immediately after applying configuration
- 188363: Sensitive column list in the configuration tab cannot be refreshed for the selected database when GUI is restarted
- 189137: Several filter parameters for generating reports are not saved in created profiles
- 189313: "Index was out of range. Must be non-negative and less than the size of the collection" error is encountered, and application closes when any schema is checked in the Include/Exclude database object view and the Group by schema and type option is turned ON
- 189314: Sensitive column search fails due to encountered timeout for databases with long queried views
- 187256: The date settings dialogue controls for the Date filter item is not visible in reporting Advanced filters when screen resolution is set to 4K
- 190569: Incorrect render of "new line" input for the SQL text query data in the report export
- 191554: The defined value for Text data filter item is not visible in advanced filters configuration
- 192447 The report export is not attached with the e-mail notification for scheduled reports when there are no events captured

# Changes:

- The schedule wizard now prompts for confirmation when closed before configuring
- The title bar for the application GUI title now includes the information about account that is running the GUI
- The database maintenance internal event report now shows filters used for archive data purging
- Databases in the Apply profile dialogue are now grouped per hosted server instance
- Sensitive columns list in the Sensitive data access alert configuration wizard now indicates SQL instance affiliation

Release: 2020.03.2021

Date: Aug 17, 2020

#### Enhancements:

- Group Managed Service Accounts (gMSA) support for the auditing service deployment
- Column-level and sensitive data access auditing
- Automatically add new databases to the auditing configuration
- Detection of new SQL Server instances
- Custom columns can now be included in a before-after auditing trail
- Archiving status and results can be forwarded via e-mail notification
- Exported reports show the time range of the audit report
- New system alert for automatic database configuration update

#### Fixes:

- Auditing configuration is not deployed for Extended Events and SQL Audit when compliance template is used
- "Invalid activation code" message is shown when activating the product manually
- Extended events technology is not auditing Exec operation forwarded via "sp\_statement" procedure call
- The application launcher icon is not created on Desktop when upgrading to 2020 versions
- The before-after report export is not structured according to the preview data grid
- Preview SQL text data is not displayed in the grid in specific cases
- "Saving configuration was not successful" error is encountered when named failover SQL instance is added for auditing
- Before-after auditing is not configurable for multiple databases sharing the same table name and schema on SQL Server 2017 and higher
- Alert notifications are not forwarded for operations when multiple SQL events are executed in the same transaction

# Changes:

• Error handling and send logs functionality has been modified

Release: 2020.02.1708

Date: Jun 11, 2020

#### Enhancements:

Audited service is now fault-tolerant to initial login failure attempt

#### Changes:

- Create trigger operations are logged twice when audited via Traces
- Data collection drop menu shows only "auto" option in a specific case
- Advance filters configuration does not display newly added objects in the configuration grid when objects from a specific group are added to the configuration
- Enable¥Disable trigger operation is logged twice when audited via Traces
- Extended events configuration is incorrectly deployed in a case when the database configuration filter contains a single database object
- Before-after values are not exported in a report document when data is retrieved from archive data sources only

Release: 2020.01.1705

Date: April 29, 2020

# Enhancements:

- Configuration change system alert has been added
- Report exporting is up to 200% faster for all supported report formats

- Duplicate events are shown in the auditing report in specific case
- The 'Auditing stopped' internal event is not audited
- Schema and Object name are not audited for Bulk insert operation
- Schema and Object name are not audited for Create table insert operation
- Configuration changes are not applied when database objects are filtered with include/exclude in simple filters when SQL Audit auditing mechanism is used
- Auditing mechanism info is not shown in the status overview tab
- Internal events are not affected by the server filter
- Changes to the "Attach report to e-mail in .zip format" are not saved
- Extended events technology is not auditing SQL Statements forwarded form "exec sp\_executesql @statement"
- The 'contains' filter criteria will not properly filter events if used in conjunction with "Login name" filter type

- The "Network connectivity" alert does not raise notification in a specific case
- DML operations are not audited in case when two compliance templates are merged
- The "Make new folder" button is not working when creating a location for Schedule Report output
- SQL text data is truncated when Create/Alter server trigger events are audited via Extended Events
- SQL text data is truncated when login failed events are audited via Extended Events
- Create/Drop login events are logged twice when audited via Extended Events
- Create table operations are logged twice when audited via Extended Events
- Alter service master key SQL statement is logged twice when audited via Extended Events
- Object name column is empty for close symmetric key SQL operation
- EXEC SQL statement is not audited via Extended Events
- Alter queue SQL statement is not audited via Extended Events or Traces auditing mechanisms
- Configuration cannot be applied when group by schema and type filter is used via Extended events or SQL Audit mechanisms
- Application is closed if the 'unknown' filter is used for client host
- Importing auditing configuration fails when Extended Events or SQL Audit auditing mechanisms are used
- Enable and Disable trigger operations are incorrectly logged as Alter trigger operation when using Extended Events
- Auditing configuration deployment fails due to NULL reference exception when SQL Server is renamed

Release: 2019.04.1654

Date: April 2, 2020

### Changes:

• Central instance configuration step has been moved to the beginning of the installation wizard

Release: 2019.04.1648

Date: January 15, 2020

- Auditing configuration is not appliable when database objects are used as a filter condition via SQL Audit auditing technology
- Schedule task complete unsuccessfully in case there is no audit evidence based on reporting template filters
- Error validating assembly due to special characters are included in the assembly name
- "Saving configuration was not successful" in specific case on SQL 2012
- Extended events or SQL Audit based auditing will not run for databases including symbols
- Events are not being audited on SQL 2005 and SQL 2008

- Before/after values are shown as empty if part of columns is not audited via BA for update operations
- Audit login, Audit logout and Audit login failed events are not audited for SQL 2012 or lower
- Auditing events are not populated for login groups used as a filter condition
- Unhandled exception occurs while obtaining data from an empty SQL Audit file
- Before After sub-report in extracted file is empty in specific case
- EXEC operation audited via Extended Events is not parsed correctly

Release: 2019.02.1638

Date: November 19, 2019

#### Enhancements:

• Support for SQL Server 2019

#### Fixes:

- Auditing configuration is incorrectly deployed for Extended Events technology via Advanced filters when login, database or application name conditions are used
- Data collecting technology is always set to auto for Failover Cluster instances in agent auditing properties
- Database and Login information is missing in the 'Audit login failed' event when data collection via SQL Audit is applied
- "Saving configuration was successful" is incorrectly shown even when before-after configuration was not applied
- Auditing configuration is incorrectly deployed for SQL Audit technology via Advanced filters when login, SQL text constrain filter or application name conditions are used
- Before-after triggers deployment fails due to NULL object reference in specific case

Release: 2019.01.1635

Date: October 7, 2019

### Enhancements:

- Extended Events can now be used as an auditing mechanism for SQL Server 2012 or higher
- SQL Audit can now be used as an auditing mechanism for SQL Server 2017 or higher
- Up to 200% smaller overhead when using SQL Auditing or Extended Events auditing technologies
- Up to 200% faster processing of audited data when using SQL Auditing or Extended Events auditing technologies
- SQL Text data is now customizable in auditing configuration on both server and database levels

- Dynamic date/time filters are now available in advanced filters as well
- MDF file location can now be customized in the Central Repository installer

- End of installation process will needlessly prompt Windows restart
- Report summary icons are not showing proper objects
- Report summary is missing information of the applied compliance standard
- System databases are not distinctively shown in browse database dialogs
- "No such host is known" message is shown when user initiates the send logs from GUI that is not connected to the central
- x86 SQL Server instances are not listed in the repository installer drop-menu
- "Group by" checkbox remains checked after ungroup is chosen in the report/schedule history
- Control buttons are missing in grid view header in Archiving history
- Operation overview status check enters infinite loop and affects GUI performance if there are no events on the selected SOL Server instance
- Central repository database is listed in the maintenance wizard controls
- Administrator credentials are not saved upon expanding the Advanced options in the Auditing agent properties dialog
- Account validation of remote GUI fails in case where Domain Controller machine does not share the same version of .NET runtime environment with the Central
- There is no control for MDF file configuration in the Central Repository installer
- Operation state is shown as "Failure" in case when "IN (x,y)" condition is used in SQL Query
- Loading packages from 2016 to 2018 product version fails
- Excluded database objects with similar name to included objects are shown in the reports
- "Trial period has ended" message is shown in the Status tab when the central machine is rebooted or when the application is updated, even though it was activated previously
- "Archiving failed" error is encountered when report scheduler that was used to generate report is deleted and full report schedule history still exists
- "Network connectivity monitor" built-in alert notifications are not being triggered when network connection with auditing instance is lost
- Archiving old database during the installation process fails in specific case
- Fixing server connection process crashes application in specific case
- ApexSQL Audit GUI will use all available CPU resources while refreshing the status without waiting for the ongoing refresh status process to complete
- The "Create login operation" state is always shown as "successful"
- DBCC operation is collected twice for same transaction in auditing trail
- Create/Drop statistics are incorrectly recognized as Alter table operation
- Save button is generating a report preview when list of columns is changed
- Operation "Drop sequence" is not being audited
- Operation "Create sequence" is not being audited
- The latest updated version is not stored in archive if upgrade process fails but has made an update on any newer version
- Global info is not updated in the status bar after product activation
- Default HIPAA and Basel II reporting templates ignores the time range filter configuration

- Default HIPAA and Basel II reporting templates always switch to advanced filter type when timerange is not set to "All days"
- Pre-defined reporting templates do not take custom time filter into account
- Archiving history list is using single page
- Internal events are not listed in the internal event type
- Weekly schedule always executes on Sundays
- Link for testing e-mail configuration is not presented as a hyperlink in 4k resolution

Release: 2018.09.1618

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: 2018.09.1612

Date: May 09, 2019

#### Enhancements:

- Repository archiving can now be scheduled
- Purge data from specific time range
- Split repository archives to multiple databases based on time and/or size
- Large reports are now automatically split into multiple files
- Scheduled report email information and details can now be customized
- Historical overview and details of scheduled report jobs are now available

- The Make new folder button is missing in the Browse for folder dialog during the installation
- Installation folder must be provided even if the previous tool version is detected and the upgrade process is initiated
- Saving report changes fails when only Internal events are included in the report
- Warning message is shown repeatedly when configuring alert conditions in case when any SQL
   Server instance is not connectable
- Information in the test summary for Cc and Bcc fields will overlap each other if multiple entries are added to the To, Cc, Bcc fields
- Total operations counter does not count in before-after events
- "Updating before-After configuration failed" error is encountered when updating before-after configuration on Windows Server 2019

- The application does not block adding the unsupported SQL Server versions to be configured for auditing with a misleading result due to the inability of starting such configurations
- Alerts are not being triggered for databases that belong to an availability group
- Before-after column filter does not filter out records for the tables that share the same column name with the tables that are filtered in
- The application closes when the value for "on day" reporting schedule settings is set to value greater than 31
- Search/find alerts will not include results which include appropriate value in the alert description
- Only "equal or greater than" operator is available in the SQL Script based alert condition
- "Folder browsing in remote client not supported. Write directory path from central instance manually" error is encountered when trying to browse for folder during the manual archiving wizard using remote client
- The Object type "table" is not available in the advanced filter configuration
- Remote SQL Server instances can be targeted when installing the Central Repository Database
- "An error occurred while processing request on central instance" error is encountered when generating excel reports which reach Excel 65.000 rows limitation
- If scheduled reports are empty they still get send to configured email recipients
- Email reports are always zipped
- Before-after auditing will show auditing values even in cases when execution of DML operations ended unsuccessfully in High Availability AlwaysOn environment
- It is not possible to copy/paste a login name when adding user
- Apply button is missing in the E-mail recipient list
- Reports are not showing data when state success/failure filters are used for internal events
- The "Add table" ribbon is not shown when server is highlighted in the server tree
- Alerts with the same name can be added using import/export alert
- Importing Advanced filter configuration fails in case when there is no previous configuration on the specific SQL Server instance
- "Object reference not set to an instance of an object" error is encountered when refreshing 'Add server' form
- Remote client users are not informed that the archiving process is in progress
- Two consecutive information messages are shown if archiving process fails
- Browse for folder dialog is not affected with theme selection
- Named failover cluster instances (FCI) are incorrectly recognized as passive
- It is not possible to copy/paste a password field in the agent auditing properties
- Exclude filter on database object does not exclude stored procedures
- "Package loading failed" error is encountered when updating application from version 2016 to 2018
- Scheduled report is not triggered on time after central instance converts to summer/winter time
- Multiple schedule executions are shown if the schedule includes multiple output formats
- Schedule log is missing info/column on execution success/fail and execution time
- Before-after auditing will not capture events when FIPS Windows feature is enabled
- Fixed permissions are not inherited for the users inside the defined AD group
- Fixed application mode (Administrator) is automatically assigned for the DC admins
- Archiving process info messages are not affected with theme selection
- Going back through the schedule wizard will show email config even if email send is disabled

- Application crashed in case of a backtrack from the second step to the first step in the schedule wizard
- Status overview does not retrieve data information for SQL Cluster instances
- Last operation in status overview displays IP address instead of SQL Server name for SQL Cluster instances
- Report schedule history is not refreshed after scheduled job is executed
- Application crashes with unhandled exception when switching from simple to advance filter type while an operation state is defined in simple filter
- "An error occurred while processing request on central instance" error is encountered when exporting before-after events to CSV format
- No data is shown in the before-after report if the "Object name is not xyz" condition is used
- Tampering with Schedule and ArchiveSchedule tables will not trigger integrity breach

- The application now requires Microsoft .NET Framework 4.7.2
- Central repository now initially requires 1GB diskspace (down from 5GB)

Release: 2018.08.1535

Date: February 06, 2019

### Enhancements:

- A warning is now displayed in case when connection with an incompatible UI version to the central instance is initiated
- Package data is now encrypted

- "No events found" report results are shown if before/after value filter is used while pulling data from archive
- Table and column names are invisible in the before-after column filter in the reports
- "An error occurred while processing request on central instance" error is encountered when generating reports with large number of events
- CRD becomes unresponsive when multi GUI instances are running on the same machine and archiving is initiated
- Server and database objects are not displayed in advanced configuration filter when configuring
   Failover cluster instances
- Server and database objects are not displayed in advanced before-after configuration filter for Failover cluster instances
- Server list does not show audited SQL Server instances and databases if an audited database is not accessible

- Alerts history list is cleared if refresh or navigation buttons are used
- "Problem occurred on central instance" alert remains active in the status tab in case of database inactivity even after the triggered alert has been deleted
- Stopping the report exporting or preview generation processes incorrectly informs user that archiving process is in progress
- Incorrect number of alerts is shown when alerts are filtered by severity level
- Only first compliance configuration template is applied in case multiple compliance templates are used to overwrite existing configuration without applying templates in-between
- Retrieving auditing agent data does not retrieve previous information about client hostname when server is being edited
- Temporary files location does not point to the last configured location in the agent auditing properties window
- "Central repository inactivity" alert is shown as active even after the alert has been resolved
- Create/Alter trigger operations are not being audited
- "Saving configuration was not successful" error is encountered when adding specific tables for before-after auditing
- Expanding/collapsing tree view in the reports tab will trigger a configuration change and prompt to save/discard
- Application does not inform user on incorrect time-date filter setup if start time is greater than the end time in the reports
- Traces including before-after audited data are not being processed in case that they include special characters in the name like: "-", "," etc.
- "Error adding database(s)" error is encountered when adding databases for auditing in case a SQL Server instance which does not host chosen databases is selected in the server tree
- Server list does not show audited SQL Server instances and databases in case a table added for before-after auditing is renamed
- Server list does not show audited SQL Server instances and databases in case an audited database is deleted from SQL Server instance
- "Preview unsuccessful" is encountered when using more than 5 filters in the report when generating report preview
- A link to the output folder is missing in the schedule summary
- Application UI freezes and indefinitely remains in responding state when trying to disable a running schedule
- Empty reports are generated in case when archived repository which is included in the data sources list is removed from the SQL Server instance
- Imported system alerts cannot be deleted

Release: 2018.07.1511

Date: November 07, 2018

#### Fixes:

• "Error Sequence contains no elements" error is encountered when new auditing instance is added and chosen in the Alert history

- Before-after alerts are not being triggered
- User is not informed that the SQL user is missing "View server state" property when making changes to the table audited for before-after changes
- Unable to apply configuration in case when database objects are filtered with include/exclude property
- User with reader privileges can change his account role
- ApexSQL Audit fails to start in case domain account has been added via Display name instead of account name
- Unable to run ApexSQL Audit UI on domain controller machine when local account is used
- Server-side components fail to start Windows thread if external exception is encountered
- Connectivity alerts are recognized as suspected tampering
- Status windows shows no information in case of reinstall
- SQL server name including lower case characters is shown in upper case letters in advanced filters reports
- "The proposed new database owner is already a user or aliased in the database" error is encountered when upgrading to the latest application version in a specific case

The logon credentials are no longer mandatory in the SMTP configuration wizard

Release: 2018.06.1506

Date: September 27, 2018

#### Enhancements:

- New error handling and send logs functionality
- Improved application installer with a dark theme
- New application icon
- Various filters based on alert details have been added to the alerts history pane
- Alerts can now be copied and exported
- Server-side components on remote instances are now automatically uninstalled when main application uninstall performed
- The SQL script can now be directly tested within the alert wizard
- Filter 'by state' has been added to the report preview
- Triggered alerts can now be marked as resolved
- The Primary key column value is now included in the auditing reports when auditing before-after values
- Before-after events can now be filtered by column in the report preview
- Before-after events can now be filtered by before-value and after-value in the report preview
- Bulk-inserts can now be audited for before-after values

- Application crashes when accessing schedules if there is an existing expired schedule
- In case when several SELECT operations are executed and audited consecutively, they get merged into one audited event which is then repeated 3 times
- ALTER database operation is reported as successful even if the execution has failed
- Certificate related operations are not audited
- Server-level DROP operations state is presented as N/A even in cases when operations have been successfully executed
- Server selection changes to the first server in the list when switching to the advanced filter
- Application fails to display notification that server-side components cannot be installed directly to an FCI node via Add server functionality
- The 'SQL Server connectivity monitor' alert is incorrectly raised during the repository archiving
- The 'Disk space' information is shown as N/A in cases when a disk drive is located on a remote network machine
- Time input for the Scheduler reverts to the default value if custom date is used
- The 'Internal error -2' error is encountered if temporary folder location finishes with the '¥' symbol
- Before-after triggers can't be applied when there is already an existing database trigger with defined 'last' property
- The 'At least one action must be selected' warning message is displayed when creating a new schedule in case when no other schedules are active
- The tooltip in the Auditing agent properties dialog does not match the dark theme
- Several elements are overlapping in the configuration pane in 4k resolution
- Before-after auditing doesn't successfully audit the data when nested CLR triggers exist in crossreferenced tables
- The before-after triggers are not removed on application uninstall in a specific case
- The 'There is already an object named 'Accounts#Const' in the database' error is encountered when upgrading from 2107 to 2018 version in a specific case
- Audited event is not captured in case a SQL View from non-audited database executes SELECT on an audited database
- The EXEC events are not audited
- The 'Provided user name is not recognized as a Windows user or user group' error is encountered when adding user accounts in case when central repository host name has been changed
- The "Object reference not set to an instance of an object" error is encountered when adding entries to the email recipient list in a specific case
- The email recipient list for an existing alert is not updated when the change is executed via Options dialog
- Saving changes in a report template collapses previously expanded level tree view
- Default template is incorrectly selected after changes are saved on a custom report template
- Previously added local user account is recognized as a domain account in a specific case
- Changes are not remembered for the edited mail recipient in case when only existing information is updated, and no new information is added to the existing recipients
- Changes in the options dialog are rolled back if user switches to another tab in the options
- User is not informed if different application version is being used when connecting via remote GUI
- SQL text is being truncated in the report preview in specific cases
- Status overview does not change the state in case when auditing instance connection is severed

- GUI freezes when updating the configuration for the unresponsive auditing instances
- The alert counter inside the status bar is not following the current history active alerts
- Application does not notify the user if server-side components are not installed on the cluster node when adding active/passive server for auditing

- The 'System' alerts can no longer be deleted
- The 'ApexSQLAuditBeforeAfter' temporary database is no longer used to temporarily store beforeafter audited data
- A separate SQL trace is now used for each database audited for before-after changes
- Database triggers created for the purpose of before-after auditing no longer require 'first' or 'last' triggering property

Release: 2018.05.1444

Date: July 23, 2018

#### Enhancements:

- The server-side components can now be automatically installed from within the application GUI when adding SQL Server instances in the domain environment
- The Inactive repository alert has been added to notify when no auditing information has been inserted into the central repository database during a specified time-period
- Application level security has been added. Individual users or groups can now be added to administrator, power user and data reader roles

- The "String or binary data would be truncated" error is encountered when audited batch insert has more than 8000 characters
- Adding a new SQL Server to the before-after configuration via remote client fails in a specific case
- The State column is missing in the Schedules panel
- The "Insufficient privileges" warning message is shown when adding a database for the beforeafter auditing even though user has administrative privileges in a specific case
- Auditing configuration information is not shown when navigating from the Status tab to the Configure tab
- Part of the batch inserts information is cut-off in the report preview
- Missing information message that the creation of before-after triggers has failed
- Adding servers in the AlwaysOn environment fails when non-default port is used by the listener
- Missing information on the affected SQL Server instance in the Last operation details in application overview
- The "Failed to remove database" error is encountered if database is removed from the before-after auditing in case an auditing configuration has not been previously applied

- Server-side components are not installed on all nodes and replicas when adding clustered servers for auditing
- The "Central repository inactivity" alert remains active even after the issue has been resolved
- The application gets unresponsive when there is a delay while loading the reports
- The number of active alerts in the ribbon always shows zero active alerts
- The "Username and password are incorrect" error is encountered when upgrading to a new version with credentials previously saved by the application
- Missing information on checked objects is missing in the summary, if all objects are manually included
- The "SQL Server connectivity monitor" alert is triggering for the passive node in the cluster
- The Browse for folder button is missing in the Servers properties form
- The Cancel button is missing in the Generating preview pop-up form
- Checkboxes are missing on the group level when objects are grouped in the object filter
- The central repository database is not checked by default in the verify integrity check
- The Alert history grid is missing headers
- The CTRL+C and CTRL+V shortcuts are not working in text fields in the Email recipient list form
- The Update statistics operation is incorrectly displayed as alter table operation in the reports
- The "Server was not added for auditing" error is encountered when servers belonging to the cluster is added for auditing in case when server ping is disabled in the network/domain
- The "Object reference not set to an instance of an object" error is encountered when applying compliance filter to the specific set of databases
- The Alert history grid is not groupable by columns
- The before-after values for the very first operation are not included in the exported report
- The Schedules panel is missing a header for the grid
- Server-level status overview is missing the Operation overview info for the selected SQL Server instance
- The Alert history grid does not include alert name column
- The "Error stopping server" message is shown when trying to stop server when connection to the server is severed
- The schedule summary is not shown in the final step of the schedule creation wizard

The standalone reporting application has been removed

Release: 2018.04.1438

Date: June 27, 2018

- The Always On primary replica hosted by SQL Server Fail Over Cluster Instance is not recognized when server is added for auditing
- Server-side components are not installed on all nodes and replicas when adding clustered instance for auditing

- Connection to the SQL Server fails while adding server for auditing in Always On environments when custom TCP port is configured for Availability group listener
- Overwriting report templates keeps the last modified settings in the UI reporting pane after changes are saved

Release: 2018.03.1429

Date: May 07, 2018

#### Fixes:

- The "Unknown error has occurred" error is encountered when launching standalone instance of the application
- The "error adding database(s)" error is encountered when adding a database for auditing in case specific custom object types are used

Release: 2018.02.1425

Date: March 27, 2018

#### Enhancements:

- More intuitive warnings and messages more than 100 messages and warnings have been updated for better user experience
- Various application and auditing information is now available in the status bar including repository and servers state, disk space, repository size, active alerts and more
- Information on the central instance, disk, RAM is now available in the Status form for virtual machines hosting audited SQL Servers

- The before-after auditing triggers are not created on SQL Server 2017 in specific cases
- The before-after auditing triggers are not created on SQL Server 2008 in a specific case
- It is not possible to apply an auditing filter if at least one server event is not selected first
- Installation wizard is missing information that Windows restart is required after .NET Framework 4.7.1 is installed
- Auditing report changes to advance mode If date/time filter is configured while report is in the simple mode
- The "Sending log files has failed" error is encountered if Send logs command is initiated while the connection to the remotely audited machine is unavailable
- The 'Could not start collecting logs' error is encountered when sending application log files while
   Outlook is running
- Several buttons are missing from the Resources tab in the main ribbon when "Connection to the central repository" window is initiated

- The 'The email configuration validation error' message is encountered when changing UI theme after other options have already been changed in different Options tabs
- Columns dragged away from the preview grid are not unchecked in the Columns list

• Checked options/fields are no longer marked with colored ribbon when checked

Release: 2018.01.1409

Date: January 05, 2018

#### Enhancements:

- Relative date filter
- Multiple client application instances support
- 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
- Auditing configuration for GDPR standard is added
- Out-of-the-box report for GDPR standard is added
- Scheduled reports can now be run on demand

- Filters are not applied to scheduled reports
- Previews are not created if central repository is larger than 50GB
- Multi-select in report preview does not work
- Application performs checks vs before-after database even when before-after auditing is not configured
- Database auditing configurations cannot be implemented in specific case
- All checkboxes are not checked when "Check all" checkbox is used
- The "Error changing configuration. Settings will be reverted" error is encountered when switching from simple to advanced filter if include/exclude objects, logins or application options are configured in the simple filter
- The add database screen shows only server level operations that can be selected but not related to databases
- Remove auditing instance is turned off and needs to be manually started after application update is performed
- The database list and object list forms are empty in a specific case
- Quarantine folder is not automatically cleared when quarantined items are processed
- The application freezes and has to be closed via task manager if the timeout is hit when checking for server-side components on remote instances
- Configured auditing filters disappear from the server list in a specific case
- Generating a report to excel file fails if cell value exceeds 32767 characters

- Application fails to inform the user if the database that is not an actual repository archive is added as a datasource
- The "end time" can be set before "start time" which makes created schedule unusable
- The "Error running report schedules" error is encountered if reports couldn't be generated before the generation timeout elapses
- The "The system cannot find the file specified" error is encountered if accessing temporary folder that cannot be accessed from the central instance
- The "Value cannot be null. Parameter name: source" error is encountered when Send logs button is used in ApexSQL Audit Reports
- SQL Server 2017 is not shown in the "add server" form if default instance naming is used

- New light, blue and dark themes are now available
- The application now requires Microsoft .NET Framework 4.7.1

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