Qlik Sense September 2020 Patch 2 Release notes

Release notes

Published: October 7, 2020

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The following release notes cover the versions of Qlik Sense Enterprise on Windows released in September 2020. Solved issues and limitations for Qlik Sense Enterprise on Cloud Services are also listed.

What's new in Sense September 2020

Please refer to the What's new sections of the online help for information about the new and updated features of the Qlik Sense Enterprise on Windows June 2020 release:

What's new in Qlik Sense September 2020

What's new in Qlik Sense September 2020 (Developers)

For the upgrade notes, refer to the "Upgrade notes" section in this document.

This document covers the following releases:

Qlik Sense September 2020

Release: September 9, 2020

Qlik Sense September 2020

Patch 1

Release: September 23, 2020

Qlik Sense September 2020

Patch 2

Release: October 7, 2020

Resolved issues

Qlik Sense September 2020 comes with fixes for the issues described below.

September 2020 Patch 2

Qvd async write improvement causing reloads to fail due to the QVD being locked

Jira issue ID: QB-2367

Description: QVD asynchronous writing will be disabled by default. This is to prevent QVD files to get locked.

This change may impact performance with QVD store.

To re-enable this feature, add "EnableQvdAsyncWrite=1" to settings.ini file

(see Qlik Knowledge base: https://tinyurl.com/y3n4me6x)

The decision on enabling this feature in the future is dependent on compiler upgrade and can only be done in future releases as compiler related issues cannot be back ported to patch versions.

Unable to rearrange variable extension dropdown values

Jira issue ID: QB-1821

Description: The variable extension allows for specified values in a drop down, that are then set to the variable when used. The value list should support rearranging these values but a different fix caused that to stop working.

September 2020 Patch 1

Overlapping text in wordcloud extension

Jira issue ID: QB-2133

Description: Issue was due to a bad font being used in certain cases. Should now be more consistent.

Qlik Sense Repository API with filter returns error 400 Bad request

Jira issue ID: QB-1995

Description: Qlik Sense Repository API with filter was returning 400 Bad Request error. This issue is fixed now.

Text and Image

Jira issue ID: QB-1353

Description: Add sanity check on switching context for text and image object.

September 2020

Issue key	Title	Description

QB-263	New QlikServiceCluster certificate for distributing apps from Qlik Sense	Below information is vital only for multi-cloud Qlik Sense deployments.
	Enterprise on Windows multi-node sites	In previous releases of Qlik Sense, certificate that was used to generate an authentication token for app distribution and the one used to generate local bearer token varied depending on which node was involved. In multi-node setup, certificates are issued to different server names, hence balancing of the workload across nodes and using a different server pem file to generate a token. This caused authentication errors when trying to authenticate the request to the cloud services due to the signature mismatch. To address this limitation new QlikServiceCluster certificate has been introduced. It is stored in Certificates (Local Computer) > Personal > Certificates.
		Above functionality is available and enabled by default in September 2020 and later releases.
		It DOES NOT require any manual configuration in following cases:
		New deployments of single or multi-node sites.Upgrade of single or multi-node sites that do not intend to use app distribution.
		It DOES require additional configuration in following cases: - Upgrade of single node sites that are using app distribution. * Identity provider in QCS tenant for QSEfW setup should be recreated with the new local bearer token that gets generated using new certificate after upgrade to September 2020. - Upgrade of multi-node sites that are using or intend to use app distribution. * Please perform steps from the following link after an upgrade: https://community.qlik.com/t5/Qlik-Support-Knowledge-Base/Enabling-App-Distribution-after-an-Upgrade-of-a-Multi-Node-Setup/ta-p/1728283/highlight/true
QB-724	Variable Input Extension not working on iPad when slider is selected	Touch events were not handled in code. Note: Now there are touch events registered to handle the drag of slider on touch devices as in iPad.
QB-831	qlik-variable-input gets 404 Not Found on style.css from external server with published mashup	In a cross-site scenario, RequireJS will look for a "style.css.js" file instead of "style.css", which is not available. Note: Now the extension is build using webpack which moves html/css/etc. into one js resolving the issue.
QB-1085	Third party software/angular.js version mismatch	Versions of the third-party software are no longer displayed in the hub's About section. This change goes along with security best practice to limit that information.

QB-1284	Publish and replace not working as expected	Publish replace don't work towards the QRS if there is object owner in the data stream not present in the QRS database. Object owners are not intended for use with QRS and is now removed in the import step, also for import replace.
QB-1294	creating file in dev-hub was sending wrong content-type to the backend	It now has been fixed with the mime-types library
QB-1301	Expressions inside dollar-sign expansion followed by a variable are not highlighted	Some expression that uses the dollar-sign expansion using parameters is not highlighted on the expression editor.
QB-1350	Fix empty dimension issue	Correction of how engine handle empty dimension during get data. The previous problem with access outside array due to incorrect criteria at get data compared to init data is solved. Now init data and get data criteria for valid data is identical and problem solved.
QB-1356	Values not provided for all dimensions using TreeDataDef	Values for the inner dimensions not always calculated when there where any invalid dimensions in a TreeDataDef.
QB-1361	Second level properties of the property panel in a container object are not displayed correctly.	When clicking second level properties on the property panel, these are not displayed and are collapsed immediately.
QB-1386	Error "Invalid Dimension" shown when the user pull Date Picker on the sheet, without even selecting one.	As per the properties of the date picker object, date field should be first selected to show this error. Note: With the fix, now user shall see a lable " Add Date Field" instead.
QB-1407	Cannot export a story with a container to PDF or PowerPoint	It cannot be exported to PDF or PowerPoint, neither from the story nor the global menu, a container chart when the show conditions of all the children of the container were set to false.
QB-1424	Date picker not loading new date fields in the field dropdown when new data is added through script.	As the fieldList value was stored for the same session, so until you refresh the app, the changes were not picked. Note: Now, the field component is calculated each time the user clicks on it to select a field so it remains updated to any new data changes.
QB-1426	Improved performance for resolving linked master objects in OpenApp	When resolving linked master objects in sheet objects, OpenApp exhibited poor and undue performance scaling with the number of sheets and sheet objects present in the app. This has been resolved and the proper object indices are now used in this lookup, taking practically negligible time.

QB-1430	Dollar-expansion of variables in certain dimension-expressions did not update with the variable	Dimension expressions that resulted in a field-on-the-fly being setup did not correctly cause a dependency chain between the object using the field-on-the-fly and a variable used in a dollar expansion in the dimension expression. This has been corrected, and the objects refresh when the variable changes. The workaround of using the CalcDim() function wrapper in the dimension expression, to avoid a field-on-the-fly, is likely to be preferable, both technically and functionally.
QB-1456	Date Picker: Shows wrong date when upgrade from November 2018 is done	The order of the dates stored in the old date picker objects was ascending but after September 2018, this order was not considered in the code Note: The fix provides separate calculation and selection mechanism for ascending order dates, so correct dates can be selected.
QB-1474	Dynamic field definition values do not appear when initializing the first sheet on Filter pane object	After the bookmark was applied a call to Engine with with GetListObjectData returned empty qDataPage, this is now resolved. So that Filter Pane values are displayed correctly.
QB-1481	Sheets: notify if field is not included in the document	When the field is not in the document, instead of showing an empty sheet, show a notification that says it could not find the field
QB-1519	Straight table: Link representation added equal signs to empty query string parameters	When the Straight table link representation encoded the URL of displayed links it would add an equal sign after all query string parameters, even the ones with empty values. Now it's only added if it was there in the original URL.
QB-1527	Incorrect chart was suggested by Insights for a question including Measure Time dimension and Dimension	As a result of the fix for a question including Measure, Dimension and Time dimension a line chart will be suggested as a response. Line chart will include the measure as the y-axis, Date dimension on the x-axis and an extra dimension
QB-1606	Fixed: Error "ORA-01722 invalid number ERROR" is not thrown on wrong data	When reloading a specific data from an Oracle db using the Qlik Oracle connector within the Qlik ODBC Connector Package, the connector is supposed to throw an error message "ORA-01722 invalid number ERROR" (which is the correct behavior), however the connector ignores the error and reloads only a subset of the data.
QB-1607	Straight table: Not possible to re-arrange columns on iOS in mashups	It was not possible to re-arrange the columns in a Straight table on iOS devices when used in a mashup.
QB-1618	Button to control the borders on the container	A new border property on the container object allows to switch on and off the borders.

QB-1619	On Sense Classic objects embedded in container are getting cropped from right	A design property caused objects embedded in a container to not fit the container object layout, being cut from the right side.
QB-1625	User can only use Analyzer access once and then access is denied after relogging	Under certain conditions repository service would fail to allocate user with analyzer type of access resulting in user not being able to open applications. System_Repository would log "Error trying to persist AnalyzerAccessType: Violation of the uniqueness constraint".
QB-1634	P&L Pivot cannot export to XLS when sheet is published	A permissions issue stopped the P&L Pivot table from the visualization bundle from being exported.
QB-1652	Reference line formatting	Fix reference line value formatting
QB-1657	Alternative dimensions and measures	Fixed class name conflicting for alternative dimensions and measures.
QB-1715	Parse DerivedFields correctly	Strip DerivedFields in the form of "=[Field]" into "Field" during internal processing.
QB-1739	Fix script table metadata functions in section access	The table metadata functions NoOfRows() and NoOfFields() should reflect the script section they are evaluated in, and this is done through a special database reference for the currently active section. This had been lost and all lookup was directed to the application data section. This has been fixed and the automatic test suite has been extended to cover the access section better.
QB-1740	Multi-KPI object is blinking	Multi-KPI object starts blinking when adding a visualization to a measure
QB-1755	The nl-parser service now disables TLSv1.0 and TLSv1.1 by default	Previously the nl-parser service would accept connections with the TLSv1.0 and TLSv1.1 protocols. These protocols have been deprecated as no longer sufficiently secure. Now nl-parser disables these protocols by default. Where required (e.g. in a legacy environment), they can be enabled by setting the environment variable NLPARSER_ENABLE_TLSV1 and/or NLPARSER_ENABLE_TLSV1_1, respectively.
QB-1763	Dynamic Views failure for published app	A dynamic views chart failed with "Refresh Error" in a published app on Windows where the user was not the owner of the template app and the template app had no attached files.
QB-1773	Alternative dimensions and measures	Restore alternative dimensions and measures after viewing data of chart as a table.
QB-1785	Scheduler service fails to initialize all events due to string formatting error	If a reload task with a trigger would contain { or } characters in its title, scheduler service would continuously fail to transition to an active state due to failure in initializing all events caused by a string formatting error.

QB-1823	iOS 13.5.1 fix for	The overlay for searching in dimension was not completely visible
	searching dimension in table	on iOS 13.5.1. This fix will make sure the overlay is completely visible again.
QB-1858	Printing Multi KPI object doesn't work	Export/Download of the Multi KPI object results in a blank chart in many cases
QB-1942	Qlik Sense Repository API filter treats _ (underscore) and % (percent) as wildcard characters	Qlik Sense Repository API was ignoring _ (underscore) and % (percent) characters when filtering tables. This is fixed now and filter works as expected for all allowed characters.
QB-1958	Cannot change number formatting	Fixed a bug that prevented the user form changing the number format
QB-1967	Grey background color is persisted when switching from responsive to custom sheet size	When switching between responsive and custom sheet size the background color was changing from grey to white. This fix persists the grey background color also when switching between the different sheet size.
QB-2013	Context menu on a container object is not open on the single object page	Conflicts between functions caused that the context menu was not displayed when right-clicking on container object or in a container's child.
QB-2022	Set decimals correctly in agnostic KPI:s with number formatting	Decimals are now set on KPI values before an animation starts. This was not the case before and sometimes caused values to get the wrong number of decimals.
QB-2031	Data handling	Fix line chart issue when there is no data point.
QB-2041	Qlik Sense Cloud: In-app Image does not get deleted from library	When opening the media library from the sheet overview (opened from the top bar in analysis mode) it was not possible to remove/insert images using the context menu (right click). This fix enables that functionality
QB-2048	Master visualization description not respecting new line	When using Chr(10) to generate new lines in the master visualization description they were ignored when viewing the description.

Known issues and limitations

The following issues and limitations were identified at release time. The list is not comprehensive; it does however list all known major issues and limitations.

Clients

• If you have an object inside the container with a show condition that evaluates to false you are not able to edit properties of this object.

Workaround:

- Option One: Make sure your show condition evaluates to true. Either by triggering an
 action/selection so that your show condition evaluates to true, or temporary remove the show
 condition. Now you can edit properties of the object inside the container.
- Option Two: If you use master items inside the container you could edit the properties of the master item and it would propagate to the master item inside the container.
- Option Three: Comment the expression that defines the condition, by entering two slashes in front of the equals sign, e.g. //=Count(Customer) <= 2
- Third-party extensions are currently not supported on mobile devices, and the Qlik Trusted Extension
 Developer program does not accredit extensions for use on mobile devices. Depending on individual
 device specifications, mobile OS, and size of the Qlik Sense app, items generated using a third-party
 extension might fail to be visualized properly on a mobile device.
- When consuming Qlik Sense apps using Microsoft Edge browser, touch screen mode is activated by default even when it is run on a non-touch device.
 - Workaround: turn 'touch screen mode' off from the navigation menu.
- When consuming Qlik Sense apps using Microsoft Edge browser on touch/hybrid devices, the long-press action does not work. This limitation prevents from accessing functions such as an object's context menu, which on touch mode requires a long-press. This is a Microsoft Edge's issue.
 - Workaround: if using an hybrid device, turn the touch mode off and turn it back on again.
- Export as Anonymous does not work for mashups deployed in a domain that is different from the domain in which Qlik Sense is installed. Export only works for Anonymous if the mashup is deployed in the same domain as Qlik Sense.
- When using the new "Load Extension" syntax in the load script, the **Data load editor** syntax completion
 does not work well after the keyword "Extension" when trying to write the call to an SSE function (AAI
 function). Nevertheless, the script executes correctly.
- Legend does not show dimension values that are after row number 3000.
- Internet Explorer supports a maximum of six web socket connections.
 - Workaround: See https://msdn.microsoft.com/library/ee330736(v=vs.85).aspx
- If dimension limits (others) is set in a straight table or Pivot table, the subtotals and totals are incorrectly calculated.
- Exporting a story to PowerPoint limitations:
 - Titles are not rescaled as HTML, font settings are not yet exported.
 - Storytelling effects are not applied.
 - Exported charts may show fixed scroll bars, depending on the export resolution.
- Opening the first application after login takes longer time in in Chrome version 78 or older.
- It is not possible to open the context menu of an orc chart on a touch device.
- Layouts saved in bookmarks will not be applied for a chart using chart suggestions
- When you choose to view data in the context menu in a Dynamic Chart and make a new selection in the app, you need to refresh the browser for the chart to be displayed again.
- OnDemand reporting extension is not supported in QCS or QSEoK

 When exporting a table that includes an invalid money format expression you may get an error message when opening the exported data in Excel.

Dynamic views

- Dynamic views that are deleted from one app are also deleted from every other app that was using the same view. There is no work-around for this issue other than to avoid deleting views that may already be in use by one or more other apps as a result of having made copies of these apps.
- When creating a new dynamic view in the assets panel, if there is one or more existing dynamic views, the dropdown menu item does not automatically change to show the the charts of the newly created dynamic view. The user must click on the dropdown menu to choose the newly created view.
- The data for a dynamic view is automatically refreshed (i.e. re-queried from source) whenever a user
 enters a sheet containing any charts for that view. The same occurs when entering and then returning
 from the global selections panel as well as when adding a new chart for the same view. To prevent
 triggering this automatic refresh behavior, users should refrain from performing these actions on the base
 app.
- The view of a dynamic chart is cleared and overlaid with a message indicating a view constraint violation condition whenever the user changes the selection state of the base app such that the view's constraints are violated. Users should refrain from altering the selection state of the base app at least until they are finished making use of the data in any one of the dynamic view charts.
- The right-click "Go to source" option on a Snapshot slide for a dynamic chart does not select the actual dynamic chart when changing the view to the base app sheet.
- Chart settings changes made to dynamic view charts using the Exploration menu are lost following refresh operation of the view.

Managing a Qlik Sense site

- The QMC Custom Property Edit page can currently handle a limited number of custom properties. If you
 want to edit custom property values in the QMC, we recommend keeping the amount of custom property
 values to a maximum of 500. If you want to just apply values without modifying them, the QMC can handle
 up to 10.000 custom property values.
- The Qlik Logging Service handles communication outages with PostgreSQL by retrying three times to
 establish the connection and displays an error if unsuccessful. Communication outages with PostgreSQL
 can occur for a number of reasons and are not always recoverable in the limited time window of three
 tries.
- With the current architecture it is not possible, using security rule on HubSection_* resource, to hide
 "Open hub" link from the "Navigation" menu when accessing app as an anonymous user.
 Workaround: Use reverse proxy configured to redirect "Open hub" link to a preferable landing site
- It is not possible to remove app objects from disk when removing apps in QMC

Installation

- With Qlik Sense February 2019 or later, a new component is delivered together with Qlik Sense called the License Service. This service is managing the product activation when a Signed License Key is used.
 The Signed License Key is mandatory to use for the following scenarios;
 - Multi-Geo/Cloud/Deployments using Qlik Sense Enterprise on Windows Qlik Sense
 Enterprise on Kubernetes or Qlik Sense Enterprise on Cloud Services as deployment
 methods with the intention to make use of a Unified Key (1 user * 1 User license across all
 deployments).
 - Qlik Sense Enterprise on Kubernetes installations

- Qlik Big Data Index installations
- Qlik Core installations
- Qlik NPrinting (February 2019 or later) installations.
- All Qlik Sense Enterprise installations including Analyzer Capacity as a user license

With this release, we have introduced a delay for the time to the first connection to the Qlik Licensing Service. With the use of a Signed License Definition, the deployment can be running for up to 60 days until the first connection to Qlik.

This will give enough time for a Customer to prepare connectivity to license.qlikcloud.com using port 443 open for outbound calls only. Read more in the knowledgebase article, https://support.glik.com/articles/000072102

 In Qlik Sense November 2018 it is not possible to install Qlik Sense Extension bundles through a silent installation. Qlik Sense Extension bundles can only be installed via the regular install procedure, or separately, once Qlik Sense November 2018 is installed. To install Qlik Sense Extension bundles separately, see "Installing and removing Qlik Sense Extension bundles from a Qlik Sense installation" in this document.

Workaround: If you are installing Qlik Sense November 2018 by performing a silent installation, install Qlik Sense Extension bundles separately at a later moment.

Service Dispatcher offline config entry lost when upgrading Sense April 2020 to June 2020

Qlik Sense Desktop

- Sorting by expression in a Pivot table may not work as expected.
- When uninstalling Qlik Sense Desktop, make sure all files are removed from %LocalAppData%\Programs\Qlik if you intend to install another version. If the files are not removed, Qlik Sense Desktop may crash when trying to apply the license.

Connectors

- REST connector: The Next token pagination option does not work when the pagination token has the same value for each page.
- For connectors in the ODBC Connectors Package, only the data types listed as supported in the online help have been verified to work correctly in the Preview and Script editor. However, ODBC Connector Package does not prevent the loading of other data types, so in some cases unsupported data types can be loaded with the load script.
- ODBC connector: If the user name on the Microsoft Windows system running Qlik Sense Desktop contains letters that are not English alphanumeric characters, database connectors in the ODBC Connector Package do not work properly.
 - **Workaround**: Change the Windows system locale to the match the character set that contains the characters used in the user name. For example, if the System locale on the system running Qlik Sense Desktop is set to English and a user name contains Swedish characters, the System locale setting must be changed to Swedish for the ODBC connector to work properly.
- The Qlik Salesforce Connector does not support PK chunking on sharing objects. PK chunking is supported only on parent objects.
- Apache Phoenix connector does not support non-latin characters in metadata.
 Connector may return a corrupted data or unpredictable query results if running a query with non-latin characters in metadata: table names, column names, aliases, etc.

Cloud deployments and Multi-Cloud

- In a Qlik Sense Enterprise on Kubernetes installation, if while loading a file using the Amazon S3
 connector you attempt to abort the load, the abort will appear successful but the connector may continue
 the load using pod resources.
- When downloading a pivot table in cloud environments (Qlik Sense Enterprise on Cloud Services and Qlik Sense Enterprise on Kubernetes), expanded rows are not included but stay collapsed.

EMM solutions for Qlik Sense Enterprise

- If you use BlackBerry Access to consume Qlik Sense Enterprise apps, the Access browser does not display <Title> information. This means that when opening a Qlik Sense app through BlackBerry Access, the app retains the title of the initial Tab instead of showing the App Name.
 - **Workaround**: refresh the browser so to display the correct App title.
- If using BlackBerry Access instead on Qlik Sense Mobile app, the access browser does not provide any indication in case of loss of connection with Qlik Sense Enterprise. If trying to interact with a Sense App after the connection is lost, the app becomes unavailable.
 - **Workaround**: refresh the browser so to trigger a new log-in request.
- If using BlackBerry Access, when a Qlik Sense Enterprise log-in session expires, the Access browser provides an error message stating that the content is no longer available. In such a case using the refresh button does not trigger a refresh, but it only closes the error message.
 - **Workaround**: close the tab and access again Qlik Sense Enterprise from the link in the BlackBerry Dynamic environment.
- When using the AirWatch browser to access Qlik Sense Enterprise, the refresh causes the content to be displayed in portrait mode even when the device is in landscape mode.
 - **Workaround**: rotate the device so that the correct orientation is detected.
- When using the AirWatch browser to access Qlik Sense Enterprise, the header of the browser shows the Server name, occupying more space than needed especially in Landscape mode.

Upgrade notes

Qlik Sense September 2020

Announcement: Qlik Sense security update may impact extensions using jQuery

The issue:

The jQuery team announced (https://blog.jquery.com/2020/04/10/jquery-3-5-0-released/) a vulnerability in jQuery versions 3.4.1 and lower where a regex used by the jQuery.htmlPrefilter method that demonstrated the expression "could introduce a cross-site scripting (XSS) vulnerability."

Impact to Qlik customers:

The issue is resolved in jQuery 3.5.0, however, updating to the new version of jQuery may require developers to refactor extensions used in Qlik Sense applications to support the change.

When will the fix be implemented:

- Qlik Sense SaaS received the jQuery update on June 25th, 2020.
- Qlik Sense Client-Managed receives the jQuery update with the September 2020 release.

Action required:

- Extension consumers
 If you are an extension consumer, no action is required by you. However, you may experience
- Extension authors
 Extension authors are encouraged to test their extensions using jQuery 3.5.1 to understand and

extensions used in your Qlik Sense applications cease working after the jQuery update is applied.

Contacting Qlik:

If you have questions regarding this change and how to perform an impact assessment, please connect with the community on the Qlik Sense Integration, Extension, & APIs forum.

Qlik Connector 7.0.4 for use with SAP NetWeaver

mitigate any impact to customers.

If you use Qlik Sense September 2020 and Qlik Connectors for use with SAP NetWeaver you need to upgrade the connector package to version 7.0.4. Previous versions of the connector package are not supported by Qlik Sense September 2020.

Qlik Sense June 2020

Security filter result caching available for Extension resource

Results of rule engine's evaluation of security rules using Extension as resource filter are now cached. This cache exists in Qlik Sense Repository Service's memory. Using this cache avoids using the rule engine and will result in performance benefits when repeatedly accessing above resource. This improvement can be disabled by modifying following key in the Repository.exe.config file, by default located in: "C:\Program Files\Qlik\Sense\Repository", followed by a restart of the Qlik Sense Repository Service:

<add key="UseSecurityCacheForExtensions" value="true" />

New Advanced LDAP UDC and support for LDAP Channel Binding and LDAP Signing in Active Directory and Generic LDAP UDCs

Existing Active Directory and Generic LDAP UDCs have been extended with Authentication Type option. This setting is optional and defaults to Anonymous or FastBind based on the credentials specified. Following values can be given as comma separated combinations depending on the security scenario. These values will be XOR-ed for authentication:

Anonymous, Encryption, Delegation, FastBind, Readonly Server, Sealing, Secure, Secure Sockets Layer, Server Bind, Signing

New Advanced LDAP UDC available. This UDC adds more settings and options when connecting to LDAP. It supports secure LDAP connection in non-standard LDAPS ports, allows connecting to LDAP with Channel Binding and LDAP Signing enabled and provides options for LDAP Session settings, and more.

For more information please refer to corresponding Qlik Sense documentation.

Security filter result caching available for ReloadTask resource

Results of rule engine's evaluation of security rules using ReloadTask as resource filter are now cached. This cache exists in Qlik Sense Repository Service's memory. Using this cache avoids using the rule engine and will result in performance benefits when repeatedly accessing above resource. This improvement can be disabled by modifying following key in the Repository.exe.config file, by default located in: "C:\Program Files\Qlik\Sense\Repository", followed by a restart of the Qlik Sense Repository Service:

<add key="UseSecurityCacheForReloadTasks" value="true" />

Optimization of security rules evaluation

Objects that are read from the database are cached during the evaluation of the entities for specific calls. If there is more than a certain number of related entities read from the database, instead of caching some, all are read and cached. This limit is called ReadAllThreshold. This improvement will speed up all the initial requests where there is no corresponding cache in place. This improvement can be configured or disabled by modifying following keys in the Repository.exe.config file, by default located in: "C:\Program Files\Qlik\Sense\Repository", followed by a restart of the Qlik Sense Repository Service:

<add key="RulesEngineObjectCaching.Enabled" value="true" />

<add key="RulesEngineObjectCaching.ReadAllThreshold" value="10" />

Argument added to silent install

From Qlik Sense June 2020 a mandatory argument is added to the silent install of QSEfW and QSD. All silent install command must include the argument 'accepteula (1|0)'. The argument is added to Qlik Sense April 2020 as optional which makes it possible to prepare your script. The EULA can be found here:

https://www.glik.com/us/legal/license-terms and the documentation of silent install: https://help.glik.com/en-

https://www.qlik.com/us/legal/license-terms and the documentation of silent install: https://help.qlik.com/en-US/sense-

admin/April2020/Subsystems/DeployAdministerQSE/Content/Sense_DeployAdminister/QSEoW/Deploy_QSE oW/Installing-Silently.htm?q=silent%20install

Qlik Sense April 2020

Backup recommendations

It is important that you make a backup of the site before upgrading, to be able to recover the site if the upgrade fails.

Qlik Sense February 2020

Windows 7 and Windows 8.1 operating systems

From Qlik Sense February 2020 and forward, Windows 7 and Windows 8.1 are not supported operating systems.

Updated NodeJS version - recreating the Qlik Sense root CA certificate

The February 2020 version of Qlik Sense updates the version of NodeJS to a currently supported version and addresses several security vulnerabilities announced by the NodeJS project. Unfortunately, this requires recreating the root CA certificate generated with versions of Qlik Sense prior to the June 2019 release.

This procedure has been automated as much as possible and is included in the installer, but depending on the deployment, additional manual steps might be required. Please make sure to follow the upgrading instructions in the help:

https://help.qlik.com/en-US/sense-

<u>admin/February2020/Subsystems/DeployAdministerQSE/Content/Sense DeployAdminister/QSEoW/DeployQSEoW/Upgrading.htm</u>

For silent upgrades, refer to the following help topic:

https://help.glik.com/en-US/sense-

<u>admin/February2020/Subsystems/DeployAdministerQSE/Content/Sense DeployAdminister/QSEoW/DeployQSEoW/Upgrading-Major-Silent.htm.</u>

Note:

You will also have to replace Qlik Sense root certificate with the newly created one in the following cases:

- Your Qlik Sense deployment is connected with Qlik NPrinting, Qlik multi-cloud setups, or any other external tools or configurations.
- You have configured QlikView Distribution Service for distribution of links to QlikView documents to the Qlik Sense hub.

Enabling Natural Language Processing

This release of Qlik Sense includes the ability to ask natural language questions in the Insights providing the same functionality seen on cloud editions of Qlik Sense since September 2019. The functionality is enabled by default for new installations of Qlik Sense, however, for upgraded environments this will be installed but switched off.

Customers wanting to enable this functionality can do so by executing the following steps on every node in the Qlik Sense cluster:

- 1. Navigate to "C:\Program Files\Qlik\Sense\CapabilityService" (or corresponding non-default location):
- 2. Edit the "capabilities.json" file.
- 3. Add the following flags. Make sure to separate them with comma (,) and enclose within the existing rectangular brackets ([]):

```
{"contentHash":"cf15d72343be5e4223b9e8de37e69aef", "originalClassName":"FeatureTog gle", "flag": "NLU_INSIGHTS", "enabled":true}

{"contentHash":"cf15d72343be5e4223b9e8de37e69aef", "originalClassName":"FeatureTog gle", "flag": "NLU_INSIGHTS_VOICE_QUERY", "enabled":true}
```

{"contentHash": "cf15d72343be5e4223b9e8de37e69aef", "originalClassName": "FeatureTog gle", "flag": "CAO DATA VALUES", "enabled": true}

- 4. Navigate to "C:\Program Files\Qlik\Sense\ServiceDispatcher" (or corresponding non-default location):
- 5. Edit the "services.conf" file.
- 6. Add "Disabled=false" under [nl-parser] and [nl-broker] sections.

Example:

```
[nl-parser]
Disabled=false
[nl-broker]
Disabled=false
```

7. Restart all the Qlik Sense services.

Note: Qlik Sense Desktop is not affected and the natural language functionality is enabled for both new installations and upgrades.

Qlik Sense November 2019

New load balancing scheme

Qlik Sense November 2019 introduces a new load balancing scheme. In previous versions of Qlik Sense, the algorithm always chose the load-balancing node with the lowest CPU load. The CPU load of all nodes was updated every 5 seconds, which might have resulted in consecutive reloads being distributed to the same node. To improve the handling of frequent consecutive reloads, the algorithm has been changed to select the node with the lower number of running tasks per "Max concurrent reloads" setting, tracking this value on the scheduler master node.

This improvement is enabled by default. If you wish to disable it, do the following:

- Open the Scheduler.exe.config, which by default is located in: "C:\Program Files\Qlik\Sense\Scheduler\Scheduler.exe.config"
- Set "DisableLegacyLoadBalancingBehavior" setting to false
- Restart Qlik Sense Scheduler Service
- Repeat these actions on each node of the cluster running the Qlik Sense Scheduler Service

Handle "invalid cookie bursts" in the Qlik Sense Proxy (QPS) Service

When a multiple cookie request arrives to the Qlik Sense Proxy Service for the same user and authentication method within a small-time frame, QPS reuses the session from the first request. This behavior avoids the creation of additional sessions, and therefore prevents reaching the maximum number of allowed sessions, which would result in temporary lock of that user. See the "Managing a Qlik Sense site" section of "Known issues and limitations" for a known limitation of this change.

This improvement is available in all patches listed below with the default value of 2 seconds **provided corresponding setting is enabled**. If you wish to **enable and** configure or disable it, do the following:

- Open the Proxy.exe.config, which by default is located in: "C:\Program Files\Qlik\Sense\Proxy"
- To **enable and** configure add the string <add key="InvalidSessionRequestBurstLimit" value="00:00:02"/> in the section <appSettings> with the desired value **greater than 0**
- To disable without removing the flag add the string <add key="InvalidSessionRequestBurstLimit" value="00:00:00"/> in the section <appSettings> with the value of 0. QPS will fall back to previous behavior with one difference before it would initially overwrite the existing cookie with an empty one in the first request (Set-Cookie: X-Qlik-Session=), now Set-Cookie header will not be included.
- Restart Qlik Sense Proxy Service
- Repeat these actions on each node of the cluster running the Qlik Sense Proxy Service

License service must be active during startup of the Qlik Sense Repository service

From Sense April 2019, the Qlik Sense Repository service (QRS) contacts the Qlik License Service during startup phase. This means that during start-up of the QRS, the Qlik Sense Service Dispatcher (QSD), which manages the Qlik License Service, must be running, so that the Qlik License Service can be reached by the QRS. When executing repository.exe -bootstrap (also with additional parameters), if the QSD is not running the bootstrap does not fully complete and the System_Repository logs register the following error:

```
83 20190507T152440.101+0200 WARN rd-AMW-2016-
03 System.Repository.Repository.Core.Licensing.LicensesInitializer 6 83b132fa-
fa98-44e4-9f86-338be262a014 RDLUND\svc-silver There was an error contacting the
license service. Keep retrying... (1 failed requests) GET /v1/licenses/overview
```

'Version' column for apps in QMC and migration of apps created with Sense 3.1 or earlier

With Qlik Sense November 2019 and later releases, in the **Apps** menu of the Qlik Management Console (QMC), the 'Migration status' column has been replaced with 'Version'. This new field shows the version of the engine used last time the app was saved. Apps created with Sense 3.1.6 or earlier versions will be highlighted with a red 'Migration needed' string, which signifies that the app must be manually migrated via the QMC. Apps created with Sense 3.2 or a later version show the last saved version and do not require manual migration. This is because apps created with Sense 3.2 or a later version are automatically migrated by the client once opened and saved. Once an app is saved and migrated, the value in the 'Version' column is updated accordingly.

Change of log level QIX Engine API error codes

When a QIX Engine API call fails, an error code is returned and a message is logged to the Engine Service log. In previous versions of Qlik Sense, the log level of this message was always ERROR, even when, for example, the API client supplied invalid parameters or requested a resource that does not exist. With Qlik Sense November 2019, client errors are now logged to the Engine Service log at WARN level. Sample log messages are:

Command=Doc::GetFieldDescription;Result=8;ResultText=Warning: Invalid parameters
Command=Delete app;Result=404;ResultText=Warning: Not Found
Command=Duplicate app;Result=9003;ResultText=Warning: Resource not found
The same message is logged to the Engine Audit log.

Qlik Sense September 2019

Setting a sheet as the app landing page

With Qlik Sense September 2019, you can select a sheet to be the landing page of your app by setting a default bookmark. If in a app you had previously configured the setting "Set selections as app default", the document will now open on the sheet where you have applied the setting instead of opening on the sheet overview. To change this behavior, do the following:

- 1. Open the app where the "Set selections as app default" setting is applied.
- 2. Go to the sheet you want to use as the app's landing page.
- 3. Open the Bookmarks
- 4. Create a new bookmark
- 5. Right click on the newly created bookmark
- 6. Choose 'Set as default bookmark'
- 7. Repeat this procedure for all apps where the "Set selections as app default" setting is applied.

For more information on this feature, see the documentation page <u>Setting a default bookmark to create an app landing page</u>.

Qlik Sense June 2019

Change of default theme for Single Integration and capability API

With Qlik Sense June 2019 or later releases, the theme for current selection for Single Integration and capability APIs is set to bright by default. Specifically, this change impacts the 'CurrentSelections' string for getObject, and currsel for Single Integration API.

Qlik Sense February 2019

New product activation method using the License Service component for Qlik Sense February 2019 and later

In Qlik Sense February 2019 or later, a new License Service component is delivered together with Qlik Sense. This service is used when the signed keys are used for product activations. The License Service will connect to a License Backend Service, hosted by Qlik, for product activations and Entitlement Management. This activation process is required for Multi Cloud deployments using Qlik Sense Enterprise on Kubernetes or Qlik Sense Enterprise on Cloud Services as deployment methods. The new activation process is currently optional for Qlik Sense Enterprise on Windows. The use of this activation process is also required if you want to use the new Qlik Sense Analyzer Capacity license introduced with Qlik Sense February 2019.

The Qlik Sense Master node needs access to an internet connection. Port 443 is used for accessing the endpoint at https://license.glikcloud.com and retrieving license information.

You can continue using the standard key with a serial and a control number product activation instead of the signed key method. However, to keep using the standard key activation method you must run Qlik Sense November 2018 in your Multi-Cloud installation.

Qlik Sense June 2018

Upgrade may fail if services are in Disabled state

If a service is in the Disabled state prior to an upgrade, it may lead to the service not being completely uninstalled, and a subsequent failure to install the new version of the service. The rollback of the service upgrade will also fail, which means that the service is not available anymore, and cannot be repaired. The most likely cause of this problem is that other processes are scanning the state of the service during uninstall or upgrade, hence preventing it from becoming completely uninstalled. Examples of such processes are Process Explorer and the built-in Control Panel > Administrative Tools > Services snap-in. This bug in Windows is documented here: https://support.microsoft.com/en-us/kb/287516

To minimize the risk of this occurring, do the following in order, before upgrading:

- 1. Stop all Qlik Sense services manually.
- 2. Verify that no service is in the Disabled state. This can be done by the **Services** snap-in, or another program that polls service state.
- 3. Ensure that all service state polling applications are closed, including applications you used in step 2. Setting all Qlik Sense services to Manual start, and then restarting the system is the most reliable way of making sure that all service state polling applications are closed.

System requirements notes

Please refer to the online help for information about the requirements for Qlik Sense:

System requirements for Qlik Sense

Additional notes:

• On a machine with a server operating system, it is only possible to install Qlik Sense (server), not Qlik Sense Desktop.

Windows 7 and Windows 8.1 support ended

From Qlik Sense systems.	February 2020 an	d forward, Windo	ws 7 and Window	s 8.1 are not support	ed operating



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