Qlik Sense June 2019

Release notes

LEAD WITH DATA™ Qlik

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What's new in Sense June 2019

Please refer to the What's new sections of the online help for information about the new and updated features of the Qlik Sense June 2019 release:

What's new in Qlik Sense June 2019

What's new in Qlik Sense June 2019 (Developers)

Qlik Sense to cease support for IE11

Qlik Sense June 2019 is the last version of Qlik Sense to support Microsoft Internet Explorer 11. Future versions will no longer support this web browser. For a full list of supported browsers in Qlik Sense, see the following documentation: Supported browsers.

Improvement of Hub load time

We have improved the responsiveness of the Qlik Sense Hub Client by improving the way security rules, database access, and hub service work together.

The results of these improvements are the following:

- Initial time required to access the Hub is significantly reduced. This is particularly noticeable in Qlik Sense installations with a high number of apps, streams, security rules, and custom properties.
- Subsequent access time is reduced.
- Stream navigation and access times is now faster.

Qlik Sense installations that currently have long access times will especially benefit from these improvements. If the time required to access the Hub for your installation is currently high (over 30 seconds), it is supposed to be reduce to a few seconds following these improvements. If the time required to access the Hub for your installation is already reasonably short (under 30 seconds), these improvements will be less noticeable.
Note: with this fix it is no longer possible to share unpublished apps.
For more information, read the following support article.

Improper Access Control Issue

This release addresses a security weakness filed with Jira issue ID: QLIK-94388. For more information, read the following security bulletin.

Support for proxy communication for the Qlik License Service

Qlik Sense June 2019 introduces support for proxy-handled communication between Qlik License Service and the Qlik License backend. Using a proxy enhances the ways you can secure and adapt the communication to your own needs. Configuration of a proxy for the Qlik License Service is done using command line parameters for Qlik Sense Enterprise for Windows installations, or using helm configurations for Qlik Sense Enterprise on Kubernetes installations.

See:
Configuring a proxy for Qlik License Service communication in Qlik Sense Enterprise on Windows
Configuring a proxy for Qlik License Service communication in Qlik Sense Enterprise on Kubernetes

Bug fixes

Qlik Sense April 2019 comes with fixes for the issue described below.

June 2019

Correct engine selected for application access

Jira issue ID: QLIK-77451
Description: DataPrepService will now attempt to select an engine that has permissions to open the application.

Internal Engine error (-128) on ListObject GetLayout method after upgrade from September 2017 to April 2018

Jira issue ID: QLIK-89965
Description: Script-defined Autocalendar fields could after the document was reloaded, with client sessions attached, cause the document's dynamically derived field (field-on-the-fly) state to become inconsistent, causing Internal Engine errors in objects using them. This also affected users that attached to the document after the reload. The generation of dynamically derived fields did not handle the inconsistent state safely, causing further errors which resulted in affected user sessions become unusable. The root cause in the post-reload processing of Autocalendar fields has been fixed.

Qlik Sense is not respecting the RelayState in SAML for IDP-initiated authentication if the URL is hosted on a different server

Jira issue ID: QLIK-92832
Description: Sense would only allow relaying to the same domain for which the session cookie was created, though it is possible to relay to a different port and path on that domain. Now for IDP-initiated authentication, we relay to the URI that was given as long as it is in the virtual proxy's host whitelist.

Qlik Sense Engine service not releasing TCP connections

Jira issue ID: QLIK-93067
Description: Configured Analytic Connections that periodically retry connecting but fail would reserve a TCP port for each try and not release it again in a timely manner. This leads to number of reserved ports growing over time and eventually the system runs out of available ports. An update of the gRPC library in the Engine resolved this issue so the ports get released immediately after the failed attempt to connect.

Connection to Sybase IQ ODBC not working in Sense

Jira issue ID: QLIK-93113
Description: When using special characters in the Sybase IQ password, the connection to the database failed in Sense but not in QlikView.

Sensitive Information Disclosure

Jira issue ID: QLIK-93156

Description: Responses to following /qrs endpoints have been restricted for unprivileged users - /filereference, /<name>service, /servernodeconfiguration/local.

The Show Hide container extension sometimes renders outside of its cell

Jira issue ID: QLIK-93165

Description: If the Show Hide container shows content that is bigger than itself it could, in some cases, result in the content being shown outside of the Show Hide container cell.

Not able to key-in search item in a Qlik Sense Mobile App

Jira issue ID: QLIK-93398

Description: In some circumstances the Listbox popover would close itself when the search field was focused.

Task stuck in Triggered state, but reloads work from hub

Jira issue ID: QLIK-93400

Description: If by some process a composite event rule got corrupted, scheduler service would get stuck in an initialization phase and not handle new triggers correctly.

Search pop up of a table does not open under specific circumstances

Jira issue ID: QLIK-93502

Description: In mashups with scrollable content the Listbox popover closed itself when focusing the search field caused a scroll event.

Glitches in logical operator precedence in qlik-repository-rules-engine

Jira issue ID: QLIK-93559

Description: Setting logical operator "AND" (&&) as one step higher precedence than logical operator "OR" (||), which is common standard. Expression like "a or b and c" and "b and c or a" will be evaluated as "a or (b and c)" and "(b and c) or a". Previously AND/OR had the same precedence and evaluation was based on the order of terms, thus the same expressions was previously evaluated as "(a or b) and c" and "(b and c) or a" !

Heatmap in a container shrinks to tiny size after editing

Jira issue ID: QLIK-93742

Description: If using a Heat-map chart extension within a container it would, in some cases, shrink to thumbnail size on rendering.

Qlik Sense default map Diagram Layer

Jira issue ID: QLIK-93778

Description: When charts overlapped in the chart layer for the map, the obscured charts would not be displayed in the tooltip.

Exporting and importing apps causing high ram consumption

Jira issue ID: QLIK-93841

Description: Sometimes a binary load of an app used compression info from the loading app rather than the binary app. This caused the load to fail.

Performance degrade in List object search and high impact on concurrent engine performance

Jira issue ID: QLIK-93883
Description: List object search was performing very poorly on large text fields due to excessive RAM memory usage in the parallelized field search. The intense memory usage caused other users on the engine node to experience poor responsiveness.

Failing to install extensions if there is a conflicting extension

Jira issue ID: QLIK-93955
Description: The extension repository installation aborts on discovering the existence of an extension that conflicts with one of the supported extensions.

Button for navigation extension fails to open e-mail link in IE11

Jira issue ID: QLIK-94037
Description: When using IE11 the Button for navigation extension is unable to open e-mail links.

Exporting a story sometimes pivot tables are missing

Jira issue ID: QLIK-94043
Description: When exporting a story which contains embedded sheets with pivot tables, they sometimes end up missing from the output.

Color pickers in extensions sometimes display the wrong color

Jira issue ID: QLIK-94131
Description: Certain extension setups where the color picker component is used in the property description could lead to the wrong color being selected and displayed.

Custom components fail to render

Jira issue ID: QLIK-94163
Description: Custom components stopped working in Sense February 2019 release, and have now been fixed.

Inline JavaScript in the index.html causes the Hub to be blocked by Content Security Policy (CSP) header

Jira issue ID: QLIK-94212
Description: Comply with Content Security Policy - Remove Inline JavaScript code

Tabbed Container interferes with implicit text coloring

Jira issue ID: QLIK-94253
Description: When using the Background color expression functionality in a table, the text color is handled implicitly by Qlik Sense. But when that same table is embedded in the Tabbed Container Extension, this handling breaks.

Engine App Copy demotes public sheets to private

Jira issue ID: QLIK-94256
Description: Engine REST API's copy endpoint copied the public sheets of the source app but the sheets arrived at the destination app as private. This is now fixed.

The show legend "Large" option for background layer in the map doesn't do anything

Jira issue ID: QLIK-94261

Description: As the Large option shouldn't do anything in this case it has been removed from the dropdown list.

Preview of calculated field displayed incorrect values when creating a composite calculated field

Jira issue ID: QLIK-94280

Description: Using a calculated field in the expression for creating a new calculated field sometimes resulted in the preview table for the add calculated field panel showing incorrect values.

Support for tls override added to precedents service

Jira issue ID: QLIK-94285

Description: Support for the -ssl flag is now enabled for precedent service to override ssl/tls protocol.

Scheduler can end up in a state where reloading tasks will fail with 'Engine not alive' error

Jira issue ID: QLIK-94286

Description: Under certain circumstances scheduler could end up with a cached error causing some reload tasks to fail when triggered in batches.

Numeric string value selections cannot be shared with the Share button extension

Jira issue ID: QLIK-94315

Description: Selecting and sharing a value, that consists only of digits, with the Share button extension does not work. The numeric string will be interpreted as a number and selection will not match original selection.

Mashup editor crashes if there are syntax errors in the mashup code

Jira issue ID: QLIK-94338

Description: When the customer created a mashup that contained code errors the whole Mashup editor crashed. It's now fixed so even if the code contains errors the Mashup editor won't crash.

Objects not rendered in full screen

Jira issue ID: QLIK-94369

Description: Objects are rendered blank in "full screen" mode in some cases. This fix makes sure the object gets rendered properly in full screen mode.

Straight table columns could be miss-aligned after selections in RTL app

Jira issue ID: QLIK-94371

Description: Using Chrome in an app set to Right-to-left and making selections in a scrolled Straight table would sometimes make the column content and column headers become miss-aligned.

Duplicates in chart tooltip

Jira issue ID: QLIK-94392

Description: No longer show duplicates in chart tooltip for certain scenarios when using color by measure.

Collapsed rows shown for hidden columns

Jira issue ID: QLIK-94475

Description: Detailed information on a visualization showed a collapsed row for every hidden column in a table. Hidden columns are now displayed with a hyphen in the detailed information for a visualization.

"Selection App cannot be found" error message displayed in Sheet View

Jira issue ID: QLIK-94489

Description: Fix for "Selection App cannot be found" error message that may appear when viewing sheets of any apps if On Demand app service is enabled and there are security rules that uses user.environment property.

Engine in iOS Device and Simulator is crashing when opening a specific sheet

Jira issue ID: QLIK-94493

Description: The Qlik Sense Mobile application may under some circumstances terminate when opening a sheet with certain content. This has been corrected so the sheet is presented as expected.

Set-Cookie header doesn't pass the Qlik broker service after a successful login

Jira issue ID: QLIK-94562

Description: Proxy service would remove any Set-Cookie header when forwarding the response HTTP headers. Now we allow multiple occurrences of the "Set-Cookie" header key.

Static directory in JWT is not indicated in the Qlik Management Console

Jira issue ID: QLIK-94627

Description: Added missing info message for JWT attribute for user directory.

Parsing lengthy library item expressions resulting in availability issues with cognitive rules engine

Jira issue ID: QLIK-94635

Description: The cognitive rules engine now avoids parsing lengthy library item expressions to ensure availability.

ODAG - Create button is missing from App Navigation links in the Hub when using a professional license

Jira issue ID: QLIK-94638

Description: Problem caused by an error in the object schema for OdagLinkUsage. Solved by changing the schema of OdagLinkUsage to remove the offending "_reverseDirection": true attribute.

After confirming selection with enter in a pivot table or a map user is moved to edit mode

Jira issue ID: QLIK-94768

Description: When going to view mode and then making a selection in a pivot table or a map, focus is still on the view/edit button. This causes to move to edit mode when pressing enter. Following this fix, when you make selections in a pivot table or a map you will stay in view mode and selections will be displayed.

Reload of ODAG Selection Apps causes a session reset

Jira issue ID: QLIK-94841

Description: Fixed an issue with Suspend handling so that it won't get corrupted and cause Engine to crash.

URL /options/ breaks context menu in Internet Explorer

Jira issue ID: QLIK-94846

Description: The context menu (right-click menu) on objects now work as expected in IE11 when using the app integration API with a URL containing the /options/* parameter.

Closing an app with App API causes Connection lost error

Jira issue ID: QLIK-94884
Description: When closing an app with App API you will receive a Connection lost error, this error will no longer be received.

Qlik Sense self-signed root certificate missing basic constraint CA:true

Jira issue ID: QLIK-95021
Description: "X509v3 Basic Constraints: critical CA:TRUE" extension has been added to root.pem certificate. Can be disabled via "Certificates.SelfSignedRoot.BasicConstraintsCA" setting in Repository.exe.config file.

Text & Image objects sometimes display incorrect text sizes

Jira issue ID: QLIK-95030
Description: When first loading a sheet with a Text & Image object it was possible that the responsive text sizing don't run properly, this fix addresses that problem.

Issue with VizlibLibrary Barchart extension on non-touch devices

Jira issue ID: QLIK-95040
Description: When using VizlibLibrary Barchart extension in IE11 on a non-touch device the sliders connected to an expression could not be moved. With this fix you can now move the sliders for a VizlibLibrary Barchart extension in all supported browsers on all devices.

Visualization API: exportImg method doesn't work in extensions

Jira issue ID: QLIK-95062
Description: The exportImg method in Visualization API is not working in extensions but works fine in a mashup, this is now fixed.

Unable to create On-demand report with selections if data table contains more than 10K entries

Jira issue ID: QLIK-95092
Description: The On-demand reporting extension fails when trying to create a report with selections from a data table that contains more than 10K entries.

Additional Response Header not configurable for base url / 301 redirect

Jira issue ID: QLIK-95106
Description: Additional response headers were not included in the redirect response.

Expression parser memory leak fix

Jira issue ID: QLIK-95120
Description: Data Prep Service and Precedents service have been fixed to avoid leaking memory when parsing expressions, which was resulting in increasing memory consumption for the two services.

Some JWT attributes not evaluated

Jira issue ID: QLIK-95131
Description: JWT Attributes such as 'aud', 'jti' and 'iss' were not evaluated when JWT authentication was used. With the fix it is now possible to use these attributes to limit down the access and usage.

Qlik Sense widget editor Navigation.gotoSheet is not landing on top of the sheet

Jira issue ID: QLIK-95135
Description: When navigating to an extended sheet the view always resets to the top of the sheet.

'GetLayout' causing engine to become unavailable

Jira issue ID: QLIK-95139
Description: Fixed race condition issue with getting data while it's being deleted.

Box plot using Color By expression does not show Outliers when multiple selection made

Jira issue ID: QLIK-95222
Description: Fix coloring issue of outliers in a box plot.

Moment.js upgrade

Jira issue ID: QLIK-95225
Description: moment.js has been upgraded to 2.18.1. Licenses has been updated to correctly reflect the version of angularjs and momentjs used.

Deployment Based Warnings Service doesn't use the Windows s channel configuration

Jira issue ID: QLIK-95368
Description: Fix for service to pick up Windows TLS settings. This resolves issues where TLS 1.0 was disabled but the service was still enabled to use it.

Resource Distribution Service doesn't use the Windows s channel configuration

Jira issue ID: QLIK-95374
Description: Fix for service to pick up Windows TLS settings. This resolves issues where TLS 1.0 was disabled but service was still enabled to use it.

Mashup doesn't work if the user doesn't have access to the first object

Jira issue ID: QLIK-95393
Description: If a user doesn't have access to the first object in the mashup, the user can't see any of the objects even if she has access to them. "Access is denied" error is displayed.

"General Script Error" when Binary reload a qvf

Jira issue ID: QLIK-95577
Description: Saving a document after a reload can under some circumstances result in an incorrectly persisted data format. The saved document (QVW/QVF/QVD) cannot be opened (with data) by the engine or be binary loaded from. It is table and field data of certain byte sizes that are incorrectly encoded.
Note: On versions with the fault, the only way to get the data to save correctly is to run with the setting ParallelFieldWrite=0 in the appropriate Settings.ini. This setting does not restore incorrectly encoded files.

Inconsistent backward behavior after reload

Jira issue ID: QLIK-95600
Description: Selection back count was set incorrect after a scheduled reload. It should be zero as no history is kept.

Script logging management improvement

Jira issue ID: QLIK-95617
Description: Script logging can be done to three different targets:
- Progress message (shown in the Qlik Sense user interface)
- The single Engine Script log (stored according to configuration)
- One unique Script log file per reload, stored in the Script log folder.
Before this fix errors were traced line-per-line to all these log targets. If there was an error in a loop and the ErrorMode was set to 0, an arbitrarily large amount of errors could be logged. As per this fix, script errors are

still traced as before to the per-reload Script log, but they are only written once per Script line to Progress messages and to the single Engine Script log. They are also logged as Warnings to the single Engine Script log, not as Errors.

Using multiple Tabbed containers in a sheet can cause some to go white on interaction

Jira issue ID: QLIK-95792
Description: When using multiple Tabbed containers in one sheet and then switching shown tab in one, could sometimes cause the other Tabbed containers to blink or go blank.

X Axis set as Duration not working

Jira issue ID: QLIK-96025
Description: Fixed Box plot and Distribution plot not working when using a measure formatted as duration.

Odag Create Link returns error ODAG-ERR-1127

Jira issue ID: QLIK-96318
Description: Fix for Non admin user get "ODAG-ERR-1127: Failed to get the fields of the selection app" message when creating an odag link.

Values missing in Waterfall chart

Jira issue ID: QLIK-96360
Description: In Qlik Sense April 2019 some values were not visualized in the waterfall chart.

Replacing attached file results in duplicate script and numbers

Jira issue ID: QLIK-96239
Description: When trying to replace an attached file, the script is duplicated and automatically runs, thus duplicating numbers. This is now fixed.

Surrogate Character is not visible when loading from Oracle with ODBC Connector Package

Jira issue ID: QVXODBC-1632
Description: Qlik ODBC Connector package in June 2019 release adds support for "Surrogate Character" in Oracle database.

Amazon Redshift views are not getting shown in the Preview field

Jira issue ID: QVXODBC-1675
Description: Qlik ODBC Connector package correctly handles views with that are created with "no schema binding" option.

Unable to make a connection with Long User name

Jira issue ID: QVREST-850
Description: Basic Authentication updated: for specific connections it's possible now to specify user name only and leave password field empty.

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.
- Calculated dimensions is not supported by NPrinting when generating reports.
- 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.
- In Qlik Sense February 2019 or later, the Date Range Picker extension allows for a maximum of 10.000 date selections. In Qlik Sense November 2018, the limit was 5.000 selections. To use the new limit of 10.000 selections, you must delete any Date Range Picker created with previous releases (Sense November 2018 and relative patches) and create a new date picker object in Sense February 2019.
- When using a wildcard with selectmatch, the selection is found but the selection is not rendered on a chart.
- Column values swapped in a table.
- When selecting excluded values, the associated values are also cleared.
- Alternate states are not supported for Qlik Sense Mobile.
- 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 changes are made to sheets in Qlik Sense Desktop, some unspecified changes are sometimes also made. Most often happens when drawing objects.
- Cannot add a deep link to a text and image object. For example, the following link does not work: qliksenselink://rd-bda-deep1.rdlund.qliktech.com/windows/sense/app/28637e5c-ec17-44b2-bd52-03ecf79d7c29/sheet/4b040373-1a3b-44ca-926c-3c43d4155e33/state/analysis
- 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.

- Connecting to a web page through a web file fails in **Data load editor**.
  Workaround: Open Settings.ini file and change "WebFileUseWinAPI = 0" to "WebFileUseWinAPI = 1".
- Creating and editing of On-demand app navigation links on published apps is not currently supported.
- Legend does not show dimension values that are after row number 3000.
- The Exists function now requires the field_name to be loaded before its values are evaluated with the exists function. If the field_name you are evaluating is not yet loaded, you will receive a script error. The previous behavior was that the function returned neither TRUE nor FALSE, but NULL instead, so the result was dependent on the NULL handling of the surrounding context/expressions.
  Workaround: Use FieldNumber('field ') to check the existence of the field before you use the field in an Exists.
- Coloring does not work for alternative dimensions in Qlik Sense 3.1 and later. The color is grayed out.
- Color schemes on charts with multiple measures, such as bar charts, that use the Multicolored setting cannot be changed.
- Exporting a chart as an image, using a DPI setting different from the default, may result in an unexpected output.
- If using the on-screen touch keyboard within the Add Data Wizard in docked mode on a Windows Tablet, the keyboard may cover much of the screen making it impossible to edit.
  Workaround: Use the keyboard in standard mode (not docked).
- Moving sheets with the mouse is not supported for hybrid devices with Internet Explorer or Edge.
- It might not be possible to scroll to the beginning or to the end in the Expression editor when using an Android tablet.
- If running Qlik Sense on a Nexus 5 phone using Google Chrome version 41, input fields will not work as expected.
  Workaround: Fixed in later version, so use Google Chrome version 55.
- On iPhone, it is not possible to use the toolbar in landscape because the iOS user interface covers/hides it.
- Generation of the test script by pressing Ctrl+00 does not work in Qlik Sense Desktop environment when using Google Chrome or the Qlik Browser on hybrid devices.
  Workaround: Launch Qlik Sense Desktop in Internet Explorer.
- Maps may take a long time to display if the association between the first dimension and the geographical field results in a large number of items.
- Internet Explorer supports a maximum of six web socket connections.
  Workaround: See https://msdn.microsoft.com/library/ee330736(v=vs.85).aspx
- If you convert an existing visualization to another type of visualization, the thumbnail in the App overview may not be updated to depict the new visualization type.
- It is not possible to upload more than one image file at a time from a device running iOS 8.
- You need to enter username and password to download an Export image/pdf on Windows phone devices
- 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.
- It is not possible to pivot dimensions in a Pivot table on devices using IOS 8.4.1.
- If you select data from web files with UTF-8 decoding and non-ASCII characters in the caption, data may be garbled.
- In Data manager, date and timestamp field classification is disabled If the table is a result of concatenation of two or more tables.
- It is not possible to select values in the search box of filter panes that are set to select one and only one field value.
- It's not possible to insert breakpoints in the data load editor on an iPad, as tapping the line number activates the virtual keyboard.
- The hub doesn't work properly when using Internet Explorer 11 and IPv6.

- Due to a degrade introduced in Mozilla Firefox versions 52 and 53, those versions are not supported to use together with Qlik Sense 3.2 SR1 or later.
- Generating a new on-demand app – or reloading with new selections – may fail with "Payload too large" error if the overall number of selected values on bound fields is very large (i.e. many hundreds of distinct values).

Multi-node

- Multi-node only synchronizes log files when they roll from .txt to .log files. The monitor apps will not receive the data before the log has rolled.
- You may not be able to connect to a RIM node if the usage of FIPS compliant algorithms has been enabled on that RIM node.

Globalization

- Some Operating Systems have not been updated with the new Russian currency symbol. Apps created in Qlik Sense installed on an Operating System that has the updated currency symbol will show as square or scrambled when the app is opened on an Operating System that does not have the updated currency symbol.
- When creating a web-file connection, Qlik Sense cannot decode UTF-8 tables with non-ASCII characters in the caption.
- When using Internet Explorer or Chrome, and if the App name is defined with Japanese characters, you may experience the app name on browser tab being defined with Chinese characters.
- When having PC locale as Turkish, the currency symbol for Lira might be displayed as a square in the Data Load Editor instead of the actual currency symbol.
  Workaround: Set the monospace font in the browser.
- The use of Chinese, Japanese and Korean input methods in the data load editor and extension editor might not behave entirely as expected.
  Workaround: Should you run into any difficulty, you can always use a desktop editor, and copy/paste into the data load editor or extension editor.

Managing a Qlik Sense site

- The Qlik License Service does not support spaces in database password. The Qlik License Service uses the same user as the repository service to contact the database. If the password for that user contains special characters, licenses wont function properly.
- If you set up your REST data connections with a regular user account and not a service account (not meaning Qlik Sense internal service accounts, but an AD/LDAP/other user directory service account), the maximum number of parallel sessions for a single user account (5) will be consumed, and the user will be locked out.
  Workaround: Use a service account instead, and do not allocate any user/professional/analyzer access to that account.
- 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.
- If you change the name of an unpublished app that is currently open in the Hub from the QMC or by using the QRS API, the new app name will not be visible until the Hub is refreshed and some errors may occur in the log.

- If you create your own Content library, the images imported to that library will not be visible when choosing an image for Story, App or Text & Image.
- If several apps with a large number of objects are imported at the same time, the import operations may fail due to timeout issues between the repository service and the database.
  Workaround: Stop all services, change the setting of seq_page_cost to 2.0 in the PostgreSQL configuration file (postgresql.conf), and restart the services.
- If you want to use a sorting in the QMC that is different than the regional setting, you must create a new user account with the desired regional setting before installing the QMC. After installation, you cannot change sorting by changing regional setting.
- Users and groups in an environment with nested groups spread over different domains do not get synchronized.
- "Next execution" time will not be updated to show correct time if the time was altered under Date&Time on the server machine.
  Workaround: If the time is changed on server machine, restart the Scheduler service.

Qlik Sense APIs

- If you add a dimension by dragging and dropping it onto the Horizontal listbox visualization extension example, or any other custom visualization extensions based on a ListObject, you may receive a *Replace invalid dimension* error message.
  Workaround: Use the Add dimension button inside the visualization extension instead.
- Using the .NET SDK importApp method will not trigger any migration of the imported app. Apps imported with the importApp method will not be displayed in the hub and cannot be opened.
  Workarounds:
    - Migrate the app to the correct version in a Qlik Sense Desktop environment before importing it to a server installation.
    - Trigger a manual migration in the QMC of the app that was imported with the .NET SDK importApp method. Alternatively, use the REST API.

Installation

- 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. 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 also required to use the Analyzer Capacity license introduced with Qlik Sense February 2019. For more information, see "New product activation method using the License Service component for Qlik Sense February 2019 and later" in the "Upgrade notes" section of this document.
  Workaround: Use the standard key with a serial and a control number product activation instead of the signed key method. To use the standard key activation method, you must run Qlik Sense November 2018 in your Multi-Cloud installation.
- After installing or upgrading to Qlik Sense February 2019, 'License management' section in QMC might not be showing all its subsections. The 'Site license' section might not present the user with the ability of switching between LEF ('Use serial number and control number') and signed-key ('Use signed license key') based licenses.
  Workaround: To resolve that state refresh QMC, restart your browser, or restart all the services.
- 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.

- If an invalid superuser password is entered, a validation error message is shown after the installation process is complete.

Qlik Sense Desktop

- Qlik Sense Desktop does not support SAML-based authentication with an OKTA identity provider or more generally any identity provider that relies upon subresource integrity. See also: Subresource Integrity.
- Export as an image and Export to PDF will not work from Qlik Sense Desktop if you have Qlik Sense (server) installed on the same machine.
- In Qlik Sense Desktop, you have access to the Basic data only through Qlik DataMarket. To access other data packages, you have to purchase a license key.
- Sorting by expression in a Pivot table may not work as expected.
- When opening Qlik Sense Desktop, the Welcome message may be displayed even though it has previously been selected not to display the message again.
- The first time Qlik Sense Desktop is started, a security alert may be shown regarding Evented I/O for V8 JavaScript and dataprepservice.exe.
- Adding desktop authentication links from the enterprise hub will not work if the following conditions are met at the same time:
    - You are logged in as the built-in administrator in Windows 10.
    - Qlik Sense Desktop is not running in the background.
    - You are using Google Chrome or Mozilla Firefox to click the desktop authentication link.

Workaround: To make the authentication link work when you are logged in as built in administrator you have to do the following:

1. Navigate to your local security policy on your Windows 10 workstation.
2. Under Local Policies/Security Options navigate to "User Account Control Admin Approval Mode for the Built-in Administrator Account "
3. Set the policy to Enabled.
4. Restart computer.

Connectors

- 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 is not effective and the file keeps loading in the background although it might look like it has been successfully aborted.
- REST connector: After upgrading from version 1.7 or previous, to version 2.6 or later, the connector panel is not loaded and you cannot load data from any apps. This issue only appears if you used a custom directory instead of the default location during your initial install of the connector. To solve this, do the following:
    - Download and run installer for version 2.15 (June 2019).
    - Click Upgrade and follow the rest of the upgrade procedure.
    - Run the installer a second time. Select the repair option.
    - Click Repair.
- 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.

- Google BigQuery Connector in ODBC Connector Package: If a user selects Standard SQL as a Language dialect in the **Create connection** dialog, queries written or views created using Legacy SQL dialect will not work.
- DataMarket connector: Numbers may be loaded as strings if the locale has ',' (comma) set as decimal separator.
- DataMarket connector: When upgrading Qlik Sense Desktop from version 2.2 or earlier to version 3.x, Qlik DataMarket may function incorrectly.
  Workaround: Repair the installation using Control Panel/Programs/Programs and Features/Qlik Sense Desktop/Change/Repair.
- EssBase connector: The EssBase connector is not compatible with the SAP BEX connector 6.3.0.
  Workaround: Upgrade the SAP BEX connector to version 6.3.2.
- 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.

Cloud deployments and Multi-Cloud

- When accessing a Qlik Sense Enterprise on Kubernetes installations using IE11, some visualizations (scatter plot, line chart, gauge, combo chart and tree map) do not render in analysis mode.
- It is not possible to upload extension containing QVF files in Qlik Sense Enterprise on Kubernetes environments. If an extension contains a QVF file, the upload to Qlik Sense Enterprise on Kubernetes fails.
- 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.
- When exporting an app from a cloud hub using Firefox web browser, the app is correctly exported, but the file misses the qvf file extension, and any word of the app title preceded by a blank space.
- A Qlik Sense Enterprise with Multi-Cloud environment can currently include only one Qlik Sense Enterprise for Windows deployment connected to Qlik Sense Enterprise for elastic deployments and/or Qlik Cloud Services (QCS).
- Collections with names that are more than 150 characters long are not properly displayed in the cloud hub. In a Qlik Sense Enterprise hub (Windows deployment), collection values (in the custom property) can contain up to 256 characters.
  Workaround: make sure that app collections you want to distribute from Qlik Sense Enterprise for Windows to the multi-cloud environment have values with no more than 150 characters.
- When multiple applications are distributed in parallel from Qlik Sense Enterprise for Windows to Qlik Sense Enterprise for elastic deployments and/or Qlik Cloud Services (QCS), the distribution might fail partially, with only some of the apps being successfully distributed. Check Application Distribution Service log in from Qlik Sense Enterprise for Windows for details on the distribution process.
  Workaround: identify which applications failed to be distributed and try distributing them one-by-one instead of as a group. For example, execute a reload on individual applications.
- In a Qlik Sense Enterprise with Multi-Cloud environment, if you delete apps included in a collection that has been previously distributed to the cloud environment, (QSE for elastic deployments and/or QCS), the collection remains visible in the cloud hub, though it is empty.
  Workaround: the Qlik Sense administrator must manually delete the empty collection.
- If you try to access the Multi-Cloud Setup Console without read access on license information, an error message appears stating: "Failed to read the license. The Qlik Sense Repository service returned an

unexpected error."
Workaround: access the Multi-Cloud Setup Console once you are granted read access or rootAdmin rights.

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.
- VMWare browser: session lost but refresh functionality not visible in browser.
  Workaround: Click the browser's Home button or restart the browser.
- 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

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.

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 end-point at https://license.qlikcloud.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.

"idpConfigs" moved to "identity-providers" in the values.yml file

The "idpConfigs" section in the *values.yml* file has been moved from "edge-auth" to "identity-providers". In this release there is support for having the "idpConfigs" section either in "edge-auth" or "identity-providers".

Windows PowerShell 4.0 or higher required for installing Qlik Sense September 2018 or later

To install Qlik Sense September 2018 or later, you must upgrade Windows PowerShell to version 4.0 or higher.

New Duplicate action is required to duplicate apps in Qlik Sense June 2018 and later

Duplicate action has been added to the list of actions that can be assigned to users. Until Qlik Sense April 2018, duplication privileges were included in the Create action. When upgrading to Qlik Sense June 2018, duplicate permission is disabled by default. To duplicate apps in Qlik Sense June 2018 and later, Duplicate actions must be assigned to users via the Security rule editor in the QMC.

5 GB total disk space required for installation

To install and run Qlik Sense November 2018, 5 GB of total disk space is required.

Permissions required to call duplicate endpoint have changed

Behavior has changed for customers who upgrade and have previously changed the relevant default rule. The /qrs/app/{id}/copy?name={name} endpoint now requires "Read" and "Duplicate" permissions for App instead of "Read" and "Create." The default rules for Qlik Sense September 2017 and later releases have been modified to ensure that the behavior is the same as in the earlier release as long as the rules have not been previously changed.

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.

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.

Previous upgrade notes

Licensing changes to the April 2018 release

Qlik Sense Enterprise now has two new user types: Professional and Analyzer. See:

Overview of Qlik license usage

If you continue to use Token allocation, there is no change in your licensing requirements in the April 2018 release.

If you adopt user-based licensing, then prior to upgrade, check your current LEF. In the QMC, navigate to the License usage summary, Site license properties, and look for LEF Access.

If your LEF contains one or more of the following lines, you should make sure you record your current user allocation because when you apply the new LEF, the current allocations will be removed.

You have two options for adding users back:

- Manual allocation adding users to the correct user type.
- Change your current rules for auto allocation to allocate to the new user types per your preference.

  PROFESSIONAL;NN;;
  ANALYSER;NN;;
  TOKENS;NN;; (sum of Professional and Analyzer)
  IGNORE TOKENS;YES;; (The April 2018 release uses this to determine if it should continue to allocate Tokens to users or allocate the two new user types.)

Applying Analyzer license requires users to log in again

Starting in the April 2018 release, the license check occurs when the user accesses the Hub. If an Analyzer pass is applied after a user has established a QPS session, the user will get the message: "You cannot access Qlik Sense because you have no access pass." User would have to log in again. To avoid this situation, allocate the Analyzer pass before the user accesses the Hub.

Important notice

You cannot upgrade to Qlik Sense June 2017 from a Qlik Sense release earlier than 3.1 SR2. Make sure that you have upgraded to Qlik Sense 3.1 SR2 or later before starting an upgrade to Qlik Sense June 2017.

Upgrading from Qlik Sense 2.x to 3.x will modify the repository database. The upgraded 3.x database is no longer compatible with Qlik Sense 2.x. It is important that you take a backup of the Qlik Sense 2.x site before upgrading to Qlik Sense 3.x so that a rollback can be carried out if required.

Starting with the February 2018 release, the following endpoints changed

```
/qrs/about/api/default/content              -> /qrs/about/api/default/app/content
/qrs/about/api/default/datasegment          -> /qrs/about/api/default/app/datasegment
/qrs/about/api/default/internal             -> /qrs/about/api/default/app/internal
/qrs/about/api/default/object               -> /qrs/about/api/default/app/object
/qrs/about/api/default/detail               ->
/qrs/about/api/default/executionresult/detail
/qrs/about/api/default/analyzeraccessgroup      ->
/qrs/about/api/default/license/analyzeraccessgroup
/qrs/about/api/default/analyzeraccesstype       ->
/qrs/about/api/default/license/analyzeraccesstype
/qrs/about/api/default/analyzeraccessusage      ->
/qrs/about/api/default/license/analyzeraccessusage
/qrs/about/api/default/loginaccesstype          ->
/qrs/about/api/default/license/loginaccesstype
```

```
/qrs/about/api/default/loginaccessusage        ->
/qrs/about/api/default/license/loginaccessusage
/qrs/about/api/default/professionalaccessgroup ->
/qrs/about/api/default/license/professionalaccessgroup
/qrs/about/api/default/professionalaccesstype  ->
/qrs/about/api/default/license/professionalaccesstype
/qrs/about/api/default/professionalaccessusage ->
/qrs/about/api/default/license/professionalaccessusage
/qrs/about/api/default/useraccessgroup         ->
/qrs/about/api/default/license/useraccessgroup
/qrs/about/api/default/useraccesstype          ->
/qrs/about/api/default/license/useraccesstype
/qrs/about/api/default/useraccessusage         ->
/qrs/about/api/default/license/useraccessusage
```

Upgrading from Qlik Sense 3.1 SR2 to Qlik Sense June 2017 or later

Please refer to the online help for instructions: Qlik Sense upgrades and updates

Change of supported characters for virtual proxy prefix

Starting with the Qlik Sense June 2017 release, a change has been introduced regarding which characters may be used in a virtual proxy prefix. This entails that some users may need to change virtual proxy prefixes in existing Qlik Sense installations
Qlik Sense supports all unreserved characters specified in https://tools.ietf.org/html/rfc3986 in lower case as proxy prefix. "/" is allowed but not as start or end of the prefix.
This means that the following characters are allowed:
"a-z", "0-9", "-", ".", "_", "~" and "/"
This is enforced by a _pattern regex attribute in the object schema which means that both QMC and QRS use the same validation.
Please refer to the online help for instructions: Editing a virtual proxy.

Perform a database cleaning before migrating to 3.x

We recommend that customers with a large number of users or applications perform a database cleanup before migrating from 2.0.x to 3.x.
After performing an upgrade in a multi-node environment, it can take a very long time for newly created database items (such as sheets, applications, bookmarks, or tags) to appear on all nodes. This is caused by long synchronization queues between the nodes, as a result of the upgrade. All new items will be at the end of these queues. From Sense 2.2, the repository database is stored in RAM to improve the performance, for users with very large databases the database can become larger than the available RAM on the server which results in an error during startup. If you are running a large installation (users or apps) we recommend that you perform the steps described below before performing the upgrade.
Workaround: Synchronization queues will eventually finalize by themselves, but in very large environments this can take several hours. If you import a large Active Directory, it is recommended to do the following before upgrade to reduce upgrade synchronization queues:

- Make sure that you applied best practices for User Directory connectors:
  https://community.qlik.com/docs/DOC-14708
- If a large Active Directory has been imported without filters, do the following:
  1. Setup LDAP import filters, according to the best practice guide, to reduce size of imported user attributes.
  2. Remove redundant users and perform a new import of the Active Directory.
  3. Run the Database Cleanup Script, provided by Qlik, to clean the repository database before upgrading. To acquire the Database Cleanup Script, log in to the Support Portal and search for article "17620". The title of the article is "Qlik Sense Database Cleanup Script 2.x and 3.x".
  4. Restart the system and start the upgrade.

Qlik Sense 3.2 includes jQuery version 3.1.1.

Qlik Sense 3.2 includes jQuery version 3.1.1, which is the latest version. If an extension uses a version of JavaScript that does not support the latest version of jQuery, it will produce an error indicating that a jQuery version lower than version 3 is required. It is recommended that the Bootstrap used with extensions be upgraded to version 3.3.7.

Deprecated functionality

Deprecation notice for Qlik Sense - Synchronized Persistence

The synchronized persistence mechanism to share data in multiple server deployments was officially deprecated by the Qlik Sense June 2017 release.

What does this mean?

Qlik Sense has had a synchronization mechanism for storing and sharing data in a multi-server deployment, which copied data to each machine ("Synchronized Persistence"). In Qlik Sense version 3.1, Qlik introduced a new architecture and additional method for storing and sharing data known as Shared Persistence, which is more scalable than the Synchronized Persistence method. Until now, both Synchronized Persistence and Shared Persistence methods have been available in the product.

What is the impact?

Qlik has now retired the Synchronized Persistence method from Qlik Sense in the next feature release and later versions. Customers who wish to upgrade to Qlik Sense September 2017 from a version of Qlik Sense prior to June 2017 need to plan to reconfigure to use Shared Persistence first. For the majority of customers, the capabilities are the same. However, a small number of customers using geographically dispersed servers will be affected.

What do I need to do?

Customers can move from Synchronized Persistence to Shared Persistence by following some simple steps. The transition to Shared Persistence is not automatically done by upgrading, but the process to transition is not complex. For questions or assistance, please go to https://help.qlik.com or contact Qlik Support.

Repository Snapshot Manager tool removed

The automatic backup and restore tool Repository Snapshot Manager has been removed, as it was intended for deployments using synchronized persistence. Please refer to the online help for manual backup and restore procedures.

Installing and removing Qlik Sense Extension bundles from a Qlik Sense installation

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. You can install or remove Qlik Sense Extension bundles from your Qlik Sense deployment at any moment. If you have a multi-node installation, Qlik Sense Extension bundles are installed on the central node.

Do the following:

1. In **Control Panel**, open **Programs and Features**.
2. In the list of programs, double-click the extension bundle that you want to install or remove.
3. The Extension Bundle Setup Wizard opens. Click **Next**.
4. Select **Change**.
5. Accept the End-User License Agreement and click **Next**.
6. On the **Custom Setup** screen, click on the bundle icon to select how to modify the bundle installation:
    -   If the bundle is installed, select **Entire feature will be unavailable** to uninstall it.
    -   If the bundle is not installed, select **Entire feature will be installed on local hard drive** to install it.

    Then, click **Next**.
7. Click **Change**.
8. When the setup modification is complete, a message invites you to manually restart the Qlik Sense Repository Service.
9. Click **Finish** to close the Extension Bundle Setup Wizard.
10. Manually restart the Qlik Sense Repository Service to make the changes effective.

You can verify that the changes have been correctly applied by checking the Extensions section in the Qlik Management Console (QMC).

You can find the above procedure also on help.qlik.com. See the "Modifying extension bundles installation" section in the following pages:
Installing Qlik Sense on a single node
Installing Qlik Sense in a multi-node site

Change in privilege requirements for publishing apps from QMC

Beginning in Qlik Sense September 2018, the privilege requirements for users publishing app objects in the Hub have been modified. Previously publish rights were required for both the app object and stream. With this change only publish rights for the app object are required.

To ensure backwards compatibility, the default security rule OwnerPublishAppObject has been adjusted. Previously, the Conditions for the security rule were:
resource.IsOwned()=user
resource.owner=user
resource.approved="false"

An addition has been made to the Conditions so that they now are:
resource.IsOwned()=user
resource.owner=user
resource.approved="false"
resource.app.stream.HasPrivilege("publish")

The effect of the rule is that publish rights to the stream and app object are required. For customers who wish to segment the ability to publish an app object from publishing to a stream, it is recommended that the default rule be disabled and the needed adjustments to a new rule be made.

BNF script reload mode

A new script reload mode, BNF, has been introduced. In some unusual cases, users may need to disable the BNF reload mode using one of these methods:

- **Disabling BNF reload mode for the entire server:** Update the Settings.ini by adding the line EnableBnfReload=0 under the [Settings 7] tag for the default reload setting "EnableBnfReload". Restart the engine.
- **Disabling BNF reload mode for individual apps:** Add the ///$bnf off tag at the top of the script (it must be within the first 50 characters of the script). Reload the script.

Search history in smart search

Search history when using smart search is now implemented. Smart search history is not available for anonymous users. Smart search history is only visible for the user profile that performed the search.

New security properties for the Qlik REST Connector

The Qlik REST Connector has new security properties in the connection dialog. Existing connections must be modified to conform to the requirements of the new properties.

The Qlik REST Connector supports the ability to include HTTP headers in the response object. Starting with the November 2017 release (version 1.2 of the REST Connector), loading of the headers does not happen by default. It must be explicitly allowed. Existing connections that load the response headers must be reconfigured with the **Allow response headers** parameter.

Translation of Bar Chart changed for French and Traditional Chinese

The translation of Bar Chart has been altered for two languages. The new translations are for French: Graphique en barres, and for Traditional Chinese: 橫條圖.

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.

- From Qlik Sense 3.1 SR2 and forward, you need to start the Qlik Sense Service Dispatcher (QSD) service before starting the Qlik Sense Repository Service (QRS).

IdevioMaps

IdevioMaps of version 5.7.5 is supported by Qlik Sense 3.2.

Qlik Q LEAD WITH DATA

About Qlik

Qlik is on a mission to create a data-literate world, where everyone can use data to solve their most challenging problems. Only Qlik's end-to-end data management and analytics platform brings together all of an organization's data from any source, enabling people at any skill level to use their curiosity to uncover new insights. Companies use Qlik to see more deeply into customer behavior, reinvent business processes, discover new revenue streams, and balance risk and reward. Qlik does business in more than 100 countries and serves over 48,000 customers around the world.

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