Qlik Sense February 2020 Patch 11

Release notes

LEAD WITH DATA™ Qlik Q

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

What's new in Sense February 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 February 2020 release:

What's new in Qlik Sense February 2020

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

February 2020 Patch 3

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 is available in all patches listed below. It is disabled by default. If you wish to enable it, do the following:
1. Open the Repository.exe.config, which by default is located in: "C:\Program Files\Qlik\Sense\Repository".
2. Add following strings in the <appSettings> section:
   <add key="RulesEngineObjectCaching.Enabled" value="true" />
   <add key="RulesEngineObjectCaching.ReadAllThreshold" value="10" />
3. Restart Qlik Sense Repository Service.
4. Repeat these actions on each node of the cluster running the Qlik Sense Repository Service.

Available in the following and later patches for Qlik Sense (when released):
- Qlik Sense September 2019 Patch 10
- Qlik Sense November 2019 Patch 10
- Qlik Sense February 2020 Patch 3
- Qlik Sense April 2020 Patch 1

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 is available in all patches listed below. It is disabled by default. If you wish to enable it, do the following:

1. Open the Repository.exe.config, which by default is located in: "C:\Program Files\Qlik\Sense\Repository".
2. Add the <add key="UseSecurityCacheForReloadTasks" value="true" /> string in the <appSettings> section.
3. Restart Qlik Sense Repository Service.
4. Repeat these actions on each node of the cluster running the Qlik Sense Repository Service.

Available in the following and later patches for Qlik Sense (when released):
- Qlik Sense September 2019 Patch 10
- Qlik Sense November 2019 Patch 10
- Qlik Sense February 2020 Patch 3
- Qlik Sense April 2020 Patch 1

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 is available in all patches listed below. It is disabled by default. If you wish to enable it, do the following:
1. Open the Repository.exe.config, which by default is located in: "C:\Program Files\Qlik\Sense\Repository".
2. Add the <add key="UseSecurityCacheForExtensions" value="true" /> string in the <appSettings> section.
3. Restart Qlik Sense Repository Service.
4. Repeat these actions on each node of the cluster running the Qlik Sense Repository Service.

Available in the following and later patches for Qlik Sense (when released):
- Qlik Sense September 2019 Patch 10
- Qlik Sense November 2019 Patch 10
- Qlik Sense February 2020 Patch 3
- Qlik Sense April 2020 Patch 1

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

Resolved issues

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

February 2020 Patch 10

Unable to create SessionApps with SessionApp custom rules
Jira issue ID: QB-3069
Description: Fixing a problem where Engine never sent SessionApp meta data to Repository for rule evaluation.

Modified dates not consistent with Qlik NPrinting reports published to the Qlik Sense Hub
Jira issue ID: QB-3037
Description: When selecting a report in the hub, there was no guarantee that the latest version is used.

No word wrap in chart descriptions
Jira issue ID: QB-2151
Description: The descriptive text does not wrap in the asset panel preview, which causes scrollbars to appear.

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Add user filter for reports in the Hub
Jira issue ID: SHEND-243
Description: For better performance, the hub now only shows reports that you own. Before, it shows reports that you have read access to. It is possible to get the old behavior back by enabling a flag called "enable-report-sharing" in hub-service.

Configure log level in Capability Service
Jira issue ID: QB-1031
Description: The logging level in the Capability Service in Qlik Sense Enterprise can now be configured in the services.conf file with a --log-level parameter.

The parameter can be one of [info(default) | warning | error | off]

Example: --log-level error

Undo visualization properties can make property panel unresponsive
Jira issue ID: QB-860
Description: In some odd scenarios undoing a property change made the property panel unresponsive.

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Save operation can fail to update App
Jira issue ID: QB-2107
Description: When another process interacted with file locking the save operation could fail. This could happen after reload, resulting in stale data.

Text and Image
Jira issue ID: QB-1353
Description: Add sanity check on switching context for text and image object.

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Publish & Replace not working when duplicated meta data exists in the Repository DB
Jira ID: QB-1961
Description: Improved handling of duplicated data in the Engine. Will also remove duplicated meta data against the Repository when a Replace operation is triggered (Publish&Replace or Import&Replace). Engine System logs will log out for each object that is removed.

To disable duplicate clean up part of the fix:
Add the following line in settings.ini file: RemoveDuplicateAppObjects=0

P&L Pivot cannot export to XLS when sheet is published

Jira issue ID: QB-1634

Description: A permissions issue stopped the P&L Pivot table from the visualization bundle from being exported.

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Fixed dimension label visibility

Jira issue ID: QB-1059

Description: The labels above each dimension are now visible again.

Qlik Insight Bot icon is not appearing

Jira issue ID: QIBDEV-773

Qlik Insight Bot icon is not appearing in certain scenarios where 1. Qlik Sense proxy service is running on different port than 443 2. Qlik Sense multi node environment 3. custom authentication (ex. SSO, web authentication) is applied over QS authentication and QIB is not installed.

Publish and Replace not working as expected

Jira issue ID: QB-1284

Description: Publish replace does not 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 are now removed in the import step, also for import replace.

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Reload tasks get stuck randomly

Jira issue ID: QLIK-101023

Description: Additional logging and error handling added for cases where database communication fails during task status management.

Unable to edit DSN ODBC/OLEDB Connections

Jira issue ID: QB-950

Description: The edit dialog for these connection types has been fixed so that it no longer appears blank.

Algorithmic improvements to object read

Jira issue ID: QB-1186

Description: Some apps with a large number of objects spent an unusual amount of time and memory during OpenApp. An improvement to object reads have been delivered to a number of releases.

Dollar-expansion of variables in certain dimension-expressions did not update with the variable

Jira issue ID: QB-1430

Description: 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.

Ensure correct KPI color with negative values and fallback value range

Jira issue ID: QB-1509

Description: Previously, negative values could result in the wrong color being shown for KPI objects. This was caused by an incorrect way of determining which segment a value belongs to when having a) negative values

combined with b) a value range not yet calculated with respect to the value (resulting in a fallback value of zero, which escaped the mapping to the correct segment).

Straight table: Link representation added equal signs to empty query string parameters
Jira issue ID: QB-1519
Description: 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.

Engine fails to start when simple initial database calls take long to execute
Jira issue ID: QB-1597
Description: Occasionally, even very simple database operations needed during Engine startup can take time to execute, for example when the database is deployed as a cloud service. The Qlik Engine had insufficient timeout limits built into the startup sequence.
The Engine Windows service would start but then stop without logging "CNTService: The service (Engine) was started" to the Windows Event log.
Timeouts have now been increased to ensure that the intermediary Repository service is the entity enforcing timeout limits on database access.

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Straight table: Problem using the vertical scrollbar with touch mode on
Jira issue ID: QB-1427
Description: When trying to use the vertical scrollbar with touch mode on, the view would jump back to the top left corner of the table.

Improved performance for resolving linked master objects in OpenApp
Jira issue ID: QB-1426
Description: 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.

Visualization details pane not rendering new line
Jira issue ID: QB-1331
Description: New line characters were not respected in the visualization details pane anymore, making it hard to present the details in a good way.

New selection action
Jira issue ID: QB-1326
Description: A new alternative in the actions list, that uses search to make selections. Works for all type of values, but a bit slower

Canceling reload of ODAG app sometimes removes the app.
Jira issue ID: QB-1303
Description: Canceling a reload of an ODAG app should no longer remove the app.

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Fix physical keyboard causing listbox close issue on iPad on iOS1
Jira issue ID: QB-620
Description: When connecting to a physical keyboard on iPad with iOS13 version, search listbox is forced to close if tap and type into the listbox

Pivot table: Double byte character titles gave unexpected line breaks
Jira issue ID: QB-771
Description: When placing measure titles containing double byte characters (CJK) in the left tree they would word wrap even though there was enough room to expand the column and avoid word wrapping.

Add a delay between retries in case of REQUEST_ABORTED error
Jira issue ID: QB-1397
Description: Add a delay between retries in case of REQUEST_ABORTED error

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Mashups: Fixes crash when loading in IE11
Jira issue ID: QB-1244
Description: New ES2015 syntax was used in code that loaded mashups, this broke in IE11 where this syntax is not supported.

Second encryption of QVD file fails with LOCAL_MACHINE certificate
Jira issue ID: QLIK-100218
Description: If the encryption certificate is placed in the LOCAL_MACHINE location the second encryption of a QVD file will fail with a "Failed to open key ..." error message.

Same app open on additional engine due to /api/precedent/v1/precedents/scraper?appId=<AppId> request
Jira issue ID: QLIK-99996
Description: Opening Insight Advisor in a multinode configuration can open apps on multiple Engines, or Engines that aren't in the load balancing rules.

Qlik Sense Data Manager : Store into QVD statement creates a QVD when switching into the Data Manager without performing any reload
Jira issue ID: QLIK-97888
Description: When a user enters Data Manager a load script was created. This ensures no load script is created and gives the user the ability to run the load script if required or wanted.

Export to excel after switching tab doesn't export the right data
Jira issue ID: QB-1077
Description: Change tab on a container doesn't change the cell that is active on the container. This causes that when data is exported to excel from the new tab, it is exported the data of the tab that was first active when the sheet was loaded.

Selections remain active due to additional session created
Jira issue ID: QB-502
Description: Proxy service would send REST calls to DataPrep service residing on a node other than the one app was opened on, in a round-robin fashion. This would result in a websocket connection being established by DPS on both nodes. When browser was closed, only one session was closed along. Now proxy service is

looking at both X-Qlik-ServerNodeId header included in the REST call and query parameter, and if both are present, first one will take precedence when making the routing decision.

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Qlik Sense/ Qlik Sense Desktop: P&L Pivot - Column separator is misaligned

Jira issue ID: QB-959
Description: Column separator between headers is not showing correctly in P&L Pivot when using two or more dimensions.

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Forms authentication login page of Qlik Sense discloses the internal hostname

Jira issue ID: QB-28
Description: When using forms authentication and specifying ".\" instead of "domain\" as the username prefix, the internal hostname would be returned to the user upon a failed login attempt.

Download script log not longer possible with ContentAdmin and DeploymentAdmin

Jira issue ID: QB-31
Description: With the removal of 'ReadFileReference' security rule (limiting access to /qrs/filereference/ endpoint), ContentAdmin and DeploymentAdmin were unable to access script log.

Unable to download failing script log in QMC

Jira issue ID: QB-71
Description: Unable to download script log in QMC when a reload task fails due to the button for downloading script log is disabled. This only happens when engine is set to legacy mode.

Anonymous users getting allocated with access types (assignments) in license back-end server

Jira issue ID: QB-76
Description: With Analyzer Capacity license in use and anonymous access allowed, license back-end server could fill-up with unwanted assignments preventing further allocations of Analyzer type of access. With the fix licenses service returns 403 when an attempt is made.

FilePath() function works LOAD statements with joker characters.

Jira issue ID: QB-85
Description: LOAD statements can load many files by specifying a file name pattern rather than a specific file name.
Now FilePath() will return the correct file path for every matching file that is loaded.

Dollar sign expansion not working in charts

Jira issue ID: QB-178
Description: In the June 2019 release dollar sign expansion used in chart expressions could result in incomplete visualization

Improve redirect URL validation

Jira issue ID: QB-189
Description: It was possible to bypass URL validation by using HTML encoding, allowing redirection to arbitrary URLs.

Leading zeros for text values were ignored when trying to pass selection

Jira issue ID: QB-196

Description: When using query parameters with values containing leading zeroes i.e. 001234, these was treated as normal numbers (1234), this is now fixed and selections are made correctly for values/texts with leading zeroes.

QTable object mixing value columns

Jira issue ID: QB-202

Description: For objects using the "new" engine qColumnOrder for sorting, QTable was, in some cases, mixing the columns - now fixed

Data Market Essentials not free anymore once SLK is applied

Jira issue ID: QB-208

Description: QRS endpoint /qrs/datamarket/settings did not properly handle signed-key license, where a license definition is used. It would only handle LEF type of license.

Multiple app mashups race condition

Jira issue ID: QB-212

Description: For mashups using multiple apps, sometimes the objects from one or more of the apps would not be displayed due to a race condition. This is fixed.

Response to "/qrs/app/hublist/full" call when accessing the hub includes duplicates of all possible values from custom property defined on apps

Jira issue ID: QB-221

Description: For each assigned value from custom properties, JSON response to "/qrs/app/hublist/full" call would return all possible values possibly resulting in a very large response. With hub fetching all the necessary information about custom properties via the "/api/hub/v1/properties" call, it was possible to strip away the excessive custom property values from the "/qrs/app/hublist/full" endpoint, "choiceValues" property to be specific.

The column width auto-adjust doesn't work properly with percentage formatting of pivot table

Jira issue ID: QB-224
Description: Pivot table: Automatic width calculations adjusted too much to long column titles in certain cases

Activating the product with signed license key for a license with only tokens will render the system unusable

Jira issue ID: QB-227

Description: Activation of a token-only license with a signed license key rendered the system in a state where you cannot control the licenses in the QMC as the relevant rules and assignment tabs are hidden. Token-only licenses must be activated by using a serial number and a control number.

"Qlik Sense G3 Broker API" error in the hub when SAML response contains a large number of groups

Jira issue ID: QB-234

Description: Previous version of Node.js did not allow headers received by HTTP servers to exceed 8192 bytes in total to prevent possible Denial of Service attacks. Support for configurable MaxHttpHeaderSize has been added. If not configured under [globals] section in the C:\Program Files\Qlik\Sense\ServiceDispatcher\service.conf file, will default to 8192.

Error "Data profiling could not be completed" when loading data

Jira Issue ID: QB-240
Description: The error occurred because of a race condition, where DPS was profiling the loaded data in its internal session application, when another request came in that caused us to dispose of the internal session.

Images in apps disappear when exported and imported

Jira Issue ID: QB-249
Description: When exporting apps the images used in text and image objects would break, as the new path would not update properly.

Scale values repeat on axis when filtered for calculated measure of 1

Jira Issue ID: QB-251
Description: Update the tick value labels of a measure axis to avoid label duplication due to formatting.

Tables inside containers requiring a horizontal scroll bar did not show it

Jira issue ID: QB-258
Description: Pivot tables and tables stored inside Container object which are wide enough to require a horizontal scroll bar, did not show the horizontal scroll bar.

Backend license update causes Sense using core based license to prevent user access

Jira issue ID: QB-306
Description: Repository was not handling 'numberOfCores' and 'Product' as virtual properties when getting\adding from\to the database. In result those two properties always had the same default values of numberOfCores=-1 and product=Standard.:

Fix for excel export with " €" money format

Jira issue ID: QB-324
Description: Fix so that money format "# ###.00 €" is more accurately formatted for excel. Some locals would interpret the last space as a thousand separator, leading to values not being correctly formatted.

P&L Pivot extension doesn't show all the data cells.

Jira issue ID: QB-329
Description: This was a problem in the way the datacube was created and rendered in the table that it would end up showing blank cells for some of the combinations.
Note: With this fix the data is rendered correctly for all the data cells.

Date Picker not selecting date range.

Jira issue ID: QB:330
Description: Date Picker extension didn't select date ranges.
Note: The fix lets the user select a date range in the date picker.

P&L Max pagination loops value doesn't work for P&L pivot.

Jira issue ID: QB-331
Description: Pagination was not implemented to handle the page size but instead data was paged for the whole hypercube size which was too big for engine to handle and it threw an error.
Note: With the fix, Pagination is implemented to page the hypercube on a size which is less than the maximum limit of engine. Also, if the data set is bigger than the maximum pagination size supported then Error Message is shown to the user.

Expressions of the type =fieldname didn't handle comments transparently

Jira issue ID: QB-337

Description: Expressions of the type =fieldname should map to a direct field reference even if decorated with comments (// and /**/), but this was only partially supported. Trailing comments and comments between = and the fieldname where not stripped away correctly before testing for a direct field reference. This caused the expression to map to an ad-hoc field-on-the-fly or calculated dimension instead. This is not only a lot less effective, it also caused e.g. total expressions and column labels to not work as intended.
The analysis now uses the general normalized (comments stripped) expression form used in all other circumstances.

Shortcut to disable data preview for OLEDB and ODBC connectors

Jira issue ID: QB-345
Description: The 'shift' key can be held down when opening the 'Select Data' dialog associated with OLEDB or ODBC connectors. This can help in cases where third party data sources take a very long time to generate the preview.

Log Monitor Shows -1 Engine Restarts

Jira issue ID: QB-346
Description: The Log Monitor app sometimes showed "Engine Restarts" of -1 due to the way the measure was defined. The measure was updated to address this issue.

Cursor problem in the search filter Qlik Sense application

Jira issue ID: QB-349
Description: Making sure focus stays in search field when typing

The selection bar gets frozen when a dimension in a container chart is selected

Jira issue ID: QB-357
Description: When Container charts had the show condition set to false, the confirm and cancel selection bar buttons froze as the model properties of the Container chart were not updated.

Update the content of a categorical legend in case of coloring by an inner dimension.

Jira issue ID: QB-366
Description: Update the content of a categorical legend in case of coloring by an inner dimension.

'Conflict when trying to do database operation; retrying' when syncing UDC under certain circumstances

Jira issue ID: QB-378
Description: In case "ModifiedDate" value on any of the settings from "UserDirectorySettings" table got corrupt, Qlik Sense Repository service was unable to correctly update it. This would result in filling up the disk space due to great amount of excessive logs being stored in "ArchivedLogs" folder.

Tooltips in current selections is incorrect

Jira issue ID: QB-380
Description: When hovering current selections you get a tooltip showing the number of selected values over the total number of values. The selected values got an extra 0 attached, leading to numbers like 30/4 instead of 3/4.

Fix for On-demand app error odaglinkusage/previewcreateprivilege failed: Forbidden - 403

Jira issue ID: QB-389

Description: Some environments can receive On-demand app error 403 forbidden message when using an ODAG app, this fixes the issue by correctly passing the security headers.

Cannot open apps in IE11

JIRA Issue: QB-391
Description: Opening an app in February 2019 Patch 4 Update 1 would result in a blank page being displayed to the user.

Read-only security rule on tasks would not allow privileged users to view their details

JIRA Issue: QB-400
Description: Users with 'Read' action on 'QmcSection_Task' and task related resources were only allowed to view the list of tasks in QMC but not their details.

Publish and replace not working as expected

JIRA Issue: QB-403
Description: Avoid problem with App Objects being overwritten by other sessions of the same app.

Not possible to load utf16 encoded XML

JIRA Issue: QB-415
Description: Reading UTF-16 encoded XML files was broken for some time. Now works again.

Custom themes that are using the same card.css as built-in themes doesn't work

JIRA Issue: QB-451
Description: The cards look (if coming form card.css from built-in themes) doesn't work for custom themes that have included this file in the theme.

Printing service fails to render images on recent Windows versions

JIRA Issue: QB-454
Description: On recent Windows versions the Printing service internal .NET Remoting protocol has shown stability issues. Since this protocol has become obsolete it has been replaced by a local GRPC communication protocol which guarantees long-term reliability and platform-independence.

QMC is missing Qlik Sense version when IE11 is used

JIRA Issue: QB-463
Description: Internet Explorer version 11 did not support function used for showing Qlik Sense version and value of 'undefined undefined' was returned.

Share button generates URL without Virtual proxy prefix

Jira issue ID: QB-469
Description: The virtual proxy prefix was not added to the generated URL.
Note: This fix adds virtual proxy prefix if present to the URL generated by the share button.

Single object URL is not able to parse URLs that contain # (sharp) when embedding in iFrames

Jira issue ID: QB-490
Description: The Single object was not able to parse URLs that contains un-encoded reserved characters like `#`.

P&L Pivot extension is mixing values when using two or more columns

Jira issue ID: QB-493

Description: The data values were displayed in wrong columns whenever the data set had missing vaues.
Note: The fix calculates the values of cells based on header, it shall be placed in, so the values show up in correct order.

QlikBrowser crashes when Bar & area chart has multiple measures

Jira issue ID: QB-497
Description: Due to negative height calculations, there were multiple console errors in Qlik Sense Desktop and it was crashing.
Note: Fixed the height calculation so as to return positive values, resulting in no console errors.

P&L Pivot extension changes the order of the data

Jira issue ID: QB-498
Description: The reason for the data being rendered in fail cells was the conversion of the native Pivot table to P&L pivot.
Note: We have disabled the conversion to and from the P&L pivot to another sense object as this could lead to faulty results based on different sort orders of data involved.

Going to source from a story will not trigger selections from default bookmark

Jira issue ID: QB-515
Description: Previously, when there was a default bookmark saved and the user clicked on "Go to source" from a snapshot the default bookmark was applied. This should no longer be the case and any selections made for creating the snapshot will not be overridden.

Trellis Container not rendered for QSD.

Jira issue ID: QB-520
Description: Trellis Container with two dimensions is not rendered at all in the QSD.
Note: With this fix, the Trellis Container with two dimensions renders correctly in the QSD.

qlik.currApp() returns null in story mode

Jira issue ID: QB-567
Description: When navigating directly to Story Mode, the `currentApp` reference in sense-client doesn't get initialized, which caused the API to return null. Now fixed

PRODUCTLEVEL date acting as time limit for perpetual signed license key

Jira issue ID: QB-583
Description: With PRODUCTLEVEL date expired, it is now possible to activate the license on versions of Qlik Sense released before the expiry date. PRODUCTLEVEL is no longer recognized as a time limit value.

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).
- Opening the first application after login takes longer time in in Chrome version 78 or older.
- With the introduction of support for SameSite cookie, due to bugs in browsers following limitation become applicable and will result in non-functional mashups:
  - Chrome versions 51-66 and Android releases before 12.13.2 will reject SameSite=None cookie
  - Safari on MacOS 10.14 and all browsers on iOS 12 will treat SameSite=None cookie as SameSite=Strict

  Affects following and later Qlik Sense patches (when released):
  - Qlik Sense November 2018 Patch 8 Update 1
  - Qlik Sense February 2019 Patch 7
  - Qlik Sense April 2019 Patch 7
  - Qlik Sense June 2019 Patch 10
  - Qlik Sense September 2019 Patch 6
  - Qlik Sense November 2019 Patch 5

  Affects following and later Qlik Sense versions (when released):
  - Qlik Sense February 2020

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

- In a scenario with an invalid session cookie and a burst of *appcontent* requests in the hub or within the app, the rendering of app thumbnail, sheets, or stories fails until page is refreshed or the user navigates between the streams or app sections.

- 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.
- nlparser_r (Natural Language Processor) requires 1GB of memory. All Nodes will experience a service running which will consume approximately 1GB of memory. This is the natural language processing service which is used in the Insight Advisor to process natural language queries. This will be seen in all Windows versions of the product, namely Qlik Sense Enterprise and Qlik Sense Desktop.

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.
- 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.
- 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

- Version 2.15 or higher of Helm is not supported. Trying to install Qlik Sense Enterprise on Kubernetes using Helm 2.15 or higher will result in the installation procedure failing.
  Workaround: make sure you are on a Helm version earlier than 2.15.
- In a Qlik Sense Enterprise on Kubernetes or Qlik Sense Enterprise on Cloud Services environment, a tenant administrator can open apps in spaces even without having been assigned access rights.
- In Qlik Sense Enterprise on Kubernetes or Qlik Sense Enterprise on Cloud Services, when exporting data from a generic object using ExportData, the user receives Access Denied error.

- When connecting to a remote MongoDB in a Qlik Sense Enterprise on Kubernetes installation, the service fails to start if SSL is not enabled for the MongoDB instance. This happens because some services assume that SSL is enabled in MongoDB by default.
  Workaround: It is always recommended having SSL enabled in database connection. When this is not an option, you can disable ssl support by adding `?ssl=false` to the end of the connection URI. A more consistent and lower maintenance option is using the DNS Seedlist format connection string. From more information, see the "DNS Connection Format" section in the following MongoDB documentation: Connection string URI Format.
- 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.
- 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.
- 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.
- 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 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

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-admin/February2020/Subsystems/DeployAdministerQSE/Content/Sense_DeployAdminister/QSEoW/Deploy_QSEoW/Upgrading.htm

For silent upgrades, refer to the following help topic:

https://help.qlik.com/en-US/sense-admin/February2020/Subsystems/DeployAdministerQSE/Content/Sense_DeployAdminister/QSEoW/Deploy_QSEoW/Upgrading-Major-Silent.htm.

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
StatusCode: InternalServerError Response: .    Could not connect to the license
service.    NO-STACKTRACE        83b132fa-fa98-44e4-9f86-338be262a014
```

'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 Setting a default bookmark to create an app landing page.

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 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.

Qlik Sense November 2018

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

In Qlik Sense November 2018 and later 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

"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".

Qlik Sense September 2018

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.

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.

Qlik Sense June 2018

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 June 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.

Qlik Sense April 2018

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.

Qlik Sense February 2018

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
```

Qlik Sense November 2017 and earlier

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.

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

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.

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: <u>Editing a virtual proxy</u>.

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.

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.

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).

Windows 7 and Windows 8.1 support ending

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

IdevioMaps

IdevioMaps of version 5.7.5 is supported by Qlik Sense 3.2.

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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