

# Qlik Sense November 2019 Patch 7

Release notes

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The following release notes cover the versions of Qlik Sense Enterprise on Windows released in November 2019. Solved issues and limitations for Qlik Sense Enterprise on Cloud Services are also listed.

## What's new in Sense November 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 Enterprise on Windows November 2019 release:

[What's new in Qlik Sense November 2019](#)

[What's new in Qlik Sense November 2019 \(Developers\)](#)

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

### November 2019 Patch 7

#### Upgrade

November 2019 Patch 6 needs to be preinstalled before upgrade to November 2019 Patch 7. When installing patch 6, make sure to follow the update instruction for "Updated NodeJS version".

### November 2019 Patch 6

#### Updated NodeJS version

This patch for Qlik Sense updates the version of NodeJS to a currently supported version and addresses several security vulnerabilities announced by the NodeJS project.

#### IMPORTANT NOTE:

Unfortunately, for Qlik Sense deployments originally installed with versions prior to the June 2019 release this requires recreating the Qlik Sense root CA certificate.

After applying the patch please complete following steps:

- Recreating the Qlik Sense Root Certificate (Root CA) <https://support.qlik.com/articles/000094071> or
- Manually Recreating the Qlik Sense Root CA <https://support.qlik.com/articles/000097192>

For Qlik Sense deployments originally installed with the June 2019 or later releases, follow standard steps for patching Qlik Sense.

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.

### This document covers the following releases:

#### Qlik Sense November 2019

Release: November 11, 2019

#### Qlik Sense November 2019 Patch 1

Release: December 4, 2019

#### Qlik Sense November 2019 Patch 2

Release: December 18, 2019

#### Qlik Sense November 2019 Patch 3

Release: January 15, 2020

#### Qlik Sense November 2019 Patch 4

Release: January 29, 2020

#### Qlik Sense November 2019 Patch 5

Release: February 12, 2020

#### Qlik Sense November 2019 Patch 6

Release: March 4, 2020

#### Qlik Sense November 2019 Patch 7

Release: March 25, 2020

## November 2019 Patch 5

### Support for SameSite cookie.

Default behavior for https is to set SameSite=None. Default behavior for http is not to set SameSite attribute, neither the Secure attribute, just like it was before this change. Other behaviors can be configured. This change is available in all patches listed below. By default above applies. If you wish to configure other values, do the following:

1. Open the Proxy.exe.config file, which by default is located in "C:\Program Files\Qlik\Sense\Proxy".
2. Add following strings in the section <appSettings> with the desired values, in example:

```
<add key="SessionCookieSettings.Https.HasSecureAttribute" value="true"/>
<add key="SessionCookieSettings.Https.SameSiteAttribute" value="Lax"/> <!-- Valid values are NoAttribute,
None, Lax and Strict -->
<add key="SessionCookieSettings.Http.HasSecureAttribute" value="false"/>
<add key="SessionCookieSettings.Http.SameSiteAttribute" value="Strict"/> <!-- Valid values are NoAttribute,
None, Lax and Strict -->
```

3. Restart Qlik Sense Proxy Service.
4. Repeat above actions on each node of the cluster running the Qlik Sense Proxy Service.

## November 2019 Patch 3

### Exclusive fractile function

FractileExc() function is added to calculate the exclusive fractile in script and chart expressions. The function is used in the same way as Fractile() which calculates the inclusive fractile.

## November 2019 Patch 1

### Improved HTTP connection handling and queuing of simultaneous identical requests

For simultaneous and identical GET requests (based on path, query and headers), response time has been improved by grouping them in the HTTP connection handler queue, only executing one call per group and using the result of that call to respond to all the requests in that group. This results in significantly improved performance on a loaded system. It decreases the load on the service and shortens the response time for subsequent simultaneous, identical and time-consuming requests. This change applies to any GET request and performance improvements are beneficial for all endpoints with that HTTP method.

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 string <add key="UseResponseDuplication" value="true" /> in the section <appSettings>
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 November 2018 Patch 8
- Qlik Sense February 2019 Patch 5
- Qlik Sense April 2019 Patch 4
- Qlik Sense June 2019 Patch 4
- Qlik Sense September 2019 Patch 1

- Qlik Sense November 2019 Patch 1

## Resolved issues

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Qlik Sense November 2019 comes with fixes for the issues described below.

### November 2019 Patch 7

#### **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.

### November 2019 Patch 5

#### **Reload task could fail when no access to data sources.**

Jira issue ID: QB-867

Description: Reload tasks could fail if owner of the app reloaded did not have access to the data connections used.

#### **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 values.

**Note:** The fix calculates the values of cells based on header, it shall be placed in, so the values show up in correct order.

### November 2019 Patch 4

#### **Copy/Export App not possible if objects are missing in binary file**

Jira issue ID: QLIK-95271

Description: Copy/Export App not possible when meta data between Repository and Engine mismatches.

**Note:** To enable this fix, add the line `AllowCopyForMissingIdInApp=1` in `Settings.ini` (please check Qlik Community pages for instructions on finding location for `settings.ini` file)

#### **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.

### November 2019 Patch 3

#### **Add detailed tuning options for QVD Load and Store CPU usage**

Jira issue ID: QLIK-97043

Description: On certain storage solution and engine hardware the QVD Load and Store scaled poorly with multiple parallel tasks ongoing in the same engine instance. Add tuning options to limit CPU Usage for more effective concurrency between tasks, and mitigating low-order storage latency.

## **Deselect in a layer in a map having another layer using calculated dimension and calculation condition cause error**

Jira issue ID: QB-543

Description: If two layers were used in a map where one layer had a calculated dimension and a calculation condition that failed (was always false), this would cause a error dialog to appear stating that an error occurred with the following error message: "invalid hypercube object state".

## **November 2019 Patch 2**

### **Not possible to select last value of a grouped or stacked bar chart**

Jira issue ID: QB-641

Description: Fixed the problem of not being able to select a value inside the last selected group or stack in a two dimensional bar chart.

### **Qlik Sense on-demand-reporting: Reference to Sense app id lost on publish/replace and promotion between environments**

Jira issue ID: QLIK-96908, QLIK-97858

Description: To be able to solve scenarios where the Sense app id is changed, causing the NPrinting reference to fail, we have introduced an app/connection filter. This filter will enable the app creator to configure On-Demand extension to point to NPrinting connections that does not have a reference to the sense app in which the On-Demand extension is present. This will enable a few different scenarios including publish and replace, where the sense app will get a new ID, and also configuring the extensions between different environments. A typical DevOps scenario.

## **November 2019 Patch 1**

### **"Load more"-button doesn't do anything in the Global Selections Tool**

Jira issue ID: QLIK-96404

Description: A fix for when you wish to load more fields in the Global Selections tool, the additional fields load but are not displayed.

### **"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, it will default to 8192.

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

Jira issue ID: QB-389

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

### **FilePath function in Qlik Sense returns only value for the first file**

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.

## November 2019

### **GetFieldSelections gives incorrect result on Sheets that are embedded in a Story**

Jira issue ID: QLIK-92787

Description: When a Sheet with a visualization using the GetFieldSelections function was added to a Story, the function would always return an empty string when the Story was viewed after the App had been persisted and read back from storage.

### **Internal Engine error (-128) on ListObject GetLayout method when using custom variables for drill down/up**

Jira issue ID: QLIK-93966

Description: Users get Internal Engine error when making selections on a list box that uses custom variable for drill down/drill up. The issue is resolved so that drill up/drill down implementation in Qlik Sense using variables returns correct results.

### **Improved Host Header Validation**

Jira issue ID: QLIK-94685

Description: Additional validation has been added to help ensure that Host Headers round-tripped between a User Browser and the Qlik Sense server are valid and resistant to tampering.

### **Auto Save would sometimes fail to save work in the Script Editor**

Jira issue ID: QLIK-95016

Description: Through normal use of the script editor the user could get into a state where the auto-save stopped happening when new content was added. This issue causing this has been found and fixed and the autosave does not stop working anymore.

### **Objects overlapping after upgrading Qlik Sense**

Jira issue ID: QLIK-95798

Description: When upgrading Qlik Sense on Windows from a version earlier than June 2018, some apps could end up with overlapping objects.

### **Horizontal scrolling of tables not working in Qlik Sense Mobile for Android**

Jira issue ID: QLIK-96035

Description: Horizontal scrolling for tables has been disabled when in mobile sheet view.

### **Object disappearing when a sheet is published in spaces (QSE on Cloud Services)**

Jira issue ID: QLIK-96220

Description: When publishing sheet in spaces, the owner object disappears when new object is added. This issue affected Qlik Sense Enterprise on Cloud Services installations and is now solved.

### **Values on Pivot Table changed if “Show totals” is enabled/disabled**

Jira issue ID: QLIK-96451

Description: Fixed an issue with PivotTables showing wrong values in some occasions if Totals are not calculated. The issue occurred for some calculations over none-hierarchical dimensions.

### **Incorrect timestamp in script log**

Jira issue ID: QLIK-96515

Description: Timestamp in both script log filename and actual script log did not follow the same standard as other engine log timestamps. Now ISO 8601 is used.

Note: This affects QV-12091 as timestamps are changed from UTC to local time.

### **Letter 'a' in the DLE Output window with the time stamps**

Jira issue ID: QLIK-96592

Description: A change in formatting timestamps caused these timestamps to be showing incorrectly. Timestamps now display correctly as per the locale set.

### **Apps not shown in hub stream when adding language/<code> to stream URL**

Jira issue ID: QLIK-96654

Description: With this fix, apps are properly shown even when adding language/<code> to the stream URL.

### **"Disable animation" not working on Map**

Jira issue ID: QLIK-96719

Description: Map no longer animates to selection if animations are disabled in the Single Configurator.

### **On Demand Reporting extension returning "Server Access Blocked by Server" message**

Jira issue ID: QLIK-96733

Description: On demand is trying to fetch available NPrinting connections before a login attempt has been done. With this fix the login attempt will occur before on demand is trying to fetch available connections.

### **Axis showing negative scale even if the data does not contain negative values**

Jira issue ID: QLIK-96786

Description: Axis show negative scale even if the data does not contain negative values. With this fix the axis do not show negative values if the dataset does not contain negative values.

### **Extensions cannot display Qlik objects from other apps using Visualization API**

Jira issue ID: QLIK-96802

Description: Changes in retrieving app properties led to errors when opening an object from a different app. App properties of the current app are now always used to open an object.

### **Mashup scroll problem on mobile devices**

Jira issue ID: QLIK-96827

Description: When scrolling on a mashup from a mobile device containing a line chart, the chart does not respond to the scroll gesture.

### **Bar chart is showing same length regardless of measure value**

Jira issue ID: QLIK-96898, QLIK-96911

Description: Range definition null handling in bar chart. The issue concerned the evaluation of null() inside of the range definition for the y-axis.

### **Qlik Sense extension returns the whole extension layout instead of the object itself**

Jira issue ID: QLIK-96917

Description: This fix addresses a drop-down on data issue where the entire extension layout is returned instead of the object.

### **Mailto links configured in navigation button do not work as expected**

Jira issue ID: QLIK-96964



Description: When clicking a navigation button with a mailto link, the email client was failing to open. The logic for handling mailto links is now updated and email client is correctly opened when clicking the navigation button.

#### **Lost added scripts in Data load editor**

Jira issue ID: QLIK-96986

Description: In Qlik Sense April 2019, changes in data load editor were not saved when closing the window.

#### **Set Analysis in Trellis container does not place the expression correctly**

Jira issue ID: QLIK-97005

Description: Trellis container fails to recognize set analysis in a basic visualization.

#### **App migration status is unknown after upgrade**

Jira issue ID: QLIK-97019

Description: For information on this fix, please see the entry "'Version' column for apps in QMC and migration of apps created with Sense 3.1 or earlier" in the Upgrade Notes section of this document.

#### **In capability APIs, listing masterobjects does not work as documented**

Jira issue ID: QLIK-97039

Description: Using the getList method with MasterObject as parameter does not work, and a user needs to use lowercase masterobject for type. This fix automatically sets lower case for all types, so that it does not matter if the type is KebabCase or CamelCase.

#### **Cannot select Dimension in a one-value bar chart**

Jira issue ID: QLIK-97041

Description: This fix allows selection on a dimension which has one value.

#### **Setting qDef.qAccumulate causes internal engine error**

Jira issue ID: QLIK-97048

Description: Turning qDef.qAccumulate on for a specific measure can cause internal engine error under specific circumstances. This issue is resolved and the qDef.qAccumulate setting works as expected.

#### **Non-key fields stored as key fields in tables**

Jira issue ID: QLIK-97054

Description: Some non-key fields got tagged as key field when the user has a reload which includes store functions together with drop tables under specific conditions. This resulted in an ill-shaped view when the user looked at the data model viewer. The root cause has been resolved so the fields get tagged correctly.

#### **"Data Manager" and "Add Data" visible even the user has no right to create app**

Jira issue ID: QLIK-97069

Description: User must have access to create apps to use the Data Manager and Add Data.

#### **Filter Pane with Drill Down Dimensions missing icon**

Jira issue ID: QLIK-97075

Description: Added the missing drill down icon.

### **Replacement of NULL values in the Data Manager not working**

Jira issue ID: QLIK-97089

Description: Fix issue where one could not replace null value or empty string in data manager. Data manager now supports replacement of empty string.

### **Reload error when using GeoGetPolygonCenter() function**

Jira Issue ID: QLIK-97101

Description: Geo functions could cause error during evaluation if provided with incorrect data. Passing incorrect data to some of the Geo functions could lead to an error. Following the design of evaluation, the behavior has been changed to return a null value instead of an error message.

### **Charts not showing the configured colors after upgrading to Sense June 2019**

Jira issue ID: QLIK-97118

Description: This fix solves coloring in primary mode for old bar charts.

### **Unhelpful error message when uploading a file with a long name**

Jira issue ID: QLIK-97165

Description: The error response sent to a user trying to upload a filename longer than 260 characters was not helpful to the user and included unnecessary information from the server.

### **Unable to set Segment value as expected in Sense June 2019**

Jira issue ID: QLIK-97166

Description: Remove transformation for dot(.) calculation in fixed value state.

### **Analyzer capacity license consume only 6 min with anonymous user regardless the duration**

Jira issue ID: QLIK-97191

Description: With analyzer capacity license anonymous user would consume only 6 minutes despite longer usage.

### **Error message when accessing QMC using IE 11**

Jira issue ID: QLIK-97193

Description: In Sense June 2019, when accessing the Qlik Sense Management Console using Internet Explorer 11, filtering tasks or apps, and selecting one of the items in the list, the following message is returned: Qlik Object doesn't support property or method 'find'.

### **Error message when accessing QMC using IE 11**

Jira issue ID: QLIK-97194

Description: See fix for QLIK-97193.

### **Appearance for section axis inverted**

Jira issue ID: QLIK-97197

Description: Fix axis docking for the combo chart and scatter plot in RTL mode.

### **Publish and Replace time is significantly longer with applications that have a high AppContent**

Jira issue ID: QLIK-97206

Description: Publishing via replacing an app with high AppContent would take long time to complete due to unnecessary for that operation generation of virtual properties.

### **Fetching list of extensions takes more time than expected**

Jira issue ID: QLIK-97301

Description: When loading certain extensions, an additional call to the QRS was being made that caused the extension to take longer to load. This issue has been fixed by making sure only one call is made.

### **Object missing when importing an app from Sense April 2018 to Sense June 2019**

Jira issue ID: QLIK-97359

Description: This fix allows rendering of bar charts that do not have the colorMapRef property.

### **App load order in Mashup causes On-Demand to lose connection**

Jira issue ID: QLIK-97402

Description: Load order of apps in a mashup affects On-Demand extension. The app where On-Demand originates from must be loaded first in order to keep connection. With this fix the load order is no longer important. On-Demand extension now preserve the connection regardless of load order.

### **Set analysis formulas are incorrectly changed in trellis containers**

Jira issue ID: QLIK-97414

Description: Any complex formulas were not created correctly by Trellis container. This fix makes it possible to create complex Set Analysis expressions or Trellis Containers with Advanced Mode.

### **Selections applied in wrong field in straight table when using "show column if"**

Jira issue ID: QLIK-97514

Description: Selections was applied in wrong fields. Fixed issue where Column Index were not calculated correctly in Engine.

### **Trellis container issue**

Jira issue ID: QLIK-97541

Description: Due to an issue in Qlik Sense June 2019, in some cases the trellis container showed just one dimension.

### **Climber extension not working after upgrade to Sense September 2019**

Jira issue ID: QLIK-97633

Description: The method "inClient" has been added again for third-party extensions together with a deprecation notice. This fixes issues with rendering specific versions of some extensions like "Climber Custom Report".

### **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.

### **Google Big Query Connector error when selecting legacy mode**

Jira issue ID: QVXODBC-1730

Description: The Google Big Query Connector failed to select data when using Legacy Mode.

### **GBQ connector: "Validate" button sends request via system proxy instead of connector proxy**

Jira issue ID: QVXODBC-1792

Description: Since version 6.16.1 of Qlik ODBC Connector package, Google BigQuery Connector provides option "Use Proxy Server". However, after pasting confirmation code and clicking "Validate", the request to exchange confirmation code to authentication token is sent via the system proxy of the Qlik Sense server instead of the proxy server provided in "Use Proxy Server" of the connection.

### **REST connector does not recognize compressed data**

Jira issue ID: QVXREST-876

Description: Since version 1.4, REST Connector can receive compressed data and decompress it. Decompression however was sometimes failing. Now the connector behaves as expected.

# Known issues and limitations

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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.

## Non-functional mash-up after SameSite upgrade

With the introduction of support for SameSite cookie, due to bugs in browsers following limitations 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

## 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](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

- 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.

## 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 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

- 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. For 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

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## 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 enabled by default with the default value of 2 seconds. If you wish to 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 configure set "InvalidSessionRequestBurstLimit" setting to the desired value
- To disable set "InvalidSessionRequestBurstLimit" setting to 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 `currse1` for [Single Integration API](#).

## Qlik Sense February 2019

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

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

The Qlik Sense Master node needs access to an internet connection. Port 443 is used for accessing the endpoint at <https://license.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](http://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: [Editing a virtual proxy](#).

## 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

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### **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

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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.



## 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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