

# QlikView

# April

# 2020

Release notes SR3

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# What's new in QlikView April 2020

## What's new in QlikView April 2020 SR3

### QlikView Plugin for Internet Explorer on Microsoft Edge

The QlikView Plugin for Internet Explorer can now be made to run in Microsoft Edge. See more in support document.

### Limitations on URL launch

Due to security reasons, limitations on how URLs can be launched have been imposed in QlikView Plugin for Internet Explorer and in QlikView Desktop. The Ajax client is however not affected.

### Bugs

This release addresses a number of bugs. See below under "Resolved Issues".

## What's new in QlikView April 2020 SR2

### Improved performance management

The number of queued tasks has been added to the Management Service performance counters.

### Support for large apps in the cloud

QlikView now supports the Expanded and Dedicated Capacity in the cloud, which is sold as a separate offer. This means that apps that are 10 GB on disk and use less than 50 GB primary memory can be loaded.

### Bugs

This release addresses a number of bugs. See below under "Resolved Issues".

## What's new in QlikView April 2020 SR1

### Internet Explorer ActiveX plugin security issue

This release addresses a security weakness filed with Jira issue ID: QV-20715. For more information, read the following security bulletin:

[QlikView IE ActiveX plugin Control Local Command Execution Vulnerability](#)

## What's New in QlikView April 2020 IR

The following is a list of new features and improvements included in this release of QlikView. For a list of system requirements see the System requirements page:

[System Requirements for QlikView](#)

## ANALYTICS MODERNIZATION

The April 2020 release is directly tied to the launch of our Analytics Modernization Program, enabling QlikView customers to modernize their BI platform by leveraging the investment already made in QlikView.

Furthermore, customers will now be able to automate QlikView document uploads to the Qlik Sense Enterprise SaaS hub for consumption. The QlikView April release specifically provides the following new features in support of this effort.

### This document covers the following releases:

QlikView April 2020 IR  
Release: April 27, 2020

QlikView April 2020 SR1  
Release: August 13, 2020

QlikView April 2020 SR2  
Release: October 1, 2020

QlikView April 2020 SR3  
Release: December 1, 2020

## Automate QlikView Document Uploads

Distribute on-premise QlikView apps to the Qlik Sense Enterprise SaaS hub to use both products side-by-side, in conjunction with the Analytics Modernization Program or Dual Use licensing (former offer).

[Publish QlikView documents and links in a Qlik Sense cloud hub](#)

## QlikView IE Plugin Client in Qlik Sense Enterprise SaaS

The QlikView Internet Explorer (IE) plugin is now supported for QlikView apps in Qlik Sense Enterprise SaaS.

[QlikView in cloud editions of Qlik Sense](#)

## Extension Support

Accessibility extension and Geo-analytics extension for QlikView is available in Qlik Sense Enterprise SaaS.

[QlikView in cloud editions of Qlik Sense](#)

## QlikView Publisher license key support

QlikView April 2020 includes support of signed license keys in QlikView Publisher supporting the Analytics Modernization Program and unified licensing.

[QlikView Publisher License](#)

## QVD encryption

QlikView April 2020 adds support for QVD encryption. Like Qlik Sense QVD Encryption, QlikView can now read and write encrypted QVD files.

[QVD Encryption](#)

## Allow Mail bookmark as a link for Analyzer users

QlikView April 2020 now allow QlikView analyzer users to mail bookmark links. In the previous release, this was restricted to professional user types only.

[File menu > Mail with Bookmark as a Link...](#)

## Exclusive Percentile

QlikView April 2020 adds Exclusive percentile function support.

[FractileExc - script function](#)

[FractileExc - chart function](#)

## Make the QDS more resilient when system stalls out

QlikView April 2020 includes the following improvements to make the QDS more resilient if the system stalls out:

- If the load balancer is locked, the QMC now displays "Cluster is down" in the task menu.
- QlikView now tries to reopen a file for 10 seconds instead of for one minute, which leads to quicker response in logs about locked files.
- If QlikView fails to grab Loadbalancer.xml on disk it will revert to the in-memory cached load balancer if such exists.
- Emails about Cluster is Down can be sent by setting up config parameter "ServiceFailureAlertEmailAddresses" in QMS program files.

## Support for QlikView QDS Alert email for AD Security Groups

With QlikView April 2020 you can also send QDS alerts to Security Groups.

[Alert E-mail](#)

## Upgrade notes

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There are no upgrade notes for this release.

## 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.

### Upgrade may cause QlikView become unlicensed

Upgrading may in some circumstances result in the QlikView installation becoming unlicensed. Reapplying your license solves the issue.

# Resolved issues

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QlikView April 2020 comes with fixes for the issues listed below.

## QlikView April 2020 SR3

### **QixPerformanceLog shows unknown values for ObjectID and Objecttype**

Jira issue ID: QV-18273

The QixPerformanceLog had lost the assignment of ObjectID and ObjectType for QlikView sheet objects. This has been restored.

### **Expression Suggestions disabled in the plugin**

Jira issue ID: QV-19033

The fix enables expression suggestions and colored key words for the 32-bit plugin.

### **QVD Store occasionally hangs in reload**

Jira issue ID: QV-20266

QVD Store operations could under some circumstances, timing and hardware dependent, hang and become completely unresponsive. The hang occurs on a very low level and can affect both Qlik Sense and QlikView.

### **Cross-site scripting (XSS) vulnerability with jQuery 3.4.1 and below**

Jira issue ID: QV-20277

jQuery upgraded to version 3.5.1. This replaces the fix delivered in SR2 which was found to be insufficient.

### **Straight table columns drag'n'drop fixes**

Jira issue ID: QV-20571, QV-21107

Moving columns, particularly when hidden/disabled columns are present are now be better handled

### **Unexpected vertical lines appear in List box**

Jira issue ID: QV-20716

Right border in list box last column is now removed

### **Authenticated user is not listed in sessions log on QV 12.50**

Jira issue ID: QV-20734

This change fixes issue where "Authenticated User" field is empty in QVS Session Log.

### **Mail with Bookmark link causes a server error.**

Jira issue ID: QV-20820

The issue is that calculated dimensions weren't taken into account when cycling a group. Including them solves the issue.

### **Missing data in chart in exported Excel after upgrading to QV 12.5**

Jira issue ID: QV-20899

Mini chart / gauge data cell values are missing when exported to Excel from PivotTable and Straight Table. This change fixes it.

### **Date format turns into number when used in a variable on NPrinting report**

Jira issue ID: QV-21006

Date loaded into QV without specifying any format, would be exported as number when sent to excel from PivotTable or Straight Table. This change fixes it.

## QlikView April 2020 SR2

### **Date formatting in NPrinting incorrect**

Jira issue ID: QV-20513; QV-20940

Description: Dates are shown as numbers in NPrinting

### **Direct free text search not working**

Jira issue ID: QV-20758

Description: After upgrading to QV12.50 it is not possible to directly free text search. The user needs to first click the drop-down arrow.

### **Excel export produce the wrong number formatting**

Jira issue ID: QV-20560; QV-20652; QV-20673

Description: Incorrect results for Excel export. Zero is sometimes shown as blank cell, and numbers are sometimes formatted as text.

### **DSC: Manually added users create error messages**

Jira issue ID: QV-20405

Description: It should be possible to turn off DSC lookup for manually added users.

### **License button not showing if browser window is narrow**

Jira issue ID: QV-20381

Description: QlikView: The "Assign license" button is not showing if the browser window is not wide enough

### **Cross-site scripting issue**

Jira issue ID: QV-20277

Description: Cross-site Scripting (XSS) Vulnerability with JQuery 3.4.1 and earlier

### **Alert e-mail is not sent as it should**

Jira issue ID: QV-20112

Description: Alert e-mail is not sent, " No QlikView Engine was available after waiting for 45 minutes"

### **Zoom does not work properly in IE Plugin**

Jira issue ID: QV-20101

Description: Document sheet tabs are not scaled by ZoomFactorForHighDPI

### **Open in server can cause process to hang**

Jira issue ID: QV-18964

Description: qv.exe hanging after QlikView Desktop is closed. It happens only with "open in server", not with local documents.

### **Server nodes show "Off duty" when network interface card teaming is used**

Jira issue ID: QV-18789

Description: QVS Nodes Showing Off Duty with Teamed NICs

### **Intermittent failure of Publisher distributions of big documents to Qlik Cloud**

Jira issue ID: QV-20848

Description: Failed QV distributions to QCS with Big Apps - Unauthorized in Collection Service

## QlikView April 2020 IR

### **Fixed issue related to column positions causing straight table to crash**

Jira issue ID: QV-19971

Description: Negative column positions for dimensions and expressions in straight tables are now handled without crashing.

### **Fail of image display in text object when its path includes wide characters**

Jira issue ID: QV-19746

Description: The fix improves Unicode character handing in image paths.

### **QlikView ajax client: Scroll position moves from left to right with no manipulation of the user**

Jira issue ID: QV-19678

Description: When scrolling, the object could continue to scroll all by itself. This has now been improved and the scrolling will end at the correct position.

### **Straight table export should now work for tables with hidden columns**

Jira issue ID: QV-19665

Description: Export of straight tables with hidden/disabled columns (introduced in 12.40 SR2) is now working.

### **IE Plugin issue: Mail with bookmark as a link not working**

Jira issue ID: QV-19645

Description: This functionality has been restored and is now working.

### **Text object alignment corrected**

Jira issue ID: QV-19633

Description: Text objects using the settings "Horizontal Scrollbar" and "Text Margin"=0 are now rendered with the correct text alignment.

### **Missing SameSite cookie attribute**

Jira issue ID: QV-19466

Description: QlikView does not specify the "SameSite" attribute on cookies leaving it up to different browser implementations to restrict cookies. Default "SameSite" value for QlikView April 2020 release is "LAX".

### **IPv6 issue: 2 QVS nodes of 5 total QVS node cluster listed as offline**

Jira issue ID: QV-19448

Description: Avoid double counting QVS nodes when in IPv6 environment.

### **QlikView Directory Service Connector: Enabling LDAP channel binding and LDAP signing**

Jira issue ID: QV-19376

Description: Changed the way the QlikView Directory Service Connector binds the LDAP connections to comply with future Microsoft change: <https://portal.msrc.microsoft.com/en-us/security-guidance/advisory/adv190023>.

### **Current selections now available for server in text file export.**

Jira issue ID: QV-19359

Description: Changed so that the "SelectionStampInTextExport" setting works in server.

### **Input field edit box should now correctly scale with zoom**

Jira issue ID: QV-19336

Description: The edit box that is used to change a value in an input field is now adjusted for zoom factor.

### **Random behavior with section access**

Jira Issue ID: QV-19307

Description: Reload of section access with concatenate load could randomly fail

Note: A Concatenate Load in the Section access segment could randomly fail if the section access table contained several fields other than the special Access fields (for example OMIT) and one of these fields were



concatenated to.

### **QlikView Distribution Service: Show Task Details on QMC (Document log) shows an Error on Windows Event log and QMC**

Jira issue ID: QV-19294

Description: Direction to the QVS document folders shown if document log is too big to display in QMC.

### **Loading QVD as XML shows different options in the Wizard**

Jira issue ID: QV-19284

Description: When loading a QVD using Table Files, and change file type to XML, the field "NoOfRecords" is missing in the wizard. This issue has now been fixed.

### **"-port=number" option of QVDistributionService.exe doesn't work**

Jira issue ID: QV-19211

Description: Setting port number as a parameter when running QDS in batch mode now works.

### **Chart axis labels not fully visible**

Jira issue ID: QV-19133

Description: Chart axis labels that contain line breaks, will now be fully rendered.

### **QlikView export to Excel does not show zeros**

Jira issue ID: QV-19063

Description: Fixed an issue where exporting a field with REAL number format to Excel, the result number did not contain trailing '0' correctly.

### **QlikView Ajax Client: Calendar object doesn't work properly in Japanese Language Setting**

Jira issue ID: QV-19052

Description: In drop-down menu the character "月" was missing for October to December.

### **Multiboxes in containers stuck in cases**

Jira issue ID: QV-19009

Description: Multiboxes in containers were not getting all information about activities outside the container, and were therefore not updating.

### **Endpoint info is not included in Session Log when session is closed for specific reasons**

Jira issue ID: QV-19007

Description: Fixed the issue where client sessions were closed because either of

- session expired after idle time
- killed because Named User Cal was Needed from another client

The client/server endpoint info was not logged properly before.

### **GeoAnalytics: DrillDown failing when a calculated dimension is used with error: Unexpected exception occurred**

Jira issue ID: QV-18976

Description: When creating an extension object with a calculated dimension and a drilldown group, an unhandled exception could occur. This has now been fixed.

### **QlikView Management Service: LBE does not set a valid license flag for perpetual dual use licenses**

Jira issue ID: QV-18970

Description: Fixed a problem where LBE did not set a valid license flag for perpetual dual-use licenses.

### **Reduce Data crashes QlikView**

Jira issue ID: QV-18963

Description: Fixed an issue where Reduce data could cause QlikView to crash.

### **QlikView Desktop: Edit Expression dialog of Input Box is not shown as expected**

Jira Issue ID: QV-18958

Description: Edit expression dialog popup of Input box did not adjust to the sheet zoom factor properly, which led to a flawed presentation.

### **Trendline equation positioning improved.**

Jira issue ID: QV-18957

Description: Now handling positioning of trendline equations so that they should always be visible.

### **Reload issue - Reload stops working**

Jira Issue ID: QV-18862

Description: Fixed a problem where CMD reload did not work due to an introduced degrade.

### **QlikView Ajax Client: Restore values options when right clicking on Input Field in table are not available**

Jira issue ID: QV-18855

Description: Options for Restore values were missing from the context menu on Input fields in tables. These have now been added.

### **Replace bookmark does not work in AJAX when using button object replace and apply bookmark action**

Jira issue ID: QV-18850

Description: Fixed an issue when replace and apply bookmark failed, it did not contain the bookmark id for the action when it was executed.

### **Axis labeling distancing now consistent for x-axis with scrollbar**

Jira issue ID: QV-18849

Description: The values on the x-axis now have the same distance as you scroll to different positions.

### **QlikView Access Point, Ajax and QMC: Insecure handling of csrf attacks**

Jira issue ID: QV-18812

Description: Protection against cross site request forgery was session based and not request based.

### **Fixed unnecessary space above bars when multiple "Value on Datapoint" expressions used**

Jira issue ID: QV-18807

Description: Multiple expressions using "Value on Datapoint" option now only allocates space above bars once.

### **IE plugin of April 2019 shows AUTOMATION ERROR with Windows 7/10 32 bits**

Jira issue ID: QV-18806

Description: QlikView plugin now works in the 32-bit version of Windows 7.

### **Copy State Contents is not copying state as set**

Jira issue ID: QV-18720

Description: Bookmarks created after selection from an action button triggered text search was applied wrong.

### **QlikView Ajax: Selections doesn't work as it should when using Firefox**

Jira issue ID: QV-18714

Description: Fixed an issue where the object was moved instead of selected when several values was marked by dragging a square around them.

### **Limit number of ticks allowed on user defined axis.**

Jira issue ID: QV-18712

Description: Limit number of ticks allowed on user defined axis. "ChartAxisTickLimit" user setting introduced to give user possibility to override (default value 100).

### **QlikView Ajax Client: Listbox search magnifying glass disappear before you can write the search string**

Jira issue ID: QV-18656

Description: When list box objects were included in a container, search entry could sometimes be interrupted.

### **QlikView Ajax Client: Button object cannot be triggered with keyboard space key**

Jira issue ID: QV-18644

Description: Button objects can now be triggered with the Space bar and Enter key.

### **QlikView Distribution Service: Distribution Task successful - logfile says <Error>diskFull**

Jira issue ID: QV-18628

Description: Fixed a problem with filtering out error messages from QVS and fail tasks.

### **QlikView Ajax Client: Copy Selections copies only the visible selections**

Jira issue ID: QV-18535

Description: Menu text has been updated to reflect that only visible selections are copied.

### **Wrong labels for groups after cycling**

Jira issue ID: QV-18496

Description: Use updated properties to set groups labels after cycling the group.

### **Selections by clicking on the axis in grid-charts sometimes select wrong values**

Jira issue ID: QV-18475

Description: Corrected an issue with indexing when values on grid-chart axes were selected.

### **Improved handling of logarithmic scale**

Jira issue ID: QV-18368

Description: Charts using logarithmic scale in combination with static step setting for axis could not handle an undefined result from expression (Divide by zero).

### **Blank images in Report Editor's preview**

Jira issue ID: QV-18297

Description: In the preview of reports from the Report Editor, images have erroneously been blank in previous QlikView releases.

### **Dynamic Updates (DU) freeze and cannot be used afterwards**

Jira issue ID: QV-18265

Description: Corrected a deadlock produced when performing DU and opening the same simultaneously.

### **File Wizard quoting for WHERE clause**

Jira issue ID: QV-18249

Description: All values except numerical are now correctly quoted when constructing a WHERE clause using the file wizard.

### **Load Script query WHERE statement for accessing data in QVD gets cutoff**

Jira issue ID: QV-18195

Description: Improved ability to parse extremely long statements with several hundred operators such as 'OR', 'AND' or concatenation with '&'.

### **Horizontal scrollbar for Straight Table in a Container not working correctly**

Jira issue ID: QV-18171

Description: For a Straight Table in a Container, if a horizontal scrollbar is moved to the right, some data was not always shown and some columns were empty.

### **Where Exists Takes Longer After QlikView 12.30 Upgrade**

Jira issue ID; QV-18169

Description: Fixed a problem where using the "where exists" clause when loading from QVD in QlikView could take much longer time after upgrading to QlikView 12.30 or later.

### **QlikView Web Service: Typo in warning message of the QVWS**

Jira issue ID: QV-18156

Description: Typo corrected.

### **Harmonizing the behavior of straight tables in containers between AJAX and classic desktop.**

Jira issue ID: QV-18155

Description: The horizontal scrollbar for a straight table in a container should only show under the expression values, if these are visible in the current size of the container.

### **QlikView Access Point: Application stuck during logging in**

Jira issue ID: QV-18149

Description: Fixed a problem where the Login dialog could open in compatibility view causing the application to hang.

### **"Unknown Load Statement Error " after QlikView Server Upgrade from 11.2 (SR12) to Nov 2018**

Jira issue ID: QV-18147

Description: Fixed problems with loading XLS files using different casing for example "Workbook" or "BOOK".

### **SubField() result changes between QV November 2017 and April 2019**

Jira issue ID: QV-18144

Description: Corrected support for SubField without field\_no in expressions.

### **QlikView Distribution Service: Inheritance reverted after reloading**

Jira issue ID: QV-18124

Description: Reworked the way ACL lists are set after reloading of QVW file.

### **QlikView QMC: JavaScript error when opening via QlikView Desktop**

Jira issue ID: QV-18122

Description: After opening the QMC from QlikView Desktop, you could get a JavaScript error when changing tabs in the QMC.

### **Document chaining return different results**

Jira issue ID: QV-17992

Description: Bookmarks created after selection from an action button triggered text search where applied wrong.

### **Numbers with default format exported to XLSX with extra digits.**

Jira issue ID: QV-17805, QV-17184, QV-17899

Description: Numbers in objects with no predefined format, were exported as "REAL" number in XLSX, this caused exported numbers to have an extra digit. This change fixed the issue.

Note: When there is no predefined format, numbers will have exported as "TEXT" in XLSX instead to align the object layout as in QlikView.

### **QlikView Ajax: multiple values are selected even if "Always one selected value" is checked**

Jira issue ID: QV-17892

Description: Fixed a problem with multiple values selected with a search string for a "One And Only One" field.

### **QlikView: Cross site scripting vulnerability in setting the sheet title in QlikView and viewing it in mobile.**

Jira issue ID: QV-17878

Description: The use of character <%= led to cross site scripting vulnerability in the sheet title.

Note: By replacing character <%= with <%- in the template this behavior is no longer seen. <%- will escape HTML characters from the string.

### **Front End issue - QV request sometimes fails silently in backend when exporting straight table box with hidden columns**

Jira issue ID: QV-17814

Description: When saving the QlikView document, it could prompt a Message Box that could not be answered in case of QVB execution. This is now overridden for QVB a log message is written.

### **QlikView Web client/Access Point/Management console: Vulnerable version of jQuery**

Jira issue ID: QV-17806

Description: jQuery is now upgraded to version 3.4.1.

### **Error when opening a file with Section Access and PRJ-folder**

Jira issue ID: QV-17785

Description: The project load was incorrectly restarted over again eternally, when a password was required.

### **Decrease of performance when trying to load a large amount of data from a QVD**

Jira issue ID: QV-17784

Description: Fixed a problem with decreased performance in some QVD loads.

Note: Avoid applying formatting to numerical data loaded from QVD fields unless the QVD field format is explicitly given. This restores the old performance numbers for plain, un-formatted numerical data without sacrificing formatting consistency. The application of specified formats to numerical fields is a costly but desired operation if the QVD fields are formatted, e.g. for date-time fields or currency.

### **Boxplot rendering improved**

Jira issue ID: QV-17781

Description: Boxplot rendering should no longer crash.

### **Table content in straight table in container is empty**

Jira issue ID: QV-17662

Description: Fixed an issue for horizontal straight tables in containers, where the total column was on the right side of the table and a horizontal scrollbar was needed, table content was empty in the view.

### **QlikView Web client: Extra space for navigation buttons in container object**

Jira issue ID: QV-17586

Description: Made container look like 12.10 desktop by setting NavigationAreaSizedOnlyByLabels=2.

### **QlikView Ajax Client: Scrollbar disappears in text box**

Jira issue ID: QV-17541

Description: Text box scroll was not updated when text box content changed.

### **Container with listboxes flickers**

Jira issue ID: QV-17509

Description: Fixed a problem when a container with many listboxes was resized, it started flickering.

### **Documents not unloaded correctly from server.**

Jira issue ID: QV-17501

Description: Documents now unloads correctly when "Allow only one copy of document in memory" option is enabled.

### **FrontEnd issue - Cell popups work differently in QV 11.20 and 12.30**

Jira issue ID: QV-17333

Description: Cell popup functionality is now restored. It had been accidentally disabled by a previous degrade.

### **QlikView: Applying a variable cause extension to refresh from 12.20**

Jira issue ID: QV-17299

Description: Resolved an issue that caused unnecessary subscription to global doc state when applying variables. Therefore, unnecessary refresh of objects, including Extensions, could be triggered.

### **Rendering fails when using SKIA rendering engine**

Jira issue ID: QV-17292

Description: Handle bit queries outside of bitmap without crashing.

### **Bookmark not behaving as expect in QV 12.30 SR1**

Jira issue ID: QV-17191

Description: A document with an action and 'always one selected' produced the wrong results when a bookmark was applied.

### **QlikView Management Service: DSP Settings for DSC Configurable ODBC calls driver name "Data source name"**

Jira issue ID: QV-17173

Description: The field "Data source name" has been renamed to "Data source driver name".

### **Reload issue - OnPostReload trigger does not work properly when using macro with user defined functions in QlikView Version 12.30**

Jira issue ID: QV-17102

Description: Restored previous functionality disabled by an accidental degrade.

### **Linked containers not synchronized between sheets**

Jira issue ID: QV-17058

Description: When linked containers were on different sheets, the same object was not the active object in both containers. That information is now propagated between sheets.

### **QlikView 12.30SR1 Report shows wrong results, changes selection in Listbox**

Jira issue ID: QV-16985

Description: Bookmarks created after selection from an action button triggered text search were applied wrong.

### **Macros should now work after calling ActiveDocument.Reload**

Jira issue ID: QV-16981

Description: Fixed a problem with catch exception and reset recurrences counter when running macros.

### **Text on axis positioning adjusted**

Jira issue ID: QV-16963

Description: Text on axis is now correctly positioned.

### **Numbers on Datapoint in Mekko Charts**

Jira issue ID: QV-16929

Description: Non-stacked values on data point can now be used in Mekko charts.

### **After upgrading to QV12.3 SR1, in AccessPoint, the text color in list box changed**

Jira issue ID: QV-16866

Description: Fixed a problem where font colors and background colors for excluded values in List boxes changed after upgrade.

### **SharedFiles issue - Purge Tshared or Shared result in every Server Bookmark being hidden in IE Plugin view**

Jira issue ID: QV-15829

Description: Restored functionality that was accidentally disabled by a degrade.

### **Calendar Date Selection Pop-Up for date fields in AJAX does not refresh**

Jira issue ID: QV-15733

Description: When the conditions for the date selection pop-up changed, the client was erroneously using old (cached) data for the pop-up.

### **Reload issue - The save part of a reload takes longer on a Documents when there are a lot of Document-Bookmarks in the Document**

Jira issue ID: QV-15070

Description: The version 5 bookmark serialization has been done in parallel to the QIX bookmarks, but the loading has been done such that QIX bookmarks completely overrode any v5 bookmarks. This double storage and fallback has been the same since at least QlikView 5.60. The change still supports loading v5 bookmarks, but they will no longer be saved.

### **Decreasing stress from TShared files**

Jira issue ID: QV-14779

Description: This is an optimization that decrease the amount of times TShared writes to disk.

### **WebView issue - OnChange trigger with Doc Extension does not work in WebView in Desktop**

Jira issue ID: QV-14029

Description: OnOpen trigger to execute actions for WebView is now allowed.



## 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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