What’s new in QlikView 12.10

The QlikView 12.10 release improvements are focused on scalability and performance, both in QVS and QDS cluster environments. With the improvements in QlikView 12.10:

- QVS clusters can now scale to more nodes, users, and documents.
- Publisher can now handle more simultaneous tasks and more nodes, with better performance and stability.

In QlikView 12.10, support has been added for:

- Browser/web: Internet Explorer 11 and ActiveX Plugin for MS Windows 10.
- Operating system: iOS10.

Full System requirements can be found here: System Requirements.

NEW FEATURES INCLUDED IN THIS RELEASE

Improved QlikView Server clustering and scaling

- Improved Shared file caching significantly improves response times in high-load situations to a specific document.
- New PGO file offline mode. This improves access to PGO files for high-load scenarios in QVS clusters that have many concurrent users in the system. This will allow for scaling to more nodes and more concurrent users.
- Improved ramp-up capacity. Significantly more users per second can now enter a cluster during peak hours.

Unbalanced QVS clustering

- With the release of QlikView 12.10, a QlikView Server cluster can now manage nodes of different sizes with respect to CPU, RAM, and number of cores. See Unbalanced QVS Clustering for detailed information.
Performance and scalability in AccessPoint

QlikView 12.10 improves caching in QlikView AccessPoint. This feature significantly decreases response times when scaling to a large number of documents and/or users.

Publisher load balancer

QlikView 12.10 adds the concept of publisher groups and regular and dedicated tasks for load balancing purposes. A publisher group is a subset of a QDS cluster. Each publisher group is given a unique name, and the set of QDS nodes (one or more) can be configured. For more information, see Clustering QlikView Distribution Service. The main features are:

- Adds configurations that allow for certain tasks to be designated to particular nodes within a QDS cluster to improve handling of resource-demanding tasks and utilize nodes of different sizes and capacity.
- Adds overload protection with a new Queued status for tasks that are not able to start due to overload. For a list of QMC task statuses, see Tasks.

Publisher high-load support

QlikView 12.10 optimizes the inter-service communication in high-load situations. This will improve stability and performance in situations with many concurrent tasks and high-frequency changes. This results in the following improvements:

- Adds a reliable means of monitoring task progress that is not tied to a system value such as LastWriteTime.
- Breaks down the single notification entity into smaller entities to improve the notification architecture related to task execution, upgrade the tasks flow, and remove bottlenecks.
- Implements a graceful retry for tasks that fail due to timeout when the system is under load.
- Introduces configurations that allow high-demand files to be moved to SSD nodes within a configuration.

Expanded QMS API

In QlikView 12.10, the functionality of the QMS API has been expanded with additional methods and new API calls. The following table shows the functionality that has been added to the QMS API with the corresponding methods that enable it:

<table>
<thead>
<tr>
<th>Functionality</th>
<th>Method used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add: QVS service, QDS service, DSC service, QVWS service</td>
<td>UpdateServices</td>
</tr>
<tr>
<td>Update DSC settings</td>
<td>GetDSCAPISettings, SetDSCAPISettings</td>
</tr>
<tr>
<td>Rename DSC</td>
<td>GetDSCAPISettings, SetDSCAPISettings</td>
</tr>
<tr>
<td><strong>Functionality</strong></td>
<td><strong>Method used</strong></td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>Add AD</td>
<td>GetDSPAPISettings, SetDSPAPISettings</td>
</tr>
<tr>
<td>Modify AD settings</td>
<td>GetDSPAPISettings, SetDSPAPISettings</td>
</tr>
<tr>
<td>Rename QVWS</td>
<td>GetQVWSSetting, SetQVWSSetting</td>
</tr>
<tr>
<td>Update QVWS settings</td>
<td>GetQVWSSetting, SetQVWSSetting</td>
</tr>
<tr>
<td>Change from SQL to XML</td>
<td>GetQVPRAPISettings, SetQVPRAPISettings</td>
</tr>
<tr>
<td>Change from XML to SQL</td>
<td>GetQVPRAPISettings, SetQVPRAPISettings</td>
</tr>
<tr>
<td>Update XML backup path</td>
<td>GetQVPRAPISettings, SetQVPRAPISettings</td>
</tr>
</tbody>
</table>

A number of API calls have been added to QlikView 12.10, most of which are related to QDS load balancing. The calls enable users to check whether they have any distribution groups set up and get the associated definitions, and check whether the QDS load balancing configurations have any errors.

The new QDS load balancing calls are as follows:
- GetAllDistributionGroups
- GetAllMissingDistributionGroups
- GetDistributionGroups
- GetDistributionGroupsDefinition
- HasAnyDistributionGroups
- IsQdsLoadbalancerConfigured
- QdsLoadBalancerConfigHasErrors

There are two other new API calls:
- GetTemplateFolderId. Returns the ID of the template folder.

**QDS shutdown improvement**

You can now allow running tasks to finish before shutting the QDS service down. While the QDS is shutting down, new tasks cannot be started. The shutdown is initiated in the QMC by pressing the shutdown button. The grace time given to tasks can specified in the QDS.exe.config by using the ServiceStopGracetimeInSeconds configuration parameter. By default, the QDS shutdown waits 1800 seconds.
SAP HANA access with single sign-on
QlikView can now be configured for single sign-on access to SAP HANA, see Configuring SAP HANA for SAML Single Sign-On with QlikView.

KNOWN ISSUES IN THIS RELEASE:

NPrinting 17.x and QlikView 12.10 compatibility
Due to an outstanding compatibility issue between NPrinting 17.x and QlikView 12.10, we recommend that customers using both products wait for QlikView 12.10 SR1 to upgrade their QlikView environment.

OTHER CHANGES INCLUDED IN THIS RELEASE:

Named CAL quarantine period increased
The quarantine period for a named CAL is increased from 24 hours to 7 days.

Changed behavior in QlikView 12.10 scripts:
- Changed error handling when mapping tables
  During reload, when using the script function ApplyMap, if there is an attempt to map tables that are not valid mapping references, the reload will now fail. Previously, unsuccessful ApplyMap statements would be ignored and the reload would complete successfully. The new behavior will let users know if the script is failing to apply a map as it was expected from the script. If the ApplyMap is unnecessary it can be removed or commented out.

- Windows UNC syntax and URL syntax cannot be mixed
  From version 12.10, Windows UNC syntax and URL syntax cannot be mixed in the same path. In version 12.00 this was possible, but could lead to ambiguous interpretations.

Examples of syntax that is not allowed:
\path withSpace x\filename%20withSpace.xxx
File:\path withSpace\filename%20withSpace.xxx

Examples of allowed syntax:
\path withSpace\filename withSpace.xxx
File:\path%20withSpace\filename%20withSpace.xxx
- **FileList and DirList**

The FileList and DirList options of the for each..next command have changed behavior. They now return a corrected path if the user sends in a malformed path.

**SECURITY CONFIGURATION: RECOMMENDATION**

**Header injection protection**

Since QlikView 12.00 SR5, protection against header injection attacks has been available. It is a QlikView Web Server feature, but is disabled by default. To enable it, change the value of the EnableHeaderChecking configuration option in QVWebServer.exe.config to **TRUE**. This configuration file can be found in **ProgramData/QlikTech/WebServer**.