Administering QlikView

QlikView®
September 2026
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Contents

1 Introduction ... 6
1.1 Status ... 6
1.2 Documents ... 6
1.3 Users ... 6
1.4 System ... 6
2 QlikView Publisher Document Administrators ... 7
3 Status ... 8
3.1 Tasks ... 8
Functions ... 8
Edit Task ... 10
Run Task ... 10
Stop Task ... 10
Show Task Details ... 10
Hide Task Details ... 11
Refresh Options ... 11
QlikView Distribution Service machine status ... 11
3.2 Services ... 11
Service Name ... 12
Running On ... 12
Status ... 12
Show Alert ... 12
Information ... 12
Shutting down a QlikView Distribution Service ... 14
3.3 QVS Statistics ... 14
Open Documents ... 15
Active Users ... 15
Performance ... 15
Documents and Users ... 18
4 Documents ... 19
4.1 QlikView Document Types and Functions ... 19
4.2 QVF support in QlikView ... 20
Supported functionality ... 20
Limitations for QlikView QVF files ... 20
4.3 Source Documents ... 20
Functions ... 21
Templates ... 23
Wizard Start Page ... 25
General ... 43
Reload ... 44
Reduce ... 45
Distribute ... 48
Document Information ... 55
Triggers ... 56
Search Functions ... 63
Server ... 64
4.4 User Documents ... 69
Search Document ... 70

Configure Document Settings 70
Server 70
Authorization 76
Document Information 78
Reload 79
Document CALs 82
4.5 Publish a link to a QlikView document in the Qlik Sense hub 84
QlikView documents 85
Before you begin 85
QlikView certificate requirements 85
Configuring Qlik Sense to allow users to publish a link to shared content 85
Configuring the QlikView Distribution Service with the Qlik Sense certificates 86
Creating a task to publish a link to a QlikView document in the Qlik Sense hub 88
4.6 Publishing QlikView documents and links in a Qlik Sense cloud hub 89
Choosing between publishing a document and a link 90
Connecting QlikView Server to a Qlik Sense Enterprise SaaS deployment 90
Publishing a QlikView document in a Qlik Sense cloud hub 92
Publishing a link to a QlikView document in a Qlik Sense cloud hub 97
5 Users 100
5.1 User Management 100
Search User 100
View and Manage User 100
CALs 100
Server Objects 102
Groups 103
Documents 103
Distributions 104
User Management Search Functions 105
5.2 Section Access Management 106
Section Access Tables 106
Manage Section Access Tables 106
6 System 111
6.1 Setup 111
Management Service 111
QlikView Servers 115
Distribution Services 131
Directory Service Connectors 139
Add 141
Delete 142
Preparation of machine one 142
File transers between the two machines 144
Preparation of machine two 144
6.2 Directory Service 145
Add 145
Delete 145
6.3 Functions 146
Custom Users 146

Delete 147
Custom User Groups 147
Delete 148
Groups table 149
Entity table 149
Add 149
Delete 151
Add 152
Delete 153
Add 154
Delete 154
Add 155
Delete 155
QlikView Web Servers 155
Respect Browsable Flag on Mount 161
Add 161
Delete 161
Remote Management Services 165
Mail Server 168
License Service 172
Cloud Deployments 173
6.4 Licenses 176
QlikView Publisher 176
QlikView Server 178
License lease 180
Refresh 182
Identify User by 182
Allow License Lease 182
Allow Dynamic CAL Assignment 182
Refresh 183
Assign Users 183
Name 184
Refresh 184
User 185
Machine ID 185
Time (UTC) 185
Refresh 185
6.5 About 189
About this QlikView System 189
6.6 Supporting Tasks 189
External Programs 189
Database Command 200
Pause 209
QVD Creation 218
6.7 Log Collector 228
Collected files 228
Collecting and exporting log files 228

1 Introduction

In this guide you will find information on how to configure and manage a QlikView site using the QlikView Management Console (QMC).

The QMC gives access to the QlikView Server (QVS) and the QlikView Publisher (QVP) module settings. It also supports the control of multiple instances of the QVS and multiple Publisher execution instances, from a single management console, by means of an integrated tree view control.

The QMC user interface is primarily built up of tabs, containing pages, tree views, folders, panes, and dialogs.

1.1 Status

The Status section covers information about tasks that can be scheduled, and also information about the different QlikView services in Windows. You also find information about QlikView Server statistics.

1.2 Documents

The Documents section includes information about source documents, assigned tasks and user documents.

1.3 Users

In the Users section, you will find details on user management and information about managing section access.

1.4 System

The System section covers setup, licensing, and supporting tasks. Additionally, you will find details on how computer information and services are presented in Windows.

2 QlikView Publisher Document Administrators

The QlikView Publisher (QVP) allows delegation of task creation and task management to non-QlikView Administrators, that is, users that are not within the QlikView Administrator Windows group. These limited users, the `QlikView Publisher Document Administrators`, `Document Administrators` in short, are useful when multiple administrators are working with the QVP. This might, for example, be applicable in a large enterprise deployment with a shared infrastructure.

> *This feature requires a QlikView Publisher (QVP) license key.*

In the QlikView Management Console (QMC), users can be assigned permission to the source document folders of the QlikView Distribution Service (QDS). In the QlikView Server (QVS) settings, users can be assigned to either the entire QVS, or to specific mounted folders that Document Administrators should be allowed to work with. Document Administrators that are logged into the QMC are only allowed to create and modify tasks on the source documents in these folders, and they cannot amend any system settings or CAL allocations in the QMC. A QlikView Administrator can also control if the triggers on the tasks worked with by the Document Administrator are enabled or disabled by default.

> *The System tab is unavailable for Document Administrators and Supervisors. This means that they cannot access supporting tasks.*

Permissions on the folders of the QVS are given on the Folder Access tab.

Permissions on the source documents, are given on the General tab, where also the status of triggers created by the Document Administrator can be set.

After having configured a Document Administrator, and used that user to login to the QMC, a restricted version of the QMC will be presented. The Document Administrator is only allowed to work with the source documents that this user has permissions on.

3 Status

The `Status` tab contains the following pages:

- Tasks, where tasks can be edited, started, and stopped.
- Services, where QlikView services hosted in Windows can be supervised.
- QVS Statistics, where data for the QlikView Server can be viewed.

3.1 Tasks

On the `Tasks` page, all tasks are presented and can be edited, started, and stopped.

Functions

Search Task

Enter the desired search term(s) in this text box, to find tasks, and click on the `Search` icon, .

Filter and Sort

The listed items can be filtered in various ways. A black `Filter by...` icon, , on a column indicates that a filter is not used on that column. A blue `Filter by...` icon, , on a column indicates that a filter is used on that column. For more information about the respective column filters, see the description of each column header.

The sort function is only available when using a filter. Each click on a sort icon, or , in a column, or on a column name, toggles between ascending and descending sort order. Only one column at a time can be used for sorting; the active column having a revealed sort icon. By default, the list is sorted on the `Name` column.

Name

The tasks are presented alphabetically in a tree view, in a sort order depending on the names of the QlikView Servers and task categories. If no category was set in the `Select Category` field when a task was configured, the task is presented in the `Default` folder.

To filter by category, click on the `Filter by Category` icon, , in this column, and select/deselect the desired criteria in the dialog, by ticking/unticking the check boxes. To reset (that is, not use) the filter, deselect all criteria by clicking on the `Clear Filter` button. To confirm any change in the dialog, click on the `OK` button.

Executed on

The machine that is executing the task, if a task is running.

If the task is not currently running, it displays the machine that last executed the task.

There is no filter available for this column.

Status

The current status of each task is indicated by one of the following alternatives:

- `Waiting`
- `Warning`
- `Failed`
- `Running`
- `Aborting`
- `Queued`
- `Unrunnable`

To filter by status, click on the `Filter by Status` icon, , in this column, and select/deselect the desired criteria in the dialog, by ticking/unticking the check boxes. To reset (that is, not use) the filter, deselect all criteria by clicking on the `Clear Filter` button. To confirm any change in the dialog, click on the `OK` button.

The available options are the status indicators, but in alphabetical ascending order.

Publisher Group

The group of machines associated with each task

To filter by status, click on the `Filter by Publisher Group` icon, , in this column, and select/deselect the desired criteria in the dialog, by ticking/unticking the check boxes. To reset (that is, not use) the filter, deselect all criteria by clicking on the `Clear Filter` button. To confirm any change in the dialog, click on the `OK` button.

Last Execution

The time stamp for the last start attempt of the task.

To filter by last execution, click on the `Filter by Last Execution` icon, , in this column, and select/deselect the desired criteria in the dialog, by ticking/unticking the check boxes, selecting options, and entering dates where applicable. To reset (that is, not use) the filter, deselect all criteria, including entered dates, by clicking on the `Clear Filter` button. To confirm any change in the dialog, click on the `OK` button.

The following options are available:

- `Period`, where one criterion can be selected, only:
  - `Last Hour`, that is, within the present hour up to the current time, for example, if the current time is 09:12, the range is from 09:00 to 09:12.
  - `Earlier Today`, that is, within the present day up to the current time, for example, if the current time is 09:12, the range is from 00:00 to 09:12.
  - `Earlier This Week`, that is, within the present week, for example, if the current time is 09:12 on a Wednesday, the range is from Monday 00:00 to Wednesday 09:12.

    - `From... - To...`, where an empty field means 'no limit', and the dates are selected in the Date Picker dialog.
- `Never`, meaning that tasks that have never been executed are presented, only.

Started/Scheduled

The time stamp for when the task was last started, manually or scheduled, or the time for when the task is scheduled to be started. To filter by started/scheduled, click on the `Filter by Started/Scheduled` icon, , in this column, and select/deselect the desired criteria in the dialog, by ticking/unticking the check boxes, selecting options, and entering dates where applicable. To reset (that is, not use) the filter, deselect all criteria, including entered dates, by clicking on the `Clear Filter` button. To confirm any change in the dialog, click on the `OK` button.

The following options are available:

- `Period`, where one criterion can be selected, only (`On a Schedule`):
    - `This Hour`, that is, within the present hour, for example, if the current time is 09:12, the range is from 09:00 to 09:59.
    - `Today`, that is, within the present day, meaning that the range is from 00:00 to 23:59.
    - `This Week`, that is, within the present week, meaning that the range is from Monday 00:00 to Sunday 23:59.
    - `From... - To...`, where an empty field means 'no limit', and the dates are selected in the Date Picker dialog.
- `On Event from Another Task`.
- `On External Event`.
- `On Multiple Events` (`On Multiple Events Completed`).
- `Not Scheduled`, meaning that tasks that have not been scheduled are presented, only.

Edit Task

To configure the task, click on the `Edit this Task` icon, .

Run Task

To run a task, click on the `Run this Task` icon, .

Stop Task

To stop a running task, click on the `Abort this Task` icon, . This removes the task from the queue.

Show Task Details

To view the following task details and log, click on the `Show Task Details` link:

- `Task Details`, presenting the following:
  - `Configuration Summary`, including task recipients, task triggers, and information for the distribution to cloud deployments such as the cloud deployment name, collections, recipients (users or groups), and triggers.
  - `Details`, including the details of the task and the execution of it; `Name`, `Category`, `Distribution Service`, `Type`, `Document`, `Status`, `Running on`, `Last execution`, `Last executed on`, `Started/Scheduled`, and `Average duration of successful executions`.

    A task with a multiple event trigger lists all events that must be completed.
- `Task History`, presenting the following:
  - `Execution Started`, presenting the time the task was last started.
  - `Status`, presenting the present status of the task; `Succeeded` or `Failed`.
  - `Duration`, presenting the period of time during which the task has been executed.
- `Log`, presenting the logs of the latest task executions.

> *Tasks only displays the last 30 days of the QlikView server's tasks. Tasks are dependent on QlikView log files, which are set to be deleted after 30 days. You can change how long log files are kept before being deleted.*
>
> Logs and error codes

Hide Task Details

To hide the task details and log, click on the `Hide Task Details` link.

Refresh Options

To enable a periodic and automatic update of the list in the left pane, tick the `Automatic Refresh of Task List` check box. To disable the automatic update, untick this check box. To update the list manually, click the `Refresh` icon, , which is only available when the automatic update is disabled.

In order to make a change of the refresh state persistent, cookies must be allowed in the browser.

QlikView Distribution Service machine status

When a QDS machine is down, an orange status bar is displayed at the top of the page. The status bar provides the name of the QDS machine that is down. The status of the tasks that are being run by this machine is set to `Unrunnable`and a black skull icon is displayed.

3.2 Services

The Services page presents a status overview of the Windows services. From here you can shut down the QlikView Distribution Service (QDS).

Shutting down a QlikView Distribution Service

The status of the services is automatically refreshed.

Service Name

When running a QlikView Server with a QlikView Publisher (QVP) license, the following services are presented:

- `QlikView Directory Service Connector (DSC)`
- `Qlik License Service`
- `QlikView Distribution Service (QDS)`
- `QlikView Management Service (QMS)`
- `QlikView Server (QVS)`
- `QlikView Web Server (QVWS)`

When running a QlikView Server without a QVP license, the following services are presented:

- `QlikView Management Service (QMS)`
- `QlikView Directory Service Connector (DSC)`
- `Qlik License Service`
- `QlikView ReloadEngine` (not a service)
- `QlikView Server (QVS)`
- `QlikView Web Server (QVWS)`

To view the status of a service in the right pane, `Messages`, click the service in the left pane.

Running On

The **Running On** column shows the name of the server on which the service is running. If a service is running on multiple servers, the number of servers is presented.

Status

The current status of the service. The possible statuses are the following:

- `Running`
- `Disconnected`
- `<Number of servers running> of <total number of servers in cluster> running`, if one or more servers in the cluster are down (but not all).
- `Invalid Setup`, if multiple instances of the QlikView Management Service are running.

Show Alert

Select the checkbox to enable the alert function in case a service is disconnected.

Information

Service status messages

Click on a service under **Service Name** to view any status messages for that service. The message is displayed, and underneath, the name of the service followed by the status.

List of custom settings applied to config files

If your deployment is upgraded to QlikView November 2018 or later, a list shows non-default config values applied to the DSC, QDS, QMS, QVWS and QVS services in your deployment.

Select a service under **Service Name**. If one or more custom values are set, a section called **Non default config values for machine <machine-name>** is added in the information tab. If a QlikView service runs on multiple machines, a separate list of non-default values is created for each machine. If there are no custom values for the selected service, the message **All values are default** is displayed instead.

When a QlikView service is run on multiple machines, these machines should have the same config values, unless specific differences are needed. If QlikView Server identifies discrepancies for the same config setting on different machines, a section called **Anomalies detected** is added below the non-default config values section. This section lists for which settings the config values don't match on different machines.

In the non-default config values list, each customized setting is listed under **Setting** and displayed as it is in the *exe.config* file. Values modified by the admin are listed under **Existing Value**. Original values are listed under **Default Value**.

> *For QlikView Server (QVS), if you change a value that is available as a setting in the user interface—either through the user interface or by editing the Settings.ini file—these changes do not appear in the non-default view. To see all current settings and values, check the Settings.ini file directly.*

See the examples below.

Example 1:

The service is running without any reported problems.

<machine-name>: Running

All values are default

Example 2:

All services in the cluster are running without any reported problems.

<machine-A>: Running

<machine-B>: Running

Non default config values for machine <machine-A>

<machine-A> config values

Setting	Existing Value	Default Value

DSCCacheSeconds	910	900
DebugLog	true	false

Non default config values for machine <machine-B>

<machine-B> config values

Setting	Existing Value	Default Value
DSCCacheSeconds	910	900

Anomalies detected

DebugLog

Shutting down a QlikView Distribution Service

From QlikView 12.10, the QMC provides a method for shutting down the QlikView Distribution Service (QDS), in a controlled way, a so-called graceful shutdown. This shuts down the QDS service, therefore allowing for maintenance activities, for example.

For a graceful shutdown of the QDS, a switch button icon is provided in the service status message for a QDS service. When you click the switch button, during a pre-configured grace period, any tasks running in the QDS are allowed to complete. If a task is not completed during the grace period, it is stopped. During this grace period, no new tasks can be started on that QDS service.

Do the following:

1. Under **Service Name**, click the QDS service you want to shut down.
   You might have to expand the tree browser of services if you are using clustered servers.
2. In the **Information** area, click the switch button icon.
3. Confirm that you want to shut down the QDS service.
   Graceful shutdown of the QDS is started. Any tasks not completed during the grace time will be stopped. The default grace period is 30 minutes.

To configure the grace period for graceful shutdown of the QDS, change the value of the following key in the QVDistributionService.exe.config file: `ServiceStopGracetimeInSeconds`.

3.3 QVS Statistics

On the `Statistics` page, the live statistics on all of the QlikView Servers that are managed by the QlikView Management Console (QMC) are presented, sorted on the following tabs:

- Open Documents, where basic information about open documents is presented.
- Active Users, where users and the number of documents they are currently keeping open are presented.
- Performance, where the QlikView Server (QVS) system performance parameters are presented.
- Documents and Users, where open documents and the users currently using them are presented.

Open Documents

On the `Open Documents` tab, the paths to, and the number of sessions towards, any open document are presented.

Path

The path and file name of the open document, relative to the root of the server.

Example:

```
mydirectory/myfile.qvw
```

Sessions

The number of sessions towards the open document.

Active Users

On the `Active Users` tab, the users and the number of documents they are currently keeping open are presented.

Name

The domain and name of the user(s).

Example:

```
COMPANY\user
```

Number of Documents

The number of open documents.

Performance

On the `Performance` tab, the following QlikView Server system performance parameters (`Name`), and their values (`Value`), are presented:

Performance parameters

Name	Value
`ExeType`	Type of QlikView Server build.
`ExeVersion`	Full version number of QlikView Server.
`Timestamp`	Date and time when log entry was created.
`DocSessions`	Total number of document sessions (one user + one document = one document session) that exist at the end of the interval.

Name	Value
AnonymousDocSessions	Total number of document sessions (one user + one document = one document session) with anonymous user that exist at the end of the interval.
TunneledDocSessions	Total number of document sessions (one user + one document = one document session) with tunneled connection that exist at the end of the interval.
DocSessionStartsSinceMidnight	Total number of document sessions (one user + one document = one document session) started since midnight (server local time).
RefDocs	Number of documents loaded at the end of the interval for which there is a session at the end of the interval.
LoadedDocs	Total number of documents loaded at the end of the interval.
IpAddrs	Total number of distinct IP addresses connected at the end of the interval. Note that tunneled sessions and multiple users originating from the same IP address cannot be distinguished.
Users	Total number of distinct NT users connected at the end of the interval. Note that anonymous users cannot be distinguished here.
CPULoad	Average CPU load from QlikView Server during interval.
VMCommitted	Size in MB of virtual memory actually used by QlikView Server at the end of the interval. This number is part of VMAllocated(MB) and should not exceed the size of the physical memory in order to avoid unacceptable response times.
VMAllocated	Size in MB of virtual memory allocated by QlikView Server at the end of the interval (VMAllocated(MB)+ VMFree(MB) = total maximum virtual memory space available to the QlikView Server process).
VMFree	Size in MB of unallocated virtual memory available to QlikView Server (VMAllocated(MB)+ VMFree(MB) = total maximum virtual memory space available to the QlikView Server process).
VMLargestFreeBlock	Size in MB of the largest contiguous block of unallocated virtual memory available to QlikView Server. This number is part of VMFree.

Name	Value
UsageCalBalance	The amount of user CALs available '-1.00' denotes that usage CALs is not used.
TimeZoneBias	Time offset (in minutes) compared to GMT.
GBytesOfRamConfigured	Minimum amount of RAM (in GBytes) configured for (and allocated to) QlikView Server.
NumberOfCores	Number of cores used by the server.
RecentCpuPercent	CPU load during the interval.
RecentRamOverload	RAM usage outside configured limits.
OffDuty	Indicates if the QVS is off duty, which means that it is reachable from the QMC, but not operational. The reason for the QVS to be off duty can be that the time limit specified in the License Enabler File (LEF) has been reached.
Unlicensed	Indicates if the QVS license has expired.
EntryType	Type of entry, where 'Server starting' denotes startup, 'Normal' denotes normal interval log entry, and 'Server shutting down' denotes shutdown.
ActiveDocSessions	Number of document sessions (one user + one document = one document session) that have shown activity during the interval and still exist at the end of the interval.
ActiveAnonymousDocSessions	Number of document sessions (one user + one document = one document session) with anonymous user that have shown activity during the interval and still exist at the end of the interval.
ActiveTunneledDocSessions	Number of document sessions (one user + one document = one document session) with tunneled connection that have shown activity during the interval and still exist at the end of the interval.
DocSessionStarts	Number of document sessions (one user + one document = one document session) that have been initiated during the interval.
ActiveDocs	Number of documents loaded at the end of the interval in which there has been user activity during the interval.
DocLoads	Number of new documents loaded during the interval.
DocLoadFails	Number of documents that have failed to load during the interval.
Calls	Total number of calls to QlikView Server during interval.

Name	Value
`Selections`	Number of selection calls during interval.
`ActiveIpAddrs`	Number of distinct IP-addresses that have been active during the interval and still exist at the end of the interval. Note that tunneled sessions and multiple users originating from the same IP cannot be distinguished.
`ActiveUsers`	Number of distinct NT users that have been active during the interval and still exist at the end of the interval. Note that anonymous users cannot be distinguished here.

Documents and Users

On the `Documents and Users` tab, the open documents and the user(s) currently using them are presented.

Document

The file name of the open document.

Example:

```
EXTENSION EXAMPLES.QVW
```

User

The domain and name of the user(s).

Example:

```
COMPANY\user
```

4 Documents

The `Documents` tab contains the following pages:

- Source Documents

  This page is only available if a valid QlikView Publisher (QVP) license was installed.

- User Documents

On these pages, the `source documents` and the `user documents` can be managed.

4.1 QlikView Document Types and Functions

Each 'document' mentioned in the QlikView Management Console (QMC) environment assumes a 'QlikView document', that is, a file with the extension *.qvf* or *.qvw*, which can be opened by a QlikView Server (QVS), and which can be of one of the following states:

- `Document`
- `Source document`
- `User document`

A source document is managed by a QlikView Publisher (QVP), that is, a QlikView Distribution Service (QDS), whilst a user document is managed by a QVS. A document is not managed, but is still a QlikView document, and as soon as it is managed by either a QDS or a QVS, it is referred to as a source document or a user document, respectively.

A user document can be created from a source document managed by a QDS, by using the reduce function, and by using the distribute function, to let a QVS manage the user document. A user document can also be created by using the QlikView Desktop, and stored in a QVS folder. A user document distributed by a QDS will not include any script.

A source document includes one script. The contents of a source document always overrules the contents in a user document that is created from the source document. This means that any change in the source document will overwrite both data and meta data in the user document, for example, when a task is executed. This can be avoided by using different user document names, using a document name template.

A document is a source document that is distributed to an e-mail recipient or to a folder outside of the QVS and QDS environment, that is, the document is not managed.

Users can access user documents via a front-end, that is, a QlikView AccessPoint, whilst administrators can access source documents via a back-end, that is, a QDS.

A source document contains the script and a layout. When the script is executed at reload, a user document is created. Source documents, including the script and the layout, are created by QlikView Developers.

4.2 QVF support in QlikView

You can save QlikView documents as QVF files, and you can export QlikView QVF files from Qlik Cloud to open them in QlikView.

Supported functionality

- Save and re-save QlikView documents as *.qvf* files from QlikView Desktop.
- Create QlikView documents as *.qvf* files from QlikView Desktop.
- Open QlikView documents saved as QlikView *.qvf* files or exported from Qlik Cloud in QlikView Desktop, Ajax client, Plugin client, and Open in Server.

Limitations for QlikView QVF files

- Cannot open Qlik Sense *.qvf* files in QlikView.
- QlikView macros are not supported.

4.3 Source Documents

This page is only available if a valid QlikView Publisher (QVP) license was installed.

On the `Source Documents` page, all source documents, and all the assigned tasks, are listed in a tree view in the left pane. The tasks are sorted under the source document to which they belong. If a source document for some reason is unavailable, the tasks belonging to the source document are flagged as orphans and stored in the *<Orphans>* folder, which means that the tasks never run. If the missing source document is re-introduced, the orphan tasks become regular tasks again.

To view or manage the settings of a task assigned to a document, in the right pane, click on the document or task in the tree view.

Task chains, where one task triggers another task, can be created. For example, 'Document 1' can be configured to be reloaded every hour, and 'Document 2' can be configured to be distributed when the reload of 'Document 1' has been executed successfully, only. Furthermore, 'Document 3', can be configured to be distributed when the distribution of 'Document 2' has been executed successfully, only, and so on.

If a trigger for any of the tasks in the chain is disabled, the chain will be broken. If any of the tasks in the chain is disabled, the chain will continue, but the disabled task(s) will simply not execute.

Functions

Search Document, Task, or Template

Enter the desired search term(s) in this text box, to find documents, tasks, or templates, and click on the `Search` icon, .

Filter

The document and task list can be filtered. A black `Filter by Documents With or Without Task` icon, , on the `Name` column indicates that a filter is not used on that column. A blue `Filter Set` icon, , on the `Name` column indicates that a filter is used on that column. To filter documents with or without assigned tasks, click on the `Filter by Documents With or Without Tasks` icon, , in the `Name` column, and select the desired criteria in the dialog, by ticking/unticking the check boxes. To reset (that is, not use) the filter, deselect all criteria by clicking on the `Clear Filter` button. To confirm any change in the dialog, click on the `OK` button.

The following options are available:

- `Document With Tasks`
- `Document Without Tasks`

View Status

To overview the tasks for a document, in the right pane, click on the document in the tree view. The possible status indicator icons are the following:

- , indicating that the task is running.
- , indicating that a warning has occurred for the task.
- , indicating that the execution of the task has failed.

The statuses of the tasks are automatically refreshed.

Add Task

To add a task, click on the `Add Task Manually` icon, , in the upper right corner of the right pane, or click on the `Add Task...` icon, , and select one of the following options in the drop-down list:

- `Add Task Manually`, meaning that a task is created, and the settings have to be configured on each of the tabs belonging to the task.
- `Add Task Using Wizard`, meaning that a task is created by going through a basic sub set of the configuration settings, which are presented in a wizard guide.
- `Add Task Using Template`, meaning that a task is created, using the settings from a template.

Edit Task

To configure a task, click on the `Edit Task` icon, , or click on the task in the tree view. In the right pane, the following tabs are presented:

- General
- Reload
- Reduce
- Distribute
- Document Information
- Triggers
- Server

Click on each tab label for more information.

Context Menu

To view the task context menu, from which the task can be managed, right-click on the task in the tree view. It is possible to multi-select tasks (using the `control` + `click` keys) and manage them batch-wise.

Copy Task

To copy a task, click on the `Copy this task to clipboard` icon, , or right-click on the task in the tree view and choose `Copy`.

Paste Task

Pasting a task into a document will create a new task. To paste a copied task to a specific document, either click on (highlight) the document and click on the `Paste Task` icon, , in the right pane (to the left of the `Add Task` icon,), or right-click on the document and choose `Paste`.

Pasting a task into an existing task will merge the tasks, overwriting the settings of the destination task. To merge a copied task with another task, either click on (highlight) the document, in which the destination task resides, in the tree view, and click on the `Paste Special...` icon of that task, , in the right pane (under the `Delete this task` icon,), or click on (highlight) the destination task in the tree view, and right-click on `Paste Special...`. Choose which parts (components) of the task to be pasted (duplicated or merged) into the destination task and click on the `OK` button. The parts of a task to be chosen correspond to each of the tabs.

A copied task can be merged with several tasks simultaneously by multi-selecting the desired destination tasks in the tree view.

Import Task

To import a task from another installation, right-click on a document and choose `Import Task`.This will bring up the remote system. Choose the task to be imported. If there is a task with the same name in the document already, a new name will be generated.

To import all tasks from a remote system, right-click on the Distribution Service and choose Import Tasks, which opens the Import dialog. Choose the Distribution Service from the remote system to be imported.

Run Task

To start a task, click on the Run this task icon, .

Abort Task

To stop a task, click on the Abort this task icon, .

Delete Task

To entirely remove a task, either click on (highlight) the document, in which the task resides, in the tree view, and click on the Delete this Task icon of that task, , in the right pane, or click on (highlight) the task in the tree view, and right-click on Delete.

Templates

In the Templates folder, a way of creating, storing, and using templates for creating new tasks, and assigning them to source documents, is provided. Templates do not include any document specific settings, that is, the following functions are not applicable:

- Reduce
- Loop and Distribute
- PDF Report from Source Document

This means that document-specific information is not included when copying a task and pasting it into a new or existing template. Also, templates cannot be executed.

A template is not assigned to any source document. A template that is copied to a source document will become a task. Another way of adding a task, using a template, is to select the Add Task Using Template option.

Functions

Search Document, Task, or Template

Enter the desired search term(s) in this text box, to find documents, tasks, or templates, and click on the Search icon, .

View

To overview all of the templates, in the right pane, click on the Templates folder in the tree view.

Add Template

To add a template, click on the Add Template icon, , in the upper right corner of the right pane. A template is created, and the settings have to be configured on each of the tabs belonging to the template.

Edit Template

To configure a template, click on the `Edit Template` icon, , or click on the template in the tree view. In the right pane, the following tabs are presented:

- General
- Reload
- Distribute
- Document Information
- Triggers
- Server

Click on each tab label for more information.

> *These tabs present the settings of a task, but they still just make up a template that cannot be executed itself. To use the settings, an executable task must be created in a document.*

Context Menu

To view the context menu of a template, from which it can be managed, right-click on the template in the tree view.

Copy Template

To copy a template, click on the `Copy this Template to Clipboard` icon, , or right-click on the template in the tree view and choose `Copy`.

Paste Template

Pasting a template into the template folder will create a new template. To paste a copied template to the template folder, either click on (highlight) the template folder and click on the `Paste Template` icon, , in the right pane (to the left of the `Add Template` icon,), or right-click on the template folder and choose `Paste`.

Pasting a template into an existing template will merge the templates, overwriting the settings of the destination template. To merge a copied template with another template, either click on (highlight) the template folder, in which the destination template resides, in the tree view, and click on the `Paste Special...` icon of that template, , in the right pane (under the `Delete this template` icon,), or click on (highlight) the destination template in the tree view, and right-click on `Paste Special...`. Choose which parts (components) of the template to be pasted (duplicated or merged) into the destination template and click on the `OK` button.

A copied template can be merged with several templates simultaneously by multi-selecting the desired destination templates in the tree view.

Import Template

To import a template from another installation, right-click on the template folder and choose `Import Template`. This will bring up the remote system. Choose the template to be imported. If there is a template with the same name in the template folder already, a new name will be generated.

To import all templates from a remote system, right-click on the `Distribution Service` and choose `Import Templates`, which opens the `Import` dialog. Choose the `Distribution Service` from the remote system to be imported.

Delete Template

To entirely remove a template, either click on (highlight) the template folder, in which the template resides, in the tree view, and click on the `Delete this Template` icon of that template, , in the right pane, or click on (highlight) the template in the tree view, and right-click on `Delete`.

Help

To get context sensitive help information (this WebHelp), that is, detailed information about the contents of the current page, click on the `Help` text in the upper right corner of the page.

Movement Buttons

If applicable and available, use the following buttons to move between pages within the wizard:

- `Previous`, meaning 'go back to the previous wizard guide page'; the configuration on the current wizard guide page will be stored until moving forward again, using the `Next` button.
- `Next`, meaning 'go ahead to the next wizard guide page'.

  > *This button is only available when the current wizard guide page has been configured with the required data.*

- `Finish`, meaning 'finish this wizard', using the configured information.

  > *This button is only available when all of the wizard guide pages have been configured.*

- `Cancel` or , meaning 'abort this wizard', without using or storing any configuration; no task will be created.

Wizard Start Page

The `Wizard` provides the basic functionality configuration of a `new task`, involving distribution, reduction, and triggers.

Start Page

On the Wizard `Start` page, the type of task that is to be configured for the `current document` can be selected. A sub set of the configuration settings for the task will be presented on wizard guide pages, depending on the answers to the following questions:

- How do you want to select the recipients of the distribution?
- Do you want to reduce the document?

The task settings can be configured on the wizard guide pages. The combinations of possible answers result in that the following wizard guide pages are presented:

Task configuration

-	**Enter recipients manually**	**Distribute to recipients based on a field in the document**
No, distribute the whole document	• General • Distribute, Manually • Trigger Task	• General • Distribute, Loop Field in Document • Trigger Task
Yes, only distribute parts of the document	• General • Reduce • Distribute, Manually • Trigger Task	• General • Reduce • Distribute, Loop Field in Document • Trigger Task

Help

To get context sensitive help information (this WebHelp), that is, detailed information about the contents of the current page, click on the `Help` text in the upper right corner of the page.

Movement Buttons

If applicable and available, use the following buttons to move between pages within the wizard:

- `Previous`, meaning 'go back to the previous wizard guide page'; the configuration on the current wizard guide page will be stored until moving forward again, using the `Next` button.
- `Next`, meaning 'go ahead to the next wizard guide page'.

  > *This button is only available when the current wizard guide page has been configured with the required data.*

- `Finish`, meaning 'finish this wizard', using the configured information.

  > *This button is only available when all of the wizard guide pages have been configured.*

- `Cancel` or , meaning 'abort this wizard', without using or storing any configuration; no task will be created.

General

On the `General` wizard guide page, the `new task` can be configured regarding reload, name, category, and attributes.

General

Perform Reload

To enable the function that reloads the document when the task is run, tick this check box. To disable the reload function, untick this check box.

Task Name

To edit the name of the task, enter the preferred name in this text box.

> *The `Task Name` must be unique; if it is not, a suffix number will be added to make it unique. For example, 'MyTask' will become 'MyTask (2)'.*

Select Category

To assign a category to a document, select one of the available categories, presented in the drop-down list.

Default value: `Default`.

Or Type a New Category

To create a category, enter a descriptive name in this text box. The new category will be available in the `Select Category` drop-down list. The category is presented on the QlikView AccessPoint.

> *Categories can be reassigned, but cannot be deleted.*

Display warning if last update time is older than (minutes):

To set a document warning if the document has not been updated within the specified number of minutes. The warning icon is presented on the document card on the QlikView AccessPoint.

Document Description

To create a document description that is displayed in Document Details on QlikView AccessPoint, enter a description in this text box.

Attributes

Meta data attributes can be created and assigned to a document. These attributes are arbitrary pairs of name and value. They are not saved in the document, but in the meta data of the QlikView Server, utilizing the QlikView Server Document Metadata Service (DMS) facility. A third-party application can read and extract the attributes from the database, using the `qvpx` protocol. The attributes are presented on the QlikView AccessPoint, in which they are used to help finding the correct document. To create an attribute and assigned value entry, to be stored in the meta file, click on the `Add` icon, , to the right in the pane, and configure the following fields:

Name

To configure a meta data attribute name, enter a descriptive name in this text box.

Value

To assign a value to the meta attribute name in the `Name` field, enter the value in this text box.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Help

To get context sensitive help information (this WebHelp), that is, detailed information about the contents of the current page, click on the `Help` text in the upper right corner of the page.

Movement Buttons

If applicable and available, use the following buttons to move between pages within the wizard:

- `Previous`, meaning 'go back to the previous wizard guide page'; the configuration on the current wizard guide page will be stored until moving forward again, using the `Next` button.
- `Next`, meaning 'go ahead to the next wizard guide page'.

  > *This button is only available when the current wizard guide page has been configured with the required data.*

- `Finish`, meaning 'finish this wizard', using the configured information.

  > *This button is only available when all of the wizard guide pages have been configured.*

- `Cancel` or , meaning 'abort this wizard', without using or storing any configuration; no task will be created.

Reduce

On the `Reduce` wizard guide page, the `new task` can be configured to split a document into several reduced copies of the original.

A reduced document contains only the reduced information, while a document using the section access function contains all information, but hides and reveals parts of it.

> *Reduction based on Section Access may cause unwanted results in the distributed documents and should be used with caution.*

> *It is mandatory to enter data on this wizard guide page.*

Reduction Method

Reduce by

Select one of the following options:

- Reduce by Field Value, meaning that one reduced document is created, by selecting the fields and values that should be distributed.

- Reduce by Bookmark, meaning that one reduced document is created, by selecting the bookmarks that should be distributed.

You can also create several separate documents, based on a field value.

Open Document

To be able to use the contents of the document for selecting bookmarks or fields and field values, the document has to be opened by clicking on this button.

> *Using this function, that is, clicking the `Open Document` button or the `...` button (if available), might be time consuming; therefore, it is done as an explicit command.*

Reduce by Field Value

Presents the `Fields` and `Values` that are available in the document.

> *Only the first 1000 entries are included. All data not selected from the boxes will be removed from the reduced document.*

> *This option is only available if the `Reduce by Field Value` option was chosen.*

Fields

To select the fields that should be part of the reduced document to be distributed, select them in this box.

Values

To select the values that should be part of the reduced document to be distributed, select them in this box.

Selected Fields

Presents the selected fields.

Selected Values

Presents the selected values.

Clear Selection

To clear all selected fields and values, click on the `Clear Selection` icon, .

Reduce by Bookmark

Presents the `Bookmarks` that are available in the document.

> *All data not selected from the drop-down list will be removed from the reduced document.*

Bookmark

To select the bookmark to distribute, scroll down the drop-down list and select it.

Loop and Reduce

Field

To create several separate documents for each value in the selected field, select the `Field` from which the value is to be looped.

> *All data not selected from the drop-down list will be removed from the reduced document.*

Help

To get context sensitive help information (this WebHelp), that is, detailed information about the contents of the current page, click on the `Help` text in the upper right corner of the page.

Movement Buttons

If applicable and available, use the following buttons to move between pages within the wizard:

- `Previous`, meaning 'go back to the previous wizard guide page'; the configuration on the current wizard guide page will be stored until moving forward again, using the `Next` button.
- `Next`, meaning 'go ahead to the next wizard guide page'.

  > *This button is only available when the current wizard guide page has been configured with the required data.*

- `Finish`, meaning 'finish this wizard', using the configured information.

  > *This button is only available when all of the wizard guide pages have been configured.*

- `Cancel` or , meaning 'abort this wizard', without using or storing any configuration; no task will be created.

Distribute, Manually

On the `Distribute, Manually` wizard guide page, the `new task` can be configured regarding the distribution method of the `current document` and the authorization of recipients.

> *It is mandatory to enter data on this wizard guide page.*

Documents can be distributed to QlikView Servers, directly to users via e-mail, and to specific folders, and the methods are the following:

- Distribute to QlikView Server
- Distribute via E-mail
- Distribute to Folder

Any combination of distribution methods are allowed; 0, 1 only, any 2, or all 3.

Distribution of a PDF to a QlikView Server is not allowed.

Distribute to QlikView Server

To add a specific resource entry to distribute to, click on the `Add` icon, , to the right in the pane, and configure the following fields:

Server

Select the desired server in the drop-down list.

Mount

Select the desired mount in the drop-down list, if applicable.

User Type

The type of recipients.

To manage the authorization of users and groups, select one of the following drop-down list options:

`All Users`, meaning that all users are authorized (that is, anonymous access to the file is allowed).

The IQVS account controls file access when anonymous access is allowed. This means that the IQVS account has to be provided with the correct file access. The account is by default created as a local account in the QlikView installation. In a clustered environment, the IQVS account must be created as a domain account, so that all nodes can access it.

`All Authenticated Users`, meaning that any authenticated user is authorized.

`Named Users`, meaning that users that should be authorized are manually added, by searching for users and groups in a domain or on a computer (the names are resolved by the Directory Service Connector).

Recipients

If `Named Users` was chosen in the `User Type` field, do the following:

To manage users and groups, click on the **Manage Users** dialog icon, .

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.
- `Selected Users`
  This box presents the selected users and groups.

- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
- `<< Delete All`
  To deselect `all` of the users and groups from the `Selected Users` box, click on this button.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Distribute via E-mail

To manage the authorization of e-mail recipients, do the following:

To manage users and groups, click on the **Manage Users** dialog icon, .

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.
- `Selected Users`
  This box presents the selected users and groups.
- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
- `<< Delete All`
  To deselect `all` of the users and groups from the `Selected Users` box, click on this button.

To distribute via email to a group of users, create a distribution group with an email address of the group itself. When the DSC performs a lookup on the group name, the email address of the group is returned and the document is distributed to that email address.

Distribute to Folder

Path

To select a folder to distribute to, click on the `Browse` icon, , and choose the folder in the `Choose Folder` dialog.

User Type

To select the method for managing users and groups, click on one of the following drop-down list options:

- `All Authenticated Users`, meaning that any authenticated user is authorized.
- `Named Users`, meaning that users that should be authorized are manually added, by searching for users and groups in a domain or on a computer (the names are resolved by the Directory Service Connector).

Add Users and Groups

If `Named Users` was chosen in the `User Type` field, do the following:

To manage users and groups, click on the **Manage Users** dialog icon, .

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.
- `Selected Users`
  This box presents the selected users and groups.
- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
- `<< Delete All`
  To deselect `all` of the users and groups from the `Selected Users` box, click on this button.

Help

To get context sensitive help information (this WebHelp), that is, detailed information about the contents of the current page, click on the `Help` text in the upper right corner of the page.

Movement Buttons

If applicable and available, use the following buttons to move between pages within the wizard:

- `Previous`, meaning 'go back to the previous wizard guide page'; the configuration on the current wizard guide page will be stored until moving forward again, using the `Next` button.
- `Next`, meaning 'go ahead to the next wizard guide page'.

  > *This button is only available when the current wizard guide page has been configured with the required data.*

- `Finish`, meaning 'finish this wizard', using the configured information.

  > *This button is only available when all of the wizard guide pages have been configured.*

- `Cancel` or ☒, meaning 'abort this wizard', without using or storing any configuration; no task will be created.

Distribute, Loop Field in Document

On the `Distribute, Loop Field in Document` wizard guide page, the `new task` can be configured to let the QlikView Publisher (QVP) distribute the `current document`.

> *It is mandatory to enter data on this wizard guide page.*

The `Loop Field in Document` function provides distribution to users based on the content of each user. Combining the `Loop and Reduce` function with the `Loop and Distribute` function, the result can be that each user gets specific and relevant information, only.

For example, one document should be distributed to all the people employed in a specific country, and the document should be distributed to the QlikView Server, each document given a unique name. The following describes a solution:

1. In the source document, which contains the information that should be distributed, add an `Employee` field containing the user name of each employee, and make sure that they are associated to the country of the user.
2. Set up `By Field Value` for `Loop and Reduce` to use the `Country` field.
3. Edit the name template to include the `Country` field, `%SourceDocumentName% %DocumentField,Country%`.
4. In the `Field Containing Recipient Information` drop-down list, select the `Employee` field.
5. In the `Check User Identity On` drop-down list, select the `SAMAccountName` option.
6. In the `Target Type` drop-down list, select the `QlikView Server` option.

Loop and Distribute

Open Document

To open the document, thus enabling the selection of a field that contains information about the recipients, click on this button.

Using this function, that is, clicking the `Open Document` button or the `...` button (if available), might be time consuming; therefore, it is done as an explicit command.

Field Containing Recipient Information

Select the field that contains the desired information about the recipients, in the drop-down list.

Check User Identity On

Select the desired type of user identity check, in the drop-down list. The available options are the following directory service attributes:

- `SecurityIdentifier`
- `DisplayName`
- `SAMAccountName`
- `EmailAddress`
- `UserPrincipalName`

These attribute names correspond to the attributes in the `Microsoft Active Directory`, which are described in the following:

- `SecurityIdentifier`, a unique value of variable length used to identify a user account, group account, or logon session to which an ACE applies.
- `DisplayName`, the display name for an object, which is usually the combination of the first name, middle initial, and last name of a user.
- `SAMAccountName`, the logon name used to support clients and servers running older versions of the operating system, such as Windows NT 4.0, Windows 95, Windows 98, and LAN Manager. This attribute has to consist of less than 20 characters to support older clients.
- `E-mailAddress`, the list of e-mail addresses for a contact.
- `UserPrincipalName`, this attribute contains the UPN, that is, an Internet-style user login name, based on the Internet standard RFC 822. The UPN is shorter than the distinguished name and easier to remember. By convention, this should map to the user e-mail name. The value set for this attribute is equal to the length of the ID of the user and the domain name.

If another Directory Service Provider (DSP) is used, these attribute names correspond as closely as possible to attributes with similar functions.

Destination

Target Type

To choose the document distribution method, tick one of the following check boxes, and configure the applicable fields:

If no destination is given, no loop distribution will be done, and no recipients are given, since they are configured by the loop.

QlikView Server

To distribute to the QlikView Server (QVS), tick this check box and select the desired `Server` and `Mount` in the drop-down lists.

E-mail

To distribute to the e-mail recipient(s), tick this check box.

Folder

To select a folder to distribute to, click on the `Browse` icon, , and choose the folder in the `Choose Folder` dialog.

Help

To get context sensitive help information (this WebHelp), that is, detailed information about the contents of the current page, click on the `Help` text in the upper right corner of the page.

Movement Buttons

If applicable and available, use the following buttons to move between pages within the wizard:

- `Previous`, meaning 'go back to the previous wizard guide page'; the configuration on the current wizard guide page will be stored until moving forward again, using the `Next` button.
- `Next`, meaning 'go ahead to the next wizard guide page'.

  > *This button is only available when the current wizard guide page has been configured with the required data.*

- `Finish`, meaning 'finish this wizard', using the configured information.

  > *This button is only available when all of the wizard guide pages have been configured.*

- `Cancel` or , meaning 'abort this wizard', without using or storing any configuration; no task will be created.

Trigger Task

On the `Trigger Task` wizard guide page, the `new task` can be configured to be started by triggers. A task can have multiple triggers, creating a workflow of tasks.

Triggers for Running this Task

Each row presents a separate trigger. The `current task` is started if any trigger is released (OR operator). If several triggers (multiple conditions) are to be released, before the `current task` is started, the `On Multiple Events Completed` function should be used (AND operator).

To create a trigger, click on the `Add` icon, , to the right in the pane.

Trigger

The type of the trigger. The possible value is the following:

- `Once Trigger`
- `Task Finished Trigger`
- `External Event Trigger`
- `And Trigger`

Details

The trigger condition settings, that is, a summary of when the trigger starts the `current task`.

Enabled

The current status of the trigger. The possible values are the following:

- `Enabled`
- `Disabled`

Edit Trigger

To configure a trigger, click on the `Edit Trigger` icon, .

Delete

To entirely remove a trigger, click on the `Delete` icon, .

Configure Trigger Dialog

Start the Task

Choose the type of trigger by clicking on one of the following options in the drop-down list:

- On a Schedule
- On Event from Another Task
- On an External Event
- On Multiple Events Completed

Enabled

To enable the trigger for execution of the task, tick this check box. To disable the trigger, untick this check box.

On a Schedule

When the `On a Schedule` trigger type was chosen, a trigger can be scheduled to start the `current task`. The following configuration options are available:

Recurrence

Choose a schedule for the trigger to start, by clicking on one of the following options:

- Once
- Hourly

- Daily
- Weekly
- Monthly
- Continuously

All time specifications must be in the 24-hour format.

Start at

Enter the date and time of the initial trigger start in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`.

Example:

```
2011-12-31 23:59:59
```

Once

No further settings are available.

Hourly

Run Every

Choose a time interval for the trigger to start, by entering the desired number in the `Hours` and `Minutes` text boxes.

Example:

`1` and `10`, meaning that the trigger will start every 70 minutes (the example not considering other possible limiting settings).

On

Choose the day(s) of the week for the trigger to start, by ticking any of the following check boxes:

- `Monday`
- `Tuesday`
- `Wednesday`
- `Thursday`
- `Friday`
- `Saturday`
- `Sunday`

If no day was chosen, the trigger runs all days.

Run Only Between

To limit the trigger start within a day, tick this check box. Enter the start time and the stop time, in between which trigger start is allowed, in the `start` and `stop` text boxes, by using the following format: `hh:mm`. To disable the limitation, untick this check box.

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Daily

Run Every

Choose a time interval for the trigger to start, by entering the desired number in the `Day` text box.

Example:

`3`, meaning that the trigger will start every third day (the example not considering other possible limiting settings).

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Weekly

Run Every

Choose a time interval for the trigger to start, by entering the desired number in the `Weeks` text box.

Example:

`2`, meaning that the trigger will start every second week (the example not considering other possible limiting settings).

On

Choose the day(s) of the week for the trigger to start, by ticking any of the following check boxes:

- `Monday`
- `Tuesday`
- `Wednesday`
- `Thursday`
- `Friday`
- `Saturday`
- `Sunday`

If no day was chosen, the current day is selected.

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Monthly

Months

Choose the month(s) of the year for the trigger to start, by ticking any of the following check boxes:

- `January`
- `February`
- `March`
- `April`
- `May`
- `June`
- `July`

- August
- September
- October
- November
- December

If no month was chosen, the current month is selected.

Check All

To automatically tick all of the months, click on this button.

Uncheck All

To automatically untick all of the months, click on this button.

Run Only

To limit the trigger start within the selected Months, select one of the following options:

- Days, and select the day(s) of the month(s) for the trigger to start, by ticking any of the following check boxes:
  - 1, 2, 3... 31, where each value represents that day of the month(s)
  - Last, meaning the very last day of the month(s)

  If no day was chosen, the trigger will not occur.

- On, and select the weekday(s) of the month(s), by ticking any of the following check boxes:

Days to trigger

Order	Weekday
First	Monday
Second	Tuesday
Third	Wednesday
Fourth	Thursday
Last	Friday
	Saturday
	Sunday

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the Max Number text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: yyyy-mm-dd hh:mm:ss. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Continuously

No further settings are available.

On Event from Another Task

When the `On Event from Another Task` trigger type was chosen, the trigger can be configured to start the `current task` on the event from another task. The following configuration options are available:

Start on

Choose a trigger event, by clicking on one of the following options in the drop-down list:

- `Successful`, meaning that the execution of the task was successful
- `Failed`, meaning that the execution of the task failed

Completion of

Choose a trigger task, by clicking on one of the options in the drop-down list.

On an External Event

When the `On an External Event` trigger type was chosen, the trigger can be configured to start the `current task` on an external event, that is, an outside component, making a QlikView Management Service (QMS) API call. The following configuration options are available:

Password

This password is used to access the task and release the trigger. The external event has to know the password. To enable an external event to release the trigger of the task, enter a password in this text box.

On Multiple Events Completed

When the `On Multiple Events Completed` trigger type was chosen, the trigger can be configured to start the `current task` when other tasks have `all` been `completed` in their execution `within a certain time`. The following configuration options are available:

Time Constraint

Choose a time limit, within which all of the tasks have to complete their execution, by entering the desired number in the `Minutes` text box.

Default value: `360`, meaning 6 hours.

Run Task When All of these Events Completed

External Event

To add an external event to the list of tasks that have to be completed for the trigger to be started, tick this check box. To entirely remove an external event from the list, untick this check box.

Password

This password is used to access the task and release the trigger. The external event has to know the password. To enable an external event to release the trigger of the task, enter a password in this text box.

Task Completed

To add tasks, and the events with which they have to be completed for the trigger to be started, click on the `Add` icon, , to the right in the pane.

Event

Select the event for the task in the drop-down list.

Task

Select the corresponding task, for which an event was selected in the `Event` field, in the drop-down list.

Help

To get context sensitive help information (this WebHelp), that is, detailed information about the contents of the current page, click on the `Help` text in the upper right corner of the page.

Movement Buttons

If applicable and available, use the following buttons to move between pages within the wizard:

- `Previous`, meaning 'go back to the previous wizard guide page'; the configuration on the current wizard guide page will be stored until moving forward again, using the `Next` button.
- `Next`, meaning 'go ahead to the next wizard guide page'.

  > *This button is only available when the current wizard guide page has been configured with the required data.*

- `Finish`, meaning 'finish this wizard', using the configured information.

  > *This button is only available when all of the wizard guide pages have been configured.*

- `Cancel` or , meaning 'abort this wizard', without using or storing any configuration; no task will be created.

General

On the `General` tab, the `current task` can be enabled and disabled, and the status is presented.

Basics

Enabled

To enable the task, tick this check box. To disable the task, untick this check box.

A disabled task does not perform any work, but it will still run, which means that any task chain will just skip this task. To completely disable a task, disable all triggers, which means that any task after this task in a chain will not run.

Task Name

To edit the name of the task, enter the preferred name in this text box.

The `Task Name` must be unique; if it is not, a suffix number will be added to make it unique. For example, 'MyTask' will become 'MyTask (2)'.

Publisher Group

To create a dedicated task, select a publisher group from the dropdown selection.

Task Description

To edit the description of the task, enter the preferred description in this text box.

Summary

A summary of the task set for the document, including recipients and triggers.

Reload

On the `Reload` tab, the `current task` can be configured to reload the document.

The possibility to use different user document names is configured using the document name template.

Unsafe macros are not allowed on reload tasks.

Perform Reload

Enable

To enable the function that reloads the document when the task is run, tick this check box. To disable the reload function, untick this check box.

Data Protection

Section Access

By default, the reload will be performed as the user under which the QlikView Distribution Service (QDS) is running. The `Section Access` setting allows the use of another user when performing the reload. To bypass the default setting, tick this check box and enter the desired user and password in the `User Name` and `Password` text boxes. To use the default setting, untick this check box.

The default setting may have to be redefined.

User Name

To configure the user name, enter the desired credentials in this text box.

Password

To configure the password, enter the desired credentials in this text box.

Script Setup

Partial Reload

If some part of the data is updated more frequently than the bulk of the data, a script can be written to support partial reload. This will typically mean that two tasks will exist. One task is less frequent, doing the full reload, and one task is more frequent, doing the partial reload. To select the partial reload functionality, tick this check box. To select the full reload functionality, untick this check box.

Script Parameters

A separate document will be created for each value. If selecting a field from the document, all values in that field will be used.

Parameter Name

The variable created in the QlikView script, which will be used in the script execution of the document.

Parameter Value

The value(s) that will be assigned to the variable in the `Parameter Name` field. The value(s) will be used to create the document. To use a sequence of data, enter the start and stop values separated with a '-' (dash). To separate single values or sequences, enter a ';' (semi-colon).

`Or`

To select a specific field in the document and create a separate document for each value in that field, click the `Open Document` button, and select the desired document field. The values present at the start of the execution will be used. If field values change during the execution, such changes will not be reflected in the new documents. The use of this field will suppress the use of any value in the `Parameter Name` field.

Using this function, that is, clicking the `Open Document` button or the `...` button (if available), might be time consuming; therefore, it is done as an explicit command.

Reduce

On the `Reduce` tab, a document can be configured to be split into several reduced copies of the original.

A reduced document contains only the reduced information, while a document using the section access function contains all information, but hides and reveals parts of it.

Reduction based on Section Access may cause unwanted results in the distributed documents and should be used with caution.

Reduction Method

Select one of the following options:

- Reduce by Field Value, meaning that one reduced document is created, by selecting the fields and values that should be distributed.
- Reduce by Bookmark, meaning that one reduced document is created, by selecting the bookmarks that should be distributed.

You can also create several separate documents, based on a field value or on a bookmark.

Open Document

To be able to use the contents of the document for selecting bookmarks or fields and field values, the document has to be opened by clicking on this button.

Using this function, that is, clicking the `Open Document` button or the `...` button (if available), might be time consuming; therefore, it is done as an explicit command.

Reduced Document Name

Save the Reduced Document with the Following Name

The name template for the reduced user document.

To create a document name template, either open the advanced name template dialog by clicking on the `Edit NameTemplate` icon, , and perform the configuration, or edit the default document name template in this text field.

Be sure to create unique resulting document names, to avoid documents being overwritten.

The advanced name template dialog contains the following fields:

- `Publisher Elements`
  - Source Document Name
  - Task Name
  - Serial Number
  - Script Variable Value
  - Select Document Field
  - '\' (back-slash), '-' (dash), '_' (under-score), ' ' (white space)
- `Date and Time`

- Year - Two Digits
- Year - Four Digits
- Month
- Month Text
- Day
- Year Month Day
- Hour (AM/PM)
- Hour (24h)
- Hour Minute
- Year Month Day - Hour Minute

To create a document name template, click on the buttons to insert values from the `Publisher Element` and `Date and Time` panes. The resulting template is presented in the `Template` field, which can also be freely edited. In the `Example` field, the resulting document name is presented, using the applicable current values.

Simple Reduce

Presents the `Fields` and `Values` that are available in the document.

> *Only the first 1000 entries are included. All data not selected from the boxes will be removed from the reduced document.*

> *This option is only available if the `Reduce by Field Value` option was chosen.*

Fields

To select the fields that should be part of the reduced document to be distributed, select them in this box.

Values

To select the values that should be part of the reduced document to be distributed, select them in this box.

Selected Fields

Presents the selected fields.

Selected Values

Presents the selected values.

Clear Selection

To clear all selected fields and values, click on the `Clear Selection` icon, .

Reduce by Bookmark

Presents the `Bookmarks` that are available in the document. To select the bookmark to distribute, scroll down the drop-down list and select it.

All data not selected from the drop-down list will be removed from the reduced document.

This option is only available if the `Reduce by Bookmark` option was chosen.

Loop and Reduce

QlikView does not support Loop and Reduce over tables that contain input fields. The original value of each input field is replaced by the index value of the row in the table.

By Field Value

To create several separate documents for each value in the selected field, choose this option, then select the `Field` from which the value is to be looped.

By Bookmark

To create one separate document per each available bookmark, choose this option.

Distribute

The `Distribute` tab contains the following pages:

Reduction based on Section Access may cause unwanted results in the distributed documents and should be used with caution.

- Manually
- Loop Field in Document
- File Type
- Notify

On these pages, the distribution of source documents, becoming user documents, can be managed.

Manually

On the `Manually` tab, the document distribution method and the authorization of recipients can be managed. Documents can be distributed to QlikView Servers, to users via e-mail, and to specific folders. In this tab you can also configure the distribution of QlikView documents, and of links to QlikView documents to a cloud deployment.

- *Distribute to QlikView Server (page 49)*
- *Distribute to Cloud Native (page 50)*
- *Distribute via E-mail (page 52)*
- *Distribute to Folder (page 52)*

Any combination of distribution methods are allowed.

When you distribute a document to folder, document information, metadata such as categories or attributes, is not distributed. If you want to distribute document information as well, you need to use the Distribute to QlikView Server method.

> *Distribution of a PDF to a QlikView Server is not allowed.*

> *When distributing links to a cloud deployment, ensure that the HTTPS protocol is used and that the Fully Qualified Domain Name (FQDN) is included in the link URL. For detailed instructions on setting up HTTPS, see* ≤ How To Setup HTTPS / SSL with QlikView AccessPoint (WebServer and IIS).

Distribute to QlikView Server

Add

To add a specific resource entry to distribute to, click on the `Add` icon, , to the right in the pane, and configure the following fields:

- `Server`

  Select the desired server in the drop-down list.

- `Mount`

  Select the desired mount in the drop-down list, if applicable.

- `User Type`

  The type of recipients.

  To manage the authorization of users and groups, select one of the following drop-down list options:

  `All Users`, meaning that all users are authorized (that is, anonymous access to the file is allowed).

  > *The IQVS account controls file access when anonymous access is allowed. This means that the IQVS account has to be provided with the correct file access. The account is by default created as a local account in the QlikView installation. In a clustered environment, the IQVS account must be created as a domain account, so that all nodes can access it.*

  `All Authenticated Users`, meaning that any authenticated user is authorized.

  `Named Users`, meaning that users that should be authorized are manually added, by searching for users and groups in a domain or on a computer (the names are resolved by the Directory Service Connector).

Recipients

If `Named Users` was chosen in the `User Type` field, do the following:

To manage users and groups, click on the **Manage Users** dialog icon, .

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.
- `Selected Users`
  This box presents the selected users and groups.
- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
- `<< Delete All`
  To deselect `all` of the users and groups from the `Selected Users` box, click on this button.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Distribute to Cloud Native

Distribute link

Select this option to enable the distribution of a link to a Qlik Sense Enterprise SaaS or Qlik Sense Enterprise on Kubernetes deployment. By selecting this option the **Deployment** drop-down menu becomes available.

Distribute document

Select this option to enable the distribution of a QlikView document to a Qlik Sense Enterprise SaaS or Qlik Sense Enterprise on Kubernetes deployment. By selecting this option the **Deployment** drop-down menu becomes available.

Deployment

From the drop-down menu select the Qlik Sense Enterprise SaaS or Qlik Sense Enterprise on Kubernetes deployment to which you want to distribute content.

Users (link distribution)

To manage users and groups, click on the **Manage Users** dialog icon, .

> *The **Manage Users** setting is not available when distributing documents.*

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.
- `Selected Users`
  This box presents the selected users and groups.
- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
- `<< Delete All`
  To deselect `all` of the users and groups from the `Selected Users` box, click on this button.

Groups (link distribution)

To manage users and groups, click on the **Manage Users** dialog icon, .

> *The **Manage Groups** setting is not available when distributing documents.*

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.
- `Selected Users`
  This box presents the selected users and groups.
- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
- `<< Delete All`
  To deselect `all` of the users and groups from the `Selected Users` box, click on this button.

Distribute via E-mail

Add Users and Groups

To manage the authorization of e-mail recipients, do the following:

To manage users and groups, click on the **Manage Users** dialog icon, .

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.
- `Selected Users`
  This box presents the selected users and groups.
- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
- `<< Delete All`
  To deselect `all` of the users and groups from the `Selected Users` box, click on this button.

> *To distribute via email to a group of users, create a distribution group with an email address of the group itself. When the DSC performs a lookup on the group name, the email address of the group is returned and the document is distributed to that email address.*

Distribute to Folder

Path

To select a folder to distribute to, click on the `Browse` icon, , and choose the folder in the `Choose Folder` dialog.

User Type

To select the method for managing users and groups, click on one of the following drop-down list options:

- `All Authenticated Users`, meaning that any authenticated user is authorized.
- `Named Users`, meaning that users that should be authorized are manually added, by searching for users and groups in a domain or on a computer (the names are resolved by the Directory Service Connector).

Loop Field in Document

On the `Loop Field in Document` tab, the QlikView Publisher (QVP) can be configured to distribute the `current document`.

The `Loop Field in Document` function provides distribution to users based on the content of each user. Combining the `Loop and Reduce` function with the `Loop and Distribute` function, the result can be that each user gets specific and relevant information, only.

For example, one document should be distributed to all the people employed in a specific country, and the document should be distributed to the QlikView Server, each document given a unique name. The following describes a solution:

1. In the source document, which contains the information that should be distributed, add an `Employee` field containing the user name of each employee, and make sure that they are associated to the country of the user.
2. Set up `By Field Value` for `Loop and Reduce` to use the `Country` field.
3. Edit the name template to include the `Country` field, `%SourceDocumentName% %DocumentField,Country%`.
4. In the `Field Containing Recipient Information` drop-down list, select the `Employee` field.
5. In the `Check User Identity On` drop-down list, select the `SAMAccountName` option.
6. In the `Target Type` drop-down list, select the `QlikView Server` option.

Loop and Distribute

Open Document

To open the document, thus enabling the selection of a field that contains information about the recipients, click on this button.

> *Using this function, that is, clicking the `Open Document` button or the `...` button (if available), might be time consuming; therefore, it is done as an explicit command.*

Field Containing Recipient Information

Select the field that contains the desired information about the recipients, in the drop-down list.

Check User Identity On

Select the desired type of user identity check, in the drop-down list. The available options are the following directory service attributes:

- `SecurityIdentifier`
- `DisplayName`
- `SAMAccountName`
- `EmailAddress`
- `UserPrincipalName`

These attribute names correspond to the attributes in the `Microsoft Active Directory`, which are described in the following:

- `SecurityIdentifier`, a unique value of variable length used to identify a user account, group account, or logon session to which an ACE applies.
- `DisplayName`, the display name for an object, which is usually the combination of the first name, middle initial, and last name of a user.
- `SAMAccountName`, the logon name used to support clients and servers running older versions of the operating system, such as Windows NT 4.0, Windows 95, Windows 98, and LAN Manager. This attribute has to consist of less than 20 characters to support older clients.
- `E-mailAddress`, the list of e-mail addresses for a contact.
- `UserPrincipalName`, this attribute contains the UPN, that is, an Internet-style user login name, based on the Internet standard RFC 822. The UPN is shorter than the distinguished name and easier to remember. By convention, this should map to the user e-mail name. The value set for this attribute is equal to the length of the ID of the user and the domain name.

If another Directory Service Provider (DSP) is used, these attribute names correspond as closely as possible to attributes with similar functions.

Destination

Target Type

To choose the document distribution method, tick one of the following check boxes, and configure the applicable fields:

> *If no destination is given, no loop distribution will be done, and no recipients are given, since they are configured by the loop.*

QlikView Server

To distribute to the QlikView Server (QVS), tick this check box and select the desired `Server` and `Mount` in the drop-down lists.

E-mail

To distribute to the e-mail recipient(s), tick this check box.

Folder

To select a folder to distribute to, click on the `Browse` icon, , and choose the folder in the `Choose Folder` dialog.

File Type

On the `File Type` tab, the type of the `current distributed document` can be configured.

> *Distribution of a PDF to a QlikView Server is not allowed.*

Output Document Type

Select one of the following options:

- `QlikView Document`, meaning that the document is distributed as a QlikView document.
- `PDF Report from Source Document`, meaning that the document is distributed as a PDF report from the source document. To get a report as basis for the PDF report, select a QlikView report in the drop-down list and click the `Open Document` button. Note that the drop-down list is not populated with available reports until the document is opened. A special license is required to distribute the document as a PDF report.

  > *Using this function, that is, clicking the `Open Document` button or the `...` button (if available), might be time consuming; therefore, it is done as an explicit command.*

Notify

On the `Notify` tab, distribution recipients can be set as recipients of notification e-mails, informing them that the document has been updated. Each e-mail address is retrieved from the directory service to which the user belongs. For example, a Windows user e-mail address is retrieved from the Windows Active Directory.

Notification E-mail

Send Notification E-mail To Recipients

To send a notification e-mail to all recipients that are part of the distribution, check this option.

> *Recipients that are part of an `e-mail` distribution will not receive any notification e-mail in addition to the e-mail that includes the document.*

Document Information

On the `Document Information` tab, a category for the `current document` can be assigned, created, edited, and deleted. Categories are used to bundle documents in containers, to make categorization easier for the end-user. The categories are only visible to the end-user on the QlikView AccessPoint. Each document can only be part of one category.

General

Select Category

To assign a category to a document, select one of the available categories, presented in the drop-down list.

Default value: `Default`.

Or Type a New Category

To create a category, enter a descriptive name in this text box. The new category will be available in the `Select Category` drop-down list. The category is presented on the QlikView AccessPoint.

Categories can be reassigned, but cannot be deleted.

Display warning if last update time is older than (minutes):

To set a document warning if the document has not been updated within the specified number of minutes. The warning icon is presented on the document card on the QlikView AccessPoint.

Document Description

To create a document description that is displayed in Document Details on QlikView AccessPoint, enter a description in this text box.

Attributes

Meta data attributes can be created and assigned to a document. These attributes are arbitrary pairs of name and value. They are not saved in the document, but in the meta data of the QlikView Server, utilizing the QlikView Server Document Metadata Service (DMS) facility. A third-party application can read and extract the attributes from the database, using the `qvpx` protocol. The attributes are presented on the QlikView AccessPoint, in which they are used to help finding the correct document. To create an attribute and assigned value entry, to be stored in the meta file, click on the `Add` icon, , to the right in the pane, and configure the following fields:

Name

To configure a meta data attribute name, enter a descriptive name in this text box.

Value

To assign a value to the meta attribute name in the `Name` field, enter the value in this text box.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Triggers

On the `Triggers` tab, the `current task` can be configured to be started by triggers. A task can have multiple triggers, creating a workflow of tasks. This tab contains the following headings:

- Current Triggers
- Task Dependencies
- Task Execution Options

Current Triggers

Each row presents a separate trigger. The `current task` is started if any trigger is released (OR operator). If several triggers (multiple conditions) are to be released, before the `current task` is started, the `On Multiple Events Completed` function should be used (AND operator).

To create a trigger, click on the `Add` icon, , to the right in the pane.

Trigger

The type of the trigger. The possible value is the following:

- `Once Trigger`
- `Task Finished Trigger`
- `External Event Trigger`
- `And Trigger`

Details

The trigger condition settings, that is, a summary of when the trigger starts the `current task`.

Enabled

The current status of the trigger. The possible values are the following:

- `Enabled`
- `Disabled`

Edit Trigger

To configure a trigger, click on the `Edit Trigger` icon, .

Delete

To entirely remove a trigger, click on the `Delete` icon, .

Configure Trigger Dialog

Start the Task

Choose the type of trigger by clicking on one of the following options in the drop-down list:

- On a Schedule
- On Event from Another Task
- On an External Event
- On Multiple Events Completed

Enabled

To enable the trigger for execution of the task, tick this check box. To disable the trigger, untick this check box.

On a Schedule

When the `On a Schedule` trigger type was chosen, a trigger can be scheduled to start the `current task`. The following configuration options are available:

Recurrence

Choose a schedule for the trigger to start, by clicking on one of the following options:

- Once
- Hourly
- Daily
- Weekly
- Monthly
- Continuously

All time specifications must be in the 24-hour format.

Start at

Enter the date and time of the initial trigger start in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`.

Example:

```
2011-12-31 23:59:59
```

Once

No further settings are available.

Hourly

Run Every

Choose a time interval for the trigger to start, by entering the desired number in the `Hours` and `Minutes` text boxes.

Example:

`1` and `10`, meaning that the trigger will start every 70 minutes (the example not considering other possible limiting settings).

On

Choose the day(s) of the week for the trigger to start, by ticking any of the following check boxes:

- `Monday`
- `Tuesday`
- `Wednesday`
- `Thursday`
- `Friday`
- `Saturday`
- `Sunday`

If no day was chosen, the trigger runs all days.

Run Only Between

To limit the trigger start within a day, tick this check box. Enter the start time and the stop time, in between which trigger start is allowed, in the `start` and `stop` text boxes, by using the following format: `hh:mm`. To disable the limitation, untick this check box.

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Daily

Run Every

Choose a time interval for the trigger to start, by entering the desired number in the `Day` text box.

Example:

`3`, meaning that the trigger will start every third day (the example not considering other possible limiting settings).

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Weekly

Run Every

Choose a time interval for the trigger to start, by entering the desired number in the `Weeks` text box.

Example:

`2`, meaning that the trigger will start every second week (the example not considering other possible limiting settings).

On

Choose the day(s) of the week for the trigger to start, by ticking any of the following check boxes:

- `Monday`
- `Tuesday`
- `Wednesday`
- `Thursday`
- `Friday`
- `Saturday`
- `Sunday`

If no day was chosen, the current day is selected.

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Monthly

Months

Choose the month(s) of the year for the trigger to start, by ticking any of the following check boxes:

- `January`
- `February`
- `March`
- `April`
- `May`
- `June`
- `July`
- `August`

- September
- October
- November
- December

If no month was chosen, the current month is selected.

Check All

To automatically tick all of the months, click on this button.

Uncheck All

To automatically untick all of the months, click on this button.

Run Only

To limit the trigger start within the selected Months, select one of the following options:

- Days, and select the day(s) of the month(s) for the trigger to start, by ticking any of the following check boxes:
  - 1, 2, 3... 31, where each value represents that day of the month(s)
  - Last, meaning the very last day of the month(s)

  If no day was chosen, the trigger will not occur.

- On, and select the weekday(s) of the month(s), by ticking any of the following check boxes:

Days to trigger

Order	Weekday
First	Monday
Second	Tuesday
Third	Wednesday
Fourth	Thursday
Last	Friday
	Saturday
	Sunday

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the Max Number text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: yyyy-mm-dd hh:mm:ss. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Continuously

No further settings are available.

On Event from Another Task

When the `On Event from Another Task` trigger type was chosen, the trigger can be configured to start the `current task` on the event from another task. The following configuration options are available:

Start on

Choose a trigger event, by clicking on one of the following options in the drop-down list:

- `Successful`, meaning that the execution of the task was successful
- `Failed`, meaning that the execution of the task failed

Completion of

Choose a trigger task, by clicking on one of the options in the drop-down list.

On an External Event

When the `On an External Event` trigger type was chosen, the trigger can be configured to start the `current task` on an external event, that is, an outside component, making a QlikView Management Service (QMS) API call. The following configuration options are available:

Password

This password is used to access the task and release the trigger. The external event has to know the password. To enable an external event to release the trigger of the task, enter a password in this text box.

On Multiple Events Completed

When the `On Multiple Events Completed` trigger type was chosen, the trigger can be configured to start the `current task` when other tasks have `all` been `completed` in their execution `within a certain time`. The following configuration options are available:

Time Constraint

Choose a time limit, within which all of the tasks have to complete their execution, by entering the desired number in the `Minutes` text box.

Default value: `360`, meaning 6 hours.

Run Task When All of these Events Completed

External Event

To add an external event to the list of tasks that have to be completed for the trigger to be started, tick this check box. To entirely remove an external event from the list, untick this check box.

Password

This password is used to access the task and release the trigger. The external event has to know the password. To enable an external event to release the trigger of the task, enter a password in this text box.

Task Completed

To add tasks, and the events with which they have to be completed for the trigger to be started, click on the `Add` icon, , to the right in the pane.

Event

Select the event for the task in the drop-down list.

Task

Select the corresponding task, for which an event was selected in the `Event` field, in the drop-down list.

Task Dependencies

Task dependency is a way of making sure that the `current task` runs only if other tasks have finished their last execution successfully. The task dependencies overrule any trigger, which means that a trigger might not be able to start the `current task`, if a task dependency for the `current task` is not fulfilled.

To configure a dependency for the `current task`, click on the `Add` icon, , to the right in the pane.

Task

Select the task(s), which must have been successfully executed before the `current task` can be executed, in the drop-down list.

Delete

To entirely remove a task dependency, click on the `Delete` icon, .

Task Execution Options

Triggers can be allowed to attempt to start the `current task` a number of times during a time period.

Number of Tries

To choose a number of start attempts for the `current task`, enter the desired number in this text box.

Default value: `1`.

Timeout in Minutes

To choose a time period for the `Number of Tries`, enter the desired number in this text box.

Default value: `1440`, meaning 24 hours.

Search Functions

In the search field, the following apply:

- Searches are performed on the entries listed in the tree view to the left.
- The asterisk operator, '*', meaning 'match of any character(s)', is supported.

- The separator operator, ';' (semicolon), meaning that several search criteria can be stated at the same time, is supported.

  Example:

  `doc*;test*` will search for entries matching `doc*` or `test*`.

- Searches are not case sensitive, meaning that upper and lower case characters are treated as if they were the same.
- Searches automatically includes the extension *.qvf* and *.qvw*.

  Example:

  `document;test` adds the search for `document.qvw;test.qvw`; hence, the entries `document.qvw` and `test.qvw` will match.

Server

The `Server` tab contains the following pages:

- Server Objects
- Availability
- Performance

On these pages, the authorization of server objects and access control of the `current document` can be managed.

Server Objects

On the `Server Objects` tab, users are authorized to create server objects in the `current document`.

Allow Creation of Server Objects

To allow users to create server objects, tick this check box. To deny users to create server objects, untick this check box.

When the check box is unticked, no server objects can be created. For server bookmarks, unticking the check box only affects the possibility to share the bookmarks with other users.

User Type

To manage the authorization of users and groups, click on one of the following drop-down list options:

`All Authenticated Users`, meaning that any authenticated user is authorized.

`Named Users`, meaning that users that should be authorized are manually added, by searching for users and groups in a domain or on a computer (the names are resolved by the Directory Service Connector).

Add Users and Groups

If `Named Users` was chosen in the `User Type` field, do the following:

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.
- `Selected Users`
  This box presents the selected users and groups.
- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
- `<< Delete All`
  To deselect `all` of the users and groups from the `Selected Users` box, click on this button.

Availability

The `Availability` tab manages the control of the `current document` in AccessPoint, including client access, download restriction, and session collaboration.

Access Method

To enable which QlikView clients, used to open and download the `current document`, are presented through the QlikView AccessPoint, tick one of the following check boxes:

- `IE Client`, meaning the QlikView plugin client.
- `Ajax client and Mobile Client Version`, meaning the AJAX client and AJAX for Mobile Clients.
  - `Ajax client URL`, to use other html pages, instead of the default, for displaying the AJAX pages, enter a valid path in this text box.

    Mobile Clients always use the following URL: /QvAJAXZfc/mobile/opendoc.htm

User Privileges

Download Document

Allowing documents to be downloaded gives users access to the document, which might be a security risk.

To manage the authorization of the downloading of documents, that is, allowing users to download the `current document` and open it in the QlikView Desktop, tick this check box, and do the following:

User Type

To select the method for managing users and groups, click on one of the following drop-down list options:

`All Users`, meaning that all users are authorized (that is, anonymous access to the file is allowed).

> *The IQVS account controls file access when anonymous access is allowed. This means that the IQVS account has to be provided with the correct file access. The account is by default created as a local account in the QlikView installation. In a clustered environment, the IQVS account must be created as a domain account, so that all nodes can access it.*

`All Authenticated Users`, meaning that any authenticated user is authorized.

`Named Users`, meaning that users that should be authorized are manually added, by searching for users and groups in a domain or on a computer (the names are resolved by the Directory Service Connector).

Add Users and Groups

To manage users and groups, click on the **Manage Users** dialog icon, .

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.
- `Selected Users`
  This box presents the selected users and groups.
- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
- `<< Delete All`
  To deselect `all` of the users and groups from the `Selected Users` box, click on this button.

Print and Export to Excel

> *In QlikView 11, touch-based clients cannot export documents to Microsoft Excel.*

To manage the authorization of the printing and export of documents, tick this check box, and do the following:

User Type

To select the method for managing users and groups, click on one of the following drop-down list options:

`All Users`, meaning that all users are authorized (that is, anonymous access to the file is allowed).

> *The IQVS account controls file access when anonymous access is allowed. This means that the IQVS account has to be provided with the correct file access. The account is by default created as a local account in the QlikView installation. In a clustered environment, the IQVS account must be created as a domain account, so that all nodes can access it.*

`All Authenticated Users`, meaning that any authenticated user is authorized.

`Named Users`, meaning that users that should be authorized are manually added, by searching for users and groups in a domain or on a computer (the names are resolved by the Directory Service Connector).

Add Users and Groups

To manage users and groups, click on the **Manage Users** dialog icon, .

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.
- `Selected Users`
  This box presents the selected users and groups.
- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
- `<< Delete All`
  To deselect `all` of the users and groups from the `Selected Users` box, click on this button.

Session Collaboration

To allow users to share a session on the `current document`, tick this check box.

Performance

The `Performance` tab manages the control of the `current document`, including load balancing, preloading, concurrent session access, and audit logging.

Sessions

Maximum Number of Concurrent Sessions

To choose a maximum number of concurrent sessions towards the `current document`, enter the desired number in this text box. An empty field means no limit.

Maximum Inactive Session Time

User sessions, which have had no activity during a specified time limit, can be configured to be closed by the QVS. To set the session timeout, enter a suitable figure in this text box.

> *The maximum inactive session time can also be set on a global level. The session time with the lowest value takes precedence. If the session time entered in this text box is lower than the global session time, the global session time is disregarded.*

Being left empty or set to `0` means no limit.

Document Timeout

Open documents take up valuable system resources (that is, memory space, RAM, is allocated) and should not be allowed to remain open when not in use. However, if a document is closed too quickly, the users may get longer delay times when accessing the document, because the server has to reopen it. This value controls for how long a document will be allowed to be unused before the QlikView Server (QVS) closes the document and reclaims the resources.

Enable Audit Logging

To enable the audit log functionality, tick this check box. To disable the audit log functionality, untick this check box.

Document Control

Server

Select a server in the drop-down list.

Customize

If there is more than one server, and if the `Customize` option was selected in the `Document Available` field, configure the following:

Document Available

To configure the load balancing, that is, on which nodes the `current document` is to be available, select one of the following options:

- `Always on All Nodes`, meaning availability on all nodes.
  - `Preload`

    To make the `current document` quickly accessed at all times, by preloading it into the primary memory of the server, tick this check box. To disable the preload function, untick this check box.

> *Using the preload functionality will use memory resources also when no user is accessing the document.*

- `Customize`, meaning that the availability can be customized.

Customize

If the `Customize` option was selected in the `Document Available` field, customize the following:

Cluster Node

Presents an auto populated list of all of the servers and clusters, including all cluster nodes, that are selected for distribution.

Document Available

To configure when the `current document` is to be available, select one of the following drop-down list options:

- `Never`, meaning that the `current document` will never be loaded on the node.
- `Always`, meaning that the document will always be available to be loaded on the node.

Preload

To make the `current document` quickly accessed at all times, by preloading it into the primary memory of the server, tick this check box. To disable the preload function, untick this check box.

> *Using the preload functionality will use memory resources also when no user is accessing the document.*

> *This option is only available if the `Always` option in the `Document Available` field was selected.*

4.4 User Documents

On the `User Documents` page, all documents that are available on the QlikView Server (QVS) are listed in a tree view in the left pane. To view or manage the settings of a document, in the right pane, click on the document in the tree view.

> *A red asterisk is used to indicate mounted folders in tree views. The icon for the root folder does not carry a red asterisk.*

> *These settings should not be changed if a QlikView Publisher (QVP) is set up to distribute the documents, because they are overridden by the settings for the QVP.*

Search Document

Enter the desired search term(s) in this text box, to find documents, and click on the `Search` icon, .

Configure Document Settings

To configure the settings of a document, click on the document in the tree view. In the right pane, the following tabs are presented:

- Server
- Authorization
- Document Information
- Reload
- Document CALs

Click on each tab label for more information.

Server

The `Server` tab contains the following pages:

- Server Objects
- Availability
- Performance

On these pages, the authorization of server objects and access control of the `current document` can be managed.

Server Objects

On the `Server Objects` tab, users are authorized to create server objects in the `current document`.

Allow Creation of Server Objects

> *When collaboration is disabled in the QlikView license (that is, the license contains `DISABLE_COLLABORATION;YES;;`), server objects and server bookmarks are not allowed. This means that the `Allow Creation of Server Objects` check box does not have any effect when collaboration is disabled.*

To allow users to create server objects, tick this check box. To deny users to create server objects, untick this check box.

> *When the check box is unticked, no server objects can be created. For server bookmarks, unticking the check box only affects the possibility to share the bookmarks with other users.*

User Type

To manage the authorization of users and groups, click on one of the following drop-down list options:

`All Authenticated Users`, meaning that any authenticated user is authorized.

`Named Users`, meaning that users that should be authorized are manually added, by searching for users and groups in a domain or on a computer (the names are resolved by the Directory Service Connector).

Add Users and Groups

If `Named Users` was chosen in the `User Type` field, do the following:

To manage users and groups, click on the `Manage User` dialog icon, .

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.
- `Selected Users`
  This box presents the selected users and groups.
- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
- `<< Delete All`
  To deselect `all` of the users and groups from the `Selected Users` box, click on this button.

Objects

All the server objects within the document are presented in a list with the following information fields:

- `ID`
- `Type`
- `Sub Type`
- `Owner`

To manage users and groups, click on the `Manage User` dialog icon, .

- `Default Scope`

  Select the directory to be searched, in the drop-down list.

- `Search for Users and Groups`

  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .

- `Search Result`

  This box presents the result of the search, using the desired criteria.

- `Replace >`

  Click this button to replace the user in the `Selected Users` box with the user selected in the `Search Result` box.

- `Selected Users`

  This box presents the selected users and groups.

To entirely remove the server object from an assigned document, click on the `Delete` icon, .

Availability

On the `Availability` tab, the control of the `current document`, that is, for example, client access, download restriction, and session collaboration, can be managed.

Access Method

To enable which QlikView clients, used to open and download the `current document`, are presented through the QlikView AccessPoint, tick one of the following check boxes:

- `IE Client`, meaning the QlikView plugin client.
- `Ajax client and Mobile Client Version`, meaning the AJAX client and AJAX for Mobile Clients.
  - `Ajax client URL`, to use other html pages, instead of the default, for displaying the AJAX pages, enter a valid path in this text box.

    Mobile Clients always use the following URL: /QvAJAXZfc/mobile/opendoc.htm

User Privileges

Download Document

Allowing documents to be downloaded gives users access to the document, which might be a security risk.

To manage the authorization of the downloading of documents, that is, allowing users to download the `current document` and open it in the QlikView Desktop, tick this check box, and do the following:

User Type

To select the method for managing users and groups, click on one of the following drop-down list options:

`All Users`, meaning that all users are authorized (that is, anonymous access to the file is allowed).

> *The IQVS account controls file access when anonymous access is allowed. This means that the IQVS account has to be provided with the correct file access. The account is by default created as a local account in the QlikView installation. In a clustered environment, the IQVS account must be created as a domain account, so that all nodes can access it.*

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`Named Users`, meaning that users that should be authorized are manually added, by searching for users and groups in a domain or on a computer (the names are resolved by the Directory Service Connector).

Add Users and Groups

To manage users and groups, click on the **Manage Users** dialog icon, .

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.
- `Selected Users`
  This box presents the selected users and groups.
- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
- `<< Delete All`
  To deselect `all` of the users and groups from the `Selected Users` box, click on this button.

Print and Export to Excel

> *In QlikView 11, touch-based clients cannot export documents to Microsoft Excel.*

To manage the authorization of the printing and export of documents, tick this check box, and do the following:

User Type

To select the method for managing users and groups, click on one of the following drop-down list options:

`All Users`, meaning that all users are authorized (that is, anonymous access to the file is allowed).

> *The IQVS account controls file access when anonymous access is allowed. This means that the IQVS account has to be provided with the correct file access. The account is by default created as a local account in the QlikView installation. In a clustered environment, the IQVS account must be created as a domain account, so that all nodes can access it.*

`All Authenticated Users`, meaning that any authenticated user is authorized.

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Add Users and Groups

To manage users and groups, click on the **Manage Users** dialog icon, .

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.
- `Selected Users`
  This box presents the selected users and groups.
- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
- `<< Delete All`
  To deselect `all` of the users and groups from the `Selected Users` box, click on this button.

Session Collaboration

To allow users to share a session on the `current document`, tick this check box.

Performance

On the `Performance` tab, the control of the `current document`, that is, for example, load balancing, preloading, concurrent session access, and audit logging, can be managed.

Sessions

Maximum Number of Concurrent Sessions

To choose a maximum number of concurrent sessions towards the `current document`, enter the desired number in this text box. An empty field means no limit.

Maximum Inactive Session Time

User sessions, which have had no activity during a specified time limit, can be configured to be closed by the QVS. To set the session timeout, enter a suitable figure in this text box.

> *The maximum inactive session time can also be set on a global level. The session time with the lowest value takes precedence. If the session time entered in this text box is lower than the global session time, the global session time is disregarded.*

Being left empty or set to `0` means no limit.

Document Timeout

Open documents take up valuable system resources (that is, memory space, RAM, is allocated) and should not be allowed to remain open when not in use. However, if a document is closed too quickly, the users may get longer delay times when accessing the document, because the server has to reopen it. This value controls for how long a document will be allowed to be unused before the QlikView Server (QVS) closes the document and reclaims the resources.

Enable Audit Logging

To enable the audit log functionality, tick this check box. To disable the audit log functionality, untick this check box.

Document Control

If there is more than one server, configure the following:

Document Available

To configure the load balancing, that is, on which nodes the `current document` is to be available, select one of the following options:

- `Always on All Nodes`, meaning availability on all nodes.
  - `Preload`

    To make the `current document` quickly accessed at all times, by preloading it into the primary memory of the server, tick this check box. To disable the preload function, untick this check box.

    > *Using the preload functionality will use memory resources also when no user is accessing the document.*
- `Customize`, meaning that the availability can be customized.

Customize

If the `Customize` option was selected in the `Document Available` field, customize the following:

Cluster Node

Presents an auto populated list of all of the servers and clusters, including all cluster nodes, that are selected for distribution.

Document Available

To configure when the `current document` is to be available, select one of the following drop-down list options:

- `Never`, meaning that the `current document` will never be loaded on the node.
- `Always`, meaning that the document will always be available to be loaded on the node.

Preload

To make the `current document` quickly accessed at all times, by preloading it into the primary memory of the server, tick this check box. To disable the preload function, untick this check box.

> *Using the preload functionality will use memory resources also when no user is accessing the document.*

> *This option is only available if the `Always` option in the `Document Available` field was selected.*

Authorization

On the `Authorization` tab, the user and group access to the `current document` can be managed. Only specified users are allowed to access the `current document`, utilizing the QlikView Server (QVS) Document Metadata Service (DMS) authorization.

> *This tab is only available if `DMS Authorization` was selected as the authorization method for this QVS.*

Users Authorized to Access Document

To create an entry for managing the access of the `current document`, click on the `Add` icon, , to the right in the pane. Configure the following fields:

Access

To configure when the `current document` is to be available, open the `Access` dialog by clicking on the `Edit` icon, , and perform the configuration for one of the following options:

- `Always`, meaning that the `current document` will always be available.
- `Restricted`, meaning that the `current document` will be available as configured:
  `Week Days`

  Choose the day(s) of the week for the document to be available, by ticking one of the following check boxes:

- `Monday`
- `Tuesday`
- `Wednesday`
- `Thursday`
- `Friday`
- `Saturday`
- `Sunday`

> *If no day was chosen, the document will never be available.*

`From`

The document will be available from when the specified time is reached. To edit this parameter, enter the preferred value, in the format `hh:mm`, in this text box.

Example: `09:00`.

`Until`

The document will be available until the specified time is reached. To edit this parameter, enter the preferred value, in the format `hh:mm`, in this text box.

Default value: `23:59`.

User Type

To configure the access of the `current document`, do the following:

To manage the authorization of users and groups, select one of the following drop-down list options:

`All Users`, meaning that all users are authorized (that is, anonymous access to the file is allowed).

> *The IQVS account controls file access when anonymous access is allowed. This means that the IQVS account has to be provided with the correct file access. The account is by default created as a local account in the QlikView installation. In a clustered environment, the IQVS account must be created as a domain account, so that all nodes can access it.*

`All Authenticated Users`, meaning that any authenticated user is authorized.

`Named Users`, meaning that users that should be authorized are manually added, by searching for users and groups in a domain or on a computer (the names are resolved by the Directory Service Connector).

Users and Groups

> *This option is only available if `Named Users` was selected.*

To manage users and groups, click on the **Manage Users** dialog icon, .

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.
- `Selected Users`
  This box presents the selected users and groups.
- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
- `<< Delete All`
  To deselect `all` of the users and groups from the `Selected Users` box, click on this button.
- `Manual Input of User Names`
  This field is used for manual input of user names that do not exist in the specified directory. If the entered user name exists in a directory in the `Default Scope` drop-down list, the user is listed in the `Selected Users` box the next time the dialog is launched.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Document Information

On the `Document Information` tab, categories for the `current document` can be assigned, created, edited, and deleted. Categories are used to bundle documents in containers, to make categorization easier for the end-user. The categories are only visible to the end-user on the QlikView AccessPoint. Each document can only be part of one category.

General

Select Category

To assign a category to a document, select one of the available categories, presented in the drop-down list.

Default value: `Default`.

Or Type a New Category

To create a category, enter a descriptive name in this text box. The new category will be available in the `Select Category` drop-down list. The category is presented on the QlikView AccessPoint.

> *Categories can be reassigned, but cannot be deleted.*

Display warning if last update time is older than (minutes):

To set a document warning if the document has not been updated within the specified number of minutes. The warning icon is presented on the document card on the QlikView AccessPoint.

Source Document

The name of the source document. To select a source document, enter the name of it in this text box.

> *The source document name is not changed by a QlikView Server reload.*

Document Description

To create a document description that is displayed in Document Details on QlikView AccessPoint, enter a description in this text box.

Attributes

Meta data attributes can be created and assigned to a document. These attributes are arbitrary pairs of name and value. They are not saved in the document, but in the meta data of the QlikView Server, utilizing the QlikView Server Document Metadata Service (DMS) facility. A third-party application can read and extract the attributes from the database, using the `qvpx` protocol. The attributes are presented on the QlikView AccessPoint, in which they are used to help finding the correct document. To create an attribute and assigned value entry, to be stored in the meta file, click on the `Add` icon, , to the right in the pane, and configure the following fields:

Name

To configure a meta data attribute name, enter a descriptive name in this text box.

Value

To assign a value to the meta attribute name in the `Name` field, enter the value in this text box.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Reload

On the `Reload` tab, the `current document` can be scheduled to be reloaded.

> *This tab is just available when running only the QlikView Server, that is, not running the QlikView Publisher (QVP).*

> *Unsafe macros are not allowed on reload tasks.*

Reload Schedule

Enabled

To enable the reload function, configured on this tab, tick this check box. To disable the reload function, untick this check box.

Recurrence

Choose a schedule for the reload function, by clicking on one of the following options:

- `None`, meaning that no reload is performed.
- Hourly
- Daily
- Weekly
- Monthly
- `Continuously`, meaning that the reload is performed all the time, that is it is started and when executed, it is started again, and so on.
- On Event from Another Task
- On an External Event

All time specifications must be in the 24-hour format.

Hourly

Every

Choose a time interval for the reload function to start, by entering the desired number in the `Hours` and `Minutes` text boxes.

Start

Enter the date and time of the initial start of the reload function in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`.

Example:

```
2011-12-31 23:59:59
```

Daily

Every

Choose a time interval and the time of the initial start for the reload function to start, by entering the desired number in the `Day` text box, and in the time in the `Time` text box, the latter by using the following format: `hh:mm`.

Weekly

Select the day of the week for the reload function to start, in the drop-down list:

- `Sunday`
- `Monday`
- `Tuesday`
- `Wednesday`
- `Thursday`
- `Friday`
- `Saturday`

Also, choose the time of the initial start for the reload function to start, by entering the time in the `Time` text box, by using the following format: `hh:mm`.

Monthly

Select the number of day of every month (having that number of day), for the reload function to start, in the drop-down list:

- `1`, `2`, `3`... `31`, and `Last Day`, where each value represents that day of every months.

Also, enter the time for the reload function to start, in this text box, by using the following format: `hh:mm`.

On Event from Another Task

The reload function can be configured to be started on the event from another task. The following configuration options are available:

Start on

Choose a start event, by clicking on one of the following options in the drop-down list:

- `Successful`, meaning that the execution of the task was successful.
- `Failed`, meaning that the execution of the task failed.

Completion of

Choose a start task, by clicking on one of the options in the drop-down list.

On an External Event

The reload function can be configured to be started on an external event, that is, an outside component, making a QlikView Management Service (QMS) API call. The following configuration options are available:

Password

This password is used to access the task and release the trigger. The external event has to know the password. To enable an external event to release the trigger of the task, enter a password in this text box.

Timeout Seconds

To choose a time limit for the reload function to execute, enter the desired number in this text box.

Default value: `21600`, meaning 6 hours.

> *If the document is not reloaded within this timeout, the process will be terminated and the old data is kept in the document.*

Dependency

When a reload that has a dependency is about to be executed, the status of this dependency will first be checked, and if the status is 'failed', the current reload will not be executed. Select a dependency in the drop-down list.

Data Protection

Section Access

By default, the reload will be performed as the user under which the QlikView Distribution Service (QDS) is running. The `Section Access` setting allows the use of another user when performing the reload. To bypass the default setting, tick this check box and enter the desired user and password in the `User Name` and `Password` text boxes. To use the default setting, untick this check box.

> *The default setting may have to be redefined.*

User Name

To configure the user name, enter the desired credentials in this text box.

Password

To configure the password, enter the desired credentials in this text box.

Reload Now

To execute the reload immediately, click on this button.

Document CALs

On the `Document CALs` tab, the assignment of document Client Access Licenses (CALs) to users can be managed.

> *This tab is only available if document CALs are included in the QlikView Server license.*

> *Assigning of a CAL does not imply access to the document.*

Summary

Presents the following document CAL information:

- `Document CALs Available on Server`, meaning the number of document CALs that the current license contains.
- `Document CALs Not Allocated on Server`, meaning the number of document CALs that are not yet allocated to any document.
- `Document CALs Allocated to this Document`, meaning the number of document CALs allocated to the current document.

- `Document CALs Embedded in Document`, meaning the number of document CALs within the current document, which are assigned to users.
- `Document CALs Assigned to Users`, meaning the number of document CALs that are already embedded in the current document.

Document CALs

Number of CALs Allocated to this Document

The number of document CALs that should be allocated to the current document. By default, this value is set to '0' (zero). To change the value, enter the desired value in this text box. To reset the value to zero again, enter '0' (zero) in the text box.

Allow Dynamic CAL Assignment

If this option is used, a new document CAL will automatically be granted to a user connecting to this QlikView Server for the first time, as long as there are available document CALs to assign. To allow the QlikView Server to assign CALs to any user that opens the document, tick this check box. To deny the QlikView Server to assign CALs to any user that opens the document, untick this check box.

Assigned Users

Presents the assignment of document CALs to users in a list. Document CALs can be assigned to users either automatically (see 'Allow Dynamic CAL Assignment') or manually. To manually assign the current document CALs to a user, do the following:

To manage users, click on the `Manage Users` dialog icon, .

- `Default Scope`

  Select the directory to be searched, in the drop-down list.

- `Search for Users`

  Enter the desired search term(s) in this text box, to find a user, and click on the `Search` icon, .

- `Search Result`

  This box presents the result of the search, using the desired criteria.

- `Add >`

  To add a user, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.

- `Selected Users`

  This box presents the selected users.

- `< Delete`

  To deselect a user, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.

- `<< Delete All`

  To deselect `all` of the users from the `Selected Users` box, click on this button.

  - `Manual Input of User Names`

    This field is used for manual input of user names that do not exist in the specified directory. If the entered user name exists in a directory in the `Default Scope` drop-down list, the user is listed in the `Selected Users` box the next time the dialog is launched.

Name

Presents a list of the names of all users currently holding a document CAL on the current document. A user can represent an authenticated `User Name` or a `Machine Name`.

Last Used (UTC)

The time stamp (UTC) from the last server activity of each user.

Quarantined Until (UTC)

If a CAL-to-user association has not been in use for the last 7 days, it will be deleted immediately. If a CAL-to-user association is currently being used or has recently been used, it will be marked for deletion, which means that new user access sessions through this CAL are not allowed. However, the CAL-to-user association will still occupy an allocated CAL until this quarantine period has passed.

Restore

Before that the `Quarantined Until (UTC)` time stamp has passed, a CAL-to-user association can be `undeleted`, by clicking on the `Restore` icon, .

Delete

When the `Quarantined Until (UTC)` time stamp has passed, a CAL-to-user association can be removed manually. To entirely remove a CAL-to-user association from the list, thus freeing a document CAL, click on the `Delete` icon, .

The CAL-to-user association is formally deleted after the expiration time.

The CAL will not be available for 7 days.

4.5 Publish a link to a QlikView document in the Qlik Sense hub

You can publish a link to a QlikView document in the Qlik Sense hub instead of distributing files by e-mail or to a specific folder location. You can use this method when you want to share a QlikView document with a named user that is part of the Active Directory user group in both QlikView and Qlik Sense.

QlikView documents

Once shared, QlikView documents are listed in the Qlik Sense hub. You can open a document from the hub and interact with it using the functionality of the AJAX client. When viewing QlikView documents in Qlik Sense, no changes can be saved.

> *QlikView documents cannot be displayed using the mobile view for small devices.*

Before you begin

To enable link to QlikView documents in the Qlik Sense hub, the following is required:

- Your QlikView version is 12.00 SR3 or later.
- Your QlikView installation has a publisher license.
- A different set of certificates (client.pfx, server.pfx, and root.cer) have been exported, by your system administrator, from the Qlik Sense Management Console to each of the QlikView Distribution Service (QDS) machines.
- The server connection to the Qlik Sense AccessPoint has been configured to use the machine name.
- Qlik Sense has been configured to allow shared content.

QlikView certificate requirements

When creating a set of certificate for QlikView, the following is required:

- The certificates must be created using the full name, including the domain of the QDS machine.
- The certificates must be password protected.
- A secret key pair must be created.

> *A new set of certificates is required for each QlikView Distribution Service (QDS) machine.*

≤ Exporting certificates through the QMC

Configuring Qlik Sense to allow users to publish a link to shared content

You must create a Qlik Sense security rule and configure the Qlik Sense repository to allow QlikView to publish links on the Qlik Sense hub.

Adding a shared content security rule

Enable shared content by creating a new security rule in the Qlik Sense Management Console.

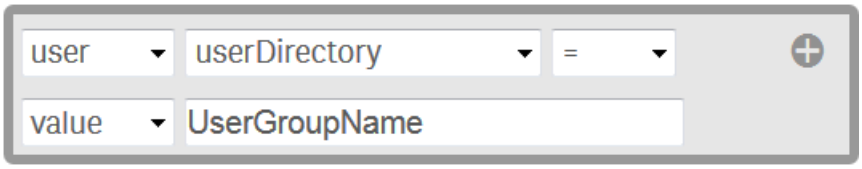
Do the following:

1. In the Qlik Sense Management Console, click **Security Rules**.
2. Click **Create new** at the bottom of the page.
3. In the **Identification** section add a name and rule description. You can use the suggestions in the following table:

Rule identification properties

Field	Value
Name	*SharedContentCreate-AllUsersFromUserGroupName*
Description	*All users from the domain UserGroupName are allowed to create shared content*

4. In the **Basic** section, select the **Create** action.
5. Ensure that the **Read** action is cleared.
6. Complete the action rule definition using the values in following image and by replacing *UserGroupName* with the name of your authentication user group.



7. In the **Basic** section type *SharedContent_** as a **Resource filter**.
8. (Optional) If you want all authenticated users to be allowed to share QlikView content, type *!user.IsAnonymous()* in the **Conditions** box.
9. Click **Apply**.
   The security rule is added to the Qlik Sense Management Console for authenticated users.

Configuring the QlikView Distribution Service with the Qlik Sense certificates

You must configure the QlikView Distribution Service (QDS) with Qlik Sense certificates to allow links to QlikView documents to be published in the Qlik Sense hub. To configure the QDS, you must import three different Qlik Sense certificates: client.pfx, root.cer, and server.pfx.

Importing the Qlik Sense certificates on the QDS machine

All certificates can be imported using the native Windows Certificate Import Wizard.

> *The root.cer certificate must be imported before all other certificates.*

Importing the root.cer certificate

1. Double-click to open the certificate.
2. Click **Install Certificate**.
   The Certificate Import Wizard is initiated.

3. Select **Current User**.
4. Select **Place all certificates in the following store**.
5. Click **Browse** and select the **Trusted Root Certification Authorities** folder.
6. Review the certificate information and click **Finish**.
   The root.cer certificate is imported on the QDS machine.

Importing the client.pfx and server.pfx certificates

1. Double-click to open the certificate.
   The Certificate Import Wizard is initiated.
2. Select **Current User**.
3. On the **Private key protection** screen type the certificate password.
4. Select **Automatically select the certificate store based on the type of certificate**.
5. Review the certificate information and click **Finish**.
   The certificate is imported on the QDS machine.

Configuring the QDS properties with the Qlik Sense certificate and machine information

The QDS configuration file must be updated on each machine with the associated certificate thumbnail and Qlik Sense and QDS machine information. By default, the *QVDistributionService.exe.config* QDS configuration file is located in *C:\Program Files\QlikView\Distribution Service*.

1. In the `<appSettings>` section, type `<add key="QRSMachineName" value="MySenseMachine.domain.com" />`replacing **QlikSenseMachineName.domain.com** with the name of your machine running the Qlik Sense Repository.

   > *The machine name must include the domain and match the name used when creating the Qlik Sense certificates.*

2. On a separate line, type `<add key="QVWSMachineName" value="QlikViewMachineName" />` replacing **QlikViewMachineName** with the name of your machine running the QlikView Web Server.

   > *The domain is not required*

3. (Optional) On a separate line, type `<add key="AjaxClientPath" value="/MyAjaxURL/opendoc.htm" />` replacing **MyAjaxURL** with the URL of your Ajax Client. If this configuration option is not added, the default `/QvAJAXZfc/opendoc.htm` is used.
4. Open the Windows Microsoft Management Console.
5. Click the **Certificates - Current User** drop-down arrow.
6. Open the Personal > Certificates folder.
7. Double-click the QlikClient certificate.
   The certificate properties are displayed.
8. On the Details tab, copy the Thumbprint value.

9. On a separate line in the *QVDistributionService.exe.config* file, type `<add key="SenseClientCertificateThumbprint" value="ThumprintID" />` replacing **ThumbprintID** with the value of the thumbprint found in the certificate properties.
10. Save your changes.
    The QDS is configured to allow you to publish links to QlikView documents in the QlikSense Hub.

Creating a task to publish a link to a QlikView document in the Qlik Sense hub

You can create a link to a QlikView document in the Qlik Sense hub by using the Qlik Management Console

> *QlikView documents in the Qlik Sense hub only support interactions using the Ajax client.*

Before you begin

To publish a link to a QlikView document in Qlik Sense you need a QlikView Server setup with a connection to an Active Directory and source documents.

Configuring the QlikView Management Console

You must configure QlikView Web Server Access Point to connect with the Qlik Sense machine.

Do the following:

1. Click the **System** tab.
2. In the QlikView Web Server folder open the current QlikView Web Server machine.
3. On the **Access Point** tab, click **Server Connections**.
4. Using the drop-down menu, change the name of the QlikView web server from *local* to the machine name.

Publishing a link to a QlikView document

Do the following task in the QlikView Management Console to publish a link to a document:

1. Click the **Documents** tab.
   The **Source Document** page opens.

   > *Only source documents can be published.*

2. Expand a QDS instance and locate the document you want to share.
3. Click to create a new task.
4. On the **Distribute** tab, click to add a recipient.
5. Select the **Named User** user type.
6. Click to add a user.

> *The named user must be part of the Active Directory user group in both QlikView and Qlik Sense.*

7. On the **Document Information** tab click to add an attribute.
8. Type *ShowInSenseHub* in the **Name** field and *true* in the **Value** field.
9. Click **Apply**.
   The task may be run and will now add a link to the QlikView document on the Qlik Sense hub.

Viewing QlikView documents in the Qlik Sense hub

Do the following:

1. Log into the Qlik Sense hub using the same credentials as the named user with which the QlikView document was shared.
2. From the hub, click **QlikView documents**.
3. Click a link to a document to open the QlikView AccessPoint in a new window.

> *QlikView documents cannot be deleted from the Qlik Sense Hub.*

4.6 Publishing QlikView documents and links in a Qlik Sense cloud hub

You can publish your QlikView documents, and links to documents, in the cloud hub. QlikView documents open directly in the cloud hub. Users do not need special permissions to open a published document. Links that are published in the cloud hub redirect the user to the QlikView Server installation. The user must be able to access the QlikView Server. You can publish documents and links in either Qlik Sense Enterprise SaaS.

> *This feature is not available in Qlik Sense Business.*

> *With the release of QlikView April 2020, publishing links to Qlik Cloud will no longer be available with QlikView April 2019.*

To publish QlikView documents or links in Qlik Cloud you must do the following tasks:

- Connect your QlikView Server deployment to an existing Qlik Cloud deployment.
  Connecting QlikView Server to a Qlik Sense Enterprise SaaS deployment (page 90)
- Create tasks to publish QlikView documents and links in the activity centers of the connected Qlik Cloud deployment.
  Publishing a QlikView document in a Qlik Sense cloud hub (page 92)

Publishing a link to a QlikView document in a Qlik Sense cloud hub (page 97)

- Optionally, migrate server bookmarks to QlikView documents in managed spaces in Qlik Cloud. *Migrating bookmarks from QlikView to Qlik Cloud tenants (page 94)*

Choosing between publishing a document and a link

Publishing a QlikView document or a link to a document gives Qlik Sense users a range of capabilities for interacting with QlikView content.

When you publish a QlikView document in a Qlik Sense cloud hub, access and consumption of the document are handled in the Qlik Sense Enterprise SaaS cloud environment. Access is managed by the Qlik Sense Enterprise cloud admin. Users can open sheets and make selections in objects but they cannot create new sheets or objects.

When you publish a link in a Qlik Sense cloud hub, the document is handled by the QVS service in the QlikView Server environment. When the user clicks the link, the document opens in the QlikView Server environment. Only users who have access to the QlikView Server can open a document from a published link. Access is managed by the QlikView admin.

Connecting QlikView Server to a Qlik Sense Enterprise SaaS deployment

Before you can publish QlikView documents or links, you must first connect your QlikView Server installation to a Qlik Sense Enterprise SaaS deployment.

Prerequisites

To publish QlikView documents or a links to a QlikView document, you must have:

- A version of QlikView Server April 2020 or later.
- A valid Publisher license.
- A configured Qlik Sense Enterprise SaaS cloud installation.

> *To access QlikView documents from a published link on the cloud hub, the user will need to be able to access the QlikView server the link was distributed from.*

Connecting QlikView Server to a Qlik Sense Enterprise cloud deployment

Do the following:

1. In the QlikView Management Console, go to the **System** tab, open the **Setup** section, then select the **Cloud Deployments** folder.
2. Select the **Add** button to create a new cloud deployment connection.
3. In the **Service URL** field, enter the first part of the cloud tenant URL, for example *<tenant_name>.<region>.qlikcloud.com/*.

Select **Apply** to create the connection. Under **Cloud Deployments** you will see connection you just created.

4. Select the connection, then select the **General** tab.
   a. In the **Deployment name** field, enter a name for the cloud deployment.
   b. In the **API endpoint** field, enter the URL to the Qlik Sense Enterprise cloud deployment that you want to publish to.
   c. Select a web server from the **Web Server** drop-down menu.
   d. Under **Distribution Settings**, you can disable the distribution of links, documents, or both.
5. In the **Issuer configuration** section, click **Generate configuration** to generate the local bearer token.
   - To connect to a Qlik Sense Enterprise SaaS deployment, select **Qlik Cloud format**.
6. Copy and save the local bearer token to a preferred location. You will need to add it to the Qlik Sense Enterprise cloud deployment to complete the connection with your QlikView Server deployment.
   Adding the bearer token to the Qlik Sense Enterprise cloud hub (page 91)
7. Select **Apply** to confirm the configuration.

Adding the bearer token to the Qlik Sense Enterprise cloud hub

To create a secure connection between your QlikView Server and your Qlik Sense Enterprise cloud hub, the QlikView Distribution Service (QDS) generates a bearer token that you add to your Qlik Sense Enterprise deployment. The bearer token has a signed key that is used in all API calls between the cloud hub and the QlikView Server.

For Qlik Sense Enterprise SaaS

To add your bearer token on Qlik Sense Enterprise SaaS:

1. In the Management console, go to **Identity provider**, then **Create new**.
2. From the drop-down menu, select **Multi-cloud**.
3. Add a description for this identity provider.
4. In the **Local bearer token** section, paste the bearer token that you generated in the QlikView Management Console.
5. Click **Create** to complete the identity provider setup.

> *If you are setting up your Qlik Sense Enterprise cloud hub tenant for the first time, see* Setup with a local bearer token.

Once the connection between the QlikView Server and Qlik Cloud is complete, you can create tasks to distribute QlikView documents or links to the connected cloud deployments.

Publishing a link to a QlikView document in a Qlik Sense cloud hub (page 97)

Publishing a QlikView document in a Qlik Sense cloud hub

You can publish QlikView documents in a cloud hub. Published QlikView documents are then available directly from the Qlik Sense cloud hub.

To publish a QlikView document in a Qlik Sense cloud hub, you first need to connect your QlikView Server to a Qlik Sense Enterprise SaaS deployment. You publish the document by creating a task in the QlikView Management Console. Once it is published in a cloud hub, access and consumption of the QlikView document is fully handled in the cloud environment. Server bookmarks are not included in published applications and must be migrated after publishing. For more information, see *Migrating bookmarks from QlikView to Qlik Cloud tenants (page 94)*.

This feature is not available in Qlik Sense Business.

Creating a task to publish a QlikView document

You can use the same task to distribute both a QlikView document and its link. The same settings will apply to both distributions. For optimal performance however, and if you want to apply dedicated settings when distributing a QlikView document or its link to Qlik Cloud, you should use separate tasks to publish QlikView links and documents.

Before you create the distribution task, make sure you connect your QlikView Server to your Qlik Cloud deployment.

Connecting QlikView Server to a Qlik Sense Enterprise SaaS deployment (page 90)

Do the following:

1. In the QlikView Management Console, go to **Documents** tab, then open the **Source Documents** section.

   You can only publish documents from any of the source documents folders listed under Distribution Services. The default path is C:\ProgramData\QlikTech\SourceDocuments.

2. Select the source document you want to publish to Qlik Cloud.
3. Select the **Add** button to create a new document task. Select the **Edit Task** button to edit an existing task.
4. *For more information about tasks, see* Source Documents.
5. Configure the document distribution.
   a. Go to the **Distribute** tab, then open the **Manually** section.
   b. Go to the **Distribute to Cloud Native** section.

c. Select **Distribute document**. This enables the distribution of the document to a Qlik Sense cloud hub.
d. From drop-down menu in the **Deployment** section, select the Qlik Sense Enterprise SaaS deployment you want to publish the document to.

> *You can select only one cloud deployment. To distribute to multiple cloud deployments, create a separate distribution task for each cloud deployment.*

6. Add one or more tags to the deployment. Adding tags is optional. Tags are visible in the cloud hub with your QlikView document and they are used to filter content in the cloud hub.
7. Select **Apply** to create the task. Tasks are listed in the **Status** tab, in the **Task** section.
8. Right-click the task and select **Run** to distribute the document to the Qlik Sense cloud hub.

> *The document is distributed to the Qlik Sense cloud hub as a staged application.*

Security considerations

When you publish a QlikView document or a link to a QlikView document, they are not published with any existing security rules. It is up to the Qlik Cloud admin to add the published QlikView document to a managed space. Managed spaces are used for providing governed access to applications with strict access control both for the application and the application data. In a managed space, only the space owner and target application consumers can open the applications. No other users can open the applications in the managed space unless they have been given permission. For more information on managed spaces, see Working in managed spaces.

Troubleshooting

If your task fails, use the QlikView Server logs to help determine the problem. This section lists possible solutions to tasks that fail.

Possible cause

You do not have access to the document source data and the default data reload causes the task to fail.

When you create a new task, data reload is enabled by default. This means the task attempts to reload the data before publishing the document or link. If you do not have access to the source data, for example you copied the QlikView document file into your source documents folder, the task will fail.

Proposed action

Disable the data reload in the task configuration.

Do the following:

1. In the QlikView Management Console, go to **Documents**, then open the **Source Documentation** section.
2. Select the task that is failing.
3. In the task configuration menu that opens, open the **Reload** tab.

4. Under **Perform Reload** section, deselect **Enable**.
5. At the bottom, click **Apply**.
6. Run the task again.

Migrating bookmarks from QlikView to Qlik Cloud tenants

QlikView Bookmark Migration Tool is a tool that migrates server bookmarks to QlikView applications in managed spaces in a Qlik Cloud tenant.

Server bookmarks are not included when QlikView documents are added to a Qlik Sense tenant. QlikView can assign ownership of the bookmark between the Active Directory users on the QlikView Server and the users in the Qlik Sense tenant. QlikView Bookmark Migration Tool maps these users so you can assign them ownership of server bookmarks. During the migration process, QlikView Bookmark Migration Tool contacts your Active Directory service and gets ID and email address information for your users and links them to users on the Qlik Sense tenant by email address. You can also manually map users, so a bookmark can be owned by a different user. The bookmarks are stored in a QMT file and then migrated to an application in the Qlik Sense tenant.

When you run QlikView Bookmark Migration Tool, you:

1. Copy shared files (.TShared or .Shared) with the bookmarks into a working folder.
2. Load files names and metadata into the working folder.
3. Select one shared file and select either all or a subset of bookmarks in the file. These are exported into a new shared file.
4. Upload the selected shared file to a QlikView application in your Qlik Sense tenant.

You can migrate your bookmarks using a QlikView document, *CloudMigrationApp*, included with QlikView Bookmark Migration Tool. The *CloudMigrationApp* manages the scripts, files, and commands to migrate your bookmarks. You can also migrate your bookmarks using the Command Prompt to run the QlikView Bookmark Migration Tool files.

QlikView Bookmark Migration Tool is available from ≤ Product Downloads.

Before you begin

Before you download and run QlikView Bookmark Migration Tool, make sure you meet the following requirements:

- You must have QlikView Desktop installed.
- You have added the QlikView documents to which you want to add the shared server bookmarks to the Qlik Sense tenant.
  Publishing a QlikView document in a Qlik Sense cloud hub (page 92)
- You must have professional access on your tenant.
- You have Management console access on your Qlik Sense tenant.
- You must generate an API key in your Qlik Sense tenant to use with QlikView Bookmark Migration Tool.
- You must have one of the following permissions in the destination managed space:

    - **Is owner**
    - **Can view**
    - **Can contribute**
    - **Can manage**
- You must have app IDs for the destination QlikView applications for the bookmarks. An app ID can be obtained from the string following *document=* in the application URL.
  For example, in the QlikView application URL *https://example.qlik.com/opendoc.htm?document=e74ebae5-5659-4211-a4de-add8e49768f6*, *e74ebae5-5659-4211-a4de-add8e49768f6* is the app ID. App IDs may vary slightly in format depending if they were published to the cloud hub or directly uploaded to the cloud hub.
- QlikView Bookmark Migration Tool requires the Windows Active Directory Module. If it is not installed, QlikView Bookmark Migration Tool installs it automatically.

Downloading and setting up the QlikView Bookmark Migration Tool

Do the following:

1. Download QlikView Bookmark Migration Tool from the ≤ Product Downloads.
   For more information, see Downloading installation files.
   For more information, see Downloading installation files.
2. Navigate to *%ProgramData%\QlikTech*.
3. Create a folder named *QlikViewMigrationTool* and copy the QlikView Bookmark Migration Tool files to that folder.
4. Optionally, create a folder and add the shared files containing the bookmarks you want to migrate to your tenant.

Migrating bookmarks to a QlikView application with *CloudMigrationApp*

> *Do not alter the load script in CloudMigrationApp.*

Do the following:

1. Navigate to the unzipped QlikView Bookmark Migration Tool folder and open the *CloudMigrationApp* document in QlikView Desktop.
2. Read and agree to the QlikView Bookmark Migration Tool terms and conditions.
3. Click **Settings** > **User preferences**.
4. In the **Save** tab, select **Save before reload**. This will prevent QlikView from clearing input data after reloading.
5. In the **Security** tab, select the following settings and click **OK**:
    - **Script (Allow Database Write and Execute Statements)**
6. Follow the directions in the QlikView document for each sheet:
    a. In **1. Initialize**, select the folder where you store shared files and the folder you want to output the copies uploaded to the tenant.
    b. In **2. Get User Data**, set the parameters needed to match owners of shared bookmark with users in the Qlik Sense Enterprise SaaS tenant.

c. In **3. View user mapping file**, review the mapping.
Optionally, edit the mapping in the file *OnPremToCloudMap.csv*. To map QlikView users to Qlik Sense users, add the **User ID** and **IdP subject** values for the users from the Qlik Cloud Management Console to the QlikView user entries. When you are done, click **Reload** in the sheet.

d. In **4. Overview**, verify you have loaded the correct file.

e. In **5. Filter metadata**, optionally use the filters to narrow the scope of shared bookmarks to migrate to the tenant.

f. In **6. Prepare new shared files for Cloud**, select the shared file from the application whose bookmarks you want to migrate. Optionally, select the IDs of the bookmarks you want to include. If you select none, all available bookmarks will be included.

g. In **7. Upload to Cloud**, set the destination application in the tenant and upload the bookmarks.

7. Repeat steps **5. Filter metadata**, **6. Prepare new shared files for Cloud**, and **7. Upload to Cloud** for each additional application to which you want to migrate bookmarks.
8. Save and close the *CloudMigrationApp*.
CloudMigrationApp keeps inputs you have added to the application when you save it.

Migrating bookmarks to a QlikView application from the Command Prompt

Do the following:

1. Open the Command Prompt as an administrator.
2. Navigate to the QlikView Bookmark Migration Tool folder.
3. Enter the following command to copy the shared files and the metadata to the output folder:
`QMTMetaInfo.exe -InputFolder $(vInputFolder) -OutputFolder $(vOutputFolder)`
Replace the variables:
   - `$(vInputFolder)`: The file path to your QlikView document folder.
   - `$(vOutputFolder)`: The file path to the folder where you want to store migration files.
4. Enter the following command to get user data from Active Directory: `QMTGetADUser.exe "$(vDCServer)" "$(vADOutputfile)"`.
Replace the following variables:
   - `$(vDCServer)`: The Domain Controller server URL.
   - `$(vADOutputfile)`: The file path to the folder for storing your list of QlikView Server users, including file name and .csv.
5. Enter the following command to get user data from the Qlik Sense tenant: `QMTGetUserInfo.exe "$(vCloudURL)/api/v1/users" "$(vApiKey)" "$(vUserIdMapLocation)"`.
Replace the following variables:
   - `$(vCloudURL)`: The URL of your Qlik Sense tenant.
   - `$(vApiKey)`. The API key from your Qlik Sense tenant.
   - `$(vUserIdMapLocation)`: The file path to the folder for storing your list of tenant users, including file name and .csv.
6. Create a new CSV file named *OnPremToCloudMap.csv* with the following columns:

    - *Owner*
    - *subject*
    - *id*
7. In *OnPremToCloudMap.csv*, add values from the *Owner* column of the CSV created in step 4 with the corresponding *subject* and *id* values from the .csv created in step 5.
8. Create a new CSV file and add a comma-separated list of the bookmark IDs from the shared file you want to migrate to your Qlik Sense tenant.
9. In the Command Prompt, create the QMT file containing the bookmarks that will be uploaded to the tenant by entering the following command: `QMTFilter.exe "$(OldSharedFile)" "$(csvFile)" "$(OnPremToCloudMap.csv)" "$(Updated)"`.
   Replace the following variables:
    - *$(OldSharedFile)*: The full path, including file name, to where the shared file is located.
    - *$(csvFile)*: The full path, including file name, to the CSV file containing the bookmark IDs.
    - *$(OnPremToCloudMap.csv)*: The full path, including file name, to *OnPremToCloudMap.csv*.
    - *$(Updated)*: The path to the folder where the QMT file will be stored.
10. Run the following command, replacing the variables: `qlik_qv_export.exe -mode=migrate -cloudUrl="$(vCloudURL)" -appId="$(vAppId)" -api_key="$(vApiKey)" -uploadpath="$(vSharedFileToUpload)" -handledDirectory="$(vHandledDirectory)"`.
   Replace the following variables:
    - *$(vCloudURL)*: The URL of your Qlik Sense Enterprise SaaS tenant.
    - *$(vAppId)*: The app ID of the application to which you are migrating bookmarks.
    - *$(vApiKey)*: The API key from your Qlik Sense Enterprise SaaS tenant.
    - *$(vSharedFileToUpload)*: The QMT file containing the bookmarks.
    - *$(vHandledDirectory)*: The full path of the folder that your QMT file will be stored once it is migrated to the cloud.

Limitations

QlikView Bookmark Migration Tool has the following limitations:

- QlikView Bookmark Migration Tool does not support migrating bookmarks to QlikView applications in personal spaces. You can migrate bookmarks to QlikView applications in shared spaces, but they are not available to users.
- UNC paths are not supported for the input or output folders. Shared folders mapped to local drives are supported.
- The number of XLSX files on sheet **4. Overview** may differ compared to the number of actual files in the folder. This is because empty metadata files are not visible in the application.
- If you already migrated bookmarks from a shared file, you must delete the previously generated files from the handled directory before copying files from that shared file again.

Publishing a link to a QlikView document in a Qlik Sense cloud hub

You can publish links to QlikView documents in a cloud hub. Users access the link from the cloud hub and open the document in a QlikView Server environment.

To publish a link to a QlikView document in a Qlik Sense cloud hub, you first need to connect your QlikView Server to a Qlik Sense Enterprise SaaS cloud deployment. You publish the link by creating a task in the QlikView Management Console. Once it is published in a cloud hub, the link is accessible from the cloud hub. The QlikView document is opened in QlikView Server.

This feature is not available in Qlik Sense Business.

Creating a task to publish a link to QlikView document

You can use the same task to distribute both a QlikView document and its link. The same settings will apply to both distributions. For optimal performance however, and if you want to apply dedicated settings when distributing a QlikView document or its link to Qlik Cloud, you should use separate tasks to publish QlikView links and documents.

Before you create the distribution task, make sure you connect your QlikView Server to your Qlik Cloud deployment.

Connecting QlikView Server to a Qlik Sense Enterprise SaaS deployment (page 90)

Do the following:

1. In the QlikView Management Console, go to **Documents** tab, then open the **Source Documents** section.

   You can only publish documents from any of the source documents folders listed under Distribution Services. The default path is C:\ProgramData\QlikTech\SourceDocuments.

2. Select the source document you want to publish to Qlik Cloud.
3. Select the **Add** button to create a new document task. Select the **Edit Task** button to edit an existing task.
4. *For more information about tasks, see* Source Documents.
5. Configure the link distribution.
   a. Navigate to the **Distribute** tab, then open the **Manually** section.
   b. In the Distribute to QlikView Server section, select **Add recipients** button.
   c. From the drop-down menu that is now visible, select a server and a user type.
   d. In the **Distribute to Cloud Native** section, select **Distribute link** to enable the distribution of the link to a Qlik Sense cloud hub.
   e. In the **Cloud Deployment** drop-down menu select the Qlik Sense Enterprise SaaS deployment you want to distribute the link to.

> *You can select only one cloud deployment. To distribute to multiple cloud deployments, create a separate distribution task for each cloud deployment.*

6. Add one or more tags to the deployment. Adding tags is optional. Tags are visible in the cloud hub with your QlikView document link and they are used to filter content in the cloud hub.
7. Select **Apply** to create the task. Tasks are listed in the **Status** tab, in the **Task** section.
8. Right-click the task and select **Run** to distribute the document link to the Qlik Sense cloud hub.

Security considerations

When you publish a QlikView document or a link to a QlikView document, they are not published with any existing security rules. It is up to the Qlik Cloud admin to add the published QlikView document to a managed space. Managed spaces are used for providing governed access to applications with strict access control both for the application and the application data. In a managed space, only the space owner and target application consumers can open the applications. No other users can open the applications in the managed space unless they have been given permission. For more information on managed spaces, see Working in managed spaces.

Troubleshooting

If your task fails, use the QlikView Server logs to help determine the problem. This section lists possible solutions to tasks that fail.

Possible cause

You do not have access to the document source data and the default data reload causes the task to fail.

When you create a new task, data reload is enabled by default. This means the task attempts to reload the data before publishing the document or link. If you do not have access to the source data, for example you copied the QlikView document file into your source documents folder, the task will fail.

Proposed action

Disable the data reload in the task configuration.

Do the following:

1. In the QlikView Management Console, go to **Documents**, then open the **Source Documentation** section.
2. Select the task that is failing.
3. In the task configuration menu that opens, open the **Reload** tab.
4. Under **Perform Reload** section, deselect **Enable**.
5. At the bottom, click **Apply**.
6. Run the task again.

5 Users

The `Users` tab contains the following pages:

- User Management, where the CALs, server objects, groups, documents, and distributions of users can be managed.
- Section Access Management, where the tables for section access can be configured.

The `Users` and `System` tabs are only available for QlikView Administrators, and not for QlikView Publisher Document Administrators.

5.1 User Management

On the `User Management` page, all of the users in the QlikView Server (QVS) and QlikView Publisher (QVP) systems can viewed and managed, for the objects in the following tabs:

- CALs
- Server Objects
- Groups
- Documents
- Distributions

Search User

To search for a user, do the following:

- `User`

  Enter the desired search term(s) to find the user name, in this text box, and click on the `Search` icon, , to initiate the search.

- `Search in`

  To restrict the boundary in which to search for a user, select one of the directories, or `All Directories` in the drop-down list.

- `Search Result`

  The result of the search is presented in the left pane, listing the name(s), `User`, and the location(s), `Path`, of the user(s).

View and Manage User

To view and manage the settings of a user, in any of the tabs to the right, click on the user in the left pane.

CALs

On the `CALs` tab, information about users assigned to Client Access Licenses (CALs), on servers or in user documents, can be viewed and removed. All of the CAL-to-user associations are presented in the list.

This tab is only available if there are document CALs assigned to the `current user`.

The information presented in this tab is depending on the selection in the left pane.

Functions

User Name

Presents the name of the current user, including the path. A user can represent an authenticated user name or a machine name.

Type

Presents the type of CAL of the current user. The possible values are the following:

- `Document CAL`
- `Named CAL`

Last Used (UTC)

The time stamp (UTC) from the last server activity of the current user.

Expiration (UTC)

If a CAL-to-user association has not been in use for the last 7 days, it will be deleted immediately. If a CAL-to-user association is currently being used or has recently been used, it will be marked for deletion, which means that new user access sessions through this CAL are not allowed. However, the CAL-to-user association will still occupy an allocated CAL until this quarantine period has passed.

Source

Presents the name of the server or user document, to which the CAL is assigned.

Delete

When the `Quarantined Until (UTC)` time stamp has passed, a CAL-to-user association can be removed manually. To entirely remove a CAL-to-user association from the list, thus freeing a document CAL, click on the `Delete` icon, .

The CAL-to-user association is formally deleted after the expiration time.

The CAL will not be available for 7 days.

Undo Delete

Before the `Quarantined Until (UTC)` time stamp has passed, a CAL-to-user association can be `undeleted`, by clicking on the `Undo Delete` icon, .

Server Objects

On the `Server Objects` tab, all the server objects that are owned by a user can be viewed and removed.

> *This tab is only available if there are document CALs assigned to the `current user`.*

> *The information presented in this tab is depending on the selection in the left pane.*

ID

Presents the ID of the server object.

Object Type

Presents the type of the server object.

Shared

Indicates whether the server object is shared, or not.

Document Name

Presents the name of the document in which the server object reside.

Owner

Presents the name of the owner of the server object. A user can represent an authenticated user name or a machine name.

Manage User

To reassign the ownership of a server object, enter the name and the path of the user in the text field, or do the following:

To manage users and groups, click on the `Manage User` dialog icon, .

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.
- `Selected Users`
  This box presents the selected users and groups.

- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
- `<< Delete All`
  To deselect `all` of the users and groups from the `Selected Users` box, click on this button.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Undo Delete

To `undelete` a previously deleted server object, click on the `Undo Delete` icon, .

Number of Entries

Presents the number of configured entries in the current section access table. Select the number of entries to be presented on each page, in the drop-down list:

- `10 per page`
- `20 per page`
- `50 per page`
- `100 per page`

Groups

On the `Groups` tab, all of the groups that a user is a member of are presented.

> *The information presented in this tab is depending on the selection in the left pane.*

Group Name

The left pane presents any directory group name(s), in which the current user is a member.

Group Name

The right pane presents the existing QlikView group names. A ticked, , group name indicates that the current user is a member of that group.

Documents

On the `Document` tab, all of the user documents and the source documents that a user has access to are presented.

> *The information presented in this tab is depending on the selection in the left pane.*

User Document Name

The left pane presents the names of the user documents to which the current user has access.

Source Document Name

The right pane presents the names of the source documents to which the current user has access.

Distributions

On the `Distributions` tab, all of the distributions, for which the current user is a recipient, are presented. Also, the task settings can be edited.

> *The information presented in this tab is depending on the selection in the left pane.*

Task Name

To edit a task, click on the task name.

Match

Presents the matching criterion, filtering the current user into the distribution list. Possible values are the following:

`All Users`, meaning that all users are authorized (that is, anonymous access to the file is allowed).

> *The IQVS account controls file access when anonymous access is allowed. This means that the IQVS account has to be provided with the correct file access. The account is by default created as a local account in the QlikView installation. In a clustered environment, the IQVS account must be created as a domain account, so that all nodes can access it.*

`All Authenticated Users`, meaning that any authenticated user is authorized.

`Named Users`, meaning that users that should be authorized are manually added, by searching for users and groups in a domain or on a computer (the names are resolved by the Directory Service Connector).

Distributions

Presents the server available for document distribution.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

> *A configured entry can only be deleted by the user if the user is an explicit recipient to the distribution, but not if the user belongs to a group that is configured as a recipient.*

User Management Search Functions

In the search field of the `Manage Users` dialog, the following apply:

- Searches in the `Microsoft Active Directory` are performed on the account names, `sAMAccountName` (the login name) and `name` (the entire account name), only.

  Example: sAMAccountName

  `jsmith`

  Example: name

  `John Smith`

- The asterisk operator, '*', meaning 'match of any character(s)', is supported.
- The separator operator, ';' (semicolon), meaning that several search criteria can be stated at the same time, is supported.

  Example:

  `jsmith*;wjones*` will search for account names matching `jsmith*` or `wjones*`.

- Searches are not case sensitive, meaning that upper and lower case characters are treated as if they were the same.
- Searches can be limited within a specific directory service provider, by stating a qualifier.

  Example 1:

  `<domain_name>\jsmith*` will search for account names matching `jsmith*` in the directory `<domain_name>`, only.

  Example 2:

  `<computer_name>\jsmith*` will search for local account names matching `jsmith*` on the local `<computer_name>`, only.

  Example 3:

  `custom\jsmith` will search for account names matching `jsmith` in `custom users`, only.

  Example 4:

  `jsmith*` will search for account names matching `jsmith*` in any configured directory service provider.

5.2 Section Access Management

On the `Section Access Management` page, all the available tables for section access are listed in a tree view in the left pane. These tables act as a central repository for section access tables to use in QlikView documents. The actual use of these tables is defined in the load script of the document.

Section access is similar to reduction, but is done by the QlikView Server when a user accesses the document. The choice between section access and static reduction is a question of performance and memory usage. When QlikView Publisher opens a section access protected QlikView file, the file is reduced based on the reduction values.

> *Reduction based on Section Access may cause unwanted results in the distributed documents and should be used with caution.*

Section Access Tables

Section Access Table URL

In order to use all of the defined section access tables, add the presented path (URL) to the load script in the QlikView `Script Editor`.

Add

To create a table entry, click on the `Add` icon, , to the right in the pane, and enter a descriptive name in the new text box. The new table will be available in the tree view in the left pane.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Manage Section Access Tables

To view and manage the settings of an existing section access table, in the right pane, click on the table in the tree view in the left pane. For example, click on the predefined table named `default`.

Allowed Users...

The current section access table URL can be configured, so that only specific users can use it.

> *Members of the Administrators group always have access to the section access table.*

To manage users and groups, click on this button.

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .

- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.
- `Selected Users`
  This box presents the selected users and groups.
- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
- `<< Delete All`
  To deselect `all` of the users and groups from the `Selected Users` box, click on this button.

Search for Users in

In the drop-down list, select the directory service connector, in which to search for users and groups using the `Allowed Users...` function. This also applies to the section access tables below (Column User with the clickable icon that brings up Manage Users).

Edit Columns...

In the `Edit Table Columns` dialog columns can be added to, or removed from, the current section access table. The available table columns are listed in Table Columns.

To open the dialog, click on this button.

- `QlikView Column`
  This list contains all the possible `reserved` columns in a QlikView section access table. To view an explanation of a column, click on it. The explanation is presented between the left `available columns` list and the right `chosen columns` list.
- `Add Column (upper)`
  To add a `reserved` column to the current section access table, click on the column and click on this button. The column is moved from the left `available columns` list to the right `chosen columns` list.
- `Type Column`
  To add a `custom` column to the current section access table, enter a name in this text box and click on the `Add Column (lower)` button.
- `Add Column (lower)`
  To add the `custom` column to the current section access table, click on this button. The new column is added to the right `chosen columns` list.
- `Promote`
  To move a column to the left, within the current section access table, click on the column in the right `chosen columns` list and click on the `Promote` icon, , as many times as needed. The column will be moved upwards in the right `chosen columns` list and to the left in the current section access table.

- `Demote`
  To move a column to the right, within the current section access table, click on the column in the right `chosen columns` list and click on the `Demote` icon, , as many times as needed. The column will be moved downwards in the right `chosen columns` list and to the right in the current section access table.
- `Remove Column`
  To entirely remove a column from the current section access table, click on the column and click on this button. Reserved columns are moved from the right `chosen columns` list to the left `available columns` list, whilst `custom` columns are deleted.

Table Columns

The following table columns are available:

- `ACCESS`, a field that defines what access the corresponding user should have. The following options are available in the drop-down list:
  - `ADMIN`
  - `USER`
- `NTNAME`, a field that should contain a string corresponding to a Windows NT domain user name or group name. In this filed, users and groups are given access to the documents distributed by the section access functionality. The QlikView Server will fetch the logon information from the operative system and compare it to the value in this field. To manage users and groups, either enter a valid string in this field, or do the following:

  To manage users and groups, click on the **Manage Users** dialog icon, .
  - `Search for Users and Groups`
    Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
  - `Default Scope`
    Select the directory to be searched, in the drop-down list.
  - `Search Result`
    This box presents the result of the search, using the desired criteria.
  - `Selected Users`
    This box presents the selected users and groups.
  - `Add >`
    To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
  - `< Delete`
    To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
  - `<< Delete All`
    To deselect `all` of the users and groups from the `Selected Users` box, click on this button.
- `NTSID`, a field that should contain a Windows NT SID. The QlikView Server will fetch the logon information from the operative system and compare it to the value in this field.

Example:

```
S-1-5-21-125976590-467238106-1092489882-1378
```

- `NTDOMAINSID`, a field that should contain a string corresponding to a Windows NT Domain SID.
- `SERIAL`, a field that should contain a number corresponding to the QlikView serial number. The QlikView Server will check the serial number of the user and compare it to the value in this field.

  Example:

  ```
  4900 2394 7113 7304
  ```

- `USERID`, a field that should contain an accepted user ID. The QlikView Server will prompt for a user ID and compare it to the value in this field. This user ID is not the same as the Windows user ID.
- `PASSWORD`, a field that should contain an accepted password. The QlikView Server will prompt for a password and compare it to the value in this field. This password is not the same as the Windows password.
- `OMIT`, a field that should contain the field that should be omitted for this specific user. Wildcards may be used and the field may be empty. A facile way of doing this is to use a sub field.

  > *Do not apply OMIT on key fields, since this changes the underlying data structure and may create logical islands and calculation inconsistencies.*

- `Custom`, a custom field defined as desired.

Import Table Data...

The contents of a tab separated file can be pasted into the current section access table. To open the `Import` dialog, click on this button.

- `Paste Tab Separated File Below:`

  Enter the tab separated file contents in this text box.

- `Treat First Row as Column Names`

  If the first row of the tab separated file is made up of, for example, column names, this row should not be imported. To exclude the first row from being imported, tick this check box. To include the first row to being imported, untick this check box.

- `Clear Table Data`

  If the imported data is to replace the possibly already existing data in the current section access table, tick this check box. If the imported data is to be appended into the current section access table, untick this check box.

Search

To filter the list of entries for the current section access table, enter the desired term(s) to search for in all columns in this text field, and click on the `Search` icon, , to initiate the search and filtering.

Add

To create a table row entry in the current table, click on the `Add` icon, , to the left in the table header. The new entry will be added last in the table.

Copy and Paste

To copy a table row entry in the current table, click on the `Add Row` icon, , in the table row to be copied. The new entry will be added just under the copied entry in the table.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Number of Entries

Presents the number of configured entries in the current section access table. Select the number of entries to be presented on each page, in the drop-down list:

- `10 per page`
- `20 per page`
- `50 per page`
- `100 per page`

6 System

The `System` tab contains the following pages:

- Setup
- Licenses
- About
- Supporting Tasks
- Log Collector

On these pages, all the settings of the various services in the QlikView Server (QVS) and the QlikView Publisher (QVP) can be managed.

The `Users` and `System` tabs are only available for QlikView Administrators, and not for QlikView Publisher Document Administrators.

6.1 Setup

The `Setup` page contains the following folders:

- Management Service, where the QlikView Management Service, communicating with all services and hosting the QMC Graphical User Interface (GUI), can be viewed and managed.
- QlikView Servers, where the hosting of the user documents can be managed.
- Distribution Services, where the QlikView Distribution Service (QDS) settings can be managed.
- Directory Service Connectors, where user information from various sources can be monitored.
- Directory Service Providers, where the configuration of the directory services can be managed.
- QlikView Web Servers, where the web servers for AJAX web pages, the hosting of the QlikView AccessPoint, and the load balancing of the QlikView Server, can be managed.
- Remote Management Services, where tasks can be imported from remote server management services.
- Mail Server, where the alert and distribution e-mail service can be managed.
- License Service where you can see the License Service information.
- Cloud Deployments

Click on each folder label for more information.

Management Service

In the `Management Service` folder, the central coordinating component in the QlikView Publisher (QVP) can be managed. The Management Service is responsible for maintaining the QlikView Publisher Repository (QVPR), keeps track of the various components, communicates with all services, and hosts the QMC Graphical User Interface (GUI). A QVP installation has only one Management Service.

The `Management Service` folder contains the following tabs:

- Summary, where the address of the Management Service can be viewed.
- General, where the level of logging of the Management Service can be managed.
- Repository, where the QlikView Publisher Repository (QVPR), that is, the database containing the task information, can be managed.
- Auditing, where the user tracking of changes on tasks and settings in the system can be viewed.

Summary

On the `Summary` tab, the address used to connect to the API of the Management Service is presented.

Click the link to show the Web Services Description Language (WSDL) for the API.

General

On the `General` tab, the level of logging of the Management Service can be managed.

Location

URL

Presents the `URL` of the Management Service.

Example:

```
http://<mycomputer>:4799/QMS
```

Logging Level

The log level of the service. Select one of the following options:

- `No Logging`
- `Normal Logging`
- `Debug Logging`

> *The debug logging level might cause heavy load on the system.*

Repository

On the `Repository` tab, the name of the database to use as repository for the QlikView Publisher (QVP) can be set. If the database does not exist, it will be created. The QlikView Publisher Repository (QVPR), is the database containing the information about every QVP task. The repository can be either XML based or stored on a Microsoft SQL Server.

> *This tab is only available if a valid QlikView Publisher (QVP) license was installed.*

Choice of Repository Type

One of the following options can be chosen:

- `XML Repository`
- `Microsoft SQL Server`

Depending on the chosen repository type, the settings available on the `Repository` tab will change.

Settings for XML Repository

Database

The name of the XML repository.

Optional Base Path

The path to the folder where the XML repository is to be created.

> *If this path contains a database with the same name, the data will be overwritten.*

Migrate Data From Current Repository

When creating a database, it is possible to move the data from, for example, a company database to the new one. To migrate data from the current QVPR repository to a new path, tick this check box. To not migrate any data, untick this check box.

> *If the destination repository contains data, it will be overwritten. Please make a backup before continuing. If creating a database, the old one can be migrated, or the database will be empty from start.*

Backup Settings

Schedule

It is possible to configure a scheduled backup of the repository. One of the following options can be chosen:

- `Never`, meaning that no backup is performed.
- `Daily at`, meaning that a backup is performed every day at a set time.
- `Every`, meaning that a backup is performed at an interval; each set minutes.

The backup is saved as a .zip file, named using the time stamp of the file creation.

Optional Backup Path

To change the path to the backup *.zip* file, enter a valid path in this field. By default, the *.zip* file is saved to the same path as the repository.

Backup Now

To create a backup immediately, click on the `Backup Now` button.

Settings for Microsoft SQL Server Repository

Get Servers

To choose a server from a list of Microsoft SQL Servers that are available on the network, click on this button.

Server

The chosen Microsoft SQL Server name.

Port

The port number of the communication.

Connection Model

The protocol that should be used for the communication with the Microsoft SQL Server.

Connect Using

Select the authentication method. One of the following options can be chosen:

- `Management Service User (Windows authentication)`, meaning that the Windows user, under which the service run, is used.
- `SQL Server Authentication`

Database

The name of the database on the Microsoft SQL Server. If this field is set to the name of an already existing QVP database, the data in the existing database will be updated.

Migrate Data from Current Repository

When creating a database, it is possible to move the data from, for example, a company database to the new one. To migrate the data from the current QVPR repository to a new path, tick this check box. To not migrate any data, untick this check box.

> *If the destination repository contains data, it will be overwritten. Please make a backup before continuing. If creating a database, the old one can be migrated, or the database will be empty from start.*

Auditing

On the `Auditing` tab, it is possible to manage the settings of the tracking of changes on tasks and settings made by users in the system. The audit log stores information about the users, the changes, and the time stamp.

Enabled

This check box indicates whether the audit logging is turned on (ticked) or off (unticked).

> *It is not possible to enable the audit logging on this tab, but auditing must be turned on in the Management Service configuration file, QVManagementService.exe.config, found in the directory C:\Program Files\QlikView\Management Service. Changing any of the parameter values requires a restart of the QlikView Management Service (QMS).*

Audit Files

Folder

The full absolute path for the audit logs.

Days to Keep Audit Logs

The number of days that the audit logs are saved. Logs older than this setting are overwritten by new logs.

QlikView Servers

In the `QlikView Servers` folder, the QlikView Server (QVS) cluster(s) hosting the user documents can be viewed, added, edited, and deleted.

> *A cluster might include one or more nodes.*

Functions

Add

To create a QVS cluster entry, click on the `Add` icon, , to the right in the pane, and enter the `URL` in the new text box. The new entry will be available in the tree view in the left pane.

Example:

```
qvp://<mycomputer>/
```

> *QVP links can only be opened in QlikView Desktop.*

Edit

To configure a QlikView Server cluster entry, click on the `Edit` icon, , or click on the entry in the tree view. In the right pane, the following tabs are presented:

- General
- Folders
- Documents
- Performance
- Logging
- Security

- Folder Access
- Login

Click on each tab label for more information.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Apply

Select `Apply` to confirm the change.

Cancel

Select `Cancel` to revert the change.

View

To view or configure the settings of a QlikView Server cluster, in the right pane, click on the entry in the tree view. Each entry contains the following tabs:

- General
- Folders
- Documents
- Performance
- Logging
- Security
- Folder Access
- Login

Click on each tab label for more information.

General

On the `General` tab, the settings of the current QlikView Server (QVS) cluster can be managed.

Cluster

Name

The name of the QlikView Server cluster. To edit the name, enter a name in this text box.

Serial Number

Presents the serial number of the QlikView Server software license.

Control

To set up a QlikView Server cluster, enter the control number for the QlikView Server software license in this text box.

Add

To add a cluster node entry, click on the `Add` icon, , to the right in the pane, and configure the following new text boxes:

- `URL`

  Enter the path to the second QlikView Server in this text box.

  Example:

  ```
  qvp://<mycomputer>/
  ```

  > *QVP links can only be opened in QlikView Desktop.*

- `Link Machine Name`

  If the QlikView Server cluster is not exposed externally with the same name as is used internally, an external name must be entered in this text box. This is to enable QlikView documents in the QlikView plugin. To mimic the behavior of version 8.5, it is possible to enter `(FromRequest)` (including the parenthesis) in this text box. The name exposed externally will then be the same as the URL that the client uses to connect to the QlikView AccessPoint, that is, the setting is taken from the request coming from the client.

  > *If this text box is left empty, the name exposed for the clients will be the computer name of the QlikView Server.*

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Folders

On the `Folders` tab, the paths to the documents and temporary files for clustering and load balancing, can be configured.

> *The root folder for the user documents in the QlikView Server (QVS) and the source folder for the source documents in the QlikView Distribution Service (QDS) should never use the same folder path.*

Document Folders

> *Do not interact with documents in folders managed by QlikView Server (QVS) or QlikView Publisher (QVP).*

Root Folder

The path to the documents that are to be accessed through the QlikView Server has to be configured. This path will typically reflect the default document location. Documents may also reside in sub folders of this folder. The Microsoft Windows file security applies for all user access to document folders and files, unless using the QlikView Server Document Metadata Service (DMS) Authorization mode.

The default location after installation may differ depending on the operating system.

Default value: `C:\ProgramData\QlikTech\Documents`.

To select a folder, enter the valid and absolute path in this text box, or click on the `Browse` icon, , and choose the folder in the `Choose Folder` dialog.

> *Valid value(s) must be entered, which might be indicated with a red `asterisk` and a tool-tip error message.*

Mounted Folders

It is also possible to specify `Mounted Folders`. Such a folder may contain sub folders to any level.

Add

To add a mounted folder, click on the `Add` icon, , to the right in the pane, and configure the following text boxes:

- `Name`

  Enter a descriptive name of the folder.

- `Path`

  To select a folder, enter the valid and absolute path in this text box, or click on the `Browse` icon, , and choose the folder in the `Choose Folder` dialog.

  Valid value(s) must be entered, which might be indicated with a red `asterisk` and a tool-tip error message.

- `Browsable`

  To make the folder, and the contents of it, browsable from the `Open in Server` dialog in the QlikView Desktop, tick this check box. To disable the browse function, untick this check box.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

System Folders

Alternate Temporary Files Folder Path

If clustering or load balancing is used for the QlikView Server, an alternate path for temporary files has to be configured. This path must be reachable by all QlikView Servers in the cluster.

To select a folder, enter the valid and absolute path in this text box, or click on the `Browse` icon, , and choose the folder in the `Choose Folder` dialog.

Alternate Extensions Path

Enter the path of, or browse to, the directory where your QlikView Extensions are located.

Documents

On the `Documents` tab, the settings for document control can be managed.

Server

Document Timeout

Open documents take up valuable system resources (that is, memory space, RAM, is allocated) and should not be allowed to remain open when not in use. However, if a document is closed too quickly, the users may get longer delay times when accessing the document, because the server has to reopen it. This value controls for how long a document will be allowed to be unused before the QlikView Server (QVS) closes the document and reclaims the resources.

Default value: `480` minutes.

Allow Document Download

> *Allowing documents to be downloaded gives users access to the document, which might be a security risk.*

Documents can be allowed to be downloaded by clients through the QlikView AccessPoint. To allow documents to be downloaded, tick this check box. To deny documents to be downloaded, untick this check box.

Allow Document Upload

New or updated documents can be allowed to be uploaded to the QlikView Server through the QlikView Distribution Service (QDS) in the QlikView Publisher (QVP). For this upload function to work, the QlikView Server is required to be defined as a resource in the QVP. And, if using the QVP, this upload function has to be allowed. To allow documents to be uploaded to the QlikView Server through the QDS, tick this check box. To deny documents to be uploaded to the QlikView Server through the QDS, untick this check box.

> *Denying documents to be uploaded will stop all distributions from working.*

Allow Only One Copy of Document in Memory

If there are changes to a document, for example, a reload or a layout change, the QVS can be configured to do either of the following options.

- Force an immediate update of the document for the user during the session, that is, allowing only one version of a document. This will conserve memory resources on the QVS.
- Await a new session, then update the document for the user. This may cause several copies of different versions of the document, residing in memory at the same time.

To allow only one version of the document in memory, tick this check box. To allow several versions of the document in memory, untick this check box.

Allow Print and Export to Excel

Documents can be allowed to be printed and exported to Microsoft Excel. To allow documents to be printed and exported, tick this check box. To deny documents to be printed or exported, deselect this check box.

Default limitations in number of rows and columns

The default maximum number of rows and columns in the Excel export file is:

- 1048566 rows per sheet. For pivot tables: 1048566 column dimensions. 10 rows can be added after the export.
- 16384 columns per sheet. If the number of columns exceeds the limit, the exported file is truncated and a warning message is sent.

> *If the export to Excel takes more than three minutes (180 seconds) to be performed, QlikView Server terminates the process and returns an error message.*

Allow Server Annotations

To enable server annotations, that is, to let clients present annotations for sheet objects in the documents, and to allow users to view, write, edit, and delete annotations, tick this check box. To disable server annotations, untick this check box.

Allow Session Collaboration

To allow users to share sessions on documents, tick this check box. To deny users to share sessions on documents, untick this check box.

Allow Server Objects

> *When collaboration is disabled in the QlikView license (that is, the license contains `DISABLE_COLLABORATION;YES;;`), server objects and server bookmarks are not allowed. This means that the `Allow Server Objects` and `Allow Anonymous Server Bookmarks` check boxes cannot be checked when collaboration is disabled.*

To allow the users to create server objects, that is, `Sheet Objects` and `Reports`, tick this check box. To deny the creation of server objects, untick this check box.

> *When the check box is unticked, no server objects can be created. For server bookmarks, unticking the check box only affects the possibility to share the bookmarks with other users.*

- `Allow Anonymous Server Bookmarks`

  Anonymous users can be allowed to create bookmarks. The machine ID of the user client is used for ownership, and the user client has to allow persistent cookies to be created. To allow anonymous users to create bookmarks, tick this check box. To deny anonymous users to create bookmarks, untick this check box.

Allow Session Recovery

Session recovery saves the current selection state for each user when a session ends. It then re-applies the selection state the next time that the same user reconnects to the same document.

> *Session recovery affects all users and documents on a server.*

To allow session recovery, tick this check box. To disallow session recovery, untick this check box.

Objects

Allow Moving and Sizing Objects

All of the users can be allowed to move and resize the QlikView objects in the various clients. To allow all of the users to move and resize the QlikView objects, tick this check box. To deny all of the users to move and resize the QlikView objects, untick this check box.

Default Label for 'Total'

The default label for `Totals` in bar charts, pivot tables, and straight tables can be configured. To edit the default label for `Totals`, enter a descriptive name in this text box.

Default value: `Total`.

Default Label for 'Others'

The default label for `Others` in bar charts and pie charts can be configured. To edit the default label for `Others`, enter a descriptive name in this text box.

Default value: `Others`.

Performance

On the `Performance` tab, the performance tuning of the CPU, sessions, memory (RAM), and document handling can be managed.

Reload Limits

> *This option is just available when running only the QlikView Server, that is, not running the QlikView Publisher (QVP).*

Max Concurrent Reloads

Sets how many documents that may be reloaded at any one time.

> *Be careful not to set too many reloads simultaneously, as it may degrade the overall performance of the computer.*

CPU

CPU Affinity

By default, the QlikView Server (QVS) automatically selects the processors to use on the hosting computer. It is possible to configure whether specific processors are to be used, or not. To deselect the use of a CPU, untick the corresponding check box. To select a CPU to use, tick the corresponding check box.

> *This function must only be used when the default setting, that is, all CPUs are used, is purposefully to be overridden.*

CPU Throttle

By default, the QlikView Server (QVS) is set to use 100% of the CPU capacity, that is, no throttling is used. It is possible to increase or decrease the priority of the QVS process, depending on how much CPU capacity the process is utilizing. In this way, some of the CPU capacity can be freed and used by other applications, improving the overall performance of the server. To set a threshold value, enter a suitable figure in this text box.

> *If the server is dedicated for the QlikView Server, this function should not be used.*

> *Should the CPU utilization for the QlikView Server process exceed the set threshold, it is most likely because Windows considers more resources available.*

Default value: `0` % (`0` means no throttling).

Sessions

Maximum Number of Concurrent Sessions

For each document that a user opens on the QVS, a new user session is generated. It is possible to configure the maximum number of concurrent user sessions that are allowed on the QVS. To set the maximum number of concurrent user sessions, enter a suitable figure in this text box.

> *If the server is dedicated for the QlikView Server, this function should not be used.*

> *This setting is not related to Client Access Licenses (CALs).*

Default value: `5000` (an empty field means no limit).

Maximum Inactive Session Time

User sessions, which have had no activity during a specified time limit, can be configured to be closed by the QVS. To set the session timeout, enter a suitable figure in this text box.

The maximum inactive session time can also be set per document. The session time with the lowest value takes precedence. If the session time entered in this text box is lower than the document session time, the document session time is disregarded.

Default value: `1800` seconds (`0` is not allowed; empty means no limit).

Possible Session Timeout

User sessions, which have had no activity during a specified time limit, can be configured to be eligible for being closed by the QVS, if needed. To set the session timeout, enter a suitable figure in this text box.

The QlikView Server may close inactive sessions and re-use the slot, if needed for other users.

Default value: `1800` seconds (`0` is not allowed; empty means no limit).

Maximum Total Session Time

All user sessions, active or not, can be configured to be terminated by the QVS after a specified time limit. To set the session timeout, enter a suitable figure in this text box.

Default value: No limit (`0` is not allowed; empty means no limit).

Working Set

The minimum and maximum of the physical amount of RAM that is allocated to, and can be used by, an application or process can be configured. This way it is possible to control whether an application can be swapped out of physical memory, or not.

There are no guarantees that the operating system can host the process with the configured amount of memory.

Using too high values will degrade the performance of other processes on the server. However, this might be desirable if the server is dedicated for the QlikView Server.

It is assumed that the physical memory up to the `Low` limit is reserved for the QlikView Server.

Do not change these settings unless being well acquainted with the Windows Virtual Memory Manager! Read more about `working sets` in the Microsoft Windows documentation.

Low

The minimum of the physical amount of RAM, in percentage, which can be used by an application. To set the minimum amount of memory, enter a suitable figure in this text box.

> *If the use of RAM exceeds this value, Windows is allowed to swap the memory that the QlikView Server is using to disk.*

Default value: `70` %.

High

The maximum of the physical amount of RAM, in percentage, which can be used by an application. To set the maximum amount of memory, enter a suitable figure in this text box.

> *If the use of RAM exceeds this value, Windows should swap the memory that the QlikView Server is using to disk.*

Default value: `90` %.

Document

Object Calculation Time Limit

The maximum amount of time that the QlikView Server will attempt to calculate a chart object can be configured. The time is set in seconds of total CPU time. To set the maximum amount of time, enter a suitable figure in this text box.

> *The total CPU time is not the same as the elapsed real time on a computer with parallel processing technology.*

Default value: `60` seconds (of total CPU time).

Max Symbols in Charts

The maximum number of symbols to plot in one chart can be configured. To set the maximum number of symbols, enter a suitable figure in this text box.

Default value: `100`.

Allow Document Auto Load

It is possible to configure so that documents are automatically loaded and unloaded. To enable automated document loading and unloading, tick this check box. To disable automated document loading and unloading, untick this check box.

Logging

On the `Logging` tab, the settings for the session, performance, event, and audit logs can be managed.

Logging

Enable Session Logging

To enable the detailed session logging from the QlikView Server, tick this check box. The stored log file will be named *Session-Stats.log*.

Enable Performance Logging Every

To enable the performance logging from the QlikView Server, tick this check box, and enter a suitable logging interval, between 1 and 1440 minutes (24 hours). The stored log file will be named *Performance.log*.

Default value: `5` minutes.

Enable Event Logging

To enable mirroring to a log file of the entries from the QlikView Server to the Windows event log, tick this check box. The stored file will be named *Events.log*.

Enable Audit Logging

To enable the logging of user selections, clear selections, sheet activation, the application of bookmarks, report access, and the maximization of objects, tick this check box. The stored file will be named as described in Log Folder.

To enable the logging to include more details (for example, all selections that come with a bookmark), tick this check box:

- `Enable Extensive Audit Logging`

Log Folder

The folder in which the QlikView Server will create and store the log file can be configured. To select a folder, enter the valid and absolute path in this text box, or click on the `Browse` icon, , and choose the folder in the `Choose Folder` dialog.

Default value: `C:\ProgramData\QlikTech\QlikViewServer`

Event Log Verbosity

This setting controls how much information that will be written to the event log files. To configure the verbosity level, select one of the following options:

- `Low`
- `Medium`
- `High`

> *The high log level might cause heavy load on the system.*

Split Files

This setting controls how often the log files are to be split, that is, a new file is created and used, in order to avoid having too large files. When this setting is used, all log files are split: event logs, session logs, performance logs, server-side extension (SSE) logs, and audit logs. To configure the recurrence time for splitting files, select one of the following options:

- `Never`, meaning that the event log files are never split, the same one file is always used.
- `Daily`, meaning that each event log file contains information from a day, at maximum.

- `Weekly`, meaning that each event log file contains information from a week, at maximum.
- `Monthly`, meaning that each event log file contains information from a month, at maximum.
- `Yearly`, meaning that each event log file contains information from a year, at maximum.

For the change in Split File setting to become effective you must restart QlikView Server (QVS).

Security

On the `Security` tab, the settings for authentication, authorization, communication, and cluster license can be managed.

Authentication

Clients

It is possible to select whether the QlikView Server (QVS) should use Windows authentication, when possible, or not. To configure the type of authentication, select one of the following options:

- `Always Anonymous`, meaning that anonymous communication is forced.
- `Allow Anonymous` (default), meaning that authentication is used whenever possible.
- `Prohibit Anonymous`, meaning that authentication is forced.

Make sure that this selection is consistent with any other security setting that may be specified in the virtual directories of the web server. For example, if the Microsoft IIS allows anonymous communication, but the QlikView Server does not, the client user will get an error message when trying to open the application through the virtual directory.

Anonymous Account

By default, the QVS will create the anonymous account on the local machine. If a cluster is used, the anonymous account should be changed to be a domain account, so that the servers in the cluster can share the account. This setting is only applicable if the server is running in NTFS mode. To configure the type of account, select one of the following options:

- `On Domain`
- `On Local Computer`

Authorization

The mode that the QVS will use when authorizing access to documents can be configured. Traditionally and by default, the QVS uses the `NTFS Authorization` mode, which means that the Windows operating system controls the file (document) access for users and groups through the NTFS security settings. The `DMS Authorization` mode uses the QVS Document Metadata Service (DMS) facility to authorize the file (document) access for users and groups. When this mode is used, the QlikView Publisher (QVP) Directory Service Connector (DSC) must be accessible, in order to resolve group membership. To select which `Directory Service Connector` to use, select one of the following options:

- `NTFS Authorization`, meaning that the Windows operating system controls the file access.
- `DMS Authorization`, meaning that the QlikView Server DMS controls the file access.

Miscellaneous

Allow Dynamic Data Update

To enable macros or external processes to update parts of the data in semi-real time, tick this check box.

This feature allows dynamic updates of the data in the currently loaded document. It is intended for QlikView Administrators to feed limited amounts of data to a QlikView document from a single source without running a reload of the document.

> *The uploaded information is only stored in RAM, so any data added or updated using the Allow Dynamic Data Update feature is lost, if a reload of the document is performed.*

> *It is recommended to disable the Allow Dynamic Data Update feature, since it can be time-consuming.*

> *The Allow Dynamic Data Update feature is not supported in clustered QlikView Server (QVS) environments.*

Default value: `Disabled` (unticked check box)

Allow Macro Execution on Server

To enable macros to execute on the QVS, tick this check box.

This feature applies to AJAX clients, since macros run on the QVS when using AJAX and in the client when using QlikView Desktop or the QlikView plugin.

If disabled, macros that use AJAX are blocked.

Default value: `Enabled` (ticked check box)

Allow Unsafe Macro Execution on Server

To enable unsafe macros to execute on the QVS, tick this check box.

> *Unsafe macros are not allowed on reload tasks.*

Default value: `Disabled` (unticked check box)

Allow Admin Using Name and Password

If the QVP is running in a separate Windows Active Directory, this setting has to be enabled to be able to connect to the QVS service. Also, the account used to connect must be part of the `QlikView Administrators` group. To enable the support of the separate Windows Active Directory, tick this check box.

> *If this setting cannot be enabled through the QMC, instead, it can be added in the QlikView settings file, Settings.ini, which is located in the directory C:\ProgramData\QlikTech\QlikViewServer\. Add* `AllowAlternateAdmin=1` *in the* `Settings 7` *section.*

Enable Server Push Over HTTP Tunnels

To enable graceful document refresh over HTTP tunnels, tick this check box.

> *The Enable Server Push Over HTTP Tunnels feature only applies when a) using QlikView Desktop or the QlikView plugin and b) the communication is tunneled.*

If enabled, the client keeps asking the QVS if there is an available refresh, which consumes bandwidth.

If disabled, the user is not informed of an available refresh until actively performing some other operation.

Default value: `Disabled` (unticked check box)

Compress Network Traffic

To let large packages be compressed in communication between the client and the QlikView Server, tick this check box.

> *The Compress Network Traffic feature should always be enabled.*

Default value: `Enabled` (ticked check box)

Allow Extensions

To enable QlikView Extensions to be added to documents, tick this check box.

If enabled, extensions (normal or document) – residing in the proper *Extensions* folder – are available and used.

If disabled, the QVS does not check for or use any extensions.

Default value: `Enabled` (ticked check box)

Cluster License

All QVSs in a cluster must have the same build number and share the same document root. When upgrading to a new version of QlikView, this is normally not a problem, if all servers are stopped, upgraded, and re-started in one go. However, if not all servers are upgraded at the same time, the build number and document root have to be taken into consideration, since the original cluster is split into two sub-clusters during the upgrade process – one that runs the original version of QlikView and one that runs the new version of QlikView – until all servers have been successfully upgraded to the new version of QlikView. Both sub-clusters share the existing cluster license, including all CALs.

The process for upgrading a single server in a cluster to a new version of QlikView is as follows:

1. Open the QlikView Management Console (QMC) on any server in the cluster.
2. Fill in the `Alternate Build Number` and `Alternate Document Root` fields (see below for details). The field values are automatically propagated to all servers in the cluster.
3. Stop the server that is to be upgraded.
4. Install the new version of QlikView on the server that was stopped.
5. Open the *Settings.ini* file (normally located in the *C:\ProgramData\QlikTech\QlikViewServer* folder) on the server where the new version of QlikView was installed.
6. Edit the path to the root folder ("DocumentDirectory"), so that it points to the same folder as the `Alternate Document Root` field in the QMC.
7. Start the upgraded server.

Alternate Build Number

In this text box, enter the build number for the new version of QlikView that is installed on the servers in the cluster that are upgraded.

The build number is part of the QlikView version number. The format of the QlikView version number is as follows:

<Major release version>.<Service release version>.<Build number>.0

- 12: Major release version (in this case, QlikView 12)
- 0: Service release version (in this case, QlikView 12.0)
- 11154: Build number
- 0: Always zero

Alternate Document Root

In this text box, enter the document root to be used by the servers in the cluster that are upgraded to the new version of QlikView.

> *The document root for the sub-cluster that runs the new version of QlikView must differ from the document root for the sub-cluster that runs the original version of QlikView (that is, the sub-clusters must not share the same document root).*

Folder Access

On the `Folder Access` tab, Supervisors and QlikView Publisher (QVP) Document Administrators can be managed.

> *The System tab is unavailable for Document Administrators and Supervisors. This means that they cannot access supporting tasks.*

Manage Supervisors and Document Administrators

The user access to the whole server (meaning all folders on the QlikView Server, including the root folder and the mounted folders), the root folder, or mounted folders, can be managed.

To manage the user access, add or remove Supervisors or QlikView Publisher (QVP) Document Administrators, do as follows:

To manage users and groups, click on the **Manage Users** dialog icon, .

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.
- `Selected Users`
  This box presents the selected users and groups.
- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
- `<< Delete All`
  To deselect `all` of the users and groups from the `Selected Users` box, click on this button.

The specifically defined folders are configured in Folders.

Default values:

Default values

Name	Path
Whole server	N/A
Root folder	C:\ProgramData\QlikTech\Documents

Alerts

On the `Alerts` tab, e-mail recipients to be alerted, if the reload of a document was unsuccessful, can be added and deleted.

This tab is just available when running only the QlikView Server, that is, not running the QlikView Publisher (QVP).

Alerts are not triggered when performing a reload using a command line statement.

Address

To add an e-mail recipient for the unsuccessful reload alerts, click on the `Add` icon, , and enter the e-mail address in this text box.

To delete a recipient, click on the `Delete` icon, .

Login

Server Login

Normally, the remote system will be accessed from the service account running this management service. If this is not feasible, for example, when the remote system is located on a different Windows Active Directory, it is possible to enter the user name and password for a valid remote user. To enable the management of a service installed on a remote server, configure the following text boxes:

- `User Name`

  Enter the name a of a user that is member of the `QlikView Administrators` group on the remote server.

- `Password`

  Enter the password for the entered `User Name`.

Distribution Services

In the `Distribution Services` folder, the QlikView Distribution Service (QDS) cluster(s), that is, the component that prepares and distributes the QlikView documents can be viewed and edited. A QlikView Publisher (QVP) installation can contain many QDSs located on different machines. Hence, these components can also be added and deleted.

> *A cluster might include one or more nodes.*

Functions

Add

To create a QDS entry, click on the `Add` icon, , to the right in the pane, and enter the `URL` in the new text box. The new entry will be available in the tree view in the left pane.

Example:

http://<mycomputer>:4720/qtxs.asmx

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Apply

Select `Apply` to confirm the change.

Cancel

Select `Cancel` to revert the change.

View

To view or configure the settings of a QDS, in the right pane, click on the entry in the tree view. Each entry contains the following tabs:

- Summary
- General
- Alert E-mail
- E-mail Templates
- Advanced
- Login

Click on each tab label for more information.

Summary

On the `Summary` tab, the address to the current QlikView Distribution Service (QDS) is presented.

General

On the `General` tab, the host name, port number, level of logging, Directory Service Connector (DSC), and source folder settings of the QlikView Distribution Service (QDS) can be managed.

Cluster

Name

The name of the QlikView Distribution Service (QDS) cluster. To edit the name, enter a name in this text box.

Add

To add an additional QDS node, click on the `Add` icon, , to the right in the pane, and configure the following new text box:

- `URL`

  Enter the path to the QDS in this text box.

  Example:

  http://<mycomputer>:4720/qtxs.asmx

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Settings for QDS

Directory Service Connector

Select the `DSC` to connect to in the drop-down list.

Application Data Folder

The path to the folder in which the data for the QDS is stored. If the QDS is part of a cluster, this path must be changed. The default location after installation may differ depending on the operating system.

Default value: `C:\ProgramData\QlikTech\DistributionService`.

To select a folder, enter the valid and absolute path in this text box, or click on the `Browse` icon, , and choose the folder in the `Choose Folder` dialog.

Logging Level

The log level of the service. Select one of the following options:

- `No Logging`
- `Normal Logging`
- `Debug Logging`

> *The debug logging level might cause heavy load on the system.*

Security

To enable the setting to use secure socket layer communication for the QDS, tick the `Use SSL for Distribution Service Communication` check box.

Source Folders

> *The root folder for the user documents in the QlikView Server (QVS) and the source folder for the source documents in the QlikView Distribution Service (QDS) should never use the same folder path.*

Disable Task Triggers for Document Administrators

To deny all QlikView Publisher (QVP) Document Administrators to activate any triggers, when creating or editing tasks and triggers, tick this check box. To allow all document administrators to activate any triggers, when creating or editing tasks and triggers, untick this check box.

Add

`Source Documents` are documents that contain data that is to be made accessible to end-users in the form of distributed `User Documents`. `Source Folders` are folders in which the `Source Documents` reside, and the paths and access rights to them can be configured.

To add an additional source folder entry, click on the `Add` icon, , to the right in the pane, and configure the following new text boxes:

- `Path`

  To select a folder, enter the valid and absolute path in this text box, or click on the `Browse` icon, , and choose the folder in the `Choose Folder` dialog.

The default location after installation may differ depending on the operating system.

Default value: `C:\ProgramData\QlikTech\SourceDocuments`.

- `Users and Groups`

  To give QlikView Publisher (QVP) Document Administrators access to the specifically defined source folder(s), add or remove users, as follows:

  To manage users and groups, click on the **Manage Users** dialog icon, .

  - `Search for Users and Groups`
    Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
  - `Default Scope`
    Select the directory to be searched, in the drop-down list.
  - `Search Result`
    This box presents the result of the search, using the desired criteria.
  - `Selected Users`
    This box presents the selected users and groups.
  - `Add >`
    To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
  - `< Delete`
    To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
  - `<< Delete All`
    To deselect `all` of the users and groups from the `Selected Users` box, click on this button.

- `Alert E-mail`

  To send alert e-mails to the configured document administrator(s), tick this check box.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

> *To shut down an entry on the QDS, use the QDS shutdown button in the QlikView Management Console. This shuts down the QDS in a controlled way, allowing tasks to run to completion during a grace period before the services shut down. See* *Services (page 11)*

Alert E-mail

On the `Alert E-mail` tab, e-mail recipients for the QlikView Distribution Service (QDS) alerts can be added and deleted.

Alert E-mail Recipients (separated by semicolon)

To add an e-mail recipient for the QDS alerts, enter the e-mail address in this text box.

You can also send QDS alerts to Security Groups. The security group name must have the `SG` prefix, for example `SG-QlikAdmins`. To add a security group as recipient for the QDS alerts, enter the security group name in this text box.

To add more recipients, use the separator operator, `;` (semicolon). You can add security groups and email addresses at the same time. To delete an recipient, edit this text box.

You can also include tasks that finished with warnings. To do so, select **Include Warnings**.

E-mail Templates

On the `E-mail Template` tab, the e-mail templates for the various messages that can be sent from the QlikView Publisher (QVP) can be managed. The messages include the following:

- Attachment (HTML)
- Attachment (Plain)
- Notify (HTML)
- Notify (Plain)
- Alert (HTML)
- Alert (Plain)

The contents of a template can be edited using `html`. The following is a list of the variables that can be used to edit email templates. Not all variables are supported for all email templates. Variables must be inside square brackets as shown below.

- `[DocTitle]`, meaning the title of the document
- `[DateTime]`, meaning the current date and time
- `[Location]`, meaning the QlikView Server folder to which the document has been distributed
- `[ResourceName]`, meaning the QVP resource to which the document has been distributed
- `[TaskName]` or `[JobName]`, meaning the name of the task
- `[Log]`, meaning the log of the task

Attachment (HTML)

This template is used when documents are e-mailed.

Subject

Default value: `QlikView Publisher: [DocTitle] is attached to this message.`

Body

Default value: `Your document "[DocTitle]" has been distributed by QlikView Publisher. The document is attached to this message.<br><br>Time: [DateTime]<br>`

Attachment (Plain)

This template is used when documents are e-mailed.

Subject

Default value: `QlikView Publisher: [DocTitle] is attached to this message.`

Body

Default value: `Your document "[DocTitle]" has been distributed by QlikView Publisher. The document is attached to this message. Time: [DateTime]`

Notify (HTML)

This template is used when documents are distributed.

Subject

Value: `QlikView Publisher Summary`

> *The subject for notification email cannot be modified.*

Body

Default value: `Your document "[DocTitle]" has been distributed by QlikView Publisher.<br/><br/>Location: <a href="[Location]"> [Location]</a><br/>Time: [DateTime]`

Notify (Plain)

This template is used when documents are distributed.

Subject

Value: `QlikView Publisher Summary`

> *The subject for notification email cannot be modified.*

Body

Default value: `Your document "[DocTitle]" has been distributed by QlikView Publisher. The document is attached to this message.<br><br>Time: [DateTime]<br>`

Alert (HTML)

This template is used when e-mail is sent as defined in Alert E-mail.

Subject

Default value: `QlikView Publisher: The task "[TaskName]" failed.`

Body

Default value: `The task "[TaskName]" failed`

Alert (Plain)

This template is used when e-mail is sent as defined in Alert E-mail.

Subject

Default value: `QlikView Publisher: The task "[TaskName]" failed.`

Body

Default value: `The task "[TaskName]" failed`

Advanced

On the `Advanced` tab, the QlikView Distribution Service (QDS) handling of the QlikView engine (*QVB.exe*) can be managed.

QlikView Engine

By default, when Distribution Groups are not activated, this section and the following settings are available.

- *Max number of simultaneous QlikView engines for distribution* - The maximum number of simultaneous QlikView Batch instances (default 4).
- *Max number of simultaneous QlikView engines for administration* - The maximum number of simultaneous QlikView Batch readers (default 20).

When a distribution group is activated this section is replaced by *Cluster Node Settings (page 138)*.

Cloud Deployment

Defines the maximum number of simultaneous distributions of documents to a cloud deployment.

Max number of simultaneous Cloud Distributions

The maximum number of simultaneous distributions of documents to cloud. Default i 5.

If the number of document distributions to cloud exceeds what is defined in *Max number of simultaneous Cloud Distribution*, the cloud distribution tasks end up in *Queued* state. Other distributions, cloud distributions with documents excluded, will run as usual.

Section Access

When section access is defined in the documents, it may be necessary to configure a specific entry for the QDS to avoid it interfering with the work of the task. By default, the QDS will apply the section access associated to the Windows user under which the service run. This may be overridden at each task. If a default override is preferable, it can be defined by configuring the login credentials in the following text boxes:

User Name

To configure the user name, enter the desired credentials in this text box.

Password

To configure the password, enter the desired credentials in this text box.

Work Order

To send a work order to the designated QDS, click on the `Send Work Order` button.

Preload Source Document Administrators

Allows cache to be generated for users and groups of users assigned as document administrators. Cache generation can be scheduled or manually triggered.

Set schedule:

- *Never*
- *Daily at* a specific time defined in the format *HH:MM*.

  > *If the daily execution already has been done and you change the time, changes will not apply until the next day.*

- *Every # hours*

Click the **Load Doc Admins** button to manually generate cache.

If you have added at least one AD group as document administrators, the cache is persisted when clicking the **Load Doc Admins** button and stored on disk: *C:\ProgramData\QlikTech\ManagementService\DocAdmins.db*.

Cluster Node Settings

When Distribution Groups are activated, this section provides QlikView Distribution Service (QDS) URL as well as lists the configuration defined in the *DistributionGroupDefinition.xml* file.

For each QDS in a publisher group, the following is configured:

- *Max Simultaneous Engines (For Dist)* - The maximum number of simultaneous QlikView Batch instances (default 4).
- *Max Simultaneous Engines (For Admin)* - The maximum number of simultaneous QlikView Batch readers (default 20).
- *Number of Dedicated Engines* - The number of dedicated QlikView Batch instances (default 0).
- *Run Dedicated Tasks Alone*- Whether to run dedicated tasks alone or not (default false).
- *Dedicated Task Grace Time*- If *Run Dedicated Tasks Alone* is set to *Yes*and this setting means that no regular task may be started by this QDS within number of minutes or less until the nearest dedicated task is scheduled (default 0).
- *Distribution Groups* - List of available distribution groups

Distribution Groups

When a distribution group is activated, this section provides the QDS URL as well as list the group(s) this QDS node is part of.

Login

Server Login

Normally, the remote system will be accessed from the service account running this management service. If this is not feasible, for example, when the remote system is located on a different Windows Active Directory, it is possible to enter the user name and password for a valid remote user. To enable the management of a service installed on a remote server, configure the following text boxes:

- `User Name`

  Enter the name a of a user that is member of the `QlikView Administrators` group on the remote server.

- `Password`

  Enter the password for the entered `User Name`.

Directory Service Connectors

In the `Directory Service Connectors` (DSC) folder, the function responsible for communicating with each of the `Directory Services`, which keep track of all the users and groups in the QlikView environment, can be managed.

Functions

Add

To create a QlikView DSC cluster entry, click on the `Add` icon, , to the right in the pane, and enter the `URL` in the new text box. The new entry will be available in the tree view in the left pane.

Example:

http://<mycomputer>:4730/qtds.asmx

> *A cluster might include one or more nodes.*

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Apply

Select `Apply` to confirm the change.

Cancel

Select `Cancel` to revert the change.

View

To view or configure the settings of a DSC, in the right pane, click on the entry in the tree view. Each entry contains the following tabs:

- Summary
- General
- Login

Click on each tab label for more information.

To view or configure the settings of a service of a Directory Service Providers (DSP), in the right pane, click on the entry in the tree view.

Summary

On the **Summary** tab, the address to the current QlikView Directory Services Connector (DSC) is presented.

General

On the `General` tab, the host name, port number, level of logging, and clustering settings of the QlikView Directory Service Connector (DSC) can be managed.

Cluster

Name

The name of the DSC cluster. To edit the name, enter a name in this text box.

Add

To add an additional DSC cluster node entry, click on the `Add` icon, , to the right in the pane, and configure the following new text boxes:

- `URL`

  Enter the path to the DSC in this text box.

  Default value: *http://<mycomputer>:4730/qtds.asmx*

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Logging Level

The log level of the service. Select one of the following options:

- `No Logging`
- `Normal Logging`
- `Debug Logging`

> *The debug logging level might cause heavy load on the system.*

Login

Server Login

Normally, the remote system will be accessed from the service account running this management service. If this is not feasible, for example, when the remote system is located on a different Windows Active Directory, it is possible to enter the user name and password for a valid remote user. To enable the management of a service installed on a remote server, configure the following text boxes:

- `User Name`

  Enter the name a of a user that is member of the `QlikView Administrators` group on the remote server.

- `Password`

  Enter the password for the entered `User Name`.

Directory Service Providers

In the `Directory Service Providers` (DSP) folders, the configuration of the following DSPs are described:

- Active Directory
- Custom Directory
- Configurable ODBC
- Configurable LDAP
- Local Directory
- Windows NT

Click on each folder label for more information.

Active Directory

The `Active Directory` service provider can connect to any Active Directory available through the underlying Windows operating system. This folder includes only a `General` tab.

Directory Service

Add

To add a Windows Active Directory entry, click on the `Add` icon, , to the right in the pane, and configure the following text boxes:

- `Path`

  To configure the path to the directory service, click on the `Get Default` icon, , to use the default path, or enter a valid path in this text box.

  Default value: `LDAP://qliktech.com`.

- `User Name`

  To configure the user name used for accessing the directory service, enter the desired credentials in this text box.

- `Password`

  To configure the password used for accessing the directory service, enter the desired credentials in this text box.

- `Settings`

To configure the `Directory Service Provider (DSP) Settings`, open the dialog by clicking on the `Edit` icon, , and enter the desired values in the following text boxes:

- `Cache Expiry in Minutes`
  Set the time for how long the queries to the directory service should be cached.

  Default value: `60` (minutes).
- `Service Timeout in Seconds`
  Set the timeout for the connection to the directory service.

  Default value: `30` (seconds).

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Custom Directory

The `Custom Directory` service provider does not rely on any external system for the users or groups. All data is stored within the QlikView Publisher Repository (QVPR). Unlike the other Directory Service Providers (DSP), the Custom Directory supports authentication through the QlikView AccessPoint, and therefore requires user and password. By default, there is no Custom Directory installed. In order to use Custom Users, a DSP for Custom Users must first be added. The Custom Directory folder contains the following tabs:

- **General**, where the Custom Directory service settings can be managed.
- **Users**, where the settings of users and groups can be managed.

Migrating Custom Directory users and groups

If needed, you can migrate Custom Directory users and groups from one machine to another.

In this section, the two machines will be referenced as follows:

- Machine one: the machine containing the Custom Directory users and groups you want to migrate
- Machine two: the machine to which you are migrating the Custom Directory users and groups

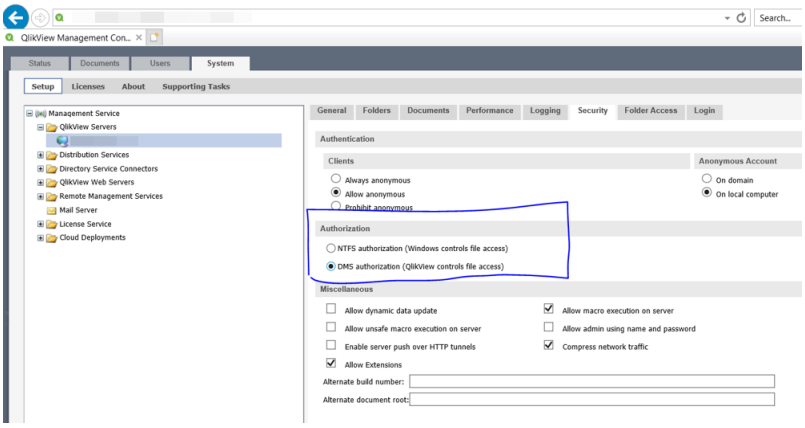
Preparation of machine one

The following steps must be done on the machine containing the Custom Directory users and groups you want to migrate.

Do the following:

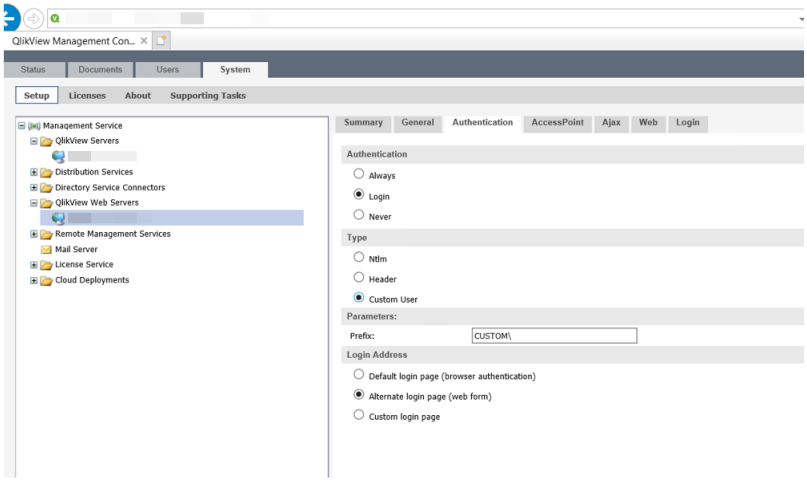
1. In the QlikView Management Console, select **System** > **Setup**.
2. Expand and select the QlikView Server.
3. In the right pane, select the **Security** tab.
4. Click **DMS authorization** and click **Apply**.

DMS authorization settings in QlikView Management Console



5. In the QlikView Management Console, select **System** > **Setup**.
6. Expand and select the QlikView Web Server.
7. In the right panel, select the **Authentication** tab.
8. In the **Authentication** section, select **Login**.
9. In the **Login Address** section, leave the setting to **Alternative login page**. This page can be used for both Windows and non-Windows users to provide credentials.
10. In the **Type** section, change the authentication type to **Custom User** because the Custom Users cannot be authenticated using the NTLM protocol. Click **Apply**.

    Authentication settings for QlikView Web Server



11. In the QlikView Management Console, select **System** > **Setup** > **Directory Service Connectors** and expand the tree.
12. Select the **Custom Directory**.
13. In the right pane, there is only one tab, named **General**. Click .
14. Click the icon to set a path for the Custom Directory. The path automatically populates to the default *Custom*.
15. Click **Apply**.

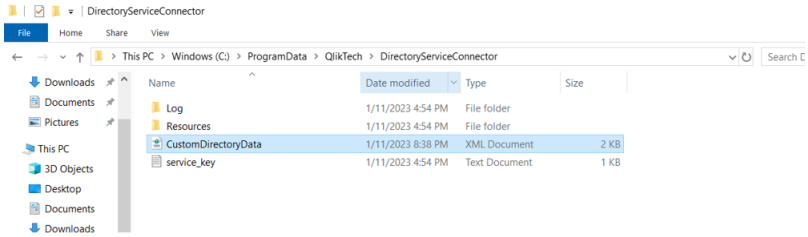
    A second tab named **Users** appears.

16. Select the **Users** tab and click to add a new user.
17. Provide a username, full name, password, and email address. Create *Bob* and *Freddy* as Custom users. You can pick a password of your choice.
18. Enable the users and click **Apply**.
19. Also create a Custom User Group named *Europe*.
20. Click **Apply**.
21. To add Bob and Freddy to the Custom Group *Europe*, click in the **Custom User Groups** section. In the dialog that opens, add * in the **Search for User and Groups** field and click the magnifying glass icon. Note that the **Default Scope** dropdown only contains the Custom directory service.
22. Add *Bob* and *Freddy* to the Selected Users and click **OK** to close the dialog.
23. Click **Apply**.

File transers between the two machines

Next, you need to copy the *CustomDirectoryData.xml* file from machine one to machine two. After this, restart the services on machine two.

Location of CustomDirectoryData.xml file in Windows File Explorer



Preparation of machine two

The following steps must be done on the machine receiving the migrated Custom Directory.

Do the following:

1. In the QlikView Management Console, select **System** > **Setup**.
2. Expand and select the QlikView Server.
3. In the right pane, select the **Security** tab.
4. Click **DMS authorization** and click **Apply**.
5. In the QlikView Management Console, select **System** > **Setup**.
6. Expand and select the . QlikView Web Server on QlikServer1.
7. In the right panel, select the **Authentication** tab.
8. In the **Authentication** section, select **Login**.
9. In the **Login Address** section, leave the setting to **Alternative login page**. This page can be used for both Windows and non-Windows users to provide credentials.
10. In the **Type** section, change the authentication type to **Custom User** because the Custom Users cannot be authenticated using the NTLM protocol. Click **Apply**.

11. In the QlikView Management Console, select **System** > **Setup** > **Directory Service Connectors** and expand the tree.
12. Select the **Custom Directory**.
13. In the right pane, there is only one tab, named **General**. Click .
14. Click the icon to set a path for the Custom Directory. The path automatically populates to the default *Custom*.
15. Click **Apply**.
16. In the QlikView Management Console, open the **Users** section.
    The migrated users and groups should now be visible.

General

On the `General` tab, the Custom Directory service settings can be managed.

6.2 Directory Service

Add

To add a Custom Directory entry, click on the `Add` icon, , to the right in the pane, and configure the following text boxes:

- `Path`

  To configure the path to the directory service, click on the `Get Default` icon, , to use the default path, or enter a valid path in this text box.

  > *This text box should not be empty.*

  Default value: `Custom`.

- `User Name`

  To configure the user name used for accessing the directory service, enter the desired credentials in this text box.

- `Password`

  To configure the password used for accessing the directory service, enter the desired credentials in this text box.

- `Port`

  To configure the port used for accessing the directory service, enter the desired credentials in this text box.

  Default value: `4735`.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Users

On the `Users` tab, the settings of users and groups of the Customer Directory can be managed. There is a possibility to create customized users and groups, using the `Custom Users`and `Custom User Groups` functions, respectively. The information about the functions is stored in the following file:

C:\ProgramData\QlikTech\DirectoryServiceConnector\CustomDataDirectory.xml

6.3 Functions

Custom Users

To add a `Custom User` entry, click on the `Add` icon, , to the right in the pane, and configure the following text boxes:

- `User Name`

  To configure the user name used for accessing the directory service, enter the desired credentials in this text box.

- `Full Name`

  To configure the full name of the custom user, enter the desired credentials in this text box.

- `Password`

  To configure the password used for accessing the directory service, enter the desired credentials in this text box.

- `E-mail`

  To configure the e-mail address of the custom user, enter the desired credentials in this text box.

- `Groups`

  To configure the group(s) that the custom user should belong to, do the following:

  To manage groups, click on the `Manage Groups` dialog icon, .

  - `Default Scope`

    Select the directory to be searched, in the drop-down list.

  - `Search for Groups`

    Enter the desired search term(s) in this text box, to find a group, and click on the `Search` icon, .

  - `Search Result`

    This box presents the result of the search, using the desired criteria.

  - `Add >`

To add a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.

- `Selected Groups`

  This box presents the selected groups.

- `< Delete`

  To deselect a group, click on it in the `Selected Groups` box and click on this button. Several items can be deselected at the same time.

- `<< Delete All`

  To deselect `all` of the groups from the `Selected Groups` box, click on this button.

- `Enabled`

  To enable the custom user, tick this check box. To disable the custom user, untick this check box.

> *Any change of the settings of a custom user will result in that a message, `The password must be reset in order to save the changes.`, is shown, indicating that a valid password must be re-entered in the `Password` field.*

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Custom User Groups

To add a `Custom User Group` entry, click on the `Add` icon, , to the right in the pane, and configure the following text boxes:

- `Group Name`

  To configure the name of the custom user group used for accessing the directory service, enter the desired credentials in this text box.

- `Users`

  To configure the user(s) and group(s) that should belong to the custom user group, do the following:

  To manage users, click on the `Manage Users` dialog icon, .

  - `Default Scope`

    Select the directory to be searched, in the drop-down list.

  - `Search for Groups`

    Enter the desired search term(s) in this text box, to find a group, and click on the `Search` icon, .

  - `Search Result`

This box presents the result of the search, using the desired criteria.

- `Add >`

  To add a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.

- `Selected Groups`

  This box presents the selected groups.

- `< Delete`

  To deselect a group, click on it in the `Selected Groups` box and click on this button. Several items can be deselected at the same time.

- `<< Delete All`

  To deselect `all` of the groups from the `Selected Groups` box, click on this button.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Configurable ODBC

The `Configurable ODBC` directory service provider can connect to ODBC databases. This folder includes only a `General` tab.

The ODBC database must have two tables (views); one for entities and one for groups. The `entity` table (the name of which is defined by the `Entity Table Database Name` setting below) must contain the following fields:

- `entityid` (unique identifier, suitable for primary key)
- `name` (string) (the name of this field is defined by the `Entity Name` setting below)
- `descr` (string)
- `email` (string)

The `groups` table (the name of which is defined by the `Groups Table Database Name` setting below) must contain the following fields, which together create a unique identifier:

- `groupid`
- `memberid`

When using configurable ODBC under Directory Service Connectors (DSC), it is recommended to use Header authentication. Authorization using Groups pulled from Configurable ODBC under DSC does not work when coupled with NTLM authentication for AccessPoint.

Example

Groups table

Groups properties

Groupid	Memberid
1001	101
1001	102
1001	103
1001	104
1002	104
1002	105

Entity table

Entity properties

Entityid	Name	Descr	Email
101	sandra.franklin	Sandra Franklin	sandra.franklin@example.com
102	michael.milliken	Michael Milliken	michael.milliken@example.com
103	lucille.pender	Lucille Pender	lucille.pender@example.com
104	dustin.plunkett	Dustin Plunkett	dustin.plunkett@example.com
105	benjamin.mitchell	Benjamin Mitchell	benjamin.mitchell@example.com
1001	users	Users	-
1002	admins	Administrators	-

In this example, everyone but Benjamin Mitchell is member of the group named Users, and Dustin Plunkett and Benjamin are the only members of the group called Administrators.

Directory Service

In a server environment, the Microsoft Access Database driver has limitations. To avoid issues, use SQL Server Express Edition.
Microsoft Access Database Engine 2016 Redistributable.

Add

To add a Configurable ODBC entry, click on the `Add` icon, , to the right in the pane, and configure the following text boxes:

- `Path`

  To configure the path to the directory service, click on the `Get Default` icon, , to use the default path, or enter a valid path in this text box.

  Default value: `ODBC://localhost`.

- `User Name`

  To configure the user name used for accessing the directory service, enter the desired credentials in this text box.

- `Password`

  To configure the password used for accessing the directory service, enter the desired credentials in this text box.

- `Settings`

  To configure the `Directory Service Provider (DSP) Settings`, open the dialog by clicking on the `Edit` icon, , and enter the desired values in the following text boxes:

  - `Service Timeout in Seconds`

    Set the timeout for the connection to the directory service.

    Default value: `30` (seconds).

  - `Directory Label`

    Set the label of the directory service to connect to.

    Default value: `DB DSP`.

  - `Entity Name`

    Set the name of the entity to connect to.

    Default value: `entity_name`.

  - `Entity Table Database Name`

    Set the name of the entity table to connect to.

    Default value: `entity`.

  - `Groups Table Database Name`

    Set the name of the table named `groups` to connect to.

    Default value: `groups`.

  - `Data Source Name`

    Set the name of the ODBC driver.

    Default value: `MySQL ODBC 5.1 Driver`.

  - `Connection Database Name`

Set the name of the ODBC database to connect to.

Default value: `dbname`.

- `Database Backend`

  Set the type of connection to the database:

  - ODBC: This connection type makes the system use the .NET OdbcConnection class.
    ≤ ObdcConnection Class
  - SQL: This connection type makes the system use the .NET SqlConnection class. Enter the custom connection string in the `Override Connection String` field.
    ≤ SqlConnection Class
  - Oracle: This connection type makes the system use the .NET OracleConnection class. Enter the custom connection string in the `Override Connection String` field.
    ≤ OracleConnection Class

  Default value: `ODBC`.

- `Override Connection String`

  If entering a string in this field, the entered value will be used, while the settings in `Connection Database Name` and `Data Source Name` will be `ignored`. The variables `{user}` and `{pwd}` can be used in the connection string. The variables are automatically replaced by the contents of the `User Name` and `Password` text boxes and can be used independently of each other.

  Example:

  ```
  Server=MyServer;Database=MyDB;User Id={user};Password={pwd};
  ```

  If not entering a string in this field, the `Database Backend` drop-down will be ignored and the connection to the database will be set to `ODBC`.

  Default value: `Driver={Microsoft Access Driver (*.mdb, *.accdb)};Dbq=C:\AccessTest.accdb;.`

- `Cache Expiry in Minutes`

  Set the time for how long the queries to the directory service should be cached.

  Default value: `15` (minutes).

> *Valid value(s) must be entered, which might be indicated with a red `asterisk` and a tool-tip error message.*

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Configurable LDAP

The `Configurable LDAP` directory service provider can connect to any generic Lightweight Directory Access Protocol (LDAP). This folder includes only a `General` tab.

Directory Service

Add

To add a Configurable LDAP entry, click on the `Add` icon, , to the right in the pane, and configure the following text boxes:

- `Path`

  To configure the path to the directory service, click on the `Get Default` icon, , to use the default path, or enter a valid path in this text box.

  Default value: `LDAP://localhost`.

- `User Name`

  To configure the user name used for accessing the directory service, enter the desired credentials in this text box.

- `Password`

  To configure the password used for accessing the directory service, enter the desired credentials in this text box.

- `Settings`

  To configure the `Directory Service Provider (DSP) Settings`, open the dialog by clicking on the `Edit` icon, , and enter the desired values in the following text boxes:

  - `Account Name Property Name`

    Map the name of the LDAP property to the corresponding account name.

    Default value: `sAMAccountName`.

  - `Cache Expiry in Minutes`

    Set the time for how long the queries to the directory service should be cached.

    Default value: `60` (minutes).

  - `Directory Label`

    Set the unique name of the directory service instance.

    Default value: `DSP1`.

  - `Display Name Property Name`

    Map the name of the LDAP property name to the corresponding display name.

    Default value: `name`.

- `Distinguished Name Property Name`
  Map the name of the LDAP property name to the corresponding distinguished name.

  Default value: `distinguishedName`.
- `E-mail Property Name`
  Map the name of the LDAP property to the corresponding e-mail address.

  Default value: `mail`.
- `Group Member Property Name`
  Map the name of the LDAP property to the corresponding group member.
- `Group Object Class Value`
  Set the class value of the LDAP group object.

  Default value: `group`.
- `ID Property Name`
  Map the name of the LDAP property to the corresponding ID.

  Default value: `sAMAccountName`.
- `LDAP Filter`
  Set the LDAP filter to use when searching for user objects.

  Default value: `(&(!(objectclass=computer))(objectGUID=*))`.
- `Service Timeout in Seconds`
  Set the timeout for the connection to the directory service.

  Default value: `30` (seconds).
- `User Member of Property Name`
  Map the name of the LDAP property to the corresponding user member.

  Default value: `memberof`.
- `User Object Class Value`
  Set the class value of the LDAP user object.

  Default value: `user`.

Valid value(s) must be entered, which might be indicated with a red `asterisk` and a tool-tip error message.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Local Directory

The `Local Directory` service provider can connect to the local users on a selected machine. This folder includes only a `General` tab.

Directory Service

Add

To add a Local Directory entry, click on the `Add` icon, , to the right in the pane, and configure the following text boxes:

- `Path`

  To configure the path to the directory service, click on the `Get Default` icon, , to use the default path, or enter a valid path in this text box.

  Default value: `local://<mycomputer>`.

- `User Name`

  To configure the user name used for accessing the directory service, enter the desired credentials in this text box.

- `Password`

  To configure the password used for accessing the directory service, enter the desired credentials in this text box.

- `Settings`

  To configure the `Directory Service Provider (DSP) Settings`, open the dialog by clicking on the `Edit` icon, , and enter the desired values in the following text boxes:

  - `Cache expiry in minutes`

    Set the time for how long the queries to the directory service should be cached.

    Default value: `15` (minutes).

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Windows NT

The `Windows NT` directory service provider can connect to any Windows NT Directory available through the underlying Windows operating system. This folder includes only a `General` tab.

Directory Service

Add

To add a Windows NT entry, click on the `Add` icon, , to the right in the pane, and configure the following text boxes:

- `Path`

  To configure the path to the directory service, click on the `Get Default` icon, , to use the default path, or enter a valid path in this text box.

  Default value: `WinNT://AKQUINET`.

- `User Name`

  To configure the user name used for accessing the directory service, enter the desired credentials in this text box.

- `Password`

  To configure the password used for accessing the directory service, enter the desired credentials in this text box.

- `Settings`

  To configure the `Directory Service Provider (DSP) Settings`, open the dialog by clicking on the `Edit` icon, , and enter the desired values in the following text boxes:

  - `Cache Expiry in Minutes`

    Set the time for how long the queries to the directory service should be cached.

    Default value: `15` (minutes).

> *Valid value(s) must be entered, which might be indicated with a red `asterisk` and a tool-tip error message.*

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

QlikView Web Servers

In the `QlikView Web Servers` folder, the QlikView Web Server(s) (QVWS) can be viewed and edited. A QlikView Publisher (QVP) installation can contain many QVWSs located on different machines. Hence, these components can also be added and deleted. A QVWS handles the following tasks:

- Hosting of the QlikView AccessPoint
- Load balancing of the QlikView Server (QVS)
- Keeping track of open sessions for the AJAX clients

- Handling of authentication (optional)
- Handling of general web content (optional)

A QVWS can either be installed as a windows service or to run under a Microsoft IIS; in the latter case, the hosting of web content is not relevant.

> *If using a Microsoft IIS web server instead of the QVWS, the QVWS resource should still have the Running status and the QVWS service under the Windows services applet should not be running or installed.*

Functions

Add

To create a QlikView Web Server entry, click on the `Add` icon, , to the right in the pane, and enter the `URL` in the new text box. The new entry will be available in the tree view in the left pane.

Default value: `http://<mycomputer>:4750/qvws.asmx`.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Apply

Select `Apply` to confirm the change.

Cancel

Select `Cancel` to revert the change.

View

To view or configure the settings of a QlikView Web Server, in the right pane, click on the entry in the tree view. Each entry contains the following tabs:

- Summary
- General
- Authentication
- AccessPoint
- AJAX
- Web
- Login

Click on each tab label for more information.

Summary

On the `Summary` tab, the address to the current QlikView Web Server (QVWS) is presented.

General

On the `General` tab, the host name, port number, level of logging, communication, and directory service connector settings of the current QlikView Web Server (QVWS) can be managed.

Location

Name

The name of the QVWS. To edit the name, enter a name in this text box.

URL

The `Host Name` and the `Port` of the server where the service is running. To edit the server address, enter a valid URL in this text box.

Default value: `http://<mycomputer>:4750/qvws.asmx`.

Logging Level

The log level of the service. Select one of the following options:

- `Low`
- `Medium`
- `High`

> *The high log level might cause heavy load on the system.*

Enable Utilization Logging

This log presents the utilization of the QlikView Servers, in order to supervise the load balance function in the QlikView AccessPoint. To enable the utilization logging, tick this check box. To disable the utilization logging, untick this check box.

Communication

Port

To configure the port number of the QVWS, enter a valid number in this text box.

Use HTTPS

To force all communication to go through `secure HTTP`, `HTTPS`, tick this check box (default). To let all communication go through ordinary `HTTP`, untick this check box.

If enabled, you also need to issue a certificate, and bind the certificate to the machine, see the following article: ≤ How To Setup HTTPS / SSL with QlikView AccessPoint (WebServer and IIS)

Use HSTS

You can also set up all communication to go through `HSTS`.

To set up QlikView Access Point and QMC to use `HSTS`, see the following article: ≤ QlikView HSTS (HTTP Strict-Transport-Security response header).

Directory Service Connectors

QlikView Publisher (QVP) Directory Service Connectors (DSC) are used for group resolution, that is, keeping track of all the users and groups in the QlikView environment.

Name

To configure which DSC to use, select one of the options in the drop-down list.

Authentication

On the `Authentication` tab, the method for letting a user of the current QlikView Web Server (QVWS) access the QlikView AccessPoint can be managed.

Authentication

To configure the user access method, select one of the following options:

- `Always`, meaning that the user has to log in to the QlikView AccessPoint.
- `Login`, meaning that the user can login, but can access the QlikView AccessPoint even without logging in.
- `Never`, meaning that the QlikView AccessPoint only accepts anonymous users.

> *If `Never` was selected, the Type and Login Address settings will be hidden.*

Type

To configure the type of authentication to use, select one of the following options:

- `NTLM`, meaning that the Microsoft authentication protocol is used.
- `Header`, meaning that an http header specified under `Parameters` is used:
  - `Header Name`

    If a customized login system is used, the http header has to be specified, in order to configure the login process in the QlikView AccessPoint. To configure the header name, enter a value in this text box.

    Default value: `QVUSER`.

  - `Prefix`

    To configure the prefix used for the header, enter a value in this text box.

    Default value: `CUSTOM\`.

- `Custom User`, meaning that the QlikView AccessPoint only accepts Custom users (defined in the Custom Directory DSP), and a prefix specified under `Parameters` is used:
  - `Prefix`

    To configure the prefix for the custom user Directory Service Provider, enter a value in this text box.

    Default value: `CUSTOM\`.

Login Address

If using custom users, an address to the login page has to be specified. Select one of the following options:

- `Default Login Page (Browser Authentication)`, meaning that the login prompt of the web browser is used
- `Alternate Login Page (Web Form)`, meaning that the login is performed using a web page
- `Custom Login Page`, meaning that the login is performed using a customized login page, which has to be entered in this text box

> *The text box contains an example string. The string has to be edited for the `Custom Login Page` option to take effect.*

AccessPoint

On the `AccessPoint` tab, the QlikView AccessPoint settings can be reached, by clicking on the following tabs:

- AccessPoint Settings
- Server Connections

Additionally, you can customize some elements of AccessPoint. For more information, see *Customizing AccessPoint (page 161)*.

AccessPoint Settings

On the `AccessPoint Settings` tab, the following QlikView AccessPoint settings can be managed.

- Custom System Message
- Path
- Open Document Options
- Default Preferred Client
- Client Paths
- Plugin Download

Custom System Message

To configure a custom system message to be presented in the QlikView AccessPoint, enter the desired statement in this text box.

Path

To configure the path to the QlikView AccessPoint, enter a valid path in this text box.

Default value: `/QvAJAXZfc/AccessPoint.aspx`.

Open Document Options

To configure in which windows documents are opened, select one of the following options:

- `Reuse New Window`

  The document is opened in a new browser window. The next opened document will use the same window.

- `Same Window`

  The document is opened in the same browser window as the QlikView AccessPoint.

- `New Window`

  Each document is opened in a new browser window.

Default Preferred Client

To configure which client that is the preferred one, when a user for the very first time accesses the QlikView AccessPoint, select one of the following options:

- `IE Plugin`
- `Ajax client and Mobile Client Version`
- `Download`, meaning download of the QlikView document files from the QlikView AccessPoint.

Client Paths

QlikView Plugin

To edit the web page of the QlikView plugin file, enter a valid path in this text box.

Default value: `/QvPlugin/opendoc.htm`.

Ajax client

To edit the web page of the AJAX client file, enter a valid path in this text box.

Default value: `/QvAJAXZfc/opendoc.htm`.

Mobile Clients always use the following URL: /QvAJAXZfc/mobile/opendoc.htm

Plugin Download

Show Link

If the link for downloading the client plugin file is to be visible on the QlikView AccessPoint, tick this check box and enter a valid path to the file in the following text box.

- `URL`

  Default value: `/QvPlugin/QvPluginSetup.exe`.

If the link for downloading the client plugin file is not to be visible on the QlikView AccessPoint, untick this check box.

Server Connections

On the `Server Connections` tab, the settings of the QlikView AccessPoint connections to QlikView Servers (QVS), can be managed.

Server Connections

Respect Browsable Flag on Mount

To set that only mounts in the QVS, which are set as `Browsable` in Folders, are presented on the QlikView AccessPoint, tick this check box. To allow that any mount in the QVS is presented on the QlikView AccessPoint, untick this check box.

Add

To add a QVS entry, click on the `Add` icon, , in the upper right corner of the right pane, and configure the following fields:

- `Name`

  Select the desired QVS in the drop-down list.

- `Load Balancing`

  To select the load balance calculation method, select one of the following options:

  - `CPU with RAM Overload`, meaning that the client is directed to the least busy QVS.
  - `Loaded Document`, meaning that the client is directed to the QVS in which the requested document is already loaded.
  - `Random`, meaning that the client is directed to a QVS randomly.

- `Always Tunnel`

  To always tunnel the communication to the QVS, select this check box. If left unselected, communication will tunnel only when the client is unable to receive QVP connections over Port 4747. QVS uses HTTPS or HTTP to handle connections when tunneling, depending on the protocol used by the web server.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Customizing AccessPoint

Customize titles, labels, images, and CSS styling in AccessPoint.

You can customize elements of the AccessPoint pages *index.htm* and *FormLogin.htm* using the JSON file *customConfig.json* in *%ProgramFiles%\QlikView\Web*.

> *You can view examples of customizations in %ProgramFiles%\QlikView\Web\customFilesExample. The example file in this folder, customConfig.json, contains style customizations and uses custom images instead of the defaults.*

The following properties can be used to customize AccessPoint:

- `title`: Used to define the document title shown in the browser.
  For example:
  ```
  "title": "My Access Point"
  ```
- `customFilesFolder`: Points to the location of replacement images. This property is only necessary if substitute files are needed. You can use any folder to which QlikView has access.

  > *It is recommended to keep replacement images in similar dimensions to the original images to avoid breaking the layout of AccessPoint.*

  For example:
  ```
  "customFilesFolder": "customFilesExample"
  ```
- `labels`: Used to replace the default label defined in `accesspoint.json`. Use the tag `all` if you want your labels to be used regardless of language.
  For example
  ```
  "labels": {
         "all": {
                 "attributeHeader": "My Attribute (All):",
                 "categoryHeader": "My Category:"
  ```

  > *For the individual labels that can be customized, see %ProgramFiles%\QlikView\Web\lang\en-US\accesspoint.json.*

  To have language-specific labels, use language tags such as `en-US`. The following languages tags can be used:
  - `de-DE`
  - `en-US`
  - `es-ES`
  - `fr-FR`
  - `it-IT`
  - `ja-JP`
  - `ko-KR`
  - `nl-NL`
  - `pl-PL`
  - `pt-BR`
  - `ru-RU`
  - `sv-SE`
  - `tr-TR`
  - `zh-CN`
  - `zh-TW`

  For example:
  ```
  "en-US": {
         "attributeHeader": "My Attribute (En):",
         "useridLabel": "Custom User Name:"
  }
  ```

- `cssSelectors`: Add a jQuery selector for the CSS elements you want to modify with the attributes you want to change or add. To change the styling of an element, use the attribute `style`. The style you specify is applied directly on the element, in addition to any other styling done directly or by CSS.
  You can view the elements available to be changed using your browser's developer tools on *index.htm* and *FormLogin.htm.*
  For example:
  ```
  "cssSelectors": {
          "#logo_main": {
                  "src": "customFilesFolder/logo_main.png",
                  "alt": "Custom"

          },
          ".pagination.topPag > h1": {
                  "style": {
                  "background-image": "url('customFilesFolder/logo_accessPoint.png')"
                  }
          },
          "body": {
                  "style": {
                  "font-family": "Arial, sans-serif",
                  "font-size": "14px"
                  }
          },
          ".filter_view a": {
                  "style": {
                  "background-image": "url('customFilesFolder/ap_sprite.png')"
                  }
          },
          "#loginBox": {
                  "style": {
                  "background-image": "url('customFilesFolder/bg_login.png')"
                  }
          },
          "link[rel=\"shortcut icon\"]": {
                  "href": "customFilesFolder/favicon.ico"
                  }
          }
  ```

Ajax

On the `AJAX` tab, the settings for the AJAX client can be managed.

Paths

Path

The paths to the AJAX client files. To create a path entry, click on the `Add` icon, , to the right in the pane, and enter the full path to the AJAX client file in the new text box.

Default value 1: `/QvAJAXZfc/QvsViewClient.aspx`.

Default value 2: `/QvAJAXZfc/QvsViewClient.asp`.

> *The default paths may be changed, but the file names have to remain unchanged for the installation to work.*

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Advanced

No Crypto

To prohibit the use of encryption between the QlikView Web Server (QVWS) and the QVS,tick this check box. To allow the use of encryption, untick this check box.

Prohibit Machine ID

The usage of anonymous bookmarks can be effectively excluded, by prohibiting the sending of machine ID. To prohibit the sending of machine ID, tick this check box. To allow the sending of machine ID, untick this check box.

Recording

To enable the logging for the AJAX client, tick this check box. To disable the logging, untick this check box.

Web

On the `Web` tab, the web browser MIME types and root folders can be managed.

MIME Types

The MIME file extensions that the QlikView Web Server (QWS) should allow. To create a MIME path entry, click on the `Add` icon, , to the right in the pane, and enter the desired values in the following text boxes:

Extension

The MIME file extension, starting with a full stop, '.', for example (and corresponding to the `Contents` examples): '.CSS', '.HTM', '.HTML', '.JPG', '.GIF', and '.JAR'.

Content

The MIME type contents, for example (and corresponding to the `Extension` examples): 'text/css', 'text/html', 'text/html', 'image/jpg', 'image/gif', and 'application/octet-stream'.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Root Folders

The paths to the various virtual folders in the QlikView Web Server. To create a path entry, click on the `Add` icon, , to the right in the pane, and enter the desired values in the following text boxes:

Name

Default value 1a: `QLIKVIEW`.

Default value 2a: `QVCLIENTS`.

Default value 3a: `QVAJAXZFC`.

Default value 4a: `QVDESKTOP`.

Default value 5a: `QVPLUGIN`.

Path

Default value 1b: *C:\Program Files\QlikView\Web*.

Default value 2b: *C:\Program Files\QlikView\Server\QlikViewClients*.

Default value 3b: *C:\Program Files\QlikView\Server\QlikViewClients\QlikViewAjax*.

Default value 4b: *C:\Program Files\QlikView\Server\QlikViewClients\QlikViewDesktop*.

Default value 5b: *C:\Program Files\QlikView\Server\QlikViewClients\QlikViewPlugin*.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Login

Server Login

Normally, the remote system will be accessed from the service account running this management service. If this is not feasible, for example, when the remote system is located on a different Windows Active Directory, it is possible to enter the user name and password for a valid remote user. To enable the management of a service installed on a remote server, configure the following text boxes:

- `User Name`

  Enter the name a of a user that is member of the `QlikView Administrators` group on the remote server.

- `Password`

  Enter the password for the entered `User Name`.

Remote Management Services

In the `Remote Management Services` folder, tasks from the management services of remote servers can be imported.

> *The involved environments must use the same major QlikView release (for example, QlikView 12 and QlikView 12 or QlikView November 2018 and QlikView November 2018). If the involved environments use different major releases (for example, QlikView November 2017 and QlikView November 2018), the Remote Management Services cannot be used.*

Each connection is set up by the user account of the current Management Service; hence, this account has to be a member of the QlikView Management API security group of the remote system.

If the QlikView Management API security group does not exist on the remote system, it must be created.

This function can be used to retrieve tasks between QlikView Publisher (QVP) environments, typically between a test system and a production system. To do this, a link, a remote management service, has to be set up in the production system, towards the test system. Using the link, tasks can be pulled from the test system into the production system. Since the test system usually has its own set of folders and servers, and other folders and servers are used in production, the test items have to be mapped to the production items. The link and the map are set up once only. Hence, when importing the tasks, the retrieval and mapping are performed automatically.

The Remote Management Services cannot be used to import Supporting Tasks.

When importing a task, triggers of the type On Event from Another Task are excluded (that is, not imported). To keep such triggers, all tasks have to be imported as described in Import task.

Functions

Add

To create a Remote Management Service entry, click on the `Add` icon, , to the right in the pane, and enter the `URL` in the new text box. The new entry will be available in the tree view in the left pane.

Default value: `http://remotehost:4799/QMS`.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Apply

Select `Apply` to confirm the change.

Cancel

Select `Cancel` to revert the change.

View

To view or configure the settings of a Remote Management Service, in the right pane, click on the entry in the tree view. Each entry contains the following tabs:

- Summary
- General
- Source Folders
- QlikView Servers
- Login

Click on each tab label for more information.

Summary

On the `Summary` tab, the API of the Remote Management Service can be accessed.

General

On the `General` tab, the URL and import options of the QlikView management services on remote hosts can be managed.

Location

Name

The name of the remote management service.

Default value: `QMS@remotehost`.

URL

The `URL` of the remote management service.

Default value: `http://remotehost:4799/QMS`.

Import Options

Disable Task Triggers on Import

To disable all of the imported tasks, tick this check box (default). To enable all of the imported tasks, untick this check box.

Source Folders

On the `Source Folders` tab, the mappings of the source and target document folders of the various management services can be managed. When importing tasks from another system, this mapping will be used to match the document on the remote system with the corresponding local document.

Source Document Folder Mappings

From

Presents all source document folders on the remote system. To set up the mapping for the source document folder, select one of the options in the drop-down list.

To

Presents all target document folders on the local system. To set up the mapping for the target document folder, select one of the options in the drop-down list.

QlikView Servers

On the `QlikView Servers` tab, the mappings of the source and target QlikView Servers can be managed. When importing tasks from another system, this mapping will be used to match the remote system with the corresponding local system.

For example, a QVS is used for test purposes on a test system, and distributions are performed to this QVS. To retrieve tasks from the test system into the production system, without causing that the production system starts to distribute to the test servers, a mapping has to be set up. The mapping should define that every task distributes to server 'X' when running on the test system, while the same task distributes to server 'Y' when running on the production system.

QlikView Server Mappings

From

Presents all available servers on the remote system (server 'X' on the test system, in the example). To set up the mapping for a source QlikView Server, select one of the options in the drop-down list.

To

Presents all available servers on the local system (server 'Y' on the production system, in the example). To set up the mapping for a target QlikView Server, select one of the options in the drop-down list.

Login

Server Login

Normally, the remote system will be accessed from the service account running this management service. If this is not feasible, for example, when the remote system is located on a different Windows Active Directory, it is possible to enter the user name and password for a valid remote user. To enable the management of a service installed on a remote server, configure the following text boxes:

- `User Name`

  Enter the name a of a user that is member of the `QlikView Administrators` group on the remote server.

- `Password`

  Enter the password for the entered `User Name`.

Mail Server

In the `Mail Server` folder, on the `General` tab, the e-mail service used for alerts and distribution of documents can be configured.

Miscellaneous

E-mail Format

Set the e-mail format, by selecting one of the following options in the drop-down list:

- `Plain text`
- `HTML message`

Server Timeout

Set the time for how long the service should wait for a response from the server.

Default value: `100` (seconds).

From Address

Set the e-mail address of the sender.

Default value: `publisher@company.com`.

Connection Method

Select one of the following connection methods:

- `SMTP` to send e-mail through an SMTP server.
- `OAuth 2.0` to send e-mail through Microsoft Graph.

SMTP Settings

These settings are available when `SMTP` is selected as the connection method.

Host Name

Set the address of the SMTP server.

Default value: `localhost`.

Port

Set the port of the SMTP server.

Default value: `25`.

Authentication

Select how the user is authenticated when sending e-mail:

- `Anonymous` to send e-mail without authentication.
- `Use Distribution Service Account` to use the Windows account that runs the service.
- `User Name and Password` to use the credentials specified in the `User Name` and `Password` fields.

User Name

Enter the user name to use when `User Name and Password` is selected for authentication.

Password

Enter the password to use when `User Name and Password` is selected for authentication.

OAuth 2.0 Settings

These settings are available when `OAuth 2.0` is selected as the connection method.

For the Microsoft Entra ID prerequisites, shared OAuth2 behavior, testing, attachments, and troubleshooting, see *Sending email with OAuth 2.0 in QlikView (page 171)*.

Tenant ID

Enter the Directory (tenant) ID of the Microsoft Entra ID application.

Client ID

Enter the Application (client) ID of the Microsoft Entra ID application.

Client Secret

Enter the client secret for the Microsoft Entra ID application.

Graph Base URL

Enter the Microsoft Graph base URL.

Authority Host

Enter the Microsoft Entra ID authority host URL.

> *The Tenant ID, Client ID, and Client Secret are encrypted before they are stored. The Azure application must have `Mail.Send` permission for the mailbox used as the sender.*

Override E-mail

> *These settings are for test purposes, only.*

Send All E-mails To

To configure a receiver of all of the e-mails sent by the QlikView Publisher (QVP), enter a valid e-mail address in this text box.

> *No other recipient will receive any e-mail sent by the QlikView Publisher (QVP).*

Send Test E-mail To

To test the settings, enter an e-mail address in this text box and click on the `Send` button.

Document Administrators Authorized to Distribute via E-mail

Users can be QlikView Publisher (QVP) Document Administrators who are allowed to distribute documents via e-mail.

To manage users, click on the `Manage Users` dialog icon, .

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.

- `Selected Users`
  This box presents the selected users and groups.
- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
- `<< Delete All`
  To deselect `all` of the users and groups from the `Selected Users` box, click on this button.

Sending email with OAuth 2.0 in QlikView

QlikView can send email through Microsoft Graph by using OAuth 2.0 with Microsoft 365. OAuth 2.0 is an additional mail connection method; existing SMTP configuration remains available.

When OAuth 2.0 is selected, QlikView does not connect directly to an SMTP server. It obtains an access token from `login.microsoftonline.com` and sends email through the Microsoft Graph REST API at `graph.microsoft.com/v1.0/users/{sender}/sendMail`.

Prerequisites

Before configuring QlikView, register an application in Microsoft Entra ID:

1. Sign in to the Azure portal and go to **Microsoft Entra ID** > **App registrations** > **New registration**.
2. Register the application.
3. Under **Certificates & secrets**, create a client secret and copy its value. The value is displayed only once.
4. Under **API permissions**, add the Microsoft Graph **Mail.Send** application permission.
5. Grant admin consent for the permission.
6. Record the Application (client) ID and Directory (tenant) ID.

The application must have **Mail.Send** permission for the mailbox used as the sender.

Security

QlikView encrypts the Tenant ID, Client ID, and Client Secret before storing them. The credentials are not stored as plain text.

Testing OAuth 2.0 mail

Use the test-mail control in the configuration page:

- In QlikView Desktop, click **Test** on the **User Preferences** > **Mail** page.
- In the QlikView Management Console, enter an address in **Send Test E-mail To** and click **Send**.

QlikView obtains an OAuth 2.0 token and sends the test email through Microsoft Graph. If a step fails, review the error message.

File attachments

When QlikView sends email with attachments, it includes the attachments inline in the Microsoft Graph request as Base64-encoded content. Each attachment is limited to 3 MB. For larger files, use another delivery method.

Troubleshooting

Error	Cause	Resolution
`OAuth 2.0 Client ID, Tenant ID, and Client Secret are required.`	One or more OAuth fields are empty.	Verify that all three fields are filled in on the mail settings page.
`OAuth token request failed: AADSTS7000215`	The client secret is invalid.	Generate a new client secret in Microsoft Entra ID and update QlikView.
`OAuth token request failed: AADSTS700016`	The Application (client) ID is incorrect or the application does not exist in the specified tenant.	Verify the Application (client) ID and Directory (tenant) ID.
`Graph sendMail failed: ErrorAccessDenied`	The application does not have `Mail.Send` permission, or admin consent was not granted.	Add the `Mail.Send` application permission and grant admin consent in Microsoft Entra ID.
`Graph sendMail failed: ErrorItemNotFound`	The sender address does not correspond to a valid mailbox in the tenant.	Make sure the sender address matches an existing Microsoft 365 mailbox.
`Attachment too large`	A file attachment exceeds the 3 MB inline limit.	Reduce the file size or use another delivery method.

License Service

In the `License Service` folder, you can see the status and information of the License Service for your QlikView Server.

License Service

The license service tab lists the license service for your QlikView Server installation.

Edit

Click on the `Edit` icon, , to open the *Summary (page 172)* tab for the License Service.

Example:

http://<mycomputer>:9200/

Summary

Here you can see the address of the License Service for your QlikView Server installation.

See also:

≤ Qlik Licensing Service Reference Guide

Cloud Deployments

In the `Cloud Deployments` folder, you can add and configure cloud deployments you want to connect to QlikView Server.

> *With the release of QlikView April 2020, publishing links to Qlik Cloud will no longer be available with QlikView April 2019.*

> *When distributing links to a cloud deployment, ensure that the HTTPS protocol is used and that the Fully Qualified Domain Name (FQDN) is included in the link URL. For detailed instructions on setting up HTTPS, see* ≤ How To Setup HTTPS / SSL with QlikView AccessPoint (WebServer and IIS).

Cloud Deployments

The `Cloud Deployments` tab lists all cloud deployments connected with your QlikView Server installation.

Add

To add a new cloud deployment, click on the `Add` icon, , to the right in the pane, and enter the `URL` in the new text box. The new entry will be available in the tree view in the left pane.

Example:

```
https://tenant.qlikcloud.com/
```

Edit

To configure a cloud deployment entry, click on the `Edit` icon, , or click on the entry in the tree view. This opens the *Summary (page 174)* tab for the selected cloud deployment.

Delete

To entirely remove a configured entry from the list, click on the `Delete` icon, .

Apply

Select `Apply` to confirm the change.

Cancel

Select `Cancel` to revert the change.

Summary

In the `Summary` tab you can see the URL of the selected cloud deployment.

General

In the `General` tab you configure the details for connecting the cloud deployment to QlikView Server.

Location

Deployment name
The name of the cloud deployment.

API endpoint
The address to the cloud hub for the cloud deployment.

Proxy

Enter server and port details to distribute to cloud via proxy.

Server
IP address of proxy server.

Port
Port used to communicate with the proxy server.

QlikView Web Server

Web Server
A drop-down menu lists all the QlikView Web Servers available in your deployment.

Distribution Settings

Disable distribution of links
Select this option if you want to disable the distribution of QlikView documents' links to the cloud deployment.

Issuer configuration

Qlik Cloud Services format
Select this option if you want to generate the local barer token (configuration) in Qlik Cloud format. If unselected, the token is generated as a text file.

Generate configuration
Click this button to trigger the configuration of the local barer token.

Copy to clipboard
Click this button to copy the local barer token text in the clipboard.

Apply

Select `Apply` to confirm the change.

Cancel

Select `Cancel` to revert the change.

Test

In the `Test` tab you test the connection to the selected cloud deployment.

Test Cloud Connection

Select QDS Cluster to test

A drop-down menu that lists all the QlikView QDS clusters available in your deployment.

Test

Click this button to test the connection to the selected cloud deployment.

The following is tested:

- *Create authentication token*: checks the communication via authentication token.
- *Connect to Cloud API*: checks communication with the cloud deployment API.
- *License*: checks if cloud deployment license contains the following tag: *QV_nodes>=1*.
- *Precondition connect to TCS*: checks if TCS service communication is authorized.

Certificate for cloud distribution

The QvCloudCA certificate enables secure communication between QlikView components in cloud deployments, supporting the distribution of apps and links from QlikView to the cloud. The certificate is automatically generated by the QlikView Management Service (QMS) when it starts for the first time, if not already present in the system's certificate store (MMC).

In clustered environments, the certificate is automatically distributed to additional nodes or services, such as the QlikView Distribution Service (QDS). You can turn off this distribution by modifying the `CloudDeploymentCertCreationMode` setting in the QMS configuration file.

Backing up and regenerating the QvCloudCA certificate

If you need to regenerate the QvCloudCA certificate, make sure to back up the existing certificate first by following these steps.

1. Open Certificates Manager:
   - Press the Windows logo key+R, type *certmgr.msc*, and click **OK**.
2. Locate the certificate:
   a. In the left pane, expand **Trusted Root Certification Authorities** and select **Certificates**.
   b. Find the QvCloudCA certificate in the right pane.
3. Export the certificate:
   a. Right-click the QvCloudCA certificate.
   b. Select **All Tasks** > **Export**, and follow the Certificate Export Wizard.
   c. Save the certificate in a secure location.
4. Stop the QlikView Management Service (QMS).

5. Remove the certificate:
   - In Certificates Manager, right-click the QvCloudCA certificate and select **Delete**.
6. Restart the QMS service.
   A new certificate will be automatically generated.

6.4 Licenses

On the `Licenses` page, all of the available product licenses are listed in a tree view in the left pane. A license can be viewed, added, and edited. Also, the QlikView Server (QVS) Client Access Licenses (CALs) can be managed. To view or manage a license or a CAL, in the right pane, click on the license in the tree view.

Type

The following licenses are presented:

- QlikView Publisher
- QlikView Server

Name

The name of the service on the hosting server, on which the license resides.

QlikView Publisher

On the `QlikView Publisher` (QVP) pane, the `QlikView Publisher License` tab is presented.

QlikView Publisher License

On the QlikView Licenses tab, you can activate, update, and consult the details of your QlikView Publisher (QVP) product license. The available options change based on what license you choose to activate: a license that requires serial and control number, or a license that requires a signed key.

Use Signed License Key

If you select Signed License Key, it shows only the fields that are relevant for licensing QlikView Publisher (QVP) with a signed key. If unselected, it shows only the field specific for licensing QlikView Publisher (QVP) with a serial number and control number.

When using a serial and control number

If you use the legacy license (serial number + control number), the signed key options remains visible in the UI. It is possible to switch to a signed key at a later moment.

Serial and Control

Serial number

Enter the `serial number` assigned to the QVP software in this text box.

Control

Enter the `control number` assigned to the QVP software in this text box.

Paste the contents of LEF file here (optional)

This is an alternative to the use of `Update License from Server`, to add a product license. Should the server not be able to access the QVP License Enabler File (LEF) information through the Internet, this information can be obtained from the product vendor, instead. Contact the product vendor for more information.

Owner Information

Name

Enter the user name of the product owner.

Organization

Enter the organization name of the product owner.

Clear License

Select to clear the license information.

Update License from Server

Select to retrieve the LEF over the Internet. This option validates the `Serial Number` and `Control` and returns the LEF.

Apply License

Select to apply the license.

> *A new LEF file will be downloaded from the LEF server at Qlik.*

When using a signed license key

If you use a signed license key, the UI option for the legacy license disappears. This is because once you apply a signed license key to an installation, you cannot change it back to a legacy unless you uninstall your environment.

Signed License Key

Signed Key

Enter the signed license key.

License Definition

Shows the details of your license. It is not modifiable.

Apply License

Select to apply the license.

QlikView Server

On the `QlikView Server` (QVS) pane, the following tabs are presented:

- QlikView Server License
- Client Access Licenses
  This tab is available if QlikView Server is licensed using a serial number and control number.
- Professional and Analyzer access
  This tab is available if QlikView Server is licensed using a signed key.

QlikView Server License

On the QlikView Licenses tab, you can activate, update, and consult the details of your QlikView Server (QVS) product license. The available options change based on what license you choose to activate: a license that requires serial and control number, or a license that requires a signed key.

Use Signed Key License

If you select Signed License Key, it shows only the fields that are relevant for licensing QlikView Server (QVS) with a signed key. If unselected, it shows only the field specific for licensing QlikView Server (QVS) with a serial number and control number.

> *The license is checked every time a document is opened. If the time limit specified by the License Enabler File (LEF) is reached, the QVS automatically enters offline mode, which means that it is reachable from the QMC but not operational. The OffDuty parameter indicates if the QVS is off duty.*

When using a serial and control number

If you use the legacy license (serial number + control number), the signed key options remains visible in the UI. It is possible to switch to a signed key at a later moment.

Serial and Control

Serial Number

Enter the `serial number` assigned to the QVS software in this text box.

Control

Enter the `control number` assigned to the QVS software in this text box.

Paste the Contents of LEF File Here (Optional)

This is an alternative to the use of `Update License from Server`, to add a product license. Should the server not be able to access the QVS License Enabler File (LEF) information through the Internet, this information can be obtained from the product vendor, instead. Contact the product vendor for more information.

Owner Information

Name

Enter the user name of the product owner.

Organization

Enter the organization name of the product owner.

Clear License

Select to clear the license information.

Update License from Server

Select to retrieve the LEF over the Internet. This option validates the `Serial Number` and `Control` and returns the LEF.

Apply License

Select to apply the license.

> *A new LEF file will be downloaded from the LEF server at Qlik.*

When using a signed license key

If you use a signed license key, the UI option for the legacy license disappears. This is because once you apply a signed license key to an installation, you cannot change it back to a legacy unless you uninstall your environment.

Signed License Key

Signed Key

Enter the signed license key.

License Definition

Shows the details of your license. It is not modifiable.

Apply License

Select to apply the license.

Client Access Licenses

On the `Client Access Licenses` (CALs) tab, information about the CALs that are available on the QlikView Server (QVS) is presented in the following tabs:

- General
- Assigned CALs

- History
- Limitations

About Client Access Licenses

Client Access Licenses (CALs) provide access to QlikView documents that reside on a QlikView Server. You must have a QlikView Publisher license to use CALs.

There are four types of CALs that are available in QlikView:

1. *Named User CAL (page 180)*
2. *Document CAL (page 180)*
3. *Session CAL (page 181)*
4. *Usage CAL (page 181)*

Named User CAL

A Named User CAL allows a single named user to access any QlikView document that resides on the QlikView Server as often and for as long as they need. Users are assigned a Named User CAL through the QlikView Management Console (QMC) manually or automatically (default).

Example:

An organization has 50 users and 10 QlikView documents. All users access all of the documents frequently. The most appropriate licensing solution is to assign each user a Named User CAL so they can access any document anytime, without time or usage restrictions.

License lease

Named User CALs can be leased to provide a temporary license for a QlikView Desktop if you do not have a stand-alone QlikView Desktop license. License leasing must be enabled in your License Enabler File (LEF) for this feature to work.

Document CAL

A Document CAL allows a single named user to access a single QlikView document that resides on the QlikView Server as often and for as long as they need. Multiple Document CALs can be assigned to the same user. Users are assigned Document CALs through the QlikView Management Console (QMC) manually or automatically. As a result of their limited scope, Document CALs require more administrative overhead to ensure users have access to the specific documents they need, and Document CALs can force users to develop a large amount of content on few documents, thus creating resource-heavy applications.

Example:

An organization has 50 users and 10 QlikView documents. Each user only needs to access a small number of documents. The most appropriate licensing solution is to assign Document CALs to users to access only the documents they need. Since each Document CAL limits access to one document, users who require access to more than one document need multiple Document CALs.

Session CAL

A Session CAL allows a single named or anonymous user on a single QlikView client to access to access any QlikView document that resides on the QlikView Server. Session CALs form a pool of licenses that are automatically assigned to users on a first-come-first-serve basis. When a user requests access to an application, they are automatically allocated a Session CAL to access the document for the duration of their session. When the session ends, the license is reallocated to the pool of Session CALs. A session CAL has a minimum session time of 15 minutes. This means that session CALs cannot be re-added to the pool before the minimum session time.

Example:

An organization has 50 users and 10 QlikView documents. Each user accesses all of the documents infrequently. Given the non-concurrent document usage, a pool of Session CALs is an appropriate licensing solution for this organization.

Usage CAL

A Usage CAL allows a single named or anonymous user on a single QlikView client to access a single QlikView document for a period of 60 minutes per 28-day period. Usage CALs form a pool of licenses that are automatically assigned to users on a first-come-first-serve basis. The Usage CAL is an all-or-nothing license. This means that whether the user session lasts 5 minutes or 60 minutes, the license is quarantined when the session expires. If a user passes the 60-minute limit, they are automatically allocated another Usage CAL from the pool. Quarantined Usage CALs cannot be immediately reallocated to the pool. Every 28 days, the Usage CAL is refreshed and the user may once again view a new QlikView document for 60 minutes, using the same Usage CAL. Usage CALs are continuously recharged at a pace corresponding to 1/28 of the total number of Usage CALs assigned to the QlikView Server per day.

Example:

An organization has 50 users and 10 QlikView documents. Each user accesses documents infrequently throughout the month. However, at the end of the month, most users access one particular document concurrently. Usage CALs can supplement a session-based license model (Session CALs) to handle a surge in usage at a predictable time.

Comparing CALs

CAL	User type	QlikView document limitations	Time limitations
Named User	Named users	none	none
Document	Named users	limited to 1 document	none
Session	Named users and Anonymous users	none	minimum 15 minutes / no maximum
Usage	Named users and Anonymous users	limited to 1 document	60 minutes in 28-day period

General

On the `General` tab, the present information about the named user CALs, document CALs, session CALs, and usage CALs is presented.

Functions

Refresh

To refresh the information currently presented, click on the `Refresh` icon, .

Identification

Identify User by

The named users can be identified in one of two ways. To set the identification method, select one of the following options:

- `User Name`, meaning the named user name
- `Machine Name`, meaning the computer name together with the MAC address

> *It is possible to change this setting at any time, but it is strongly recommended to use one mode consistently within a given QlikView Server. If changed during operation, the same user might take up two CALs: one based on the `User Name` and one based on the `Machine Name`.*

Named User CALs: X assigned (Y in license)

The number of presently assigned (used), `X`, and licensed (defined in the LEF file) named user CALs, `Y`, are presented in the header.

Allow License Lease

To allow users to 'borrow' a license for use off-line for a period of 30 days, tick this check box. To deny users to 'borrow' a license, untick this check box.

Allow Dynamic CAL Assignment

A new Named User CAL can automatically be granted to a user connecting for the first time to the QlikView Server, as long as there are available Named User CALs to assign. To enable that CALs are added dynamically, tick this check box. To disable that CALs are added dynamically, untick this check box.

Document CALs: X assigned (Y in license)

The number of presently assigned (used), `X`, and licensed (defined in the LEF file) document CALs, `Y`, are presented in the header. Document CALs can be either automatically or manually assigned to users.

Session CALs: X available (Y in license)

The number of presently available (that is, not used), `X`, and licensed (defined in the LEF file) session CALs, `Y`, are presented in the header.

Usage CALs: X available (Y in license)

The number of presently available (that is, not used), `X`, and licensed (defined in the LEF file) usage CALs, `Y`, are presented in the header. Usage CALs are allocated in full upon license initiation. Then, 1/28th of the total number of usage CALs (licensed) are replenished daily up to the amount of the total number of available usage CALs. For example, if there are 56 licensed usage CALs , there will be 2 (56 divided by 28) additional, minus any used, usage CALs allocated daily, not exceeding 56.

Assigned CALs

On the `Assigned CALs` tab, the assignment of all types of Client Access Licenses (CALs) to users can be managed.

Functions

Refresh

To refresh the information currently presented, click on the `Refresh` icon, .

Assigned Users

Presents the assignment of users to all types of CALs in a list.

Assign Users

To manually assign the named CALs to a user, do the following:

> *Named and Document CALs can only be assigned to users. You cannot assign Named or Document CALs to groups.*

To manage users and groups, click on the **Manage Users** dialog icon, .

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.
- `Selected Users`
  This box presents the selected users and groups.
- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.

- << Delete All
  To deselect all of the users and groups from the Selected Users box, click on this button.

Name

Presents a list of the names of all users that are currently assigned to a named CAL. A user can represent an authenticated User Name or a Machine Name.

Last Used (UTC)

The time stamp (UTC) from the last server activity of each user.

Quarantined Until (UTC)

If a CAL-to-user association has not been in use for the last 7 days, it will be deleted immediately. If a CAL-to-user association is currently being used or has recently been used, it will be marked for deletion, which means that new user access sessions through this CAL are not allowed. However, the CAL-to-user association will still occupy an allocated CAL until this quarantine period has passed.

Restore

Before that the Quarantined Until (UTC) time stamp has passed, a CAL-to-user association can be undeleted, by clicking on the Restore icon, .

Delete

When the Quarantined Until (UTC) time stamp has passed, a CAL-to-user association can be removed manually. To entirely remove a CAL-to-user association from the list, thus freeing a document CAL, click on the Delete icon, .

The CAL-to-user association is formally deleted after the expiration time.

The CAL will not be available for 7 days.

History

On the History tab, the current information about leased license activity is presented. A leased license is used by end-users who connect to the QlikView Server (QVS) and are allowed to 'borrow' a license to open a downloaded document during a period of 30 days.

Functions

Refresh

To refresh the information currently presented, click on the Refresh icon, .

License Lease History

User

Presents the name of the leased license user.

Machine ID

Presents the computer identity of the leased license end-user.

Time (UTC)

The time stamp (UTC) from the latest time the user leased the license.

Limitations

On the `Limitations` tab, the number of CALs that may be in use at the same time can be limited. The number of CALs can be limited to be less than the default values that are stated in the QlikView Publisher (QVP) License Enabler File (LEF).

Functions

Refresh

To refresh the information currently presented, click on the `Refresh` icon, .

Limit number of CALs

To limit the number of simultaneously open CALs, enter the desired values in the following text boxes:

- `Named user CALs`

  Set the number of simultaneously open named user CALs. The text in parenthesis to the right of this text box presents the current licensed named user CALs.

  Default value: `5`.

- `Session CALs`

  Set the number of simultaneously open session CALs. The text in parenthesis to the right of this text box presents the current licensed session CALs.

  Default value: `5`.

- `Usage CALs`

  Set the number of simultaneously open usage CALs. The text in parenthesis to the right of this text box presents the current licensed usage CALs.

  Default value: `300`.

- `Document CALs`

  Set the number of simultaneously open document CALs. The text in parenthesis to the right of this

text box presents the current licensed document CALs.

Default value: `30`.

Professional and Analyzer access

In the `Professional and Analyzer access` tab, you find information about the available and allocated Professional and Analyzer access. Here you also assign or revoke Professional and Analyzer access from users.

General

Allow dynamic assignment for Professional access

Select this option to allow dynamic assignment of Professional access. A Professional access is automatically granted to a user connecting to QlikView for the first time, if any Professional access quota is available. Leave the option unselected to deny Professional access dynamic assignment.

Allow dynamic assignment for Analyzer access

Select this option to allow dynamic assignment of Analyzer access. An Analyzer access is automatically granted to a user connecting to QlikView for the first time, if any Analyzer access quota is available. Leave the option unselected to deny Analyzer access dynamic assignment.

Allow license lease

Professional access can be leased to provide a temporary license for QlikView Desktop.

Select this option to allow users to use Professional access off-line with QlikView Desktop. Leave the option unselected to deny users to borrow Professional access.

Analyzer: X assigned (Y in license)

This field states the number of assigned Analyzer access (X), and the total number Analyzer access (Y) available for your QVS license.

If you have assigned more users than the total number available for your QVS license, **Excess** is true for the over-allocated users.

Additionally, you can see information on when a user was last logged on and which app was accessed.

Professional: X assigned (Y in license)

This field states the number of assigned Professional access (X), and the total number Professional access (Y) available for your QVS license.

If you have assigned more users than the total number available for your QVS license, **Excess** is true for the over-allocated users.

Additionally, you can see information on when a user was last logged on and which app was accessed.

Analyzer capacity

Analyzer capacity: X min.

Indicates the number (X) of minutes available for Analyzer capacity access with your QVS license.

Consumed this month: X min. (Remaining: Y)

Indicates the number (X) of minutes consumed for Analyzer capacity access in the current month. In brackets, it indicates the number of minutes available in the current month for Analyzer capacity access.

Overage:

This fields indicates if your license allows for exceeding the number of allocated minutes for Analyzer capacity access. Depending on your license, the overage fields shows:

- `Yes`: indicates that your QVSlicense allows for unlimited overage of minutes for Analyzer capacity access.
- `Max X min.`: indicated that your QVS license allows for a maximum number of X minutes for Analyzer capacity access.

The overage field is not available if your QVS license does not allow for overage minutes for Analyzer capacity access.

Analyzer Access

Assigned Users

Shows the list of users assigned with Analyzer access.

Name

List of names of users assigned with Analyzer access.

Allocating and removing Analyzer access to users

To allocate Analyzer access to users:

1. Click on the `Manage Users` icon, . An access assignment window opens.
2. Search for a user in the dedicated search field. You can search for multiple users at the same time by writing a semicolon-separated list. The user or users matching with your search are listed in under **Search Result**.
3. Select the user you want to grant with Analyzer access, and click **Add**.
4. Select **OK** to confirm the access allocation. The access assignment window is closed.
5. Select **Apply** to confirm the access allocation.
6. The users with Analyzer access are now listed under **Assigned Users**.

Removing an access allocation

To remove Analyzer access from a user, click on the `Delete` icon, . Then, select **Apply** to confirm.

If you wish to cancel an access removal before it is applied, select the `Restore` icon in the row of the user for which you want to maintain the allocated access. This option is available only before selecting **Apply**.

Professional Access

Assigned Users

Shows the list of users assigned with Professional access.

Name

List of names of users assigned with Professional access.

Allocating and removing Professional access to users

To allocate Professional access to users:

1. Click on the `Manage Users` icon, . An access assignment window opens.
2. Search for a user in the dedicated search field. You can search for multiple users at the same time by writing a semicolon-separated list. The user or users matching with your search are listed under **Search Result**.
3. Select the user you want to grant with Professional access, and click **Add**.
4. Select **OK** to confirm the access allocation. The access assignment window is closed.

   If you wish to cancel an access allocation before it is applied, select the `Restore` icon in the row of the user for which you want to revert the allocation. This option is available only before selecting **Apply**.
5. Select **Apply** to confirm the access allocation.
6. The users with Professional access are now listed under **Assigned Users**.

Removing an access allocation

To remove Professional access from a user, click on the `Delete` icon, . Then, select **Apply** to confirm.

If you wish to cancel an access removal before it is applied, select the `Restore` icon in the row of the user for which you want to maintain the allocated access. This option is available only before selecting **Apply**.

License Lease Information

User

Presents the name of the leased license user.

Machine ID

Presents the computer identity of the leased license end-user.

License Type

Presents the license type for the leased license user.

Time (UTC)

The time stamp (UTC) from the latest time the user leased the license.

6.5 About

On the `About` page, information about the entire QlikView system, that is, the various Windows services and the computer they run on, is presented. Each service is presented under a separate heading.

About this QlikView System

More Details / Less Details

To view less details, click on the `Less Details` link, which will result in the following information being presented:

- `Product Information`
- `Machine Information`
- `CPU Information`

To view more details, click on the `More Details` link, which will result in the following information being presented:

- `Product Information`
- `Current Process Information`
- `Machine Information`
- `CPU Information`
- `Logical Drives Information`
- `Network Information`
- `File Information`

6.6 Supporting Tasks

On the `Supporting Tasks` page, the following available supporting task groups are listed in a tree view in the left pane:

- External Programs
- Database Command
- Pause
- QVD Creation

To view or manage the supporting tasks of a group, in the right pane, click on the folder in the tree view.

External Programs

In the `External Programs` folder, supporting tasks for external programs can be viewed and managed.

Functions

Add Task

To add a task, click on the `Add Task` icon, , in the upper right corner of the right pane. The following tabs will be created:

- General
- Triggers

Click on each tab label for more information.

View Status

To view the status and the settings of a task, in the right pane, click on the task in the tree view.

Edit Task

To configure a task, click on the `Edit Task` icon, , or click on the task in the tree view. In the right pane, the following tabs are presented:

- General
- Triggers

Click on each tab label for more information.

Copy Task

To copy a task, click on the `Copy this task to clipboard` icon, .

Paste Task

Pasting a task into a folder will create a new task. To paste a copied task to a specific folder, click on (highlight) the folder and click on the `Paste Task` icon, , in the right pane (to the left of the `Add Task` icon,).

Run Task

To start a task, click on the `Run this task` icon, .

Abort Task

To stop a task, click on the `Abort this task` icon, .

Delete Task

To entirely remove a task, either click on (highlight) the document, in which the task resides, in the tree view, and click on the `Delete this Task` icon of that task, , in the right pane, or click on (highlight) the task in the tree view, and right-click on `Delete`.

General

On the `General` tab, the basic settings and parameters of the `current task` can be managed. The categories for a document can be assigned, created, edited, and deleted. A category bundles documents in containers, to make categorization easier for the end-user. The categories are only visible to the end-user on the QlikView AccessPoint. Each document can only be part of one category.

Basics

Enabled

To enable the task, select this check box. To disable the task, clear this check box.

Task Name

To edit the name of the task, enter the preferred name in this text box.

> *The `Task Name` must be unique; if it is not, a suffix number will be added to make it unique. For example, 'MyTask' will become 'MyTask (2)'.*

Select Category

To assign a category to a supporting task, select one of the available categories, presented in the drop-down list.

Default value: `Default`.

Or Type a New Category

To create a category, enter a descriptive name in this text box. The new category will be available in the `Select Category` drop-down list.

> *Categories can be reassigned, but cannot be deleted.*

Task Description

To edit the description of the task, enter the preferred description in this text box.

Parameters

Command Line Statement

The command line statement that will be executed. To edit the command line, enter the preferred statement in this text box.

> *If the statement contains any ' ' (white space), the path must start and end with quotation marks, ".*

Example:

The task starts the application *notepad.exe* and displays the content of the file *odbc.ini*:
c:\windows\notepad.exe c:\windows\odbc.ini

Task Result Handling

Ignore Errors (Non-zero Return Codes)

Normally, any non-zero result code will be treated as if the task failed. To ignore the result code, making the task always being treated as successful, select this check box. To handle errors, clear this check box.

File Exists

Run task to check if file exists

By enabling **File Exists**, the task verifies that the selected file is available at the desired location. When a File Exists task is set to trigger a document task, the document task only runs if the File Exists task successfully locates the file. This setting prevents the failures of document tasks when the files required to complete the task are not available. A File Exists task completes successfully even when the file is not located. A File Exists task fails when the file path entered is empty, or if a network failure prevents the task from being completed.

You can enable **File Exists** by selecting the **Run task to check if file exists** check box. Then, insert the path to a file in the **Path:** field.

> *When you select **Run task to check if file exists**, the **Command Line Statement** text box in the **Parameters** section is deactivated.*

Path

Enter the file path in the text box. The file path must include the file extension.

You can set a File Exist task to locate any file. This means that the target of the File Exists task can be an alternative file not connected to a document task. The document task only runs when the File Exists task locates the alternative file. If you set the File Exists task to locate an alternative file, make sure that the file read by the document task is available when the document task runs.

You can use asterisks in the file path. When the path contains asterisks, the following rules apply:

- The file extension must always be included. For example:
  C:\ProgramData\QlikTech\SourceDocuments\Data.qvw*
- If more than one file satisfies the path conditions, the task is completed as soon as the first file matching the file path is located.
- An asterisk can be added before or after the file name. Two asterisks can be used simultaneously, one at each end.
  *C:\ProgramData\QlikTech\SourceDocuments*Data.qvw*

  C:\ProgramData\QlikTech\SourceDocuments\Data.qvw*

  *C:\ProgramData\QlikTech\SourceDocuments*Data*.qvw*
- An Asterisk cannot be inserted within a file name. The following path is invalid:
  *C:\ProgramData\QlikTech\SourceDocuments\Data*3.qvw*

Triggers

On the `Triggers` tab, the `current task` can be configured to be started by triggers. A task can have multiple triggers, creating a workflow of tasks. This tab contains the following headings:

- Current Triggers
- Task Dependencies

Current Triggers

Each row presents a separate trigger. The `current task` is started if any trigger is released (OR operator). If several triggers (multiple conditions) are to be released, before the `current task` is started, the `On Multiple Events Completed` function should be used (AND operator).

To create a trigger, click on the `Add` icon, , to the right in the pane.

Trigger

The type of the trigger. The possible value is the following:

- `Once Trigger`
- `Task Finished Trigger`
- `External Event Trigger`
- `And Trigger`

Details

The trigger condition settings, that is, a summary of when the trigger starts the `current task`.

Enabled

The current status of the trigger. The possible values are the following:

- `Enabled`
- `Disabled`

Edit Trigger

To configure a trigger, click on the `Edit Trigger` icon, .

Delete

To entirely remove a trigger, click on the `Delete` icon, .

Configure Trigger Dialog

Start the Task

Choose the type of trigger by clicking on one of the following options in the drop-down list:

- On a Schedule
- On Event from Another Task
- On an External Event
- On Multiple Events Completed

Enabled

To enable the trigger for execution of the task, tick this check box. To disable the trigger, untick this check box.

On a Schedule

When the `On a Schedule` trigger type was chosen, a trigger can be scheduled to start the `current task`. The following configuration options are available:

Recurrence

Choose a schedule for the trigger to start, by clicking on one of the following options:

- Once
- Hourly
- Daily
- Weekly
- Monthly
- Continuously

> *All time specifications must be in the 24-hour format.*

Start at

Enter the date and time of the initial trigger start in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`.

Example:

```
2011-12-31 23:59:59
```

Once

No further settings are available.

Hourly

Run Every

Choose a time interval for the trigger to start, by entering the desired number in the `Hours` and `Minutes` text boxes.

Example:

`1` and `10`, meaning that the trigger will start every 70 minutes (the example not considering other possible limiting settings).

On

Choose the day(s) of the week for the trigger to start, by ticking any of the following check boxes:

- `Monday`
- `Tuesday`
- `Wednesday`
- `Thursday`
- `Friday`
- `Saturday`
- `Sunday`

If no day was chosen, the trigger runs all days.

Run Only Between

To limit the trigger start within a day, tick this check box. Enter the start time and the stop time, in between which trigger start is allowed, in the `start` and `stop` text boxes, by using the following format: `hh:mm`. To disable the limitation, untick this check box.

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Daily

Run Every

Choose a time interval for the trigger to start, by entering the desired number in the `Day` text box.

Example:

`3`, meaning that the trigger will start every third day (the example not considering other possible limiting settings).

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Weekly

Run Every

Choose a time interval for the trigger to start, by entering the desired number in the `Weeks` text box.

Example:

`2`, meaning that the trigger will start every second week (the example not considering other possible limiting settings).

On

Choose the day(s) of the week for the trigger to start, by ticking any of the following check boxes:

- `Monday`
- `Tuesday`
- `Wednesday`
- `Thursday`
- `Friday`
- `Saturday`
- `Sunday`

If no day was chosen, the current day is selected.

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Monthly

Months

Choose the month(s) of the year for the trigger to start, by ticking any of the following check boxes:

- `January`
- `February`
- `March`
- `April`
- `May`
- `June`
- `July`
- `August`
- `September`
- `October`
- `November`
- `December`

> *If no month was chosen, the current month is selected.*

Check All

To automatically tick all of the months, click on this button.

Uncheck All

To automatically untick all of the months, click on this button.

Run Only

To limit the trigger start within the selected `Months`, select one of the following options:

- `Days`, and select the day(s) of the month(s) for the trigger to start, by ticking any of the following check boxes:
  - `1`, `2`, `3`... `31`, where each value represents that day of the month(s)
  - `Last`, meaning the very last day of the month(s)

  > *If no day was chosen, the trigger will not occur.*

- `On`, and select the weekday(s) of the month(s), by ticking any of the following check boxes:

Days to trigger

Order	Weekday
First	Monday
Second	Tuesday
Third	Wednesday
Fourth	Thursday
Last	Friday
	Saturday
	Sunday

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Continuously

No further settings are available.

On Event from Another Task

When the `On Event from Another Task` trigger type was chosen, the trigger can be configured to start the `current task` on the event from another task. The following configuration options are available:

Start on

Choose a trigger event, by clicking on one of the following options in the drop-down list:

- `Successful`, meaning that the execution of the task was successful
- `Failed`, meaning that the execution of the task failed

Completion of

Choose a trigger task, by clicking on one of the options in the drop-down list.

On an External Event

When the `On an External Event` trigger type was chosen, the trigger can be configured to start the `current task` on an external event, that is, an outside component, making a QlikView Management Service (QMS) API call. The following configuration options are available:

Password

This password is used to access the task and release the trigger. The external event has to know the password. To enable an external event to release the trigger of the task, enter a password in this text box.

On Multiple Events Completed

When the `On Multiple Events Completed` trigger type was chosen, the trigger can be configured to start the `current task` when other tasks have `all` been `completed` in their execution `within a certain time`. The following configuration options are available:

Time Constraint

Choose a time limit, within which all of the tasks have to complete their execution, by entering the desired number in the `Minutes` text box.

Default value: `360`, meaning 6 hours.

Run Task When All of these Events Completed

External Event

To add an external event to the list of tasks that have to be completed for the trigger to be started, tick this check box. To entirely remove an external event from the list, untick this check box.

Password

This password is used to access the task and release the trigger. The external event has to know the password. To enable an external event to release the trigger of the task, enter a password in this text box.

Task Completed

To add tasks, and the events with which they have to be completed for the trigger to be started, click on the `Add` icon, , to the right in the pane.

Event

Select the event for the task in the drop-down list.

Task

Select the corresponding task, for which an event was selected in the `Event` field, in the drop-down list.

Task Dependencies

Task dependency is a way of making sure that the `current task` runs only if other tasks have finished their last execution successfully. The task dependencies overrule any trigger, which means that a trigger might not be able to start the `current task`, if a task dependency for the `current task` is not fulfilled.

To configure a dependency for the `current task`, click on the `Add` icon, , to the right in the pane.

Task

Select the task(s), which must have been successfully executed before the `current task` can be executed, in the drop-down list.

Delete

To entirely remove a task dependency, click on the `Delete` icon, .

Database Command

In the `Database Command` folder, supporting tasks for running commands against databases can be viewed and managed.

Functions

Add Task

To add a task, click on the `Add Task` icon, , in the upper right corner of the right pane. The following tabs will be created:

- General
- Triggers

Click on each tab label for more information.

View Status

To view the status and the settings of a task, in the right pane, click on the task in the tree view.

Edit Task

To configure a task, click on the `Edit Task` icon, , or click on the task in the tree view. In the right pane, the following tabs are presented:

- General
- Triggers

Click on each tab label for more information.

Copy Task

To copy a task, click on the `Copy this task to clipboard` icon, .

Paste Task

Pasting a task into a folder will create a new task. To paste a copied task to a specific folder, click on (highlight) the folder and click on the `Paste Task` icon, , in the right pane (to the left of the `Add Task` icon,).

Run Task

To start a task, click on the `Run this task` icon, .

Abort Task

To stop a running task, click on the `Abort this task` icon, .

Delete Task

To entirely remove a task, either click on (highlight) the document, in which the task resides, in the tree view, and click on the `Delete this Task` icon of that task, , in the right pane, or click on (highlight) the task in the tree view, and right-click on `Delete`.

General

On the `General` tab, the basic settings and parameters of the `current task` can be managed. The categories for a document can be assigned, created, edited, and deleted. A category bundles documents in containers, to make categorization easier for the end-user. The categories are only visible to the end-user on the QlikView AccessPoint. Each document can only be part of one category.

Basics

Enabled

To enable the task, tick this check box. To disable the task, untick this check box.

Task Name

To edit the name of the task, enter the preferred name in this text box.

> *The `Task Name` must be unique; if it is not, a suffix number will be added to make it unique. For example, 'MyTask' will become 'MyTask (2)'.*

Select Category

To assign a category to a supporting task, select one of the available categories, presented in the drop-down list.

Default value: `Default`.

Or Type a New Category

To create a category, enter a descriptive name in this text box. The new category will be available in the `Select Category` drop-down list.

> *Categories can be reassigned, but cannot be deleted.*

Task Description

To edit the description of the task, enter the preferred description in this text box.

Parameters

User Name

User name used for the connection string.

Password

Password used for the connection string. In this field the password is hidden to avoid displaying it in clear text.

Connection String

The connection string that will be used for connecting to the database. To edit the connection string, enter the preferred statement in this text box.

> *Use they keyword {user} and {pwd} in the connection string to insert the user name and password.*

Database Command

The database command statement that will be executed. This can be any command that the database will recognize (`Stored Procedures` or `SQL statements`). To edit the database command, enter the preferred statement in this text box.

Triggers

On the `Triggers` tab, the `current task` can be configured to be started by triggers. A task can have multiple triggers, creating a workflow of tasks. This tab contains the following headings:

- Current Triggers
- Task Dependencies

Current Triggers

Each row presents a separate trigger. The `current task` is started if any trigger is released (OR operator). If several triggers (multiple conditions) are to be released, before the `current task` is started, the `On Multiple Events Completed` function should be used (AND operator).

To create a trigger, click on the `Add` icon, , to the right in the pane.

Trigger

The type of the trigger. The possible value is the following:

- `Once Trigger`
- `Task Finished Trigger`
- `External Event Trigger`
- `And Trigger`

Details

The trigger condition settings, that is, a summary of when the trigger starts the `current task`.

Enabled

The current status of the trigger. The possible values are the following:

- `Enabled`
- `Disabled`

Edit Trigger

To configure a trigger, click on the `Edit Trigger` icon, .

Delete

To entirely remove a trigger, click on the `Delete` icon, .

Configure Trigger Dialog

Start the Task

Choose the type of trigger by clicking on one of the following options in the drop-down list:

- On a Schedule
- On Event from Another Task
- On an External Event
- On Multiple Events Completed

Enabled

To enable the trigger for execution of the task, tick this check box. To disable the trigger, untick this check box.

On a Schedule

When the `On a Schedule` trigger type was chosen, a trigger can be scheduled to start the `current task`. The following configuration options are available:

Recurrence

Choose a schedule for the trigger to start, by clicking on one of the following options:

- Once
- Hourly
- Daily
- Weekly
- Monthly
- Continuously

> *All time specifications must be in the 24-hour format.*

Start at

Enter the date and time of the initial trigger start in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`.

Example:

```
2011-12-31 23:59:59
```

Once

No further settings are available.

Hourly

Run Every

Choose a time interval for the trigger to start, by entering the desired number in the `Hours` and `Minutes` text boxes.

Example:

`1` and `10`, meaning that the trigger will start every 70 minutes (the example not considering other possible limiting settings).

On

Choose the day(s) of the week for the trigger to start, by ticking any of the following check boxes:

- `Monday`
- `Tuesday`
- `Wednesday`
- `Thursday`
- `Friday`
- `Saturday`
- `Sunday`

If no day was chosen, the trigger runs all days.

Run Only Between

To limit the trigger start within a day, tick this check box. Enter the start time and the stop time, in between which trigger start is allowed, in the `start` and `stop` text boxes, by using the following format: `hh:mm`. To disable the limitation, untick this check box.

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Daily

Run Every

Choose a time interval for the trigger to start, by entering the desired number in the `Day` text box.

Example:

`3`, meaning that the trigger will start every third day (the example not considering other possible limiting settings).

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Weekly

Run Every

Choose a time interval for the trigger to start, by entering the desired number in the `Weeks` text box.

Example:

`2`, meaning that the trigger will start every second week (the example not considering other possible limiting settings).

On

Choose the day(s) of the week for the trigger to start, by ticking any of the following check boxes:

- `Monday`
- `Tuesday`
- `Wednesday`
- `Thursday`
- `Friday`
- `Saturday`
- `Sunday`

If no day was chosen, the current day is selected.

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Monthly

Months

Choose the month(s) of the year for the trigger to start, by ticking any of the following check boxes:

- `January`
- `February`
- `March`
- `April`
- `May`
- `June`
- `July`
- `August`
- `September`
- `October`
- `November`
- `December`

If no month was chosen, the current month is selected.

Check All

To automatically tick all of the months, click on this button.

Uncheck All

To automatically untick all of the months, click on this button.

Run Only

To limit the trigger start within the selected `Months`, select one of the following options:

- `Days`, and select the day(s) of the month(s) for the trigger to start, by ticking any of the following check boxes:
  - `1`, `2`, `3`... `31`, where each value represents that day of the month(s)
  - `Last`, meaning the very last day of the month(s)

> *If no day was chosen, the trigger will not occur.*

- `On`, and select the weekday(s) of the month(s), by ticking any of the following check boxes:

Days to trigger

Order	Weekday
First	Monday
Second	Tuesday
Third	Wednesday
Fourth	Thursday
Last	Friday
	Saturday
	Sunday

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Continuously

No further settings are available.

On Event from Another Task

When the `On Event from Another Task` trigger type was chosen, the trigger can be configured to start the `current task` on the event from another task. The following configuration options are available:

Start on

Choose a trigger event, by clicking on one of the following options in the drop-down list:

- `Successful`, meaning that the execution of the task was successful
- `Failed`, meaning that the execution of the task failed

Completion of

Choose a trigger task, by clicking on one of the options in the drop-down list.

On an External Event

When the `On an External Event` trigger type was chosen, the trigger can be configured to start the `current task` on an external event, that is, an outside component, making a QlikView Management Service (QMS) API call. The following configuration options are available:

Password

This password is used to access the task and release the trigger. The external event has to know the password. To enable an external event to release the trigger of the task, enter a password in this text box.

On Multiple Events Completed

When the `On Multiple Events Completed` trigger type was chosen, the trigger can be configured to start the `current task` when other tasks have `all` been `completed` in their execution `within a certain time`. The following configuration options are available:

Time Constraint

Choose a time limit, within which all of the tasks have to complete their execution, by entering the desired number in the `Minutes` text box.

Default value: `360`, meaning 6 hours.

Run Task When All of these Events Completed

External Event

To add an external event to the list of tasks that have to be completed for the trigger to be started, tick this check box. To entirely remove an external event from the list, untick this check box.

Password

This password is used to access the task and release the trigger. The external event has to know the password. To enable an external event to release the trigger of the task, enter a password in this text box.

Task Completed

To add tasks, and the events with which they have to be completed for the trigger to be started, click on the `Add` icon, , to the right in the pane.

Event

Select the event for the task in the drop-down list.

Task

Select the corresponding task, for which an event was selected in the `Event` field, in the drop-down list.

Task Dependencies

Task dependency is a way of making sure that the `current task` runs only if other tasks have finished their last execution successfully. The task dependencies overrule any trigger, which means that a trigger might not be able to start the `current task`, if a task dependency for the `current task` is not fulfilled.

To configure a dependency for the `current task`, click on the `Add` icon, , to the right in the pane.

Task

Select the task(s), which must have been successfully executed before the `current task` can be executed, in the drop-down list.

Delete

To entirely remove a task dependency, click on the `Delete` icon, .

Pause

In the `Pause` folder, supporting tasks for pauses can be viewed and managed.

Functions

Add Task

To add a task, click on the `Add Task` icon, , in the upper right corner of the right pane. The following tabs will be created:

- General
- Triggers

Click on each tab label for more information.

View Status

To view the status and the settings of a task, in the right pane, click on the task in the tree view.

Edit Task

To configure a task, click on the `Edit Task` icon, , or click on the task in the tree view. In the right pane, the following tabs are presented:

- General
- Triggers

Click on each tab label for more information.

Copy Task

To copy a task, click on the `Copy this task to clipboard` icon, .

Paste Task

Pasting a task into a folder will create a new task. To paste a copied task to a specific folder, click on (highlight) the folder and click on the `Paste Task` icon, , in the right pane (to the left of the `Add Task` icon,).

Run Task

To start a task, click on the `Run this task` icon, .

Abort Task

To stop a task, click on the `Abort this task` icon, .

Delete Task

To entirely remove a task, either click on (highlight) the document, in which the task resides, in the tree view, and click on the `Delete this Task` icon of that task, , in the right pane, or click on (highlight) the task in the tree view, and right-click on `Delete`.

General

On the `General` tab, the basic settings and parameters of the `current task` can be managed. The categories for a document can be assigned, created, edited, and deleted. A category bundles documents in containers, to make categorization easier for the end-user. The categories are only visible to the end-user on the QlikView AccessPoint. Each document can only be part of one category.

Basics

Enabled

To enable the task, tick this check box. To disable the task, untick this check box.

Task Name

To edit the name of the task, enter the preferred name in this text box.

> *The `Task Name` must be unique; if it is not, a suffix number will be added to make it unique. For example, 'MyTask' will become 'MyTask (2)'.*

Select Category

To assign a category to a supporting task, select one of the available categories, presented in the drop-down list.

Default value: `Default`.

Or Type a New Category

To create a category, enter a descriptive name in this text box. The new category will be available in the `Select Category` drop-down list.

Categories can be reassigned, but cannot be deleted.

Task Description

To edit the description of the task, enter the preferred description in this text box.

Parameters

Select one of the following pause options:

- `Delay Seconds`

  This will pause for `n` seconds. To edit this parameter, enter the preferred value in this text box.

  Default value: `0` (seconds).

- `Delay Until`

  This will pause until the specified time is reached. To edit this parameter, enter the preferred value, in the format `hh:mm`, in this text box.

Triggers

On the `Triggers` tab, the `current task` can be configured to be started by triggers. A task can have multiple triggers, creating a workflow of tasks. This tab contains the following headings:

- Current Triggers
- Task Dependencies

Current Triggers

Each row presents a separate trigger. The `current task` is started if any trigger is released (OR operator). If several triggers (multiple conditions) are to be released, before the `current task` is started, the `On Multiple Events Completed` function should be used (AND operator).

To create a trigger, click on the `Add` icon, , to the right in the pane.

Trigger

The type of the trigger. The possible value is the following:

- `Once Trigger`
- `Task Finished Trigger`
- `External Event Trigger`
- `And Trigger`

Details

The trigger condition settings, that is, a summary of when the trigger starts the `current task`.

Enabled

The current status of the trigger. The possible values are the following:

- `Enabled`
- `Disabled`

Edit Trigger

To configure a trigger, click on the `Edit Trigger` icon, .

Delete

To entirely remove a trigger, click on the `Delete` icon, .

Configure Trigger Dialog

Start the Task

Choose the type of trigger by clicking on one of the following options in the drop-down list:

- On a Schedule
- On Event from Another Task
- On an External Event
- On Multiple Events Completed

Enabled

To enable the trigger for execution of the task, tick this check box. To disable the trigger, untick this check box.

On a Schedule

When the `On a Schedule` trigger type was chosen, a trigger can be scheduled to start the `current task`. The following configuration options are available:

Recurrence

Choose a schedule for the trigger to start, by clicking on one of the following options:

- Once
- Hourly
- Daily
- Weekly
- Monthly
- Continuously

> *All time specifications must be in the 24-hour format.*

Start at

Enter the date and time of the initial trigger start in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`.

Example:

`2011-12-31 23:59:59`

Once

No further settings are available.

Hourly

Run Every

Choose a time interval for the trigger to start, by entering the desired number in the `Hours` and `Minutes` text boxes.

Example:

`1` and `10`, meaning that the trigger will start every 70 minutes (the example not considering other possible limiting settings).

On

Choose the day(s) of the week for the trigger to start, by ticking any of the following check boxes:

- `Monday`
- `Tuesday`
- `Wednesday`
- `Thursday`
- `Friday`
- `Saturday`
- `Sunday`

If no day was chosen, the trigger runs all days.

Run Only Between

To limit the trigger start within a day, tick this check box. Enter the start time and the stop time, in between which trigger start is allowed, in the `start` and `stop` text boxes, by using the following format: `hh:mm`. To disable the limitation, untick this check box.

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

`2012-12-31 23:59:59`

Daily

Run Every

Choose a time interval for the trigger to start, by entering the desired number in the `Day` text box.

Example:

`3`, meaning that the trigger will start every third day (the example not considering other possible limiting settings).

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

`2012-12-31 23:59:59`

Weekly

Run Every

Choose a time interval for the trigger to start, by entering the desired number in the `Weeks` text box.

Example:

`2`, meaning that the trigger will start every second week (the example not considering other possible limiting settings).

On

Choose the day(s) of the week for the trigger to start, by ticking any of the following check boxes:

- `Monday`
- `Tuesday`
- `Wednesday`
- `Thursday`
- `Friday`

- `Saturday`
- `Sunday`

> *If no day was chosen, the current day is selected.*

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Monthly

Months

Choose the month(s) of the year for the trigger to start, by ticking any of the following check boxes:

- `January`
- `February`
- `March`
- `April`
- `May`
- `June`
- `July`
- `August`
- `September`
- `October`
- `November`
- `December`

> *If no month was chosen, the current month is selected.*

Check All

To automatically tick all of the months, click on this button.

Uncheck All

To automatically untick all of the months, click on this button.

Run Only

To limit the trigger start within the selected `Months`, select one of the following options:

- `Days`, and select the day(s) of the month(s) for the trigger to start, by ticking any of the following check boxes:
  - `1`, `2`, `3`... `31`, where each value represents that day of the month(s)
  - `Last`, meaning the very last day of the month(s)

> *If no day was chosen, the trigger will not occur.*

- `On`, and select the weekday(s) of the month(s), by ticking any of the following check boxes:

Days to trigger

Order	Weekday
First	Monday
Second	Tuesday
Third	Wednesday
Fourth	Thursday
Last	Friday
	Saturday
	Sunday

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Continuously

No further settings are available.

On Event from Another Task

When the `On Event from Another Task` trigger type was chosen, the trigger can be configured to start the `current task` on the event from another task. The following configuration options are available:

Start on

Choose a trigger event, by clicking on one of the following options in the drop-down list:

- `Successful`, meaning that the execution of the task was successful
- `Failed`, meaning that the execution of the task failed

Completion of

Choose a trigger task, by clicking on one of the options in the drop-down list.

On an External Event

When the `On an External Event` trigger type was chosen, the trigger can be configured to start the `current task` on an external event, that is, an outside component, making a QlikView Management Service (QMS) API call. The following configuration options are available:

Password

This password is used to access the task and release the trigger. The external event has to know the password. To enable an external event to release the trigger of the task, enter a password in this text box.

On Multiple Events Completed

When the `On Multiple Events Completed` trigger type was chosen, the trigger can be configured to start the `current task` when other tasks have `all` been `completed` in their execution `within a certain time`. The following configuration options are available:

Time Constraint

Choose a time limit, within which all of the tasks have to complete their execution, by entering the desired number in the `Minutes` text box.

Default value: `360`, meaning 6 hours.

Run Task When All of these Events Completed

External Event

To add an external event to the list of tasks that have to be completed for the trigger to be started, tick this check box. To entirely remove an external event from the list, untick this check box.

Password

This password is used to access the task and release the trigger. The external event has to know the password. To enable an external event to release the trigger of the task, enter a password in this text box.

Task Completed

To add tasks, and the events with which they have to be completed for the trigger to be started, click on the `Add` icon, , to the right in the pane.

Event

Select the event for the task in the drop-down list.

Task

Select the corresponding task, for which an event was selected in the `Event` field, in the drop-down list.

Task Dependencies

Task dependency is a way of making sure that the `current task` runs only if other tasks have finished their last execution successfully. The task dependencies overrule any trigger, which means that a trigger might not be able to start the `current task`, if a task dependency for the `current task` is not fulfilled.

To configure a dependency for the `current task`, click on the `Add` icon, , to the right in the pane.

Task

Select the task(s), which must have been successfully executed before the `current task` can be executed, in the drop-down list.

Delete

To entirely remove a task dependency, click on the `Delete` icon, .

QVD Creation

In the `QVD Creation` folder, supporting tasks for QlikView Data (QVD) creation can be viewed and managed.

The QVD creation feature allows QlikView Administrators to deliver specific QVD files to specific QlikView Developers and end-users. With QVD creation, QlikView Administrators can schedule tasks to create QVD files. These tasks do not require an existing QlikView document file. Instead, the QlikView Administrator can insert the load script necessary to generate a QlikView table into the QVD creation task, and the QlikView Publisher (QVP) will execute the load script and automatically store the QVD in a desired location.

Functions

Add Task

To add a task, click on the `Add Task` icon, , in the upper right corner of the right pane. The following tabs will be created:

- General
- Triggers

Click on each tab label for more information.

View Status

To view the status and the settings of a task, in the right pane, click on the task in the tree view.

Edit Task

To configure a task, click on the `Edit Task` icon, , or click on the task in the tree view. In the right pane, the following tabs are presented:

- General
- Triggers

Click on each tab label for more information.

Copy Task

To copy a task, click on the `Copy this task to clipboard` icon, .

Paste Task

Pasting a task into a folder will create a new task. To paste a copied task to a specific folder, click on (highlight) the folder and click on the `Paste Task` icon, , in the right pane (to the left of the `Add Task` icon,).

Run Task

To start a task, click on the `Run this task` icon, .

Abort Task

To stop a task, click on the `Abort this task` icon, .

Delete Task

To entirely remove a task, either click on (highlight) the document, in which the task resides, in the tree view, and click on the `Delete this Task` icon of that task, , in the right pane, or click on (highlight) the task in the tree view, and right-click on `Delete`.

General

On the `General` tab, the basic settings and parameters of the `current task` can be managed. The categories for a document can be assigned, created, edited, and deleted. A category bundles documents in containers, to make categorization easier for the end-user. The categories are only visible to the end-user on the QlikView AccessPoint. Each document can only be part of one category.

Basics

Enabled

To enable the task, tick this check box. To disable the task, untick this check box.

Task Name

To edit the name of the task, enter the preferred name in this text box.

> *The `Task Name` must be unique; if it is not, a suffix number will be added to make it unique. For example, 'MyTask' will become 'MyTask (2)'.*

Select Category

To assign a category to a supporting task, select one of the available categories, presented in the drop-down list.

Default value: `Default`.

Or Type a New Category

To create a category, enter a descriptive name in this text box. The new category will be available in the `Select Category` drop-down list.

> *Categories can be reassigned, but cannot be deleted.*

Task Description

To edit the description of the task, enter the preferred description in this text box.

Parameters

Table Name

The name of the QVD database table. To edit the table name, enter the preferred name in this text box.

> *The table name is required, because the QVD creation task uses this name to generate the QlikView table and QVD file. The QVD creation task will fail if the table name is not provided.*

QVD Path

To select a folder for the QVD, click on the `Browse` icon, , and choose the folder in the `Choose Folder` dialog.

QVD Users

To select the method for managing users and groups, click on one of the following drop-down list options:

- `All Authenticated Users`, meaning that any authenticated user is authorized.
- `Named Users`, meaning that users that should be authorized are manually added, by searching for users and groups in a domain or on a computer (the names are resolved by the Directory Service Connector).

Add Users and Groups

If `Named Users` was chosen in the `User Type` field, do the following:

To manage users and groups, click on the **Manage Users** dialog icon, .

- `Search for Users and Groups`
  Enter the desired search term(s) in this text box, to find a user or a group, and click on the `Search` icon, .
- `Default Scope`
  Select the directory to be searched, in the drop-down list.
- `Search Result`
  This box presents the result of the search, using the desired criteria.
- `Selected Users`
  This box presents the selected users and groups.

- `Add >`
  To add a user or a group, click on it in the `Search Result` box and click on this button. Several items can be added at the same time.
- `< Delete`
  To deselect a user or a group, click on it in the `Selected Users` box and click on this button. Several items can be deselected at the same time.
- `<< Delete All`
  To deselect `all` of the users and groups from the `Selected Users` box, click on this button.

Script

The load script that is required to generate the QVD file. To edit the script, enter the preferred statement in this text box.

> *A QVD generation task can only create a single QVD file. The script entered into the task should contain all the script necessary to create the QlikView table, including the necessary 'CONNECT' statements. The QVD creation task automatically adds the necessary 'STORE' statement; therefore, this statement should not be included in the script.*

Triggers

On the `Triggers` tab, the `current task` can be configured to be started by triggers. A task can have multiple triggers, creating a workflow of tasks. This tab contains the following headings:

- Current Triggers
- Task Dependencies

Current Triggers

Each row presents a separate trigger. The `current task` is started if any trigger is released (OR operator). If several triggers (multiple conditions) are to be released, before the `current task` is started, the `On Multiple Events Completed` function should be used (AND operator).

To create a trigger, click on the `Add` icon, , to the right in the pane.

Trigger

The type of the trigger. The possible value is the following:

- `Once Trigger`
- `Task Finished Trigger`
- `External Event Trigger`
- `And Trigger`

Details

The trigger condition settings, that is, a summary of when the trigger starts the `current task`.

Enabled

The current status of the trigger. The possible values are the following:

- `Enabled`
- `Disabled`

Edit Trigger

To configure a trigger, click on the `Edit Trigger` icon, .

Delete

To entirely remove a trigger, click on the `Delete` icon, .

Configure Trigger Dialog

Start the Task

Choose the type of trigger by clicking on one of the following options in the drop-down list:

- On a Schedule
- On Event from Another Task
- On an External Event
- On Multiple Events Completed

Enabled

To enable the trigger for execution of the task, tick this check box. To disable the trigger, untick this check box.

On a Schedule

When the `On a Schedule` trigger type was chosen, a trigger can be scheduled to start the `current task`. The following configuration options are available:

Recurrence

Choose a schedule for the trigger to start, by clicking on one of the following options:

- Once
- Hourly
- Daily
- Weekly
- Monthly
- Continuously

> *All time specifications must be in the 24-hour format.*

Start at

Enter the date and time of the initial trigger start in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`.

Example:

`2011-12-31 23:59:59`

Once

No further settings are available.

Hourly

Run Every

Choose a time interval for the trigger to start, by entering the desired number in the `Hours` and `Minutes` text boxes.

Example:

`1` and `10`, meaning that the trigger will start every 70 minutes (the example not considering other possible limiting settings).

On

Choose the day(s) of the week for the trigger to start, by ticking any of the following check boxes:

- `Monday`
- `Tuesday`
- `Wednesday`
- `Thursday`
- `Friday`
- `Saturday`
- `Sunday`

If no day was chosen, the trigger runs all days.

Run Only Between

To limit the trigger start within a day, tick this check box. Enter the start time and the stop time, in between which trigger start is allowed, in the `start` and `stop` text boxes, by using the following format: `hh:mm`. To disable the limitation, untick this check box.

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Daily

Run Every

Choose a time interval for the trigger to start, by entering the desired number in the `Day` text box.

Example:

`3`, meaning that the trigger will start every third day (the example not considering other possible limiting settings).

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Weekly

Run Every

Choose a time interval for the trigger to start, by entering the desired number in the `Weeks` text box.

Example:

`2`, meaning that the trigger will start every second week (the example not considering other possible limiting settings).

On

Choose the day(s) of the week for the trigger to start, by ticking any of the following check boxes:

- `Monday`
- `Tuesday`
- `Wednesday`
- `Thursday`
- `Friday`

- `Saturday`
- `Sunday`

> *If no day was chosen, the current day is selected.*

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Monthly

Months

Choose the month(s) of the year for the trigger to start, by ticking any of the following check boxes:

- `January`
- `February`
- `March`
- `April`
- `May`
- `June`
- `July`
- `August`
- `September`
- `October`
- `November`
- `December`

> *If no month was chosen, the current month is selected.*

Check All

To automatically tick all of the months, click on this button.

Uncheck All

To automatically untick all of the months, click on this button.

Run Only

To limit the trigger start within the selected `Months`, select one of the following options:

- `Days`, and select the day(s) of the month(s) for the trigger to start, by ticking any of the following check boxes:
  - `1`, `2`, `3`... `31`, where each value represents that day of the month(s)
  - `Last`, meaning the very last day of the month(s)

  > *If no day was chosen, the trigger will not occur.*

- `On`, and select the weekday(s) of the month(s), by ticking any of the following check boxes:

Days to trigger

Order	Weekday
First	Monday
Second	Tuesday
Third	Wednesday
Fourth	Thursday
Last	Friday
	Saturday
	Sunday

Max Number of Executions

To limit the number of trigger starts, tick this check box and enter the allowed number of trigger starts in the `Max Number` text box. To not limit the number of trigger starts, untick this check box.

Expire

To make the trigger expire on a specific date and time, tick this check box and enter the date and time in this text box, by using the following format: `yyyy-mm-dd hh:mm:ss`. To make the trigger not to expire, untick this check box.

Example:

```
2012-12-31 23:59:59
```

Continuously

No further settings are available.

On Event from Another Task

When the `On Event from Another Task` trigger type was chosen, the trigger can be configured to start the `current task` on the event from another task. The following configuration options are available:

Start on

Choose a trigger event, by clicking on one of the following options in the drop-down list:

- `Successful`, meaning that the execution of the task was successful
- `Failed`, meaning that the execution of the task failed

Completion of

Choose a trigger task, by clicking on one of the options in the drop-down list.

On an External Event

When the `On an External Event` trigger type was chosen, the trigger can be configured to start the `current task` on an external event, that is, an outside component, making a QlikView Management Service (QMS) API call. The following configuration options are available:

Password

This password is used to access the task and release the trigger. The external event has to know the password. To enable an external event to release the trigger of the task, enter a password in this text box.

On Multiple Events Completed

When the `On Multiple Events Completed` trigger type was chosen, the trigger can be configured to start the `current task` when other tasks have `all` been `completed` in their execution `within a certain time`. The following configuration options are available:

Time Constraint

Choose a time limit, within which all of the tasks have to complete their execution, by entering the desired number in the `Minutes` text box.

Default value: `360`, meaning 6 hours.

Run Task When All of these Events Completed

External Event

To add an external event to the list of tasks that have to be completed for the trigger to be started, tick this check box. To entirely remove an external event from the list, untick this check box.

Password

This password is used to access the task and release the trigger. The external event has to know the password. To enable an external event to release the trigger of the task, enter a password in this text box.

Task Completed

To add tasks, and the events with which they have to be completed for the trigger to be started, click on the `Add` icon, , to the right in the pane.

Event

Select the event for the task in the drop-down list.

Task

Select the corresponding task, for which an event was selected in the `Event` field, in the drop-down list.

Task Dependencies

Task dependency is a way of making sure that the `current task` runs only if other tasks have finished their last execution successfully. The task dependencies overrule any trigger, which means that a trigger might not be able to start the `current task`, if a task dependency for the `current task` is not fulfilled.

To configure a dependency for the `current task`, click on the `Add` icon, , to the right in the pane.

Task

Select the task(s), which must have been successfully executed before the `current task` can be executed, in the drop-down list.

Delete

To entirely remove a task dependency, click on the `Delete` icon, .

6.7 Log Collector

On the `Log Collector` page, you can collect and export log files from a period that you define. The logs facilitate troubleshooting for Qlik Support.

Collected files

The following files are available for collection.

Windows event log

The log collector reads Windows application event logs and only extracts QlikView related events. With these logs, Qlik Support can analyze all QlikView services starts and stops, warnings, and errors.

System information

The log collector uses standard Windows Management Instrumentation (WMI) for collecting information about the local server, current hotfixes, and service packs. The log collector also uses the command line for detecting proxy setups, which services are running, certificate names, and internet settings. This information is useful when troubleshooting connectivity and Windows related problems.

Collecting and exporting log files

Do the following:

1. Enter start and end date, manually, or by using the calendar: .
2. Enter the support case number.
3. Select which additional logs you want to include:
   - Windows event log
   - System information
4. Click **Collect and export logs**.

A zip file is generated that you can send to Qlik Support.

If there are no logs available for the selected dates, Log collector will still run and collect generic information.