# A QlikView Upgrade Guide

Simplifying the QlikView Upgrade procedure.



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This technical paper aims to break down the QlikView upgrade procedure into a simple step-by-step guide.

The example instructions are written with a QlikView 11.20 environment as the base install. We will upgrade to 12.40 (April 2019).

However, unless otherwise stated, the procedure can be applied to all QlikView versions.

# What you will find:

- Detailed preparation steps to follow before the upgrade including what to back up
- Information about QlikView related files and how they are affected by the upgrade
- A step-by-step upgrade example

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# 1. Preparing for the Upgrade

Upgrading a QlikView environment is a straightforward procedure and most of your time will be spent preparing for it, rather than executing the actual upgrade. A good backup and verification/testing strategy will help mitigate any unexpected complications, such as documents no longer behaving as expected or data loss.

# 1a. Review the Documentation, Release Notes, and System Requirements

The Qlik Online Help provides an overview of *What's New* in each of Qlik's major releases and the Release notes contain information crucial for understanding specific requirements or considerations for the chosen version. Up-to-date System Requirements can be found on our Help Site.

#### **Related Content:**

- What's New in QlikView April 2019? (help.qlik.com)
- What's New in QlikView November 2018? (help.qlik.com)
- What's New in QlikView November 2017? (help.glik.com)
- System Requirements for QlikView April 2019 (help.qlik.com)
- Upgrading and Migrating QlikView Server (help.glik.com)
- Upgrading and Migrating QlikView Server from 11.20 (help.qlik.com)
- QlikView Service Account Requirements (support.qlik.com)
- Known issues and changes between 11.20 to 12.20 and later (KB 000047422)
- QlikView Folder And Files To Exclude From Anti-Virus Scanning (KB 000005617)



If you are upgrading multiple point releases forward, be sure to download all interim Release Notes. Review each to ensure awareness of all new features and upgrade items made available between releases.



If upgrading from 11.20, we recommend reviewing disk performance for storing QlikView apps and operational files. See *QlikView and its backend File Share System* (KB 000050593) for details.

# 1b. Testing

Deploy a testing environment to allow for user acceptance tests before moving ahead with a production upgrade.

- Verify that documents designed in earlier versions still behave as expected
- If custom solutions were built using API (Application Programming Interface) calls,
   verify their functionality
- Test any 3<sup>rd</sup> party integrations such as single sign-on portals or reverse proxy implementations and any object/document extensions

#### 1c. License and Maintenance

Ensure that you have a valid maintenance contract before upgrading your QlikView Server installation. Attempting to upgrade without a valid maintenance contract will result in limited functionality of QlikView Server. See <u>Maintenance contract on upgrade</u>. Another useful document is the *QlikView Product Terms*.

## 1d. Backing up the environment and understanding our file structure

The following is a list of directories and files used by QlikView, as well as brief explanations of their purpose. They should be backed up before the upgrade.



During the upgrade, QlikView will modify (Service Release upgrade) or replace (Major Point Release upgrade) its Program Files. This means all configuration changes done manually in the <code>.exe.config</code> files will be overwritten with default values. See <u>Backing up custom content</u> (help.com) for details.

#### The C:\ProgramData\QlikTech directory

In a default installation, this folder stores subfolders for each service, along with settings and QlikView's operational files. These files will be reused post-upgrade.

#### The QlikView Publisher Repository (QVPR)

If not moved, the QVPR is stored in the QlikView ProgramData directory inside the Management Service folder. The QVPR maintains **service settings** and **tasks**, as well as daily backups stored in .zip format. The QVPR is migrated (XML Schema files updated) to the updated version at startup of the Management Service post-upgrade.

#### Setting files (.ini and .xml files)

Services which do not have their settings stored in the QVPR, store them instead in .ini or .xml files. They are in the ProgramData (Application Data) folder for the respective services. An example is the settings.ini used by the QlikView server, which stores all QlikView Server service settings, such as where the root folder or document mounts are

found. Another example is the Web Server's config.xml. These files will be reused post-upgrade.

#### **QlikView operational files (Persistent Group Object - .pgo files)**

They are stored in the QlikView root folder. An example is the CalData.pgo file, which stores all **CAL** (**Client Access License**) information. These files are crucial. QlikView will reuse them when upgrading. There are also 'backup' copies found on each QlikView Server node in the ProgramData application directory for QlikViewServer. Ensure timestamps are in sync between locations. .pgo file definititions

#### QlikView documents (.qvw, .qvd)

The QlikView User and Source document files will remain untouched by the upgrade itself but will be converted to the updated version of the product when opened and saved by a reload via QlikView Desktop, QlikView Reload Engine or QlikView Publisher.

#### .shared and .tshared files

Each QlikView .qvw has a .shared or .tshared (available with version 12.20 and later) file. They store server **bookmarks** and **user objects**. As with the .qvw files, they will not be touched by the upgrade, but the content may be converted to newer formats when the files are first opened by the QlikView Server service post upgrade. Cleaning/Converting shared files

#### Log files

The upgrade will not change existing log files. Depending on the version you are upgrading from, additional service logs may be written, and the log file structure of new files may change.

#### **Certificates**

When using Certificate Trust between services, QlikView relies on certificates for service communication. See *Certificate Trust* (help.glik.com) for details on where to find them.



If running QlikView **12.00 or later**, *do not delete* the certificates. Always have a backup available. *Backing up and Restoring Certificates* 

If running QlikView **11.20** and upgrading to November 2017 (12.20) or later, **remove the certificates** before the upgrade. A different method of encryption is used between these releases.

#### Licenses

When using a LEF (License Enabler File) based license, two LEF.txt files are stored on disk which holds license data. They are reused during an upgrade and not changed. A backup is recommended.

- C:\ProgramData\QlikTech (QlikView Server) and
- C:\ProgramData\QlikTech\ManagementService\Publisher LEF (Publisher)

# 2. Upgrading the QlikView Server(s)

This document is written using an upgrade from 11.20 to April 2019 (12.40) as an example. However, unless otherwise stated, the upgrade instructions apply to the entire range of an on-premise installation.

When performing an upgrade, ensure that the *entire* environment is upgraded. This includes:

## 1. The QlikView Server services across all deployed nodes

See the instructions in this document for details.

## 2. QlikView Desktop Clients

Distribute the installation package to your users based on your local IT (Information Technology) practices

## 3. QlikView Internet Explorer Plugins

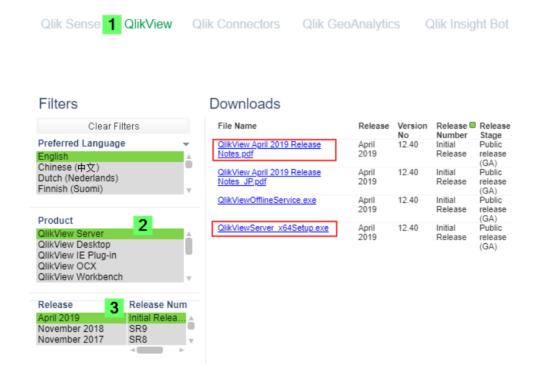
If possible, upgrade the plugin before the server as to prevent service crashes caused by outdated clients accessing it. Distribute the installation package to your users based on your local IT.



The best practice is to use the latest Service Release (SR) in the major point release track you choose. You should stay informed of future SR's and update to those that have fixes you may need related to issues you are experiencing. Subscribe to the <u>Qlik Support Updates blog</u> for news on our latest releases.

# 2a. Download the QlikView Installation package and Release Notes

- They are available from the Extended Download Page accessible for customers on Qlik.com. Log in with your customer credentials and navigate to Support > Product Downloads & Upgrades.
- 2. Filter for QlikView, your desired language, the QlikView Server installation package and the chosen version.
- 3. Download both the QlikViewServer\_x64Setup.exe installation package and the related Release Notes.
- 4. Copy the installation package to all servers.



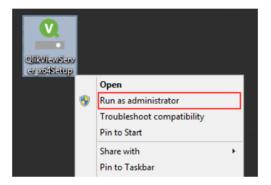
# 2b. Installing the upgrade

Stop all QlikView Services. When upgrading an environment across multiple
machines, such as a cluster or a distributed setup, always upgrade the entire
environment. Maintaining an outdated version on one service will lead to issues.



Available for 12.10 and later: To avoid interrupting running tasks, shut down the QlikView Distribution Service (QDS) by performing a graceful shutdown. See *Shutting down a QlikView Distribution Service* (help.com).

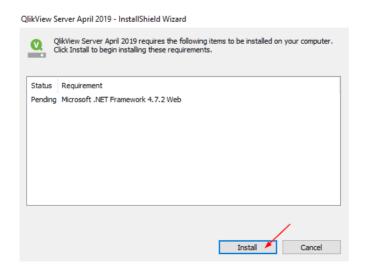
- 2. Log in as a member of the local *Administrators* security group on the server, execute the previously downloaded QlikView installation package.
- 3. Right-click the item and select *Run as administrator*



4. You will be prompted to install the required .NET Framework version if it is currently not installed. Click *Install*. The installation package will be downloaded (*Internet Connectivity required*).



Check the System Requirements area of Online Help if you are unsure of which version of .Net Framework is required to confirm things. Check specific version to which you are upgrading.

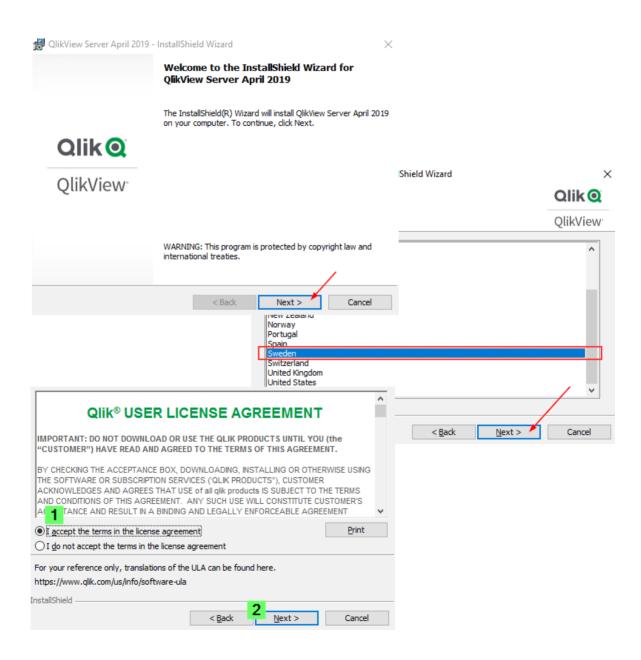


- 5. The installer will launch and detect an earlier version of QlikView installed.
- 6. Check the Uninstall earlier version tick box and click Next.

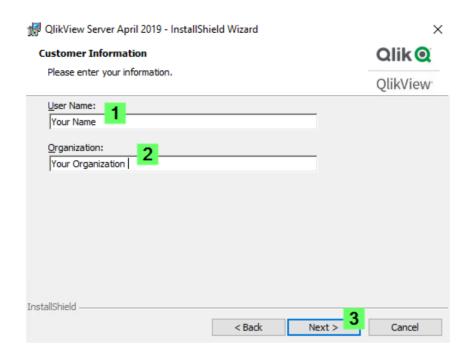


If you are only upgrading to a *Service Release* within the same major release track, such as SR 1 of April 2019 on an IR of April 2019, the product will not be *uninstalled* but files will be *updated*.

- 7. Select the correct **Region** and click **Next** again.
- 8. Finally, read and accept the License Agreement and click Next



9. Input your name and organization name.



- 10. Verify the installation folder. Do not change the path during an upgrade. Click **Next**.
- 11. Select the original service configuration and click *Next*.



If you are only upgrading to a *Service Release* within the same major release track, the upgrade will detect the installed services and automatically continue.

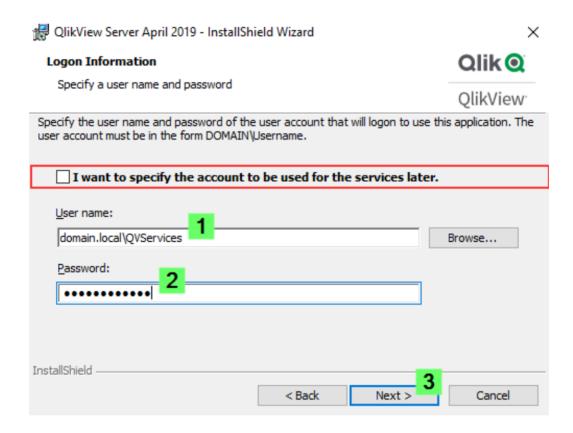
#### Examples:

- a. Full installation, Single machine with QlikView Webserver: If all components were installed and the QlikView WebServer was used.
- b. Full installation, Single machine with Microsoft IIS (Internet Information Services): Same as above, but with IIS as the web server.
- c. **Custom installation, select profiles:** Choose from this selection if you have a distributed environment and are only upgrading currently installed services.
  - i. QlikView Server: For QlikView Server and Directory Service
     Connector
  - ii. **Reload/ Distribute Engine:** Reload Engine/Distribution Service.
  - iii. **Management Console:** QlikView Management Service which is the backend for the QlikView Management Console (QMC).
  - iv. Webserver: QlikView Web Server or IIS Support.

12. Specify the Username and Password of the **Service Account**. This will add the account to the **QlikView Administrators** group created by the installation package.



This step may fail with the message Server not found. Verify that the specified server exists. See <u>Server not found when installing QlikView Server</u> (KB 000002804) for details.



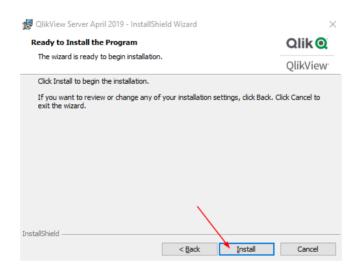
13. You will be prompted to choose the *Service Authentication* method. During a Version/Point release upgrade, do not change the method previously used. Always select the same as for the original install. Service Release upgrades will not prompt for this. Click *Next*.



If running QlikView **12.00** or later ensure that a certificate backup is available.

If running QlikView **11.20** and upgrading to November 2017 or later, you will have already removed the certificates, as the installer will not launch otherwise.

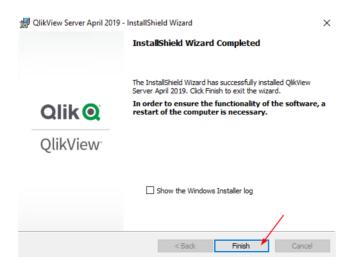
14. Confirm the last prompt by clicking *Install*. The installation will continue.



15. Once the upgrade has finished, click *Finish*.

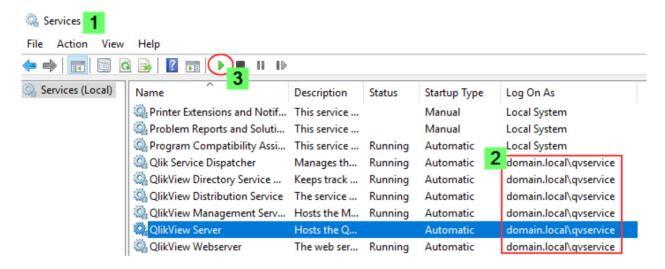


If the installation met any issues, check the *Show the Installer log* checkbox for troubleshooting. See *How to read installation logs for Qlik products*.



# 2c. Verifying the Upgrade

- 1. Review the account running the QlikView Services and start the Services.
- Open the Windows Services console, review what account they are set to Log On As and if this is correct.
- 3. Start the services on all machines.



- 4. Verify License information.
  - a. Open the QlikView Management console and navigate to System > Licenses > QlikView Server QVS@servername and/or QlikView Publisher QMS@servername
  - b. Check that license details are still complete.
- 5. Verify QlikView Server settings.
  - Open the QlikView Management console and navigate to
     System > Setup > QlikView Servers > QVS@servername > Folders
  - 5. Check that the **Root Folder** and **Mounted Folders** still point to the correct locations. This will verify that the QlikView Server settings.ini has been correctly reused.
- 6. Verify AccessPoint availability and that documents open
  - 6. Navigate to the QlikView AccessPoint and open an existing QlikView document.
- 7. If using Reload Engine/Publisher, verify a task runs and completes successfully.