

QlikView Installation Guide

Server/Publisher

April 13, 2011 – Version 1.x

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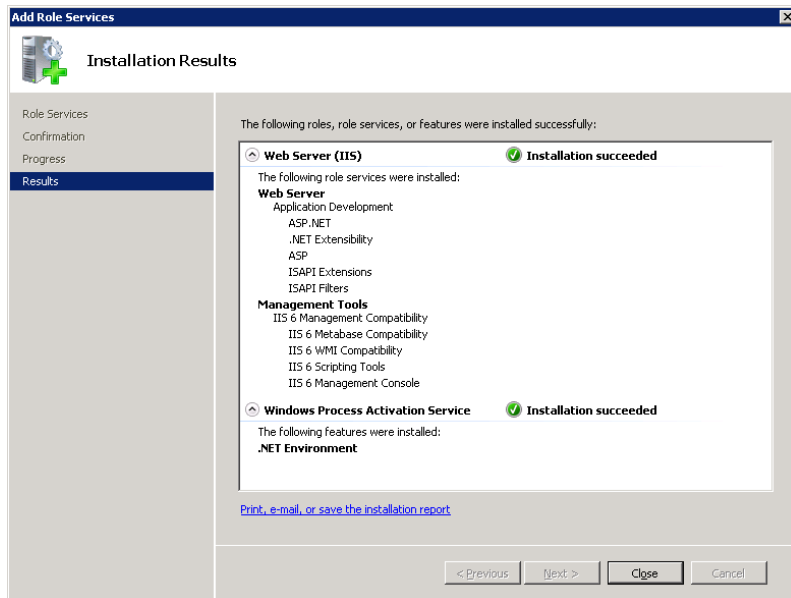
Overview

This document will describe the installation and configuration process for QlikView Server and Publisher at the VA AITC. At the end of this process, you should have a clustered QlikView Server and single QlikView Publisher installed and configured across multiple machines. One reload and distribution task will be defined and ability to open a document through AccessPoint will be tested. Additional information can be found in the **QlikView Server Reference Manual.pdf**, which can be downloaded from <http://global.qlikview.com/download/>

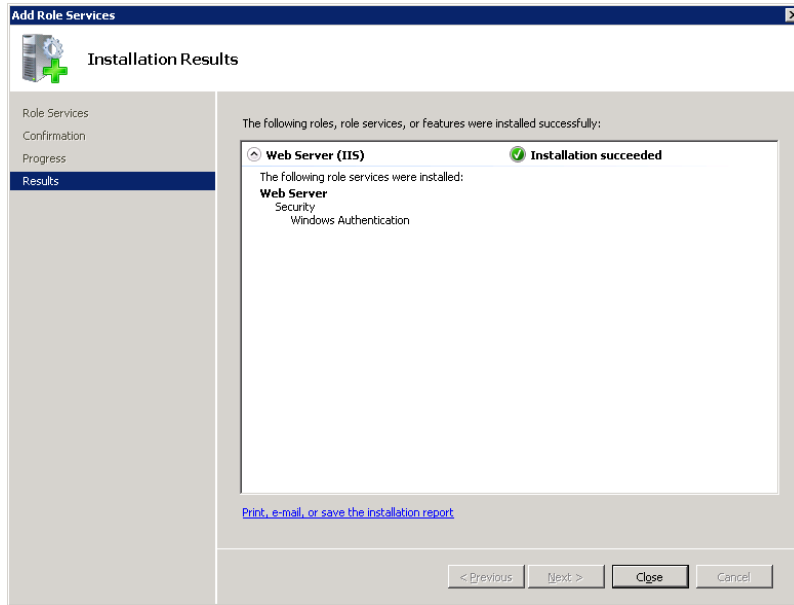
Pre-Installation

The following tasks should be completed prior to starting the QlikView Server installation and configuration process.

1. Allocate and install VM or physical QlikView server machines. Dev environment has 2 VM's defined, **VASDPAPP80** and **VASDPAPP82**.
2. Verify **.NET 3.5.1** is installed.
3. For the primary server (e.g. VASDPAPP40), in addition to the server OS, verify **IIS 7** is installed. For IIS, please verify that the features include all features listed on page 1 of the document **IIS7_6 Compatibility Settings.pdf**. The features installed on Dev are:



and

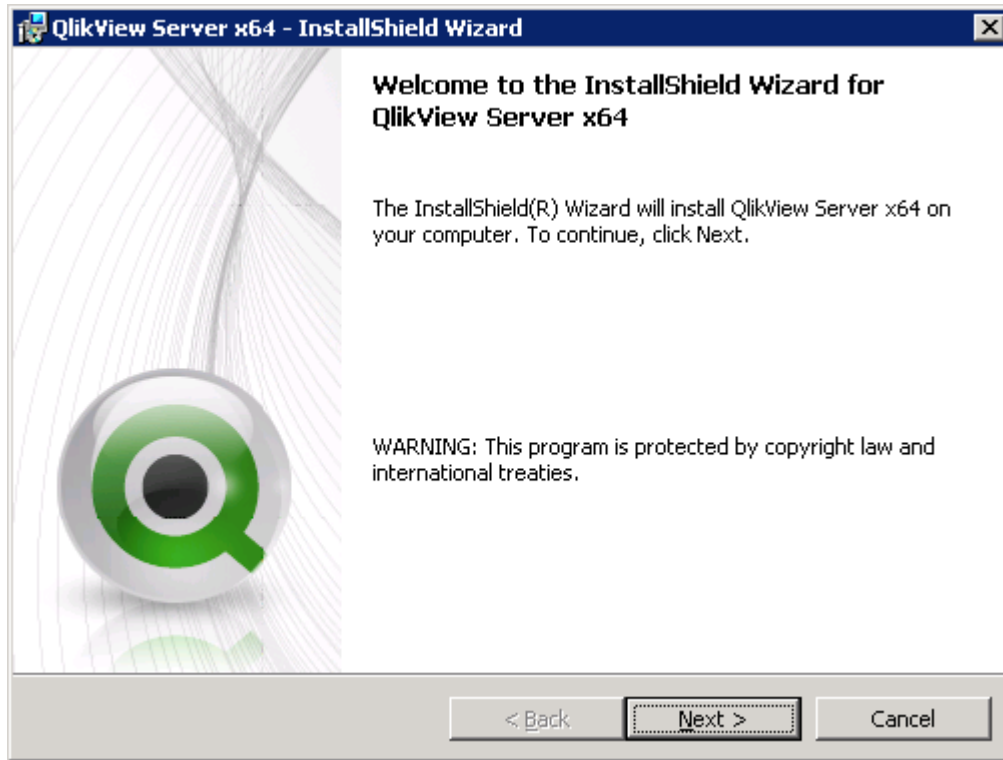


4. Install and configure shared storage. All machines should have access to a common folder. Create a folder named **QlikView_AccessPoint**.
5. Download QlikView Server installation file from <http://global.qlikview.com/download/>. Select Version 10, English, 64-bit. For initial install, we are using GA IR (initial release).
6. Define a service account for each environment. This account should have local administrator rights on each machine. The account should be included in the Local **Administrators** and **QlikView Administrators** Groups on each machine. The user should be explicitly included (not through group names) in the QlikView Administrators group. The service account for the Dev environment is sdp_qlikview_dev.
7. Create a new website in IIS. This can be located on the D:\ drive of the primary server in the QlikView cluster configuration. This is named QlikView in the Dev environment. For information on the security certificate, please see *Appendix A* in this document.

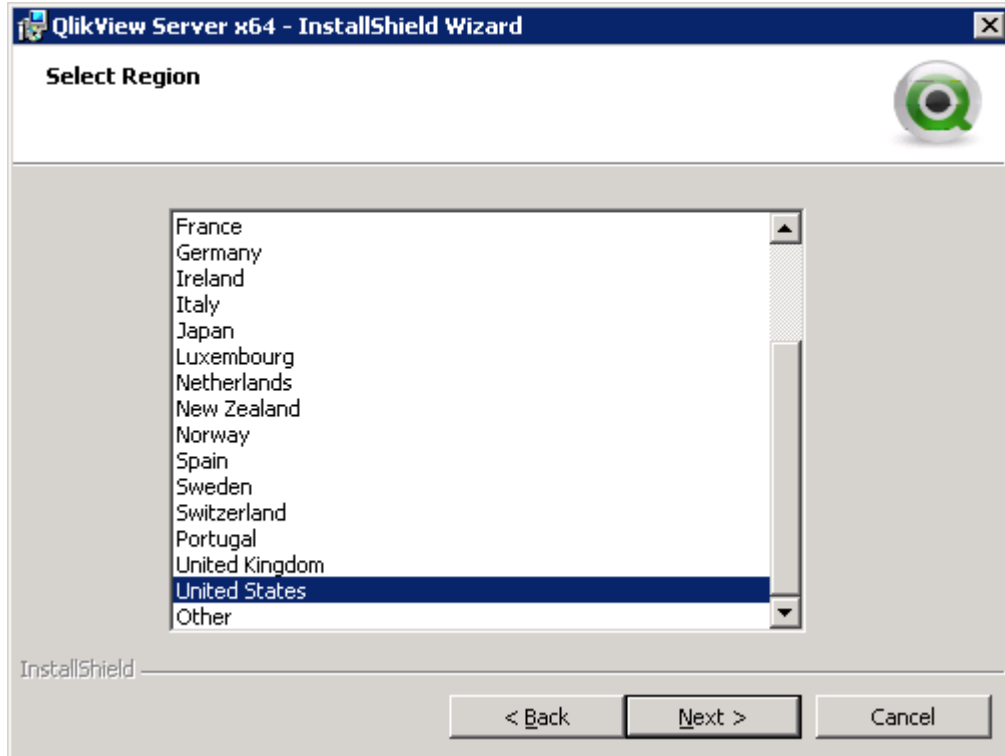
Installation

The following tasks should be performed to install the QlikView Server application.

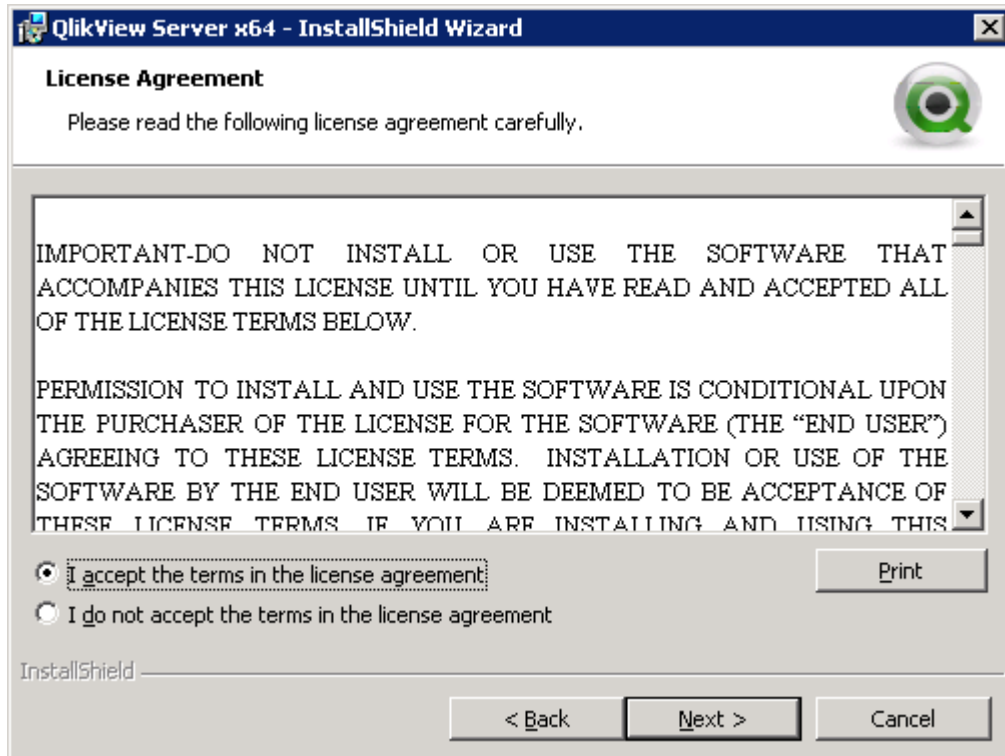
1. Execute the QlikView Server installation file **QlikViewServer_X64Setup.exe**. This file was downloaded during Pre-Installation.



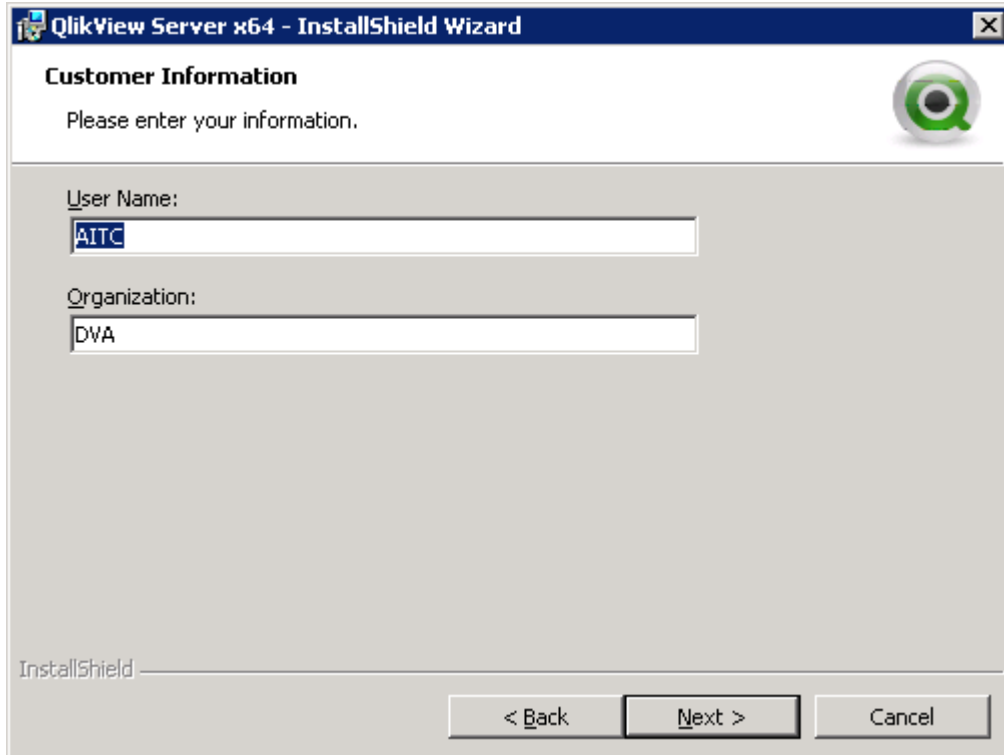
2. Click Next



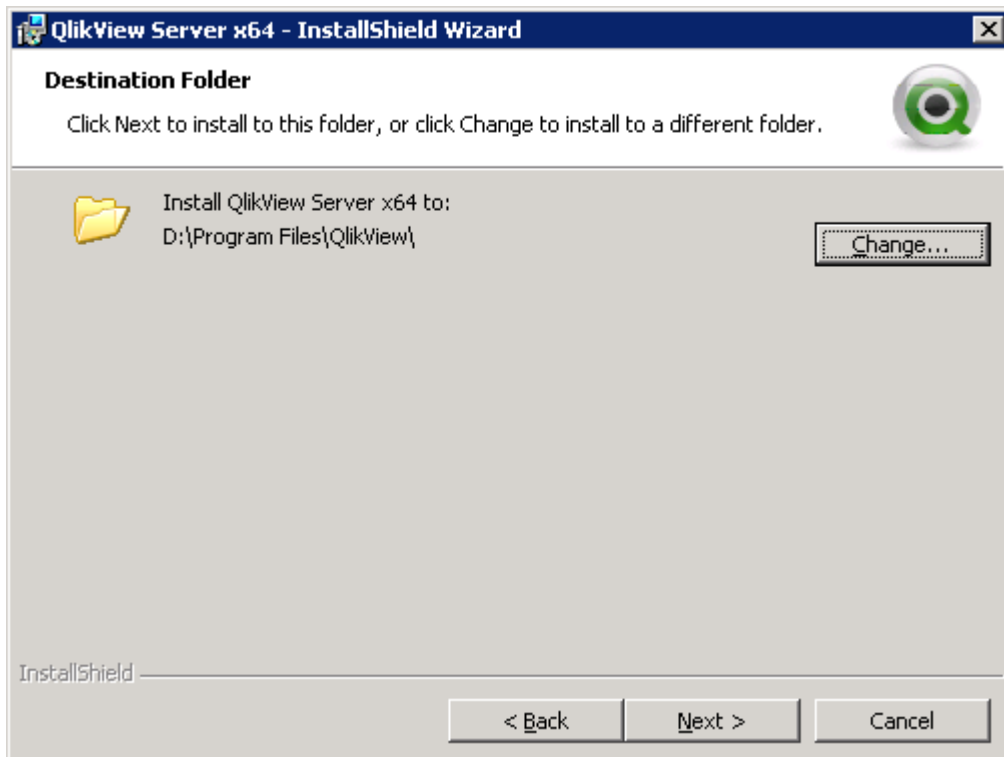
3. Select United States for the correct EULA and click Next.

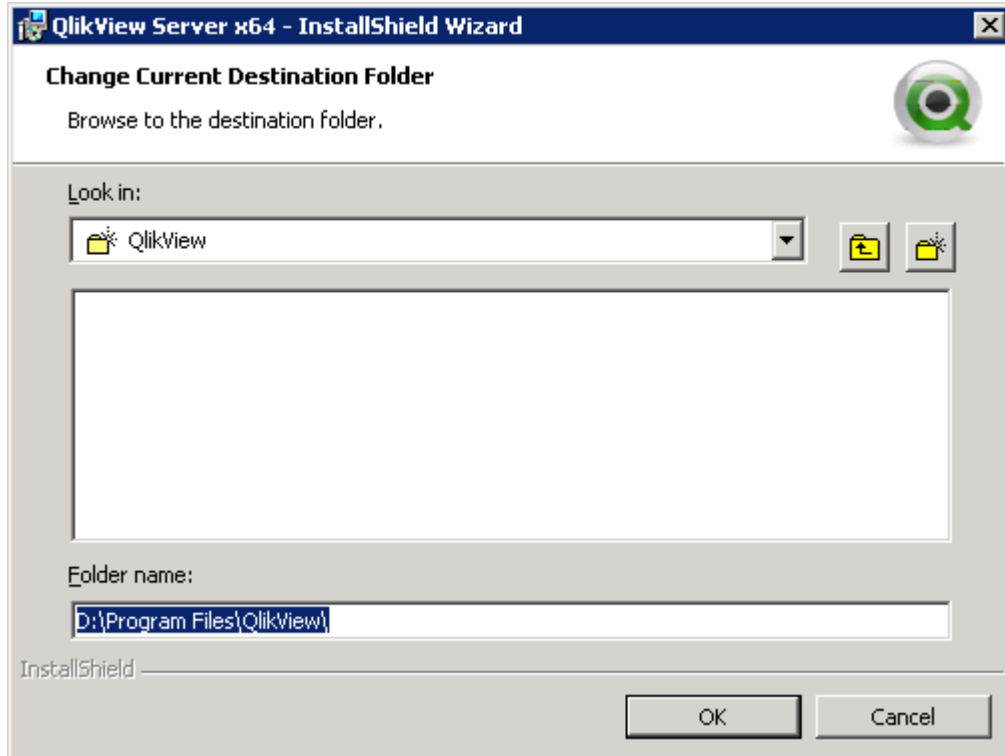


- Review and accept the license agreement and click Next.

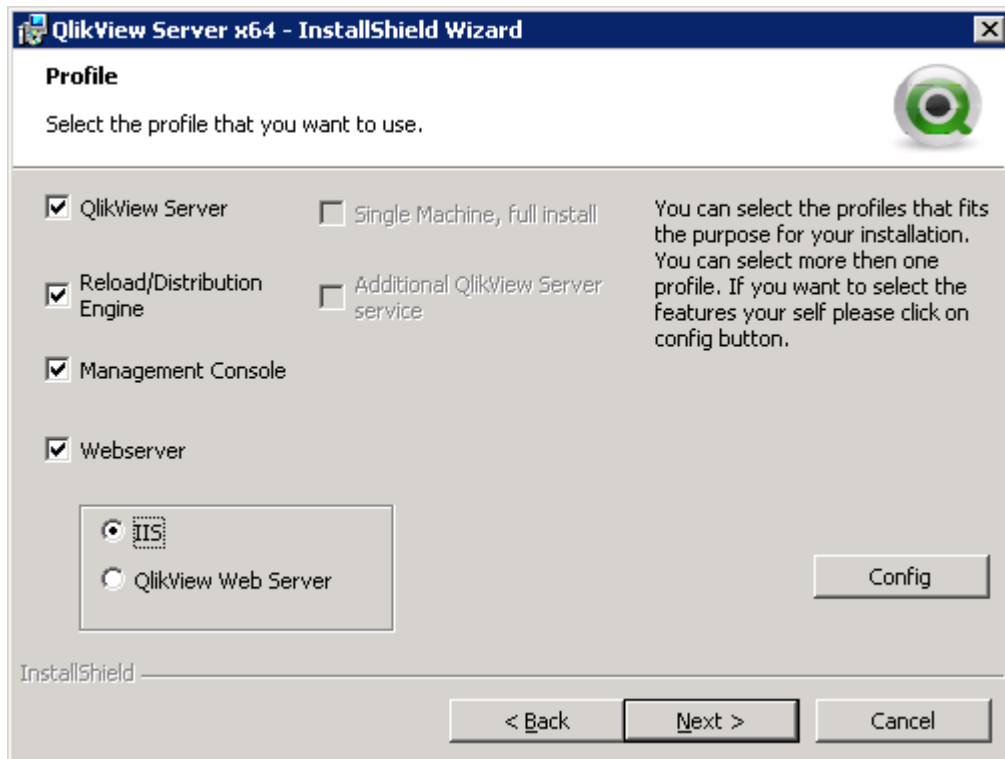


- Enter Customer Information and click Next.

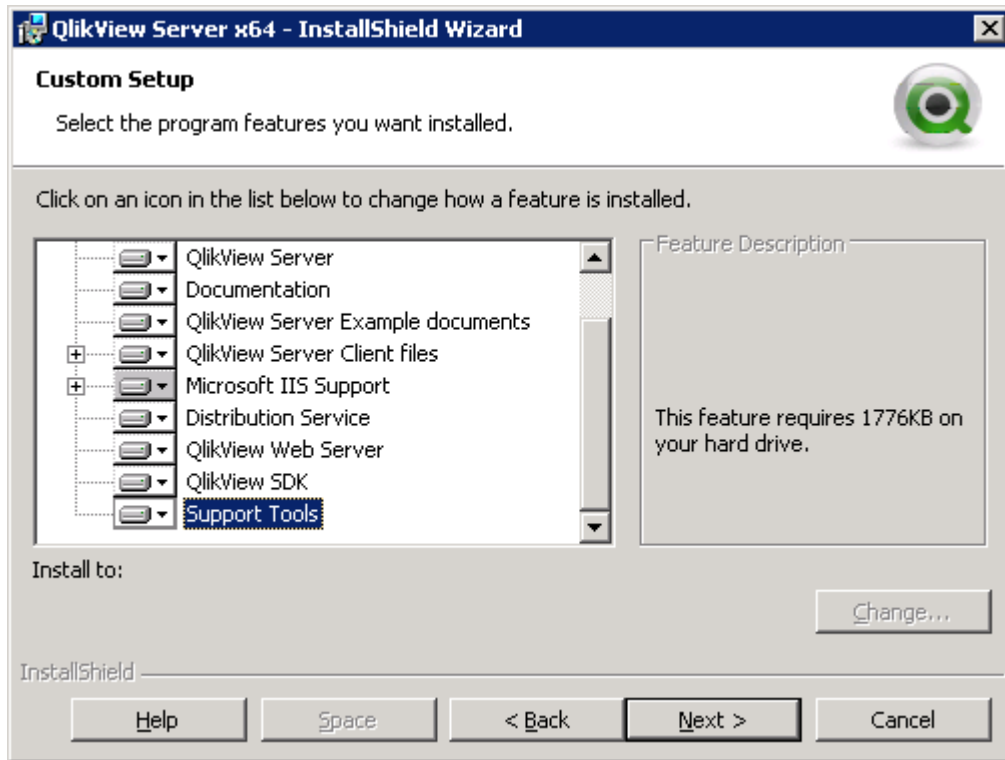




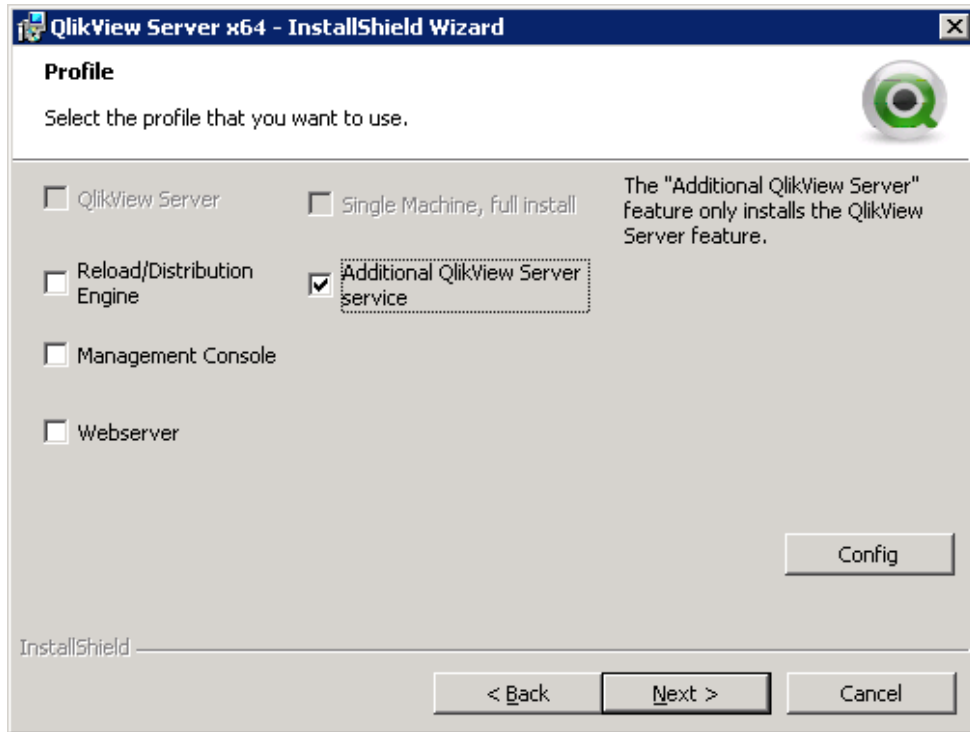
6. Change the destination folder to install. Programs should be installed on D:\ drive. Click OK and then Next to continue.



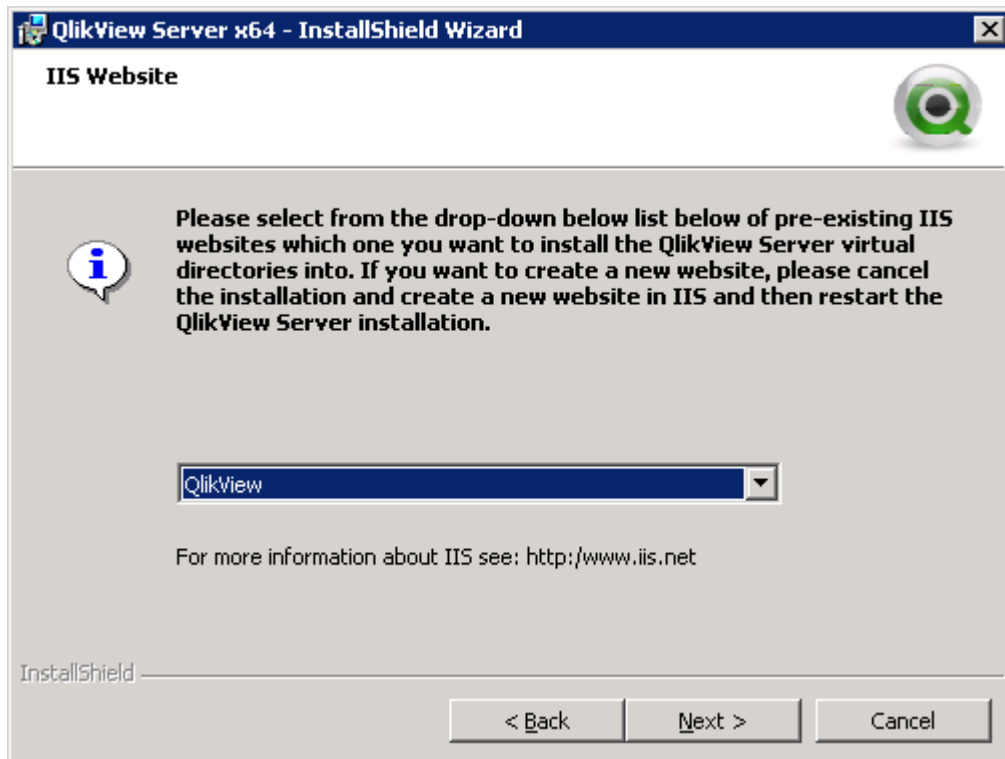
7. For the primary machine in the cluster, select QlikView Server, Reload/Distribution Engine, Management Console, and Webserver (IIS). Click the Config button to add additional features.



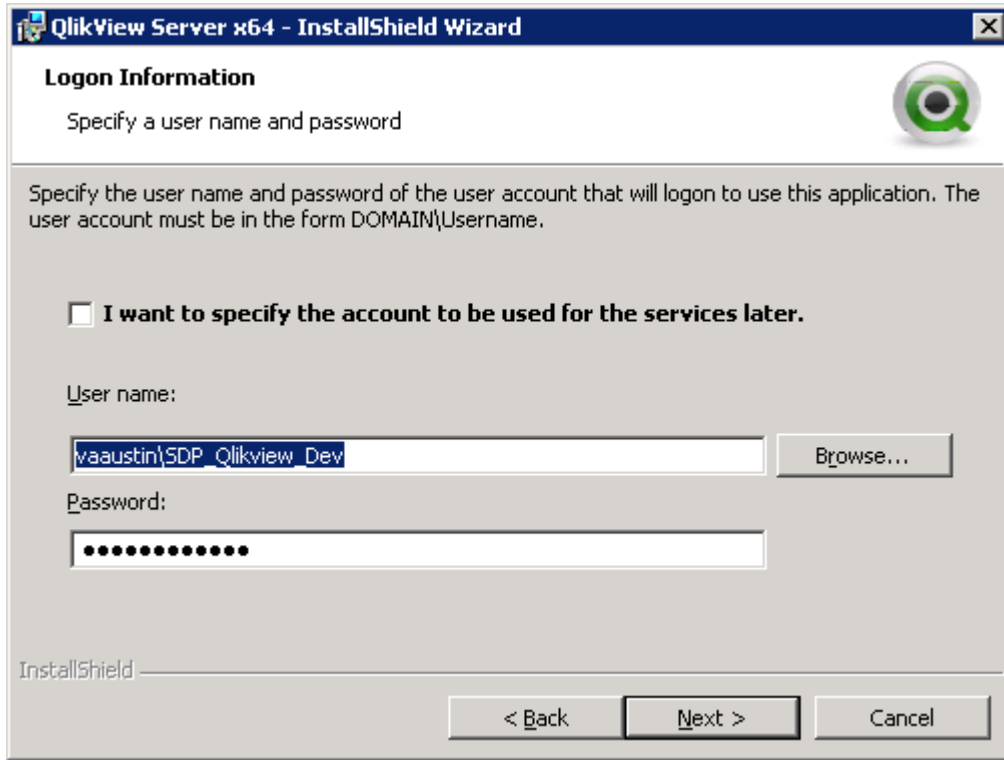
For additional machines, select Additional QlikView Server Service only and click Next (no additional Config is necessary).



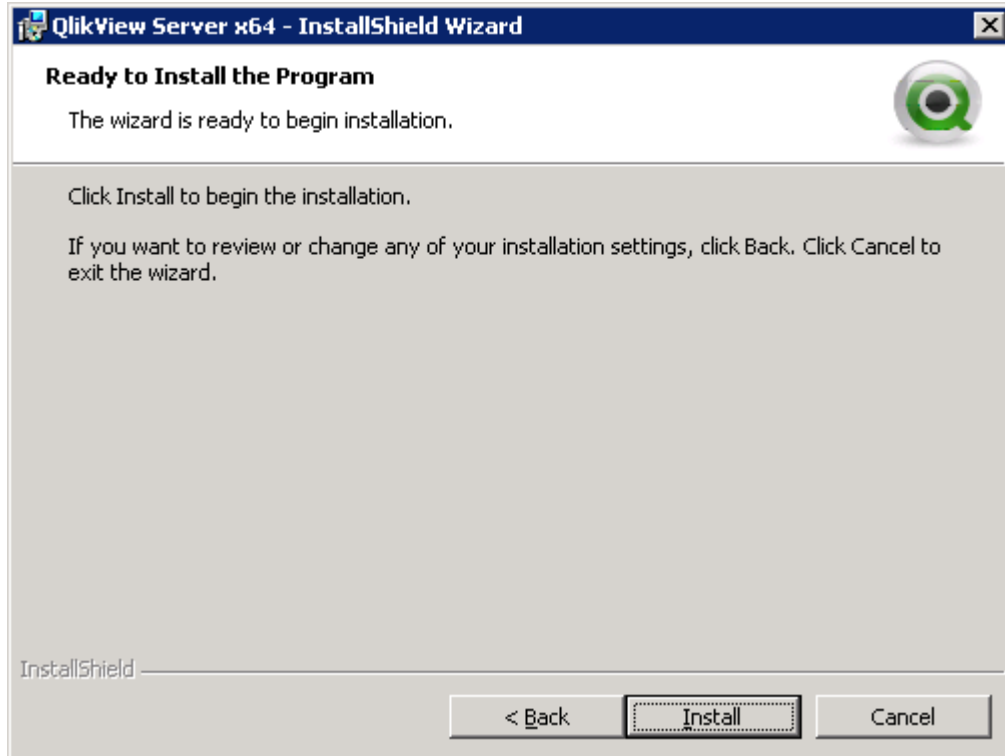
8. Select Install on Installation for Microsoft IIS Support, QlikView SDK, and Support Tools. Click Next to Continue.



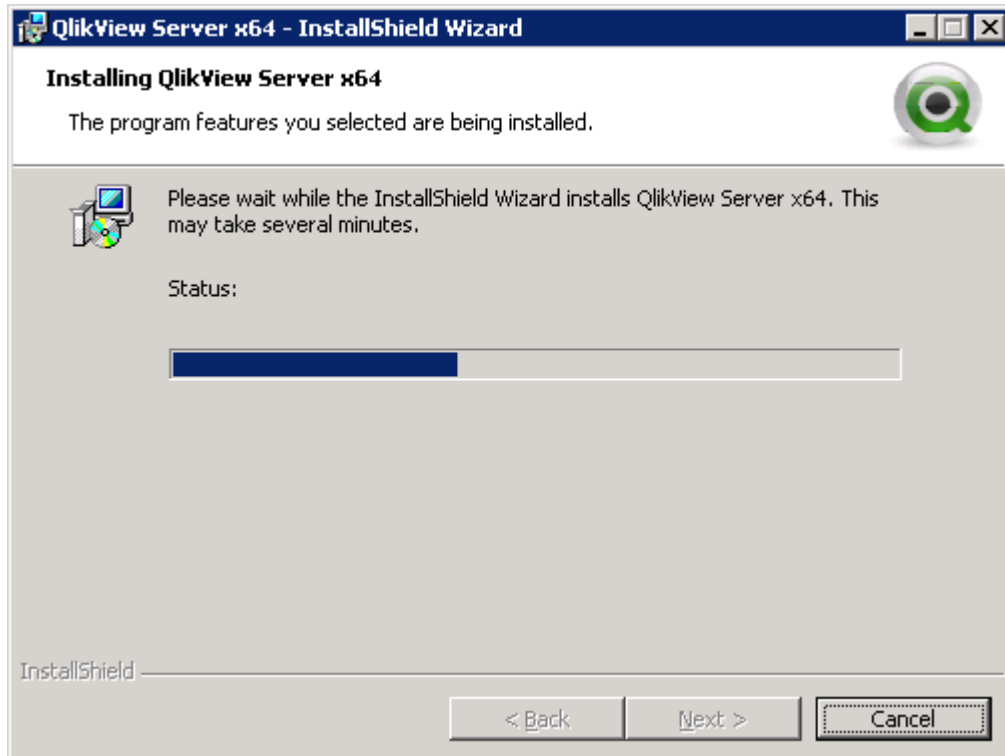
9. For the primary machine in the cluster, select the website you created during Pre-Installation to use for QlikView Server. Click Next to continue.

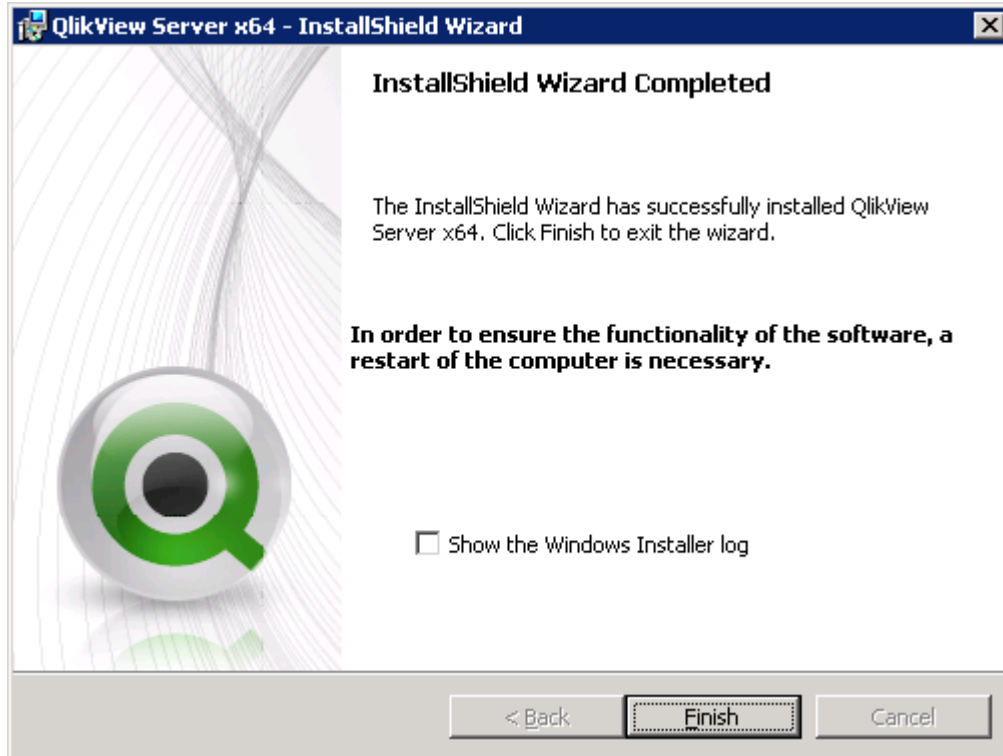


10. Specify the service account and password to use for all QlikView services.



11. Click Install to continue.





12. Click Finish to complete the installation dialog.

13. REBOOT THE MACHINE TO COMPLETE THE INSTALLATION PROCESS.

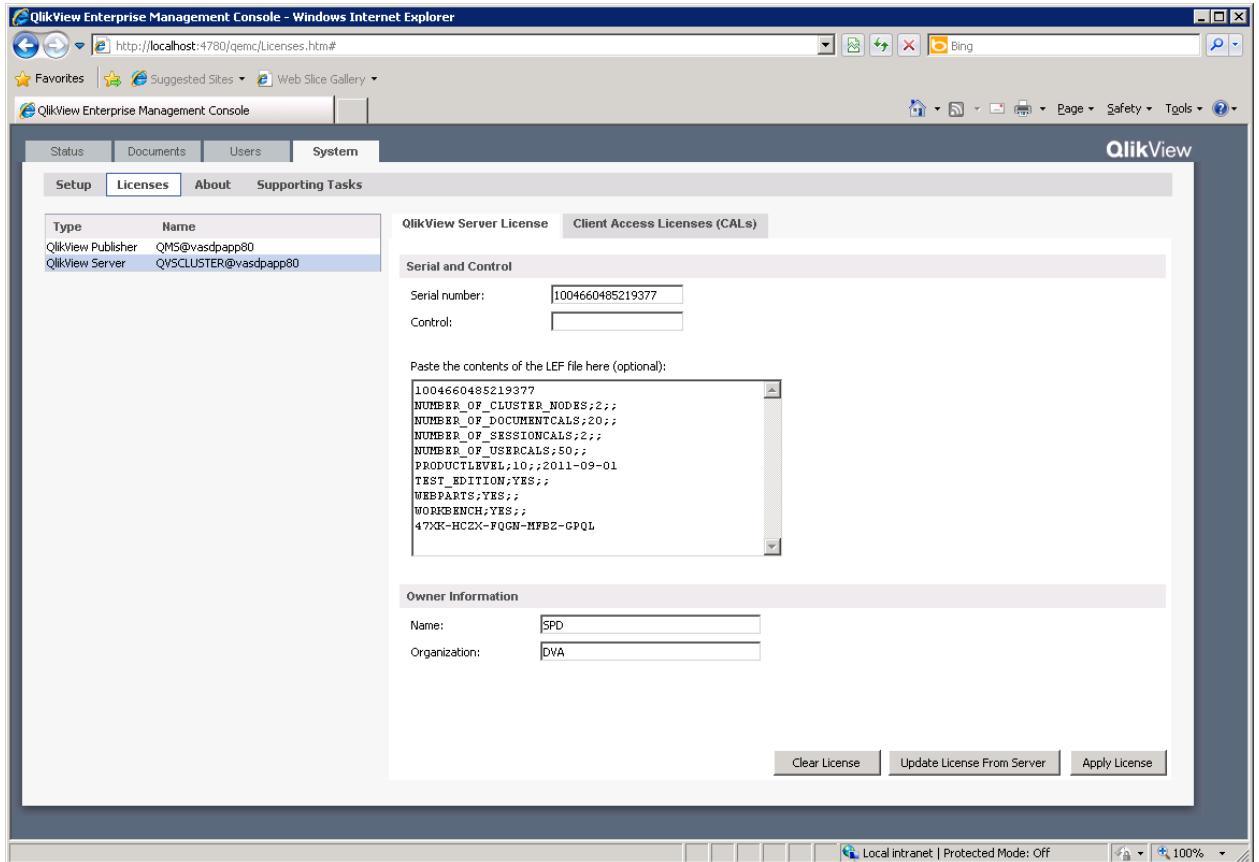
QlikView Enterprise Management Console (QEMC)

Once the machine has completed its reboot, initiate the QlikView Enterprise Management Console (QEMC). This tool will be used to configure, control and monitor all QlikView Servers and services in the QlikView cluster. It is installed on the primary machine in the QlikView cluster, but can be opened through any browser that has access to the environment. To allow a specific user to open the QEMC, they must be a member of the local QlikView Administrators group on the primary machine in QlikView cluster.

If you are on the server console, you can open the QEMC through Program shortcuts under QlikView and QlikView Enterprise Management Console. You can also open through a browser URL: <http://<server>:4780/qemc/default.htm>

License QlikView Server and Publisher

Use the QEMC to enter the license information for QlikView Server and Publisher. Navigate to: System ... Licenses ... QlikView Server ... QlikView Server License.



Enter the serial number (no spaces) and control number. Paste the LEF information for this license. Enter the Owner Name and Organization. Once all information is entered, click **Update License From Server**.

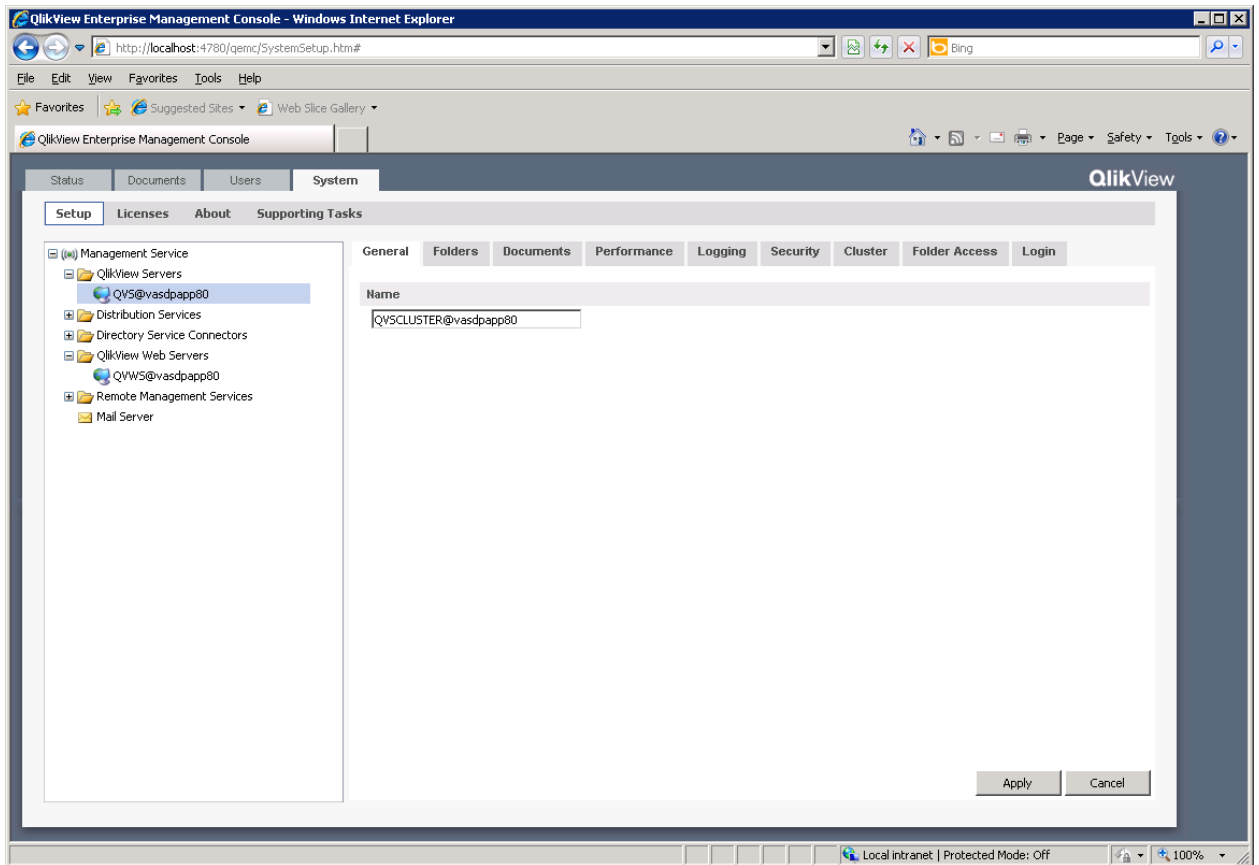
You will need to click OK to restart the QlikView Server service.

If successful, all information will still display except the control number. You can also check the Client Access Licenses (CALs) tab to verify the correct number of CALs have been assigned (All servers in the QlikView cluster share the total CALs).

Repeat this process for QlikView Publisher. Only the primary server in the QlikView cluster needs to be licensed through this dialog.

Configure QlikView Servers in Cluster

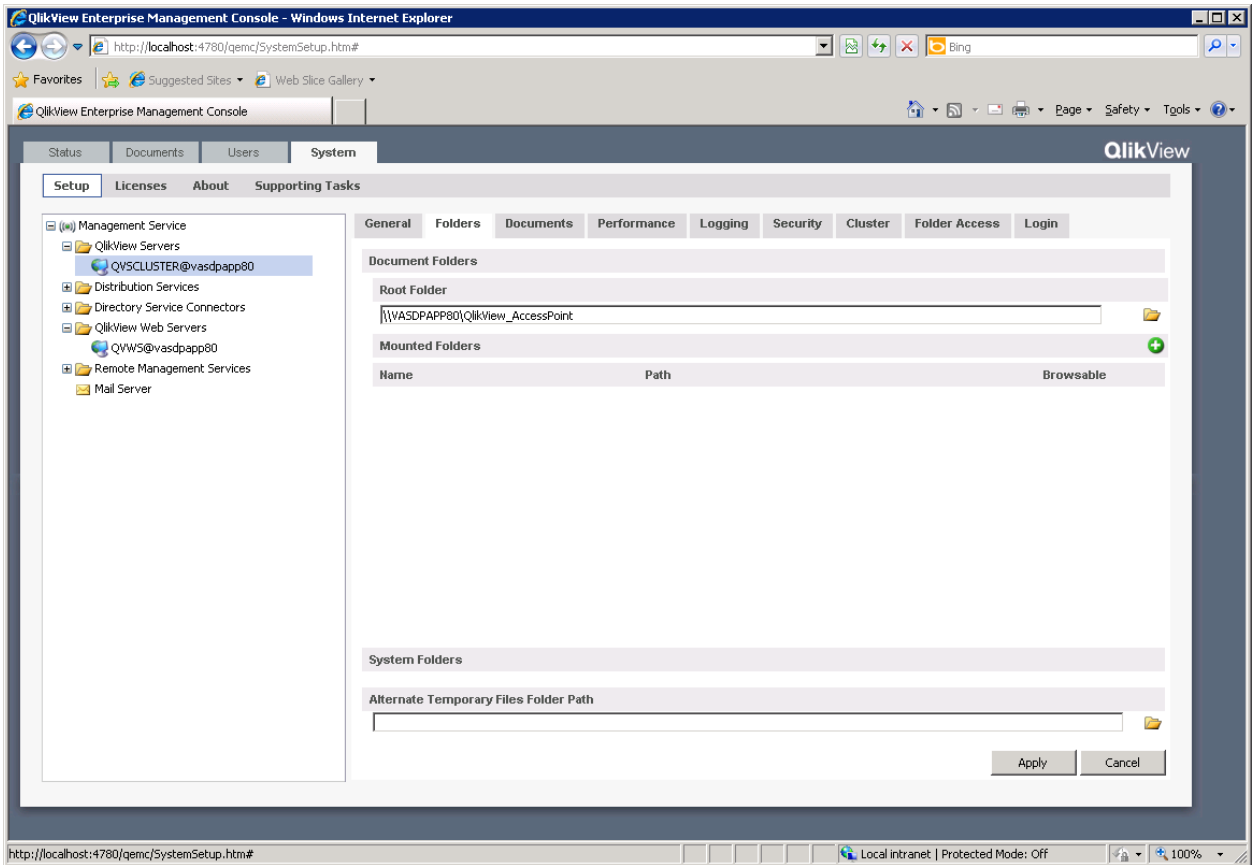
Use the QEMC to configure the folder and cluster information for the primary server. In the Dev environment, this is VASDPAPP80. Configure this under System ... Setup.



It is suggested to change the name of the primary server to QVSCUSTER@<server>. In Dev, this is QVSCUSTER@vasdpapp80. Change the name on the general tab for the QlikView Server. If you have more than one server

listed under QlikView Servers on the left pane, select QlikView Servers to see the list in the right side. Then delete the additional servers by clicking on the X. You should only see the primary server listed. Click Apply to save changes.

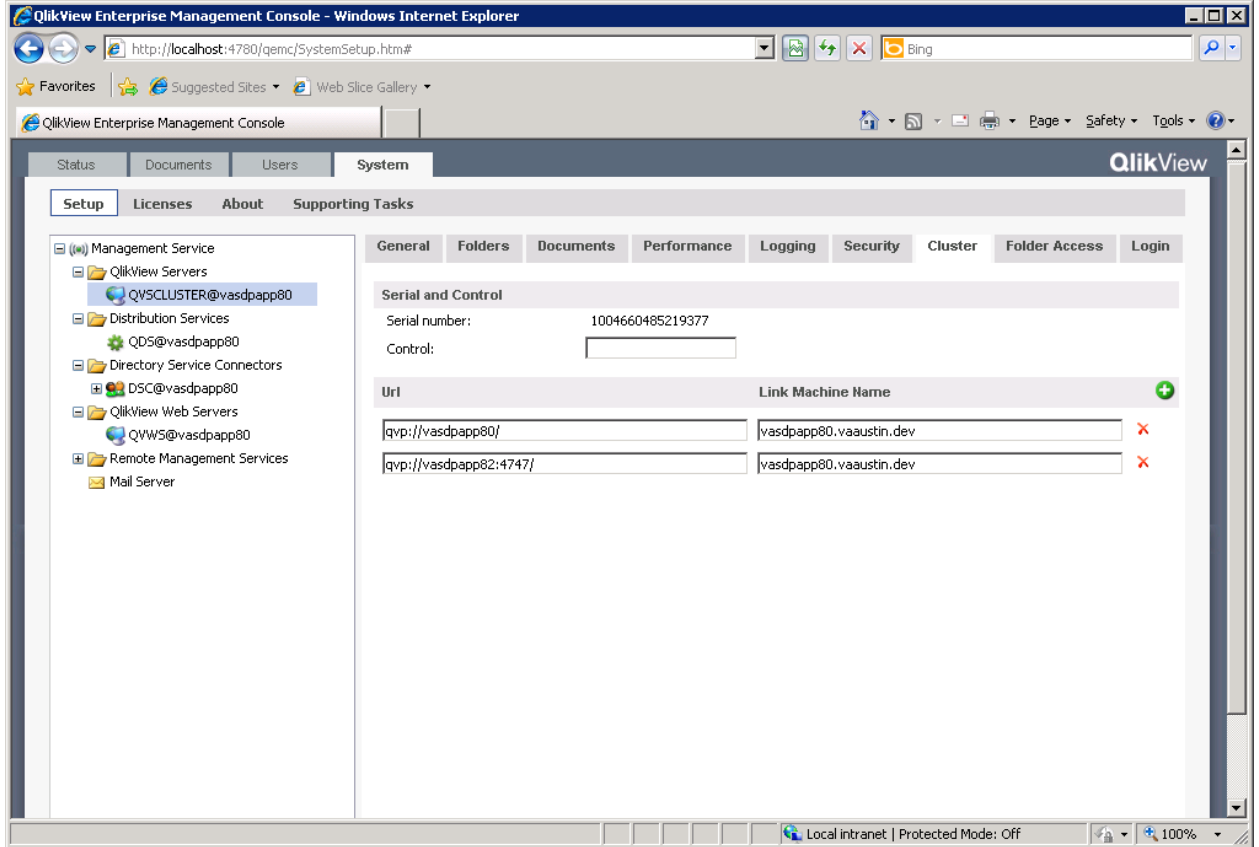
Locate and select the primary server under QlikView Servers. On the Folders tab, enter the shared storage location pointing to the QlikView_AccessPoint folder you created during Pre-Installation.



Click Apply to save changes.

This requires a restart of the QlikView Server service. Click OK to restart the service.

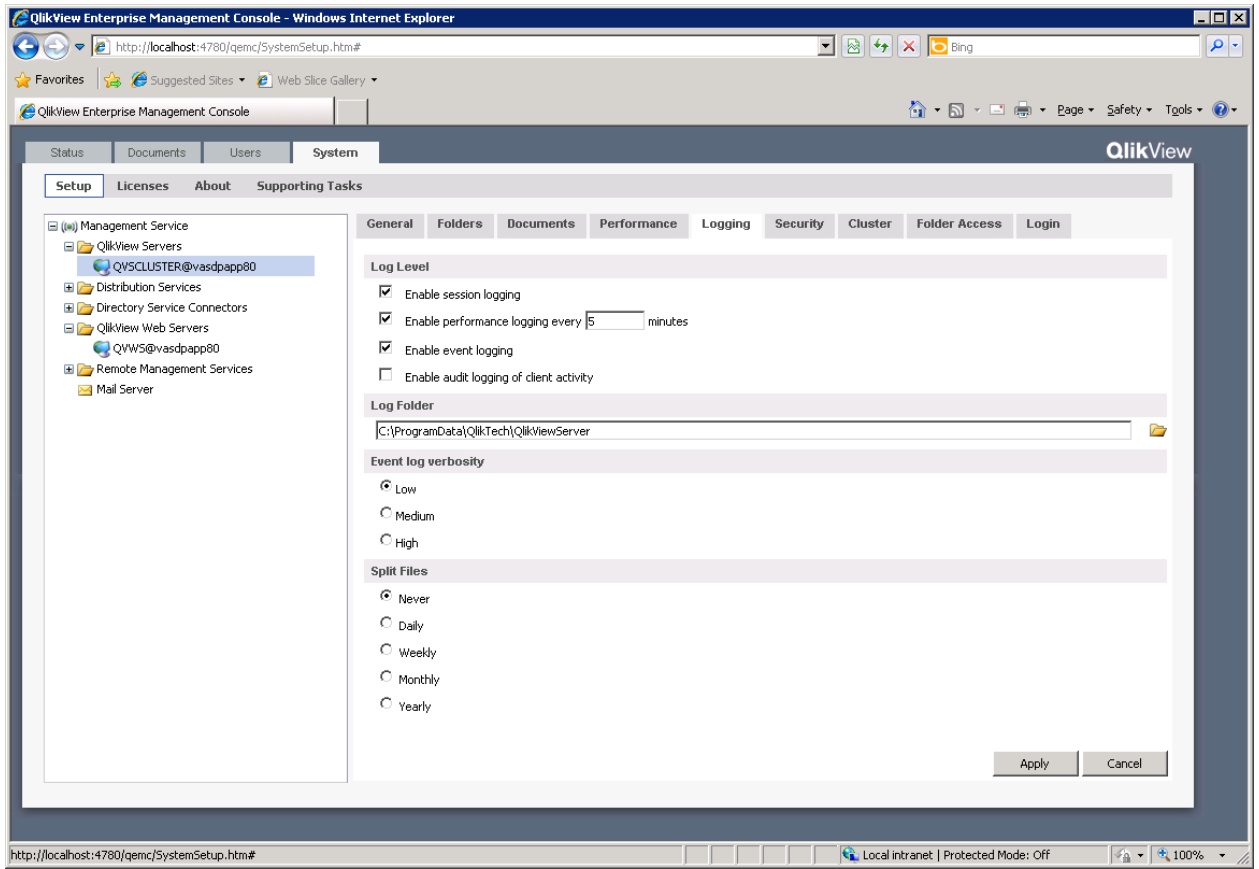
Next, you must list all servers in the QlikView cluster. Use the Cluster tab in this dialog to specify all servers, including the primary server. For additional servers, be sure to specify the port on the name, e.g. **qvp://vasdpapp82:4747/**



You will need to enter the Control number for the license. If there is more than one additional server in the cluster, click on the green + button to add. For the Link Machine Name, you must specify the full address (based on the security certificate) of the primary machine.

OPTIONAL:

If you wish to change the location of the QlikView Server log files, open the Logging folder and enter the new location, e.g. `D:\QlikView\Logs`

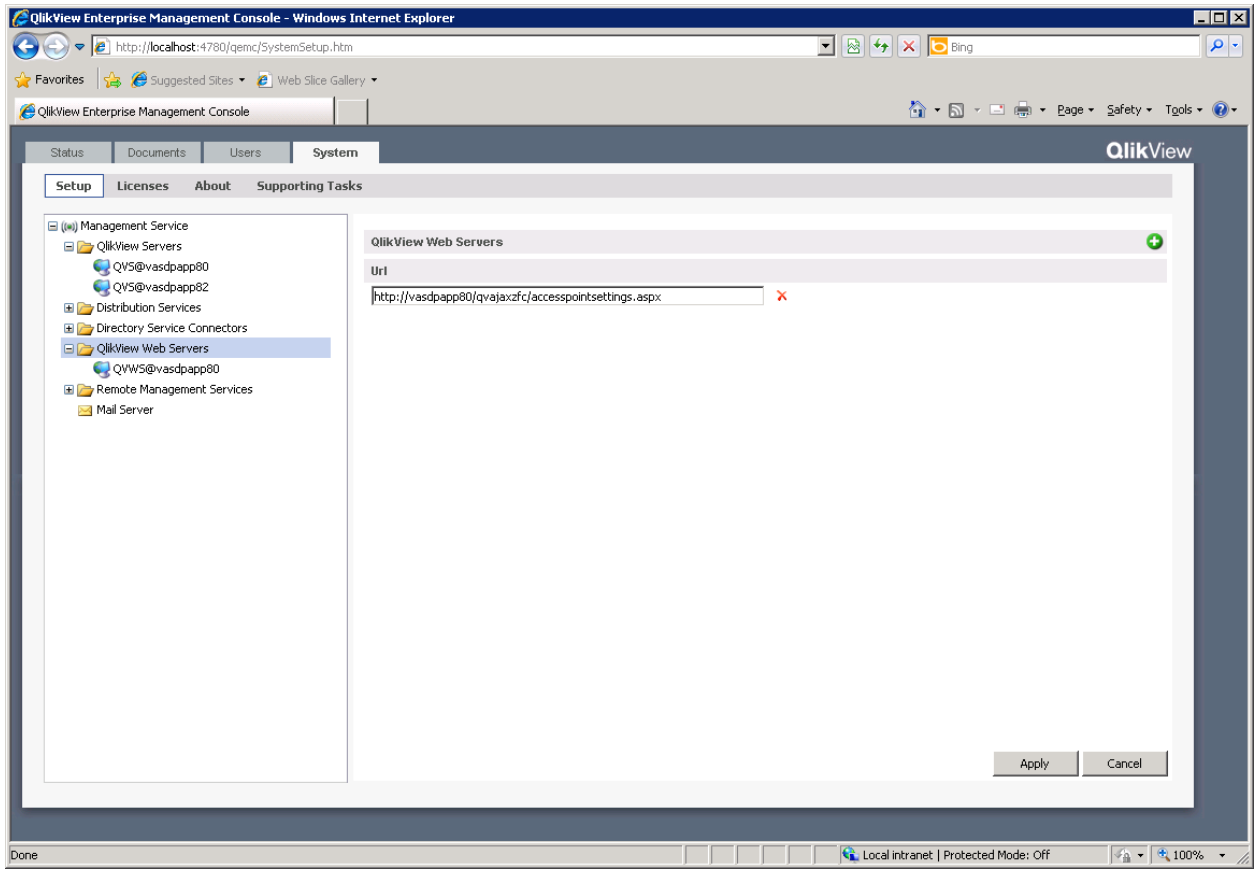


Configure IIS Webserver

Use the QEMC to configure the IIS webserver located on the primary QlikView server in the QlikView cluster. Navigate to System ... Setup. Select QlikView Web Server and change the location to:

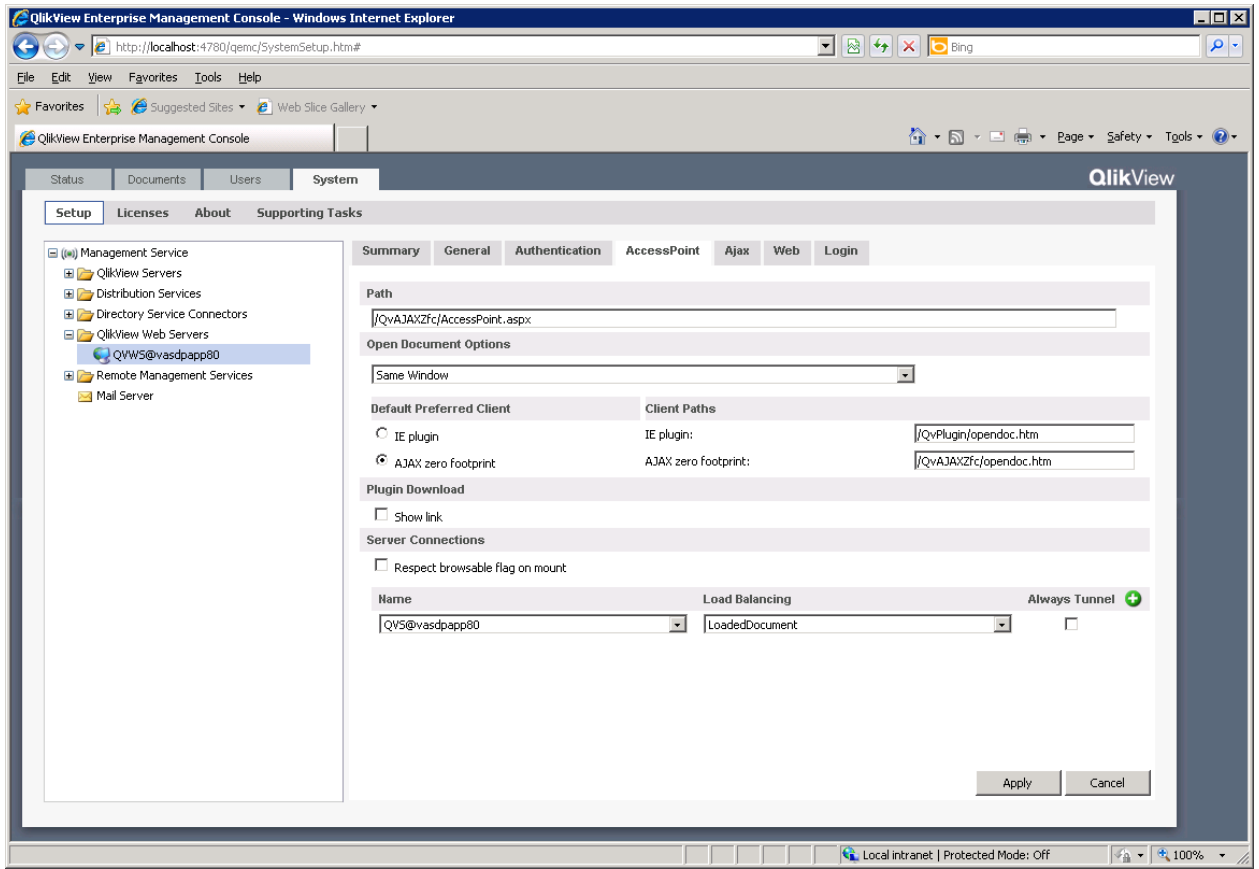
<http://<server>:80/qvajaxzfc/accesspointsettings.aspx>

Then click Apply to save settings.



Configure QlikView AccessPoint in Cluster

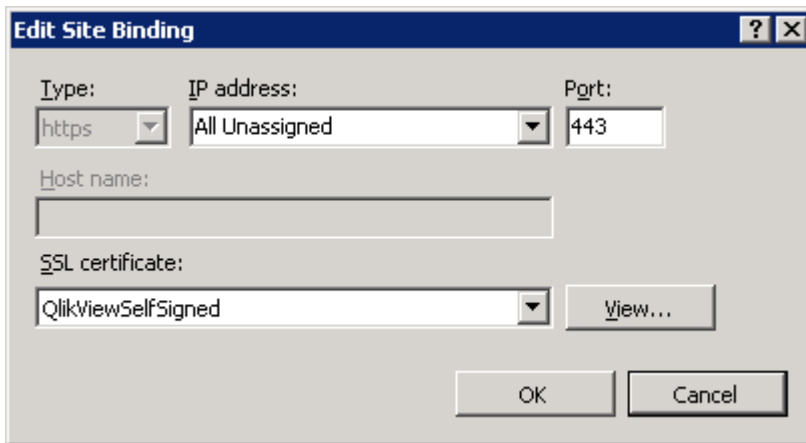
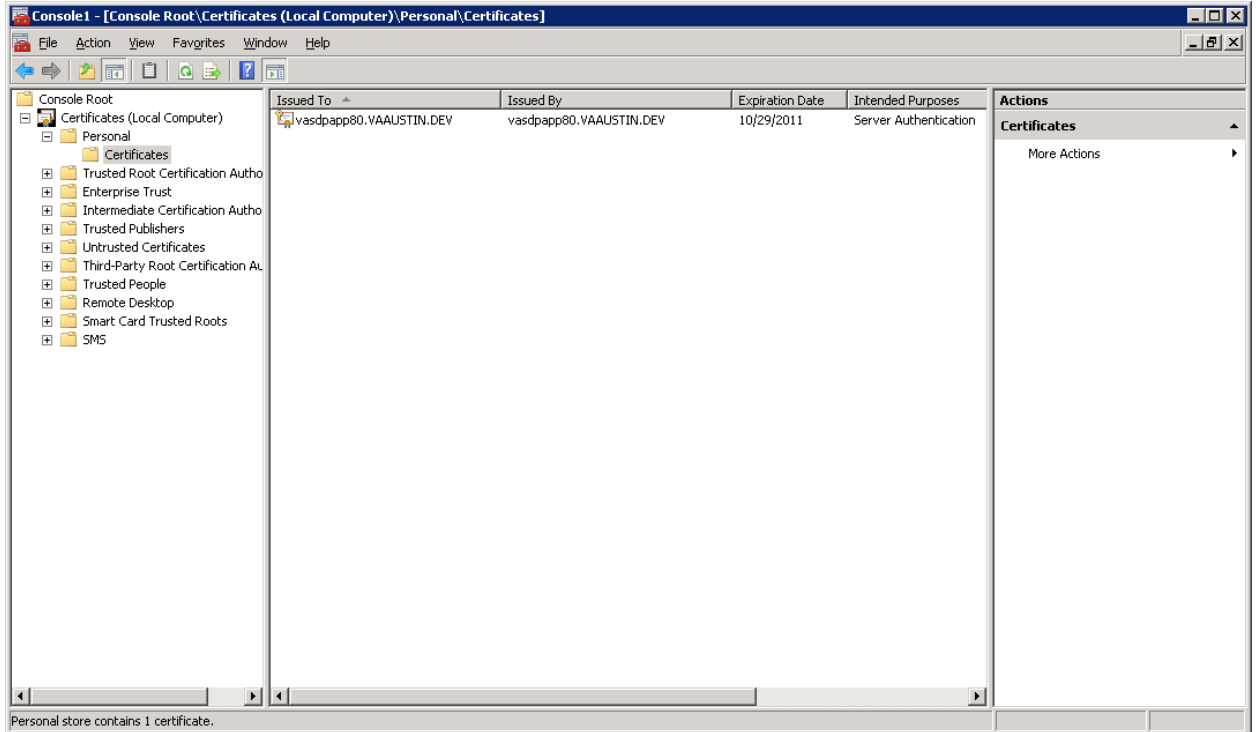
Use the QEMC to configure the shared AccessPoint in the QlikView cluster. Navigate to System ... Setup. Select the QlikView Web Server to configure.



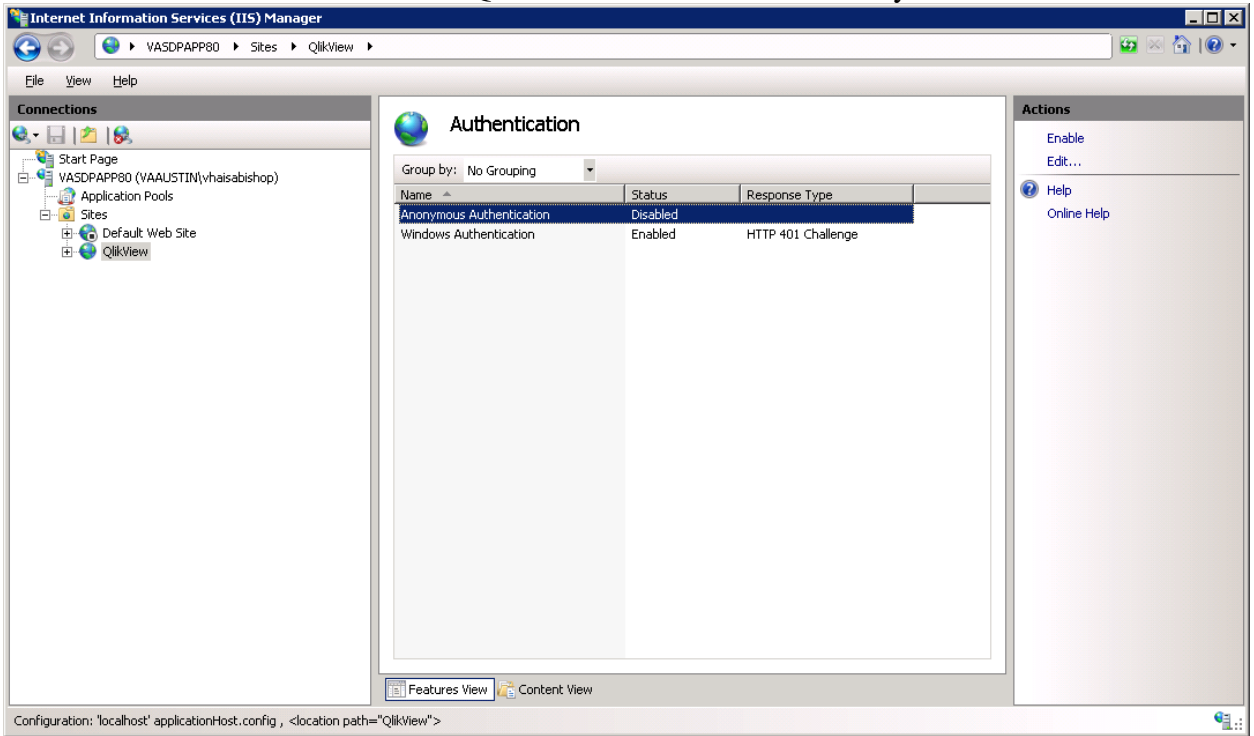
On the AccessPoint tab and under Server Connections, enter the name of the primary QlikView Server as: QVS@<server>. Also, change the Load Balancing selection to Loaded Document. Click Apply to save changes

IIS Configuration

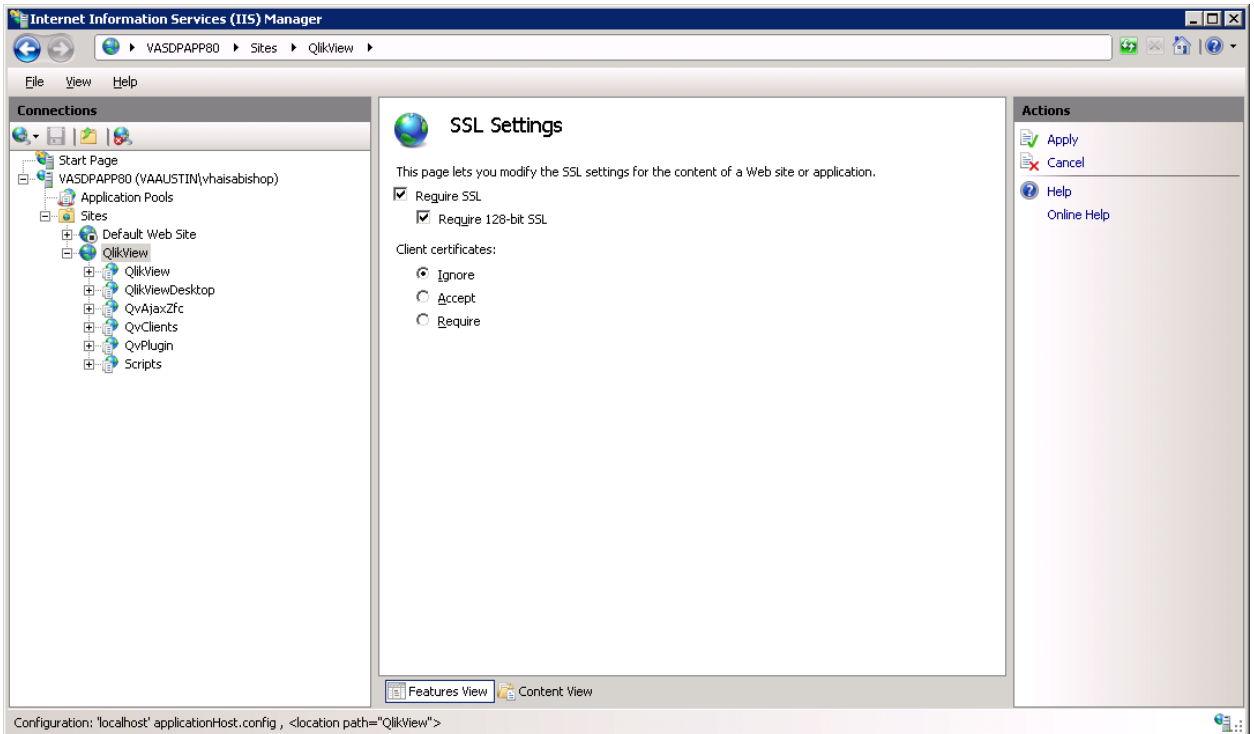
Import the certificate and bind it.



Set Windows Authentication on the QlikView website. Disable Anonymous.



Set Require SSL, 128-bit to the QlikView website through IIS.



QlikView Web Services using SSL Configuration

This section will describe how to set SSL communication between the QlikView web services, including Management console, Directory service, Distribution service, etc. This communication requires use of a third party certificate which must be requested after QlikView Server-Publisher has been installed.

For Dev environment, a self-signed certificate is being used. Pre-prod and Prod will use a standard third party certificate. Once the certificate is obtained, follow the instructions in **Appendix C** in the **QlikView Server Reference Manual**. This will guide you to complete the following steps to be performed on the primary server:

1. Import the certificate to the correct certificate store on the server using **Management Console** and the **Certificate snap-in**.
2. Get the thumbprint for the certificate. Open the **Certificate snap-in** in MMC and double-click on the certificate. Copy the **Thumbprint** hash to notepad or similar. Remove the spaces in the hash.
3. Generate the GUID. Download **Guidgen.exe** from Microsoft to generate a unique GUID in Registry Format. Copy the GUID to **Notepad.exe**.
4. Bind to SSL in Windows Server 2008. Using the **netsh** command shell as follows

```
netsh http add sslcert ipport=0.0.0.0:4710 certhash=hash appid=GUID
```

where

ipport is the ipnumber of QlikView service and the port used (4710).

certhash is the thumbprint hash of the certificate.

appid is the generated GUID in the form {xxxxxxxx-xxxx-....}'. The GUID must be enclosed by curly brackets.

To verify the registration of the certificate, use `netsh http show sslcert`.

You will need to run this command four times as follows:

```
netsh http add sslcert ipport=0.0.0.0:4710 certhash=hash appid=GUID
netsh http add sslcert ipport=0.0.0.0:4720 certhash=hash appid=GUID
netsh http add sslcert ipport=0.0.0.0:4730 certhash=hash appid=GUID
netsh http add sslcert ipport=0.0.0.0:4780 certhash=hash appid=GUID
```



```

Administrator: C:\Windows\system32\cmd.exe
C:\>netsh http add sslcert ipport = 0.0.0.0:4710 certhash=c31c866988e889e4c42a4a3d2c5c05ddb9f49dd7 appid={C4F2E66C-397B-42ac-BCA8-557551494F02}
SSL Certificate successfully added

C:\>netsh http add sslcert ipport = 0.0.0.0:4720 certhash=c31c866988e889e4c42a4a3d2c5c05ddb9f49dd7 appid={C4F2E66C-397B-42ac-BCA8-557551494F02}
SSL Certificate successfully added

C:\>netsh http add sslcert ipport = 0.0.0.0:4730 certhash=c31c866988e889e4c42a4a3d2c5c05ddb9f49dd7 appid={C4F2E66C-397B-42ac-BCA8-557551494F02}
SSL Certificate successfully added

C:\>netsh http add sslcert ipport = 0.0.0.0:4780 certhash=c31c866988e889e4c42a4a3d2c5c05ddb9f49dd7 appid={C4F2E66C-397B-42ac-BCA8-557551494F02}
SSL Certificate successfully added

C:\>
    
```

There is a .bat file on the dev VASDPAPP80 C:\ drive named sslcert.bat that you can view as an example.

5. Make changes to **config.xml** for QlikView Web Server to add the full URL used for SSL. The default location for the config.xml file is **D:\Program Files\QlikView\Server\WebServer**. Note that the URL must match the URL for which the certificate is valid.

```
<ConfigUrl>https://_:4750/qvws.asmx</ConfigUrl>
```

Make sure no other services are using the port specified for SSL and restart the service. If it fails to start, it's either because a service is already running on the specified port, or errors exist in the config.xml.

Update Configuration Files

Change QlikView services configuration files to use https. In each of the files listed below, set the value for **UseHTTPS** to **true**.

```

D:\Program Files\QlikView\Management Service\QVManagementService.exe.config
D:\Program Files\QlikView\Directory Service Connector\DirectoryServiceConnector.exe.config
D:\Program Files\QlikView\Distribution Service\QvDistributionService.exe.config
    
```

Restart all QlikView Services. The secondary QlikView Server service(s) does not need to be restarted.

Update QEMC Configuration

Open the QEMC using the SSL URL as follows:

URL: <https://<server full name>:4780/qemc/default.htm>

Where

Server full name is the fully qualified domain name on the certificate, e.g.:
VASDPAPP80.VAAUSTIN.DEV

The URL for the services must match the URL in the certificate. The settings must be changed in the user interface: System, Setup, Service, General, Location.

Change the beginning of the URL for each of the following services listed using https and the full server name. For example:

https:// VASDPAPP80.VAAUSTIN.DEV

Make this change for:

Distribution Service

Directory Service Connector

QlikView Web Service

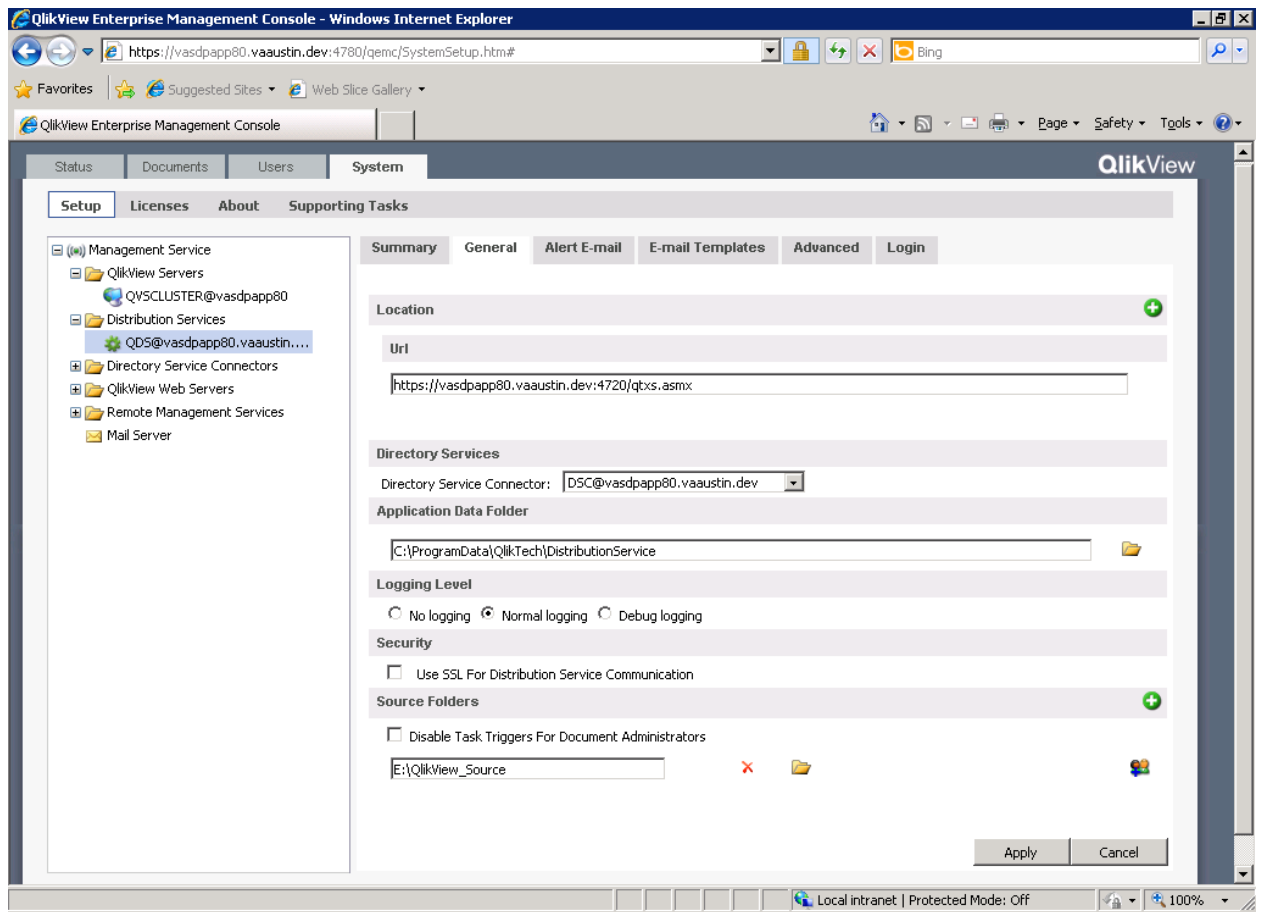
Be sure to click Apply after each update.

QlikView Publisher Configuration

Use the QEMC to configure the QlikView Publisher. The QlikView Publisher is responsible for reload and distribution of QlikView documents. All documents are generally reloaded from the Source Documents location and distributed to the User Documents (AccessPoint) location.

Define the Source Document Folders:

Navigate to System ... Setup. Select the QDS under Distribution Services to configure.



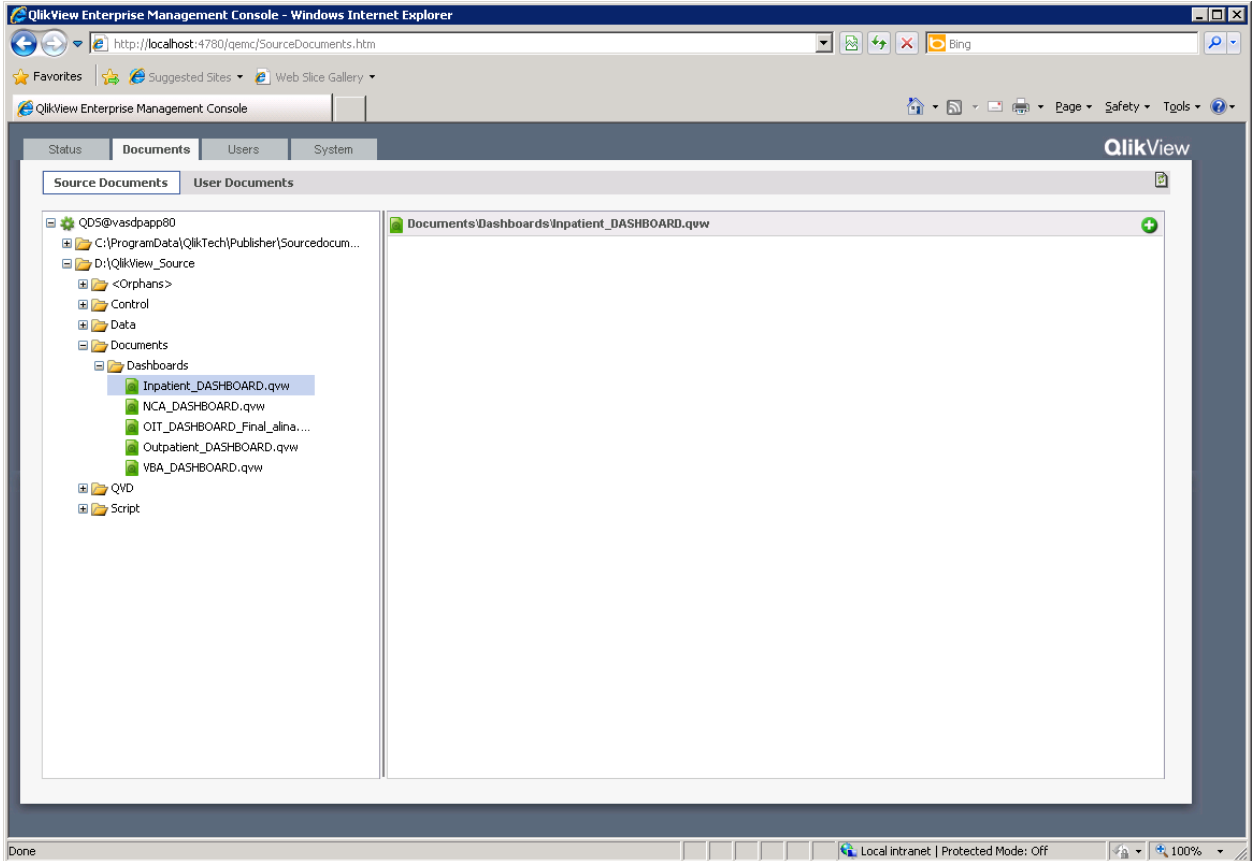
On General tab, click the green + button under Source Folders to add a folder. Click the folder icon to browse for the location.

Click OK and then Apply when done with adding folders. For the initial development, we only require the folder E:\QlikView_Source.

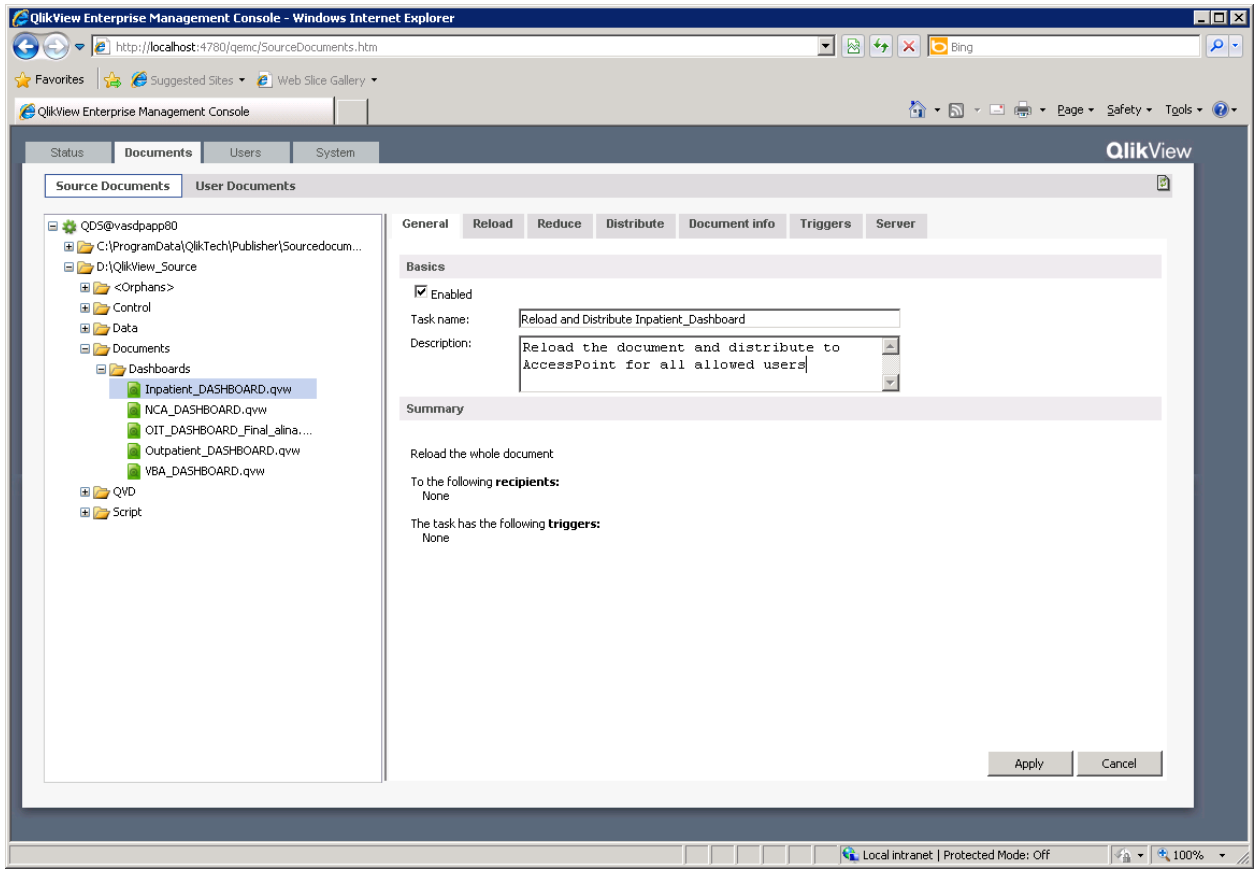
Define a Task:

Publisher Tasks are created to perform sets of activities against a document. Typically, these activities involve reloading and distributing a document to a specified set of users.

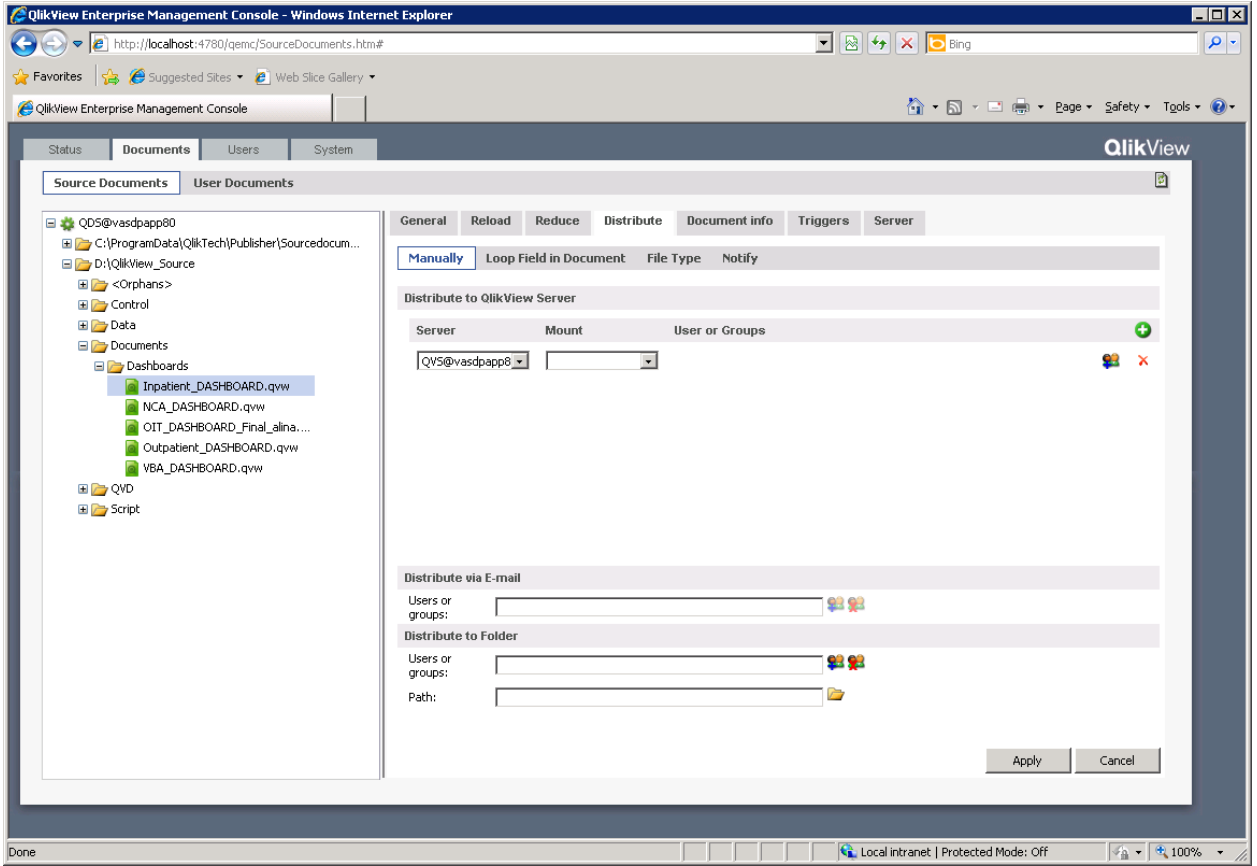
To define a task, navigate to Documents ... Source Documents. Use the folder tree to locate the document to create the task for.



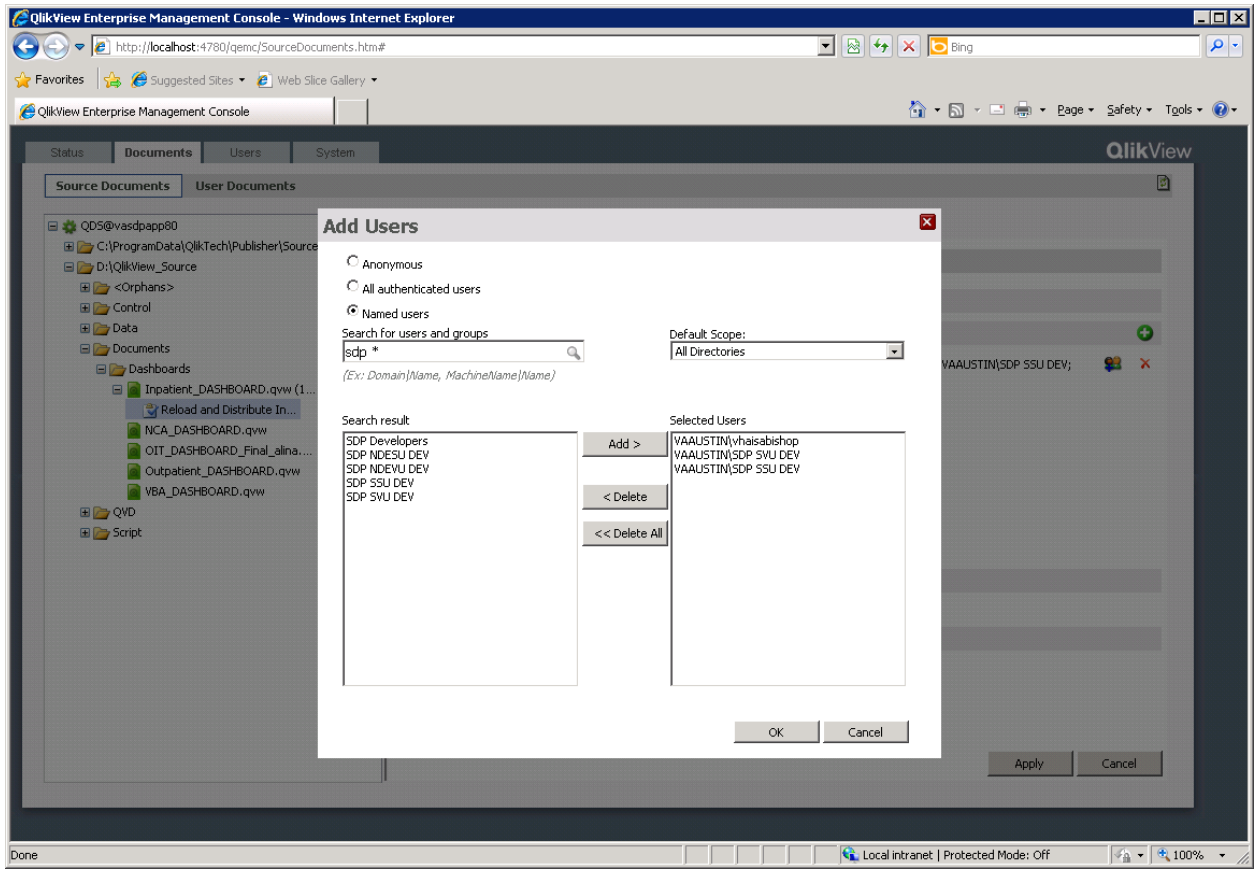
Click on the green + button in the upper right of the screen.



On the **General** tab, make sure the task is Enabled. Enter a task name and description. No changes are required on **Reload** and **Reduce** tabs for this task. Edit the **Distribute** tab to set the authorized users.

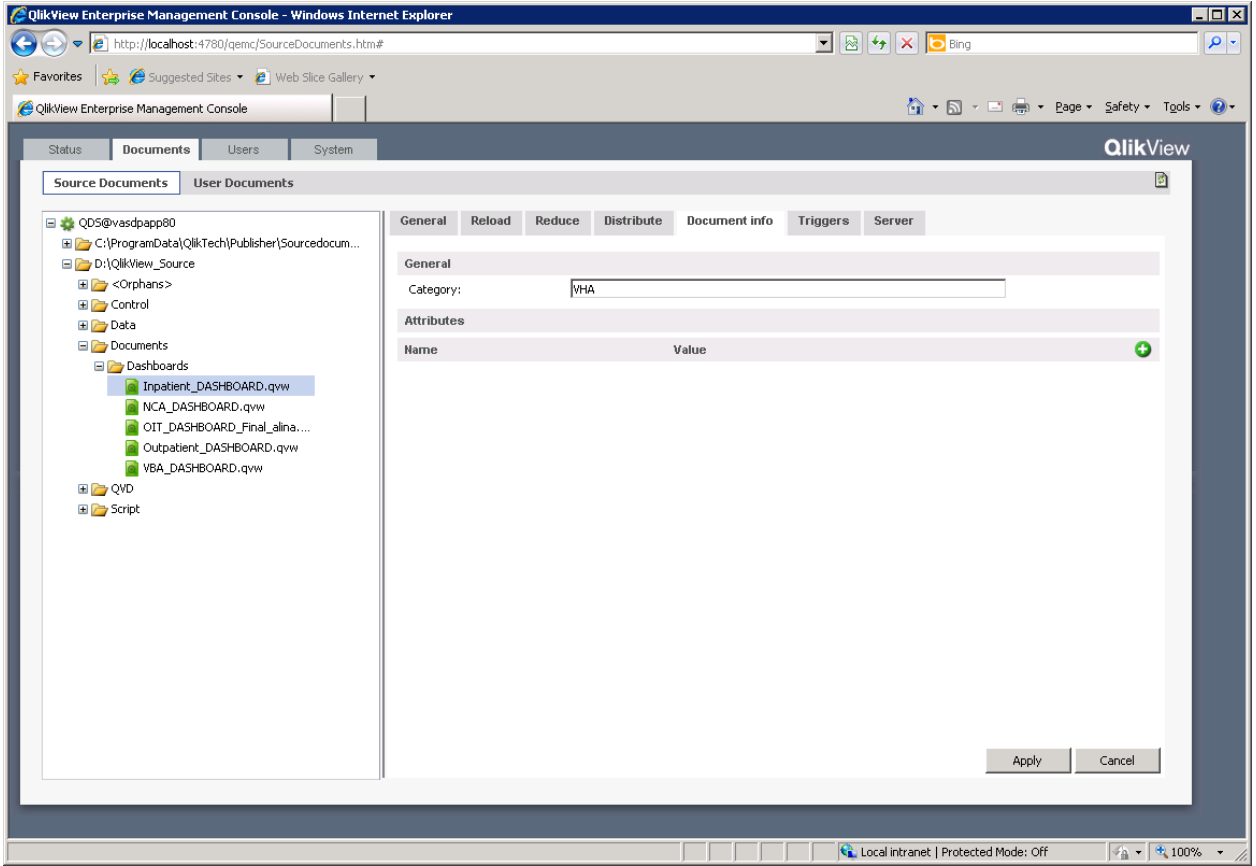


Click on the green + button to add a distribution. Click on the Users icon to add the users to allow access to.

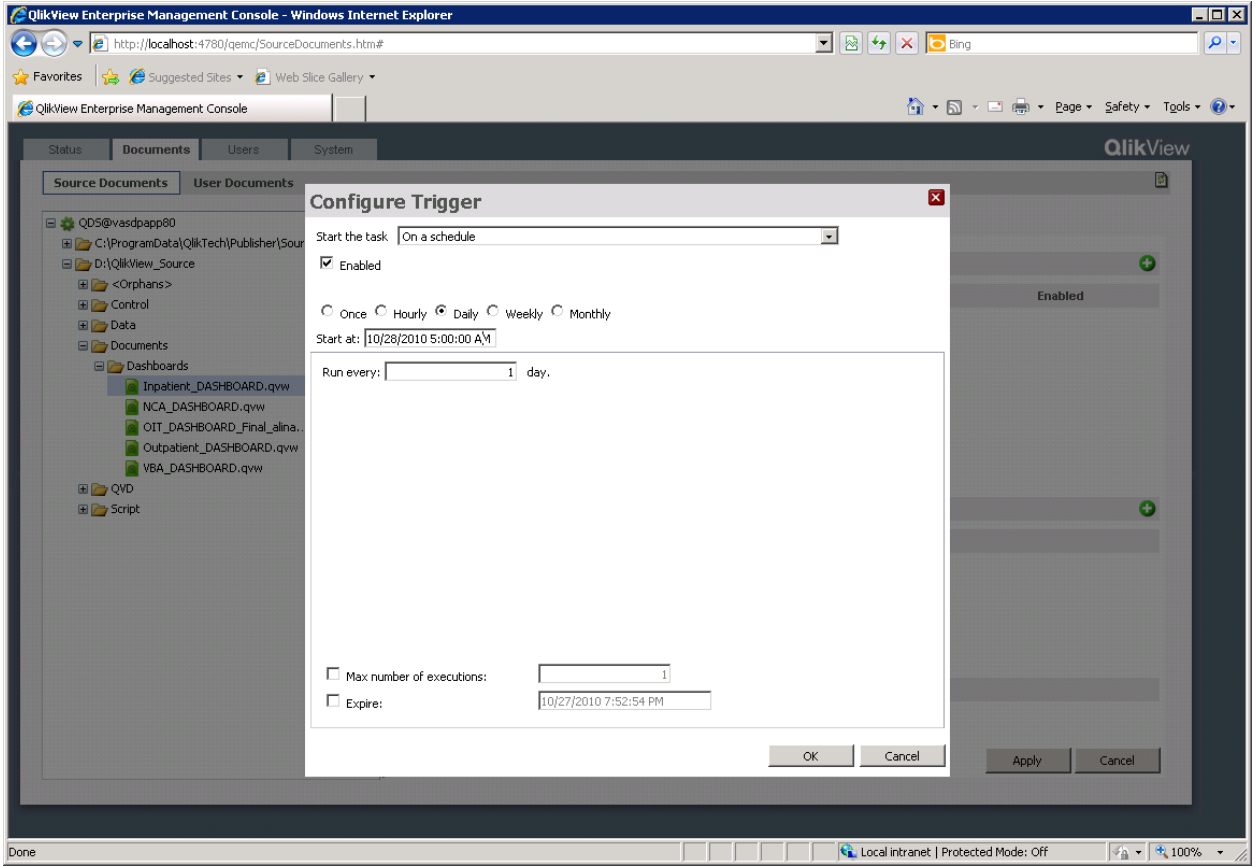


Hint: use the * in the search string to find generically. Click on the search icon to find users. Select the users or groups from the left side and click Add to move to the right side. Click OK when you are done adding users.

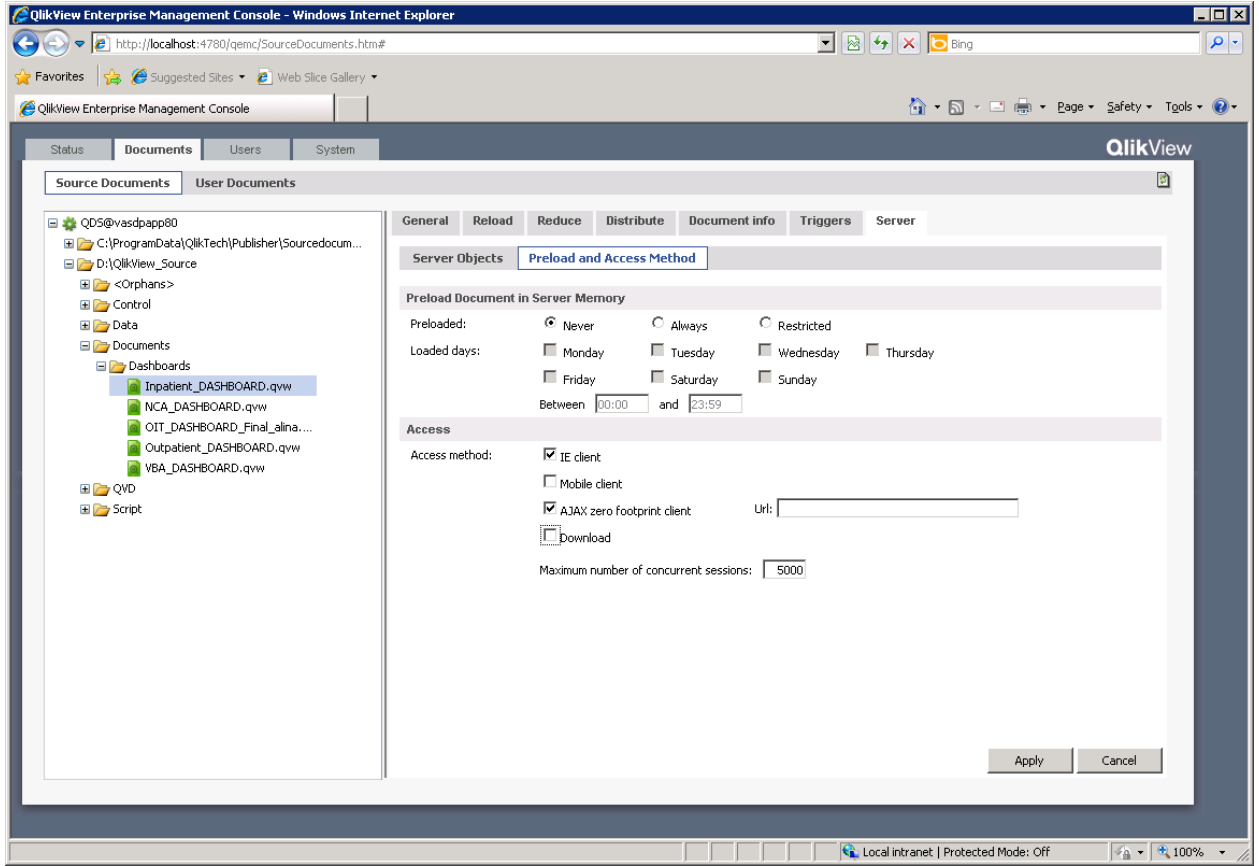
Add a category for this document on the **Document Info** tab.



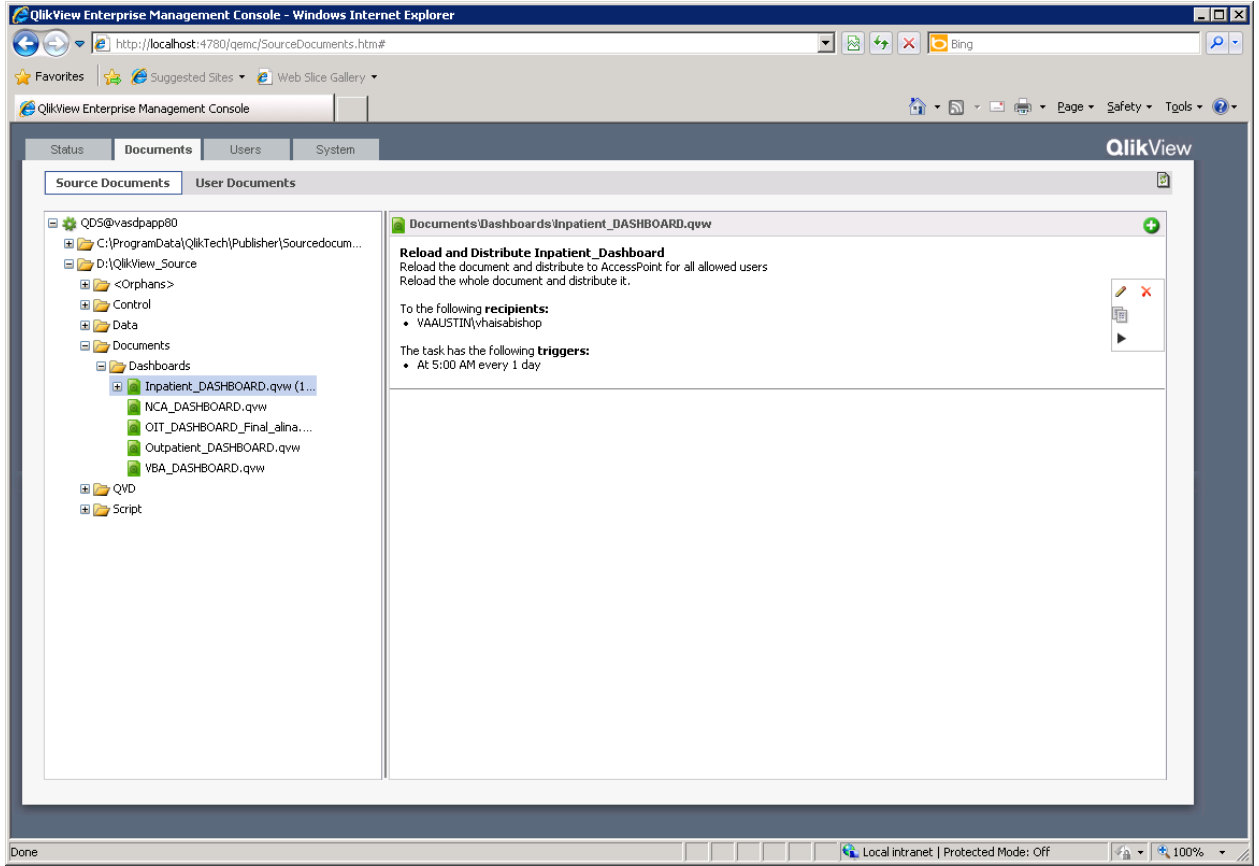
Set a trigger for reload on the **Triggers** tab – usually a time schedule



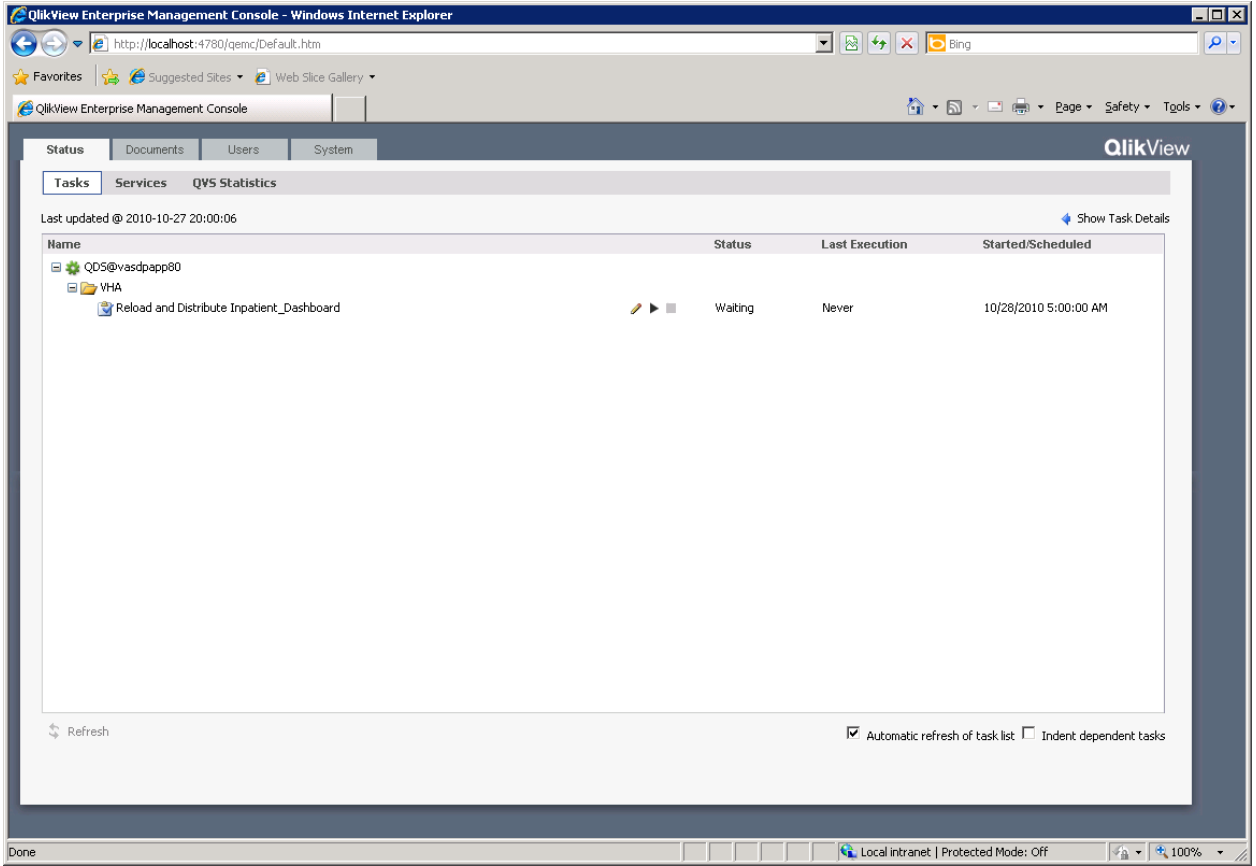
Set preloading and client access on the **Server** tab – consider removing the Download check.



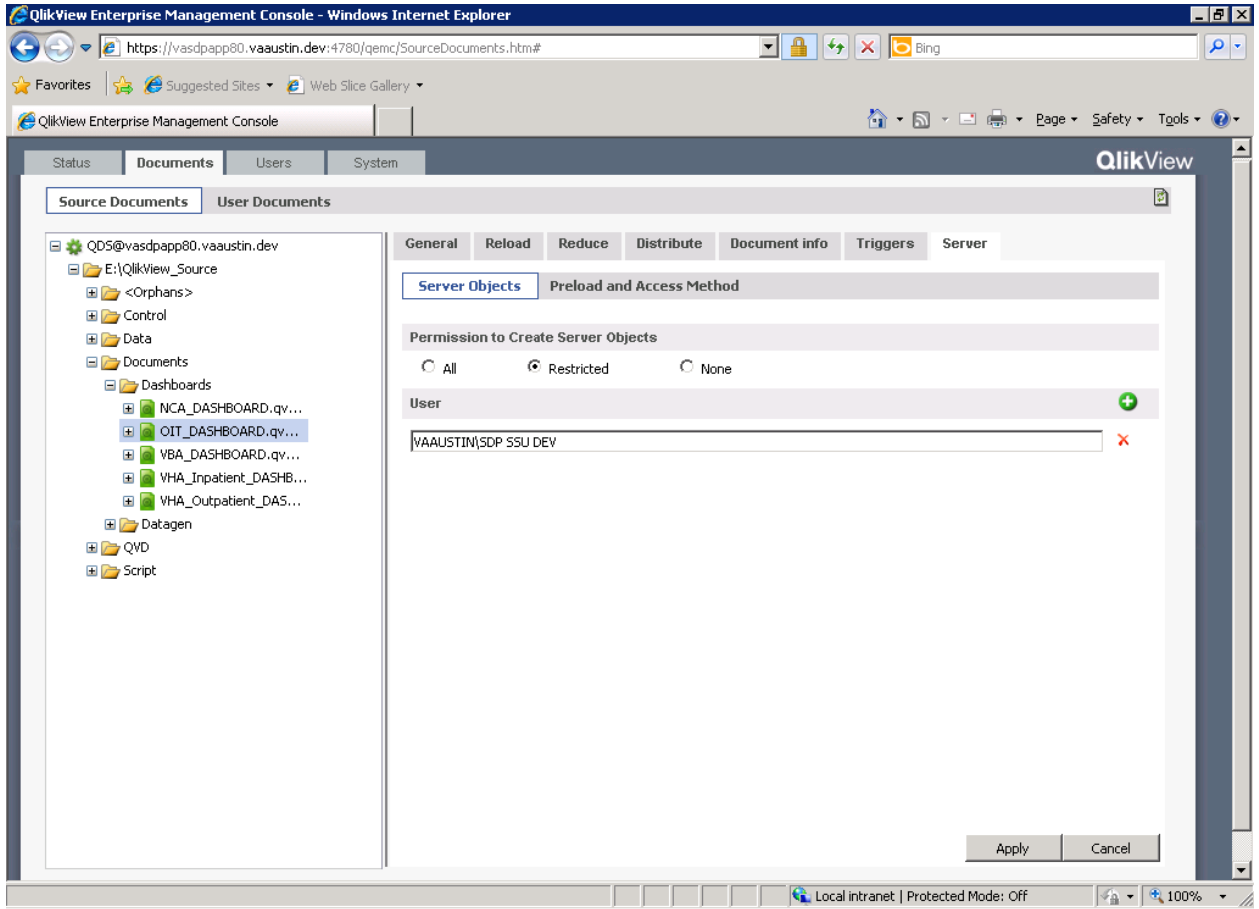
Click Apply to save this task.



A task can be run manually either from Source Documents or Status ... Tasks



Once the task has completed the status will be set to Waiting. The document should be available in AccessPoint to the allowed users.

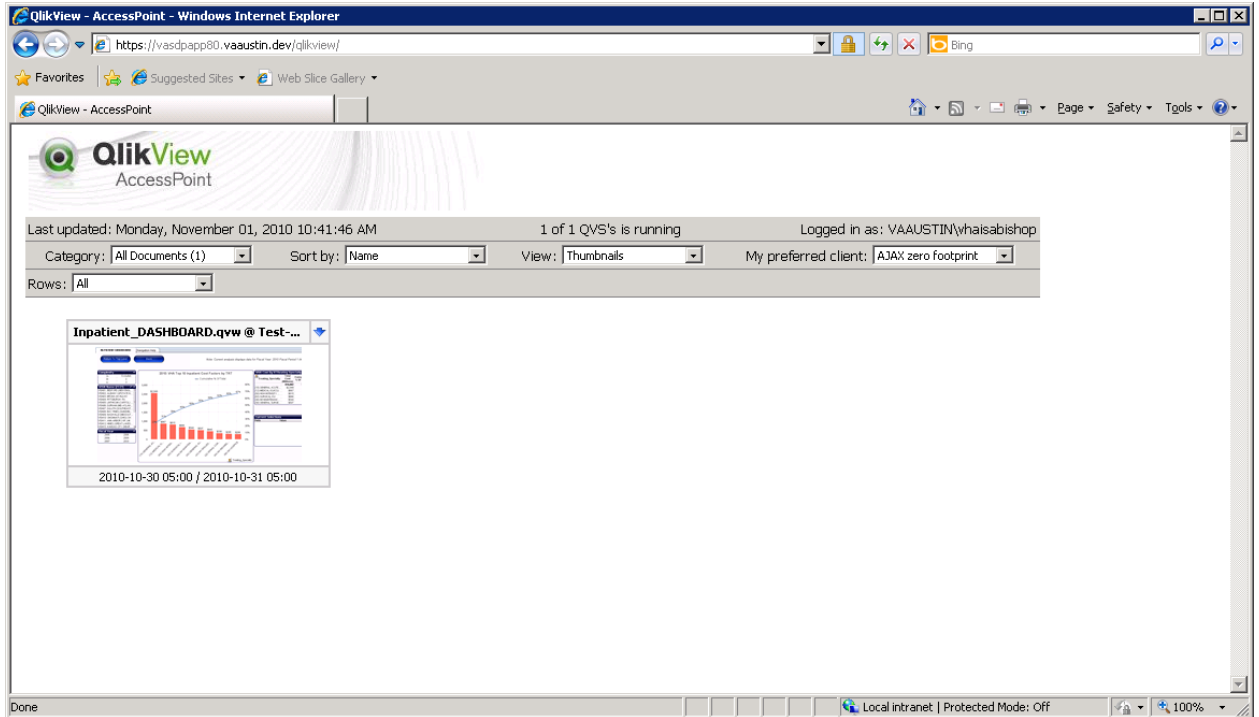


To restrict certain users from creating objects through the QlikView client, use the Server tab in the task definition. Set Create Objects to Restricted. Add the Domain\User name or group name that is ALLOWED to create objects. Multiple names or groups may be added (use the green + button to add). This must be configured for EACH document.

QlikView AccessPoint

Open the AccessPoint using a web browser. The URL is:
<https://<server full name>/QlikView>

For Dev, the server full name is: vaspapp80.VAAUSTIN.DEV



Click on a document image to open the document in the browser window.

Appendix A - Security Certificate

A Self Signed Certificate has been created on VASDPAPP80:

