

# **Using IIS with QlikView**

Area of Interest: Server Architecture

## Contents

<b>1</b>	<b>INTRODUCTION.....</b>	<b>3</b>
<b>2</b>	<b>APPLICABLE VERSIONS OF QLIKVIEW.....</b>	<b>3</b>
<b>3</b>	<b>USING QLIKVIEW AND IIS TOGETHER.....</b>	<b>3</b>
<b>4</b>	<b>CHOOSING BETWEEN IIS AND QV WEB SERVER.....</b>	<b>4</b>
<b>5</b>	<b>PREPARING IIS FOR QLIKVIEW.....</b>	<b>5</b>
5.1	VERSION OF IIS & .NET.....	5
<b>6</b>	<b>INSTALLATION OF QLIKVIEW SERVER.....</b>	<b>5</b>
6.1	QV9.....	6
6.2	QV10 + 11.....	6
6.3	FINAL CONFIGURATION.....	6
<b>7</b>	<b>APPENDIX – IIS 7 FEATURES.....</b>	<b>8</b>
	Appendix – IIS 7 Features	

## 1 Introduction

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When users connect to QlikView data on a QlikView Server they typically go via the Access Point web application and often may use the AJAX client also. For these applications to work they must be delivered through a web server.

All recent versions of QlikView have been shipped with the default of using either the built in QlikView web server or optionally to use Microsoft Internet Information Server (IIS) instead. Both options allow the core functionality of QlikView to work in the same way.

For various reasons some users may wish to use IIS to deliver the QlikView web content. This document provides information to help choose the right web server and also details how to optionally deploy QlikView using IIS.

## 2 Applicable Versions of QlikView

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This document is valid for versions 9, 10 and 11 of QlikView Server and is written assuming the use of the most recent Service Releases for those versions. Note that in some older services releases additional manual steps were required and these are not details here.

Each version requires a different version of the .net framework also as per the standard requirements for each product version.

## 3 Using QlikView and IIS Together

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Like most web servers, IIS and the QlikView web server use port 80 (http) to communicate (by default). Often two services wanting to communicate on the same port cannot be used at the same time, however with QlikView this is not the case.

If both the QlikView view web server and IIS are installed then port 80 is shared by the two services and a process occurs where QlikView registers all of the addresses for the content it wants to serve. Any requests from a user browsing to content registered by QlikView will be directed to QlikView's web server and all other traffic will be handled by IIS as normal

Although not recommended this allows a single server to be shared between QlikView and other web based content.

It can be confusing to system administrators when both are present as QlikView's content does not display in IIS and there is not visual clue that QlikView is actually handling the content. If there is no reason to have IIS install then remove it from the server.

Port sharing is NOT available in Windows XP and port 80 cannot be shared between QlikView and none IIS web servers such as Apache.

## 4 Choosing between IIS and QV Web Server

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Both QlikView Web Server and IIS will deliver the same result in terms of QlikView functionality and there in most deployments there is no performance difference between the two (IIS can be more scalable for huge user volumes). Typically it is external factors to QlikView that are the reason to choose IIS. These reasons may include the following:

- The customer is more familiar and comfortable with IIS
  - Often QlikView is an extra service that systems administrators have to look after and may not be QlikView experts. IIS is often a more familiar component
  - Some customer may mandate the use of IIS

- You want detailed logging of web activity or performance
  - While QlikView server logs sessions, QlikView Web Server does not log details on the hits on all of the pages and components, IIS can do this. This information can be used to monitor usage and errors
  - IIS includes a range of performance counters that can be used to monitor the performance of the web server
- You want to integrate with an IIS based SSO system or have more fine grained control over security of web content
  - QlikView web server includes a range of security options to support typical out of the box functionality. IIS supports these also but allows the use of common SSO ISAPI modules to integrate into SSO systems as well as other options for securing content. Additionally if using functionality like QlikView ticketing you may need IIS to be able to execute the code you write to make use of this.
- The server is already hosting some content through IIS or you want to use mash-ups
  - The QlikView webserver cannot host .net content, if you want to host .net content alongside QlikView or use the QlikView workbench then IIS must be used to host this
- SSL configuration is more straightforward
  - IIS has wizard driven SSL set up process where as the QV web server requires several more manual steps

There are a few further points to consider before choosing to use IIS:

- QV web server is a fully supported QlikView product
  - The QlikView web server is designed to work with QlikView and is fully supported, IIS may have localised configuration that may affect the way QlikView works through it.
- QV web server is installed and ready to use out of the box
  - IIS requires a number of configuration steps post install, these are not covered by the install wizard
- QV web server is a cut down version of IIS, so the performance is the same

Both web server options can utilize the load balancing features through QlikView AccessPoint.

Typically using the QlikView Web Server is sufficient and using IIS is only really required when one of the reasons indicated above is apparent.

## 5 Preparing IIS for QlikView

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### 5.1 Version of IIS & .net

QlikView's web content can be hosted though either IIS6 on Windows 2003 or IIS7 on Windows 2008. The configuration for use with QlikView changes slightly for each version as detailed below.

The following versions of .net are required to be installed as a prerequisite for installing QlikView.

QV9 - .net 2.0

QV10 - .net 3.5

QV11 - .net 4.0

### **Installing on Windows 2003 and IIS 6**

Installation of IIS6 is done through the Add/Remove programs option. A default install is sufficient for use with QlikView as most common options are added.

To install .net on windows 2003 you must download and run the installer from the Microsoft web site. This may also have already been installed by windows update.

Depending on the install order you may need to register .net with IIS. To check if you go to the IIS management tool and look at the Extensions folder and the installed versions should appear on the right. If they are not present run the following commands (no damage will be done if you run it when it is already installed) (path may vary for the version of .net)

```
C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\aspnet_regiis.exe -i
```

Once the above is complete you can continue with the QlikView install.

### **Installing on Windows 2008 and IIS 7**

Both the IIS 7 and .net installation is performed via the Roles and Features configuration in windows 2008. The default install of IIS will not include .net or some of the other features required for QlikView.

The appendix at the bottom of the document shows the steps to walk through this but in summary the follow options are required when installing IIS 7:

- Asp.net – This will then prompt for support .net components to be added
- Basic Authentication
- Windows Authentication

Once IIS 7 is configured then the QlikView install can continue.

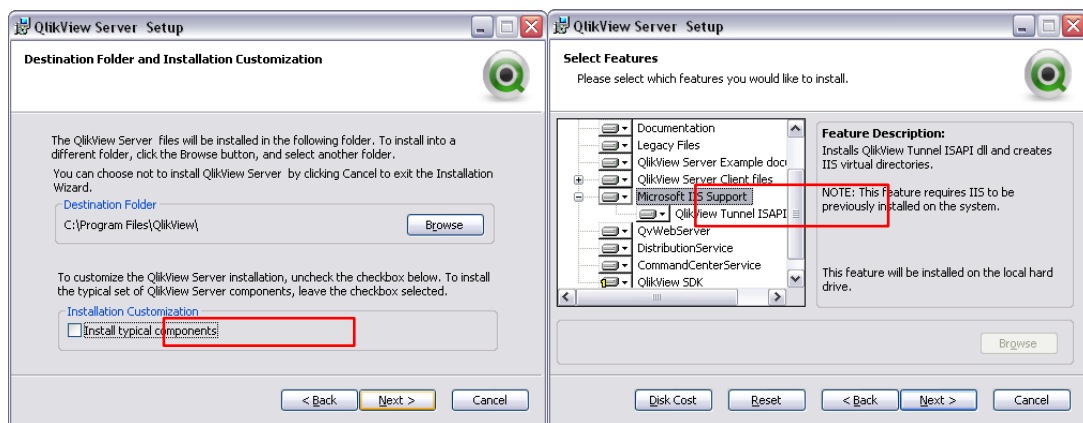
## 6 Installation of QlikView Server

To support use of IIS one of the non standard features in the QlikView Server installer must be selected. Depending on the version of QlikView you have the installer screens may look slightly different

Note this assume all QlikView components are being installed on the same server. Additional steps may be required if you are distributing components onto different servers.

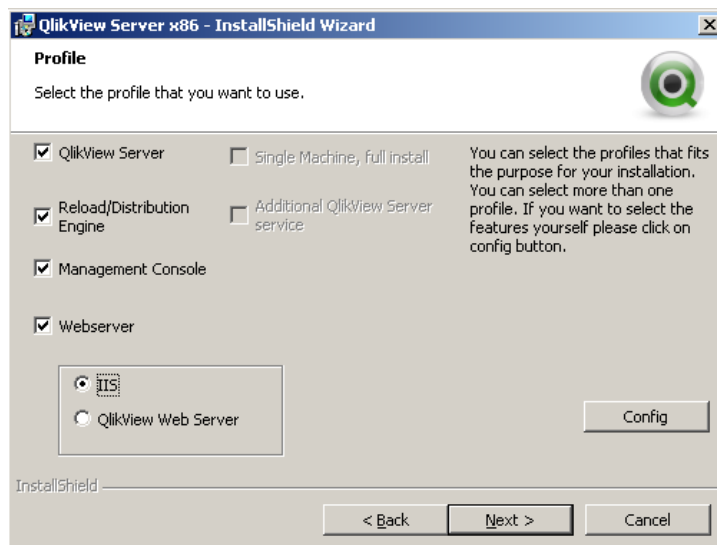
### 6.1 QV9

When you run the installer un-tick the “Install Typical Components” check box and on the next screen ensure that the “Microsoft IIS Support” option is selected. If you wish to use QlikView Tunnelling ensure this option is select also.



### 6.2 QV10 + 11

When you run the install and get to the components screen check the values as shown below



Complete the server install as normal including rebooting and then apply the server license.

### 6.3 Final Configuration

**Note:** IIS 6 requires that the Service Account you specified to run the QlikView services under is a member of the local IIS\_WPG windows group on the server. Add the service account to this group using computer management. This is not required in IIS7

To test that IIS is working correctly an Internet Explorer window and browse to <http://localhost/QvAjaxZfc/AccessPointSettings.aspx>. This page is used to connect IIS the QlikView Management Consoles, since it should return no visual content it should return an error like the below.

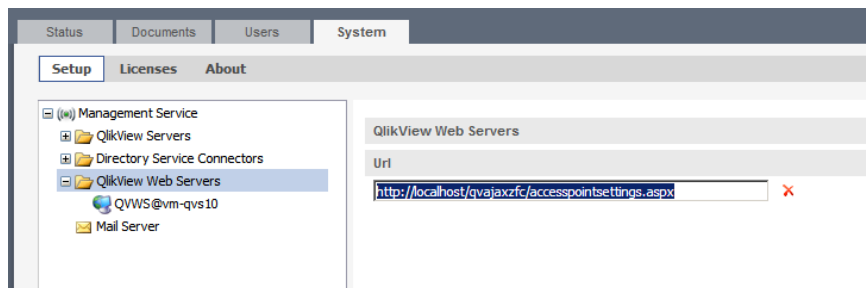
**<Root>POST request without contents, can't process!</Root>**

This means IIS configuration is now complete. If you get prompted to login or if you do not get the above then review the settings in IIS accordingly.

The final task is to connect IIS to QlikView's management console. To do this open the QlikView Enterprise Management Console. Select the System tab and then select the QlikView Web Servers node on the left hand side.

Replace the URL in the box on the right with the below address and click apply:

<http://localhost/QvAjaxZfc/AccessPointSettings.aspx>



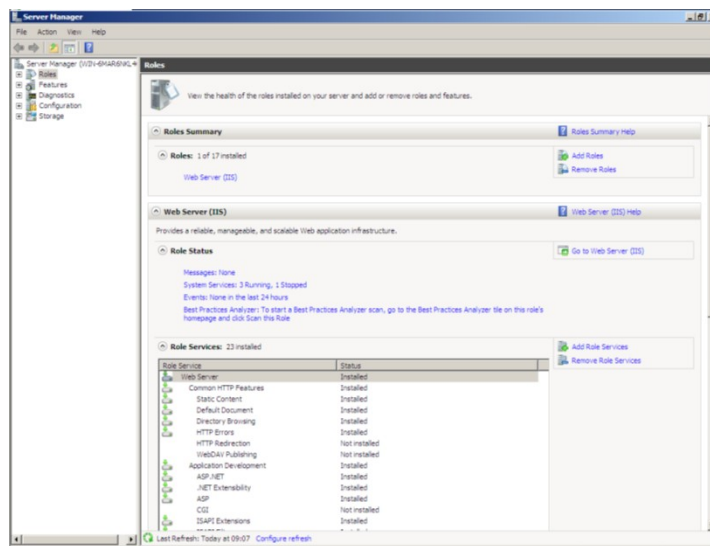
Change the URL accordingly if IIS and QlikView are on different servers. Expand the QlikView Web Server node on the right and select the server under it. On the right there should still be all the tabs for configuring the web server, if these are missing then review the settings above.

To test that QlikView is now working through IIS, open Internet Explorer and browse to <http://localhost/QlikView>, the Access Point should now display correctly and it should be possible to open documents.

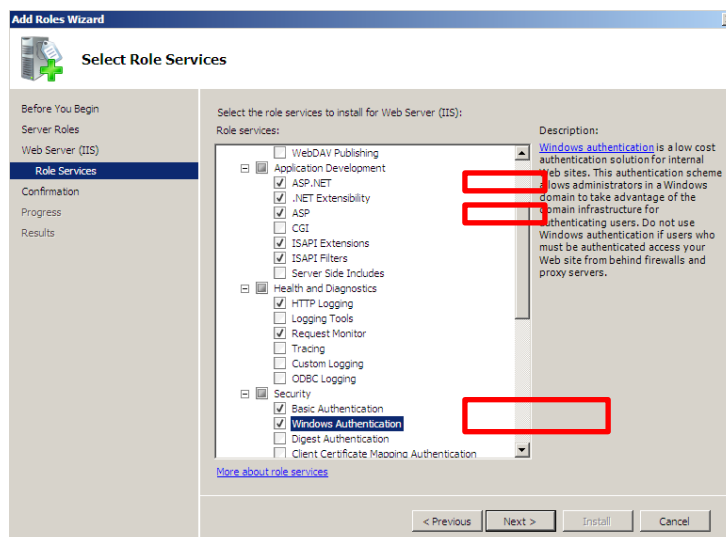
## 7 Appendix – IIS 7 Features

The default install of IIS 7 does not include some of the features that QlikView will need to use. The features mentioned below should be added if installing IIS 7 from scratch but the below instructions refer to adding the features after IIS7 has been installed already.

- Open the Server manager (this normally opens when you logon)
- Click the Add Role Services link as shown below

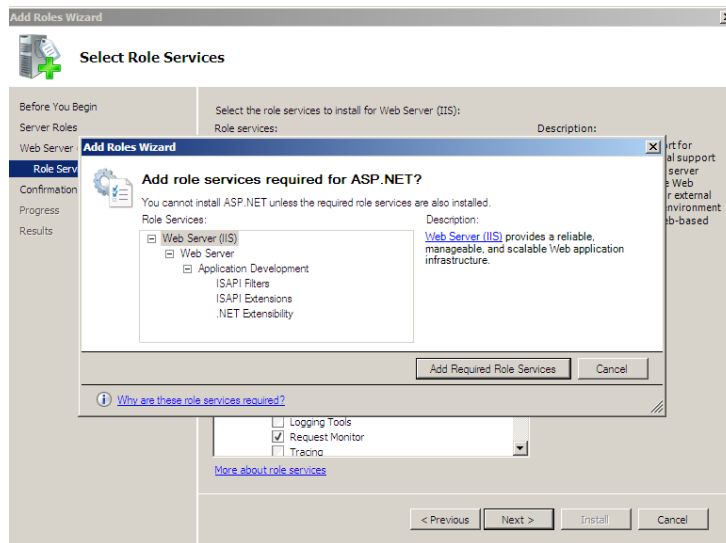


- Ensure the features highlighted below are selected.
  - Asp.net
  - Asp
  - Basic Authentication
  - Windows Authentication





- When selecting the Asp.net feature the below pop up will display, click the “Add Required Role Services” button.



- Finish the installer