

Qlikview 9 Accesspoint Single Sign On

rva@qliktech.com

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Introduction

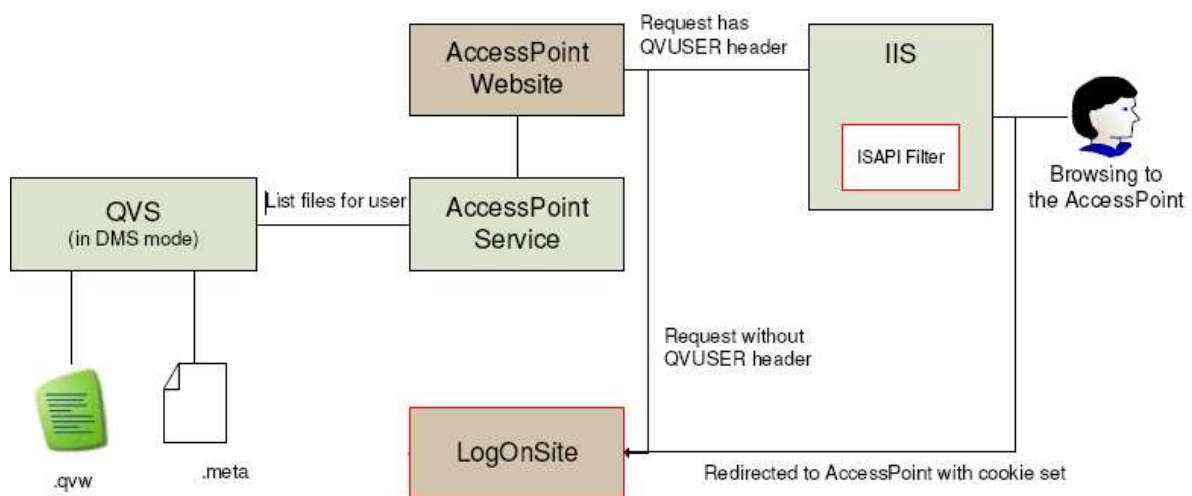
There are many single sign-on solutions in the Market that protect a URL or web resource by redirecting the initial request for a protected resource to a login page prompting the user to enter their (single sign-on) credentials. Once a user is authenticated the user is again redirected, this time back to the originally requested resource, and this time the Single Sign-on solution will have also appended an HTTP header containing the user id of the logged in user. The name of the header will vary from system to system (e.g. the header name is "sm_user" for SiteMinder) and the content will be the user id.

If the Accesspoint does not find the user id in the header, the "Login address" will have Accesspoint redirect to the given URL (note in most commercial single sign-on solutions like this the redirect is handled outside of Accesspoint by the SSO piece so in many cases this will simply be a precaution that should never really get called)

This document describes how to configure Qlikview with IIS to use the existing SSO infrastructure.

Example

Attached to this document is also a small example to mimic a SSO infrastructure.



The logon site will handle the login. The actual site will not check the password, but allow whatever username you type in there. In a real world scenario, password checks etc. will have to be implemented.

The logon site will add a cookie to the user called QvCookie, containing the username in clear text. In a real world scenario this should be done using some kind of advanced ticket handling instead.

The user will be redirected to the Accesspoint. The ISAPI filter will now check for this cookie and if it is found, it will transfer the value to the header, named QVUSER.

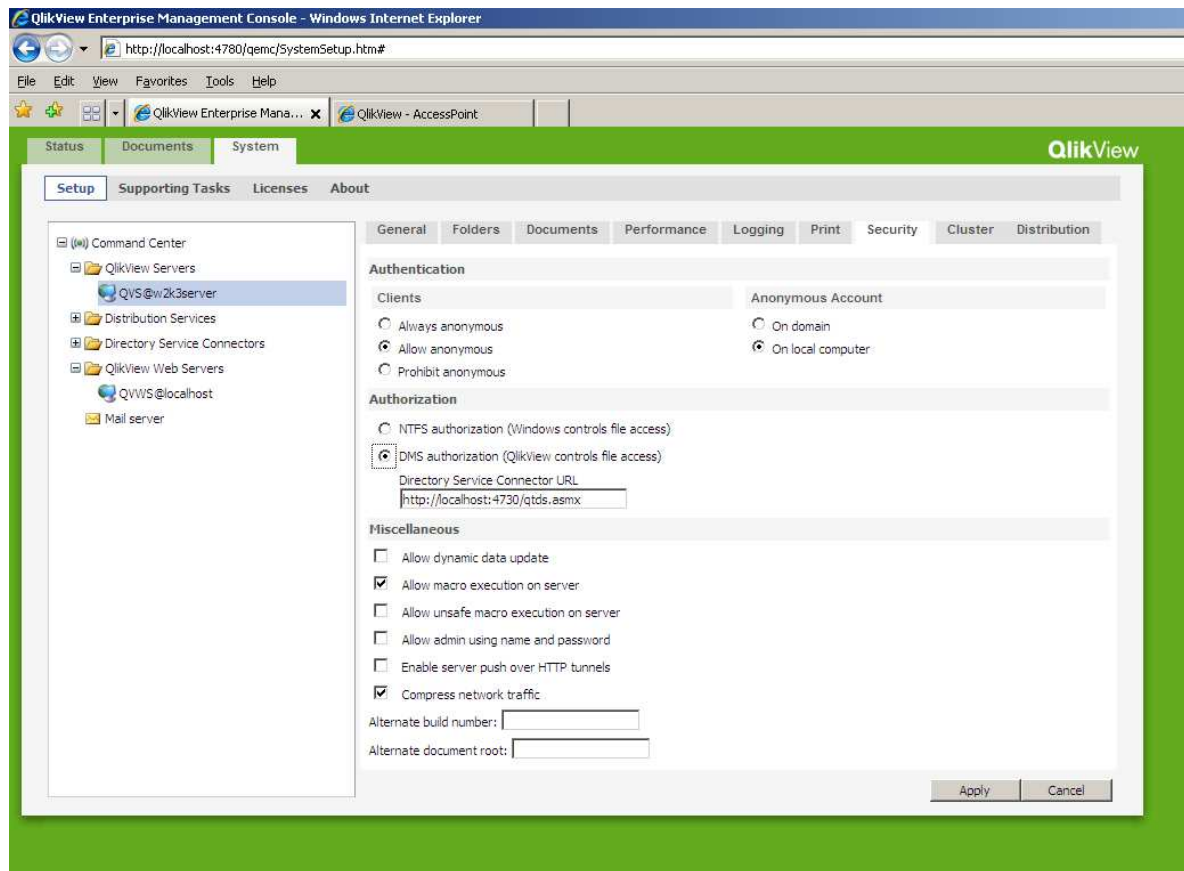
The Accesspoint will trust this header and request files from the Qlikview server for this user.

To allow us to use non windows-user with Qlikview the Qlikview Server has run in DMS mode. Additionally as we have to configure the Accesspoint to look for the HTTP-Header field. As we want to deploy an ISAPI-Filter for the SSO Example, we then need to configure IIS.

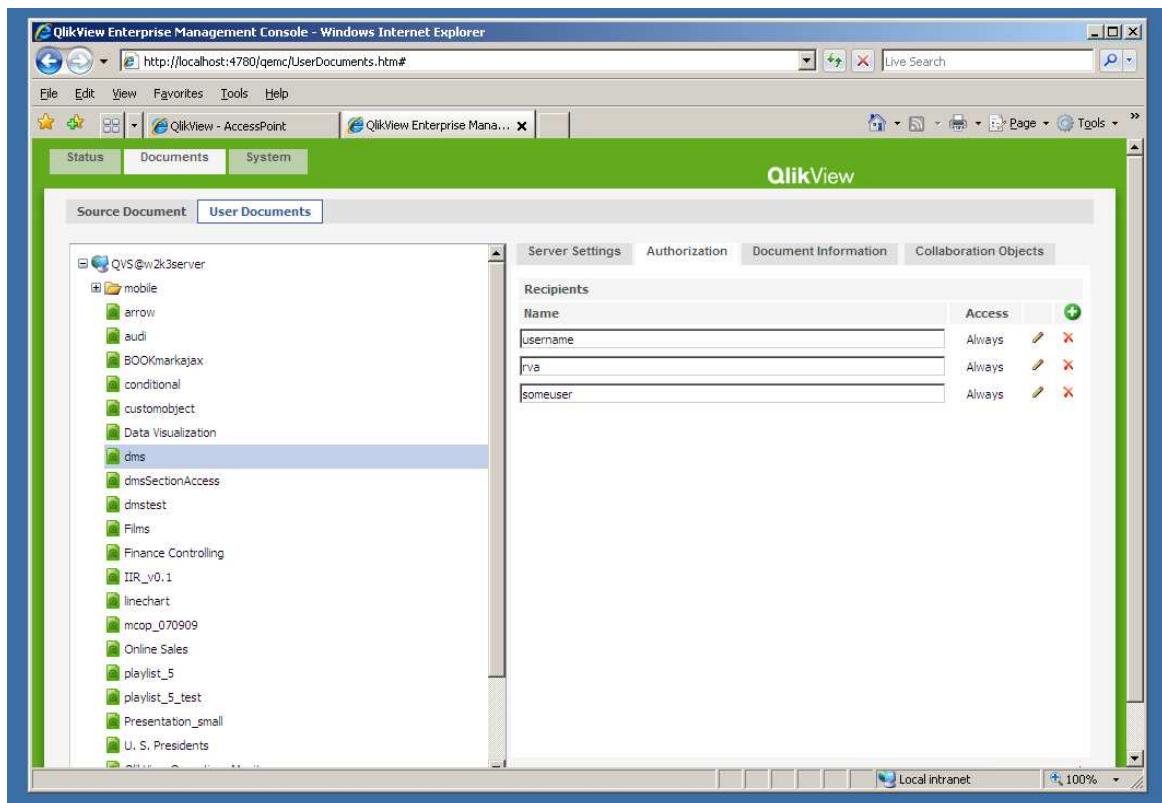
Configuration QV Server

QVS DMS Mode

Use the QlikView Enterprise Management Console to configure DMS mode. Go to “System|Setup|QlikView Servers| Security|DMS Authorization”. Click “Apply” and restart the Qlikview server.



To give users access to documents, go to “Document|User Documents”. Select a document and go to “Recipients”. Add the usernames (of your SSO system) which should have access to the document.



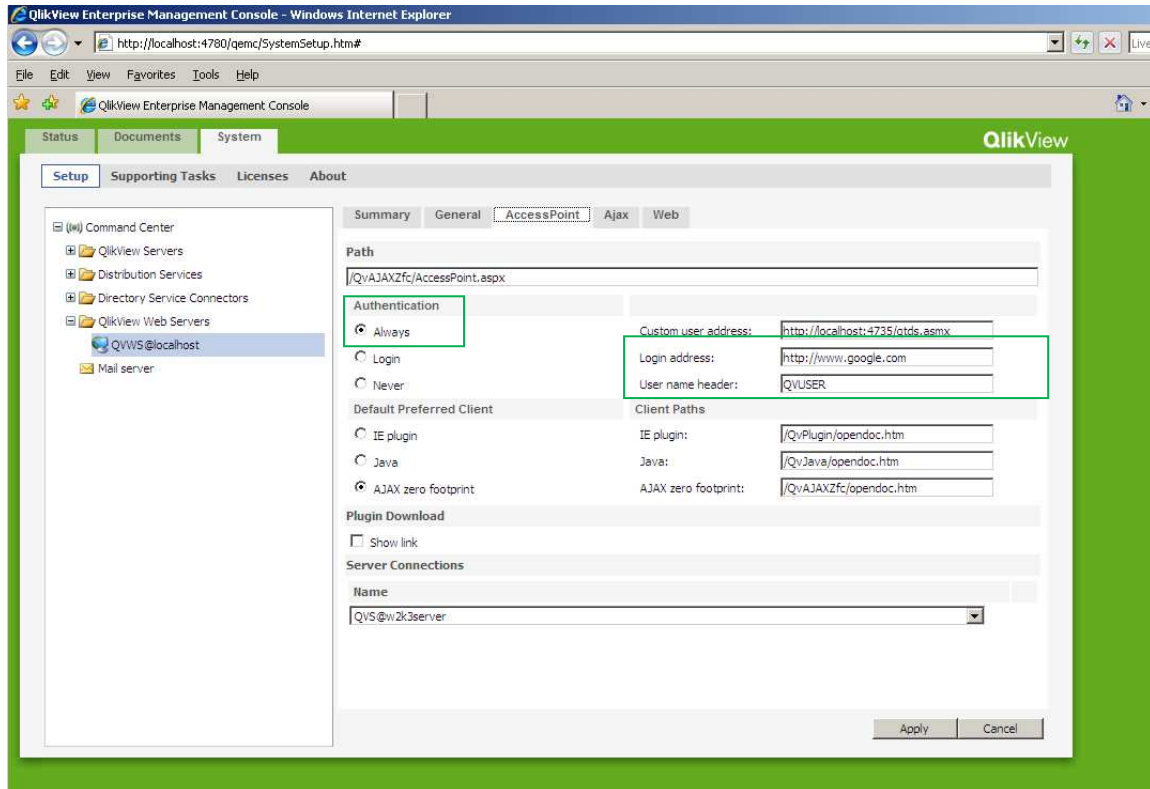
In the screenshot above we give the users „username“, „rva“ and „someuser“ access to the document „dms“.

Configure Accesspoint

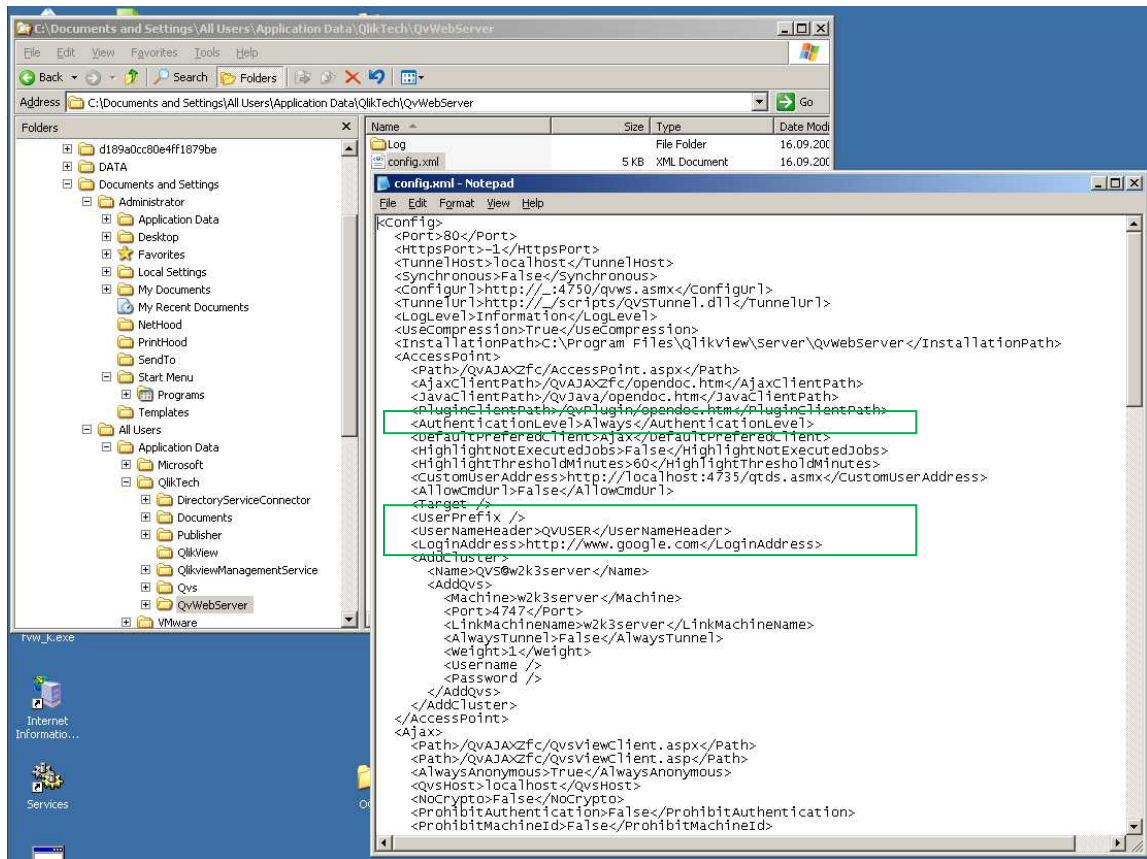
In the Enterprise Management Console go to „Qlikview Web Servers“ and select the web server. Go to “Accesspoint” and add to the field “User Name Header” the value “QVUSER”. This makes the Accesspoint to check for the HTTP-Header field.

You can utilize the field “Login address” to make a redirect to the specified page if no HTTP-Header field was found. This should be the URL of your login-page. For testing purposes set it to <http://www.google.com>.

Ensure that the Authentication is set to “Always”.

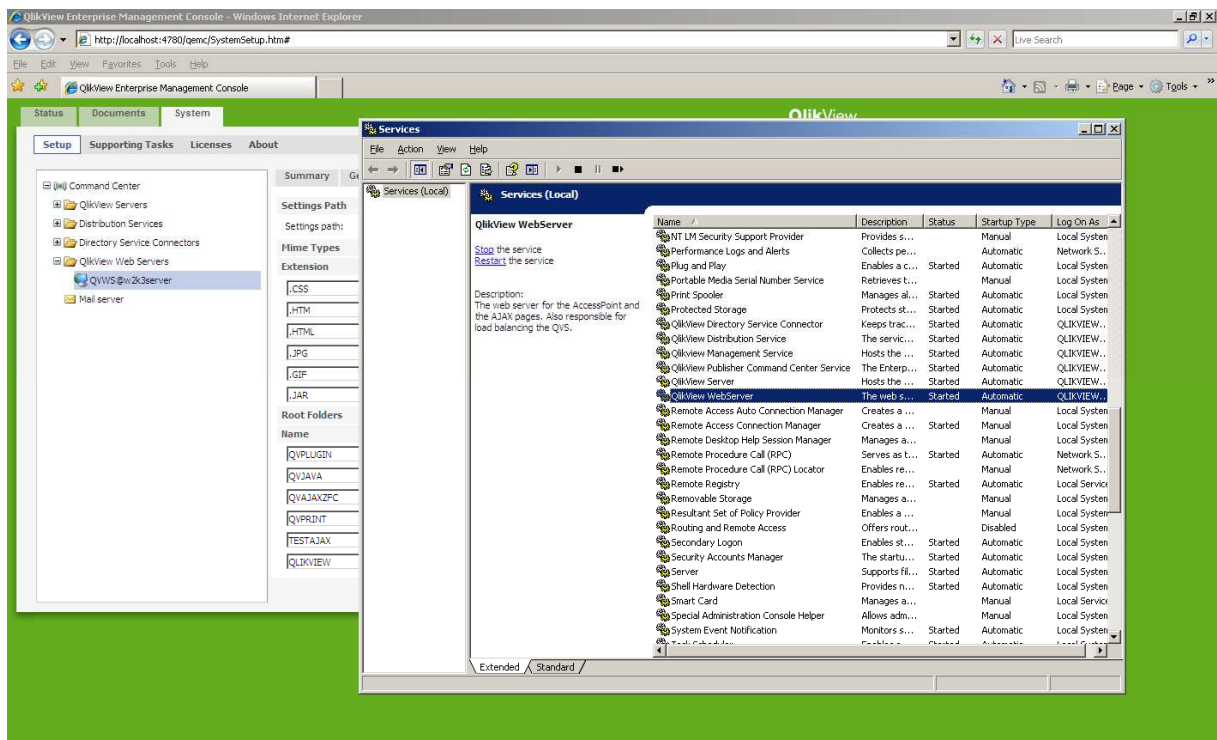


Double check the settings in the config file *C:\Documents and Settings\All Users\Application Data\QlikTech\QvWebServer\config.xml*. If you don't want to use the default prefix “CUSTOM/” for all of your users remove it from the key <UserPrefix> .



Stop QlikView WebServer

As we want to utilize IIS in our scenario, stop the service “QlikView Web Server“. You may want to set the “Startup Type” of the service to “Manual”.



Configuration IIS

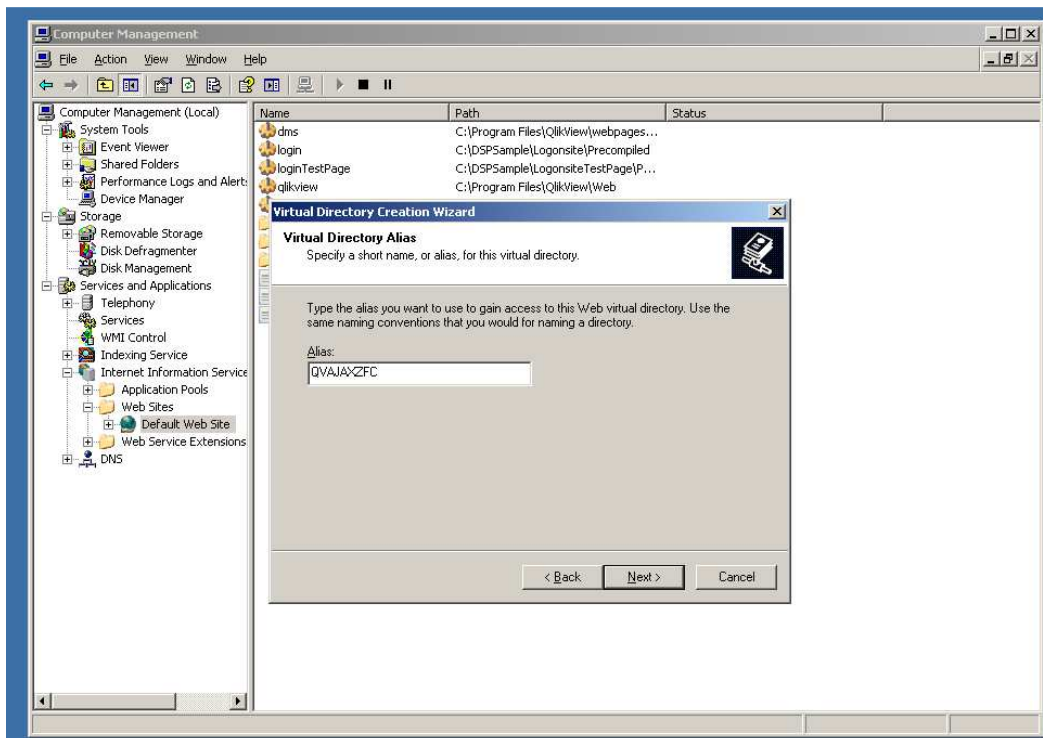
Create Virtual Directories

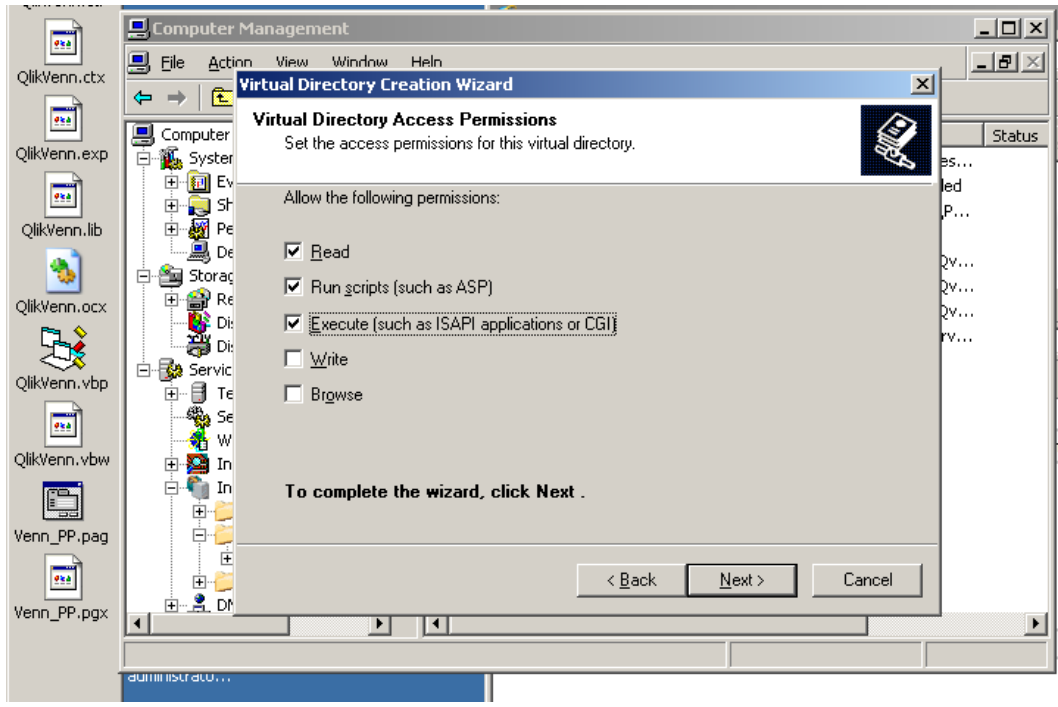
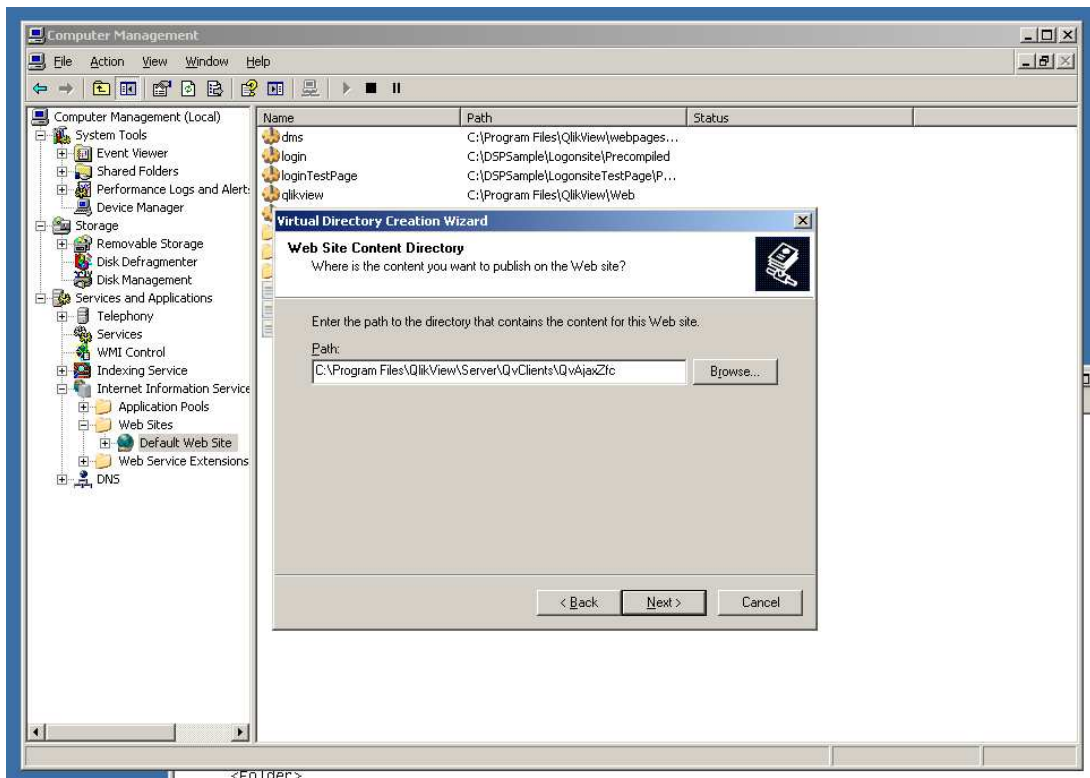
To configure IIS we have to add the virtual directories previously hosted by the QlikView WebServer. See your exact directory paths in *C:\Documents and Settings\All Users\Application Data\QlikTech\QvWebServer\config.xml*.

The default installation is:

Virtual Directory	Path	Description
QVCLIENTS	C:\Program Files\QlikView\Server\QvClients	Client configuration
QVPLUGIN	C:\Program Files\QlikView\Server\QvClients\QvPlugin	Functionality ActiveX-plugin
QVAJAXZFC	C:\Program Files\QlikView\Server\QvClients\QvAjaxZfc	AJAX functionality, Ticketing
QLIKVIEW	C:\Program Files\QlikView\Web	The Accesspoint
QVJAVA	C:\Program Files\QlikView\Server\QvClients\QvJava	Functionality Java Client
QVPRINT	C:\Documents and Settings\All Users\Application Data\QlikTech\Qvs\QvPrint\	Print folder for AJAX, JAVA

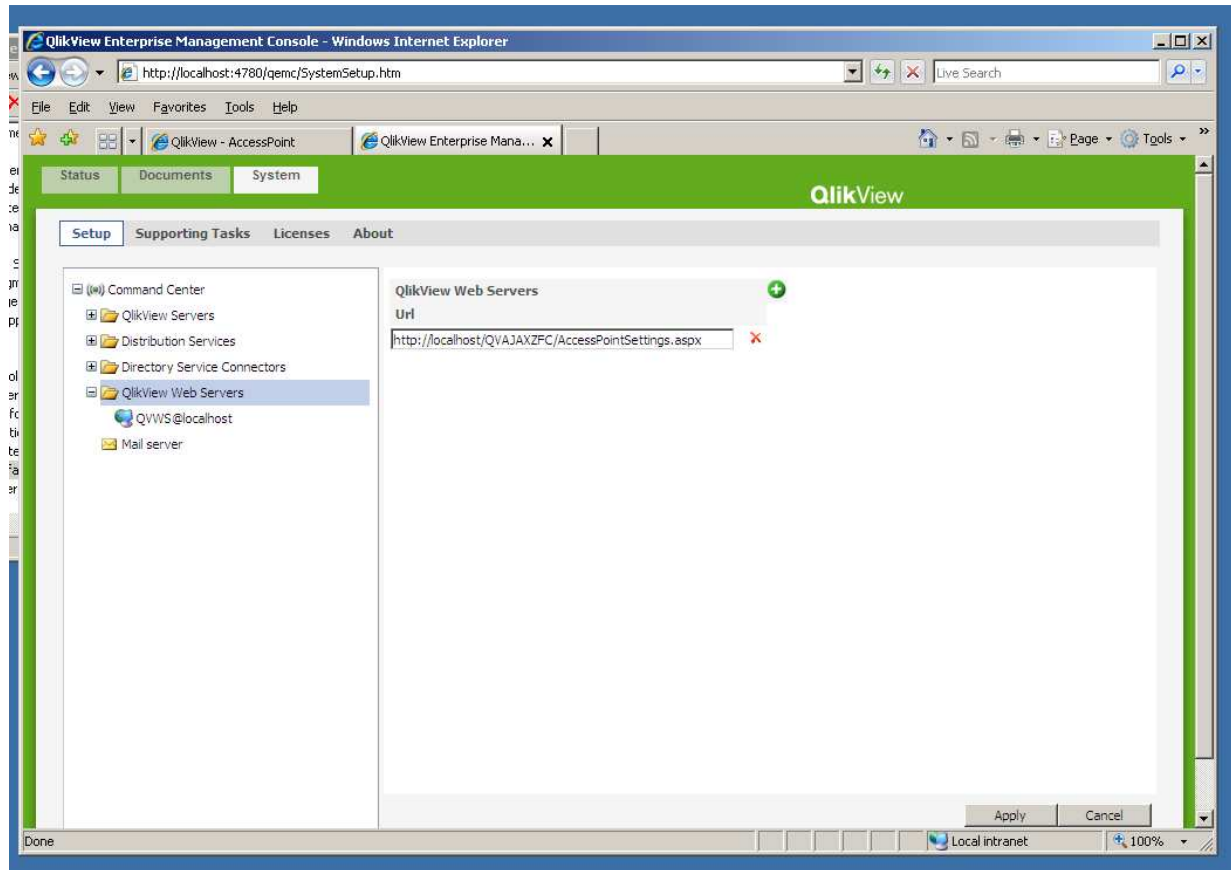
The following screenshots show an example how to configure QVAJAXZFC in IIS. Repeat it for all virtual directories.





Configure QlikView Server to use IIS

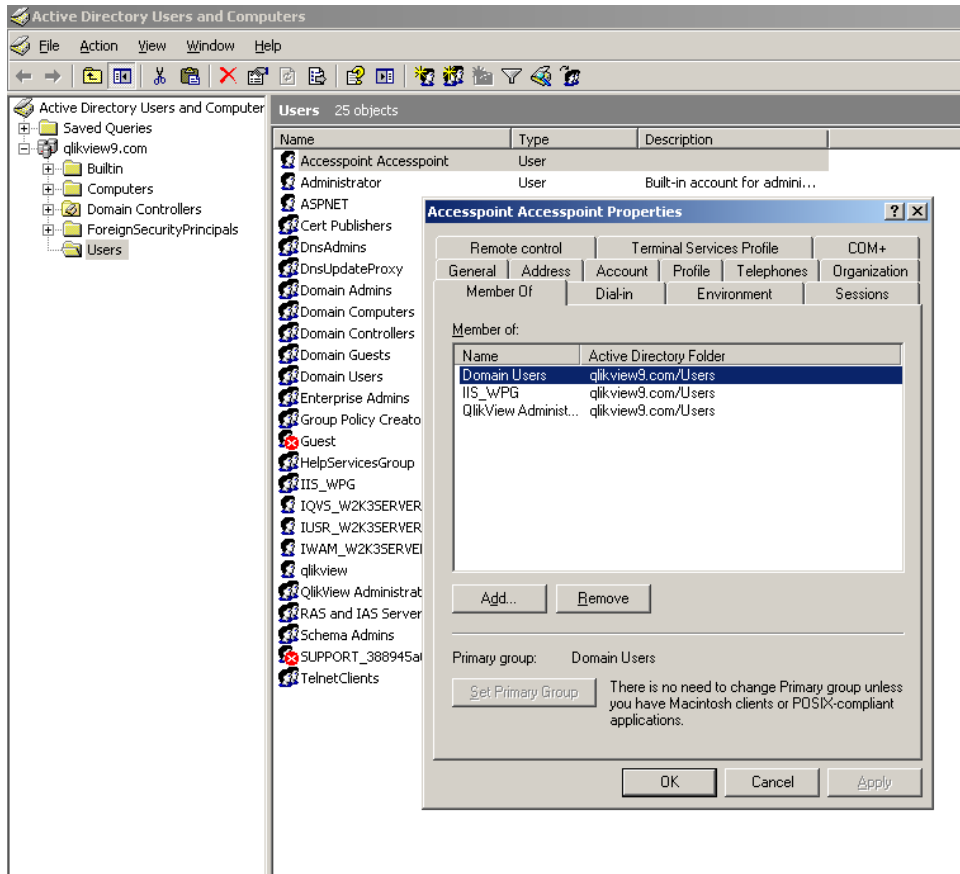
To make Qlikview aware of using IIS open the “Enterprise Management Console”. Go to “System|Setup|QlikView Web Servers”. Remove the old entry, and add a new URL <http://localhost/QVAJAXZFC/AccessPointSettings.aspx>. Press “Apply”.



Create user for Application Pool

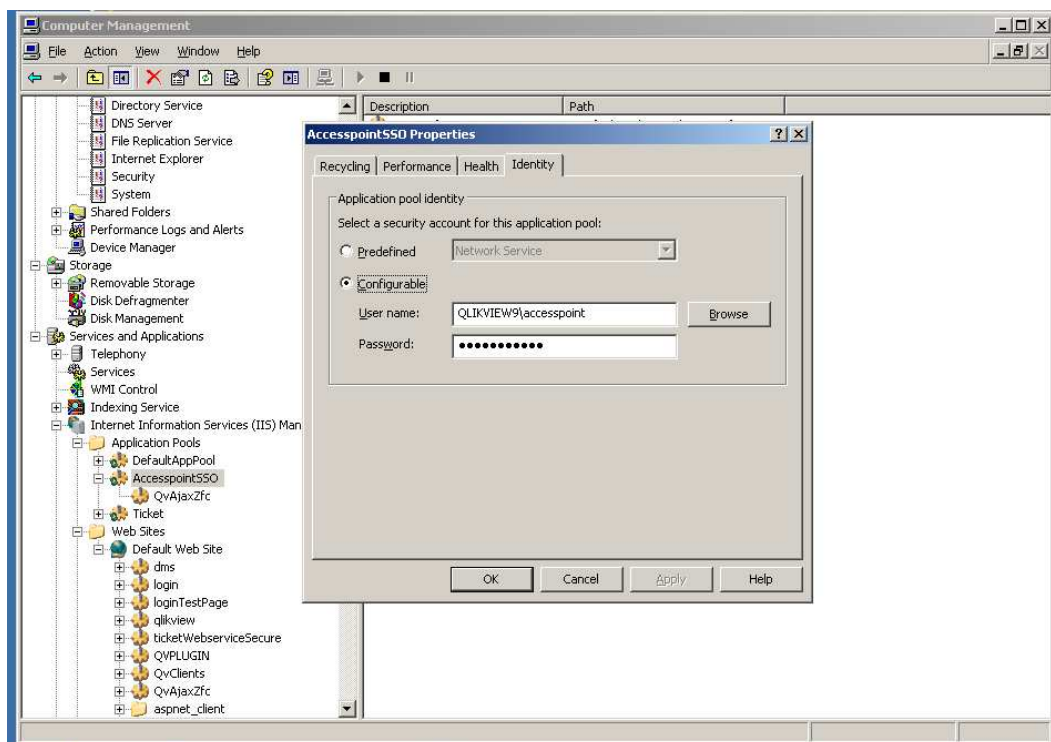
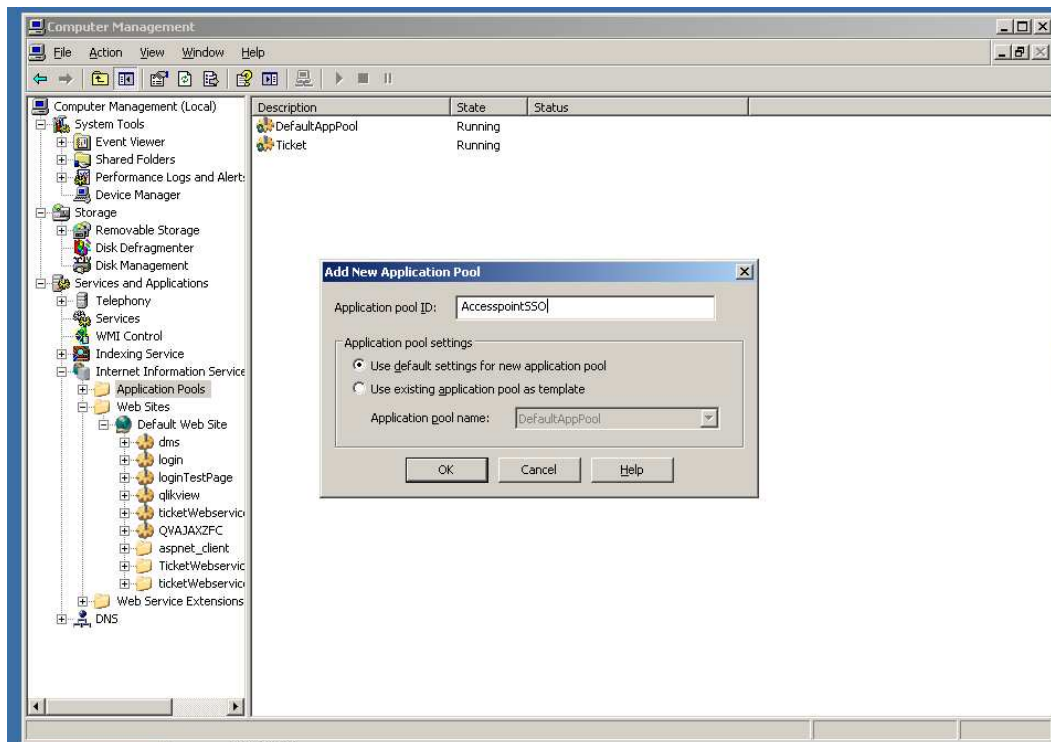
In DMS Mode a ticketing process is in place to allow users to access an application. This ticket is passed over by the QlikView Server when requested by a “QlikView administrator”. Therefore we need a user that is allowed to request such a ticket.

Create a new user “Accesspoint” that is member of the group “QlikView Administrators” and is allowed to run an IIS application pool (typically the user needs to be a member of the group “IIS_WFG” for that).

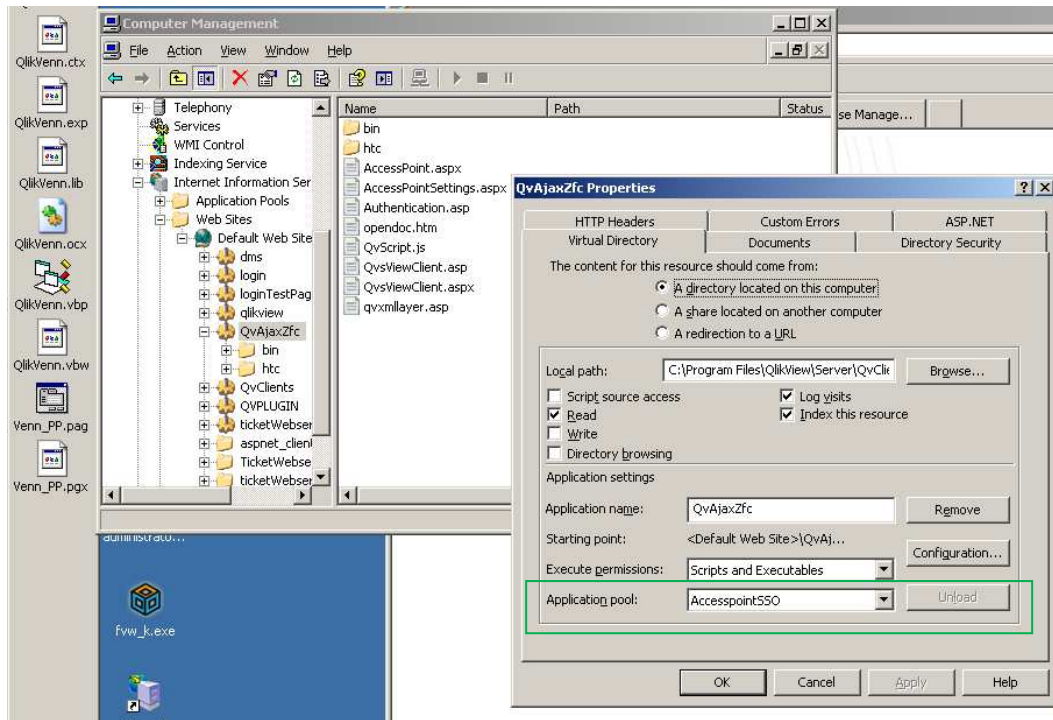


Setup Application Pool

Go back to IIS and create a new application pool „AccesspointSSO“. Go to “Properties|Identity” and assign the newly created user to run the application pool.

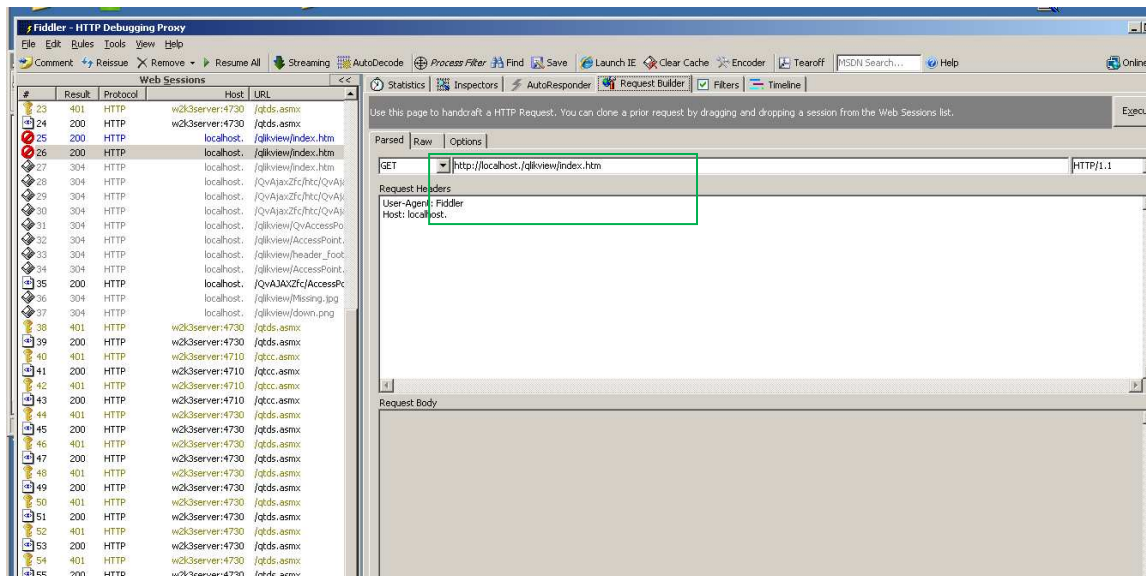


To allow IIS to retrieve the ticket, you now have to assign the application pool to the virtual directory „QVAjaxZfc“. Select the virtual directory, go to “Properties|Application Pool” and select “AccesspointSSO” from the dropdown.

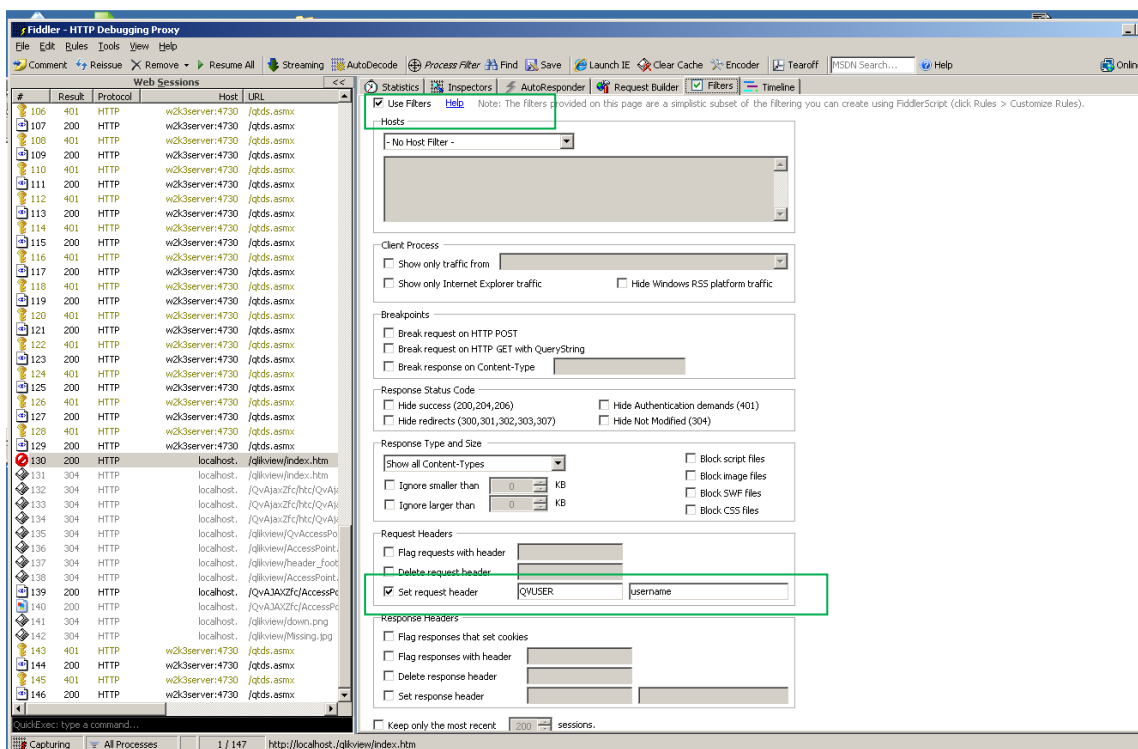


User Fiddler to test configuration

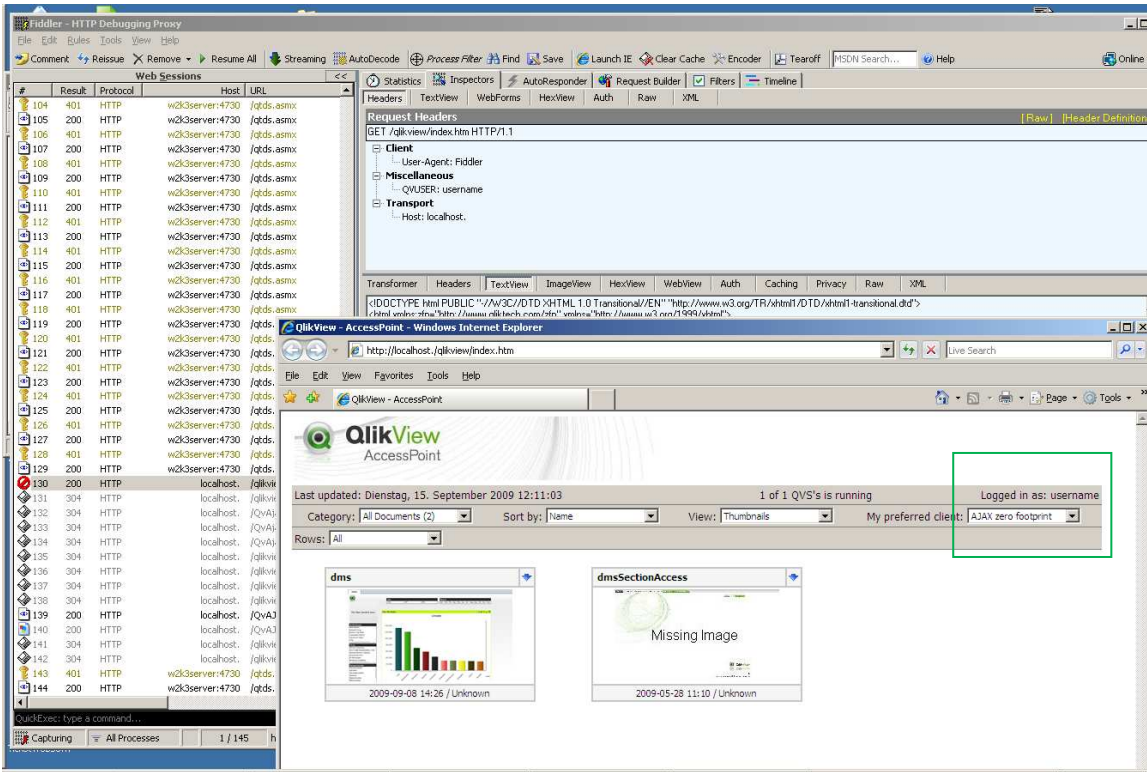
Optionally you can use Fiddler (<http://www.fiddler2.com/fiddler2/>) to test your configuration right now. Use the “Request Builder” and enter the URL <http://localhost./qlikview/index.htm>.



Go to tab “Filters”. Check the checkbox “Use Filters”. Scroll down and add under “Request Headers|Set Request Header” the value “QVUSER” with “username”.



Go back to “Request Builder” and press the button “Execute”. Fiddler now should execute the HTTP-request successfully. Select the line on the left side and click the button “Launch IE”. You now should see the user “username” logged into the Accesspoint.



Configuration SSO-Example

As mentioned in the introduction this document has an example attached to mimic a single sign on scenario. All files and source codes can be found in the SSOSample.zip.

The logon site will handle the logon. The actual site will not check the password, but allow whatever username you type in there. In a real world scenario, password checks etc will have to be implemented.

The logon site will add a cookie to the user called QvCookie, containing the username in clear text. In a real world scenario this should be done using some kind of advanced ticket handling instead.

The user will be redirected to the Accesspoint. The ISAPI filter will now check for this cookie and if it is found, it will transfer the value to the header, named QVUSER.

The Accesspoint will trust this header and request files from the QlikView server for this user.

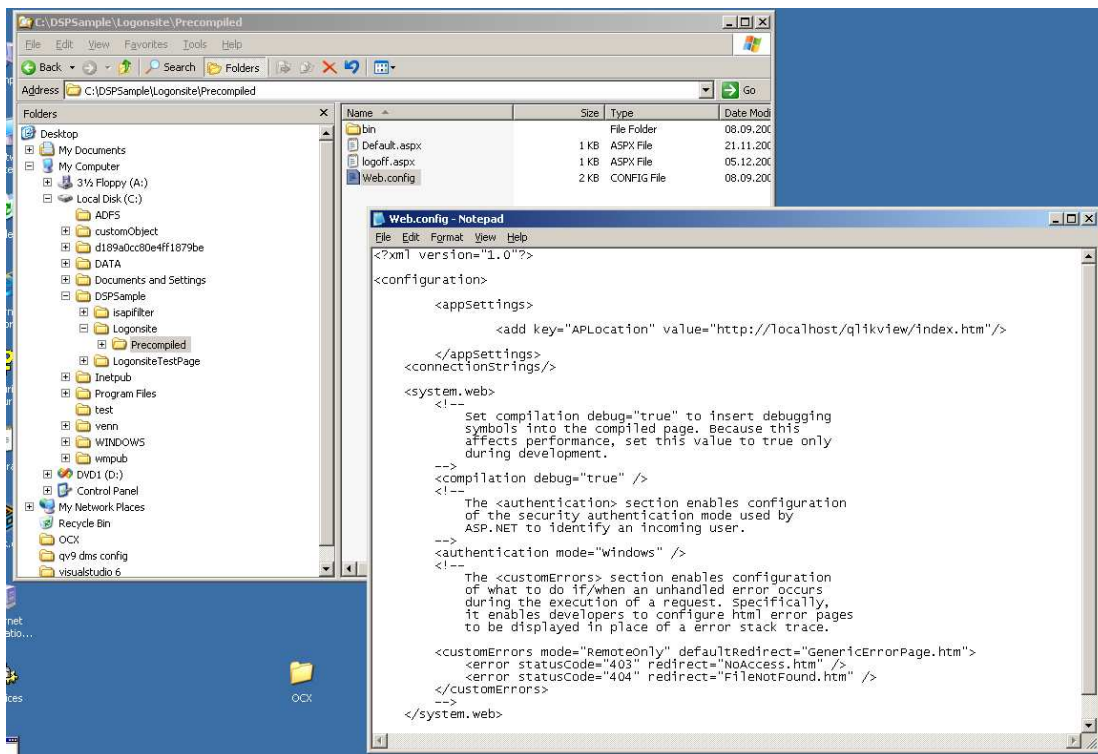
Logon site

1. Save the logon site files to disk. Go to the IIS manager. Add a virtual directory to your logon site, pointing to the files' location, for example *C:\DSPSample\Logonsite\Precompiled*.

Assume this logon site is at

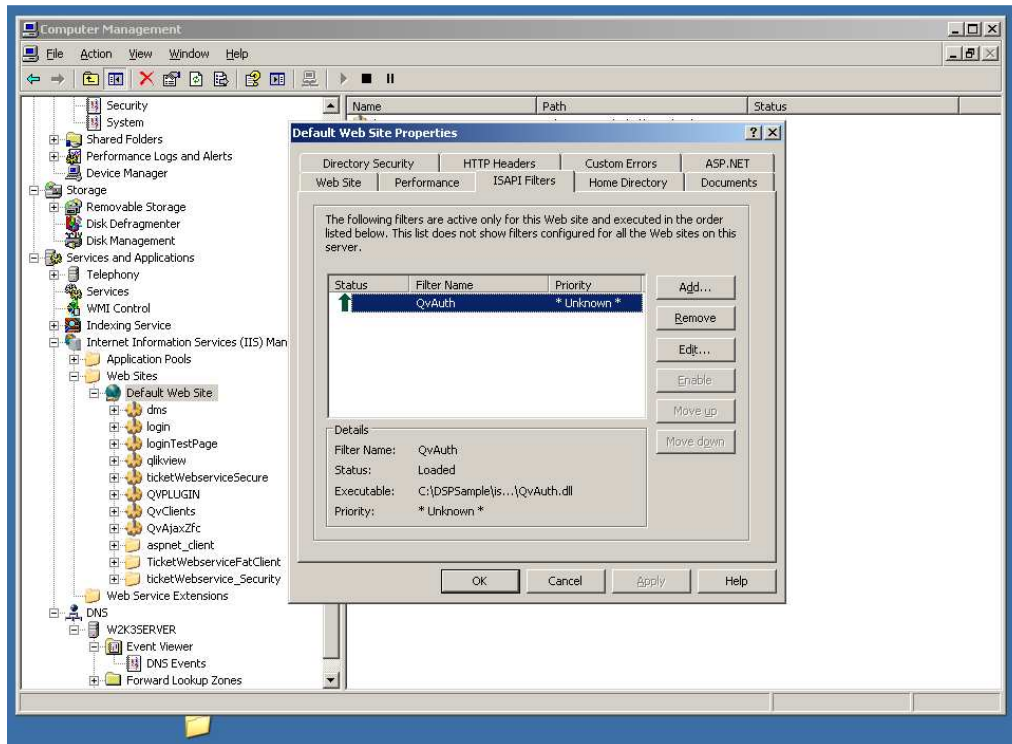
<http://localhost/login/> and the Accesspoint is at <http://localhost/qlikview/index.htm>

2. If your Accesspoint is running on a different URL, edit *web.config* for the logon site. Change the "APLocation" key.



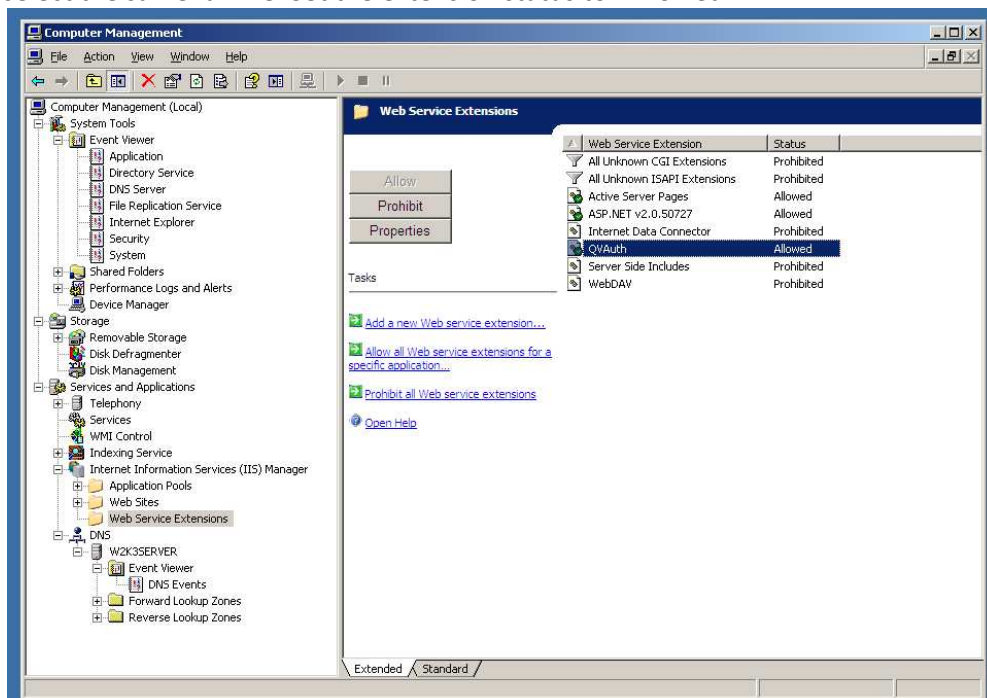
Isapi-filter

For 32 bit versions select the file \isapifilter\x86\QvAuth.dll. For 64 bit versions select the file \isapifilter\x64QvAuth.dll. Start the IIS Manager.



2. Select „Properties“ for the default website. Go to the ISAPI Filters tab and add QvAuth.dll. Name it appropriately. Click ok.

3. This step applies only to IIS version 6. Go to Web Service Extension. Right-click and select” Add New Web Service Extension... “. Set the extension status to something appropriate. Click Add and select the same .dll file. Set the extension status to “Allowed”.



Test Example

Go to <http://localhost/login/>. Enter username “username” and click “Logon”. The logon page now redirects to the Accesspoint and puts the username in a cookie. ISAPI-filter puts in the HTTP-Header field “QVUser”. The Accesspoint then shows only the applications the user “username” is authorized to see.

