Integrating Qlikview in Java based web applications

To integrate qlikview files in third party applications we need a qlikview webserver which hosts the qlikview files.

Steps to install qlikview Server

Create an windows account with admin privileges and use this account while installing qlikview server. Post installation start all qlikview services.

Download latest/required qlikview sever from http://app.demo.qlikview.com and install qlikview server by following below steps



Please select your country in the next step

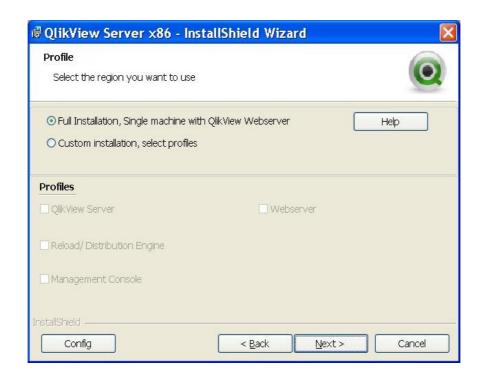


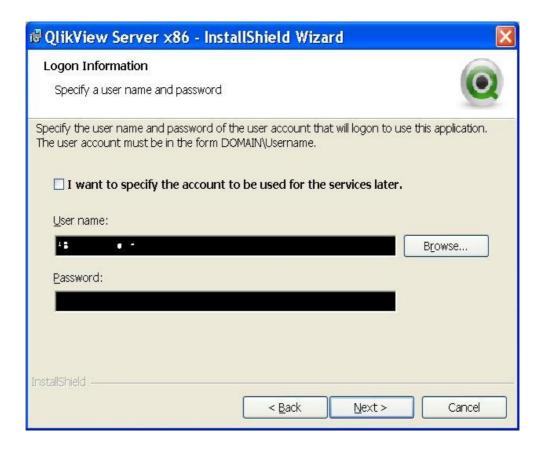


Enter user name and Organization Name

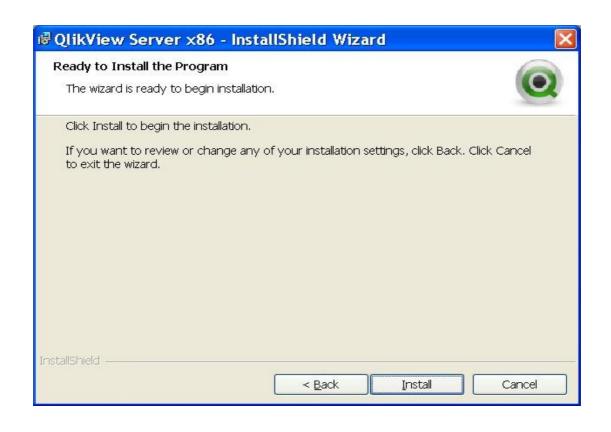






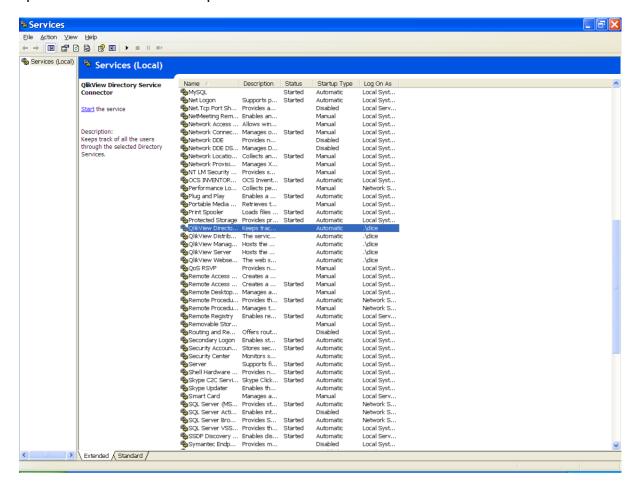


Enter the windows admin user credentials (which was created earlear)



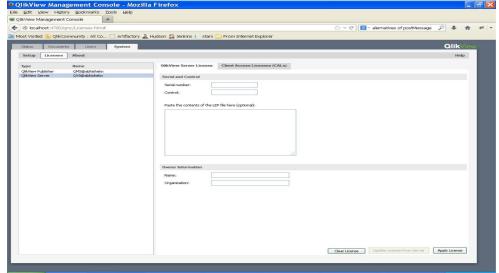


open services.msc and start all qlikview services as shown below.

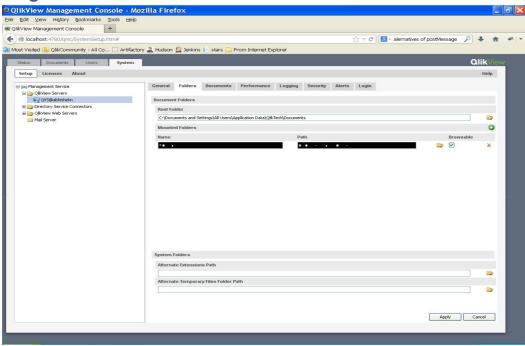


Applying Qlikview sever Licence

Now open qlikview management console and navigate to system > Licences > Qlikview server and apply qlikview server licence.

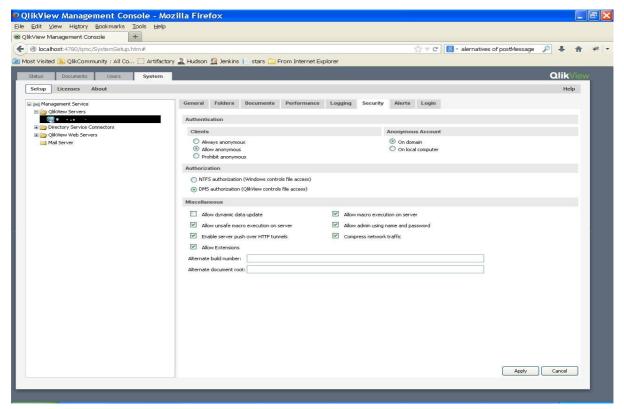


Creating a mount folder



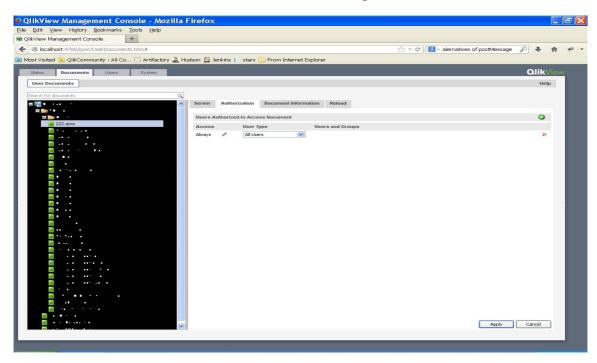
Seting the authorization mode to DMS

Navigate to security tab and set authorization to DMS authentication mode.



Authorizing users to access documents

This should be done at document level as shown below. Navigate to Documents Tab and click on



appropriate document and Give permision to all users as you application is already autthehorizing the users

Steps to configure web ticketing

Open Application Data hidden folder and in that open QlikTech\WebServer in that config.xml and configure trusted IPs. These trusted IP's are IP addresses of the client who are accessing the qlikview files and also include sever IP address if you want to test web ticketing in that machine as shown below.

```
<GetWebTicket url="/QvAjaxZfc/GetWebTicket.aspx">
```

- <TrustedIP>127.0.0.1</TrustedIP>
- <TrustedIP>10.113.57.100</TrustedIP>
- </GetWebTicket>

Program to Generate web Ticket

```
import java.io.OutputStreamWriter;
import java.net.HttpURLConnection;
import java.net.URL;
import javax.xml.parsers.DocumentBuilder;
import javax.xml.parsers.DocumentBuilderFactory;
import org.w3c.dom.Document;
```

```
public class TestWebTicket {
public static void main(String[] args) {
            //this URL is qlikview accesspoint url after you open a
specific document
            String serverURL="http://10.113.59.101/QvAJAXZfc/opendoc.htm?
document=Mount/CFO.gvw";
           URL qlikViewUrl = new URL( serverURL.substring( 0,
serverURL.indexOf( "/QvAJAXZfc/" ) ) + "/QvAJAXZfc/GetWebTicket.aspx" );
            System.out.println("DICE Web Ticket URL: " + qlikViewUrl);
            HttpURLConnection qlikViewUrlConn = (HttpURLConnection)
qlikViewUrl.openConnection();
            qlikViewUrlConn.setRequestMethod( "POST" );
             //Logged in User name
            String diceUserId = "test";
            qlikViewUrlConn.setDoOutput( true );
            qlikViewUrlConn.setUseCaches( false );
           qlikViewUrlConn.setRequestProperty( "Content-Type", "text/xml;
charset=utf-8" );
           String data = "<Global method=\"GetWebTicket\"><UserId>" +
diceUserId + "</UserId></Global>" ;
            qlikViewUrlConn.setRequestProperty("Content-length",
data.length()+"");
            System.out.println("DICE Web Ticket URL is requested for the
user id: " + diceUserId);
           OutputStreamWriter wr = new
OutputStreamWriter( qlikViewUrlConn.getOutputStream() );
            wr.write( data );
            wr.flush();
            DocumentBuilder documentBuilder =
DocumentBuilderFactory.newInstance().newDocumentBuilder();
           Document document =
documentBuilder.parse( qlikViewUrlConn.getInputStream() );
            String ticket = null;
            if ( document.getDocumentElement().getFirstChild() != null &&
document.getDocumentElement().getFirstChild().getFirstChild() != null )
                  ticket =
document.getDocumentElement().getFirstChild().getFirstChild().getNodeValue(
);
            System.out.println("The Web Ticket received for the user - '" +
diceUserId + "' is : " + ticket);
            String url = serverURL.substring( 0,
serverURL.indexOf( "/QvAJAXZfc/" ) ) + "/QvAJAXZfc/Authenticate.aspx?
type=html&webticket=" +
            ticket + "&try=" + serverURL;
            System.out.println(url);
      catch ( Exception e )
           throw new RuntimeException( e );
}
```

}

Please find the above java program. In this program we are passing the logged in username to get the web ticket. Update the qlikview server URL that is nothing but the complete path of a document opened in qlikview access point.

Place this URL in an iframe to integrate in to your application.

In case of GXT we have coded as below

```
private Element iFrameDiceDashboard;
iFrameDiceDashboard = DOM.createIFrame();
iframeNameDD = "diceView" + new Date().getTime();
iFrameDiceDashboard.setId( iframeNameDD );
iFrameDiceDashboard.setAttribute( "name", iframeNameDD );
iFrameDiceDashboard.setAttribute( "frameborder", "0" );
iFrameDiceDashboard.setAttribute( "src", dashBoardUrl );
iFrameDiceDashboard.setAttribute( "width", "100%" );
iFrameDiceDashboard.setAttribute( "height", "100%" );
```

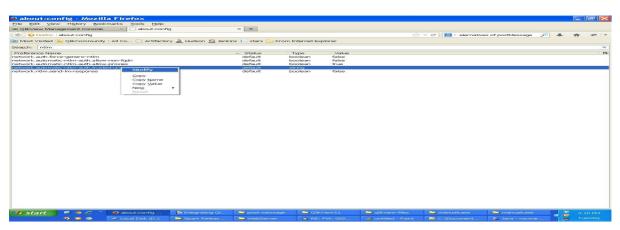
Configuring trusted IP in the browser.

In the clients browser configure the qlikview server IP address as trusted IP address otherwise you will get a popup asking username and password.

Steps to configure trusted IP

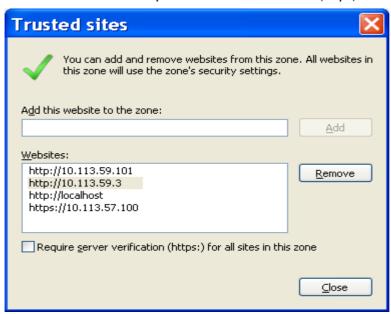
In case of FireFox

Type about:config in the address bar and modify **network.automatic-ntlm-auth.trusted-uris** and add qlikview sevrer ip addressas shown below

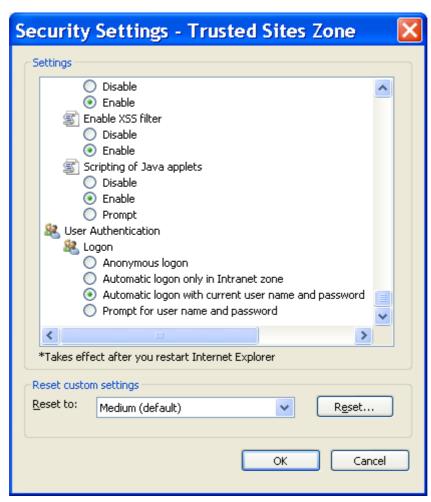


In Case of internet Explorer

Open IE and press Alt+T and go to Internet Options > Security > trusted Sites > Sites and add qlikview sevrer URL. Uncheck required server authentication (https) as shown below



Then click on custom level and go to user authentication and select automatic logon with current user name and password as shown below



Issues faced

1) Webticket is null

When we forget to include the IP address of the client in trusted IP's of config.xml then we get null as returned value instead of webticket refer steps to configure web ticketing .

2) Popup asking user credentials in Browser

We forgot to configure qlikview server ip address as trusted IP in clients browser , refer setps to configure trusted ip

3) Failed to open document

When we forget to give permission to all users at document level in qlikview management console we will face this issue.

4) File not found

The required document that user is asking for is not there in mount folder of qlikview server.

5) <u>Unable to start glikview services</u>

There are two possibilities

- a) The user under which qlikview services are running is no longer administrator of the system
- b) The user under which qlikview services are running has changed his system password. In this case go to services and select the service and right click and open properties and go to log on tab and change the user password and apply. Now you can start the services