



# Harmonic (Rhozet) WFS WebGUI AddOn

## About

Job Status	
Active:	Queued:
0	0
Fatal:	Completed:
145	1013

This product is an AddOn to Harmonic's WFS transcoding farm management service. It adds a GUI that can be accessed either via a standard Web-Browser or via a Microsoft Windows Gadget that resides on the operators desktop.

It gives access to all information and controls that are relevant to transcoding farm operators. Different access levels based on a user/group/role definition can be configured. A login dialogue grants access and manages the right options to be available. This said "customers" to the transcoding farm can be limited to watching the status while only operators can change priorities but just supervisors can stop and delete a job within Harmonic's ProMedia WFS.

Controls

- List Options      Job Options -      Running      Queued      Done      Failed

Name	Created	Qud	Status	Progress	Priority	Starttime	FetcherId	Preview
Package for OTT [N2 Mon Dec 06 2013 15:23:29.71-02:45pm]			Completed	5		Fri Dec 06 2013 15:23:29.71-02:45pm	MOBILE-MANAGER	
System Maintenance Tue Dec 03 2013 13:11:06.98-02:45-477			Completed	4		Fri Dec 06 2013 13:11:06.98-02:45-477	MOBILE-MANAGER	
System Maintenance Tue Dec 03 2013 13:11:06.98-02:45-478			Completed	4		Tue Dec 03 2013 13:11:06.98-02:45-478	MOBILE-MANAGER	
Package for OTT [N2 Mon Dec 07 2013 23:24:16]-478-479			Completed	5		Mon Dec 09 2013 13:23:49.169-01:46-479	MOBILE-MANAGER	
Package for OTT [N2 Mon Dec 07 2013 23:49:16]-479-479			Completed	5		Mon Dec 09 2013 13:23:49.169-01:46-479	MOBILE-MANAGER	
Package for OTT [N2 Mon Dec 07 2013 23:49:16]-479-479			Completed	5		Mon Dec 09 2013 13:23:49.169-01:46-479	MOBILE-MANAGER	
Package for OTT [N2 Mon Dec 07 2013 23:31e5e9-479-479]			Completed	5		Mon Dec 09 2013 13:23:31e5e9-479-479	MOBILE-MANAGER	
Package for OTT [N2 Mon Dec 07 2013 23:31e5e9-479-479]			Completed	5		Mon Dec 09 2013 13:23:31e5e9-479-479	MOBILE-MANAGER	
Package for OTT [N2 Mon Dec 07 2013 23:31e5e9-479-479]			Completed	5		Mon Dec 09 2013 13:23:31e5e9-479-479	MOBILE-MANAGER	
System Maintenance Fri Nov 29 2013 15:19:16.536-02:45-480			Completed	4		Tue Nov 26 2013 00:48:16.536-02:45-480	MOBILE-MANAGER	
System Maintenance Tue Nov 26 2013 00:48:16.536-02:45-480			Completed	4		Tue Nov 26 2013 00:48:16.536-02:45-480	MOBILE-MANAGER	
System Maintenance Tue Nov 26 2013 00:48:16.536-02:45-480			Completed	4		Tue Nov 26 2013 00:48:16.536-02:45-480	MOBILE-MANAGER	
Package for OTT [N2 Mon Nov 25 2013 13:08:240]-480-480			Completed	5		Mon Nov 25 2013 13:08:240	MOBILE-MANAGER	
Package for OTT [N2 Mon Nov 25 2013 13:08:240]-480-480			Completed	5		Mon Nov 25 2013 13:08:240	MOBILE-MANAGER	
Transcode for OTT [N2 Mon Nov 25 2013 13:08:240]-480-480			Completed	5		Mon Nov 25 2013 13:08:240	MOBILE-MANAGER	
Transcode for OTT [N2 Mon Nov 25 2013 13:08:240]-480-480			Completed	5		Mon Nov 25 2013 13:08:240	MOBILE-MANAGER	
Package for OTT [N2 Mon Nov 25 2013 11:94:4bcfa-5d6-41ea]			Completed	5		Mon Nov 25 2013 11:94:4bcfa-5d6-41ea	MOBILE-MANAGER	
Package for OTT [N2 Mon Nov 25 2013 11:b6292b5-6c51-431c]			Completed	5		Mon Nov 25 2013 11:b6292b5-6c51-431c	MOBILE-MANAGER	
Transcode for OTT [N2 Mon Nov 25 2013 11:0fcab54-6d5-4d23]			Completed	5		Fri Dec 06 2013 15:14:01	MOBILE-MANAGER	
Transcode for OTT [N2 Mon Nov 25 2013 11:d2c279a5-9095-4bf0]			Completed	5		Mon Nov 25 2013 11:d2c279a5-9095-4bf0	MOBILE-MANAGER	
Job [11:22-13,14:30] Fri Nov 22 2013 14:13:3ac9b8a-7033-4b34			Completed	5		Mon Nov 25 2013 12:14:13 V1 API Client	MOBILE-MANAGER	
Test from and to NAS Fri Nov 22 2013 13:43:10f568-57-f4fe-4f47-			Paused	4		Mon Dec 02 2013 13:43:10f568-57-f4fe-4f47-	MOBILE-MANAGER	
Test from and to NAS Fri Nov 22 2013 13:43:10f568-57-f4fe-4f47-			Queued	4		Fri Nov 22 2013 13:43:10f568-57-f4fe-4f47-	MOBILE-MANAGER	

Task List

Machine	Name	Type	Progress	Status	Time Started
MOBILE-MANAGER(CarbonCoder)	Video 24x28 153 820 Audio 48 Transcode		100%	Completed	12/02/13 23:51:15
MOBILE-MANAGER(CarbonCoder)	Video 512x288 372 830 Audio 48 Transcode		100%	Completed	12/02/13 23:49:39
MOBILE-MANAGER(CarbonCoder)	Video 410x248 299 822 Audio 48 Transcode		100%	Completed	12/02/13 23:49:33
MOBILE-MANAGER(CarbonCoder)	Video 320x180 240 821 Audio 48 Transcode		100%	Completed	12/02/13 23:47:42
MOBILE-MANAGER(CarbonCoder)	Video 68x284 577 M30 Audio 48 Transcode		100%	Completed	12/02/13 23:47:35
MOBILE-MANAGER(CarbonCoder)	Video 112x144 124 B12 Audio 480 Transcode		100%	Completed	12/02/13 23:46:00
MOBILE-MANAGER(Notifier)	Report		100%	Completed	
MOBILE-MANAGER(Connector)	Connector : Transform Task Set : NoopTask		100%	Completed	

Task Properties

Property	Value
Target File #1	\Mobile-NAS\workspace\output\elementary_output\V24_Trailer-AlfaRomeoAdvantageRace - Copy_512.ts
Error	MOBILE-AGENT-1(CarbonCoder) : One or multiple sources from the project file could not be loaded. [CR:0x00020013]
Error	MOBILE-AGENT-1(CarbonCoder) : One or multiple sources from the project file could not be loaded. [CR:0x00020013]
Target File (base)	\Mobile-NAS\workspace\output\elementary_output\V24_Trailer-AlfaRomeoAdvantageRace - Copy_512
Target Path	\Mobile-NAS\workspace\output\elementary_output
FetcherAddress	192.168.0.120
Task GUID	{87b65ccf-207-4fb2-8bf2-099527060364}
Rate of RT	0.4912543278814
Task Duration	0:00:00:59
Time Completed	12/02/13 23:50:38
Time Started	12/02/13 23:49:39
Time Submitted	12/02/13 23:49:05
Transcode Preset	Vide 512x288 372 830 Audio 48000 16 2.56 (ce00002f-63b7-4431-9114-56be36660afe)
Transcode Type	H.264 Exporter (df227069-514d-4127-bb25-bf31d1e732ba)
Source Duration	00:00:29
Source File	\Mobile-NAS\workspace\input\Transcode for OTT\N24_Trailer-AlfaRomeoAdvantageRace - Copy.avi
Presetsuid	ce00002f-63b7-4431-9114-56be36660afe
Job XML	{30759d40-9b7-4662-b4de-3cc986197677}

Errors

Type	Task Name	Message
Error	Video 512x288 372 830 Audio 48000 16 2.56	MOBILE-AGENT-2(CarbonCoder) : One or multiple sources from the project file could not be loaded. [CR:0x00020013]
Error	Video 512x288 372 830 Audio 48000 16 2.56	MOBILE-AGENT-1(CarbonCoder) : One or multiple sources from the project file could not be loaded. [CR:0x00020013]
Error	Video 440x248 299 822 Audio 48000 16 2.48	MOBILE-AGENT-1(CarbonCoder) : One or multiple sources from the project file could not be loaded. [CR:0x00020013]
Error	Video 440x248 299 822 Audio 48000 16 2.48	MOBILE-AGENT-2(CarbonCoder) : One or multiple sources from the project file could not be loaded. [CR:0x00020013]
Error	Video 682x384 577 M30 Audio 48000 16 2.56	MOBILE-AGENT-2(CarbonCoder) : One or multiple sources from the project file could not be loaded. [CR:0x00020013]
Error	Video 682x384 577 M30 Audio 48000 16 2.56	MOBILE-AGENT-1(CarbonCoder) : One or multiple sources from the project file could not be loaded. [CR:0x00020013]
Error	Video 112x64 124 B12 Audio 48000 16 2.24	MOBILE-AGENT-1(CarbonCoder) : One or multiple sources from the project file could not be loaded. [CR:0x00020013]
Error	Video 112x64 124 B12 Audio 48000 16 2.24	MOBILE-AGENT-2(CarbonCoder) : One or multiple sources from the project file could not be loaded. [CR:0x00020013]



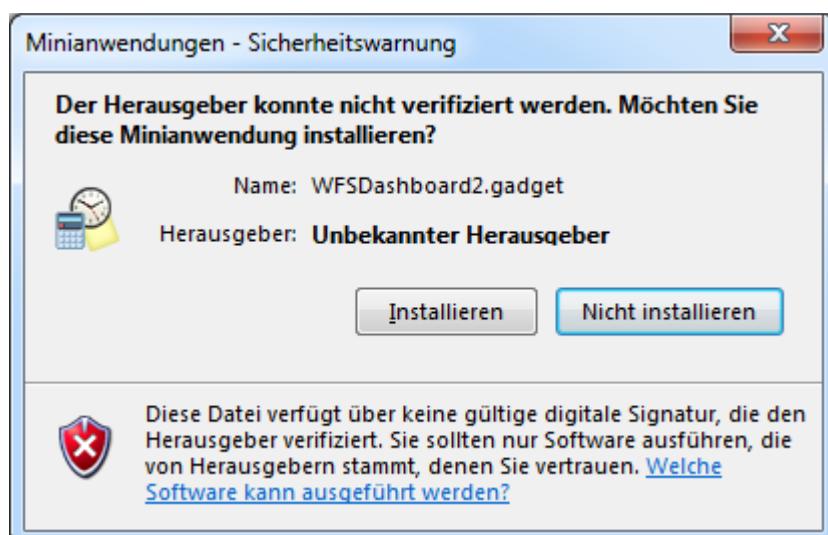
# Installation – General

The WFS WebGUI gets delivered as a) Windows Desktop Gadget or as b) Webserver Application. The Proxy feature gets delivered as Tomcat Webserver Application in any case and is mandatory for the WebGUI to get access to the data from Harmonics WFS Controller.

- The installation of the **Windows Desktop Gadget** happens via a double click or right mouse button click + open option.

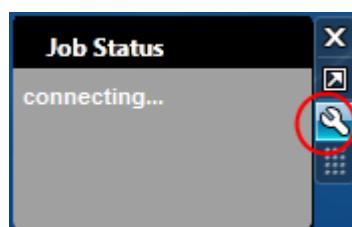


A pop up dialogue asks to confirm the installation.

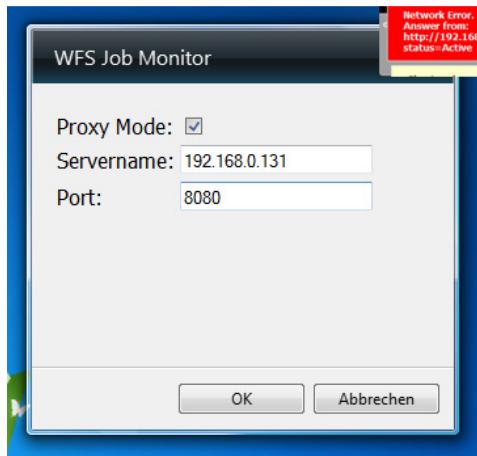


Immediately afterwards a new Gadget shows up on the Windows desktop.

The tool symbol gives access to the **configuration** dialogue.



Please insert the IP Adress of either the WFS Controller or x-dream-media's WFS Proxy (see below).



A successful configuration will result the Gadget shows the number of queued, running, successful and failed jobs. The arrow symbol gives access to the fully featured job monitor GUI.



- b) The installation of the WebGUI requires a pre-installed and -configured Apache Webserver + a Tomcat Java Application server. This manual does not show how this is done. We do refer to the documentation from the Apache and Tomcat community.

The installation of the WebGUI happens fully automatically after copying the Tomcat Application file

Rhozet.JobManager.JMServices.war 16.12.2013 13:40 WAR-Datei 996 KB

into Tomcats Application folder:

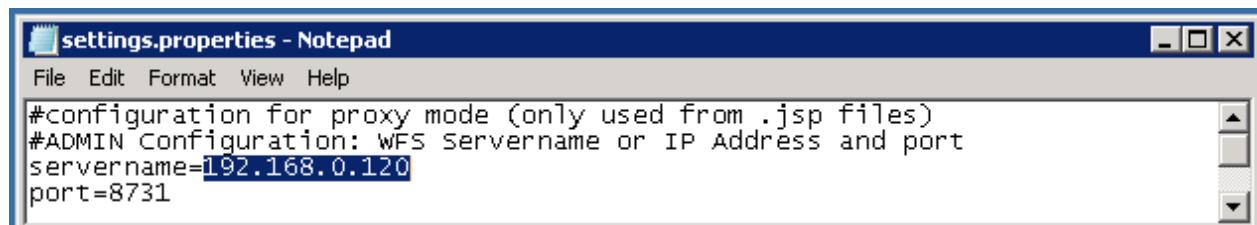
A screenshot of a Windows file explorer window. The left pane shows the directory structure of the Tomcat installation, with "webapps" being the active folder. The right pane is a detailed list of files and folders within "webapps". Two items are circled in red: "Rhozet.JobManager.JMServices" (a folder) and "Rhozet.JobManager.JMServices.war" (a WAR file).

Name	Date modified	Type	Size
docs	11/12/2013 5:28 PM	File folder	
examples	11/19/2013 3:16 PM	File folder	
host-manager	11/12/2013 5:28 PM	File folder	
manager	11/12/2013 5:28 PM	File folder	
Rhozet.JobManager.JMServices	12/16/2013 3:02 PM	File folder	
ROOT	11/12/2013 5:28 PM	File folder	
WFS_GUI_operator	11/29/2013 4:01 PM	File folder	
WFS_GUI_supervisor	12/3/2013 2:49 AM	File folder	
WFS_GUI_viewer	12/3/2013 2:50 AM	File folder	
Rhozet.JobManager.JMServices.war	12/16/2013 1:40 PM	WAR File	996 KB

As result the Application files are being unpackaged.

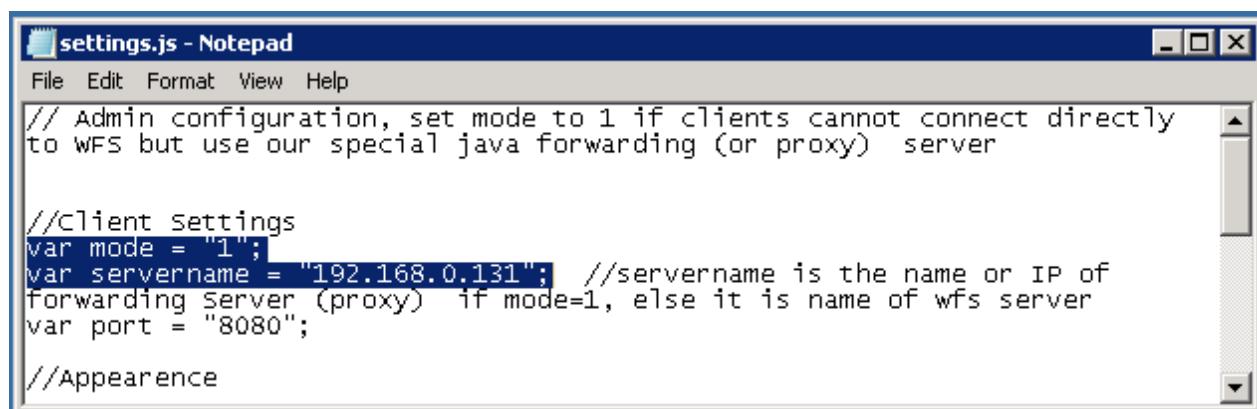
The **configuration** happens via two XML files:

“**settings.properties**” file defines the behaviour of the proxy feature. The relevant parameter to set is the IP Adress of the WFS Controller.



```
#configuration for proxy mode (only used from .jsp files)
#ADMIN Configuration: wFS Servername or IP Address and port
servername=192.168.0.120
port=8731
```

“**settings.js**” file defines via what IP address or URL the GUI connects to the WFS Controller. This can be the WFS Controller. In this case the “mode” needs to be set to “0”. But usually it should be the Tomcat proxy service from above. In this case the “mode” needs to be set to “1” and the “servername” set to the WFS Controller IP address or URL.

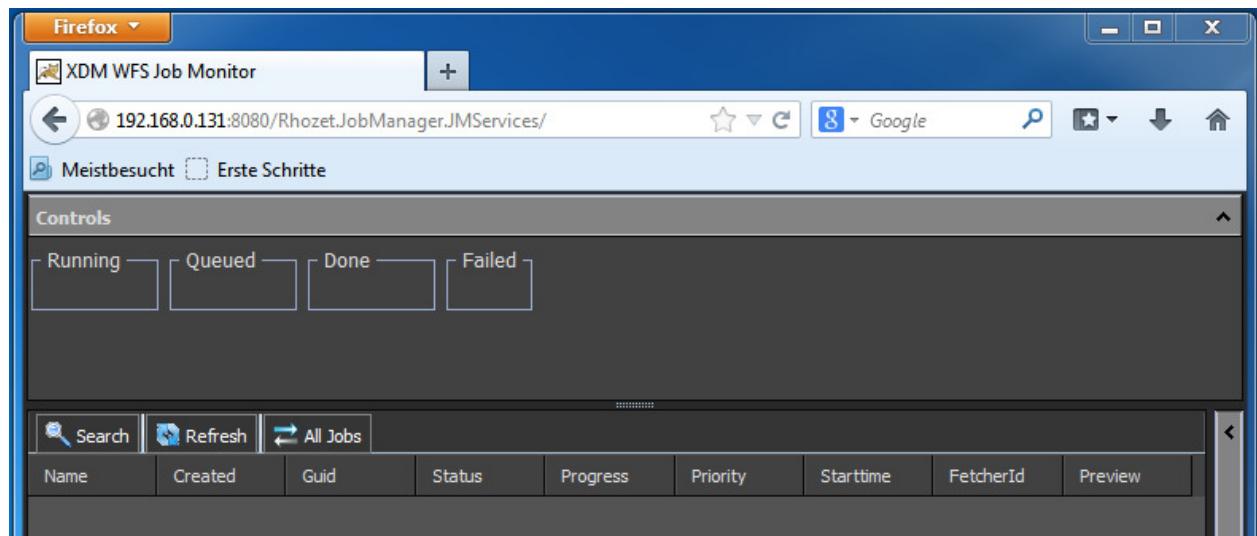


```
// Admin configuration, set mode to 1 if clients cannot connect directly
// to wFS but use our special java forwarding (or proxy) server

//client settings
var mode = "1";
var servername = "192.168.0.131"; //servername is the name or IP of
//forwarding server (proxy) if mode=1, else it is name of wfs server
var port = "8080";

//Appearance
```

Afterwards the WebGUI can be access via it's IP address or URL.





# Managing User Control Restrictions

"settings.js" file defines what controls are available for the user by a right click on a particular job.

A screenshot of a Windows Notepad window titled "settings.js - Notepad". The window contains JavaScript code defining user control settings. It includes XML definitions for both "Job Control" and "restricted" roles, along with a comment indicating the end of admin configuration.

```
var settings_showInitial = 500;

//User controls. Add or delete "item" tags as necessary # full menu xml
string: "<?xml version='1.0'?><menu><item id='controls' text='Job
Control'><item id='priority' text='Set Priority'><item id='1'
text='1' /><item id='2' text='2' /><item id='3' text='3' /><item id='4'
text='4' /><item id='5' text='5' /><item id='6' text='6' /><item id='7'
text='7' /><item id='8' text='8' /><item id='9' text='9' /><item id='10'
text='10' /></item><item id='requeue' text='Requeue/Resume' /><item
id='pause' text='Pause' /><item id='abort' text='Abort' /></item></menu>" // minimal menuxml: <?xml version='1.0'?><menu><item id='controls'
text='restricted'></item></menu>"

var userControlsMenuXML = "<?xml version='1.0'?><menu><item id='controls'
text='restricted'></item></menu>";

//END of admin configuration
```

The minimal set (no controls) for a "**viewer**" role is defined by the following definition:

```
var userControlsMenuXML = "<?xml version='1.0'?><menu><item id='controls'
text='restricted'></item></menu>";
```

For an "**operator**" role we do recommend the following settings:

```
var userControlsMenuXML = "<?xml version='1.0'?><menu><item id='controls'
text='Job Control'><item id='priority' text='Set Priority'><item id='1'
text='1' /><item id='2' text='2' /><item id='3' text='3' /><item id='4'
text='4' /><item id='5' text='5' /><item id='6' text='6' /><item id='7'
text='7' /><item id='8' text='8' /><item id='9' text='9' /><item id='10'
text='10' /></item><item id='requeue' text='Requeue/Resume' /></item></menu>";
```



And finally for a “**supervisor**” role the complete control set is made available via the following settings:

```
var userControlsMenuXML = "<?xml version='1.0'?><menu><item id='controls' text='Job Control'><item id='priority' text='Set Priority'><item id='1' text='1' /><item id='2' text='2' /><item id='3' text='3' /><item id='4' text='4' /><item id='5' text='5' /><item id='6' text='6' /><item id='7' text='7' /><item id='8' text='8' /><item id='9' text='9' /><item id='10' text='10' /></item><item id='requeue' text='Requeue/Resume' /><item id='pause' text='Pause' /><item id='abort' text='Abort' /></item></menu>";
```

A screenshot of a web-based application interface. At the top, there are three buttons: 'Search' (with a magnifying glass icon), 'Refresh' (with a circular arrow icon), and 'All Jobs' (with a double arrow icon). Below this is a table with three columns: 'Name', 'Created', and 'Guid'. The table lists ten job entries. A context menu is open over the first entry, showing options: 'Job Control' (which is further expanded to 'Set Priority', 'Requeue/Resume', and 'Pause'), 'Abort', and 'Delete'.

Name	Created	Guid
Transcode for OTT [N24_...]	Thu Dec 12 2013 15:40:19	60561b8c-5e9f-454a-9b3-3cf6-474d
Transcode for OTT [N24_...]	Thu Dec 12 2013 15:40:19	60561b8c-5e9f-454a-9b3-3cf6-474d
Test from and to SAN [N24_I...]		d75-6d93-4726
System Maintenance		215-1fae-4cef-2f2-060a-4244
Test from and to NAS [N24_I...]	Thu Dec 12 2013 15:43:45	4
System Maintenance	Wed Dec 18 2013 15:47:10	108-bd11-4df1
Test from and to NAS [N24_I...]	Fri Dec 13 2013 14:28:33	938-e6e4-417f
Package for OTT [N24_Tr...]	Fri Dec 13 2013 14:26:52	f02-98ec-4092
Package for OTT [N24_Tr...]	Fri Dec 13 2013 14:22:58	b8b-83b9-4a02
Transcode for OTT [N24_Tr...]	Fri Dec 13 2013 11:00:05	5af-097c-4021
System Maintenance		337-6aef-441a
Test from and to SAN [N24_T...]	Thu Dec 12 2013 16:16:01	af8-e4c2-4df7
Package for OTT [N24_I...]	Thu Dec 12 2013 15:46:00	662-ff09-4716
Package for OTT [N24_T...]	Thu Dec 12 2013 15:43:59	9021aba1-3349-479b

## Managing Roles

Offering **different roles** at the same point in time is achieved by copying the WebGUI as often as needed to allow access. For easiness of access we recommend to rename the copies to names according to the roles.

Note: The WebGUI folder includes the WebGUI + the proxy service. But for easiness of rollout and cause of the small number of files we do recommend to copy the complete folder.

In our example with 3 roles for “viewer”, “operator” and “supervisor” as shown above we got the following folder structure:

A screenshot of a Windows file explorer window. The left pane shows a tree view of the 'webapps' directory under 'tomcat'. The right pane is a detailed list of files and folders. The list includes: 'old' (File folder, 12/18/2013 3:38 PM), 'Rhozet.JobManager.JMServices' (File folder, 12/18/2013 3:28 PM), 'ROOT' (File folder, 11/12/2013 5:28 PM), 'WFS\_GUI\_operator' (File folder, 12/18/2013 3:40 PM), 'WFS\_GUI\_supervisor' (File folder, 12/18/2013 3:41 PM), 'WFS\_GUI\_viewer' (File folder, 12/18/2013 3:40 PM), and 'Rhozet.JobManager.JMServices.war' (WAR File, 12/18/2013 3:19 PM).

	Name	Date modified	Type
	old	12/18/2013 3:38 PM	File folder
	Rhozet.JobManager.JMServices	12/18/2013 3:28 PM	File folder
	ROOT	11/12/2013 5:28 PM	File folder
	WFS_GUI_operator	12/18/2013 3:40 PM	File folder
	WFS_GUI_supervisor	12/18/2013 3:41 PM	File folder
	WFS_GUI_viewer	12/18/2013 3:40 PM	File folder
	Rhozet.JobManager.JMServices.war	12/18/2013 3:19 PM	WAR File

Within the folders “WFS\_GUI\_viewer”, “WFS\_GUI\_operator” and “WFS\_GUI\_supervisor” please adjust the available controls as shown earlier.

The three different GUIs are now accessible via the following URLs:

[http://\[servername or IP\]:8080/WFS\\_GUI\\_viewer/](http://[servername or IP]:8080/WFS_GUI_viewer/)

[http://\[servername or IP\]:8080/WFS\\_GUI\\_operator/](http://[servername or IP]:8080/WFS_GUI_operator/)

[http://\[servername or IP\]:8080/WFS\\_GUI\\_supervisor/](http://[servername or IP]:8080/WFS_GUI_supervisor/)

## Managing Access Restrictions

So far the users can access the role based GUIs without any password protection. The access restriction can be added via Tomcats user management.

Two files are relevant to do so: “tomcat-users.xml” and “web.xml”. They can be found in the “conf” folder within the tomcat installation folder.

A screenshot of a Windows file explorer window. The left pane shows a tree view of the 'conf' directory under 'tomcat'. The right pane is a detailed list of files. The list includes: 'Catalina' (File folder), 'catalina.policy' (POLICY File, 7/2/2013 9:59 AM), 'catalina.properties' (PROPERTIES File, 7/2/2013 9:59 AM), 'context.xml' (XML Document, 7/2/2013 9:59 AM), 'logging.properties' (PROPERTIES File, 7/2/2013 9:59 AM), 'server.xml' (XML Document, 7/2/2013 9:59 AM), 'tomcat-users.xml' (XML Document, 11/21/2013 7:31 PM), and 'web.xml' (XML Document, 11/21/2013 7:53 PM).

	Name	Date modified	Type
	Catalina	11/12/2013 6:07 PM	File folder
	catalina.policy	7/2/2013 9:59 AM	POLICY File
	catalina.properties	7/2/2013 9:59 AM	PROPERTIES File
	context.xml	7/2/2013 9:59 AM	XML Document
	logging.properties	7/2/2013 9:59 AM	PROPERTIES File
	server.xml	7/2/2013 9:59 AM	XML Document
	tomcat-users.xml	11/21/2013 7:31 PM	XML Document
	web.xml	11/21/2013 7:53 PM	XML Document



The “tomcat-users.xml” file defines the roles, usernames and passwords as follows:

A screenshot of a Windows Notepad window titled "tomcat-users.xml - Notepad". The window shows XML code defining users and their roles. The code includes a header note about limitations under the license, followed by definitions for three roles: "viewer", "operator", and "supervisor", each associated with a user named "password".

```
Limitations under the License.  
-->  
<tomcat-users>  
    <role rolename="viewer"/>  
    <user username="viewer" password="password" roles="viewer"/>  
    <role rolename="operator"/>  
    <user username="operator" password="password" roles="operator"/>  
    <role rolename="supervisor"/>  
    <user username="supervisor" password="password" roles="supervisor"/>  
</tomcat-users>
```

The “web.xml” within the “WEB-INF” folder as subfolder of each “webapps” folder defines the role that may access such folder.

The code on the following page shows the definition of the “supervisor” user.



web.xml - Editor

Datei Bearbeiten Format Ansicht ?

```
<!-- Define a Security Constraint on this Application -->
<security-constraint>
    <web-resource-collection>
        <web-resource-name>WFS HTML interface</web-resource-name>
        <url-pattern>/*</url-pattern>
            <http-method>GET</http-method>
            <http-method>POST</http-method>
    </web-resource-collection>
    <auth-constraint>
        <role-name>supervisor</role-name>
    </auth-constraint>
        <user-data-constraint>
            <!-- transport-guarantee can be CONFIDENTIAL, INTEGRAL, or NONE -->
            <transport-guarantee>NONE</transport-guarantee>
        </user-data-constraint>
    </security-constraint>

    <!-- Define the Login Configuration for this Application -->
    <login-config>
        <auth-method>BASIC</auth-method>
        <realm-name>WFS HTML interface</realm-name>
    </login-config>

    <!-- Security roles referenced by this web application -->
    <security-role>
        <description>
            The role that is required to log in to the WFS HTML interface
        </description>
        <role-name>supervisor</role-name>
    </security-role>
</web-app>
```

# Version

Version 1.1

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