Installation Guide

Apparo Fast Edit

For Microsoft Windows Server

IBM Cognos Analytics

Version 3.3.0.0

Multi Instance

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1 Prior to Installation

Installing Apparo Fast Edit can be done in 1 hour if you prepare your environment.

Please be aware of the following points before starting installation:

1.1 Hardware requirements

- **File system about 1 GB**
- **Main Memory about 2 GB**

1.2 Supported operating systems

- **Windows 2008-2022 (64 bit only)**

1.3 Supported IBM Cognos Analytics versions

- **All IBM Cognos Analytics 11 versions (with Cognos Gateway architecture only)**

1.4 Supported web servers

- **MS Internet Information Server (IIS) version 7.0 and higher**
- **Apache 2.4**
- **IBM Web server (IHS)**

1.5 Supported Java version

- **OpenJDK 11 (already in setup included)**
- **Oracle Java 11**

1.6 Supported security systems

- **All security systems that are currently in use for IBM Cognos Analytics**

1.7 Supported virtual environments

- **VMware ESX, ESXi**
- **VMware Player**
- **VMs of AWS, Azure**

Apparo Fast Edit must be installed using a local Windows administrator account.

The Cognos Analytics Firewall (CAF) is supported too. It is possible to use standard settings or adding host name/domains into the list of valid domains.

IBM Cognos Analytics must be already installed and running.

The IBM Cognos Analytics Gateway must be already installed.

1.8 Installation strategy

Following steps are necessary in this order:

1	Database preparation for Apparo repository
2	Installation and configuration of all Apparo application servers
3	Installation and configuration of Apparo gateway including web server

1.9 Architecture

Possible Apparo Fast Edit architectures:

1	**Single Instance**, your existing IBM Cognos Analytics environment is installed on **one computer only – that's suitable for testing too.** A „Single Instance" is useful for small Cognos environments or test systems.
2	**Multi Instance**, one or more Apparo application servers are installed on one or more hosts. A „Multi Instance" is useful for better performance and high availability.

This document is describing the installation and configuration process for a Multi Instance.

Preparation

1	**Preparation** • Analysing environment • Creation of a **database user** for the Apparo repository
2	**Installation of all Apparo application servers**
3	**Configuration of all Apparo application servers** Configuration using the Apparo Configuration Manager
4	**Creating the Apparo Designer entry in IBM Cognos portal**
5	**Installation of the Apparo gateway**
6	**Configuration of the Apparo gateway** Configuration the web server and the Apparo gateway using the Apparo Configuration Manager
7	**Installing clients**

2.1 Creation of a database user for the Apparo repository

Apparo Fast Edit requires a Database repository. In this repository all of your definitions are stored.

Following databases are supported:

- **Oracle**
- **IBM DB/2 LUW**
- **MS SQL Server**

This database user must be defined before starting the Apparo Fast Edit setup.

You can find a detail description in the document "Installation – creating database user".

Essential grants:

- The database user must be able to create database tables
- A Login with this user must be possible.

3 Installation of all Apparo application servers

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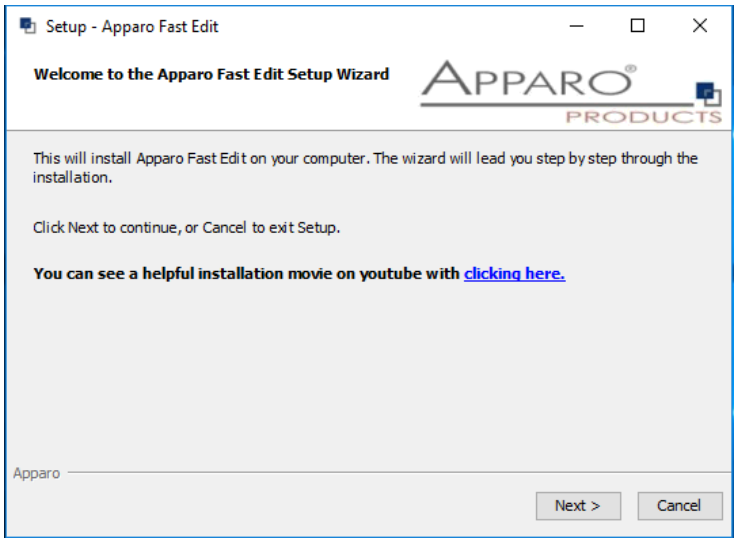
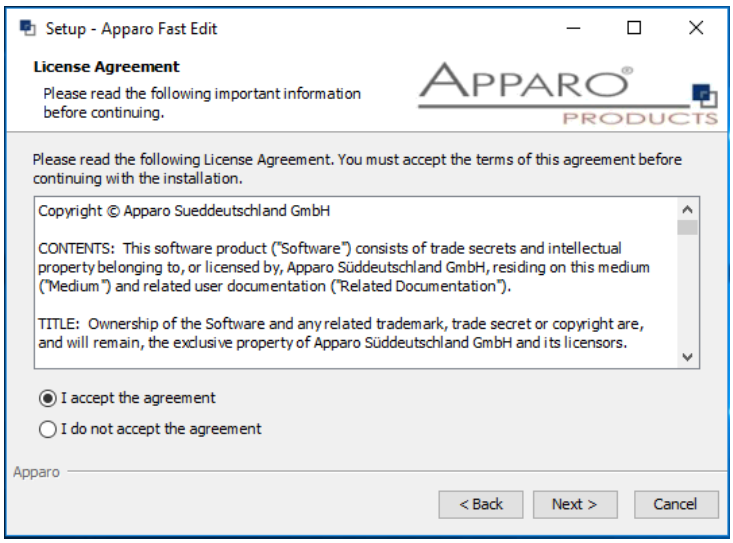
Start the Installation by starting the file

FastEdit3.3.0.x.yyy_windows_tomcat_cognos_analytics.exe



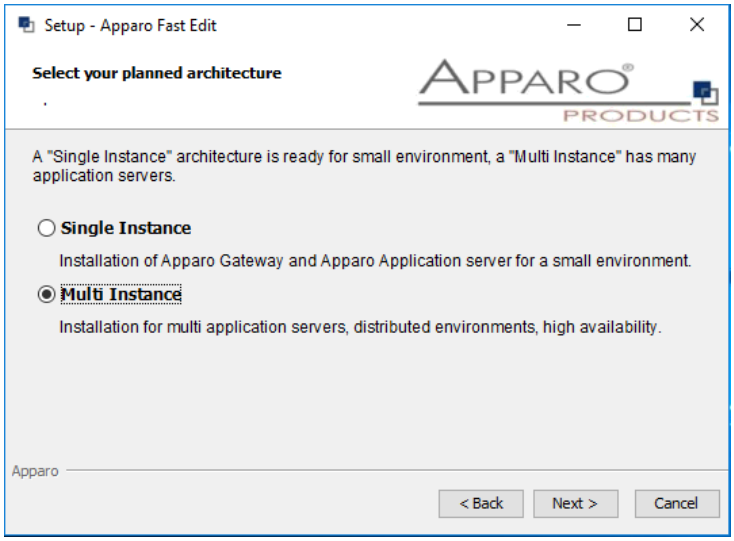
Confirm the beginning of the installation by clicking „**Next**“.

3.1 License agreement

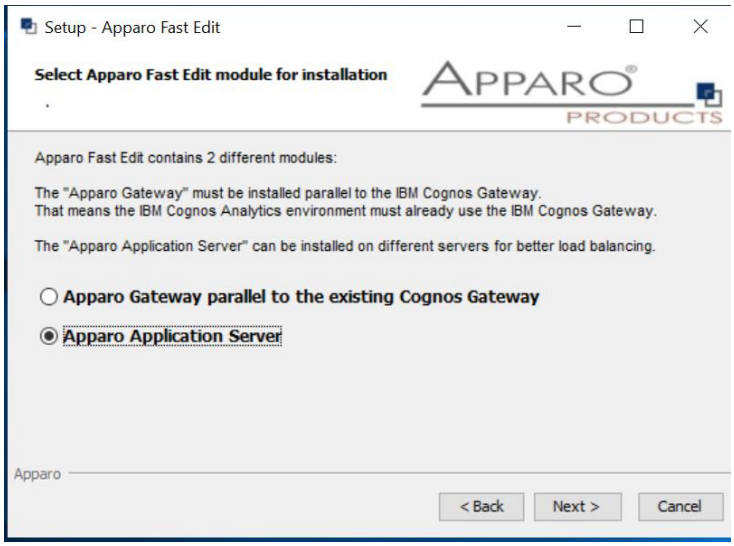


Read and confirm the license agreement by clicking „**Next**“.

3.2 Selecting the architecture

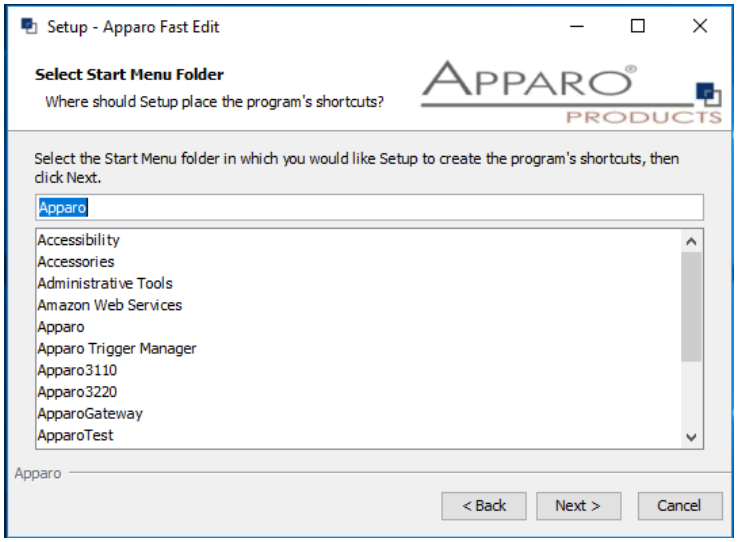


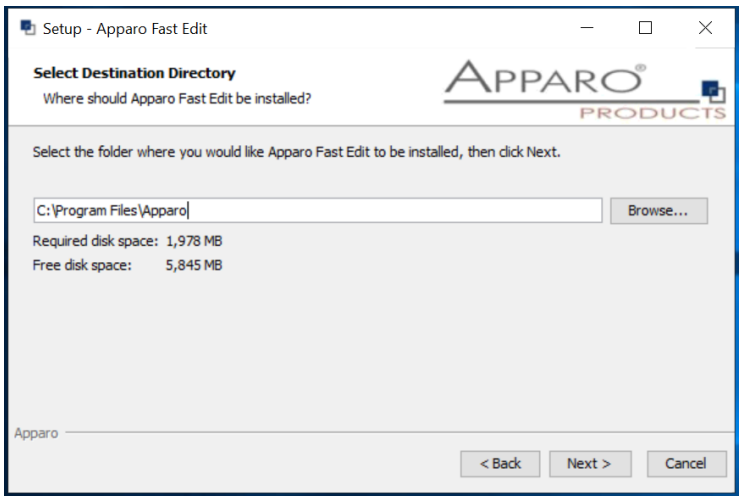
Select "**Multi Instance**" and choose „**Next**>".



Please select "**Apparo Application Server** " and choose „**Next**>".

3.3 Defining the start menu folder and target file directory

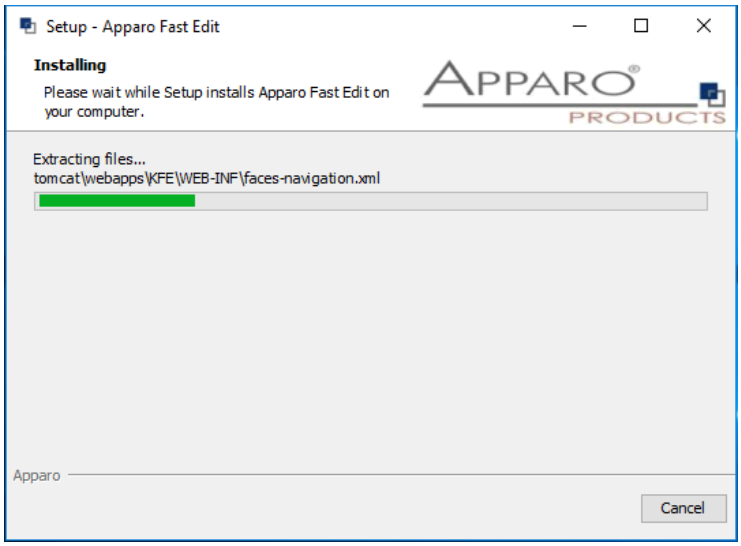




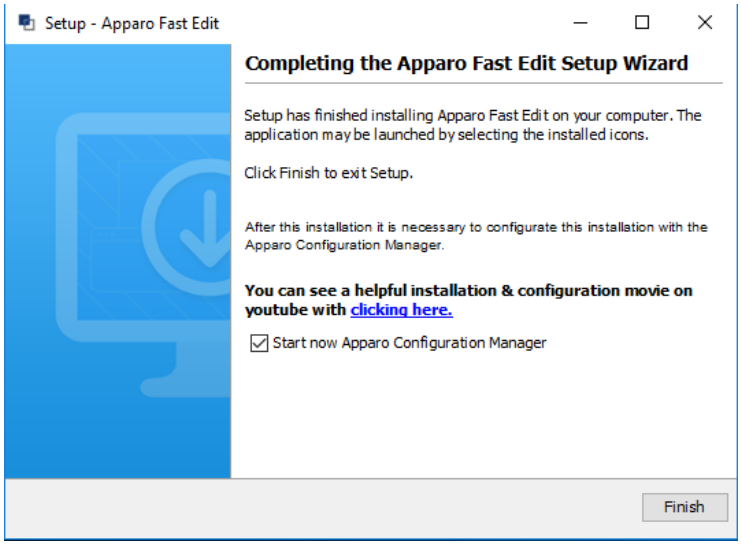
Please define folder and path and choose „**Next >**“.

3.4 Carrying out the installation

Finally the installation of Apparo Fast Edit with the selected architecture will start.
After that this installation must be configured with the **Apparo Configuration Manager**.



3.5 Installation finish



Now it's time to **configure** the installation with the **Apparo Configuration Manager.**

Click „**Finish**" for completing the installation and to start the configuration.

4 Configuration of all Apparo application servers

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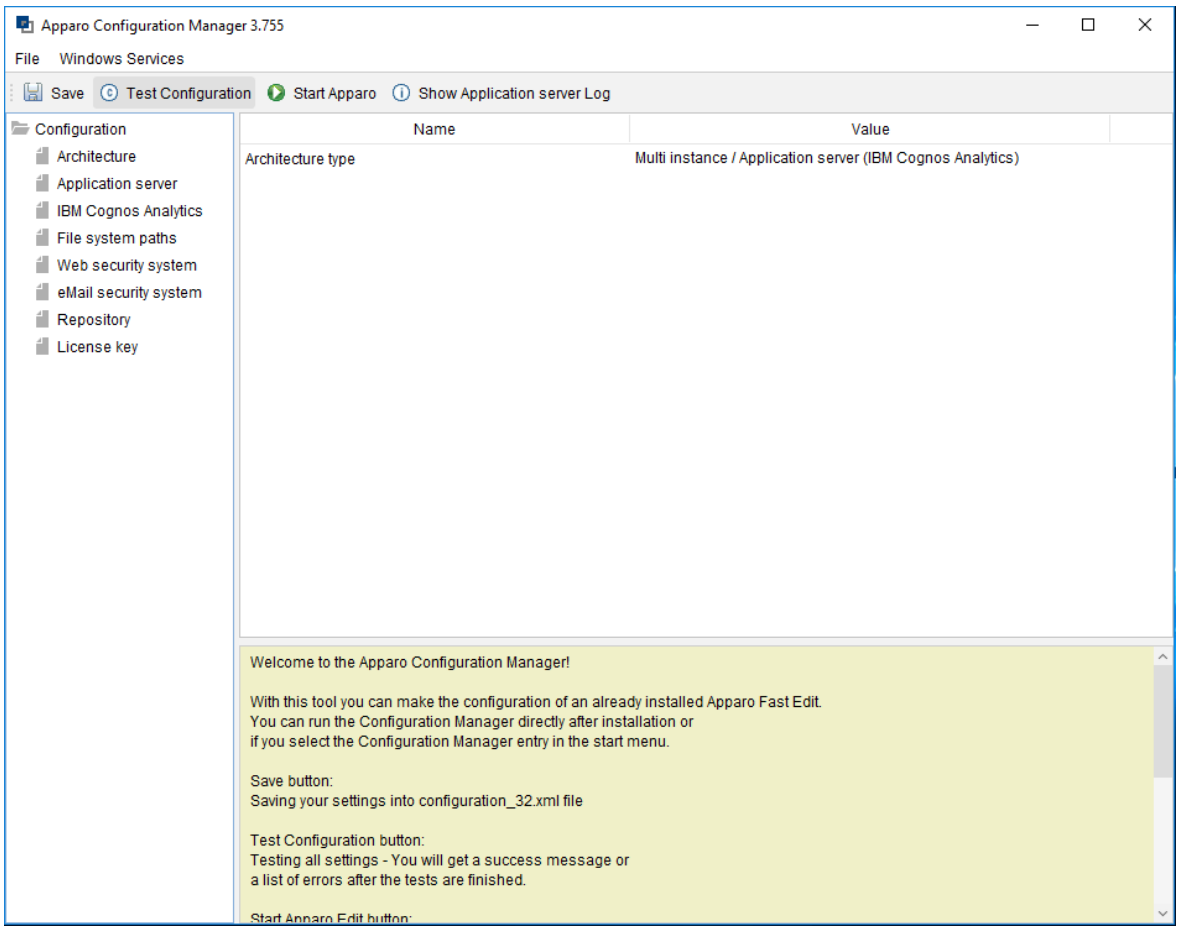
7	**Installing clients**

With the **Apparo Configuration Manager** you are able to configure the already installed Apparo application server.



The settings are grouped into chapters (left side).

For each setting you can read a helpful description text in the yellow box.

To do list:

1	**Define all settings**
2	**Press the „Test Configuration“ button for testing all settings**
3	**Press the „Start Apparo“ button for starting the application server**
4	**You can see the log file of the application server with pressing „Show Log“** **If the application server is running then you can see in the log:** **2023-11-07 02:37:41,831 INFO com** **++** **+ Apparo Fast Edit 3.3.0.y (Build nnn) was successfully started at 07.11.2023 02:37:41 +** **++**

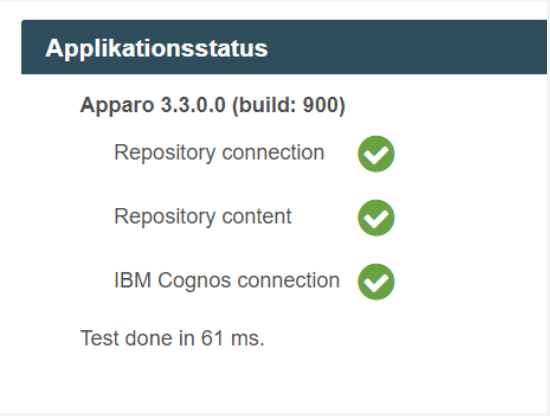
Test of an Apparo application servers without using an Apparo gateway:

http://<applicationserver:<startport>/apparo/pages/apptest.xhtml

Example: http://server1:18000/apparo/pages/apptest.xhtml

With this URL you can test if the Apparo application server is running fine or has problems.

Output:



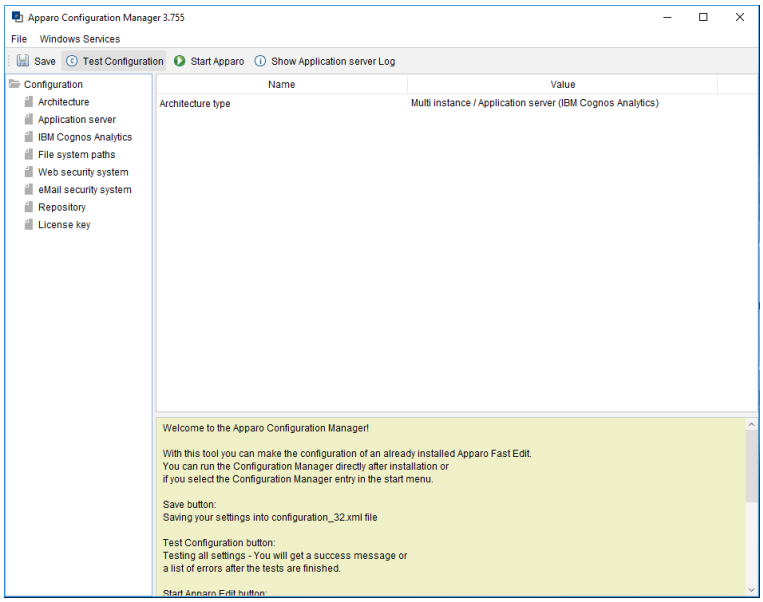
The configuration of Apparo Fast Edit is stored in file configuration.xml
in file directory [APPARO_HOME]\FastEdit\cm .

If you plan a parallel/cluster system then it's sometimes comfortable to copy this file into the target system.

If you open the Apparo Configuration Manager then you will see the same configuration settings like of your source system and it's possible to change it comfortable.

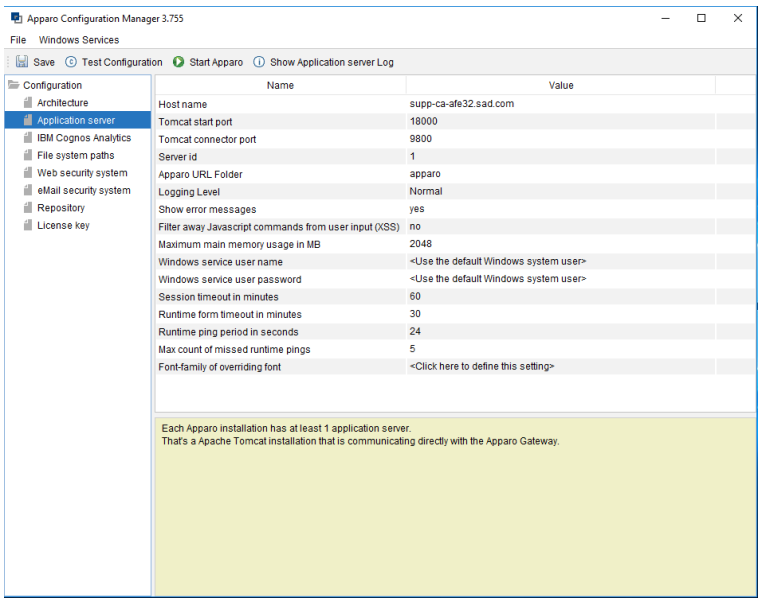
4.1 Architecture

In this section of the Configuration Managers you can find the selected Apparo architecture.
This architecture was defined at installation time and is not changeable now.



4.2 Application server

Settings for the application server:

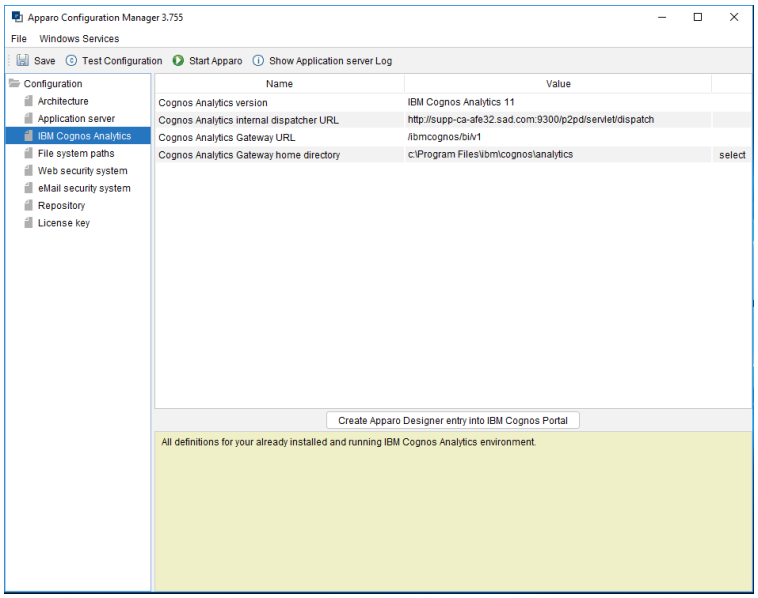


The setting **Server ID** is important in a multi-application environment.
Each application server has an unique ID starting with 1, then 2,3,4…

This Server ID must be used later in the **Apparo gateway settings too.**

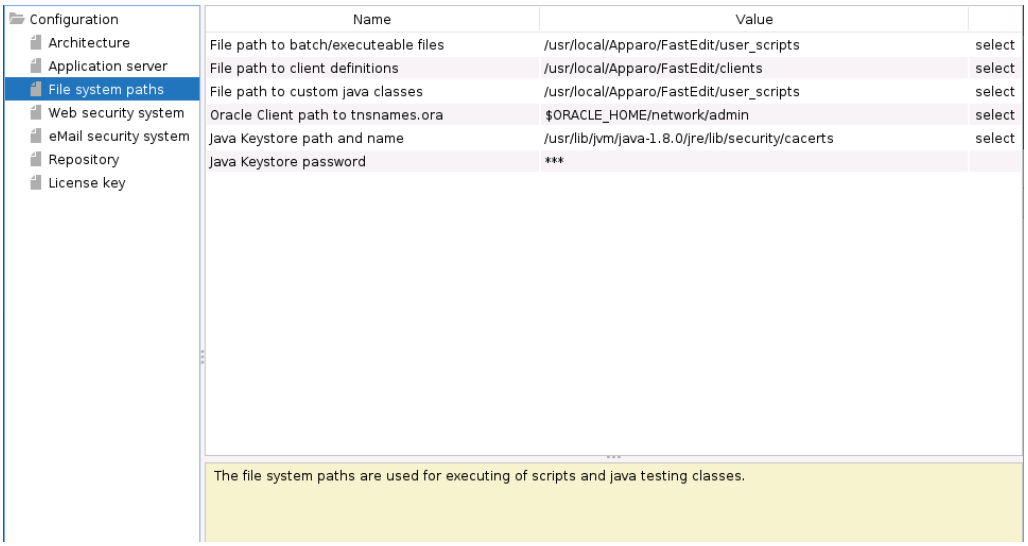
4.3 IBM Cognos Analytics

Settings for the already installed Cognos environment:



4.4 File system paths

With the file systems paths you can define the place for storing batch files that can be called from a Business Case, Java test classes for data quality checks, path to the client definitions, Oracle client and Java keystore for certificates.



4.4.1 File path to batch/executable files

It is possible to call executable files, scripts, batch files, javascript files etc. in a Business Case.
The Apparo system wide file directory is defined here. Every Business Case of every client can access this file directory.

Each client has an own user_scripts file directory that is accessible for Business Cases of this client **only**. You can find this file directory in the file directory of the client in the clients file directory.

4.4.2 File path to client definitions

Client depending CSS files and icons are stored in the clients file directory. In a cluster environment all Apparo instances must be able to access this file directory.

4.4.3 File path to custom java classes

It is possible to call Java classes in a Business Case.
The Apparo system wide file directory is defined here. Every Business Case of every client can access this file directory.

4.4.4 Oracle Client path to tnsnames.ora

If you want to use an Oracle Client that is installed server-side then you must define the path to the used tnsnames.ora file.

4.4.5 Java Keystore path and name

If you want to use TLS/SSL connections to other servers like application servers, databases or LDAP/Active Directory servers and the certificate is not public available then you must add your certificates into the Java machine that is used for Apparo.

The certificates are stored in [JAVA_HOME]\lib\security\cacerts

You can import your certificate with following command.
In this example Apparo is installed in “C:\Program Files\Apparo”, the certificate file has the name “C:\myCertificate.crt” and the default password of the key store is “changeit”.

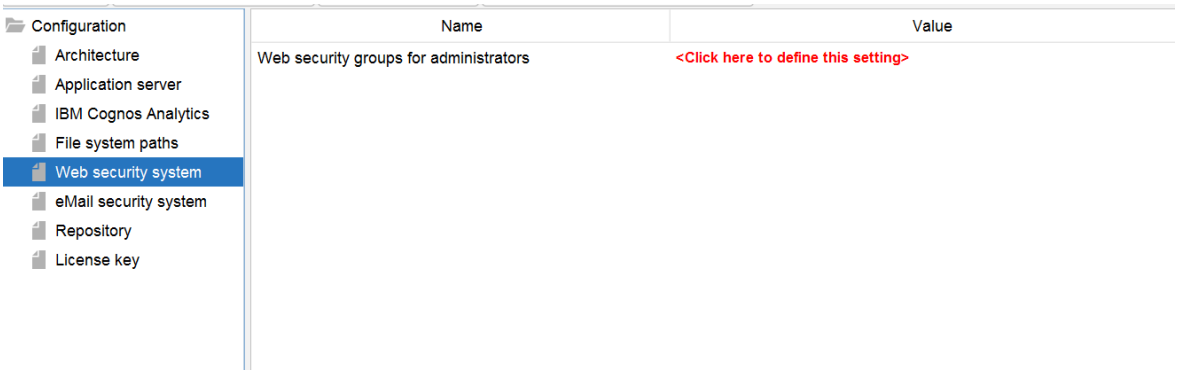
"C:\Program Files\Apparo\FastEdit\OpenJDK\bin\keytool" -importcert -file C:\myCertificate.crt -alias my.company.com -keystore " C:\Program Files\Apparo\FastEdit\OpenJDK\lib\security\cacerts" -storepass changeit

After that you must restart the Apparo Configuration Manager again.

4.4.6 Java Keystore password

The Java key store is secured with a password. Default password is “changeit”.

4.5 Web security system



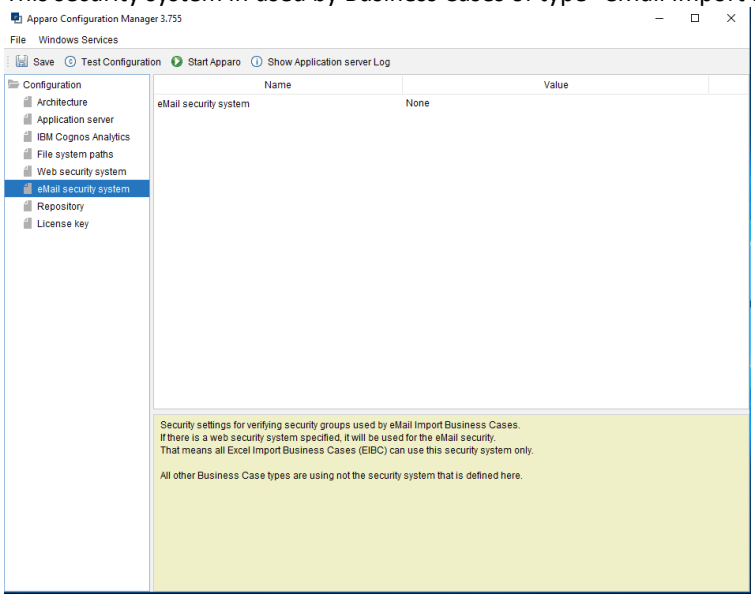
If a user is member of the security group that is here defined then this user has **full access** and can see and change the content of all clients in the Apparo Designer.

If this setting remains **empty** then everybody has **full access**.

Apparo has access to the Cognos Analytics security system and therefore knowing all groups.

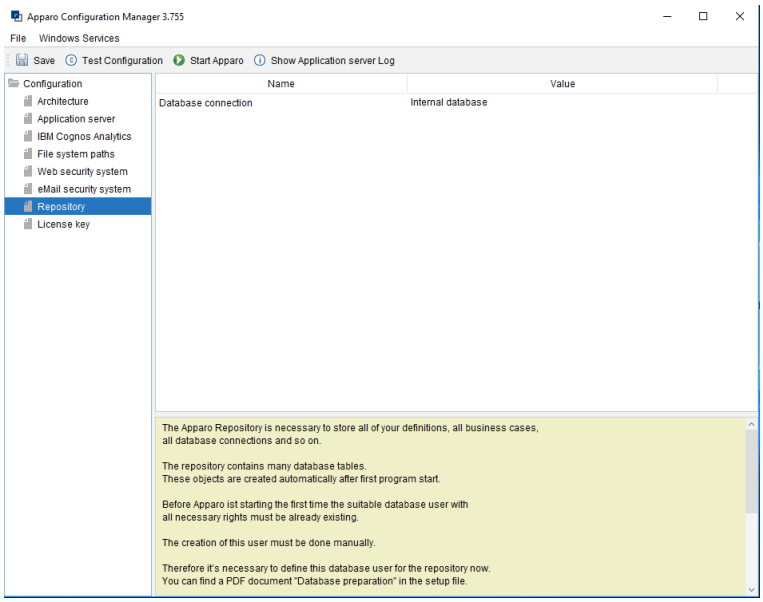
4.6 Mail security system

This security system in used by Business Cases of type “eMail Import Business Cases”



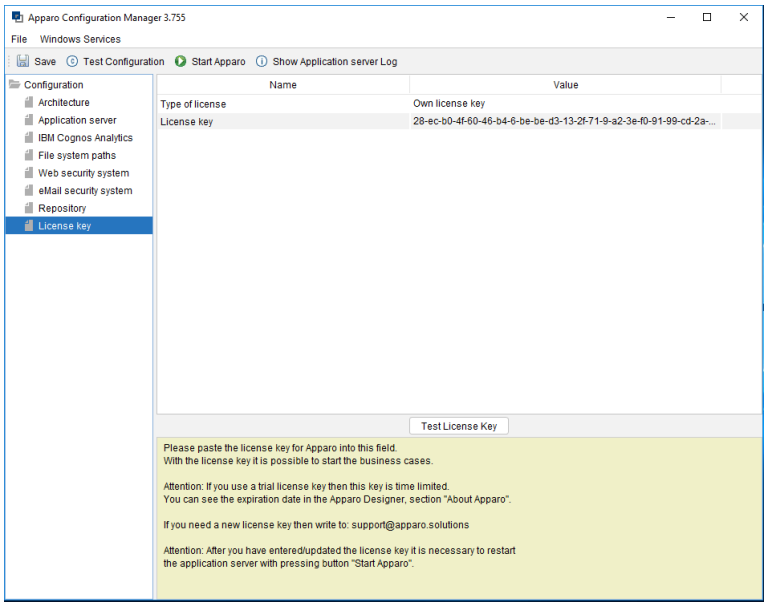
4.7 Repository

The database connection to the Apparo repository:



4.8 License key

In this section you can add & change the license key. This key is necessary to run Apparo Fast Edit.



To complete the installation, you can save and test the configuration.
If everything is OK, please start the server by clicking the button 'Start Apparo'.
This button is deploying the configuration and starting the server.

5 Creating the Apparo Designer entry in IBM Cognos portal

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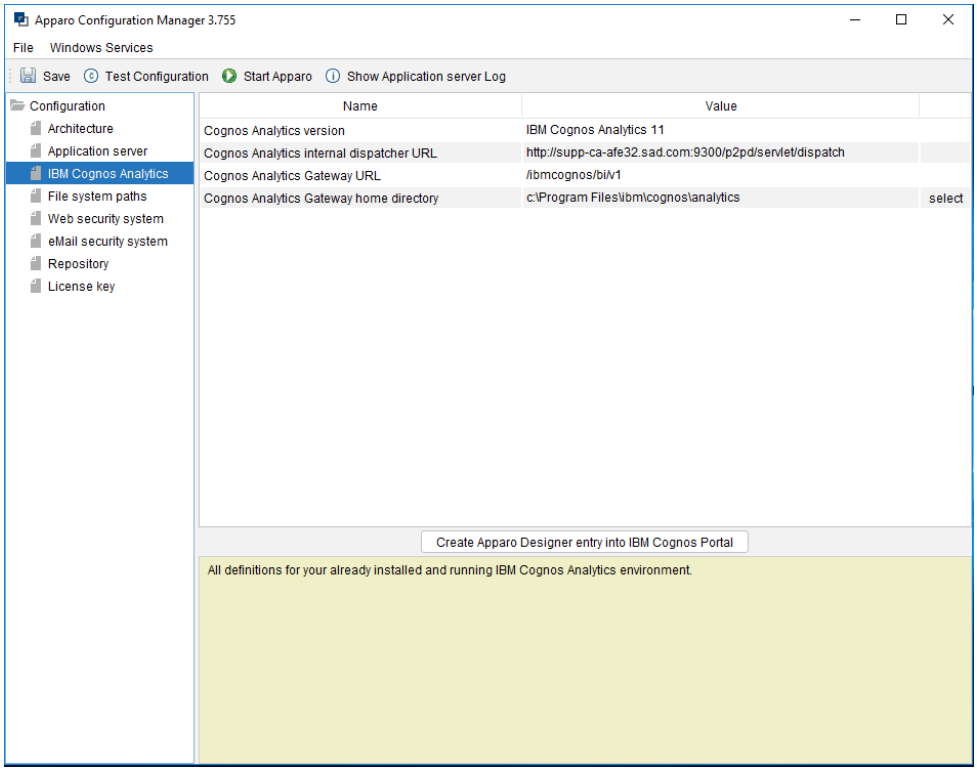
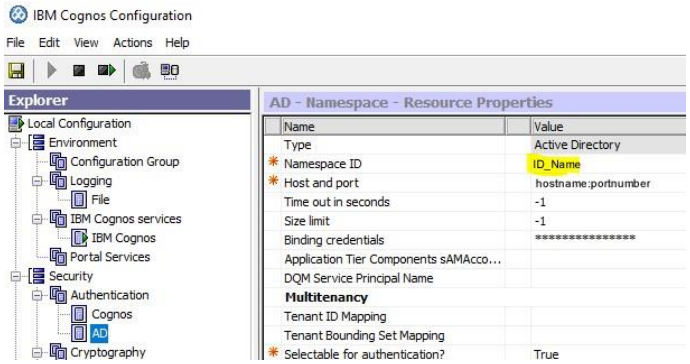
Possibility #1

The portal entry for starting the Apparo Designer can be created with the Configuration Manager:

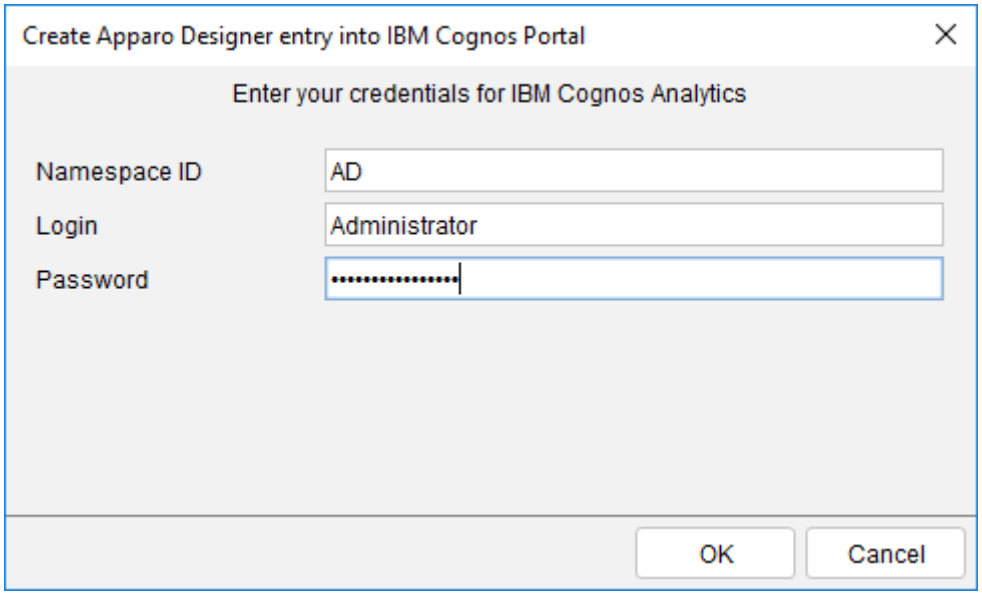


Click the Button ‘Create Apparo Designer entry into IBM Cognos Portal

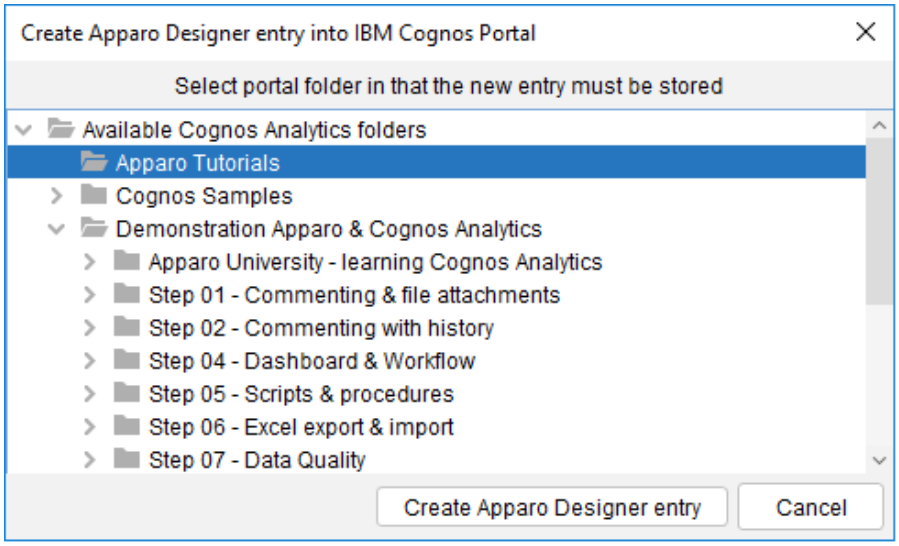
Please take the “**Namespace ID**”:



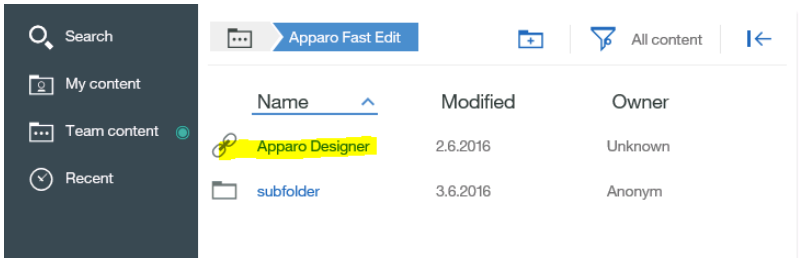
In the next step you will be asked to enter your credentials:



Select the desired target folder and click ‘Create Apparo Designer entry’



You can see this new entry in the Cognos portal:



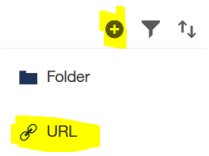
Possibility #2

Starting with CA 11.0.10 you can define hyperlinks manually:

Please copy

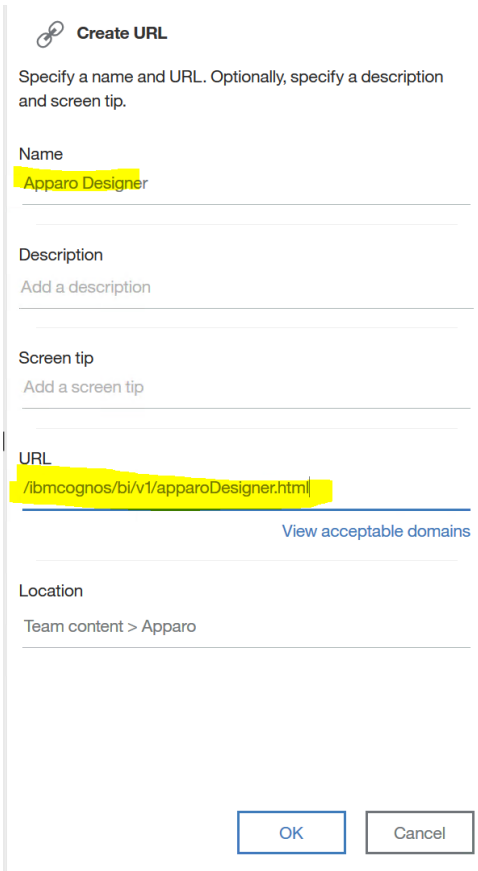
/ibmcognos/bi/v1/apparoDesigner.html

… and create a new entry in a team content folder, e.g. “Apparo”:



Press the + icon and select URL.

Enter name and URL:



Press OK button.

6 Installation of the Apparo gateway

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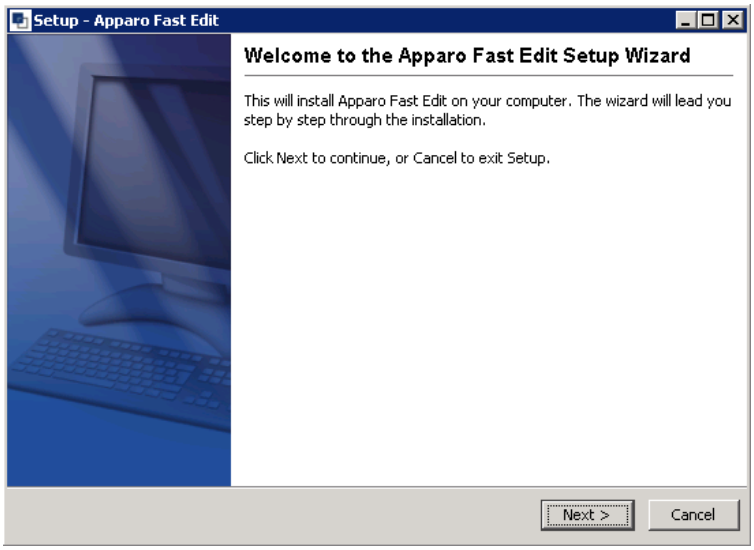
Start the Installation by executing the file:

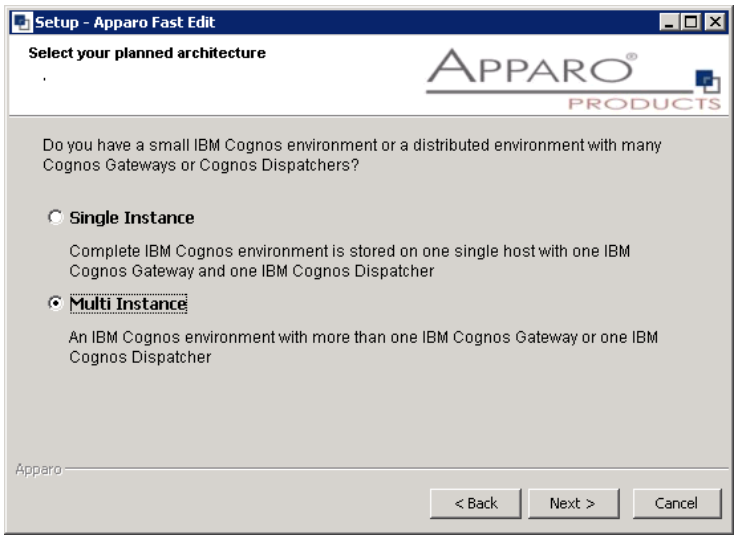
FastEdit3.3.0.x.yyy_windows_tomcat_cognos_analytics.exe



Confirm the beginning of the installation by clicking „**Next**“.

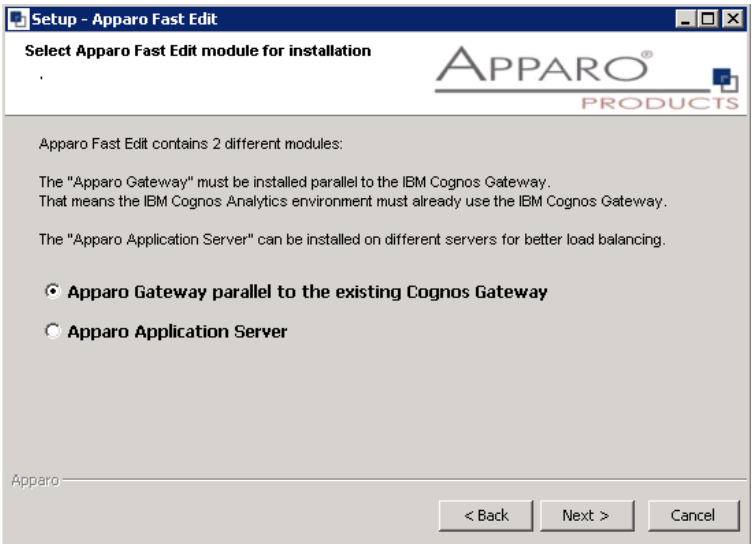
6.1 License agreement

6.2 Architecture



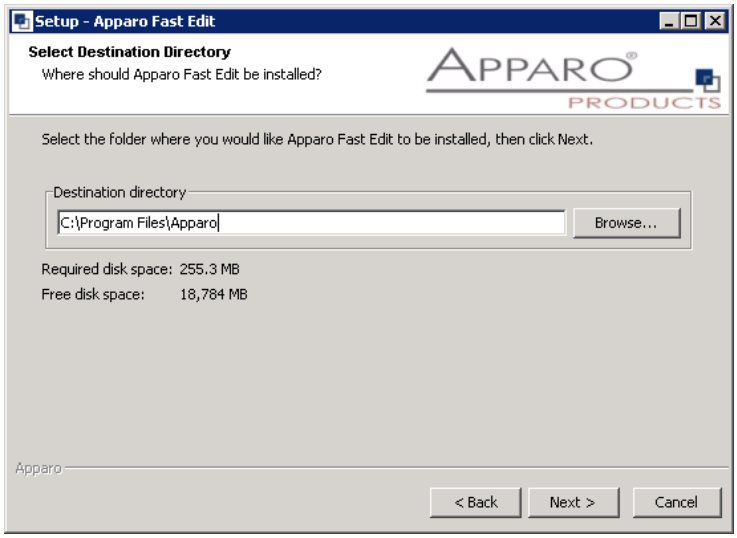
Select "**Multi Instance**" and choose „**Next**>".

Now it's the time to choose the entry for the **Apparo gateway**.



Select **Apparo Gateway** and choose „**Next**>“.

6.3 Defining the target file directory



The default path is

C:\Program Files\ApparoGateway

Please define the path and choose „**Next**“.

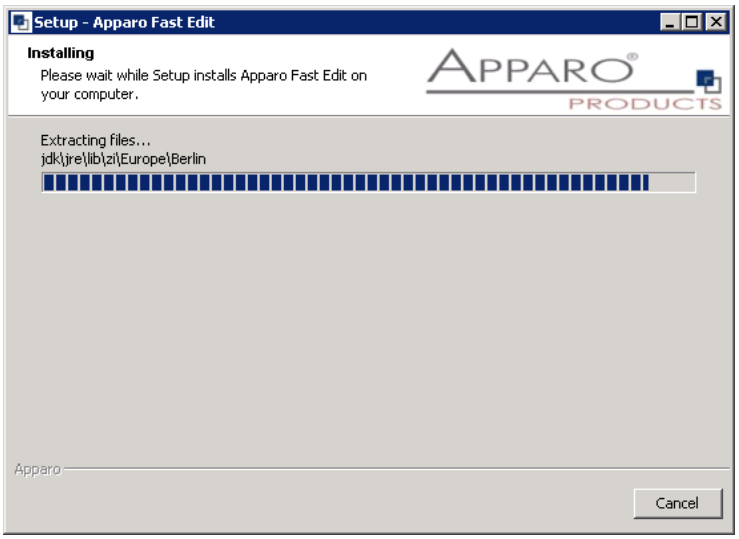
The configuration of Apparo Fast Edit is stored in file configuration.xml in file directory [APPARO_HOME]\FastEdit\cm .

Hint:

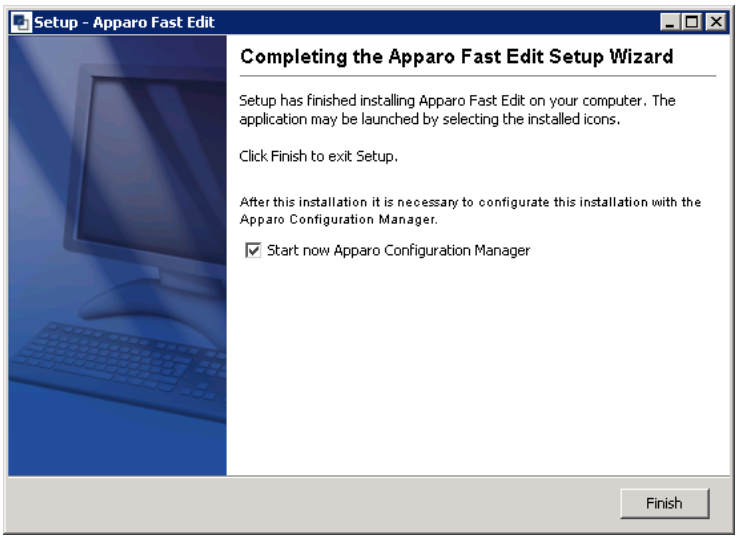
If you want to install the Apparo gateway parallel to the same server like an Apparo application server then you must use another target file directory, e.g. c:\Program Files\ApparoGateway

6.4 Carrying out the installation

Finally the installation of Apparo Fast Edit with the selected architecture will start.
After that this installation must be configured with the **Apparo Configuration Manager**.



6.5 Installation finish



Now it's time to **configure** the installation with the **Apparo Configuration Manager.**

Click „**Finish**" for completing the installation and to start the configuration.

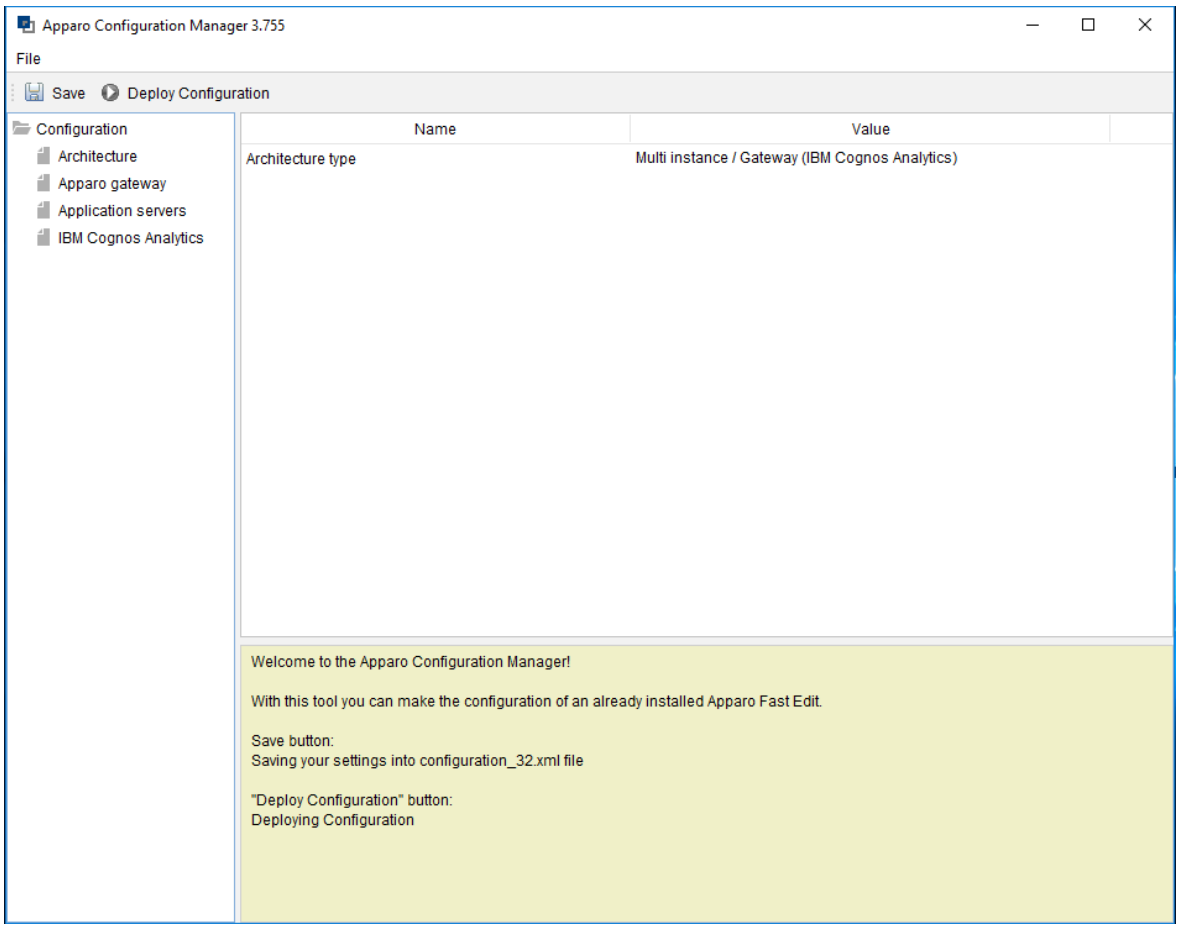
7 Configuration of the Apparo gateway

1	**Preparation** • Analysing environment • Creation of a **database user** for the Apparo repository
2	**Installation of all Apparo application servers**
3	**Configuration of all Apparo application servers** Configuration using the Apparo Configuration Manager
4	**Creating the Apparo Designer entry in IBM Cognos portal**
5	**Installation of the Apparo gateway**
6	**Configuration of the Apparo gateway** Configuration the web server and the Apparo gateway using the Apparo Configuration Manager
7	**Installing clients**

Important

Before starting of the Apparo configuration it is important that the configuration of all Apparo application servers with the Apparo Configuration Manager is successfully finished and the application servers are already running with pressing Button "Start Apparo".

With the **Apparo Configuration Manager** you are able to configure the already installed Apparo gateway.



The settings are grouped into chapters (left side).

For each setting you can read a helpful description text in the yellow box.

To do list:

1	**Define all settings.**

2	**Press the „Deploy Configuration“ button for deploying.**

3	**Press the „Save“ button for storing the settings.**

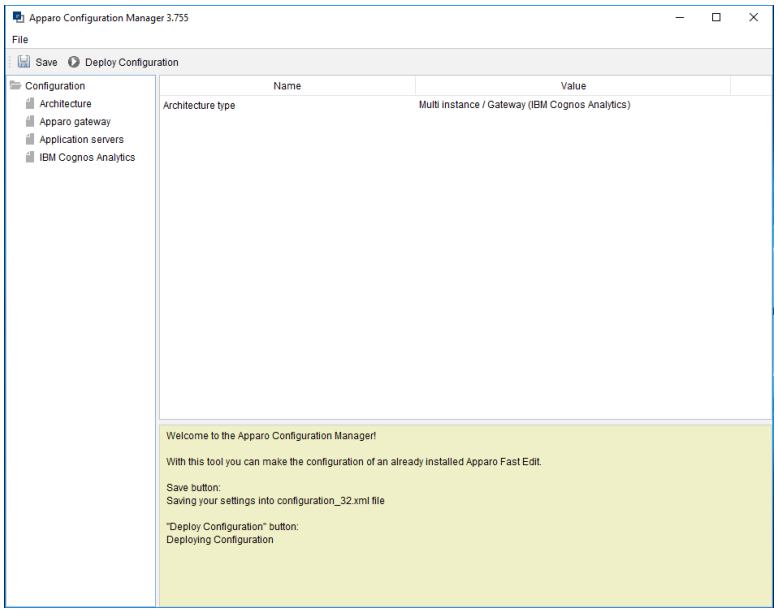
The configuration of Apparo Fast Edit is stored in file configuration.xml in file directory [APPARO_HOME]\FastEdit\cm .

If you plan a parallel/cluster system then it’s sometimes comfortable to copy this file into the target system.

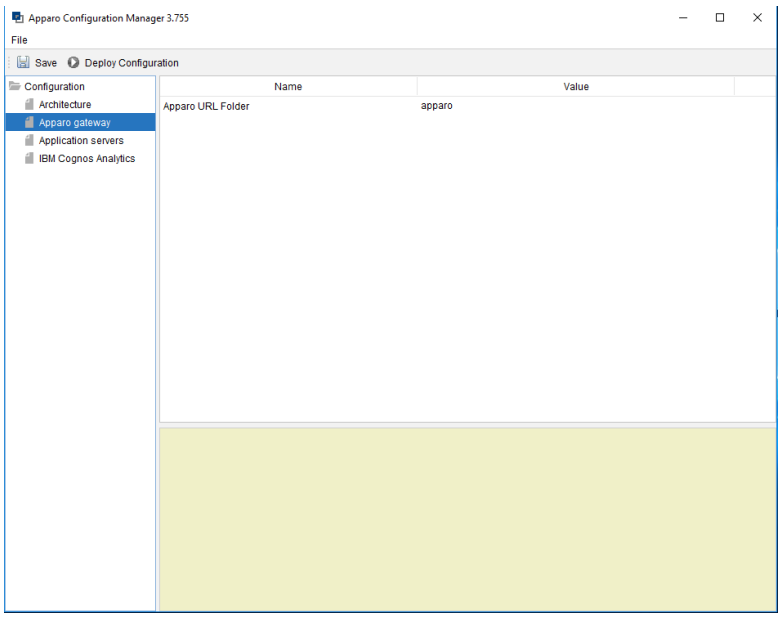
If you open the Apparo Configuration Manager then you will see the same configuration settings like of your source system and it’s possible to change it comfortable.

7.1 Architecture

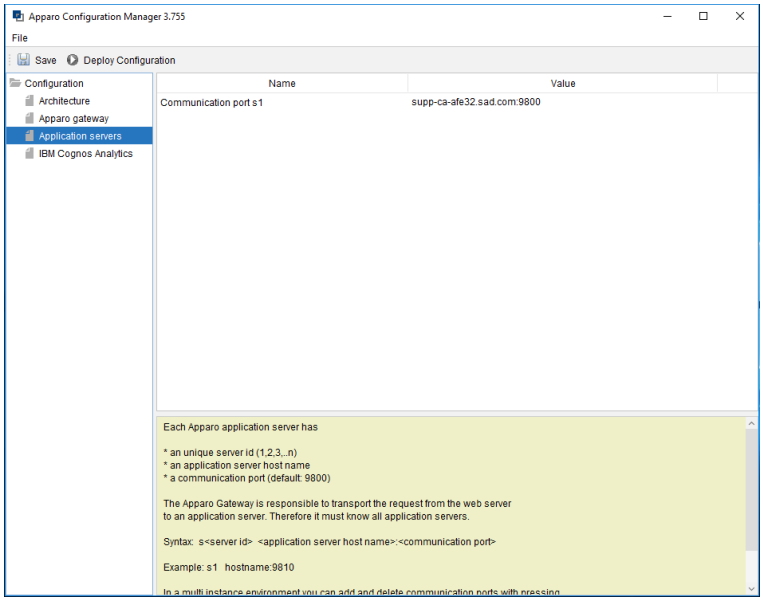
In this section of the Configuration Managers you can find the selected Apparo Fast Edit architecture. This architecture was defined at installation time and is not changeable now.



7.2 Apparo gateway



7.3 Application Server

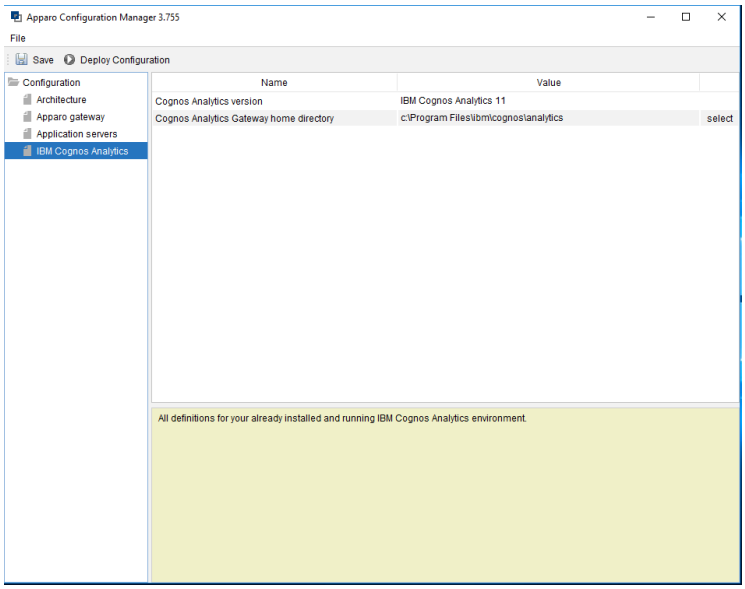


You can add an Apparo application server entry with pressing the right mouse button.

The setting **Server ID** is important in a multi-application environment.
Each application server has an unique ID starting with 1, then 2, 3, 4, …

This Server ID must be used in the **Apparo application settings too.**

7.4 IBM Cognos Analytics



The last step is to save and deploy the configuration.

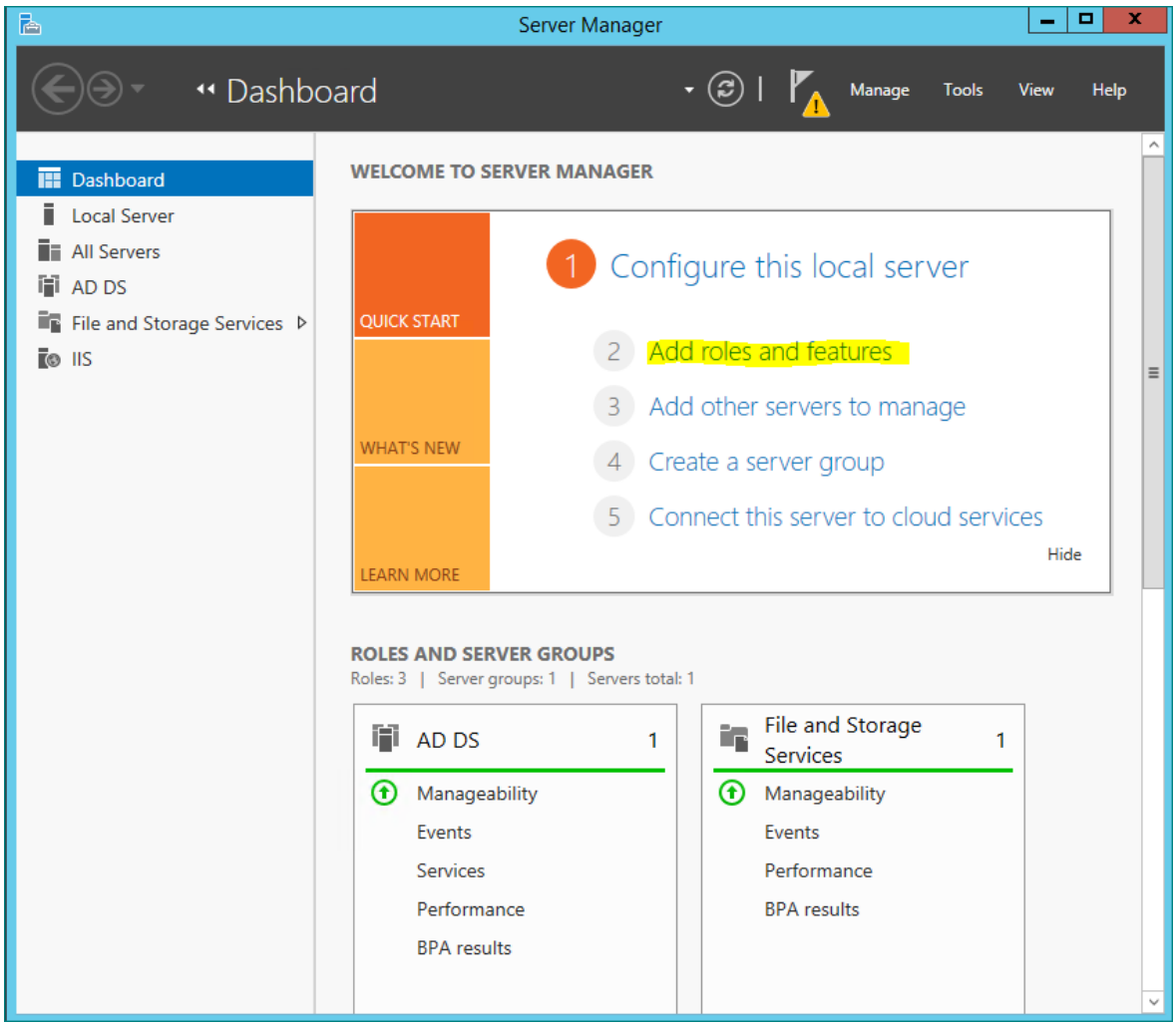
7.5 Configuration of the Microsoft Internet Information Server (IIS) 7 and higher

The IIS must support ISAPI modules. This enhancement must be installed first.

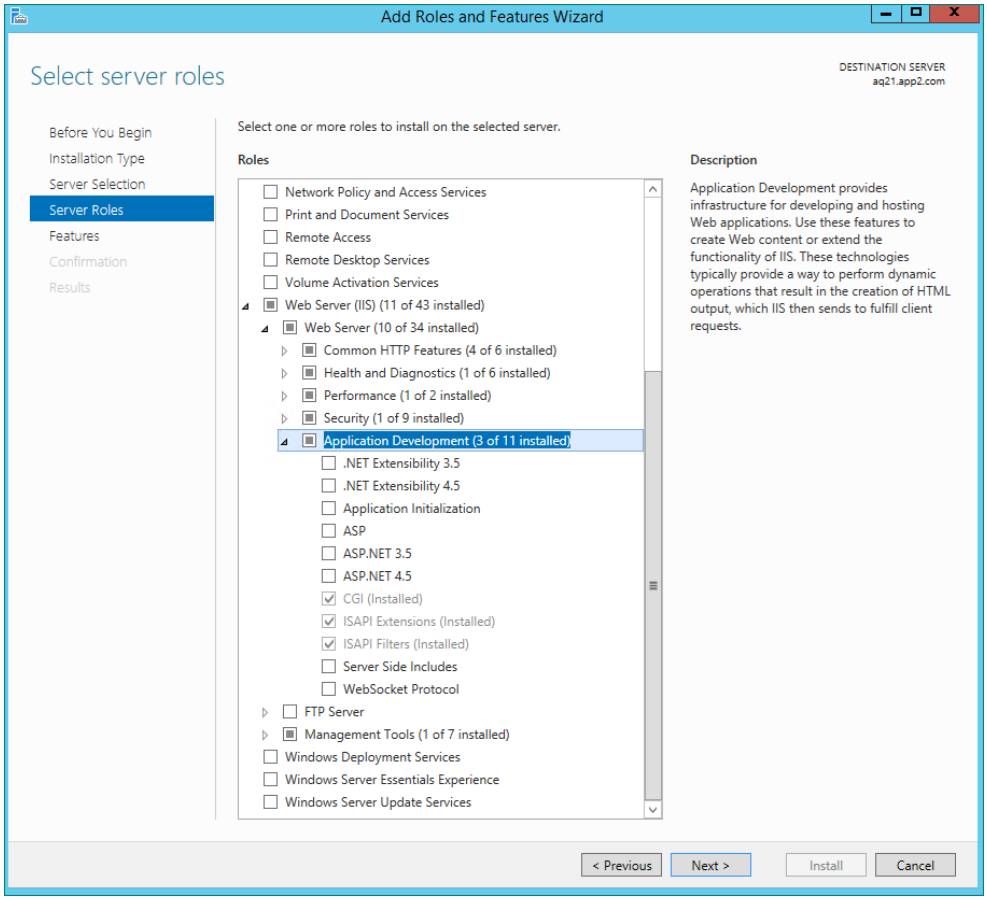
Please start the **Server Manager** of the Windows operating system.

Select:

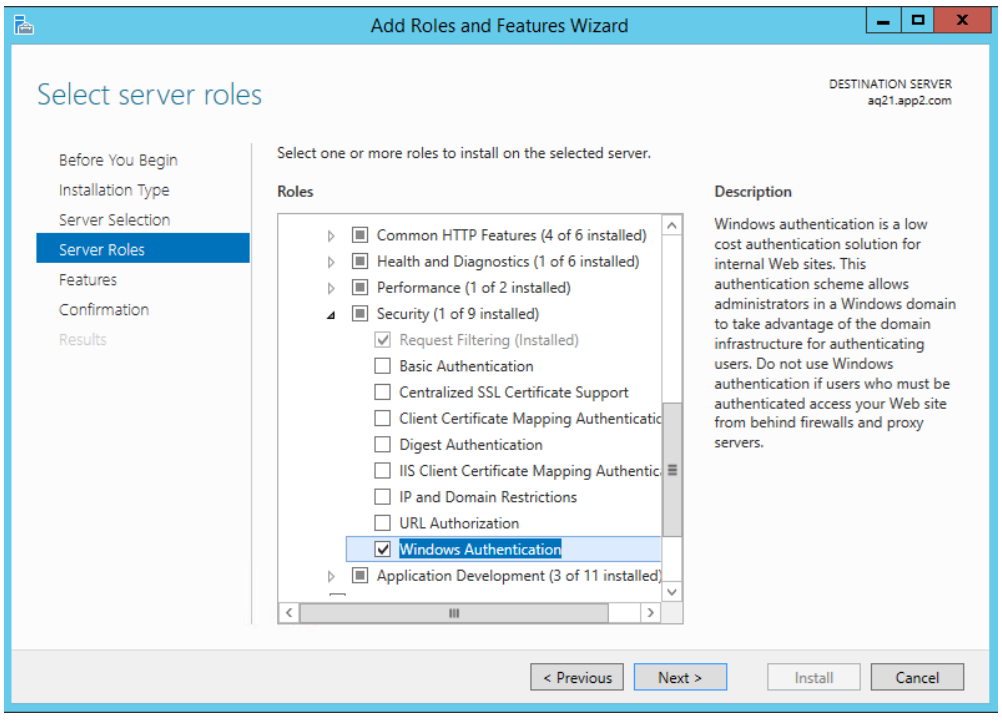
- Add roles and feature:



Please check if selections **ISAPI Extensions** and **ISAPI Filters** are enabled.



Please enable in chapter „**Security**“ the feature „**Windows Authentication**“:



After that the IIS is ready for the next installation tasks.

Following steps are necessary:

1	A new virtual directory apparo must show to file directory „cgi-bin“
2	Allowing ISAPI filter
3	Installation of the ISAPI filter with the name apparo using IIS_fastedit.dll
4	Defining a new rule in Rewrite URL feature

Important

Before starting of the IIS configuration it is important that the configuration with the Apparo Configuration Manager is successfully finished and the application server has already started with the button “Start Apparo”.

The IIS configuration guide is also available as tutorial video in the Apparo YouTube channel:

http://movies.apparo.solutions

You can choose between 2 different installation possibilities:

1. Using a script that is making all configuration steps for the IIS **automatically.** This is the normal way.

2. Making the configuration steps **manually**

7.5.1 Make configuration of IIS using script

Open File Explorer and go into file directory

[APPARO HOME]\FastEdit\cm

Run the script "**MakeConfigurationIIS.bat**" as Administrator.

It is using default settings, like ibmcognos for the virtual directory for Cognos Analytics and Default Web Site for the web site name.

If necessary then you can change these settings in the script.

After execution of this batch the installation of the Apparo gateway is successfully finished.

7.5.2 Make configuration of IIS manually

If you want to make the configuration manually then please follow following steps.
If you want to use the script-way then please read the chapter before.

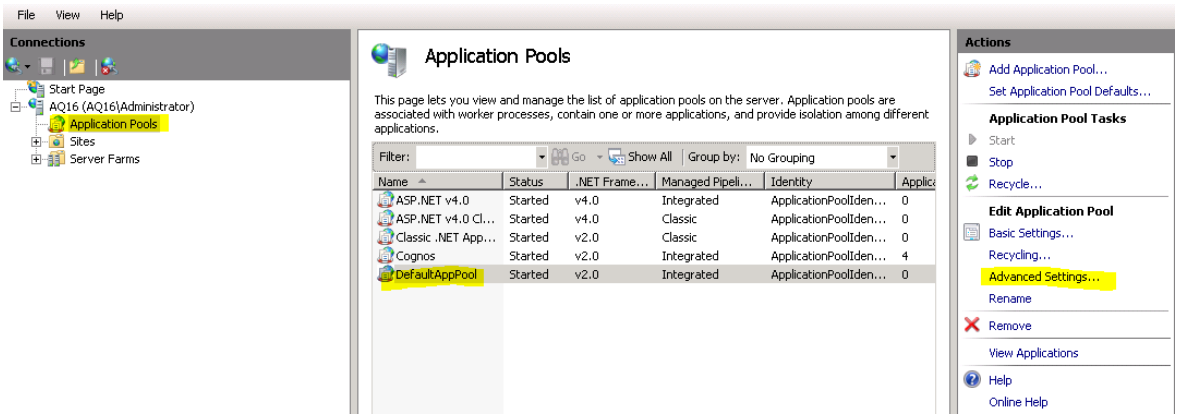
1	A new virtual directory apparo must show to file directory „cgi-bin“

You must use a local Windows Administrator account for installation.
Using a domain account with administrator role is not always working correctly.

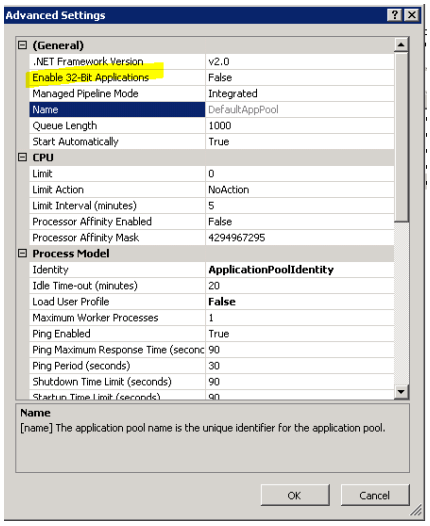
You can use an own Application Pool or the DefaultAppPool for Apparo Fast Edit.

You must use the same Application Pool for Cognos, Apparo and Default Website.

Please analyze the settings of the “DefaultAppPool” Application Pool first and select in the “Application Pool” folder the “DefaultAppPool” entry:



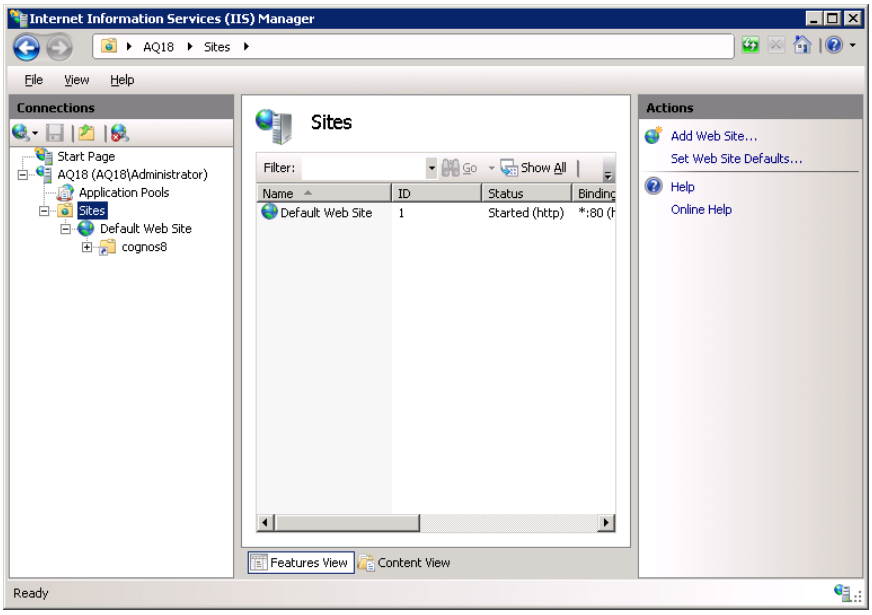
Press now the “Advanced Settings …” entry on right page:



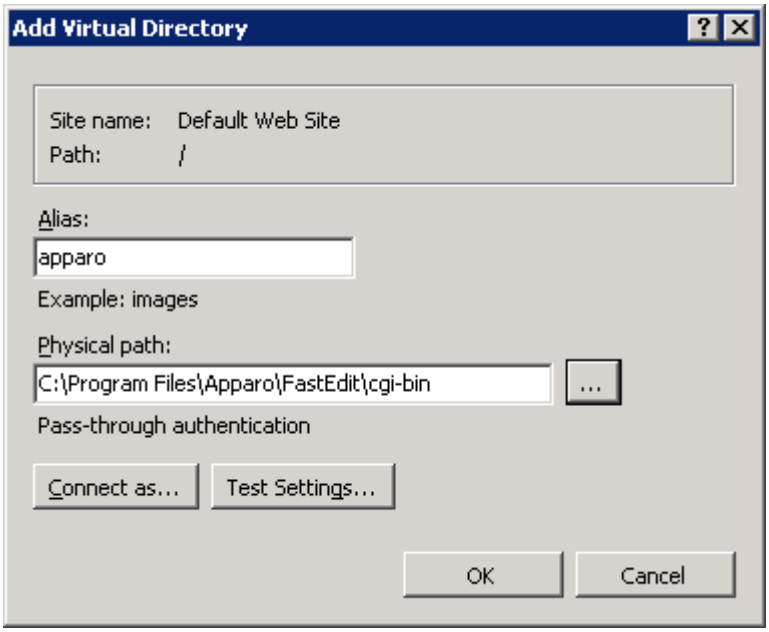
Please check the setting “**Enable 32-Bit Applications**”. It must be “false”.

Next step:

Open the IIS console:

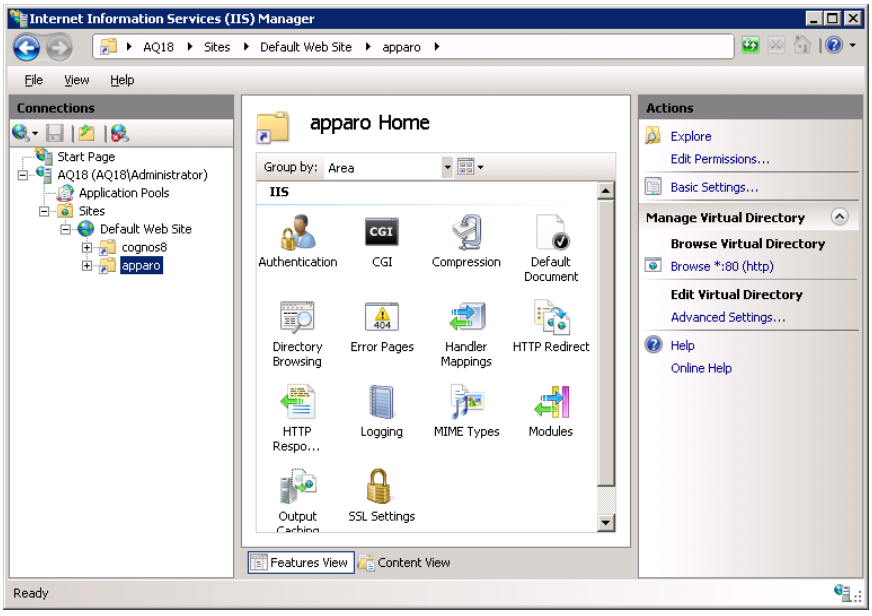


Choose the „**Default Web Site**“, press right mouse button and select „**Add virtual Directory**“.



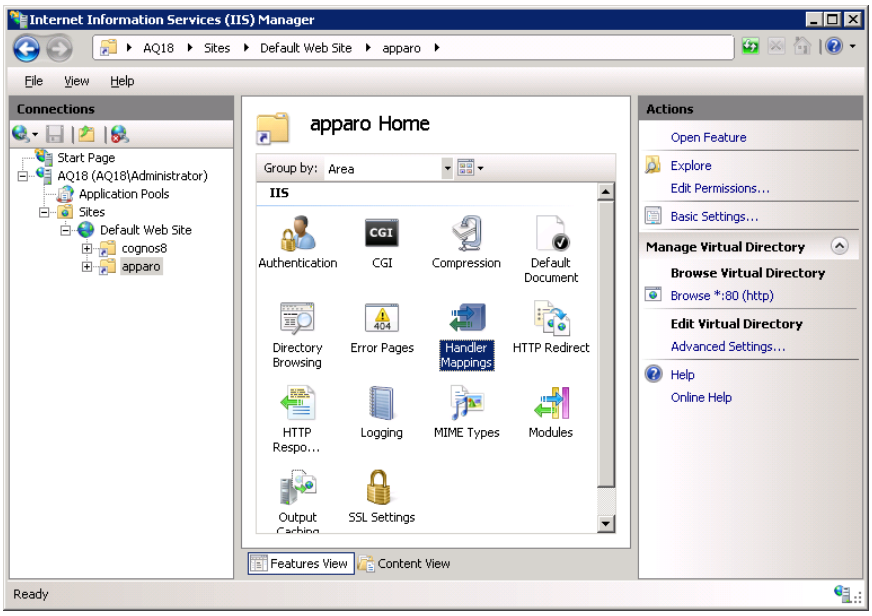
Enter the alias "**apparo**" and the path to the cgi-bin file directory of Apparo Fast Edit.

Press „**OK**"

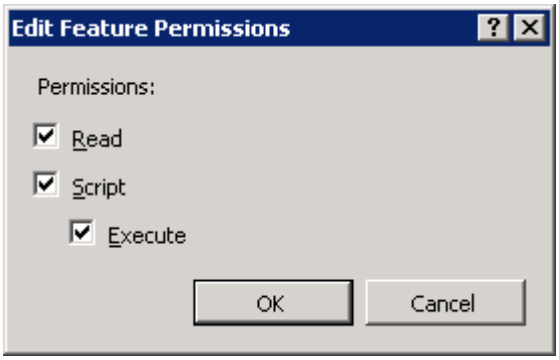


This directory must have executable rights:

Select “**apparo**” folder again and double-click “**Handler Mappings**”



Select on the right side “**Edit Feature Permissions…**” and enable “**Execute**”.



Press “**OK**”.

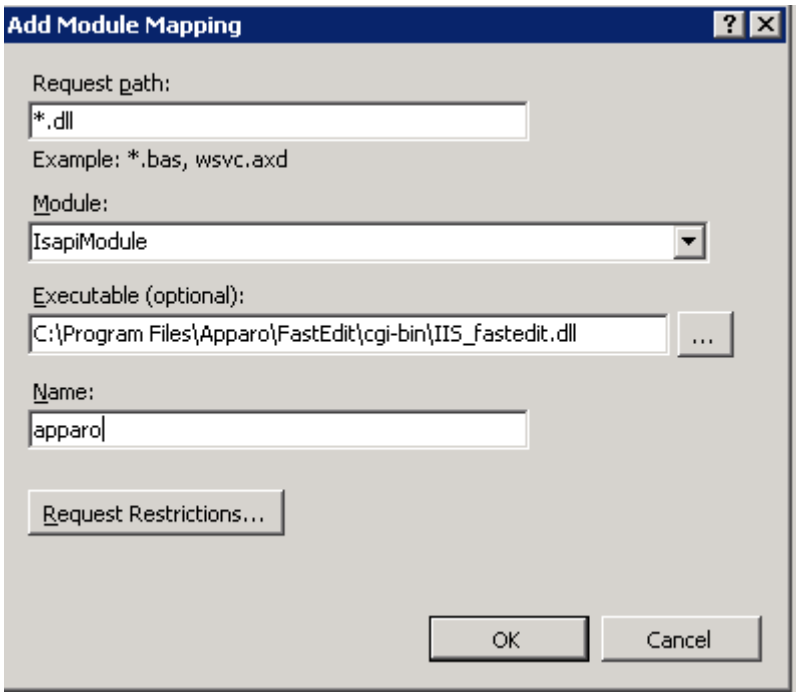
Defining the mapping:

Choose the new created virtual directory „**apparo**“.

Double click - now you can define a new mapping.

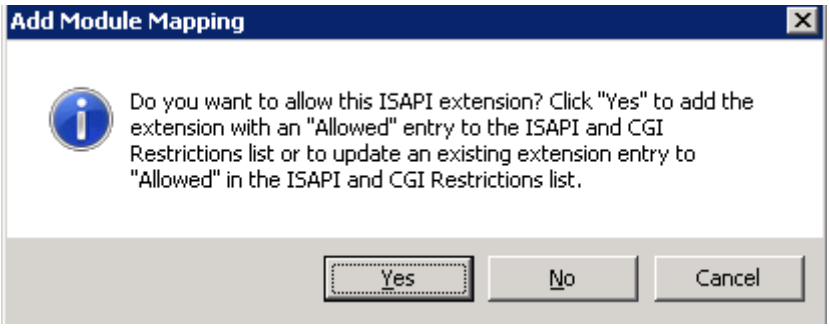
Select entry „**Add Module Mapping…**“ from the right side.

Now you see a new window for the mapping definition.
Please enter the necessary entries:



„**Executable**“ must contain the valid path to the used ISAPI file IIS_fastedit.dll.

Now press „**Ok**“ and

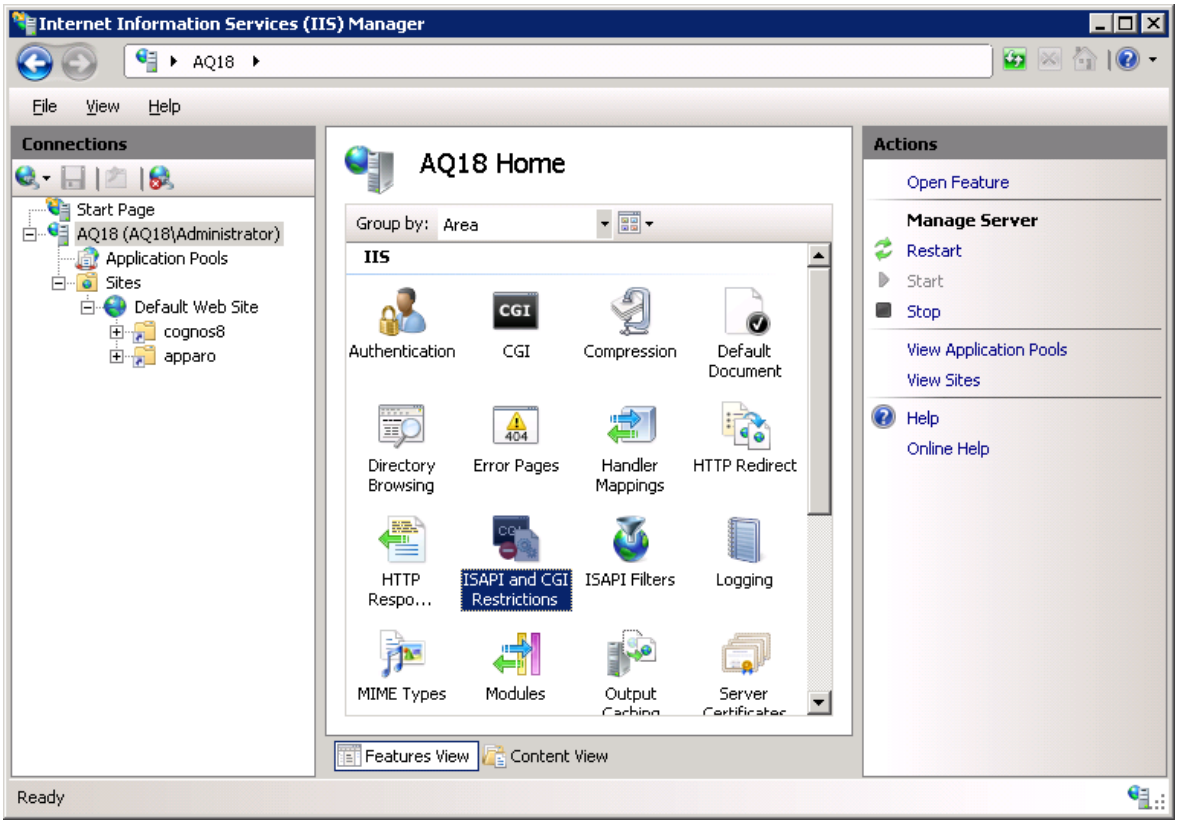


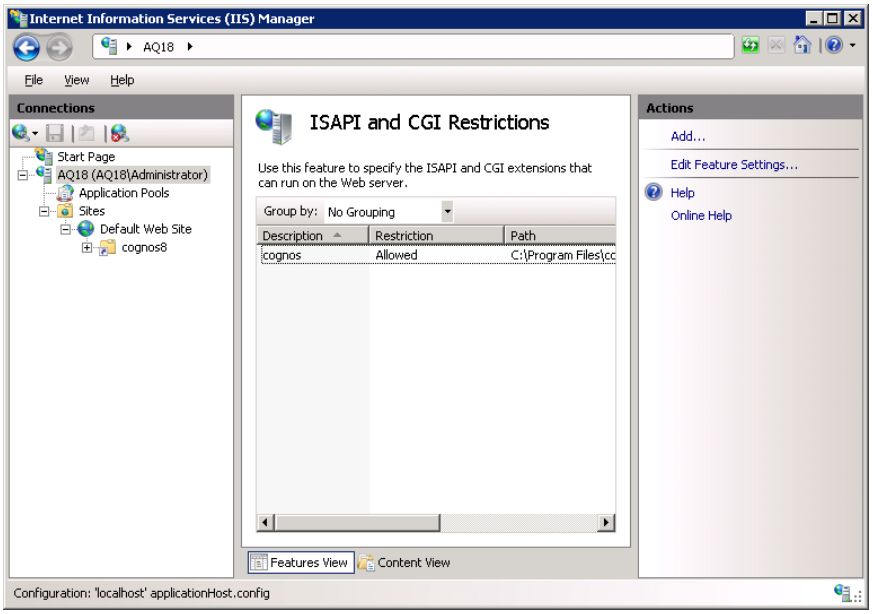
then „**Yes**“.

2	Allowing ISAPI filter

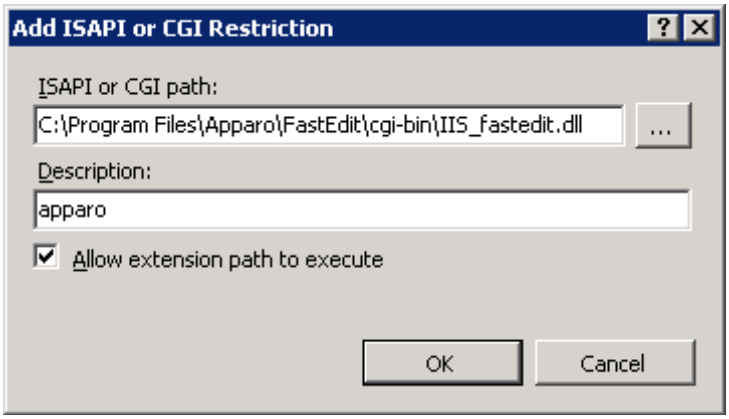
Click the server name entry (important!)

Select the server name entry (here: AQ18) and double click "**ISAPI and CGI Restrictions**":





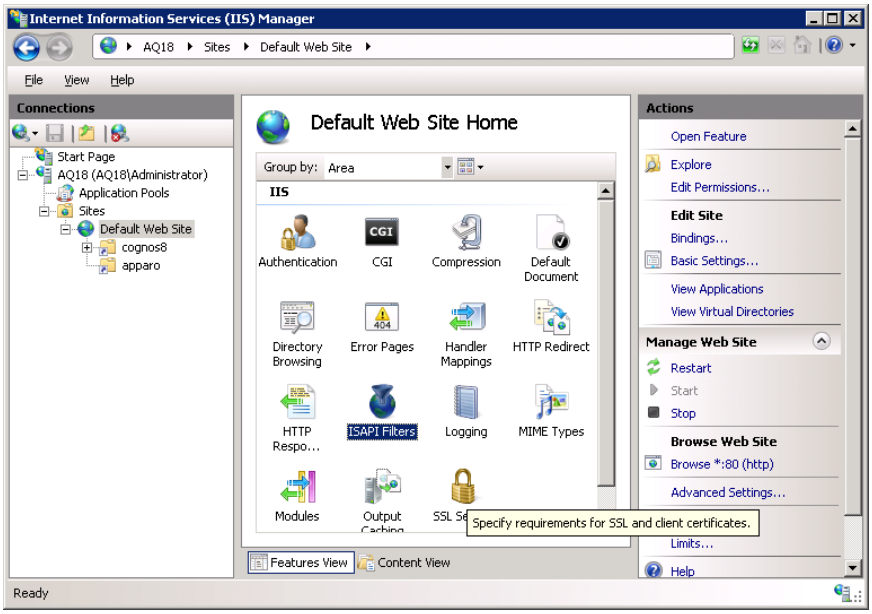
Press "**Add…**" and input:



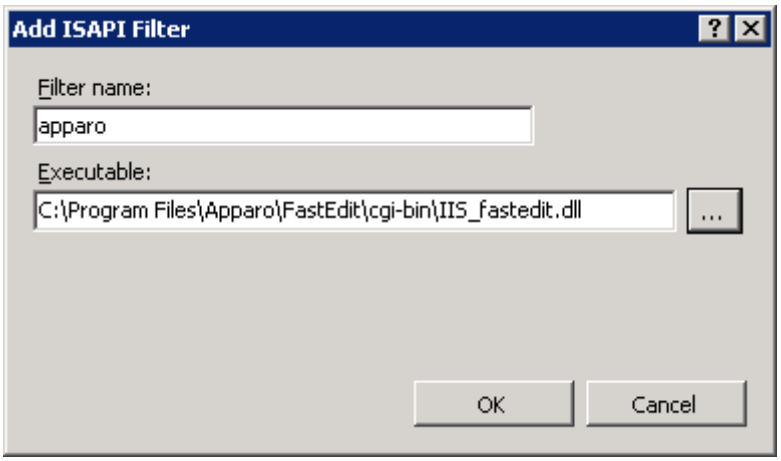
Enable "**Allow extension path to execute**" and press "**OK**".

3	Installation of the ISAPI filter with the name apparo using IIS_fastedit.dll

Select again "**Default Web Site**" and double click "**ISAPI Filters**":



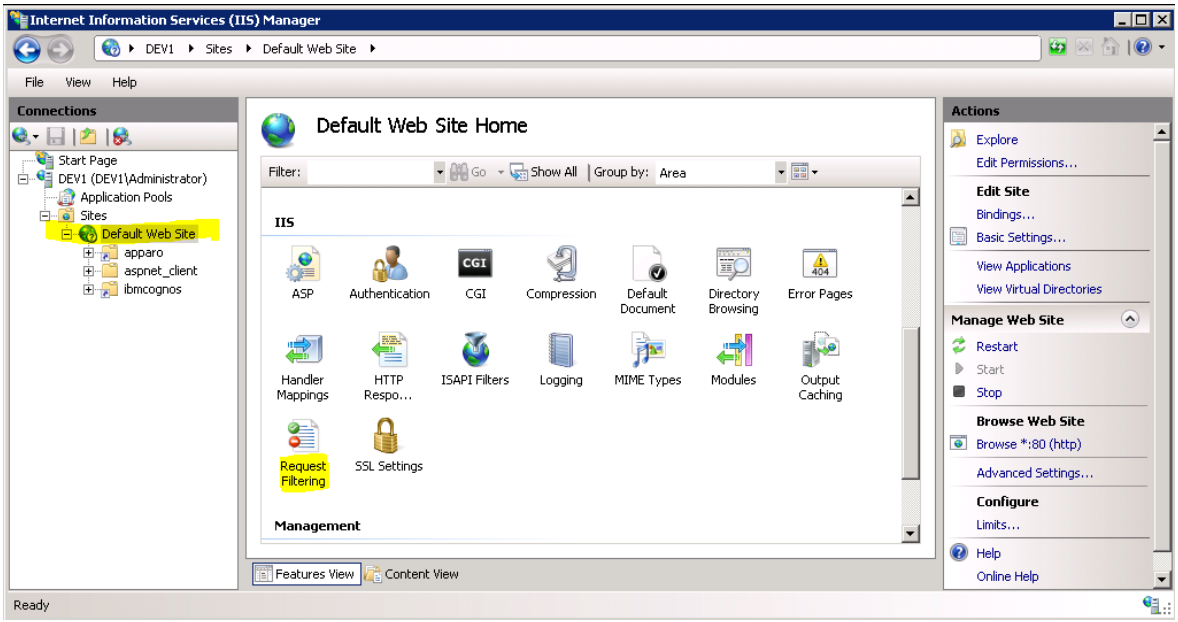
Press "Add…"



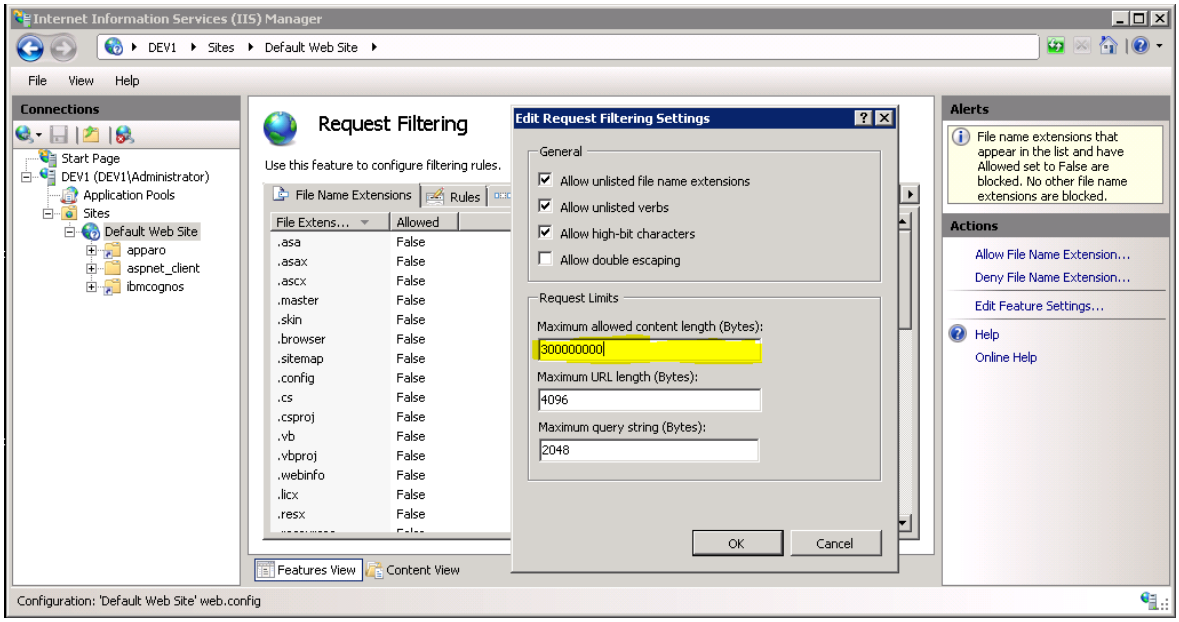
Input the filter name „apparo" and select the **IIS_fastedit.dll** in file directory **[APPARO_HOME]\FastEdit\cgi-bin**

Press "**OK**".

Resizing the upload limit



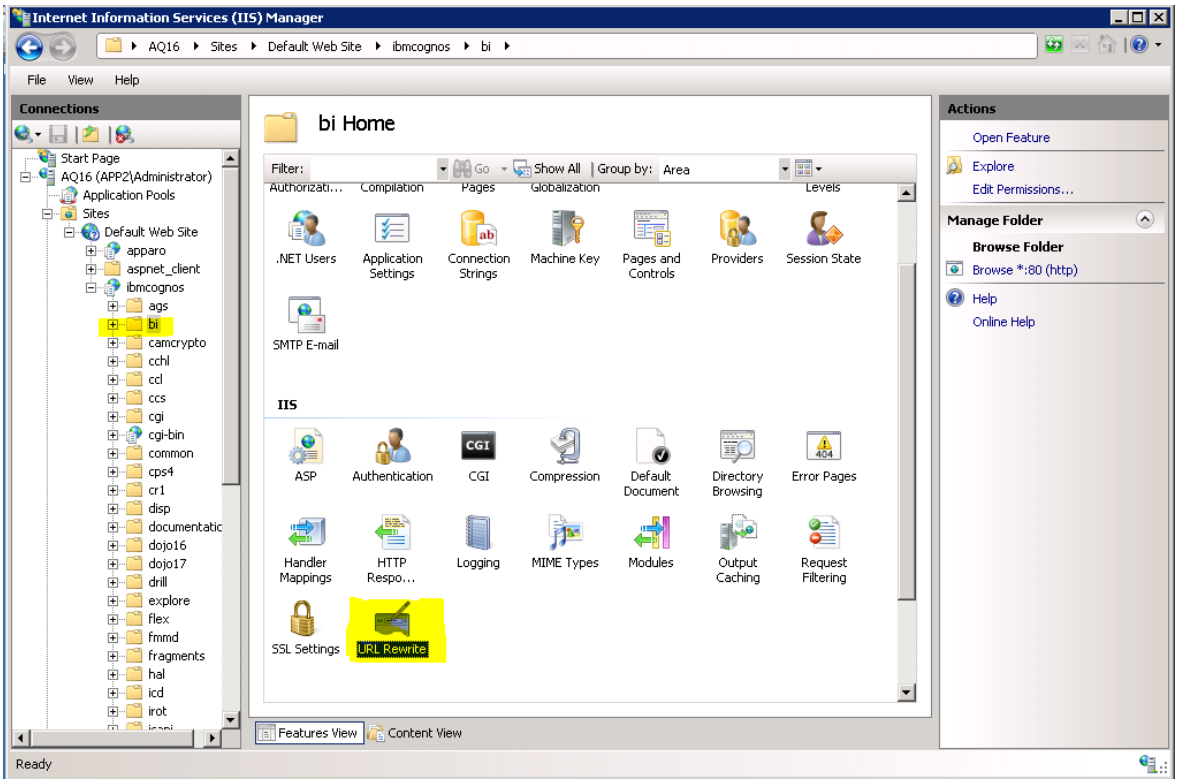
Select “Default Web Site” in the tree view, left side.
Select „Request Filtering“ with double-click.
Select “Edit Feature Settings” on right side.



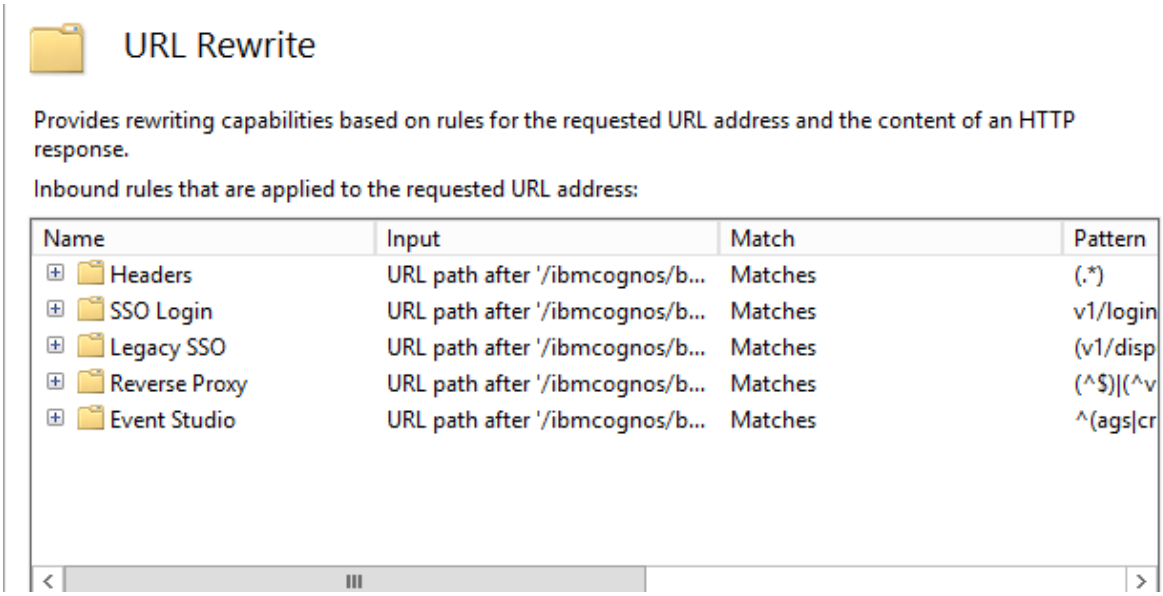
Change value of Maximum allowed content length (Bytes) to 300 000 000 (= 300 MB).

4	Defining a new rule in Rewrite URL feature

Select virtual sub folder "**bi**" in folder "**ibmcognos**" and double click "**URL Rewrite**" icon.

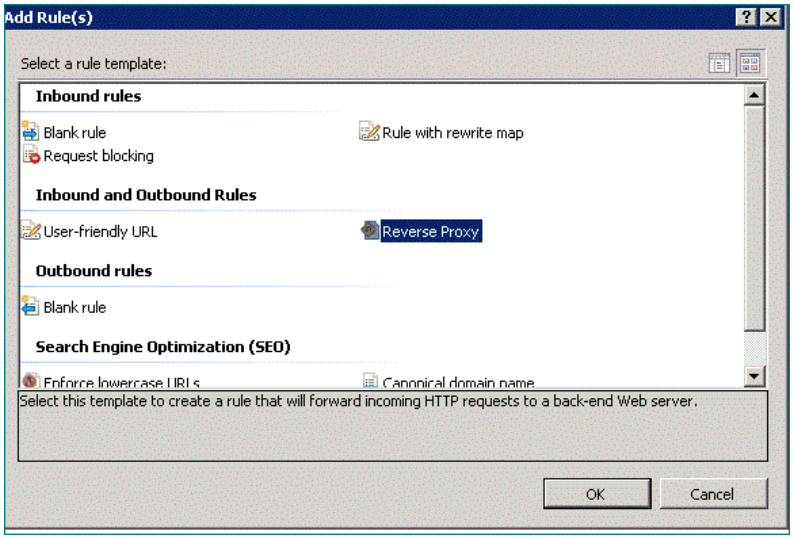


Now you should see:



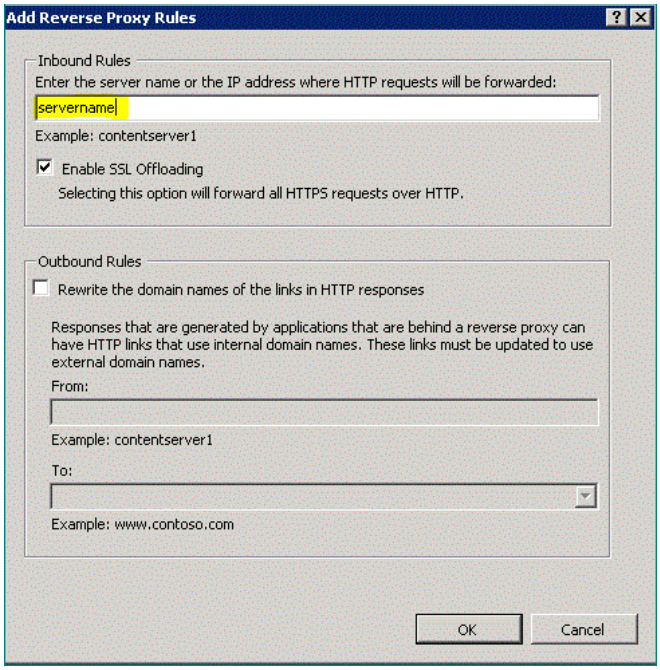
These rules are for IBM Cognos Analytics. Apparo Fast Edit need a similar rule.

Add a new rule (see right side) and press “Add Rule(s)”.

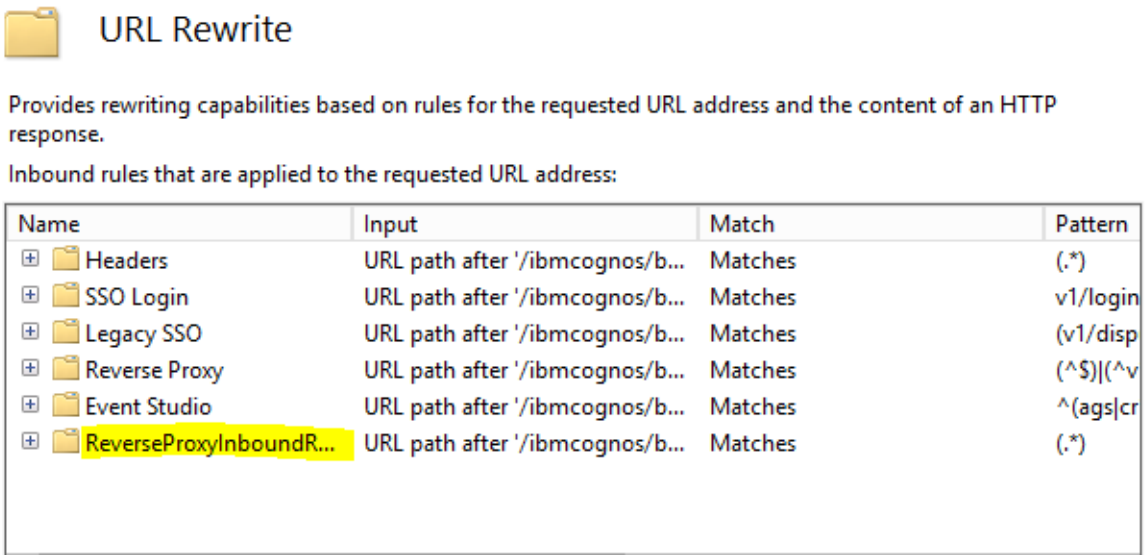


Double click “Reverse Proxy”.

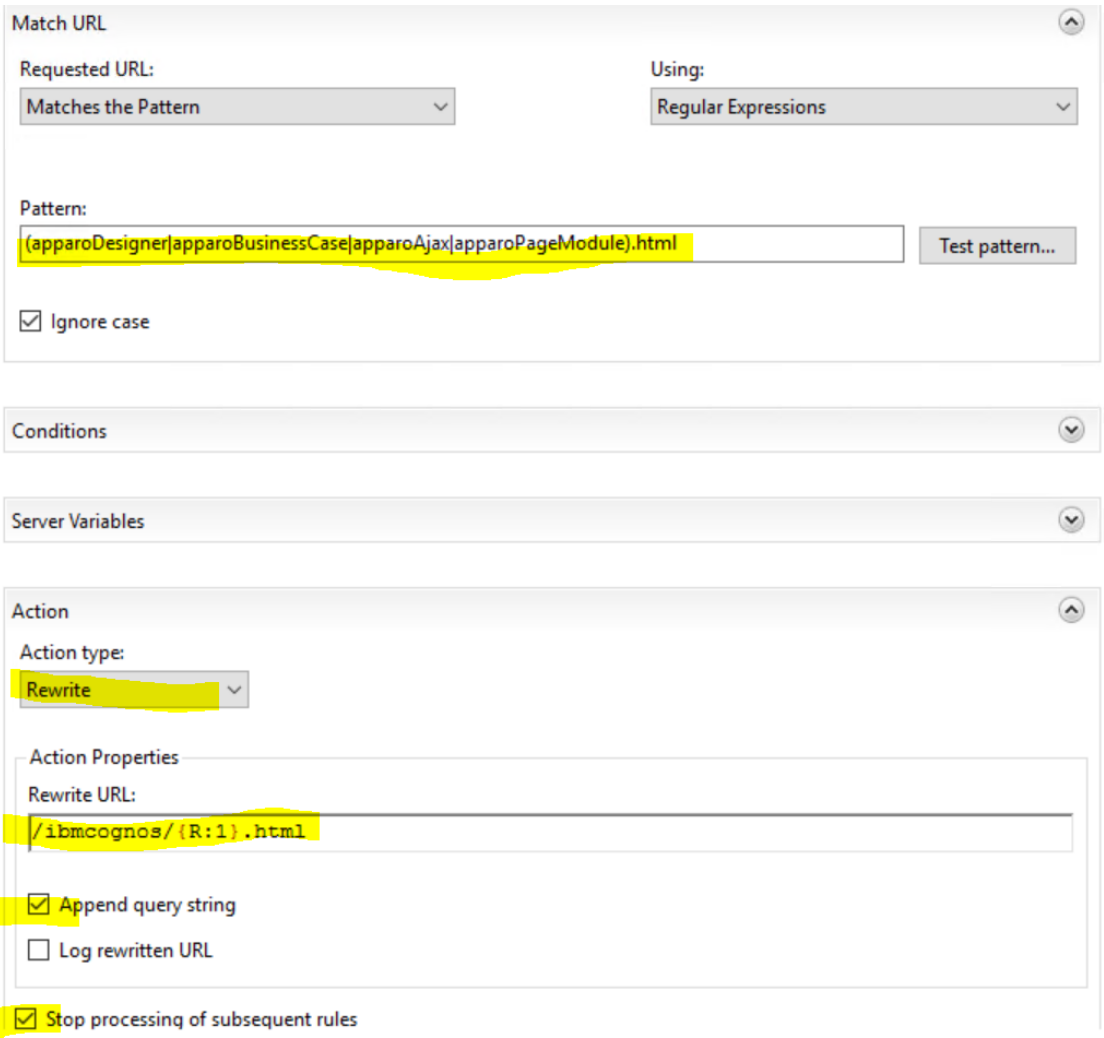
Enter the current server name and press OK.



Now you see:



Edit now the new rule and enter the yellow marked texts:



You must enter:

(apparoDesigner|apparoBusinessCase|apparoAjax|apparoPageModule).html

… and

/ibmcognos/{R:1}.html

Press “Apply” (see right side).

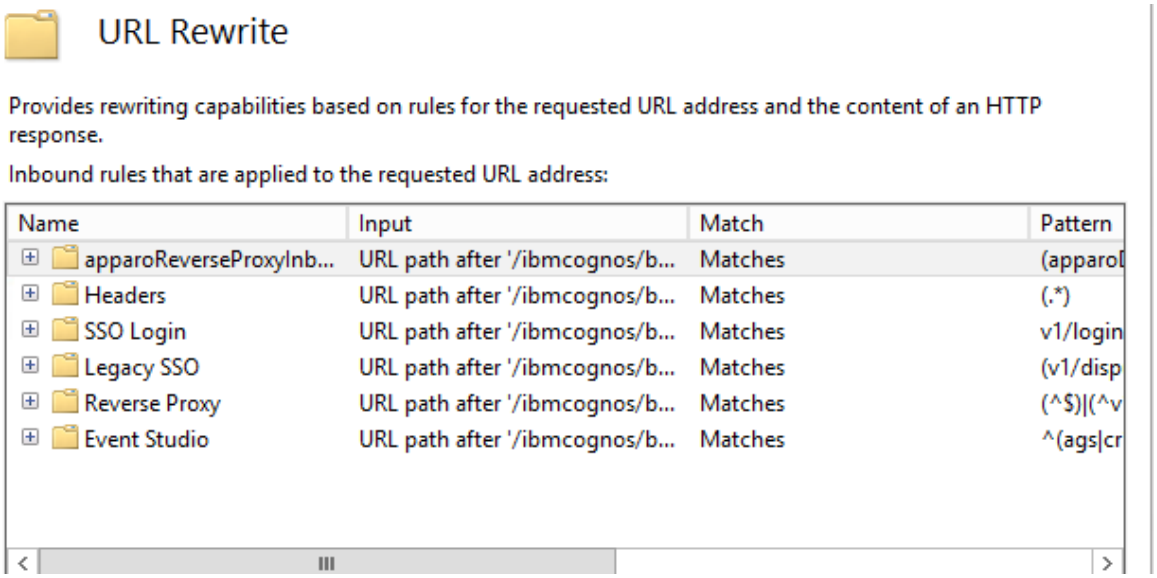
After you have changed this rule it is time to rename this rule.
Please rename this rule to “apparoReverseProxy” using “Rename” feature (see right side).

Hint: If you want to use checkboxes in a List in a report then please add apparoTableModule too:
(apparoDesigner|apparoBusinessCase|apparoAjax|apparoPageModule|apparoTableModule).html

Change the execution order:

Select the last rule (apparoReverseProxy) and press “Move up” to the top of this list.

Now you see following order:



It is necessary that the rule for Apparo Fast Edit has **the first position**.

Now the installation of the Apparo gateway is successfully finished.

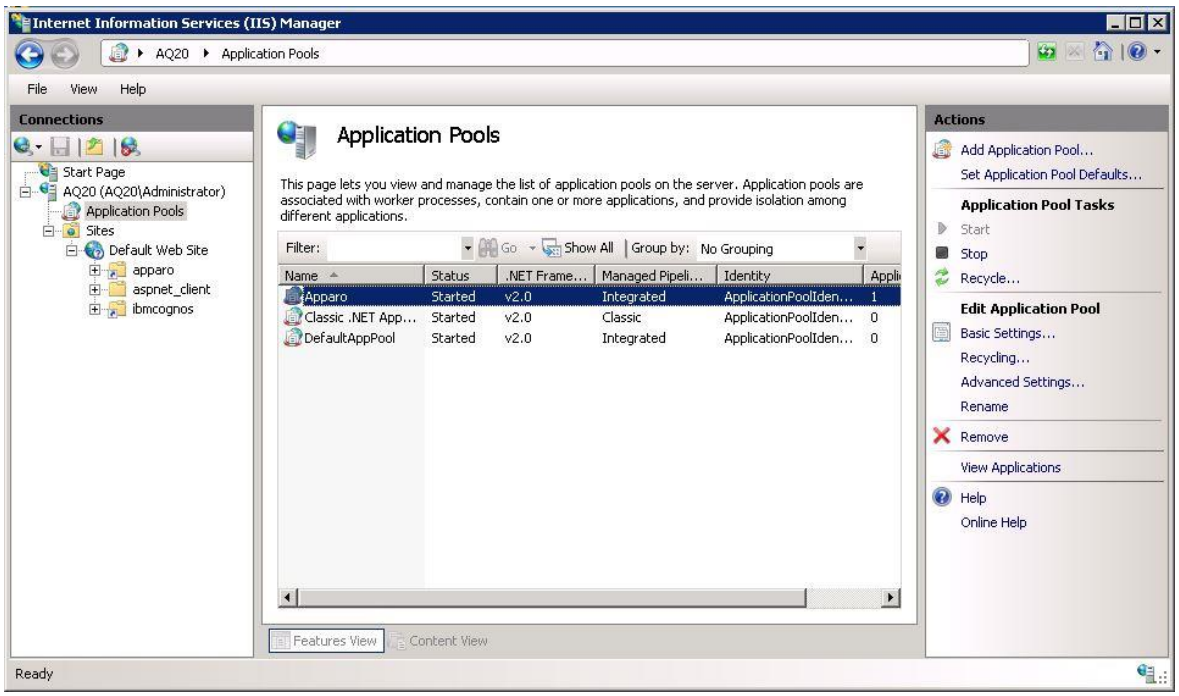
Checks:

- **test if the virtual directory is defined and it points to file directory cgi-bin**
- **test if the virtual directory has the right to execute**
- **test if this ISAPI filter is allowed**

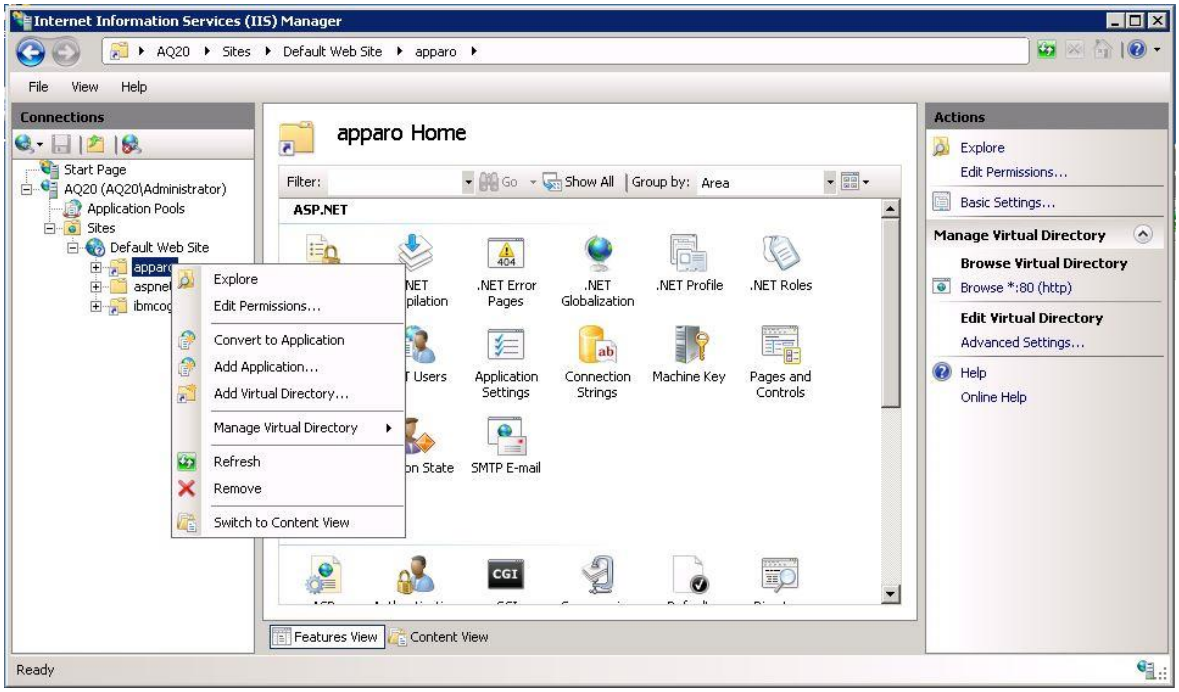
restart the IIS

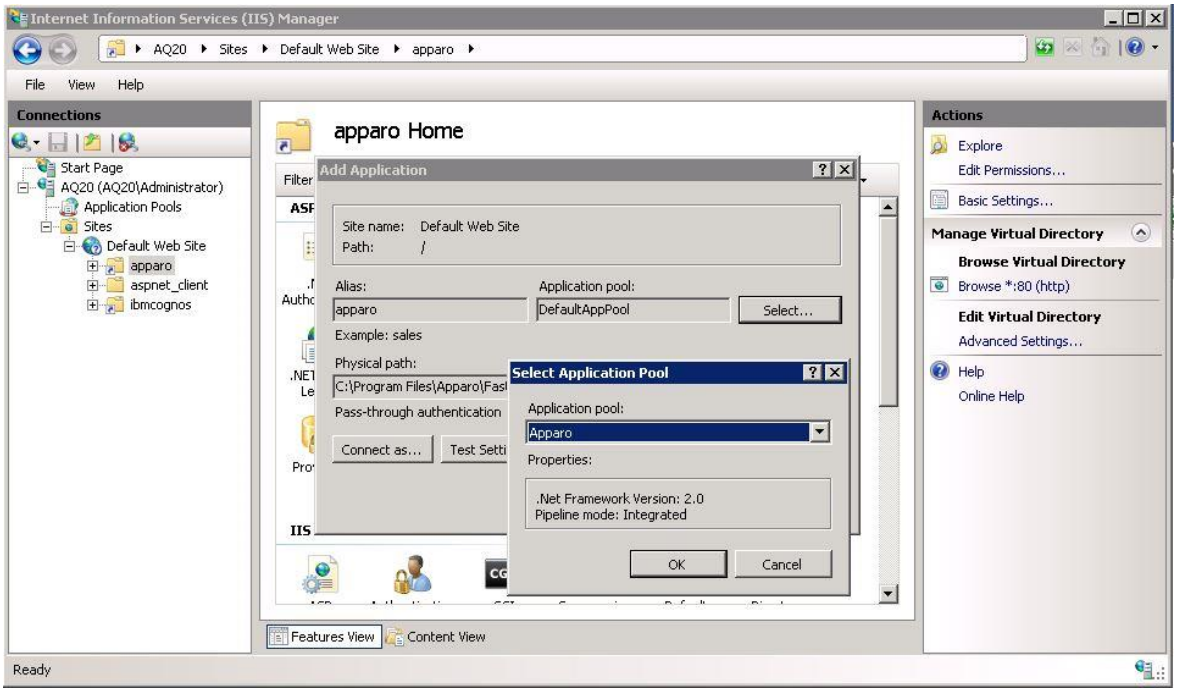
Using an own Application Pool

If you want to use a separate application pool instead of the “DefaultAppPool” then additional settings are required.

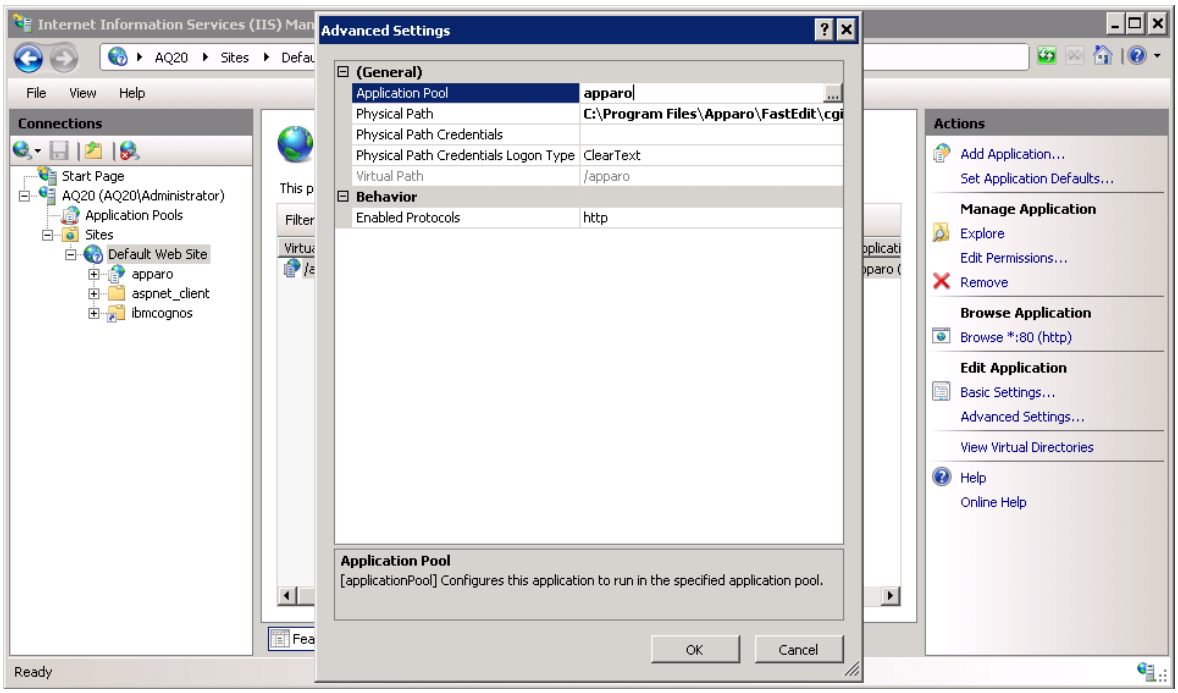


Click with the right mouse button on the virtual directory ‘apparo' and select ‚Convert to Application’





Then select the desired Application Pool with the “Select ...” button.



The “Default Web Site” must use the same Application Pool (Advanced Settings)

Other applications like Cognos are not affected by the application pool setting of the default web site.

Hint:

When using 64 Bit Windows, please check the settings of the Application Pool regarding the usage of the 32bit version (Advanced Settings -> Enable 32bit Application).

In case it is set to “true”, please use the file IIS_FastEdit_32bit.dll.

7.6 Configuration of the Apache 2.4 web server

This chapter is describing the configuration of Apache web server 2.4 and higher.

Hint: The configuration of Apparo Fast Edit using Apparo Configuration Manager must be already finished before you can continue.

Following installation steps are necessary:

Open the text file "**apache_cognos_analytics.txt**" in folder [APPARO_HOME]/FastEdit/cgi-bin

It has this or similar content (server names are of course different):

```
# put these rules into file cognos.conf at the beginning

RewriteEngine On
RewriteRule /ibmcognos/bi/v1/apparoDesigner.html /ibmcognos/apparoDesigner.html [PT,L]
RewriteRule /ibmcognos/bi/v1/apparoBusinessCase.html /ibmcognos/apparoBusinessCase.html [PT,L]
RewriteRule /ibmcognos/bi/v1/apparoAjax.html /ibmcognos/apparoAjax.html [PT,L]
RewriteRule /ibmcognos/bi/v1/apparoPageModule.html /ibmcognos/apparoPageModule.html [PT,L]
RewriteRule /ibmcognos/bi/v1/apparoTableModule.html /ibmcognos/apparoTableModule.html [PT,L]


# put these into the file httpd.conf

<IfModule mod_proxy.c>
        ProxyPass /apparo balancer://ApparoFastEdit/apparo
        ProxyPassReverse /apparo balancer://ApparoFastEdit/apparo
        ProxyIOBufferSize 32768
        <Proxy balancer://ApparoFastEdit>
                BalancerMember ajp://ip-172-31-28-181.eu-west-1.compute.internal:9800 route=s1 loadfactor=1
                ProxySet timeout=300
                ProxySet lbmethod=bytraffic
                ProxySet nofailover=On
                ProxySet stickysession=JSESSIONID|jsessionid
        </Proxy>
        <Location /balancer-manager>
                SetHandler balancer-manager
        </Location>
</IfModule>
```

This file contains 2 parts:

1. Add the <IfModule mod… part at the end of the httpd.conf file like here and before the Cognos part.

```
# put these into the file httpd.conf

<IfModule mod_proxy.c>
        ProxyPass /apparo balancer://ApparoFastEdit/apparo
        ProxyPassReverse /apparo balancer://ApparoFastEdit/apparo
        ProxyIOBufferSize 32768
        <Proxy balancer://ApparoFastEdit>
                BalancerMember ajp://ip-172-31-28-181.eu-west-1.compute.internal:9800 route=s1 loadfactor=1
                ProxySet timeout=300
                ProxySet lbmethod=bytraffic
                ProxySet nofailover=On
                ProxySet stickysession=JSESSIONID|jsessionid
        </Proxy>
        <Location /balancer-manager>
                SetHandler balancer-manager
        </Location>
</IfModule>
```

2. Add 5 rewrite rules manually into file httpd.conf – both must be placed directly before the include command for Cognos.

```
# put these rules into file cognos.conf at the beginning

RewriteEngine On
RewriteRule /ibmcognos/bi/v1/apparoDesigner.html /ibmcognos/apparoDesigner.html [PT,L]
RewriteRule /ibmcognos/bi/v1/apparoBusinessCase.html /ibmcognos/apparoBusinessCase.html [PT,L]
RewriteRule /ibmcognos/bi/v1/apparoAjax.html /ibmcognos/apparoAjax.html [PT,L]
RewriteRule /ibmcognos/bi/v1/apparoPageModule.html /ibmcognos/apparoPageModule.html [PT,L]
RewriteRule /ibmcognos/bi/v1/apparoTableModule.html /ibmcognos/apparoTableModule.html [PT,L]
```

Proxy settings

Enable following modules (they are normally already enabled):

```
LoadModule proxy_module modules/mod_proxy.so
LoadModule proxy_ajp_module modules/mod_proxy_ajp.so
LoadModule proxy_balancer_module modules/mod_proxy_balancer.so
LoadModule lbmethod_bytraffic_module modules/mod_lbmethod_bytraffic.so
```

Save the file httpd.conf and restart the web server.

7.7 Configuration of IHS (IBM web server)

Using IHS means using the IBM plugin.

Add 5 rewrite rules manually into file cognos.conf:

```
# put these rules into file cognos.conf at the beginning

RewriteEngine On
RewriteRule /ibmcognos/bi/v1/apparoDesigner.html /ibmcognos/apparoDesigner.html [PT,L]
RewriteRule /ibmcognos/bi/v1/apparoBusinessCase.html /ibmcognos/apparoBusinessCase.html [PT,L]
RewriteRule /ibmcognos/bi/v1/apparoAjax.html /ibmcognos/apparoAjax.html [PT,L]
RewriteRule /ibmcognos/bi/v1/apparoPageModule.html /ibmcognos/apparoPageModule.html [PT,L]
RewriteRule /ibmcognos/bi/v1/apparoTableModule.html /ibmcognos/apparoTableModule.html [PT,L]
```

Add following settings into the config file of the plugin: **plugin-cfg.xml**
After that please follow this list:

- Replace the server names with your host names
- Replace file paths
- Replace ports if necessary

```
<ServerCluster CloneSeparatorChange="false" GetDWLMTable="false"
IgnoreAffinityRequests="true" LoadBalance="Round Robin"
Name="Apparo_Cluster" PostBufferSize="0" PostSizeLimit="-1"
RemoveSpecialHeaders="true" RetryInterval="60" ServerIOTimeoutRetry="-1">


    <Server CloneID="2a66e1ff-ab90-4c77-a85e-a59d5001632e"
ConnectTimeout="5" ExtendedHandshake="false" LoadBalanceWeight="1"
MaxConnections="-1" Name="apparo_node_apparoserver"
ServerIOTimeout="900" WaitForContinue="false">

 <Transport Hostname="applicationserver-hostname" Port="18000" Protocol="http"/>
 <Transport Hostname="applicationserver-hostname" Port="443" Protocol="https">
<Property Name="keyring" Value="C:/Program Files/ibm/HTTPServer/apparo.kdb"/>
 <Property Name="stashfile" Value="C:/Program Files/ibm/HTTPServer/apparo.sth"/>
</Transport>
 </Server>
 <PrimaryServers>

 <Server Name="apparo_node_apparoserver"/>
    </PrimaryServers>
  </ServerCluster>
  <UriGroup Name="apparo_host_Apparo_Cluster_URIs">
    <Uri AffinityCookie="JSESSIONID" AffinityURLIdentifier="jsessionid" Name="/apparo*"/>
</UriGroup>


 <Route ServerCluster="Apparo_Cluster"

UriGroup="apparo_host_Apparo_Cluster_URIs" VirtualHostGroup="default_host"/>
```

Server Time out:

Please check that your IHS configuration has the setting

TimeOut 1800

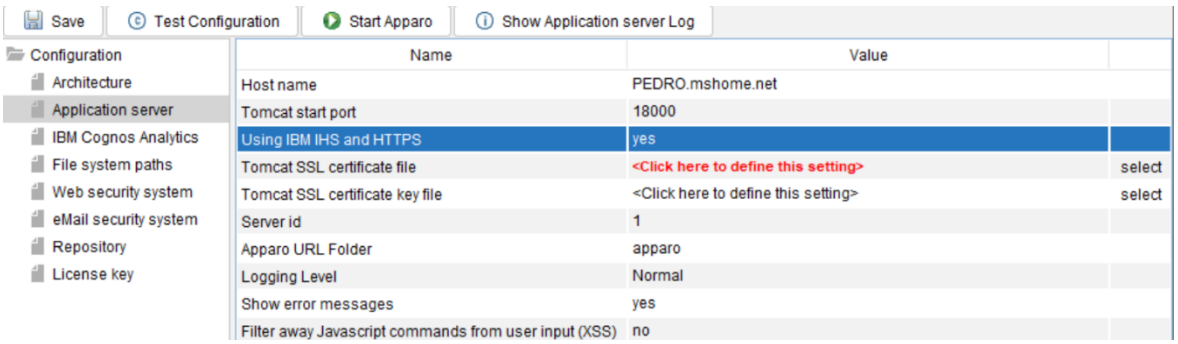
Apparo Fast Edit need much time for importing/exporting/upgrading and Excel import.

After the setting file is changed, please restart the IHS.

If using HTTPS:

Open the Configuration Manager for every used Apparo **application server** and select chapter "**Application server**":

Please change the setting "**Using IBM IHS and HTTPS**" to "**yes**" and select the files for the **SSL certificate** for the application server:



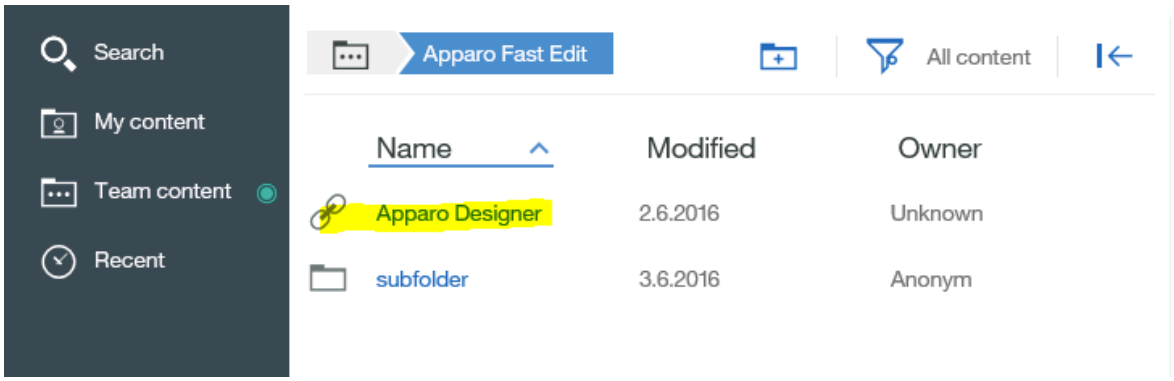
Now the installation of the Apparo gateway for IHS is finished.

8 Installation of clients

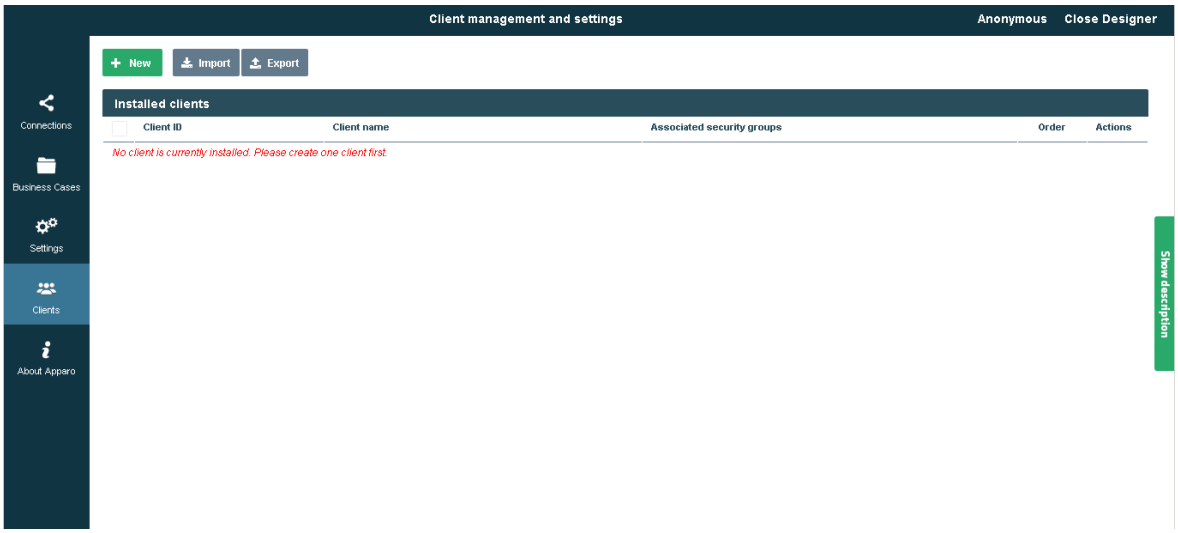
1	**Preparation** • Analysing environment • Creation of a **database user** for the Apparo repository
2	**Installation of all Apparo application servers**
3	**Configuration of all Apparo application servers** Configuration using the Apparo Configuration Manager
4	**Creating the Apparo Designer entry in IBM Cognos portal**
5	**Installation of the Apparo gateway**
6	**Configuration of the Apparo gateway** Configuration the web server and the Apparo gateway using the Apparo Configuration Manager
7	**Installing clients**

Now it is necessary to install the clients that will be used by users into Apparo Fast Edit.

Please open your IBM portal and select the entry “Apparo Designer”:



Now you should see:



Please select “Show description” button on the right side to see descriptions for each feature.

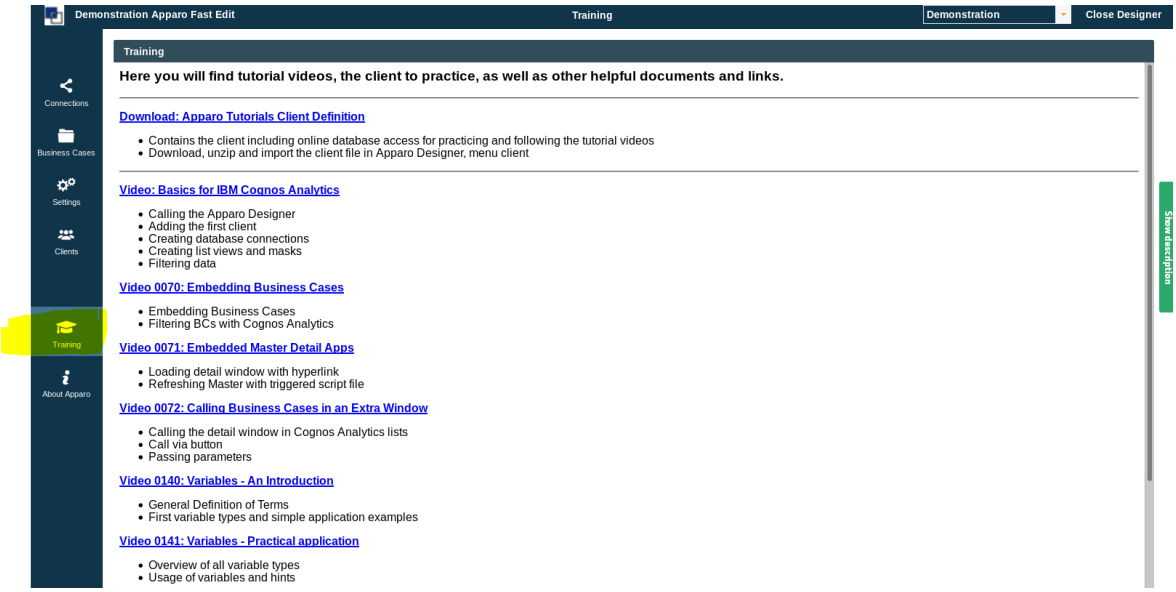
Press the “**New**” button and create a new client.

You can find a detail description of client management in “Configuration guide”.

The installation & configuration on serverside is now successfully completed.

Please also read the following chapter 'Browser requirements'.

We recommend to open the "Training" Icon in the Apparo Designer.
This page contains helpful training movies.



9 Configuration Manager using command line

It is possible to automate the configuration process of the Configuration Manager.

The complete configuration is stored in the file **configuration.xml**

You can find this file in the [APPARO_HOME]/FastEdit/cm file directory.

Using this command line the configuration can be restored:

```
[APPARO_HOME]\FastEdit\cm\cmc.bat parameter1 parameter2 …
```

Parameter name	Functionality
-?,--help	Displays this help text
-deploy true/false	Configuration Manager will deploy the setting files
-start true/false	Start Apparo Fast Edit (if no gateway)

10 Import/Export definitions using command line

You can export and import clients (including languages, folder, Business Cases, connections, DB-messages), Business Cases, folder and connections using scripts.

10.1 Exporting definitions

The export program is stored in the file directory “export”: [APPARO_HOME]\FastEdit\export

Use script **afe-export.bat**

If you start the script without arguments then you can see the possible arguments:

-afeUrl <URL>	The Apparo Fast Edit URL address that will export the data. Example: http://localhost:18000/KFE. If you don't use this argument then the export is using the application server of this installation and its installation port.
-bcid <BUSINESS_CASE_ID>	ID of a Business Case you want to export.
-clientId <CLIENT_ID>	ID of a client you either want to export or an ID of a client the target object (Business Case, folder or connection) belongs to.
-dbc <CONN_NAME>	Name of a database connection you want to export.
-emailc <CONN_NAME>	Name of an email connection you want to export.
-f <FILEPATH>	Filename & path where to write the exported XML.
-folderPath <PATH>	Path of a folder you want to export. It should start with a slash character '/' which should also be used as a path separator.
-h	Displays this help text
-p <password>	The password used to authenticate. This setting is necessary in a secured environment.
-u <username>	The user used to authenticate. This setting is necessary in a secured environment.

All export activities are logged server side in file directory logs, file afeexport.log

Sample: **afe-export.bat –f \etc\definition.xml -clientId DemoClient**

10.2 Importing definitions

The import program is stored in the file directory “import”: [APPARO_HOME]\FastEdit\import

Use script **afe-import.bat (**If you start the script without arguments then you see the possible arguments)

-afeUrl <URL>	The Apparo Fast Edit URL address that will export the data. Example: http://localhost:18000/KFE. If you don't use this argument then the export is using the application server of this installation and its installation port.
-clientId <CLIENT_ID>	ID of a client that Business Cases, language definitions, database messages or connection definitions will be imported into.
-f <FILE>	The file that contains the client, Business Case, language definition, database messages or connection definitions.
-h	Displays this help text
-importSecurity <true|false>	Business cases and folders may contain a list of user groups defining who can access them. If this option is set to false, such security information will not be imported.
-overwriteBc <true|false>	If true then Business Cases from the import file will overwrite already existing Business Cases if their Business Case ID are the same. If false, Business Cases with such conflicting identifiers will be skipped.
-overwriteClient <true|false>	If true then clients from the import file will overwrite already existing clients with the same identifiers including client content like Business Cases. If false then clients with such conflicting identifiers will be skipped.
-overwriteClientButRescueExistingConnections <true|false>	If this parameter is used, then all connections of an existing client that is currently being re-imported (and overwritten if present) will be left unchanged. Default=false. New connections are created.
-overwriteConnection <true|false>	If true then database and email connections from the import file will overwrite already existing connections with the same names. If false then connections with such conflicting names will be skipped.
-p <password>	The password used to authenticate. This setting is necessary in a secured environment.
-u <username>	The user used to authenticate. This setting is necessary in a secured environment.

All import activities are logged server side in file directory logs, file afeimport.log

Sample: **afe-import.bat –f \etc\definition.xml –u aferep –p aferep -clientId Sales**

11 TLS/SSL in a Cognos environment

If the **Cognos gateway is using TLS/SSL** then there **are no changes necessary** in the Apparo configuration.

If **the Cognos dispatcher** is using TLS/SSL (e.g using https with port 9300) then every installed Apparo application server must be informed about the used certificate.

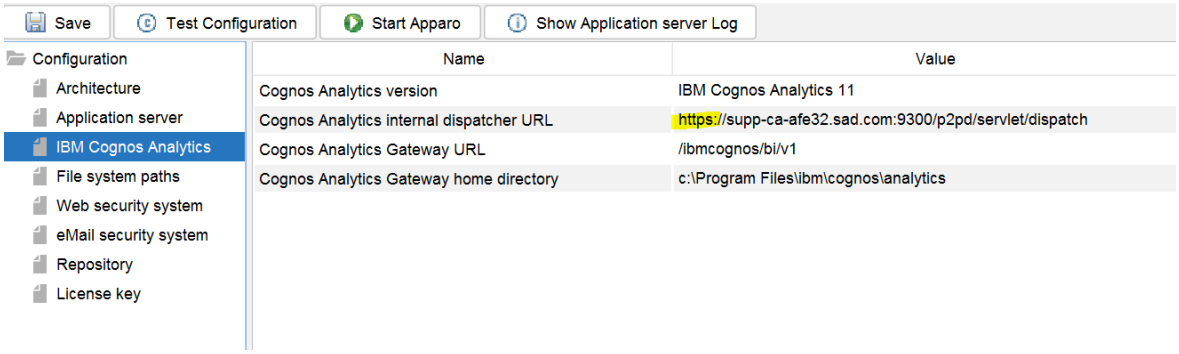
The certificates are stored in [APPARO_HOME]\FastEdit\OpenJDK\lib\security\cacerts

You can import your certificate with following command.

In this example Apparo is installed in “C:\Program Files\Apparo”, the certificate file has the name “C:\myCertificate.crt” and the default password of the key store is “changeit”.

```
"C:\Program Files\Apparo\FastEdit\OpenJDK\bin\keytool" -importcert -file C:\myCertificate.crt -alias my.company.com -keystore " C:\Program Files\Apparo\FastEdit\OpenJDK\lib\security\cacerts" -storepass changeit
```

.
Then open the Apparo Configuration Manager again and check if the URL for Cognos is using https:



If there are changes necessary then please update the URL and press “Start Apparo” button.

12 Support

If you need support then please write an eMail to:

support@apparo.solutions