

Installation Guide

Apparo Fast Edit

For Linux / IBM AIX

IBM Cognos Analytics

Version 3.1.1.0

Single Instance



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1 Prior to Installation

Installing Apparo Fast Edit can be done in 30 minutes 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 1 GB**

1.2 Supported operating systems

- **Linux Red Hat**
- **Suse Linux**
- **IBM AIX 7.x**

1.3 Supported IBM Cognos versions

- **IBM Cognos Analytics 11.0.6 – 11.0.9 (with Cognos Gateway architecture only)**

1.4 Supported web servers

- **Apache Webserver 2.4**

1.5 Supported security systems

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

1.6 Supported virtual environments

- **VMware ESX, ESXi**

Apparo Fast Edit must be installed using a **local root** account.

IBM Cognos Analytics must be already installed and running.

The IBM Cognos Analytics Gateway must be already installed.

1.7 Architecture

Possible Apparo Fast Edit architectures:

<p>1</p>	<p>Single instance, your existing Cognos environment is installed on <u>one computer only – that’s suitable for testing too.</u></p> <p>A „Single Instance“ is useful for small IBM Cognos environments or test systems.</p> <p>Using “Single Instance” the complete Apparo Fast Edit installation and the complete IBM Cognos installation is installed on one single server.</p>
<p>2</p>	<p>Multi instance, one or more Apparo gateways and one or more Apparo application servers are installed on one or more hosts.</p> <p>A „Multi instance“ is useful for better performance and high availability.</p> <p>If you want to use the multi instance architecture then please close this document and open the document “installation cluster”</p>

You can find an Apparo Fast Edit architecture document in the setup file too.

1.8 Overview installation steps

<p>1</p>	<p>Preparation</p> <ul style="list-style-type: none"> • Creation of an database user for the Apparo repository • Defining the Cognos portal folder for the Apparo Designer entry
<p>2</p>	<p>Installation</p> <p>Starting setup file for installation of the files</p>
<p>3</p>	<p>Configuration the Apparo application server</p> <p>Using Apparo Configuration Manager to configure the installation</p>
<p>4</p>	<p>Creating the Apparo Designer entry in Cognos portal</p> <p>Creating the start entry of Apparo Designer</p>
<p>5</p>	<p>Configuration the Apparo gateway</p> <p>Configuration of the Apache web server</p>
<p>6</p>	<p>Installing clients</p>

2 Preparation

1	Preparation Creation of an database user for the Apparo repository
2	Installation Starting setup file for installation of the files
3	Configuration the Apparo application server Using Apparo Configuration Manager to configure the installation
4	Creating the Apparo Designer entry in Cognos portal Creating the start entry of Apparo Designer
5	Configuration the Apparo gateway Configuration of the Apache web server
6	Installing clients

2.1 Creation of an 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
- Internal database (for test and development systems)

If you don't want to use the internal database then 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 repository".

Essential grants:

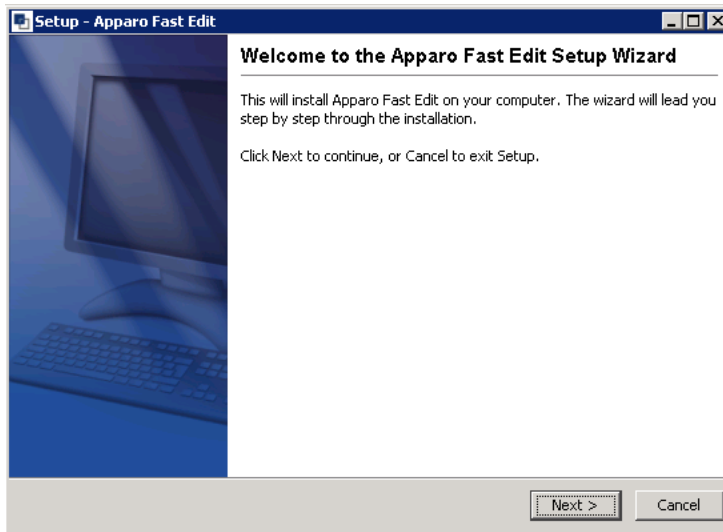
- The database user must be able to create database tables
- A Login with this user must be possible

3 Installation

<p>1</p>	<p>Preparation Creation of an database user for the Apparo repository</p>
<p>2</p>	<p>Installation Starting setup file for installation of the files</p>
<p>3</p>	<p>Configuration the Apparo application server Using Apparo Configuration Manager to configure the installation</p>
<p>4</p>	<p>Creating the Apparo Designer entry in Cognos portal Creating the start entry of Apparo Designer</p>
<p>5</p>	<p>Configuration the Apparo gateway Configuration of the Apache web server</p>
<p>6</p>	<p>Installing clients</p>

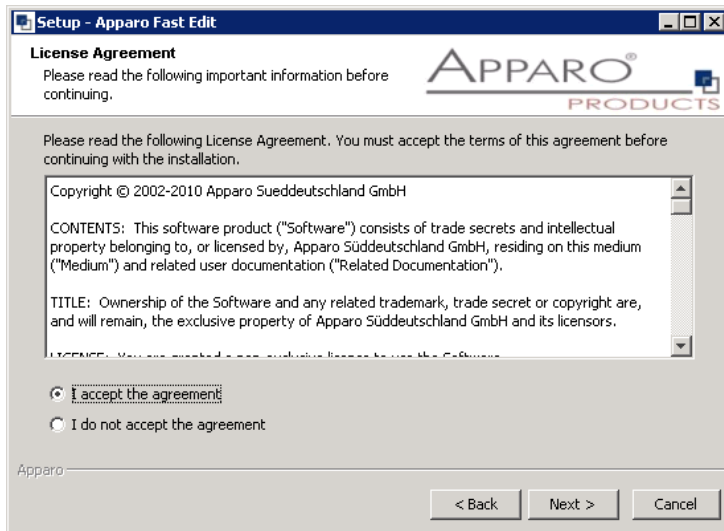
Start the Installation by executing the file

FastEdit3.1.x.yyy_linux_tomcat_cognos_analytics.sh



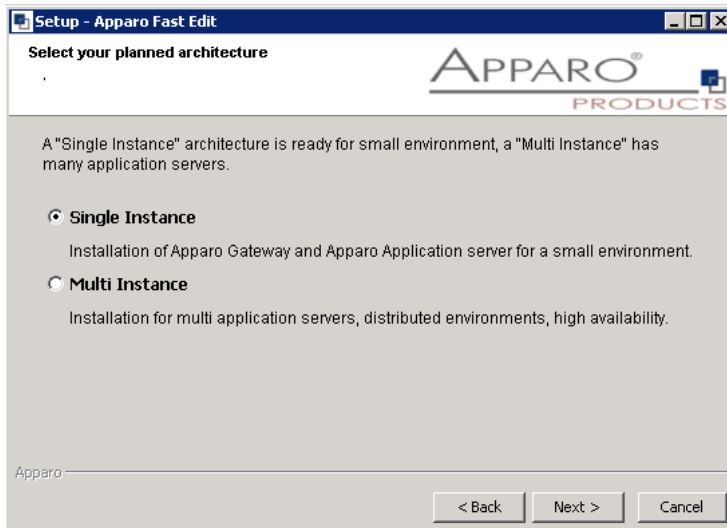
Confirm the beginning of the installation by clicking „**Next**“.

3.1 License agreement



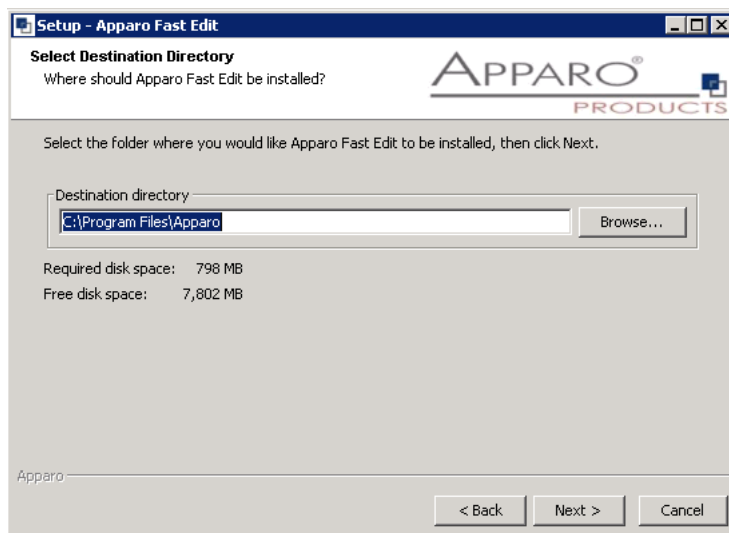
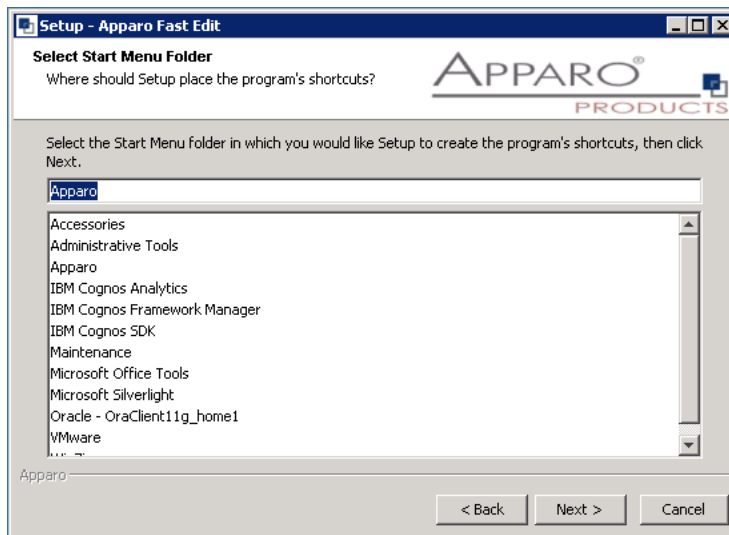
Read and confirm the license agreement by clicking „I Agree“.

3.2 Selecting the architecture



Please select “Single Instance” and choose „Next>“.

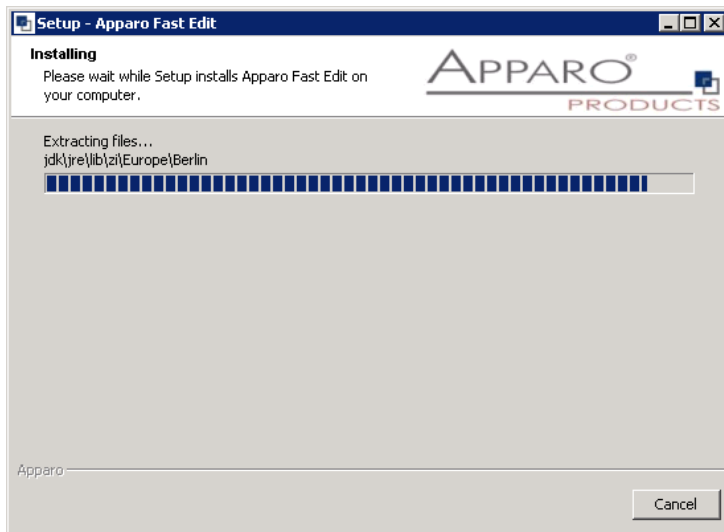
3.3 Defining the start menu folder and target file directory



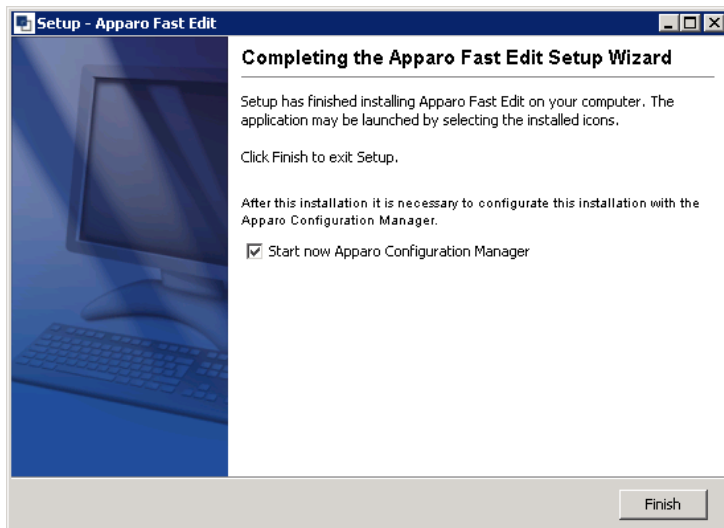
Please define folder and path and choose „**Next >**“.

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.

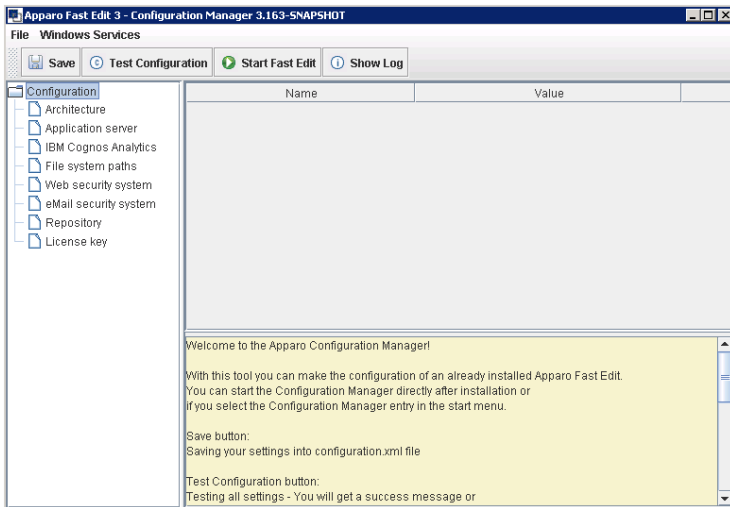
4 Configuration the Apparo application server

1	Preparation Creation of an database user for the Apparo repository
2	Installation Starting setup file for installation of the files
3	Configuration the Apparo application server Using Apparo Configuration Manager to configure the installation
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With the **Apparo Configuration Manager** you are able to configure the already installed Apparo Fast Edit.

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 „ <u>Start Fast Edit</u> “ button for starting the application server |
| 4 | <p>You can see the log file of the application server with pressing „<u>Show Log</u>“</p> <p>If the application server is running then you can see in the log:</p> <pre> +++++++ + Apparo Fast Edit 3.1.x.y (Build nnn) was successfully started at 07.11.2016 02:37:41 + +++++++ </pre> |

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

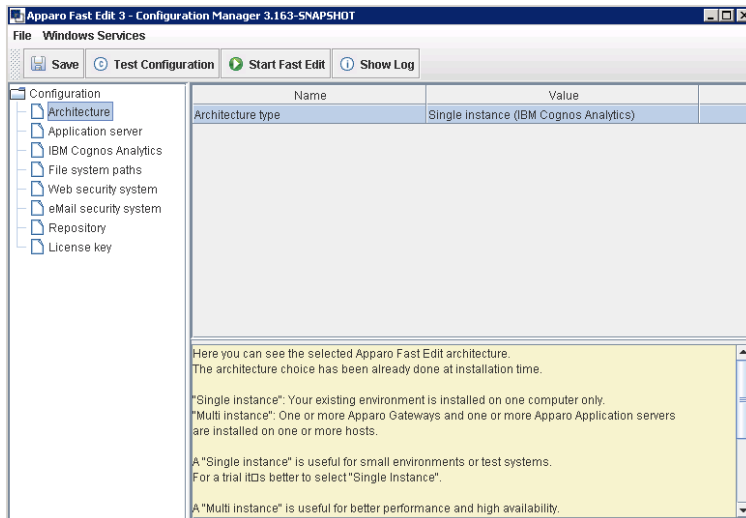
<http://<applicationserver:<startport>/apparo/pages/apptest.xhtml>

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.

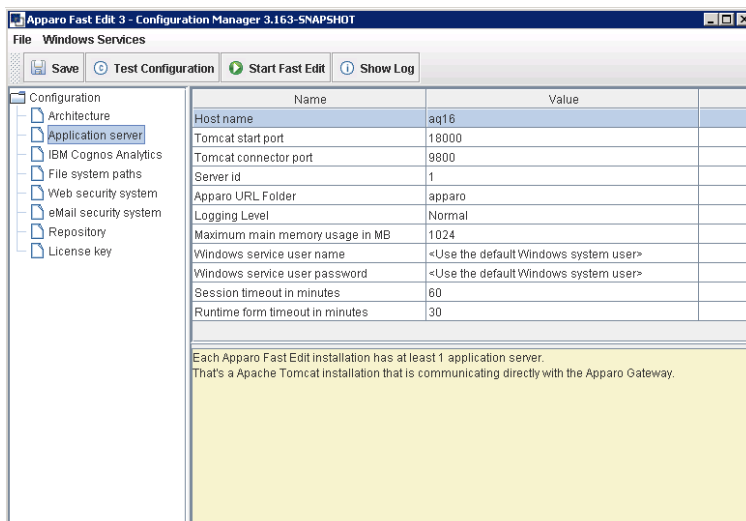
4.1 Architecture

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.



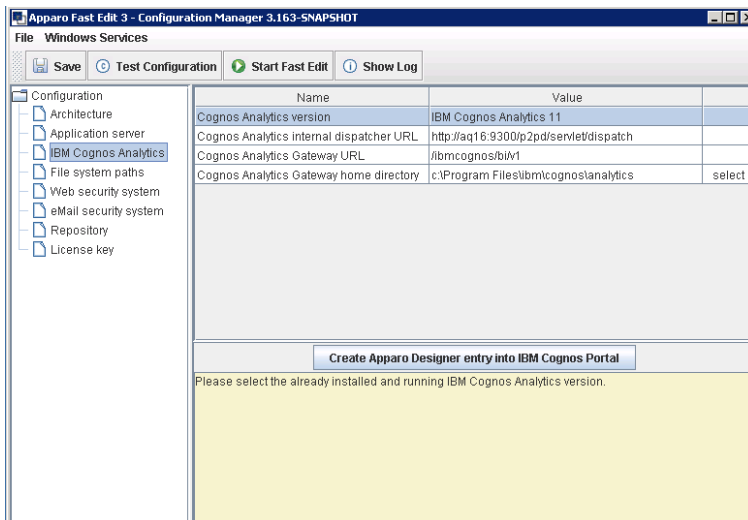
4.2 Application Server

Settings for the application server, e.g. memory.



4.3 IBM Cognos Analytics

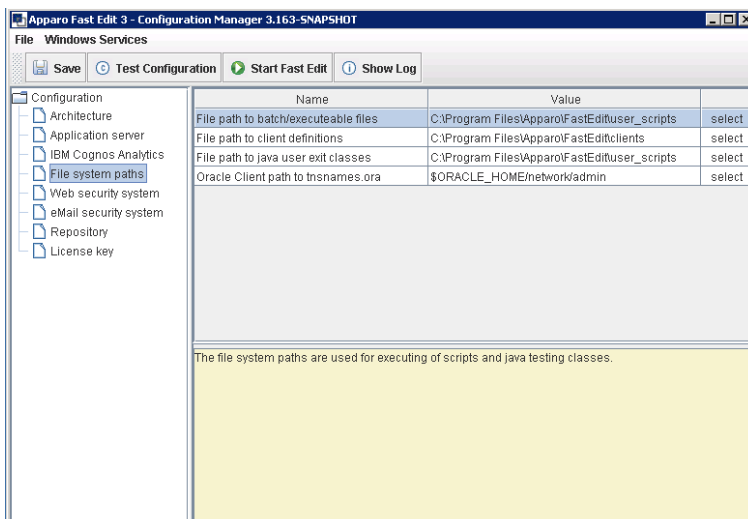
Settings for the already installed IBM Cognos Analytics environment:



It is necessary to create an “Apparo Designer” entry using the button.

4.4 File system paths

File directories for the clients, server side scripts and user defined Java classes for testing:

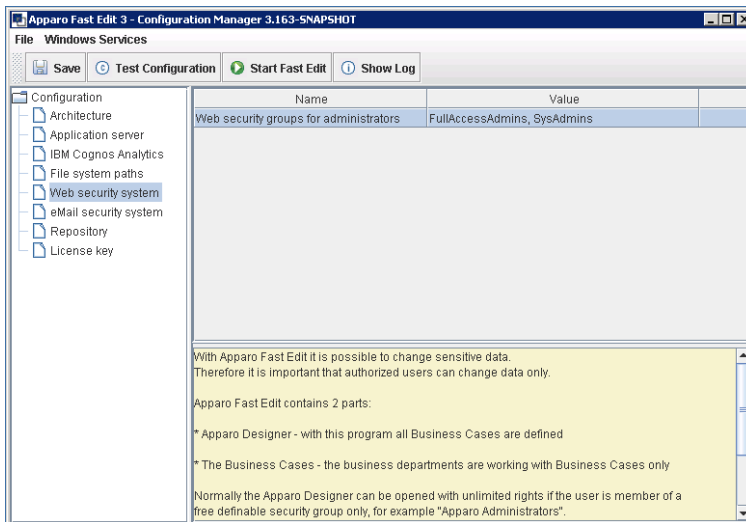


4.5 Web security system

The Cognos group/role that is necessary to open the Apparo Designer **with full access.**

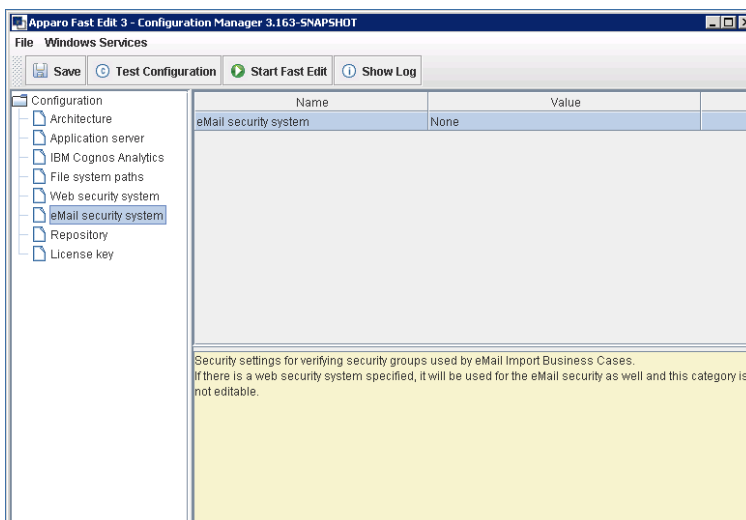
Apparo Fast Edit is using automatically all security namespaces of IBM Cognos in that the current IBM Cognos user is logged in.

If no security group is defined then everybody can open the Apparo Designer with full access.



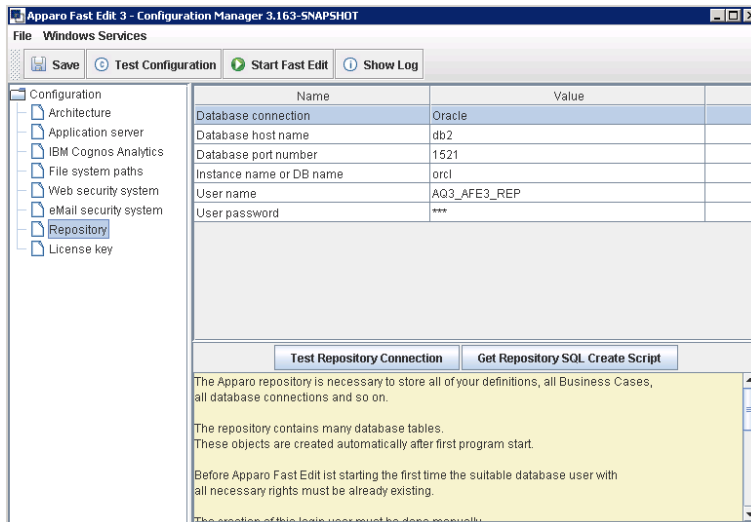
4.6 eMail security system

The Excel Import Business Case is running outside of the Cognos security and need therefore an own security system.



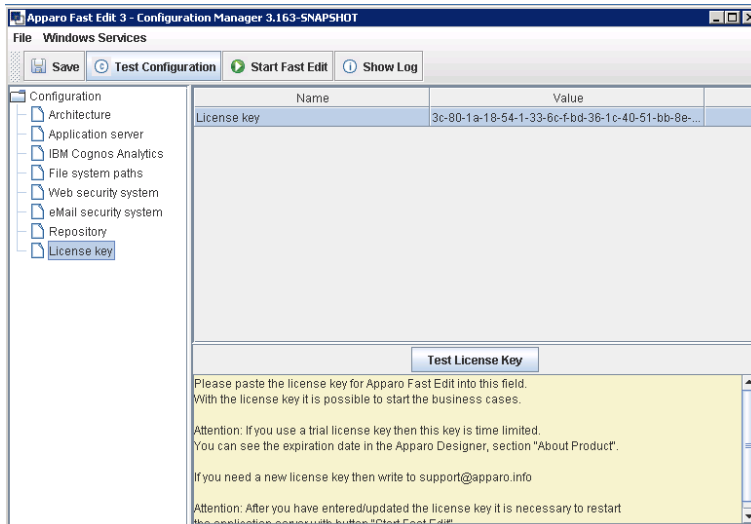
4.7 Repository

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.



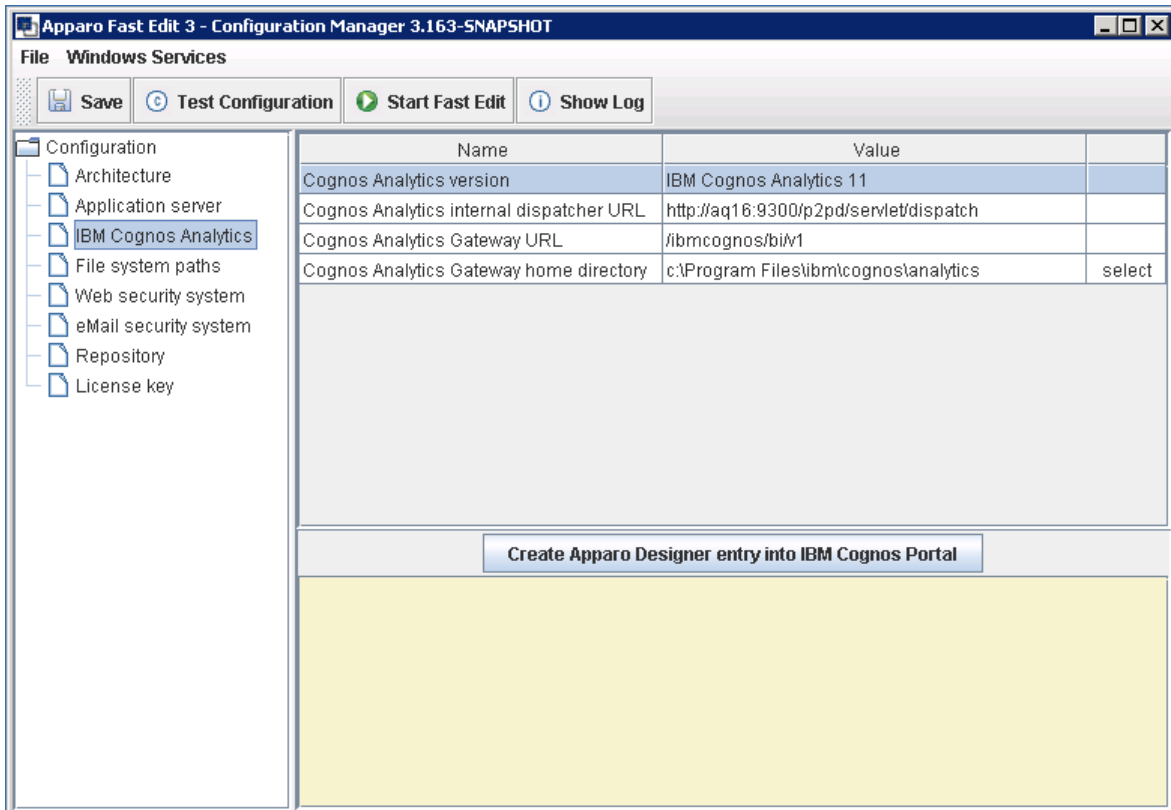
To complete the installation you can save and test the configuration. If everything is OK, please start the server by clicking the button 'Start Fast Edit'.

Using this button it is deploying the configuration and starting the server.

5 Creating the Apparo Designer entry in IBM Cognos portal

<p>1</p>	<p>Preparation Creation of an database user for the Apparo repository</p>
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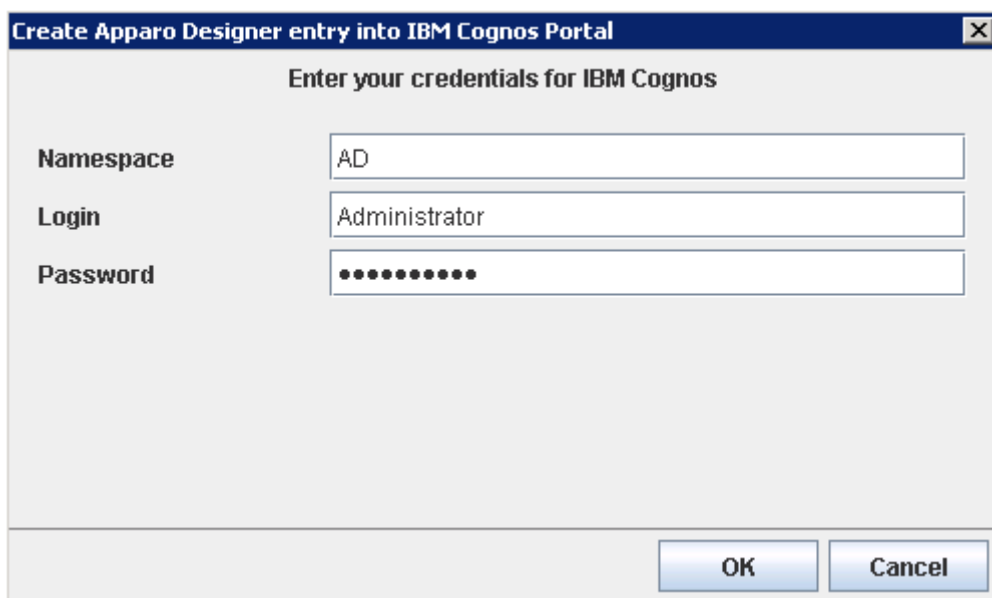
The portal entry for starting the Apparo Designer can be created with the Configuration Manager:



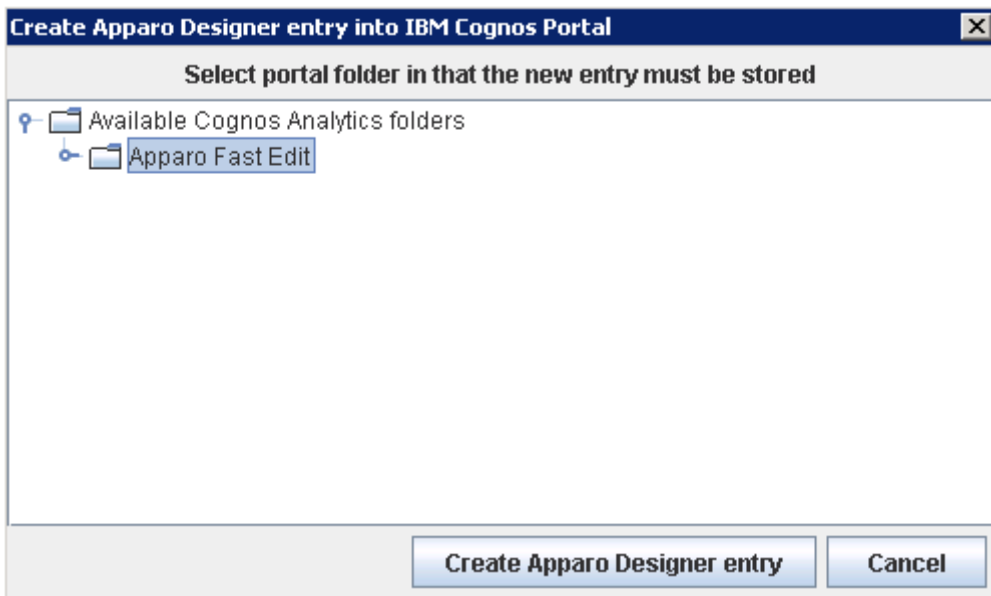
Click the Button 'Create Apparo Designer entry into IBM Cognos portal'

In the next step you will be asked to enter your Cognos credentials:
This credential will be not stored somewhere and will be just used for login once.

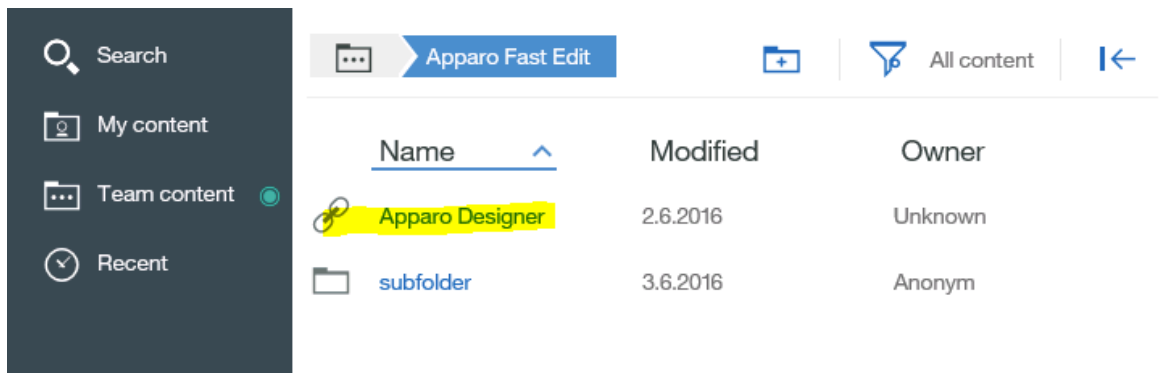
Please use the Namespace ID.



Select the desired Cognos target folder and click 'Create Apparo Designer entry'



You can see this new entry in the Cognos portal:



6 Configuration of the Apparo gateway

1	Preparation Creation of an database user for the Apparo repository
2	Installation Starting setup file for installation of the files
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6	Installing clients

6.1 Configuration of the Apache Webserver

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:

```
# put these 2 rules into file cognos.conf at the begin
RewriteRule /ibmcognos/bi/v1/apparoDesigner.html /ibmcognos/apparoDesigner.html [PT,L]
RewriteRule /ibmcognos/bi/v1/apparoBusinessCase.html /ibmcognos/apparoBusinessCase.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://192.168.0.140:9800 route=s1 loadfactor=1
    ProxySet timeout=300
    ProxySet lbmethod=bytraffic
    ProxySet nofailover=0n
    ProxySet stickysession=JSESSIONID|jsessionid
  </Proxy>
  <Location /balancer-manager>
    SetHandler balancer-manager
  </Location>
</IfModule>
```

This file contains 2 parts:

1. Rewrite rules

Add both rewrite rules into **cognos.conf** file – both must be placed directly before the first rewrite rule for Cognos:

Example:

```
# UI to monitor/configure load balancer
<Location /ibmcognos/balancer-manager>
  SetHandler balancer-manager
</Location>

Alias /ibmcognos /usr/local/ibm/cognos/analytics/webcontent

RewriteEngine On

RewriteRule /ibmcognos/bi/v1/apparoDesigner.html /ibmcognos/apparoDesigner.html [PT,L]
RewriteRule /ibmcognos/bi/v1/apparoBusinessCase.html /ibmcognos/apparoBusinessCase.html [PT,L]

# Send default URL to service
RewriteRule ^/ibmcognos/bi/$ balancer://mycluster/bi/ [P]

# Rewrite Event Studio static references
RewriteCond %{HTTP_REFERER} v1/disp [NC]
RewriteRule ^/ibmcognos/bi/(ags|crl|prompting|ccl|common|skins|ps)/(.*) /ibmcognos/$1/$2 [PT,L]

# Define cognos location
<Location /ibmcognos>
```

2. Proxy settings

Enable following modules:

```
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
```

Add in file **httpd.conf** at the end the load balancing definitions, copy the part from the file **apache_cognos_analytics.txt**.

Example:

```
IncludeOptional conf.d/*.conf
```

```
<IfModule mod_proxy.c>
    ProxyPass /apparo balancer://ApparoFastEdit/apparo
    ProxyPassReverse /apparo balancer://ApparoFastEdit/apparo
    ProxyIOBufferSize 32768
    <Proxy balancer://ApparoFastEdit>
        BalancerMember ajp://aq40:9800 route=s1 loadfactor=1
        ProxySet timeout=300
        ProxySet lbmethod=bytraffic
        ProxySet nofailover=0n
        ProxySet stickysession=JSESSIONID|jsessionid
    </Proxy>
    <Location /balancer-manager>
        SetHandler balancer-manager
    </Location>
</IfModule>

<VirtualHost *:80>
    Include conf/cognos.conf

</VirtualHost>
```

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

Hint if using RedHat Linux:

If you get an Apache error like:

[error] (13)Permission denied: proxy: AJP: attempt to connect to <servername:9800> failed

Please enter following command:

```
/usr/sbin/setsebool -P httpd_can_network_connect 1
```

Server Time out:

Please check that your Apache web server configuration has the setting

TimeOut 1800

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

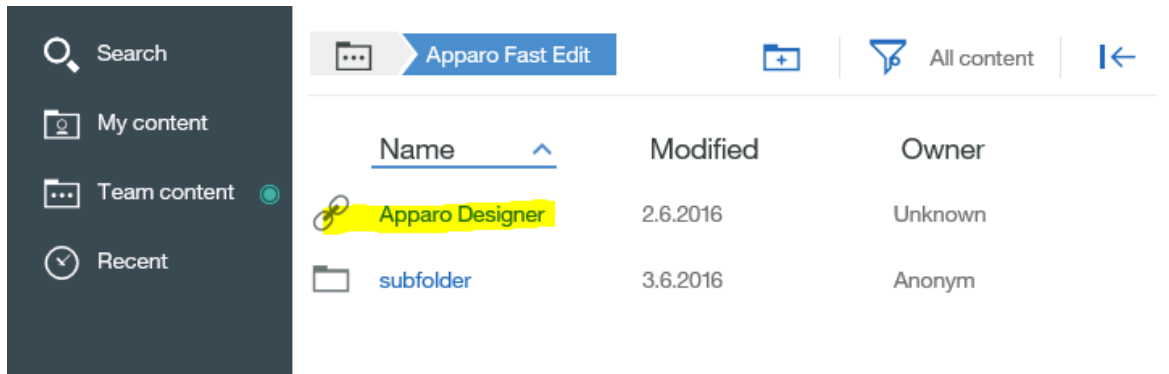
Now the installation of the Apparo gateway for Apache web server is finished.

7 Installation clients

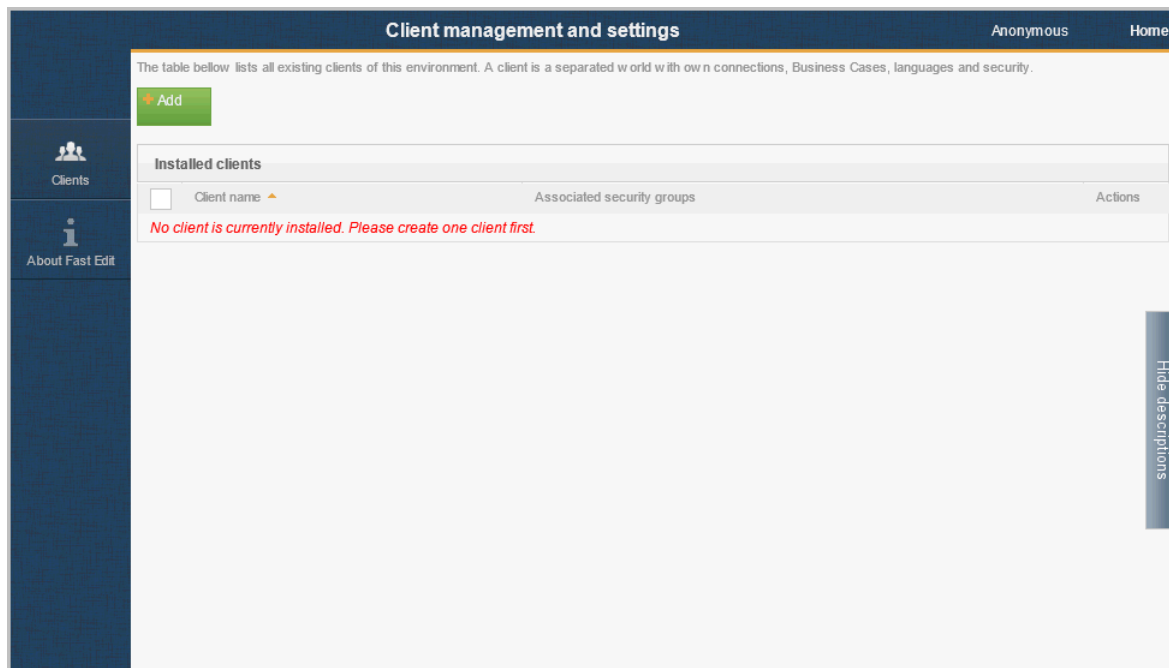
1	<p>Preparation Creation of an database user for the Apparo repository</p>
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6	<p>Installing clients</p>

Now it is necessary to install the clients.

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



Now you should see:



Please read now the document “**Configuration Guide**” for defining/importing clients.

The installation & configuration on serverside is now successfully completed.

Please also read the following chapter 'Browser requirements'.

We recommend to read the document "Training Guide" for the fundamental usage for the first steps.

You can find all documentations and movies in

[APPARO_HOME]/FastEdit/doc

Movies about Apparo Fast Edit:

<http://movies.apparo.solutions>

8 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.sh 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)

9 Import/Export definitions using command line

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

9.1 Importing definitions

Important: At this time the Apparo Fast Edit application must already run.

The import program is stored in the file directory "import": [APPARO_HOME]/FastEdit/import

Use script **afe-import.sh** (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/apparo. 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.
-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.

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

Sample:

```
afe-import.sh -f /etc/definition.xml -clientId Sales
```

9.2 Exporting definitions

The export program is stored in the file directory "export": [APPARO_HOME]/FastEdit/export

Use script **afe-export.sh**

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/apparo. 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

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

Sample:

```
afe-export.sh -f /etc/definition.xml -clientId DemoClient
```

10 Browser requirements

10.1 Supported browsers and versions

Microsoft Internet Explorer 8 (not recommended, execution is slow)

Microsoft Internet Explorer 9

Microsoft Internet Explorer 10

Microsoft Internet Explorer 11

Hint: Compatibility mode for Internet Explorer 8 must be disabled.

Mozilla Firefox (current version)

Google Chrome (current version)

Apple Safari (current version)

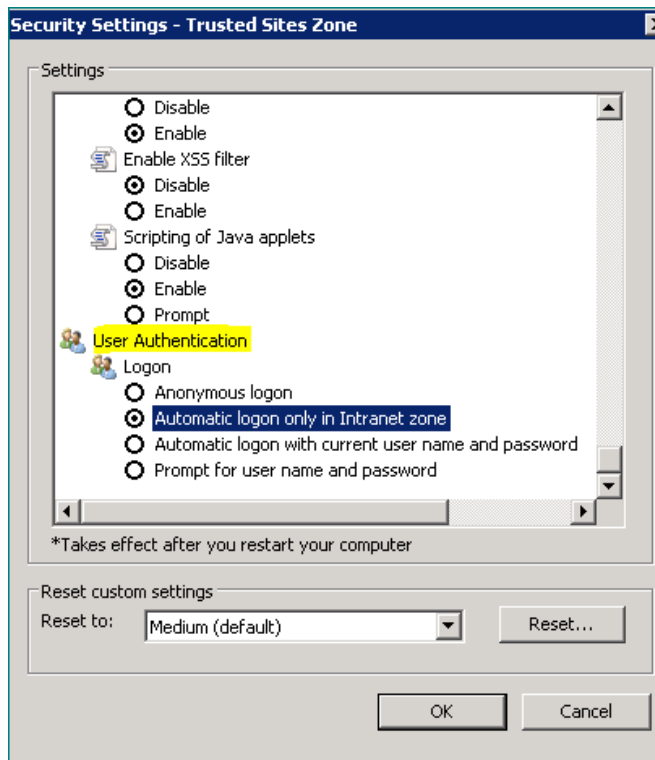
10.2 Supported operating systems for client browsers

Microsoft Windows

10.3 Additional settings for Microsoft Internet Explorer only

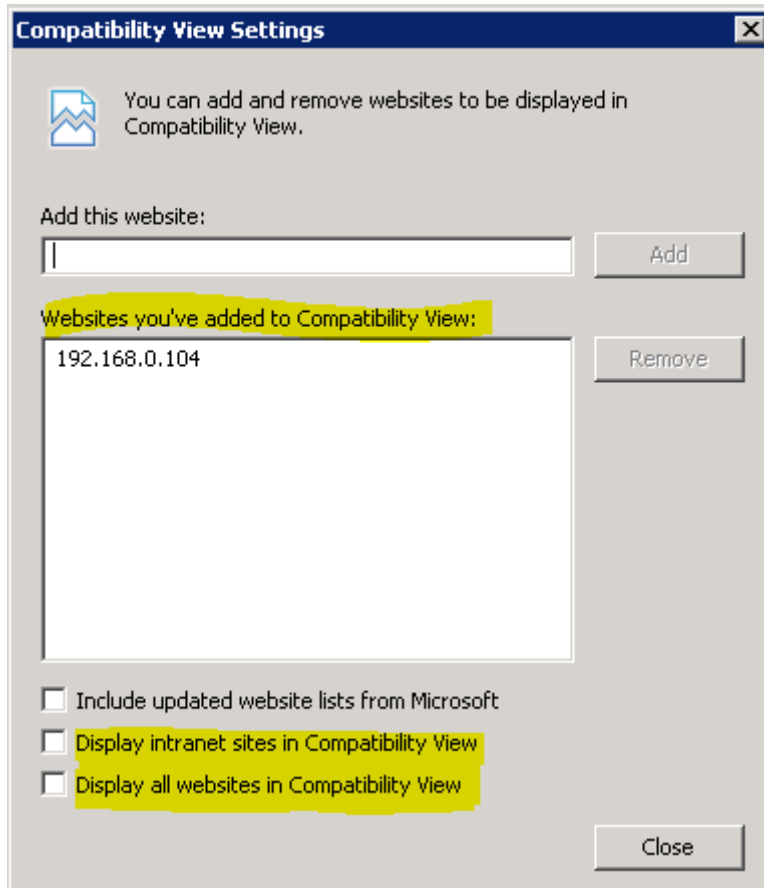
- Domain name of Apparo Fast Edit web server must be in trusted sites
- “about:blank” must be in trusted sites

Settings for Single Sign On (SSO) for standalone versions of Apparo Fast Edit:



Hint: Apparo Fast Edit is not supporting Internet Explorer 7.

Therefore the settings “**Display intranet in Compatibility View**” and “**Display all websites in Compatibility View**” must be **disabled**.



Solution: Placing these domains into the “Websites you’ve added to Compatibility View” because in this case Apparo Fast Edit can disable the Compatibility View automatically.

10.4 Additional settings for all browsers

- Popup blocker must be **disabled**
- File download (Excel files) must be allowed

11 Support

If you need support please write an email to:

support@apparo.solutions