

Apparo Fast Edit

Installation Guide

3.1

Linux & IBM AIX / Standalone version



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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 1000 MB

Main memory: about 2000 MB

1.2 Supported operating systems

- Linux 64 Bit
- IBM AIX 7

1.3 Supported web server

- Apache web server 2.4

1.4 Supported virtual environments

- VMware ESX/ESXi (for Linux)

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

This version is running only on the *Apache Tomcat 7 Application Server*.
This Tomcat server will be installed automatically.

1.5 Architecture

Possible Apparo Fast Edit architectures:

<p>1</p>	<p>Single Instance, the complete Apparo Fast Edit including web server is installed on <u>one computer only – that’s suitable for testing</u></p> <p>A „Single Instance“ is useful for small environments or test systems.</p>
<p>2</p>	<p>Multi Instance, one or more Web servers 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>

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

This document is describing the installation and configuration of a Single Instance.

You can find a document “Installation cluster” for Multi Instance too.

1.6 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 security group for all users that must be able to open the Apparo Designer
<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>Configuration the Apparo gateway Configuration the web server</p>
<p>5</p>	<p>Open the portal</p>
<p>6</p>	<p>Installing clients Installing the clients in Apparo Designer</p>

2 Preparation

1	<p>Preparation</p> <ul style="list-style-type: none"> • Creation of an database user for the Apparo repository • Defining the security group for all users that must be able to open the Apparo Designer
2	<p>Installation</p> <p>Starting setup file for installation of the files</p>
3	<p>Configuration the Apparo application server</p> <p>Using Apparo Configuration Manager to configure the installation</p>
4	<p>Configuration the Apparo gateway</p> <p>Configuration the web server</p>
5	<p>Open the portal</p>
6	<p>Installing clients</p> <p>Installing the clients in Apparo Designer</p>

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 10g – 12c
- IBM DB/2 9.0 – 11.1
- MS SQL Server 2005 - 2016
- Internal database (**for test and development systems only; NOT FOR CLUSTER SYSTEMS**)

This database user must be set up 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 and sequences.
- A login with this user must be possible.

Hints:

- **Oracle:** DB-User must have CONNECT, RESOURCE and UNLIMITED TABLESPACE grants. User **SYS** is not allowed.
- **IBM DB/2:** see document “Installation - creating database user”

2.2 Defining the security group

Apparo Fast Edit can use following security systems:

- **LDAP**
- **MS Active Directory (including Single Sign On)**

The Apparo Designer is secured – just users with a defined security group can open the Designer.

Therefore it's necessary to define a new group with the name "**Apparo Designers**" (for example) in your security system first.

3 Installation

1	<p>Preparation</p> <ul style="list-style-type: none"> • Creation of an database user for the Apparo repository • Defining the security group for all users that must be able to open the Apparo Designer
2	<p>Installation</p> <p>Starting setup file for installation of the files</p>
3	<p>Configuration the Apparo application server</p> <p>Using Apparo Configuration Manager to configure the installation</p>
4	<p>Configuration the Apparo gateway</p> <p>Configuration the web server</p>
5	<p>Open the portal</p>
6	<p>Installing clients</p> <p>Installing the clients in Apparo Designer</p>

Start the installation by executing the file

- **FastEdit3.1.x.y.zzz_linux_tomcat_standalone.sh** (for a 64 Bit-only Linux environment)

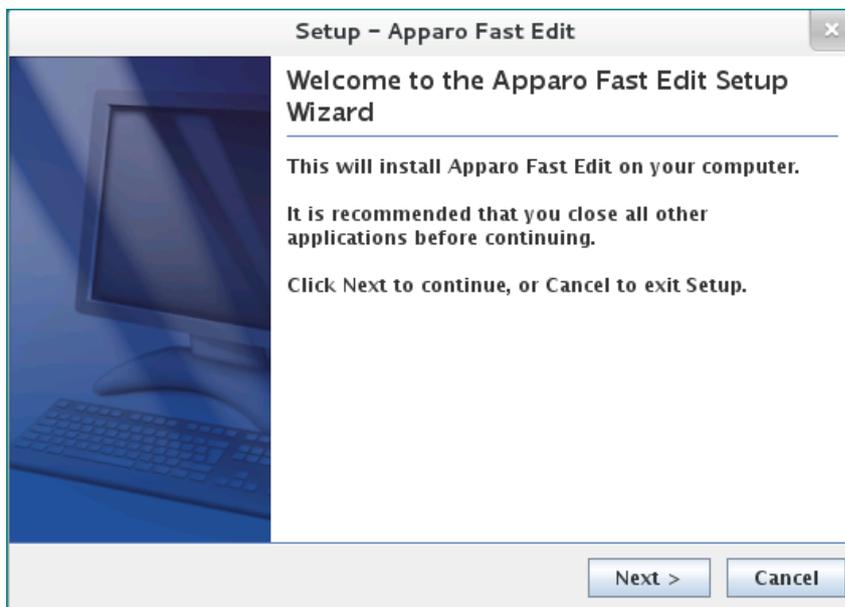
Or for IBM AIX:

- **FastEdit3.0.x.y.zzz_aix_tomcat_standalone.sh** (for a 64 Bit only AIX environment)

Please use the chmod command: `chmod 777 FastEdit*.sh`

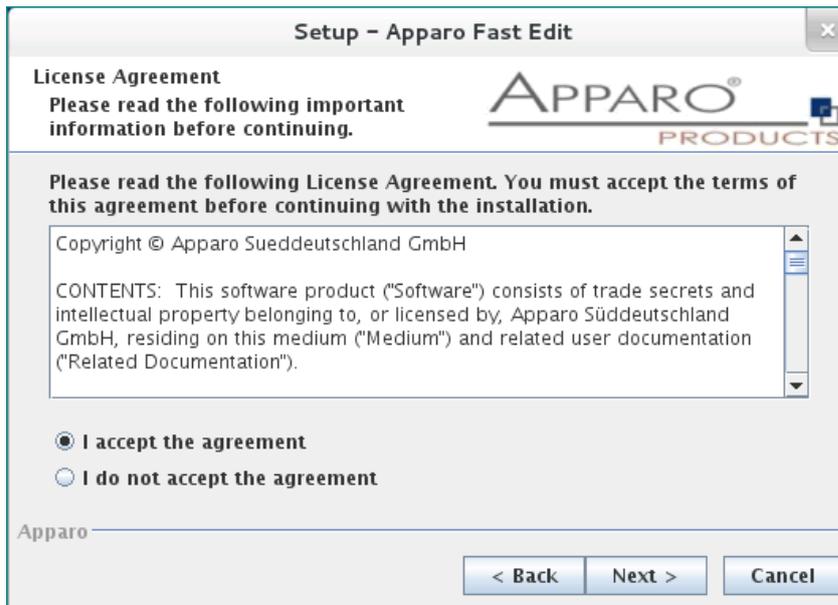
The graphical UI (X Window) is preferred but not necessary.
You can run the Fast Edit setup in text mode too.

The Apparo Configuration Manager is running in graphical mode only.



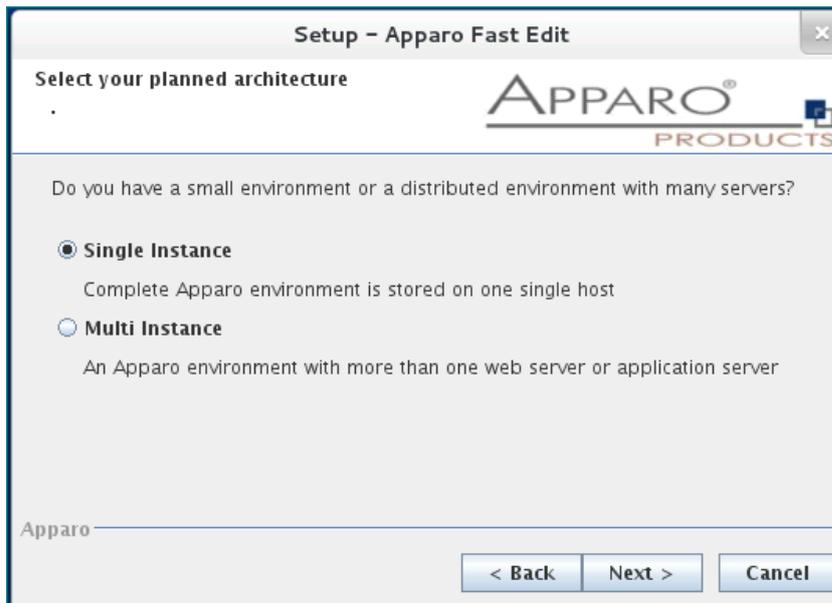
Confirm the beginning of the installation by clicking „**Next**“.

3.1 License agreement



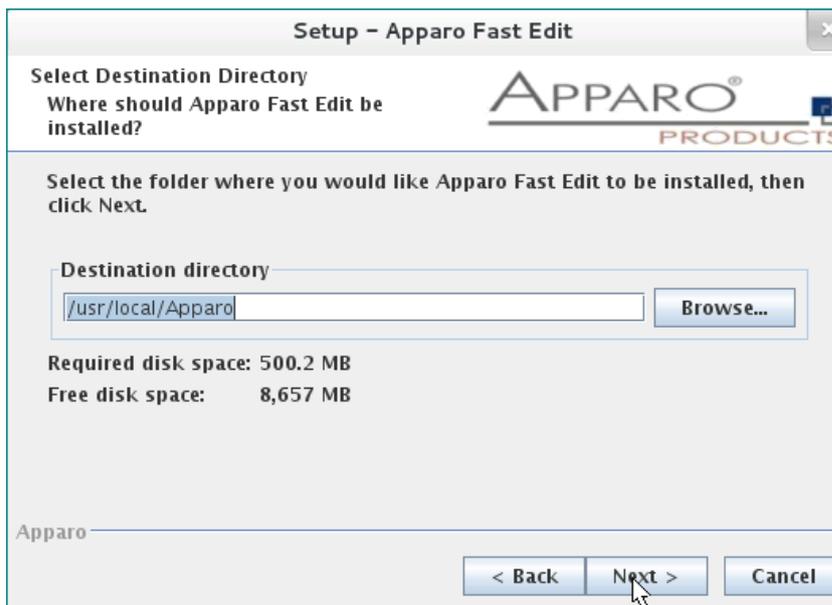
Read and confirm the license agreement by clicking „Next“.

3.2 Selecting the architecture



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

3.3 Defining the target file directory

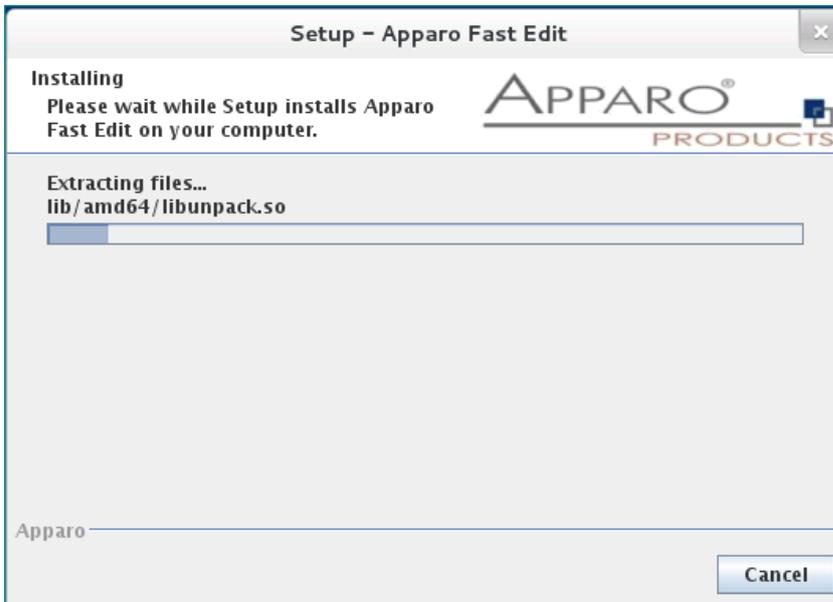


Default file directory for Linux environments: **/usr/local/Apparo**

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

3.4 Carrying out the installation

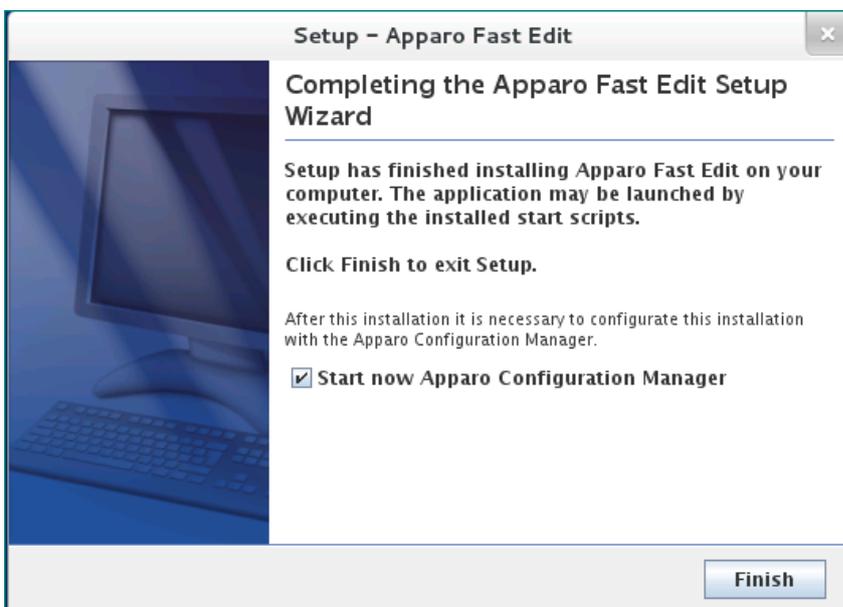
Finally the installation of Apparo Fast Edit with the selected architecture will be installed.



After that this installation must be configured with the **Apparo Configuration Manager**.

3.5 Installation finish

Output in a Linux environment:



If an IBM AIX environment the checkbox is not visible because the JAVA_HOME variable must be defined first.

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

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

For IBM AIX:

Please check that Java 7 Release 1 is already installed, default file directory: /usr/java71_64

Please check that variable JAVA_HOME and PATH are correctly set to support this java vm.

Next step:

Go into folder [APPARO_HOME]/FastEdit/cm

Start script:

./cm.sh

4 Configuration

1	<p>Preparation</p> <ul style="list-style-type: none"> • Creation of an database user for the Apparo repository • Defining the security group for all users that must be able to open the Apparo Designer
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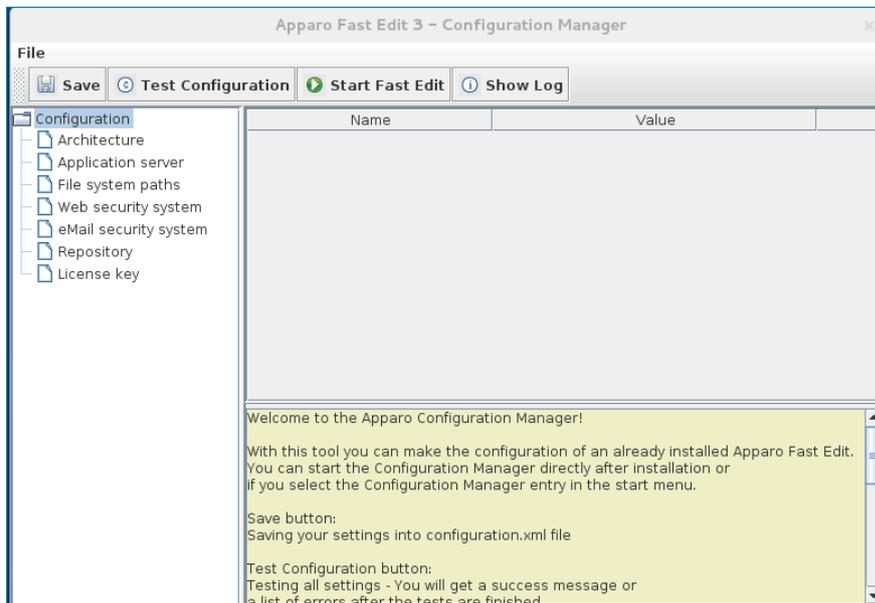
With the Apparo Configuration Manager you are able to configure the already installed Apparo Fast Edit.

You can now configure for the selected architecture all necessary settings.

The settings are grouped into chapters (left side).

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

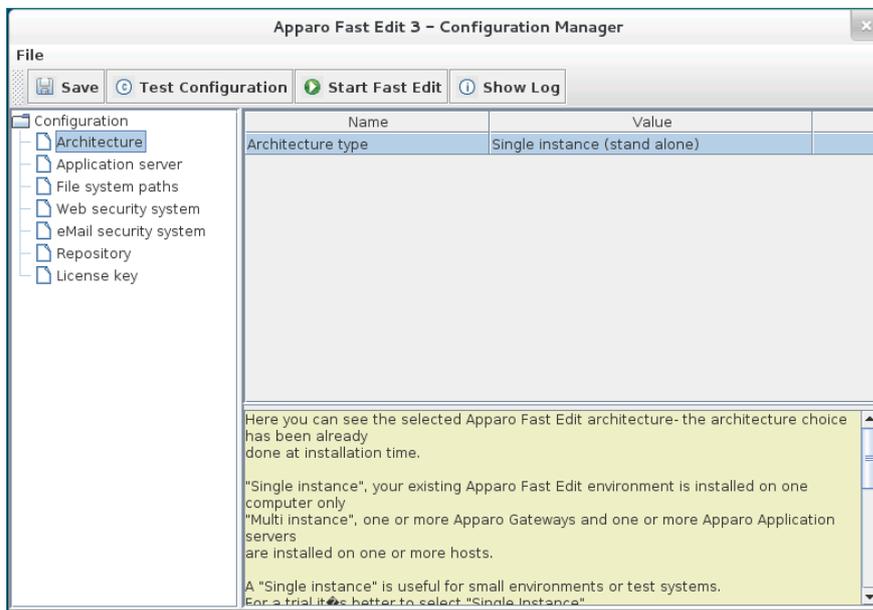
After you have defined all settings you can start and deploy configuration of Apparo Fast Edit with **“Start Fast Edit”** button.



4.1 Architecture

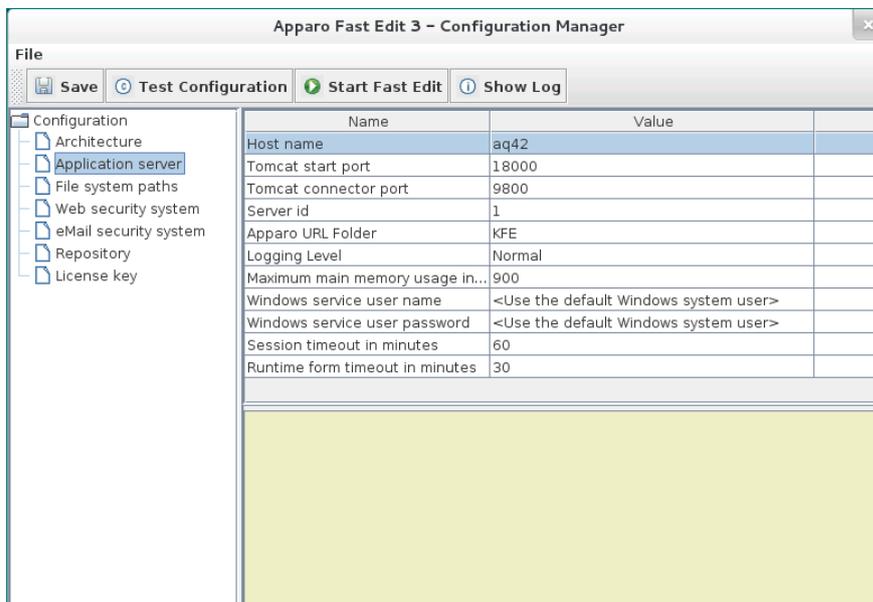
The architecture can be “Single instance” (complete Apparo Fast Edit is installed on one server including the web server” and

“Multi instance”: The Apparo gateway is installed parallel to the web server and the application server(s) are installed on another server.



4.2 Application server

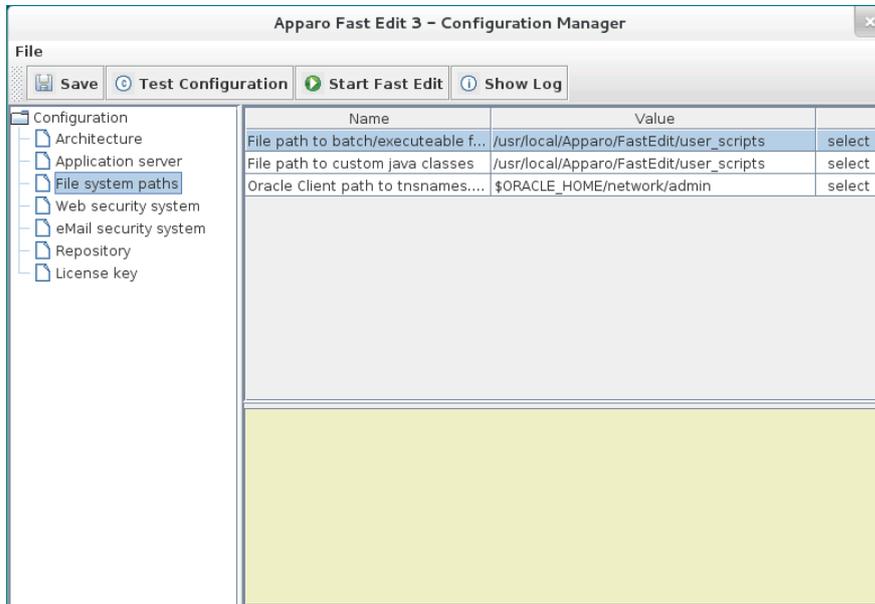
The settings for the Tomcat application server, like memory, ports etc.



4.3 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 or Java test classes for data quality checks.

Using an Oracle client it is necessary to define the place of the tnsnames.ora file.



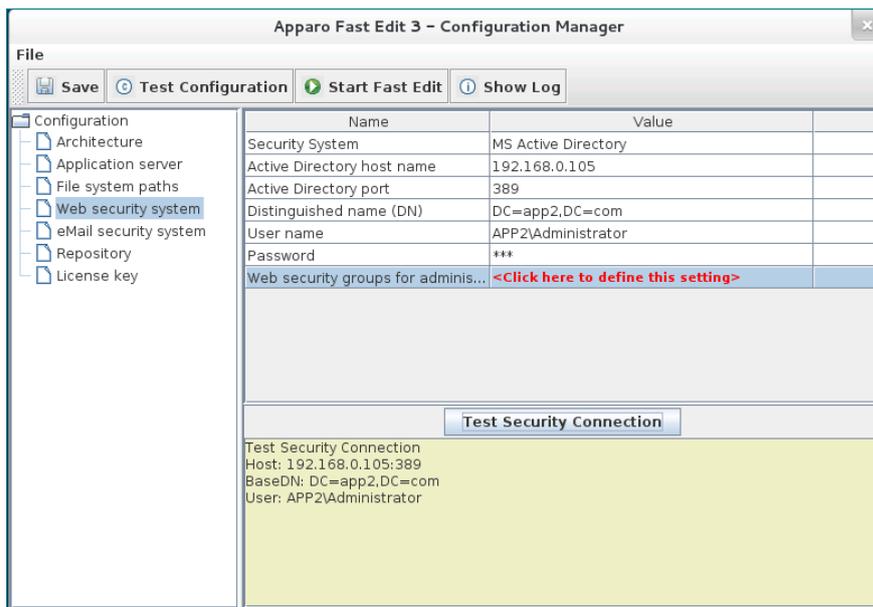
4.4 Security

Normally Apparo Fast Edit is integrated in a Windows domain environment. That means the MS Active Directory server knows all user logins and their groups.

To be able to use a MS Active Directory server it is necessary to define the DN, the search user (normally Administrator) and its password.

In this example the Windows domain has the name "APP2" or "app2.com" Therefore the Distinguished name is "DC=app2, DC=com".

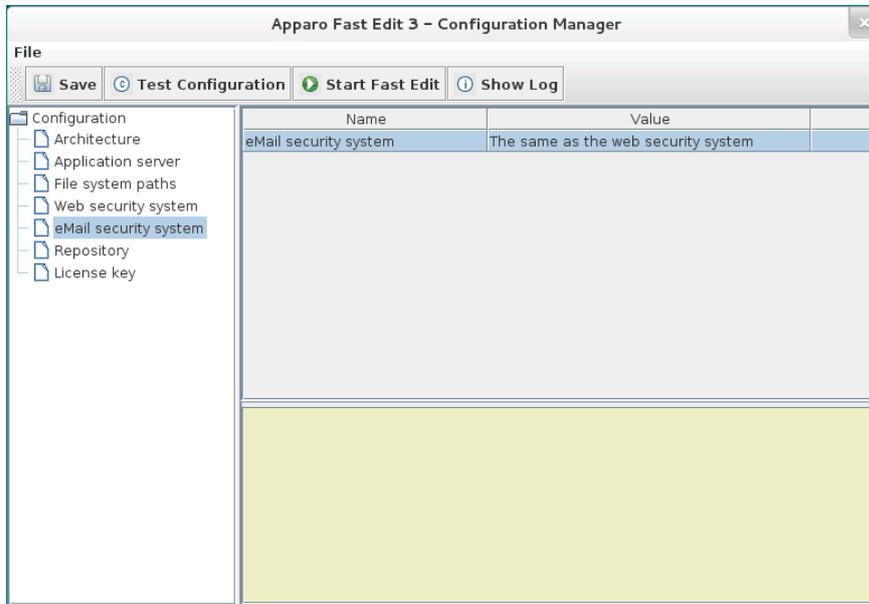
User name: Please use the domain name too, e.g. APP2/Administrator



4.5 eMail security system

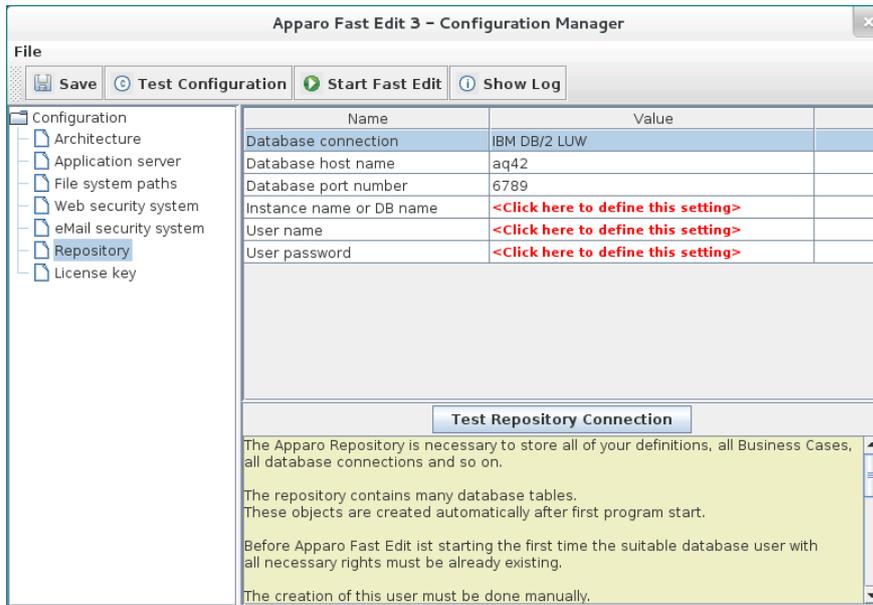
An eMail Excel Import Business Case can import data of Excel files that are delivered using an eMail. It is possible to restrict the usage for member of security groups only.

Apparo Fast Edit is using in this case following security system:



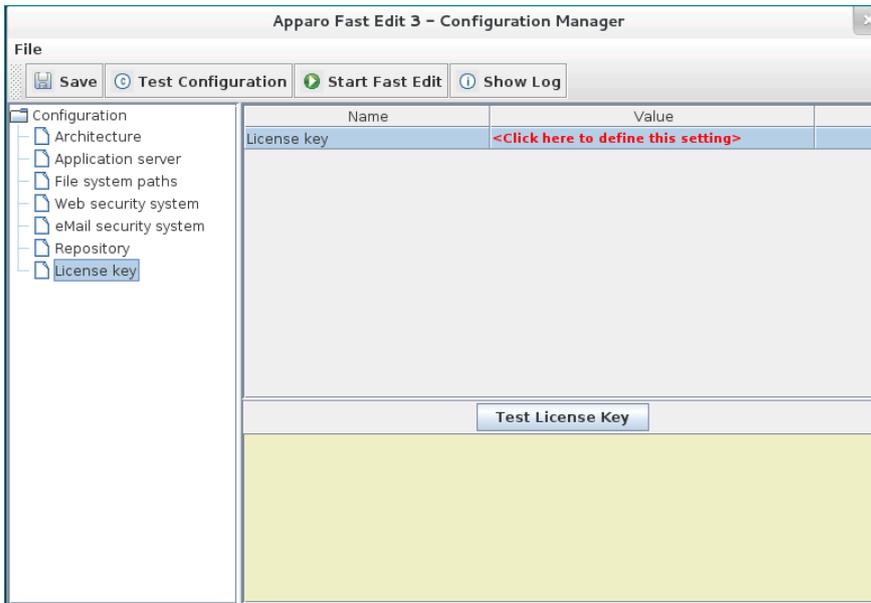
4.6 Repository

In the database repository all Business Case definitions are stored.



4.7 License key

You must copy your license key into this setting.



4.8 Testing configuration

Apparo Fast Edit is running if you can see following message in the Log file:

```
+++++  
+ Apparo Fast Edit 3.1.x.x was successfully started at <Start time and date>  
+++++
```

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.

If you want to use the EIBC (eMail Import Business Case) then Apparo Fast Edit need 2 GB main memory.

5 Configuration of the Apparo gateway

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5.1 Configuration of the Apache Webserver with proxy

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:

1. Configure the ajp proxy and the ajp proxy balancer modules, by modifying *httpd.conf* of your Apache web server **httpd.conf**

```
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
```

2. Add following into the httpd.conf file:

Configure the load balancer members under <IfModule mod_proxy.c>:
Open text file „**afe.conf** “ that is stored in directory cgi-bin in a text editor.

Replace in httpd.conf the line “<IfModule mod_proxy.c> “ with the content of the text file or use the parts of the text of afe.conf. Example – a configuration with 1 node:

```
<IfModule mod_proxy.c>
  ProxyPass /apparo balancer://ApparoFastEdit/apparo
  ProxyPassReverse /apparo balancer://ApparoFastEdit/apparo
  ProxyIOBufferSize 32768
  <Proxy balancer://ApparoFastEdit>
    BalancerMember ajp://aq34:9800 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>
```

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.

6 Open the portal

1	<p>Preparation</p> <ul style="list-style-type: none"> • Creation of an database user for the Apparo repository • Defining the security group for all users that must be able to open the Fast Edit Designer
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The URL for opening the Apparo Portal:

<http://servername/apparo>

Hint: If you have changed the folder name in the Apparo Configuration Manager then you must use this name instead of “apparo”.

If you have changed the Apparo gateway protocol to https then you must use https.

Opening the Apparo Designer:

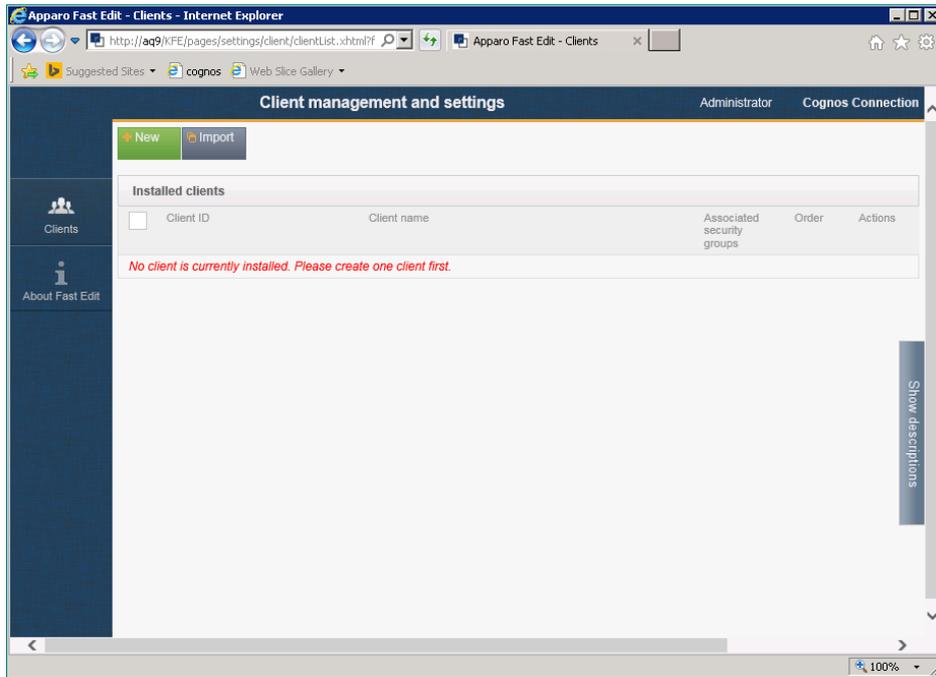
<http://servername/apparo/designer>

Example:

<https://aqserver11/apparo>

Now try to start the Apparo Portal – just **use the link in your web browser.**

The following window should open if the repository is empty:



In this example the repository is empty and no clients are installed.

7 Installation clients

1	<p>Preparation</p> <ul style="list-style-type: none"> • Creation of an database user for the Apparo repository • Defining the security group for all users that must be able to open the Apparo Designer
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4	<p>Configuration the Apparo gateway</p> <p>Configuration the web server</p>
5	<p>Open portal</p>
6	<p>Installing clients</p>

Please read the document “**Configuration Guide**” for how to install clients etc.

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

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

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.
-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.sh -f /etc/definition.xml -u aferep -p aferep -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
-p <PASSWORD>	The password used to authenticate. This setting is necessary in a secured environment non BI environment.
-u <USERNAME>	The user used to authenticate. This setting is necessary in a secured non BI environment.

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 Start-up of Apparo Fast Edit without Configuration Manager

Apparo Fast Edit can be started using the script

startService.sh

it is stored in

[APPARO_HOME]/FastEdit/bin

Following arguments are necessary:

1. Start port of Tomcat, default: 18000 (see settings in Configuration Manager)
2. Main memory max, default: 1024 (in MB)

Example:

./startService.sh 18000 2048

11 Starting of Apparo Configuration Manager

The Apparo Configuration Manager can be started using:

```
./cm.sh
```

it is stored in

```
[APPARO_HOME]/FastEdit/cm
```

Example:

```
cd /opt/Apparo/FastEdit/cm
```

```
./cm.sh
```

Important for IBM AIX:

Please be sure that variables JAVA_HOME and PATH are set correctly and the Java 7 Release 1 is in use.

12 The Apparo system log

All internal system message of Apparo Fast Edit are stored in

afe.log

it is stored in:

[APPARO_HOME]/FastEdit/logs

Example:

cd /opt/Apparo/FastEdit/logs

gedit afe.log

The Tomcat system log is stored in:

[APPARO_HOME]/FastEdit/tomcat/logs

Example:

cd /opt/Apparo/FastEdit/tomcat/logs

gedit catalina.log

13 Online documentation

The complete documentation is stored in

[APPARO_HOME]/FastEdit/doc

14 Browser requirements

14.1 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)

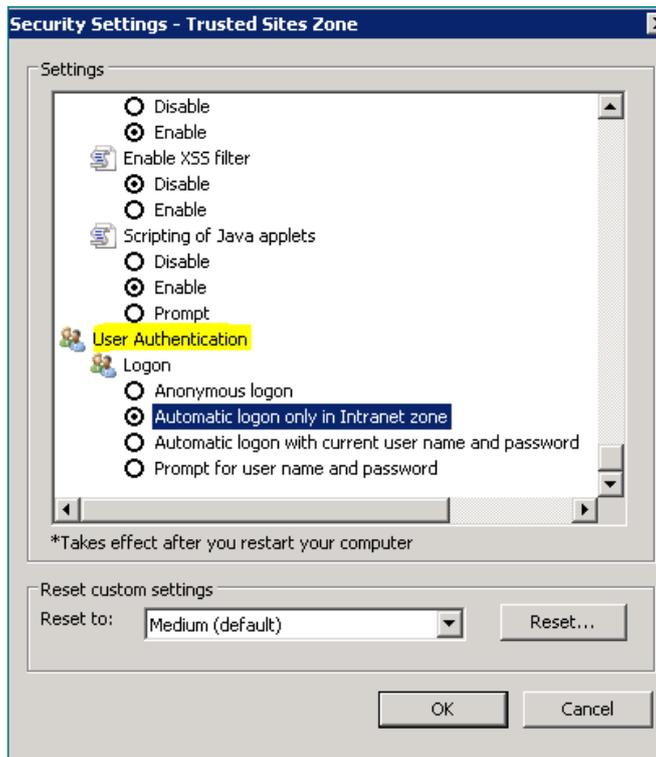
14.2 Supported operating systems for client browsers

Microsoft Windows

14.3 Additional settings for Microsoft Internet Explorer only

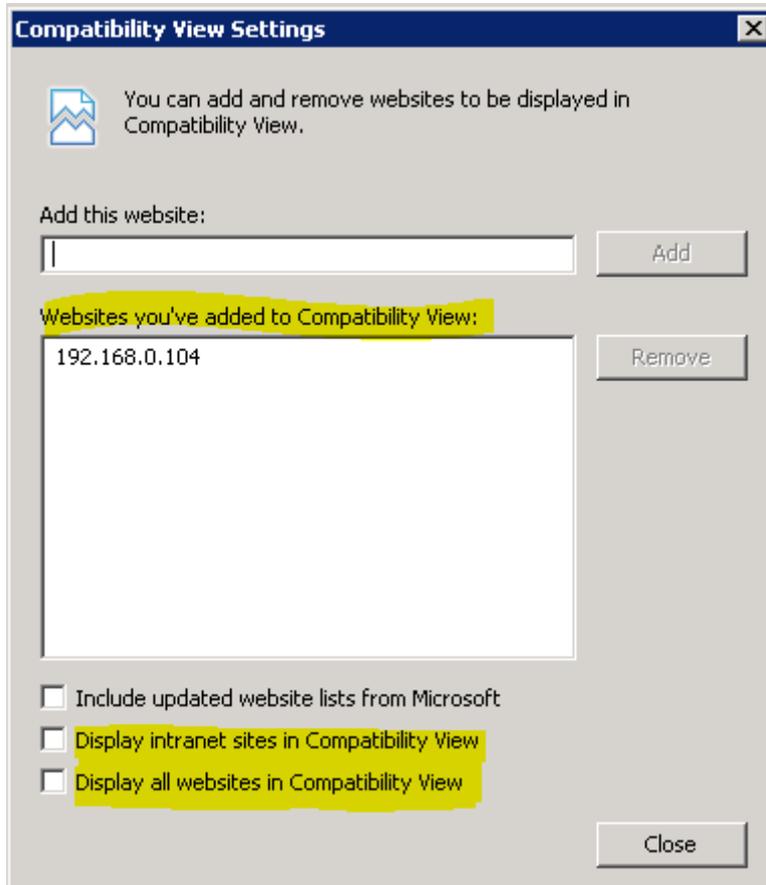
- Domain name of Apparo Fast Edit web server must be in trusted sites
- “about:blank” must be in trusted sites

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.

14.4 Additional settings for all browsers

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

15 Support

If you need support please write an eMail to:

support@apparo.solutions