

Installation Guide

Apparo Fast Edit

For IBM Red Hat/AIX/Suse

IBM Cognos Analytics

Version 3.2.2

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 2 GB

1.2 Supported operating systems

- IBM AIX/Red Hat
- SUSE Linux

1.3 Supported IBM Cognos versions

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

1.4 Supported web servers

- Apache Webserver 2.4
- IBM IHS

1.5 Supported Java VM

- **OpenJDK 8 / Oracle Java 8 Build 200 and higher**
The Java VM must be already installed. It is not part of the Apparo installation.

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

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

OpenJDK8 (Java 8) must be already installed.

1.8 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 Analytics environments or test systems.</p> <p>Using “Single Instance” the complete Apparo Fast Edit installation and the complete IBM Cognos Analytics 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.

1.9 Overview installation steps

1	Preparation <ul style="list-style-type: none"> • Creation of a database user for the Apparo repository • Defining the Cognos portal folder for the Apparo Designer entry
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 Preparation

1	Preparation Creation of a database user for the Apparo repository
2	Installation Starting setup file for installation of the files
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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
- Internal database (for test and development systems only)

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

1	Preparation Creation of a database user for the Apparo repository
2	Installation Starting setup file for installation of the files
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Start the Installation by executing the file

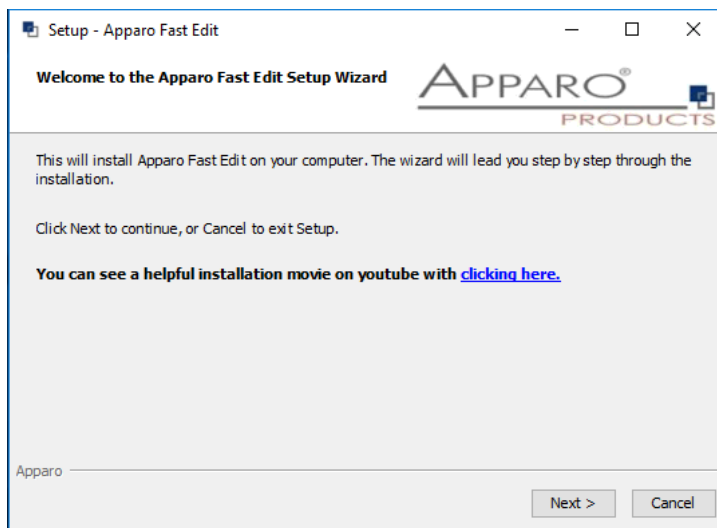
FastEdit3.2.2.0.yyy_linux_tomcat_cognos_analytics.sh

Or

FastEdit3.2.2.0.yyy_aix_tomcat_cognos_analytics.sh

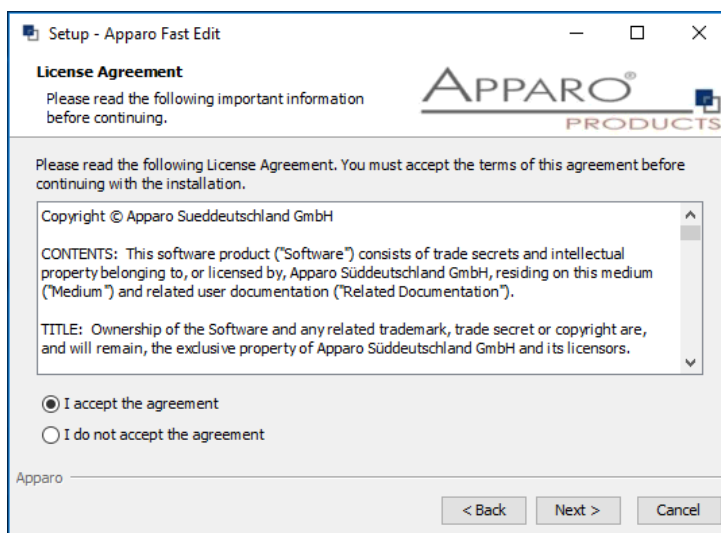
You must define the variable **INSTALL4J_JAVA_HOME** first.
It must have the path to the Java8/OpenJDK 8 installation.

Example: **export INSTALL4J_JAVA_HOME=/etc/vm/jv8**



Confirm the beginning of the installation by clicking „Next”.

3.1 License agreement



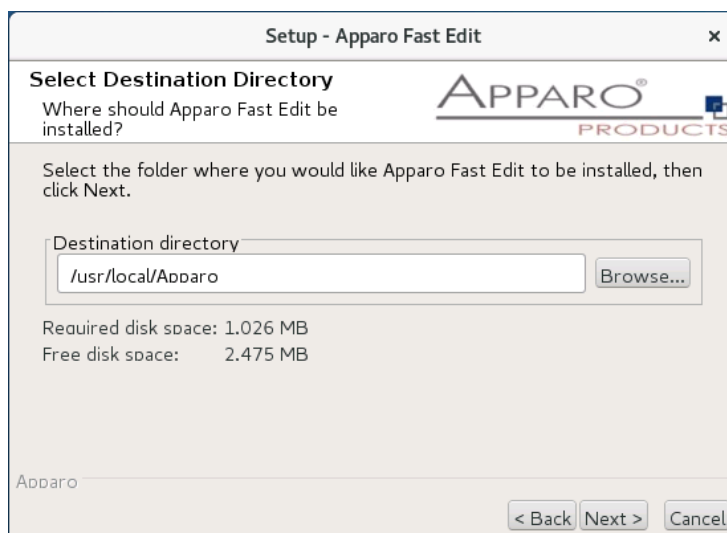
Read and confirm the license agreement by clicking „I Agree”.

3.2 Selecting the architecture



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

3.3 Defining the installation file directory

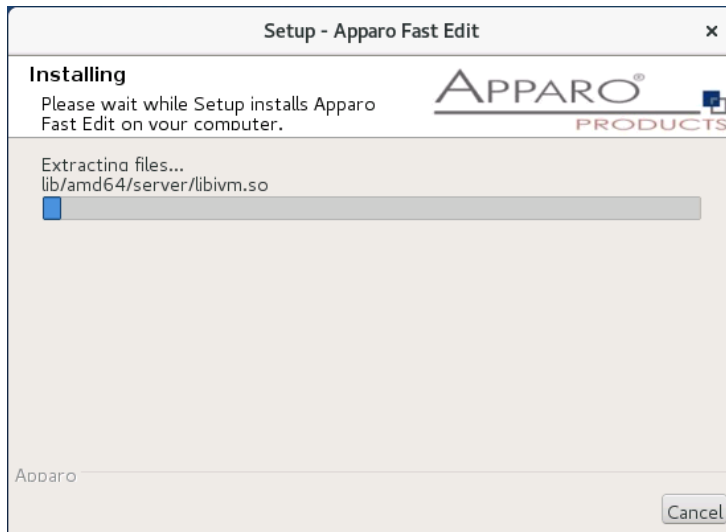


Typical folder: **/usr/local/Apparo**

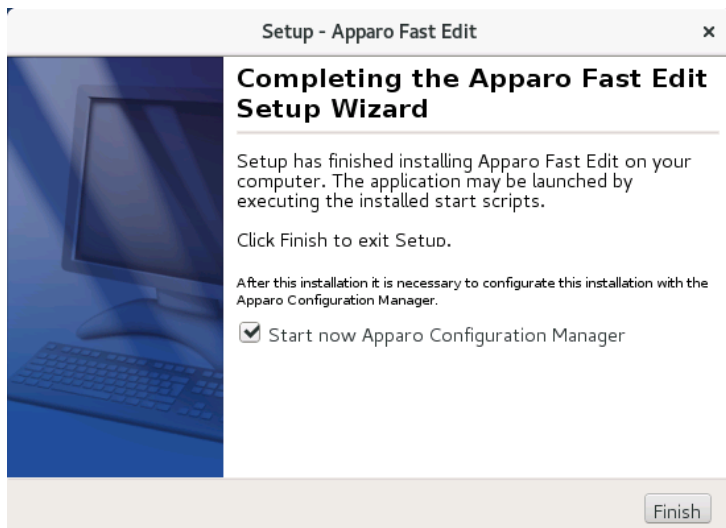
Please define folder and path and choose **„Next >“**.

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.

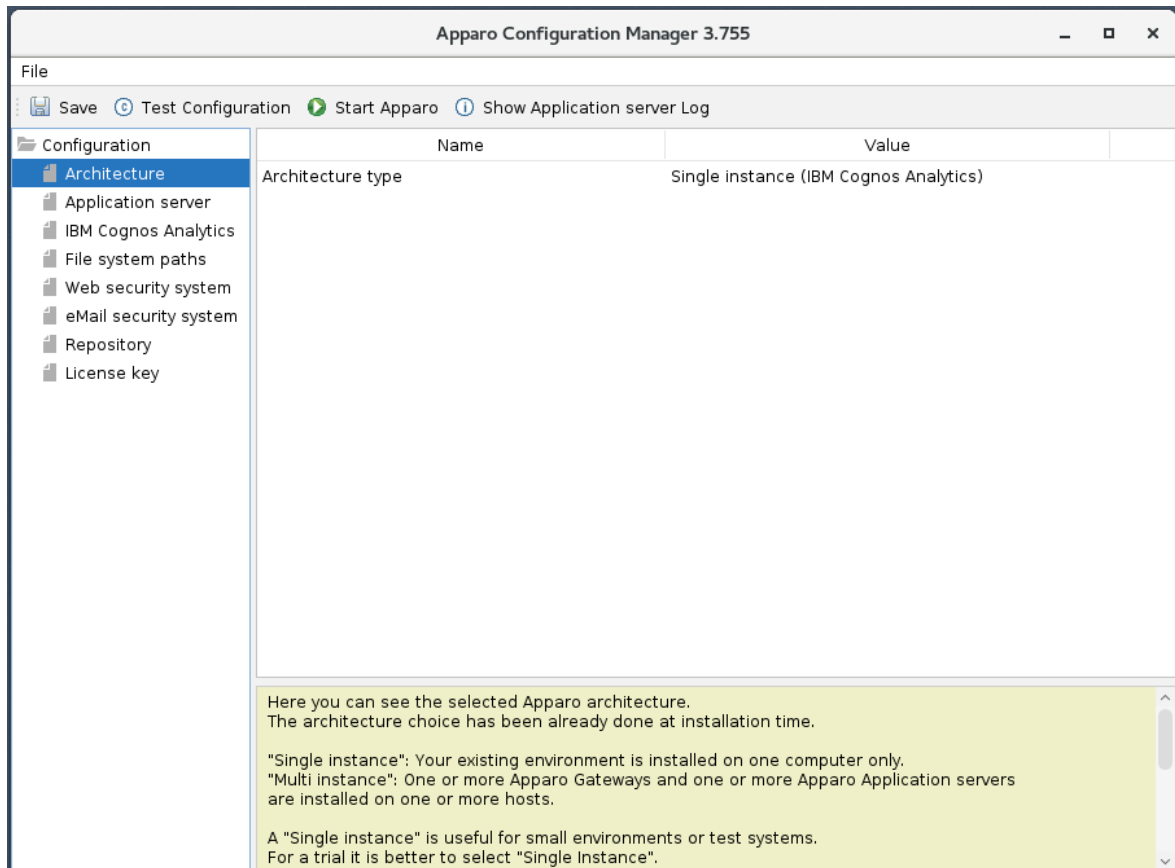
4 Configuration the Apparo application server

1	Preparation Creation of a database user for the Apparo repository
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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 Apparo</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 3.2.2.y (Build nnn) was successfully started at 07.11.2017 02:37:41 + +++++ </pre>

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

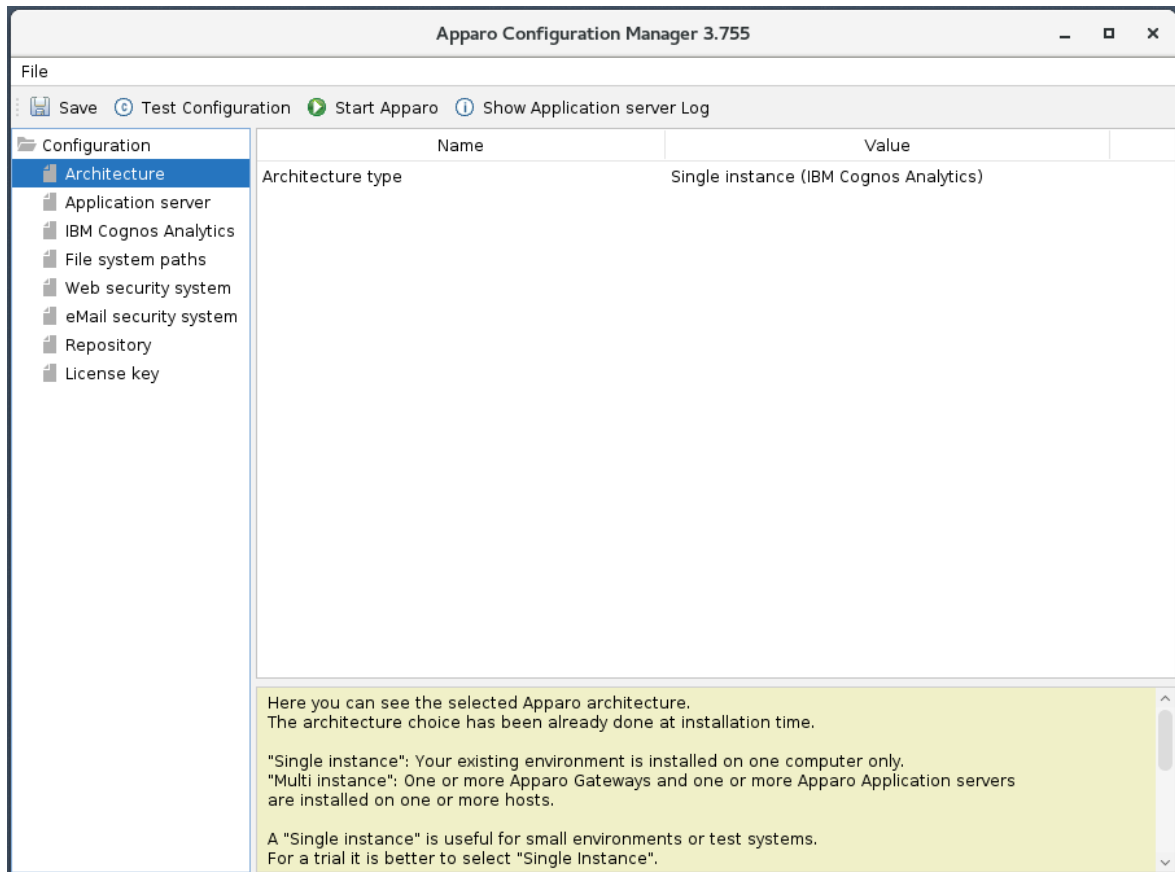
<http://<applicationserver:<startport>/apparo/pages/apptest.xhtml>

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.

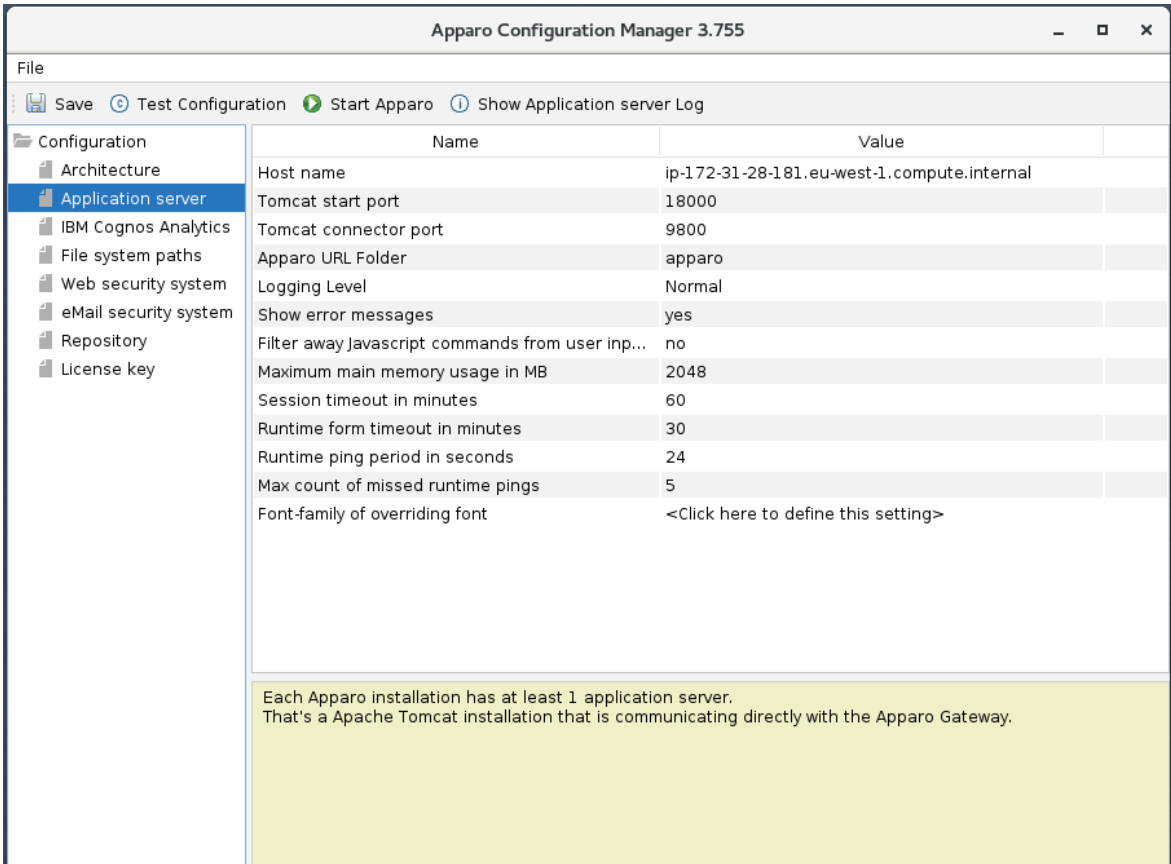
4.1 Architecture

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.



The screenshot shows the 'Apparo Configuration Manager 3.755' window. On the left is a tree view with the following items: Configuration, Architecture, Application server (selected), IBM Cognos Analytics, File system paths, Web security system, eMail security system, Repository, and License key. The main area displays a table of configuration settings for the 'Application server'.

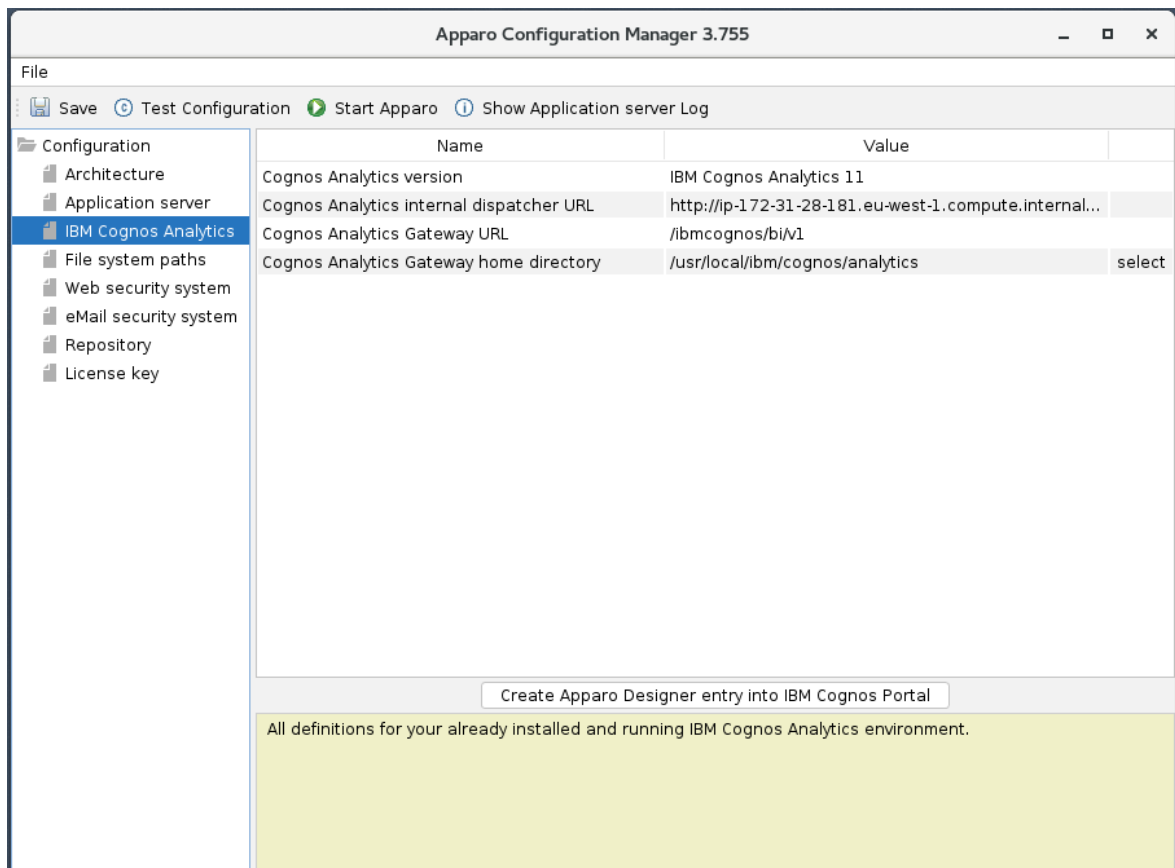
Name	Value
Host name	ip-172-31-28-181.eu-west-1.compute.internal
Tomcat start port	18000
Tomcat connector port	9800
Apparo URL Folder	apparo
Logging Level	Normal
Show error messages	yes
Filter away Javascript commands from user inp...	no
Maximum main memory usage in MB	2048
Session timeout in minutes	60
Runtime form timeout in minutes	30
Runtime ping period in seconds	24
Max count of missed runtime pings	5
Font-family of overriding font	<Click here to define this setting>

Each Apparo installation has at least 1 application server.
That's a Apache Tomcat installation that is communicating directly with the Apparo Gateway.

If you want to use Excel import using XLSX then main memory should be set to 4096 or higher.

4.3 IBM Cognos Analytics

Settings for the already installed IBM Cognos Analytics 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.

Configuration	Name	Value	
Architecture	File path to batch/executeable files	/usr/local/Apparo/FastEdit/user_scripts	select
Application server	File path to client definitions	/usr/local/Apparo/FastEdit/clients	select
File system paths	File path to custom java classes	/usr/local/Apparo/FastEdit/user_scripts	select
Web security system	Oracle Client path to tnsnames.ora	\$ORACLE_HOME/network/admin	select
eMail security system	Java Keystore path and name	/usr/lib/jvm/java-1.8.0/jre/lib/security/cacerts	select
Repository	Java Keystore password	***	
License key			

The file system paths are used for executing of scripts and java testing classes.

4.4.1 File path to batch/executeable 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

The Java VM is not part the of Apparo installation and therefore you must inform Apparo about the path to this file.

You can import your certificate with following command:

For a Linux environment:

```
sudo keytool -importcert -file filename.cer -alias randomaliasname -keystore  
$JAVA_HOME/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

Following security systems are supported:

- LDAP
- Active Directory / Kerberos
- No security system

If you want to use Microsoft Azure Active Directory then you must use the version 3.3 of Apparo.

Following authentication ways are possible:

- No logon, no security
- Logon page
- Single Sign On (Apache web server using Apache environment variable for login name, e.g. for SAML)

Bind user login for Active Directory: Please use the domain name too, e.g. APP2/Administrator

Name	Value
Authentication	Login page
Security System	MS Active Directory
Active Directory host name	<Click here to define this setting>
Use SSL	no
Active Directory port	389
Base Distinguished Name (DN)	-retrieve automatic-
Authentication Method	Simple bind
Bind user login	<Click here to define this setting>
Password	<Click here to define this setting>
Web security groups for administrators	<Click here to define this setting>

Test Security System Connection Test User Login

How Apparo must ask for the user login.
Login page: The user is seeing a login page and the system is asking for username and password.

Single Sign On (SSO): The web server (Apparo Gateway) is trying to catch the user name from the web browser. The browser must deliver the user name automatically (there are settings for that) and must be in the same Windows domain.
If the browser is not delivering a user name then the browser is asking for a login. This is possible if the web server is running with Windows only.

Single Sign On (SSO) using Apache variable: This is helpful if you want to use Apache web server and SAML. The web server (Apparo Gateway) is reading the current user name from a Apache variable. The content of this variable will be delivered to the Apparo application server.
That means the SAML system must fill an Apache variable with the login user name. You must define the variable name here too.

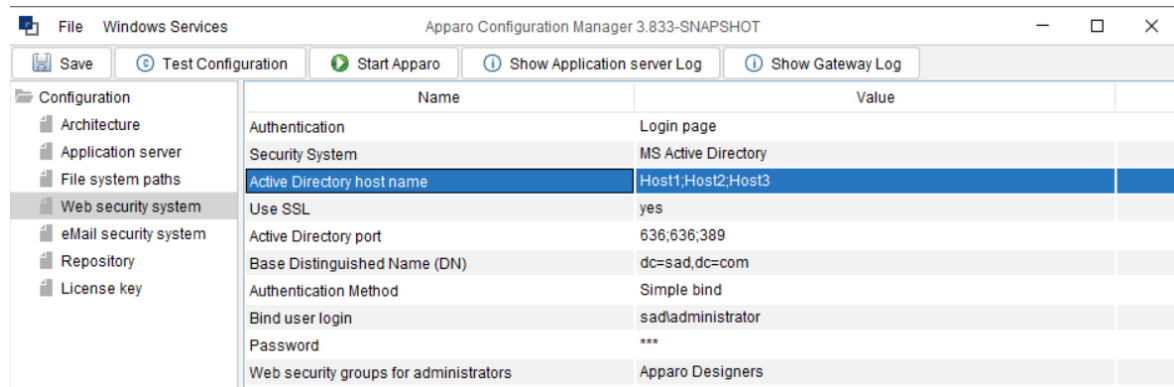
4.5.1 Setting "Web security groups for administrators":

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**.

4.5.2 Using multiple LDAP/Active Directory servers parallel

If you use multiple Active Directories and the simple bind protocol, you can use a list with multiple entries of AD hostnames, AD ports and Base Distinguished Names separated by semicolons (;).



The order is important and the number of values should match, if there are three AD servers, they should be entered like host1;host2;host3.

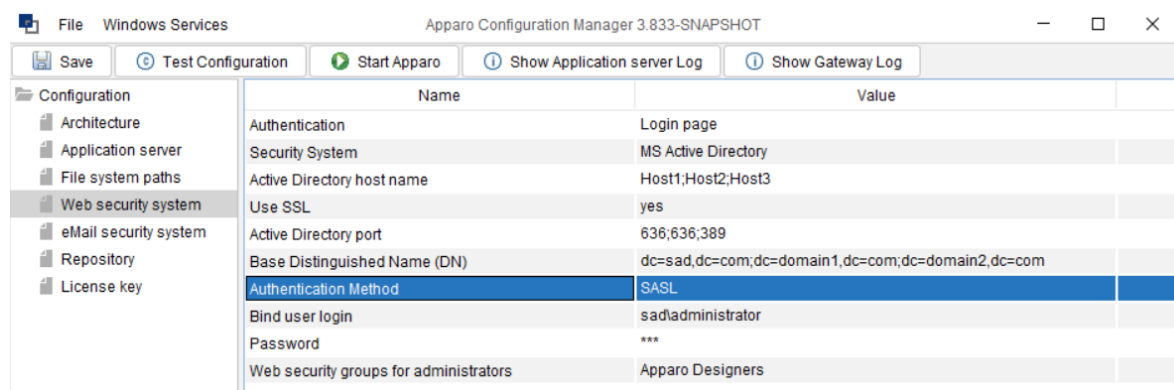
If they all use the same port, it can be entered only once, for example 636. Otherwise, you need to enter three values like 636;636;389.

This also applies to the Base Distinguished Names, if they are all the same, this only needs to be entered once. Multiple Base Distinguished Names work with SASL/Kerberos only.

When the user logs in, the first hostname is used along with the first port and the first Base DN, If the first server is offline or the user is not found there, the system will automatically try to connect to the next AD server.

4.5.3 Using SASL/Kerberos

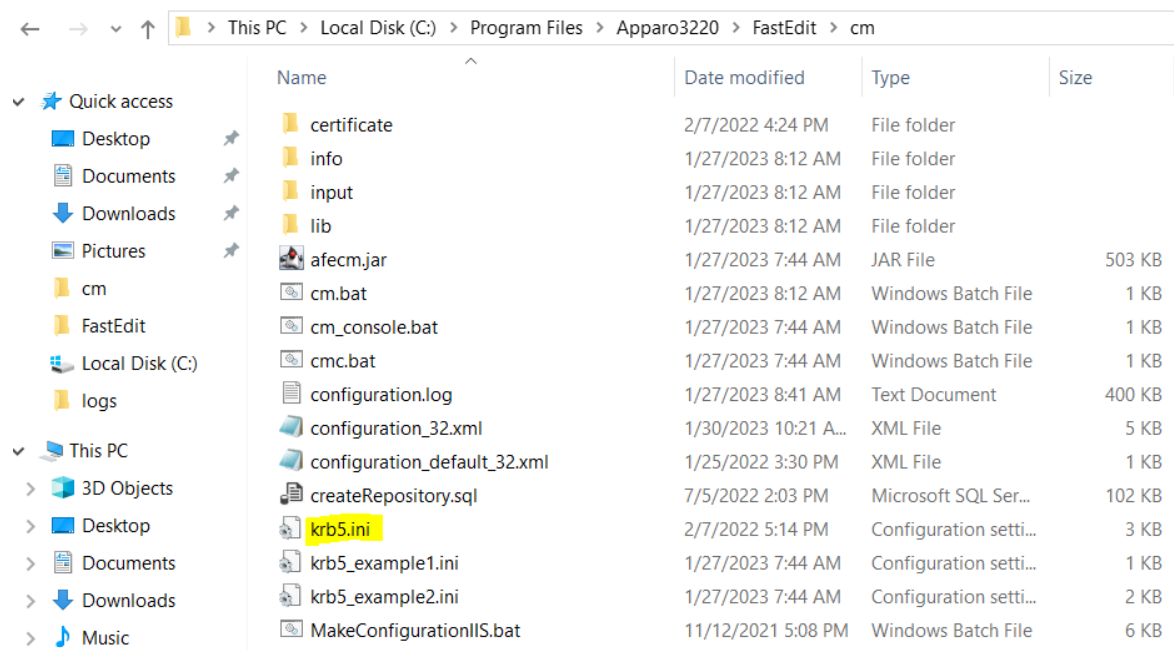
For using Kerberos, you have to set the Authentication Method to SASL security protocol.



Important!

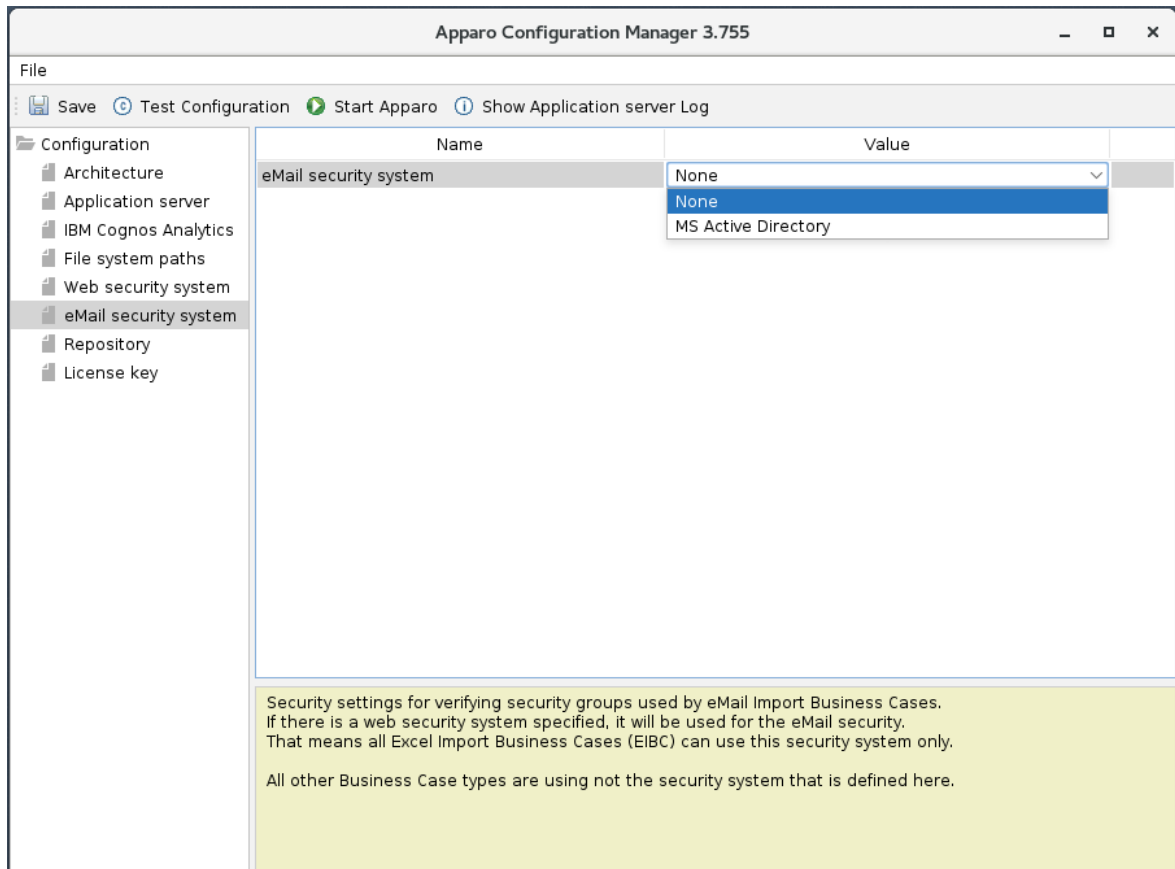
If you select SASL, you must also edit the krb5.ini text file.

You can find this file in the **cm directory**, including example files.



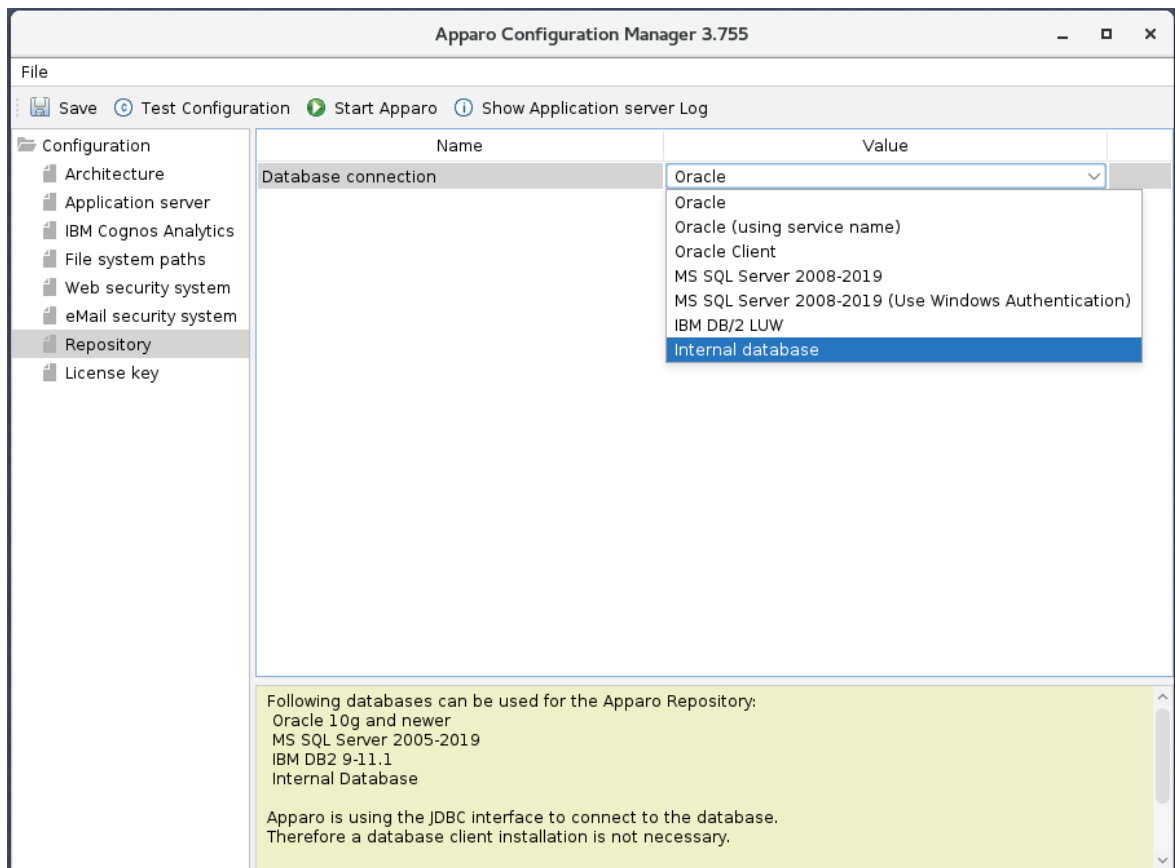
4.6 eMail security system

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



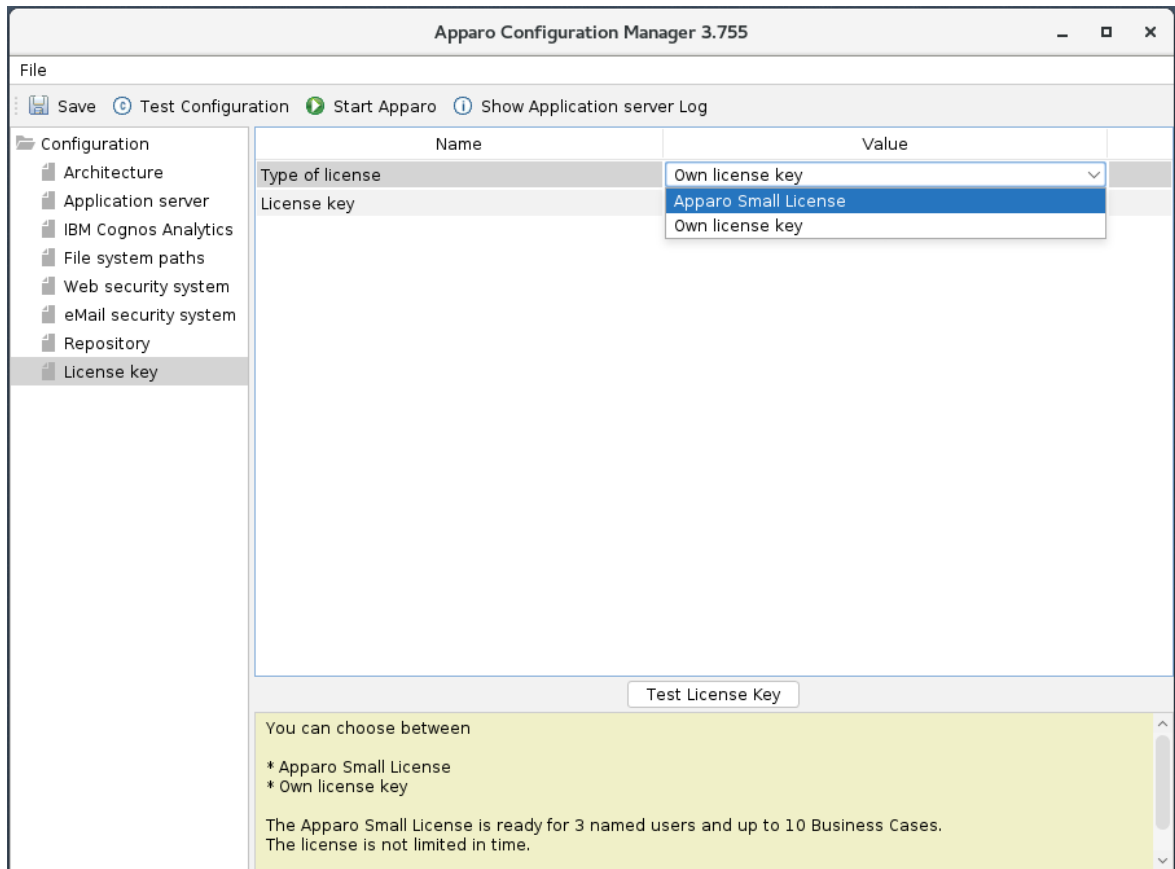
4.7 Repository

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 Apparo'.

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

After starting you can press the button “Show Application server Log”:

```

2019-06-15 14:52:24,221 [main] INFO DbSupportFactory - Database: jdbc:derby://usr/local/Apparo/FastEdit/InternalRepository (Apache Derby 10.14)
2019-06-15 14:52:25,722 [main] INFO MetaDataTableImpl - Repair of failed migration in metadata table "APP"."AFE_REPOSITORY_VERSION" not necessary. No failed migration detected.
2019-06-15 14:52:26,002 [main] INFO DbRepair - Successfully repaired metadata table "APP"."AFE_REPOSITORY_VERSION" (execution time 00:00.415s).
2019-06-15 14:52:26,378 [main] INFO DbValidate - Successfully validated 6 migrations (execution time 00:00.196s)
2019-06-15 14:52:26,515 [main] INFO DbMigrate - Current version of schema "APP": 3.02.000
2019-06-15 14:52:26,515 [main] WARN DbMigrate - outOfOrder mode is active. Migration of schema "APP" may not be reproducible.
2019-06-15 14:52:26,516 [main] INFO DbMigrate - Schema "APP" is up to date. No migration necessary.
2019-06-15 14:52:39,305 [main] INFO ServerImpl - Setting the server's publish address to be /
2019-06-15 14:52:39,518 [main] INFO ApplicationListener - Setting system property: java.awt.headless=true
2019-06-15 14:52:39,519 [main] INFO ApplicationListener - Setting system property: oracle.net.tns_admin=$ORACLE_HOME/network/admin
2019-06-15 14:52:39,520 [main] INFO ApplicationListener -
+-----+
- Apparo 3.2.0.0 (Build 503) for IBM Cognos Analytics 11 was successfully started at Jun 15, 2019 2:52:39 PM +
+-----+

```

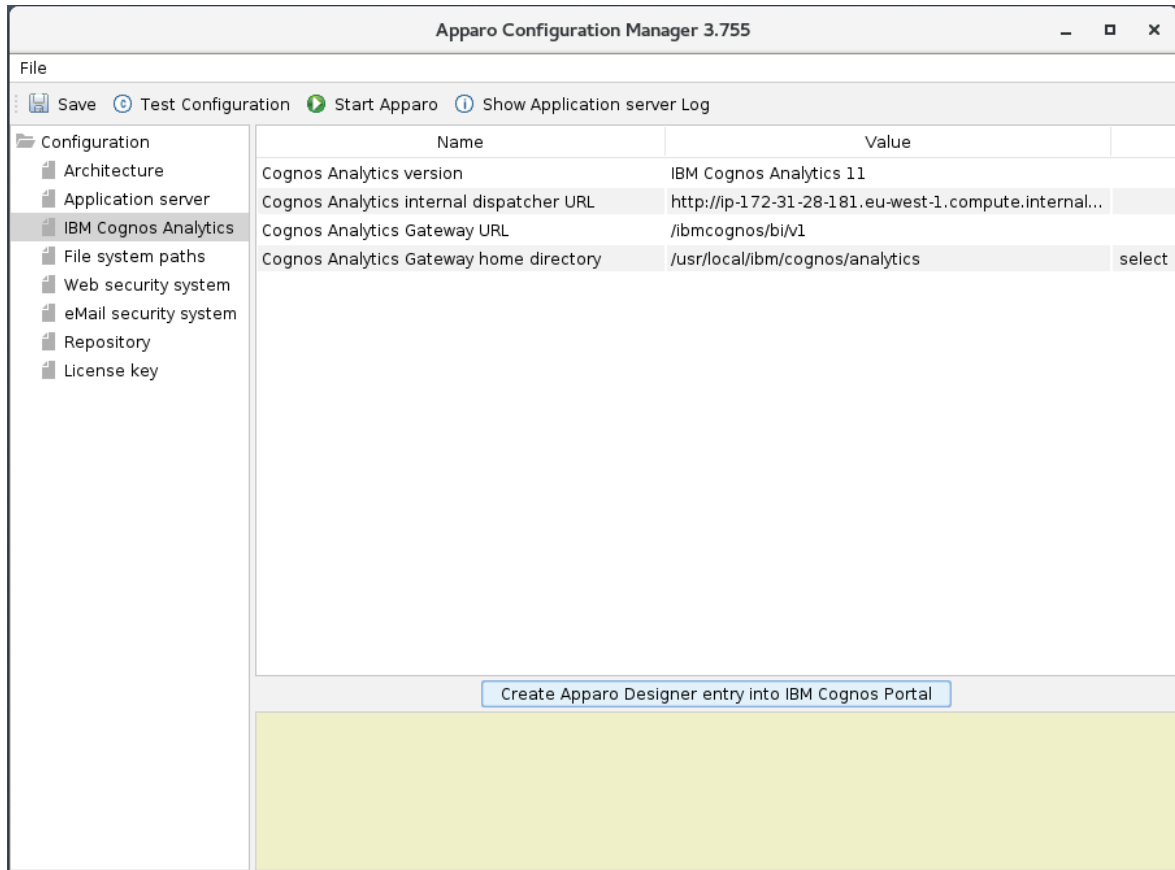
The application has started fine if you see a message above that is yellow marked.

5 Creating the Apparo Designer entry in IBM Cognos portal

1	Preparation Creation of a database user for the Apparo repository
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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'

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. You can find this value in the Cognos Configuration.

Enter your credentials for IBM Cognos Analytics

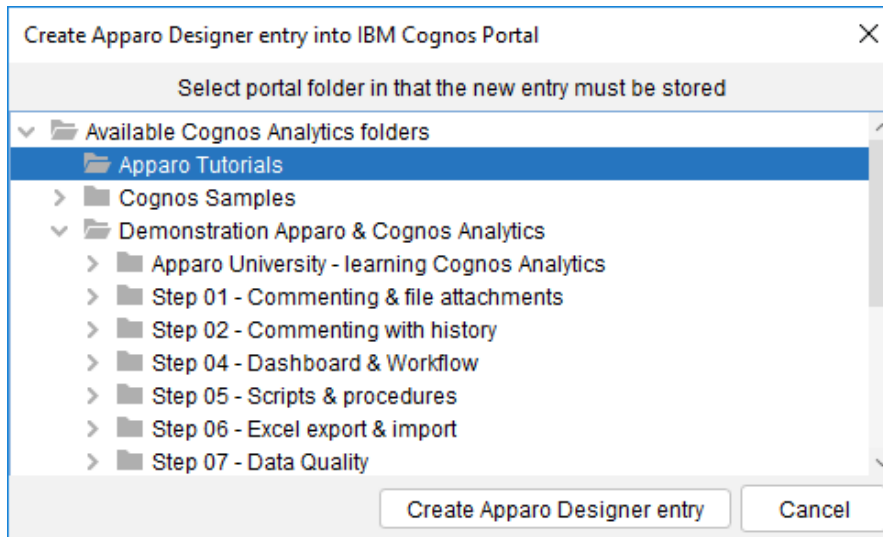
Namespace ID:

Login:

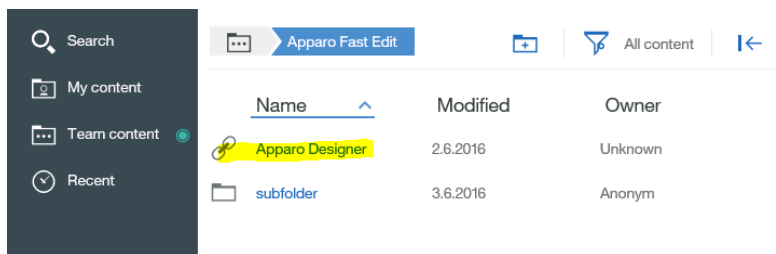
Password:

OK Cancel

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



You can see this new entry in the Cognos portal:



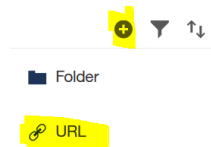
Possibility #2

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:

Create URL

Specify a name and URL. Optionally, specify a description and screen tip.

Name

Description

Screen tip

URL

[View acceptable domains](#)

Location

Press OK button.

6 Configuration of the Apparo gateway

1	Preparation Creation of a database user for the Apparo repository
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6.1 Configuration of the Apache 2.4 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 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 65536
    <Proxy balancer://ApparoFastEdit>
        BalancerMember ajp://ip-172-31-16-246.eu-west-1.compute.internal:9800 route=s1 loadfactor=1
        ProxySet timeout=3000
        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 65536
    <Proxy balancer://ApparoFastEdit>
        BalancerMember ajp://ip-172-31-16-246.eu-west-1.compute.internal:9800 route=s1 loadfactor=1
        ProxySet timeout=3000
        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.

Hint if using Red Hat 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.

6.2 Configuration of the IHS (IBM Webserver)

IHS is not supporting the AJP protocol. Therefore the web server must work as a reverse proxy.

Enable following module (they are normally already enabled):

```
LoadModule proxy_module modules/mod_proxy.so
```

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]
```

Add following settings into the config file:
Replace localhost with the internal server name.

```
Header add Set-Cookie "ROUTEID=.%{BALANCER_WORKER_ROUTE}e; path=/" env=BALANCER_ROUTE_CHANGED

ProxyPreserveHost On

<Proxy "balancer://apparocluster">

    BalancerMember "http://localhost:18000/apparo" route=s1
    BalancerMember "http://localhost:18000/apparo" route=s2

    ProxySet stickysession=ROUTEID
    ProxySet timeout=3000
    ProxySet nofailover=On
</Proxy>

ProxyPass "/apparo" "balancer://apparocluster"
ProxyPassReverse "/apparo" "balancer://apparocluster"
```

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.

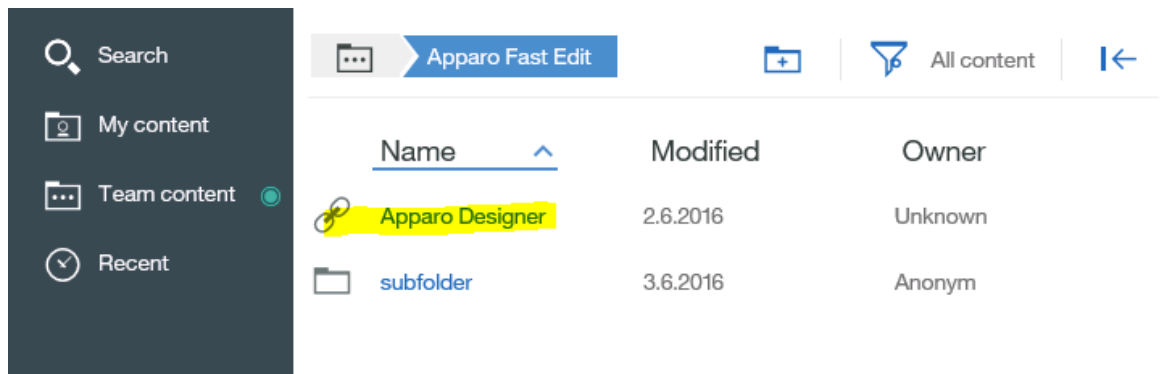
Now the installation of the Apparo gateway for IHS is finished.

7 Installation clients

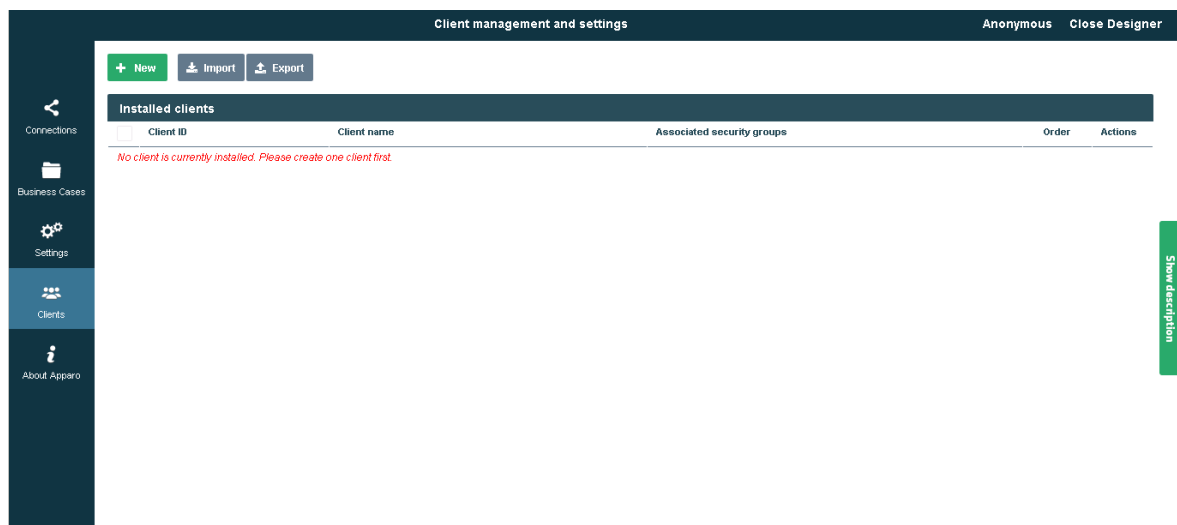
1	Preparation Creation of a database user for the Apparo repository
2	Installation Starting setup file for installation of the files
3	Configuration the Apparo application server Using Apparo Configuration Manager to configure the installation
4	Creating the Apparo Designer entry in Cognos portal Creating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

Now it is necessary to install the clients.

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



Now you should see:

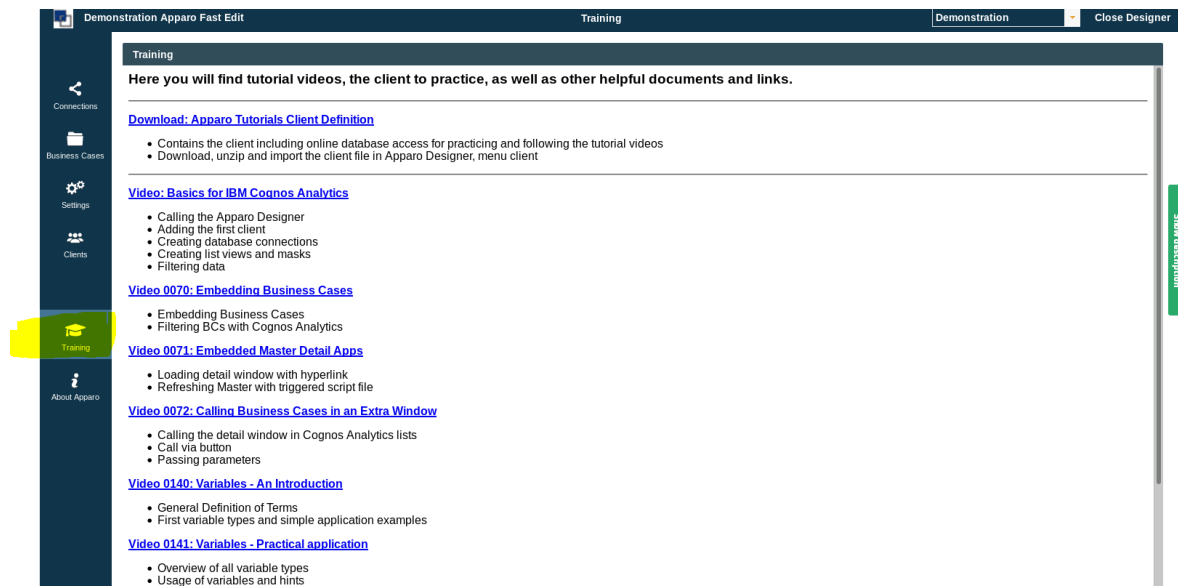


Please read now the document “**Configuration Guide**” for creating new/importing clients.

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.



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 application server using -start 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 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: <code>http://localhost:18000/apparo</code> . 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**

9.2 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.
-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.sh -f /etc/definition.xml -u aferep -p aferep -clientId Sales**

10 Browser requirements

10.1 Supported browsers and versions

Microsoft Internet Explorer 11
Microsoft Edge

Mozilla Firefox (current version)
Google Chrome (current version)
Apple Safari (current version)

10.2 Supported operating systems for client browsers

Microsoft Windows 7 / 10
Android
Apple iOS

10.3 Additional settings for Microsoft Internet Explorer only

“about:blank” must be in trusted sites

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