

Apparo Fast Edit

Setting up security and security-based features

Version 3.2.2



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1 Basics

Apparo is automatically using the security system of the underlying Business Intelligence system like Qlik Sense or IBM Cognos Analytics.

For the Apparo Stand-Alone version it is using either MS Active Directory (with SSO) or LDAP.

If you want to enter more than one security group, you need to **separate the groups by comma**.
Example: Group_A, Group_B, Group_C.

You can use placeholders as * and & too:
controlling* is the same like controllingAfrica, controllingEurope

The most security settings are white list based, which means if you enter one or several security groups then the access is restricted to those groups. If you leave it empty, then all users have full access.

Hint: Security group names are case-sensitive

Please note:

**If you use security groups then it is important to restrict Apparo on system level too.
Therefore please look into the chapter “System administrator user security” too.**

1.1 Security user types

There are 3 different user types:

- **business users** (using Business Cases, the normal user)

The security settings for business users are mainly focused on the question:

Who is allowed to see, change or insert data, which means security groups are used to filter data output and input, restrict the access or control features and the behaviour of widgets.

- **designer users** (creating Business Cases, the administrator and designer)

The security settings for designer users are restricted to the access and edit rights within the Apparo designer.

- **System administrator users**

Caring about system administration & configuration

2 Business user security

The behaviour of a Business Case can depend on security groups too.

2.1 Security hierarchy

The security is hierarchically organized.

From top to bottom:

- Security settings on **client** level
- Security settings on **designer folder** level
- Security settings on **Business Case** level
- Security settings on **feature** level
- Security settings on **widget** level

2.2 Security settings on client level

Apparo Demonstration
Settings of client Demonstration

Client head	General	Languages	Default numeric & datetime formats	Access rights	Automatic t
Business Log	Portal	Colours of portal and designer	Business case standard style	Login page	

Each client has a unique name and optional security groups that are necessary for using it.

Client identifier *

A unique identifier for the client. This identifier will be used as a folder name on the server's filesystem name for client specific files. Client identifier may contain only basic letters a-z, A-Z, numbers 0-9, dashes or underscore characters.

Client name *

An unique name for the client.

Client is enabled and Business Cases can be used

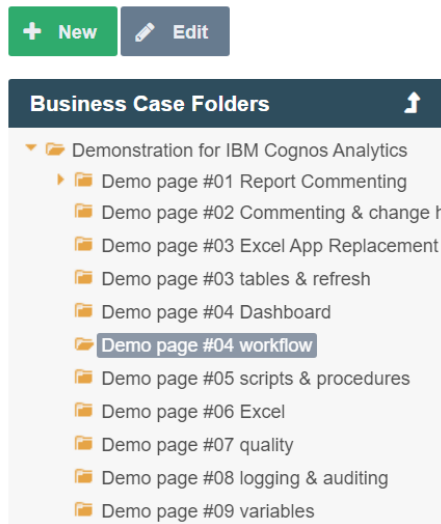
Client security groups (comma separated list)

Each user must be mapped to a client. If an user is member of at least one of these security groups (separated by comma) then the user is member of this client.

If you add users group(s) here then each business user **must be member of at least 1 group** to be able to **run a Business Case** of this client.

2.3 Security settings on designer folder level

The folders are in the Apparo Designer, left side:



Just press the “Edit” button and you see:

You can use security groups for controlling

- what user group can **see/open, edit/delete this folder**
- what user group can **run the Business Cases** that are inside a folder
- what user group can **see the Business Cases in read-only mode** (limited access) only

2.4 Enabling security group features on Business Case level

The security on Business Case level must be enabled first.

Click the 'Features' button in the top right corner of the Business Case edit view.

The security features can be enabled in the chapter 'Access control' in the tab 'Security':

Please select all features that you want to use in this Business Case:

Insert/delete/update/copy	Actions and scripts
▶ Inserting of new data rows ✓	▶ Widget data calculations ✓
▶ Editing of data rows ✓	▶ My own action buttons
▶ Deleting of data rows ✓	▶ Automatic scripts and database procedures
▶ Bulk data update	
▶ Copying of data rows	Other
Excel	▶ Refreshing data
▶ Excel import ✓	▶ My own database error messages
▶ Excel export ✓	▶ Filtering ✓
	▶ Data transaction handling
Data quality	Access control
▶ Data row validator ✓	▼ Security ✓
▶ Checking primary key ✓	Security
Data change history	Enable security settings for starting BC YES
▶ Auditing of data changes	Enable security group dependent behaviour YES
▶ Data history	▶ Limited access (readonly mode)
OK	CANCEL

- **Enabling security settings for starting BC** will add the feature who can run this Business Case
- **Enabling security group dependent behaviour** will enable all security settings on widget and feature level.

2.4.1 “Security” feature / Running a Business Case for special security groups only

Allows to enter security groups separated by commas. It limits the running of the Business Case (whitelist).

The screenshot shows the Apparo Business Case Designer interface. At the top, there is a dark blue header with the text "Apparo Demonstration" and "Business Case Designer - SAMPL MASTER PROD LIST". Below the header, there are four buttons: "Run" (green), "Close", "Save", and "Cancel".

The main content area is divided into two panels. On the left is a sidebar menu with the following items: "Main settings", "Standard buttons", "Filter data output", "Variables", "Inserting of new data rows", "Editing of data rows", "Delete data rows manually", "Excel import", "Excel export", and "Security" (which is highlighted in yellow). On the right is the "Security" configuration panel. It has a title "Security" and a text area containing the instruction: "Comma separated list of security group names. Only users, who are members Wildcards * and % can be used in group names both representing any number controllingEurope etc." Below this text is a text input field labeled "Security group" containing the text "Group_A, Group_B", which is also highlighted in yellow.

2.4.2 “Inserting of new data rows” feature for special user groups only

These settings belong to security group dependent behavior settings and need to be enabled in ‘Features’ first.

In the most cases you need to specify the security groups that are allowed to use the feature in a separate window.

The screenshot shows the 'Apparo Demonstration' interface with the 'Business Case Designer - SAMPL MASTER PROD LIST / SAMPLES - produ...' window. On the left, a sidebar contains settings categories: 'Main settings', 'Standard buttons', 'Filter data output', 'Variables', 'Inserting of new data rows' (selected), and 'Editing of data rows'. The main area is titled 'Inserting of new data rows' and contains the following text: 'If enabled then insertion of new data rows is possible. In this case an empty data record will be shown under the existing data in the read-only widgets in the inserting area too. Optional it's possible to enable the insertion feature for some user groups only.' Below this, there are two dropdown menus: 'Insertion of rows is enabled for' (set to 'selected security groups') and 'Inserting area is placed' (set to 'after editing area'). A checkbox 'Inserting area is able to update an already existing data row' is checked. A yellow link 'Specify settings for security group' is visible next to the first dropdown.

When clicking the yellow marked link the following window appears:

The screenshot shows the 'Business Case Designer - SAMPL MASTER PROD LIST / S...' window with the title 'Business Case security groups definition - Insert enabled'. It features a section 'Existing security groups' with a table containing one entry: 'Demo_Group_1'. Below this is a section 'Add new security group' with a text input field containing 'Demo_Group_2' and a green 'ADD SECURITY GROUP' button. At the bottom, there is a 'BACK TO BUSINESS CASE' button.

Here you can add the security groups that are allowed to use this feature.

2.4.3 “Data output filter” feature depending on security groups

You can enter different output filters for each security group.

Entered filters for security groups will not replace but extend the main filter. This can be controlled by the Logical group (AND or OR).

Output filter SQL condition security groups definition

Security group	SQL where condition	Logical group	Actions
UserGroupABC	Group = 'ABC'	AND	✎ ✕

In this example the filter will be

- **ID=<%ID%> AND Group='ABC'** for the group **UserGroupABC**
- and just **ID=<%ID%>** for all others.

2.5 Security settings on widget level

Security settings on Widget level are mainly:

- Settings for hiding or making a Widget read-only
- Default or constant values for different security groups
- Filters on Widget level (when using Lookup or Multiselect Widgets)

The screenshot shows a configuration panel with four tabs: "Widget type", "Mapping & Other", "Features", and "Lookup & Dropdown & Multiselect". The "Features" tab is active. Under the "Hiding" section, there are three checkboxes: "Hide this widget in the editing area", "Hide this widget in the inserting area", and "Hide this widget in edit and inserting area for". The third checkbox is checked, and a dropdown menu is open next to it, showing options: "all users", "selected security groups", "specific value", and "if variable returns true". Below this, the "Read-only" section is partially visible.

Using this setting hides the widget, but only for users who are member of one of the entered user groups. Other users can see the widget.

This close-up shows the "Hide this widget in edit and inserting area for" checkbox checked. The dropdown menu is set to "selected security groups". A yellow highlight is placed over the text "> Specify settings for security group" to the right of the dropdown.

Hide the widget for the selected user groups

Widget security groups definition - Hidden

The interface is titled "Widget security groups definition - Hidden". It has two main sections: "Existing security groups" and "Add new security group".
 - Under "Existing security groups", there is a table with one row: "Group_1".
 - Under "Add new security group", there is a text input field containing "Group_2" and a green button labeled "ADD SECURITY GROUP".
 - At the bottom, there is a blue button labeled "BACK TO WIDGET EDITOR".

2.5.1 Default and constant values depending on security groups

Widget settings of database column PRODUCT_LINE_ID

Widget type	Mapping & Other	Features	Lookup & Dropdown & Multiselect	Visual	Help texts	Data output format
Column name	PRODUCT_LINE_ID <input type="checkbox"/> Enable expressions					
Default value	<input type="text"/> for selected security groups <input type="button" value="Specify settings for security group"/>					
Constant value	<input type="checkbox"/> Use constant value in insert case only <input type="checkbox"/> Constant value is used only in manual inserts from inserting area.					
	<input type="text"/> for selected security groups <input type="button" value="Specify settings for security group"/>					
	<input checked="" type="checkbox"/> Use this constant value if the current user is not a member of the above defined groups/roles.					
Variable for using content in detail BC	<input type="text"/>					
<input type="button" value="OK"/>		<input type="button" value="CANCEL"/>				

Widget security groups definition - Default value

Existing security groups		
Security group	Default value	Action
Group_1	Value_1	<input type="button" value="X"/>
Add new security group		
Security group	Default value	
<input type="text" value="Group_2"/>	<input type="text" value="<%VARIABLE_1%>"/>	<input type="button" value="ADD SECURITY GROUP"/>

You can enter different value for each used security group, variables are allowed.

2.5.2 Showing widget / readonly widget depending on security groups

You can control the widget behaviour using the “Features” tab of the widget:

Widget settings of database column ID_COLOUR

Widget type

Mapping & Other

Features

Visual

Help texts

Data output format

Hiding

Hide this widget in the editing area

Hide this widget in the inserting area

Hide this widget in edit and inserting area for all users ▼

all users

selected security groups

specific value

if variable returns true

Read-only

Read-only in edit and inserting area for all users ▼

Read-only in edit area for all users ▼

Read-only in inserting area all users ▼

2.6 Retrieving the current user security groups in a variable

For debug and other purposes, it can be useful to know all user groups of the current user. The variable can be output, for example in the header, or further processed for other purposes, e.g. in variables or in filters.

Query the security groups in a Script variable:

```
var groups = afe.getGroupsByRegex('.*');
var result = 'Security groups of the current user: ';
for(var i = 0; i < groups.length; i++) {
  var group = groups[i];
  result = result + group + ', ';
}
// returning a string with all security groups of the current user
result;
```

2.7 User based security without groups

To maintain a user based security without groups you will need a user rights table and SQL- & Script variables.

The user rights table contains the user login, the Business Case ID and the rights (read, write, ...)

Example:

We set a widget to read-only for all users if a variable returns 'true'.

Widget settings of database column **PRODUCT_LINE_ID**

Widget type	Mapping & Other	Features	Lookup & Dropdown & Multiselect	Visual	Help texts	Data output format
Hiding						
<input type="checkbox"/> Hide this widget in the editing area						
<input type="checkbox"/> Hide this widget in the inserting area						
<input checked="" type="checkbox"/> Hide this widget in edit and inserting area for if variable returns true Variable name: <%CHECK_USER%>						

Now we need a script variable that returns always true, except for those who have edit rights.

Script body:

```
var x='true';
var check=afe.executeSql('select count(*) from MySecurityTable
where user_login = <%USER_LOGIN%> and bc_id =<%CURRENT_BC_ID%> and right="EDIT"');
if ( check > 0)
{ x='false';}
x;
```

Variable value

Data output format

Script body

Script language : javascript

You can see a detailed JavaScript language description including examples by clicking the question mark icon placed next to the editor.

Attention: If you want to use a Apparo variable in Javascript that contains text then you must use it in quotes, for example: `string.replace('<TEXT1>', '<TEXT2>', 'text')` If a script variable must return value true or false then it must be a string like 'true'.

```

1  var x='true';
2  var check=afe.executeSql('select count(*) from MySecurityTable
3  where user_login = <USER_LOGIN> and bc_id =<CURRENT_BC_ID> and right="EDIT"');
4  if ( check > 0)
5  { x='false';}
6  x;
7
8
9
10
11
12
13
14
15
16
17
18
19
20

```

SYNTAX CHECK
?

Verification OK

Calculate the variable before each usage again

OK
CANCEL

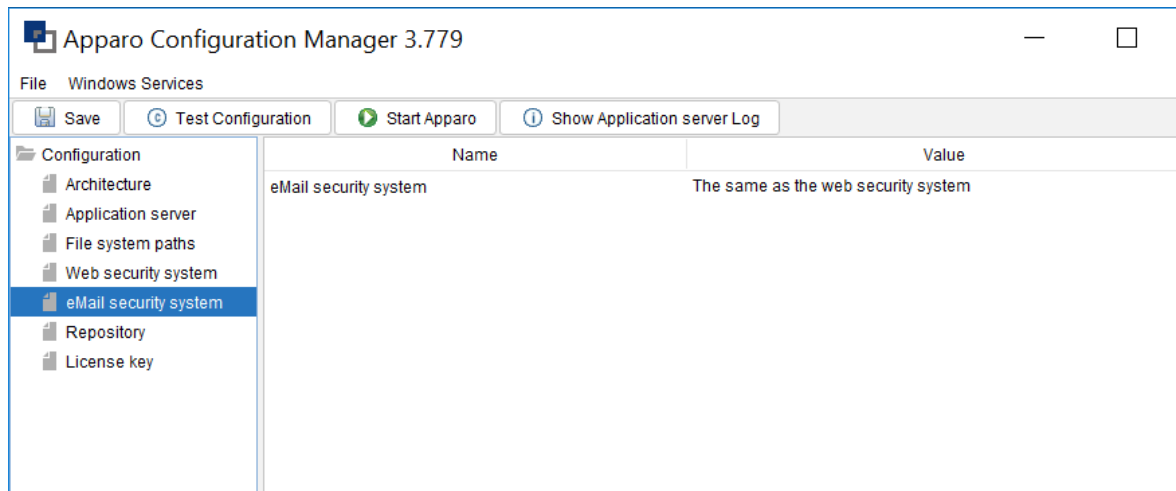
The used SQL statement returns a number > 0 and the used script variable is not longer 'true' and becomes editable.

2.8 E-Mail import security (EIBC)

The import of e-mail attachments is using its own security system and settings.

It can't use the security system of the used Business Intelligence system because at this time no user is logged in the BI system.

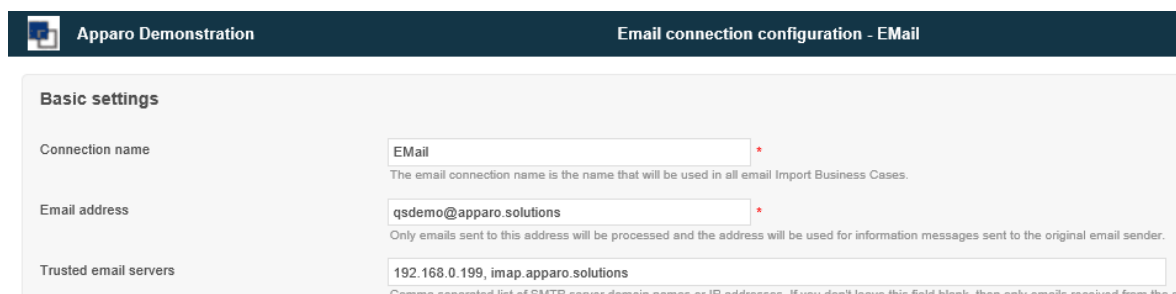
2.8.1 eMail security system



This only applies when using the feature 'Excel import via E-Mail' (EIBC), this feature is not using the authentication system of the underlying BI system and users do not require a BI user license.

2.8.2 Security settings of e-mail connections

When setting up the e-mail address that receives the e-mails for the import of attachments, you can enter here a comma separated white list of trusted e-mail servers.



E-Mails received from others sources will be ignored. If left empty, all e-mails are trusted.

2.8.3 Email import group security settings

E-Mail import Business Cases are containing all settings for the import of email attachments, each can have different email import groups.

Each group contains the settings to import one or several attachments.

The screenshot shows the 'Email import group settings' window with the 'Security' tab selected. The settings are as follows:

- Allowed email sender addresses:** *@apparo.*
- Security keywords:** <%EMAIL_KEYWORDS%>
- Email confirmation required:**
- Confirmation reply must come within:** 15 minutes
- Check if the email address of the sender is defined in the local security system:**
- Authorized security groups:** GROUP_1, GROUP_2
- Business Case limited access:** No limitation (default), Limited for all, Limited for variable value

Allowed email sender addresses

Comma separated white list of allowed sender addresses. Placeholders (*,?) are allowed. [*@apparo.*](#) means all senders from apparo.AnyTopLevelDomain is accepted.

Security keywords

A list of comma separated words that every email has to contain in the subject or body. If any of them is missing, the email will be rejected. Leave it empty if you don't want to use this feature. Variables are not allowed

Email confirmation required

Sends a confirmation e-mail to the sender of an e-mail to ensure the origin.

Confirmation reply must come within minutes

Timeframe within the confirmation e-mail must be replied, otherwise the import will be rejected.

Check if the email address of the sender is defined in the local security system

Rejects the email if the sender is not defined

Authorized security groups

Contains a list of security groups that are allowed to use this import group

3 Designer user security

It is possible to restrict the access/usage in the Apparo Designer.

3.1 Security hierarchy

The security is hierarchically organized.

From top to bottom:

- Security settings on **client** level
- Security settings on **folder** level
- Security settings on **database connection** level

3.2 Security on client level

Defines restrictions for accessing secured parts of Apparo designer of a client.

Only members of the listed security groups will be able to access the particular functions.

If no access rights are defined, the access to function is unrestricted for all designer users.

Apparo Client Administrator: Has unrestricted access to all features of this client

Apparo Connection Administrator: Can create, edit and delete database and email server connections

Apparo Designer: Manages Business Cases - can create, delete and edit Business Cases and folders

Apparo Import & Export Administrator: Can import and export Business Cases and connections

Enter comma separated list of security groups for each Apparo role:

Apparo Client Administrator	ADMIN System Administrator
Apparo Connection Administrator	ADMIN System Administrator
Apparo Designer	ADMIN System Administrator, DEMO System Designer
Apparo Import & Export Administrator	ADMIN System Administrator
Apparo Portal Administrator	ADMIN System Administrator, DEMO System Designer

OK CANCEL

Hint: Apparo Portal Administrator is available in Stand-alone version only

3.3 Security on database connection level

You can define what group of designers can use a database connection or not.

Apparo Demonstration
Database connection configuration

Main
Advanced
Variables
Automatic tables/columns creation
Security

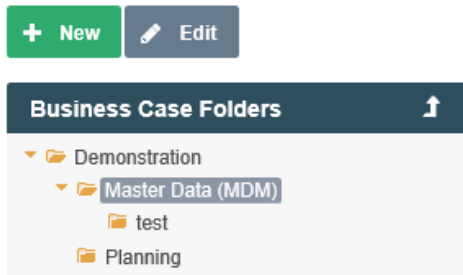
If not everybody should be able to use this database connection then it is possible to restrict access to specific designer users.
Add all security groups that must be able to use this database connections.
If this settings remains empty then everybody can use this database connection.

Security groups

OK
CANCEL

3.4 Folder security

Select the folder and click 'Edit' to open the folder properties:



Depending on the given rights, the user can:

- **See and open** folders and subfolders
- **Edit and delete** folder and its contents (subfolders, business cases)
- **Running Business Cases** or not of this folder
- **Making Business Cases read-only** for this folder

Folder properties:

Settings of this Business Case folder Master Data (MDM)

Name of this Business Case folder	<input type="text" value="Master Data (MDM)"/>
Description of this Business Case folder	<input style="height: 30px;" type="text"/>
Necessary security group to see and open this folder	<input style="height: 30px;" type="text" value="Security_Group_A"/>
Necessary security group to edit/delete this folder	<input style="height: 30px;" type="text" value="Security_Group_B"/>
Necessary security group for running the included Business Cases of this folder and subfolders	<input style="height: 30px;" type="text" value="Security_Group_C"/>
Necessary security groups with limited access to Business Cases of this folder and subfolders	<input style="height: 30px;" type="text" value="Security_Group_D"/>

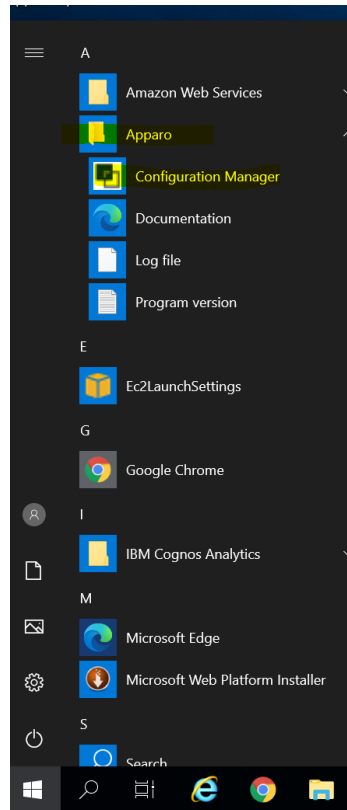
OK
CANCEL

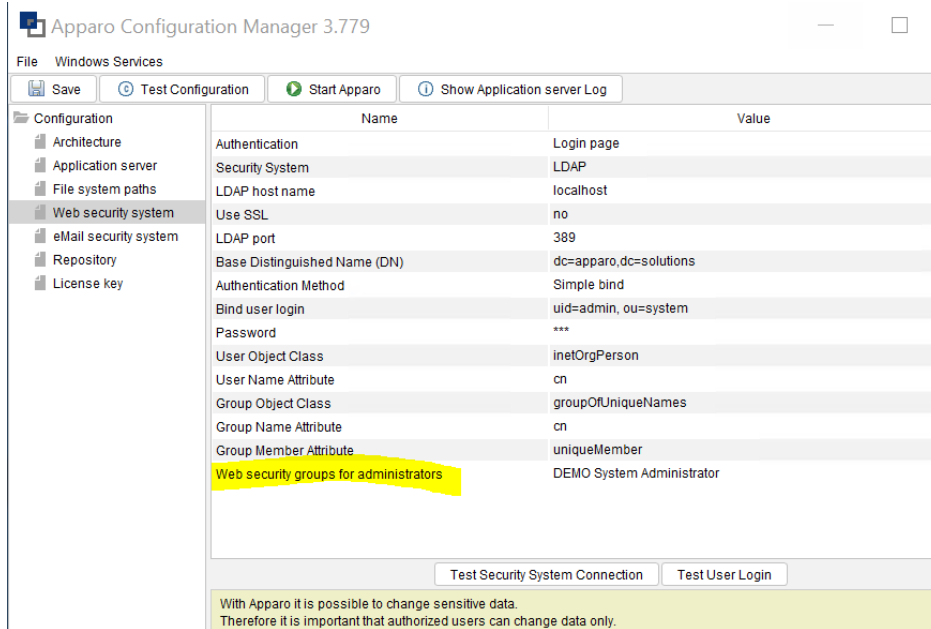
4 System administrator user security

The **Apparo Configuration Manager** contains an important security setting that is defining the name of the security group for **System Administrators**.

You can open it using the Windows Start

... or jumping into
[APPARO HOME]\FastEdit\cm
and starting cm.bat or cm.sh





Members of the entered security groups **have full access rights to the complete Apparo system, including the Apparo Designer** and can create, alter and delete clients.

They have system wide no limitations.

These users can run all Business Cases of all clients without limitations.

Hint: If left empty all users accessing the designer have full rights, even in case the following security levels deny this.

Therefore better making a security group like for example “**Apparo Administrators**” and adding all system users into it.

After you have added this name into “**Web security groups for administrators**” please press “**Start Apparo**”.