

How To Recover Login Module Stack when login to NWA or Visual Administrator is impossible

Applicable Releases:

SAP NetWeaver 7.0

SAP NetWeaver CE 7.1

Topic Area:

Security & Identity Management

Capability:

Identity & Access Management

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Document History

Document Version	Description
1.00	First official release of this guide

Typographic Conventions

Type Style	Description
<i>Example Text</i>	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Cross-references to other documentation
Example text	Emphasized words or phrases in body text, graphic titles, and table titles
Example text	File and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
Example text	User entry texts. These are words or characters that you enter in the system exactly as they appear in the documentation.
< Example text >	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
EXAMPLE TEXT	Keys on the keyboard, for example, F2 or ENTER.

Icons

Icon	Description
	Caution
	Note or Important
	Example
	Recommendation or Tip

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1. Business Scenario

The authentication to the NetWeaver Application Server Java is done through the authentication templates. If the authentication template has an improperly set authentication stack, the authentication to the Java Engine is impossible.

2. Background Information

The Java Stack of the Web Application Server is up and running.

However it is not possible to authenticate in the Visual Administrator (NW 7.0).

The web access to the NWA returns blank page. (NW CE 7.1)

There is no error message in the log and trace files.

Remote clients like Visual Administrator or NWDS

Error while connecting

com.sap.engine.services.security.exceptions.BaseLoginException: Access Denied.

3. Prerequisites

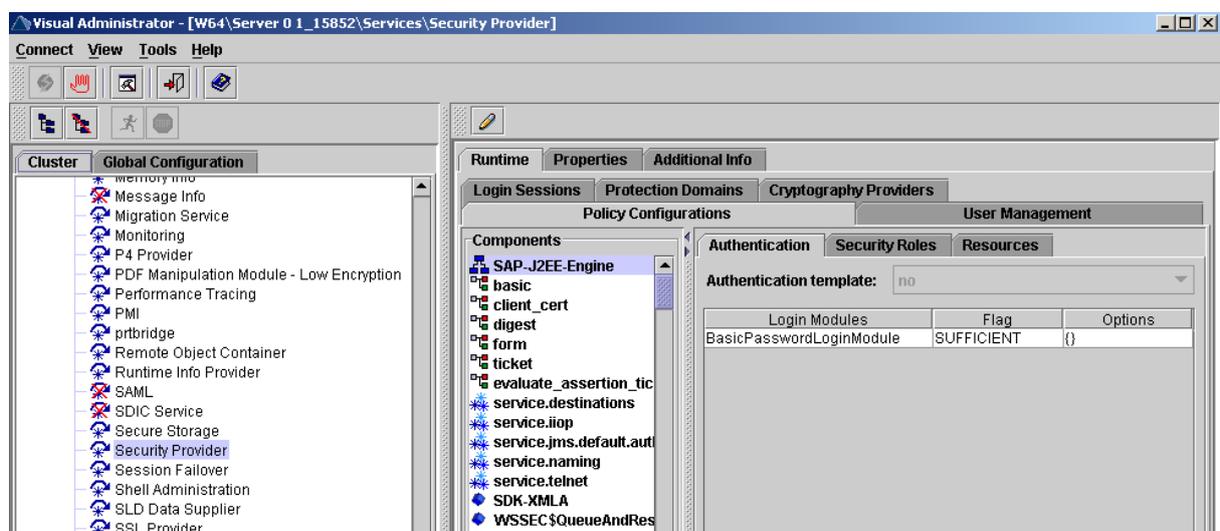
NetWeaver 7.0

The template is located under:

*Visual Administrator: Server -> Services -> Security Provider -> Runtime tab -> Policy Configurations tab
SAP-J2EE-Engine in the Components panel.*

In the Authentication tab the "Authentication template:" should be "no".

The **BasicPasswordLoginModule** should be the only login module stack listed and the Flag should be set to SUFFICIENT.



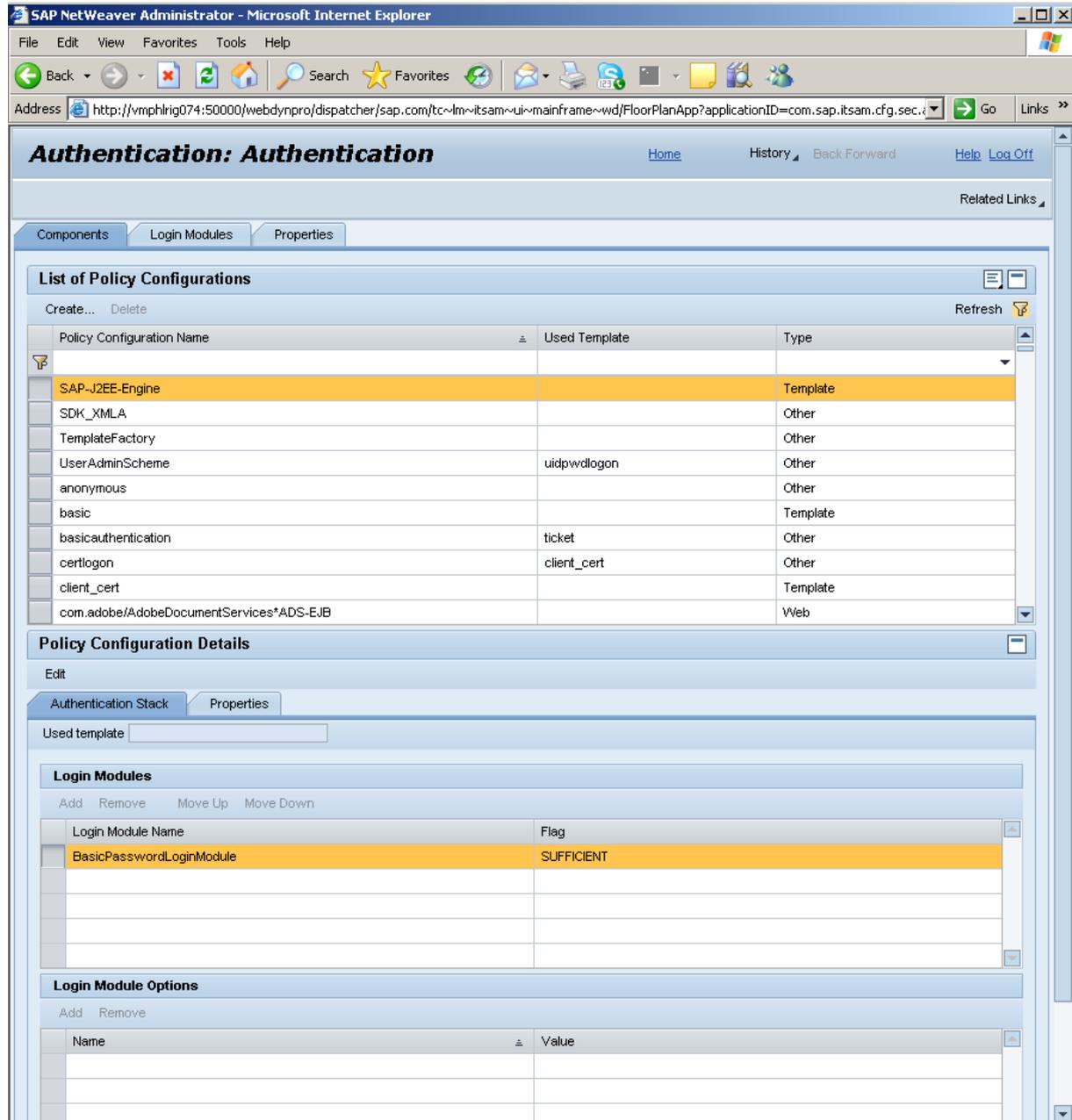
NetWeaver CE 7.1

The template is located under:

NWA: Configuration Management -> Security -> Authentication -> Components tab -> Template SAP-J2EE-Engine in the List of Policy Configuration panel.

Under the Policy Configuration Details Panel -> Authentication Stack ->

The **BasicPasswordLoginModule** should be the only login module stack listed and the Flag should be set to SUFFICIENT.



4. Step-by-Step Procedure

Apparently due to the fact that the authentication to the Visual Administrator or the NetWeaver Administrator is impossible, the problem cannot be fixed with modification of the authentication stack using these tools.

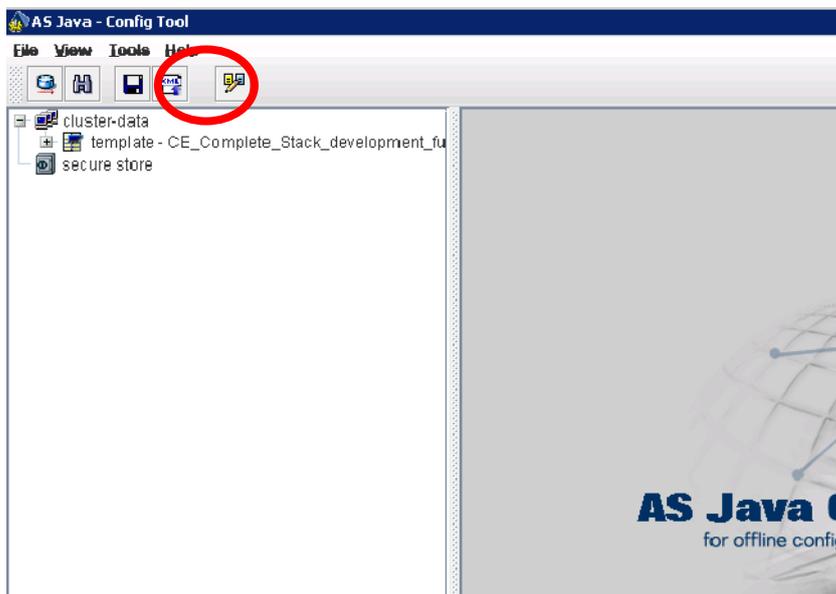
For resolving the problem, please use one of the tools: **configtool** or the **offlineconfigeditor**.

Tools located under `/usr/sap/<SID>/<instanceID>/j2ee/configtool/` folder.

4.1 Use the configtool or the offlineconfigeditor

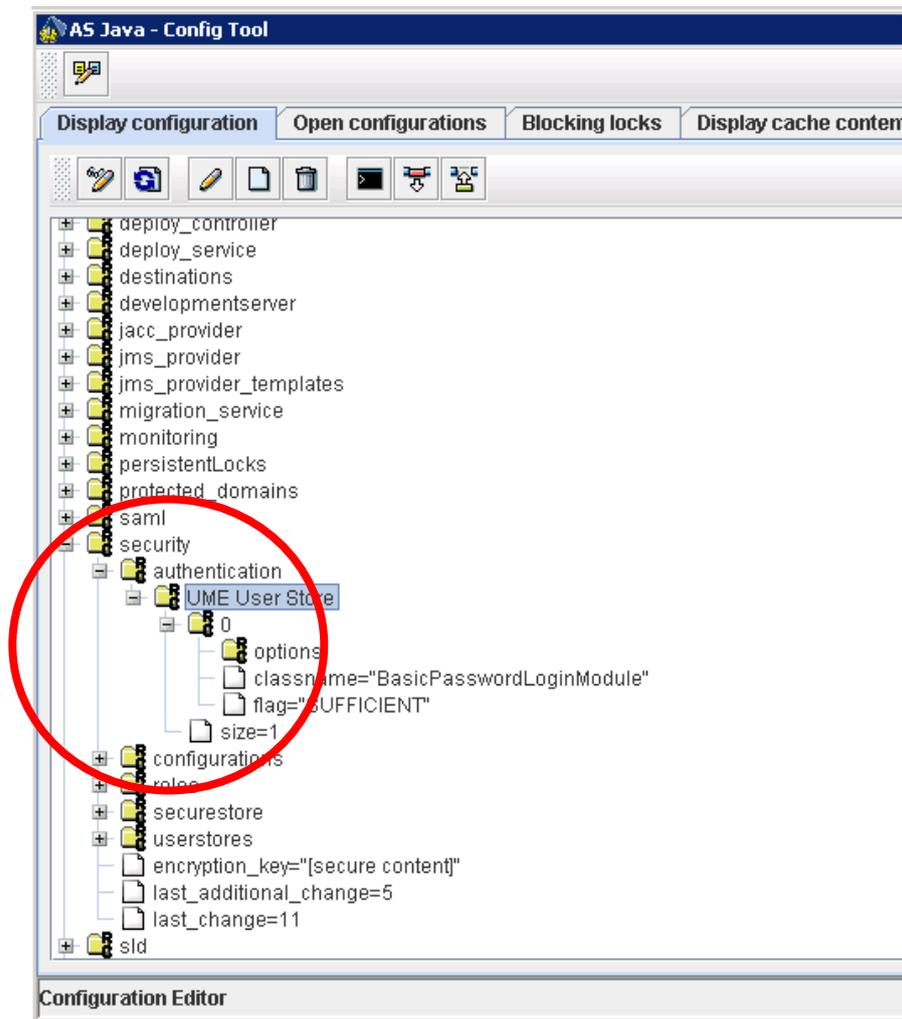
1. Click on the  icon

If using the *offlineconfigeditor* just proceed with the next step.



2. Choose tab Display Configuration

Navigate to *Configurations* -> *security* -> *authentication* -> *UME User Store*



If no additional login modules are installed you should see only two sub-notes:

Sub-note called **0** and sub-note called: **size=1**

As well as 3 sub-notes under 0 called: **options**, **classname** and **flag**.

 Note

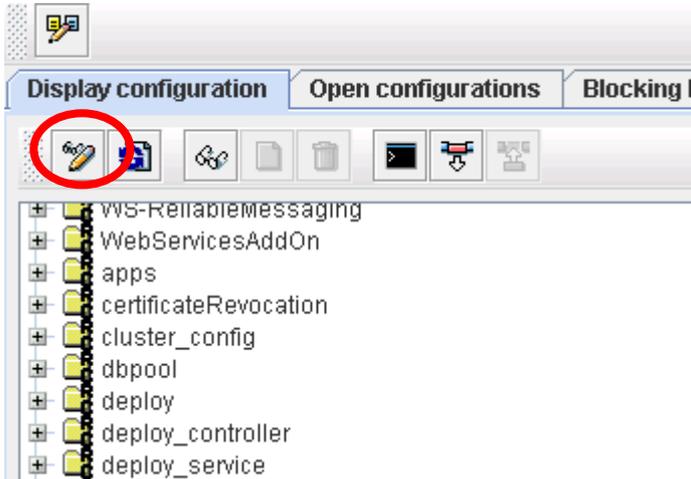
The above screenshot represents the correct minimal requirement for a login module structure, and this is what you have to make your configuration look like in order to recover the logging.

3. Switch to edit mode:

 CAUTION

Be aware that any change of configurations with the configtool or the offlineconfigeditor is making modifications directly to the WAS database so any wrong modification might brake the engine

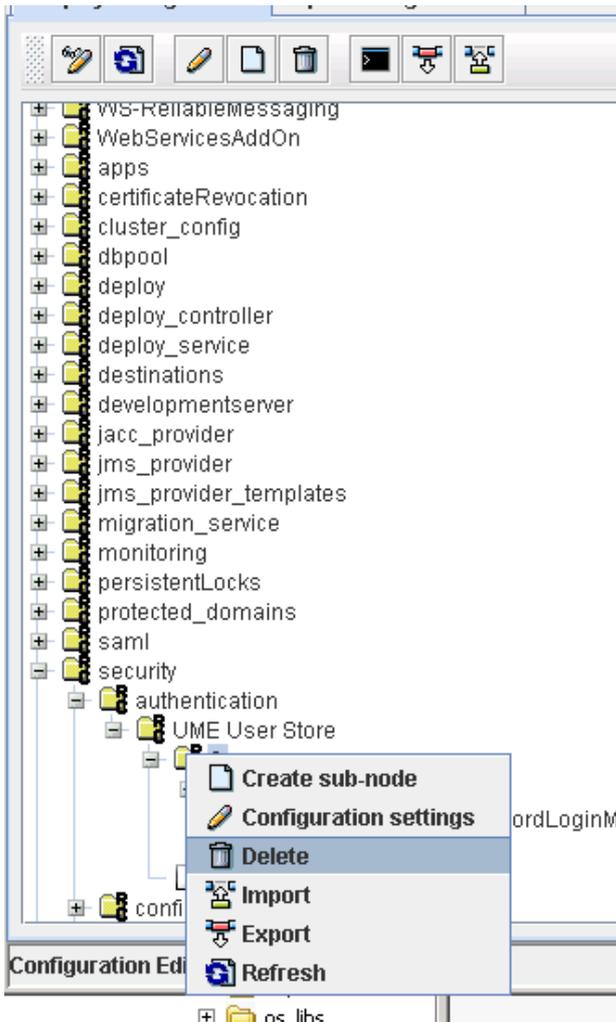
Switch to edit mode by pressing the pencil icon. Click Yes on the “Switch to edit mode” popup window.



4. Delete all sub-notes under the UME User Store

Go to *security -> authentication -> UME User Store*:

Choose a sub-note under the **UME User Store** from the context menu (right click) choose Delete.



5. Create the sub-note 0

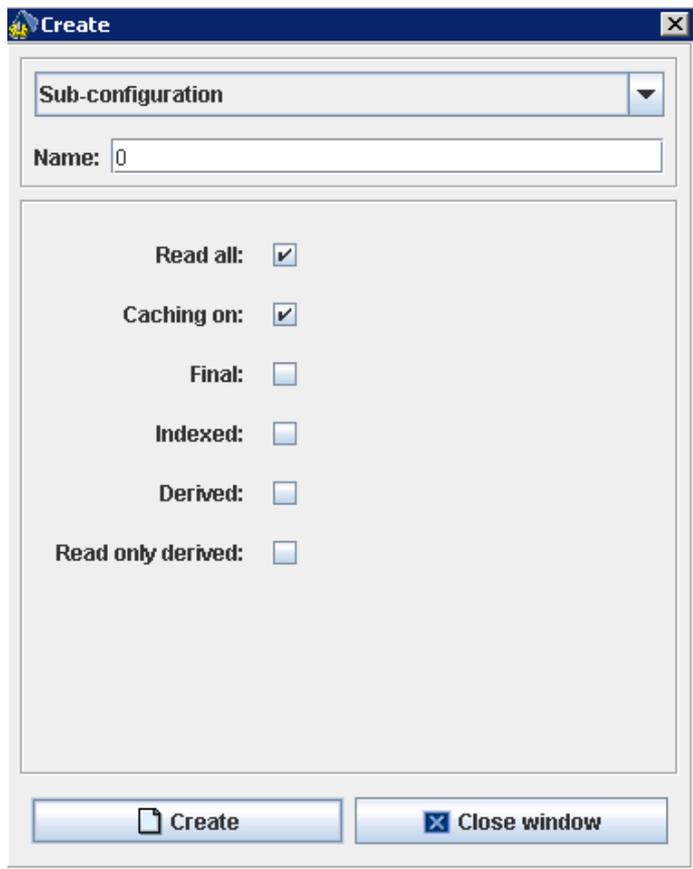
Choose the note *UME User Store* and from the context menu choose *Create sub-note*

A new window will pop up

Choose the Sub-configuration from the drop down

Enter 0 for Name

And press the create button.



The screenshot shows a dialog box titled "Create" with a close button in the top right corner. The dialog contains the following elements:

- A dropdown menu labeled "Sub-configuration" with a downward arrow.
- A text field labeled "Name:" containing the value "0".
- A list of checkboxes:
 - Read all:
 - Caching on:
 - Final:
 - Indexed:
 - Derived:
 - Read only derived:
- Two buttons at the bottom: "Create" and "Close window".

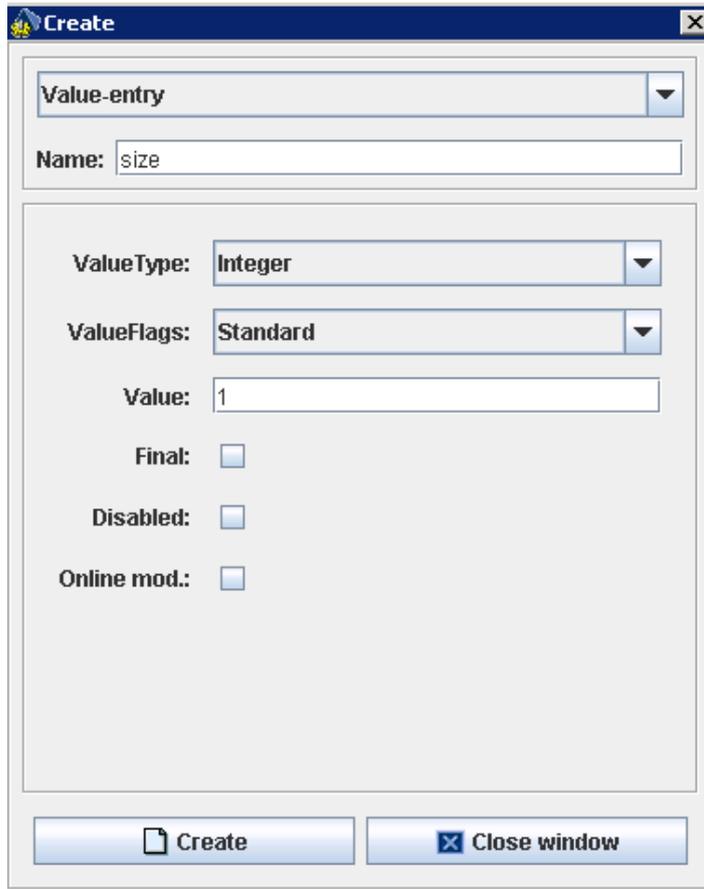
6. Repeat the same step of creating a sub-folder

Choose *Value-entry* from the drop down

Name: *size*

Value Type: *Integer*

Value: *1*



The screenshot shows a 'Create' dialog box with the following fields and options:

- Value-entry** (dropdown menu)
- Name:** size (text input)
- ValueType:** Integer (dropdown menu)
- ValueFlags:** Standard (dropdown menu)
- Value:** 1 (text input)
- Final:**
- Disabled:**
- Online mod.:**
- Create** (button)
- Close window** (button)

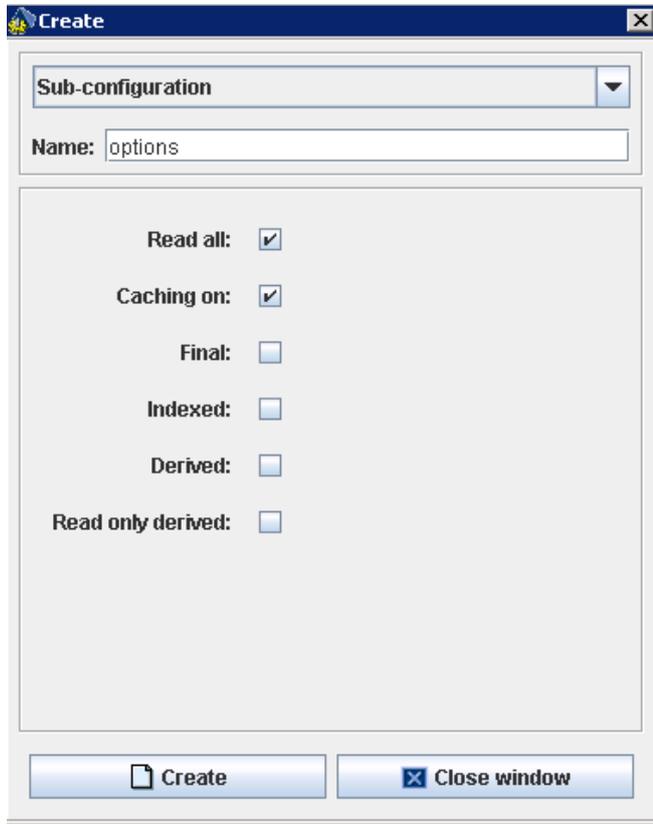
7. Repeat the same steps for creating the sub-structure for the 0

Choose the newly created 0 structure and create this sub-structure under it:

a. Create a new sub-folder:

Choose *Sub-configuration* from the drop-down menu

Name: *options*



- b. Create a new sub-folder for the login module class name:

Choose *Value-entry* from the drop-down menu.

Name: *classname*

Value Type: *String*

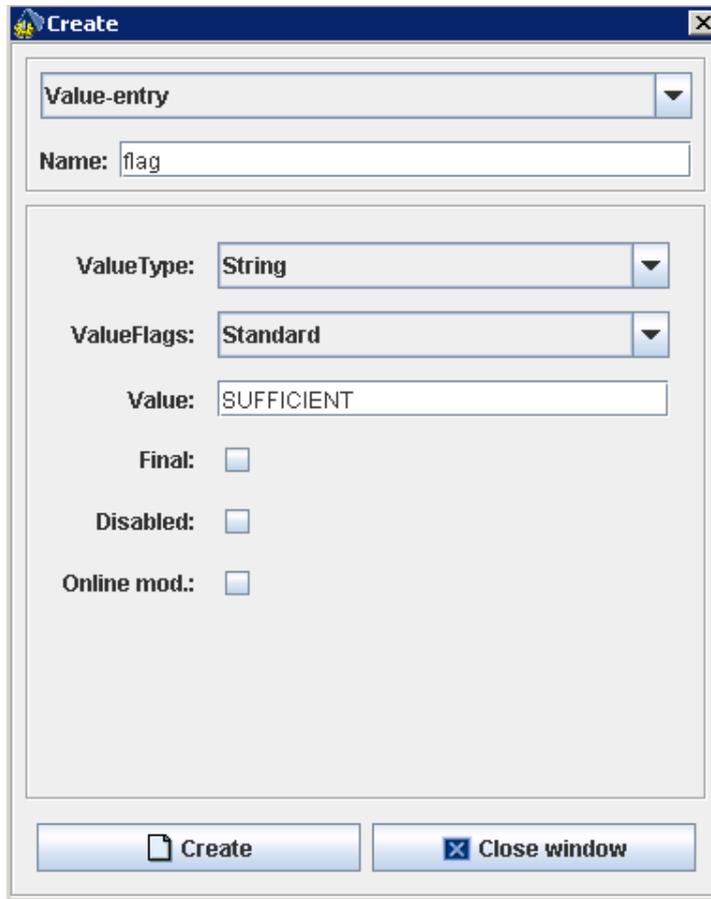
Value: *com.sap.engine.services.security.server.jaas.BasicPasswordLoginModule*

The screenshot shows a 'Create' dialog box with the following fields and options:

- Value-entry** (dropdown menu)
- Name:**
- ValueType:**
- ValueFlags:**
- Value:**
- Final:**
- Disabled:**
- Online mod.:**

Buttons at the bottom:

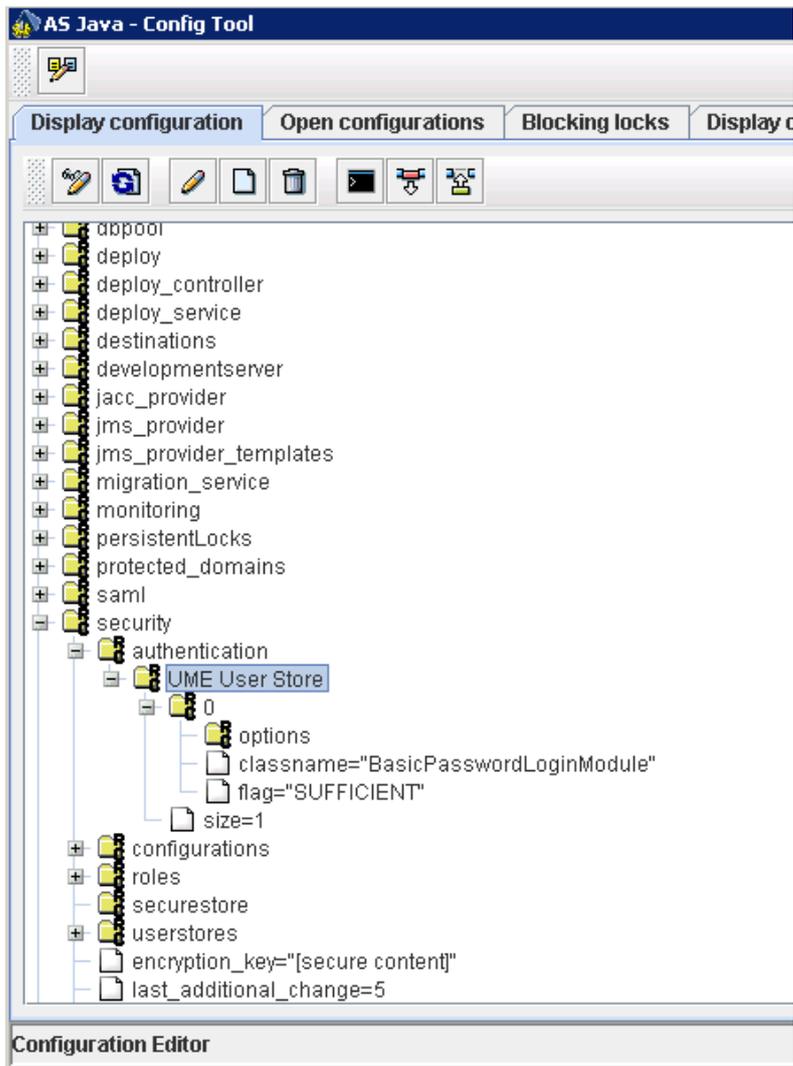
- c. Create a new sub-folder
Choose *Value-entry* from the drop-down menu
Name: *flag*
Value Type: *String*
Value: *SUFFICIENT*



The screenshot shows a 'Create' dialog box with the following fields and options:

- Value-entry (dropdown menu)
- Name: flag (text input)
- ValueType: String (dropdown menu)
- ValueFlags: Standard (dropdown menu)
- Value: SUFFICIENT (text input)
- Final:
- Disabled:
- Online mod.:
- Buttons: Create, Close window

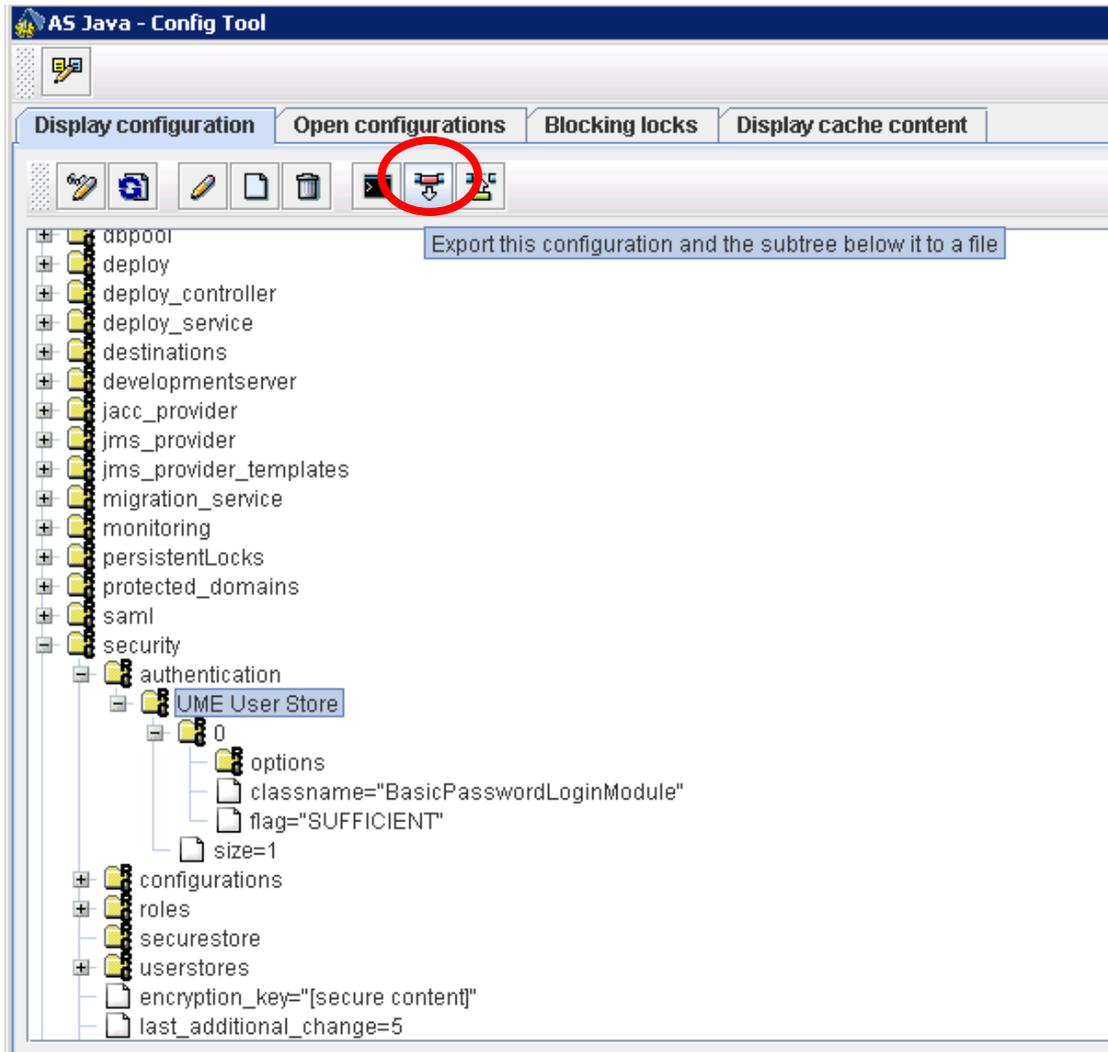
8. The final structure should like this:



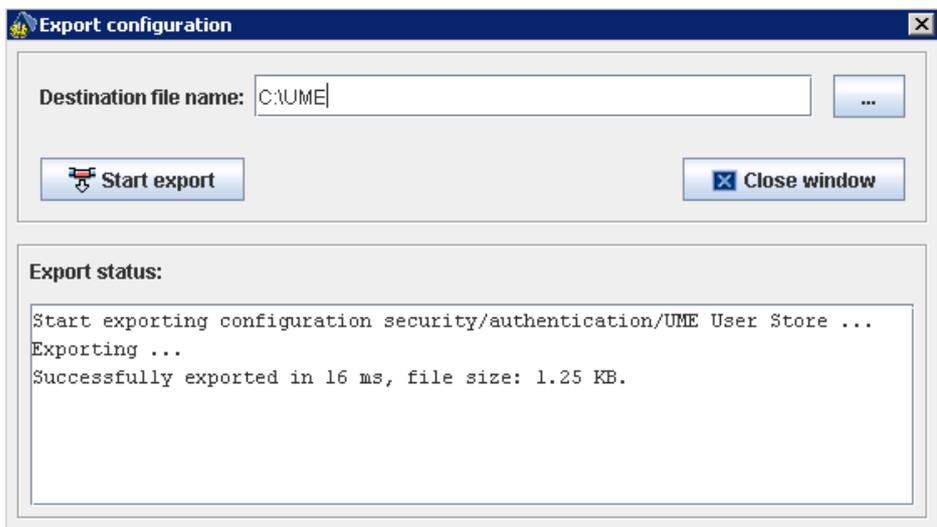
9. Close the ConfigTool, offlineconfigeditor.
10. Restart the WAS

4.2 Create a copy of the configuration for future use.

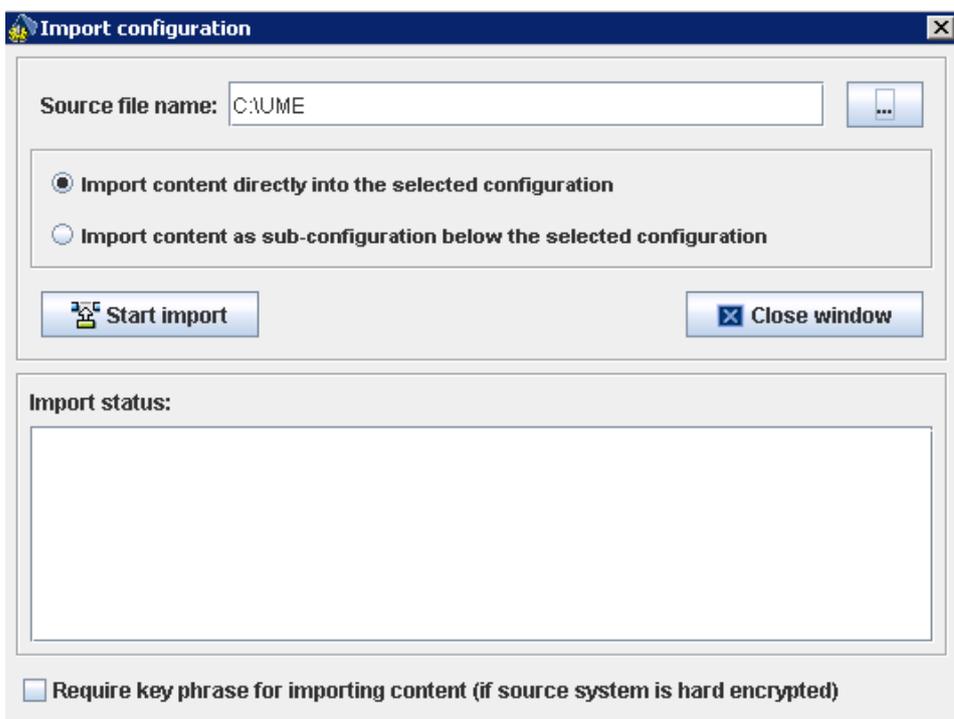
1. You can create a copy of the new created configuration into a file for easy restore if required in the future.
2. Before closing the configtool, choose the "UME User Store" sub-note and click the "Export configuration to a file" icon.



- On the new pop up window, enter a file name and click “Start Export”. Store the configuration for future needs.



- You can import the configuration using the ‘Import configuration icon’  Choose the UME User Store and import content “Directly into the selected configuration”



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