SAP NetWeaver® Identity Management
Identity Center

Installing and configuring the Identity Management User Interface

Version 7.2 Rev 16
Preface

The product

SAP NetWeaver Identity Management Identity Center is a high-end identity management solution, capable of handling a large amount of repositories containing an unlimited amount of information. The Identity Center offers a robust, flexible and scalable high-availability solution for workflow, provisioning, data synchronization and joining for a large number of data repositories. The Identity Center provides a framework for a number of jobs.

The reader

This manual is written for people who are to use the Identity Center and the Identity Management User Interface.

Prerequisites

Before you can install the Identity Management User Interface, make sure that the following prerequisites are present:

- One of the following SAP NetWeaver versions must be correctly installed and licensed:
  - SAP NetWeaver AS Java as of Release 7.0 SP14 or higher (SAP NetWeaver 7.0).
  - SAP NetWeaver Composition Environment 7.1 Including Enhancement Package 1 (SAP NetWeaver CE 7.1 EHP 1).
  - SAP NetWeaver Composition Environment 7.2 (SAP NetWeaver CE 7.2).
  - SAP NetWeaver 7.3.
  - SAP NetWeaver 7.3 Including Enhancement Package 1 (SAP NetWeaver 7.3 EHP 1).
  - SAP NetWeaver 7.4.
  - SAP NetWeaver Identity Management Identity Center version 7.2 SP9 or higher, must be correctly installed and licensed.
  - Basic knowledge about the SAP NetWeaver AS Java and its tools.
  - When giving certain accesses to the Identity Management User Interface, basic knowledge about the Identity Center is required.

The manual

This tutorial describes how you install the Identity Management User Interface and perform the initial configuration.
Related documents

You can find useful information in the following documents:

- **SAP NetWeaver Identity Management Identity Center: Installation overview.**
- **SAP NetWeaver Identity Management Identity Center: Installing the Management Console.**
- **SAP NetWeaver Identity Management Identity Center: Installing the Runtime Components.**
- **SAP NetWeaver Identity Management Identity Center: Installing the database (Microsoft SQL Server/Oracle/IBM DB2).**
- **SAP NetWeaver Identity Management Solution Operation Guide.**
- **SAP NetWeaver Identity Management Security Guide.**


For details about SAP NetWeaver Administrator (NWA) see:

- SAP NetWeaver 7.3 EHP 1: [http://help.sap.com/saphelp_nw73ehp1/helpdata/en/49/49b19720cc3b5be10000000a42189b/frameset.htm](http://help.sap.com/saphelp_nw73ehp1/helpdata/en/49/49b19720cc3b5be10000000a42189b/frameset.htm).
- SAP NetWeaver 7.4: [http://help.sap.com/saphelp_nw74/helpdata/en/49/49b19720cc3b5be10000000a42189b/frameset.htm](http://help.sap.com/saphelp_nw74/helpdata/en/49/49b19720cc3b5be10000000a42189b/frameset.htm).

For Software Deployment Manager (SDM) see [http://help.sap.com/saphelp_nw70/helpdata/EN/22/a7663bb3808c1fe10000000a114084/frameset.htm](http://help.sap.com/saphelp_nw70/helpdata/EN/22/a7663bb3808c1fe10000000a114084/frameset.htm).

Find documentation about Software Update Manager (SUM) on SAP Service Marketplace at [http://service.sap.com/sltoolset](http://service.sap.com/sltoolset) → Software Logistics Toolset 1.0 → Software Update Manager (SUM), under "Documentation" on the bottom of the page.

For more information on SAP NetWeaver see [http://help.sap.com](http://help.sap.com).
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Introduction

While the administrator (manager) manages the Identity Center configuration through the Management Console, the Web Dynpro Java application Identity Management User Interface is used for all end-user registration/self service, password resets and approval of tasks. It also contains monitoring information for administrators (managers) of the Identity Center. This document describes how to install and configure the Identity Management User Interface. When installing and configuring the User Interface you need to complete the following steps:

- Define the JDBC connection for the JMX layer
- Deploy the Identity Management User Interface
- Configure the JMX layer
- Perform the initial configuration
- Integrate the User Interface in the SAP NetWeaver Portal (optional)

The procedures may be different depending on what database system you are using. The procedures are the same for all database systems unless stated otherwise in this document.

The procedures may also be different depending on your version of SAP NetWeaver:

- SAP NetWeaver AS Java as of Release 7.0 (SAP NetWeaver 7.0)
- SAP NetWeaver Composition Environment 7.1 Including Enhancement Package 1 (SAP NetWeaver CE 7.1 EHP 1)
- SAP NetWeaver Composition Environment 7.2 (SAP NetWeaver CE 7.2)
- SAP NetWeaver 7.3
- SAP NetWeaver 7.3 Including Enhancement Package 1 (SAP NetWeaver 7.3 EHP 1)
- SAP NetWeaver 7.4

There is an own section describing the procedures for SAP NetWeaver AS Java as of Release 7.0.

Much of the procedures for other supported SAP NetWeaver versions on the list (SAP NetWeaver CE 7.1 EHP 1, SAP NetWeaver CE 7.2, SAP NetWeaver 7.3, SAP NetWeaver 7.3 EHP 1 and SAP NetWeaver 7.4) are the same. The procedures for these versions are therefore described in a shared section "Other SAP NetWeaver releases" throughout the document.
Defining the JDBC connection for the JMX layer

In order to be able to retrieve data from the identity store, the JMX layer of the Identity Management User Interface needs a JDBC data source pointing to the Identity Center database. Before creating the JDBC data source, make sure that a database driver is installed.

Note:
If operating with multiple Java nodes the driver needs to be installed on all these.

SAP NetWeaver AS Java as of Release 7.0

To set up the connection for SAP NetWeaver AS Java 7.0 use Visual Administrator (the J2EE Engine administration tool). Start and login to the Visual Administrator.

Deploying the JDBC driver

To deploy the driver on SAP NetWeaver 7.0, follow the process described on http://help.sap.com/saphelp_nw70/helpdata/en/80/4f34c587f05048adee640f4c346417/content.htm.

Note:
The JDBC driver must be installed on the server as described in the document SAP NetWeaver Identity Management Identity Center Installation overview.

Note:
SAP NetWeaver AS Java 7.0 is not supported when using IBM DB2 as the database system.

Note:
Even though specifying an arbitrary name for your driver entry (such as myDriver) will be sufficient, it is recommended to give the driver a logical name e.g. SQL2005 or ORACLE.

Note:
On the server, verify that the file exists in the location \usr\sap\<System ID>\<INSTANCE_NAME>\j2ee\cluster\server0\bin\ext\<name of the driver> (e.g. C:\usr\sap\F21\JC30\j2ee\cluster\server0\bin\ext\SQL2005 or C:\usr\sap\F21\JC30\j2ee\cluster\server0\bin\ext\ORACLE). Sometimes an empty file is created. If this is the case, copy the file manually into the location then restart the server.

Adding the Identity Center database as a data source

The driver is uploaded and we can now create the data source. To do so, follow the process of creating a data source with JDBC version 1.x, as described on http://help.sap.com/saphelp_nw70/helpdata/EN/c0/3ad4d5cd63647a188b582aa537d3/content.htm.

Note:
You have to choose the JDBC version 1.x when creating a JDBC data source in the AS Java. It is important to emphasize that the mentioned JDBC version is not related to the version of the JDBC driver you are using. You may use all supported JDBC driver versions for the supported databases. For Microsoft SQL Server for instance, you may not only use the JDBC driver version 1.2, which might appear to match the JDBC version 1.x, but also the driver version 3.0.

Note:
SAP NetWeaver AS Java 7.0 is not supported when using IBM DB2 as the database system.
Following the above mentioned process for adding the Identity Center database as a data source, pay special attention to the following fields (and apply the values listed):

<table>
<thead>
<tr>
<th>Tab</th>
<th>Name of the field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Main&quot; tab</td>
<td>Name</td>
<td>Name the data source &quot;IDM_DataSource&quot; (must be in this exact casing). If you choose to name the data source differently, then you must create alias &quot;IDM_DataSource&quot; for the data source. Read more about creating and managing data source aliases on <a href="http://help.sap.com/saphelp_nw70/helpdata/en/11/4963a6cf52ad429b3b3b65e003f2d1/content.htm">http://help.sap.com/saphelp_nw70/helpdata/en/11/4963a6cf52ad429b3b3b65e003f2d1/content.htm</a>.</td>
</tr>
<tr>
<td>&quot;Main&quot; tab</td>
<td>JDBC Version</td>
<td>Make sure that the 1.x JDBC version is selected.</td>
</tr>
<tr>
<td>&quot;Main&quot; tab</td>
<td>Driver Class</td>
<td>Fill in the driver class:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- com.microsoft.sqlserver.jdbc.SQLServerDriver for MS SQL Server</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- oracle.jdbc.driver.OracleDriver for Oracle</td>
</tr>
<tr>
<td>&quot;Main&quot; tab</td>
<td>Database URL</td>
<td>Provide the correct database URL:</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>For MS SQL Server:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>jdbc:sqlserver://&lt;host&gt;;database=&lt;database prefix&gt;_db (e.g. jdbc:sqlserver://trd90500010.example.com;database=mxmc_db)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Port for a non-default JDBC connection is a part of the JDBC URL, e.g. jdbc:sqlserver://&lt;host&gt;:&lt;port&gt;;database=&lt;database prefix&gt;_db.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>For Oracle:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>jdbc:oracle:thin:@&lt;host&gt;:&lt;port&gt;:&lt;database SID&gt; (e.g. jdbc:oracle:thin:@10.55.165.63:1521:orcl)</td>
</tr>
<tr>
<td>&quot;Main&quot; tab</td>
<td>User</td>
<td>Enter the user name that you use to log in to the database server, the provisioning user. E.g. &lt;database prefix&gt;_prov (for example mxmc_prov).</td>
</tr>
<tr>
<td>&quot;Main&quot; tab</td>
<td>Password</td>
<td>Provide the password of the provisioning user defined in the &quot;User&quot; field.</td>
</tr>
<tr>
<td>&quot;Additional&quot; tab</td>
<td>Default Connection Isolation</td>
<td>Select &quot;TRANSACTION_READ_COMMITTED&quot;.</td>
</tr>
<tr>
<td>&quot;Additional&quot; tab</td>
<td>SQL Engine</td>
<td>Choose &quot;Native SQL&quot; for MS SQL Server. Choose &quot;Vendor SQL&quot; for Oracle.</td>
</tr>
</tbody>
</table>
Updating the data source

If you need to update the data source information (e.g. changes in server, database, password etc), do the following:

1. In Visual Administrator, select Server\Services\JDBC Connector in the "Cluster" tab.
2. Select "DataSources" in the "Runtime" tab, and navigate to the data source you need to update.
3. Update the data and choose to save the changes in the data source. The following warning will appear:

4. Choose "Yes" to confirm and save the changes.

After updating, the server needs to be restarted – the application must be stopped and started again. Follow the steps described on http://help.sap.com/saphelp_nw70/helpdata/en/7e/75ebf7b14440a19a99dd4e2f0ef304/frameset.htm to restart the application "sap.com/tc~idm~jmx~app".

The server is now restarted and ready to use.
Other SAP NetWeaver releases

To set up the connection for SAP NetWeaver CE 7.1 EHP 1, SAP NetWeaver CE 7.2, SAP NetWeaver 7.3, SAP NetWeaver 7.3 EHP 1 and SAP NetWeaver 7.4, use the SAP NetWeaver Administrator (NWA).

To access the NWA do the following:

1. Enter http(s)://<host>:<port> in your browser, which will take you to your index page.
2. Then select SAP NetWeaver Administrator. Or you can just enter http(s)://<host>:<port>/nwa in your browser. Both procedures will display the login page for the NWA.

Deploying the JDBC driver

Follow the descriptions on how to deploy the drivers listed for each SAP NetWeaver version:

- SAP NetWeaver CE 7.1 EHP 1:  
  [http://help.sap.com/saphelp_nwce711/helpdata/en/44/e31e432d476c30e10000000a114a6b/frameset.htm](http://help.sap.com/saphelp_nwce711/helpdata/en/44/e31e432d476c30e10000000a114a6b/frameset.htm).

- SAP NetWeaver CE 7.2:  

- SAP NetWeaver 7.3:  

- SAP NetWeaver 7.3 EHP 1:  

- SAP NetWeaver 7.4:  
Defining the JDBC connection for the JMX layer

SAP NetWeaver Identity Management Identity Center Installing and configuring the Identity Management User Interface

Note:
The JDBC driver must be installed on the server as described in the document SAP NetWeaver Identity Management Identity Center Installation overview.

Note:
Even though specifying an arbitrary name for your driver entry (such as myDriver) will be sufficient, it is recommended to give the driver a logical name e.g. SQL2005, ORACLE or DB2.

Adding the Identity Center database as a data source

To create the data source, follow the descriptions listed for each SAP NetWeaver version:

- SAP NetWeaver CE 7.1 EHP 1:

- SAP NetWeaver CE 7.2:

- SAP NetWeaver 7.3:

- SAP NetWeaver 7.3 EHP 1:

- SAP NetWeaver 7.4:

Note:
You have to choose the JDBC version 1.x when creating a JDBC data source in the AS Java. It is important to emphasize that the mentioned JDBC version is not related to the version of the JDBC driver you are using. You may use all supported JDBC driver versions for the supported databases. For Microsoft SQL Server for instance, you may not only use the JDBC driver version 1.2, which might appear to match the JDBC version 1.x, but also the driver version 3.0.
Following the above mentioned processes for adding the Identity Center database as a data source, pay special attention to the following fields (and apply the values listed) in the "Settings" tab:

<table>
<thead>
<tr>
<th>Name of the field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Source Name</td>
<td>Name the data source &quot;IDM_DataSource&quot; (must be in this exact casing). If you choose to name the data source differently, then you must create alias &quot;IDM_DataSource&quot; for the data source. Read more about creating and managing aliases here:</td>
</tr>
<tr>
<td></td>
<td>For SAP NetWeaver CE 7.1 EHP 1: <a href="http://help.sap.com/saphelp_nwce711/helpdata/en/51/735d4217139041e10000000a1550b0/frameset.htm">http://help.sap.com/saphelp_nwce711/helpdata/en/51/735d4217139041e10000000a1550b0/frameset.htm</a></td>
</tr>
<tr>
<td></td>
<td>For SAP NetWeaver 7.3: <a href="http://help.sap.com/saphelp_nw73/helpdata/en/4a/5c48e0876d1012e10000000a42189b/frameset.htm">http://help.sap.com/saphelp_nw73/helpdata/en/4a/5c48e0876d1012e10000000a42189b/frameset.htm</a></td>
</tr>
<tr>
<td></td>
<td>For SAP NetWeaver 7.3 EHP 1: <a href="http://help.sap.com/saphelp_nw74/helpdata/en/4a/5c48e0876d1012e10000000a42189b/content.htm?frameset=/en/4a/5c4402876d1012e10000000a42189b/frameset.htm">http://help.sap.com/saphelp_nw74/helpdata/en/4a/5c48e0876d1012e10000000a42189b/content.htm?frameset=/en/4a/5c4402876d1012e10000000a42189b/frameset.htm</a></td>
</tr>
<tr>
<td>Driver Name</td>
<td>Select the JDBC driver.</td>
</tr>
<tr>
<td>SQL Engine</td>
<td>Choose &quot;Native SQL&quot; for MS SQL Server. Choose &quot;Vendor SQL&quot; for Oracle and IBM DB2.</td>
</tr>
<tr>
<td>Isolation Level</td>
<td>Select &quot;Transaction Read Committed&quot;.</td>
</tr>
<tr>
<td>JDBC Version</td>
<td>Make sure that the 1.x JDBC version is selected.</td>
</tr>
<tr>
<td>Driver Class Name</td>
<td>Fill in the driver class:</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- com.microsoft.sqlserver.jdbc.SQLServerDriver for MS SQL Server</td>
</tr>
<tr>
<td></td>
<td>- oracle.jdbc.driver.OracleDriver for Oracle</td>
</tr>
<tr>
<td></td>
<td>- com.ibm.db2.jcc.DB2Driver for IBM DB2</td>
</tr>
</tbody>
</table>
### Defining the JDBC connection for the JMX layer

#### SAP NetWeaver Identity Management Identity Center Installing and configuring the Identity Management User Interface

<table>
<thead>
<tr>
<th>Name of the field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database URL</td>
<td>Provide the correct database URL:</td>
</tr>
<tr>
<td></td>
<td><strong>For MS SQL Server:</strong></td>
</tr>
<tr>
<td></td>
<td>jdbc:sqlserver://&lt;host&gt;;database=&lt;database prefix&gt;_db (e.g. jdbc:sqlserver://trd90500010.example.com;database=mxmc_db)</td>
</tr>
<tr>
<td></td>
<td>Port for a non-default JDBC connection is a part of the JDBC URL, e.g. jdbc:sqlserver://&lt;host&gt;:&lt;port&gt;;database=&lt;database prefix&gt;_db.</td>
</tr>
<tr>
<td></td>
<td><strong>For Oracle:</strong></td>
</tr>
<tr>
<td></td>
<td>jdbc:oracle:thin:@&lt;host&gt;:&lt;port&gt;:&lt;database SID&gt; (e.g. jdbc:oracle:thin:@10.55.165.63:1521:orcl)</td>
</tr>
<tr>
<td></td>
<td><strong>For IBM DB2:</strong></td>
</tr>
<tr>
<td></td>
<td>jdbc:db2://&lt;server&gt;:/&lt;prefix&gt;_DB:currentSchema=&lt;prefix&gt;_OPER;currentFunctionPath=&lt;prefix&gt;_OPER;maxStatements=100;retrieveMessagesFromServerOnGetMessage=true;</td>
</tr>
<tr>
<td></td>
<td>For example jdbc:db2://MyServer:52222/IC_DB:currentSchema=IC_OPER;currentFunctionPath=IC_OPER;maxStatements=100;retrieveMessagesFromServerOnGetMessage=true;</td>
</tr>
<tr>
<td>User Name</td>
<td>Enter the user name that you use to log in to the database server, the provisioning user. E.g. &lt;database prefix&gt;_prov (for example mxmc_prov or IC_prov).</td>
</tr>
<tr>
<td>Password</td>
<td>Provide the password of the provisioning user defined in the &quot;User Name&quot; field.</td>
</tr>
</tbody>
</table>
Defining the JDBC connection for the JMX layer
SAP NetWeaver Identity Management Identity Center Installing and configuring the Identity Management User Interface

Updating the data source

If you need to update the data source information (e.g. changes in server, database, password etc), do the following:

1. In the NetWeaver Administrator, go to Configuration Management/Infrastructure/Application Resources.
2. Select "JDBC Custom DataSources" in the "Show" field to list all created data sources:

   ![Application Resources: Overview](image)

   Find and select the data source you need to update. This will display the resource details in the "Resource Details" section (below the "Resource List" section).

3. Update the data and choose "Save" to save the changes.
4. An information dialog box appears confirming that the data source has been saved successfully. Choose "Close" to close the dialog box.
Deploying the Identity Management User Interface

Start by downloading the .SCA file (the Identity Management User Interface) which is to be deployed:

1. Navigate to the download area of SAP NetWeaver Identity Management 7.2 on SAP Service Marketplace (SMP) and download the .SCA file (Identity Management User Interface).

   **Note:**
   For deploying the User Interface on AS Java 7.0, download the .SCA file stored under NW IDM IC UIS 7.00\OSINDEP. For deploying the User Interface on the EHP 1 for SAP NW CE 7.1, SAP NW CE 7.2 and SAP NW 7.3, download the .SCA file stored under NW IDM IC UIS 7.10\OSINDEP.

2. If necessary unpack the file.

   The .SCA file is now ready to be deployed.

SAP NetWeaver AS Java as of Release 7.0

You deploy the Identity Management User Interface from SDM (Software Deployment Manager):

1. Start SDM:

2. Deploy:

   The Identity Management User Interface is now deployed. The next step is configuring the JMX layer, which is described in section Configuring the JMX layer on page 15.

Other SAP NetWeaver releases

You can use Software Update Manager (SUM) to deploy the Identity Management User Interface.

Make sure that the following prerequisites are fulfilled:

- Make sure that the Software Update Manager is downloaded and available on your SAP NetWeaver AS Java. SUM is part of the Software Logistics Toolset delivery and available for download at [http://service.sap.com/swdc](http://service.sap.com/swdc) → Support Packages and Patches → A - Z Index → "S" → SL TOOLSET → SL TOOLSET 1.0 → Entry by Component → SOFTWARE UPDATE MANAGER (SUM).

- Find the documentation for Software Update Manager on the SL Toolset page on SAP Service Marketplace at [http://service.sap.com/sltoolset](http://service.sap.com/sltoolset) → Software Logistics Toolset 1.0 → Software Update Manager (SUM), under "Documentation" on the bottom of the page. For SAP NetWeaver AS Java, there are three guides depending on the used platform/operating system (UNIX, Microsoft Windows and IBM i).

- Before running and using the Software Update Manager (SUM), you should complete all required preparation and planning actions in the SUM upgrade guide.

- Make sure that the SAP system and its database are started.

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• On the host where you want to start the Software Update Manager GUI, Java 6 or higher has to be installed.

To start and use the Software Update Manager, do the following:

1. Make sure that the Software Update Manager is running on the application server of the primary application server instance.
2. Start the Software Update Manager GUI.
3. Logon to the Software Update Manager and deploy the SCA file.

Each of the steps is described in own subsections.

Note:
For details about the steps and processes of the Software Update Manager beyond what is provided in this document, see the Software Update Manager documentation on SAP Service Marketplace.

Running the Software Update Manager

To run the Software Update Manager on the application server, do the following:

1. Logon to the host on which the primary application server instance is running as user <SAPSID>adm (instance user).
2. Unpack the Software Update Manager package (<archive>.SAR) with the following command:

   SAPCAR -xvf <download directory>/<path>/<Archive>.SAR -R <DRIVE>:\usr\sap\<sapsid>

   This command will create the directory SUM under the /usr/sap/<sapsid> directory. You can also specify a directory other than /usr/sap/<sapsid>. In the following, the directory /<path to SUM directory>/SUM is referred to as <update directory>.

   Note:
   The complete path to the SUM directory must not exceed 30 characters.
3. Start the Software Update Manager entering the command:

   <DRIVE>:\<update directory>\STARTUP.BAT (for Windows), or
   /<update directory>/STARTUP (on UNIX)

Starting the Software Update Manager GUI

Start the Software Update Manager GUI. It is recommended that you call the GUI from an Internet browser.

1. Enter the Internet address http://<host name>:4239. Replace <host name> with the name of the host on which the Software Update Manager is running.
2. In the dialog box that appears, choose "Run".
3. The Software Update Manager GUI is now started and you may log-on.
Deploying using the Software Update Manager

The Software Update Manager controls the entire procedure, from checking the system requirements and importing the necessary programs through stopping production operation until production operation is resumed. The procedure is divided up into a number of different roadmap steps. The roadmap steps are in turn divided into phases. Many phases require no user input - step through those by choosing "Next". The successful completion of a phase is a precondition for the success of all subsequent phases.

*Note:*
User actions are also required when errors occur. If an error occurs, correct it and repeat the phase in which the error has occurred. Once the phase has been repeated successfully, you can continue with the process.

To logon to the Software Update Manager and deploy the SCA file, do the following:

1. Enter the user name and the password for the AS Java Administrator user with which you log in to the system.

2. In the "Specify Credentials" roadmap step, specify the password for the instance user (<sapsid>adm), and then choose "Next".

3. In the "Select Target" roadmap step, specify the path to the SCA file in the "Directory" field, then choose "Next".

4. In the "Confirm Target" roadmap step, enter the keyword that is specified in the current Central Software Update Manager Note. Confirm the selected target system version by choosing "Next".

*Note:*
You can find the Central Software Update Manager Note in the Software Update Manager guide or by searching on SAP Support Portal (http://service.sap.com/notes).

5. In the "Configuration" roadmap step, provide the password of the AS Java Administrator before proceeding. In this step it is also possible to specify the composition of the target release system.

6. Step through the phases requiring no user input by choosing "Next" and complete the process. Upon completing the process successfully, the important statistics are collected in a comprehensive report. You may also provide feedback on your experience by submitting a simple feedback form which is incorporated in the Software Update Manager GUI.

When the SAP NetWeaver Identity Management User Interface is deployed on your SAP NetWeaver, proceed to configuring the JMX layer, which is described in section *Configuring the JMX layer* on page 15.
Upgrading the Identity Management User Interface

To perform an upgrade of an already deployed Identity Management User Interface component, do the following:

- For SAP NetWeaver AS Java as of Release 7.0: Deploy the Identity Management User Interface as described for this SAP NetWeaver version in section *Deploying the Identity Management User Interface* on page 10.

- For other supported SAP NetWeaver releases: use Software Update Manager (SUM) as described for these versions in section *Deploying the Identity Management User Interface* on page 10.
Deploying on an existing SAP NetWeaver AS Java installation

If you wish to run the Identity Management User Interface on a previously installed and already in use SAP NetWeaver AS Java, you need to make sure that the required environment is in place. Deploying on an existing SAP NetWeaver AS Java is done using the same procedures as when installing the Identity Management User Interface.

1. Verify that the JDBC driver for your database system is present. If necessary, add the JDBC driver as described in section Defining the JDBC connection for the JMX layer on page 2.

2. Add the Identity Center database as a data source as described in section Defining the JDBC connection for the JMX layer on page 2.

3. Download the .SCA file from the download area of SAP NetWeaver Identity Management 7.2 on SAP Service Marketplace (for AS Java 7.0 download the .SCA file stored under NW IDM IC UIS 7.00/OSINDEP, while for EHP 1 for SAP NW CE 7.1, SAP NW CE 7.2 or SAP NW 7.3 download the .SCA file stored under NW IDM IC UIS 7.10/OSINDEP) and unpack if necessary.

4. Deploy the Identity Management User Interface as described in section Deploying the Identity Management User Interface on page 10.
Configuring the JMX layer (Java System Properties)

This section shows how to change the settings, like configuring the cache, defining which identity store you are working on and configuring the encryption key-file.

The procedure is different depending on your version of SAP NetWeaver.

**SAP NetWeaver AS Java as of Release 7.0**

To alter the configuration, you do the following:
1. Start the Visual Administrator.
2. Select the "Cluster" tab.
3. Go to Server\Services\Configuration Adapter.
4. In the right pane, go to apps\sap.com\nc~idm~jmx\app\appcfg and open Propertiesheet application.global.properties.

![Propertiesheet application.global.properties](image)

Use the button, or just double-click, to open and view.
The following properties are available:

**com.sap.idm.jmx.ac_check_level**
This property is used to specify how to display folders in the Identity Management User Interface improving performance for task access control. By using this mechanism the initial display of the folders in the task selector will be optimized, but depending on the setting, empty folders may be shown. Possible values are:

- 8: Only access control rules of the tasks are checked.
- 4: Performs a check to prevent empty groups from being displayed. This is the recommended value in a production system.
- 2: Performs a check to decide if the current user is allowed to see the task(s), but will not evaluate if the user is allowed to execute the task(s) on the selected entry.
- 0: Performs a full check in the task tree, including the test if the user is allowed to execute the task(s) on the selected entry. This is the default value.

In a normal production system, this property should be set to 4 for optimal performance. There will be a risk that empty folders are displayed, but full access control is always performed when expanding the folders, so only tasks that are allowed for the user will be displayed.

**com.sap.idm.jmx.cache.ttl**
This is time-to-live for the elements in the cache. Set to 60 minutes by default.

*Note:*
The cache property set to 60 minutes is recommended for the production systems. To achieve more reactive system behaviour in a development/test system, set the value to 1 or 2 minutes.

**com.sap.idm.jmx.crypt.keyfile**
A file holding the 3DES keys, i.e. the Keys.ini file. See the SAP NetWeaver Identity Management Security Guide for details.

*Note:*
If SAP NetWeaver AS Java is not installed on the same host as the Runtime Components, the Keys.ini file that is located in the folder <Identity Center installation directory> /Key (normally C:/usr/sap/IdM/Identity Center/Key) should be copied to the /sapmnt directory of the AS Java. It is the global directory of SAP NetWeaver AS Java which is accessible for all Java instances in cluster environment.

Ensure that the <SID>adm user has the proper permissions to copy the Keys.ini file to the /sapmnt directory of the AS Java.

**com.sap.idm.jmx.idstore.reqidprefix**
This holds a string with a prefix for all the requests sent, identifying the application which owns requests – here "MXIDMUI", used by the Identity Management User Interface. The string contains only letters "a" through "z" (upper or lower case) and the numbers 0 to 9. Application strings starting with "MX" are reserved. The following applications are defined:

- MXGRC: Used by the GRC integration.
- MXIDMUI: Used by the Identity Management User Interface.

*Note:*
Any application identifier may be defined as a user defined application identifier in a project, as long as it does not start with "MX".

**com.sap.idm.jmx.idstoreid**
Identifier of the IDStore to log into.
com.sap.idm.jmx.show_selfservice
A Boolean property determining visibility of the "Self Services" tab in the User Interface. Set to "true" by default (i.e. the "Self Services" tab is visible by default).

Close Propertiesheet application.global.properties by choosing "OK".

5. To make changes to the configuration you need to enter the edit mode. To switch between view and edit mode choose . A dialog box will appear warning you that you are about to switch to edit mode:

Choose "Yes".

6. When in edit mode, open Propertiesheet application.global.properties either by choosing or by double-clicking.

7. Select and open the property you wish to edit and change, e.g. com.sap.idm.jmx.idstoreid. A "Change property entry" dialog box opens:

Enter the correct value into the "Custom" field.

Note:
Changing the com.sap.idm.jmx.idstoreid property is used as an example of how to edit and change the properties in the JMX layer. The properties should only be changed if necessary. Here, the value "2" is used for demonstration purposes. Be sure to use the real identity store IDs from your Identity Center when editing the com.sap.idm.jmx.idstoreid property.
8. Choose "Apply custom".

![Configuration Display]

The new value is now inserted into the configuration.

9. Choose "OK" to apply changes.
Other SAP NetWeaver releases

To alter the configuration, do the following:

1. In the NWA, go to Configuration Management/Infrastructure.
2. Select "Java System Properties".
3. Select the "Applications" tab in the "Details" section.

4. Find and select the "tc~idm~jmx~app". In the "Extended Details" section, you can see the following properties:

   **com.sap.idm.jmx.ac_check_level**
   
   This property is used to specify how to display folders in the Identity Management User Interface improving performance for task access control. By using this mechanism the initial display of the folders in the task selector will be optimized, but depending on the setting, empty folders may be shown. Possible values are:

   - **8**: Only access control rules of the tasks are checked.
   - **4**: Performs a check to prevent empty groups from being displayed. This is the recommended value in a production system.
   - **2**: Performs a check to decide if the current user is allowed to see the task(s), but will not evaluate if the user is allowed to execute the task(s) on the selected entry.
   - **0**: Performs a full check in the task tree, including the test if the user is allowed to execute the task(s) on the selected entry. This is the default value.
In a normal production system, this property should be set to 4 for optimal performance. There will be a risk that empty folders are displayed, but full access control is always performed when expanding the folders, so only tasks that are allowed for the user will be displayed.

**com.sap.idm.jmx.cache.ttl**
This is time-to-live for the elements in the cache. Set to 60 minutes by default.

**Note:**
The cache property set to 60 minutes is recommended for the production systems. To achieve more reactive system behaviour in a development/test system, set the value to 1 or 2 minutes.

**com.sap.idm.jmx.crypt.keyfile**
A file holding the 3DES keys, i.e. the Keys.ini file. See the SAP NetWeaver Identity Management Security Guide for details.

**Note:**
If SAP NetWeaver AS Java is not installed on the same host as the Runtime Components, the Keys.ini file that is located in the folder <Identity Center installation directory> /Key (normally C:/usr/sap/IdM/Identity Center/Key) should be copied to the /sapmnt directory of the AS Java. It is the global directory of SAP NetWeaver AS Java which is accessible for all Java instances in cluster environment.

Ensure that the <SID>adm user has the proper permissions to copy the Keys.ini file to the /sapmnt directory of the AS Java.

For more information about SAP system directories, see http://help.sap.com/saphelp_nw74/helpdata/en/27/44f17a26a74a8abfbd202c4f5dc9a0fframeset.htm (for SAP NetWeaver versions CE 7.2 EHP1, 7.3, 7.3 EHP1 and 7.4) or http://help.sap.com/saphelp_nwce711/helpdata/en/4d/3dc7bd936391ee10000000a15822b/content.htm?frameset=en/4d/3da980d936391ee10000000a15822b/frameset.htm&currenttoc=en/7f/c824036a1b4929b2b5a17377debcab/plain.htm&node_id=5 for SAP NetWeaver CE 7.1 EHP1.

**com.sap.idm.jmx.idstore.reqidprefix**
This holds a string with a prefix for all the requests sent, identifying the application which owns requests – here "MXIDMUI", used by the Identity Management User Interface. The string contains only letters "a" through "z" (upper or lower case) and the numbers 0 to 9. Application strings starting with "MX" are reserved. The following applications are defined:

- MXGRC: Used by the GRC integration.
- MXIDMUI: Used by the Identity Management User Interface.

**Note:**
Any application identifier may be defined as a user defined application identifier in a project, as long as it does not start with "MX".

**com.sap.idm.jmx.idstoreid**
Identifier of the IDStore to log into.

**com.sap.idm.jmx.show_selfservice**
A Boolean property determining visibility of the "Self Services" tab in the User Interface. Set to "true" by default (i.e. the "Self Services" tab is visible by default).
5. To make changes to the configuration, select the property you wish to edit and change (e.g. `com.sap.idm.jmx.idstoreid`), and choose "Modify".

6. Enter the custom value and choose "Set" to change it.

**Note:**
Changing the `com.sap.idm.jmx.idstoreid` property is used as an example of how to edit and change the properties in the JMX layer. The properties should only be changed if necessary. Here, the value "2" is used for demonstration purposes. Be sure to use the real identity store IDs from your Identity Center when editing the `com.sap.idm.jmx.idstoreid` property.
7. Choose "Save As" to confirm the change.
Initial configuration

Authentication of the users logging on to the Identity Management User Interface is done by the User Management Engine (UME). There are three URLs that can be used to access the Identity Management User Interface, where two of them are in scope of this document:

- `http(s)://<host>:<port>/idm` to access the main Identity Management User Interface containing the self-service tab and the manager tabs.
- `http(s)://<host>:<port>/idm/admin` to access the administrator tabs of the Identity Management Administration User Interface.

For more information on the Identity Management User Interface URLs, see *SAP NetWeaver Identity Management Security Guide* (section 5.1.1 Access to the Identity Management User Interfaces (URLs)).

What parts of the Identity Management User Interface are available depends on which UME actions are assigned to the user and what privileges are given in the Identity Center. For details, see *SAP NetWeaver Identity Management Security Guide* (sections 5.1.2 Providing General Access (UME Actions) and 5.1.3 Providing Specific Access (Identity Management Privileges)).

Before running the User Interface a role needs to be created, giving any authenticated user a general access to the Identity Management User Interface. To do so, you must have a user that has a permission to create and assign roles when logged-on the UME.

Adding user to the identity store

To be able to use the "Self Services" tab and other manager and administrator tabs (except the "Monitoring" tab) in the Identity Management User Interface, the user must be defined in both UME and in the Identity Center's identity store. This is not necessary for access to the "Monitoring" tab, i.e. it is sufficient that the user exists in UME.

The link between the users is the UME "User ID" and the user's **MSKEYVALUE** in the identity store. These must match (casing is ignored). Whether this user is created in the Identity Center before or after the role creation is not of importance.

**Note:**

Any user can be added using the below described procedure. However, typically only admin users (and/or some test users) are created this way (manually) to get started, while end-users usually are imported and synchronized using for instance SAP provisioning framework or, independently of the SAP provisioning framework, as described in document *SAP NetWeaver Identity Management Identity Center User management for the Identity Management User Interface*. 

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To create an admin user (user with manager and/or administrator privileges) in the Identity Center's identity store, do the following:

1. In the Identity Center, select the identity store in the console tree and view the identity store properties.

2. Select the "General" tab and choose "Add user…".

   This will open "Add Identity store user" dialog box.

   Enter user name and password for the user.

   Select "Add manager privileges" and/or "Add administrator privileges" to give access to manager/administrator tabs in the User Interface. See section Access to manager and administrator tabs on page 36 for more. For access to "Monitoring" tab, see section Access to Monitoring on page 33.

3. Choose "OK" to close the dialog box and create user.
General access ("Self Services" tab)

Self service tasks, where users can change its own user data, request the role etc, can be accessed from the "Self Services" tab. To create a role that gives access to "Self Services" tab, do the following:

1. Enter http(s)://<host>:<port> in your browser. This will open the SAP J2EE Engine Start Page.
2. Select "User Management", which starts the user management administration console for the User Management Engine (UME).
3. Provide your UME credentials and choose "Log on":

![Image of SAP NetWeaver login page]
4. Change search criteria to "Role", and then choose "Create Role":

In the "General Information" tab fill in the following:

**Unique Name**
Give the role a describing name. The name "idm.authenticated" is used as example, but any name can be used.

**Description**
Short description of the role can be added as well. This is not a mandatory field.
5. Select the "Assigned Actions" tab.

In the left pane (Available Actions):
Type "idm*" in the field "Get" and choose "Go". This will list the actions/access rights it is possible to link to the role.
6. Select the "idm_authenticated" action and choose "Add".

The "idm_authenticated" action is now assigned to the role and this will be shown in the right pane (Assigned Actions).
7. Select the "Assigned Groups" tab:

In the "Available Groups" pane, choose "Go" to list all available groups.
8. Select the "Authenticated Users" group and choose "Add".

The "Authenticated Users" group is now given the role and this will be shown in the right pane (Assigned Groups).

Assigning the idm.authenticated role to a user group is just one of several ways to give general access to the User Interface. If only some of the users need access to the User Interface, access can be given by assigning the role directly to those users.
9. Choose "Save" to confirm and create the new role, which will give a general access to the User Interface to every authenticated user. The just created role will be displayed in the list of the roles available:

Now that the role is created, you are able to access the Identity Management User Interface (and the "Self Services" tab).

Access to Monitoring ("Monitoring" tab)

It is also possible to give access to the "Monitoring" tab to those who need it. A monitoring role can be created and actions `idm_monitoring_support` (giving read only access to "Monitoring" tab) or `idm_monitoring_administration` (giving read and write access to "Monitoring" tab) can be assigned by following the same procedure as for `idm_authenticated` giving access to "Self Services" tab described on page 27. Assign the created monitoring role to "Administrators" group or a specific user who needs access to "Monitoring" tab in the User Interface.

The "Monitoring" tab is available in the Identity Management Administration User Interface, with URL http(s): //<host>:<port>/idm/admin.
For more information about monitoring, see SAP NetWeaver Identity Management Solution Operation Guide (section 4).

Configuring the language settings for the Identity Management User Interface

The language settings for the Identity Management User Interface are determined by the language settings for user in User Management Engine (UME):

1. Logon to UME and search for the user you want to configure the language settings for.
2. Select the user from the search list and choose "Modify" in the details pane below the list. This will open the entry detail information for editing.
3. Choose the "General Information" tab.
4. Select a language from the list in the "Language" field and choose "Save".

The language settings are now configured. The change will take effect after the next logon.

Note: If you have configured customized favorite buttons in the User Interface, the language of the text on these buttons (labels) will not be automatically updated according to the new language settings. To update the language for the favorite buttons, you need to remove the existing buttons and add the updated ones.
General access to Identity Management User Interface

To access the User Interface do the following:

1. Enter http(s)://<host>:<port>/idm in your browser.

Provide the credentials in the log-in window.

2. Choose "Log on".

You are now logged on to the User Interface. The image above shows the logged-in user with access to only "Self Services" tab.
Access to manager and administrator tabs

Access to other tabs than the "Monitoring" tab in the Identity Management User Interface is controlled by assigning privileges in the Identity Center's identity store to the person entries.

For more details about each privilege, see SAP NetWeaver Identity Management Security Guide (section 5.1.3 Providing Specific Access (Identity Management Privileges)).

In section Adding user to the identity store on page 25, the manager and administrator privileges (all) are given the admin user automatically by selecting "Add manager privileges" and "Add administrator privileges" when adding the user to the identity store. But these privileges can be also be assigned to users manually and on the need-to basis, for instance by creating a self service task for privilege assignment. This can be done in the following way:

1. In the Identity Center, select the identity store and choose **New/Folder**... from the context menu to create a new folder.

   ![Identity Center](image)

   Rename the folder to "IdM UI".
2. Select the folder and choose **New/Ordered task group** from the context menu.

![Task Group Configuration](image1.png)

Rename the task to "Assign privilege" and select the "UI task" option.

3. Select the "Attributes" tab:

![Attributes Tab](image2.png)

**Entry type**
Select "MX_PERSON" entry type. Choose "..." to open a dialog box from which you select the entry type.
Note:
A dialog box will appear asking you to confirm your choice. Choose "Yes" to confirm and to close the dialog box.

Task attributes
The attributes MSKEYVALUE and DISPLAYNAME are already selected. Select the attribute "MXREF_MX_PRIVILEGE". Use "Up" or "Down" to list the selected attributes in the same order as shown above.

4. Choose "Apply".
5. Select the "Access control" tab.

6. Choose "Add..." and fill in the following:
Allow access for
Select "Logged-in user or identity store entry".

ID store
Select the correct identity store. In this example "Enterprise People" is used.

Name
Leaving this field empty will make the task accessible to everyone. Name is entered when restricting the access to the task (e.g. enter Administrator name to give access to this task only to the "Administrator" user).

On behalf of
There are two ways of creating a self service task. You either select "User or identity store entity" or "Relation - Self". Both ways are legitimate.

7. Choose "OK".

8. Choose "Apply".
Now the self service task is created and is visible in the "Self Services" tab of the User Interface:

![Image of SAP NetWeaver Identity Management](image)

To assign privileges and give access to other tabs than "Self Services", do the following:

1. Select the task.

![Image of Assign privilege](image)

The task will open in a new window.

**Note:**

If you are using Internet Explorer 7 or later, you can open the task in a new tab instead of the new window. To enable this option in your browser choose Tools/Internet Options, and in the "Tabs" section of the "General" tab choose "Settings" where you select the option "Always open pop-ups in a new tab" or similar. If you are using Mozilla Firefox, the task will open in a new tab by default.
2. Choose "Search" on the left side of the pane (under **Available**) to list available privileges:

![Assign privilege interface](image)

**Note:**

When searching for any specific entry (persons, roles, privileges and so on) in the Identity Management User Interface, make sure you always provide the language-specific characters of that entry. For example: To search for an entry containing an accented "e" ("é"), you should type "é". If you provide only "e", the entry will not be displayed in the search result.

Select the desired privileges (multi-select is possible).

3. Choose "Add".
4. Choose "Save" and close the task.

The privileges are now added and the tabs should be visible in the Identity Management User Interface.

**Note:**

*You will need to choose the "Refresh" button before the tabs are visible.*

Here for the URL http(s)://<host>:<port>/idm:
And for the http(s)://<host>:<port>/idm/admin:
Customizing the Web Dynpro Java applications

As a Web Dynpro application, SAP NetWeaver Identity Management User Interface may be adapted. You can define a specific theme (the look and feel) of your User Interface application or create and activate keyboard access for User Interface elements.

Defining customer specific themes for Web Dynpro applications

Customer-specific themes can be defined for Web Dynpro applications. Users are advised to set their themes according to where their applications run. The applications can run as standalone applications or inside the SAP Enterprise Portal. The process of defining the themes depends on whether your application runs standalone or inside the portal, and on the SAP NetWeaver version you are using.

For more information, see the following documentation:

- SAP NetWeaver 7.0
  - Configuring the Web Dynpro Runtime Environment: http://help.sap.com/saphelp_nw70/helpdata/en/43/8a1a8ece230c8ce10000000a11466f/frameset.htm
  - Setting the Theme: http://help.sap.com/saphelp_nw70/helpdata/en/1e/535d420447e054e10000000a155106/frameset.htm
- SAP NetWeaver CE 7.1 EHP 1
  - Configuring the Web Dynpro Runtime Environment: http://help.sap.com/saphelp_nwce711/helpdata/en/43/8a1a8ece230c8ce10000000a11466f/frameset.htm
  - Setting the Theme: http://help.sap.com/saphelp_nwce711/helpdata/en/1e/535d420447e054e10000000a155106/frameset.htm
- SAP NetWeaver CE 7.2
  - Configuring the Web Dynpro Runtime Environment: http://help.sap.com/saphelp_nwce72/helpdata/en/43/8a1a8ece230c8ce10000000a11466f/frameset.htm
  - Setting the Theme: http://help.sap.com/saphelp_nwce72/helpdata/en/4a/391ad0cb1b0457e10000000a421937/frameset.htm
- SAP NetWeaver 7.3
  - Setting the Theme: http://help.sap.com/saphelp_nw73/helpdata/en/4a/391ad0cb1b0457e10000000a421937/frameset.htm
- SAP NetWeaver 7.3 EHP 1
Configuring the Web Dynpro Runtime Environment:

Setting the Theme:
http://help.sap.com/saphelp_nw73ehp1/helpdata/en/4a/391ad0cb1b0457e10000000a421937/frameset.htm

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Configuring the Web Dynpro Runtime Environment:

Setting the Theme:
http://help.sap.com/saphelp_nw74/helpdata/en/4a/391ad0cb1b0457e10000000a421937/frameset.htm

Keyboard access for User Interface elements in Web Dynpro

It is possible to activate keyboard access for User Interface elements in applications running in the HTML client and based on Web Dynpro for ABAP or Java. This information is relevant to you if you use the keyboard to navigate around your application's UI and use its functions.

To use the keyboard commands, you must enable the accessibility mode. Many of the commands also work when accessibility mode is disabled, but others, such as group navigation or navigation of inactive UI elements, only work when it is enabled.

For more information about how to enable keyboard access, see the following information (for supported SAP NetWeaver versions):

SAP NetWeaver 7.0:
http://help.sap.com/saphelp_nw70/helpdata/en/47/60a081df4b3d31e10000000a42189c/frameset.htm

SAP NetWeaver CE 7.1 EHP 1:
http://help.sap.com/saphelp_nwce711/helpdata/en/45/2d250efc9457c0e10000000a1553f7/frameset.htm

SAP NetWeaver CE 7.2:

SAP NetWeaver 7.3:
http://help.sap.de/saphelp_nw73/helpdata/en/48/159c8688474c23e10000000a42189b/content.htm?frameset=/en/21/e45a19d7734d1d881ea449b5c5f93e/frameset.htm

SAP NetWeaver 7.3 EHP 1:
http://help.sap.de/saphelp_nw73ehp1/helpdata/en/48/159c8688474c23e10000000a42189b/content.htm?frameset=/en/21/e45a19d7734d1d881ea449b5c5f93e/frameset.htm

SAP NetWeaver 7.4:
http://help.sap.de/saphelp_nw74/helpdata/en/48/159c8688474c23e10000000a42189b/content.htm?frameset=/en/21/e45a19d7734d1d881ea449b5c5f93e/frameset.htm

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Integrating Identity Management User Interface in the SAP NetWeaver Portal (optional)

You can integrate the Identity Management User Interface in the SAP NetWeaver Portal. Before it can be integrated in the SAP NetWeaver Portal, the Identity Management User Interface should be installed and configured locally on the SAP NetWeaver Portal, as described in this document.

You need to perform the following configuration in the SAP NetWeaver Portal:

- Import the predefined content for the SAP NetWeaver Portal.
- Check the Portal integration of the Identity Management User Interface.

Importing predefined contents for the SAP NetWeaver Portal

To import the contents to the Portal, do the following:

1. Log on to the Portal as system administrator.
2. Select the "System Administration" tab and its sub-tab "Transport", and then navigate to Transport Packages/Import.
3. Import the .EPA archive (role, worksets, iViews). The .EPA archive is provided in the "Misc" subdirectory in the installation kit for the Designtime Components.

For more details on importing and deploying of EPA archives, see the following:

- For SAP NetWeaver 7.3 EHP 1: [http://help.sap.com/saphelp_nw73ehp1/helpdata/en/74/d2fa201326419fa014fc0f1c9bf7cd/fr ameset.htm](http://help.sap.com/saphelp_nw73ehp1/helpdata/en/74/d2fa201326419fa014fc0f1c9bf7cd/fr ameset.htm).
- For SAP NetWeaver 7.4: [http://help.sap.com/saphelp_nw74/helpdata/en/74/d2fa201326419fa014fc0f1c9bf7cd/frame set.htm](http://help.sap.com/saphelp_nw74/helpdata/en/74/d2fa201326419fa014fc0f1c9bf7cd/frame set.htm).
Verifying the Portal integration of the Identity Management User Interface

To verify the Portal integration, do the following:

1. Log on to the SAP NetWeaver Portal with your admin user (that also exists in the identity store you would like to access through the Portal).

2. Select the "Identity Management" tab in the Portal and verify that you have the access to the User Interface and its contents.

Note: In order for this to work, you must have configured the Identity Management User Interface correctly, giving at least a general access to the User Interface to users, as described on page 25.

If everything is done correctly, the contents of the Identity Management User Interface will be presented under the "Identity Management" tab in the SAP NetWeaver Portal. The content will be something similar to the one shown below:

![Identity Management User Interface in SAP NetWeaver Portal](image)