



Cloud Access Manager 8.1.4

How to Configure for SSO to SAP  
NetWeaver using SAML 2.0

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One Identity LLC.  
Attn: LEGAL Dept  
4 Polaris Way  
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### Legend

-  **WARNING:** A WARNING icon indicates a potential for property damage, personal injury, or death.
-  **CAUTION:** A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.
-  **IMPORTANT, NOTE, TIP, MOBILE, or VIDEO:** An information icon indicates supporting information.

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# Introduction

This guide provides step-by-step configuration instructions for Single Sign-On (SSO) access to SAP NetWeaver using Cloud Access Manager using the SAML 2.0 protocol.

## Prerequisites and requirements

Ensure that the following prerequisites and requirements are met before you configure SSO to SAP Netweaver using SAML 2.0.

- [Supported versions](#)
- [DNS settings](#)

## Supported versions

The SAML 2.0 protocol is supported on the following SAP NetWeaver versions:

- Java 7.2x, 7.3x, 7.4x
- ABAP 7.02, 7.3x, 7.4x

## DNS settings

If internal NetWeaver applications will be accessed by users on the Internet using the Cloud Access Manager proxy, the DNS settings should be as follows:

- End-user computers must be able to resolve the public Cloud Access Manager proxy FQDN
- The Cloud Access Manager proxy computer must be able to resolve the FQDN of the NetWeaver server on the internal network.

If users will access NetWeaver applications directly from their internal network, end-user computers must be able to resolve both the Cloud Access Manager proxy machine FQDN and the NetWeaver server FQDN.

# User mappings

In the following example Cloud Access Manager is deployed using Active Directory as the user store, and the logon ID of NetWeaver internal users matches the sAMAccountName of Cloud Access Manager users.

- [NetWeaver configuration \(Service Provider Role\)](#)
- [Cloud Access Manager configuration - \(Identity Provider Role\)](#)

## NetWeaver configuration (Service Provider Role)

### To configure NetWeaver (Service Provider Role)

1. In the SAP NetWeaver admin interface, navigate to **Configuration | Security | Authentication and Single Sign-On**. Select the **SAML 2.0** tab.

The screenshot displays the SAP NetWeaver administration console for SAML 2.0 configuration. The interface includes a navigation bar with 'Authentication and Single Sign-On: SAML 2.0' and a search bar. Below the navigation, there are tabs for 'Local Provider', 'Trusted Providers', 'Policies', and 'Name ID Management'. The 'Local Provider' section is active, showing the provider name 'netweaver' and operational mode 'Service Provider'. The 'Signature and Encryption' section contains fields for 'SAML2', 'Signing Key Pair' (test), 'Encryption Key Pair' (test), and 'Trusted CAs Keystore View' (TrustedCAs). The 'Miscellaneous' section includes 'Clock Skew Tolerance (Seconds)' (120), 'Legacy Systems Support (Issue Logon Ticket)' (Off), 'Allow HTTP Access' (No), and 'Interval for Deleting Expired Artifacts' (5 Minutes). The 'Artifact Resolution Service (ARS)' section has 'Mode' (Enabled) and 'Endpoint URL' (https://sapnvrce73.demo.sap.corp:50001/saml2/ars). The 'Artifact Validity Period (Seconds)' is set to 60.

2. Click **Enable** SAML 2.0 support.
3. In the **Provider Name** field, type NetWeaver and click **Next**.
4. Click **Browse**, located next to the **Signing Key Pair** field. In the **Select Keystore Entry** box, click **Create**. In the **Entry Settings** window under **Entry Name**, type **test** and click **Next**.
5. In the **Subject Properties** window, in the **Common Name** field type **test**. Click **Finish**, and then click **OK**.
6. Click **Next** to advance to **Service Provider Settings**.
7. Under **Identity Provider Discovery**, switch **Selection Mode** to **Automatic**.

**NOTE:** This hides the NetWeaver home realm discovery interface. It is not needed here since Cloud Access Manager is the only configured identity provider.

8. Click **Finish**.
9. Click **Edit** then click the **Service Provider Settings** tab.
10. Click **Add** in the **Relay State Mappings** section and insert the following entry to facilitate IDP-initiated SSO later:  

```
RelayState = portal  
Path = /irj/portal
```
11. Click **OK** and then **Save**.

## Cloud Access Manager configuration - (Identity Provider Role)

### *To configure Cloud Access Manager (Identity Provider Role (IDP))*

1. Log in to the Administration Console using the desktop shortcut **Cloud Access Manager Application Portal** and select **Add New from the Applications** section on the home page.
2. Click **Configure Manually**. Select **Using SAML**, and then click **Next**.
3. Under **Federation Settings**, set **Recipient** value to:  

```
https://<NetWeaver_server_fqdn>:<port>/saml2/sp/acs
```

Where **<NetWeaver\_server\_fqdn>** is the fully-qualified domain name of your SAP NetWeaver server, and **<port>** is the port number used by the NetWeaver server to listen on, for example <https://srvnwce73.demo.sap.corp:50001/>.
4. Set **Audience / SP Identity** to NetWeaver and click **Next**.

## Federation Settings

If your service provider provides a federation metadata URL enter it below or if they provide a file containing federation metadata you can select it below. Otherwise consult the documentation or administrative interface for the application for the values you should enter here.

Federation metadata URL

Upload federation metadata file

The following values are required for Cloud Access Manager to sign the user in to the application.

Assertion Consumer Service URLs		
Index	Recipient	Default
0	https://srnwce73.demo.sap.corp:50001/saml2/sp/acs	<input checked="" type="checkbox"/>
<input type="button" value="+ Add ACS Entry"/>		

Audience / SP Identity

Application Logout URL

If your service provider signs their authentication requests then you may upload their signing certificate to verify that the requests come from a trusted source.

Upload signing certificate

If your service provider requires authentication responses to be encrypted then you may upload their encryption certificate.

Upload encryption certificate

5. On the **Subject Mapping** page, select **Derive the username from an attribute**, and enter **sAMAccountName** in the attribute name. Do not add extra claim mappings. Click **Next**.
6. Choose whether to proxy the application. Select **Proxy this application** if you want to expose your NetWeaver application to users on the Internet. If you choose this option, then you must:
  - a. Set the value of the application URL to **https://<NetWeaver\_server\_fqdn>:<port>** for example **https://srnwce73.demo.sap.corp:50001**. Click **Next**.
  - b. Set the proxy URL to the publicly-accessible proxy URL for the application. Click **Next**.
7. Allow a role which includes your sample user to access the application. Click **Next**.
8. Name the application **SAP NetWeaver**. Click **Next**.
9. In the **Application Portal** section, change the title of the first entry to **SAP NetWeaver Portal**.

10. Switch the **SSO Mode** to **IDP initiated**. In the **Relay State (optional)** field type **portal**.
11. Click **Finish**. On the **Application Created** page, click **Download Metadata** and then **Download Certificate**. Save both files to a location that can be accessed by the NetWeaver admin browser. Click **Close**.

## NetWeaver configuration

The following sections explain how to configure NetWeaver:

- [Cloud Access Manager as an Identity Provider \(IDP\)](#)
- [Enabling SSO to SAP NetWeaver applications](#)

## Cloud Access Manager as an Identity Provider (IDP)

### *To configure Cloud Access Manager as an identity Provider*

1. In NetWeaver administration on the **Configuration | Security | Authentication and Single Sign-On | SAML 2.0** page, click the **Trusted Providers** link. Click **Add**, and choose **by uploading metadata file**.
2. In the **Select Metadata** step, choose the `CloudAccessManagerMetadata.xml` document downloaded in step 11 of [Cloud Access Manager configuration - \(Identity Provider Role\)](#) and click **Next**.
3. In the **Metadata Verification** step, choose the certificate (PEM file) downloaded in step 11 of [Cloud Access Manager configuration - \(Identity Provider Role\)](#) and click **Next**.
4. In the **Provider Name** step, type the alias name **Cloud Access Manager** and click **Next**.
5. In the **Signature and Encryption** step, change the **Single Sign-On Authorization Request Sign** parameter to **Never** and click **Next**.
6. Click **Next** through to the end, then click **Finish**.
7. Click **Edit**, then under the **Identity Federation** tab, click **Add** to add a Name ID format.
8. Under **Format Name**, choose **Unspecified**. Under **Source Name**, choose **Logon ID**.
9. Click **OK** and then **Save**.
10. Click **Enable**.



# Enabling SSO to SAP NetWeaver applications

## To allow single sign-on (SSO) to your NetWeaver applications

1. In **NetWeaver Admin**, select **Configuration | Security | Authentication and Single Sign-On**.
2. On the **Authentication** tab, highlight the **ticket** policy configuration. On the **Authentication Stack** tab, click **Edit**.
3. Under **Login Modules**, click **Add**. Choose **SAML2LoginModule** from the dropdown list. Click **Add** again, and choose **CreateTicketLoginModule** from the list.
4. Change the order and the flag status of the five login modules to match the following, then click **Save**. This will use federation, and fall back to forms if federation fails.

EvaluateTicketLoginModule	SUFFICIENT
<b>SAML2LoginModule</b>	<b>OPTIONAL</b>
<b>CreateTicketLoginModule</b>	<b>SUFFICIENT</b>
BasicPasswordLoginModule	REQUISITE
CreateTicketLoginModule	OPTIONAL

**Details of policy configuration "ticket"**

Authentication Stack | Properties

Edit Save Cancel

Used Template:

Session Fixation Protection:

**Login Modules**

Add Remove Move Up Move Down

Login Module Name	Flag
Evaluate TicketLoginModule	SUFFICIENT
<b>SAML2LoginModule</b>	<b>OPTIONAL</b>
Create TicketLoginModule	SUFFICIENT
BasicPasswordLoginModule	REQUISITE
Create TicketLoginModule	OPTIONAL

**Options of login module "SAML2LoginModule"**

Add Remove

Name	Value

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## Contacting us

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- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to videos at [www.YouTube.com/OneIdentity](http://www.YouTube.com/OneIdentity)
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product