

Oracle Hospitality OPERA Cloud Identity Management

Administrator Guide for Configuring Identity Federation (When using Microsoft Azure AD Synchronization for User Provisioning)



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Oracle Hospitality OPERA Cloud Identity Management Administrator Guide for Configuring Identity Federation (When using Microsoft Azure AD Synchronization for User Provisioning), Release 24.2

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Preface

Purpose

This guide explains the steps to configure Identity Federation to setup OPERA Cloud services SSO with customer identity provider. This document is required to be followed only if the customer identity provider is **Microsoft Azure AD**

Audience

This document is intended for OPERA Cloud Services application administrators.

Customer Support

To contact Oracle Customer Support, access the Customer Support Portal at the following URL:

<https://iccp.custhelp.com>

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- Screen shots of each step you take

Documentation

Oracle Hospitality product documentation is available on the Oracle Help Center at

<http://docs.oracle.com/en/industries/hospitality/>

Revision History

Date	Description of Change
July 2024	Initial Publication
August 2024	Revision

1

Steps to Configure Identity Federation in OCI IAM Identity Domain

OPERA Cloud Identity Management provides the capability of identity federation by determining which customers can integrate their identity provider with OPERA Cloud to implement single sign on with OPERA Cloud. Leveraging OPERA Cloud Identity Management's identity federation feature, customers can use their corporate credentials to log on to OPERA Cloud, which eliminates the necessity to separately manage users and their access to OPERA Cloud.

This document provides the steps to configure identity federation.



Note:

Only follow these steps if the customer identity provider is Microsoft Azure AD.

Step 1: Download the SAML Metadata in OCI IAM Identity Domain

1. Log in to Oracle IAM Domain Admin Console.
2. Open the navigation menu and click **Identity & Security**.
3. Under Identity, click **Domains**.
4. Click the name of the identity domain in which you want to work.
5. Click **Security** on the left navigation and then click **Identity providers**.
6. Click **Export SAML metadata**.
7. Select **Download XML** under Metadata with self-signed certificates.

Step 2: Add OCI IAM Identity Domains as an Enterprise Application in Azure AD



Note:

You can skip this step if the enterprise application for OCI is already created as part of setting up Azure AD synchronization with OCI.

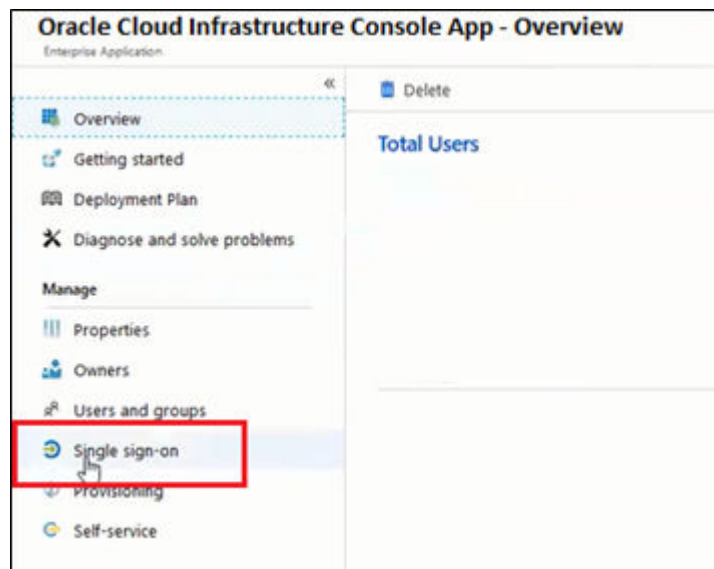
1. In the Azure portal, on the left navigation panel, select **Azure Active Directory**.

2. In the Azure Active Directory pane, select **Enterprise applications**. A sample of the applications in your Azure AD tenant appears.
3. At the top of the All applications pane, click **New application**.
4. In the Add from gallery region, enter **Oracle Cloud Infrastructure Console** in the search box.
5. Select the **Oracle Cloud Infrastructure Console** application from the results.
6. In the application-specific form, you can edit information about the application. For example, you can edit the name of the application.
7. When you are finished editing the properties, select **Create**.

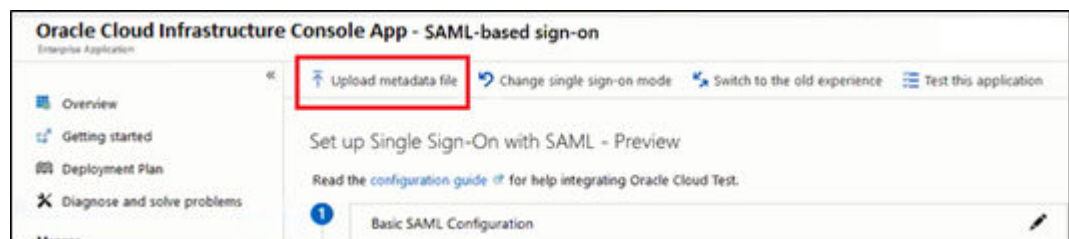
The getting started page appears with the options for configuring the application for your organization.

Step 3: Configure OCI IAM Identity Domain as an Enterprise Application in Azure AD

1. Under the Manage section, select **Single sign-on**.



2. Select **SAML** to configure the single sign-on. The Set up Single Sign-On with SAML page appears.
3. At the top of the page, click **Upload metadata file**.



4. Locate the **federation metadata file** (metadata.xml) you downloaded from Oracle Cloud Infrastructure in Step 1 and upload it here. After you upload the file, the following Basic SAML Configuration fields are automatically populated:
 - Identifier (Entity ID)
 - Reply URL (Assertion Consumer Service URL)
5. In the **Basic SAML Configuration** section, click **Edit**. On the Basic SAML Configuration pane, enter the following required information:
 - **Sign on URL:**
 - a. Enter the OPERA Cloud User Interface URL for your OPERA Cloud Environment if you have a single OPERA Cloud environment.
For example: https://customerocua.oraclehospitality.eu-frankfurt-1.ocs.oraclecloud.com/IDENTITY/operacloud/ where IDENTITY is the ENTERPRISE ID of the customer.
 Or
 - b. Enter the OPERA Cloud Identity Management Portal URL if you have multiple OPERA Cloud environments.
For example: https://ocimqa.oraclehospitality.us-phoenix-1.ocs.oraclecloud.com/IDENTITY/ocimportal/ where IDENTITY is the ENTERPRISE ID of the customer.

Basic SAML Configuration

[Save](#)

• **Identifier (Entity ID)** ⓘ
The default identifier will be the audience of the SAML response for IDP-initiated SSO

Default

Patterns: *.identity.oraclecloud.com

• **Reply URL (Assertion Consumer Service URL)** ⓘ
The default reply URL will be the destination in the SAML response for IDP-initiated SSO

Default

Patterns: https://*.identity.oraclecloud.com/fed/v1/metadata

• **Sign on URL** ⓘ

Relay State ⓘ
Enter a relay state

6. Click **Save**.

Step 4: Configure User Attributes and Claims

The Oracle Cloud Infrastructure Console enterprise application template is seeded with the required attributes, so there is no need to add any. However, you must make the following customizations:

1. In the User Attributes & Claims section, click **Edit** in the upper-right corner. The Manage Claim panel appears.
2. Next to the Name identifier value field, click **Edit**.
3. Under Required claim, select **Unique User Identifier** (Name ID).
4. Select **Email address** and change it to “Persistent.”
5. For Source, select **Attribute**.
6. For Source attribute, select **user.userprincipalname**.

7. Click **Save**.

Table 1-1 SAML Attribute Mapping

SAML User Attribute Type	SAML User Attribute Name	IAM Domain User Attribute	Value	Mandatory Attribute
Attribute	#upper(\$ (assertion.oc_ownercode))	urn:ietf:params:scim:schemas:idcs:extension:custom:User:OC_UserOwnerCode	N/A	No
Attribute	oc_employee_number	urn:ietf:params:scim:schemas:idcs:extension:custom:User:OC_UserEmployeeNo	N/A	No

Table 1-1 (Cont.) SAML Attribute Mapping

SAML User Attribute Type	SAML User Attribute Name	IAM Domain User Attribute	Value	Mandatory Attribute
Attribute	oc_primaryworklocation	urn:ietf:params:scim:schemas:ids:extension:custom:User:OC_PrimaryWorkLocation	Mandatory Single Valued User Attribute. Indicates the user's primary work location. Primary Work Location can have values <ENTERPRISE_IDCHAINCODE>:EC for multi chain customers derived from the user profile. For customers having only a single chain, the source value can be set to constant <ENTERPRISE_ID>:E <CHAINCODE>:C for all users. <ENTERPRISE_ID><CHAINCODE> will be oc_orgcode. This mapping is required and mandatory only if oc_primaryworklocation cannot be sent in the SAML claims from IdP.	Yes

Figure 1-1 Attributes & Claims**Attributes & Claims** ...

+ Add new claim + Add a group claim Columns | Got feedback?

Required claim		
Claim name	Type	Value
Unique User Identifier (Name ID)	SAML	...
Additional claims		
Claim name	Type	Value
oc_employeenumber	SAML	...
oc_orgcode	SAML	...
oc_ownercode	SAML	...

Advanced settings

The claim values in the above image are only examples.

Step 5: Download the Azure AD SAML Metadata Document

1. In the SAML Signing Certificate section, click the **download** link next to Federation Metadata XML.
2. Download this document and make a note of where you save it. You will upload this document to the IAM Domain Console in the next series of steps.

Step 6: Assign User Groups to the Application

To enable Azure AD users to log in to Oracle Hospitality OPERA Cloud, you must assign the appropriate user groups to your new enterprise application.

1. On the left navigation pane, under Manage, select **Users and Groups**.
2. Click **Add** at the top of the Users and Groups list to open the Add Assignment pane.
3. Click the **Users and groups** selector.
4. Enter the name of the group you want to assign to the application into the **Search by name** or **email address** search box.
5. Hover over the group in the results list to see a check box appear. Select the **check box** to add the group to the Selected list.
6. When you are finished selecting groups, click **Select** to add them to the list of users and groups to be assigned to the application.
7. Click **Assign** to assign the application to the selected groups.

Step 7: Add Microsoft Azure AD as an Identity Provider in OCI IAM Identity Domains

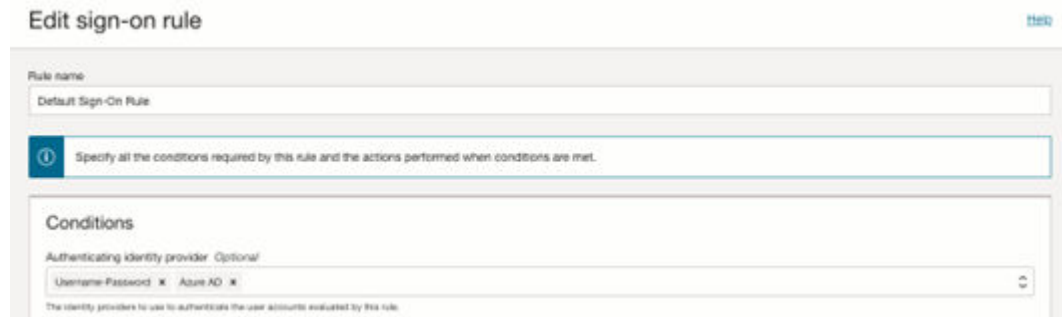
Enter the Azure AD identity provider details by following these steps:

1. Navigate to the Oracle IAM domain console.
2. On the navigation menu, click **Security** and then click **Identity providers**.
3. Click **Add IdP** and then click **Add SAML IdP**.
4. Enter the following information:
 - **Name:** Enter the name of the IdP.
 - (Optional) **Description:** Enter a description of the IdP.
 - (Optional) **Identity provider icon:** **Drag and drop** a supported image or click **select one** to browse for the image.
5. Click **Next**.
Ensure that Import identity provider metadata is selected, and browse and select, or drag and drop the Azure AD metadata XML file into Identity provider metadata. This is the metadata file you saved earlier from Azure AD.
6. Click **Next**.
7. In Map user identity, set the values as shown in the following screenshot.

The screenshot shows the 'Identity Provider Metadata' form. At the top, there is a status bar with 'Metadata is saved.' and an 'Upload' button. Below this are several input fields: 'Issuer ID' (with a red asterisk), 'Signature Hashing Algorithm' (a dropdown menu), 'Include Signing Certificate' (a checkbox), and 'Requested NameID Format' (a dropdown menu). At the bottom, there are two more dropdown menus: 'Identity Provider User Attribute' (with a red asterisk) and 'Oracle Identity Cloud Service User Attribute' (with a red asterisk). These two bottom dropdown menus are enclosed in a red rectangular box.

8. Click **Next**.
9. Under Review and Create, verify the configurations, and then click **Create IdP**.
10. Click **Activate**.
11. Click **Add to IdP Policy Rule**.
12. Click **Default Identity Provider Policy** to open it, and from the context (three dots) menu choose **Edit IdP rule**.
13. Click **Assign identity providers** and then click **Azure AD** Identity provider to add it to the list.
14. Click **Save Changes**.

15. Go back to Security and click **Sign-on policies**.
16. Click **Default Identity Provider Policy** to open it, and in the Sign-on rules from the context (three dots) menu on the right, select **Edit IdP rule**.
17. Select **Azure AD**.

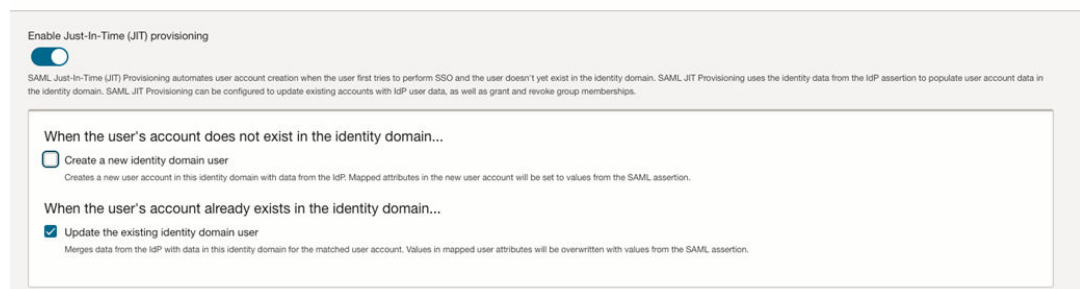


18. Save your changes.

JIT Attribute Mapping

1. In the OCI console, open the navigation menu and click **Identity & Security**.
2. Under Identity, click **Domains**.
3. In the respective domain, navigate to **Security** and then navigate to **Identity Provider**.
4. Under the respective Identity Provider, click **Configure JIT**.
5. Turn on the **Enable Just-In-Time (JIT) provisioning** option and select the **Update the existing identity domain user option**.

Configure Just-in-time (JIT) provisioning



6. Save your changes.

Follow the below steps to create JIT Attribute mapping for custom attributes.

1. Create a Confidential Application
 - a. In the OCI identity domain, open the navigation menu and click **Identity & Security**.
 - b. Under **Identity**, click **Domains**.
 - c. Click the name of the identity domain that you want to work in. You might need to change the compartment to find the domain that you want. Then, click **Integrated applications**.
 - d. Click **Add application**.

- e. In the **Add application** screen, select **Confidential Application**, and then click **Launch workflow**.
- f. On the **Add application details** page, enter an application name and description, and then click **Next**.
- g. On the **Configure OAuth** page, under **Client configuration**, select **Configure this application as a client now**.
- h. Under **Authorization**, select only **Client Credentials** as the **Allowed Grant Type**.
- i. At the bottom of the page, select **Add app roles** and then click **Add roles**.
- j. In the **Add app roles** panel, select **Identity Domain Administrator**, and then click **Add**.
- k. Click **Next** and then click **Finish**.
- l. On the application detail page, scroll down to **General Information**. Copy the **Client ID** and the **Client Secret** and save it in a secure place for later.
- m. After the application is created, click **Activate**.

The confidential application is now activated.



Note:

Once JIT Configuration is completed, this Client application can be deactivated.

Step 8: Configuring Just In Time Provisioning Attribute Mapping using Postman

To configure the part of JIT attribute Mapping through Postman, follow these steps:

Set the Environment Parameters in Postman

1. Open Postman, select **Environments**, and click **Import**.
2. On the **Import** screen, Import the file **OCI IAM Identity Domain.postman_environment.json**. For the JSON file downloads, refer to the following Customer Support Portal article: https://iccp.custhelp.com/app/answers/answer_view/a_id/1016088.
3. In the imported environment, update the environment variables by entering the following values, and then click **Save**.
 - a. **HOST**: The Oracle IAM Domain URL.
 - b. **CLIENT_ID** and **CLIENT_SECRET**: The Client ID and the Client Secret from the confidential application.

Import the OCIM Federation Postman Collection

1. On the Postman main page, select **Collection** and click **Import**.
2. In the Import dialog box, import the file **OCIM Federation.postman_collection.json**. For the JSON file downloads, refer to the following Customer Support Portal article: https://iccp.custhelp.com/app/answers/answer_view/a_id/1016088.

Request an Access Token

1. On the Collections tab, expand **OCIM Federation** and select **Obtain access_token** (client credentials). Click **Send**.

The access token is returned in the response from Oracle Identity Domain.

2. Highlight the access token content between the quotation marks and then right-click.
3. In the shortcut menu, select **Set: OCI IAM Identity Domain**. In the secondary menu, select **access_token**. The highlighted content is assigned as the access token value.

Get the Identity Provider Name

1. Select **Get the Identity Provider Name** and click **Send**.
2. Note the partnerName in the response for the type: SAML. The partnerName should be the Identity Provider configured in Identity Domain.

Get the Identity Provider Id by passing the Identity Provider Name

1. Select **Get the Identity Provider Id by passing the Identity Provider Name**.
2. Replace partnerName in the URI with the partnerName from the 'Get the Identity Provider Name' section (see previous steps).
3. Click **Send**.
4. Note the **jtiUserProvAttributes.value**.

Update the JIT Attribute Mapping

1. Select **Update the JIT Attribute Mapping**.
2. Replace the **<jtiUserProvAttributes.value>** in the URL with the value from the 'Get the Identity Provider Id by passing the Identity Provider Name' section (see previous steps).
3. Click **Send**.

Note:

Status: 200 OK should be received in the response.

Confirm the JIT Mappings are Created

1. Go to the OCI Identity Domain console, navigate to Identity Provider, and select the provider.
2. Click **Configure JIT** and confirm the JIT mappings have been created.

Step 9: Test SSO Between Azure AD and OCI IAM

Note:

The configurations in the 'Setting Up Synchronization with Microsoft Azure AD' guide must be completed before you can test the SSO between Azure AD and OCI IAM.

In this section, you can test that federated authentication works between OCI IAM and Azure AD.

1. Open a [supported browser](#) and enter the OCI Console URL:
<https://cloud.oracle.com>.
2. Enter your **Cloud Account Name**, also referred to as your tenancy name, and click **Next**.
3. Select the identity domain in which AzureAD federation has been configured.
4. On the sign-in page, you can see an option to sign in with Azure AD.
5. Select Azure AD. You are redirected to the Microsoft login page.
6. Provide your AzureAD credentials.
7. On successful authentication, a 'Connection Successful' message appears.