Oracle Hospitality OPERA Cloud Identity Management

Administrator Guide for Configuring Microsoft Entra ID Synchronization with OPERA Cloud Identity Management





Oracle Hospitality OPERA Cloud Identity Management Administrator Guide for Configuring Microsoft Entra ID Synchronization with OPERA Cloud Identity Management, Release 25.5

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Preface

Purpose

This guide explains the Microsoft Entra ID Synchronization feature of Oracle Hospitality OPERA Cloud. Customers who are using Microsoft Entra ID as their identity provider can utilize the Microsoft Entra ID Synchronization feature.

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

Table Revision History

Date	Description of Change
November 2025	Initial Publication

Microsoft Entra ID Synchronization Overview

OPERA Cloud Identity Management's OCI IAM Identity Domains provide the capability of synchronizing users and groups from Microsoft Entra ID. This feature ensures customers who are using Microsoft Entra ID as their identity provider can centrally manage their users and groups in Microsoft Entra ID, and those users, groups, and user group memberships are seamlessly synchronized into OPERA Cloud Identity Management.

Prerequisites for Microsoft Entra ID Synchronization

- An operational Microsoft Entra ID tenant.
- A user account in Microsoft Entra ID with permission to configure provisioning (for example, Application Administrator, Cloud Application Administrator, Application Owner, or Global Administrator).
- OPERA Cloud Identity Management's OCI IAM Identity Domains provisioned for the customer.
- User account in OCI IAM Identity Domain with Administrator permissions.

Configuring Microsoft Entra ID Synchronization in OCI IAM Identity Domain

This section provides the steps to configure Microsoft Entra ID as the authoritative identity store to manage identities in OPERA Cloud Identity Management. Microsoft Entra ID is configured using an application template from Microsoft Entra ID Gallery.

Below are the high-level steps involved in this configuration.

- Configure OCI IAM so that Microsoft Entra ID is the identity store to manage identities in OCI IAM. In OCI IAM, create a confidential application.
- 2. Generate a secret token from the OCI IAM identity domain's client ID and client secret. Use this along with the domain URL in Microsoft Entra ID.
- Create an app in Microsoft Entra ID and use the secret token and identity domain URL to specify the OCI IAM identity domain and prove that it works by pushing users from Microsoft Entra ID to OCI IAM.
- **4.** Assign the users and groups you want to provision to OCI IAM in the Microsoft Entra ID application.

1. Create a Confidential Application

- Log in to the Oracle Cloud Infrastructure (OCI) Console using https://cloud.oracle.com.
- Open the navigation menu and select Identity & Security. Under Identity, select
 Domains. Select the Identity Domain in which you want to configure Okta provisioning.
- 3. Click Integrated Applications.
- 4. Click Add Application and choose Confidential Application and click Launch workflow.
- 5. Enter a name for the confidential application, for example, "EntraIDClient." Click Submit.
- 6. Click the OAuth Configuration tab and then click Edit OAuth Configuration.
- Under Client configuration, select Configure this application as a client now.
- 8. Under Authorization, select Client credentials.
- 9. Scroll to the bottom and click the **Add app roles** button.
- Under App roles click Add roles, and in the Add app roles page, select User Administrator and click Add.
- 11. Click Submit.
- **12.** On the application details page, click the **Actions** menu and click **Activate** and confirm that you want to activate the new application.

2. Find the Domain URL and Generate a Secret Token

You need the following details for the connection settings of the Enterprise application that you create in Entra ID:



- The Identity Domain URL
- A secret token generated from the Client ID and Client Secret

Find the Domain URL

- Return to the Identity Domain where you are configuring Entra ID Synchronization.
- On the Identity Domain Details page, click Copy next to the Domain URL and make a note of it.

Generate Secret Token

- Click Integrated Applications.
- 2. Click the confidential application you created for Entra ID synchronization.
- 3. Click OAuth Configuration.
- Under General Information, copy the value next to Client ID and make a note of it.
- Under Client Secret, locate the three dots (ellipsis) next to Show secret and then select Copy. Note this value as the Client Secret.
- 6. The secret token is the base64 encoding of <clientID>:<cli>clientsecret>.
 In a Microsoft Windows environment, open CMD and use this powershell command to generate the base64 encoded value:

```
[Convert]::ToBase64String([System.Text.Encoding]::UTF8.GetBytes('<client_id
>:<clientsecret>'))
```

In an Apple MacOS, use the following:

```
echo -n <clientID>:<clientsecret> | base64
```

① Note

Substitute the <clientID> and <clientsecret> in the command with the values noted in the previous steps. Ensure there are no blank spaces when entering the client ID and client secret values.

7. Copy the value returned by the command and make a note of this value. This value is the **Secret Token**.

3. Create the OCI Application on Entra ID

Configure Microsoft Entra ID to enable Entra ID to be the authoritative identity store to manage identities in IAM.

- In the browser, sign into Microsoft Azure using the URL https://portal.azure.com
- 2. Click Microsoft Entra ID to open the Entra ID overview page.
- 3. In the left menu under Manage, click Enterprise applications.
- 4. On the Enterprise applications page, click **New application**.
- 5. Select Oracle Cloud Infrastructure Console.
- 6. Enter a name or accept the default of Oracle Cloud Infrastructure Console.



- Click Create.
- 8. Select **Provisioning** from the left menu under Manage.
- Click Get started and change the Provisioning Mode to Automatic.
- 10. In the Tenant URL, enter the OCI IAM Domain URL from 2. Find the Domain URL and Generate a Secret Token followed by ladmin/v1. That is, the tenant URL is https://
 <domainURL>/admin/v1.
- **11.** Enter the secret token you generated in <u>2. Find the Domain URL and Generate a Secret Token</u>.
- 12. Click **Test Connection** and verify if the test is successful. Click **Save**.

4. Additional Configurations for Federated Users

Custom Attribute Mapping

To add mapping for target attributes, such as custom attributes and attributes not defined by default in the provisioning connector schema, you can edit the JSON representation of the schema to add the attribute mappings.

Note

Editing the list of supported attributes is only recommended for administrators who have customized the schema of their applications and systems and have first-hand knowledge of how their custom attributes are defined or if a source attribute does not automatically appear in the Microsoft Entra ID admin center UI. This sometimes requires familiarity with the APIs and developer tools provided by an application or system. The ability to edit the list of supported attributes is locked down by default, but customers can enable this capability by navigating to the following URL: https://portal.azure.com/?

Microsoft AAD Connect Provisioning forceSchemaEditorEnabled=true.

You can navigate to your application to view the attribute list. For more information, see the <u>Editing the list of supported attributes</u> section of the Microsoft article Tutorial - *Customize user provisioning attribute-mappings for SaaS applications in Microsoft Entra ID*.

- Open a new browser tab and access the URL: https://portal.azure.com/?
 Microsoft AAD Connect Provisioning forceSchemaEditorEnabled=true
- 2. Navigate to the previously created Enterprise Application.
- 3. In the left menu under Manage, click **Provisioning** and then click **Edit Provisioning**.
- Under Provisioning, select Mappings, and then select Provision Microsoft Entra ID Users.
- Select the Show advanced options check box at the bottom of the Attribute Mapping screen, and then select Edit attribute list for OracleIDCS.
- 6. Add a new entry for the mandatory custom attribute:

urn:ietf:params:scim:schemas:idcs:extension:custom:User:OC PrimaryWorkLocation

Type: String





(i) Note

Optionally, you can also refer to the Table 2-1 User Mappings and add other Custom attributes that are not already listed on the Edit Attribute List page.



7. **Save** the User Attribute list and close the browser tab.

User Attribute Mapping

- In another browser tab, log in to Microsoft Azure.
- Click Microsoft Entra ID.
- In the left menu, click **Enterprise applications**. 3.
- Click the application you created earlier: Oracle Cloud Infrastructure Console. 4.
- In the left menu under Manage, click Provisioning and then click Edit Provisioning.
- In the Provisioning page, click Mappings.
- Under Mappings, click Provision Microsoft Entra ID Users.
- Under Attribute Mappings, scroll down and click Add New Mapping.



Note

- In Entra User mapping, keep only the mappings shown in the below table and remove all other mappings.
- If you cannot find the target attribute in the User Mapping in Entra, refer to the 'Custom Attribute Mapping' section to add the target attribute.
- Save the User Attribute Mappings and return to the Provisioning page.

Refer to Table User Mappings. ALL mandatory attributes indicated in the table must be included as shown in the below image. You can optionally add other additional attributes listed in the table if required.





Table 2-1 User Mappings

ra ID Us er	OCI IAM Doma in User Attrib ute Name	mai n Attr ibu	Ma ppi ng Typ e	Value	Description	Ma nda tor y
	userN ame	Stri ng	Dir ect	N/A	Username	Yes
sur na me	name .famil yNam e		Dir ect	N/A	Lastname	Yes
mai l	email s[type eq "work "].val ue		Dir ect	N/A	Email address	Yes
	urn:ie tf:par ams:s cim:s c hema s:idcs: exten sion:c usto m:Us er: OC_Pr imar yWor kLoca tion		Con sta nt	<enter pri="" se_id="">:E or <chain co="" de="">:C</chain></enter>	Mandatory Single Valued User Attribute. Indicates the User's primary work location. Primary Work Location can have values <enterpri se_id="">:E for multi- chain customers derived from the User profile. For customers having only a single chain, the source value can be set to constant <chainco de="">:C for all users.</chainco></enterpri>	Yes



Table 2-1 (Cont.) User Mappings

ra ID Us er	OCI IAM Doma in User Attrib ute Name	mai n Attr ibu	Ma ppi ng Typ e	Value	Description	Ma nda tor y
ol(t	urn:ie tf:par ams:s cim:s c hema s:orac le:idc s:exte nsion :user: User:i sFede rated User	lea		CBool("t rue ")	Enable Federated User flag in Identity Domain.	Yes
ol(t	urn:ie tf:par ams:s cim:s chem as:ora c le:idc s:exte nsion :user: User: bypas s Notifi catio n	lea		CBool("t rue ")	The bypass notification flag controls whether an email notification is sent after creating or updating a user account in Identity Domain. The bypassNotif ication must be set to "true" for Federated users. This disables us er account activation notification in IAM Identity Domain for the user.	Yes
acti ve		Stri ng	Exp res sio n		User status. The attribute IsSoftDelete d is often part of the default mappings for an application in Entra ID. It is not recommen ded to remove the IsSoftDelete d attribute from your attribute mappings.	Yes
giv en Na me	name .given Name		Dir ect	N/A	Firstname	No
ferr	prefe rredL angu age		Dir ect	N/A	User's preferred writtenor spoken language usedfor localized user interfaces.	No



Table 2-1 (Cont.) User Mappings

ra ID Us er	OCI IAM Doma in User Attrib ute Name	mai n Attr ibu	Ma ppi ng Typ e	Value	Description	Ma nda tor y
dis pla yNa me	displa yNam e		Dir ect	N/A	The display name.	No
job Titl e	title	Stri ng	Dir ect	N/A	Title	No
mo bile	phon eNum bers[t ype eq "mobi le"].v alue	Stri ng	Dir ect	N/A	User's mobile phone number.	No
ion At trib ute Use r Ow ner	urn:ie tf:par ams:s cim:s c hema s:idcs: exten sion:c usto m:Us er: OC_U serO w nerCo de		Dir ect	N/A	Unique code (typically, the sales manager's initials) for the owner. For example, oc_ownercode=First_Last_Initial.	No



Table 2-1 (Cont.) User Mappings

ra ID Us er		mai n Attr ibu	Ma ppi ng Typ e	Value	Description	Ma nda tor y
em plo yee Id	urn:ie tf:par ams:s cim:s c hema s:idcs: exten sion:c usto m:Us er: OC_U serE mplo yeeN o		Dir ect	N/A	Numeric or alphanumeric identifier assigned to a person, typically based on order of hire or association with an organization.	No



Table 2-1 (Cont.) User Mappings

ra ID Us er	OCI IAM Doma in User Attrib ute Name	mai n Attr ibu	Ma ppi ng Typ e	Value	Description	Ma nda tor y
	urn:ie tf:par ams:s cim:s c hema s:idcs: exten sion:c usto m:Us er: OC_U serTy pe		Dir ect	Possible Values: FU LL- TI ME EM PL OY EE PA RT- TI ME EM PL OY EE TR AIN EE CO NT RA CT OR CO NS ULT AN T OT HE R	Used to identify the organization-to-user relationship.	No



Table 2-1 (Cont.) User Mappings

ra ID Us er	OCI IAM Doma in User Attrib ute Name	mai n Attr ibu	Ma ppi ng Typ e	Value	Description	Ma nda tor y
art	urn:ie tf:par ams:s cim:s c hema s:idcs: exten sion:c usto m:Us er: OC_D epart ment		Dir ect	N/A	Specifies the user's department.	No
pho ne N um	eNum bers[t ype		Dir ect	N/A	User's work phone number.	No
ens	name .hono rificP refix		Dir ect	N/A	User's Initials	No
ext ens	name .midd leNa me		Dir ect	N/A	User's middle name	No



Table 2-1 (Cont.) User Mappings

ra ID Us er	OCI IAM Doma in User Attrib ute Name	mai n Attr ibu	Ma ppi ng Typ e	Value	Description	Ma nda tor y
ens	name .hono rificS uffix		Dir ect	N/A	Suffix	No
ext ens ion At trib ute Tim e zon e	timez one	Stri ng	Dir ect	N/A	User's timezone	No
ext ens ion At trib ute Loc ale	locale	Stri ng	Dir ect	N/A	Used to indicate the User's default location for purposes of localizing items such as currency, date and time format, numerical representations, and so on.	No



Table 2-1 (Cont.) User Mappings

ra ID Us er	OCI IAM Doma in User Attrib ute Name	mai n Attr ibu	Ma ppi ng Typ e	Value	Description	Ma nda tor y
ext ens ion At trib ute Act As	urn:ie tf:par ams:s cim:s c hema s:idcs: exten sion:c usto m:Us er: OC_A ctAs		Dir ect	Values: • Res	OPERA Cloud attribute. Determines the Originating Application value in Blocks and Manage Block (see Managing Blocksin the OPERA Cloud User Guide) referenced by the Origin list field in Group Rooms Control (see Using Group Rooms Control in the OPERA Cloud User Guide) search and in reports.	No
At trib ute	urn:ie tf:par ams:s cim:s c hema s:idcs: exten sion:c usto m:Us er: OC_A ctAt		Dir ect	Values: Pro per ty	OPERA Cloud attribute. Determines the Originating Application value in Blocks and Manage Block (see Managing Blocks in the OPERA Cloud User Guide) referenced by the Origin list field in Group Rooms Control (see Using Group Rooms Control in the OPERA Cloud User Guide) search and in reports.	No



Table 2-1 (Cont.) User Mappings

ra ID Us er	OCI IAM Doma in User Attrib ute Name	mai n Attr ibu	Ma ppi ng Typ e	Value	Description	Ma nda tor y
ens ion At trib ute	urn:ie tf:par ams:s cim:s c hema s:idcs: exten sion:c usto m:Us er: OC_H ubs	ng	Dir ect	N/A	Assign one or more hubs (see Configuring Hubs in the OPERA Cloud User Guide) to a user to determine their property location access in multi-property operations. oc_hubs is a String array in IAM Domain and the Identity Provider should map a multi-valued attribute to oc_hubs. Value for oc_hubs must sent in all uppercase.	No
ens ion At trib ute Hu b	urn:ie tf:par ams:s cim:s c hema s:idcs: exten sion:c usto m:Us er: OC_H ubs_S t ring		Dir ect	N/A	Assign one or more hubs (see Configuring Hubs in the OPERA Cloud User Guide) to a user to determine their property location access in multi-property operations. OC_Hubs_String must be sent in all uppercase as comma separated values.	No

Group Attribute Mapping

Follow the below steps to add the IDCS Group Description custom attribute:

- 1. Open a **new** browser tab and access the URL : https://portal.azure.com/?
 https://portal.azure.com/?
- 2. Navigate to the Enterprise Application previously created.
- 3. In the left menu under Manage, click Provisioning and then click Edit Provisioning.
- 4. Under Provisioning, select **Mappings**, and then select **Provision Microsoft Entra ID Groups**.
- 5. Scroll down and select the **Show advanced options** check box at the bottom of the Attribute Mappings screen and then select **Edit attribute list for OracleIDCS**.
- **6.** Add a new entry for the Description attribute as shown below:



Name: urn:ietf:params:scim:schemas:oracle:idcs:extension:group:Group:description

Type: String

Save the Group attribute list and close the browser tab.

Follow the below steps to add the Group attribute mappings:

- 1. In another browser tab, log in to Microsoft Azure and navigate to the Enterprise Application you created earlier.
- 2. In the left menu under Manage, click **Provisioning** and then click **Edit Provisioning**.
- 3. Under Mappings, click **Provision Microsoft Entra ID Groups**. Refer to the below table to update and add the mappings for Group attributes.

Table 2-2 Group Attribute Mappings

Entra ID Attribut e Name	IAM Domain Group Attribut e Name	IAM Domain Attribut e Type	Mappin g Type	Value	Description	Mandatory
display Name	display Name	String	Direct	N/A	Group display name	Yes
membe rs	membe rs	String	Direct	N/A	Members of the group	No
objectId	externa lId	String	Direct	N/A	External Group Id	No
descript ion	urn:ietf: para ms:scim :sch emas:or acle: idcs:ext ensi on:grou p:Gr oup:des cript ion	String	Direct	N/A	Group description	No

- 4. Save the Group Attribute mappings.
- 5. Return to the **Provisioning** page and set the **Provisioning Status** to "On."

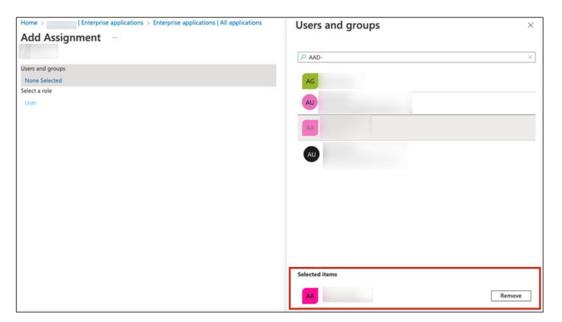
5. Assign Users and Groups to the Microsoft Entra ID Application

Assign the users you want to provision to OCI IAM.

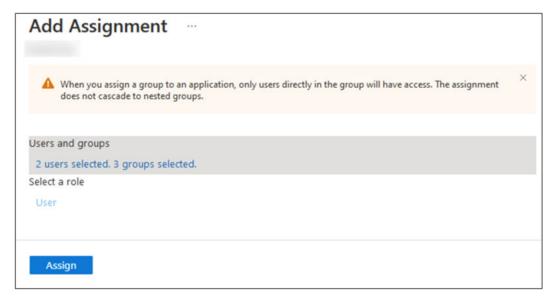
- 1. In Microsoft Entra ID, in the left menu, under Manage, click Enterprise applications.
- 2. Click the application you created earlier.
- 3. In the left menu under Manage, click Users and groups.
- 4. In the Users and groups page, click Add user/group.
- On the Add Assignment page, under Users and groups, click None Selected. The Users and groups page opens.



6. Select one or more users or groups from the list by clicking them. The ones you select are listed under Selected items.



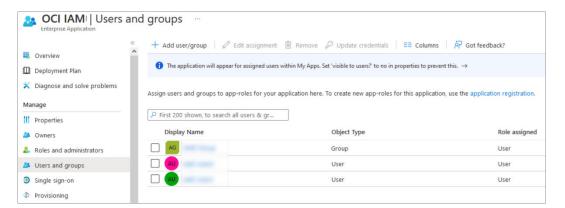
Click Select. The number of users and groups selected are shown on the Add Assignment page.



8. On the Add Assignment page, click **Assign**.

The Users and groups page now shows the users and groups you have chosen.





Click Provisioning in the left menu to provision the groups and users. The provisioning log shows the status.

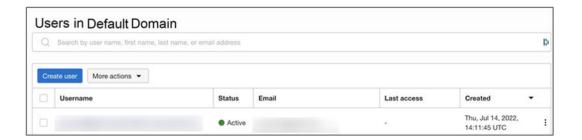


10. When provisioning is successful, the **Current cycle status** indicates that the incremental cycle has completed, and the number of users provisioned to OCI IAM appears.



In OCI IAM, you can now see the users and groups provisioned from Entra ID.





Note

OC_PrimaryWorkLocation is a custom attribute in OCI IAM Domain. Due to an issue in Microsoft Entra ID, this does not get synced from Microsoft Entra ID to Oracle through the provisioning connector in Microsoft Entra. As a work around, we are having the custom attribute sync carried out by JIT attribute mapping as part of the Federation configuration. This custom attribute is updated in OCI IAM Domain at the time of the user's first login to OPERA Cloud.