

# Configuration Guide - Identity Provisioning in SAP Cloud for Customer using a System for Cross-domain Identity Management (SCIM)

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In your SAP Cloud Platform Integration (CPI) tenant copy package “Identity Provisioning in SAP Cloud for Customer using a System for Cross-domain Identity Management (SCIM)” from catalog (Discover tab page) to your customer workspace (Design tab page)

## User Replication

For Identity (User) replication to SAP Cloud for Customer configure and deploy the following artifacts

- User Replication via SCIM
- Get User by UserID
- Get User Count
- Value mapping for Identity Provisioning (Maintain the required value mappings)

The corresponding SAP Cloud for Customer ODATA service is “*employeeanduser*”, and this can be consumed with a technical user by adding the service to the communication arrangement “*OData Services for Business Objects*”

## Group Replication

For Group replication to SAP Cloud for Customer configure and deploy the following artifacts

- Groups Replication via SCIM
- Get Group Count

The corresponding SAP Cloud for Customer ODATA service is “*identitybusinessrole*”, and currently this service can only be consumed via a business user.

## SCIM Endpoints:

The artifacts User Replication via SCIM and Group Replication via SCIM, use HTTP adapter on CPI to process SCIM requests, the base URL (<BASE\_URL>) for both resource types is of format: - <CPI-Runtime-URL>/http/

End point for user replication: <BASE\_URL>/Users/

End point for group replication: <BASE\_URL>/Groups/

## Supported Operations:

### Users

- GET
  - Supported Queries:
    - Retrieve a user by id: <BASE\_URL>/Users/<id>
    - Retrieve all users: <BASE\_URL>/Users
  - Supported Filters:
    - By Username: <BASE\_URL>/Users?filter=username eq "XX25092001"
    - By Email: <BASE\_URL>/Users?filter=email eq "xx25092003@abc.com"
    - By Employee No: <BASE\_URL>/Users?filter=employeeNumber eq "56910"
  - Paging: <BASE\_URL>?startIndex=m&count=n (where m and n can be any positive integer numbers)
- POST
  - <BASE\_URL>/Users/
- PUT
  - <BASE\_URL>/Users/<id>
- DELETE
  - <BASE\_URL>/Users/<id>

### Groups

- PATCH
  - Supported Operations: -
    - Modify member resource via ‘add’ and ‘remove’ operation
    - Remove all member resource
    - Remove all existing members resource and add new members
- PUT
  - Replace all existing members resource with new members
  - Remove all members

➤ GET

Supported Queries:

- Retrieve a specific Group by id: <BASE\_URL>/Groups/<id>
- Retrieve all Groups with member assignments: <BASE\_URL\_>/Groups

Supported operations

- Supported filter attribute: displayName attribute is supported with support for only 'eq' operator  
 Ex: <BASE\_URL>/Groups?filter=displayName eq 'SALES\_REP'
- Paging: <BASE\_URL>/Groups?startIndex=m&count=n (where m and n can be any positive integer)

### Expected Response with Status Codes:

Users:

#### Method POST

Expected status code	Request	Expected Response	Additional notes
201	Request body has all required and additional supported attributes	Created user and its attributes	Header <i>location</i> contains the URL for newly created resource
400	Request body has a missing required attribute	SCIM compliant error response body	For C4C SCIM adapter mandatory attributes are "userName" (Max 40-character length), "familyName" and "givenName"
409	Request body for creating a user with duplicate unique attribute (check for all unique attributes)	SCIM compliant error response body	"userName" and Custom attribute "employeeNumber" (if available) must be unique

#### Method GET

- /Users:

Expected status code	Request	Expected Response	Additional notes
200	If there are users present, they are returned along with "totalResults"		If no users are present, empty list is returned. Additionally, "startIndex" and "itemsPerPage" are returned if the SCIM API query contains pagination

- /Users/<user\_id>: Get Single user

Expected status code	Request	Expected Response	Additional notes
200	The specified user exists	Returned user	
404	The specified user does not exist or deleted user	No response body	

#### Method PUT

(/Users/<user\_id>)

Expected status code	Request	Expected Response	Additional notes
200	The specified user exists	Returned user	Except "username" and Custom attribute "employeeNumber" (if available) all other attributes can be updated
404	The specified user does not exist or deleted user	No response body	

#### Method DELETE

(/Users/<user\_id>)

Expected status code	Request	Expected Response	Additional notes
204	The specified user exists	No response body	
404	The specified user does not exist	No response body	

Groups:

#### Method POST

Expected status code	Request	Expected Response	Additional notes
501		Not Implemented	We do not support creation of Group from outside SAP Cloud for Customer System

#### Method DELETE

(/Groups/<group\_id>)

Expected status code	Request	Expected Response	Additional notes
501		Not Implemented	Deletion of groups is not allowed from outside SAP

			Cloud for Customer system
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### Method GET

- /Groups:

Expected status code	Request	Expected Response	Additional notes
200	If there are Groups present, they are returned along with "totalResults", along with current "members" assignment to the Groups		If no Groups are present, empty list is returned. "startIndex" and "itemsPerPage" are returned if the SCIM API query contains pagination

- / Groups /<group\_id>: Get Single Group

Expected status code	Request	Expected Response	Additional notes
200	The specified group exists	Will contain SCIM compliant Group resource with members	
404	The specified group does not exist		In this case SCIM compliant error response body will be sent
400	Request containing invalid group-id		In this case SCIM compliant error response body will be sent

### Method PUT

(/Groups/<group\_id>)

Expected status code	Request	Expected Response	Additional notes
200	The specified group exists	Updated Group details along-with current member assignments	If empty member array is sent, then group will be updated by removing all currently assigned members
404	The specified group/member does not exist	No response body	
400	Invalid request body	No response body	

*Method PATCH*

(/Groups/<group\_id>)

<b>Expected status code</b>	<b>Request</b>	<b>Expected Response</b>	<b>Additional notes</b>
200	Group exists Operations: add, remove are supported	Updated Group details along-with current member assignments	Combination of multiple operations add/remove, is supported
404	If group/member does not exist	No response body	
400	Invalid payload body	No response body	
409	Reassigning already existing member	No response body	