

# APEX SCIM Administration Guide

Release 1.0

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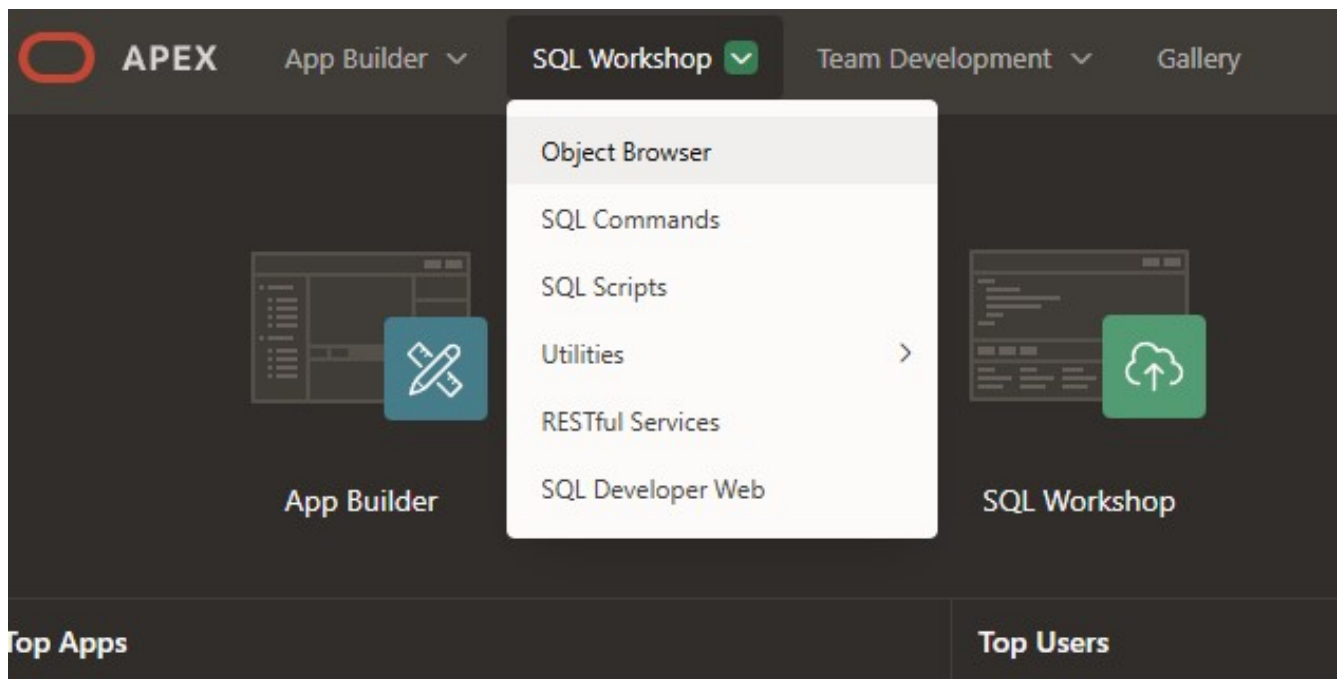
## Installation

Installation contains these high level steps:

- Installing the Database
- Installing the APEX Application
- Installing the REST Module
- Post Install Config

### Installing the Database

1. Logon to the workspace and go to **SQL Workshop** -> **SQL Scripts**



2. Click **Upload**. Select the **installscim.sql** file and give it a name. Click **Upload**.

Upload Script

File

installscim.sql

Script Name

installscim

File Character Set

Unicode UTF-8

Cancel

Upload

3. Click the arrow icon in the **Run** column.

Search

Delete Checked

Upload >

Quick SQL

Create >

	Updated By	Updated	Bytes	Results	Run
		1 seconds ago	122,816	0	

1 - 1

4. Click the **Run Now** button.



## Run Script

You have requested to run the following script. Please confirm your request.

Script Name	installscim
Created	on 11/08/2024 08:42:12 PM by [REDACTED]
Updated	on 11/08/2024 08:42:12 PM by [REDACTED]
Number of Statements	82
Script Size in Bytes	122,816

Cancel

Run Now

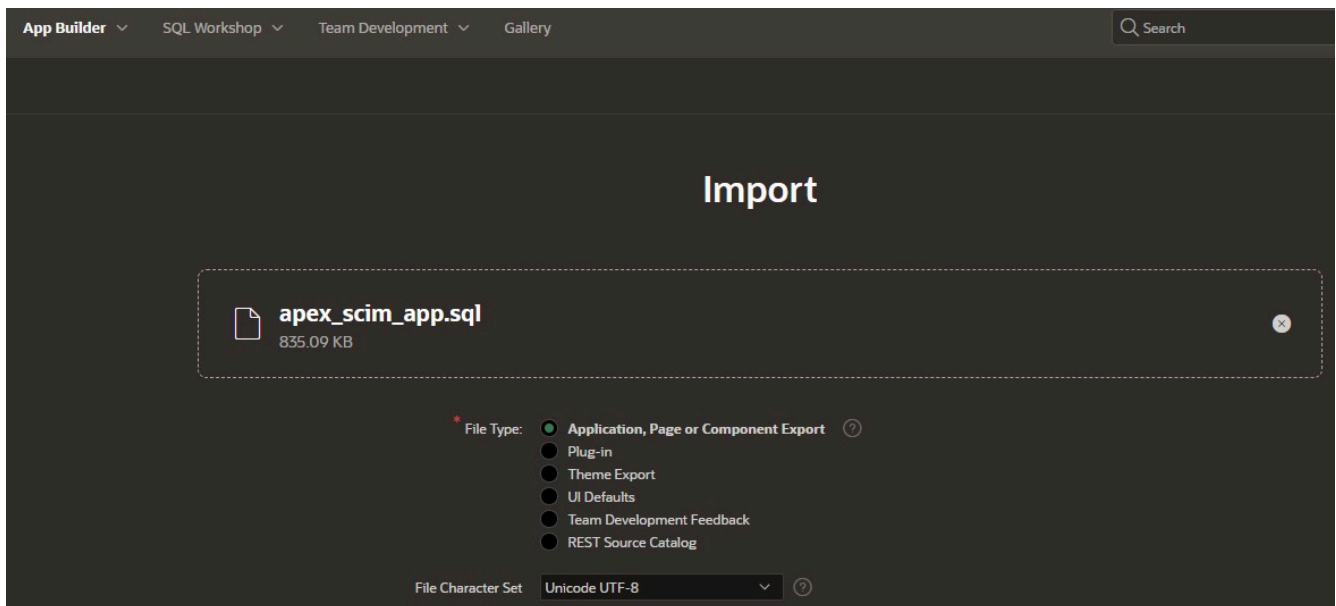
### Installing the APEX Application

1. Go to **App Builder** -> **Import**.

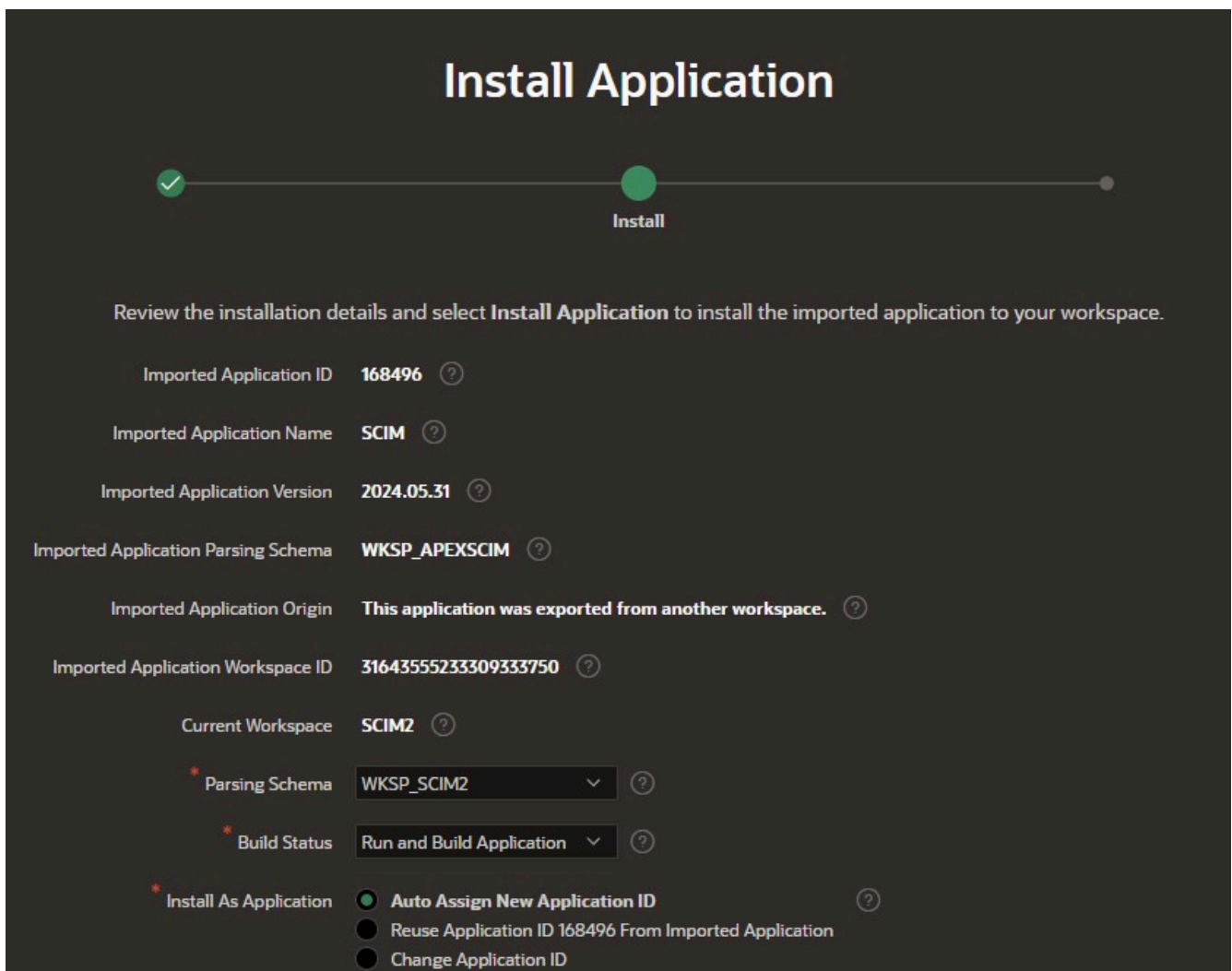


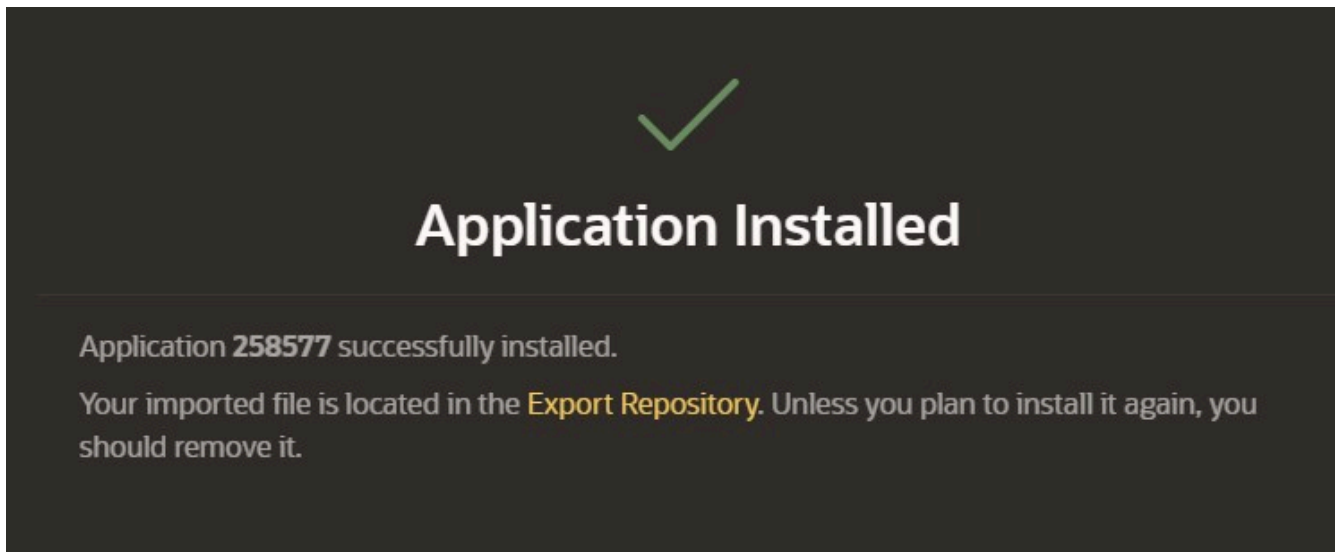
Import

2. Select the **apex\_scim\_app.sql** file.



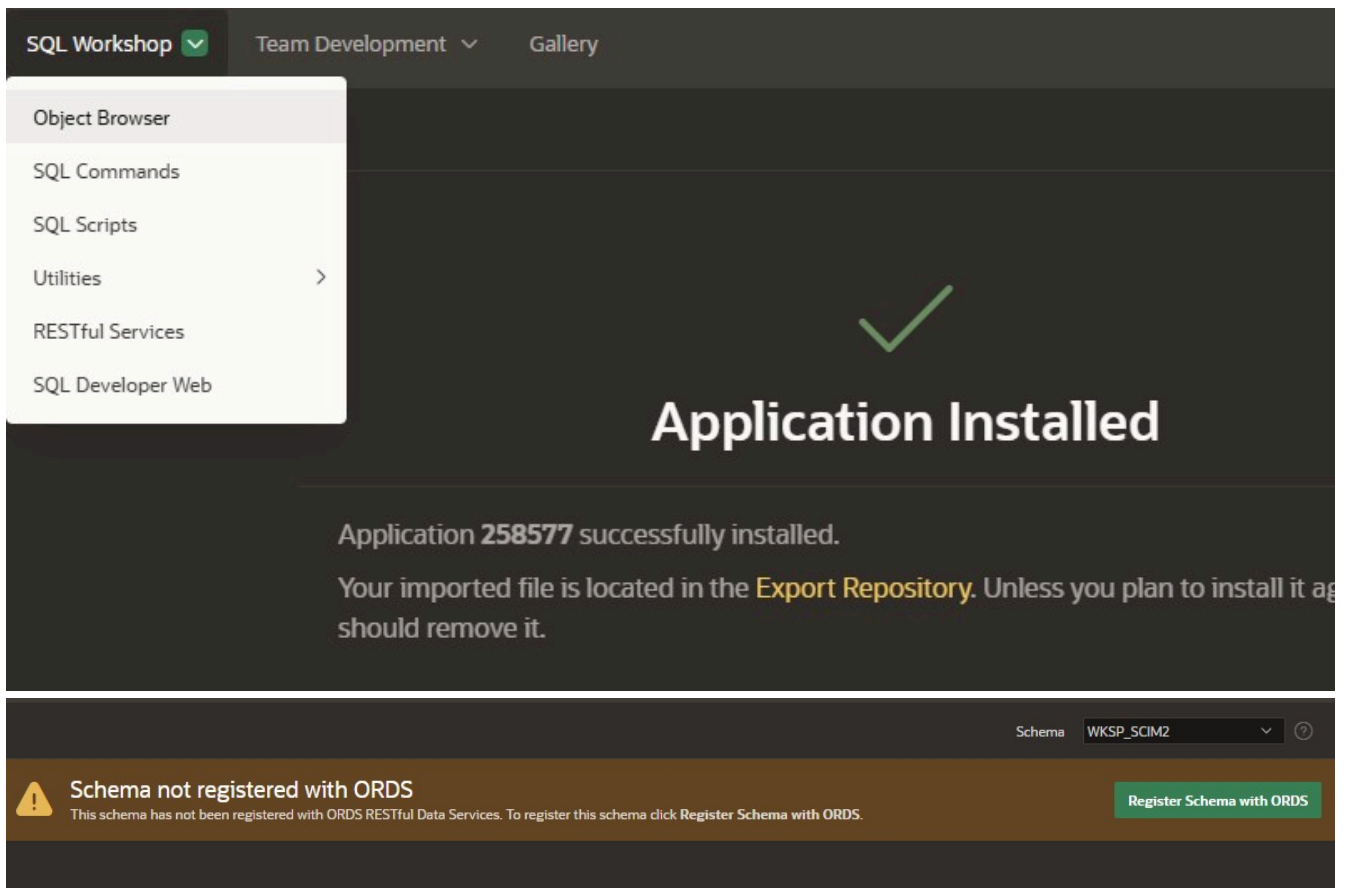
3. Click the **Install Application** button.





## Installing the REST Module

1. Go to **SQL Workshop** -> **RESTful Services**. Click **Register Schema with ORDS**.



2. Click **Save Schema Attributes**

## ORDS Schema Attributes

Enable RESTful Access

☒

?

\* Schema Alias

scim2

?

You are editing the alias for the workspace's default schema. Setting this alias will also change the Path Prefix at the workspace level.

Install Sample Service

☐

?

Authorization Required for Metadata Access

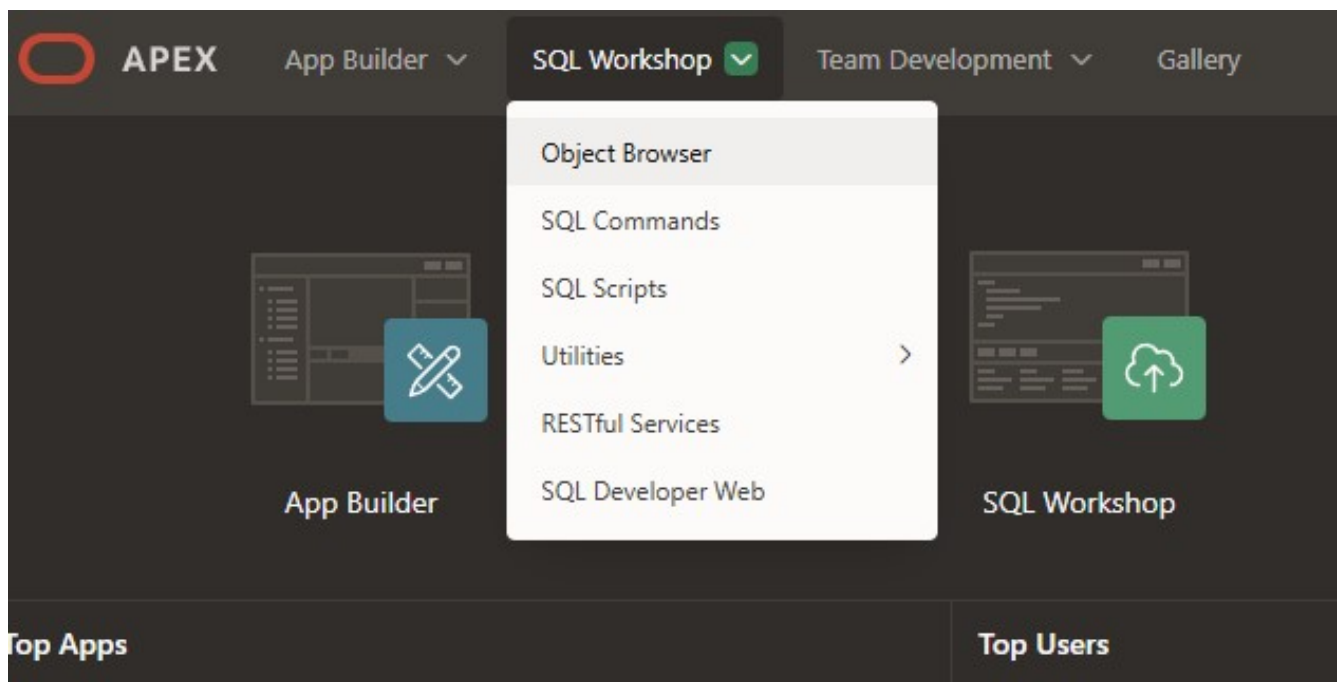
☐

?

Cancel

Save Schema Attributes

3. Go to **SQL Workshop** -> **SQL Scripts**



4. Click **Upload**. Select the **installrest.sql** file. Click **Upload**.

## Upload Script

File

installrest.sql

Script Name

installrest

File Character Set

Unicode UTF-8

Cancel

Upload

5. Click the **Run Now** button.

## Run Script

You have requested to run the following script. Please confirm your request.

Script Name	installrest
Created	on 11/08/2024 09:02:57 PM by
Updated	on 11/08/2024 09:02:57 PM by
Number of Statements	1
Script Size in Bytes	29,764

Cancel

Run Now

## Post Install Config

The following Post Install Config steps are required to populate the resource schema attributes. These steps can be completed again to customize the attributes.

1. Run the application and parse the default resource schemas. Click **Config** -> **Document Store**.

≡

SCIMADMIN

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SCIMADMIN

2. Click the **pencil** next to Group.

Config \ Config Store Report

Config Store Report			
	Docname ↑≡	Childdoc	Endpointname
	Group	Meta	Schemas

3. Click **Parse Group Schema**.

Config \ Config Store Report \

## Config Store Edit

Config Store Edit

Doc Name

Group

Child Doc

Meta

Endpoint Name

Schemas

Conf Type

SCHEMA

Parse Group Schema




Success Parsing Schema

Create

Endpointname	Created	Lastmodified
Schemas	11/8/2024	11/8/2024
	11/8/2024	11/8/2024
ServiceProviderConfig	11/8/2024	11/8/2024
Schemas	11/8/2024	11/8/2024

4. Click the **pencil** next to User.

	User	Meta	Schemas
---	------	------	---------

5. Click **Parse User Schema**.

Config \ Config Store Report \

Config Store Edit

Config Store Edit

Doc Name  
User

Child Doc  
Meta

Endpoint Name  
Schemas

Conf Type  
SCHEMA

Parse User Schema

Success Parsing Schema

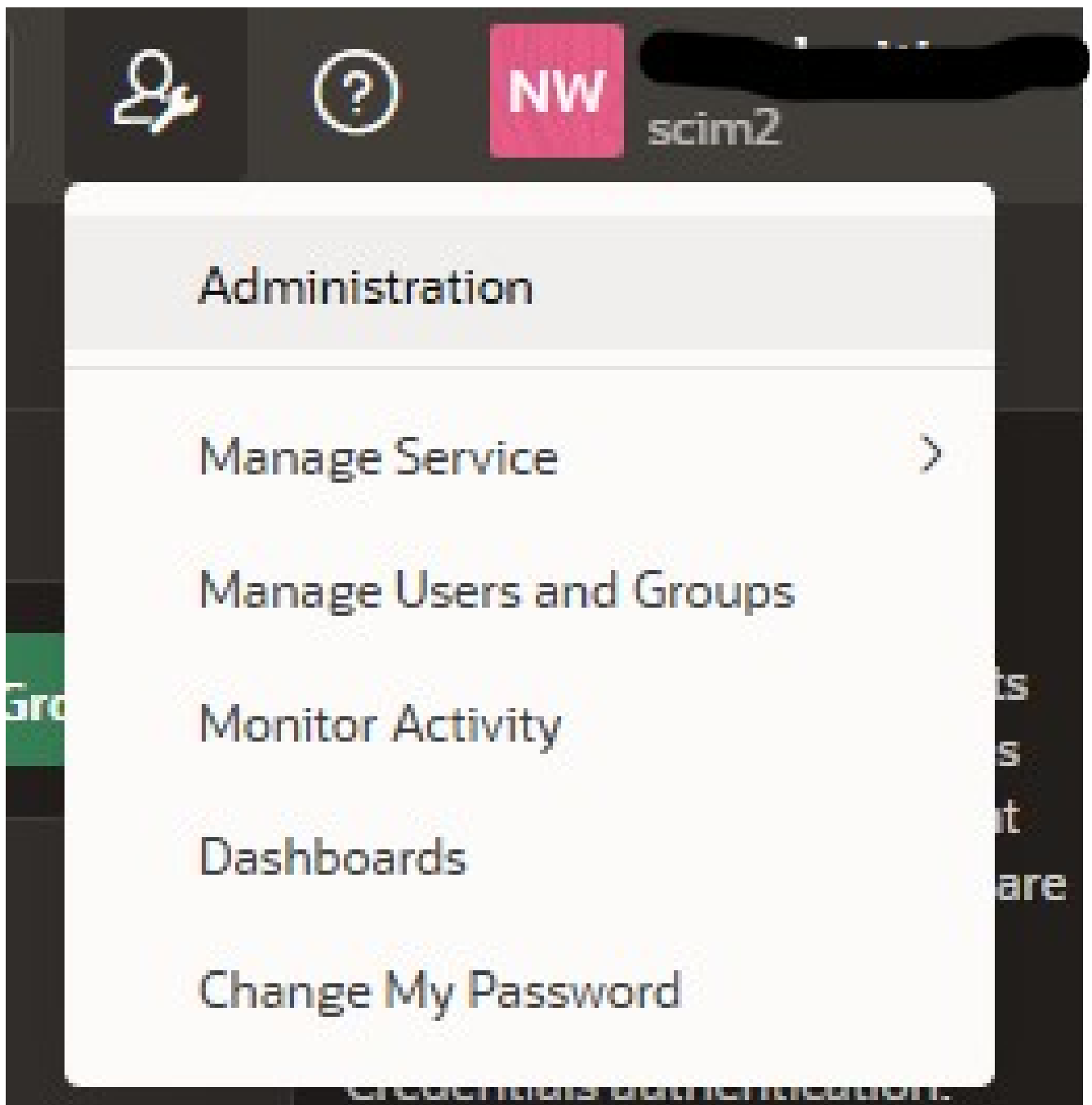
Create

Endpointname	Created	Lastmodified
Schemas	11/8/2024	11/8/2024
	11/8/2024	11/8/2024
ServiceProviderConfig	11/8/2024	11/8/2024
Schemas	11/8/2024	11/8/2024

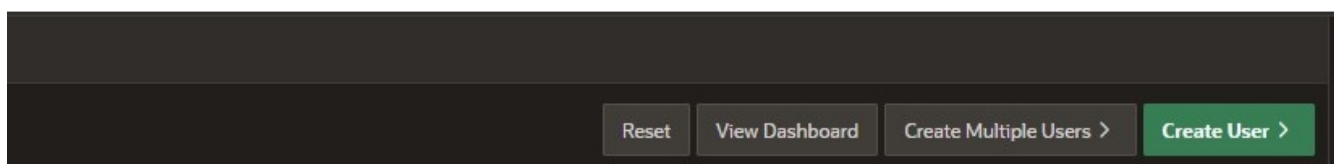
The installation is now complete. You must either create a client user or configure OAUTH in order to invoke the server.

## Creating the Client User

1. Go to **Administration -> Users and Groups**



2. Click **Create User**.



3. Provide the required values.

Create User

Cancel
Create and Create Another
Create User

Show All
User Identification
Account Privileges
Password
Group Assignments

User Identification

Username

SCIMCLIENTUSER

?

Email Address

scimclientuser@example.com

?

First Name

SCIM

?

Last Name

Clientuser

?

Description

This is a SCIM client user.

?

27 of 200

Default Date Format

?

Set the password appropriately. This will not be an interactive account so toggle the **Require Change of Password on First Use** switch.

Assign the **APEXSCIM** and **RESTful Services** groups. Click **Create User**.

Account Privileges

Default Schema

WKSP\_SCIM2

?

Accessible Schemas (null for all)

WKSP\_SCIM2

?

User is a workspace administrator:

☐

?

User is a developer:

☐

?

App Builder Access

☐

?

SQL Workshop Access

☐

?

Team Development Access

☐

?

Set Account Availability

Unlocked

?

Password

Password

\*\*\*\*\*

Passwords are case sensitive

?

Confirm Password

\*\*\*\*\*

?

Require Change of Password on First Use

☐

?

Group Assignments

Group Assignments:

OAuth2 Client Developer  
SQL Developer

APEXSCIM

RESTful Services

>>

^

^

4. You can now perform a sanity check using Postman.

HTTP APEXSCIM / Schemas Get

Save Share

GET  Send

Params Authorization Headers (8) Body Scripts Settings Cookies

**Auth Type**

Basic Auth

The authorization header will be automatically generated when you send the request. Learn more about [Basic Auth](#) authorization.

Username SCIMCLIENTUSER

Password

Heads up! These parameters hold sensitive data. To keep this data secure while working in a collaborative environment, we recommend using variables. Learn more about [variables](#).

body Cookies (2) Headers (10) Test Results 200 OK • 2.57 s • 1.4 KB Save Response

Pretty Raw Preview Visualize HTML

```

1  {"schemas":["urn:ietf:params:scim:api:messages:2.0:ListResponse"],"totalResults":2,"startIndex":1,"itemsPerPage":50,
   "Resources":[{"id":"Group","name":"Group","description":"Group","attributes":[{"name":"id","type":"string",
   "multiValued":false,"description":"For
2  internal use.
3  readOnly.","required":true,"caseExact":false,"mutability":"readOnly","returned":"always","uniqueness":"server"},
   {"name":"displayName","type":"string","multiValued":false,"description":"A
4  human-readable name for the Group.
5  REQUIRED.","required":false,"caseExact":false,"mutability":"readWrite","returned":"default","uniqueness":"none"},
   {"name":"externalId","type":"string","multiValued":false,"description":".
6  REQUIRED.","required":true,"caseExact":false,"mutability":"immutable","returned":"always","uniqueness":"server"},
   {"name":"members","type":"complex","multiValued":true,"description":"A
7  list of members of the
8  Group.","required":false,"subAttributes":[{"name":"externalId","type":"string","multiValued":false,"description":".
9  REQUIRED.","required":true,"caseExact":false,"mutability":"immutable","returned":"always","uniqueness":"server"},
   {"name":"displayName","type":"string","multiValued":false,"description":"display

```

## Creating the OAUTH Client

If you plan to use an OAUTH login instead of Basic Authorization then perform the following.

1. Go to **SQL Workshop** -> **SQL Scripts**

APEX App Builder SQL Workshop Team Development Gallery

Object Browser

SQL Commands

SQL Scripts

Utilities

RESTful Services

SQL Developer Web

App Builder SQL Workshop

Top Apps Top Users

2. Select the **createoauthclient.sql** file and click **Upload**.

## Upload Script

\* File

createoauthclient.sql

?

Script Name

createoauthclient

?

File Character Set

Unicode UTF-8

?

Cancel

Upload

3. Click the **arrow icon** in the **Run** column.



Search

Delete Checked

Upload >

Quick SQL

Create >

	Updated By	Updated 	Bytes	Results	Run
		1 seconds ago	122,816	0	

1 - 1

↑ SQL Scripts \ Results

Script: **createoauthclient** ⓘ Status: **Complete** ⓘ

View: ☐ Detail ☒ Summary ⓘ Rows: 15 ⓘ

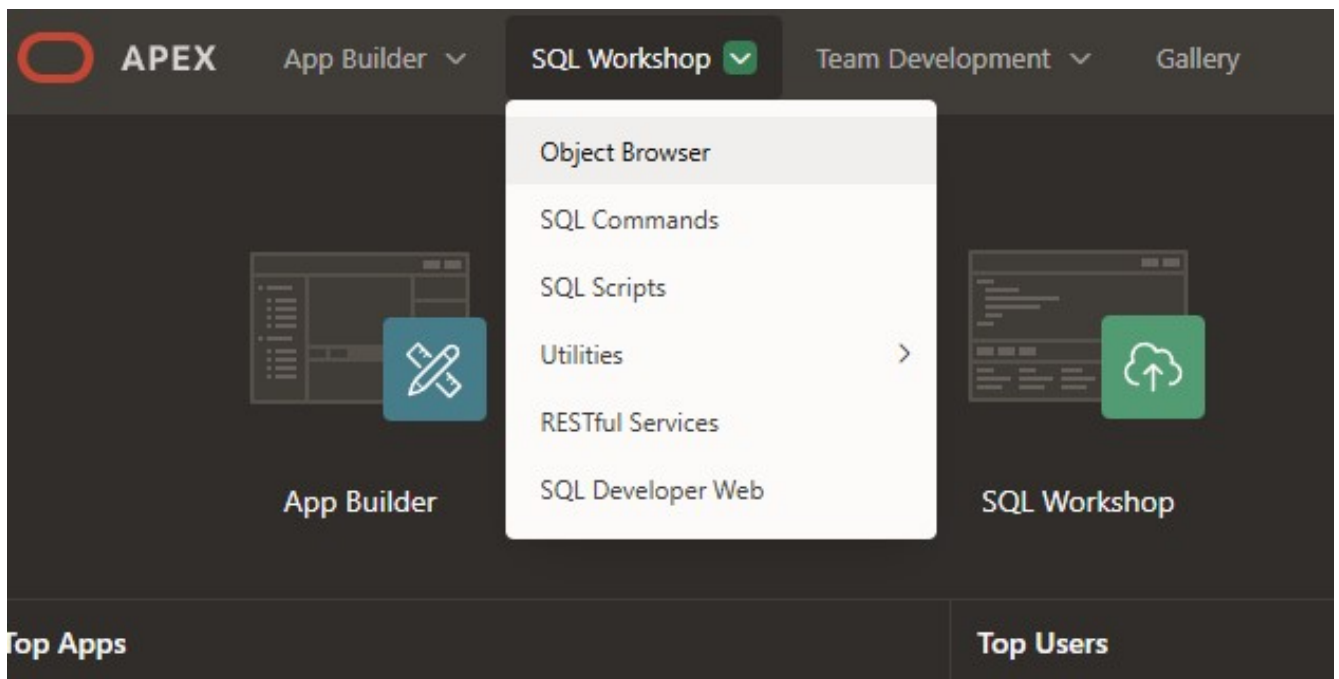
Number ↑=	Elapsed	Statement
1	0.13	begin OAUTH.create_client( p_name => 'sci

Download

1  
Statements Processed

1  
Successful

4. Next, you must obtain the Client Credentials. Go to **SQL Workshop -> SQL Commands**.



5. Run the following SQL to obtain the client credential and secret.

```
SELECT id, name, auth_flow, response_type, client_id, client_secret FROM USER_ORDS_CLIENTS;
```

SQL Commands

Schema: WKSP\_SCIM2

Language: SQL Rows: 10 Clear Command Find Tables Save Run

```
1 SELECT id, name, auth_flow, response_type, client_id, client_secret
2 FROM USER_ORDS_CLIENTS;
```

Results Explain Describe Saved SQL History

ID	NAME	AUTH_FLOW	RESPONSE_TYPE	CLIENT_ID	CLIENT_SECRET
19026314	scim_client	CLIENT_CRED	TOKEN	AisBuGzX7MzStvtaJmDeg...	[REDACTED]

1 rows returned in 0.03 seconds Download

## 6. Test the OAUTH config from Postman

APEXSCIM Save

Overview **Authorization** Scripts Variables Runs

This authorization method will be used for every request in this collection. You can override this by specifying one in the request.

Auth Type

OAuth 2.0

The authorization data will be automatically generated when you send the request.  
Learn more about [OAuth 2.0](#) authorization.

Add auth data to Request Headers

**Heads up!** These parameters hold sensitive data. To keep this data secure while working in a collaborative environment, we recommend using variables. Learn more about [variables](#).

## Configure New Token

Token Name

APEX

Grant type

Client Credentials

Access Token URL ⓘ

[REDACTED]sci  
m2/oauth/token

Client ID ⓘ

AisBuGzX7MzStvtajMMdeg..

Client Secret ⓘ

sZBmjQuZ4clBUAhW34ISMw..

Scope ⓘ

e.g. read:org

Client Authentication ⓘ

Send as Basic Auth header

### Advanced

ⓘ You can add more specific customizations to your OAuth2 requests here. Learn more about [configuration](#) ↗

Refresh Token URL ⓘ

https://apexurl.com/apex/<wkspname>/oauth/token

Token Request ⓘ

	Key	Value	Send In
	Create parameter	Value	

Refresh Request ⓘ

	Key	Value	Send In
	Create parameter	Value	

 Clear cookies ⓘ

Get New Access Token





## Request Log



Go

Actions ▾

Lvl	Ts ↓	Location	Entryname	Entrydetail
4	11/10/2024	pkg_server.processReq	res code	201
5	11/10/2024	pkg_server.buildRes	starting loop count	0
4	11/10/2024	pkg_server.buildSelect	rows topn	select * from (select respjson,lastmodified from v_usr where id=nvl(:id,id) order by id asc)
3	11/10/2024	pkg_server.buildTopN	starting	
4	11/10/2024	pkg_server.buildSelect	psql wrapper	select * from (select respjson,lastmodified from v_usr where id=nvl(:id,id) order by id asc)
4	11/10/2024	pkg_server.buildSelect	psql order by	select respjson,lastmodified from v_usr where id=nvl(:id,id) order by id asc
3	11/10/2024	pkg_server.getValidateSortOrder	PSORTORDER	
3	11/10/2024	pkg_server.getValidateSortOrder	starting	
4	11/10/2024	pkg_server.buildOrderBy	sortBy is null	
4	11/10/2024	pkg_server.buildOrderBy	pdeforderby	id
4	11/10/2024	pkg_server.buildOrderBy	presourcetype	User
3	11/10/2024	pkg_server.buildOrderBy	starting	
4	11/10/2024	pkg_server.buildSelect	psql where	select respjson,lastmodified from v_usr where id=nvl(:id,id)

## Request Body Detail

Body

```
{
  "schemas": ["urn:ietf:params:scim:schemas:core:2.0:User"],
  "externalId": "684684684646",
  "userName": "bill1028@example.com",
  "name": {
    "formatted": "Mr Bill Jones Jr",
    "familyName": "Jones",
    "givenName": "Bill",
    "middleName": "Z",
    "honorificPrefix": "Mr",
    "honorificSuffix": "Jr"
  },
  "displayName": "Bill Jones",
  "nickName": "Bill",
  "emails": [
    {
      "value": "bill1028@example.com",
      "type": "work",
      "primary": true
    },
    {
      "value": "billjones@gmail.com",
      "type": "home"
    }
  ],
  "addresses": [
    {
      "type": "work",
      "streetAddress": "100 Universal City Plaza",
      "locality": "Hollywood",
      "postalCode": "90028",
      "country": "US"
    }
  ]
}
```

### 2. Config -> Parameters - Configurable Server Parameters

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Server Logging Level

Loglvl  
Verbose(5)

Save

Items Per Page

Items Per Page  
50

Save

### 3. Config -> Document Store - Configuration artifacts to support the endpoints. The User and Group schemas can be edited.

SCIMADMIN

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Config \ Config Store Report

Config Store Report

	Docname ↕	Childdoc	Endpointname	Created	Lastmod
	Group	Meta	Schemas	9/13/2024	11/5/2024
	Meta			11/5/2024	11/5/2024
	ServiceProviderConfig		ServiceProviderConfig	9/13/2024	11/6/2024
	User	Meta	Schemas	9/13/2024	11/5/2024

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Config \ Config Store Report \ Config Store Edit

Config Store Edit

Doc Name

Child Doc

Endpoint Name

Conf Type

Docstore

Cancel

4. Config -> Endpoints - Endpoint configurations to match the REST endpoints.

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Config \ Endpoint Report

Endpoint Report

Edit	Name ↕	Path	Readonly	Resourcetype	Description	URN	Is Enabled	Is ResourceType
	Users	/Users	false	User	User Account	urn:ietf:params:scim:schemas:core:2.0:User	true	true
	ServiceProviderConfig	/ServiceProviderConfig	true	ServiceProviderConfig		urn:ietf:params:scim:schemas:core:2.0:ServiceProviderConfig	true	false
	Search	.search	true			urn:ietf:params:scim:api:messages:2.0:ListResponse	true	false
	Schemas	/Schemas	true	Schema			true	false
	ResourceTypes	/ResourceTypes	true	ResourceType		urn:ietf:params:scim:schemas:core:2.0:ResourceType	true	false
	Me	/Me	true				false	false
	Groups	/Groups	false	Group	Group	urn:ietf:params:scim:schemas:core:2.0:Group	true	true
	Bulk	/Bulk	false			urn:ietf:params:scim:api:messages:2.0:BulkResponse	false	false

Endpoint Edit

×

Name

Path

Readonly

Resourcetype

Description

Urn

Isenabled

Isresourcetype

Respview

Sortcoldefault

Cancel

Create

5. Config -> Attributes - A flat view of the attributes once parsed from the schemas(kept in document store).

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Actions

Schema	Attrid	Name	Attrpath	Jsonpath	Uniqueness	Returned	Mutability	Caseexact
User	263218C1736D7437E0630311A8C089F9	userName	userName	\$[*].userName	server	default	readWrite	false
User	263218C1736D7437E0630311A8C089F9	id	id	\$[*].id	server	always	readOnly	false
User	263218C17377437E0630311A8C089F9	externalId	externalId	\$[*].externalId	server	always	immutable	false

6. Config -> Filters - A list of the filters available for the SCIM filter parameter.

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Filters Report

Edit	SCIM Expression	SQL Expression
	lt	json_exists(respjson,'\$?(@.Sattr < \$\$bind)' passing :\$bind as "\$bind")
	le	json_exists(respjson,'\$?(@.Sattr <= \$\$bind)' passing :\$bind as "\$bind")
	ew	like '%:compval'
	pr	json_exists(respjson,'\$.Sattr')
	eq	json_exists(respjson,'\$?(@.Sattr == \$\$bind)' passing :\$bind as "\$bind")
	sw	json_exists(respjson,'\$?(@.Sattr starts with \$\$bind)' passing :\$bind as "\$bind")
	ge	json_exists(respjson,'\$?(@.Sattr >= \$\$bind)' passing :\$bind as "\$bind")
	ne	json_exists(respjson,'\$?(@.Sattr <> \$\$bind)' passing :\$bind as "\$bind")
	co	json_exists(respjson,'\$?(@.Sattr has substring \$\$bind)' passing :\$bind as "\$bind")
	gt	json_exists(respjson,'\$?(@.Sattr > \$\$bind)' passing :\$bind as "\$bind")

Filter Edit

Scimexpression

Sqlexpression

Isenabled

Partcount

Cancel

Create

7. Resources -> Users: SCIM Users.

SCIMADMIN		
<div><div>Home</div><div>Server Requests</div><div>Config</div><div>Resources</div><div>Users</div><div>Groups Members</div><div>Groups</div></div>	Resources \ Users Report	
	<div><div>Q</div><div>Go</div><div>Actions</div></div>	
	<div>Id</div>	<div>External ID</div>
	<div>2376A4555F2C6083E0630311A8C03F46</div>	<div>701984</div>
	<div>259E3177DA8D9E05E0631611A8C0184C</div>	<div>684684684646</div>
	<div>2644DAA6C32FA6C3E0630311A8C0CDAA</div>	<div>00ukxg0j5jhOIC0kE5d7</div>
	<div>25312F67F1549B68E0630311A8C0E520</div>	<div>123456798</div>
	<div>258D79FE18A7BEA7E0631611A8C0E88A</div>	
	<div>2642749B257DD013E0631611A8C074E8</div>	<div>00uijnc1ceSGdhuLy5d7</div>
	<div>263FA878E6C5A30AE0631611A8C0F33E</div>	<div>00uj17hnsoEg5M4it5d7</div>
<div>Username</div>		<div><div>bjensenzabcde@example.com</div><div>bill1028@example.com</div><div>isaac.mccall@example.com</div><div>nickw@example.com</div><div>Runscope293Tdlwcieis032@atko.com</div><div>trinity@whiterabbit.fake</div><div>foxglove@example.com</div></div>

User Detail

Id	2694CFC225E1DDDFE0631611A8C00AB7
Externalid	684684684646
Username	bill1028@example.com
Last Name	Jones
First Name	Bill
Display Name	Bill Jones
Middle Name	Z
Prefix	Mr
Suffix	Jr
Title	Developer
Usertype	Employee
Preferredlanguage	en-US
Locale	en-US
Timezone	America/New_York
Active	true
Created	11/10/2024
Lastmodified	11/10/2024

Phone

8. Resources -> Group Members: SCIM Group Members.



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Groupdisplayname	Groupid	Memberdisplayname
NESTEDGROUPS	25646D78971D362DE0631611A8C0A9F7	
NESTEDGROUPS	25646D78971D362DE0631611A8C0A9F7	
NESTEDGROUPS999	258B131ADCACF73AE0631611A8C00895	
NESTEDGROUPS999	258B131ADCACF73AE0631611A8C00895	
OKTAGROUP13579	2642FC74E4F4AAEDE0630311A8C01B4B	Selasphorus rufous
OKTAGROUP13579	2642FC74E4F4AAEDE0630311A8C01B4B	Digitalis purpurea

9. Resources -> Groups: SCIM Groups.

SCIMADMIN

Home

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Go

Actions

Externalid	Displayname
8C56B0E0630311A8C0D1	NESTEDGROUPS
	OKTAGROUP13579
0311A8C0D1	NESTEDGROUPS1028
	The Garden
0311A8C0D199@@@9	PARENTGOUP
0311A8C0D1999	NESTEDGROUPS999

## Integrating With Okta

1. Start by accessing the OKTA admin console. Next, go to the **Applications** menu and click **Create App Integration**.

- Dashboard 
- Directory 
- Customizations 
- Applications 
- Applications
- Self Service
- API Service Integrations

## Applications

### Developer Edition provides a limited number of

Deactivate unused apps or check out our [plans page](#). Contact us to find a plan

[Create App Integration](#)[Browse App Catalog](#)[Assign Users to App](#)

2. Select **SAML 2.0** and click **Next**.

### Create a new app integration

Sign-in method

[Learn More](#) 

- ☐ **OIDC - OpenID Connect**  
Token-based OAuth 2.0 authentication for Single Sign-On (SSO) through API endpoints. Recommended if you intend to build a custom app integration with the Okta Sign-In Widget.
- ☒ **SAML 2.0**  
XML-based open standard for SSO. Use if the Identity Provider for your application only supports SAML.
- ☐ **SWA - Secure Web Authentication**  
Okta-specific SSO method. Use if your application doesn't support OIDC or SAML.
- ☐ **API Services**  
Interact with Okta APIs using the scoped OAuth 2.0 access tokens for machine-to-machine authentication.

[Cancel](#)[Next](#)

3. Give the app a name and click **Next**.

## Create SAML Integration


1 General Settings	2 Configure SAML	3
--------------------	------------------	---



1 General Settings

App name

APEX

App logo (optional)





App visibility

☐ Do not display application icon to users

Cancel

Next

4. The SAML integration will not be fully implemented but you must supply required values. Click **Next**.

# Create SAML Integration

1 General Settings

2 Configure SAML

## A SAML Settings

### General

Single sign-on URL ?

☒ Use this for Recipient URL and Destination URL

Audience URI (SP Entity ID) ?

Default RelayState ?

If no value is set, a blank RelayState is sent

Name ID format ?

Application username ?

Update application username on

5. Select **This is an internal app that we have created** and click **Finish**.

6. Go to the **General Tab**, click **Edit** and Select **Enable SCIM Provisioning**. Click **Save**.



# APEX

Active ▾



[View Logs](#)

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**General**

[Sign On](#)

[Provisioning](#)

[Import](#)

[Assignments](#)

## App Settings

[Cancel](#)

Application label

APEX

This label displays under the app on your home page

Application visibility

☐ Do not display application icon to users

Provisioning

☒ Enable SCIM provisioning

Auto-launch

☐ Auto-launch the app when user signs into Okta.

Application notes for end users

This note will be accessible to all end users via their dashboard

7. Go to the **Provisioning** tab and provide the SCIM Provisioning configuration. The Import Groups action is not supported due to the apparent PUT call which APEX ORDS does not support.

GeneralSign OnProvisioningImportAssignments

SettingsIntegration

SCIM Connection

SCIM version2.0

SCIM connector base URLhttps://apexurl.com/apex/<ordsmodule>/v2

Unique identifier field for usersuserName

Supported provisioning actions

☒ Import New Users and Profile Updates

☒ Push New Users

☒ Push Profile Updates

☒ Push Groups

☐ Import Groups

Authentication ModeHTTP Header

HTTP Header

AuthorizationBearer .....

The HTTP Bearer header is being used for authentication in this example. Configuring APEX authentication is covered in the APEX docs. The **Test Configuration Connector** button should succeed. Click **Save**.

# Test Connector Configuration



Connector configured successfully



These provisioning features were detected in your connector:

User Import	✓
Import Profile Updates	✓
Create Users	✓
Update User Attributes	✓
Push Groups	✓
Import Groups	✗

Close

8. Configure the **To App** provisioning. Password sync is not supported. Click **Save**.

**Settings**  
To App  
To Okta  
Integration

 → 

### Provisioning to App Cancel

**Create Users** ✓ Enable

Creates or links a user in APEX when assigning the app to a user in Okta.

The [default username](#) used to create accounts is set to **Okta username**.

---

**Update User Attributes** ✓ Enable

Okta updates a user's attributes in APEX when the app is assigned. Future attribute changes made to the Okta user profile will automatically overwrite the corresponding attribute value in APEX.

---

**Deactivate Users** ✓ Enable

Deactivates a user's APEX account when it is unassigned in Okta or their Okta account is deactivated. Accounts can be reactivated if the app is reassigned to a user in Okta.

9. Configure the **To Okta** provisioning.



## User Creation & Matching

Cancel

Imported user is an exact match to Okta user if

- ☒ Okta username format matches
- ☐ Email matches

- ☐ The following attribute matches:

firstName

- ☐ The following combination of attributes matches:

Okta username format or Email

Allow partial matches

- ☐ Partial match on first and last name

Confirm matched users

- ☐ Auto-confirm exact matches
- ☐ Auto-confirm partial matches


Confirm new users

- ☐ Auto-confirm new users
- ☐ Auto-activate new users

Save






Cancel

10. Click **Import Now** to perform an import.



# APEX

Active



[View Logs](#) [Monitor Imports](#)

General

Sign On


Provisioning


Import

Assignments

Push Groups

## Import Results

 Import Now


 Clear Unconfirmed Users

4 imported users need review · 0 imported users confirmed

ALLNOEXACTPARTIALIGNORED

Confirm/Cancel

Show 10

 Imported User

Assignment


### 4 users scanned!

- 4 new users imported
- 0 existing users updated
- 0 existing users unchanged
- 0 users removed

### 5 groups scanned!






- 0 new groups imported
- 1 existing groups updated

11. Assign an OKTA group to the application. Click **Assign to Groups**.



# APEX

Active



[View Logs](#) [Monitor Imports](#)

General

Sign On

Provisioning

Import

Assignments

Push Groups

Assign

Convert assignments

Groups

Filters

People

Groups

Priority

Assignment

01101110

01101111

01101100

01101000

01101001










01101110

01100111

No groups found

Click **Assign** next to the group. Click **Save and Go Back**. Click **Done**.

## Assign APEX to Groups

	<b>Everyone</b> All users in your organization	<a href="#">Assign</a>
	<b>NESTEDGROUPS</b>	<a href="#">Assign</a>
	<b>NESTEDGROUPS1028</b>	<a href="#">Assign</a>
	<b>NESTEDGROUPS999</b>	<a href="#">Assign</a>
	<b>OKTAGROUP13579</b> This group came from OKTA	<a href="#">Assign</a>
	<b>OKTAORIGINATED</b> This is a group that was created in OKTA.	<a href="#">Assign</a>
	<b>PARENTGOUUP</b>	<a href="#">Assign</a>
	<b>The Garden</b> Terraform created this group	<a href="#">Assign</a>
	<b>The Garden</b>	<a href="#">Assign</a>

[Done](#)

12. Assign a user to the group(not pictured). Then go to the **Push Groups** tab. Click **Assign to Groups**. Filter for the OKTA group and push the group membership APEX.

## Push Groups to APEX

Close

Pushed Groups

All

Errors

By name


By rule

Push groups by name

To sync group memberships from Okta to APEX, choose a group in Okta and a group in the app.

OKTAGROUP13579





☒ Push group memberships immediately

Group	Match result & push action
 OKTAGROUP13579	No match found

[+ Create Group ▾](#)

Last push will update.

## Push Groups to APEX

<div><div>Push Groups ▾</div><div>Refresh App Groups</div><div>Bulk Edit</div><div></div><div>Search...</div></div>				
Pushed Groups	Group In Okta	Group In APEX	Last Push	Push Status
All	All errors resolved			
Errors	 OKTAGROUP13579 This group came from...	 OKTAGROUP13579 This group came from...	November 6, 2024 at 1:41:26 PM EST	Active ▾ 
By name				
By rule				

## Integrating With Azure

1. Click **create your own application**

# Create your own application



Got feedback?

If you are developing your own application, using Application Proxy, or want to integrate an application that is not in the gallery, you can create your own application here.

What's the name of your app?

APEX SCIM



What are you looking to do with your application?

- ☐ Configure Application Proxy for secure remote access to an on-premises application
- ☐ Register an application to integrate with Microsoft Entra ID (App you're developing)
- ☒ Integrate any other application you don't find in the gallery (Non-gallery)

## We found the following applications that may match your entry

We recommend using gallery applications when possible.



Outreach SCIM



ASC Contracts



Pexip Service (MMV legacy app) - SSO with EntraID


Create


2. Click **Provision User Accounts**.


## Properties

AS	Name ⓘ	APEX SCIM
	Application ID ⓘ	a4e7cf68-c243-43bb-9706-f...
	Object ID ⓘ	4da7a543-8fa2-4cd2-8af8-e...


## Getting Started

**1. Assign users and groups**  
Provide specific users and groups access to the applications  
[Assign users and groups](#)

**2. Set up single sign on**  
Enable users to sign into their application using their Microsoft Entra credentials  
[Get started](#)

**3. Provision User Accounts**  
Automatically create and delete user accounts in the application  
[Get started](#)

3. Select **automatic provisioning mode** and provide the credentials(bearer token).

 Got feedback?



Automate identity lifecycle management with Microsoft Entra

Automatically create, update, and delete accounts when users join, leave, and move within your organization. [Learn more.](#)

[Get started](#)

[What is provisioning?](#)

[Plan an application deployment.](#)

[Configure automatic provisioning.](#)

4. Turn the **provisioning status On** and click **Save**. The access token for provisioning can be obtained from Postman.



> Default Directory | Enterprise applications > Enterprise applications | All applications > APEX SCIM

## APEX SCIM | Provisioning



Save



Discard

Overview

Provision on demand

Image

**Provisioning**

Users and groups

Expression builder

Monitor

Provisioning logs

Audit logs

Insights

Troubleshoot

New support request

### Provisioning Mode

Automatic

Use Microsoft Entra to manage the creation and synchronization of user assignment.

▼ Admin Credentials

▼ Mappings

▼ Settings

### Provisioning Status ⓘ

On

Off

Home > Default Directory | Enterprise applications > Enterprise applications | All applications > APEX SCIM | Overview >

## Provisioning

Save Discard

### Provisioning Mode

Automatic

Use Microsoft Entra to manage the creation and synchronization of user accounts in APEX SCIM based on user and group assignment.

^ Admin Credentials

#### Admin Credentials

Microsoft Entra needs the following information to connect to APEX SCIM's API and synchronize user data.

Tenant URL ⓘ

<https://apexurl.com/apex/<ordsmodule>/v2>

Secret Token

\*\*\*\*\*

Test Connection

✓ Testing connection to APEX SCIM


The supplied credentials are authorized to enable provisioning

### 5. Click **Assign Users and Groups**

Microsoft Azure

Search resources

Home > Default Directory | Enterprise applications > Enterprise applications | All applications >



APEX SCIM | Overview

Enterprise Application

Overview

Deployment Plan

Diagnose and solve problems

Manage

Security

Activity

Troubleshooting + Support

AS

Name ⓘ

APEX SCIM


Application ID ⓘ

a4e7cf68-c243-43bb-9706-f...

Object ID ⓘ

4da7a543-8fa2-4cd2-8af8-e...

Getting Started



1. Assign users and groups

Provide specific users and groups access to the applications

[Assign users and groups](#)

6. Click **Add User/Group**. Click **Users** -> None Selected -> Select the user(s) -> Click **Select**.



Microsoft Azure

Show portal menu

Search resources, services, and docs (G+)

Home > Default Directory | Enterprise applications > Enterprise applications

Add Assignment

Default Directory

Groups are not available for assignment due to your Active Directory plan level for the application.

Users

None Selected

Select a role

User

Assign



Users

Try changing or adding filters if you don't see what you're looking for

Search

2 results found

All Users

	Name	Type
<input checked="" type="checkbox"/>	 Gregory Smith	User
<input type="checkbox"/>	 [REDACTED]	User

Select

7. Click **Assign**.

Show portal menu

ft Azure

[Home](#) > [Default Directory | Enterprise applications](#) > [Enterprise applications |](#)

# Add Assignment ...

Default Directory



Groups are not available for assignment due to your Active Directory plan level. You the application.

Users

1 user selected.

Select a role

User

Assign

8. The provisioning statut should appear with the status **Success**.

[Home](#) > [Default Directory | Enterprise applications](#) > [Enterprise applications | All applications](#) > [APEX SCIM | Overview](#) >

## Provisioning Logs ...

[Download](#) [Learn more](#) [Refresh](#) [Columns](#) [Got feedback?](#)

<div><input type="text" value="Search"/></div> <div>Date : <b>Last 24 hours</b>   Show dates as : <b>Local</b>   Status : <b>All</b>   Action : <b>All</b>   Application contains <b>4da7a543-8fa2-4cd2-8af8-e0d67aa3c242</b> <a href="#">Add filters</a></div>						
Date	Identity	Action	Source System	Target System	Status	
11/7/2024, 1:59:36 PM	Display Name Gregory Smith Source ID 46982fbc-a9f8-4fbe-a226-d69ee7 Target ID 26583C4BC05D98CAE0631611A8C	Create	Microsoft Entra ID	customappsso	Success	