

Changes while working with Cisco API's

Note this document is for those who are already using Cisco API's and have created applications on Cisco API console prior to Mar 1, 2023. If you have created applications prior to Mar 1, 2023, your client id and secret will expire by Sep 30, 2023. In order to continue using Cisco API's you will have make certain changes to your existing code.

These changes are described primarily in 3 steps.

- a. Register new application for using Cisco API's at <https://apiconsole.cisco.com>
- b. Use new token URL along with new application details from step 1 to generate token.
- c. Use newly generated token to make API call using modified domain name in the API endpoint URL.

a) Register new Application.

1. Login to developer portal at <https://apiconsole.cisco.com>
2. Click on "My apps and keys" and you will see all your existing applications with the API lists for the applications. You will see deprecated word in the API name for your existing applications. Make a note of all API's listed here. You will need this list while registering new applications.

Example:

test26_web			
Registered Token	1/26/23 2:01 pm	Application Type: Web	Grant Type: Authorization Code, Implicit, Refresh
API	KEY	CLIENT SECRET	STATUS
HelloWorld- Deprecated: HelloWorld	rpwqv4m6y3mppjveatkxuctm	Sb8JctFQPAAekCym5xbsEkGx	active
Edit This App Delete This App Add APIs			

3. You can right click on “Register a New App” and select “open link in new tab”. This way you can have list of existing applications open in one tab and “register new app” on another tab.
4. “Register a New App” page has changed. Primarily related to “Application Type” and “Grant Type”. Your selection of “Application Type” will change the “Grant Type” offered.

Application Type

Your choice of “Application Type” will determine the “Grant Type” available:

- ☒ Browser
- ☐ Web
- ☐ Native
- ☐ Service

Grant Type

Choose at least one Grant Type:

- ☐ Resource Owner Password Credentials
- ☐ Authorization Code [with PKCE only for Browser and Native app type]
- ☐ Client Credentials
- ☐ Implicit
- ☐ Refresh Token

Redirect URI (You can enter multiple URI with comma separated.)

You can enter multiple redirect URIs.

5. Take a note of “Grant Type” listed on the existing application on the “My Apps and Keys” page under “Applications” section. You may be required to register multiple applications if you are using same application for different grant types today.

Follow following table for selecting right “Application Type” to get exact “Grant Type” in your existing application.

Application Type Valid Grant Type

browser	authorization_code , implicit
native	authorization_code , implicit , password , refresh_token
service	client_credentials
web	authorization_code , implicit , refresh_token

6. Once you have selected the right “Application type” and “Grant type”, you can take a note of “API’s” listed on existing application. Select the same list of “API’s” while registering new application. Here you will select same API’s without the deprecated word in it. Note that you won’t see deprecated API’s list while registering.
7. Agree to terms of service and click on “Register”.
8. You will get the new application details in email as well as you can view it by clicking “My apps and keys”. Note down client id and secret for the application which you will use to generate the token.

Example:

This example shows Application creation for HelloWorld API with Application Type as “Service” and Grant Type = “Client Credentials”

Register an Application

Get a key and register your application using the form below to start working with our APIs.

Application Details

Name of your application (you can change it later) *

Client credential Flow example Hello World

Please describe what your application will do

this application will be used for client credentials flow

Application Type : Service

Grant Type: Client Credentials

Application Type

Your choice of "Application Type" will determine the "Grant Type" available:

☐ Browser

☐ Web

☐ Native

☒ Service

Grant Type

Choose at least one Grant Type:

☐ Resource Owner Password Credentials

☐ Authorization Code [with PKCE only for Browser and Native app type]

☒ Client Credentials

☐ Implicit

☐ Refresh Token

Redirect URI (You can enter multiple URI with comma separated.)

You can enter multiple redirect URIs.

☒ HelloWorld

☒ HelloWorld

RATE LIMITS

100 Calls per second

100,000 Calls per day

Terms of Service

Please review the services you have selected above and agree to the [terms of service](#) 

☒ I agree to the terms of service

Register

Cancel

Client credentials example Flow Hello World

this application would be used for client credentials flow Application Type: Service Grant Type: Client credentials

Registered 3/1/23 10:08 pm Application Type: Service Grant Type: Client Credentials

API	KEY	CLIENT SECRET	STATUS
HelloWorld	xs5zhea6sczhenmycxc3tp4b	XeFzjrpZd9zHDdTudnBMUuB7	active

[Edit This App](#) [Delete This App](#) [Add APIs](#)

b) Use new token URL along with new application details from step 1 to generate token

Your code is using the following end point to generate a token on the platform.

<https://cloudsso.cisco.com/as/token.oauth2>

Going forward you will use the following token generation endpoint.

<https://id.cisco.com/oauth2/default/v1/token>

1. Old token generation URL: <https://cloudsso.cisco.com/as/token.oauth2>
2. You can use your newly created "Client id" and "Secret" with the new token generation URL for generating a token.

Example for “Application Type” = “Service” and “Grant Type” = “Client Credentials”

[https://id.cisco.com/oauth2/default/v1/token?grant_type=client_credentials&client_id=XXXXXXXXXXXX &client_secret=XXXXXXXXXXXX](https://id.cisco.com/oauth2/default/v1/token?grant_type=client_credentials&client_id=XXXXXXXXXXXX&client_secret=XXXXXXXXXXXX)

Important: you need to pass additional header with the token generation call without it you won't get the token.

Content-Type: application/x-www-form-urlencoded

3. Token generation call using Postman:

POST https://id.cisco.com/oauth2/default/v1/token?grant_type=client_credentials&client_id=XXXXXXXXXXXX&client_secret=XXXXXXXXXXXX **Send**

Params ● Auth ● Headers (10) Body Pre-req. Tests Settings Cookies

Query Params

	KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/>	grant_type	client_credentials			
<input type="checkbox"/>	scope	product			
<input checked="" type="checkbox"/>	client_id	4f04aef4-18b8-49c0-9671-bf652...			
<input checked="" type="checkbox"/>	client_secret	arPLTu-i45QgU1418ojPEY3pXfgF5...			
	Key	Value	Description		

Body **200 OK** 397 ms 3 KB **Save Response**

Pretty Raw Preview Visualize JSON

```
1 {
2   "token_type": "Bearer",
3   "expires_in": 3600,
4   "access_token":
     "eyJraWQiOiJBNZU1obml2T1BZMG5teUh6Z1lCNS1IYTRqTWpIeGNURWJwLUs1dXdoSmxjIiwiaWF0Ijoi
     eyJ2ZXIiOiJEsImp0aSI6IkFULmhh2YmhLdzF0THh3VmRsdVZpb1U3RFhvMWdqdHhaT0UcV1BLThxS
     UdMYVkiLCJpc3MiOiJodHRwczovL2lkLmNpc2NvLmNvbS9vYXV0aDIvZGVmYXVsdCIsImF1ZCI6Im
     FwaTovL2RlZmF1bHQiLCJpYXQ0IjE2Nzc2MDc2MzcsImV4cCI6MTY3NzYxMTIzNywiY2lkIjoingY
     wNGF1ZjQ0MTI0OC00OWMwLTK2NzEtYmY2NTIxZW1YWFhIiwic2NwIjpbImN1c3RvbXNjb3B1I0s
     ImFjY2Vzc19sZXZlbnCI6MSwic3ViIjoingYwNGF1ZjQ0MTI0OC00OWMwLTK2NzEtYmY2NTIxZW1Y
     WFlhIiwiaWF0IjoiNzVhF9uYW11TioihbVshCudWxsTiwiYXNwTioingYwNGF1ZjQ0MTI0OC00OWMwLTK2Nz
```

4. Token generation using curl #

curl -X POST

```
'https://id.cisco.com/oauth2/default/v1/token?grant_type=client_credentials&client_id=pahfekfcjkhk8w2hwpjffydgt&client_secret=Qv59wJ6nDAK7mQTPrJxCZ5zZ' --header 'Content-Type: application/x-www-form-urlencoded' --header 'Content-Length: 0'
```

5. Now it's time to make an API call since you have generated the "token" with the newly created application details.

Note that your "API endpoint URL" is changed for compared to your earlier endpoint URL.

Example: Take a note of domain name change from api.cisco.com to apix.cisco.com.

Please note that your API endpoint URL remains same except domain name.

Old API endpoint URL: https://api.cisco.com/hello

Old domain name: api.cisco.com

New API endpoint URL: https://apix.cisco.com/hello

New domain name: apix.cisco.com

Test your API call with the newly created token. You are ready to use this in your code / application.

Example of API call with client credentials.

Postman:

2MBS4ZEDq9cecsBxdn406G9s1fJqK_95C_r6vIQHY5k-
gx__lQnkoeD3gvhAgCl5eCuB4DPW-
nv0xBshRNyGBk11ZDyx83RAv6Ai_3TkleeEalM5OTr7oMc8MxrPLmzl
0c6txnqcX7QSHS5S3LROqYFrCiQBPTsGcoL-
vhL351XzJ0Dkfm2Hz94AVYym_alb69yE3QWE_gb0nuoA0GPx3GHi81
xJN8bau-kwyVXQXzmjDew3BW4PSDCujwQRAgQX5-FYiKqtmlwA'