

# 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
<a href="#">Edit This App</a> <a href="#">Delete This App</a> <a href="#">Add APIs</a>			

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**

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

<https://cloudsso.cisco.com/as/token.oauth2> (being deprecated)

You will use the following token generation endpoint going forward.

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

1. You can use your newly created "Client id" and "Secret" with the new token generation URL for generating a token.

Example: For Application created using “Application Type” = “Service” and “Grant Type” = “Client Credentials”

`https://id.cisco.com/oauth2/default/v1/token?grant_type=client_credentials&client_id=XXXXXXXXXXXXXXXXX &client_secret=XXXXXXXXXXXXXXXXX`

**Important:** Its important to pass following header with the token generation call  
Without it you won't your token call won't be successful.

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

2. Token generation call using Postman:

POST ▼ [https://id.cisco.com/oauth2/default/v1/token?grant\\_type=client\\_credentials&client\\_id=pahfekfcjkhk8w2hwpjffydgt&client\\_secret=Qv59wJ6nDAK7mQTPrJxCZ5zZ](https://id.cisco.com/oauth2/default/v1/token?grant_type=client_credentials&client_id=pahfekfcjkhk8w2hwpjffydgt&client_secret=Qv59wJ6nDAK7mQTPrJxCZ5zZ) 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":
      "eyJraWQiOiJBNZU1obml2T1BZMG5teUh6Z1lCNS1IYTRqTWpIeGNURWJwLUs1dXdoSmxjIiwiaWxn
      IjoiaU1MyNTYifQ.eyJ2ZXIiOiJESImp0aSI6IkFULmh2YmhlZDZFOThh3VmRSdVZpb1U3RFhvMWdqdHhaT01UcVlBLThxS
      UdMYVkiLCJpc3MiOiJodHRwczovL2lkLmNpc2NvLmNvbS9vYXV0aDIvZGVmYXVsdCI6ImF1ZCI6Im
      FwaTovL2RlZmF1bHQiLCJpYXQiOiJlZ2Nzc2MDc2MzcsImV4cCI6MTY3NzYxMTIzNywiY2lkIjoiaWY
      wNGF1ZjQzMThiOC00OWMwLTK2NzEtYmY2NTIxZW1YWFhIiwic2NwIjpbImN1c3RvbXNjb3BlIiwiaW
      ImFjY2Vzc19sZXZlbnCI6MSwic3ViIjoiaWYwNGF1ZjQzMThiOC00OWMwLTK2NzEtYmY2NTIxZW1Y
      WFhIiwiaW17nVshF9uYW11TioibnVshCRudWxsTiwiYXNwTioiaWYwNGF1ZjQzMThiOC00OWMwLTK2Nz
  
```

### 3. 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'

### c) Use newly generated token to make API call using modified domain name in the API endpoint URL

1. Now it's time to make an API call since you have generated the "token" with the newly created application details.
2. Note that your "API endpoint URL" is changed 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

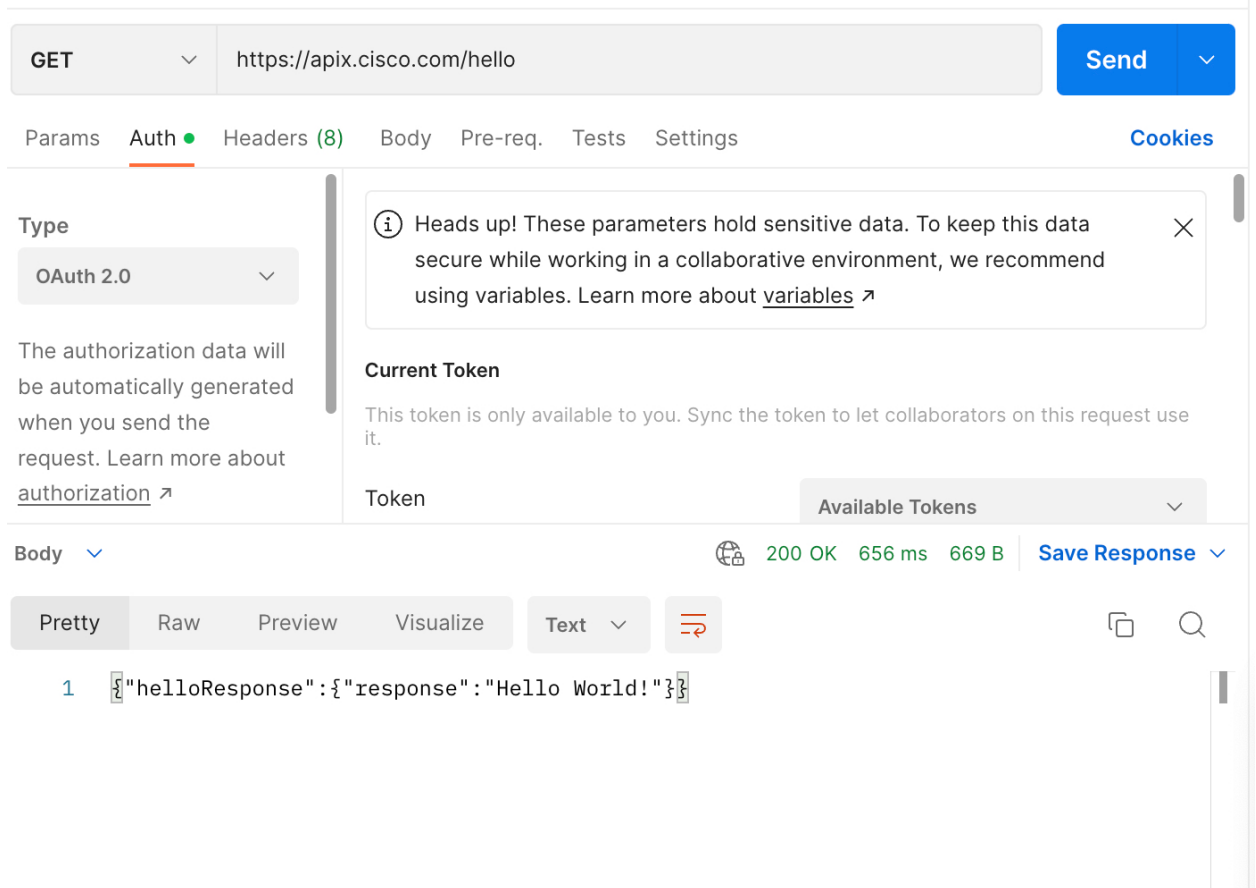
Everything in the URL other than the domain name remains the same.

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

### **Example of API call using Client Credentials as Grant Type:**

#### **Postman:**





**Curl:**

```
curl --location 'https://apix.cisco.com/hello' --header 'Authorization:
Bearer
eyJraWQiOiJNZU1obml2T1BZMG5teUh6Z1lCNS1lYTRqTWpleGNUR
WJwLU1dXdoSmxjliwiYWxnljoiUIMyNTYifQ.eyJ2ZXliOiJEsImp0aSI6Ik
FULm5fUWlieVFRNEJ6cnJOOVAYUmtUaE9uaERBdEpsbE1HQTFDcj
VvS0t0Qm8iLCJpc3MiOiJodHRwczovL2lkLmNpc2NvLmNvbS9vYXV0
aDlvZGVmYXVsdCIsImF1ZCI6ImFwaTovL2RlZmF1bHQiLCJpYXQiOiJ
E2Nzc2OTg4MjYsImV4cCI6MTY3NzcwMjQyNiwiY2kljoibnlnMzh4ZW
05Zmoydjg3YndhOTk1ODZ1liwic2NwLjpbImN1c3RvbXNjb3Blll0sImFj
Y2Vzc29sZXZlbCI6MSwic3ViljoibnlnMzh4ZW05Zmoydjg3YndhOTk1O
DZ1liwiZnVsbnF9uYW1ljoibnVsbCBudWxsliwiYXpwljoibnlnMzh4ZW05
Zmoydjg3YndhOTk1ODZ1ln0.H16tUd2KWyBYW_jmAU-
b7qvhPe_Kt05zH_7GSpAAYB5u1bkeqjf4TlqKSP7EVr58wkF2K59xEm
```

2MBS4ZEDq9cecsBxdn406G9s1fJqK\_95C\_r6vIQHY5k-  
gx\_\_lQnkoeD3gvhAgCI5eCuB4DPW-  
nv0xBshRNyGBk11ZDyx83RAv6Ai\_3TkleeEalM5OTr7oMc8MxrPLmzl  
0c6txnqcX7QSHS5S3LROqYFrCiQBPTsGcoL-  
vhL351XzJ0Dkfm2Hz94AVYym\_alb69yE3QWE\_gb0nuoA0GPx3GHi81  
xJN8bau-kwyVXQXzmjDew3BW4PSDCujwQRAgQX5-FYiKqtmlwA'