

Google Drive Authenticate a Connector Instance

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You can authenticate with Google to create your own instance of the Google Drive connector through the UI or through APIs. Once authenticated, Google Drive can use the connector instance to access the different functionalities offered by the Google Drive platform.

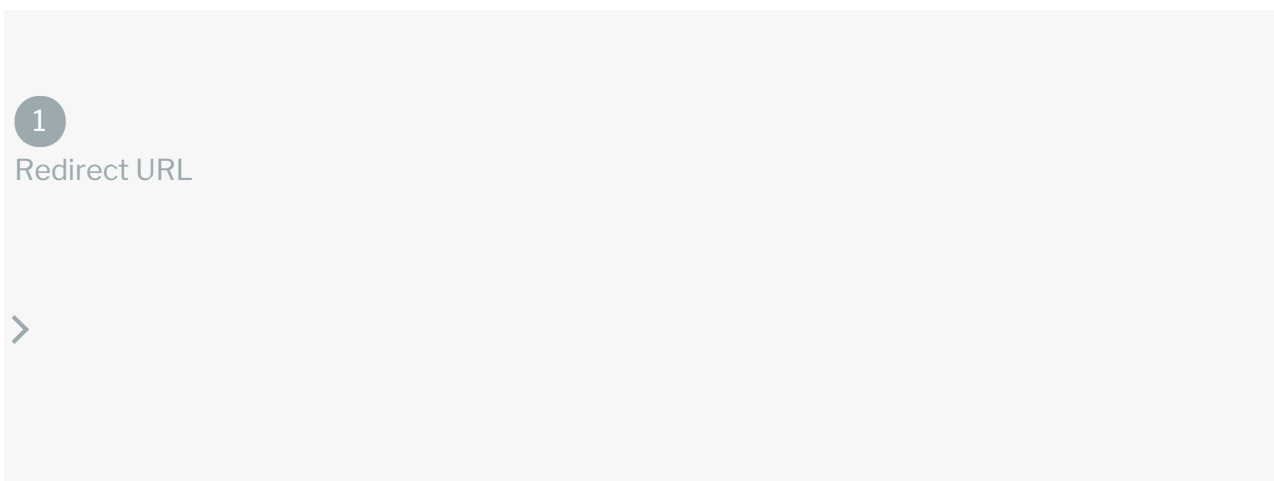
Authenticate Through the UI

Use the UI to authenticate with Google Drive and create a connector instance. Because you authenticate with Google Drive via OAuth 2.0, all you need to do is add a name for the instance. After you create the instance, you'll log in to Google Drive to authorize SAP Cloud Platform Open Connectors access to your account. For more information about authenticating a connector instance, see [Authenticate a Connector Instance \(UI\)](#).

After successfully authenticating, we give you several options for next steps. [Make requests using the API docs](#) associated with the instance, [map the instance to a common resource](#), or [use it in a formula template](#).

Authenticate Through API

Authenticating through API is a multi-step process that involves:



2

Authenticate Users



3

Authenticate Instance

- [Getting a redirect URL](#). This URL sends users to the vendor to log in to their account.
- [Authenticating users and receiving the authorization grant code](#). After the user logs in, the vendor makes a callback to the specified url with an authorization grant code.
- [Authenticating the connector instance](#). Using the authorization code from the vendor, authenticate with the vendor to create a connector instance at SAP Cloud Platform Open Connectors.

Getting a Redirect URL

1

Redirect URL



2

Authenticate Users



3

Authenticate Instance

Use the following API call to request a redirect URL where the user can authenticate with the API provider. Replace `{keyOrId}` with the connector key, `googledrive`.

```
GET /elements/{keyOrId}/oauth/url?apiKey=&apiSecret=&callbackUrl=
```

Query Parameters

Query Parameter	Description
apiKey	The key obtained from registering your app with the provider. This is the OAuth Client ID that you recorded in API Provider Setup .
apiSecret	The secret obtained from registering your app with the provider. This is the OAuth Client Secret that you recorded in API Provider Setup .
callbackUrl	The URL that will receive the code from the vendor to be used to create a connector instance. This is the Callback URL that you noted at the end of API Provider Setup .

Example cURL

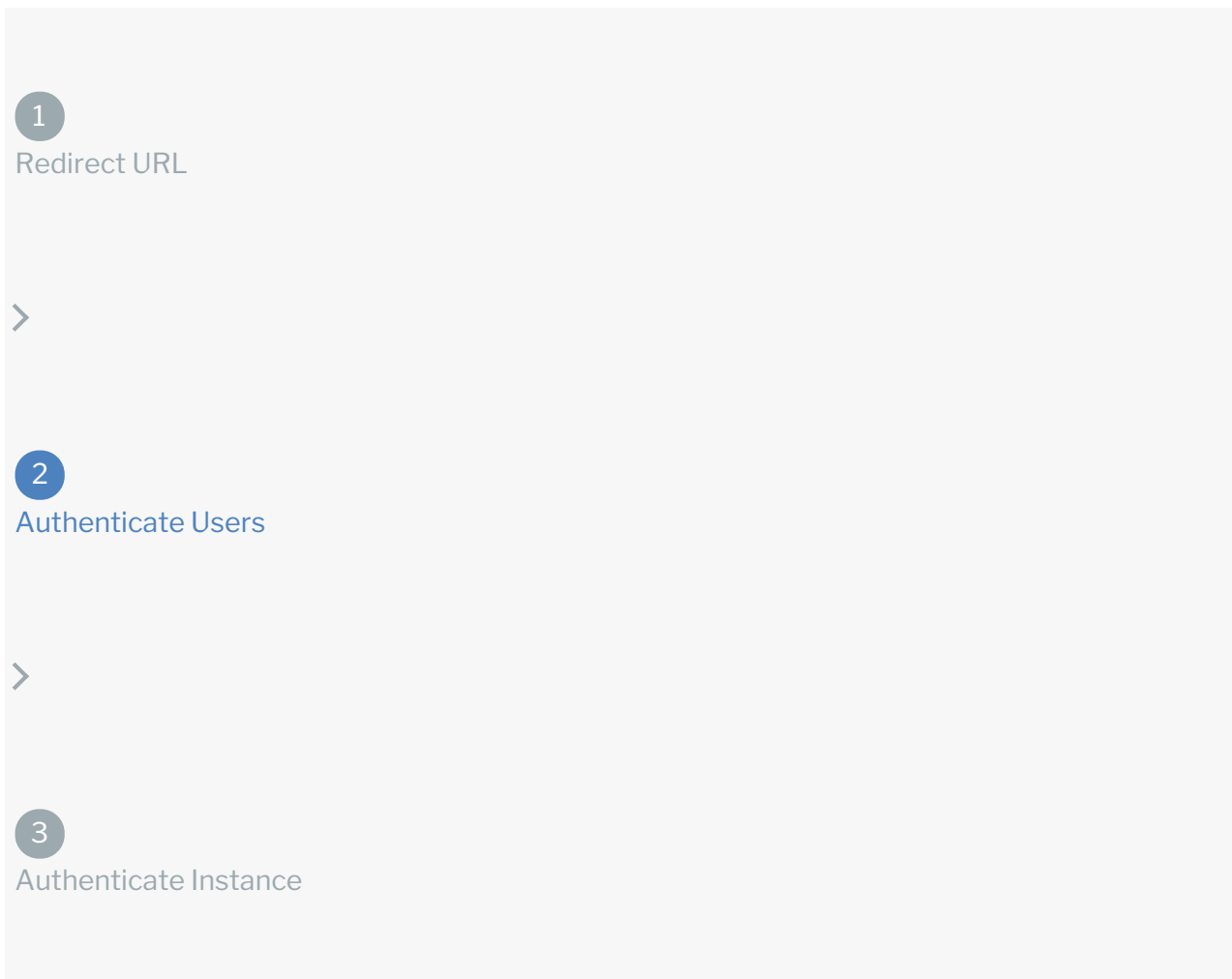
```
curl -X GET
-H 'Content-Type: application/json'
'https://api.openconnectors.us2.ext.hana.ondemand.com/elements/api-v2/elements/googledrive/oauth/url?apiKey=fake_api_key&apiSecret=fake_api_secret&callbackUrl=https://www.mycoolapp.com/auth'
```

Example Response

Use the `oauthUrl` in the response to allow users to authenticate with the vendor.

```
{
  "oauthUrl": "https://accounts.google.com/o/oauth2/auth?access_type=offline&approval_prompt=force&client_id=fake_api_key&redirect_uri=https://www.mycoolapp.com/auth&response_type=code&scope=https://www.googleapis.com/auth/drive&state=googledrive",
  "element": "googledrive"
}
```

Authenticating Users and Receiving the Authorization Grant Code



Provide the response from the previous step to the users. After they authenticate, Google Drive provides the following information in the response:

- code
- state

Response Parameter	Description
code	The Authorization Grant Code required by SAP Cloud Platform Open Connectors to retrieve the OAuth access and refresh tokens from the endpoint.
state	A customizable identifier, typically the connector key (<code>googledrive</code>).

Note: If the user denies authentication and/or authorization, there will be a query string parameter called `error` instead of the `code` parameter. In this case, your application can handle the error gracefully.

Authenticating the Connector Instance

- 1
Redirect URL
- >
- 2
Authenticate Users
- >
- 3
Authenticate Instance

Use the `/instances` endpoint to authenticate with Google Drive and create a connector instance. If you are configuring events, see the [Events](#) section.

Note: The endpoint returns a connector token upon successful completion. Retain the token for all subsequent requests involving this connector instance.

To create a connector instance:

1. Construct a JSON body as shown below (see [Parameters](#)):

```

{
  "element": {
    "key": "googledrive"
  },
  "configuration": {
    "oauth.api.secret": "84_-gkk6tCz5MkDVceY542Q1",
    "filter.response.nulls": "true",
    "event.poller.refresh_interval": "5",
    "oauth.callback.url": "https://auth.cloudelements.io/oauth",
    "event.vendor.type": "polling",
    "oauth.scope": "https://www.googleapis.com/auth/drive",
    "googledrive.include.teamdrives": "false",
    "oauth.api.key": "561333405226-s822jr4f8tslijuha0kca4gkog1t0i8h.a
pps.googleusercontent.com",
    "revoke.access.token": "true",
    "event.notification.enabled": "false",
    "oauth.user.refresh_time": null,
    "oauth.user.refresh_token": null
  },
  "name": "googleone",
  "eventsEnabled": null,
  "providerData": {
    "state": "googledrive",
    "code": "4/rQHYkrLrJ-Bvbsh2BHyKuIVU7ygxlb84HWZPytfHNWh6KQbC8uyAaC
DfnLHPHmAfPlA1UE02Bf-wj3MBhPlpBws",
    "scope": "https://www.googleapis.com/auth/drive",
    "debug": false,
    "secret": "84_-gkk6tCz5MkDVceY542Q1"
  }
}

```

2. Call the following, including the JSON body you constructed in the previous step:

```
POST /instances
```

Note: Make sure that you include the User and Organization keys in the header. For more information, see [Authorization Headers, Organization Secret, and User Secret](#).

3. Locate the `token` and `id` in the response and save them for all future requests using the connector instance.

Example cURL

```

curl -X POST \
  https://api.openconnectors.us2.ext.hana.ondemand.com/elements/api-v2/instances \
  -H 'authorization: User , Organization ' \
  -H 'content-type: application/json' \
  -d '{
    "name": "GoogleDrive_Instance",
    "element": {
      "key": "googledrive"
    },
    "providerData": {
      "code": "xoz8AFqScK2ngM04kSSM"
    },
    "configuration": {
      "oauth.callback.url": "https://www.mycoolapp.com/auth",
      "oauth.api.key": "fake_api_key",
      "oauth.api.secret": "fake_api_secret",
      "document.root.folder.name": "Documents"
    },
    "tags": [
      "For Docs"
    ]
  }'

```

Parameters

API parameters not shown in SAP Cloud Platform Open Connectors are in

`code formatting` .

Note: Event related parameters are described in [Events](#).

Parameter	Description	Data Type
'key'	The connector key. googledrive	string
Name <code>name</code>	The name for the connector instance created during authentication.	Body
<code>oauth.callback.url</code>	The Callback URL that was registered when creating credentials in your Google Drive project. This is the Callback URL that you noted at the end of API Provider Setup .	
	The OAuth Client ID from Google Drive. This is	

Parameter	Description	Data Type
<code>oauth.api.key</code>	the Client ID that you noted at the end of API Provider Setup .	string
<code>oauth.api.secret</code>	The OAuth Client Secret from Google Drive. This is the Client Secret that you noted at the end of API Provider Setup .	string
Document Root Folder <code>document.root.folder.name</code>	The directory on Google Drive that contains the documents that you want to connect.	string

Example Response

```
{
  "id": 427188,
  "name": "GoogleDrive_Instance",
  "createdDate": "2017-06-06T18:54:51Z",
  "token": "7/1+qpTUzoU6OlqvIeynPKJKCztvKYTlx1AD+au3bfk=",
  "element": {
    "id": 21,
    "name": "Google Drive",
    "key": "googledrive",
    "description": "Add a Google Drive Instance to connect your existing Google Drive account to the Documents Hub, allowing you to manage files and folders. You will need your Google Drive account information to add an instance.",
    "image": "elements/provider_googledrive.png",
    "active": true,
    "deleted": false,
    "typeOAuth": true,
    "signupURL": "https://drive.google.com",
    "transformationsEnabled": false,
    "bulkDownloadEnabled": false,
    "bulkUploadEnabled": false,
    "cloneable": false,
    "extendable": false,
    "beta": false,
    "authentication": {
      "type": "oauth2"
    },
    "hub": "documents",
    "private": false
  },
  "elementId": 21,
  "disabled": false,
  "eventsEnabled": false
}
```