Google AdWords Authenticate a Connector Instance

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

Authenticate Through the UI

Use the UI to authenticate with Google and create a connector instance. Because you authenticate with Google via OAuth 2.0, all you need to do is add a name for the instance and specify the client customer ID (see Google AdWords API Provider Setup). After you create the instance, you'll log in to Google AdWords 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:

1

Redirect URL

>

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

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③
Authenticate Instance

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

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

Query Parameters

Query Parameter	Description
apiKey	The key obtained from registering your app with the provider. This is the Client ID that you recorded in Google AdWords API Provider Setup.
apiSecret	The client secret obtained from registering your app with the provider. This is the Client Secret that you recorded in Google AdWords API Provider Setup.
callbackUrl	The URL that will receive the code from the vendor to be used to create a connector instance. This is `https://auth.cloudelements.io/oauth`, the redirect URL you added to your Google AdWords app during Google AdWords 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/
googleadwords/oauth/url?apiKey=&apiSecret=fake_api_secret&callbackUrl=https://a
uth.cloudelements.io/oauth&state=googleadwords'
```

Example Response

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

```
{
    "oauthUrl": "https://accounts.google.com/o/oauth2/auth?prompt=consent&acce
ss_type=offline&scope=https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fadwords&respons
e_type=code&redirect_uri=https%3A%2F%2Fauth.cloudelements.io%2Foauth&state=goog
leadwords&client_id=987561129758-fji3r18FHu28FFH21jkf89982hfdy.apps.googleuserc
ontent.com",
    "element": "googleadwords"
}
```

# Authenticating users and receiving the authorization grant code

Provide the response from the previous step to the users. After they authenticate, Google AdWords 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 (`googleadwords`).

> ℹ **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
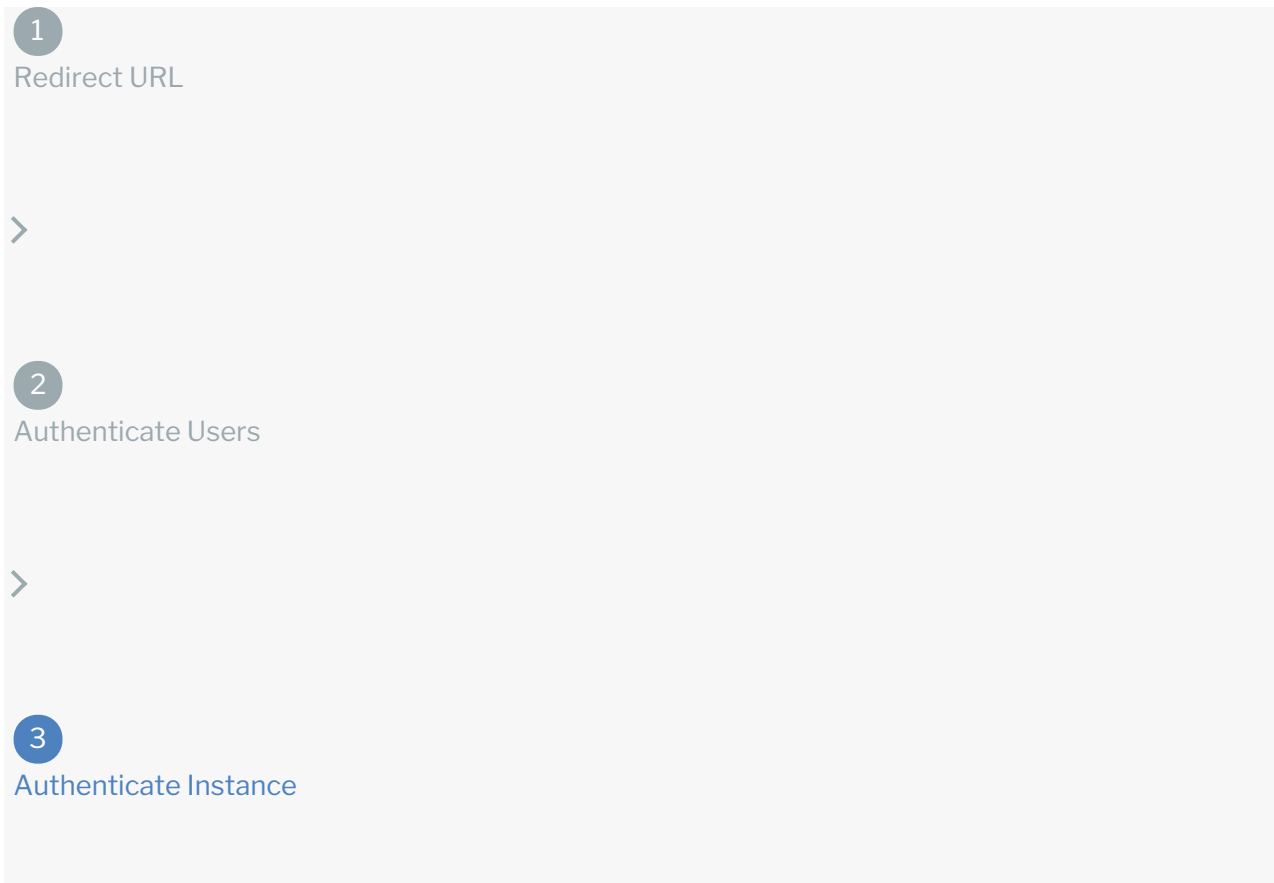
Use the `/instances` endpoint to authenticate with Google AdWords and create a connector instance.

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

To create a connector instance:

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

```json
{
  "element":{
    "key":"googleadwords"
  },
  "providerData": {
    "code": ""
  },
  "configuration": {
    "googleadwords.api.version": "v201809",
    "googleadwords.clientCustomerId": "",
    "oauth.api.key": "",
    "oauth.api.secret": "",
    "oauth.callback.url": ""
  },
  "tags": [
    ""
  ],
  "name":"Google AdWords API Instance"
}
```

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. Note the **Token** and **ID** 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/instance
s \
  -H 'authorization: User , Organization ' \
  -H 'content-type: application/json' \
  -d '

{
  "element": {
    "key": "googleadwords"
  },
  "providerData": {
    "code": "12p8hsa8ehgpishef9yeg89ashegaspe"
  },
  "configuration": {
    "googleadwords.api.version": "v201809"
    "googleadwords.clientCustomerID": "8018675309"
    "oauth.api.key": "fii92sa08g92jkfEi3hf992fd",
    "oauth.api.secret": "aeiosf8892fhio3hf98q3g9229fghieoshe9f",
    "oauth.callback.url": "https://auth.cloudelements.io/oauth"
  },
  "tags": [
    "Adwords"
  ],
  "name": "API Instance"
}

'
```

Parameters

API parameters not shown in SAP Cloud Platform Open Connectors are in `code formatting`.

Parameter	Description	Data Type
'key'	The connector key. googleadwords	string
`code`	The authorization grant code returned from the API provider in an OAuth 2.0 authentication workflow. SAP Cloud Platform Open Connectors uses the code to retrieve the OAuth access and refresh tokens from the endpoint.	string
Name `name`	The name for the connector instance created during authentication.	Body

Parameter	Description	Data Type
`googleadwords.api.version.id`	The version of the AdWords API with which you want to connect. This is filled in by default, but you can provide a different version of the API if you have a specific need to do so.	string
`googleadwords.clientCustomerID`	The unique ID of the client customer with which you want to authenticate. This is the Client Customer ID you recorded in Google AdWords API Provider Setup.	string
`oauth.api.key`	The key obtained from registering your app with the provider. This is the Client ID that you recorded in Google AdWords API Provider Setup.	string
`oauth.api.secret`	The client secret obtained from registering your app with the provider. This is the Client Secret that you recorded in Google AdWords API Provider Setup.	string
`oauth.callback.url`	The Callback URL for the application you registered with Google AdWords. This is `https://auth.cloudelements.io/oauth`, the **Redirect URL** that you added to your app during Google AdWords API Provider Setup.	string
tags	*Optional*. User-defined tags to further identify the instance.	string

Example Response for an Authenticated Connector Instance

```
{
  "element": {
    "key": "googleadwords",
    "id": 6736,
    "name": "Google AdWords",
    "hookName": "GoogleAdwords",
    "description": "Add a Google Adwords Instance to connect your existing Goog
le account to the General Hub, allowing you to manage your customers, ads, camp
aigns, ad groups, etc. across multiple Elements. You will need your Google Adwo
rds account information to add an instance ",
    "image": "elements/custom-element-default-logo.png",
    "logo": "googleadwords",
    "active": true,
    "deleted": false,
    "typeOauth": false,
    "trialAccount": false,
    "resources": [],
    "objects": [],
    "transformationsEnabled": true,
```

```json
      "bulkDownloadEnabled": true,
      "bulkUploadEnabled": true,
      "cloneable": true,
      "extendable": true,
      "beta": false,
      "authentication": {
        "type": "oauth2"
      },
      "extended": false,
      "useModelsForMetadata": true,
      "hub": "general",
      "protocolType": "soap",
      "parameters": [],
      "private": false
    },
    "providerData": {},
    "configuration": {},
    "tags": [
      "myCoolInstance"
    ],
    "name": "myCoolInstance",
    "id": 640074,
    "createdDate": "2019-10-16T16:00:20Z",
    "token": "yu27FD8ef4312hjijfi2EuIoP982f8Qfewif2/4r54spUKmqse0=",
    "elementId": 6736,
    "provisionInteractions": [],
    "valid": true,
    "disabled": false,
    "maxCacheSize": 0,
    "cacheTimeToLive": 0,
    "authenticationType": "oauth2",
    "eventsEnabled": false,
    "cachingEnabled": false,
    "externalAuthentication": "none",
    "traceLoggingEnabled": false,
    "organizationId": 60705,
    "accountId": 168005,
    "userId": 184978,
    "user": {
      "id": 184978
    }
}
```