

Box Authenticate a Connector Instance

Last Modified on 03/19/2020 5:54 pm EDT

On this page

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

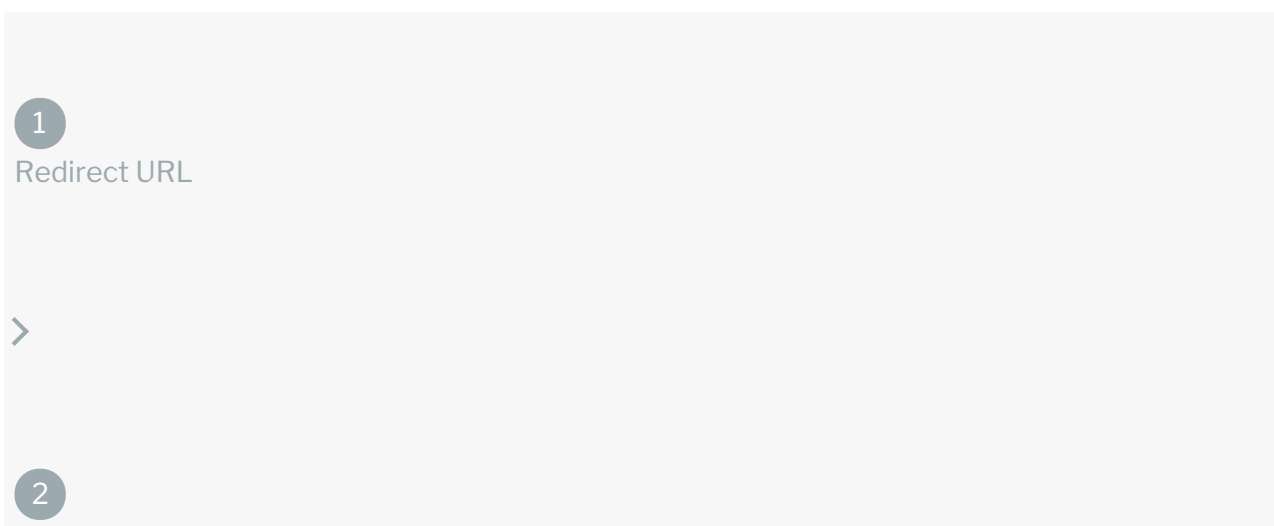
Authenticate Through the UI

Use the UI to authenticate with Box and create a connector instance. Because you authenticate with Box 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 Box 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:



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, `box`.

```
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 Consumer Key that you recorded in API Provider Setup .
apiSecret	The secret obtained from registering your app with the provider. This is the Consumer 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 the API Provider Setup .

Example cURL

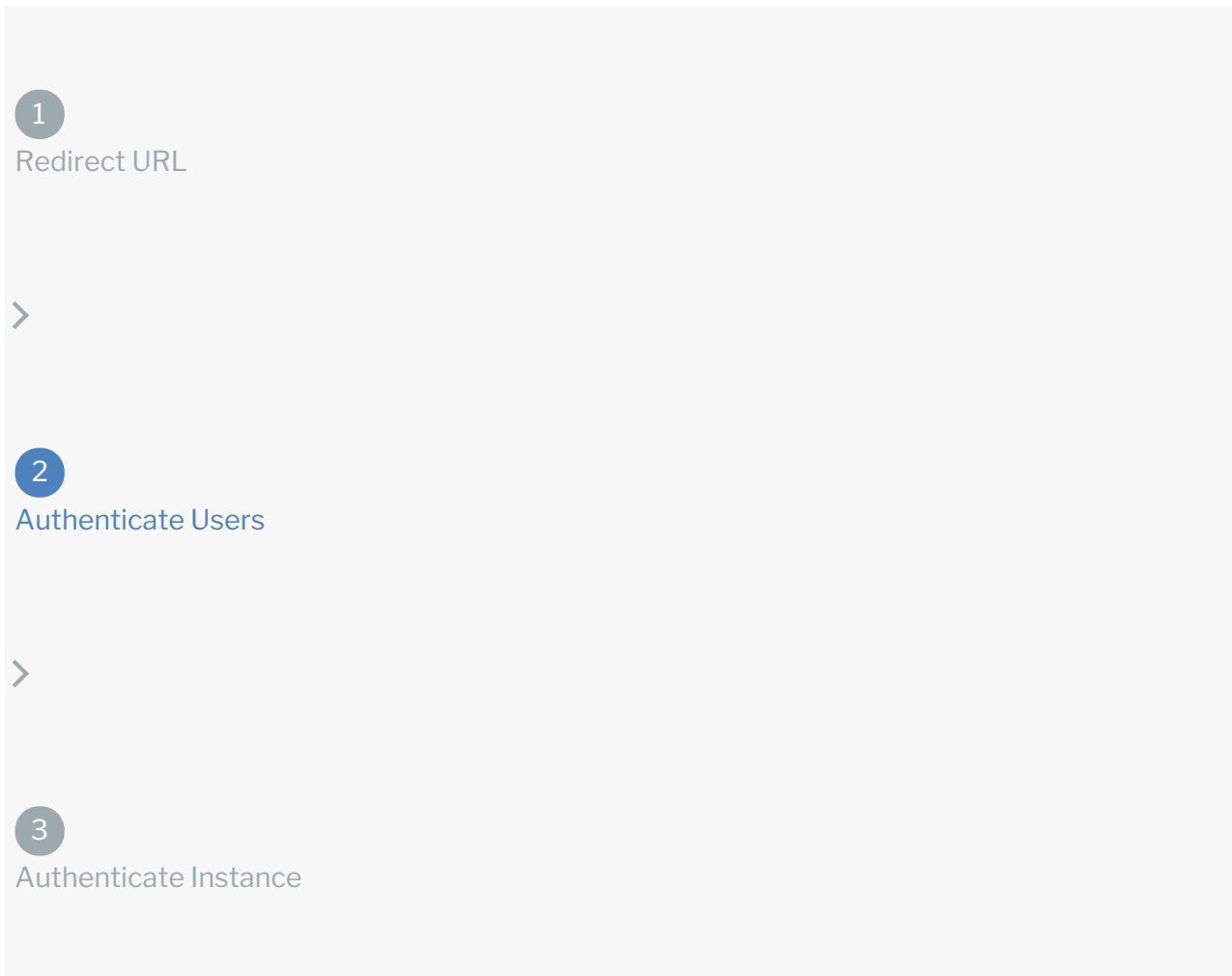
```
curl -X GET
-H 'Content-Type: application/json'
'https://api.openconnectors.us2.ext.hana.ondemand.com/elements/api-v2/elements/box/oauth/url?apiKey=fake_api_key&apiSecret=fake_api_secret&callbackUrl=https://httpbin.org/get&state=box'
```

Example Response

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

```
{
  "oauthUrl": "https://www.box.com/api/oauth2/authorize?response_type=code&client_id=57du4eiw3cseqfrs06bn9hg37ff344hv&redirect_uri=https%3A%2F%2Fhttpbin.org%2Fget&state=box",
  "element": "box"
}
```

Authenticating Users and Receiving the Authorization Grant Code



Provide the response from the previous step to the users. After they authenticate, Box 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>box</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 Box and create a connector instance. If you are configuring events, see [Box Events](#).

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": "box"
  },
  "providerData": {
    "code": ""
  },
  "configuration": {
    "oauth.callback.url": "",
    "oauth.api.key": "",
    "oauth.api.secret": "",
    "filter.response.nulls": true
  },
  "tags": [
    ""
  ],
  "name": ""
}
```

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 '{
  "element": {
    "key": "box"
  },
  "providerData": {
    "code": "xoz8AFqScK2ngM04kSSM"
  },
  "configuration": {
    "oauth.callback.url": "",
    "oauth.api.key": "",
    "oauth.api.secret": ""
  },
  "tags": [
    "MyTag"
  ],
  "name": "My Box Instance"
}'

```

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. box	string
name: <code>name</code>	A unique name for the connector instance created during authentication.	string
<code>oauth.callback.url</code>	The Redirect URL from Box that you noted in API Provider Setup .	string
<code>oauth.api.key</code>	The Client Id from Box that you noted in API Provider Setup .	string
	The Client Secret from Box that you noted in API	

<code>oauth.api.secret</code>	Provider Setup.	string Data
Parameter	Description	Type
tags	<i>Optional.</i> User-defined tags to further identify the instance.	string

Example Response

```
{
  "id": 427236,
  "name": "FromAPI-tags",
  "createdDate": "2017-06-06T21:29:33Z",
  "token": "s;dkjhsadlkjhfvlnkadflvakdfvaqewcs",
  "element": {
    "id": 22,
    "name": "Box",
    "hookName": "Box",
    "key": "box",
    "description": "Add a Box Instance to connect your existing Box account to the Documents Hub, allowing you to manage files and folders. You will need your Box account information to add an instance.",
    "image": "elements/provider_box.png",
    "active": true,
    "deleted": false,
    "typeOauth": true,
    "trialAccount": false,
    "configDescription": "If you do not have an Box.net account, you can create one at Box.Net Signup",
    "resources": [],
    "transformationsEnabled": false,
    "bulkDownloadEnabled": false,
    "bulkUploadEnabled": false,
    "cloneable": true,
    "extendable": true,
    "beta": false,
    "authentication": {
      "type": "oauth2"
    },
    "extended": false,
    "hub": "documents",
    "protocolType": "http",
    "parameters": [],
    "private": false
  },
  "elementId": 22,
  "provisionInteractions": [],
  "valid": true,
  "disabled": false,
  "maxCacheSize": 0,
  "cacheTimeToLive": 0
}
```



```
configuration": {
  "base.url": "",
  "oauth.api.secret": "wvyQdUrNvXbHabxPVcxZV60G0ELMEx3n",
  "event.notification.subscription.id": null,
  "event.metadata": "{\"webhook\": {\"file\": {\"eventTypes\": [\"create\
d\", \"updated\", \"deleted\"]},\n      \"folder\": {\"eventTypes\": [\"
created\", \"updated\", \"deleted\"]}}}\",
  "oauth.subuser.email": null,
  "oauth.user.token": "KtWxcp0Rz4VYRdHh72g1mBu0yPW8Zbq8",
  "oauth.user.id": "263773421",
  "filter.response.nulls": "true",
  "pagination.type": "offset",
  "event.notification.callback.url": null,
  "oauth.callback.url": "https://httpbin.org/get",
  "event.notification.signature.key": null,
  "oauth.user.refresh_token": "mbqHxMQ0okd24mom1wsj3PMx41JLWpfAtmdtiSN0kW
vbYGqpALCc6TldBVZrF92Z",
  "oauth.user.refresh_interval": null,
  "oauth.api.key": "57du4eiw3cseqfrs06bn9hg37ff344hv",
  "document.tagging": null,
  "oauth.user.refresh_time": "1496784574729",
  "event.notification.enabled": "false"
},
"eventsEnabled": false,
"traceLoggingEnabled": false,
"cachingEnabled": false,
"externalAuthentication": "none",
"user": {
  "id": 1234567
}
}
```