

# Google Suite Events

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## On this page

SAP Cloud Platform Open Connectors supports events via polling or webhooks depending on the API provider. For more information about our Events framework, see [Events Overview](#).

## Supported Events and Resources

SAP Cloud Platform Open Connectors supports polling events for Google Suite. After receiving an event, SAP Cloud Platform Open Connectors standardizes the payload and sends an event to the configured callback URL of your authenticated connector instance.

You can set up polling for the `events` resource. You can also copy the `events` configuration to poll other resources. See [Configure Polling Through API](#) for more information.

**Note:** Unless configured for a specific time zone, polling occurs in UTC.

## Configure Polling Through the UI

To configure polling through the UI, follow the same steps to authenticate a connector instance, and then turn on events. Select the resources to poll, and then click **Create Instance**. For more information, see [Authenticate an Connector Instance with Events \(UI\)](#) or the connector-specific authentication topic.

## Configure Polling Through API

Use the `/instances` endpoint to authenticate with Google and create a connector instance with polling enabled.

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

To authenticate a connector instance with polling:

1. Get an authorization grant code by completing the steps in [Getting a redirect URL](#) and [Authenticating users and receiving the authorization grant code](#).

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

```
{
  "element":{
    "key":"googlesuite"
  },
  "providerData":{
    "code": ""
  },
  "configuration":{
    "oauth.api.key": "",
    "oauth.api.secret": "",
    "oauth.callback.url": "",
    "event.notification.enabled": true,
    "event.notification.callback.url": "http://mycoolapp.com",
    "event.poller.refresh_interval": "",
    "event.poller.configuration":{
      "calendars/{calendarId}/changed-events": {
        "url": "/hubs/general/calendars/{calendarId}/changed-events",
        "idField": "",
        "datesConfiguration": {
          "updatedAtField": "updated",
          "updatedAtFormat": "yyyy-MM-dd'T'HH:mm:ss.SSS'Z'",
          "updatedAtTimezone": "GMT",
          "createdAtField": "created",
          "createdAtFormat": "yyyy-MM-dd'T'HH:mm:ss.SSS'Z'",
          "createdAtTimezone": "GMT"
        }
      },
      "calendars/primary/changed-events": {
        "url": "/hubs/general/calendars/primary/changed-events",
        "idField": "",
        "datesConfiguration": {
          "updatedAtField": "updated",
          "updatedAtFormat": "yyyy-MM-dd'T'HH:mm:ss.SSS'Z'",
          "updatedAtTimezone": "GMT",
          "createdAtField": "created",
          "createdAtFormat": "yyyy-MM-dd'T'HH:mm:ss.SSS'Z'",
          "createdAtTimezone": "GMT"
        }
      },
      "changed-groups": {
        "url": "/hubs/general/changed-groups",
        "idField": "id",
        "datesConfiguration": {
          "updatedAtField": "metadata.updateTime",
          "updatedAtFormat": "yyyy-MM-dd'T'HH:mm:ss.SSS'Z'",
          "updatedAtTimezone": "GMT",
```

```

        "createdDateField": "metadata.updateTime",
        "createdDateFormat": "yyyy-MM-dd'T'HH:mm:ss.SSS'Z'",
        "createdDateTimezone": "GMT"
    }
},
"changed-messages": {
    "url": "/hubs/general/changed-messages",
    "idField": "id"
}
}
},
"tags": [
    ""
],
"name": ""
}

```

3. 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](#).

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

## Example cURL with Polling

```

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": "googlesuite"
},
"providerData": {
    "code": ""
},
"configuration": {
    "oauth.api.key": "xxxxxxxxxxxxxxxxxxxxxxxx",
    "oauth.api.secret": "xxxxxxxxxxxxxxxxxxxxxxxx"
}
}

```

```
"oauth.callback.url":"https://auth.mycoolapp.com/oauth",
"event.notification.enabled": true,
  "event.notification.callback.url": "https://api.openconnectors.us2.ext.hana.ondemand.com/elements/api-v2/events/page.elementKey/",
"event.poller.refresh_interval": "15",
"event.poller.configuration":{
  "calendars/{calendarId}/changed-events": {
    "url": "/hubs/general/calendars/{calendarId}/changed-events",
    "idField": "",
    "datesConfiguration": {
      "updatedAtField": "updated",
      "updatedAtFormat": "yyyy-MM-dd'T'HH:mm:ss.SSS'Z'",
      "updatedAtTimezone": "GMT",
      "createdAtField": "created",
      "createdAtFormat": "yyyy-MM-dd'T'HH:mm:ss.SSS'Z'",
      "createdAtTimezone": "GMT"
    }
  },
  "calendars/primary/changed-events": {
    "url": "/hubs/general/calendars/primary/changed-events",
    "idField": "",
    "datesConfiguration": {
      "updatedAtField": "updated",
      "updatedAtFormat": "yyyy-MM-dd'T'HH:mm:ss.SSS'Z'",
      "updatedAtTimezone": "GMT",
      "createdAtField": "created",
      "createdAtFormat": "yyyy-MM-dd'T'HH:mm:ss.SSS'Z'",
      "createdAtTimezone": "GMT"
    }
  },
  "changed-groups": {
    "url": "/hubs/general/changed-groups",
    "idField": "id",
    "datesConfiguration": {
      "updatedAtField": "metadata.updateTime",
      "updatedAtFormat": "yyyy-MM-dd'T'HH:mm:ss.SSS'Z'",
      "updatedAtTimezone": "GMT",
      "createdAtField": "metadata.updateTime",
      "createdAtFormat": "yyyy-MM-dd'T'HH:mm:ss.SSS'Z'",
      "createdAtTimezone": "GMT"
    }
  },
  "changed-messages": {
    "url": "/hubs/general/changed-messages",
    "idField": "id"
  }
}
},
"tags": [
  "Docs"
```

```

],
  "name": "API Instance with Polling"
}'

```

## Parameters

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

`code formatting`.

Parameter	Description	Data Type
<code>key</code>	The connector key. googlesuite	string
<code>code</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 <code>name</code>	The name of the connector instance created during authentication.	Body
<code>oauth.api.key</code>	The API key or client ID obtained from registering your app with the provider. This is the <b>Client ID</b> that you noted in <a href="#">API Provider Setup</a> .	string
<code>oauth.api.secret</code>	The client secret obtained from registering your app with the API provider. This is the <b>Client secret</b> that you noted in <a href="#">API Provider Setup</a> .	string
<code>oauth.callback.url</code>	The API key or client ID obtained from registering your app with the provider. This is the <b>Authorized redirect URI</b> that you noted in <a href="#">API Provider Setup</a> .	
Events Enabled <code>event.notification.enabled</code>	<i>Optional.</i> Identifies that events are enabled for the connector instance. Default: <code>false</code> .	boolean
Event Notification Callback URL	The URL where you want SAP Cloud Platform Open Connectors to send the	string

Parameter	Description	Data Type
<code>event.notification.callback.url</code>	events.	
Event poller refresh interval (mins)	A number in minutes to identify how often the poller should check for changes.	number
<code>event.poller.refresh_interval</code>		
Configure Polling	<i>Optional.</i> Configuration parameters for polling.	JSON object
<code>event.poller.configuration</code>		
Resource to Poll	The polling event configuration of the resource that you will monitor.	JSON object
URL	The url to query for updates to the resource.	String
<code>url</code>		
ID Field	The field in the resource that is used to uniquely identify it.	String
<code>idField</code>		
tags	<i>Optional.</i> User-defined tags to further identify the instance.	string