ServiceNow OAuth Events

Last Modified on 11/03/2021 11:48 am EDT

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SAP 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 Open Connectors supports polling events for ServiceNow OAuth. After receiving an event, SAP 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.

> ℹ **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.

> ℹ**Note:** Because of the Parent-child relationship among ServiceNow objects, duplicate events are generated. For example: `core_company` and `sys_user` are implemented as `accounts` and `contacts` which are duplicated by `agents` . `sys_user` is the parent table of `customer_contact` and `core_company` is the parent table of `customer_account` . Any record created in the child table, is also created in the parent table.
>
> If all the SAP Open Connectors endpoints are selected under polling (in the instance creation page), any event triggered for a creation/update/deletion of record in the child tables will also create duplicate events of their respective parent tables.
>
> The user may find duplicate events in the logs. In order to just get a single event for the child table, the user must create an instance by deselecting the parent table (under the polling section of the instance creation page). For more information, refer to inbound Rest and community questions.

Configure Polling Through API

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

> ℹ **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":"servicenowoauth"
 },
 "providerData":{
  "code": ""
 },
 "configuration":{
  "oauth.callback.url": "",
  "oauth.api.key": "",
  "oauth.api.secret": "",
  "servicenow.subdomain": "",
  "event.notification.enabled": true,
  "event.notification.callback.url": "http://mycoolapp.com",
  "event.poller.refresh_interval": "",
  "event.poller.configuration":{
   "accounts":{
    "url": "/hubs/helpdesk/accounts?where=sys_updated_on>'${gmtDate:yyyy-MM-dd'T'HH:mm:ss}'",
      "idField": "sys_id",
      "datesConfiguration": {
        "updatedDateField": "sys_updated_on",
        "updatedDateFormat": "yyyy-MM-dd HH:mm:ss",
        "createdDateField": "sys_created_on",
        "createdDateFormat": "yyyy-MM-dd HH:mm:ss"
      }
   }
  }
 },
 "tags":[
  ""
 ],
 "name":""
}
```

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

```
POST /instances
```

> ℹ **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.

5. Follow up on the developer instance by following the instructions in Manage Your Developer Instance.

Example JSON with Polling

instance JSON with polling events enabled:

```
{
  "element":{
    "key":"sageone"
  },
  "providerData":{
    "code":"1c6ff4089d58d80e86482ab7d5b97f15dd7b041d"
  },
  "configuration":{
    "oauth.api.key": "xxxxxxxxxxxxxxxxx",
    "oauth.api.secret": "xxxxxxxxxxxxxxxxxxxxx",
    "oauth.callback.url": "https://mycoolapp.com",
    "event.notification.enabled":true,
    "event.notification.callback.url":"http://mycoolapp.com",
    "event.poller.refresh_interval":"15",
    "event.poller.configuration":{
      "customers":{
        "url":"/hubs/finance/customers?where=lastModifiedDate>='${date:yyyy-MM-dd'T'HH:mm:ss'Z'}' and attributes='c
reated_at,updated_at",
        "idField":"id",
        "datesConfiguration":{
          "updatedDateField":"updated_at",
          "updatedDateFormat":"yyyy-MM-dd'T'HH:mm:ss'Z'",
          "updatedDateTimezone":"GMT",
          "createdDateField":"created_at",
          "createdDateFormat":"yyyy-MM-dd'T'HH:mm:ss'Z'",
          "createdDateTimezone":"GMT"
        }
      }
    }
  },
  "tags":[
    "Test"
  ],
  "name":"API_Polling"
}
```

Parameters

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

Parameter	Description	Data Type
`key`	The connector key. servicenowoauth	string
`code`	The authorization grant code returned from the API provider in an OAuth2 authentication workflow.	string
Name `name`	The name for the connector instance created during authentication.	Body
`oauth.callback.url`	The Callback URL for the connected app you created for ServiceNow OAuth Beta. This is the Callback URL that you recorded in API Provider Setup.	
`oauth.api.key`	The key obtained from registering your app with the provider. This is the **Client ID** that you recorded in 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 API Provider Setup.	string

Parameter	Description	Data Type
Events Enabled `event.notification.enabled`	*Optional*. Identifies that events are enabled for the connector instance. Default: `false` .	boolean
Event Notification Callback URL `event.notification.callback.url`	The URL where you want SAP Open Connectors to send the events.	string
Event poller refresh interval (mins) `event.poller.refresh_interval`	A number in minutes to identify how often the poller should check for changes.	number
Configure Polling `event.poller.configuration`	Optional*. Configuration parameters for polling.	JSON object
accounts	The configuration of the customers resource.	JSON object
URL `url`	The url to query for updates to the resource.	String
ID Field `idField`	The field in the resource that is used to uniquely identify it.	String
Advanced Filtering `datesConfiguration`	Configuration parameters for dates in polling	JSON Object
Updated Date Field `updatedDateField`	The field that identifies an updated object.	String
Updated Date Format `updatedDateFormat`	The date format of the field that identifies an updated object.	String
Created Date Field `createdDateField`	The field that identifies a created object.	String
Created Date Format `createdDateFormat`	The date format of the field that identifies a created object.	String
tags	*Optional*. User-defined tags to further identify the instance.	string