# Marketo Events

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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 both polling and webhook events for Marketo.

# Polling

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.

**1** 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**

In order to enable polling, add these extra configurations to your instance JSON:

"event.notification.enabled": "true",
"event.notification.callback.url": ""

The default poller configuration is:

```
{
   "leads": {
    "url": "/lead-changes?where=lastChangeDate>'${gmtDate:yyyy-MM-dd'T'HH:mm
:ss.SSS'Z'}'",
   "idField": "person.id",
    "datesconfiguration" : {
        "updatedDateField": "person-updatedAt",
        "updatedDateFormat": "yyyy-MM-dd'T'HH:mm:ss'Z'",
        "updatedDateTimezone": "GMT"
   }
}
```

Instance JSON with polling events enabled:

```
{
    "element": {
        "key": "marketo"
    },
    "providerData": {
        "code": ""
    },
    "configuration" : {
        "oauth.api.key": "",
        "oauth.api.secret": "",
        "oauth.callback.url": "https://www.mycoolapp.com/auth",
        "marketo.identity.url": "",
        "oauth.callback.url": "https://www.mycoolapp.com/auth",
        "marketo.identity.url": "",
        "event.oidfication.enabled": "true",
        "event.poller.refresh_interval":"15",
        "event.poller.configuration": "{\n \"leads\": {\n \"url\": \"/lead-changes?
    where=lastChangeDate>'${gmtDate:yyyy-MM-dd'T'HH:mm:ss.3SS'2'}'\",\n \"idFiel
d\":\"person.id\",\n \"updatedDateFormat\":\"yyyy-MM-dd'T'HH:mm:ss'Z'\",\n \"u
pdatedDateTimezone\": \"GMT\"\n \\n \n \n)",
    "event.notification.callback.url": ""
    },
    "tags": [
    ""
    ],
    "name": ""
}
```

## Webhooks

Create a Marketo instance with events enabled and supply your event notification url.

# Step 1. Get Connectors OAuth Information

HTTP Header: None HTTP Verb: GET Request URL: /elements/{keyOrld}/oauth/url Request Body: None Query Parameters:

- apiKey- the key obtained from registering your app with the provider
- apiSecret the secret obtained from registering your app with the provider
- **callbackUrl** the URL that you supplied to the provider when registering your app, state any custom value that you want passed to the callback handler listening at the provided callback URL.

Description: The result of this API invocation is an OAuth redirect URL from the endpoint. Your application should now redirect to this URL, which in turn will present the OAuth authentication and authorization page to the user. When the provided callback URL is executed, a code value will be returned, which is required for the Create Instance API.

## Example cURL Command:



### Response:



Handle Callback from the Endpoint: Upon successful authentication and authorization by the user, the endpoint will redirect to the callback URL you provided when you setup your application with the endpoint, in our example, https://www.mycoolapp.com/auth. The endpoint will also provide two query string parameters: "marketo" and "code". The value for the "state" parameter will be the name of the endpoint, e.g., "sfdc" in our example, and the value for the "code" parameter is the code required by SAP Cloud Platform Open Connectors to retrieve the OAuth access and refresh tokens from the endpoint. 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.

# Step 2. Create an Instance

To provision your Marketo connector, use the /instances API.

Below is an example of the provisioning API call.

- HTTP Headers: Authorization- User, Organization
- HTTP Verb: POST
- Request URL: /instances
- Request Body: Required see below
- Query Parameters: none

Description: token is returned upon successful execution of this API. This token needs to be retained by the application for all subsequent requests involving this connector instance.

A sample request illustrating the /instances API is shown below.

HTTP Headers:

Authorization: User , Organization

This instance.json file must be included with your instance request. Please fill your information to provision. The "key" into SAP Cloud Platform Open Connectors Marketo is "marketo". This will need to be entered in the "key" field below depending on which connector you wish to instantiate.

```
{
  "element": {
    "key": "marketo"
    },
    "providerData": {
        "code": ""
     },
    "configuration" : {
        "oauth.api.key": "",
        "oauth.api.secret": "",
        "oauth.callback.url": "https://www.mycoolapp.com/auth",
        "marketo.identity.url": "",
        "marketo.rest.url": "",
        "event.notification.enabled": "true",
        "event.notification.callback.url": ""
    },
    "tags": [
        ""
    ],
    "name": ""
}
```

Here is an example cURL command to create an instance using /instances API.

Example Request:



If the user does not specify a required config entry, an error will result notifying her of which entries she is missing.

Below is a successful JSON response:

Make Note of the Instance ID

Note: Make sure you have straight quotes in your JSON files and cURL commands. Please use plain text formatting in your code. Make sure you do not have spaces after the in the cURL command.

Call GET /instances and get your instance ID for the Marketo instance you just created

Example Request:



# Retrieve the Instance ID and Base64 encode it. We recommend the site:

# https://www.base64encode.org/

### Log in to your Marketo Account and select "Admin"

	Notifications: 47	Atul Barve 💌	🥵 History 👻	🛛 Admin	% Community	🥐 Help 🔻
1			/			
Design Studio	Lead Data	base	Analytics	2		~
/						

#### Select "Webhooks"

Admin				
🦉 Change Password 💦 🕹 Invite New U	lser			-
				🔏 Full Access
🄯 Admin				
<ul> <li>My Account</li> <li>Login Settings</li> <li>Users &amp; Roles</li> </ul>	Security	<ul> <li>Location</li> <li>Smart Campaign</li> <li>Email</li> <li>Communication Limits</li> </ul>	¢¢	
<ul> <li>CRM</li> <li>Sales Insight</li> <li>Landing Pages</li> </ul>	-12	<u>Tags</u> 7     Single Sign-On       7     Treasure Chest	Other Stuff	22
<ul> <li>Munchkin</li> <li>Web Services</li> <li>LaunchPoint</li> <li>Webhooks</li> </ul>	Webhooks	Field Management Marketo Custom Objects	Database Management	OX

Select "New Webhook"



Name the webhook and give it a description Input the following URL:

https://api.openconnectors.us2.ext.hana.ondemand.com/elements/apiv2/events/marketo/{INSERT\_BASE64\_ENCODED\_INSTANCE\_ID}

Select "POST" as the Request Type Input your desired template, example below:

{"first\_name":{{lead.First Name}},"last\_name":{{lead.Last Name}},"email":{{
lead.Email Address}}}

Select JSON for "Request Token Encoding" as well as "Response Type" Select Save

Edit Webhook		×
Webhook Name:	* Test	4
Description:	Test webhook	
URL:	* INSERT TOKEN	
	https://api.cloud- elements.com/elements/api- v2/events/marketo/{base64encodec	5 Jin
Request Type:	* POST	*
د Template:	INSERT TOKEN	
Te F Ty	{"first_name":{{lead.First Name}},"last_name":{{lead.Last Name}},"email":{{lead.Email	6
Request Token Encoding:	JSON	•
Response type:	JSON	*
se la	7 CANCEL	SAVE

Select "Marketing Activities" from the main menu

Test			Search
Test webhook			🖃 😋 Webhooks
		_	💠 Calebs Test Webhook
Details		EDIT	💠 Test
Details			
URL:	https://api.cloud-elements.com/elements/api-v2/events/market o/{base64encodedInstanceID}		
Payload Template:	{"first_name":{{lead.First Name}},"last_name":{{lead.Last Nam e}},"email":{{lead.Email Address}}}		
Request Token Encoding:	JSON		
Request Type:	POST		
Response Format:	JSON		
Used By:	٥		
Response Mappings		EDIT	

## Select "New Smart Campaign"

Marketing Activities Car	mpaign Inspector	Campaign Qu	leue	Subscr	iptions						
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										A F	ull Access
Marketing Activi	ities										
Programs		S	10/	2015			09/2015			08/:	2015
<ul> <li>Visualize ongoing campaigns</li> <li>Manage all assets from a singli</li> <li>Measure program success</li> </ul>	e view EW PROGRAM	4 3 NEM LEAD	,500 ,600 ,700								
Smart Campaigns		1	,800								
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						ompariso	n or three h	Update	d Oct 28, 2	015 3:01 A	M PDT Export
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Select the newly created webhook for the "Campaign Folder" Name the campaign and give it a description

New Smart Car	mpaign	
Campaign Folder:	* Test	
Campaign Name:	* Test	
Description:	Test Campaign	
		TE
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#### Select Smart List – "Who"

	Smart List Flow	Schedule	Results						
New 🕯	Campaign Actions	🖓 View Can	npaign Member	S				-	
Te	est								
Tes	st Campaign								
1. Sn			Status	Used By	Membership Trend	Members by Week	Email	Run H	
Define	e which leads this campaign	will affect	Summary						
2. Flo	ow - "What"		Status:		Batch (never run)				
Define	e campaign actions and step	s	Qualification Rules:		Each lead can run through the flow once				
3 50	hedule - "When"		Members:		<u>0</u>				
Manag	ge when the campaign is act	ive	Leads in V	Vait step:	Calculate				
		_	Smart List	(0)					
4. Re	esults - "Wow!"		No rules						
Track	campaign progress	_	No steps						

Drag and drop events you wish to associate with the campaign

Test	Smart List	Flow	Schedule	Results			
New 9	🔹 📿 Campaign	Actions 🔻	🖇 View Cam	paign Members			□
🎾 Use A	LL filters 🔻 🛛	🛆 Collaps	se All 🛛 🤝 Exp	band All			🖶 Auto-Save: Oct 28, 10:57 AM MDT
🥜 Le	ad is Created					0 × 0	Search
						SAdd Constraint 💌	
🖉 Ad	lded to List					0 ×	B S Mobile Apps
Г	List Name: is		¥	Sample Bulk Test	ø	外 Add Constraint ▼	<ul> <li>Added to Attendance</li> <li>Added to Engagement Program</li> <li>Added to List</li> <li>Added to Construction</li> </ul>
🖉 Da	ita Value Chang					0 X	Campaign is Requested
Г	Attribute: Add	ress				> Add Constraint •	<ul> <li>Clicks Link in Sales Email</li> <li>Clicks Link on Web Page</li> <li>Data Value Changes</li> </ul>
							<ul> <li>Engagement Program Cadence Char</li> <li>Engagement Program Stream Chang</li> <li>Fills Out Form</li> <li>Has Interesting Moment</li> <li>Is Sent Sales Email</li> </ul>

## Select "Flow" Select the newly created webhook

Test Smart List	Flow	Schedule	Results	
🗃 New 🔹 🛛 🖓 Campaign	🖓 View Campai	gn Members		
🛆 Collapse All 🛛 🔻 Expan	🛆 Collapse All 🛛 🔻 Expand All			🖬 Auto-Save: Oct 28, 10:58 AM MDT
💠 1 - Call Webhook				⊙ × Search
				🖙 Add Choice 🤝 Interesting Moment
Webhook: Test				Send Alert
				★ Change Score
				🔂 Change Data Value
				🖃 🛃 Programs
				A Change Program Status
				Schange Program Success
				🕻 Add to Engagement Program
				😿 Change Engagement Program Cad
				😿 Change Engagement Program Stre
				ය 🗟 👔 Special
				60 Change Revenue Stage
				🐍 Delete Lead
				😪 Request Campaign
				🔴 Remove from Flow
				□ ♀ Integration
				🛧 Call Webhook

Select "Activate"

Test	Smart List	Flow	Schedule	Results						
🗑 New 🔻	🖓 Campaig	n Actions 🦻	Edit Settings	🖓 View Campa	gn Memb	ers				-
Trig	gered C	ampaig	gn Schedul	e						
Campaig	gn Status:	Inactive								
Smart Li	st Mode:	Triggered								
Smart	Campaign Set	tings			EDIT					
<b>if lead</b> Each le <b>if lead</b> Ignore	has been in ead can run th has reached limit	this Smart ( rough the flo the commu	Campaign before ow once unication limits							
		ACTIVAT	E							