

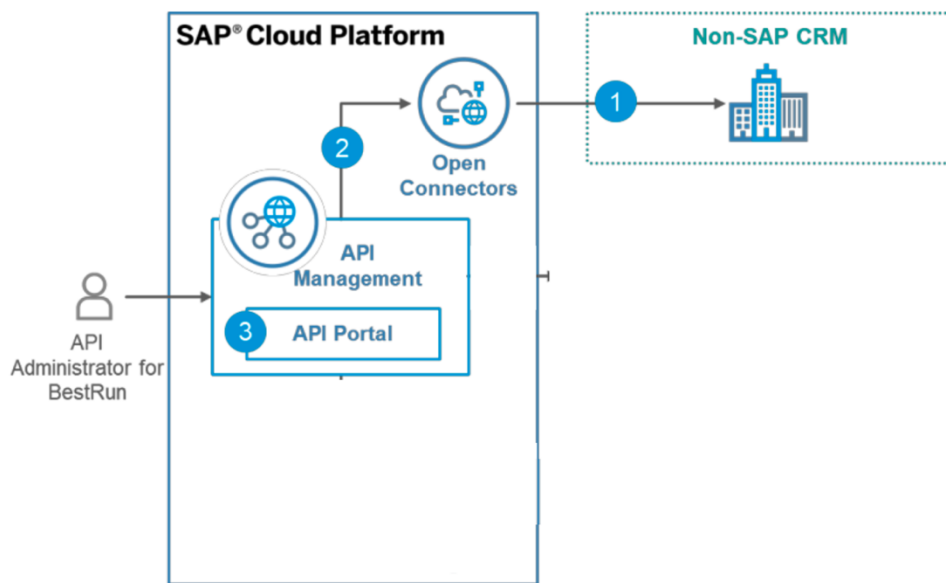
Exercise 3.1: Connect to non-SAP CRM System from SAP Cloud Platform Open Connector


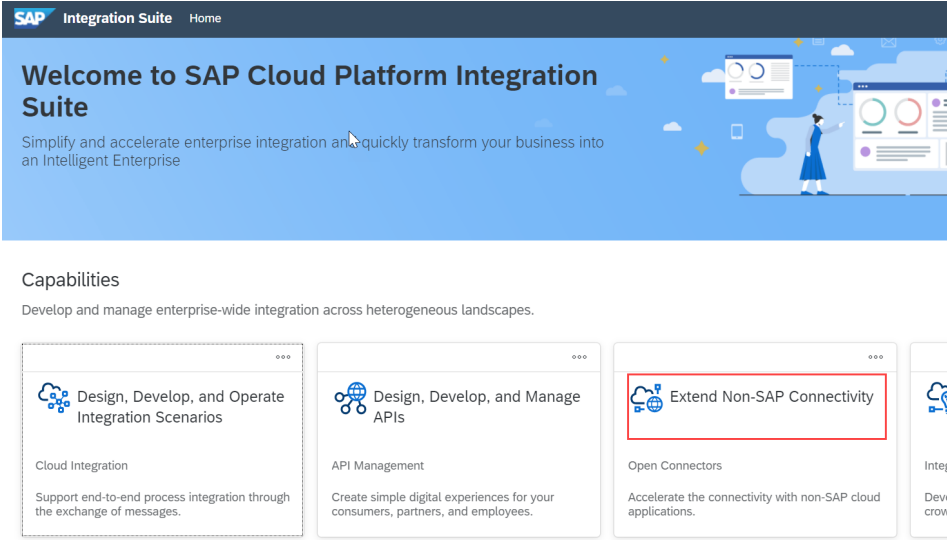

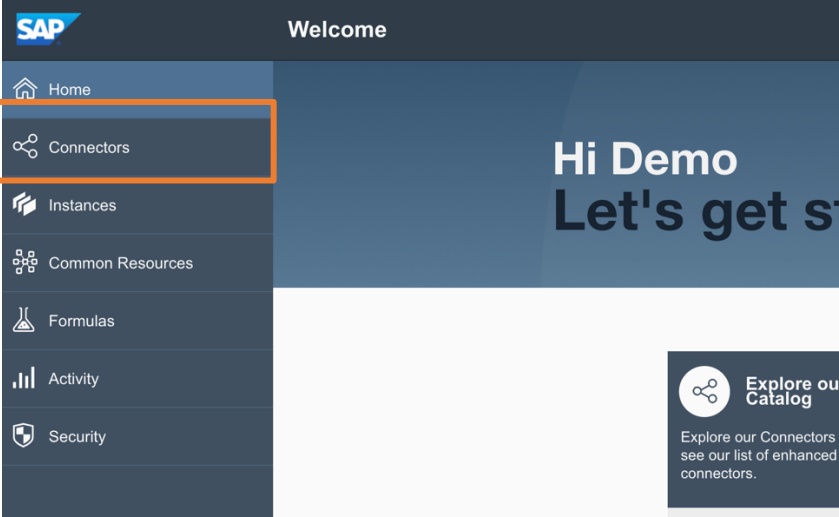
Overview

BestRun AG would like to expose the APIs from their non-SAP CRM system like information about their customers, latest address and communication information about their customers, upcoming deals to enable their business users to query for this information and build customer insights using SAP Analytics Cloud. BestRun AG plans to use SAP Cloud Platform API Management to securely expose their APIs from non-SAP CRM system. Furthermore, they plan to use the analytics features of SAP Cloud Platform API Management to gain insights into the usage of the APIs by their business users.

In this exercise you will configure the following for BestRun AG :-

1. *Connect to non-SAP CRM system of BestRunAG using **SAP Cloud Platform Open Connectors**.*
2. *Create an API Provider of type **Open Connectors** in SAP Cloud Platform API Management to discover & explore all the created instances from SAP Cloud Platform Open Connectors.*
3. *Apply the BestRun IT governance policy of Quota, Spike Arrest and Verify API Key to the non-SAP CRM connector instance.*

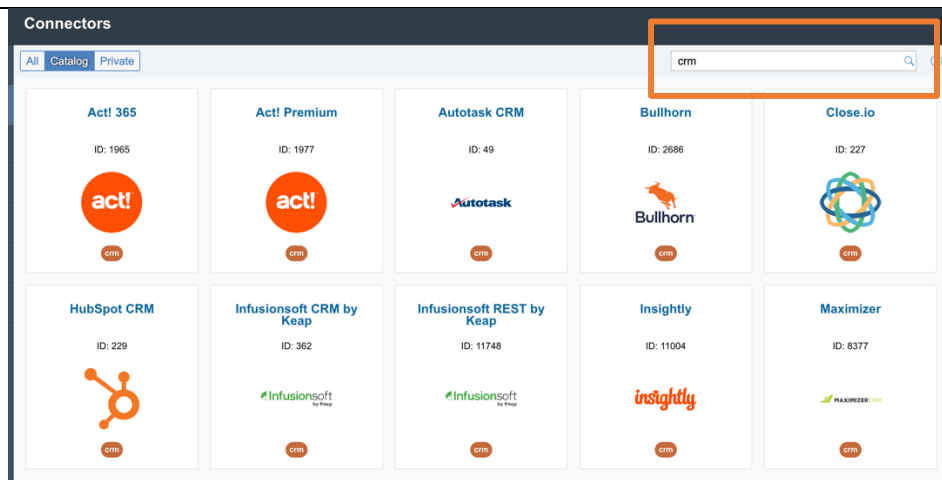


Step	Explanation	Screenshot
1	<p>In the account cockpit, click on Subscription, select Integration Suite tile and click Go to Application to launch Integration Suite</p> <p>In the Integration Suite Launchpad, select the capability</p> 	
2	<p>SAP Cloud Platform Open Connectors provides 160 connectors to non-SAP cloud application.</p> <p>To explore all connectors, click </p> <p>From the landing page you can explore the catalogue of pre-built connectors to non- SAP cloud application or explore the interactive API documentations of the connectors or explore the advanced features like creating your own common resources model.</p>	

3 In SAP Cloud Platform Open Connectors you will find connectors to all the top non-SAP cloud applications. These connectors are grouped based on what we call as hubs. You can search for all connectors in a given hub, by simply typing the name of the hubs like CRM, finance, helpdesk, documents, social and more.

Enter **crm** in the text field to view all non-SAP CRM connectors.

The full list of available connector is available in our [help documentation](#)

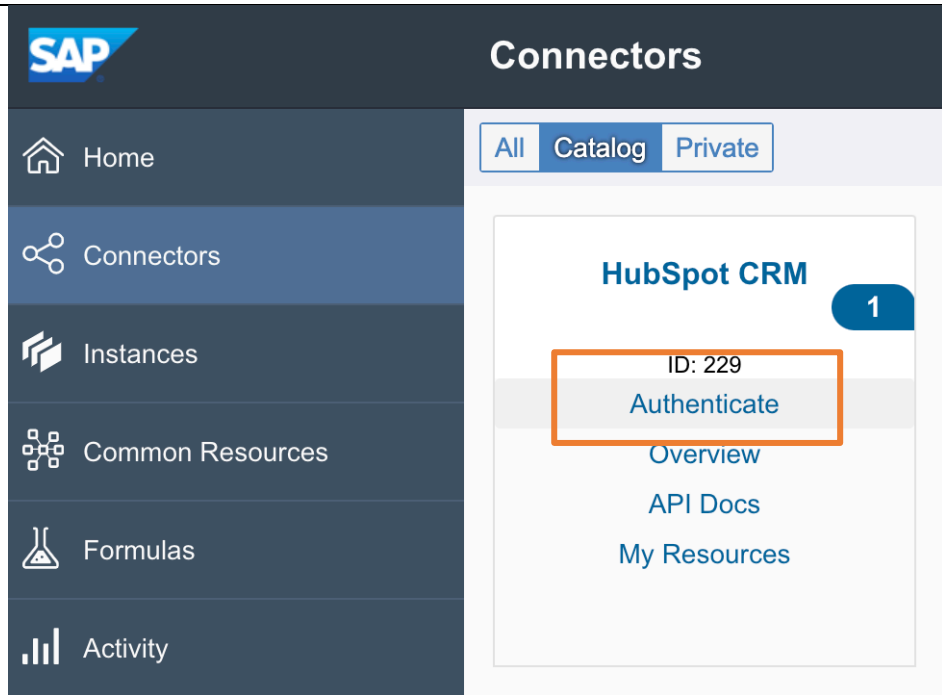


4 In order to consume the selected connector, the first steps start with creating an authenticated instance of the selected connector and providing your non-SAP tenant details & credentials.

In this exercise, HubSpot CRM has been used, hover over the HubSpot CRM connector and click **Authenticate**

to connect to your HubSpot account.

You can use any of the non-SAP CRM connectors, if you the necessary sandbox or system access to the non- SAP CRM system.



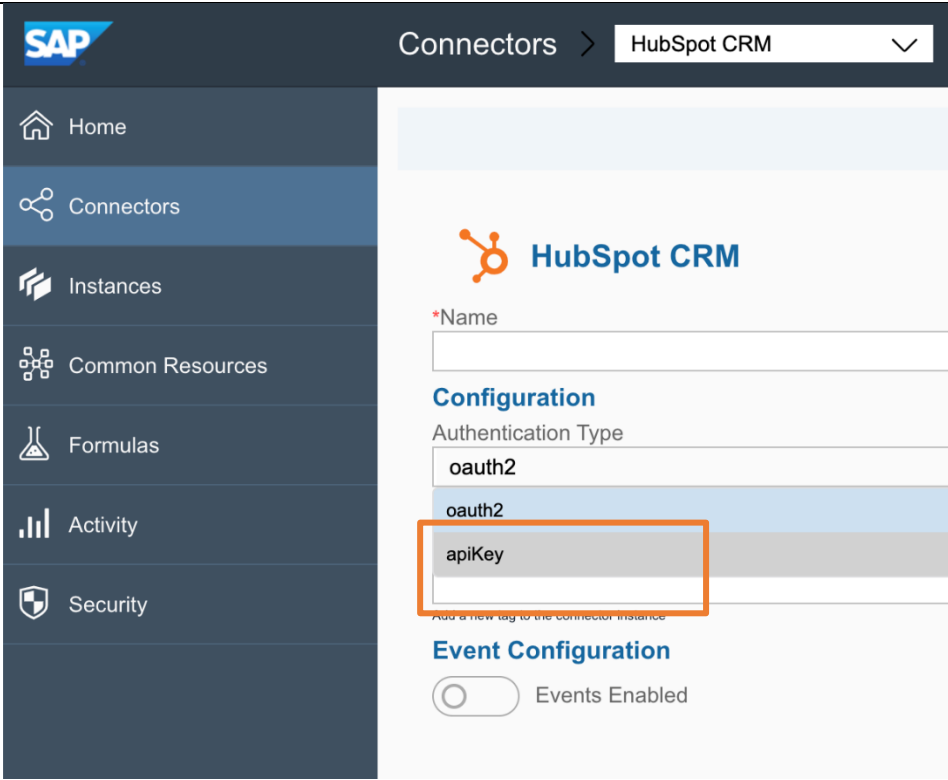
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The connection wizard is generated automatically based on the selected non- SAP connector & the supported authentication by the non-SAP connector. If you are using a different non-SAP application, the wizard screen may vary.

You can select the authentication type of your choice.

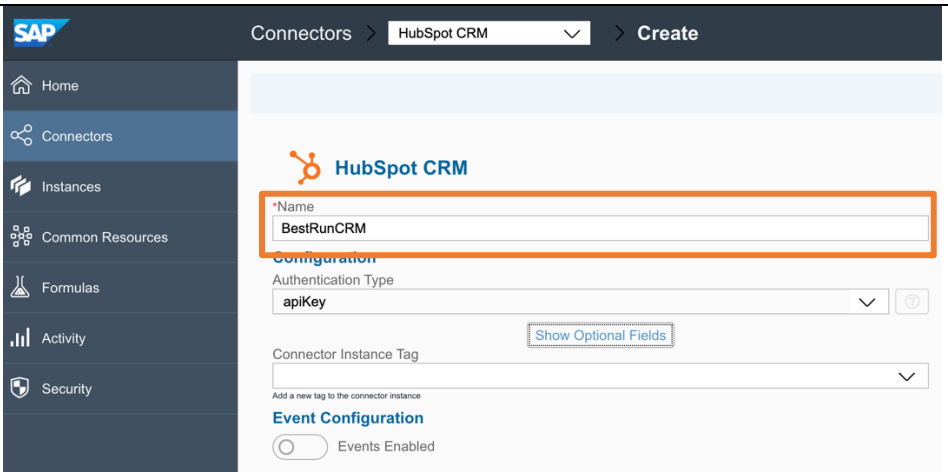
In case of HubSpot CRM, the apikey based authentication approach is used.

Select **apiKey** from the drop down.



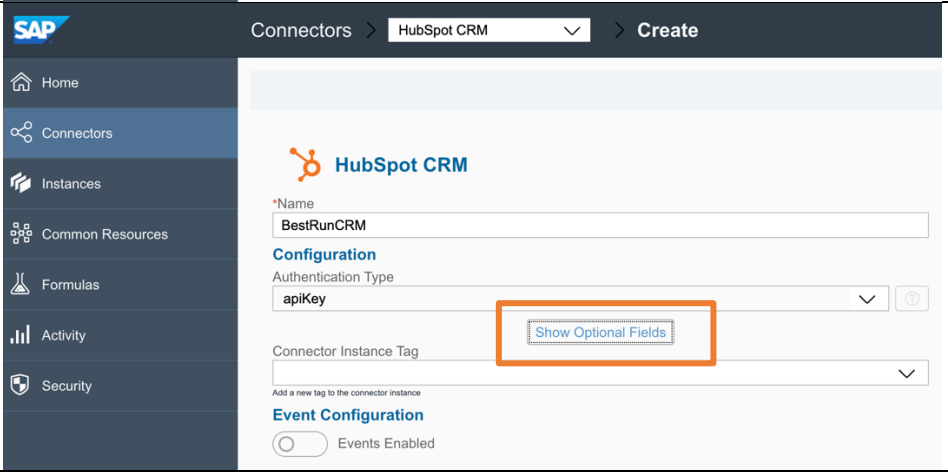
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Enter **BestRunCRM** in the Name text field.



7

Click **Show Optional Fields** to enter the HubSpot CRM integration or api key

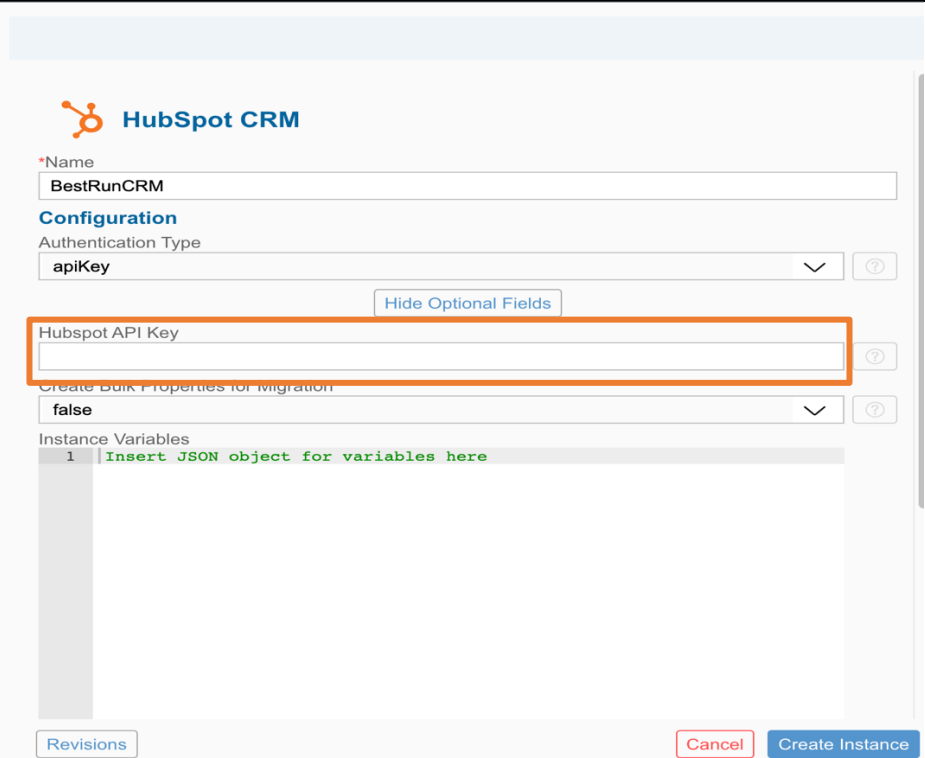


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BestRun AG IT team has already created an integration key **ce000c4d-1610-4691-ac72-4ff1246bdd45** on their non- SAP CRM system which needs to be entered in **Hubspot API Key**

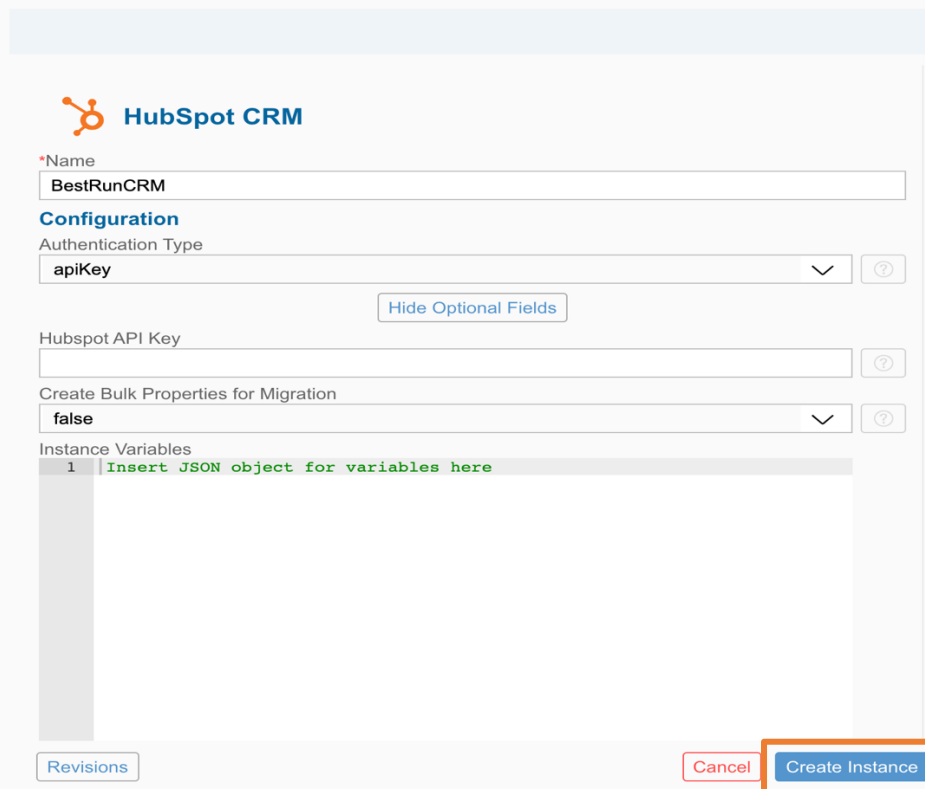
Steps to get your own sandbox HubSpot account is captured in this [blog](#).



The image shows the HubSpot CRM configuration form. The 'Name' field is filled with 'BestRunCRM'. Under the 'Configuration' section, 'Authentication Type' is set to 'apiKey'. The 'Hubspot API Key' field is highlighted with an orange border. Below it, 'Create Bulk Properties for Migration' is set to 'false'. The 'Instance Variables' section contains a single entry with the text 'Insert JSON object for variables here'. At the bottom right, the 'Create Instance' button is highlighted with an orange border.

9

Click **Create Instance** to create an authentication to the selected non-SAP CRM system.



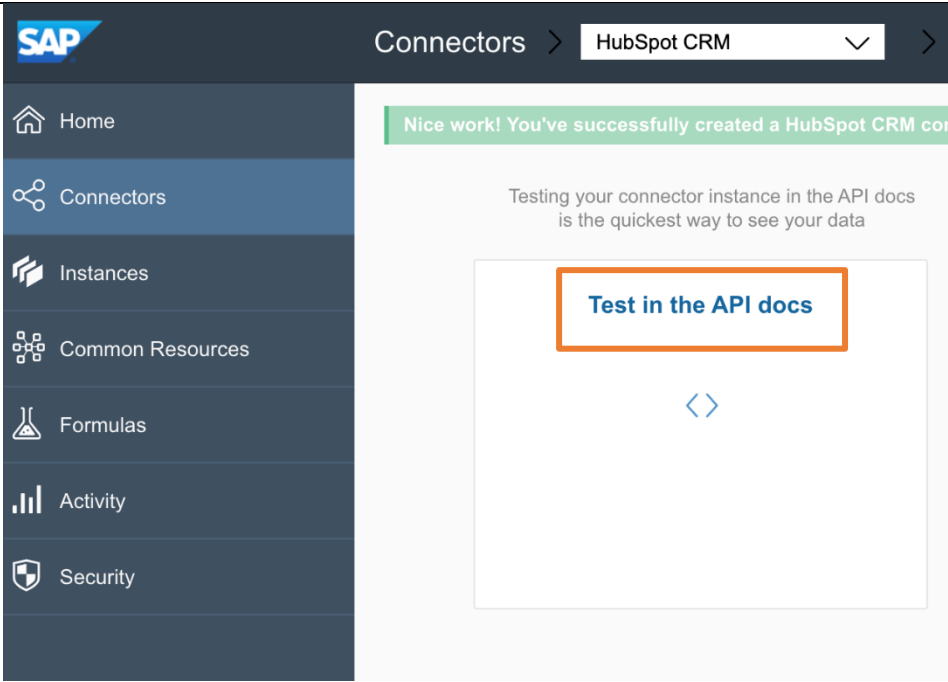
This image is identical to the one above, showing the HubSpot CRM configuration form. The 'Create Instance' button at the bottom right is highlighted with an orange border.

10 In SAP Cloud Platform Open Connectors, we provide the interactive API documentation to the pre- built connectors. Once you create an authenticated connector instance to your non-SAP application you could Test the API Docs using the generated OpenAPI (Swagger) documentation. Click

Test in the API docs

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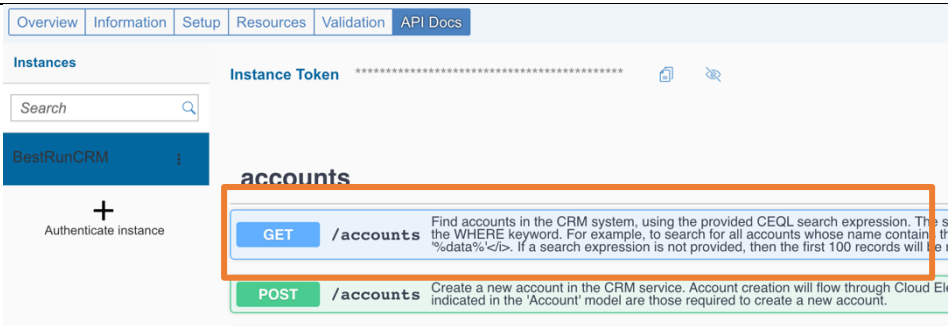
to test the newly created non-SAP CRM connector instance.



11 Click

GET /accounts

to fetch all accounts from the selected non-SAP CRM system. SAP Cloud Platform Open Connectors provides harmonized URIs for the connectors based on the Hubs that they are part. That is, all the connectors of the CRM Hubs would have the resources called as /accounts which will return companies resources. The advantage of this harmonization is that irrespective of the non-SAP CRM connector that you would select the URI to get the list of companies would be /accounts. Similar URI harmonization is being done for documentation hub, where the



	you would see the harmonized URIs like /files, /folders.	
12	Click Try it out to test the list of accounts.	<div>rch expression in CEQL is the WHERE clause in a typical SQL query, but without word 'data', the search expression parameter will be <i>where=name like urned.</div> <div>Try it out</div>
13	Click Execute to try out the selected resource from your non-SAP CRM connector	<div>nextPage string (query) <div>The next page cursor, taken from the response header: elements-next-page-token nextPage - The next page cursor, taken from the response p</div></div> <div>fields string (query) <div>Specify the fields (in csv) to return in the response payload. Defaults to all standard fields fields - Specify the fields (in csv) to return in the response p</div></div> <div>Execute</div> <div>Show Model</div>
14	<p>This would show the CURL command with the harmonized RESTful URIs to your HubSpot application and the normalized authentication token which can be used to securely and seamless connect to your HubSpot application.</p> <p>Note: The harmonized URIs and authentication headers can be used to connect securely to your HubSpot application via SAP Cloud Platform from any application that supports connecting to an HTTP endpoint.</p> <p>To simplify the application & integration development, the CURL command is generated. The CURL command would contain information about the fully qualified URL, authorization token, request payload (in case of POST, PUT/PATCH) call. For the get list of accounts call, you could also notice the harmonization of pagination</p>	<div><div>SAPConnectors</div><div>Connectors > HubSpot CRM > API Docs</div><div>OverviewInformationSetupResourcesValidationAPI Docs</div><div>Instances</div><div>Search</div><div>BestRunCRM</div><div>Authenticate instance</div><div>Show Model</div><div>Curl</div><div>curl -X GET "https://api.openconnectors.hKumADWDTRih5RIT4tv80/o86hhpczLD9d</div><div>Request URL</div><div>https://api.openconnectors.trial.u</div><div>Server response</div><div>CodeDetails</div></div>

	<p>done using pageSize and search using where query parameters.</p> <p>The advantage of this harmonization is that irrespective of which non- SAP CRM connector that you may have selected (SugarCRM, SalesForce, Zoho, HubSpot..) you would have same way of getting filtered list of records.</p> <p>The default response received from the non-SAP connectors is passed as is. With common resource (common objects), you can transform fields provided by their non-SAP applications to a single, normalized resource.</p>	
	<p>Congratulations, you have successfully created and tested an authenticated connector instance to the non-SAP CRM system used by BestRun AG.</p> <p>In the next exercise, you will managing this non-SAP CRM connector using SAP Cloud Platform API Management.</p>	

Continue to **Exercise 3.2_Add_API_Providers_of_type_Open_Connectors**