

VBCS Training Lab- Budapest

Integrating an External REST API

Introduction



In this hands-on-lab, we will create an extension to Oracle Sales Cloud that consumes the custom TwitterHandle property on the Contact object and displays a list of tweets for the contact.

Hands on Lab Instructions

Creating a Web Application

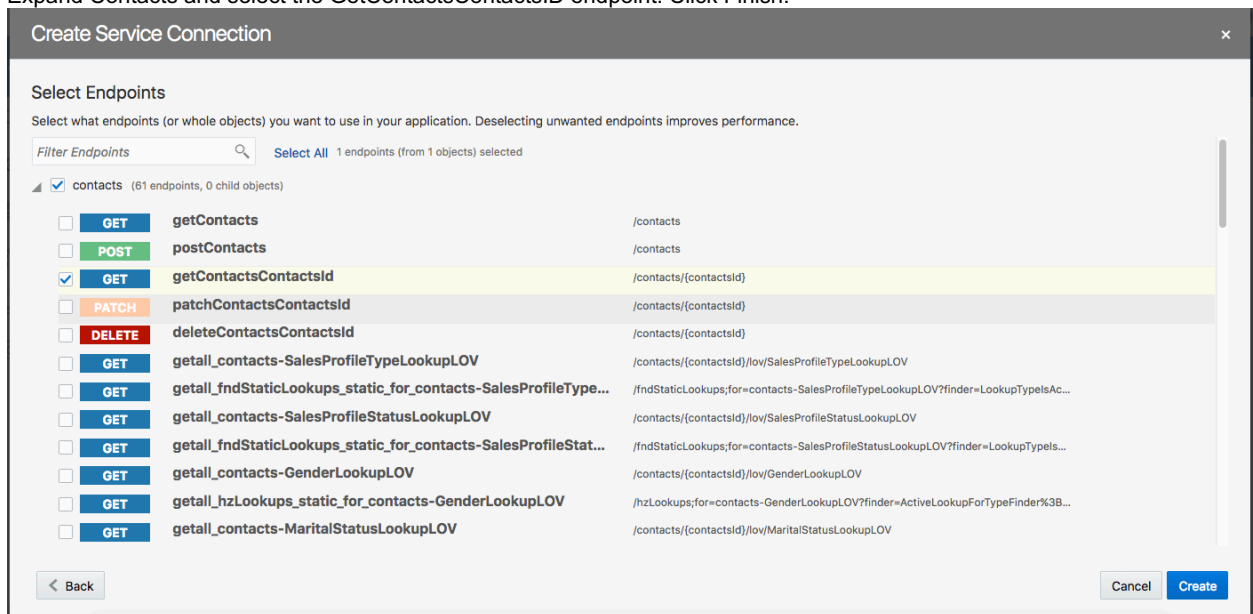
1. Go to <https://oic-vbdemo.uscom-east-1.oraclecloud.com/ic/builder/>
2. Login in as angelo.santagata@oracle.com / ILoveKangaroo4242#
3. Click New button to create a new application
4. Name the application BudapestLabMyName
5. Click Finish

Registering the Contact Object


6. In the left sidebar, click the Service Connections icon 
7. Click the  icon in the Services panel
8. Click Define By Specification
9. In the Service Specification tab, enter the following information:


Field	Value
Service ID	Contact
API Type	ADF Describe
Service Specification	https://cccn-test.fa.em2.oraclecloud.com/crmRestApi/resources/11.13.17.11/contacts/describe
Authentication Mechanism	Basic
Username	angelo.santagata@oracle.com
Password	ILoveKangaroo4242#

10. Click Next
11. Expand Contacts and select the GetContactsContactsID endpoint. Click Finish.



Registering the Twitter API

12. In the left sidebar, click the Service Connections icon 

13. Click the  icon in the Services panel

14. Click Define By Endpoint

15. In the Service tab, enter the following information:

Field	Value
Method	Get
URL	https://api.twitter.com/1.1/statuses/user_timeline.json
Action Hint	Get Many
Service Base URL	Leave default (https://api.twitter.com/1.1/statuses)
Service Name	Twitter
Service ID	Leave default (twitter)

16. In the Authentication tab, enter the following information:

Field	Value
Authentication Method	Client Credentials OAuth 2.0
Client Id	Q5GfmUalvQYVTAH0ZAfyd31HH
Secret	IB0UIQfLtxFyioOcqEHeGbFYPrHmXqxtlgzUctgfbskUaJ0ThV
Scope	Leave blank
Authorization URL	https://api.twitter.com/oauth2/token

Create Service Connection ×

Method ^{*} [?] GET ^{*} URL https://api.twitter.com/1.1/statuses/user_timeline.json ^{*} Action Hint ^{*} [?] Retrieve Many [?]

Service

Authentication

Request

Response

Test

Authentication Mechanism

Client Credentials OAuth 2.0

Client Id ^{*}

Q5GfmUalvQYVTAH0ZAfyd31HH

Secret ^{*}

Secret

Scope

IB0UIQfLtxFyioOcqEHeGbFYPrHmXqxtlgzUctgfbskUaJ0ThV

Authorization URL ^{*}

https://api.twitter.com/oauth2/token

17. Click Request > URL Parameters. Add two Dynamic Query Parameters:

- screen_name – String
- count - Number

Create Service Connection

Method

GET

URL

https://api.twitter.com/1.1/statuses/user_timeline.json

Action Hint

Service

Authentication

Request

Response

Test

Body

Headers

URL Parameters

Path Parameters

No items to display.

Query Parameters

Add

Dynamic

Name	Type	Default Value	Required
screen_name	String		<input type="checkbox"/>
count	Number		<input type="checkbox"/>

Back

Cancel

Create

- Click Test. Enter SFGiants as the screen_name and click Send. The response body appears in the Body area below. Click the Copy to Response Body button.

Create Service Connection

Method

GET

URL

https://api.twitter.com/1.1/statuses/user_timeline.json

Action Hint

Retrieve Many

Service

Authentication

Request

Response

Test

query	screen_name	string	SFGiants	<input type="checkbox"/>
query	count	integer		<input type="checkbox"/>

Reset to Defaults

Send

Status: 200 OK

Response

Body

Headers

```
[
  {
    "created_at": "Thu Feb 15 20:53:52 +0000 2018",
    "id": "964241370813780000",
    "id_str": "964241370813779971",
    "text": "BOCHY BALL takes you behind the scenes and shows how Bruce Bochy creates the conditions - chemistry, character, cul...
https://t.co/mDnEUHeIO1",
```

Copy to Response Body

Back

Cancel

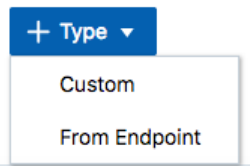
Create

- Click Create.

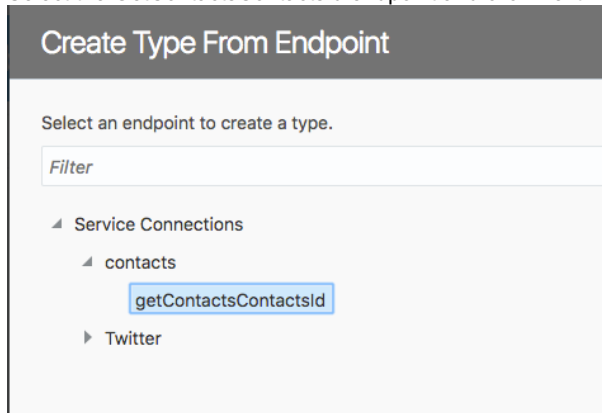
Calling the Contact REST Endpoint


Here we will create a Type that will mirror the response payload of the Contact REST Endpoint. Then we will create a variable of that type and an Action Chain to populate it from a REST call.

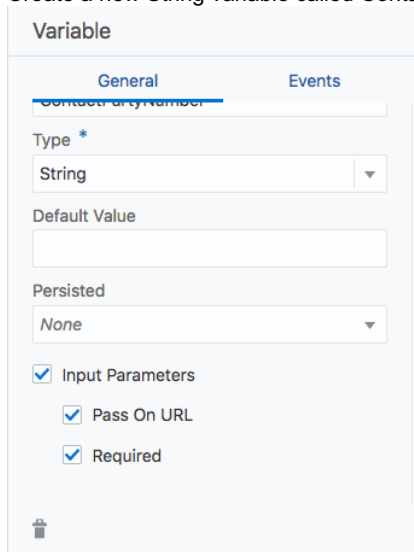
20. Click the Main tab in the browser. If you closed it, you can open it by going to Web Apps > webapp1 > flows > main > main.
21. Click the Variables tab, then the Types tab.
22. Add a Type from Endpoint




23. Select the GetContactsContactsId endpoint and click Next.

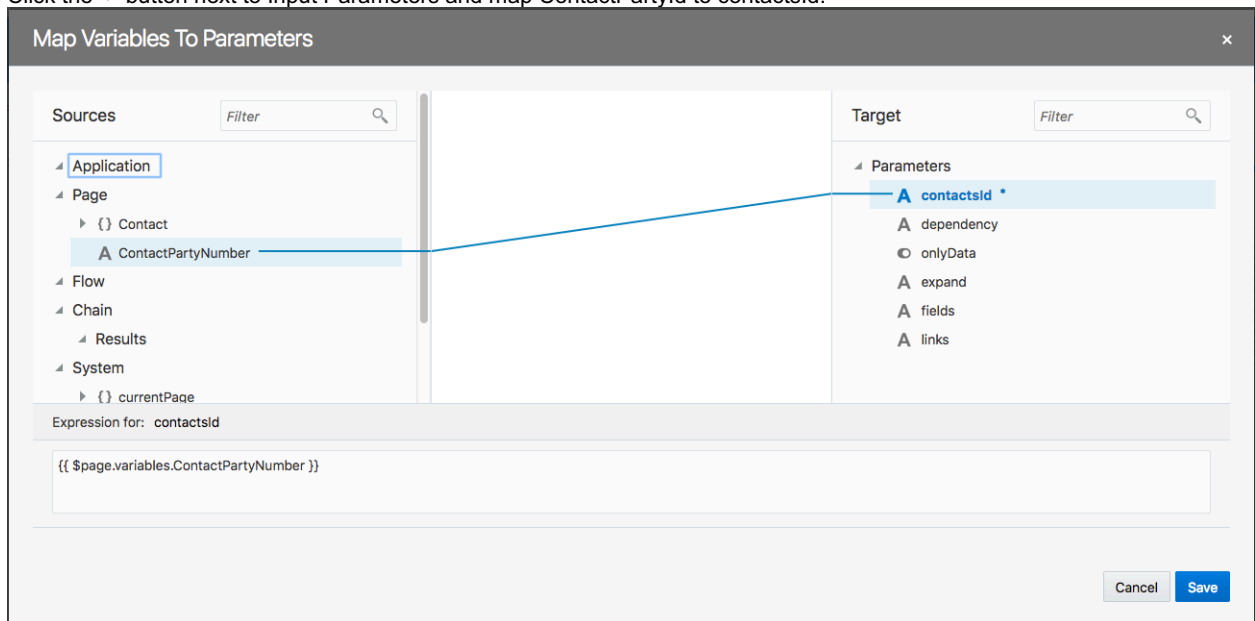


24. Select the PartyNumber, ContactName, and TwitterHandle_c fields and click Finish.
25. Open the web app start page by clicking the Main tab and double-clicking the start page icon.
26. Go to the Variables tab  and add a new variable called Contact of type getContactsContactsId.
27. Create a new String variable called ContactPartyNumber. Make it a required input parameter passed in the URL

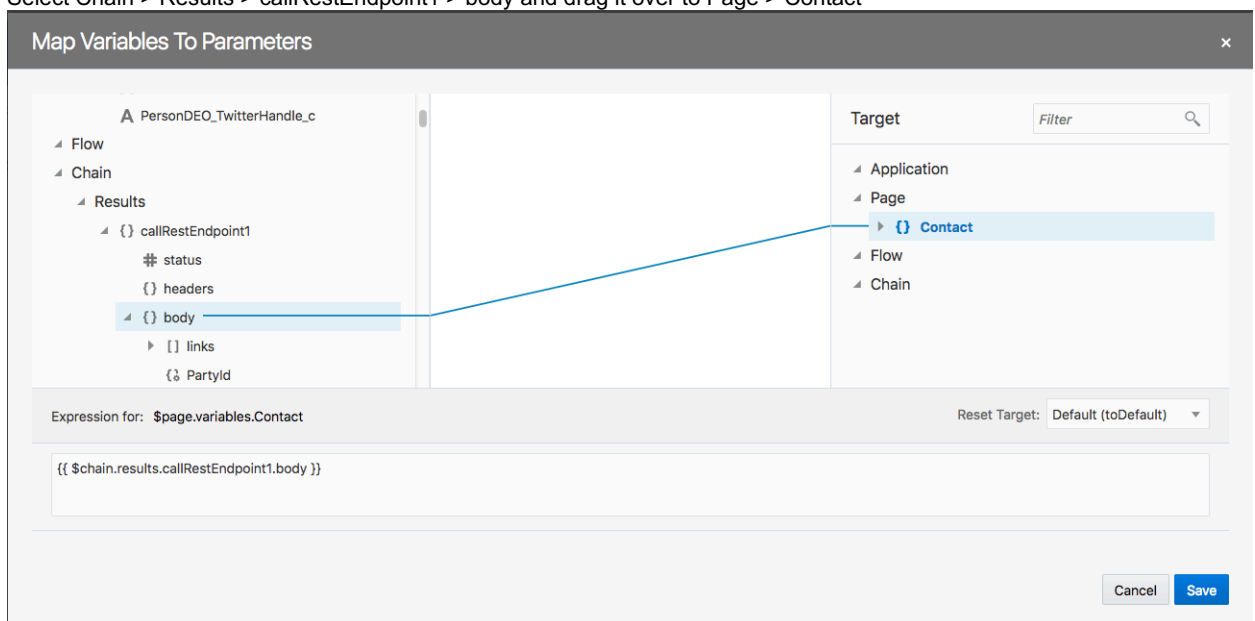


28. Give ContactPartyNumber a default value of 9. This is just to get some data in the designer. At runtime it'll get passed in.
29. Go to the Actions  tab and create a new action called populateContact.
30. Open the action chain and drag a Call REST Endpoint action into the chain. Set getContactsContactsId as the endpoint.

31. Click the -> button next to Input Parameters and map ContactPartyId to contactsid.



32. Drag an Assign Variables action onto the chain after the Call REST Endpoint action. Click the -> button next to Variables to open the Mapping dialog.
33. Select Chain > Results > callRestEndpoint1 > body and drag it over to Page > Contact

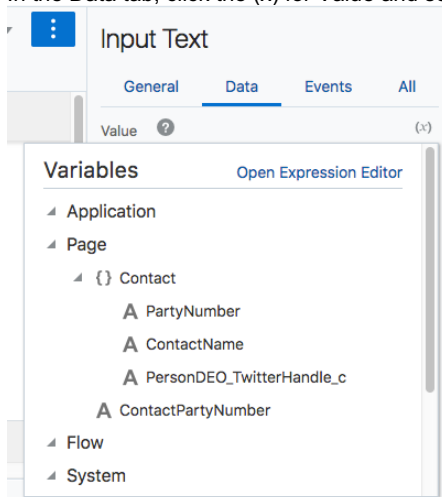


34. Click Save

Create the UI

35. Drop an Input Text component in the page.
36. Set the text in the label to Twitter Handle. Make it read-only.

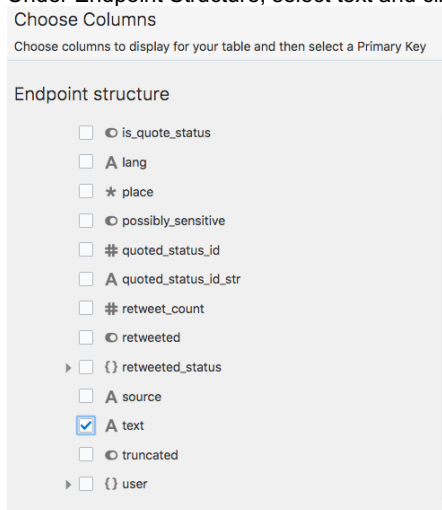
37. In the Data tab, click the (x) for Value and select Contact > PersonDEO_TwitterHandle_c.



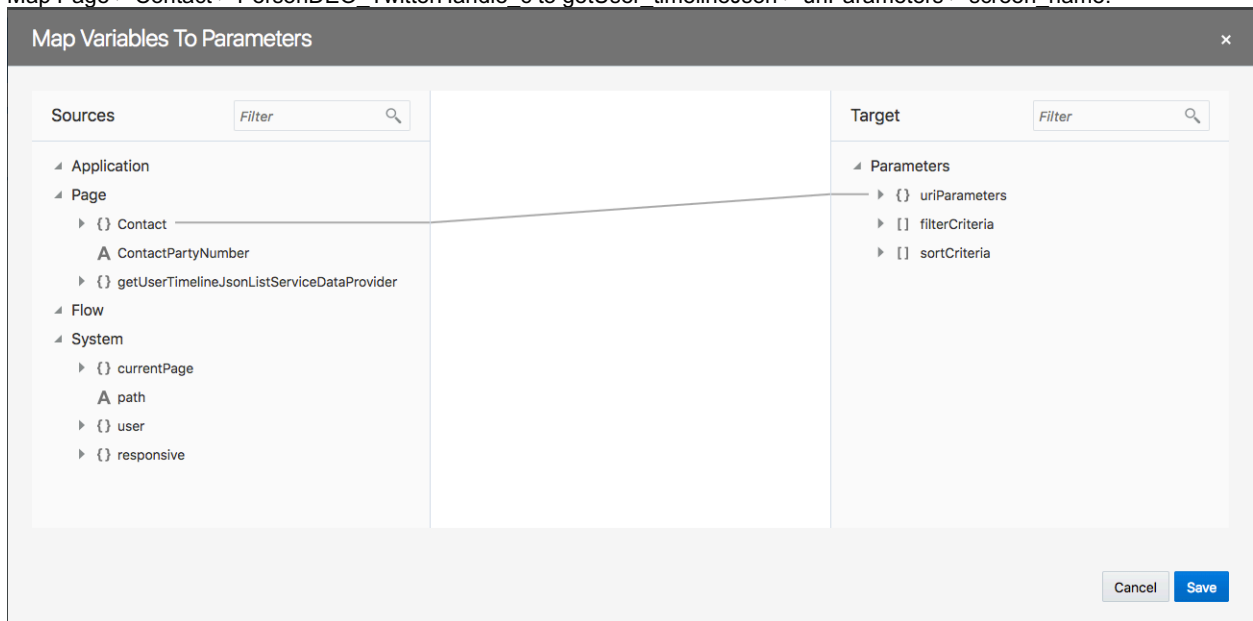
38. Drop a table under the Input Text component. In the Properties Inspector, click Add Data.

39. Select Service Connections > Twitter > getUser_timelineJson and click Next.

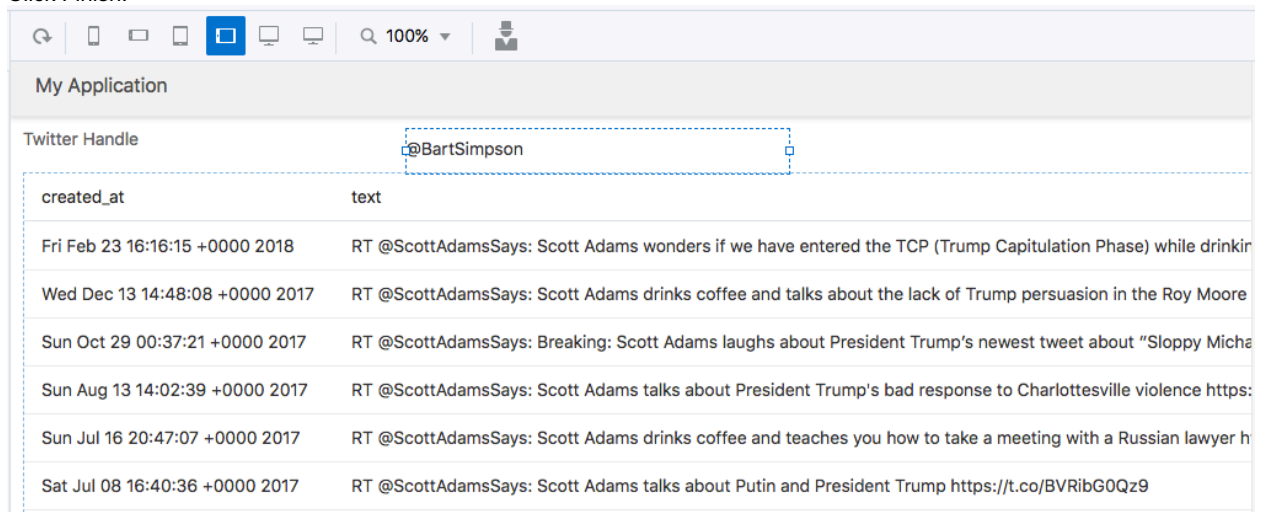
40. Under Endpoint Structure, select text and click Next.



41. Map Page > Contact > PersonDEO_TwitterHandle_c to getUser_timelineJson > uriParameters > screen_name.



42. Click Finish.



Conclusion

Oracle Visual Builder Cloud Service is one of the fastest ways to develop and deploy an application to nearly any platform. Whether you are a seasoned application developer or have no technical background at all, VBCS gives you the ability to work with and share data more efficiently than ever before.

Be sure to visit the Oracle VBCS web site to get the latest details about this revolutionary application development tool and many other Oracle Cloud offerings.

<https://cloud.oracle.com/visual-builder>