App Connect with RPA

Hands-on Lab

Version 1.1

15th September 2021

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1. Introduction

This hands-on lab you will learn to build an App Connect flow to run a bot.

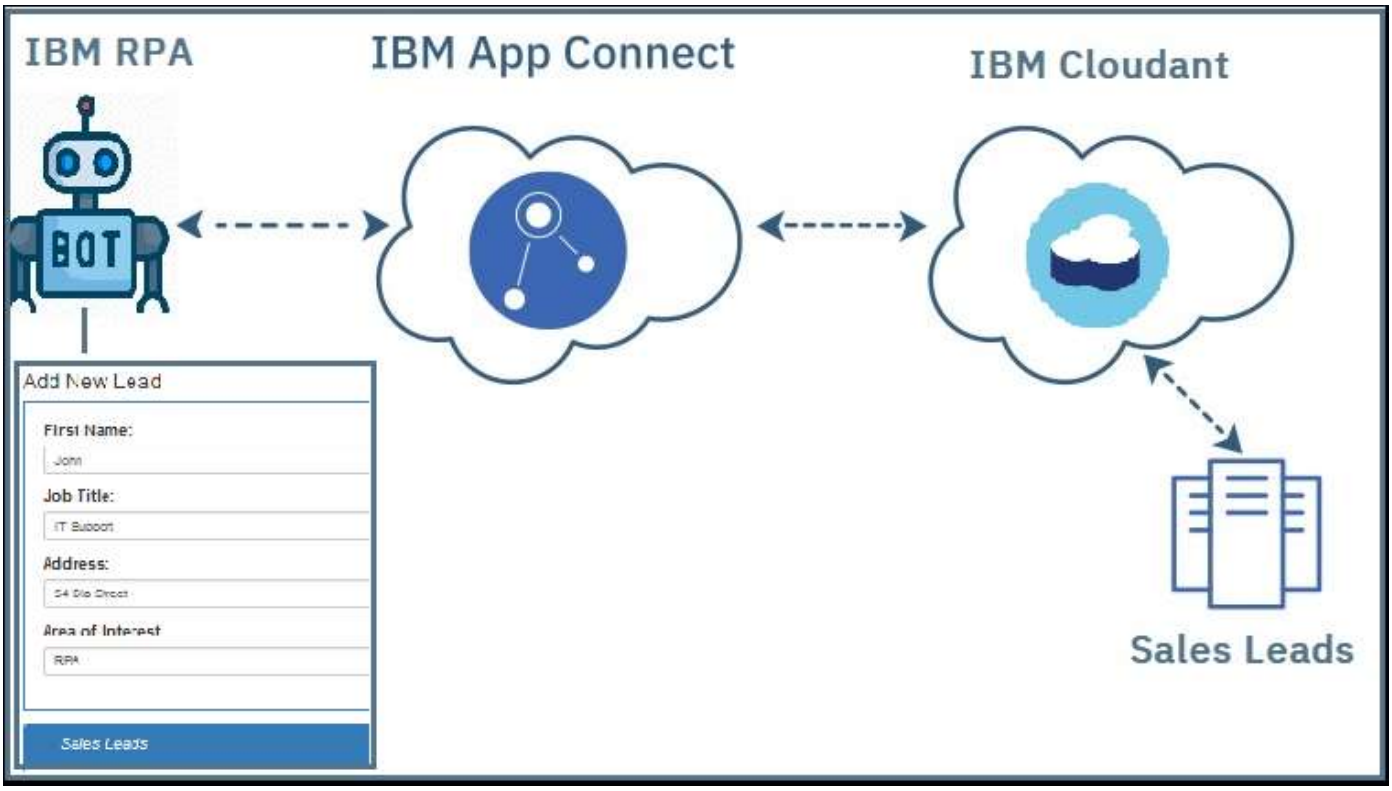


FIGURE 1. LAB ARCHITECTURE

2. Use case

In this exercise you will build a bot to automate sales leads for JK Automation. Sales leads are currently captured by the sales team and entered to a database. The sales leads are then manually copy/pasted into the online opportunity system. This task is error prone and the sales team repeatedly ask if this can be automated, but automation has been too difficult. Until now …

3. Prerequisites

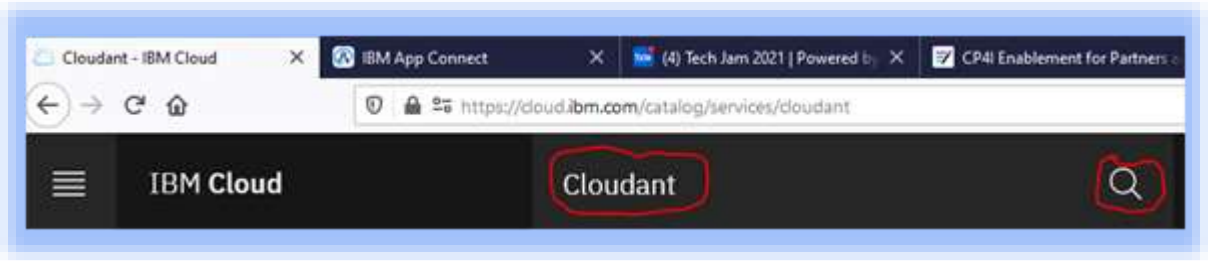
- An IBM Cloud Account. If you don't have one, visit: https://cloud.ibm.com/registration
- App Connect Lite (free)
- Cloudant Lite (free)

4. Lab Instructions

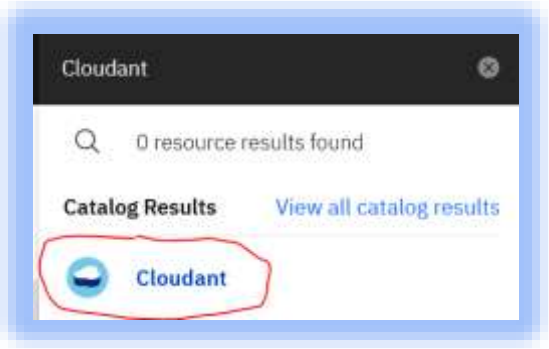
Create a Cloudant database

Log into IBM Cloud

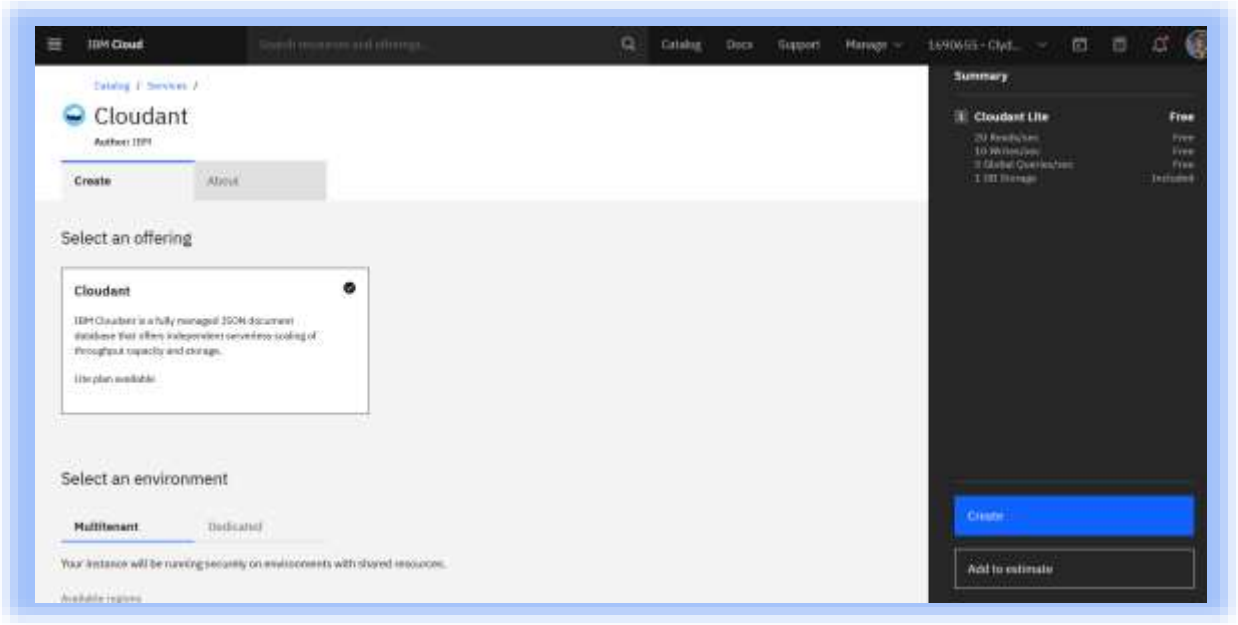
In the search bar, type Cloudant and then press the magnifying glass.



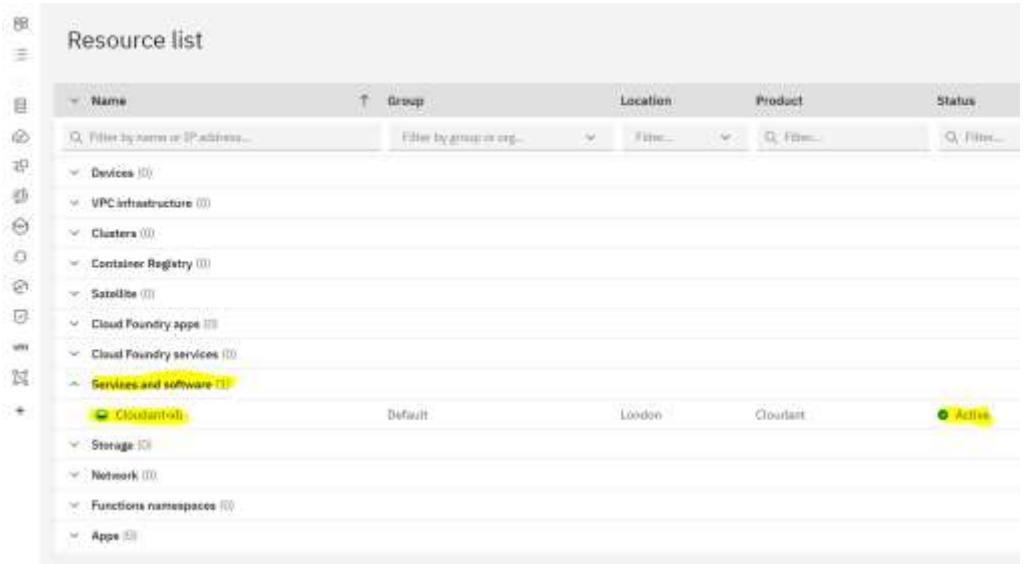
Select the Cloudant Service:



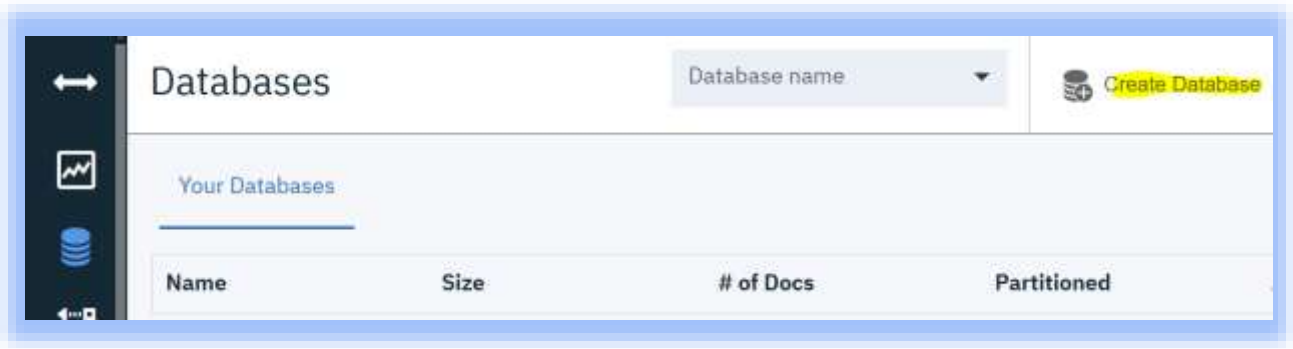
Select the **Cloudant Lite** service and then press “Create”



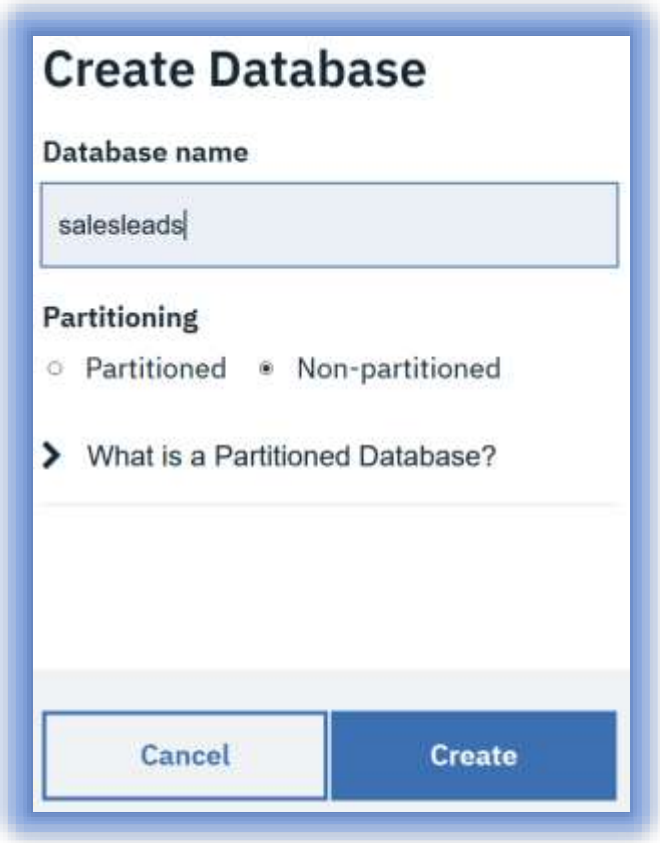
After a minute or two you should see the service has been provisioned under *Services and Software.* Make sure the service is in *Active* state.



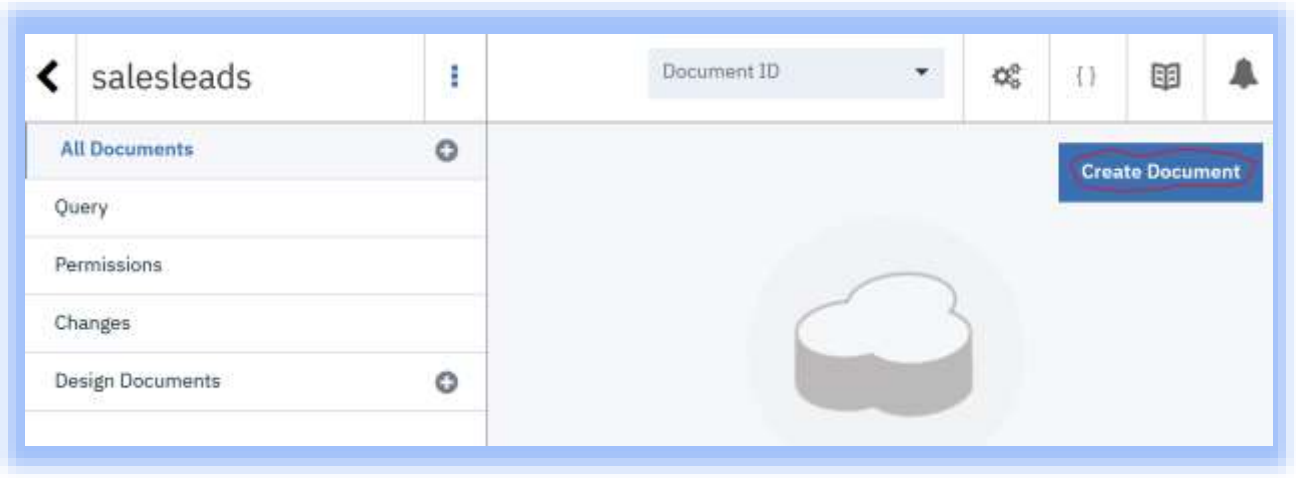
Click on your provisioned Cloudant instance and click *Launch Dashboard*. Select Databases and then *Create Database*:



Give the database the name of *salesleads* and make it non-partitioned. Then press Create.



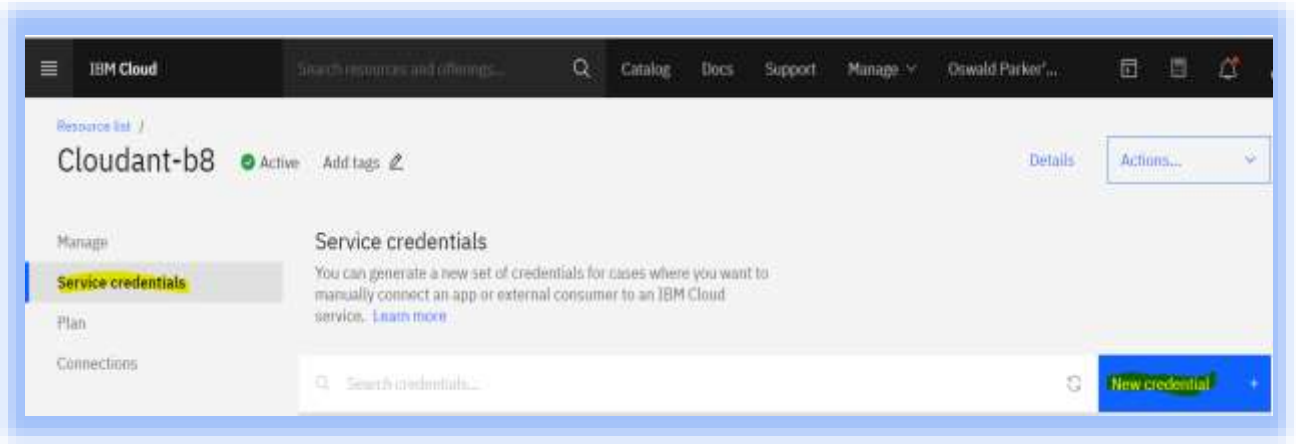
Select *Create Document*:



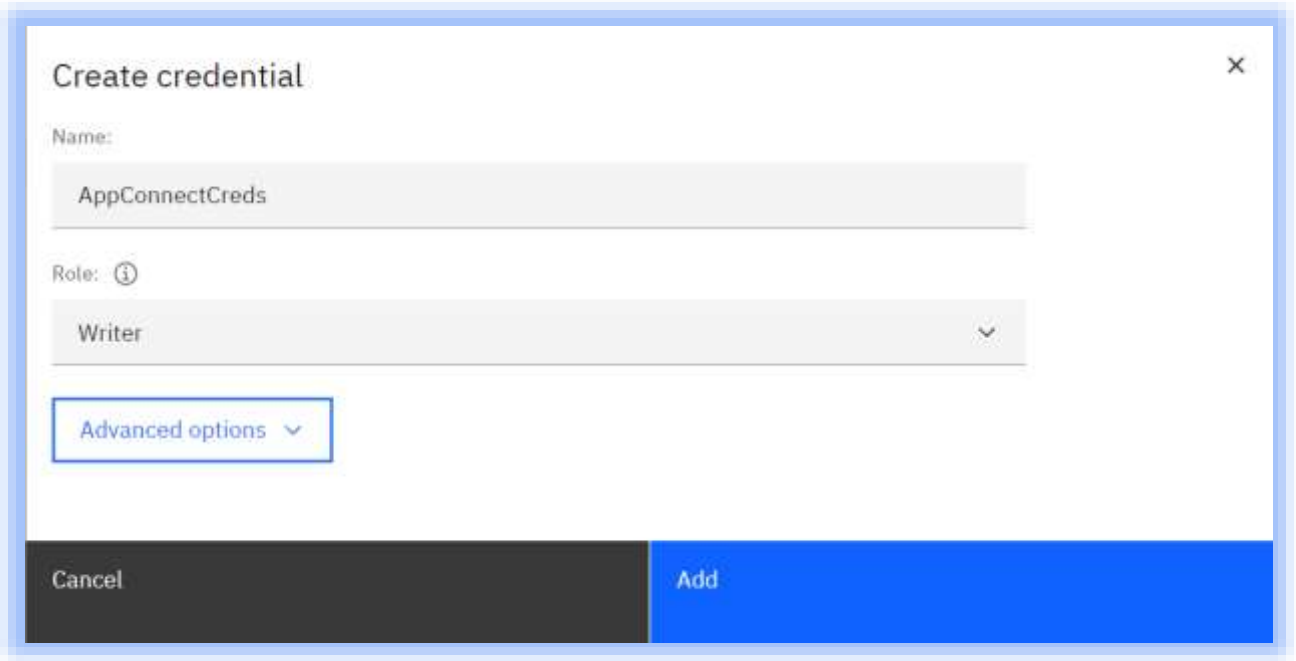
Paste the following JSON into the document and then press *Create Document.* You should see the message *"Document created successfully"*


```
{
 "_id": "28eb67f1e89deb5a058758433d36c446",
 "first_name": "Ned",
 "last_name": "Flanders",
 "job_title": "IT Support",
 "company": "IBM",
 "email": "ned@ibm.com",
 "phone": "87898977",
 "client_address": "101 Acasia Av",
 "client_city": "Springfield",
 "client_zipcode": "786786",
 "interest": "8",
 "followup": "Yes",
 "client_state": "North Carolina"
}
```

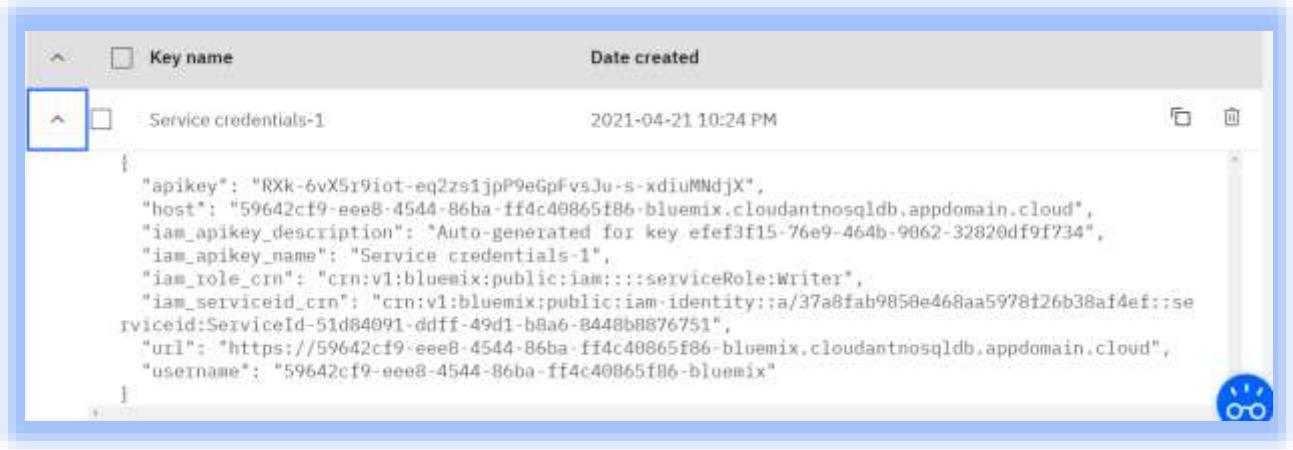

Back in IBM Cloud, click on your Cloudant instance and then click on Service Credentials. Select *New Credential*:



Give the credential name of *AppConnectCreds* and make the role *Writer:*



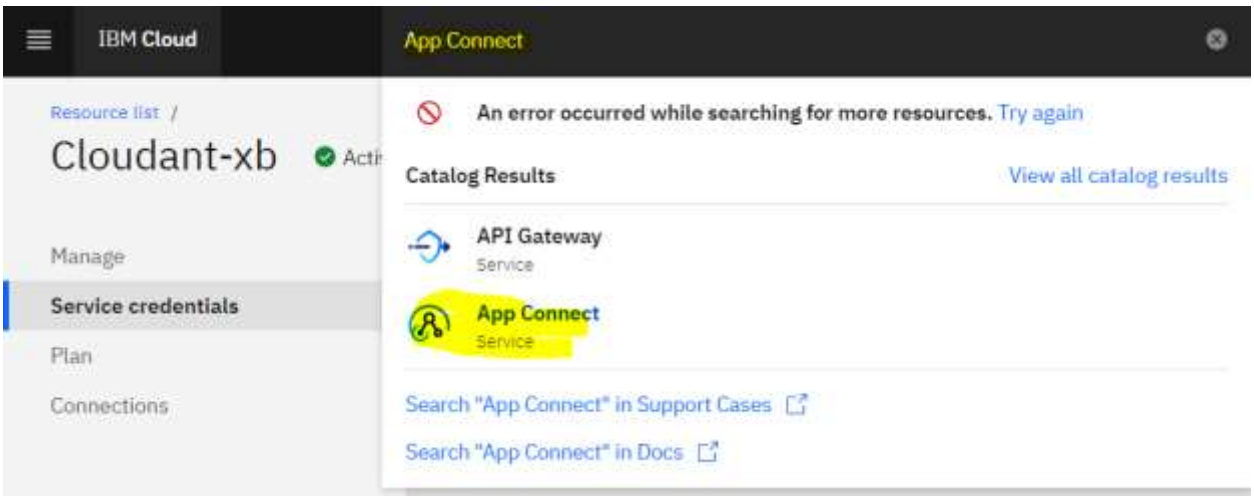
Press *Add*. Now expand the newly created service Credentials to view the details.



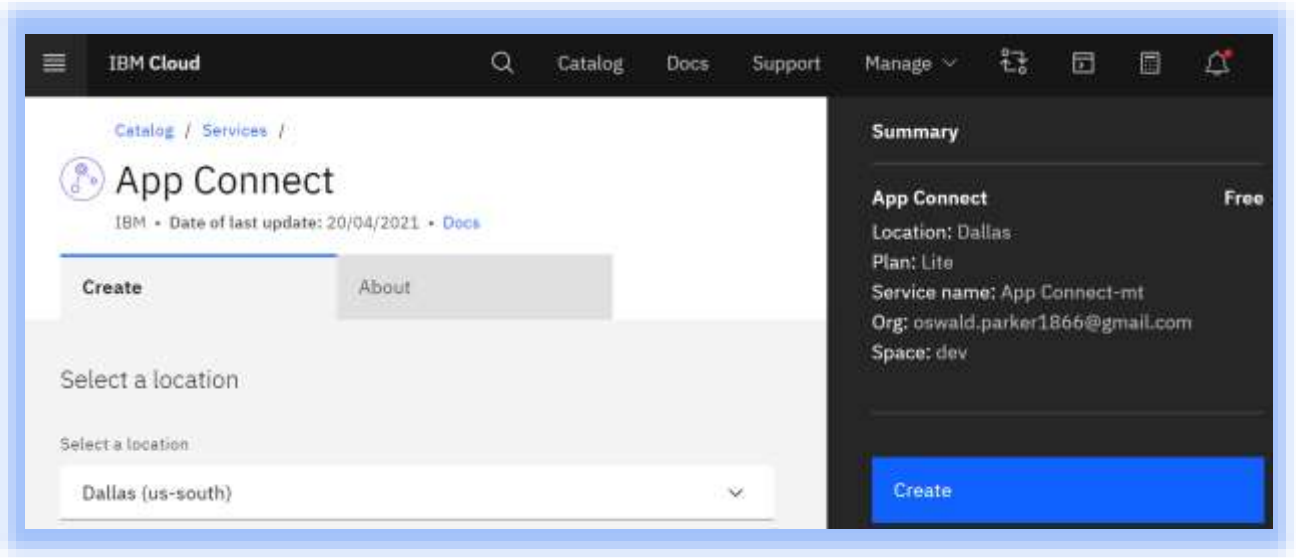
Copy these details into notepad so that you can use them in the next section.

Provision an App Connect Instance

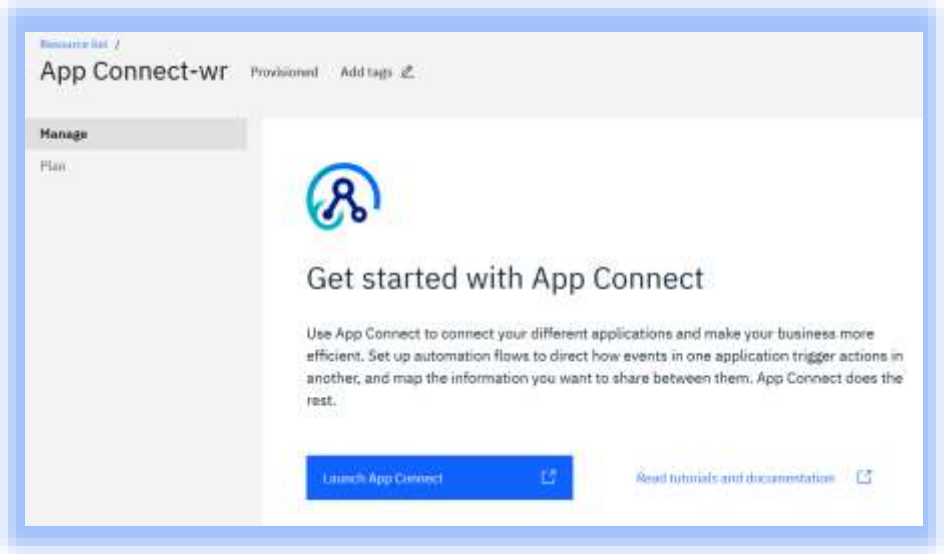
Still in IBM Cloud, in the search bar, type *App Connect*:



Select the *App Connect* service. Create an App Connect Lite (free plan) by pressing *Create*.

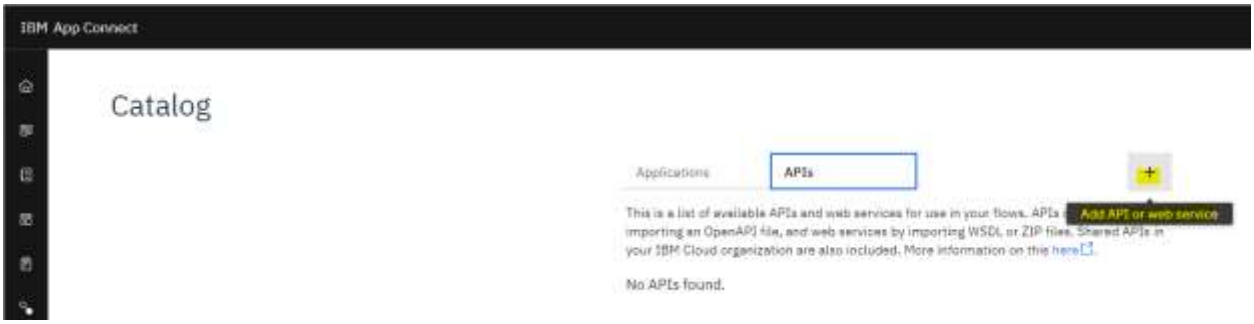


After a few minutes your App Connect instance will be provisioned. Select Launch App Connect.



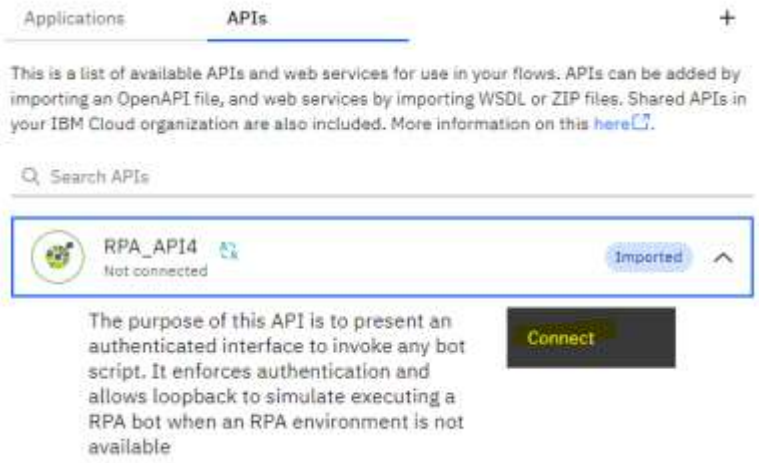
Import the RPA Bot API

On the left-hand side, select *Catalog*  and then select the *APIs* tab and then press the + button



Drag *https://rpapi.eu-gb.mybluemix.net/RPA_API.yaml* to the drop area and press *Next*. Enter the name *RPA_API4* and description *RPA API*. Note the name RPA_API4 must be exact. Press *Add API*. The API should be created without errors.

Select the drop-down arrow on the newly created *RPA API* and press *Connect*

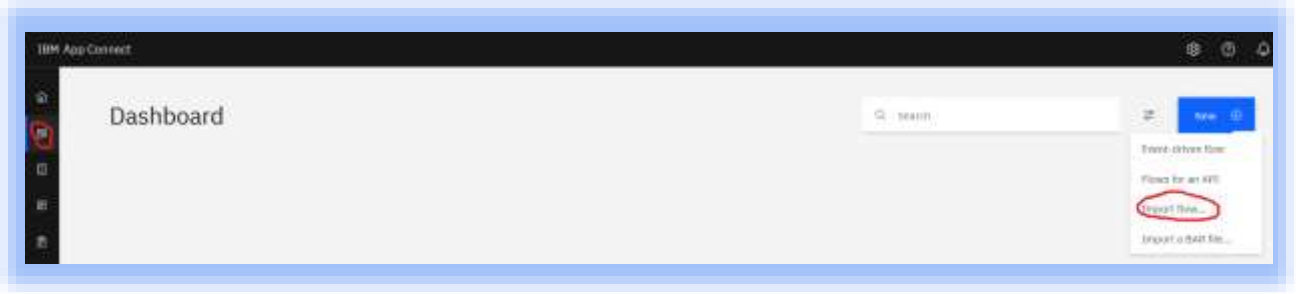


Leave all fields as default and press *Connect* again.

An API Account should now have been created, which we will use in the next step.

Create an App Connect Flow

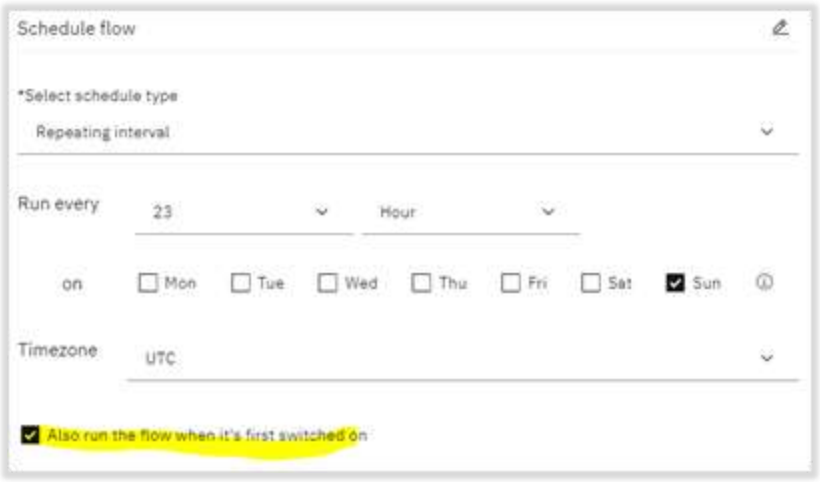
On the left-hand side, select *Dashboard*  and then on the right-hand side, press *New->Import Flow…*



Drag https://rpapi.eu-gb.mybluemix.net/SalesLeadsApi.yaml to the drop area and press *Import*. The API Flow should be imported. You should see the flow with several errors that we will rectify in the next step.

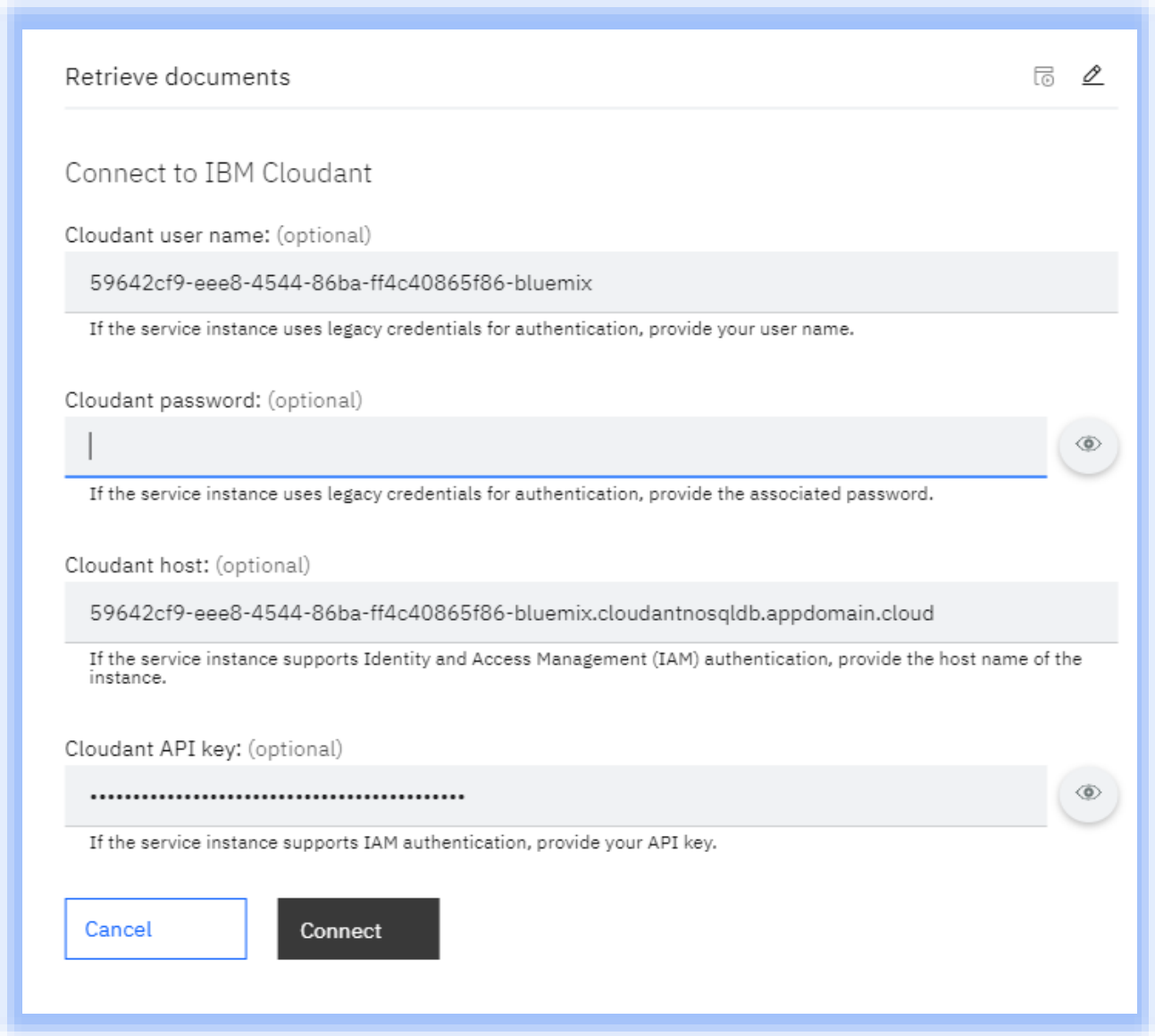
Fix Errors in the Flow

Click on the Scheduler inside the flow. Create a schedule as shown below

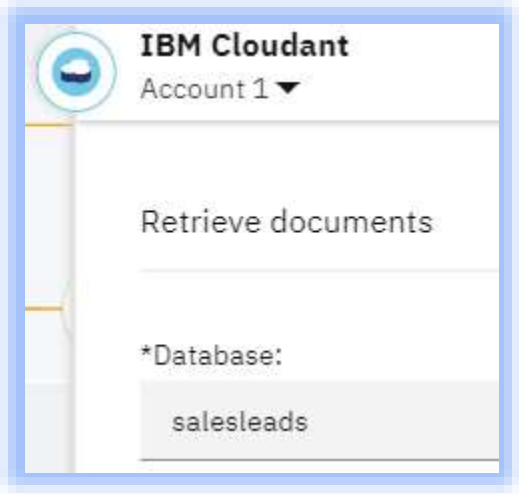


The error should disappear.

Click on IBM Cloudant. Click on connect. Enter the credentials of the Cloudant instance you created earlier. The Cloudant password is not required:

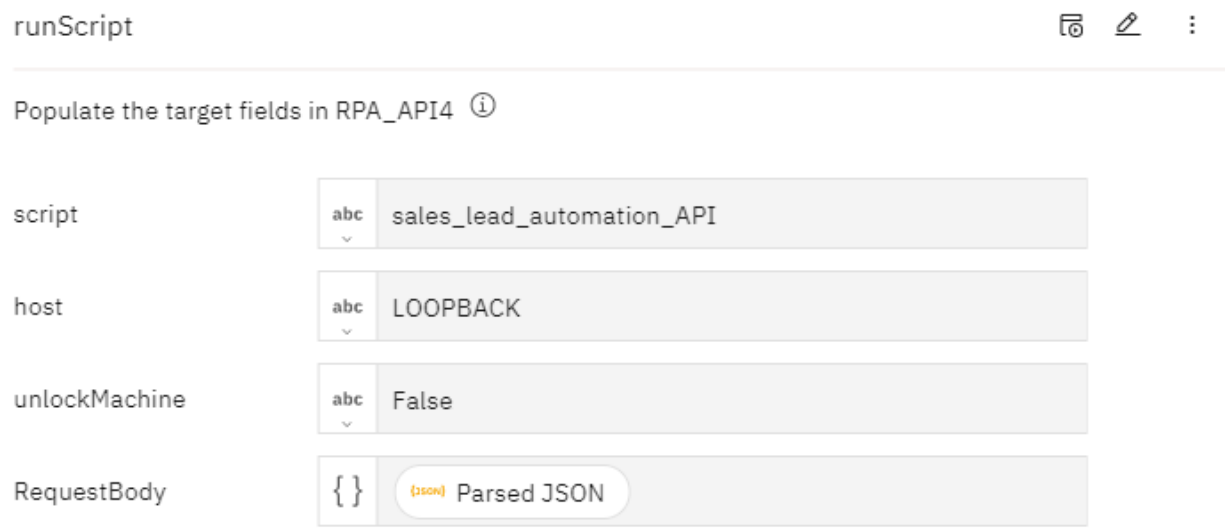


If you have more than one Cloudant database, select *salesleads*



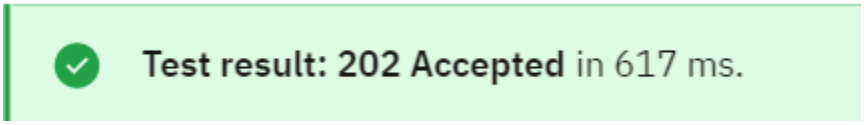
Click *IBM Cloudant*, select the drop down and select *salesleads* under *Database*. The database should have no errors.

Back in the flow, click on RPA_API4. You should see the following:



Press the *play* button and then press *continue*:

After a moment you should see:



This verifies that the API is working.

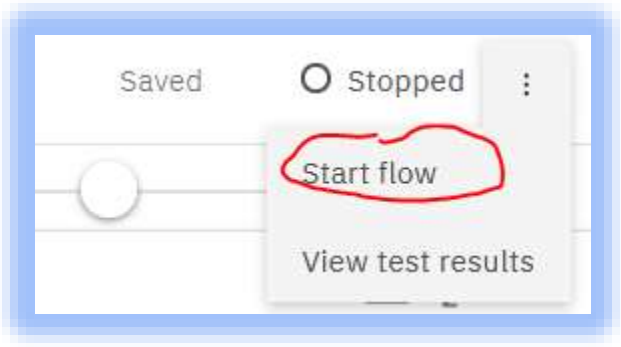
Note that for this lab we are using an emulated RPA *host* called LOOPBACK. To see the API invoked using a real RPA server host, view the following video:

https://youtu.be/1K_Zja-okQg

All the errors in the flow have now been fixed, so we can now run the entire flow.

Run the App Connect Flow

Choose *Start flow* under the vertical ellipsis at the top right of the flow



The flow will run. It will perform the following:

1. Read a document from Cloudant
2. Invoke the RPA bot using the document as bot parameters
3. The bot fills in a web form using the passed in parameters.
4. Once executed, the bots pass back the results where they are written to Cloudant
5. If there are several Cloudant documents, the process repeats from step 1

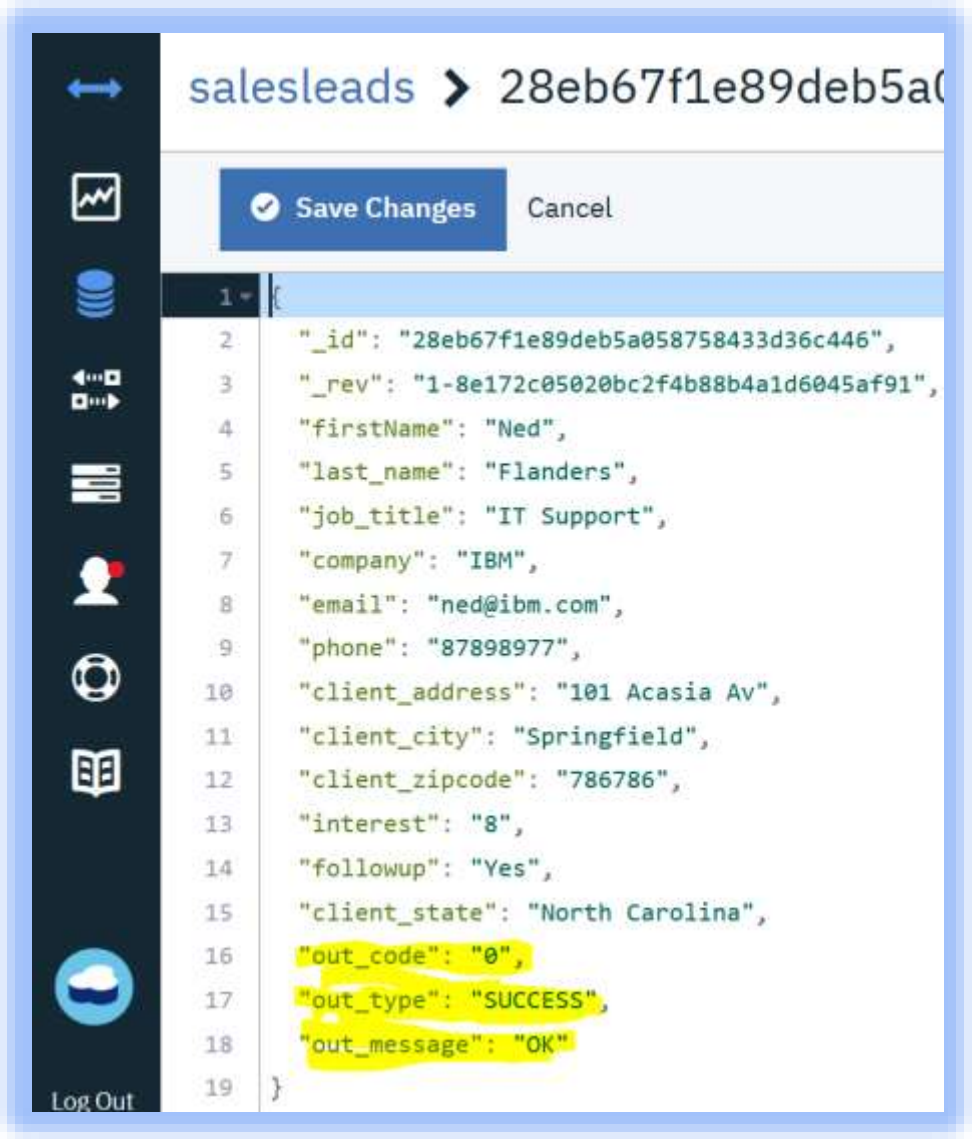
View App Connect Logs

To view the result, select the Logs  icon. After a few minutes you should see `Flow SalesLeadsRPA completed successfully` in the log

	Event time (UTC)	Message
⌄	2021-09-15 16:32:03.852	Flow SalesLeadsRPA completed successfully.
⌄	2021-09-15 16:32:03.800	Processing complete
⌄	2021-09-15 16:16:41.382	Successfully created API "RPA_API4".
⌄	2021-09-15 16:05:27.350	An instance of App Connect with ID fog7zo51h has been provisioned.

View Processing Result in Cloudant

To view the processing results in Cloudant, go back to your Cloudant database and open the document you created earlier. The processing results from the bot have been added to the Cloudant document. This indicates that the bot added data to the JK Automation web site and returned successfully.



Go back into App Connect *Dashboard*  , Within the SalesLeadsRPA vertical ellipses menu, select *Stop Flow*.

Congratulations. You have completed the RPA with App Connect lab!

THIS COMPLETES THIS HANDS-ON STANDARD LAB