



Launch a BAW Process from IBM RPA

Hands-on Lab

*Version 1.2 for
Business Partner
Virtual Workshop
using on-prem*

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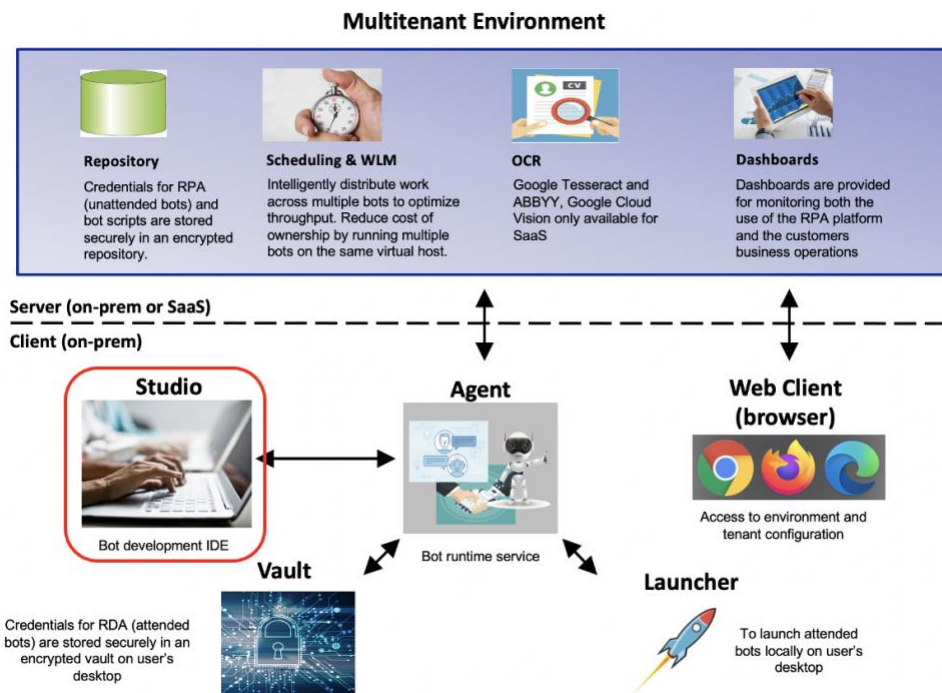
Jukka Juselius – jukka.juselius@fi.ibm.com (modifications for BP workshop)

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1. Introduction

This hands-on lab you will use IBM RPA Studio to enhance the automation you created in Lab 1. You will start with an existing automation and make the necessary enhancements.



Use case

In Lab 1 you learned how to automate processing of sales leads that arrive in a CSV/Excel format. The bot you created in Lab 1 automatically entered the sales leads into the online opportunity system of record (JK Automation Sales Leads).

The sales leads designated as “Follow up” require a follow up by the sales team. To automate this your Bot will need to start a Business automation Workflow (BAW) process instance called “Opportunity Management Process”.

The process handles sales leads that have the “Follow up?” flag turned on. In the first step of the process the sales lead information is verified and corrected (for example contact information). In the second step of the process a sales manager explores the opportunity and decides if it should be followed in a “Sales Progression Sub-Process”.

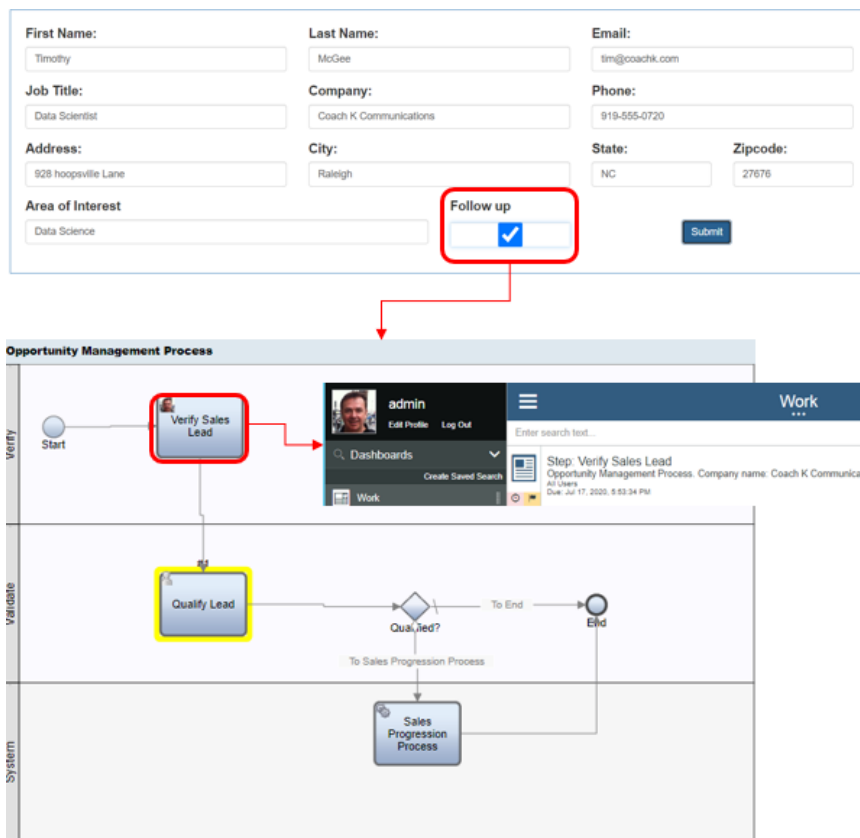


FIGURE 1. OPPORTUNITY MANAGEMENT SALES PROCESS - LAUNCHED BY BOT

Prerequisites

None. You have everything you need in your lab environment. Just notice that we have already built the “Opportunity Management Sales Process” and installed it to your environments BAW server. Also, the BAW server is started, so you should be good to go 👍

2. Lab Instructions

Start IBM RPA Studio

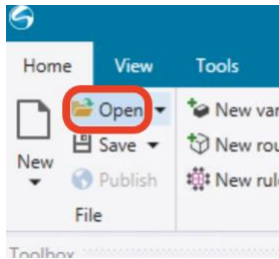
_1. Double-click the IBM RPA Studio shortcut in your desktop (if not already open).



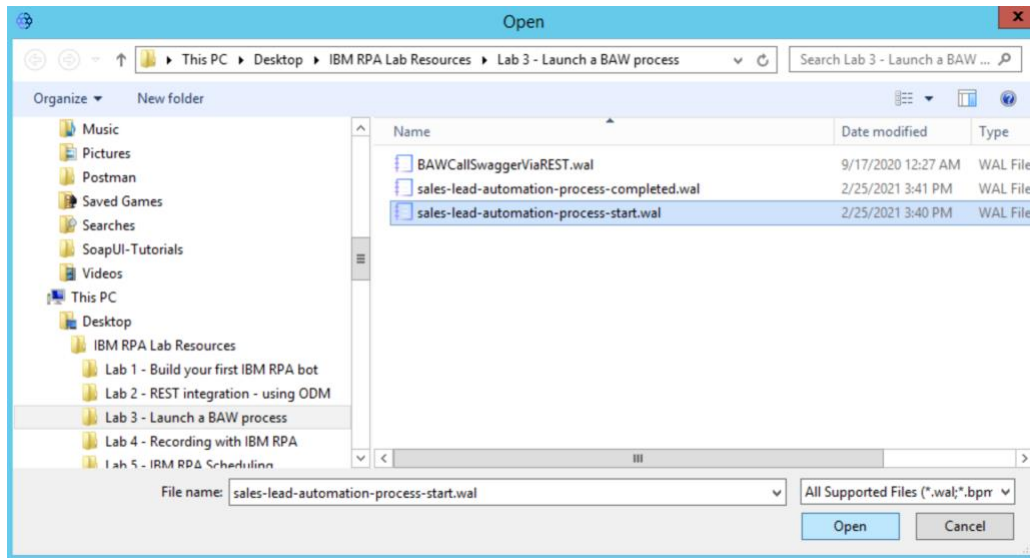
Import Completed automation

You will now import the same automation you created in Lab 1: Build your first IBM RPA bot.

_1. Click Open icon from the top toolbar (NOT the dropdown menu arrow besides it).



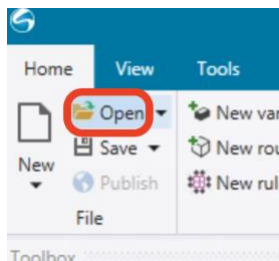
_2. Navigate to *Desktop* → *IBM RPA Lab Resources* → *Lab 3 – Launch a BAW process* and select **sales-lead-automation-process-start.wal** and click **Open**.



Import BAW REST Bot

Next, you import a bot which you will use in your automation to launch a BAW process instance.

_1. Click **Open** icon from the top toolbar (NOT the dropdown menu arrow besides it).



The screenshot shows a Windows File Explorer window titled 'Open'. The address bar indicates the current path is 'This PC > Desktop > IBM RPA Lab Resources > Lab 3 - Launch a BAW process'. The left-hand navigation pane shows a tree view of the file system, with 'Lab 3 - Launch a BAW process' selected under 'Desktop > IBM RPA Lab Resources'. The main content area displays a list of files with columns for 'Name', 'Date modified', and 'Type'. The files listed are 'BAWCallSwaggerViaREST.wal' (modified 9/17/2020 12:27 AM), 'sales-lead-automation-process-completed.wal' (modified 2/25/2021 3:41 PM), and 'sales-lead-automation-process-start.wal' (modified 2/25/2021 3:40 PM). At the bottom, the 'File name' field contains 'BAWCallSwaggerViaREST.wal', and the file type dropdown is set to 'All Supported Files (*.wal;*.bpr)'. 'Open' and 'Cancel' buttons are visible at the bottom right.

Name	Date modified	Type
BAWCallSwaggerViaREST.wal	9/17/2020 12:27 AM	WAL File
sales-lead-automation-process-completed.wal	2/25/2021 3:41 PM	WAL File
sales-lead-automation-process-start.wal	2/25/2021 3:40 PM	WAL File

1. In **BAWCallSwaggerViaREST** automation click **Script** tab.



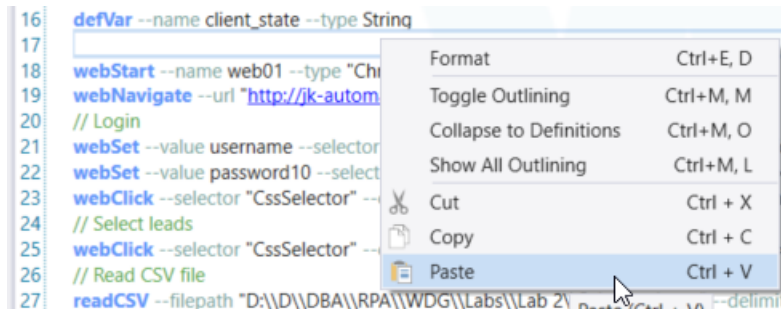
_3. Switch back to **sales-lead-automation-process-start.wal**.

_4. Click Script tab.



_5. Select **Line 16**, place your cursor to end of the line and hit `enter` to add a new line below it.

_6. Select **Line 17** right-click and paste.



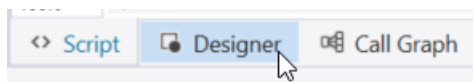
_7. On **Line 17-19** remove the comments `//##` and Save.

```
17 defVar --name vActionPath --type String --value "/processes?  
18 defVar --name vResJSON --type String --value "" --parameter  
19 defVar --name vBAWJSON --type String --value "{ \"input\": [f
```

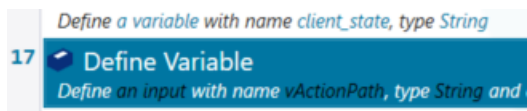
Initialize Execute Script variables

The Execute Script command invoke a Bot that start a BAW Process instance and passes to it the sales lead data extracted from the CSV file.

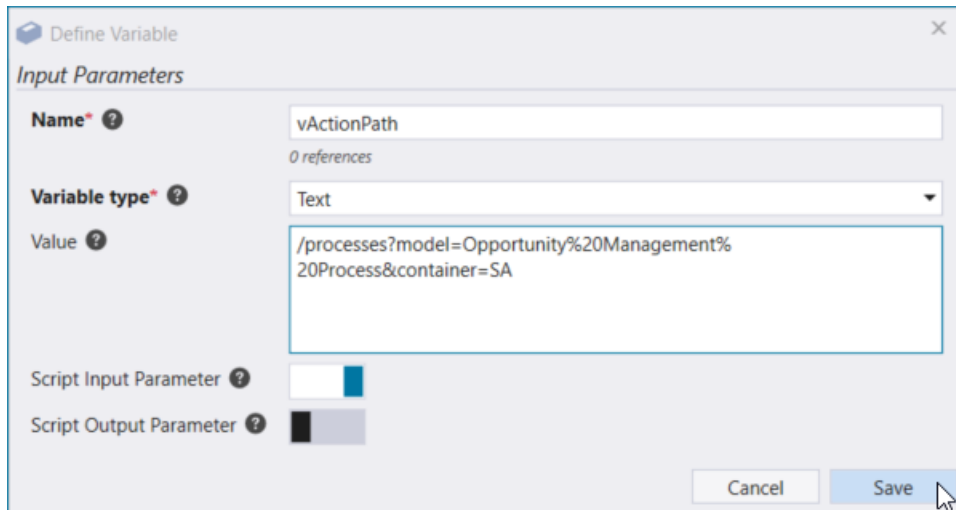
_1. Click Designer tab



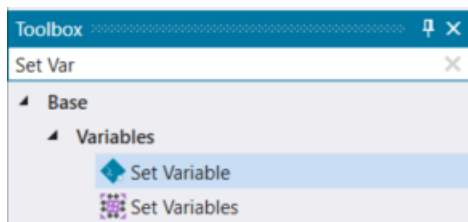
_2. Double-click **Line 17** where we set vActionPath variable.



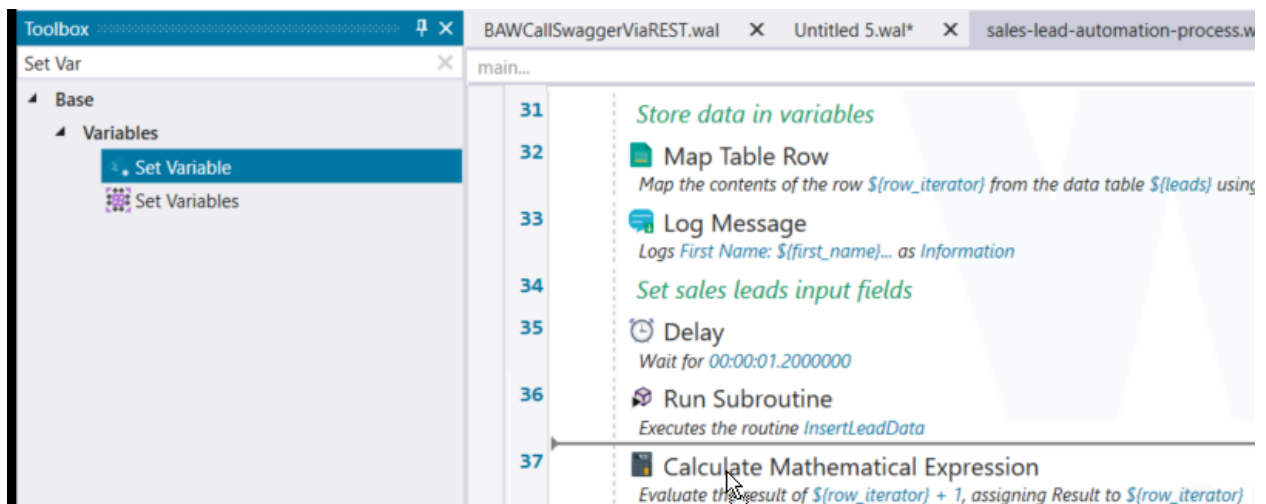
_3. For **Value** replace the current value with **/processes?model=Opportunity%20Management%20Process&container=SA** and click **Save**.



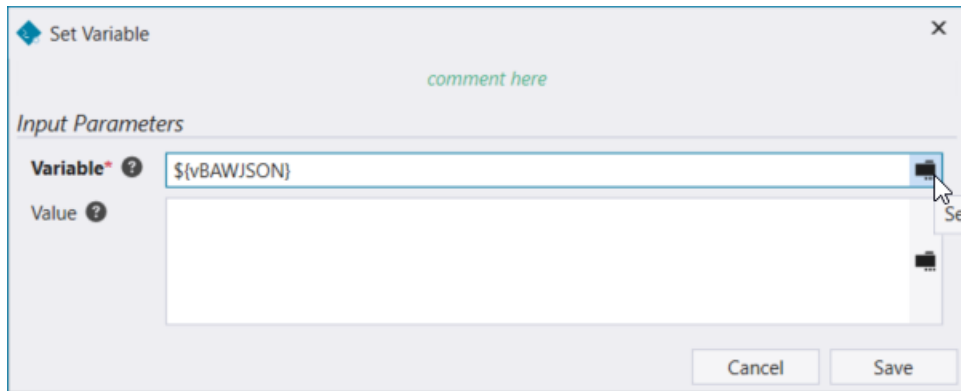
_4. On the **Toolbox** search for **Set Var**.



_5. Drag and Drop **Set Variable** after line 36.



_6. For Variable select an existing variable **vBAWJSON** and click Save.

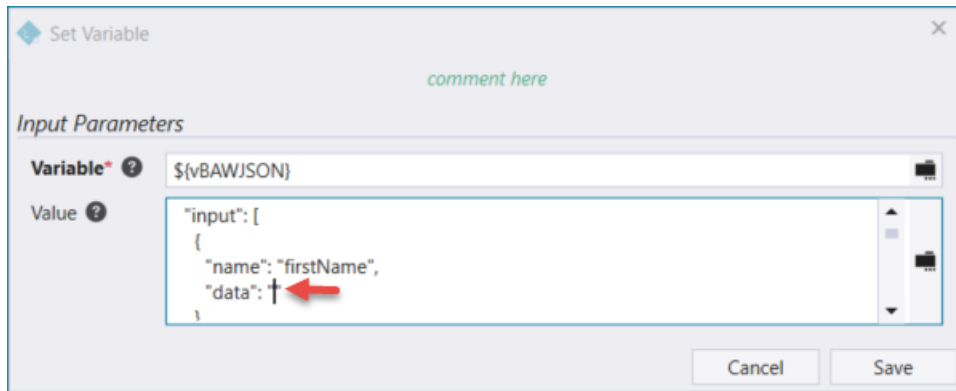


_7. For Value enter (you may want to use **ProcessJSON.txt** file in the Lab 3 resources folder).

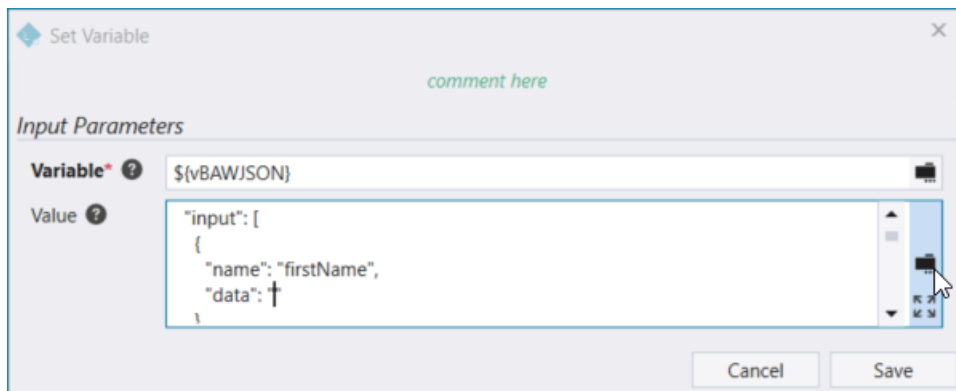
```
{
  "input": [
    {
      "name": "firstName",
      "data": ""
    },
    {
      "name": "lastName",
      "data": ""
    },
    {
      "name": "companyName",
      "data": ""
    },
    {
      "name": "email",
      "data": ""
    },
    {
      "name": "phone",
      "data": ""
    },
    {
      "name": "address",
      "data": ""
    },
    {
      "name": "city",
      "data": ""
    },
    {
      "name": "state",
      "data": ""
    },
    {
      "name": "zip",
      "data": ""
    },
    {
      "name": "areaOfInterest",
      "data": ""
    }
  ]
}
```

You will now need to set all occurrences of "data": "" with "data": "{variable}".

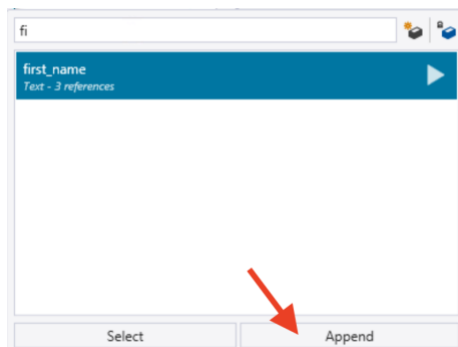
_8. Set the cursor as shown below, inside the double quotes for data value



_9. Click Select a variable button



_10. Select **first_name** and click Append.



_11. Repeat the above procedure for the remaining data items in the JSON.

```
{
  "input": [
    {
      "name": "firstName",
      "data": "${first_name}"
    },
    {
      "name": "lastName",
      "data": "${last_name}"
    },
  ],
}
```

```

{
  "name": "companyName",
  "data": "${company}"
},
{
  "name": "email",
  "data": "${email}"
},
{
  "name": "phone",
  "data": "${phone}"
},
{
  "name": "address",
  "data": "${client_address}"
},
{
  "name": "city",
  "data": "${client_city}"
},
{
  "name": "state",
  "data": "${client_state}"
},
{
  "name": "zip",
  "data": "${client_zipcode}"
},
{
  "name": "areaOfInterest",
  "data": "${interest}"
}
]
}

```

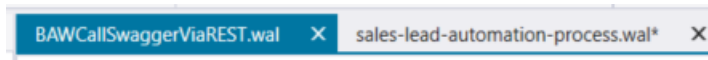
_12. Click Save.



_13. **Save** your work by hitting **Ctrl+S** or the **Save** icon from the top toolbar.

Add Invoke Bot Command (executeScript)

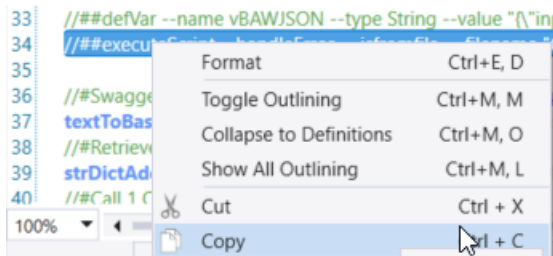
_1. Switch to **BAWCallSwaggerViaREST** automation



_2. Click **Script** tab



_3. Select **line 34** (the hole line), right-click and copy.



_4. Switch back to **sales-lead-automation-process.wal**

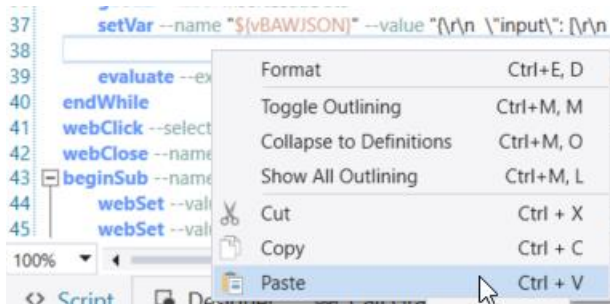


_5. Click **Script** tab



_6. Enter new line below **Line 37**.

_7. Select the new line (38) right-click and paste.



_8. On **Line 38** remove the comments **///##**

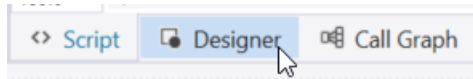
```

37 setVar --name "${vBAWJSON}" --value "${v}
38 executeScript --handleError --isfromfile -
39 evaluate --expression "${row iterator} + 1"

```

Initialize Invoke Bot Command (executeScript)

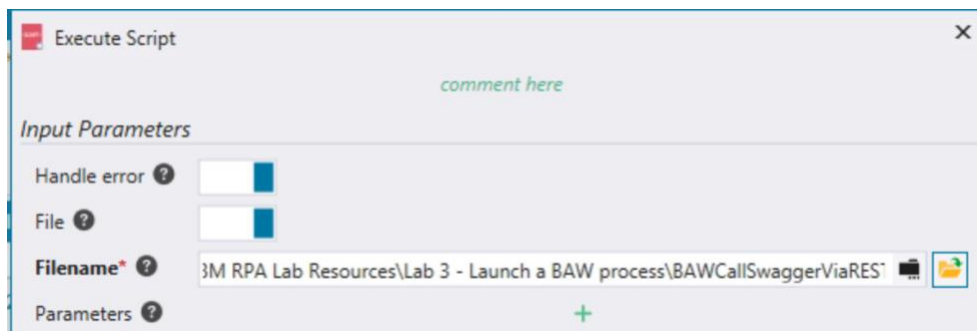
_1. Click Designer tab



_2. Double-click Line 38.

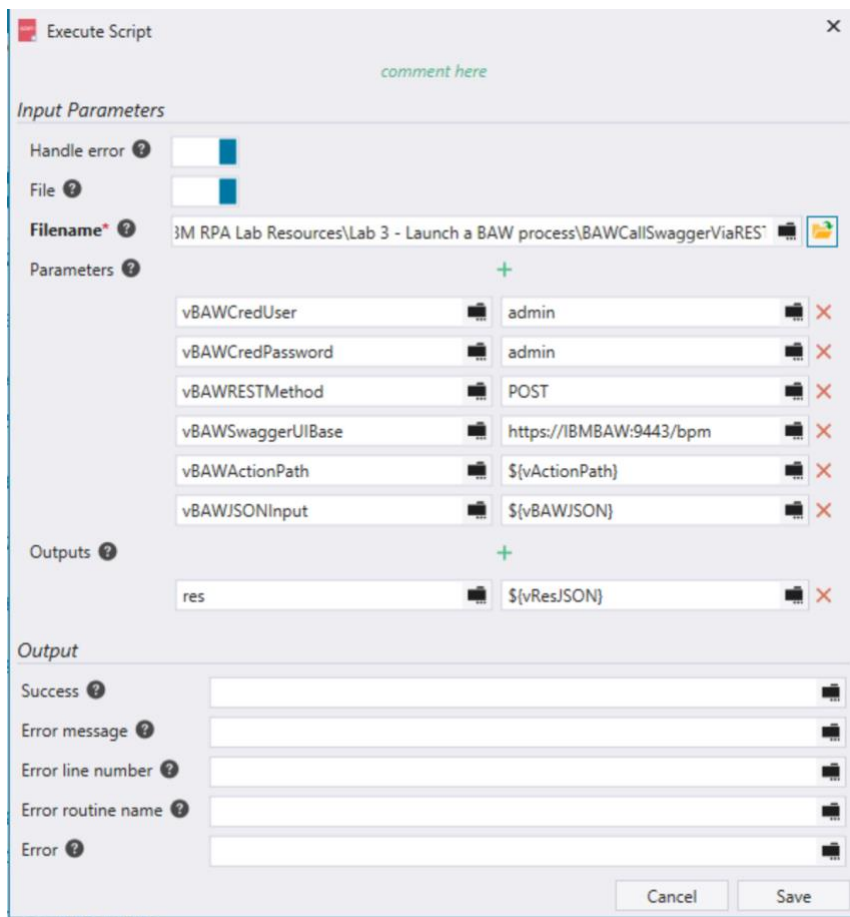


_3. Click File selection helper icon and navigate to Desktop → IBM RPA Lab Resources → Lab 3 – Launch a BAW process and open **BAWCallSwaggerViaREST.wal**.



_4. Set Parameters as follows, and then click **Save**. *NOTE! In production automation we would definitely utilize the credential store to retrieve the credentials to use here.*

Parameter	Comment	Value
vBAWCredUser	This is the BAW Server user id	admin
vBAWCredPassword	This is BAW Server password	admin
vBAWSwaggerUIBase	This is the Start Process REST API endpoint. You will need to select you own IP or host name. You can use either the IP or host name.	https://IBMBAW:9443/bpm



Execute Script

comment here

Input Parameters

Handle error ? ☐

File ? ☐

Filename ?

Parameters ? +

vBAWCredUser	admin	X
vBAWCredPassword	admin	X
vBAWRESTMethod	POST	X
vBAWSwaggerUIBase	https://IBMBAW:9443/bpm	X
vBAWActionPath	\${vActionPath}	X
vBAWJSONInput	\${vBAWJSON}	X

Outputs ? +

res	\${vResJSON}	X
-----	--------------	---

Output

Success ?

Error message ?

Error line number ?

Error routine name ?

Error ?

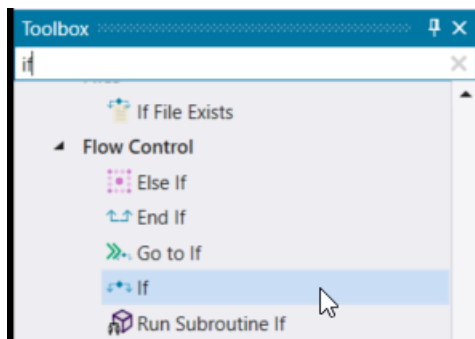
Cancel Save

_5. Save your work by hitting **Ctrl+S** or the **Save** icon from the top toolbar.

Add process invocation rule

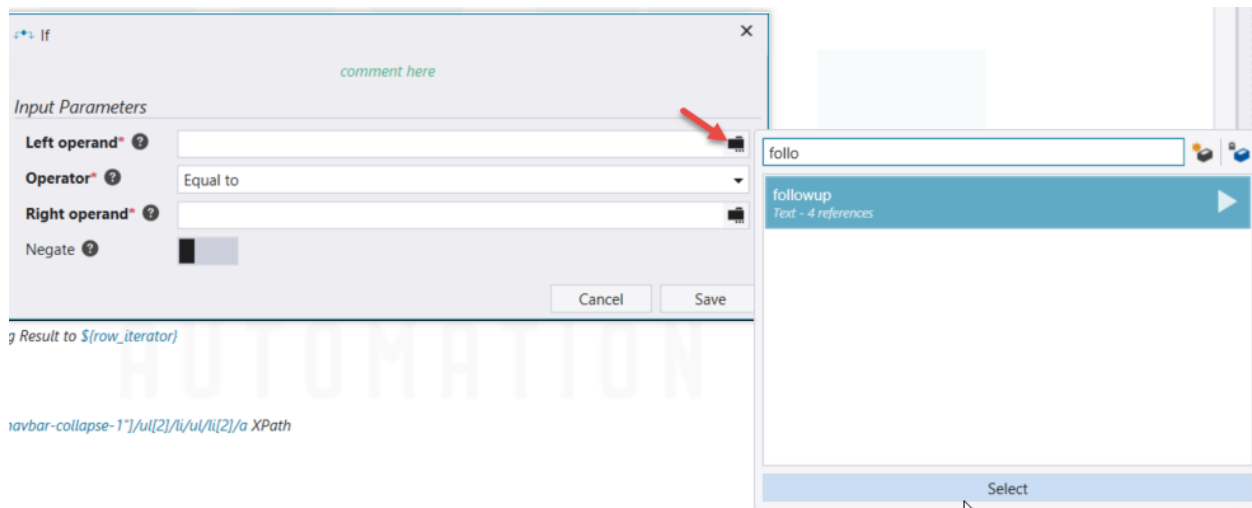
Since we only want to start the process if follow up is requested, let's add an if clause to enforce this rule.

_1. On the **Toolbox** search for **If**

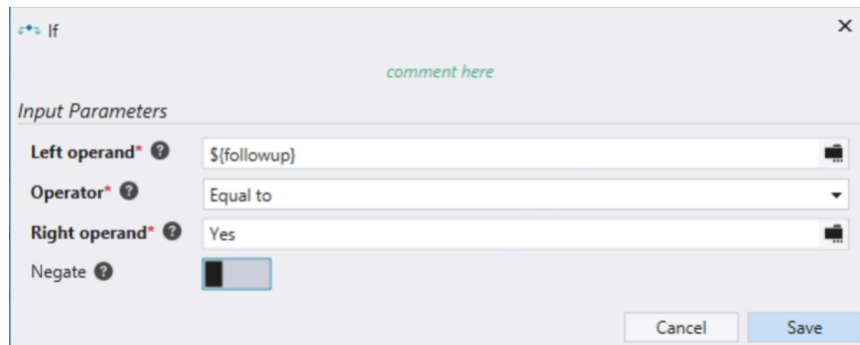


_2. Drag and drop the If command between line 37 and 38

_3. To set **Left operand**, click **Select a variable icon**, select variable **followup** and click **Select**



_4. For **Right operand** type **Yes** and then click **Save**.



_5. Move (drag and drop) the **End If** clause after line 40 – Execute Script command.

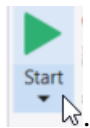


_6. **Save** your work by hitting **Ctrl+S** or the **Save** icon from the top toolbar.

Nice! All done with the configurations. You can start testing 👍

Test your automation

_1. Click the green **Start** icon from the top toolbar. Alternatively, you can hit **F5**. Let the automation run through.

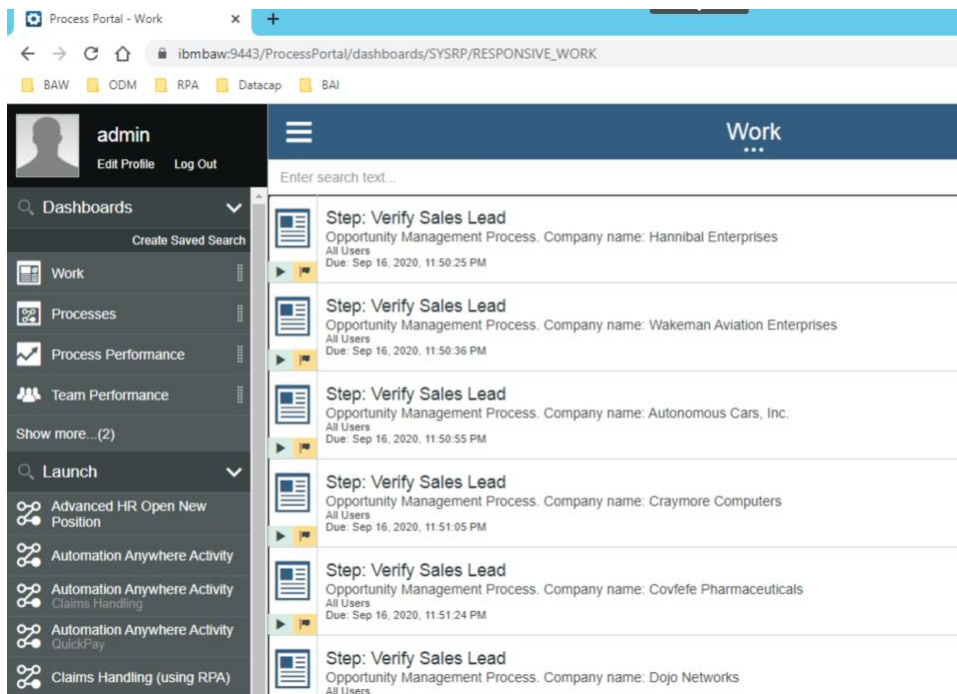


Examine generated process instances

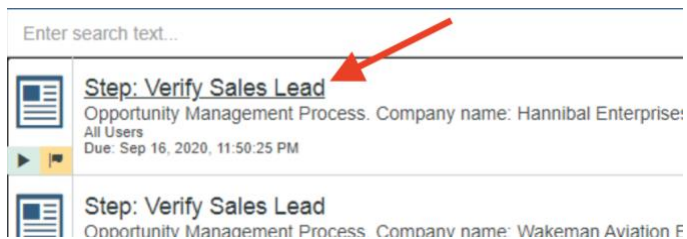
_1. Switch to your Business automation Workflow Server Process Portal by **opening a Chrome web browser** and selecting **BAW → Process Portal** from the bookmarks bar.

_2. Login as **admin**. Password: **admin**.

You should now see only **Verify Sales Lead** tasks but only for the entries in the CSV file where the Follow Up was set to Yes.



_3. Click on the first task to claim it



The purpose of this task is to verify the opportunity details and change the details if needed.

_4. Change the Are of Interest to **Robotic Process Automation with WDG Automation** and click OK.

Step: Verify Sales Lead

Focus Corp - Sales Opportunity Management System

Verify Opportunity Information

Opportunity ID

4554

First Name: Paul

Phone: 905-883-8234

Address: 119 Barkley Drive

Last Name: Pacholski

Company Name: Hannibal Enterprises

State:

Email: pacholsk@hannibalent.com

Zip: L3T-6N2

Area Of Interest

Robotic Process Automation with WDG Automation

OK

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You should now see **Qualify Lead** task at the end of your task list. The sales manager can use the information supplied in this activity to further investigate the lead and make the final decision to continue with the lead or abandon it.

Step: Qualify Lead

Opportunity Management Process. Company name: Wakeman Aviation Enterprises

All Users

Due: Jul 17, 2020, 6:12:40 PM

_5. Click Qualify Lead task to claim it.

Step: Qualify Lead

Opportunity Management Process. Company name: Wakeman Aviation Enterprises

All Users

Due: Jul 17, 2020, 6:12:40 PM

Note that all the information is now available as red-only.

Step: Qualify Lead

Focus Corp - Sales Opportunity Management System

Qualify Lead

Opportunity ID

4554

First Name

Paul

Phone

905-883-8234

Address

119 Barkley Drive

Last Name

Pacholski

Company Name

Hannibal Enterprises

State

Email

pacholsk@hannibalent.com

Zip

L3T-6N2

Area Of Interest

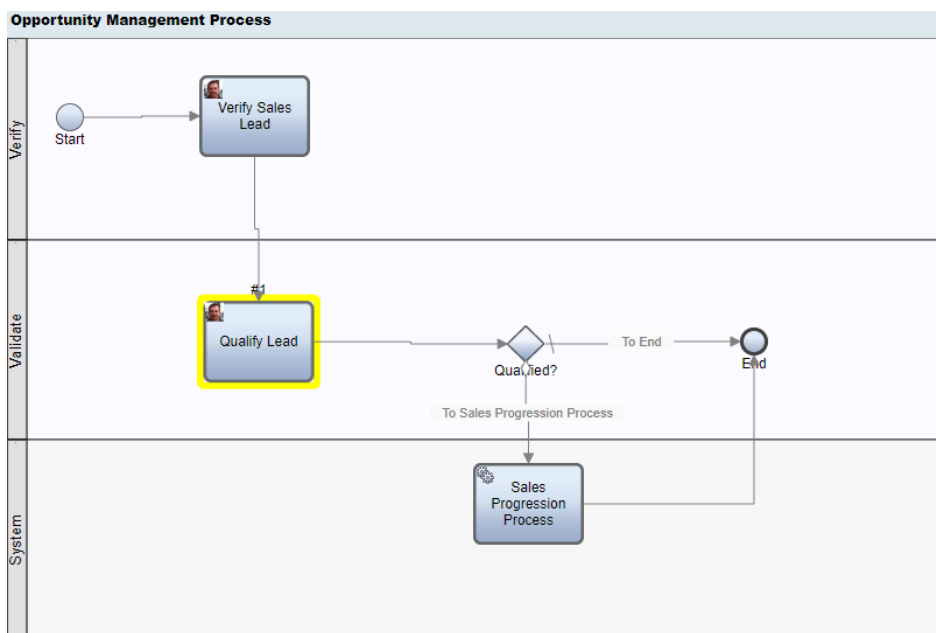
Robotic Process Automation with WDG Automation

Qualify

Reject

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The Sales Manager can examine the sales lead data and make the decision. While Reject will stop the process instance, clicking Qualify moves to the next step where the actual Sales Process begins!



_6. Click **Qualify**.

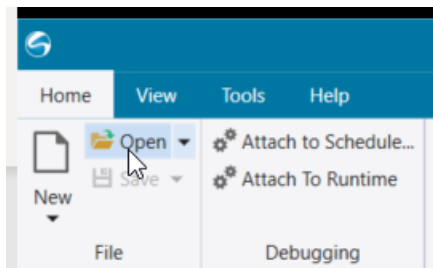
THIS COMPLETES THIS HANDS-ON LAB

3. Run Completed Automation

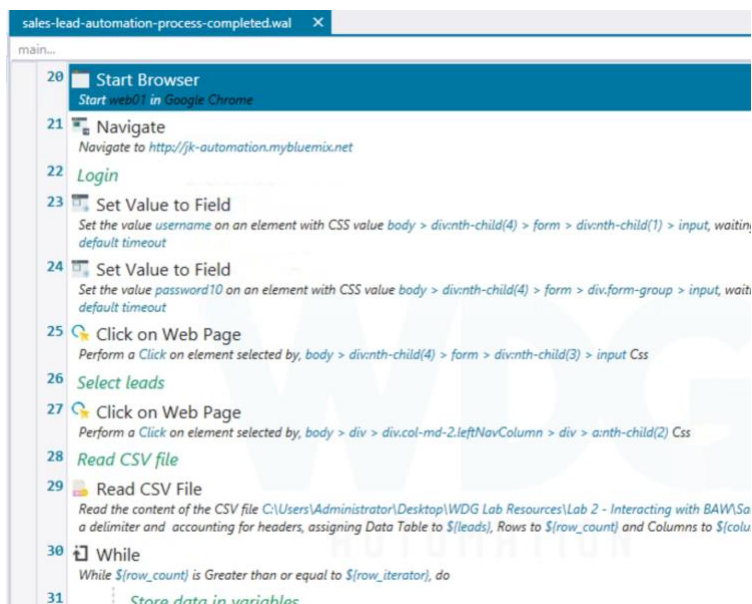
If you just want to run the automation without authoring it first follow these instructions below.

Open completed lab

_1. In IBM RPA Studio, Select Open .



_2. Navigate to *Desktop* → *IBM RPA Lab Resources* → *Lab 3 – Launch a BAW process*. Select **sales-lead-automation-process-completed.wal** and click Open .



Run the automation

_1. Click the green Start icon from the top toolbar. Alternatively, you can hit F5.



_2. Follow the steps in [Test your automation](#) on page 18.