

Walkthrough: Sketch a BPMN diagram for an RPA process

In this walkthrough, you create a BPMN diagram for an RPA process by using the MuleSoft RPA Manager BPMN Editor. You will:

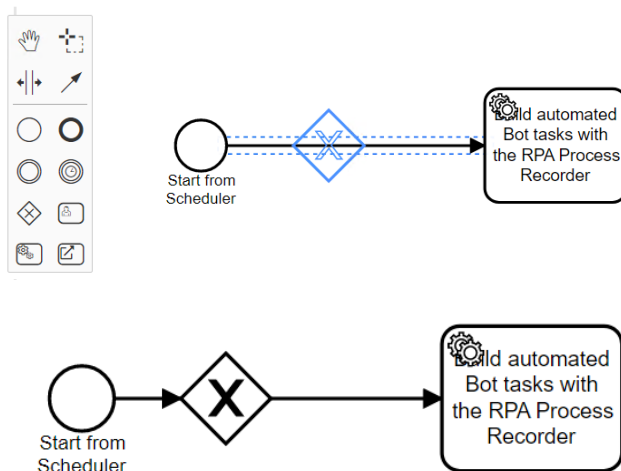
- Design an RPA process in the MuleSoft RPA Manager BPMN editor.
- Design conditional logic by using Exclusive Gateways.
- Annotate a BPMN diagram to indicate variable names and where they are used.

Sketch Out an Initial BPMN Design in the Mulesoft Rpa Manger BPMN Editor

To get started, use the BPMN editor to sketch out the overall structure of the RPA process.

Route the Start event to an Exclusive Gateway to decide if the flow should route to a User Task

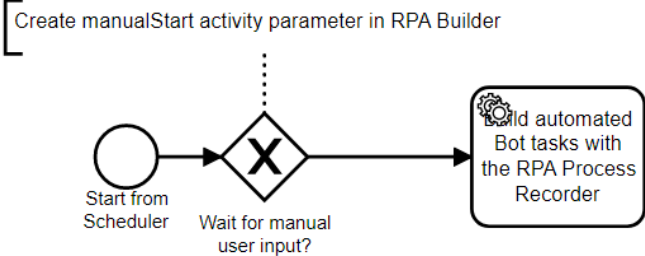
1. From the main menu, click the **Create Exclusive Gateway** icon then move the it between the **Start Event** and **RPA Bot Task**; the new Exclusive Gateway should break up the connector between the Start Event and RPA Bot Task.



2. Double-click the **Exclusive Gateway** element and type in the label **Wait for manual user input?**.

Add an annotation to remind the developer to set a variable value in the test and deployment profiles to be used by this Exclusive Gateway

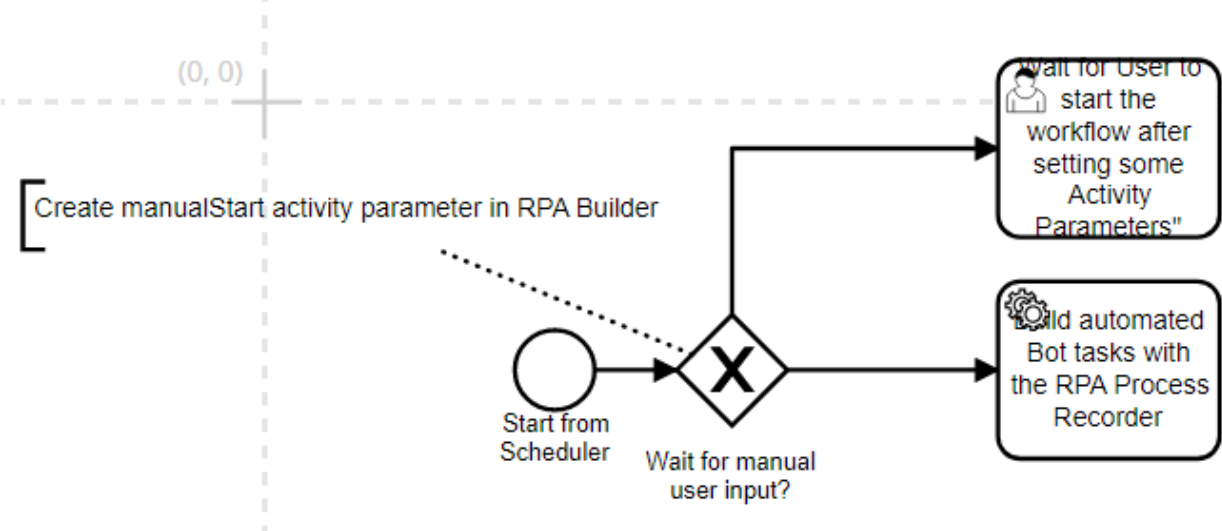
- 3. From the context menu, add an annotation and type in the value "Create manualStart activity parameter in RPA Builder".



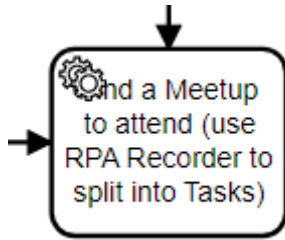
*Note: The **manualStart** activity parameter is a boolean value that is used here to route the flow. If the value is false, it routes directly to an RPA Bot task. If the value is true, it routes to a User Task that waits for user input before flowing to the same RPA Bot task.*

Add a Route to a User Task When the Manualstart Value Is True

- 4. Click the **Exclusive Gateway** and use the context menu to add a **User Task**, then drag the **User Task** above the **Exclusive Gateway**.
- 5. Label the User Task Wait for User to start the workflow after setting some Activity Parameters.

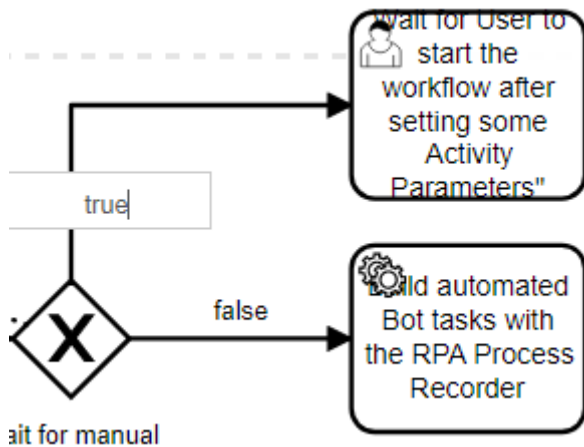


6. Rename the RPA Bot Task Find a Meetup to attend (use RPA Recorder to split into Tasks).



Define the Names of the Routes from the Exclusive Gateway

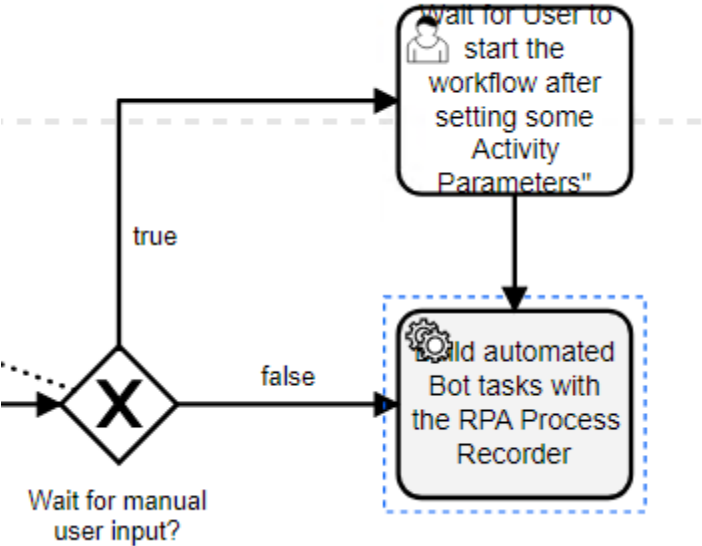
7. Double-click the connector to the RPA Bot Task and label it **false**.
8. Double-click the connector to the User Task and label it **true**.



Note: The actual logic to decide between these labeled routes will be added by an RPA developer in RPA Builder. You will see this done in the next trail.

Connect the User Task to the RPA Bot Task

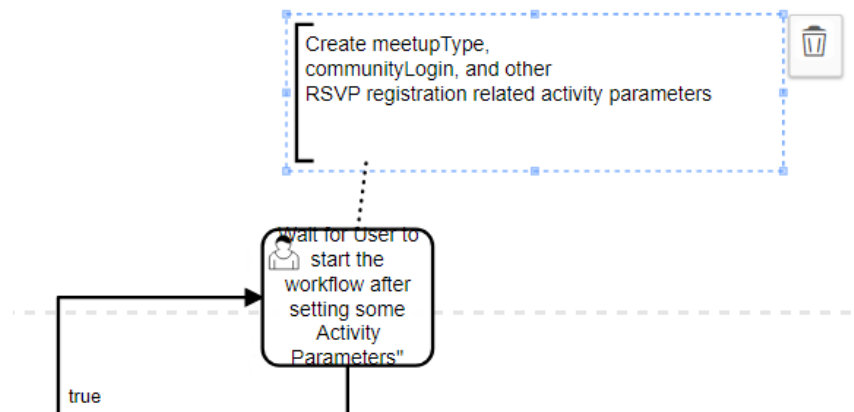
- 9. Click the **User Task** and use the context menu to connect the **User Task** to the **RPA Bot Task**.



Note: Activity parameters may already be defined in the test or deployment profile when the RPA process is sent to an RPA Bot, but they can also be set or overridden in User Tasks. The User Task can pass in activity parameters for the user to just read, or can also include activity parameters for the user to set or override. This is the way users can manually interface with the running RPA process.

Annotate the User Task with activity parameter names

10. Click the **User Task** and from the context menu add an annotation to specify the names of the activity parameters that will be used by the downstream flow of RPA Bot Tasks; annotate that there must be a **meetupType** and **communityLogin** activity parameter defined.



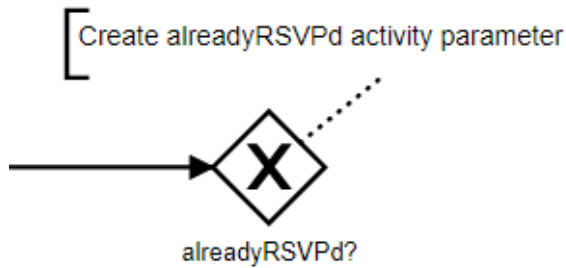
Note: The RPA Developer will refine this design with other variables, as they are needed to implement the RPA process in RPA Builder. You may also refine the design after you use the RPA Recorder to specify additional activity parameters that the RPA developer will need in RPA Bot Tasks in the flow after you split up the RPA Bot Task into multiple RPA Bot Tasks. For example, this one RPA Bot Task will be split into several more specific RPA Bot Tasks, such as "Login to Community Site", or "Search for Meetup of type meetupType".

Connect the RPA Bot Task to an Exclusive Gateway

Now, in between, after we've done some steps to locate a MuleSoft Meetup, we're going to pause to make a decision based on whether the automated steps detect if the user has already RSVP'd to the selected MuleSoft Meetup event.

11. Click the **RPA Bot Task**, then use the context menu to add an Exclusive Gateway after the RPA Bot Task.
12. Label the Exclusive Gateway **alreadyRSVPd?**.

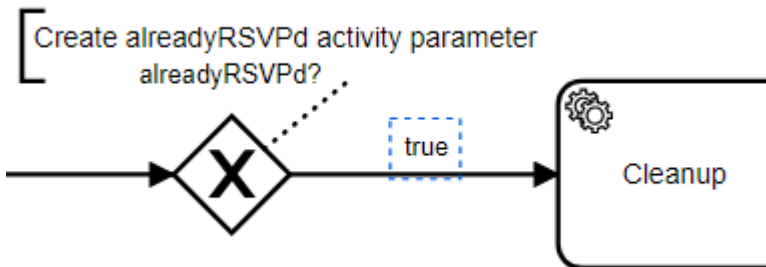
13. Add an annotation to tell the RPA developer to create and use an activity parameter named **alreadyRSVPd**.



14. If the MuleSoft Community user in the flow already RSVP'd to the event, route directly to a cleanup RPA Bot Task

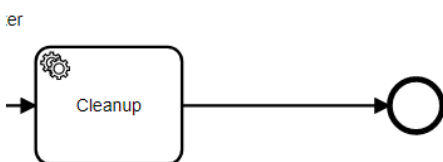
If alreadyRSVPd is true, route directly to a cleanup RPA Bot Task

15. Click the **alreadyRSVPd?** Exclusive Gateway and add an RPA Bot Task.
16. Label the new RPA Bot Task **Cleanup**.
17. Note: This Cleanup RPA Bot Task should be implemented to close any open windows or applications, so the RPA process runs reliably and consistently each time in a predictable way.
18. Click the connector after the alreadyRSVPd Exclusive Gateway and label it **true**.



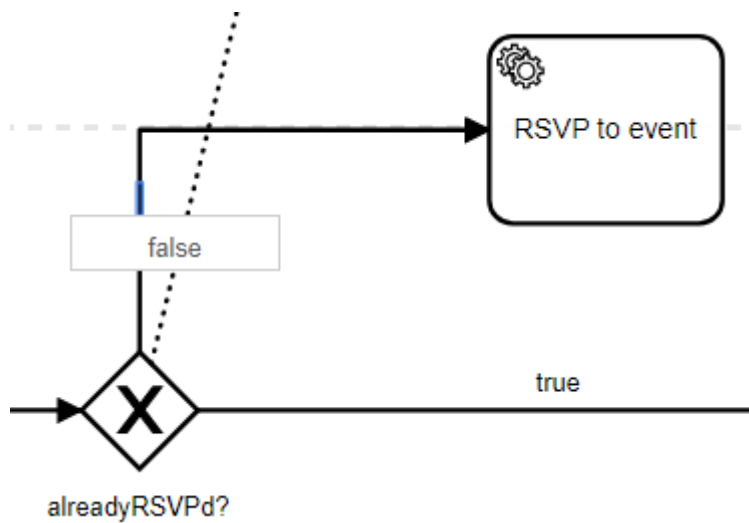
End the RPA Flow after the Cleanup RPA Bot Task

19. Click on the Cleanup RPA Bot Task to add an End Event.



Connect the alreadyRSVP? Exclusive Gateway to a new RPA Bot Task element

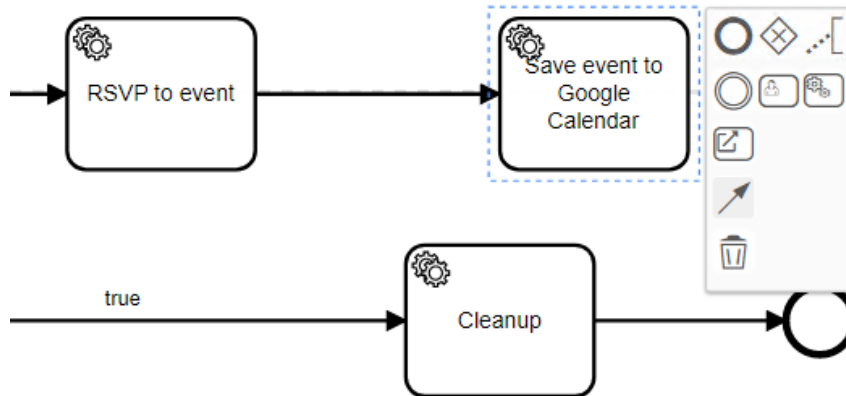
20. Click the **alreadyRSVPd?** Exclusive Gateway and add an RPA Bot Task above the Cleanup flow.
21. Label the RPA Bot Task **RSVP to event**.
22. Double-click the new route out of the **alreadyRSVPd?** Exclusive Gateway and label it **false**.



Add another RPA Bot Task after the RSVP to event RPA Bot Task

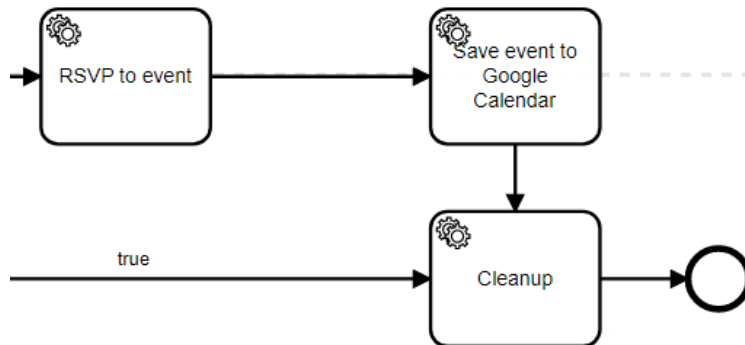
23. Click the **RSVP to event** RPA Bot Task and use the context menu to add an RSVP Bot Task.

24. Label the RSVP Bot Task Save event to user's Google Calendar.



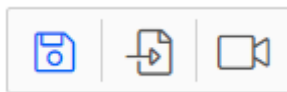
Connect the new flow route back to the Cleanup RPA Bot Task

25. Use the content menu to connect the new RSVP Bot Task to the **Cleanup** RSVP Bot Task.



Save the BPMN document to the local file system

26. In the lower-right main menu, click **Save**.




27. Set the Process name to RSVP to MuleSoft Virtual Meetups.

28. Set the Process variant to **Before RPA Recorder**.

29. Leave the Directory set to the default **C:\ProcessRecorder** (or change it to the location where you want to store BPMN files).

Save recording as

Process name	<input type="text" value="RSVP to MuleSoft Meetups"/>
Process variant	<input type="text" value="Before RPA Recorder"/>
Directory	<input type="text" value="C:\ProcessRecorder"/> 

Summary

That concludes this walkthrough of sketching out an RPA process design in MuleSoft RPA Studio. In the next unit, you will learn how to use the MuleSoft RPA Recorder to continue to gather more detailed requirements, and then how to merge them with this initial RPA design using the MuleSoft Recorder editor.