

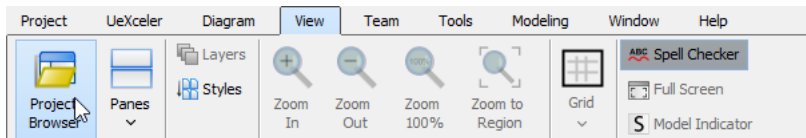


How to Draw BPMN 2.0 Business Process Diagram?

Written Date : March 9, 2016

Drawing a BPMN 2.0 Business Process Diagram

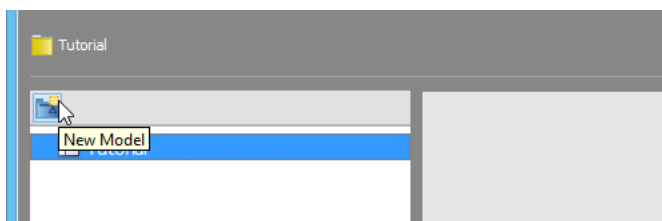
1. Create a new project by selecting **Project > New** from the application toolbar. In the **New Project** window, enter *Tutorial* as the project name and click **Create Blank Project**.
2. Let's create a model first. Select **View > Project Browser** from the application toolbar.



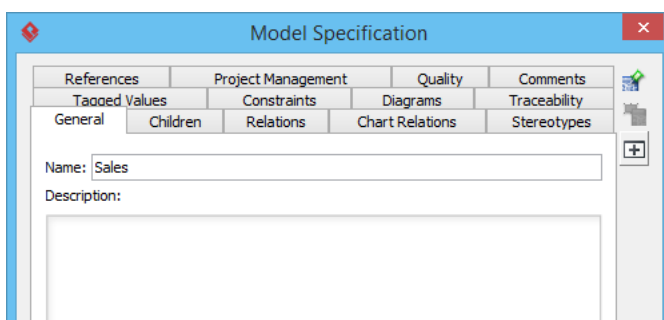
3. Open the **Model Structure** page in the **Project Browser**.



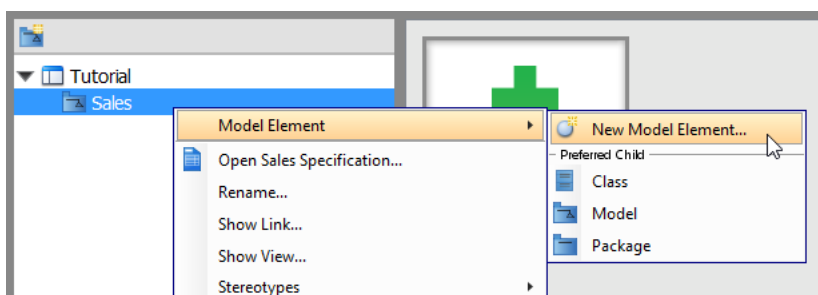
4. Click the **New Model** button at the top of the model list on the left-hand side.



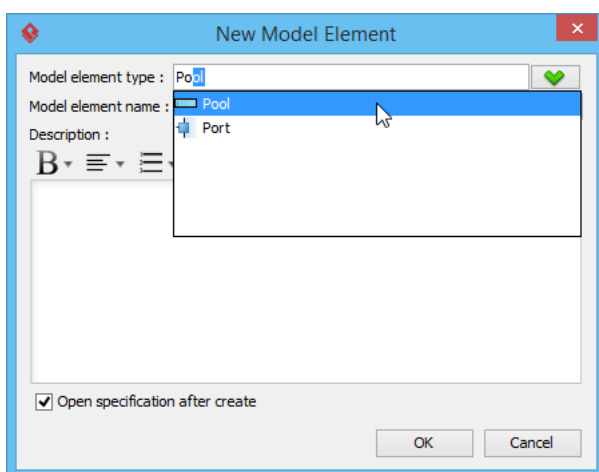
5. Name the model *Sales* and click **OK** to confirm.



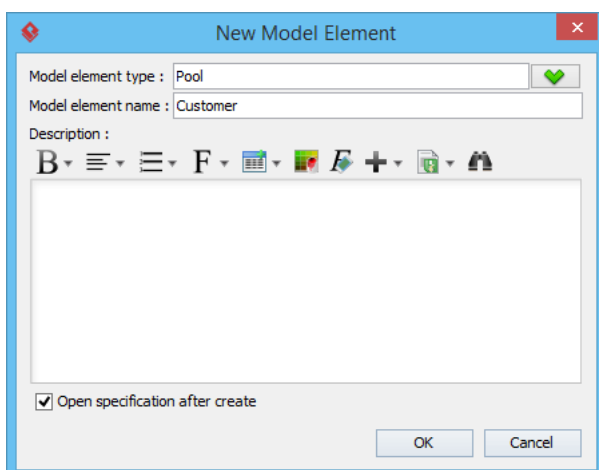
6. You can create pools directly under the *Sales* model without using a diagram. Let's try it. Right-click on the *Sales* model and select **Model Element > New Model Element...** from the popup menu.



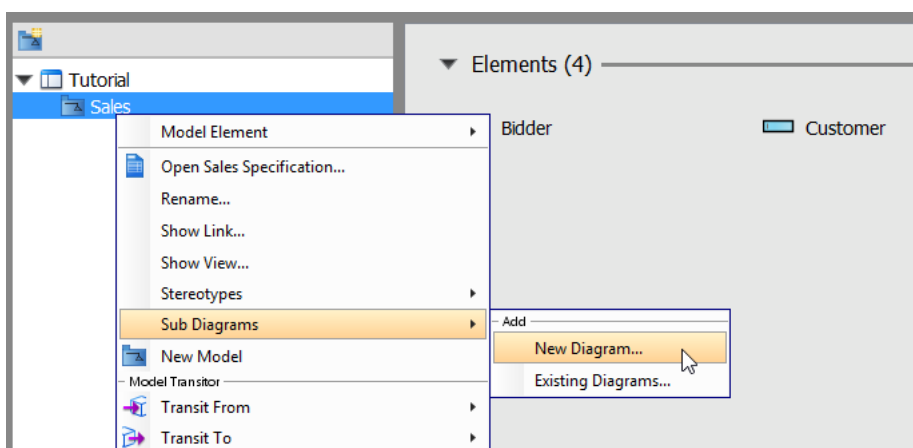
7. You can search for the model you want to create in the **New Model Element** window. Enter *Pool* in the **Model element type** text field to search for **Pool**.



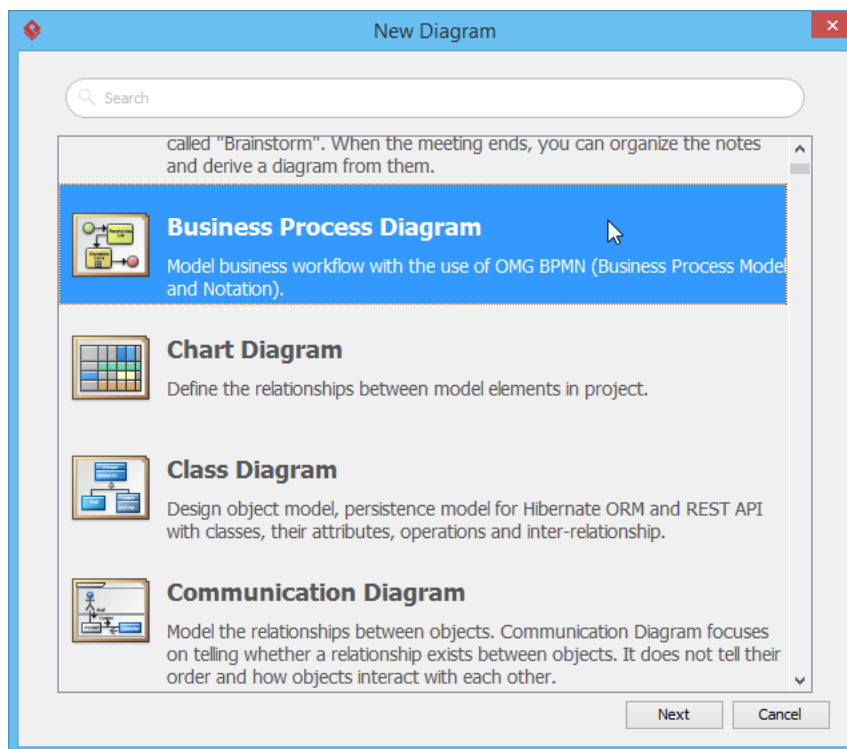
8. Enter *Customer* as the **Model element name**.



9. Uncheck **Open specification after create** and click **OK** to continue.
10. Repeat these steps to create the pools *Bidder*, *Manufacturer*, and *Supplier*.
11. Right-click on the *Sales* model and select **Sub Diagrams > New Diagram...** from the popup menu.



12. In the **New Diagram** window, select **Business Process Diagram** and click **Next**. Keep the diagram name as provided and click **OK** to create the diagram.



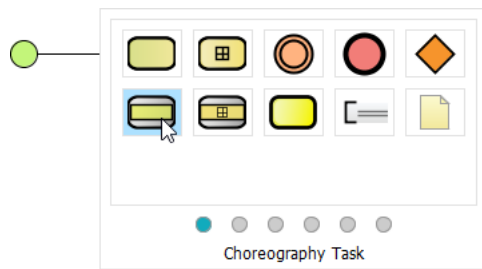
13. You can now start creating the [business process diagram](#). First, let's create a start event. Select the **Start Event** tool from the diagram toolbar and click on the empty area of the business process diagram.



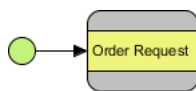
14. Now, click on the start event and drag out the **Resource Catalog** icon.



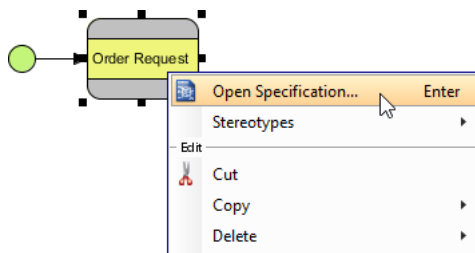
- Release the mouse button on the blank area of the diagram and select **Choreography Task** from the Resource Catalog.



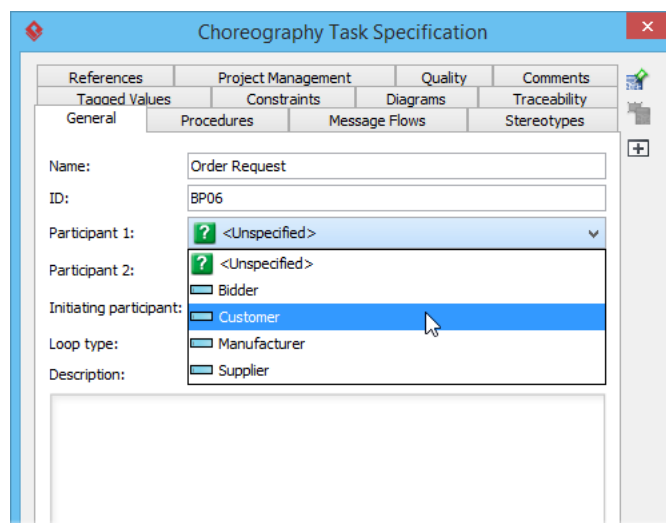
- Enter *Order Request* as the name of the choreography task and press **Enter** to confirm.



- Right-click on *Order Request* and select **Open Specification....**

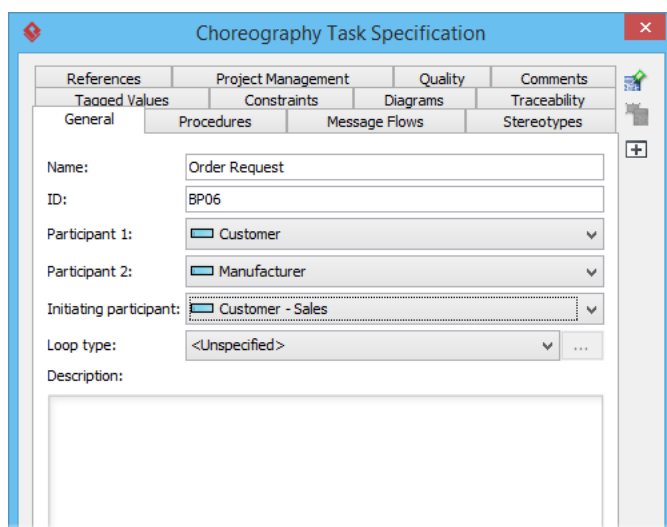


- Select the *Customer* pool as **Participant 1**.

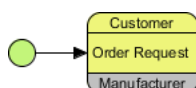


- Select the *Manufacturer* pool as **Participant 2**.

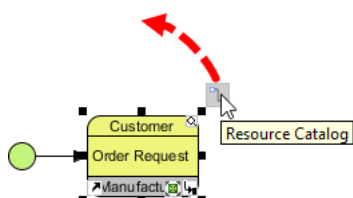
20. Select the *Customer* pool as the **Initiating participant**.



21. Click **OK** to confirm. The *Order Request* task is now done. You can see that the initiating participant is shown in the same color as the task, while the non-initiating participant is shown in gray.



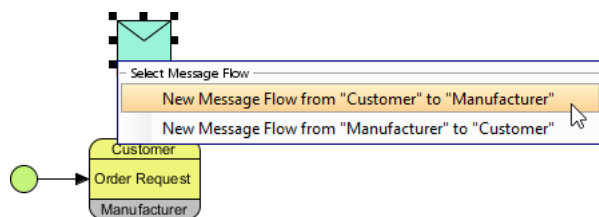
22. Let's create a message between *Customer* and *Manufacturer*. Click on the *Order Request* task and drag out the **Resource Catalog** icon.



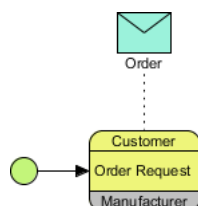
23. Release the mouse button above the choreography task and select **Message** from the Resource Catalog.



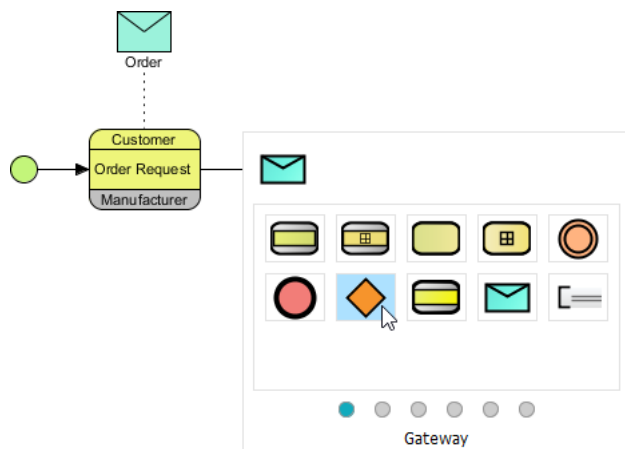
24. Then, select **New Message Flow from "Customer" to "Manufacturer"** from the popup menu.



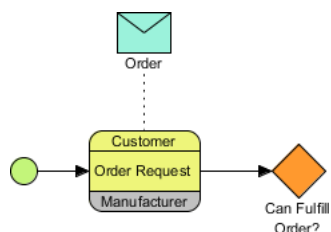
25. Enter *Order* as the name of the message and press **Enter** to confirm.



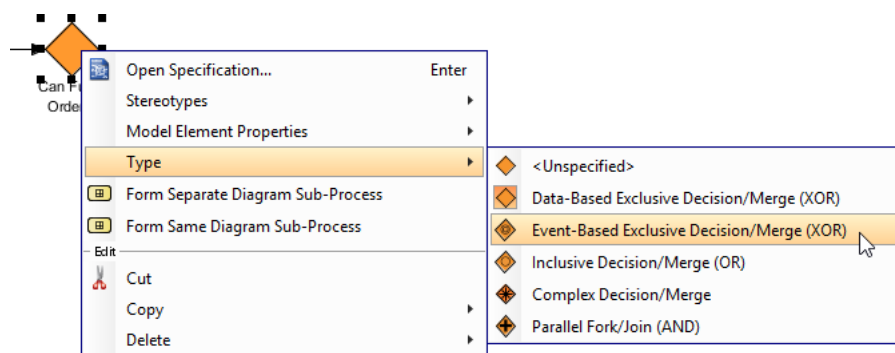
26. Create an **Event-based Exclusive Gateway** from *Order Request*. Again, click on *Order Request* and drag out the **Resource Catalog** icon. Release the mouse button in the empty space of the diagram and select **Gateway** from the Resource Catalog to create a gateway.



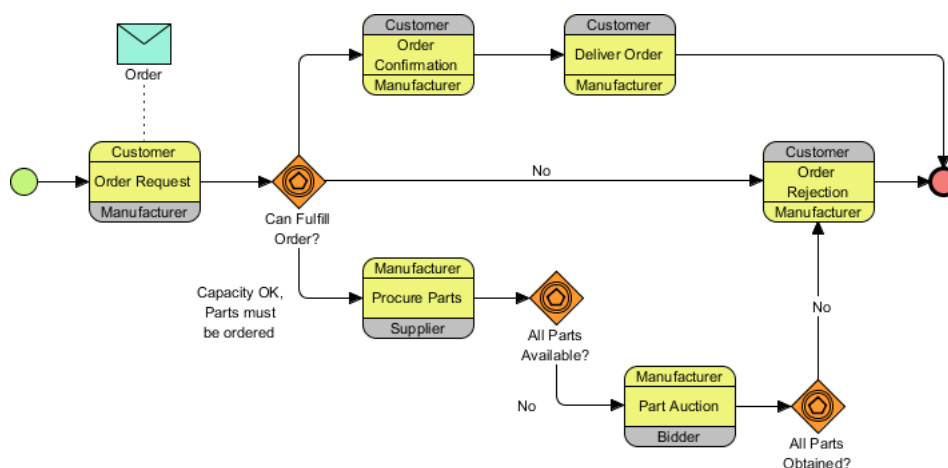
27. Enter *Can Fulfill Order?* as the name of the gateway and press **Enter** to confirm. You can insert a line break by pressing **Alt + Enter**.



28. Right-click on the gateway and select **Type > Event-Based Exclusive Decision/Merge (XOR)**.

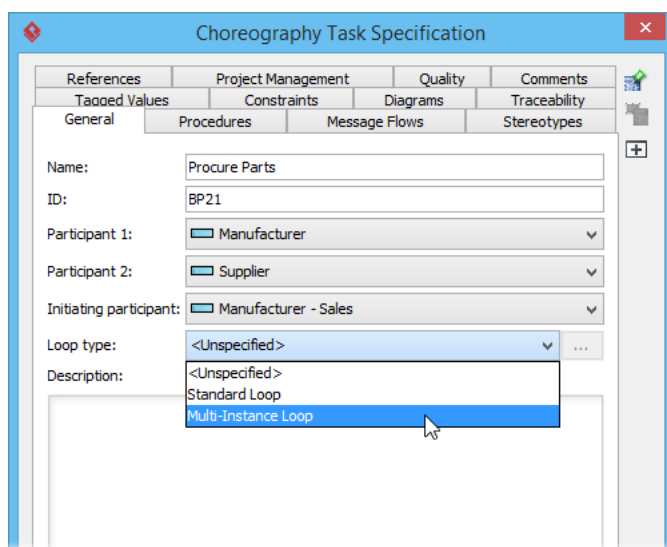


29. Repeat the steps to complete the business process diagram, like this:

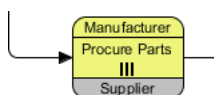


30. There could be multiple instances of the 'Procure Parts' activity running simultaneously. Let's represent this by setting the loop type of the *Procure Parts* task to Multi-Instance Loop. Right-click on the *Procure Parts* task and select **Open specification...** from the popup menu.

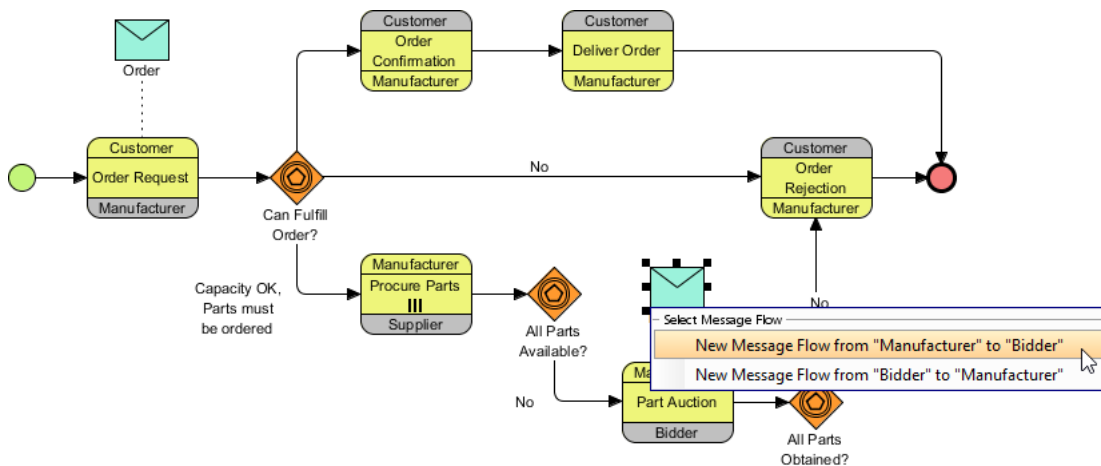
31. Select **Multi-Instance Loop** for the **Loop type** combo box.



32. Click **OK** to confirm. The **Multi-Instance loop** marker is now shown in the *Procure Parts* task.

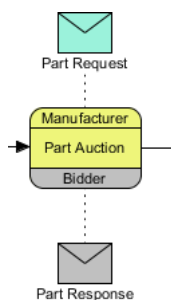


33. Let's create messages between *Manufacturer* and *Bidder* on the *Part Auction* task. Using the Resource Catalog, create a **Message** from the *Part Auction* activity. Select **New Message Flow from "Manufacturer" to "Bidder"** from the popup menu.

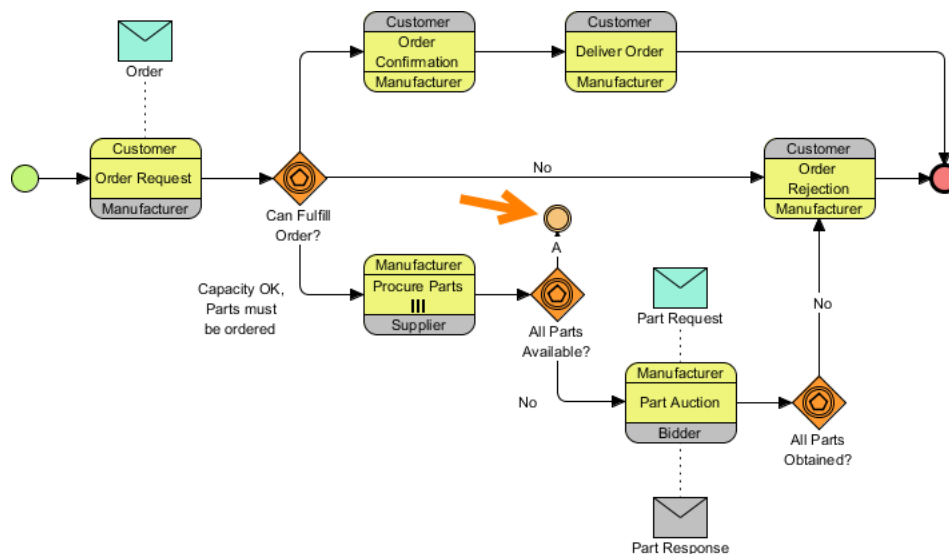


34. Name the message *Part Request*.

35. Repeat the step to create another message to the *Part Auction* task. This time, select **New Message Flow from "Bidder" to "Manufacturer"** during creation. Name the message *Part Response*. You can see that the message from *Bidder* to *Manufacturer* is in a different color because *Bidder* is a non-initiating participant.

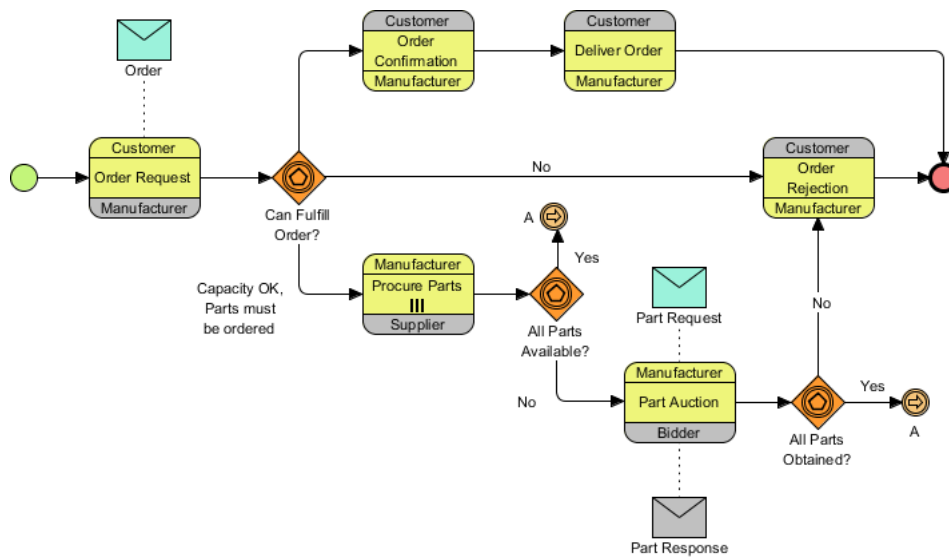


36. The gateways *All Parts Available?* and *All Parts Obtained?* in the business process diagram only model the "false" situation. What about the "true" case? Assuming that the flow should go back to the *Order Confirmation* task, we don't want to make the diagram too complicated with too many connector lines. Let's represent the flow using a pair of intermediate events. Click on the *All Parts Available?* gateway and drag out the **Resource Catalog** icon. Release the mouse button above the gateway and select **Intermediate Event** from the Resource Catalog. Enter *A* as the name and press **Enter**.

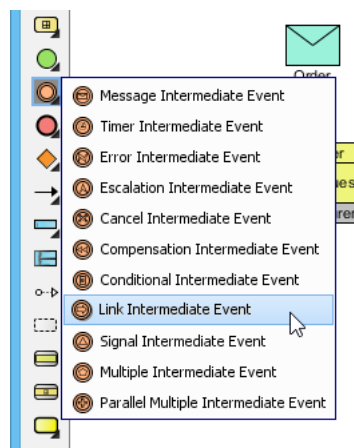


37. Name the connector *Yes*.
38. Right-click on the intermediate event and select **Trigger > Link Trigger**.

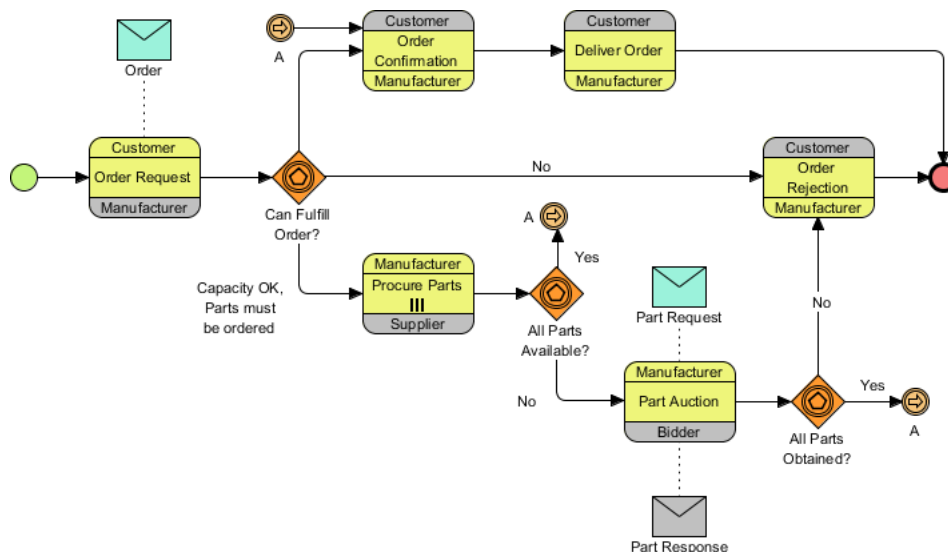
39. Repeat the steps to create another link event from the *All Parts Obtained?* gateway.



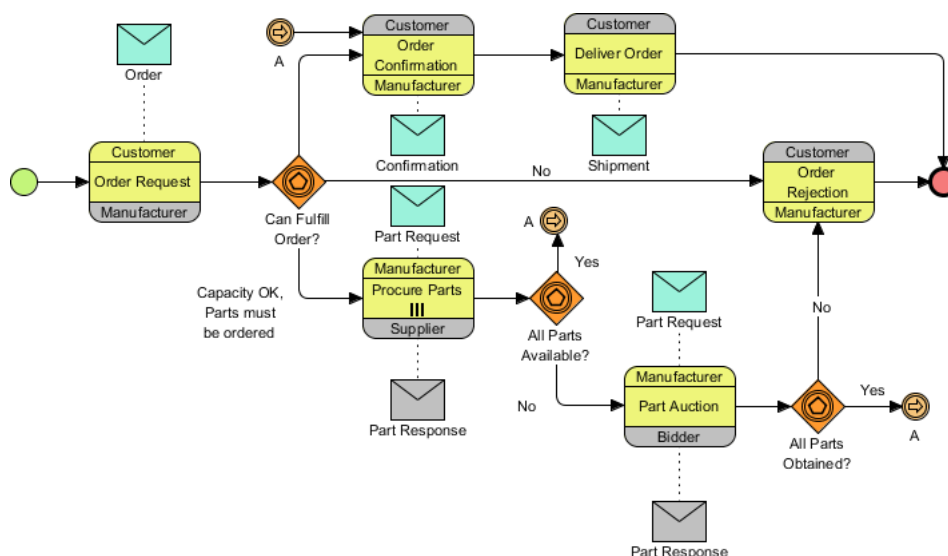
40. Select **Link Intermediate Event** from the diagram toolbar.



41. Click on the left-hand side of the *Order Confirmation* task and name it A. Connect it to the task. Your diagram should now look like this:



42. Create the other messages. Finally, your business process diagram should look like this:



Resources

1. [Complete Project - Tutorial.vpp](#)

Related Links

- [Introduction to BPMN](#)

- [How to Define Working Procedures for Business Tasks](#)



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