# **5** Steps to Draw Flowchart with BPMN

This tutorial will show you how to draw a simple flowchart in 5 steps, using **Business Process Visual ARCHITECT (Modeler Edition)**. The example will be about a fire safety inspection process. And we will draw that in a business process diagram following the **Business Process Modeling Notation (BPMN)** as shown below.



### **Step 1 - Define Organizations**

In BPMN, we use **pools** to represent organizations. In our example, we are going to draw 2 pools to represent the Fire Safety Department and the Client.

1. To rename the new diagram, right-click on any white space in the background and select Rename...

For our example, we'll name it Fire Safety Inspection Diagram.



2. Select Horizontal Pool from the Diagram Toolbar and drag it to the diagram.



3. Rename Pool to *Fire Safety Department* and press **Enter**.



4. Repeat the steps above to create another pool (below the Fire Safety Department) and name it *Client*.



## **Step 2 - Define Participants**

In an organization are different roles to be taken on. We are going to add 3 participants or what we called **lanes** in Business Process Modeling Notation (BPMN). The 3 lanes are Supervisor, Inspector and Inspection Assistant.

1. Select Lane from the Diagram Toolbar. Drag and drop it in the Fire Safety Department pool.



2. Rename Lane to Supervisor. Press ENTER.





3. Repeat the steps above to add another lane to the Fire Safety Department pool. Name it *Inspector*.



4. Repeat the steps above to add another lane to the Fire Safety Department pool. Name it *Inspection Assistant*.



#### **Step 3 - Draw a Start Event**

While flowchart lacks a way to explicitly mark the beginning of a process, BPMN provides a standard notation to do so – start event. Here we are going to add one in our diagram.

Select Start Event from the Diagram Toolbar. Drag and drop it in the Supervisor Lane.



#### Step 4 - Draw Tasks

Tasks describe specific work to be performed in a process. They are placed in lanes to specify the person who is responsible for completing them.

Here we are going to add several tasks following the start event. The tasks will be done among the 3 participants and placed in the respective lanes.

Select the start event and drag the **Sequence Flow -> Task** icon to the right.

- 1. Stop dragging and release the mouse button to place the new task. (*Note: You must stay in the Supervisor lane because this task is to be done by the supervisor.*)
- 2. Rename Task to Assign Cases.



3. To elaborate on the goal of the Assign Cases task, we can provide a description to go with it. To do that, select Assign Cases task and type in the **Documentation Pane** at the lower left corner.



4. To elaborate on what steps to take in the Assign Cases task, we can provide procedural details in the **Procedure Editor**, which should be shown below your diagram.

What if the Procedure Editor is not currently shown?

Right-click on any white space in the diagram and select Show Procedure Editor.

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If you select the Assign Cases task, a row beginning with "1." will appear in the Procedure Editor.

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Click on the first row to enter step 1. Press ENTER to put in step 2.



5. We will now add a new task for Inspector. Select **Assign Cases**. Drag the **Sequence/Message Flow** -> **Task** icon to the Inspector lane. Rename Task to *Conduct Inspection*. Once the Supervisor is finished with his task, the Inspector continues with the workflow.



6. Drag the resource icon **Sequence/Message Flow -> Task** from **Conduct Inspection** to create a new task. Place it in the Inspection Assistant lane. Name it *File Inspection Report*. Once the Inspector is done with the inspection, it becomes the Inspection Assistant's turn to pick up the workflow from there.



7. Drag the resource icon **Sequence/Message Flow -> Task** from **File Inspection Report** to create a new task. Place it in the Inspector lane. Name it *Submit Inspection Report*.



8. Drag the resource icon **Sequence/Message Flow -> Task** from **Submit Inspection Report** to create a new task. Place it in the Supervisor lane. Name it *Review Inspection Report*.

# **Step 5 - Draw Decisions**

1. In BPMN, decisions are represented by gateways which are diamond shapes. Drag the resource icon **Sequence/Message Flow -> Task** from **Review Inspection Report** to create a new gateway. Place it in the Supervisor lane. Name it *Approve?*. (*Note: We end the name "Approve" with a question mark to indicate a decision which possibly leads to more than one path.*)



2. Drag the resource icon **Generic Resource** from **Approve?** to create an end event. At the location where you want to place it, double-click to open the menu to choose End Event.



3. Double-click on the line to enter "Yes" to specify that this is the path for approved reports. Essentially, the process ends there if the inspection report is approved.



4. If the inspection report didn't get approved, the case will loop back to the **Assign Cases** task and return to the pile of outstanding cases.

We will now create a path for disapproved reports. Drag the resource icon **Sequence/Message Flow** -> **Task** from **Approve?** to the left to reach the **Assign Cases** task. Drop the blank task over it. Double-click on the link to enter "No." (Note: Instead of creating a fresh task as we did earlier, here we are only creating a flow that connects to an existing task, Assign Cases.)



## **Generate Word Document**

To help communicate your flowchart with other professionals, Business Process Visual ARCHITECT offers an option to generate an easy-to-read report. It clearly presents information about the tasks and events in your flowchart on both summary and detail levels. You may also choose the format in which to generate your report, such as Word or PDF.

As an example, we will now show you how to generate a report in Word format.

1. From the main toolbar at the top, select **Doc > Generate Word Report...** 



2. In the dialog box opened, (1) select the location and filename for the report, (2) select the diagram to include in the report and (3) click **Generate**.

Generate Word
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Reset       Reset to Default       Set as Default       Generate       Cancel       Apply       Help

3. A page from the generated report.



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