



How to Expand a BPMN Sub-Process?

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What is a BPMN Sub-Process?

A sub-process is an activity in BPMN that represents a collection of related activities within a larger business process. It allows you to break down a complex process into smaller, more manageable parts that can be further detailed, analyzed, and optimized. Sub-processes can be used to represent both sequential and parallel flows of activities.

There are two main types of sub-processes: Embedded and Reusable.

- **Embedded sub-process:** An embedded sub-process is defined and used within a single, larger process. It is represented by a rectangle with a thick border and is placed inside the main process. It has its own set of activities, events, and gateways that describe its internal flow.
- **Reusable sub-process:** A reusable sub-process can be used in multiple processes. It is represented by a rectangle with a thin border and is defined outside of the main process. Like an embedded sub-process, it has its own set of activities, events, and gateways.

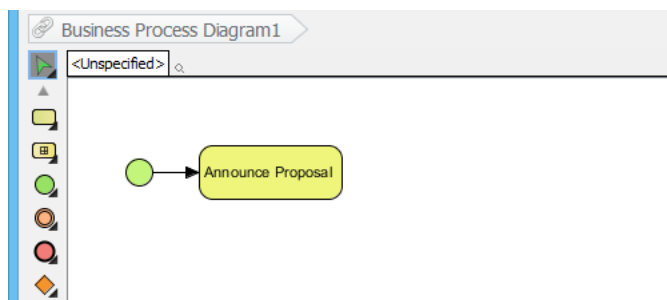
Benefits of Using Sub-Processes

Sub-processes offer several advantages, including:

1. **Clarity and simplicity:** By breaking down a complex process into smaller parts, sub-processes make it easier to understand, follow, and communicate. They also help to eliminate redundancy and ambiguity.
2. **Reusability:** Reusable sub-processes can save time and effort by allowing you to reuse the same process logic in different parts of a process or across multiple processes. This also helps to ensure consistency and standardization.
3. **Optimization:** Sub-processes can be individually analyzed and optimized for performance and efficiency, leading to better outcomes and lower costs.
4. **Collaboration:** Sub-processes can be assigned to different teams or individuals for implementation, promoting collaboration and accountability.

How to Model with Sub-processes

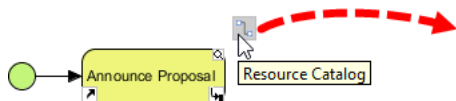
1. Create a [business process diagram](#) with a start event and a task named *Announce Proposal*. Connect them with a sequence flow.



2. You can create a sub-process using the Resource Catalog. Move your mouse pointer over the *Announce Proposal* task.



3. Press and drag the **Resource Catalog** icon (at the top right of the shape) to an empty space on the diagram.



4. Release the mouse button and select **Sequence Flow > Sub-Process** from the Resource Catalog.



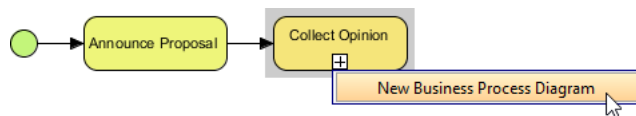
5. Enter *Collect Opinion* as the name of the sub-process and press **Enter** to confirm.



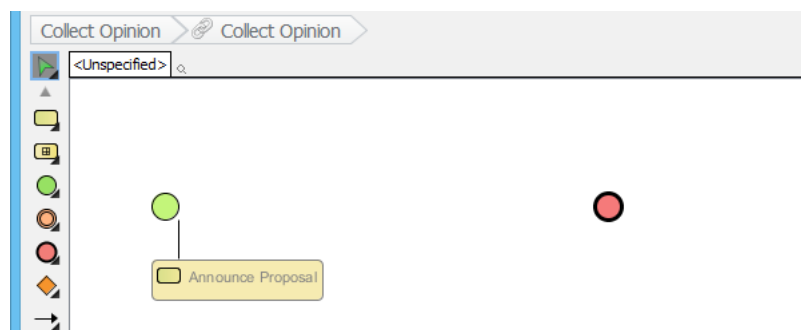
Creating a Deeper Process Layer

Both tasks and sub-processes are activities in [BPMN](#). However, a sub-process allows you to define a more detailed level of process logic in a separate sub-process diagram. Let's see how this works.

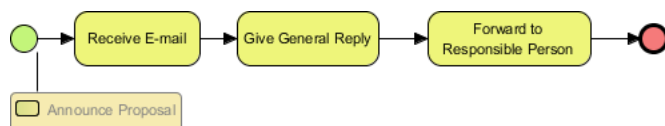
1. Click the plus icon in the *Collect Opinion* sub-process and select **New Business Process Diagram** from the popup menu.



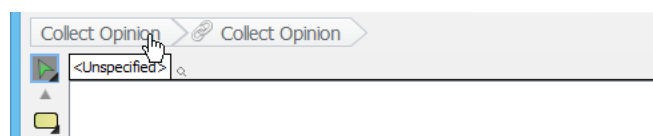
A new business process diagram will be created and opened. It contains a start and end event, which are used to connect the process flow from the parent diagram to the flow in this new diagram.



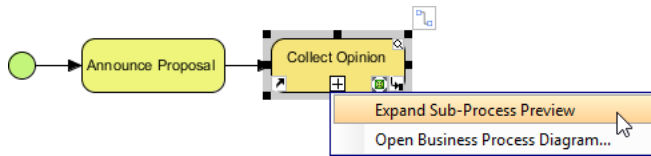
2. Create three tasks, *Receive E-mail*, *Give General Reply*, and *Forward to Responsible Person*, between the start and end events as shown below.



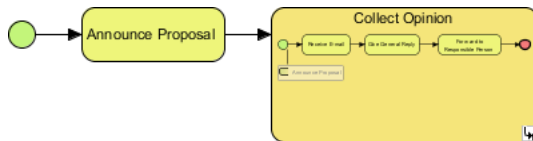
3. Now, return to the parent diagram by clicking on the shortcut in the breadcrumb trail.



4. You can optionally display the content of the sub-process as a preview within the sub-process shape. Click the plus icon in the *Collect Opinion* sub-process and select **Expand Sub-Process Preview** from the popup menu.



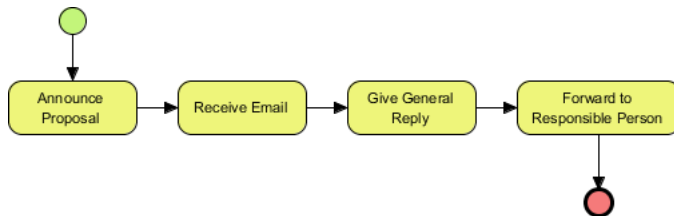
You will see a preview of the sub-process content. If the preview is too small or large, you can resize the sub-process shape, and the preview will automatically adjust to fit.



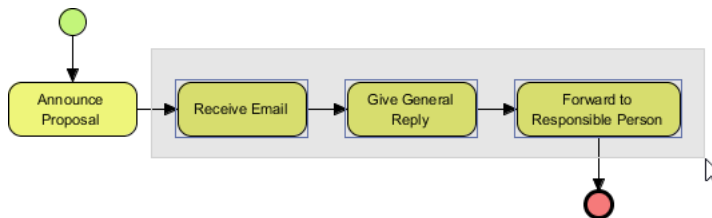
Creating a Sub-Process Diagram from Existing Tasks

You can also group several flow objects in a business process diagram into a sub-process. Let's try it out.

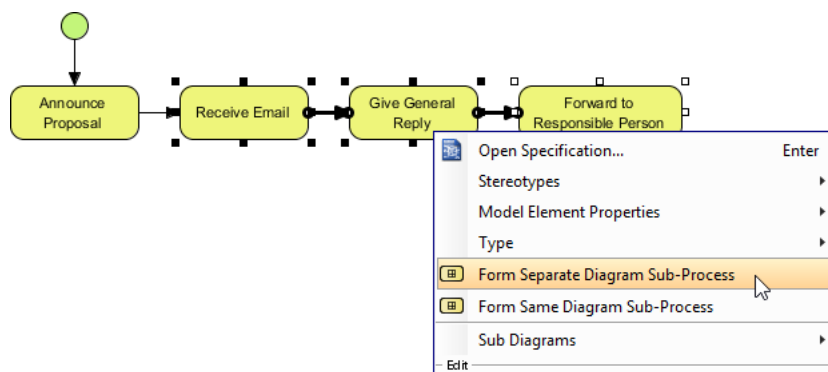
1. Draw a new business process diagram with a start event, an end event, and three tasks: *Announce Proposal*, *Receive Email*, and *Forward to Responsible Person*.



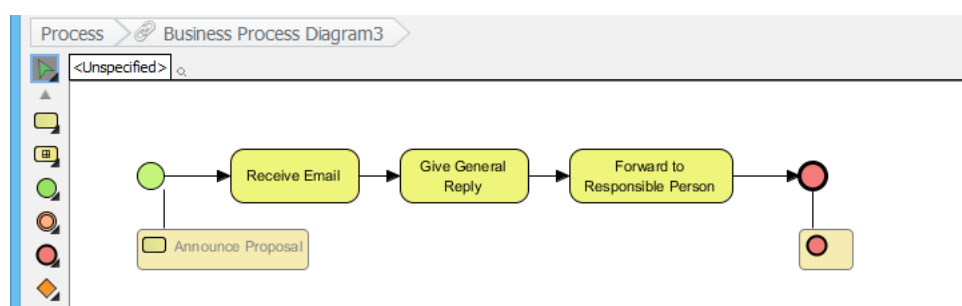
2. Select the three tasks.



3. Right-click on the selected tasks and choose **Form Separate Diagram Sub-Process** from the context menu.



A new sub-process diagram will be created, and the three selected tasks will be moved into it.



If you had selected **Form Same Diagram Sub-Process** instead, a new sub-process shape would have been created in the same diagram, containing the three tasks, without creating a new business process diagram.

Related Links

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



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