

Activities (Rounded Rectangles)

Represent the work performed within an organization. It can be simple or composed:



Task

A task is a simple activity used when the work performed within the process cannot be broken down to a finer level of detail.
BPMN defines different task types:



User



Manual



Service



Send



Receive



Script



Reference



Business Rule



Sub-process

Is a composed activity whose internal details are defined as a flow of other activities.



Embedded Sub-process

Depends on the parent process. It cannot contain pool or lanes.



Reusable Sub-process

Is a process defined as an independent process diagram that does not depend on the parent process.



Transactional Sub-process

Its behavior is controlled through a transaction protocol.



Ad-Hoc Sub-process

Contains a group of activities whose sequence and number of activities is defined by their performers.



Event Sub-process

Is launched by an event

Artifacts

Artifacts are used to provide additional information about the process.



Annotation

Are text boxes used to provide additional information about the process.



Group

Group a set of activities for the purpose of documentation or analysis.



Data Object

Provides information about how documents, data and other objects are used and updated during the process.



Data Store

Provides a mechanism for activities to retrieve or update stored information that will exist beyond the scope of the process.

Gateways (Diamonds)

Gateways are elements used to control divergence and convergence of the flow. (Split and merge)



Data-Based Exclusive Gateway

The exclusive decision has two or more outgoing sequence flows, but only one of them can be taken based on data expression conditions. As convergence is used to merge alternative paths.



Event-Based Gateway

This gateway represents a point in the process where only one of many paths of the process can be selected based on an event, not on data expression condition. Remaining paths will be disabled.



Exclusive Event-Based Gateway

Allows instantiating a process. If ONE of the subsequent events occurs, a new process instance will be created.



Parallel Event-Based Gateway

Allows instantiating a process. If ALL of the subsequent events occur, a new process instance will be created.



Parallel Gateway

Is used to create parallel flows. As convergence is used to synchronize multiple parallel paths into one. The flow continues when all the incoming sequence flows have reached the gateway.



Inclusive Gateway

Is used when in a point of the flow one or more routes can be activated from many available, and the decision is based on process data. As convergence indicates that the active routes are synchronized into just one.



Complex Gateway

Is used to control complex decisions. As convergence, there will be an expression that will determine which of the incoming sequence flow will be required for the process to continue.

Swimlanes



Pool

A pool is a container of a single process. The name of the pool can be considered as the name of the process. There is always at least a pool even if it is not diagrammed.



Lane

A lane is a subdivision of a pool and represents a role or an organizational area.

Connecting Objects



Sequence flow

Represents the control of the flow and the sequence of the activities, gateways and events



Conditional sequence flow



Default sequence flow



Message flow

- A Message flow is used to show the flow of messages between two entities or processes.
- Represents signals or messages, not flow controls
- Not all message flows are fulfilled for each instance of the process nor is there a specific order for the messages


















































Association

An association is used to associate additional information about the process and compensation tasks.

Events (Circles)

Events represent something that happens or may happen during the course of a process and that affect its flow. There are three event types:

Start events	Intermediate Events	Catch	Interrupting	Non - Interrupting	Throw	End Events
These events start process flows. Do not have incoming sequence flows.	Intermediate Events indicate that something occurs or may occur somewhere between the start and end. These events can be used within sequence flows or attached to the boundaries of an activity so it is executed once the event is activated.					These events end process flows thus, they do not have outgoing sequence flows.
<div></div> <div>None Start Event Does not specify any particular behavior to start a process.</div>	<div>None Intermediate Event</div> <div>Indicates that something occurs or may occur within the process. It only can be used within the sequence flow.</div>				<div></div>	<div></div> <div>None End Event Indicates that the flow ends and there is no a defined result.</div>
<div></div> <div>Message Start Event A process starts when a message is received.</div>	<div>Message Intermediate Event</div> <div>Indicates that a message can be sent or received. It can be used within a sequence flow or attached to the boundaries of an activity to indicate an exception flow.</div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div> <div>Message End Event Indicates that a message is sent when the flow arrives at the end.</div>
<div></div> <div>Timer Start Event A process starts at certain time or on a specified date.</div>	<div>Timer Intermediate Event</div> <div>Indicates a waiting time within the process. It can be used within a sequence flow or attached to the boundaries of an activity to indicate an exception flow.</div>	<div></div>	<div></div>	<div></div>		
	<div>Escalation Intermediate Event</div> <div>Indicates that the process must be escalated to a higher level of responsibility. The shape can be used within the sequence flow to throw the event or attached to the boundaries of an activity to catch it.</div>		<div></div>	<div></div>	<div></div>	<div></div> <div>Escalation End Event Indicates that an escalation is necessary when the flow arrives at the end.</div>
<div></div> <div>Conditional Start Event A process starts when a business condition becomes true.</div>	<div>Conditional Intermediate Event</div> <div>Is used when the flow needs to wait for a business condition to be fulfilled. It can be used within a sequence flow or attached to the boundaries of an activity to indicate an exception flow.</div>	<div></div>	<div></div>	<div></div>		
	<div>Link Intermediate Event</div> <div>This event allows connecting two sections of the process. It only can be used within the process flow.</div>	<div></div>			<div></div>	
	<div>Error Intermediate Event</div> <div>Is used to catch and handle errors. It only can be used attached to the boundaries of an activity.</div>		<div></div>			<div></div> <div>Error End Event Allows sending an error exception when the flow arrives at the end.</div>
	<div>Cancel Intermediate Event</div> <div>Is used within the transactional processes modeling. It only can be used attached to the boundaries of transactional sub processes to indicate an exception flow that will be activated once the sub process is cancelled.</div>		<div></div>			<div></div> <div>Cancel End Event Allows sending a cancel exception when the flow arrives at the end. It is only used in transactional sub processes.</div>
	<div>Compensation Intermediate Event</div> <div>Allows handling compensations. It can be used within the sequence flow to indicate that a compensation is needed or attached to the boundaries of an activity for the activity to be compensated once the event is activated.</div>		<div></div>		<div></div>	<div></div> <div>Compensation End Event Indicates that the flow has finished and it is necessary a compensation.</div>
<div></div> <div>Signal Start Event A process starts when a signal coming from another process is captured.</div>	<div>Signal Intermediate Event</div> <div>Is used to send or receive signals. It can be used within a sequence flow or attached to the boundaries of an activity to indicate an exception flow.</div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div> <div>Signal End Event Indicates that a signal is sent when the flow arrives at the end.</div>
<div></div> <div>Multiple Start Event Indicates that there are many ways to start the process. Only one of them will be required.</div>	<div>Multiple Intermediate Event</div> <div>This event can be activated by many causes. Only one of them is required. It can only be used within the sequence flow.</div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div> <div>Multiple End Event Indicates that many results can be given when the flow arrives at the end.</div>
<div></div> <div>Multiple Parallel Start Event Indicates that there are multiple triggers required to start the process.</div>	<div>Parallel Multiple Intermediate Event</div> <div>This event is activated by multiple causes. It is necessary that all of them to be fulfilled for activating it. It can be used within the sequence flow or attached to the boundaries of an activity.</div>	<div></div>	<div></div>	<div></div>		
						<div></div> <div>Terminate End Event The process and all its activities finish, no matters if there is one or more pending flows.</div>