

Events

An Event in a process is something that happens that affects the sequence or timing of activities in a process, for example the receipt of a message. There are three main types of Event: Start, Intermediate and End.

Event Type	Start	Intermediate	End	Description
	Catch	Throw		
None				No specific trigger for the event (for example, to start the process as a sub-process).
Message				Message is sent to start the process, resume flow or at the end of the process.
Timer				Event is triggered at a specific date/time or at a regular interval (time cycle).
Error				Ends a sub-process with an error. On a task boundary, either catches the specified error or any error if no specific error is specified.
Cancel				Ends a transactional sub-process. On a task boundary, catches the cancel event thrown from within the sub-process.
Compensation				Either throws or catches a call for compensation. Used to process compensating activities for previously executed tasks.
Conditional				Triggered based on the evaluation of conditions.
Link				Creates a "go to" or "off page connector" to break up a process for better legibility.
Signal				Broadcasts or catches signals.
Multiple				Indicates that one of several possible triggers are to be thrown or caught.
Terminate				Ends the process and all activities within without compensation or error handling.

Task

A Task represents work that a company or organization performs using business processes.

Task Type	Description
	User Tasks are those that require human interaction with a software application.
	Manual Tasks are those that are completed by a person without using software.
	Service Tasks complete without human interaction (for example, an automatic email notification or a web service).
	Script Tasks contain a set of instructions to execute.
	Send Tasks are used to send messages to a system or person outside of the Process (often using a web service).
	Receive Tasks are used to wait for a message from a system or person outside of the Process (often using a web service).
	Reference Tasks refer to another Task and prevent you from having to duplicate the same Task several times in a Process.
	Call a reusable Sub-Process that is defined outside of the Process.
	Process that is fully contained in the parent Process.

Gateways

Gateways are a control mechanism for the Sequence Flow in the process. Gateways are used for branching, merging, forking and joining as well as for conditional decisions.

Gateway	Description
Exclusive XOR Data	One output Sequence Flow is chosen based on expressions using process data.
Exclusive XOR Event	One output Sequence Flow is chosen based upon an external event (for example, a JMS message).
OR	Each output Sequence Flow is independently evaluated according to an expression. This means that anywhere from zero to the maximum output Sequence Flows can be taken.
Complex	A Complex Gateway is used to fork or merge depending on complex criteria.
Parallel	A Parallel Gateway is used to fork or merge several parallel paths (synchronization).

Artifacts

Artifacts are used to make processes easier to follow.

Artifact	Description
Data Object	A Data Object is used for informational purposes to show how a document or other data relates to the Process. It may be associated with flows or flow-related objects.
Group	Groups are used to indicate a relationship between elements of a Process by enclosing them in a dashed line.
Text Annotation	Text Annotations explain or clarify the Process. They may be associated with flow or flow-related objects.
Pool/Lane	A Pool is used as a container for partitioning Processes in ways that make sense for your business. A lane is a subdivision of a Pool.

Connections

Connections join objects in the diagram. Sequence Flow indicates the flow of the Process between Tasks, Gateways, and Events.

Sequence Flow	Description
Uncontrolled Flow	The basic form of sequence flow where no conditions apply.
Conditional Flow	Defines a conditional process flow between objects.
Default Flow	The default flow of process if all other conditions are false.
Message Flow	Indicates the flow of messages between objects in separate Pools or between Pools.
Association	Connects flow-related objects with non-flow related objects to make a Process more readable. Also used for specifying a compensation Task for a compensation Event on a Task boundary.