

An Introduction to BPMN 2.0

A guide to the core elements within the business process modelling notation

The Three Levels of BPMN

Descriptive Process Models

Suitable for high level modelling – should be comfortable for analysts that have used flowcharts.

Analytic Process Models

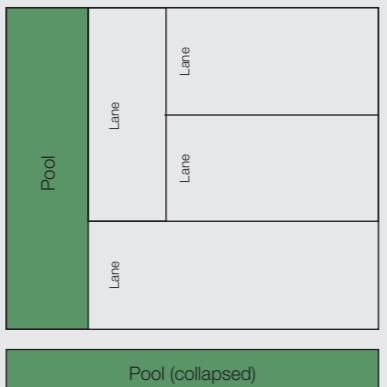
Contains the concepts most commonly used and covered in BPMN training

Common Executable Process Models

Focuses on the elements required for executable process models

Notation: Descriptive Process Models

Pools and Lanes



Events

Start Events

A process commences because something has happened, such as a message received or a date is reached.



None



Time



Message

End Events

A process finishes when an end is reached. Because a process may have several outcomes, there may be multiple end events.



None



Message



Terminate

Gateways

Gateways represent decisions within the process, and control the splitting and merging of sequence flow.

The simplest examples are shown:



Exclusive
Follow only one path

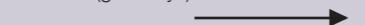


Parallel
Follow all paths

Flow

Sequence Flow

The sequential flow of the process between events that occur, activities performed by the lanes and decisions that are made (gateways).



Message Flow

The flow of information as Messages between Participants



Association

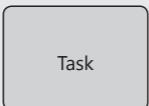
Used to attach artefacts (such as data objects) to activities.



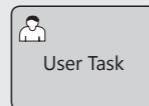
Activities

Tasks

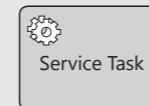
A task is something that a lane (role) does during the process. A task is a granular (atomic) activity that cannot or does not need to be broken down any further.



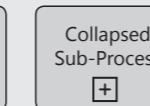
Task



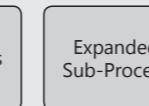
User Task



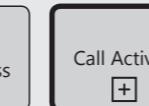
Service Task



Collapsed Sub-Process



Expanded Sub-Process



Call Activity

Sub Processes

A sub process summarises a group of activities, and can be expanded out into further detail. Sub processes can be shown as collapsed (with the [+] symbol), or expanded.

Artefacts



Data Store

A data store is somewhere that the process can read or write data, that persists beyond the scope of the process.



Data Object

Data objects are inputs to and outputs from activities. Data objects could be used to represent documents, data or other objects that are passed between the activities in a process.



Annotation

Annotations allow additional information relevant in documenting the process to be shown on the diagram.

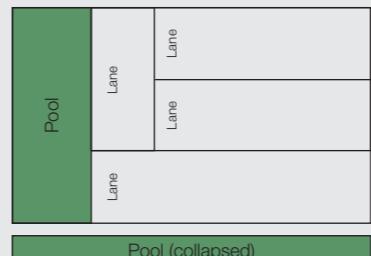


Group

A visual way of informally grouping items on a diagram, for example to highlight an area that requires further analysis.

Notation: Analytic Process Models

Pools and Lanes



Events

Start Events

None



Timer



Message



Signal

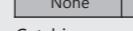


Conditional

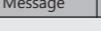


Immediate Events

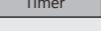
None



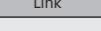
Message



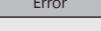
Timer



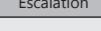
Link



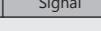
Error



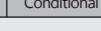
Escalation



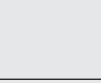
Signal



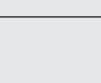
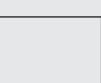
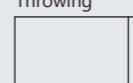
Conditional



Catching

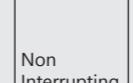


Throwing



Boundary Intermediate Events (interrupting, non interrupting)

Interrupting



Non Interrupting



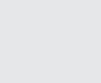
Non Interrupting



Non Interrupting



Non Interrupting



Non Interrupting



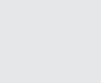
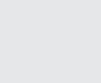
Non Interrupting



Non Interrupting



End Events



Flow

Sequence Flow

The flow of the process between events that occur, activities performed by the lanes and decisions that are made (gateways).



Normal



Conditional



Default



Activities

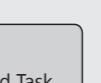
Tasks



Task



User Task



Service Task



Send Task



Receive Task

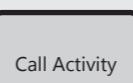


Loop



Multiple Instance

Sub Processes



Collapsed



Expanded

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