

# BPMN - Business Process Modeling Notation 1.2 — with ActiveModeler Avantage

[www.activemodeler.com](http://www.activemodeler.com)

## EVENTS

An event is something that "happens" during the course of a business process. There are three kinds of event related to flow execution.

	Start	Intermediate	End
	Catching	Throwing	
Unmarked	(Green circle)	(Pink circle)	(Red circle)
Timer	(Green circle with clock)	(Pink circle with clock)	
Error	(Pink circle with error symbol)		
Cancel	(Pink circle with X)		
Compensation	(Green circle with double arrow)	(Pink circle with double arrow)	
Conditional	(Green circle with list)	(Pink circle with list)	
Signal	(Green triangle)	(Pink triangle)	
Multiple	(Green pentagon)	(Pink pentagon)	
Link	(Green circle with arrow)	(Pink circle with arrow)	
Message	(Green envelope)	(Pink envelope)	
Terminate			(Red circle)

These events affect the flow of the process and usually have a cause or an impact .

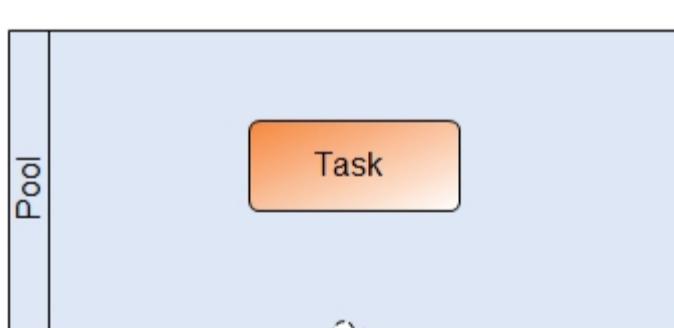
## SWIMLANES

To show who is doing what and where, many process modeling methodologies use the concept of swimlanes.

## POOLS, LANES

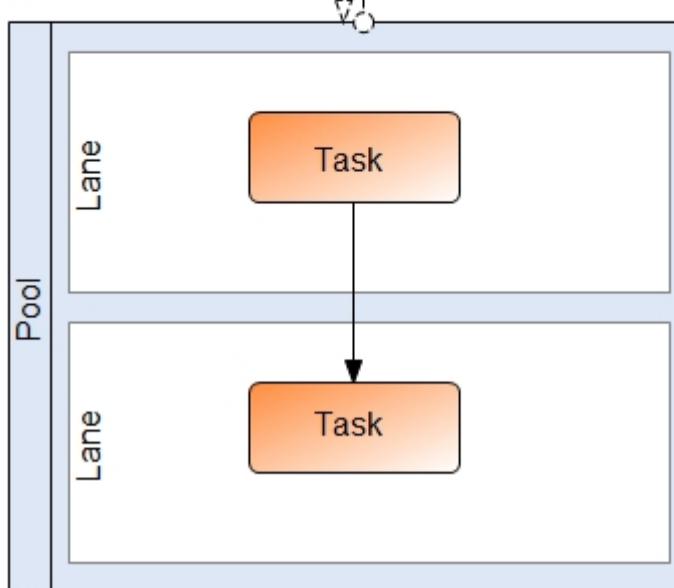
### POOLS

A Pool represents a Participant in a Process. Pools are usually used when the diagram involves two separate business entities or participants.



### LANES

A Lane is a sub-partition within a Pool and will extend the entire length of the Pool, either vertically or horizontally. Lanes are used to organize and categorize activities within a Pool.



## ACTIVITIES

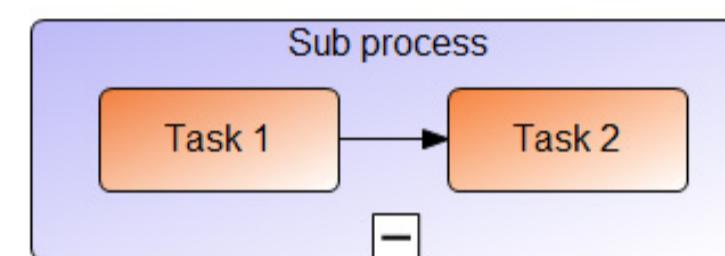
The types of activities that are part of the Business Process Diagram are: Process, Sub-Process and Task.

## SUB-PROCESS, TASK

### SUB-PROCESS

A Sub-Process is a compound activity in a Process map. It can be broken down into a finer level of detail (a Process) through a set of sub-activities.

.**Expanded sub-process:** show all details



### TASK

A Task is a "lowest level" activity in a Process map. A Task is used when the work is not broken down to a finer level of detail.

.**Collapsed sub-process:** hide his details

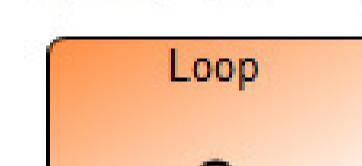


.**Task**

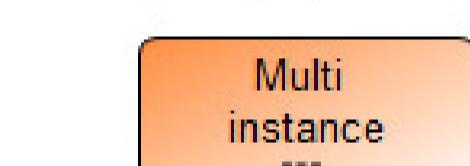


### ACTIVITY MARKERS

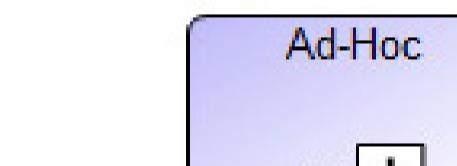
Activity is iterated if a loop condition is true.



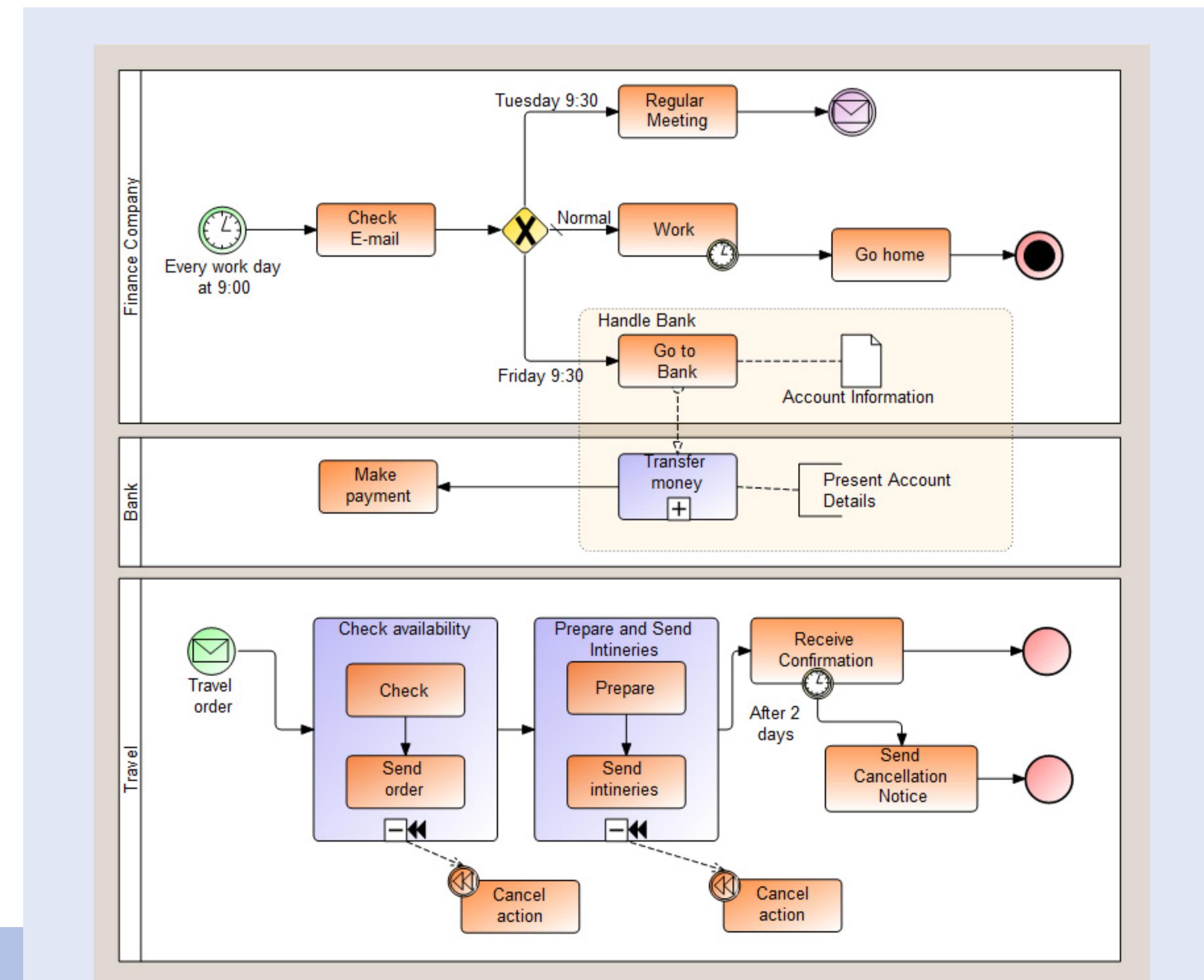
Multiple instance of the same activity are started in parallel or sequential.



Each task from sub-process can be executed arbitrarily until a completion condition is fulfilled.



The compensation activity is special in that it does not follow the normal rules, it is outside the normal flow of the process.

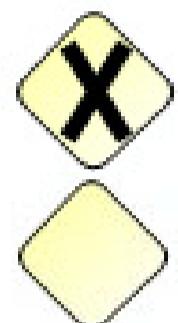


## GATEWAYS

### EXCLUSIVE

#### DATA-BASED

The values of process data are examined to determine which path should be taken.

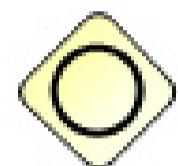


**EVENT BASED**  
This is used where the type of event itself rather than data evaluation determines which route to take.



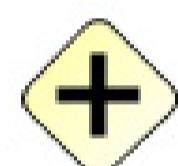
### INCLUSIVE

Each branch will be evaluated and will not stop when one branch condition becomes true.

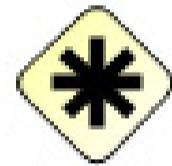


### PARALLEL

Provide a mechanism to synchronize parallel flow and to create parallel flow.



**COMPLEX**  
Handle situations that are not easily handled through the other types of Gateways.



## ARTIFACTS

They are used for provide additional information about a process.

## DATA OBJECT, TEXT ANNOTATION, GROUP

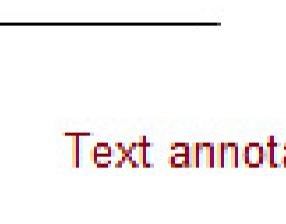
### DATA OBJECT

Data Objects show what information is produced or required by an activity.



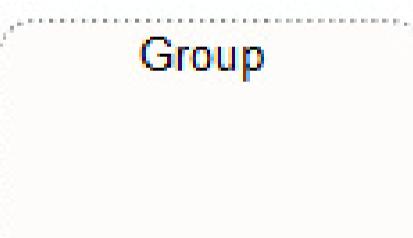
### TEXT ANNOTATION

Text Annotations allow a process modeler to provide additional information for the reader of a BPMN Diagram.



### GROUP

Grouping can be used for documentation or analysis purposes, but does not affect the Sequence Flow. Groups can also be used to identify the activities of a distributed transaction that is shown across Pools.



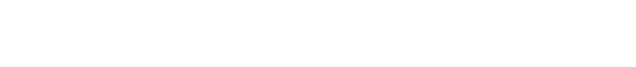
## CONNECTING OBJECTS

Standard Sequence flow



Message flow

Conditional Sequence flow



Association

Default Sequence flow

