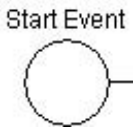
Modeling Business Events

During business process modeling, you model the events that happen in the business, and show how they affect process flows. An event either kicks off a process flow, or happens during a process flow, or ends a process flow. BPMN provides a distinct notation for each of these types of events, shown in the table below.

Table 1: Basic event types in BPMN and their notations.

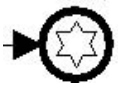
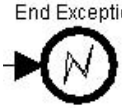
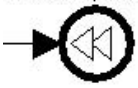
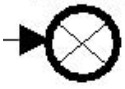
Start Event	Intermediate Event	End Event
 Starts a process flow.	 Happens during the course of a process flow.	 Ends a process flow.

More Complex Events -- Specifying Trigger Types

When you model more complex process flows, such as B2B web services, you need to model more complex business events, such as messages, timers, business rules, and error conditions. BPMN enables you to specify the trigger type of the event, and denote it with a representative icon, as specified in Table 2.

Specifying a trigger type to an event puts certain constraints on the process flow that you are modeling, which are explained in the table. For example, a timer cannot end a process flow. You can only draw message flows from and to message events. These types of modeling rules, which are actually kinds of business rules, should be enforced automatically by the modeling tool providing support for BPMN.

Table 2: Event Trigger Types.

Start Events	Intermediate Events	End Events	Description
Start Message 	Message 	End Message 	A start message arrives from a participant and triggers the start of the process, or continues the process in the case of an intermediate event. An end message denotes a message generated at the end of a process.
Start Timer 	Timer 	A Timer cannot be an End Event.	A specific time or cycle (for example every Monday at 9am) can be set to trigger the start of the process, or continue the process in the case of an intermediate event.
Start Rule 	Rule 	A Rule cannot be an End Event.	Triggers when the conditions for a rule become true, such as “Stock price changes by more than 10% since opening.”
Start Link 	Link 	End Link 	A link is a mechanism for connecting the end event of one process flow to the start event of another process flow.
Start Multiple 	Multiple 	End Multiple 	For a start multiple event, there are multiple ways of triggering the process, or continuing the process in the case of the intermediate event. Only one of them is required. The attributes of the event define which of the other types of triggers apply. For end multiple, there are multiple consequences of ending the process, all of which will occur (for example, multiple messages sent).
An Exception cannot be a Start event.	Exception 	End Exception 	An end exception event informs the process engine that a named error should be generated. This error will be caught by an intermediate exception event.
A Compensation event cannot be a Start event.	Compensation 	End Compensation 	An end compensation event informs the process engine that a compensation is necessary. This compensation identifier is used by an intermediate event when the process is rolling back.
An End event cannot be a Start event.	An End event cannot be an Intermediate event.	End Cancel 	An end event means that the user has decided to cancel the process. The process is ended with normal event handling.
An End Kill event cannot be a Start event.	An End Kill event cannot be a Intermediate event.	End Kill 	An end kill event means that there is a fatal error and that all activities in the process should be immediately ended. The process is ended without compensation or event handling.