

# Event

An event is the specification of some occurrence that may potentially trigger effects by an object, that is, an event shows what should happen to change a particular [state](#) in a system. There are the following event types:


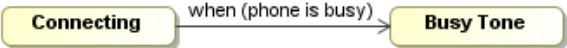
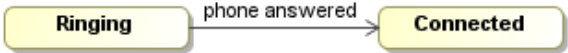
- [Any Receive Event](#)
- [Call Event](#)
- [Change Event](#)
- [Signal Event](#)
- [Time Event](#)

Events are important in diagrams which represent a [behavior](#) of a system. These diagrams are listed in the following table.

Diagram name	Event usage description
<a href="#">Activity diagram</a>	To specify an event type for the <a href="#">Accept Event Action</a> .
<a href="#">State Machine diagram</a>	To specify a event type for the <a href="#">transition</a> , or transition to self.
<a href="#">Protocol State Machine diagram</a>	To specify an event type for the protocol transition, or protocol transition to self.

When specifying an event type for a transition, you can [type the command straight on the transition path](#) on the diagram pane. The same assignment is valid for a transition to self, protocol transition, and protocol transition to self.

Event types, their functions, samples, and command syntax are described in the following table.

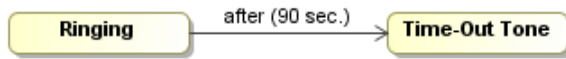
Name	Function and Sample	Command syntax
<b>Any Receive Event</b>	A trigger for an AnyReceiveEvent is triggered by the receipt of any <a href="#">message</a> that is not explicitly handled by any related trigger.	<i>all</i>
<b>Call Event</b>	<p>A call event specifies the receipt by an object of a <a href="#">message</a> invoking a call of an <a href="#">operation</a>:</p>  <p>In this example, the call event type is specified with the <i>create()</i> operation.</p>	<i>&lt;operation ()&gt;</i>
<b>Change Event</b>	<p>A change event specifies a change in the system configuration that makes a condition true:</p>  <p>In this example, the change event type is specified, and its Change expression property is specified as <i>phone is busy</i>.</p>	<i>when (&lt;expression&gt;)</i>
<b>Signal Event</b>	<p>A signal event represents the receipt of an asynchronous signal instance. A signal event may, for example, cause a state machine to trigger a transition:</p>  <p>In this example, the signal event type is specified, and its Signal property is specified as <i>phone answered</i>.</p>	<i>&lt;signal name&gt;</i>

## Related pages

- [Specifying a time for a time event](#)
- [Signal Event](#)
- [Activity diagram](#)
- [State Machine diagram](#)
- [Protocol State Machine diagram](#)
- [Model Elements](#)

## Time Event

A time event specifies a point in time. At the specified time, the event occurs. There are two possible types of event occurrences: at the relative time and at the absolute time:



In this example, the relative time event is specified, and its When property is specified as *90 sec.*

For more information, see [Specifying a time for a time event](#).

- *after (<time>)* - an event occurrence at the relative time
- *at (<time>)* - an event occurrence at the absolute time