Choreography Activities

A Choreography Activity is an abstract element. It represents a point on a choreography flow where an interaction occurs between two or more participants.

There are three types of Choreography activities defined in business process modeling:

- Choreography Task
- SubChoreography
- Call Choreography

The shape of a Choreography Task, SubChoreography, or Call Choreography consists of two or more participant compartments and one name compartment. One of the participants can be selected as an initiating participant. The color of the initiating participant compartment is the same as the color of the name compartment. The other participants compartments are gray.



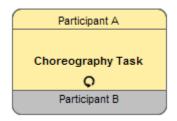
Compartments on Choreography Activity shape

The looping properties of a Choreography Activity can be specified. They can be repeated sequentially, essentially behaving like a loop. The presence of loop characteristics signifies that the Choreography Activity has looping behavior. There are two types of Looping characteristics defined in BPMN:

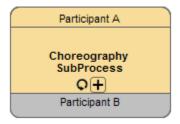
Standard Loop

A Standard Loop marker displayed on a name compartment of a Choreography Activity shape shows that the looping behavior based on a boolean condition is defined for this Activity. Additional looping characteristics can also be defined: the Activity will loop as long as the boolean condition is true. The condition is evaluated for every loop iteration and can be evaluated at the beginning or end of the iteration. In addition, a numeric cap can be optionally specified, but the number of iterations cannot exceed this cap.

· Choreography Activity with Standard Loop marker



SubChoreography with Standard Loop marker



Multi-instance Loop

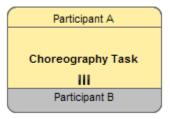
A Multi-instance Loop marker shows that a desired number of Choreography Activity instances can be created. The instances can be executed either in parallel or sequentially and each will be identified using a different marker.

Related diagram

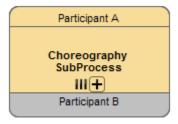
• BPMN Process Diagram

Related procedure

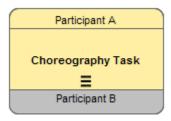
 Using Choreography Activity • Choreography Task with Parallel MultiInstance Loop marker



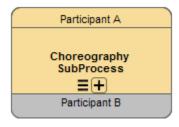
• SubChoreography with Parallel MultiInstance Loop marker



• Choreography Task with sequential MultiInstance Loop marker



• SubChoreography with sequential MultiInstance Loop marker





Multi-instance Loop and Standard Loop markers can be added to all types of Choreography activities.

There are circumstances when a Choreography Activity references a multi-instance participant (the minimum multiplicity property value for a participant is 2 or greater). A multi-instance participant represents a situation where there is more than one possible related participant involved in a Choreography. If this is the case, a MultiInstance marker will be displayed in the participant compartment of a Choreography Activity shape.