



NetBeans BPEL Elements Overview

Fulvio Frati

fulvio.frati@unimi.it

Sesar Lab

http://ra.crema.unimi.it

[Overview]

- Three categories:
 - Web Service
 - Basic Activities
 - Structured Activities

- Fault Handlers Management

[Web Service]

- Represents agreements between the process and its partner services



- **Invoke:** Enable the process to send a message to partner web service

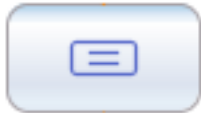


- **Receive:** Causes the process to wait for a message to arrive from a partner web service



- **Reply:** Causes the process to send a message in reply to a partner web service that come from a receive activity

[Basic Activities]



- **Assign:** Assigns the values to a variable or web services parameters



- **Wait:** instructs the process to wait for a specified time or until a certain time has passed

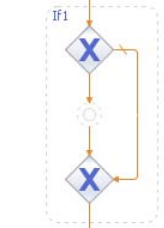


- **Throw:** Generates a fault or throws an exception within a process



- **Exit:** Terminates the execution

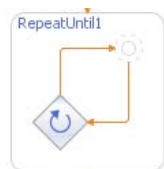
Structured Activities



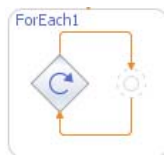
- **If:** Specifies a conditional behavior when one branch of activity is executed from a set of activities



- **While:** Repeat an activity as long as the condition is true



- **Repeat Until:** Repeats an activity as long as the condition, evaluated after the execution of the activity, is true



- **For Each:** Executes the contained activities N+1 times



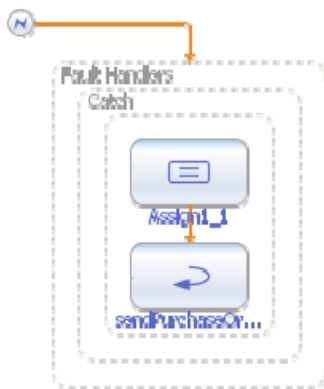
- **Pick:** waits for the occurrence of an event



- **Flow:** Specifies one or more activities to be executed concurrently

[Fault Handlers]

- BPEL allows to catch and manage exceptions using fault handlers



- The **catch** activity intercepts and handles specific types of fault
- Each fault handler contains an activity that runs in case of an exception
- Several catch activities could be attached to the process to manage different types of faults