Pools, Lanes, and Message Flows



Participants are responsible for performing the activities that comprise a process flow. Participants can be organizations, roles, or systems.

Pools are containers for the sequence flow that is the responsibility of a participant. Every participant has their own pool, and every end-to-end process is contained within a single pool.

Sometimes, the details of a participant's process are unimportant or unavailable. In such cases, an empty or "black box" pool is used to model a collaboration between two participants.

Pools can be subdivided into lanes to clarify responsibilities. In this example, the responsibility for completing process activities is divided between ACME Corporation's Accounts Receivable Clerk and Chief Financial Officer.

Lanes, in turn, can be subdivided in a hierarchical fashion to add further clarity. In this example, the Operations lane has been subdivided into the Warehouse lane and the Delivery lane.

Sequence flows define the execution order of activities and the flow of information within a pool. In other words, sequence flows cannot cross pool boundaries.

Message flows define the flow of information between pools. Message flows can connect flow objects in different pools, a pool and a flow object, or two pools.

Incoming message flows must be received before an activity starts. Outgoing message flows are sent upon the completion of an activity. In this example, Message 1 must be received before Task A can begin. Message 2 is sent immediately upon the completion of Task C.

The use of throwing and catching message events can add further clarity regarding the sequence of activities across different pools. In this case, the sequence is clear: Task 1 is completed, and Message 1 is sent and received. Next, Task 2 is completed, and Message 2 is sent and received. Finally, Task 3 is completed.

Processes are often started upon the receipt of a message. In this example, an order received from a customer triggers the company's order fulfillment process.