

# SpiffWorkflow

Scan, Sign Up, Draw Your Code with Spiff Workflow!



## Task/activities

A task or activity represents a unit of work.

**Task** Represents a specific piece of work or an action that needs to be accomplished.

**Call Activity** Activity that references another process. It's useful for reusing common processes within multiple parent processes

A collection of related tasks within a larger process.

### Task Types

- User Task:** Web forms
  - Manual Task:** Manual Confirmation
  - Business Rule Task:** Make decisions
  - Service Task:** Call an external application
  - Script Task:** Write some python!
  - Send Task:** Send a message
  - Receive Task:** Await a message
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### Activity Markers

- Sub-Process:** This task references and includes another workflow process
- Loop:** Indicates that the task can be repeated based on a specific condition
- Parallel:** Indicates that multiple instances of the task will occur in parallel
- Sequential:** Indicates that multiple instances of the activity will happen all at once.
- Ad Hoc:** Signifies that the sub-process does not have a formal sequence and can contain multiple embedded activities, executed in any order.

## Events

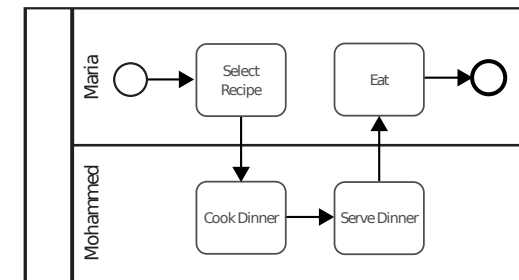
Distinct actions that shape the flow of a process, acting as the dynamic turning

SpiffWorkflow currently does not support non-interrupting start events.

|             | Start         |              |                  | Intermediate |                |                  | End          |             |
|-------------|---------------|--------------|------------------|--------------|----------------|------------------|--------------|-------------|
|             | Start Process | Sub-Process  | Sub-Process      | Mid-Process  | Boundary Event | Boundary Event   | Mid-Process  | End Process |
|             |               |              |                  |              |                |                  |              |             |
|             | Catching      | Catching     | Catching         | Catching     | Catching       | Catching         | Throwing     | Throwing    |
|             | None          | Interrupting | Non-Interrupting | Interrupting | Interrupting   | Non-Interrupting | Interrupting | None        |
| Message     |               |              |                  |              |                |                  |              |             |
| Timer       |               |              |                  |              |                |                  |              |             |
| Conditional |               |              |                  |              |                |                  |              |             |
| Signal      |               |              |                  |              |                |                  |              |             |
| Escalation  |               |              |                  |              |                |                  |              |             |
| Error       |               |              |                  |              |                |                  |              |             |
| Terminate   |               |              |                  |              |                |                  |              |             |

## Pools and Lanes

Pools and lanes organize and clarify roles and responsibilities.



**Expanded Pool**

**Empty Pool**

When communicating between process models using messages, an empty pool can be used to clarify what process is being called.

Lanes group activities within a single Pool, usually signifying different roles or departments

Tasks can be connected across separate pools. Pools can only be connected with message flows.

## Data

Information is generated as a process progresses. By default, SpiffWorkflow copies the data from one task to the next.

### Data Object

Data that is only accessible to connected tasks. They are shared, rather than copied between tasks.

### Data Input

Defines the accepted arguments to a process. If present, it restricts the data passed into a Call Activity.

### Data Store

Data that is accessible across many process instances. It exists outside the process.

### Data Output

If present, only the data named in Data Outputs will be returned by a Call Activity.

## Gateways

Gateways are a decision node that enables one to choose between different paths based on certain conditions or events.

|                 | Symbol | Outgoing Sequence | Rule   | Default flow |
|-----------------|--------|-------------------|--|--------------|
| Exclusive (XOR) |        |                   | Only one outgoing sequence flow that meets the condition |              |
| Inclusive (OR)  |        |                   | All outgoing sequence flows that meet the conditions     |              |
| Parallel (AND)  |        |                   | All outgoing sequence flows                              | NA           |
| Event-Based     |        |                   | All outgoing sequence flows where event is triggered     | NA           |

## Connectors

Connectors generally refer to the elements that establish the flow and relationships between different BPMN elements

|                           | Symbol | Rule  | Use |
|---------------------------|--------|---|-----|
| Normal sequence flow      |        | Standard Path. Shows the order in which activities will be performed in a process.        |     |
| Conditional sequence flow |        | Used to indicate that the flow will be taken only if a specific condition is met.         |     |
| Default sequence flow     |        | The Default Path. Taken if no other paths are valid.                                      |     |
| Message flow              |        | Depicts communication between two separate participants (see pools above) using messages. |     |
| Association               |        | Used to associate artifacts (like data, text, or annotations) with flow objects.          |     |