

# 1min. Tutorial

A simple 1 minute tutorial, how to configure an easy 3 steps flow and invoke transitions.

The first thing first is to prepare the configuration XML file. It is going to be parsed by JAXB, so you have to strictly respect XSD.

## 1min-example-flow.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<flowDescriptor xmlns="http://www.wicketstuff.cz/p/boss-flow/flowXmlModel"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  >

  <flowId>1</flowId>
  <flowName>1min-example-flow</flowName>
  <flowDescription>The 1 minute Tutorial example flow</flowDescription>

  <viewState name="S1initialState" initialState="true">
    <transition refName="goStep1to2" defaultNext="true"/>
  </viewState>

  <viewState name="S2middleState">
    <transition refName="goStep2to3" />
    <transition refName="goStep2to1" defaultPrevious="true" />
  </viewState>

  <viewState name="S3finalState" finalState="true">
  </viewState>

  <transition name="goStep1to2" targetStateName="S2middleState" />
  <transition name="goStep2to3" targetStateName="S3finalState" />
  <transition name="goStep2to1" targetStateName="S1initialState" />

</flowDescriptor>
```

Now you have to initialize the flow processor. It can parse the XML file from an input stream. Also you can change some properties or add listeners etc. That is just going to be done once. It can be an application singleton, for example a Spring bean is a good solution for Spring based web applications.

## Initializing Flow

```
// Create a new flow processor instance, that is going to hold FormData payload
// as a flow data object
IFlowProcessor<FormData> processor = new DefaultFlowProcessor<FormData>();

// Set the XML file with flow definitions, parse it and build flow
processor.setFlowInputStream(new FileInputStream("1min-example-flow.xml"));
processor.initializeProcessor();

// Now flow processor is ready to use
```

Now see how to create the flow carter and shift between flow states.

### Running Flow

```
// Initialize flow carter object with an payload of type FormData
IFlowCarter<FormData> carter = processor.initFlow(1, new FormData());

// Invoke a transition
// for step 'S1initialState' you can use instead of 'goStep1to2'
processor.invokeDefaultNextTransition(carter);

// now the flow is in 'S2middleState'

// Invoke a transition
// There is no default next transition defined for the 'S2middleState'
// so you have to invoke transition by its name
processor.invokeTransition(carter, "goStep2to3");

// Obtain current state
IFlowState<FormData> currentState = carter.getCurrentState();

// Obtain current state name
String currentStateName = currentState.getStateName();

// Obtain current view name
String currentViewName = null;
if(currentState instanceof IFlowViewState) {
    currentViewName = ((IFlowViewState<MyData>)currentState).getViewName();
}

// Obtain data object
FormData formData = carter.getPayload();
```

That's all.