# State Machine Diagrams

A state machine diagram that is assigned to a <<PersistentState>> class governs its behavior. This state machine diagram defines all **persistent states** of the object and **transitions between the states**. These states are persistent, that is, they are independent of the life-cycle of the xUML Runtime.

Below an example of the state machine diagram of **Purchase Order** is shown. An object of this class can only be in the two states **Initialized** and **Checked out**. Depending on signals and time-outs, the object changes its state or is ultimately destroyed.

Figure: State Machine Diagram of a Purchase Order
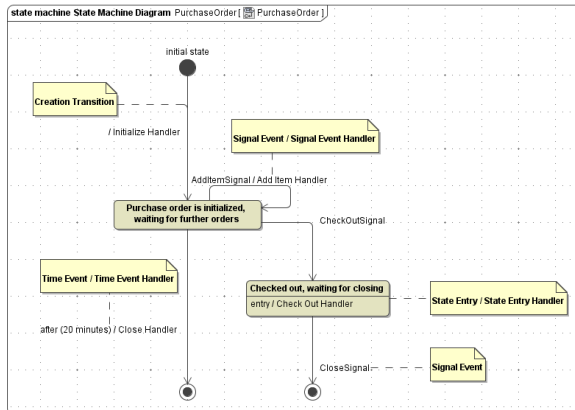
Find a detailed descriptions of all states and transitions and their characteristics on

- States
- Transitions