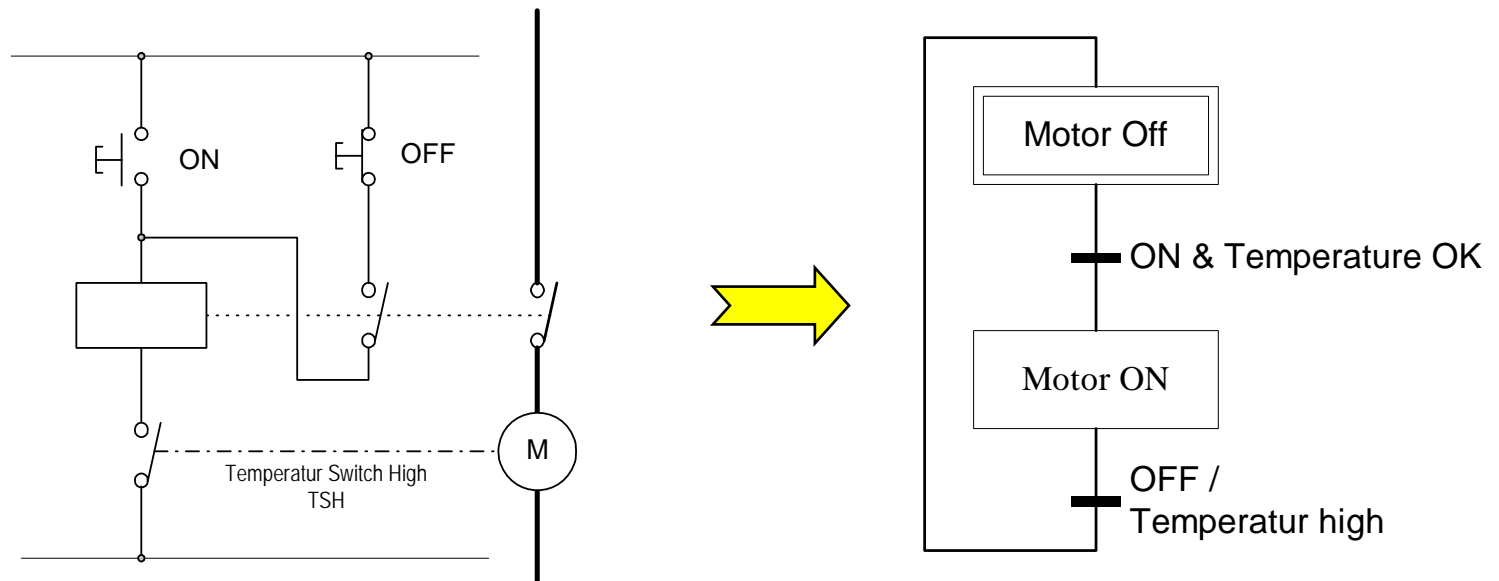
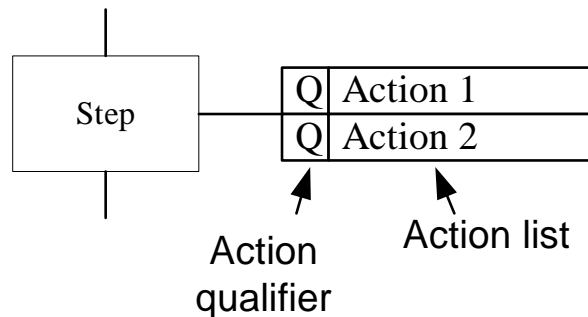
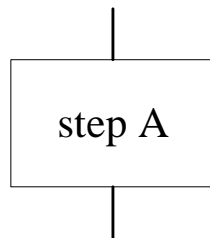


Example



SFC elements

Step:



- ☑ Expression
- ☑ State
- ☑ Collection of actions
- ☑ Processing state

SFC elements

Transition:

☑ Switching condition

+ Temperature to high

SFC elements

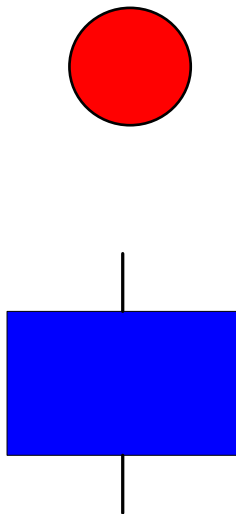
Connectors:



- ☑ Directed arc between steps and transitions
- ☑ Usually directed top down, otherwise flow indicated with an arrow

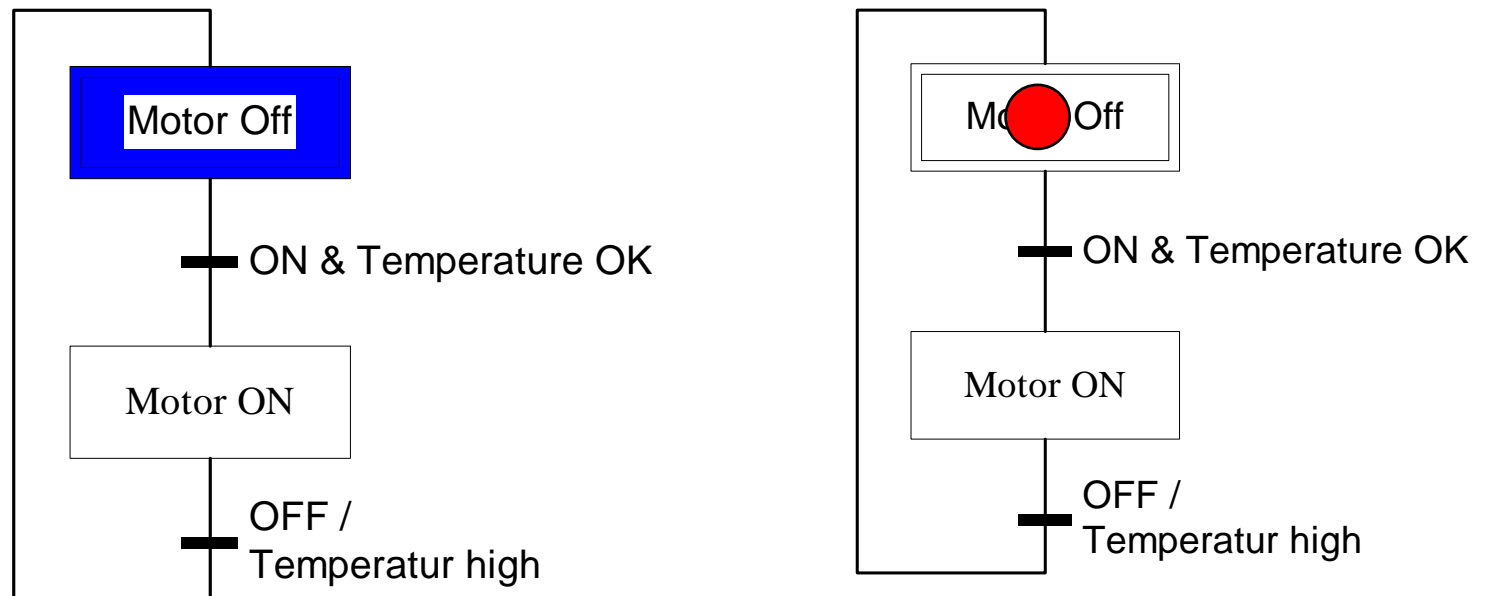
SFC elements

Token, marked or active step

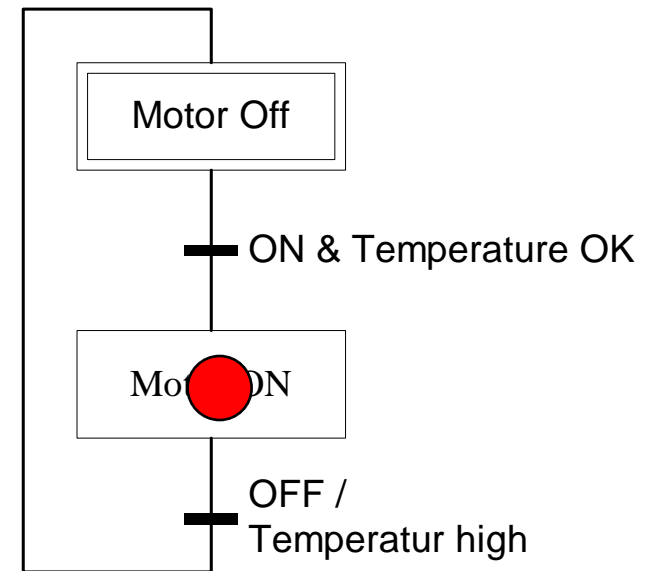
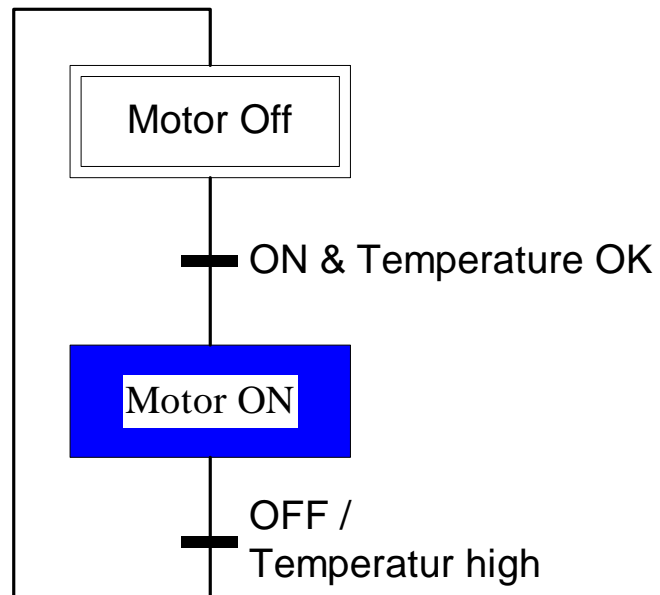


- ☑ Used for SFC simulation

Example

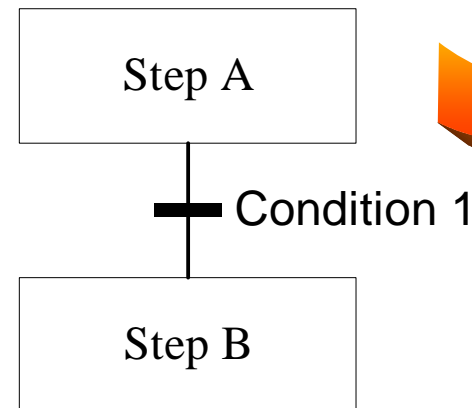
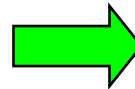
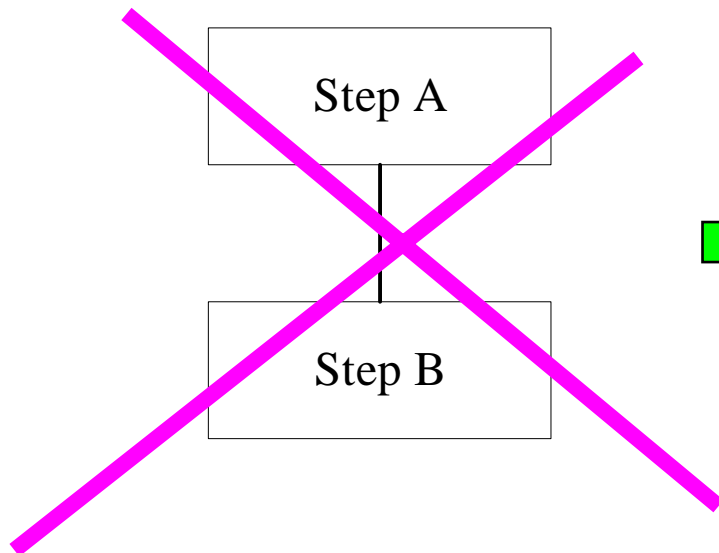


Example



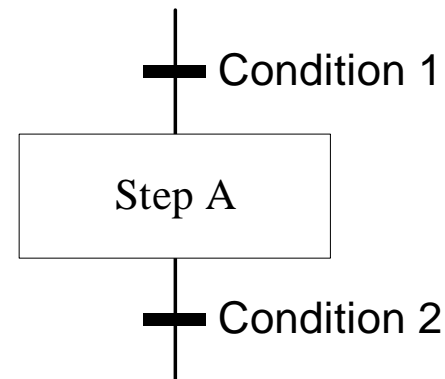
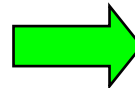
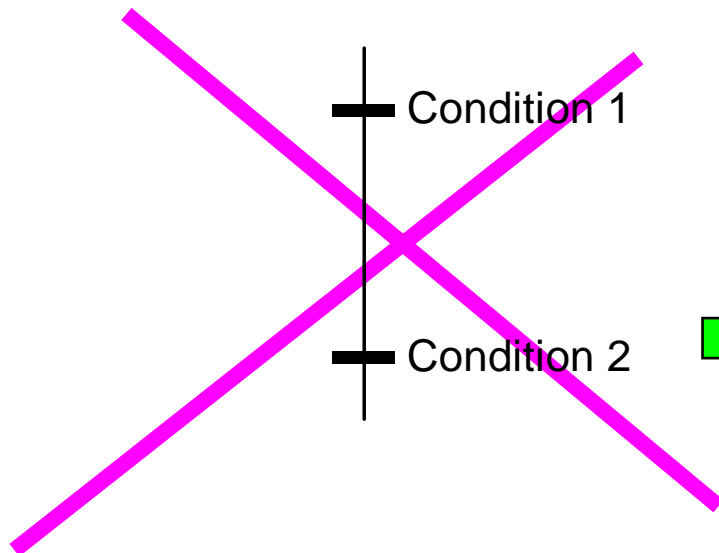
Drawing Roules

- ☑ Never connect to steps directly, between to steps there is always a transition.



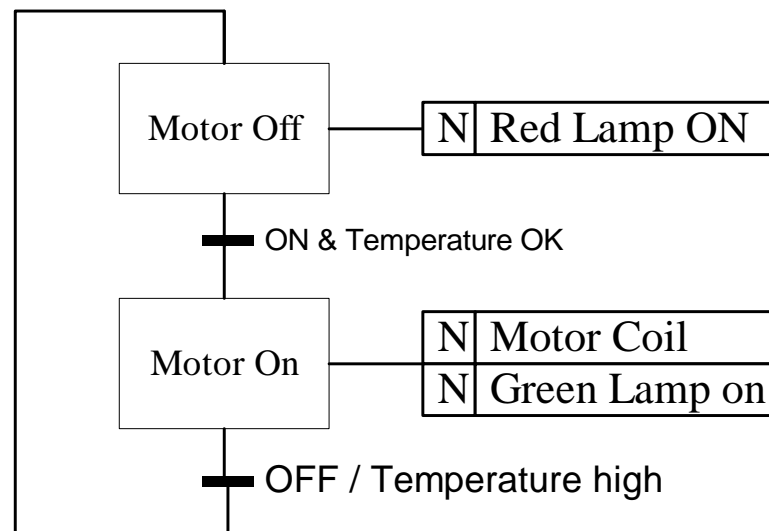
Drawing Roules

- ✓ Never connect to transitions directly,
between to transitions there is always a step.



Actions

- ☑ Actions are associated to steps and define what has to be done

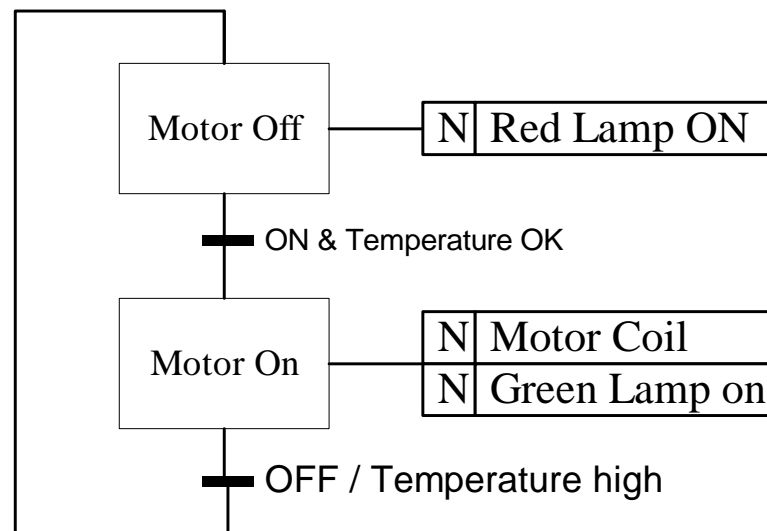


Qualifier

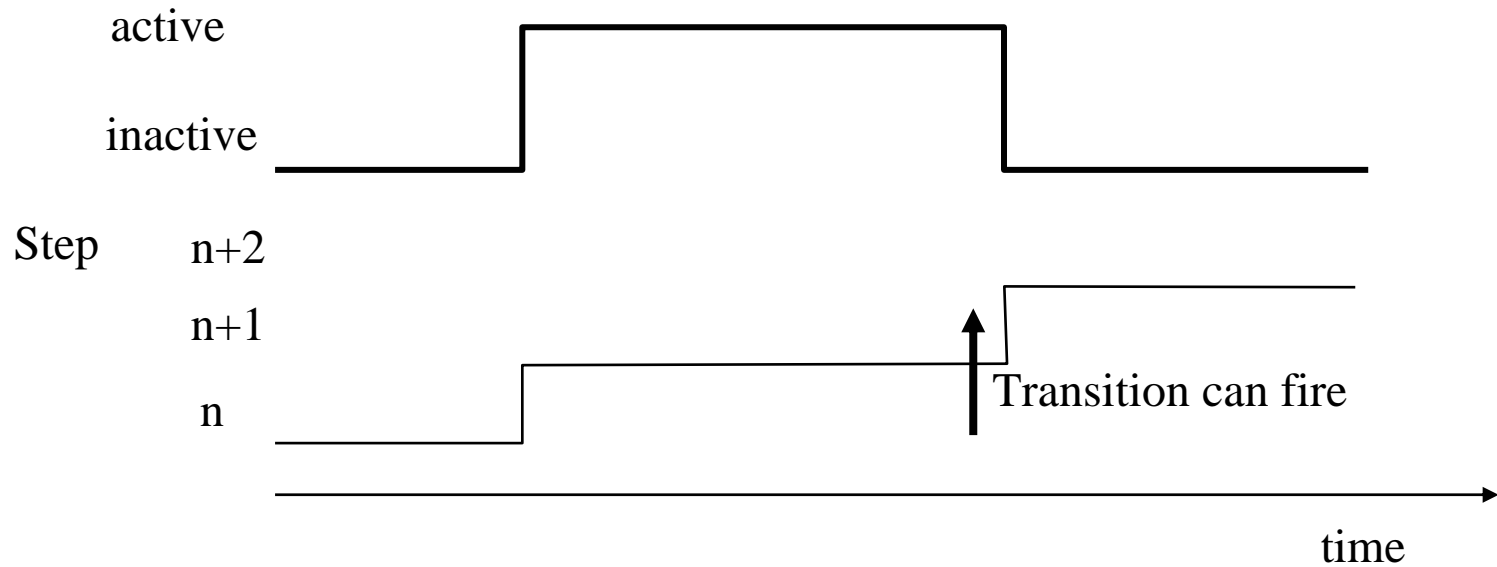
- ☑ The action qualifier determines, when the action is executed
- ☑ Qualifiers (not complete):
 - N: Normal, when step is active
 - P+: at step entrance
 - P-: when step is left
 - S: Set
 - R: Reset

Qualifier

☑ Example



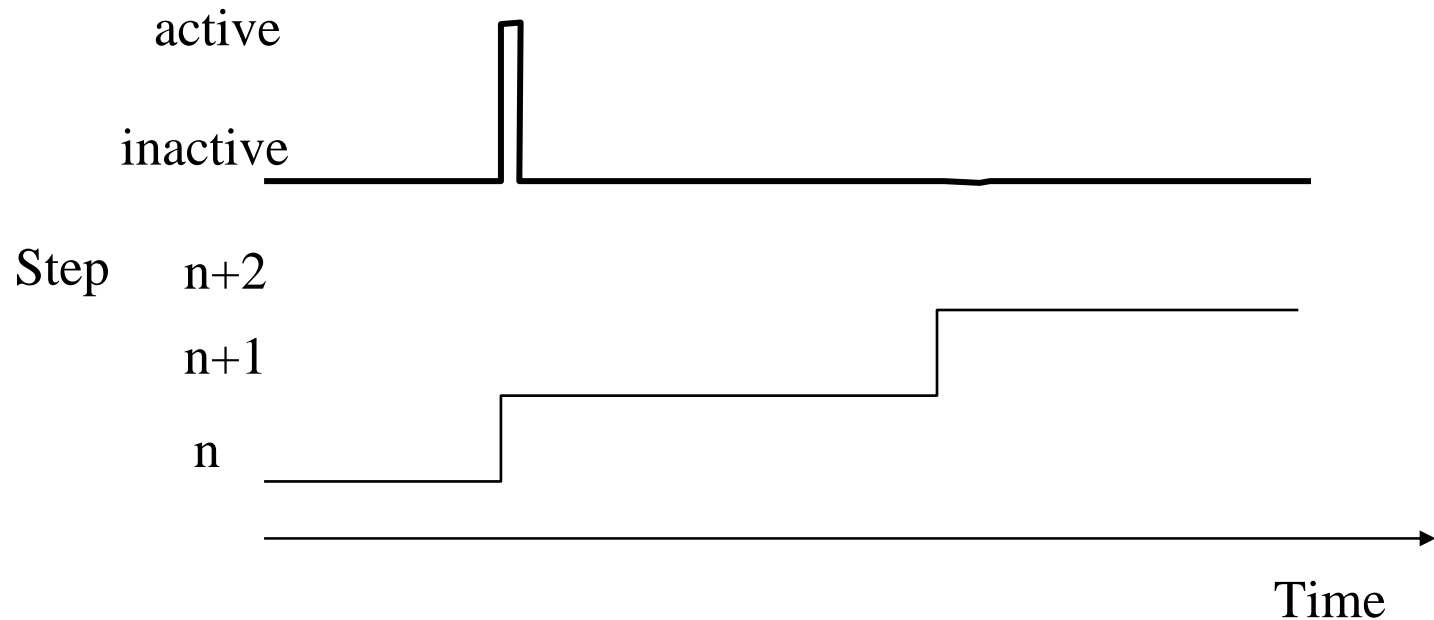
Qualifier N



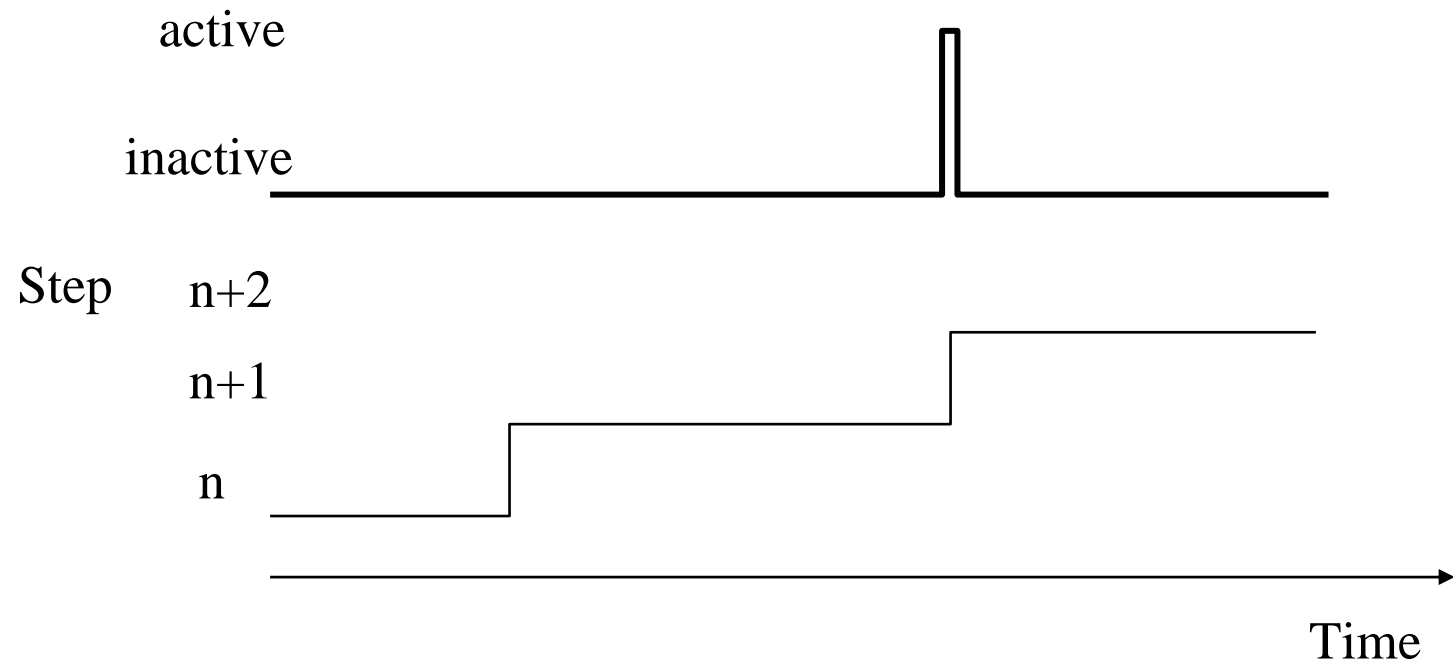
Why executing actions once more after transition can fire?

- ☑ Only active actions are called by the automata logic and there the action need to have a last chance to set its variables as desired

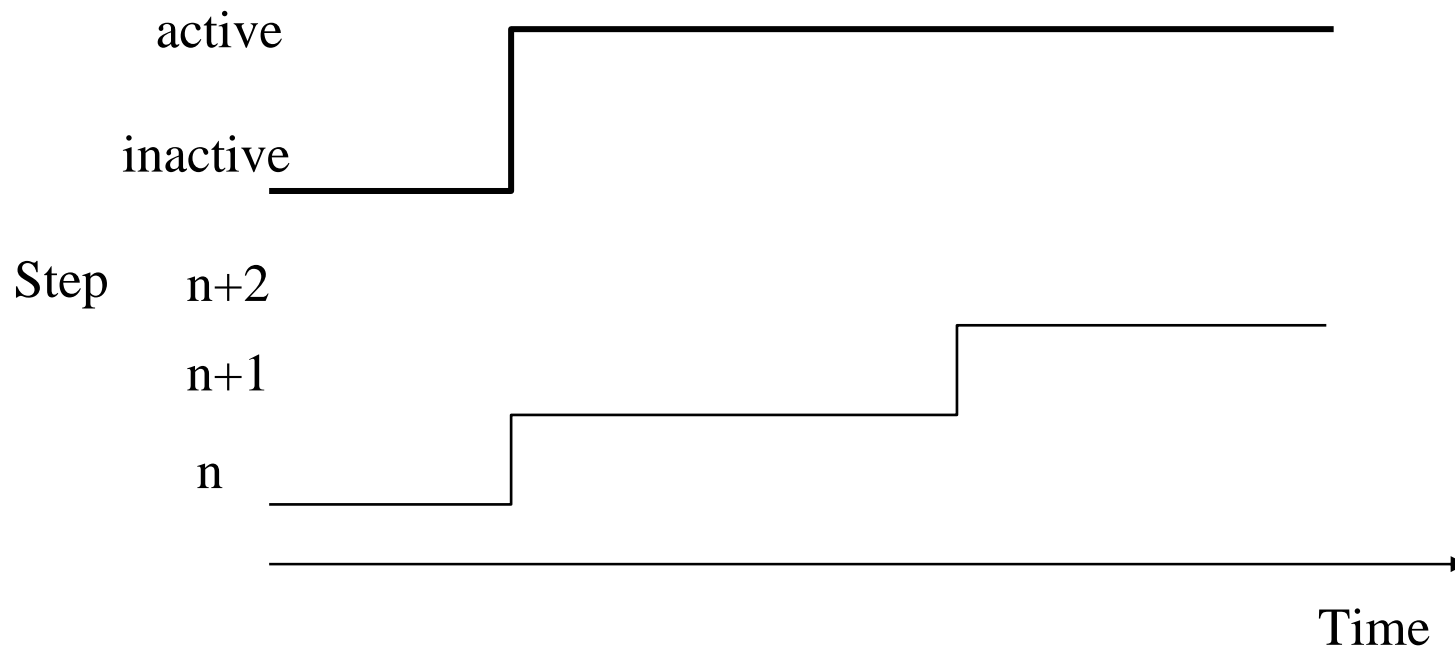
Qualifier P+



Qualifier P-



Qualifier S



Qualifier R

