



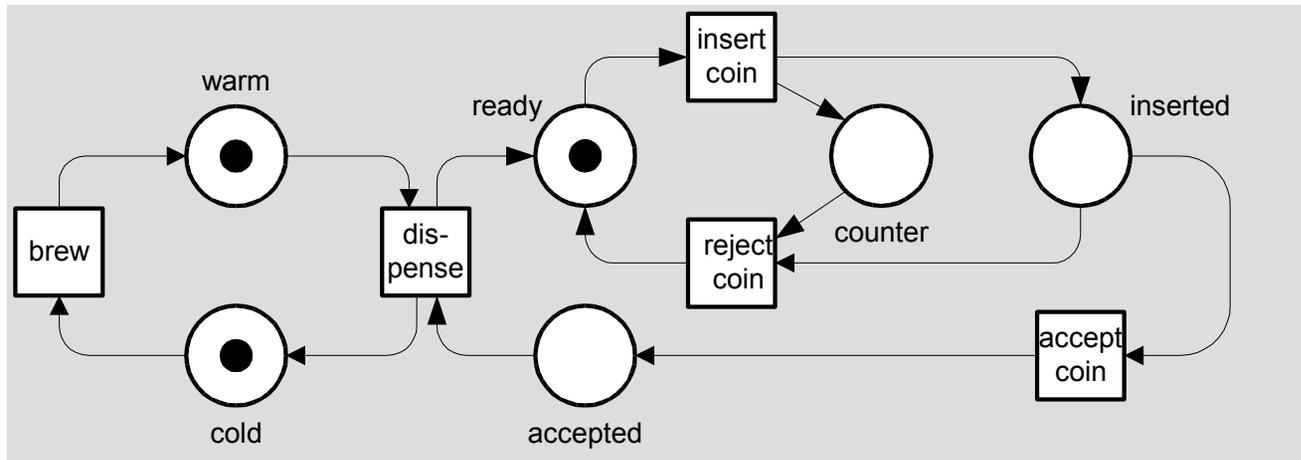
Validating the Petri Net Model

Efficiency

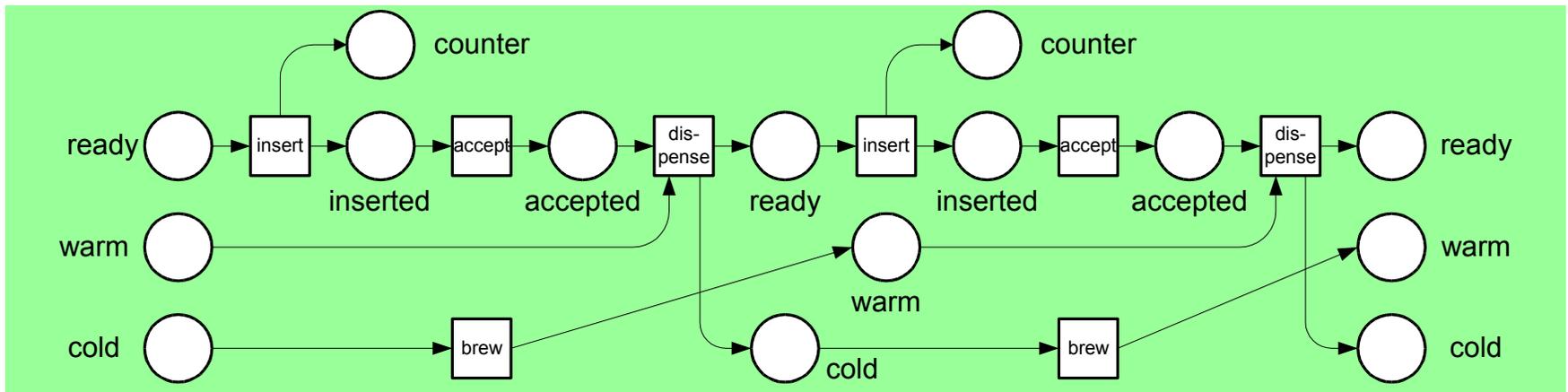
- every occurrence sequence is represented by an occurrence sequence of a process net
- every occurrence sequence of a process net corresponds to an occurrence sequence of the model
- the number of process nets exceeds the number of occurrence sequences significantly (exponential in the degree of parallelism)



Advantage 1: Efficiency

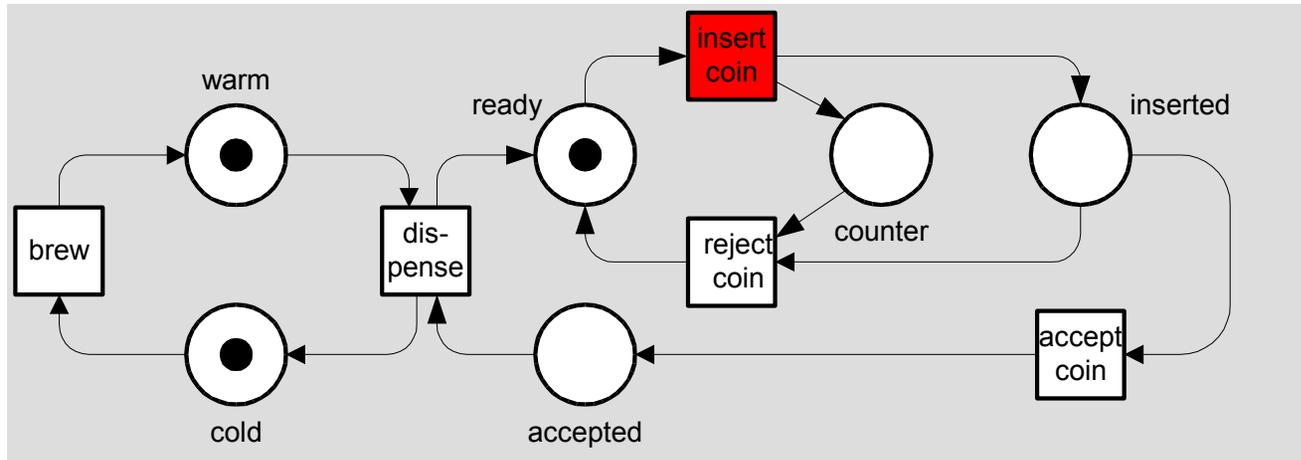


The process net represents 21 different occurrence sequences

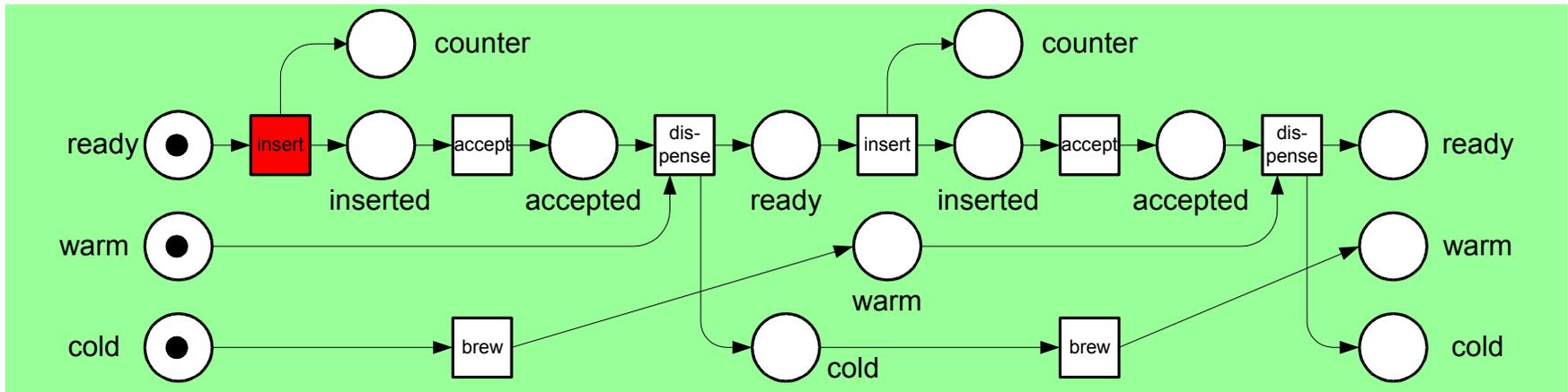




One common occurrence sequence

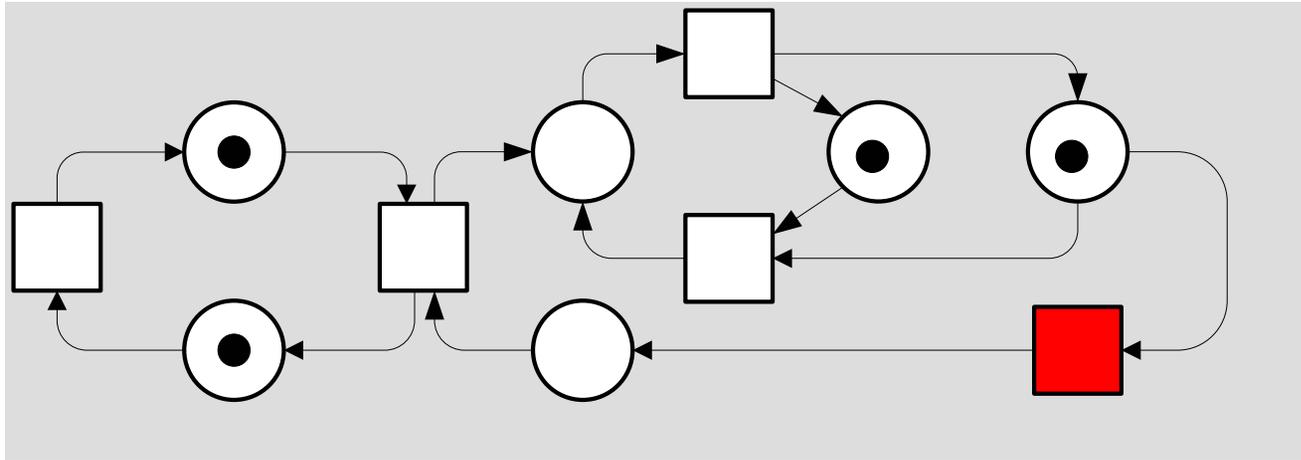


insert

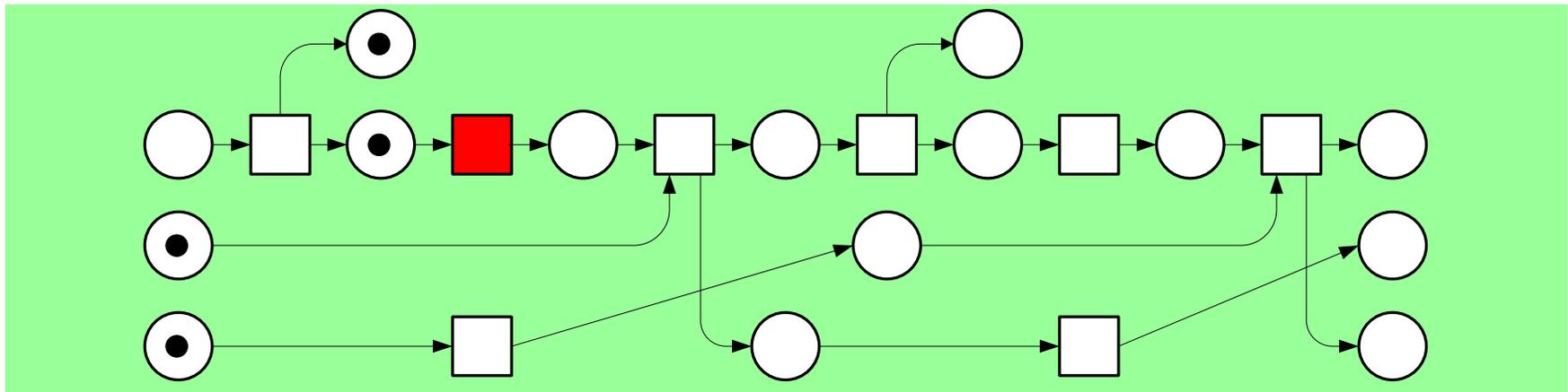




One common occurrence sequence



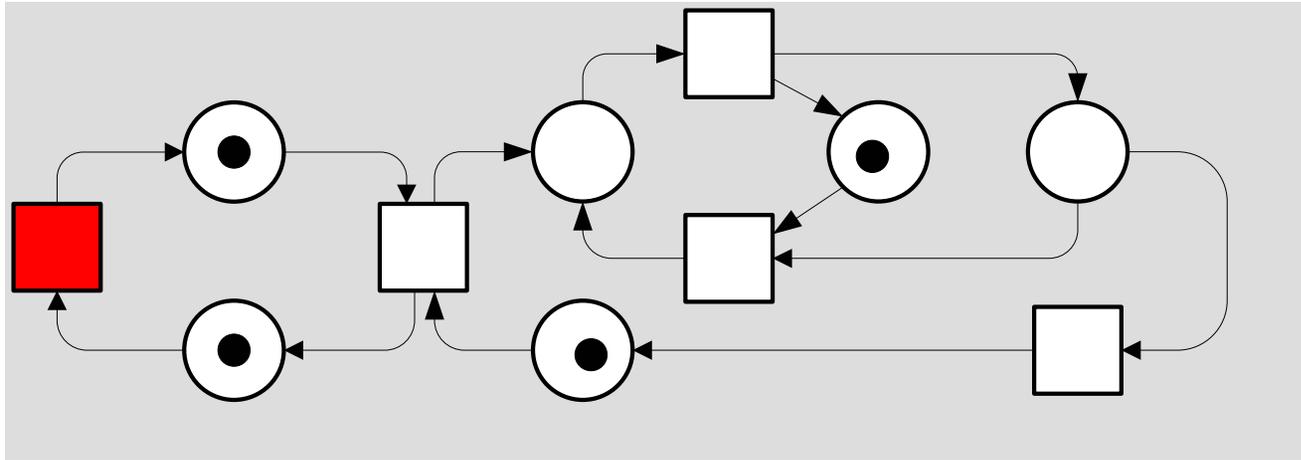
insert, accept



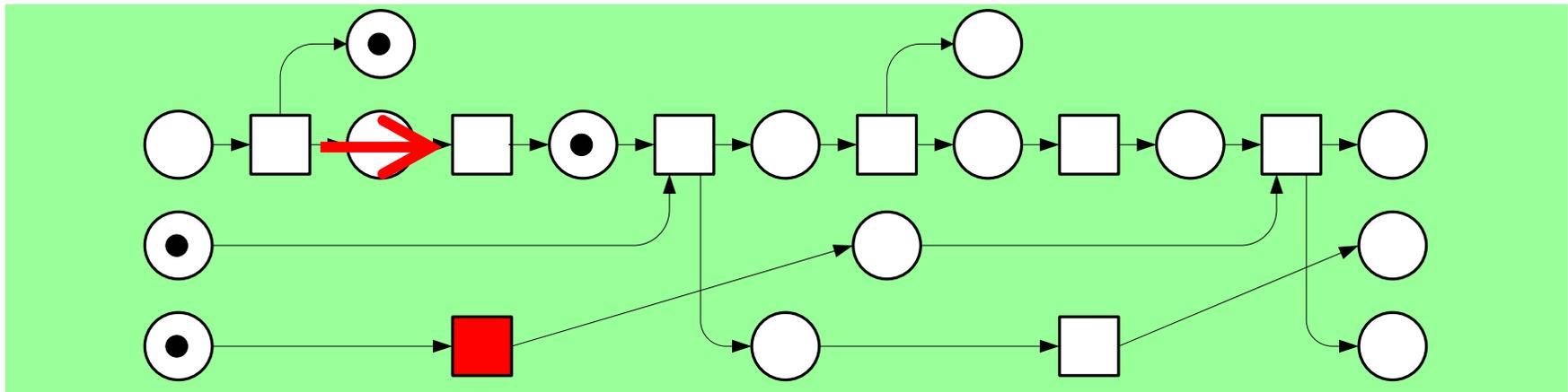
wa



One common occurrence sequence



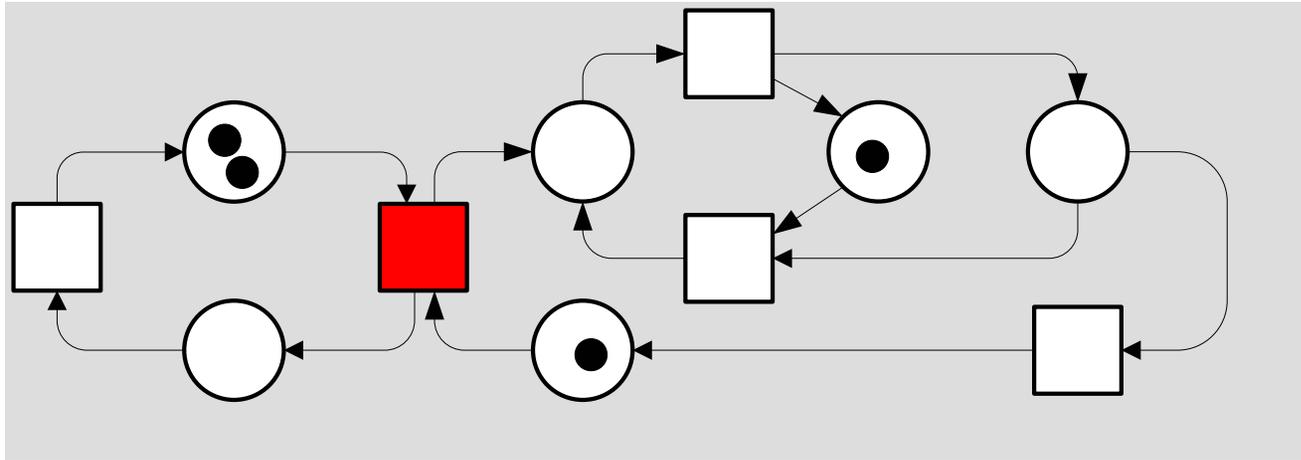
insert, accept, brew



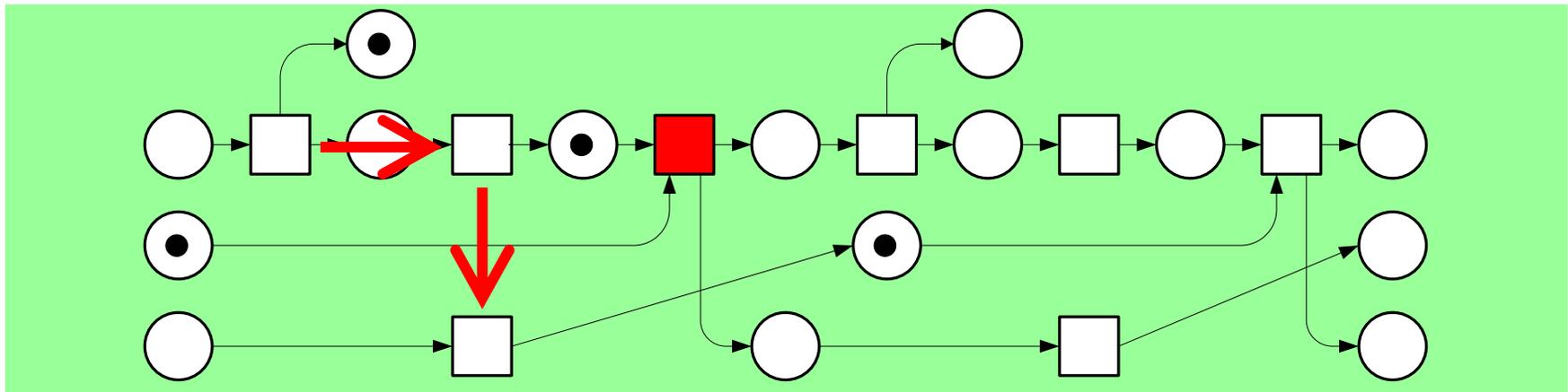
wa



One common occurrence sequence



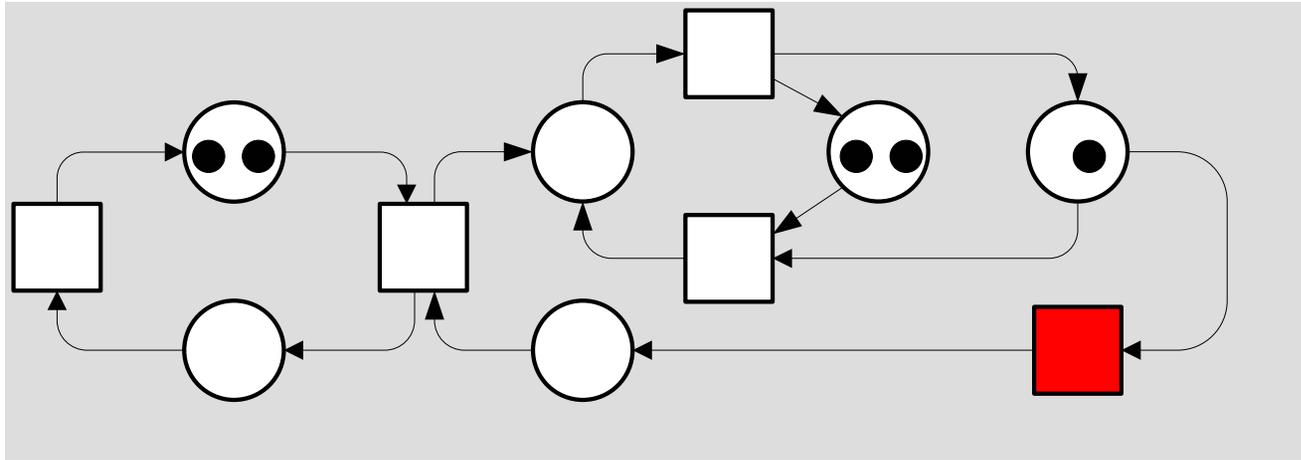
insert, accept, brew, dispense



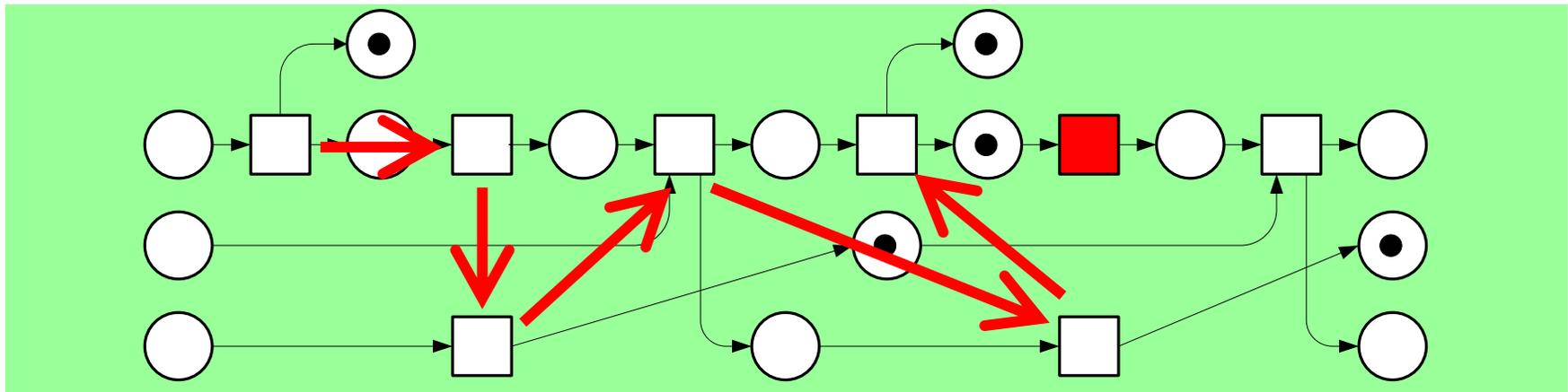
wa



One common occurrence sequence



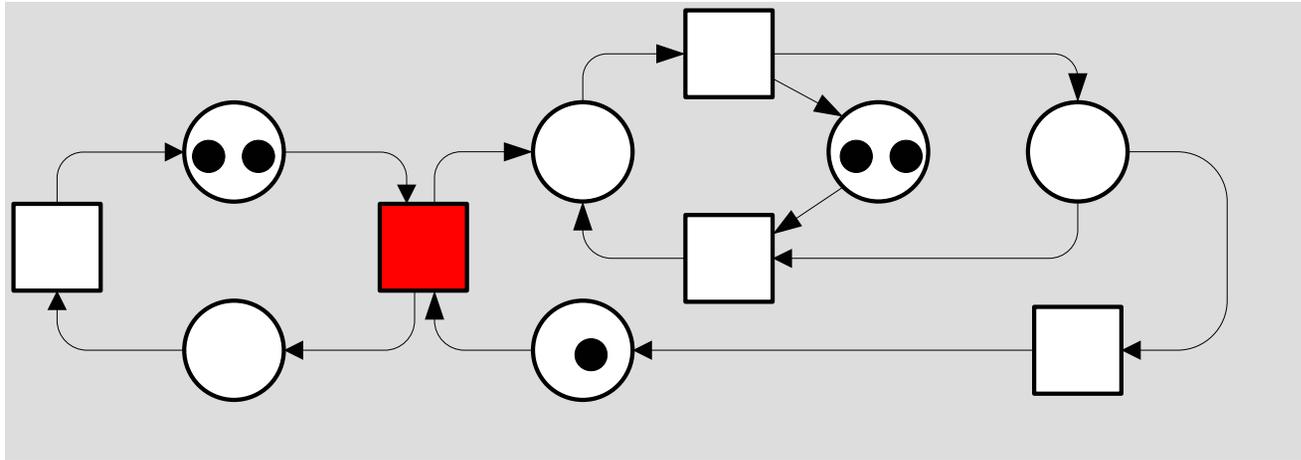
insert, accept, brew, dispense, brew, insert, accept



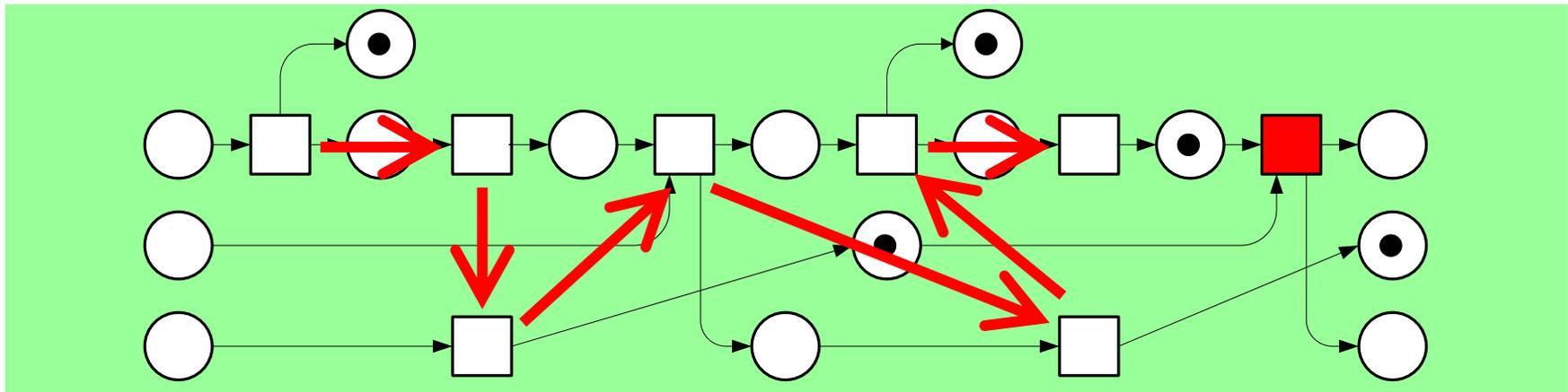
wa



One common occurrence sequence



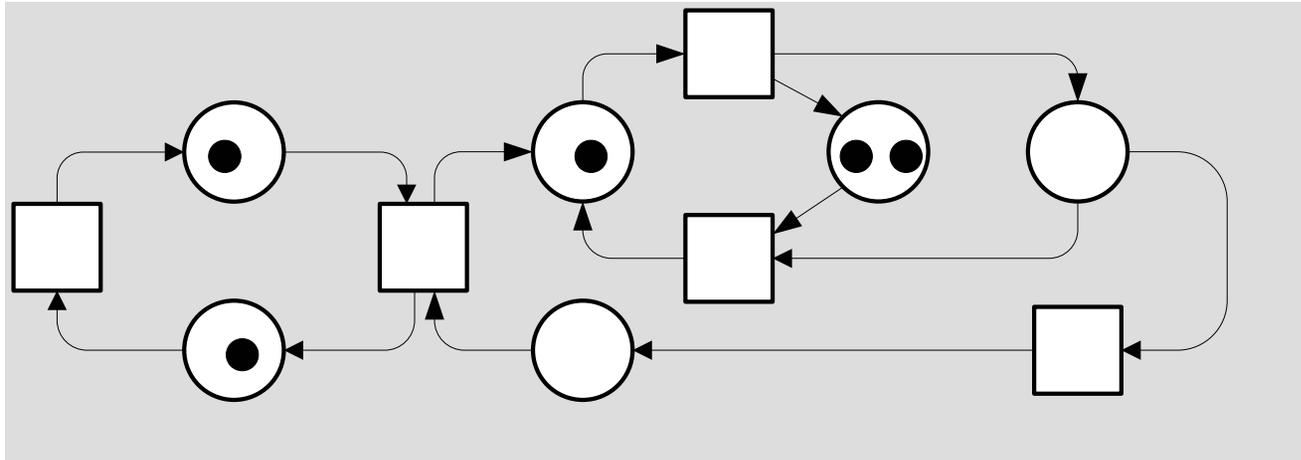
insert, accept, brew, dispense, brew, insert, accept, dispense



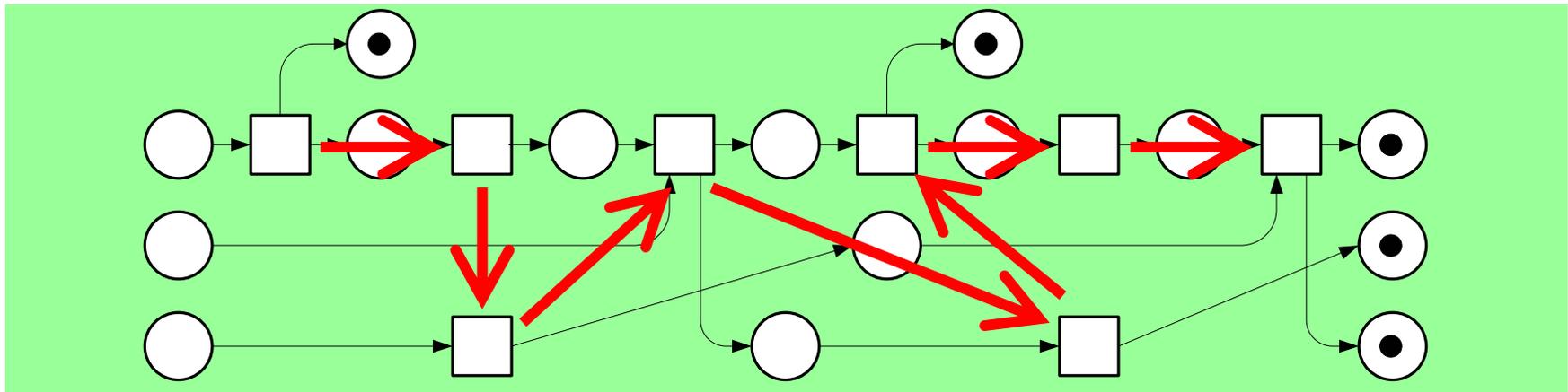
wa



One common occurrence sequence



insert, accept, brew, dispense, brew, insert, accept, dispense



a linearization of the partial order of events