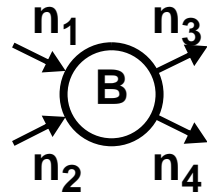
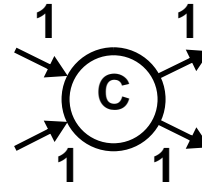


Useful Classes of Dataflow Actors

“Synchronous” dataflow (SDF):



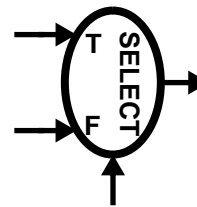
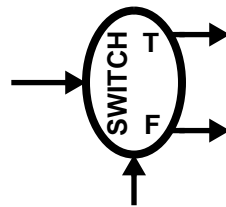
synchronous
dataflow



homogeneous
synchronous
dataflow

The actors are enabled by fixed integer numbers of accumulated tokens, and produce fixed integer numbers of tokens.

Boolean dataflow (BDF):

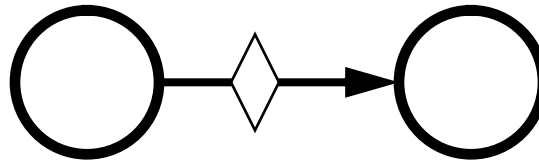


Boolean-controlled routing

Production and/or consumption is variable.

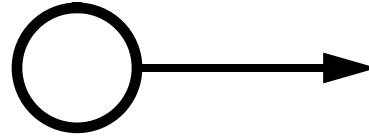
“Delays” — Initial Tokens

For each initial token, there is a one-token offset between the tokens produced and consumed:

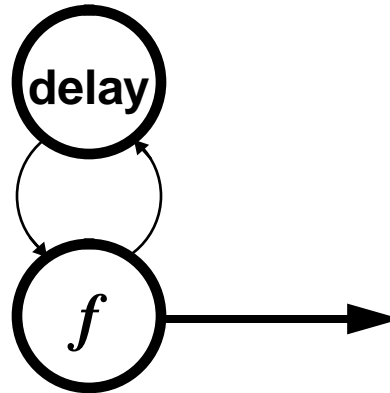


Sources and Sinks

Always enabled:



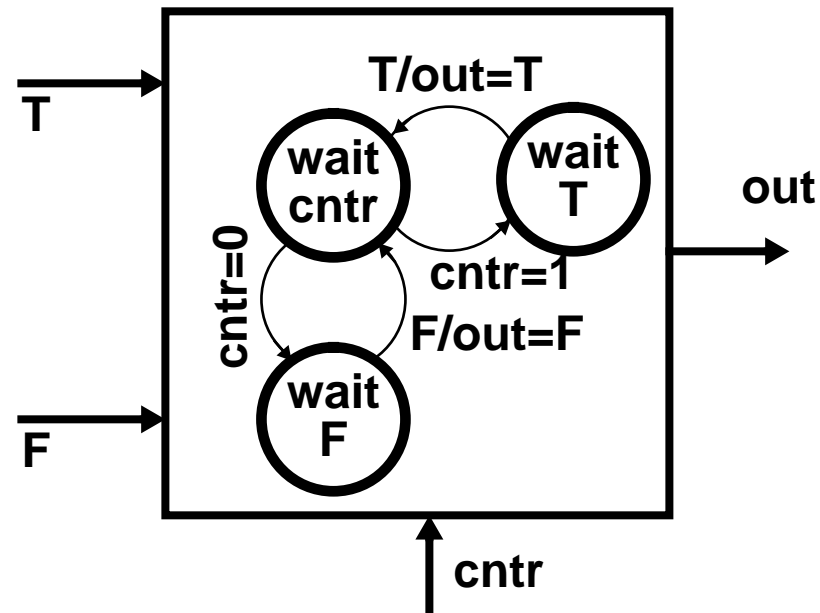
There is nothing special about sources:



Similarly, there is nothing special about sinks.

Sequential Functions Implemented as FSMs

Each state corresponds to a blocking read.
Example: select actor:



Firing Rules

In any state of an FSM, can require any fixed number of tokens from any fixed set of inputs.

SDF then is simply the one-state special case.