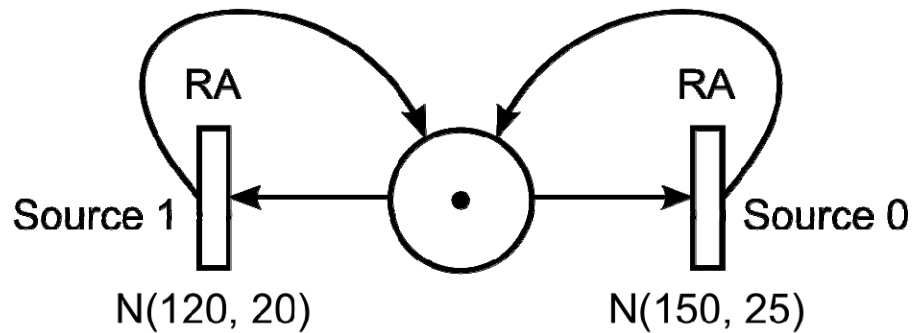


Applied Discrete Modelling

Assignment 4 “Quality Tester”: Proxel-based Simulation



System Specification

The quality tester's behaviour is described by the above SPN. (time unit = 1 s)

Assume that the probability for the item to test OK is 0.9 for source 0 and 0.95 for source 1.

Implementation

Modify the given hard-coded Proxel-program to simulate the above Petri net.

Tasks and Questions

Construct the state space and RG of the above model.

Use your program to answer the following questions:

- How many parts are tested on average within one hour for different time steps (e.g. 20, 10, 5, 2)?
- How many parts from source 0 (and source 1) have been tested defective for different time steps (e.g. 20, 10, 5, 2)?