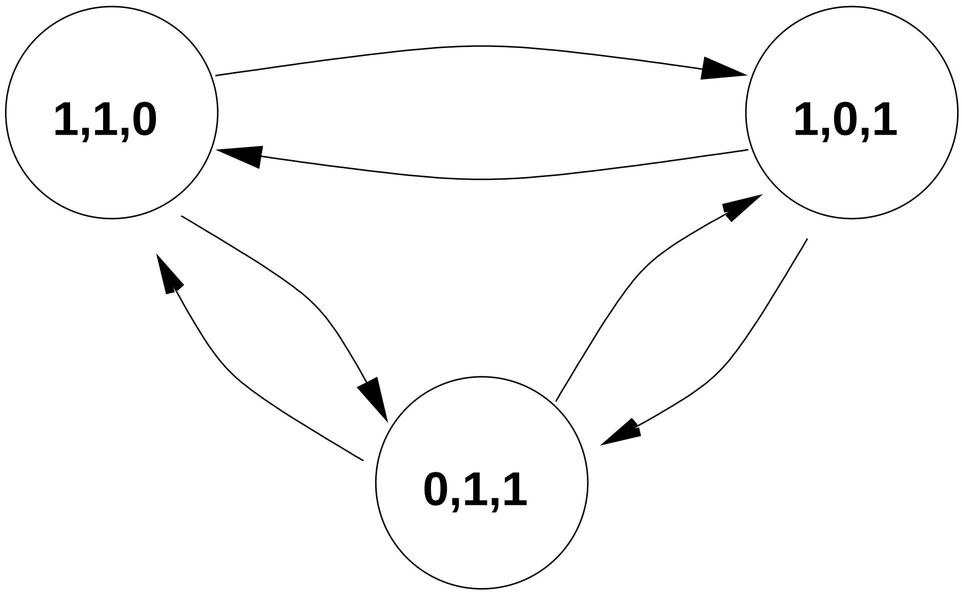
Simple Queueing Networks

- Initial examples (e.g. the $M/M/1$ queue) used the state numbers to represent the numbers of customers in the system
- We then introduced more complex state spaces (e.g. the $M/H_2/1$ queue with parallel servers) to model other arrival/departure processes
- We can also extend the state space to model queueing networks
- Each state is now a tuple representing the numbers at each node

Simple Queueing Networks (2)

- E.g. suppose we have two customers, three servers and when a customer leaves a server they move to the idle one:



The state information **a,b,c** represents the number of customers at the three servers

- This is not always practicable, but may be worthwhile if the number of queues (or customers) is small