Simulation Plan Updates

COMSATS Institute of Information Technology
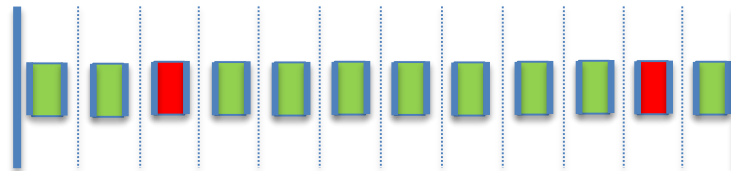
What we will be simulating?

FLP-1

FLP-2

FLP-3

FLP-250

Network

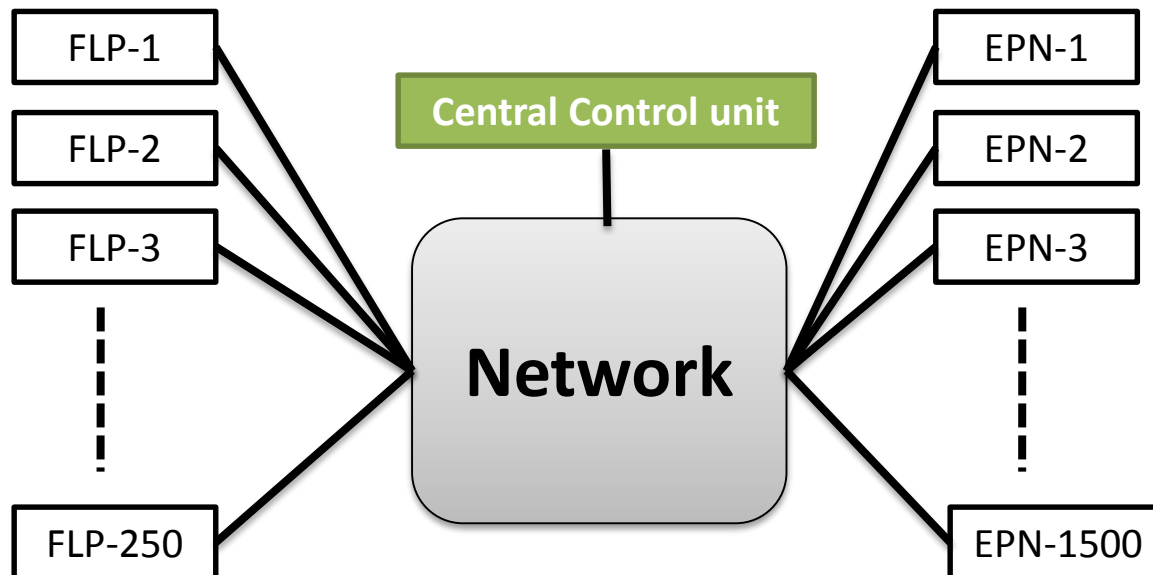EPN-1

EPN-2

EPN-3

EPN-1500
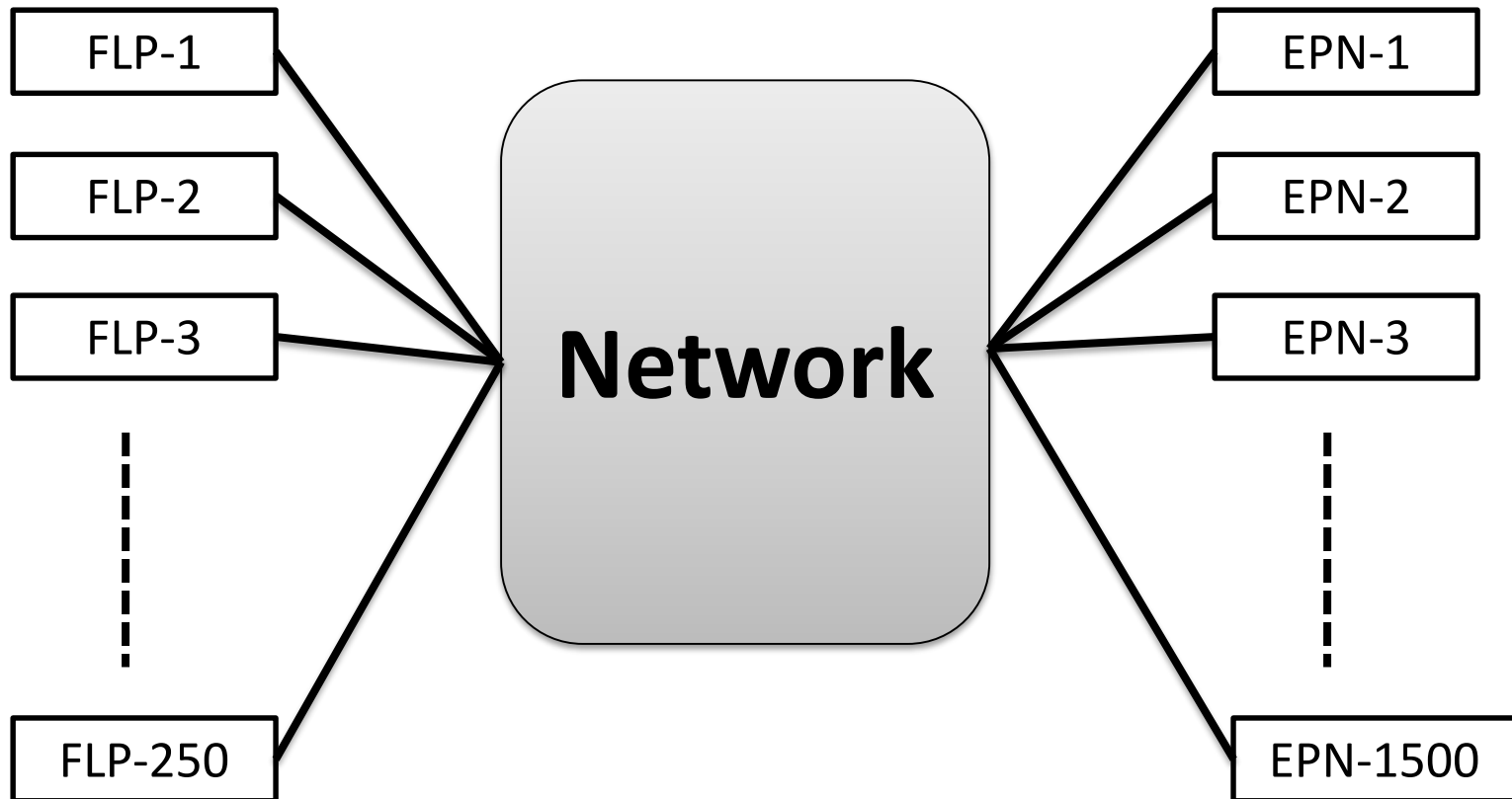
@ FLP

- FLP generates STF of configurable
  - Size (with dummy data)
 - Number of missing HBF

STF @ FLP

FLP to EPN

- What should be mechanism to synchronize FLP and EPN nodes?

- What should be the destination EPN for a particular STF?

- How STFs with missing HBFs will be handled in FLP to EPN network?

Central Control Unit (CCU)

- CCU will be responsible of scheduling the flow of traffic from FLP to EPN
  - Offline scheduling
    - Based on known traffic load on different FLPs and EPNs
    - Network related information, such as network topology and capacity of the switches
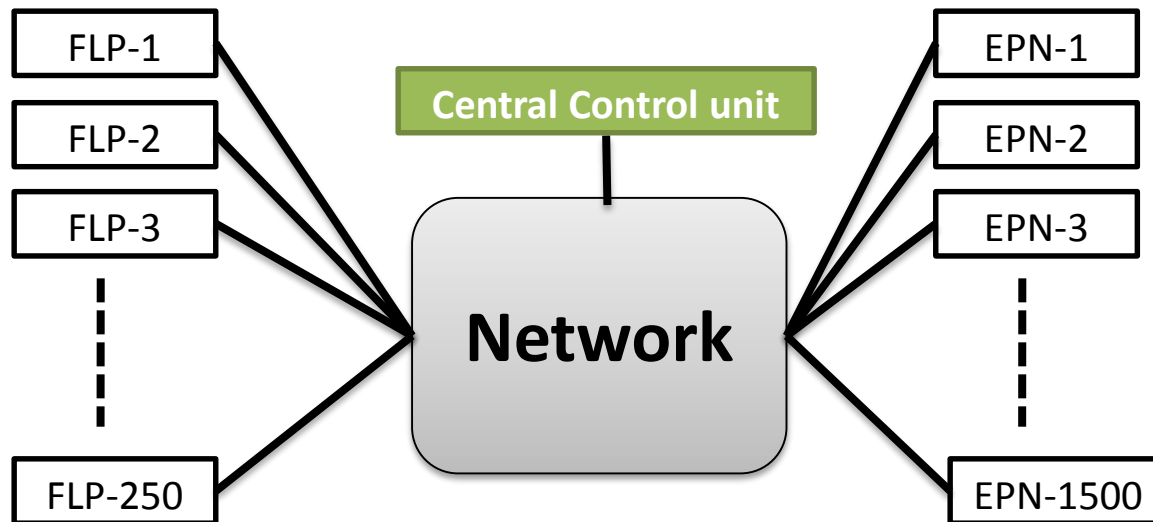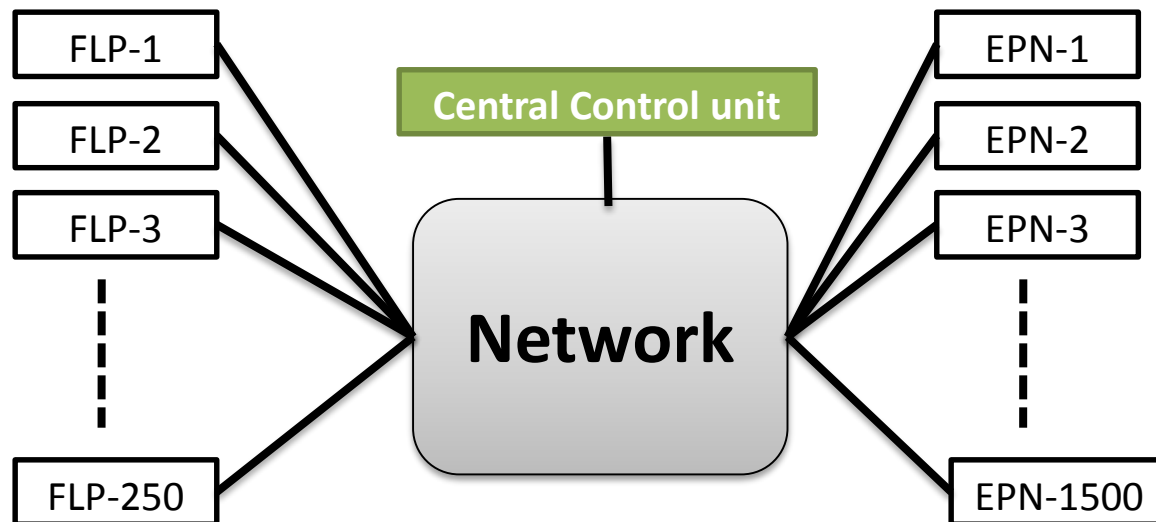
Central Control Unit (CCU)

- Online re-scheduling
  - Based on statuses received from the FLP and EPN nodes
    - Data arrival rate at the FLP
    - Availability of EPN
    - Time frame building time at EPN
    - Any other relevant information

| FLP-1 | | Central Control unit | | EPN-1 |

What we want to achieve with CCU?

- Synchronize FLP and EPN communication
- Balance traffic load on network switches
- Addresses TCP incast problem
- Reduce the burden of decision making in FLP and EPN nodes

- Questions suggestions