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Split Data Plane Switches on GENI

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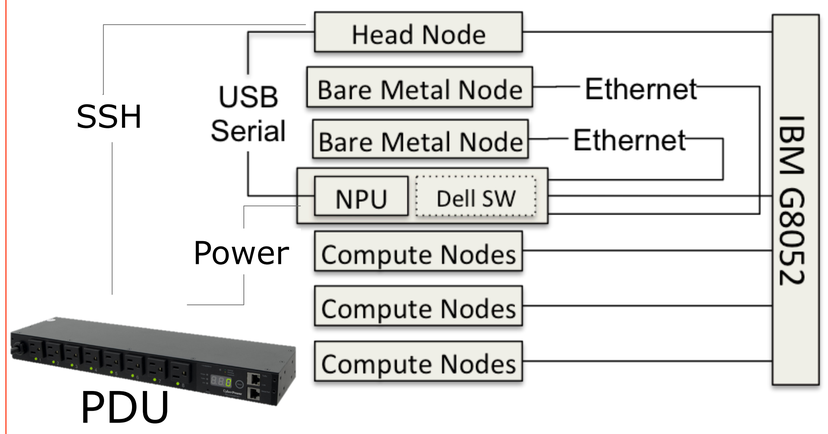
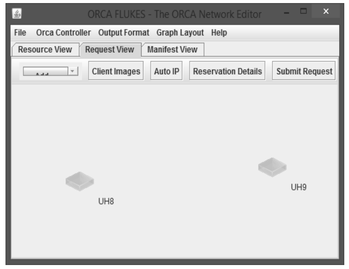
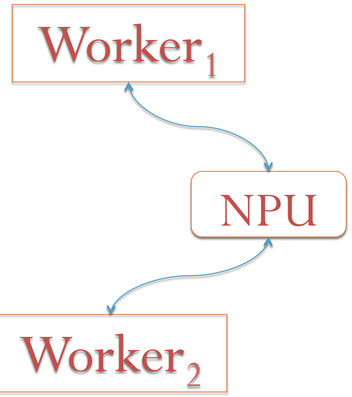
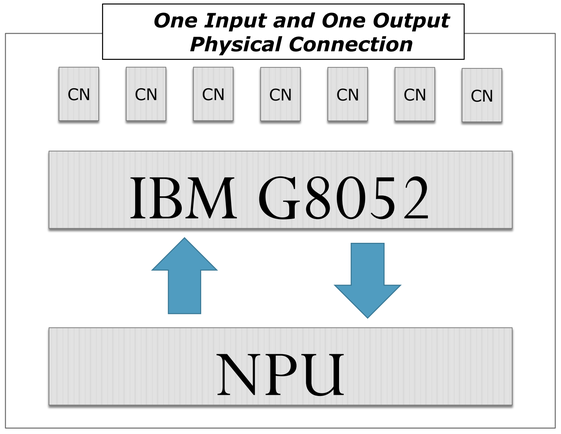
SPECIAL THANKS TO DELL
DONATING SDP BOXES FOR GENI
Special thanks to Michael Wever from CAVIUM
BARNSTORMER SOFTWORKS

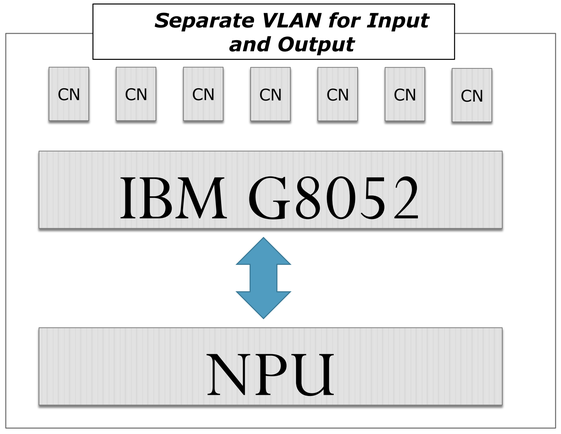
Fixed Connectivity











ACL entries in switch for NPU access

```
access-list geni1 permit ip any any redirect Tengigabitethernet 1/2/2

interface gigabitethernet 1/0/10

ip access-group geni1 in
```

Switch port 10 traffic (all IPs) is forwarded to the NPU.

Start script

load firmware
power ON
add user
add credentials

Stop script

notify user
power off
remove firmware

Aggregate Considerations

NPU programmability

load firmware, power ON, add user, add credentials... another VM on GENI?

Leverage hardware accelerators

Port expansion

NPU-switch interface: leverage high-capacity interface with internal forwarding

Experimentation Potential

Deploy on demand
Pass selected flows through
Distribute functions in the network