pRU Ethernet Configuration

July 3, 2019

Slow Control Links

All pRU slow control communication are via TCP/IP on a 1Gb/s link.

• pRU Listening Port: 49153

IP & MAC Addresses

The IP & MAC are based on the RU ID.

IP Gateway: 192.168.0.1

IP Address Range: 192.168.0.100 - 192.168.0.163

MAC Address Range: 0x000a35000000 - 0x000a3500003F

10Gb Offload

Each pRU has a number of offload links. It uses a protocol called pDTP on top of UDP. The pRU acts as a server that responds to requests from the client.

• pRU UDP Loopback Port: 29070

• pRU pDTP Port: 30000

IP & MAC Addresses

Both the gateway, IP & MAC are based on the RU ID.

IP Gateway Range: 192.168.100-163.1

IP Address Range: $192.168.\{GATEWAY\}.200 - 192.168.\{GATEWAY\}.203$

MAC Address Range: 0x000a35FF{RU ID}{LINK NUM}

RU_ID: 0-63 LINK_NUM: 0-3

Depreciated

In old implementation of pRU, the offload is also on the same link as the slow control. It will transmit data to host computer port 29070. The pRU IP is locked to 192.168.1.10 and MAC address to: 0x000a35000102