



Online Computing at LArTF for DUNE ND LAr 2x2 Demonstrator

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DUNE DOCDB #24562



LArTF Computing Hardware

- Computers
 - Gateway servers, access from internet (vpn not needed)
 - acd-gw01 (124325)
 - acd-gw02 (124326)
 - DAQ, access through gateways
 - acd-srv01 (121514)
 - acd-srv02 (121516)
- Network
 - Cisco C3850-48U-L (managed)
 - Stackable 48 10/100/1000 Ethernet UPOE ports, with 1100WAC power supply
 - ArgonCube public 131.225.195.0 (ports1-24)
 - ArgonCube private 192.168.196.0 (ports 25-48, sfp 1)
 - Netgear GS110TP (8-ports, unmanaged)
 - ArgonCube private 192.168.196.0 (all ports 1-8)

Server Rack at LArTF

C3850-48U-L (managed)

uplink with slack so rack can be moved (a bit)

Netgear GS110TP (unmanaged)

Shelf with monitor and keyboard for sys admins

acd-gw01

acd-gw02

acd-srv01

acd-srv02



CISCO WS-C3850-48U-L



Low Noise Electrical Isolation on Network



- Temporary installation in server rack to verify functionality
 - Fiber uplink with short fiber
 - Lane verified access to pacman and RPi
- Move to appropriate rack when ready
 - Need longer fiber
 - Plug into low noise power
 - Different cat6 jumpers
- Uplink limited to 1 Gb for all connected devices

Netgear GS110TP (unmanaged)



RJ45 Copper x8

SFP 1Gb x2



External Power Brick

LArTF Network Details

- Network monitoring
 - <https://mrtg-prod.fnal.gov/MRTG-SiteMap/MicroBooNE.html>
 - s-uboone-lartf-argon-1
 - On-site access or VPN
- Cisco C3850-48U-L connected to LArTF router for uBoone
 - 10GB uplink
 - 48 port POE
- Subnets
 - /26 (64) Public address (131.225.195.x)
 - /24 (256) Private address (192.168.196.x) local – power supplies, etc
 - /24 (256) Private address (10.x.x.x) site – cameras

LArTF Network Logical

