Protodune-SP Data Movement Update

Steven Timm / Adam Aurisano / Stu Fuess / Igor Mandrichenko/ Robert Illingworth Dune S+C 1 Dec. 2017



Protodune DC2 post-followup

- Questions:
 - EOS developers said bug fix was coming for zero-byte files, has this been done?
 - Need to query EOS developers, what is structure of eospublicftp gateway—is it using fuse mount to read files?
 - One EOS ticket still open—FUSE mount doesn't respect ACL's (RQF1005260)
 - One quota decision need to be made—how to reserve certain amount of EOS quota for NP04 and NP02 staging areas.

Protodune-SP post-DC2 followup

- Action items:
 - Boosting EOS->FNAL transfer rate
 - New dedicated "write pool" nodes at Fermilab currently being commissioned
 - Meeting tomorrow with network people to see if we can get on the LHCONE network path
 - Boosting tape write rate at FNAL
 - New tape robot is on the way with more, bigger, and faster drives.
 - Deploying ART plugin to insert metadata
 - Merged to ARTDAQ trunk code.

🛠 Fermilab 🕬

Protodune-SP post-DC2 followup

- Cleanup:
 - Stored all runs 300 and greater on tape
 - Got Online Monitoring histograms
 - Working on BNL cold electronics histograms taken during coldbox testing
 - New file family made for current running "Detector Commissioning"

Protodune-SP post-DC2 followup

- Current research
 - Using Rucio to move data sets in and out of EOS, and to UK sites
 - Testing CERN FTS3 as File Transfer system
 - Works but doesn't give any speed advantage so far
 - Needed if Rucio is used, to monitor the file transfers.
 - Authentication issues continue
 - Ticket RQF0886402 was closed without comment a couple of months ago, Cilogon-basic certs not yet accepted.
 - Gridmap file maker to replace current EOS method of polling DUNE voms server is not yet in place, but is in testing.