

# DQM - a few open issues

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# p3s status

- p3s: services - DB/Web - migrated to CERN Open Stack
  - “standard” CentOS 7 image
  - job submission to Tier-0 is still work in progress
  - created a script for testing payload within its intended p3s environment interactively
  - some debugging of the DB backend will be needed (concurrency)
- Consultations with the FNAL FTS team re: feeding data to p3s
  - there are latencies in the data transmission chain which we think will be acceptable for purposes of p3s - on scale of minutes
  - measured data transmission rates, 100MB/s within EOS, 40MB/s to p3s clients
- Web access from outside
  - be aware of SELinux and firewall settings on CentOS
  - using ssh tunnels for now
  - firewall permissions - request files, not critical yet
  - reverse proxy, will look at the setup by Igor Mandrichenko
- Presentation service
  - Looked at LHCb Monet (used in OM), nice system but with a steep learning curve
  - will probably roll our own, something simple

# DQM overview

- DQM/p3s currently relies on builds by Dorota
- Consultations with the calibrations group (M.Mooney)
  - No outstanding requirements for DQM
  - ...but purity monitoring identified as important, and we are already working on that
- DQM payloads that exists as prototypes/work in progress
  - purity (B.Baller), runs w/o reco on tracks crossing CPA and APA, writes out purity and its uncertainty for each calculation run, JSON or CSV format
  - signal processing + event display (D.Adams)
- DQM payloads we think are possible (although will require work!)
  - basics BI plots using the DB interface to be developed
  - reco?
- DQM payloads not well understood
  - CRT
  - PD
  - BI-to-TPC match, also see a note on geometry below

# Numbering and mapping protoDUNE elements

- Important as it impacts everything from MC to reco and from online to offline, Brett Viren's initiative
- Brett's DocDB 4064 (draft), work in progress
  - contains important proposals for numbering schemes throughout all the elements of the detector and the readout chain
  - example of entities to account for and map: TPC drift cells, APAs, wires, wire segments, ASICs, WIBs, RCEs etc
- Different TPC numbering schemes exist de facto, e.g. TPC numbering by
  - installation group
  - LArSoft team
  - ...need to converge
- Feedback/participation from the DRA group - important

# Isufficient information

- CRT
  - indications are that the data stream will be joined with that of TPC (good)
- PD
- Geometry (BI+TPC)
  - prior effort by Martin Tzanov
  - Beam Instrumentation Group - different geometry, TBD next week
- Data format?