DAQ Status and Plans

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Overview

- Operational Monitoring

- Configuration

- RunInfo

- (DQM)

Operational Monitoring

- Based on the ProtoDUNE experience, error handling and reporting has very high priority and attention within the DAQ group

- DAQ will have:
  - Prometheus/Grafana for op.mon. metrics and host monitoring
  - Kafka for stream processing (error and action tracking)
  - ELK stack for log aggregation and storage

- All of them supported by CERN IT services
  - Retrieval, retention policies, etc. needs more thought

Configuration

- Unfortunately don't have strong opinion on the configuration DB tech. choice
  - No data access library for configuration retrieval so far
  - We have JSON configuration files that are received by the DAQ applications

- Configuration data transferred to central DB as full documents, without subset access.

- DB group mentioned, that there is a preference for storing the configuration data in MongoDB as ProtoDUNE-1 transfer tools could be reused
  - (This should be fine by the DAQ for ProtoDUNE-2.)

Run Info

- Didn't exist in ProtoDUNE-1

- Logbook had details about RunSummary, which was quite suboptimal

- For ProtoDUNE-2, DAQ will have substantial improvement to track and store "events"/"actions" happening during the run

- We need input from Offline which are these "events" are important and needs to be stored in the RunInfo database

(DQM)

- Dedicated small working group within DAQ consortium

- Work started recently but already have lot of progress

- Data retrieval from the DQM services needs discussion between the team and Offline