Goal Today

Can we draft guidelines that we can use to ensure that all metadata we need to analyze ProtoDUNE II data will be recorded, and that it will be stored in the most useful and appropriate place?

It is helpful to examine some uses cases….

Use Case 1: Front-end Error State

Case: The WIB detects a problem with an FEMB and takes it offline, flagging the disabled FEMB in the header of each frame from that FEMB.

Use Case 2: Front-end (Pulser) Calibrations

Case: The DAQ Configuration, Control, and Monitoring (CCM) tells the WIB to begin pulser calibrations. Frames are tagged as coming during those pulser calibrations.

Use Case 3: DAQ Re-Configuration

Case: The DAQ Run Control changes the trigger mask so that we are no longer triggering on data from APA 1 but only on beam instrumentation. It also disables some new mis-behaving channels.

Use Case 4: DAQ Partitioning

Case: The DAQ Creates a new partition consisting of a select number of elements from the detector (e.g., APA 0).

Use Case 5: Calibrations

Case: A laser calibration run is started, and the laser system reports information about its position and firing time.

Use Case 6: Detector-wide Conditions Change

Case: A new run is started with the HV set 50 kV above where it was.