Prototype DAQ Software (1)

Murrough Landon – 11 February 2000

Routes to Prototype DAQ System

- OldDAQ: Evolve from existing DAQ software, adding DAQ -1 components

- ProZAQ: Start afresh with DAQ -1 based system plus homegrown components

- DetDAQ: Wait for full DAQ -1 development for ROD crates

- Look at required tasks - some will be common

- Prioritise the common tasks to avoid wasting our limited effort

Common DAQ Tasks

- Define configuration database:
  (partitions, available modules, VME addresses, software; calibration and setup parameters, modules present, modules to read, etc)

- Develop database editor

- Select VME access method

- Develop Module and related classes

- Initialise modules and crate interconnections
  (load and configure RC commands)

- Start/stop modules
  (run, stop RC commands)

- Definition of Event format/class?
  (inclusion of data read from non-ROD modules?)

- Understanding how to use and test the ROD

Prototype DAQ Software (2)

ProZAQ Tasks

- BufferManager as jacket class around PBM?

- Simple Event class

- Mechanism to trigger readout of Events

- Simple Producer class
  `ModuleList->Init(),Load(),ReadEvent()`

- Simple monitor/analysis class

DetDAQ Tasks

- Help define the architecture to meet our requirements

- To meet a summer timescale, help to implement it?
  Serious work may start after April DAQ -1 workshop?

- Still need our own run controller, Module classes, database, monitor

- Still need to sort out Event format

OldDAQ Tasks

- Iterative reengineering... (cf Normans talk on 31 Jan)