

Prototype DAQ Software (1)

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Overview

- Most of the core DAQ -1 back end components evaluated
- Data flow aspects not available for ROD crate until summer 2000 (at the earliest)
- Develop interim dataflow framework in DAQ -1 framework
- Later replace with ROD crate DAQ, so dont invest too much
- Aim for something we can add modular components which could be easily moved later
- At least have something we can use as a testbed for development

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Initial work

- Produce something very basic before my long absence. . .
- Start with “back end integration test setup”: simple system with “data flow” emulator
- Replace run controller with minimal example skeleton
- Change database to use this reduced and renamed partition
- Add startup of empty producer and monitor programs
- Simplistic communication between run controller and controlled programs
- Skeleton of minimal buffer manager
- Skeleton of minimal Event class

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Current status

- Makefile builds system, my evaluation test programs and Dox
- Sketchy README, INSTALL, CUSTOMISE files
- Run controller, database and process startup OK
- DAQ script starts servers and Integrated GUI
- No communication between RC and producer (and monitor)
- Monitor crashes at startup!
- Buffer manager and Event are completely virtual
- Its a prototype of a Zero Acquisition system, but might keep people happy until I return → ProZAQ.

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Next steps

- Debug shared memory communications
- Debug monitor program - at least it should do nothing without crashing!
- Enter into CVS repository
- Install it (and DAQ -1 software) at RAL and demonstrate
- Go on holiday. . .