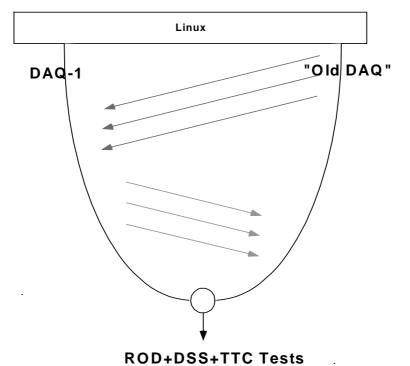
# Data Acquisition Software -Status January 2000

## **Reminder of Aims**

• Unified DAQ developed from our current daq and Daq-1;



- Must provide a usable DAQ system at appropriate times for trigger hardware tests
- Intended to be a prototype for the final DAQ, so experience in running the prototype software is essential.
- Running on PC under Linux (to overcome limitations of the elderly 68K system);
- Connects to VME via Ethernet and a small interface program in the 68K but portable to other interface when we eventually choose one;

### DAQ Software Status January 2000

### Work Completed:

- The current working DAQ is version v421 at Birmingham. This contains the DSS support.
- We have collected v421 and inserted it into cvs.
- A new version v425 has been created at RAL (leaving v422 v424 if needed for 68K development).
- The following changess have been made, leading to a "reduced DAQ" (still temporarily called v425):
- 1. The code has been adapted to compile and link with the c++ compiler.
- 2. Support for obsolete hardware modules has been removed (FADC, TXM, CPM, FEM, JEM, CTPD). This leaves just DSS and (existing) TCM (+VIC) supported.
- **3.** The ROOT histogramming system has been installed on the PC, and some test programs have been demonstrated.

#### **Next Steps**

To get back to a working system, we need to make separate changes to daqctl, daqprod and daqana:

**Daqctl:** 

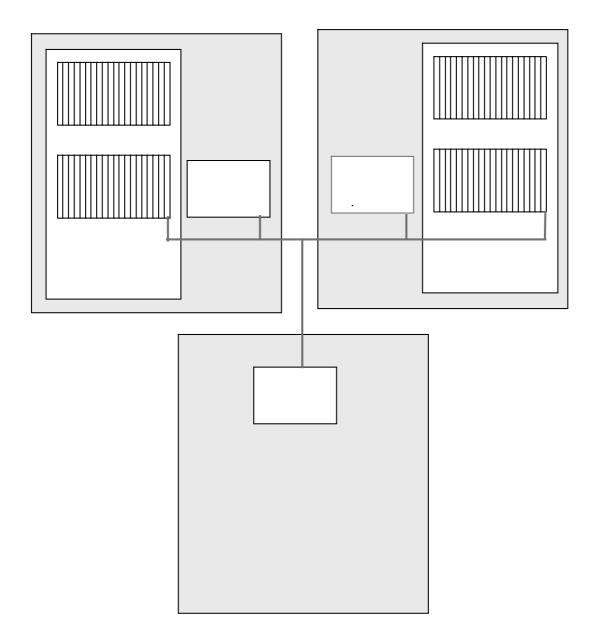
- 1. Remove the code to start and stop runs and programs – daqctl will then become just a menubased editor for daq parameters. Run control will be via the daq-1 user interface.
- 2. Eventually replace with proper database system.

**Daqprod:** 

- 1. Incorporate VME access via Ethernet. Add TTC support.
- 2. Eventually rewrite to include Objects (DSS, Event)

Daqana:

- 1. Replace existing HMINI calls with ROOT calls. When this works, the old presenter can be discarded.
- 2. Eventually rewrite to analyse event objects.



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| E  | Edit run comment at run start : ON  |   |  |  |
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| G  | Autostart next run 0FF              |   |  |  |
| C  | Camac access enabled : OFF          |   |  |  |
| н  | FEM parameters                      |   |  |  |
| I.   | TXM parameters                      |   |  |  |
| J J  | FADC parameters                     |   |  |  |
| K.   | TCM parameters                      |   |  |  |
| L  | CPM parameters                      |   |  |  |
| υ  | CTPD parameters                     |   |  |  |
| w  | JPM parameters                      |   |  |  |
| S S  | DSS parameters                      |   |  |  |
| M.   | Magic slice number (for histos) : 0 |   |  |  |
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| G   | Autostart next run                  |   |  |  |
| C C   | Camac access enabled : OFF          |   |  |  |
| K   | TCM parameters                      |   |  |  |
| s   | DSS parameters                      |   |  |  |
| м   | Magic slice number (for histos) : 0 |   |  |  |
| U   | UIC parameters                      |   |  |  |
| P   | Print prod_pars to a file           |   |  |  |
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