

Online Status Report

29-May-98

- ***Active Projects***
- ***Manpower Status***
- ***Issues***

Active Projects

- ***Online Host System***
 - Standard Fermi UNIX environment and products (using upsII)
 - KAI C++ compiler being exercised
 - Integrating Linux platforms
 - Near-term activity:
 - *Acquisition of 2nd host machine*
 - *Acquisition of Online NT Server*
- ***Control Path DAQ (via DART)***
 - Lab D test stands making use of DART
 - Generally successful activities, but not directly focussed at eventual Run II “real” needs

Active Projects (cont'd)

- **Infrastructure components:**
 - **Client / Server package**
 - *Base component of most Online applications*
 - *Behind schedule by ~6 months!*
 - *Intention is to focus a lot of effort on this topic in the near future*
 - **CDAQ replacement**
 - *Mix of old ACNET / CDAQ functions with new EPICS functions*
 - *Haven't been sufficiently goal-driven with development, hence refocussing efforts*
 - **Database**
 - *installation pending FNAL licensing discussions with ORACLE*
 - *A definite example of delay caused by waiting to do the "general" solution*

Manpower Status

- ***Online System Manager***
 - Making overtures to person in Computing Division to assume this position
 - Getting help as needed from CD/OSS Department, but 'help' not seen as the proper long-term solution to our needs

- ***Software 'experts'***
 - Getting commitment from CD/ODS Department to provide people for specific efforts:
 - *Client / Server infrastructure*
 - *Data Logger*
 - *Event distribution (ie to EXAMINEs)*
 - Also getting more generic CD/ODS support for DART adaptation to D0 needs:
 - *Porting to Digital UNIX*
 - *Extensions to DART DAQ from multiple 68K front ends*

Issues

- ***We're still very short of people***
 - Continuing efforts to enlist Computing and Beams Division help
 - In need of collaboration (physicist) effort at several key points:
 - *Leadership of Event Monitoring and DAQ Monitoring efforts*
 - Welcome any additional help
- ***List of "Inactive Projects" is long!***
 - Control & Monitoring functions:
 - *High Voltage*
 - *Downloading*
 - *Alarms*
 - Event Monitoring functions:
 - *EXAMINE*
 - *and many others*
- ***"We know what to do, how to do it, but we don't have the people to do it"***

Issues (cont'd)

- ***Learning curve for the 'new era'***
 - **UNIX / Linux / NT**
 - *Basic components available, but still building the environment*
 - **C++**
 - *Still questions with maturity of compilers*

- ***Our schedule is being reworked***
 - **Internally it was felt that we didn't have enough measurable milestones, and hence weren't adequately working on short term goals**
 - **Still very worried about not being connected to schedules of detector groups**
 - *request detector, electronic, trigger groups to give us specific computing and software schedule requirements*

Issues (cont'd)

- ***Software infrastructure development is behind schedule***
 - **Two consequences:**
 - *Progress on major Online applications is being delayed (eg COOR)*
 - *Tools which we hope to provide detector-specific application developers are not ready, and hence we can't yet argue for such help*
 - **We're trying to put outside (CD) help there**
- ***We expect that almost all of the Online group's efforts in the next 6 months will be devoted to these infrastructure needs***
 - **Consolidation of our efforts will likely mean *less* involvement with test stands**

Issues (cont'd)

- ***There is a “Catch-22” problem:***
 - **If we don't consolidate Online efforts, then key infrastructure components and applications will not be ready on time**

but...
 - **Left on their own, we expect detector groups to avoid complicated ‘general’ solutions (DART, ORACLE, EPICS,...) and go for the simpler “PC with Bit3” solutions.**
- **I expect we have to live in this world, but we must still remember that all of this must eventually “fit together”!**