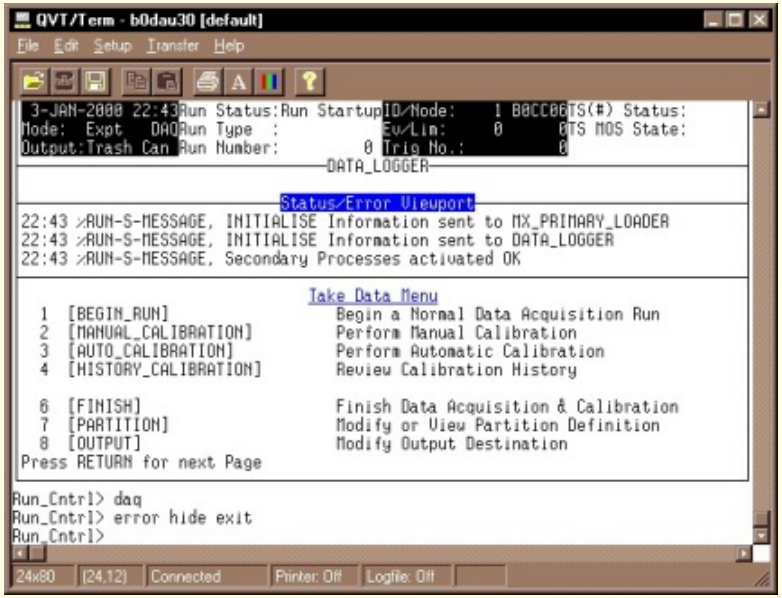
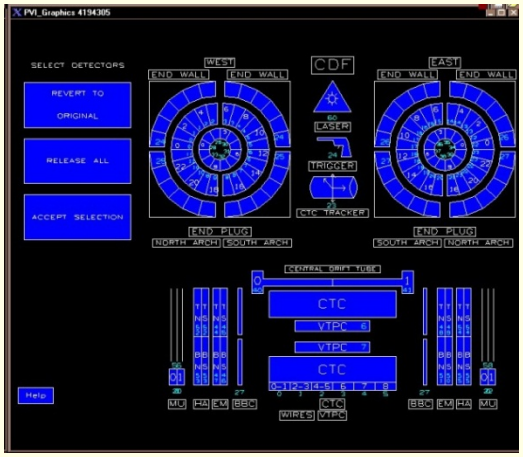
RunControl Through the Ages (personal experience)



CDF Run I (0) RunControl designed to run on VT100 terminals

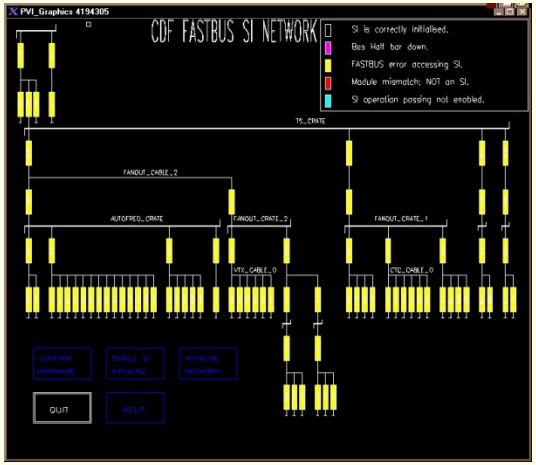
Tightly coupled to Fastbus branch network hardware, tied to VMS operating system

Fortran for low and high level interfaces

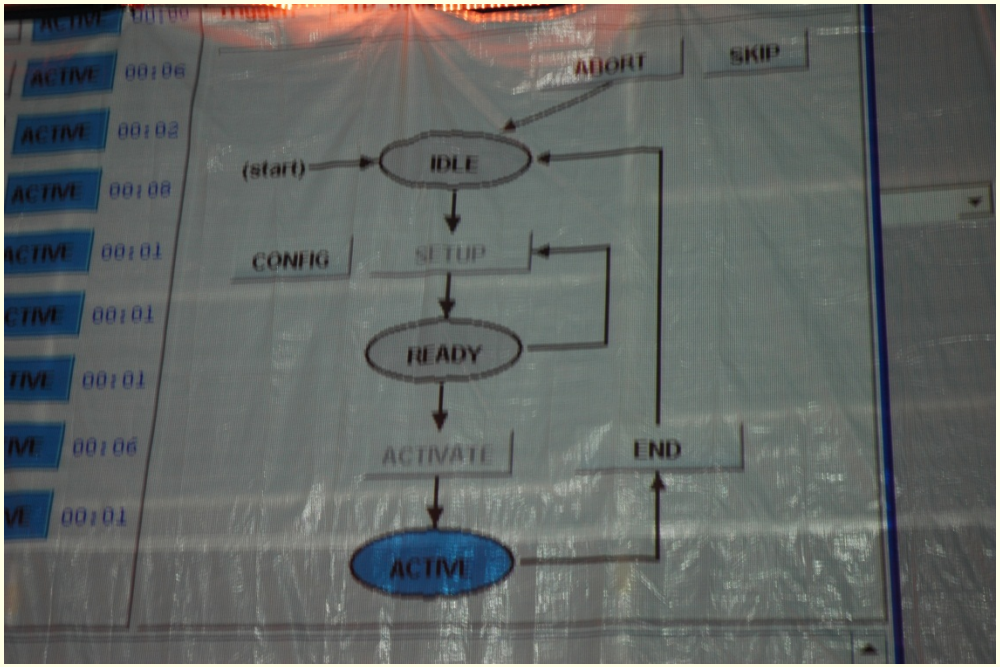


Early GUI attempt for selecting subdetectors – ran on more advanced terminals with graphics capabilities

J.Patrick



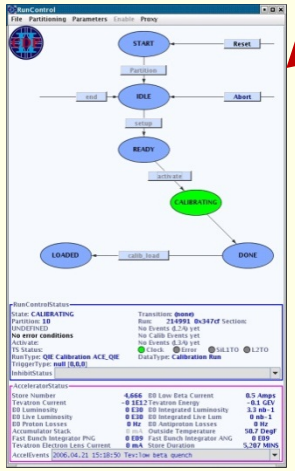
RunControl History, Zeus (2)

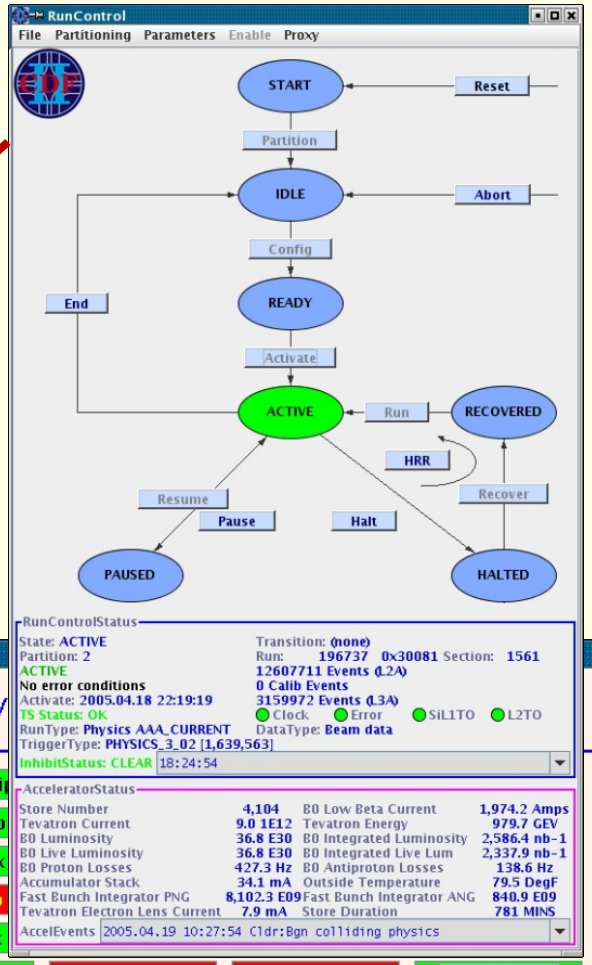


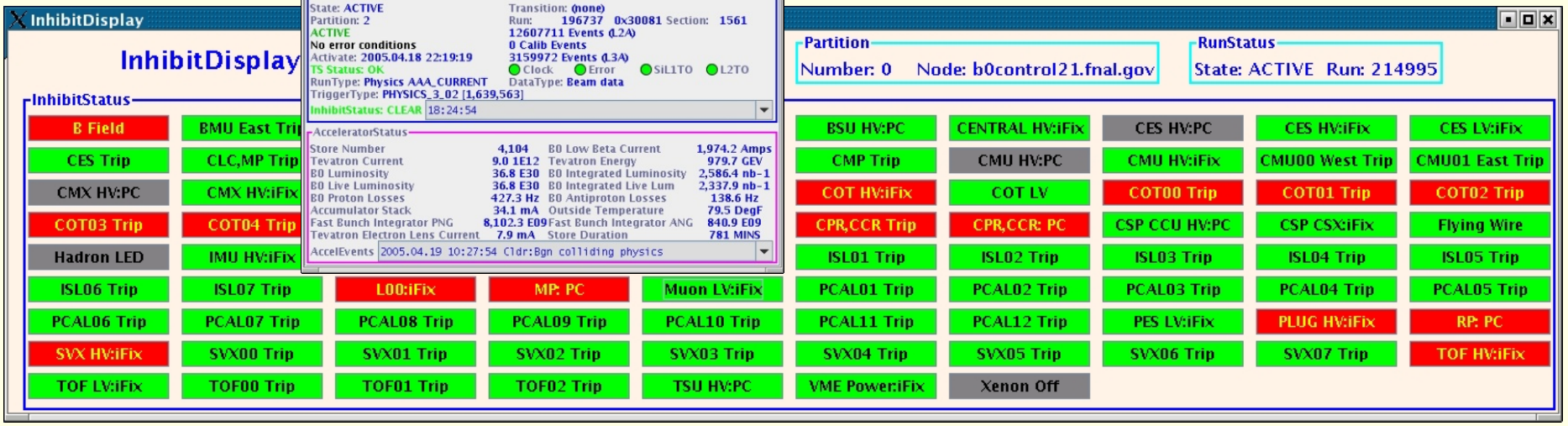
- Zeus main RunControl (2) – distributed command with little knowledge of subdetectors
- Not coupled to front end hardware at all; ran on VMS but easy to port
- TCL/TK for GUI and subdet write their own
- C and Occam for front end control of hardware; VME crates processors connected by hypercube of links (inmos transputers)

C. Youngman, J. Milewski, D. Boscherini

RunControl History, CDF II







CDF II RunControl – pure Java control and display with OO

Ran on Linux

C on VxWorks for front-end control; embedded MVME processor served by ethernet

Subdetectors inherit and easily extend state machines

RunControl history, CMS

CMS main RunControl – Tomcat/Java backend with Javascript/HTML web display

Runs on any browser, usually Firefox on Linux; subdetectors inherit and extend for local RC

C++ for front-end control *xDAQ*; VME crates serviced by bridge to PCI on Linux

What is the future?

A. Petrucci, H. Sakulin, A.,Oh

See talks earlier this week