# *Status of the Software Components for the Slice Test*

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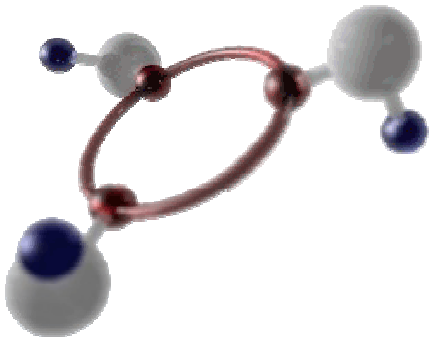
EMU slice test meeting, 2004/01/11

# *XDAQ (L. Orsini, J. Gutleber)*

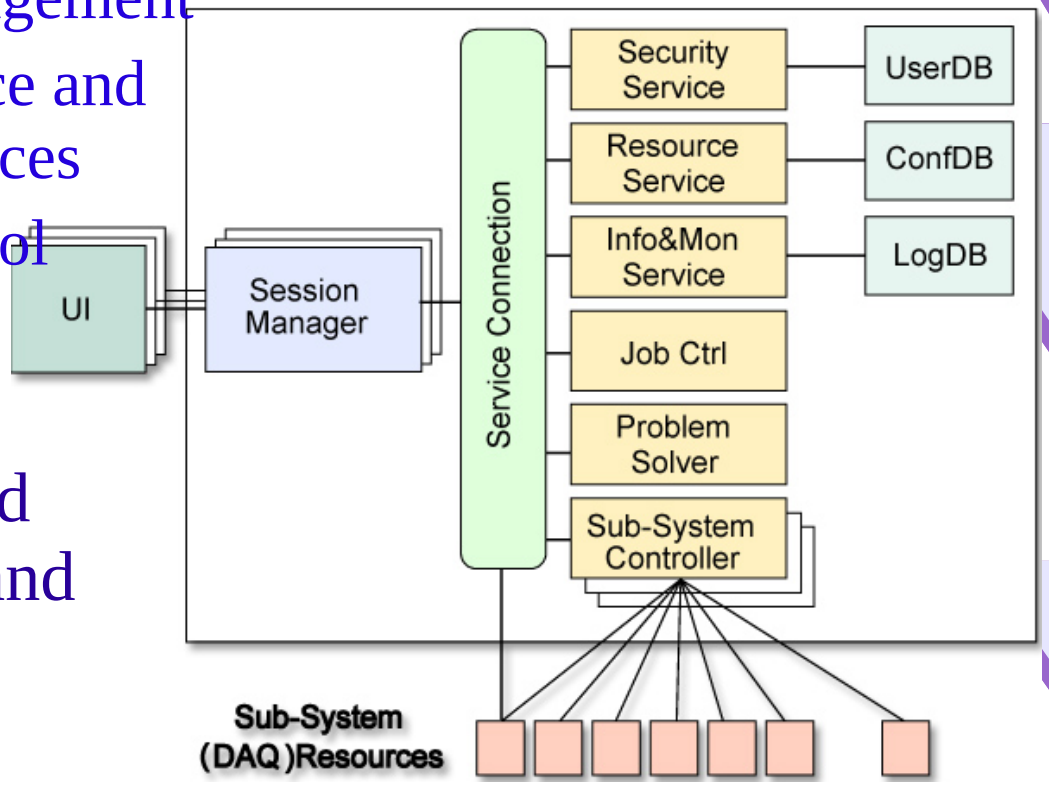
- V1_3 released in Sep. '03
  - New dynamic loading scheme with version control
    Application code needs slight modifications.
- V2_0 released in Dec. '03
  - Xerces-C 2.x
    Application code needs no modification.
  - New logging mechanism.
- It works stably.



# *RCMS - Run Control and Monitor System*

***(M. Gulmini, G. Maron)***

- Run control for the CMS
- Most of the functionalities are implemented
  - UI, Session management
  - Security, Resource and Information services
  - Sub-system control
- V1.0 was released in Nov.'03
- Used in Tracker and Muon beam tests, and filter farm control.



# *RCMS (cont'd)*

- Tomcat (Web application server)
- MySQL or eXist
- V1.0 was released in Nov.'03
- Used in Tracker and Muon beam tests, and filter farm control.
- Still very simple monitoring capability.
- Installed on cmsevm, step-by-step installation guide is available.

# *RCMS Future Plan*

- Integration of missing components
  - Problem solver, Job control ...
- OGSA evaluation
- ORACLE-IMS
- Interfacing to other DAQ components
  - Other databases
  - Filter farm
  - Trigger
  - Sub-detectors

# *PVSS (F. Glege)*

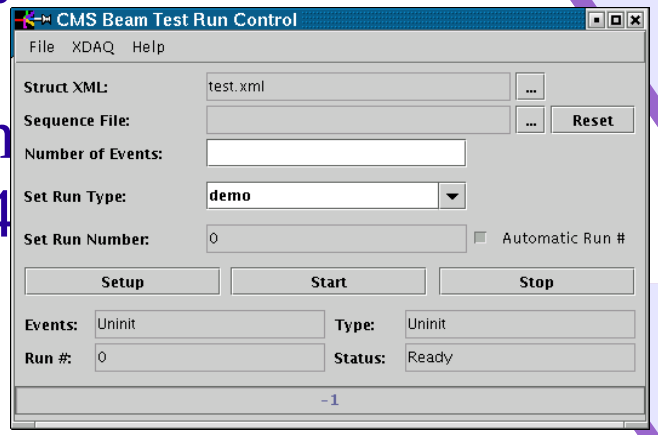
- An implementation of SCADA
- LHC-wide standard (JCOP) for DCS
- DIM-PVSS bridge exists and works.
- RC-DCS communication scheme is not well defined yet.

# *XDAQ control library - xdaqctl* *(I. Suzuki)*

- Java control library for the XDAQ
- Release 1_3 for XDAQ V1.2, used in the '03 HCAL beam tests.
- Release 1_5 for XDAQ V1.3
- New release for XDAQ V2.0 will come soon

# *HCAL Run Control* *(D. Charak, I. Suzuki)*

- A simple run control GUI using xdaqctl.
- Used in '03 beam test
- Used at an electronics test bench at Fermilab with minor modifications
- 'Post-mortem' meeting ☐ necessity of refactoring and better testing
- New, completely rewritten version will be available at end of Jan. '04



# *HCAL Plan in '04* *(J. Mans)*

- Beam tests, May. - Aug.
  - Focus on stable data taking and better monitoring.
  - New monitoring scheme - 'Monitorable'
    - has more information than XDAQ parameters
    - is indirectly accessed via 'cache server'
  - XDAQ V2.0, Custom RC, DIM-based DCS
- US-CMS slice test, Sep. - Dec.
  - Focus on integration
  - CMS EVB, RCMS, DIM-PVSS bridge (S. Linn at FSU)
  - Study and development of DBs (Configuration, Condition, Offline) has been started.

# *Summary*

- CMS DAQ software components are available. They work well and are evolving.
- Beam tests in spring '04:
  - Modified/improved software based on '03 beam tests
- Slice test in fall '04:
  - EVB
  - RCMS
  - PVSS

# *More Information...*

- CPT Week
  http://agenda.cern.ch/fullAgenda.php?ida=a035751
  - DAQ meeting
  - Online software working group
- ATLAS-CMS RCMS meeting
  http://agenda.cern.ch/fullAgenda.php?ida=a036273
- US-CMS slice test DAQ page
  http://home.fnal.gov/~ichiro/slicetest/
- XDAQ framework
  http://xdaq.web.cern.ch/xdaq/