ONCS Plans for ER

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BNL

Q/A

- **What is the appropriate piece of the sbsyssubsystem to be implemented for te ER? What are the performance goals for the system to be complete?**
  - Reminder: ONCS has not yet seen any PHENIX hardware (except the timing system)
  - ER is the environment in which we develop the core ONCS software in 1008
  - Provide software support for the subsystems as they are commissioning their piece of the detector in 1008
- **When will all reviews for the system be complete**? N/A
- **When will it be available to be installed and commissioned in the counting house?**
  - ONCS intends to shifts its activities to the counting house asarp
- **How will participation in the ER impact completion of the EAST arm**?
  - There is no EAST ONCS, but it will be a significant problem for ONCS to
    - support the ER
    - support installation and testing of the EAST arm
    - continue developping core ONCS software

- **When will A system chain test be complete?**
  - Goal for summer 98
- **What software is needed to commission the system and when will it be available?**
- **When will we have sufficient production FEE?** N/A
- **When will we have full specs for ALL services. What is needed from SE&I and EF&I.** N/A
- **When will the gas system be available for the system?**
  - CT: Developped by CT - integrated into EPICS in early 99
  - MA: TBD (S.Pate is looking into Muon anc.sys)
- **When will LV and HV be available:**
  - see comments at the end
- **What calibration systems are needed and when will they be available?** N/A
- **If a beam test is planned for 1998….**
  - No support for beam tests are planned
- **What other issues need to be considered?**
  - See next few slides

3 Priorities for next 6 months

- **Counting house computing infrastructure**
- **Integrate FEM and DCM (SEB a bit later) into the existing ONCS software (release 1)**
- **HV**

Counting House Activities

- **The main ONCS activities will gradually shift into the counting house as hardware arrives**
- **Counting house is where we will develop most of our code**
- **ONCS plans to install computing hardware at the earliest possible date (I.e. asap the network connection is installed - end March)**
  - phoncs0+1(2) (Sun Enterprise Server 3000)
  - (X)Terminals (immediately 3++, add 8-10 in May, add 8-10 in late summer)
  - disks, tapes (***DLT initially***), printers, fax….

Counting House (cont)

- **Installation of crates and racks**
- **Installation of HV for EMCAL, TOF and RICH**
- **Installation of test setups for readout of PHENIX electronics (FEMs, DCMs, TS…..)**
  - **first in 2-214**
  - **move the test setup to 1008**

Next Steps in the ONCS Software Development

- **DAQ setup task force (chair M.Purschke)**
  - **coordination of the various tasks in the different subsystems (DAQ, ONCS, Instrumentation)**
  - **First step is integration of DCM into ONCS release 1 software**
  - **Addition of FEM (whichever type is available first) and Timing System**
- **Goal: Reading out a piece of PHENIX from FEM to tape and read it back with STAF**
- **Needs:**
  - complete set of hardware for one granule
  - FEM and DCM software
  - Event format + offline code
  - Our own software

HV

- **Starting in March LeCroy will ship HV modules to us**
- **Modules have to pass initial tests before they can be hooked up to the detector - this should be done with the “final” hardware and software (I.e. VxWorks-Arcnet and EPICS software)**
- **ONCS will participate in these tests and installation as it proceeds**

HV (cont)

- **Every subsystem has to name a person resident at BNL who is responsible for participating in these tests, I.e.**
  - **testing modules**
  - **learning how to use and configure the EPICS HV software**
  - **help ONCS out in the final setup of the HV for his/her subsystem**

HV: Two special cases...

- **ONCS needs to know who is responsible for integrating the HV into EPICS for**
  - **TOF (CAEN)**
  - **PbGl (Custom HV system)**
- **Preferably this person should be resident at BNL (or at least come to BNL for the period while this job is being done)**

ONCS Liaisons to Subsystems

- BB: CW
- MVD: SD
- DC,PC,TEC: JH
- RICH: CW
- TOF: ED
- PbSc,PbGl: MLP
- MuTr, MuID: SP
- Level1: CW

- ONCS needs to know liaisons from every subsystem for:
  - FEM
  - calibration and monitoring
  - ….

Ancillary Systems (other than HV)

- **Compiled information from subsystems on ancillary systems into an "official" ONCS document, which is released this week**
- **Some issues are resolved, others are flagged as open and others are not (yet) known…**
- **ONCS has to select the ONCS standard hardware (ADC - VSAM, Keithley?)**
- **ONCS needs feedback whether this module does the job**