

DSG-R&D CS-Studio Phoebus Meeting Minutes

Date: February 2, 2024

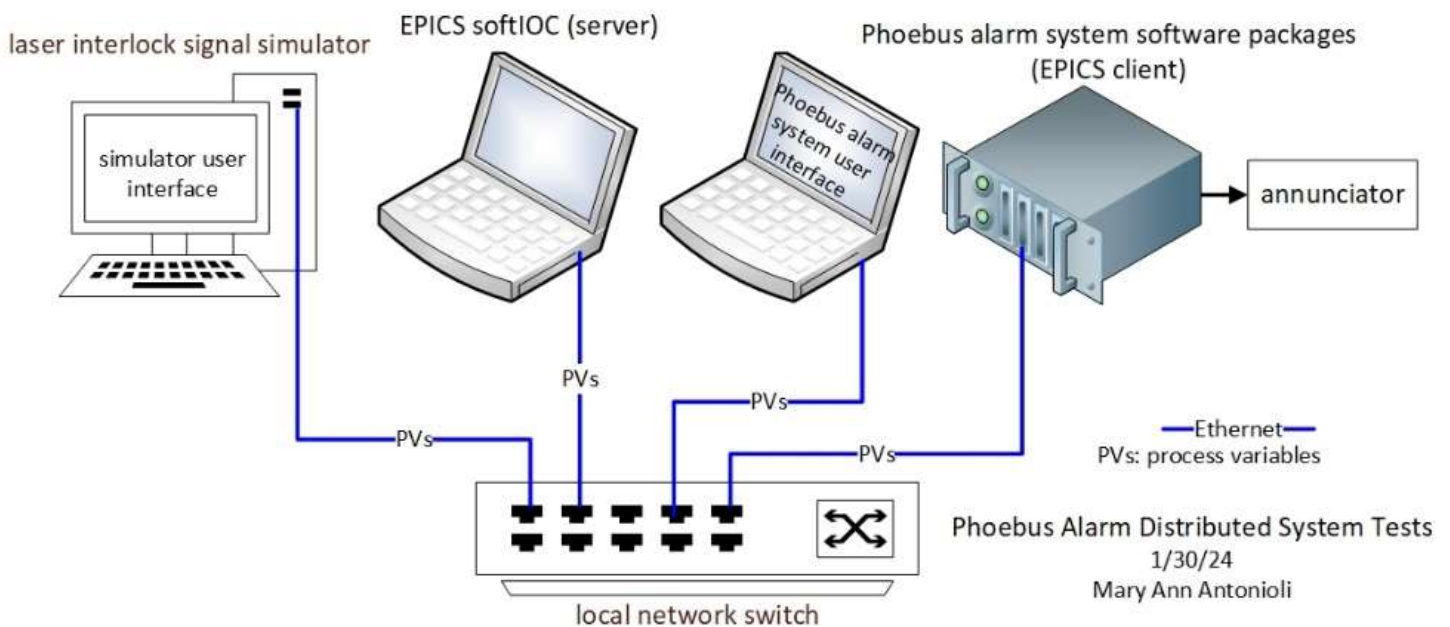
Time: 2:00 PM – 3:00 PM

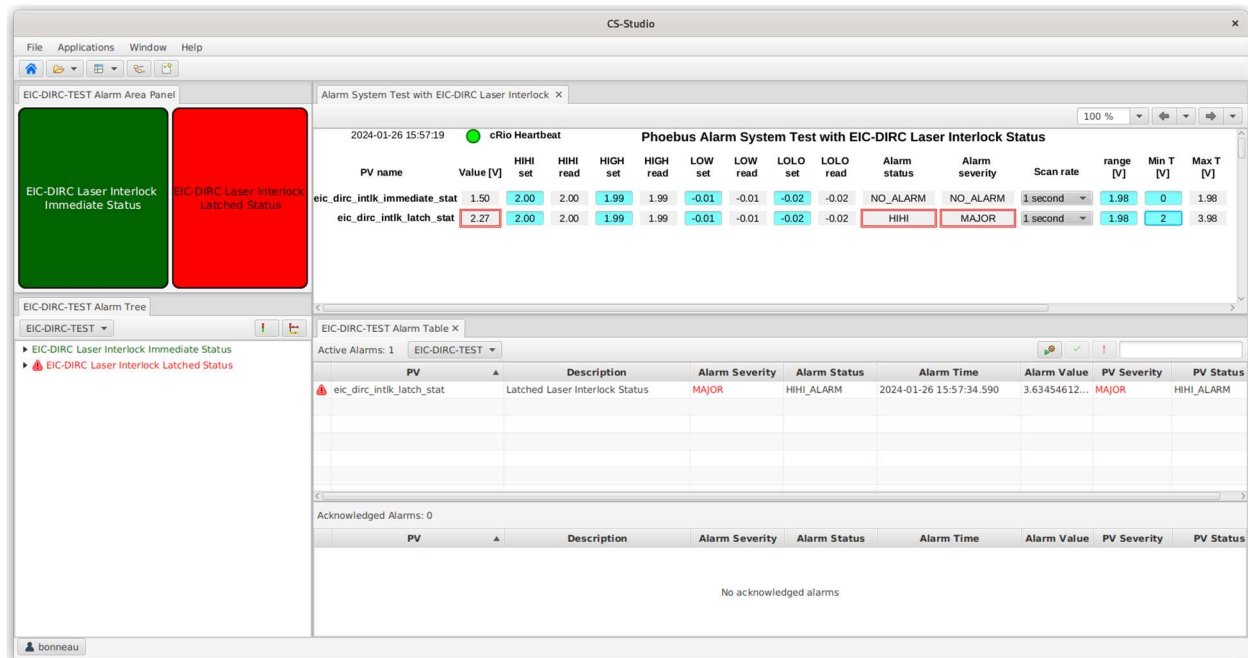
Attendees: Peter Bonneau, Aaron Brown, Pablo Campero, Tyler Lemon, and Marc McMullen

1. EIC DIRC Phoebus Alarm Distributed System Tests

Peter Bonneau

1. Discussed the Phoebus alarm distributed system tests
 - Tests the communication between the software packages and the Phoebus applications
 - All development and testing to date have been with a host-based EPICS system, alarm system software packages, and Phoebus applications all integrated into a single development computer
 - In the EIC DIRC Phoebus alarm system test, the source of the EPICS PVs used for alarms is sourced external to the alarm development by a cRIO EPICS client
2. Discussed the first distributed alarm system test for EIC DIRC
 - In a computer separate from the Phoebus alarm system, the laser interlock signal simulator is used as an EPICS PV source
 - The Phoebus alarm system, an EPICS client, resides in a separate Linux computer
3. Reviewed the local network configuration that will be used for the test
 - DHCP for the computers and cRIO hardware
 - A Dell DA310u multiport adapter will be used for laptop USB C - SSD and Ethernet connections
 - Same network configuration will be used for the laser lab EIC DIRC tests





Phoebus Alarm System Test with EIC DIRC Laser Interlock User Interfaces

2. [EIC DIRC Startup Procedure and Applications](#)

Peter Bonneau

1. Discussed EPICS client configuration for EIC DIRC laser interlock PVs
 - cRIO network client configuration required for Phoebus alarm testing
 - Successful cRIO system test required before Phoebus alarm system startup
2. Phoebus layout files are used to automatically start and stop alarm applications
3. DSG January memo is on EIC DIRC startup procedure and applications

3. [EIC DIRC Stability Test with Phoebus Development Computer](#)

Peter Bonneau

1. Discussed stability test on Phoebus development computer
 - On one of the two EIC DIRC alarm system development computers, the system has locked-up several times while running the tests using the external SSD
 - Lock-up was in Linux OS, not Phoebus
 - Rebuilt system by cloning master Phoebus development system SSD
 - Retest in progress; has run error-free continuously for a week

4. [EPICS Development](#)

Peter Bonneau

1. Discussed development of new EPICS versions at the lab