

DSG-R&D Phoebus Meeting Minutes

Date: April 14, 2023

Time: 02:00PM – 02:30PM

Attendees: Mary Ann Antonioli, Peter Bonneau, and Aaron Brown

1. Phoebus screen development for alarm system

Mary Ann Antonioli, Peter Bonneau, and Aaron Brown

1. Reviewed status of development
 - Mary Ann is replacing array-based screens with screens with individual PVs for NPS and the Phoebus alarm system
 - Status screens for sum of EPICS alarm PVs will be developed using the NPS hardware interlock system Phoebus screens as a template
 - The NPS softIOC will be used for screen testing

2. Development of NPS and alarm test system PV list

Mary Ann Antonioli and Aaron Brown

1. Mary Ann is revising the array-based PV list with individual PVs
2. Detector signal simulation control and monitoring PVs for individual PVs will be added
3. Alarm system PV list includes all hardware interlock system PVs and sum of EPICS alarm PVs
 - Additional PVs for Range, Min, and Max will be needed for analog input PVs
 - An additional Boolean PV will be needed for binary input PVs

3. Development of Phoebus alarm test system server configuration file

Peter Bonneau

1. At the initial startup of the alarm server, a file in .XML format will be imported with the alarm settings for each monitored PV
 - The configuration settings for each PV include
 - Monitoring enable
 - Guidance on how to respond to the alarm
 - Alarm annunciate enable
 - Alarm trip delay
 - Links to user interface displays
 - Automated actions (email)
 - Commands (user defined scripts)
2. Discussed development of software to implement the configuration file
3. Discussed existing .XML tools available

4. Alarm system softIOC development

Peter Bonneau and Aaron Brown

1. Discussed implementation of the alarm test system softIOC
 - Will use the NPS ops softIOC as a base template and add detector signal simulation via random number generators
2. Discussed database records needed to support summary of EPICS alarm PVs