DSG-R&D Phoebus Alarm System Meeting Minutes
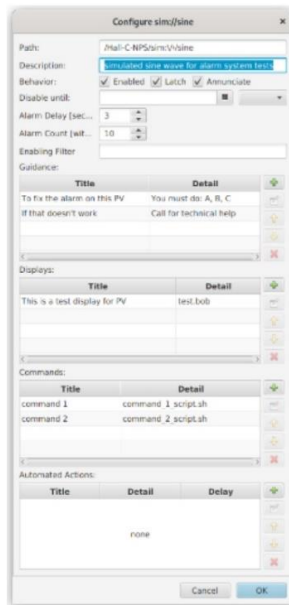
Date: April 07, 2022
Time: 11:00PM – 12:00PM

Attendees: Mary Ann Antonioli, Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, George Jacobs, Tyler Lemon, and Marc McMullen

1. **Phoebus alarm system development**
   Peter Bonneau
   1. EPICS alarm system based on CS-Studio Phoebus – debugging the Kafka message stream for alarm system process variable (PV) configuration settings
      - PVs to be monitored by the alarm system, and their alarm system settings, are entered on the Phoebus user interface
      - Settings for each PV
        - Monitoring enable
        - Alarm annunciate enable
        - Guidance on how to respond to the alarm
        - Links to user interface displays
      - Some settings are not being accepted by the alarm server
      - Wrote a Kafka message stream spy program to aid in debugging the configuration message stream; found errors in the format of the message stream
      - Successfully debugged PV configuration message stream

Phoebus alarm system user interface menu for PV configuration

   2. Developing an Input/Output Controller (IOC) using EPICS base 3.14 to be used for development and testing of alarm system
      - Configured and built software tool for database development using Visual Database Configuration Tool (VisualDCT)
        - Obtained VisualDCT v2.8.2 source code. Supports all versions of EPICS including V7
        - Built, configured, and tested VisualDCT on Linux development computer