

Hall C EPICS

Date: January 18, 2019

Time: 10:00AM – 11:00AM

Attendees: Peter Bonneau, Brian Eng, Amanda Hoebel, Steve Lassiter, Tyler Lemon, Steve Wood

1. HV TCL/TK conversion to CS-Studio (CSS).

- 1.1. DSG has developed Python script to convert TCL/TK configuration files to CSS.
- 1.2. HV in use for SHMS and HMS so DSG will avoid testing screens with PVs that have potential to write values to HV system.
- 1.3. Additional features requested on CSS HV screens:
 - 1.3.1. Ability to display channel information for bar if user hovers mouse of part of HV voltage and current histograms.
 - 1.3.2. Generate channel map document for HV group for use as debugging tool.
 - 1.3.3. Backup/restore system for HV parameters.
- 1.4. Discussed potential need for graphical interface for HV.
 - 1.4.1. Steve Wood mentioned that while a graphical HV interface is not necessarily needed for current system, it may be helpful for new detector systems.

2. PLC-to-EPICS interface

- 2.1. HMS PLC interface to EPICS went down January 17, 2019.
- 2.2. DSG worked to resolve issue with Steve Lassiter.
- 2.3. KEPServerEX software used as intermediate between EPICS and PLC was source of error.
- 2.4. Discussed plans to downgrade PLC controller firmware in attempt to fix issue.
 - 2.4.1. After meeting, firmware downgrade of PLC controllers from 20.058 to 20.055 resolved issue; HMS PLC system now able to communicate to EPICS.

3. WEDM

- 3.1. DSG demonstrated WEDM cryogenics screens.
- 3.2. Hall C made additional request of alarm indicating for monitors.
 - 3.2.1. DSG will look into how to indicate alarms in WEDM.
 - 3.2.2. Alarms should be able to handle disconnects and frozen values.
 - 3.2.3. Heartbeat signals may need to be added to PLC for a “screen/comms operational” status.

4. Skylla7

- 4.1. Windows 7 server Skylla7 used as Hall C PLC controls server.
- 4.2. During PLC-to-EPICS debugging, reboot of Skylla7 took ~21 minutes.
 - 4.2.1. Long reboot time may be due to internal failure (disk corruption, memory issue, or other).
- 4.3. DSG recommends planning to replace Skylla7 with a new server with Windows 10.
 - 4.3.1. Windows 7 will no longer be supported by JLab Computer Center after 2019.

5. CAEN crate for testing

- 5.1. Hall C will loan CAEN HV crate to DSG for development of CAEN-to-EPICS interface for Hall C EPICS system.
- 5.2. Hall C will arrange for new modules and CAEN mainframe to be brought to DSG.