Hall C HV CS-Studio Screen Testing

Date: May 10, 2019
Time: 10:00AM – 11:00AM

Attendees: Steve Wood, Tyler Lemon

1. Tested new high voltage CSS screens.
    1.1. On/off control, status readback, voltage monitoring, and current monitoring worked.
    1.2. Screens and main menu able to be opened using an executable shell script.

2. Issues noted during testing and course of action for correction:
    2.1. Controls for all HMS channels' voltage set point, current trip point, ramp rates, and voltage limit do not display current value.
        2.1.1. HMS uses older CAEN mainframes that assigns separate control and readback PVs for each channel property.
        2.1.2. Screens are using the control PV, whose value was zero unless control was used.
        2.1.3. DSG will investigate how to display value of readback PV while retaining control functions of the control PV.
    2.2. Main menu is missing histograms for all HMS and SHMS channels.
        2.2.1. Screens created but not added to main menu screen.
        2.2.2. DSG will update main menu to have an option for missing screens.
    2.3. Path dependencies of backup/restore program and group control scripts were incorrect for execution on *cdaql1*.
        2.3.1. Hardcoded path values in programs needed to be updated for location of programs and files on *cdaql1*.
        2.3.2. After path updates, all on/off group controls worked correctly.

3. Steve Wood created *go_newhv* executable on counting house PC to open CSS screens.
    3.1. Use of executable on counting house PC may lead to more path dependency issues.
        3.1.1. Tyler Lemon will investigate and verify correct operation of screens and scripts.

4. Additional items discussed/requested:
    4.1. Units displayed on screens should be abbreviated format (uA rather than microAmps).
    4.2. Screens can be different colors rather than just grey/black/white.
    4.3. Python program used to create CSS screens from Tcl/Tk configuration files will be copied to *cdsg* home directory on *cdaq* PCs.