

Hall C EPICS Progress Meeting

Date: December 13, 2018

Time: 10:00AM – 11:00AM

*Attendees: Peter Bonneau, Mike Fowler, Amanda Hoebel, Tyler Lemon, Steve Wood,
Amrit Yegneswaran*

1. DSG's progress on Hall C Web EDM (WEDM) screens for cryogenics

- 1.1. Using PV list sent by Steve, DSG has developed EDM screens to monitor HMS, SHMS, and Hall C cryogenics.
- 1.2. Screens have been deployed to WEDM.
 - 1.2.1. URL of directory browser:
<https://epicsweb.jlab.org/wedm/browse?dir=/cs/opshome/edm/hlc/spectrometers>
- 1.3. "Menu page" overview of WEDM screens temporarily located at
<https://userweb.jlab.org/~tlemon/wedm>
 - 1.3.1. Final menu will be added to main epicsweb menu once list of screens and menu hierarchy are finalized.

2. Hall C HV user interfaces

- 2.1. Hall C uses .tcl scripts to generate HV user interface screens.
- 2.2. Each detector has a channel and group mapping that is used to generate screen.
- 2.3. Steve will send DSG more documentation on .tcl screens.
- 2.4. Existing CAEN-to-EPICS communication:
 - 2.4.1. Older CAEN units that communicate to EPICS using CAENnet protocol over a softIOC.
 - 2.4.2. Newer CAEN units communicate directly to EPICS.
 - 2.4.3. Existing user interfaces make differences in CAEN-to-EPICS communication transparent to end user.
- 2.5. Architecture of existing HV screens:
 - 2.5.1. Channel and group mappings are read into script.
 - 2.5.1.1. Screens displaying many channels take several minutes to open.
 - 2.5.2. Script generates bar plot overview monitor and individual tables of detector HV.
- 2.6. Architecture of requested new HV screens:
 - 2.6.1. Still use configuration files to log channel mapping.
 - 2.6.2. Screens developed in Controls System Studio (CSS)
 - 2.6.2.1. CSS can potentially open all channels much quicker than .tcl script.
 - 2.6.2.2. CSS screens will not have to be generated every time they are accessed.
- 2.7. DSG will start investigating the best way to replicate .tcl screens in CSS.