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For L1 Cal System Upgrade Review, 8.26-27.05

L1 Cal Power Supply Monitoring GUI

The ADF crates, TAB crates, and the final Communications Crate all use commercial WIENER power supplies with built-in Canbus interfaces for control and monitoring. Hardware and software to interface these to EPICS have been developed by Linda Bagby, John Fogglesong, and Geoff Savage.

This GUI's purpose is to display monitored quantities from the crates. This GUI is nearing completion. The currently functional version monitors the crates which are already running on the sidewalk. The only thing which it does not do is show alarms; these have to be set in EPICS. Once they are set, the GUI will be ready to use. As of now, it can be used to monitor the Voltages and Currents of each of the crates' four outputs, as well as the speeds of three fans on each crate, the temperature of the crate and whether the crate is on or off:

FileViewHelp

L1 Cal2b

Cal Supply Device	Power	Chan U0 +5.0 V	Chan I0 Load (A)	Chan U1 +5.0 V	Chan I1 Load (A)	Chan U3 +3.3 V	Chan I3 Load (A)	Chan U5 +5.0 V	Chan I5 Load (A)	Temp (deg C)	Fan 1 (rev/sec)	Fan 2 (rev/sec)	Fan 3 (rev/sec)
L1 Cal Power Supply													
L1CAL_LVPS_11	on	5.02	18.66	4.99	10.86	3.29	34.08	5.00	9.46	27	56	57	56
L1CAL_LVPS_13	off	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30	0	0	0

Status:

Reconnect

The GUI for the WIENER crates is currently running in a stand-alone mode, but the Python scripts are set up in such a way that they can easily be "picked up" and put into the main Calorimeter Monitoring GUI.

All data manipulation and translation (i.e., picking out the proper bit from the proper byte for the power status, and translating so "0" displays "off" and "1" displays "on") is done before the information leaves EPICS. This will allow the Significant Event Server to run with without any data manipulation.