MicroBooNE Good Runs Database

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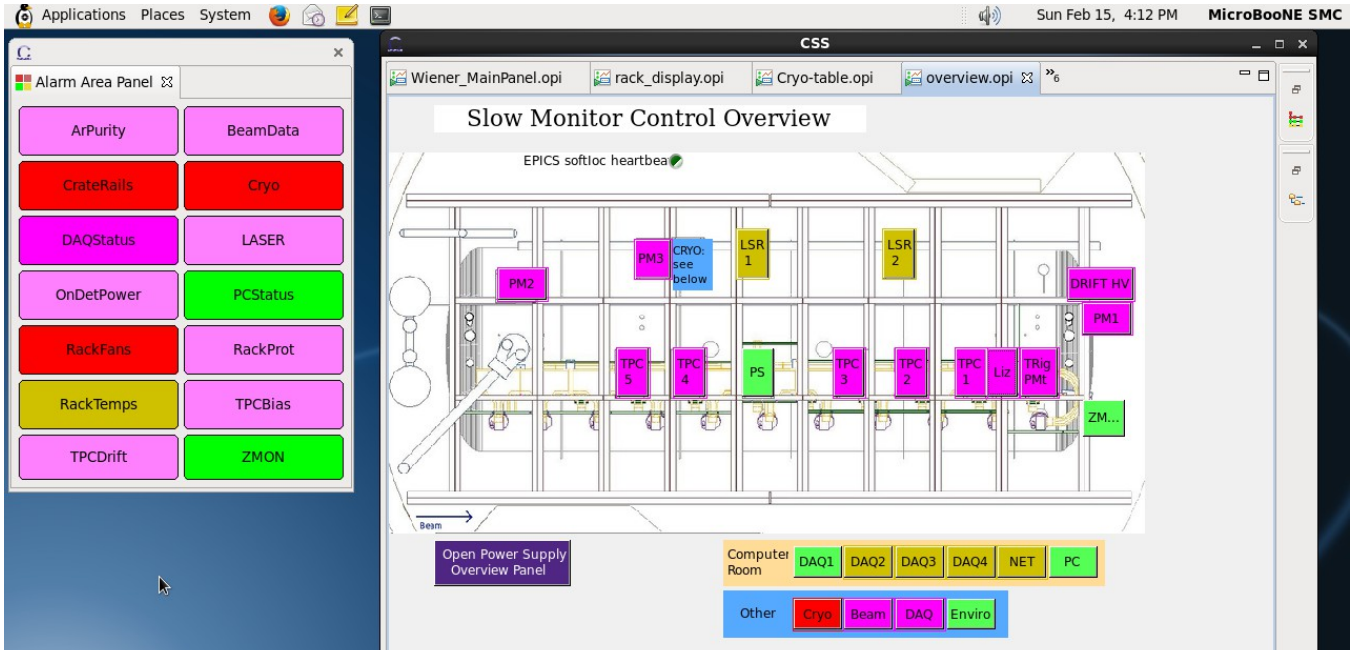
Progress

- Able to successfully connect to and read Slow Monitoring Database
- Very early version of python script
  - Reads from “sample” table for a few channels for the last 24 hours
  - Prints out all entries returned for each channel
  - Currently lives in my own work directory
- Able to connect to `uboonedaq-prod-ws01` via vnc and run CSS



Subsystems

Preliminary list of subsystems that may contribute to 'Good Run' status

- TPC Drift HV: 2 variables (voltage, current)
- TPC Wire Bias: 4 (switch, voltage, current) x 20 (3 modules, 20 total channels) = 80 variables
- OnDetPower
  - TPC Wire Bias (see above)
  - Asics LV: 1 (switch) x 44 channels = 44 variables
  - PMT Flasher: 4 variables (switch, voltage, current) → Probably not needed for 'Good Run' status
- Crate Rails (Rack Electronics): 3 variables (switch, voltage, current) x 36 channels = 108 variables
- PMT HV: 5 (5V,+/-12V) x 6 Modules + 2 (voltage, current) x 48 channels = 126 variables
- Beam Data: 9 (age, protons, position, etc.) for BNB + 3 for NuMI = 12 variables
- Cryostat?
- Argon Purity?
- **Total:** 376 variables. Probably will not need all of these.

Plan

- Make script configurable
  - Put list of variables in xml file with tolerances
  - Easy to add/remove variables, change tolerances
- Use info from RunConfig DB
  - Get start/end timestamp for run
  - DAQ configuration may make on/off status for some components not needed
- Expert input needed
  - Fill out/trim list of variables
  - Tolerances for channels/subsystems