Slow Control Working Group

A. Fava, N. Moggi

Organization of the working group

- Conveners: A. Fava, N. Moggi.
 To be taken over by N. Moggi by himself soon.
- Present subscribers: B. Badgett, L. Bagby, M. Diwan, A. Fava, C. James, A. Menegolli, T. Nichols, D. Nicklaus, GL. Raselli, M. Rossella, G. Sava. More people welcome!
- Follow-up of informal group started back in 2017.
 Acting as branch of the SBN Slow Controls working group, convened by A.
 Fava & S. Gollapinni.
- Mailing list: ICARUS-SLOWCONTROLS@LISTSERV.FNAL.GOV
- Kick-off meeting, joint with ICARUS DAQ working group, on July 13 2018.
 No regular meetings scheduled after that: only occasional meetings as needed.

Scope of the working group

- Framework for ICARUS slow controls
 - EPICS as central software for the I/O control.
 - Control System Studio (CSS) for displays and operator panel.
- Charge of the working group
 - $\circ~$ Design architecture and procure hardware components as needed.
 - Develop custom I/O applications (IOCs) for detector system interfaces (ex: power supplies, rack monitoring, ground monitoring etc.).
 - Tailor tools for external system interfaces, developed in common with SBND, to ICARUS needs and schedule requirements (ex: Cryogenics monitoring, Beam, DAQ etc.)
- Milestones
 - \circ Complete the development of IOCs by March 2019.
 - Operational and slow control monitoring of DAQ processes by March 2019.
 - Tailoring of common external system interfaces to ICARUS needs by June 2019.

Status & perspectives

- Architecture & design complete, except readout of drift HV system.
- Hardware mostly procured.
 Specifications defined for components still missing.
- Custom applications for primary PMT HV, TPC bias HV and PMT readout ready.
 Applications for PMT HV distribution, TPC readout and inner sensors under development.
- Software development of external system interfaces, archiver and CSS at early stages.

More help welcome!

Extensive tests needed for all components.
 Test stands available at CERN and Fermilab.
 More help welcome!