

# Continued Development of NPS's Low Voltage EPICS IOC

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I continued development of an IOC to communicate with Hall C NPS's MPOD low voltage power supply.

In the previous month, efforts were focused on determining how to install and configure a SNMP command module into an IOC. This past month, efforts have been focused on actually creating the IOC with the SNMP command module.

Part of this is ensuring that the PC where the IOC is developed has Net-SNMP installed onto it. This separate application is used by the IOC as the low-level SNMP commands needed to communicate with the MPOD.

The other part of creating a functional IOC that can communicate to the MPOD is building the executable that is ran to put the IOC into operation. The majority of this is done using the EPICS base's included scripts, but there are some portions that require modifying configuration files used by the scripts.

At this point in IOC development, there have been two roadblocks. The first is for IOC development on one of DSG's Hall C Linux PCs and involves the PC missing driver libraries needed by the SNMP command module for securely communicating to devices. The second roadblock is for IOC development on Hall C's NPS Linux server. This second roadblock involves the location where files are stored for the IOC configuration resulting in path names that are too long for the EPICS base's script used to compile the final IOC executable.

Resolutions for both roadblocks are being investigated, with efforts focused on getting the IOC to run on Hall C's NPS Linux server since that system is where the final IOC version will be stored and ran.

- **NPS is using an MPOD to supply low voltage to the detector**
- **An EPICS IOC with SNMP command capabilities is being developed for remote monitoring and control of the MPOD in Hall C's established EPICS environment**
- **Roadblocks in IOC development have been encountered in the past month, but resolutions are being investigated**