

# NPS Low Voltage EPICS IOC Development

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

Hall C NPS uses MPOD low voltage modules to supply the detector electronics with low voltage. Initially, the network communication for the low voltage channel control and monitoring was done using a proprietary user interface from iseg. To better integrate the low voltage controls and monitoring into Hall C's existing controls and monitoring environment, an EPICS IOC that can communicate to the MPOD and publish/read data to/from EPICS is needed.

MPODs use simple network management protocol (SNMP) commands for communicating to remote devices on the network. Part of the IOC development is determining how to allow the EPICS IOC to send SNMP commands and handle the response.

This is done by installing an SNMP command application into the EPICS IOC when the IOC is created (this process is similar to how IOCs are set up to communicate to PLCs in Hall B and Hall D).

Presently, efforts have gone towards learning how to configure and install the SNMP application into an EPICS IOC. To avoid negatively effecting the NPS MPOD that is in use, all development so far has taken place on one of DSG's development Linux PCs with test PVs.

After test IOCs with SNMP command capabilities are able to be consistently created, development of a production version that is linked to NPS's MPOD controller will be created.

- **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**