

Interfacing EPICS to the widespread platform management interface IPMI (video)

The Intelligent Platform Management Interface (IPMI) is a standardized interface to management functionalities of computer systems. The data provided typically includes the readings of monitoring sensors, such as fan speeds, temperatures, power consumption, etc. It is provided not only by servers, but also by uTCA crates that are often used to host an experiment's control and readout system. Therefore, it is well suited to monitor the health of the hardware deployed in HEP experiments. In addition, the crates can be controlled via IPMI with functions such as triggering a reset, or configuring IP parameters. We present the design and functionality of an EPICS module to interface to IPMI that is based on ipmitool. It supports automatic scanning for IPMI sensors and filling the PV metadata (units, meaning of status words in mbbi records) from the IPMI sensor information. Most importantly, the IPMI-provided alarm thresholds are automatically placed in the PV for easy implementation of an alarm system to monitor IPMI hardware.

Primary author: Dr RITZERT, Michael (Heidelberg University)

Presenter: Dr RITZERT, Michael (Heidelberg University)

Track Classification: Low-level Controls