ATCA control S/W in LHCb
Integrate ATCA control in the CERN standard SCADA software – PVSS/WinCC

- Control shelves and blades
  - Switch On/Off, reboot
- Monitor parameters
  - Temperatures, voltages, fans, …
Options

- IPMI Manager for PVSS
  - Doesn’t seem to exist
- OpenHPI
  - OpenHPI client for PVSS
    - Doesn’t seem to exist
  - SNMP
- Dedicated server
  - Use one of the available IPMI tools to communicate with the HW
  - Use DIM* to serve PVSS
    - DIM client readily available for PVSS

*Distributed Information Management System: Provides a network transparent inter-process communication layer for distributed/mixed environments
Many options available
  ◦ IPMItool
    • No library but is open source
  ◦ OpenIPMI
    • Library available for Linux
  ◦ Ipmiutil
    • Library available for Linux and Windows
  ◦ ...

Currently the one that seems to have better support for PICMG control is IPMItool
What we have

- **IpmiSrv**
  - From the LHCb Farm Monitoring and Control (FMC) tools
  - Uses DIM
  - Works as is to control crate power
    - But not much else...
  - Can be extended
  - Uses ipmitool command line calls and parses the replies

- **A new IPMI server**
  - Uses DIM
  - Uses direct ipmitool RMCP calls
  - Very early stages of development
    - Working test version with limited functionality
What we have

- Current integration with PVSS (for PCs)
- List of PCs
- Commands
- Monitored Values
Next steps

- An ATCA crate was bought to continue the tests
  - Should be arriving soon
- More active development of the Server software