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Hardware Controls System Upgrade for the STAR Experiment[1]
MATTHEW BRNICKY, Creighton University, STAR COLLABORATION — The hardware controls system for the STAR (Solenoidal Tracker At RHIC) experiment is being upgraded to accommodate new detectors. The number of items monitored and controlled will increase from 25000 to 40000. While reliable, the current system uses processors designed when the first system tests were carried out in the mid-1990's. Such computing hardware is not appropriate for the new front end electronics. Specialized workstations are being replaced by new personal computers. Additionally, many aging processors housed in electronics crates will be replaced by PC's. A prototype upgrade is being tested during the Spring 2006 run. Software systems are currently being redesigned to require less operator intervention while maintaining backward compatibility. A stand-alone distribution kit has been developed to make the controls tools available to the new subsystems. Implementation and aspects of the new control hardware and software will be presented.

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