

IMPLEMENTING DISTRIBUTED TECHNOLOGY ON BESIII SLOW CONTROL SYSTEM

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Abstract

Abstract: BESIII Slow Control System consists of Temperature and Humidity monitoring system, High Voltage monitoring system, Low voltage supplying system, VME monitoring system, Gas monitoring system and so on. These systems are implemented based on LabVIEW. Communication between them is implemented with technology of share variables of LabVIEW. The Slow Control System needs capability of communication with Data Acquisition of BESIII detector of and Control System of Accelerator. The DAQ System of BESIII is developed on Linux system. The control system of Accelerator Machine is based on EPICS. In order to communicate with both of them, An Engine of LabVIEW share variables to DIM (Distributed Information Management) software is developed to interconnect BESIII Slow Control System and DAQ System. LabVIEW share variables to EPICS process variables software is used to interconnect BESIII Slow Control System and Control System of Accelerator. Key words: BESIII Slow Control, LabVIEW, EPICS, DIM, process variables, share variables

**CONTRIBUTION NOT
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