

Development of DAQ-Middleware

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DAQ-Middleware is a software framework of network-distributed DAQ system based on Robot Technology Middleware, which is an international standard of Object Management Group (OMG) in Robotics and developed by AIST. DAQ-Component is a software unit of DAQ Middleware. Basic components are already developed. For examples, Gatherer is a readout component, Logger is a logging component, Monitor is an analysis component and Dispatcher connects Gatherer to Logger/Monitor as the data path. DAQ operator component controls those components by using the control/status path. An important point is that those components are reusable as DAQ-Components because the control/status path and data path as well as XML-based system configuration and XML/HTTP-based system interface are well defined in DAQ-Middleware framework.

DAQ-Middleware was adopted by experiments at J-PARC (Japan Proton Accelerator Research Complex) while the commissioning at the first beam had been successfully carried out.

The functionality of DAQ-Middleware and the status of DAQ-Middleware at J-PARC will be presented.

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