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# The Fermilab Test Beam Facility Data Acquisition System

*Thursday 14 June 2018 15:50 (15 minutes)*

The Real-Time Systems Engineering Department of the Scientific Computing Division at Fermilab has deployed set of customizations to our Off-The-Shelf DAQ solution (otsdaq) at the Fermilab Test Beam Facility (FTBF) to read out the beamline instrumentation in support of FTBF users. In addition to reading out several detectors which use various detection technologies and readout hardware, the FTBF Data Acquisition system (DAQ) can perform basic track reconstruction through the facility in real time and provide data to facility users. An advanced prototype coincidence module, NIM+, performs trigger distribution and throttling, allowing the beamline instrumentation to be read out at different rates. Spill data is saved to disk for studies of the facility performance, and hit data are also made available on the FTBF network for experiments'use. A web-based run control and configuration GUI are provided, and the online monitoring snapshots created after each beam spill are viewable from any computer connected to the Fermilab network. The integrated DAQ system for the facility provides users with tracking data along the beamline and a single location for obtaining data from the facility detectors, which set the baseline for qualifying their own detectors.

## Minioral

Yes

## Description

DAQ

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