Mu2e Online DAQ and Slow Controls Interface ANTONIO
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RIVERA, Fermi National Accelerator Laboratory — The muon campus program
at Fermilab includes the Mu2e experiment that will search for a charged-lepton fla-
vor violating processes where a negative muon converts into an electron in the field
of an aluminum nucleus, improving by four orders of magnitude the search sensitiv-
ity reached so far. Mu2es Trigger and Data Acquisition System (TDAQ) uses *otsdaq*
as its solution. Developed at Fermilab, *otsdaq* uses the *artdaq* DAQ framework and
art analysis framework, under-the-hood, for event transfer, filtering, and processing.
otsdaq is an online DAQ software suite with a focus on flexibility and scalability,
while providing a multi-user, web-based, interface accessible through the Chrome or
Firefox web browser. The detector Read Out Controller (ROC), from the tracker
and calorimeter, stream out zero-suppressed data continuously to the Data Transfer
Controller (DTC). Data is then read by a software filter algorithm that selects events
considering data flux that comes from a Cosmic Ray Veto System (CRV). A Detector
Control System (DCS) for monitoring, controlling, alarming, and archiving has been
developed using the Experimental Physics and Industrial Control System (EPICS)
Open Source Platform. The DCS System has also been itegrated into *otsdaq*.

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Date submitted: 11 Jan 2021   Electronic form version 1.4