Off-the-Shelf DAQ - Idea #7395

Investigate possible interactions with XDAQ and addition of XDAQ functions to artdaq

12/01/2014 10:10 AM - Kurt Biery

Status:	New		**Start date:**	12/01/2014
Priority:	Normal		**Due date:**	03/31/2015
Assignee:			**% Done:**	0%
Category:			**Estimated time:**	80.00 hours
Target version:			**Spent time:**	0.00 hour

Description

From what we understand so far, it seems like the use of XDAQ in CMS pixel testing at the testbeam includes several types of functionality:

- readout of the electronics hardware
- configuration of the electronics hardware
- control of data taking at both low and high levels (i.e. state transitions in the electronics and Run Control)
- display the status of the electronics hardware
- viewing of histograms stored on disk
- (possibly) a graphical interface to read and write registers in the electronics and run tests (monitor, control, and test?)

This Issue is a placeholder to document the desire to investigate various aspects of the current system and how various functions might be replaced by or interacted with from **artdaq**.

For example, one exercise might be to graft a XDAQ process into an **artdaq** system. In this model, the XDAQ process would receive configuration data and commands from a BoardReader, and would send its data to the same BoardReader. This would include writing the appropriate FragmentGenerator to talk to the XDAQ process.

Another exercise might be to investigate whether XDAQ could be used as a web-based interface for sending control commands to **artdaq** processes.

Further exercises might be to investigate which functions could be provided by a nodejs server running in conjunction with **artdaq**.

History

#1 - 01/13/2017 04:00 PM - Eric Flumerfelt

- Project changed from artdaq to Off-the-Shelf DAQ

- Target version deleted (577)

I'm moving this issue over to otsdaq; it seems to make more sense there...