

## artdaq - Support #23173

### Combine pdune\_swtrig and pdune\_swtrig\_noRM sample configurations into one

08/26/2019 05:05 PM - Kurt Biery

<b>Status:</b>	Closed	<b>Start date:</b>	08/26/2019
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Kurt Biery	<b>% Done:</b>	0%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	Before DAQInterface v3_07_00	<b>Co-Assignees:</b>	Eric Flumerfelt
<b>Experiment:</b>	-		
<b>Description</b>			
<p>Currently, we have two (similar) configurations in artdaq-utilities-daqinterface/simple_test_config: pdune_swtrig and pdune_swtrig_noRM.</p> <p>The first one was a stepping stone toward the second one, and I believe that the first one has now become obsolete. (A few more details: the first one had both a DFO and a RoutingMaster. The DFO and the SWTrig BR were in one artdaq subsystem, and the RM and the rest of the BRs and the EBs were in a second subsystem. In this model, the DFO's DataSendermanager got routing tables from the RM.)</p> <p>The second config has the preferred model of demonstrating the software trigger at protoDUNE. It uses no RoutingMaster. The DFO receives the free-buffer tokens from the EventBuilders, and the Data Requests that are sent from the EventBuilders to the BoardReaders contain the destination to which each fragment should be sent.</p> <p>I propose to combine these two configs into a new "pdune_swtrig_DFO" config, and I'll do this work, hopefully soon. This change shouldn't affect any existing development or integration testing, but I wanted to file this Issue to share information about this change.</p> <p>Please note that the pdune_swtrig_noRM config only works with artdaq and artdaq_utilities code which is available on working/22353_protoDFO_* branches. And the new pdune_swtrig_DFO sample config will also only work with the code that has the full set of DFO-related changes (see Issue 22535).</p>			

#### History

##### #1 - 09/04/2019 01:56 PM - Kurt Biery

- Assignee set to Kurt Biery
- Status changed from New to Resolved

I have committed the change to a branch named "feature/23173\_combine\_configs" in the artdaq-utilities-daqinterface repository. This branch was created from the head of the "develop" branch as it existed today, 04-Sep-2019.

I've confirmed that the merged configuration area (pdune\_swtrig\_DFO) gives the same results as the earlier pdune\_swtrig\_noRM config area when run in the artdaq demo.

I added a few features to the new config area, such as enabling the (metric) reporting of Empty and Missing fragments with the FragmentWatcher module in the event builders.

##### #2 - 10/23/2019 01:03 PM - Eric Flumerfelt

- Status changed from Resolved to Reviewed
- Co-Assignees Eric Flumerfelt added

Only changes to simple\_test\_config. This simple\_test\_config requires RoutingNetOutput, which is currently not available in artdaq, so the string "pdune\_swtrig" will remain in artdaq-demo:tools/run\_integration\_tests.sh ignoredConfigs regex.

##### #3 - 12/10/2019 11:50 AM - Eric Flumerfelt

- Target version set to Before DAQInterface v3\_07\_00
- Status changed from Reviewed to Closed