

artdaq Utilities - Bug #23431

Possible issue with private-network bookkeeping (DAQInterface) on the protoDUNE DAQ cluster

10/16/2019 04:04 PM - Kurt Biery

Status:	Reviewed	Start date:	10/16/2019
Priority:	Normal	Due date:	
Assignee:		% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:		Spent time:	0.00 hour
Experiment:	-	Co-Assignees:	
Description			
<p>When trying to take data at protoDUNE with dune-artdaq software based on e17:s83 and the latest DAQInterface v3_00_07e, I found that data requests were not successfully being transmitted between EventBuilders and BoardReaders. Below, I've included the results of a "grep" for "multicast" in the run_records directory for the run in question.</p> <p>I wonder if the problem is related to the fact that the BR computers only see the 10.73.136.0 network, while the EB computers see both 10.73.136.0 and 10.73.138.0.</p> <pre>[np04daq@np04-srv-001 9868]\$ date Wed Oct 16 22:56:45 CEST 2019 [np04daq@np04-srv-001 9868]\$ pwd /nfs/sw/artdaq/run_records/9868 [np04daq@np04-srv-001 9868]\$ grep multicast * cob3_rce05.fcl: multicast_interface_ip: "0.0.0.0" cob3_rce05.fcl: table_update_multicast_interface: "10.73.136.0" cob3_rce06.fcl: multicast_interface_ip: "0.0.0.0" cob3_rce06.fcl: table_update_multicast_interface: "10.73.136.0" cob3_rce07.fcl: multicast_interface_ip: "0.0.0.0" cob3_rce07.fcl: table_update_multicast_interface: "10.73.136.0" cob3_rce08.fcl: multicast_interface_ip: "0.0.0.0" cob3_rce08.fcl: table_update_multicast_interface: "10.73.136.0" cob4_rce01.fcl: multicast_interface_ip: "0.0.0.0" cob4_rce01.fcl: table_update_multicast_interface: "10.73.136.0" cob4_rce02.fcl: multicast_interface_ip: "0.0.0.0" cob4_rce02.fcl: table_update_multicast_interface: "10.73.136.0" cob4_rce03.fcl: multicast_interface_ip: "0.0.0.0" cob4_rce03.fcl: table_update_multicast_interface: "10.73.136.0" cob4_rce04.fcl: multicast_interface_ip: "0.0.0.0" cob4_rce04.fcl: table_update_multicast_interface: "10.73.136.0" cob4_rce05.fcl: multicast_interface_ip: "0.0.0.0" cob4_rce05.fcl: table_update_multicast_interface: "10.73.136.0" cob4_rce06.fcl: multicast_interface_ip: "0.0.0.0" cob4_rce06.fcl: table_update_multicast_interface: "10.73.136.0" EventBuilder11.fcl: multicast_interface_ip: "10.73.138.0" EventBuilder3.fcl: multicast_interface_ip: "10.73.138.0" timing_3.fcl: multicast_interface_ip: "0.0.0.0" timing_3.fcl: table_update_multicast_interface: "10.73.136.0"</pre>			

Associated revisions

Revision 3b3ddf39 - 10/18/2019 01:36 PM - John Freeman

JCF: Issue #23431: when checking for a boardreader's request mode, don't assume the value is enclosed in quotes

History

#1 - 10/18/2019 01:51 PM - John Freeman

- % Done changed from 0 to 100

- Status changed from New to Resolved

The issue is resolved via the one and only commit on bugfix/23431_fix_private_network_bookkeeping, 3b3ddf39cb9e2275ed83783c04b3f30bc020933e. Basically, there was a line in bookkeeping intended to determine whether boardreaders were

receiving requests or not:

```
res = re.search(r"\n\s*request_mode\s*:\s*\"%s\"" % (token), procinfo.fhicl_used)
```

which was missing the case where the request mode value wasn't surrounded with quotes (e.g., request_mode: window instead of request_mode: "window"). So the new line is:

```
res = re.search(r"\n\s*request_mode\s*:\s*\"?%s\"?" % (token), procinfo.fhicl_used)
```

i.e., the added question marks make the quotes optional.

On the ProtoDUNE cluster, the repo /nfs/sw/artdaq-utilities-daqinterface currently is at the aforementioned commit. For testing, to use it instead of a tagged DAQInterface, in your favorite /nfs/sw/artdaq/DAQInterface/source_me[0-6] file just change

```
setup artdaq_daqinterface v3_00_07e
#. /nfs/sw/artdaq/DAQInterface2/mock_ups_setup.sh
```

to

```
#setup artdaq_daqinterface v3_00_07e
. /nfs/sw/artdaq/DAQInterface2/mock_ups_setup.sh
```

#2 - 10/21/2019 03:12 PM - John Freeman

- Status changed from Resolved to Reviewed

Kurt's tested this bugfix branch successfully on the ProtoDUNE cluster, so I'm marking the issue as Reviewed.