

## artdaq Utilities - Idea #24312

### DAQInterface should ensure that the MessageFacility FHiCL code it's given is legal

04/14/2020 10:07 AM - John Freeman

<b>Status:</b>	Rejected	<b>Start date:</b>	04/14/2020
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>		<b>% Done:</b>	100%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>		<b>Spent time:</b>	0.00 hour
<b>Experiment:</b>	-		

#### Description

A couple of days ago, Bill Badgett was confused about why he couldn't launch processes using DAQInterface. The problem was that he'd modified MessageFacility.fcl and left its code in an illegal state; DAQInterface forwards MessageFacility.fcl to artdaq processes when it launches them, but since the code was illegal the processes couldn't launch. It would be nice if DAQInterface could run a (quick) check on the MessageFacility.fcl and refuse to run if it finds that there's a problem with the FHiCL.

#### Associated revisions

##### Revision 61ba461e - 04/19/2020 09:17 PM - John Freeman

JCF: Issue #24312: DAQInterface will use fhicl-dump to make sure that there aren't any syntax issues with the FHiCL code used to control MessageViewer

#### History

##### #1 - 04/19/2020 09:28 PM - John Freeman

- % Done changed from 0 to 100

- Status changed from New to Resolved

Resolved with commit 6b1713a2c242b17ce1f513953a4fa1d436552df6 on branch feature/24312\_check\_for\_illegal\_fhicl. Basically, if the FHiCL document DAQInterface uses to control sending messages to MessageViewer has a syntax error, DAQInterface won't even try to launch artdaq processes but will instead inform users of the problem. This FHiCL document is typically called MessageFacility.fcl unless a different document is pointed to by the environment variable DAQINTERFACE\_MESSAGEFACILITY\_FHICL, and it's automatically produced by DAQInterface if it doesn't already exist. To test the feature in this issue, just sabotage this FHiCL document and make sure DAQInterface notices there's a problem.

##### #2 - 05/20/2020 03:05 PM - Gennadiy Lukhanin

- Status changed from Resolved to Rejected

My tests on the Icarus cluster were not successful. DAQInterface crashes if the MessageFacility FHiCL code it's given is legal.

```
14:53:48 icarus@icarus-evb01:~/DAQ_DevAreas/DAQ_14May20/DAQInterface develop*
$ /daq/software/products_dev/artdaq_daqinterface/v3_08_00FB24312FB24420/bin/DAQInterface.sh: line 37: 128288 A
borted                (core du
mped) nohup stdbuf -oL $ARTDAQ_DAQINTERFACE_DIR/rc/control/daqinterface.py --partition-number $DAQINTERFACE_PA
RTITION_NUMBER --rpc-port $DAQI
NTERFACE_PORT 0>&- >> $expanded_daqinterface_logfilename 2>&1
```

```
# This file was automatically generated as /home/nfs/icarus/DAQ_DevAreas/DAQ_14May20/srcs/sbndaq/sbn-fd/DAQInt
erface/MessageFacility.fcl at T
hu May 14 15:41:29 CDT 2020 on host icarus-evb01-daq.fnal.gov-daq.fnal.gov, and is
# the default file DAQInterface uses to determine how to modify the
# standard MessageFacility configuration found in artdaq-core
# v3_02_01's configureMessageFacility.cc file. You can edit the
# contents below to change the behavior of how/where MessageFacility
# messages are sent, though keep in mind that this FHiCL will be
# nested inside a table. Or you can use a different file by setting
# the environment variable DAQINTERFACE_MESSAGEFACILITY_FHICL to the
# name of the other file.
```

```
udp : { type : "UDP" threshold : "DEBUG" porti : DAQINTERFACE_WILL_OVERWRITE_THIS_WITH_AN_INTEGER_VALUE host
: "icarus-evb01-daq.fnal.gov" }
```

Note: I changed the "port" key to "porti".