

## artdaq - Idea #13389

Support # 15000 (New): Audit all messages produced by artdaq during normal running

### Make sure error messages are as useful as possible for end users

08/01/2016 05:14 PM - John Freeman

<b>Status:</b> Closed	<b>Start date:</b> 08/01/2016
<b>Priority:</b> Normal	<b>Due date:</b>
<b>Assignee:</b> John Freeman	<b>% Done:</b> 60%
<b>Category:</b> Known Issues	<b>Estimated time:</b> 8.00 hours
<b>Target version:</b>	
<b>Experiment:</b> -	
<b>Description</b> This Issue is motivated by an email Bill Badgett sent last week in which he asked about the consequences of repeatedly seeing the diskwriting aggregator print out "Failed to enqueue SubRun event." messages. It might be helpful to review artdaq's error and warning messages to make sure that end users are maximally informed, and if not, to add any necessary info.	
<b>Related issues:</b>	
Related to artdaq - Idea #18210: Non-pathological low request rate results in...	<b>Closed</b> <b>11/12/2017</b>
Related to artdaq - Feature #19475: Messages from CommandableFragmentGenerato...	<b>Closed</b> <b>03/23/2018</b>

### Associated revisions

#### Revision 8be25dfe - 08/15/2016 05:12 PM - John Freeman

JCF: error messages in the process fragments loops of eventbuilders and aggregators have been rewritten; see Redmine Issue #13389 for more

#### Revision 2faf58f9 - 10/18/2016 02:18 PM - John Freeman

JCF: if an invalid transition is requested, explain to the user that the transition's not allowed from the DAQ's current state; this can be filed under ongoing Redmine Issue #13389

### History

#### #1 - 08/15/2016 05:34 PM - John Freeman

- Status changed from New to Assigned
- Assignee set to John Freeman
- % Done changed from 0 to 50

With artdaq commit 8be25dfea229ac009d872c54a92dd43ed4a175fa, the process fragments loops in the eventbuilders and aggregators have had their messages updated. The main thrust with this commit is that if an problem occurs which removes the guarantee that the DAQ will continue functioning properly until it's shutdown and reinitialized, users are informed of this. A diff with the previous commit will tell the whole story, but some of the changes include:

- When we want to break out of the loop but an end-of-subrun fragment either hasn't been received or failed to get enqueued for art, tell users they may need to shut down the DAQ. E.g., instead of the error

```
Failed to enqueue SubRun event.
```

we have

```
Attempt to send EndOfSubRun fragment to art timed out after 5 seconds; DAQ may need to be returned to the "Stopped" state before further data taking
```

- If art's not initialized and the fragment received's not the Init fragment, print out an error:

```
Didn't receive an Init event with which to initialize art; DAQ may need to be returned to the "Stopped" state before further data taking
```

- If we've received all the EndOfData fragments and the EndOfSubRun fragment but there are still outstanding fragments, print a warning:

```
EndOfSubRun fragment and all EndOfData fragments received but more data expected
```

**#2 - 08/26/2016 02:11 PM - John Freeman**

- % Done changed from 50 to 60

With artdaq commit 369fe780496352273cdb9894345bd9c0bc565903, if EventStore can't queue an event, replace:

```
Enqueueing event X FAILED, queue size = Y
```

with

```
Enqueueing event X FAILED, queue size = Y; apparently no events were removed from this process's queue during the Z-second timeout period
```

**#3 - 11/14/2016 01:19 PM - Eric Flumerfelt**

- Target version set to 575

**#4 - 01/13/2017 03:46 PM - Eric Flumerfelt**

- Category set to Known Issues

- Target version deleted (575)

- Parent task set to #15000

**#5 - 11/12/2017 02:35 PM - John Freeman**

- Related to Idea #18210: Non-pathological low request rate results in error message added

**#6 - 03/23/2018 02:02 PM - John Freeman**

- Related to Feature #19475: Messages from CommandableFragmentGenerator should be associated with the fragment generator in question added

**#7 - 11/05/2019 09:09 AM - Eric Flumerfelt**

- Status changed from Assigned to Closed

Closing due to age. I believe that the specific messages mentioned here are no longer relevant, and we are always improving the contents of our error messages based on user feedback.