

artdaq Utilities - Bug #23318

DAQInterface should double-check its assumptions about what a process's logfile is

09/24/2019 01:00 PM - John Freeman

Status:	Reviewed	Start date:	09/24/2019
Priority:	Normal	Due date:	
Assignee:	John Freeman	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:		Spent time:	0.00 hour
Experiment:	-	Co-Assignees:	Eric Flumerfelt
Description			
<p>An interesting issue came up today. On sbn-daq01, in the run record for run 1705 (/daq/run_records/1705), the logfiles listed in the metadata.txt file were all wrong. Probing more deeply, it appears that no logfiles were actually produced by the artdaq processes for that run. While that's its own issue, it also highlighted an area of improvement for DAQInterface: DAQInterface assumes artdaq processes always successfully produce logfiles, so it will simply take the most recent logfile in the relevant directory (<logfile area>/<boardreader label>-<host name>-<port number>) to be the logfile for the process in question. Perhaps it could double check that the timestamp on the logfile makes sense; in the case of today's run 1705, it wound up pointing to logfiles dated from July.</p>			

Associated revisions

Revision b2dbcd2a - 10/01/2019 09:50 AM - John Freeman

JCF: Issue #23318: have DAQInterface throw an exception if it sees an expected logfile is too old (or is missing entirely)

Revision 0e141ddc - 10/01/2019 12:40 PM - John Freeman

JCF: Issue #23318: slight improvements to the output

History

#1 - 09/24/2019 03:54 PM - John Freeman

After discussion at today's specially-scheduled 2 PM meeting, it was generally agreed that the proper response for DAQInterface if it determines that a logfile from an artdaq process is not available is to refuse to run.

#2 - 09/24/2019 03:56 PM - John Freeman

Also: the **reason** logfiles weren't available for the run this morning on SBND is that the subdirectories to which artdaq writes its root files weren't ones to which the executor had write access. Eric pointed out at today's meeting that it's nontrivial for artdaq itself to figure this out, which is why determining if this problem exists is kicked up to the DAQInterface level.

#3 - 10/01/2019 12:45 PM - John Freeman

- % Done changed from 0 to 100

- Status changed from New to Resolved

This issue is resolved with commit 0e141ddc03aa92e845e8a496f4db6e479e9a9327 at the head of bugfix/23318_require_logfiles. To determine the logfile for a given artdaq process, DAQInterface previously accessed bash via Popen and listed the most recent logfile in the expected subdirectory. Now, it also checks to make sure that (A) a logfile exists, and (B) the logfile's modification time is after the beginning of the boot transition. If this isn't the case, it returns itself to the "stopped" state with an error message.

#4 - 10/22/2019 08:53 AM - Eric Flumerfelt

Code review. Tested by `cd daqlogs;chown root:root .;chown -R root:root *`.

#5 - 10/22/2019 08:53 AM - Eric Flumerfelt

- Status changed from Resolved to Reviewed

- Co-Assignees Eric Flumerfelt added