

art - Bug #18733

mixed file has events but can't read them

01/12/2018 01:42 PM - Raymond Culbertson

Status:	Closed	Start date:	01/12/2018
Priority:	Normal	Due date:	
Assignee:	Kyle Knoepfel	% Done:	100%
Category:	I/O	Estimated time:	0.00 hour
Target version:	2.09.06	Spent time:	2.00 hours
Occurs In:	2.09.04	Experiment:	Mu2e
Scope:	Internal	SSI Package:	art
Description			
A file FN=/pnfs/mu2e/scratch/users/rlc/dig.owner.val-ceMixDigi.dsconf.seq.art produced by a mixing job has events:			
<pre>> count_events \$FN /pnfs/mu2e/scratch/users/rlc/dig.owner.val-ceMixDigi.dsconf.seq.art 1 1 10 0 and products: > artProductSizes \$FN Number of entries: 10 Size Size/Entry Fraction Data Product Name (bytes) (bytes) 805199 80519.9 0.408 mu2e::StrawDigis_makeSD__ceMixDigi. 359470 35947.0 0.182 mu2e::StepPointMCs_detectorFilter_calori ... </pre>			
But when I run a job with a simple, stable module:			
<pre>> mu2e --trace -c Print/fcl/dumpDataProducts.fcl -s \$FN </pre>			
it finds no events:			
<pre>++ Job started +++open input file ++++finished: open input file /pnfs/mu2e/scratch/users/rlc/dig.owner.val-ceMixDigi.dsconf.seq.art +++close output file from dump ++++finished close output file <none> from dump +++close input file ... Art has completed and will exit with status 0. </pre>			
I can produce and read non-mixed files in this build.			
To reproduce source /cvmfs/mu2e.opensciencegrid.org/setupmu2e-art.sh git clone http://cdcv.s.fnal.gov/projects/mu2eoffline/Offline.git cd Offline git checkout -b temp 72f3b6b32814 source setup.sh scons -j 20 >& build.log mu2e --trace -c Print/fcl/dumpDataProducts.fcl -s \$FN			
Related issues:			
Related to art - Bug #18726: Mu2e GenEventCount not found		Closed	01/11/2018

History

#1 - 01/12/2018 02:08 PM - Kyle Knoepfel

The file looks malformed. Was it produced with version 2.09.04?

#2 - 01/12/2018 02:19 PM - Kyle Knoepfel

- Status changed from New to Feedback

#3 - 01/12/2018 02:20 PM - Raymond Culbertson

Yes, the file is mixed in v2_09_04, from two much older files.
There was no reported error in producing the file.
The same mixing job worked in v2_07_03.

To reproduce the mixing:

```
scp ${USER}@mu2egpvm01:/mu2e/app/users/rlc/dev/Offline/Validation/fcl/ceMixDigi.fcl Validation/fcl
scp ${USER}@mu2egpvm01:/mu2e/app/users/rlc/dev/Offline/Validation/fcl/prolog.fcl Validation/fcl
mu2e -c Validation/fcl/ceMixDigi.fcl -s
/pnfs/mu2e/tape/phy-sim/sim/mu2e/cd3-beam-g4s4-detconversion/v566/1d/ab/sim.mu2e.cd3-beam-g4s4-detconversion.v566.004001_00006825.art
-n 10
```

#4 - 01/12/2018 02:26 PM - Kyle Knoepfel

Okay, thanks for the instructions to reproduce the file. Andrei stopped by yesterday with a problem *that looks similar*--his problem was fixed with art [2.09.06](#) (tagged this morning). I'd like to see if this error is fixed also with art 2.09.06.

#5 - 01/12/2018 02:26 PM - Kyle Knoepfel

- Category set to I/O
- Status changed from Feedback to Assigned
- Assignee set to Kyle Knoepfel
- SSI Package art added

#6 - 01/12/2018 04:01 PM - Kyle Knoepfel

- Status changed from Assigned to Resolved
- Target version set to 2.09.06
- % Done changed from 0 to 100

It turns out the error encountered is a symptom of the same error that was exposed by issue [#18726](#). I am able to produce the malformed file in art [2.09.04](#), and I verify that updating to art [2.09.06](#) will allow mixed-event files to be correctly formed, thus resolving this bug.

Our apologies for the inconvenience.

#7 - 01/12/2018 04:01 PM - Kyle Knoepfel

- Description updated

#8 - 01/18/2018 02:11 PM - Kyle Knoepfel

- Related to Bug #18726: Mu2e GenEventCount not found added

#9 - 01/18/2018 02:11 PM - Kyle Knoepfel

- Status changed from Resolved to Closed