

art - Bug #6303

Event Mixer

05/19/2014 02:05 PM - Nathan Mayer

Status:	Remission	Start date:	05/19/2014
Priority:	Normal	Due date:	
Assignee:	Christopher Green	% Done:	0%
Category:	I/O	Estimated time:	0.00 hour
Target version:		Spent time:	0.00 hour
Occurs In:		Experiment:	NOvA
Scope:	Internal	SSI Package:	art

Description

When running the event mixer we get the following error message from ART:

```
cet::exception caught in art
---- EventProcessorFailure BEGIN
An exception occurred during current event processing
---- ScheduleExecutionFailure BEGIN
ProcessingStopped.

---- LogicError BEGIN
    MixHelper could not find entry number 1848 in its own lookup table.
    cet::exception going through module MixSimEvents/singleMixer run: 1 subRun: 7 event: 1
---- LogicError END
    Exception going through path p1
---- ScheduleExecutionFailure END
    cet::exception caught in EventProcessor and rethrown
---- EventProcessorFailure END
%MSG
```

We'd like to understand better what this message telling us and how to avoid it in the future. This is for art version 1.08.10.

History

#1 - 05/20/2014 10:36 AM - Christopher Green

- Category set to I/O
- Status changed from New to Feedback
- Assignee set to Christopher Green
- SSI Package art added
- SSI Package deleted ()

Could you tell us please, what art version and readMode (SEQUENTIAL, RANDOM_REPLACE, RANDOM_LIM_REPLACE or RANDOM_NO_REPLACE) you were using when you observed this error? It would also help to know exactly how many events were in the secondary file(s) you were reading at the time. I'm not going to change the tracker designation just yet but on first blush this smells like an off-by-one error in the secondary event selection code for one of the read modes.

#2 - 06/10/2014 10:50 AM - Nathan Mayer

The readMode just says random. It's for art version 1.08.10 as I said above. There were approximately 36000 events in the secondary file. And a poison mean of 28.65 events for the secondaries.

#3 - 06/10/2014 11:34 AM - Christopher Green

Can you point me to this date file, please? I'm not seeing any evidence of off-by-one behavior in the code for the mode (RANDOM, a.k.a. RANDOM_REPLACE), so what I'm left with is wondering whether that entry is actually missing from the file for reasons unknown. Anything you can tell me about how the file was generated would also be helpful.

#4 - 06/10/2014 12:00 PM - Christopher Green

Please also attach or paste the output of ART_DEBUG_CONFIG=1.

#5 - 06/10/2014 12:04 PM - Nathan Mayer

That's isn't going to be possible. The secondary files that are created are transitory. The secondary file is created from 40 random files that get concatenated together. The resultant concatenated file is destroyed on the worker node. I'll try to replicate this error and retrieve the concatenated files.

#6 - 06/10/2014 12:43 PM - Christopher Green

Why are you concatenating the files rather than listing them all in the mix filter configuration? With the different random modes (RANDOM_LIM_REPLACE and RANDOM_NO_REPLACE, for example) it seems like the number of events in a file is now irrelevant.

A change was recently made to the mix helper that **may** have removed the chance for this to happen (for release with [1.10.00](#)), but since we don't know exactly what the circumstances were I would propose we put this ticket into remission status until you are able to duplicate it with the upcoming release.

#7 - 06/10/2014 01:31 PM - Nathan Mayer

Ok, that sounds fine. We'll keep working on this end.

#8 - 06/11/2014 08:06 AM - Christopher Green

- *Tracker changed from Support to Bug*

#9 - 06/11/2014 08:06 AM - Christopher Green

- *Status changed from Feedback to Remission*

#10 - 04/17/2015 10:24 AM - Kyle Knoepfel

- *Target version set to 521*

#11 - 10/23/2017 12:12 PM - Kyle Knoepfel

- *Target version deleted (521)*