

art - Bug #18384

Seg fault copying zero-event artroot file.

11/27/2017 05:14 PM - Herbert Greenlee

Status:	Closed	Start date:	11/27/2017
Priority:	Normal	Due date:	
Assignee:	Kyle Knoepfel	% Done:	100%
Category:	Infrastructure	Estimated time:	0.00 hour
Target version:	2.05.01	Spent time:	4.00 hours
Occurs In:	2.05.00	Experiment:	MicroBooNE
Scope:	Internal	SSI Package:	art

Description

I get a seg fault from inside art when copying an artroot file with zero events.

```
$ lar -c copy.fcl -s /uboone/data/users/uboonepro/crash_zero.root
27-Nov-2017 17:06:36 CST Opened input file "/uboone/data/users/uboonepro/crash_zero.root"
%MSG-i FastCloning: RootOutput.out1@Construction 27-Nov-2017 17:06:36 CST ModuleConstruction
Initial fast cloning configuration (from default): true
%MSG
27-Nov-2017 17:06:36 CST Opened output file with pattern "merged.root"
%MSG-w FastCloning: PostBeginSubRun 27-Nov-2017 17:06:36 CST run: 6551 subRun: 212
Fast cloning deactivated for this input file due to information in FileBlock.
%MSG
Segmentation fault
```

The zero-event file was created with art v2.05.00. Crash happens with art v2_05.00 as well as art v2_08_04.

Crash happens in RootOutputFile.cc.

```
#0 0x00007fff5433e2f in (anonymous namespace)::maybeInvalidateRangeSet (bt=art::InSubRun, principalRS=..., productRS=...) at
/scratch/workspace/nu-release-build/v2_06_02/s43-e10/prof/build/art/v2_05_00/src/art/Framework/IO/Root/RootOutputFile.cc:227
```

The input file is not obviously corrupted, and was successfully written by art from an input file with a nonzero number of events.

History

#1 - 11/28/2017 08:55 AM - Kyle Knoepfel

- Status changed from New to Accepted

#2 - 11/28/2017 02:27 PM - Kyle Knoepfel

- Category set to Infrastructure

- Status changed from Accepted to Assigned

- Assignee set to Kyle Knoepfel

Herb, the problem is understood, and the solution is straightforward. Is it sufficient to issue a bug-fix release for art 2.09? Or is a 2.08 bug-fix release required?

#3 - 11/28/2017 02:55 PM - Herbert Greenlee

I'd prefer a patch for e10 (v2_05_xx) and development head (v2_09 is acceptable).

#4 - 11/28/2017 03:49 PM - Kyle Knoepfel

We prefer not to backport all the way to art v2_05 since that leaves a lot of versions in between without the fix. Is there a reason why art v2_08 would not be sufficient?

#5 - 12/04/2017 03:27 PM - Kyle Knoepfel

- Status changed from Assigned to Resolved

- Target version set to 2.05.01

- % Done changed from 0 to 100
- Occurs In 2.05.00 added
- Occurs In deleted (2.08.04)
- SSI Package art added

Based on discussions with Herb, we will provide an art 2.05 bug-fix release with the understanding that *art* series 2.06, 2.07, and 2.08 will not automatically include the fix. A bug-fix release from any of those series can be requested if necessary.

Fix implemented with commits [canvas:fd47f45](#) and [art:1440031](#).

#6 - 12/05/2017 10:48 AM - Kyle Knoepfel

- Status changed from Resolved to Closed