

art - Support #17751

a problem with debugging art v2_07-based executables with gdb

09/20/2017 01:48 PM - Pavel Murat

Status:	Closed	Start date:	09/20/2017
Priority:	Normal	Due date:	
Assignee:	Christopher Green	% Done:	100%
Category:	Third Party	Estimated time:	4.00 hours
Target version:		Spent time:	6.00 hours
Scope:	Internal	SSI Package:	
Experiment:	Mu2e		

Description

Dear art experts,

I wonder if the issue below has been reported - turns out that GDB can't parse symbols from one of art v2_07 shared libraries. From what I can see, the net outcome is that GDB can't recover, even if let continue, and, for example, fails to set break points.

-regars, Pasha

```
murat@mu2egpvm04:/mu2e/app/users/murat/v6_3_1>which gdb
/cvmfs/mu2e.opensciencegrid.org/artexternals/gdb/v7_12/Linux64bit+2.6-2.12/bin/gdb
murat@mu2egpvm04:/mu2e/app/users/murat/v6_3_1>which art
/cvmfs/mu2e.opensciencegrid.org/artexternals/art/v2_07_03/slf6.x86_64.e14.debug/bin/art
murat@mu2egpvm04:/mu2e/app/users/murat/v6_3_1>gdb
```

GNU gdb (GDB) 7.12

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and "show warranty" for details.

This GDB was configured as "x86_64-pc-linux-gnu".

Type "show configuration" for configuration details.

For bug reporting instructions, please see:

<<http://www.gnu.org/software/gdb/bugs/>>.

Find the GDB manual and other documentation resources online at:

<<http://www.gnu.org/software/gdb/documentation/>>.

For help, type "help".

Type "apropos word" to search for commands related to "word".

(gdb) file

```
/cvmfs/mu2e.opensciencegrid.org/artexternals/art/v2_07_03/slf6.x86_64.e14.debug/lib/libart_Framework_Services_System_Trigger
NamesService_service.so
```

Reading symbols from

```
/cvmfs/mu2e.opensciencegrid.org/artexternals/art/v2_07_03/slf6.x86_64.e14.debug/lib/libart_Framework_Services_System_Trigger
NamesService_service.so.../home/greenc/work/cet-is/test-products/gdb/v7_12/src/gdb-7.12/gdb/cp-support.c:1600:
```

demangler-warning: unable to demangle

```
'_ZSt7forwardIRZN3art19TriggerNamesServiceC4ERKN5fhicl12ParameterSetERKSt6vectorINSt7__cxx1112basic_stringIcSt11char
_traitsIcESaIcEEEEsaISC_EEEUIRT_mRKT0_E_EOSH_RNSt16remove_referenceIsh_E4typeE' (demangler failed with signal 11)
```

Unable to dump core, use `ulimit -c unlimited' before executing GDB next time.

```
/home/greenc/work/cet-is/test-products/gdb/v7_12/src/gdb-7.12/gdb/cp-support.c:1615: demangler-warning: unable to demangle
```

```
'_ZSt7forwardIRZN3art19TriggerNamesServiceC4ERKN5fhicl12ParameterSetERKSt6vectorINSt7__cxx1112basic_stringIcSt11char
_traitsIcESaIcEEEEsaISC_EEEUIRT_mRKT0_E_EOSH_RNSt16remove_referenceIsh_E4typeE' (demangler failed with signal 11)
```

A problem internal to GDB has been detected,
further debugging may prove unreliable.

Related issues:

Has duplicate art - Support #17752: art 2.8.3 generating a bus error under GD...

Closed

09/20/2017

Has duplicate art - Support #19287: un-demangleable symbol

Closed

03/06/2018

History

#1 - 09/25/2017 11:24 AM - Kyle Knoepfel

- *Tracker changed from Bug to Support*
- *Category set to Third Party*
- *Status changed from New to Assigned*
- *Assignee set to Christopher Green*
- *Estimated time set to 4.00 h*

We are working to provide a solution with GDB 8.0, which will work on SLF6 and SL7.

#2 - 09/25/2017 11:25 AM - Kyle Knoepfel

- *Has duplicate Support #17752: art 2.8.3 generating a bus error under GDB (SLF6) added*

#3 - 09/26/2017 08:11 AM - Christopher Green

- *Status changed from Assigned to Resolved*
- *% Done changed from 0 to 100*

Please try https://scisoft.fnal.gov/scisoft/packages/gdb/v8_0_1/gdb-8.0.1-slf6-x86_64.tar.bz2, and let us know if it addresses your problem.

#4 - 10/02/2017 11:53 AM - Kyle Knoepfel

- *Status changed from Resolved to Closed*

#5 - 03/07/2018 08:17 AM - Kyle Knoepfel

- *Is duplicate of Support #19287: un-demangleable symbol added*

#6 - 03/07/2018 08:17 AM - Kyle Knoepfel

- *Is duplicate of deleted (Support #19287: un-demangleable symbol)*

#7 - 03/07/2018 08:18 AM - Kyle Knoepfel

- *Has duplicate Support #19287: un-demangleable symbol added*