

SciSoft - Bug #23325

Root v6_16_00 not working in CentOS 7

09/25/2019 09:56 AM - Cathal Sweeney

Status:	Closed	Start date:	09/25/2019
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:		Spent time:	0.00 hour
Description			
Root v6_16_00 Linux64bit+3.10-2.17-e17-{debug prof} gives the following error upon start-up:			
root.exe: /scratch/workspace/canvas-products/vdevelop-/SLF7/e17-debug/build/root/v6_16_00/source/root-6.16.00/interpreter/llvm/src/tools/clang/include/clang/Serialization/Module.h:72: clang::serialization::InputFile::InputFile(const clang::FileEntry*, bool, bool): Assertion <code>!(isOverridden && isOutOfDate) && "an overridden cannot be out-of-date"</code> failed.			
when using the following OS:			
Distributor ID: CentOS Description: CentOS Linux release 7.7.1908 (Core) Release: 7.7.1908 Codename: Core			
It seems to run without issue on the following SL7 distribution:			
Distributor ID: Scientific Description: Scientific Linux release 7.6 (Nitrogen) Release: 7.6 Codename: Nitrogen			
Related issues:			
Related to SciSoft - Support #25050: ROOT v6_16_00 error		Closed	10/05/2020

History

#1 - 09/25/2019 09:59 AM - Eric Flumerfelt

This is a known issue: <https://sft.its.cern.ch/jira/browse/ROOT-10288>

One possible workaround is to rebuild root v6_16_00 on the target machine.

```
cd <products directory>
```

```
curl https://scisoft.fnal.gov/scisoft/packages/root/v6_16_00/root-6.16.00-source.tar.bz2|tar -jxf -  
./root/v6_16_00/build_root.sh $PWD e17 debug
```

#2 - 09/25/2019 10:02 AM - Christopher Backhouse

Does that issue imply that if we can get the SL7 copy of byteswap.h earlier in the include path than the system one it could work around the problem?

#3 - 09/25/2019 10:07 AM - Kyle Knoepfel

Chris, it may fix the problem, assuming the timestamp for that header is okay. But there are other headers that may have the same issue. Best bet is to just rebuild on the target machine.

#4 - 09/30/2019 10:40 AM - Kyle Knoepfel

- Status changed from New to Feedback

Are you able to rebuild on the target machine?

#5 - 09/30/2019 10:58 AM - Christopher Backhouse

We're using a ups version of root, ultimately the one setup as a dependency of art, so building our own root is not very convenient in comparison.

#6 - 10/07/2019 10:37 AM - Christopher Green

Unfortunately, rebuilding ROOT on a CentOS or SL 7.7 machine is really the only sustainable option. SL 7.7 is currently in testing. When accepted, upgrading Jenkins machines to use it will be a solution, but not a short-timescale one. We can give details on how to do a practically-turnkey ROOT build on your system (or a similarly configured one) to produce a locally-built ROOT UPS package, if this would work for you. Build time would be 15-60 minutes, on a relatively-capable multi-code machine.

#7 - 10/07/2019 11:54 AM - Christopher Green

Please note: Eric's two-line instruction above is most of the way there. Assuming you wish to build a ROOT UPS product in a temporary place and then install it elsewhere:

1. Ensure the relevant product stack is installed and accessible via PRODUCTS.
2. Make a temporary products area:

```
mkdir product-tmp
cd product-tmp
```

3. Initialize it from an existing UPS area:

```
tar -C ${PRODUCTS%:*} -c .upsfiles | tar xv
```

4. Obtain the correct source tarball:

```
curl -O -J -L --fail https://scisoft.fnal.gov/scisoft/packages/root/v6_16_00/root-6.16.00-source.tar.bz2 |
\
tar xj
```

5. ...and build:

```
./root/v6_16_00/build_root.sh e17 debug tar
```

6. Unwind the tarball in the location from which you wish to use it (removing the existing build first if necessary) and then remove product-tmp.

Building in a temporary area and then installing the tarball will take care of removing intermediate build products which are not part of the final build (object files, etc., etc.).

#8 - 10/28/2019 10:37 AM - Lynn Garren

Were you able to resolve this issue using the instructions above?

#9 - 10/28/2019 01:16 PM - Cathal Sweeney

So it turns out that, while it would be nice to have this problem fixed, it much easier to just work from a different machine running on a compatible OS. I have not tried the instructions above. If it would be useful for you to check that the above works then I am happy to do so, otherwise I think NOvA are happy to continue with the build of ROOT we currently have.

#10 - 11/04/2019 10:23 AM - Kyle Knoepfel

- Status changed from Feedback to Closed

Thanks for the feedback, we will close this issue.

#11 - 10/06/2020 09:34 AM - Kyle Knoepfel

- Related to Support #25050: ROOT v6_16_00 error added