New issue

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Old gcc "Value too large for defined data type" error #7175

Closed · 1 of 2 tasks · **lcavalli** opened this issue on Jul 14, 2021 · 2 comments

lcavalli commented on Jul 14, 2021

Windows Build Number

Microsoft Windows [Versione 10.0.19043.1110]

WSL Version

- ☑ WSL 2
- ☐ WSL 1

Kernel Version

Linux version 5.4.72-microsoft-standard-WSL2

Distro Version

Arch Linux

Other Software

Docker version 20.10.7, build f0df350 (Docker Desktop for Windows)

Repro Steps

I have a quite old SPARC CPU (Leon) cross compiler toolchain based on GCC 4.4.2 (32 bit version). I create a docker image based on i386/debian:bullseye-20210621-slim and I can map a local folder to a folder in the docker image and execute a Makefile script. The native folder with my project source tree is into an NTFS Windows 10 filesystem, mounted to /mnt/c/<...snip...> inside WSL2. When GCC is executed the "Value too large for defined data type" error messgae is shown:

```
root@f43ac2c97451:/build# make
make[1]: Entering directory '/build/XxxXX'
Compiling src/startup.S
/opt/sparc-elf-4.4.2/bin/sparc-elf-gcc -ggdb -Wall -mtune=ut699 -mv8 -mfpu -nostdinc -fno-builtin -mno-app-regs -fno-common
-fno-strict-aliasing -DMHZ=40 -I./../Common -O2 -c -o obj/startup.o src/startup.S
cc1: error: ./../Common: Value too large for defined data type
cc1: error: src/startup.S: Value too large for defined data type
make[1]: *** [Makefile:69: startup.o] Error 1
make[1]: Leaving directory '/build/XxxXX'
make: *** [Makefile:14: default] Error 2
```

I then tried to rebuild the docker image from a 64 bit debian (including i686 libc libraries to execute the toolchain) but the behaviuor was the very same as above.

After a google search it seems that the problem may be related to mounting options of native filesystem into WSL2.

I finally copied my whole project source tree into my home folder under WSL2 (ext4 in a vhdx image) and executed the docker image from there. The Makefile script completes without any error.

I have found that the issue #3472 is similar but it was closed without a clear solution.

Expected Behavior

GCC executes without error messages.

Actual Behavior

GCC stops with "Value too large for defined data type" error message.

Diagnostic Logs

No response

0xbadfca11 commented on Jul 15, 2021

You need to build the entire 32-bit toolchain you are using with _FILE_OFFSET_BITS=64.

> https://www.mjr19.org.uk/sw/inodes64.html

❤ 1

lcavalli commented on Jul 16, 2021 Author

Made a quick test with the LD_PRELOAD hack described in the link and it worked. Recompiling the toolchain _FILE_OFFSET_BITS=64 is the way to go.
Thank you.

lcavalli closed this as completed on Jul 16, 2021

Assignees

No one assigned

Labels

None yet

Projects

None yet

Milestone

No milestone

Development

No branches or pull requests

2 participants