Subject: Dwarf debugger - developer needed :)
Posted by mirek on Tue, 14 Jul 2020 08:48:47 GMT
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After implementing MacOS and having CLANG for windows, I think now the one last large piece missing is better debugger for DWARF targets (that means POSIX and also should improve CLANG debugging).

In practice, it means virtualizing current Pdb debugger a bit to allow it read DWARF debug info, in fact only about 4 functions are needed and then adding POSIX debugging API as #ifdef alternative to windows one (they are not completely dissimilar, so this part should be relatively easy).

DWARF part is somewhat tedious. Not sure whether to pick one of libraries, perhaps adapt LLDB code or go the hard path and reimplement everything...

I will dive into this right after 2020.2 release, but perhaps some brave programmer would like to look into it too?

Mirek

Subject: Re: Dwarf debugger - developer needed :)
Posted by Slade on Tue, 05 May 2026 23:58:32 GMT
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Is this what you had in mind, https://github.com/SladeRich/ultimatepp/tree/Dwarf-Implement ation ? If it is of value you can cherry pick whatever you like.

Uses
libelf-dev, libdw-dev, libunwind-dev, and libcapstone-dev

Known issues
Debugging in Linux Mint the debugee GUI applications does not start up but remain in a hung state. This occurs is when PTRACE_SETOPTIONS enables multithreading monitoring, it will start when only debugging the main thread. (This is not a problem with Raspberry Pi 5 BookWork).
Also can not extract global variable symbol value, but better knowledge of Dwarf/ELF should be able to solve this.

Note I am not a expert in Dwarf or Linux, not that that stops me.

Slade