Subject: How to inspect memory at pointer-address while debugging
Posted by slashupp on Sat, 29 Jun 2019 08:29:51 GMT
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Am trying to resolve a segfault.
Debugging, I get a pointer-value that I need to look at the data it
points to so I can try locate it in my code.
How can I display the block of memory it points to?

Subject: Re: How to inspect memory at pointer-address while debugging
Posted by mirek on Sat, 29 Jun 2019 22:26:19 GMT
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slashupp wrote on Sat, 29 June 2019 10:29Am trying to resolve a segfault.
Debugging, I get a pointer-value that I need to look at the data it
points to so I can try locate it in my code.
How can I display the block of memory it points to?

Right-click the watch/auto line with ptr value, "Memory at...":

Subject: Re: How to inspect memory at pointer-address while debugging
Posted by slashupp on Sun, 30 Jun 2019 08:12:16 GMT
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hi mirek

I use Linux (Devuan/Debian)

Quote:Right-click the watch/auto line with ptr value, "Memory at...":

R-click shows only "Insert / Edit / Delete"-options in Watches-tab,
no effect when I R-click in Auto/Locals-tabs

Is there some setting I need to change, add something somewhere, an option I need to tick?

PS: I see this "Memory at" is in Pdb.h which depends on PLATFORM_WIN32 (in Debuggers.h line 115)
Is it not available for Linux?

Subject: Re: How to inspect memory at pointer-address while debugging
Posted by mirek on Sun, 30 Jun 2019 08:26:28 GMT
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slashupp wrote on Sun, 30 June 2019 10:12hi mirek

I use Linux (Devuan/Debian)

Quote:Right-click the watch/auto line with ptr value, "Memory at...":

R-click shows only "Insert / Edit / Delete"-options in Watches-tab,
no effect when I R-click in Auto/Locals-tabs

Is there some setting I need to change, add something somewhere, an option I need to tick?

PS: I see this "Memory at" is in Pdb.h which depends on PLATFORM_WIN32 (in Debuggers.h line 115)
Is it not available for Linux?

I see, sorry, you have not mentioned what system you use. That is for MSVC...

Mirek

Subject: Re: How to inspect memory at pointer-address while debugging
Posted by slashupp on Sun, 30 Jun 2019 09:16:26 GMT
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Any chance of getting this for Linux as well?
Or possible workaround so I can display the memory-content for the pointer?

Subject: Re: How to inspect memory at pointer-address while debugging
Posted by mirek on Sun, 30 Jun 2019 15:44:04 GMT
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slashupp wrote on Sun, 30 June 2019 11:16
Any chance of getting this for Linux as well?

Definitely.

Quote:
Or possible workaround so I can display the memory-content for the pointer?

Well, you can always run gdb commandline...

Mirek

Subject: Re: How to inspect memory at pointer-address while debugging
Posted by slashupp on Fri, 05 Jul 2019 14:11:07 GMT
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Eventually found the cause for my segfault..
I used three global string-vars that got set by some classes and used elsewhere
for context-data.
For some reason the system tried to free their memory twice (found by single-stepping with gdb)
I moved them to their own class and used getter/setters for access and passed a pointer to this class around, and the segfault went away.
Took days to find & fix...
Lesson learned: try to avoid global variables!
Hope this will help someone with similar symptoms

Subject: Re: How to inspect memory at pointer-address while debugging
Posted by mirek on Sat, 06 Jul 2019 06:38:51 GMT
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slashupp wrote on Fri, 05 July 2019 16:11Eventually found the cause for my segfault..
I used three global string-vars that got set by some classes and used elsewhere
for context-data.
For some reason the system tried to free their memory twice (found by single-stepping with gdb)
I moved them to their own class and used getter/setters for access and passed a pointer to this class around, and the segfault went away.
Took days to find & fix...
Lesson learned: try to avoid global variables!
Hope this will help someone with similar symptoms

Interesting. Usually it works fine and it would be good to know exact circumstances....

Mirek

Subject: Re: How to inspect memory at pointer-address while debugging
Posted by mirek on Fri, 19 Jul 2019 12:17:06 GMT
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slashupp wrote on Sun, 30 June 2019 11:16
Any chance of getting this for Linux as well?
Or possible workaround so I can display the memory-content for the pointer?

It is now implemented for GDB (and that way linux) too.

Mirek

Subject: Re: How to inspect memory at pointer-address while debugging
Posted by slashupp on Sat, 20 Jul 2019 08:20:03 GMT
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great stuff! going to download latest svn from nightly builds & test
thx mirek

Subject: Re: How to inspect memory at pointer-address while debugging
Posted by slashupp on Sat, 20 Jul 2019 10:25:22 GMT
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crashes theide with segfault : something..??can't see (behind xmessage: "Invalid memory access") "too big"

I suggest a smaller buffer to be used, with size default say about 128 bytes, and configurable in 'Settings'. It's rare to want to see entire buffer at pointer.

Also maybe make the buffer scrollable say 16 bytes at a time both forward and backward of the pointer's address

Subject: Re: How to inspect memory at pointer-address while debugging
Posted by mirek on Sun, 21 Jul 2019 09:20:35 GMT
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Found and fixed (hopefully...)

Subject: Re: How to inspect memory at pointer-address while debugging
Posted by slashupp on Mon, 22 Jul 2019 05:39:29 GMT
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nope, still same crash

I've checked-out using subversion & copied the relevant directories to my $HOME/upp since the tar-ball is still at 13502 which I already use

Subject: Re: How to inspect memory at pointer-address while debugging
Posted by mirek on Mon, 22 Jul 2019 12:00:45 GMT
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slashupp wrote on Mon, 22 July 2019 07:39

nope, still same crash

It works for me (checked linux and mingw)....

Quote:
I've checked-out using subversion & copied the relevant directories to my $HOME/upp
since the tar-ball is still at 13502 which I already use

There is handy function to checkout and configure the trunk - right click Assembly list...

Well, if this does not work with recompiled theide, I will need more details...

Mirek

Subject: Re: How to inspect memory at pointer-address while debugging
Posted by slashupp on Mon, 22 Jul 2019 15:25:51 GMT
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Quote:There is handy function to checkout and configure the trunk - right click Assembly list...

Where is this 'Assembly list...' that I need to right-click?
(I did "svn checkout svn://www.ultimatepp.org/upp/trunk/" to get the (current?) version I used)

I'd rather use the to-be-updated tarball in the Nightly builds - it is much less of a hassle to use than svn directly.

Subject: Re: How to inspect memory at pointer-address while debugging
Posted by mirek on Mon, 22 Jul 2019 16:37:57 GMT
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slashupp wrote on Mon, 22 July 2019 17:25Quote:There is handy function to checkout and configure the trunk - right click Assembly list...

Where is this 'Assembly list...' that I need to right-click?
(I did "svn checkout svn://www.ultimatepp.org/upp/trunk/" to get the (current?) version I used)

I'd rather use the to-be-updated tarball in the Nightly builds - it is much less of a hassle to use than svn directly.

When you start TheIDE, there is "Assembly" list in the left of package selection dialog.

Subject: Re: How to inspect memory at pointer-address while debugging
Posted by slashupp on Tue, 23 Jul 2019 09:21:58 GMT
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Quote:When you start TheIDE, there is "Assembly" list in the left of package selection dialog.

Ah. It's in Setup-menu of ide as well.. will experiment

SHIT!!! My main monitor just now went red for a couple of seconds and then blank, and does that now continuously when I turn it on: show all in red for a few sec's then dies
it's a Samsung P2450, using the second monitor (21" Dell)
Can the monitor be fixed? or is it trash now?
Anyone know of sites with info on repairing this kind of thing?

Subject: Re: How to inspect memory at pointer-address while debugging
Posted by slashupp on Tue, 23 Jul 2019 12:26:06 GMT
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got 13505, tested and all is working
thx