# Subject: Problem Launching stable IDE on OpenBSD 4.8-stable Posted by Col. Builder on Wed, 20 Apr 2011 03:39:07 GMT

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I've just spent the afternoon getting the IDE building on an installation of OpenBSD4.8 (freshly updated to -stable). But when I launch the IDE, all I get is a message dialog saying "Invalid Memory Access".

I had to tweak the uppsrc/Makefile to account for many of my headers and libraries being under /usr/local/include, /usr/local/lib. Only some of the libs & headers on my system are under /usr/include & /usr/lib that the makefile assumes everything is under. These folder choices were made by the default behavior of the OpenBSD package system.

Has anyone else had similar problems?

Subject: Re: Problem Launching stable IDE on OpenBSD 4.8-stable Posted by dolik.rce on Wed, 20 Apr 2011 06:35:12 GMT

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Hi Col. Builder, Welcome to the forum

Col. Builder wrote on Wed, 20 April 2011 05:39I had to tweak the uppsrc/Makefile to account for many of my headers and libraries being under /usr/local/include, /usr/local/lib. I guess I can add those folders to the Makefile defaults to be more OpenBSD friendly...

As for the invalid memory access, it is hard to tell... Could you try to run it in debugger and post a backtrace when the error happens? (You might need to recompile theide with -g in CFLAGS and tweak the ar invocation in AR variable to get executable with debugging symbols...).

Also you could try to compile some simpler apps from examples/tutorial/reference directory, to see how deep the problem lays. E.g. wc (this one uses Core only) and Days (just basic GUI), both are in examples directory.

Meanwhile, I'll try to install OpenBSD in virtual machine to see if I can reproduce the problem...

Best regards, Honza

Subject: Re: Problem Launching stable IDE on OpenBSD 4.8-stable Posted by masu on Wed, 20 Apr 2011 08:14:09 GMT

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You may have a look here:

http://www.ultimatepp.org/forum/index.php?t=msg&goto=767 2&&srch=openbsd#msg\_7672

I got to run TheIDE a long time ago under OpenBSD, but finally, I managed to get it running. I will try to recompile latest version ASAP.

If you intend to write multi-threaded programs, you should check if the shipped compiler (C++ libs) is now supporting thread local storage since U++ library heavily makes use of it.

Matthias

Subject: Re: Problem Launching stable IDE on OpenBSD 4.8-stable Posted by Col. Builder on Wed, 20 Apr 2011 21:01:46 GMT

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dolik.rce wrote on Tue, 19 April 2011 23:35Hi Col. Builder, Welcome to the forum

Col. Builder wrote on Wed, 20 April 2011 05:39I had to tweak the uppsrc/Makefile to account for many of my headers and libraries being under /usr/local/include, /usr/local/lib. I guess I can add those folders to the Makefile defaults to be more OpenBSD friendly...

As for the invalid memory access, it is hard to tell... Could you try to run it in debugger and post a backtrace when the error happens? (You might need to recompile theide with -g in CFLAGS and tweak the ar invocation in AR variable to get executable with debugging symbols...).

Also you could try to compile some simpler apps from examples/tutorial/reference directory, to see how deep the problem lays. E.g. wc (this one uses Core only) and Days (just basic GUI), both are in examples directory.

Meanwhile, I'll try to install OpenBSD in virtual machine to see if I can reproduce the problem...

Best regards,

Honza

Thanks for the welcome!

Here are the relevant lines of the makefile that I tweaked:

UPPOUT = \_out/

CINC = \

- -I./\
- -l/usr/local/include/freetype2 \
- -l/usr/local/include/gtk-2.0 \
- -l/usr/local/include/glib-2.0 \
- -l/usr/local/lib/glib-2.0/include \
- -l/usr/local/lib/gtk-2.0/include \

```
-l/usr/local/include/cairo \
-l/usr/local/include/pango-1.0 \
-I/usr/local/include/atk-1.0 \
-l/usr/local/include/gdk-pixbuf-2.0 \
-l/usr/local/include/gtk-2.0/gdk-pixbuf \
-l/usr/local/include/libpng \
-I/usr/include/freetype2 \
-l/usr/include/gtk-2.0 \
-l/usr/include/glib-2.0 \
-l/usr/lib/glib-2.0/include \
-l/usr/lib/atk-2.0/include \
-l/usr/include/cairo \
-l/usr/include/pango-1.0 \
-I/usr/include/atk-1.0 \
-l/usr/include/gdk-pixbuf-2.0 \
-l/usr/include/qtk-2.0/qdk-pixbuf \
-l/usr/include/libpng \
-I/usr/X11R6/include \
-I/usr/X11R6/include/freetype2 \
-I/usr/X11R6/include/gtk-2.0 \
-I/usr/X11R6/include/glib-2.0 \
-I/usr/X11R6/lib/glib-2.0/include \
-I/usr/X11R6/lib/gtk-2.0/include \
-I/usr/X11R6/include/cairo \
-I/usr/X11R6/include/pango-1.0 \
-I/usr/X11R6/include/atk-1.0 \
-I/usr/local/include \
-l/usr/include
#Macro = -DflagGUI -DflagGCC -DflagSHARED -DflagLINUX -DflagPOSIX
Macro = -DflagGUI -DflagGCC -DflagSHARED -DflagOPENBSD -DflagPOSIX
CC = c++
LINKER = \$(CC)
CFLAGS = -O3 -ffunction-sections -fdata-sections
CXXFLAGS = -O3 -ffunction-sections -fdata-sections
LDFLAGS = -WI,--gc-sections $(LINKOPTIONS)
#LIBPATH = -L"/usr/X11R6/lib" -L"/usr/lib"
LIBPATH = -L"/usr/X11R6/lib" -L"/usr/lib" -L"/usr/local/lib"
I don't know if the changes to Macro are needed, but they seemed appropriate since I'm not
running linux.
```

I'm not overly familiar with gdb/command-line-debugging, my experience comes from a long history ('89 to present) of IDE usage, mostly on Macs (Borland/Turbo C++, CodeWarrior, and a little bit of XCode). I might need a little bit to get up to speed on gdb. Hopefully I can get U++'s IDE up and running guickly on my system and I won't need to spend huge amounts of time on

mastering the command-line before I can start doing some useful stuff.

Anyway, I'll try to get a backtrace of the error. If I need to change the AR options, then I'll have to read up on that. So it might be a day or two before I can get back with one.

I'll also try building those other example projects you mentioned to see what gives.

(edited code section above to include changes to LIBPATH)

Subject: Re: Problem Launching stable IDE on OpenBSD 4.8-stable Posted by dolik.rce on Thu, 21 Apr 2011 05:36:22 GMT View Forum Message <> Reply to Message

Oh, I see, you are using the "release makefile" for theide (there is also one called "universal makefile", which compiles any package). The changes you did seem to be correct. I think you are just missing one more flag, BSD. The Macro variable should be something like Macro = -DflagGUI -DflagGCC -DflagSHARED -DflagBSD -DflagOPENBSD -DflagPOSIX Hopefully this will result into correctly compiled theide, so you will not need to use the debugger

Honza

Subject: Re: Problem Launching stable IDE on OpenBSD 4.8-stable Posted by Col. Builder on Thu, 21 Apr 2011 21:19:17 GMT View Forum Message <> Reply to Message

dolik.rce wrote on Wed, 20 April 2011 22:36Oh, I see, you are using the "release makefile" for theide (there is also one called "universal makefile", which compiles any package). The changes you did seem to be correct. I think you are just missing one more flag, BSD. The Macro variable should be something like Macro = -DflagGUI -DflagGCC -DflagSHARED -DflagBSD -DflagPOSIX

Hopefully this will result into correctly compiled theide, so you will not need to use the debugger

### Honza

OK, I'm doing a clean rebuild using the extra flag, we'll see of it fixes things (fingers crossed).

Where can I find the "universal makefile"? Would I need to grab sources out of version control instead of a tarball to get ahold of it? I just downloaded a source tarball of the stable U++ and that's what I'm currently working with.

And it's not debuggers per-se that I'm trying to avoid, it's just command-line stuff that gives me the heebie-jeebies.

# Subject: Re: Problem Launching stable IDE on OpenBSD 4.8-stable Posted by Col. Builder on Thu, 21 Apr 2011 21:58:19 GMT

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That extra flag didn't help any.

I still get the same message box: "Invalid Memory Access!"

I tried launching it from the commend line instead of by double-clicking, and this is what came back in the terminal window:

Invalid memory access!

<unknown>: Fatal IO error 35 (Resource temporarily unavailable) on X server :0.0.

Does this help any?

Subject: Re: Problem Launching stable IDE on OpenBSD 4.8-stable Posted by dolik.rce on Thu, 21 Apr 2011 22:17:59 GMT

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Hm, so it didn't help... Judging by the error message, it is something X related, but the message itself doesn't help much

Col. Builder wrote on Thu, 21 April 2011 23:19Where can I find the "universal makefile"? Would I need to grab sources out of version control instead of a tarball to get ahold of it? I just downloaded a source tarball of the stable U++ and that's what I'm currently working with.

The makefile is hidden in the SVN But don't worry, it can be easily retrieved from the google mirror: http://code.google.com/p/upp-mirror/source/browse/trunk/uppb ox/lpbuild/Makefile. As it's author, I must admit it is rather buggy lately... Also, I never tested it on OpenBSD (only on FreeBSD and Linux). If you decide to use it, note that it requires to be used with gmake. You can place it just about anywhere and then call (from within the same directory) like this:gmake PKG=ide FLAGS="GCC GUI SHARED OPENBSD" NESTS="/path/to/upp/uppsrc" You can also run just gmake or gmake help to see more about the options... Anyway, I guess that there is about 99% chance it will work the same or worse than the release makefile...

Honza

Subject: Re: Problem Launching stable IDE on OpenBSD 4.8-stable Posted by Col. Builder on Fri, 22 Apr 2011 21:25:55 GMT View Forum Message <> Reply to Message

dolik.rce wrote on Thu, 21 April 2011 15:17The makefile is hidden in the SVN But don't worry, it can be easily retrieved from the google mirror:

http://code.google.com/p/upp-mirror/source/browse/trunk/uppb ox/lpbuild/Makefile. As it's author, I must admit it is rather buggy lately... Also, I never tested it on OpenBSD (only on FreeBSD and

Linux). If you decide to use it, note that it requires to be used with gmake. You can place it just about anywhere and then call (from within the same directory) like this:gmake PKG=ide FLAGS="GCC GUI SHARED OPENBSD" NESTS="/path/to/upp/uppsrc" You can also run just gmake or gmake help to see more about the options... Anyway, I guess that there is about 99% chance it will work the same or worse than the release makefile...

#### Honza

I'd say your prediction was spot on:\$ gmake PKG=ide FLAGS="GCC GUI SHARED OPENBSD" NESTS="/home/joel/upp/uppsrc"

Using 1 parallel job ...

Parsing package files needed for ide ...

sed: RE error: invalid argument to regex routine

Segmentation fault (core dumped)

sed: RE error: invalid argument to regex routine

Segmentation fault (core dumped)

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sed: RE error: invalid argument to regex routine

Segmentation fault (core dumped)

sed: RE error: invalid argument to regex routine

Segmentation fault (core dumped)

sed: RE error: invalid argument to regex routine

Segmentation fault (core dumped)

sed: RE error: invalid argument to regex routine

Segmentation fault (core dumped)

Segmentation fault (core dumped)

Building package ide [TheIDE main package] (333 files in 29 packages, flags: GCC GUI MAIN OPENBSD POSIX SHARED)

Creating directory \_out/CtrlCore/GCC\_GUI\_OPENBSD\_POSIX\_SHARED/ ...

^C Compiling CtrlCore/CtrlCore.icpp (flags GCC GUI OPENBSD POSIX SHARED) [/333] ... gmake[1]: \*\*\* [\_out/CtrlCore/GCC\_GUI\_OPENBSD\_POSIX\_SHARED/CtrlCore.io] Error 130 gmake: [ide] Error 130 (ignored)

It seemed to lock up on creating that directory, so I ctrl-c'd it (as you can see) since sed had already core-dumped all over the directory anyway.

I'm going to go ahead with hand-making some per project/archive makefiles and see if that Days example file exhibits the same problems.

Subject: Re: Problem Launching stable IDE on OpenBSD 4.8-stable Posted by dolik.rce on Sat, 23 Apr 2011 07:27:04 GMT View Forum Message <> Reply to Message

I guess OpenBSD sed behaves a little different than ferrBSD one...

I downloaded OpenBSD 4.8 to install it in VirtualBox, but for some reason it won't boot no matter what I do :-/ I'll try few more times over the weekend... but since than, I don't have nothing much to advice you

Honza

Subject: Re: Problem Launching stable IDE on OpenBSD 4.8-stable Posted by dolik.rce on Sun, 24 Apr 2011 22:21:35 GMT View Forum Message <> Reply to Message

Good news, I finally managed to install OpenBSD in Qemu and after few unsuccesful tries I also compiled theide and reproduced the problem. Tomorrow I'll try to dig in deeper to see if I can figure out why does it crash...

Honza

Subject: Re: Problem Launching stable IDE on OpenBSD 4.8-stable Posted by Col. Builder on Mon, 25 Apr 2011 01:29:31 GMT View Forum Message <> Reply to Message

That is good news!

At least writing those per project/archive makefiles hasn't been a waste of time: I've been getting more familiar with the project layout/organization as a by-product.

Subject: Re: Problem Launching stable IDE on OpenBSD 4.8-stable Posted by dolik.rce on Mon, 25 Apr 2011 12:14:24 GMT

Col. Builder wrote on Mon, 25 April 2011 03:29At least writing those per project/archive makefiles hasn't been a waste of time: I've been getting more familiar with the project layout/organization as a by-product.

Do I understand correctly that you are using U++ without theide, just writing the makefiles by hand? If yes, you have my deep respect, I don't think anyone ever attempted to do that

Now the bad news... I suspect the GCC to be actually the cause of the problems. On OpenBSD the gcc 4.2.1 is used by default, which is known to cause trouble with U++. So far I wasn't able to succesfully install any other compiler (tried gcc 3.3.6, but it reports missing cc1plus). LLVM/Clang is next option, but first I have to figure out how to build the version 2.8 from ports (because IIRC 2.9 doesn't work very well with U++)...

If you have a better understanding of OpenBSD internals than me (and I'm sure you do, I'm learning everything on the way ) you can try to use some other compiler yourself.

Honza

Subject: Re: Problem Launching stable IDE on OpenBSD 4.8-stable Posted by dolik.rce on Mon, 25 Apr 2011 14:09:09 GMT View Forum Message <> Reply to Message

Good news again! I have a running theide

I'm just not sure yet what did the trick - I disabled a lot of things. So now I will start to enable them again one by one, checking what works and what not. This will take a while, the compilation in virtual machine takes quite some time. So for now, I will attach the makefile as is and update it later (probably tomorrow) in more optimal shape.

Honza

Subject: Re: Problem Launching stable IDE on OpenBSD 4.8-stable Posted by dolik.rce on Mon, 25 Apr 2011 14:17:03 GMT View Forum Message <> Reply to Message

Here is the Makefile (had to post it using Lynx from within the openbsd )

EDIT: Removed the attachment

Subject: Re: Problem Launching stable IDE on OpenBSD 4.8-stable Posted by dolik.rce on Mon, 25 Apr 2011 17:36:13 GMT

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So, here is the final Makefile

Actually all that was needed to be done was to use -O2 instead of -O3 optimizations...

Be aware, that theide compiled on OpenBSD suffers from the same bug as MacOS X version which causes the menus to be painted under the windows. To fix that change line 206 in uppsrc/CtrlCore/CtrlKbd.cpp from topwindow->SetWndForeground(); // cxl 2007-4-27toif(activate) topctrl->SetWndForeground(); // cxl 2007-4-27

I also noticed (and had to correct) some compile errors in ndisasm plugin, but since you already compiled theide without noticing that, you probably don't need to fix that...

Hopefully, now you can finally enjoy a working theide

Honza

## File Attachments

1) Makefile, downloaded 360 times

Subject: Re: Problem Launching stable IDE on OpenBSD 4.8-stable Posted by Col. Builder on Sat, 30 Apr 2011 00:25:51 GMT

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That did it!

I had to check out the latest sources from svn and copy it into uppsrc (it expected some modules not present in the source tarball). After I did that it went smooth as silk!

Thanks for all your assistance! I'm on my way to having a dev environment that isn't saddled with all that virally licensed junk.

Now I just need to get used to the ide's organization (I'm a hardcore CodeWarrior guy, so TheIDE feels fairly alien at the moment), and also get Ilvm/clang working as the compiler (I know... probably very non-trivial)!

Thanks Again!

Subject: Re: Problem Launching stable IDE on OpenBSD 4.8-stable Posted by dolik.rce on Sat, 30 Apr 2011 03:00:13 GMT

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Col. Builder wrote on Sat, 30 April 2011 02:25Now I just need to get used to the ide's organization (I'm a hardcore CodeWarrior guy, so TheIDE feels fairly alien at the moment), and also get Ilvm/clang working as the compiler (I know... probably very non-trivial)!

It's not easy to get used to different IDE, but when you do, you will probably be quite happy with theide

Setting up clang is piece of cake, at least version 2.8 (the newer 2.9 does not currently work with U++ ). You just make a copy of the GCC build method and change compiler name to "clang++" and it should work In worst case some include paths might be necessary to add, but that is still easy.

### Honza

PS: More precisely: clang 2.9 doesn't work with libc4.6 headers, maybe it would work with libc4.5, but I haven't tried... Also the situation on OpenBSD might be different from my experience on Linux...