Subject: Ultimate++ on Solaris 10 ia86
Posted by dmcgeoch on Mon, 21 Jul 2008 17:31:41 GMT
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I recently obtained access to a ai86 Solaris 10 system and was trying to find out the state of the Solaris port. There seems to be mention here and there, but no actual information. If someone could let me know what the basic requirements are, I would be happy to report my results on that platform. Thanks for your assistance.

Dave

Subject: Re: Ultimate++ on Solaris 10 ia86
Posted by mirek on Mon, 21 Jul 2008 17:44:22 GMT
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dmcgeoch wrote on Mon, 21 July 2008 13:31I recently obtained access to a ai86 Solaris 10 system and was trying to find out the state of the Solaris port. There seems to be mention here and there, but no actual information. If someone could let me know what the basic requirements are, I would be happy to report my results on that platform. Thanks for your assistance.

Dave

Well, if there is libxft, there should be little problem.

Mirek

Subject: Re: Ultimate++ on Solaris 10 ia86
Posted by dmcgeoch on Tue, 22 Jul 2008 11:55:19 GMT
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I was wondering if there were any instructions/tips for performing a clean install of Ultimate++. Currently the only thing on the Solaris box is Sun Studio. What I wanted to know was where is a good starting point. As far as I can tell, the instructions that I have seen all require a working copy of TheIDE in order to build TheIDE.

Subject: Re: Ultimate++ on Solaris 10 ia86
Posted by dmcgeoch on Thu, 24 Jul 2008 10:58:43 GMT
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I guess I wasn't clear in what I was asking for. I was hoping that someone who had previously ported Ultimate++ to another hardware/OS platform, could give me some pointers on how to build TheIDE without having an existing binary for TheIDE. I located an old (602) Makefile from the BSD port, but that relies heavily on BSD specific portage makefiles. Searching the forums, I have seen references to a Sun/Solaris port, but have not been able to locate any specific information on

the status of it or even who was working on it. If I can get Ultimate++ ported to the x86 version on Solaris 10, my next step is going to be to port it to the sparc version of Solaris 8.

Another issue that I have is that the systems that I am using are not connected to the internet so anything that has to be installed has to be downloaded to a PC first, then transfered to the Sun boxes.

Thank you for any information that you can give me,

Dave

Subject: Re: Ultimate++ on Solaris 10 ia86
Posted by mr_ped on Thu, 24 Jul 2008 12:27:06 GMT
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I would probably start with current 2008.1 installation on some supported platform (probably try to guess which one is closest to Solaris in terms of libraries?), and examining the Build/Create makefile for main "ide" package.
That functions is slowly improved over time, so recently the makefiles produced are sometimes usable (when compared to 602 version of Create makefile, which require further edit every time).

Also try to search forums for "umk" posts, there can be some information too.

Still you will have to dig deeply into that makefile and U++ build process and change it by hand.

People who did some port are sparse :/. (I'm not the one)

Subject: Re: Ultimate++ on Solaris 10 ia86
Posted by mirek on Thu, 24 Jul 2008 13:08:50 GMT
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mr_ped wrote on Thu, 24 July 2008 08:27Build/Create makefile...
That functions is slowly improved over time, so recently the makefiles produced are sometimes usable (when compared to 602 version of Create makefile, which require further edit every time).

Also try to search forums for "umk" posts, there can be some information too.

I think that while still not perfect, new "Project/Export project" works very well. At least, it does not require many Makefile edits and produced Makefile is using relative paths...

Mirek

Subject: Re: Ultimate++ on Solaris 10 ia86
Posted by dmcgeoch on Thu, 24 Jul 2008 13:24:16 GMT
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Thank you mr_ped and mirek. That gives me a good starting point. I am currently using the windows version of TheIDE compiled from svn. I am also loading on a linux box to help with comparisons between the make files. I'll keep you posted with how the Solaris version is going.

Dave

Subject: Re: Ultimate++ on Solaris 10 ia86
Posted by masu on Thu, 24 Jul 2008 18:54:56 GMT
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Hi,

I am maintaining the FreeBSD port and as far as I can remember what I have done back then was to:

1. download linux sources of last release (not the dev ones since there is no Makefile)
2. modify the provided Makefile in conjunction with some source file changes
3. prepare the FreeBSD port files

Item 2 is the most time consuming step, but you should begin with setting the compilation flags to SOLARIS and NOGTK and try to build TheIDE in static mode.

If you find compilation/link errors like missing functions, try to search your include/library directories with 'grep -r function_name *' to locate the missing header file/library.

Use the PLATFORM_SOLARIS flag to encapsulate your additions or modifications in the sources.

Good Luck.

Matthias

Edit: Changed LINUX build flag to SOLARIS (maybe that is a better option).

Subject: Re: Ultimate++ on Solaris 10 ia86
Posted by Mindtraveller on Thu, 24 Jul 2008 20:41:14 GMT
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I have latestSVN sources which where built under FreeBSD.TheIDE is recompiled too. If you need something from it, I may upload.

Subject: Re: Ultimate++ on Solaris 10 ia86
Posted by dmcgeoch on Thu, 24 Jul 2008 20:49:38 GMT
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Thanks for the tips Matthias.

I am using version 317 from svn Since I already had that on my Windows PC.
I used the Project Export function to create a makefile on the windows PC then copied over to the Sun PC. Then modified the Makefile to use the proper include and lib directories.

I also found that Sun loads a version of the GNU utilities, so I was able to make use of them instead of the Sun tools. I may try to use Sun's tools after I get the everything to build with the GNU tools. A big issue I ran into is that "make" != "gmake", make complained about the ".tpp" files while gmake had no problem.

I am off till Monday, so I won't be able to continue until then.

Once I get a successful build, I'll post my Makefile.

Dave

Subject: Re: Ultimate++ on Solaris 10 ia86
Posted by masu on Fri, 25 Jul 2008 08:56:06 GMT
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I wouldn't use the Makefile generated on Win, but rather use the one generated on Linux since the libraries that are needed for linking may be similar.

I think it would be easier for you.

If you do not have immediate access to a Linux system here http://www.ultimatepp.org/forum/index.php?t=msg&th=3542& amp;start=0& you can find ones generated on FreeBSD with minor issues (extensively reported by riri) on Linux.

I also had to use gmake for building, since BSD make made problems. I think it's enough to have a good Makefile for Solaris that needs gmake for the first step.

I am also going to maintain the source release and we should think about common Makefile(s) for *nix OSs.

Matthias

Subject: Re: Ultimate++ on Solaris 10 ia86
Posted by dmcgeoch on Fri, 25 Jul 2008 13:02:24 GMT
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Matthias,

Before generating the makefile I configured TheIDE to use MINGW, this gives me the GNU links. I did generate a working makefile on linux as well and have been comparing the two makefiles whenever I run into an issue. I am hoping that once I get a working Makefile, I can start tweaking it to use the Sun compiler and libraries. I did find many little gotchas already, mainly in the location of required headers.

Dave

Subject: Re: Ultimate++ on Solaris 10 ia86
Posted by dmcgeoch on Mon, 28 Jul 2008 19:18:09 GMT
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As promised, here is an update on Solaris build.

I had to modify two files, Core/Cpu.cpp and Core/Core.h. The changes were minor and related to the get_nproc function and the __ASSEMBLY__ define. The modified files are attached.

I also attached the current Makefile. I am having a problem when it comes to compiling the DrawTextXft.cpp file. The compiler is complaining about FC_HINT_STYLE not being defined. As far as I can tell, it is not defined anywhere on the Sun. I searched every include file and more. I did find the FC_HINTING define, but that's it. I am going to add the define for FC_HINT_STYLE and go from there.

Dave

File Attachments
1) Solaris.tar.gz, downloaded 603 times

Subject: Re: Ultimate++ on Solaris 10 ia86
Posted by masu on Mon, 28 Jul 2008 20:05:04 GMT
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Hi Dave,

FC_HINT_STYLE is defined in fontconfig.h, the header of fontconfig API (I have version 2.5.0). If it is not available you should install this one first.

But it should be available with X.org libraries installed.

What version do you have?

Regards,
Matthias

Subject: Re: Ultimate++ on Solaris 10 ia86
Posted by dmcgeoch on Mon, 28 Jul 2008 20:13:52 GMT
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Hi Matthias,

I am away from the computer right now, so I can't get the version until tomorrow.

All I know off the top of my head is that computer came preconfigured from Sun with Solaris 10 and the basic support software. I am trying to complete this build without adding additional software and libraries. Not that I can't, it is just a royal pain to get anything copied to the computer. As it is, I just to post to this forum, I have to copy files to my work pc, then copy the files to a server at my house, then use a remote xserver to access the forum to upload the files. My work won't me me access the forums directly.

Dave

Subject: Re: Ultimate++ on Solaris 10 ia86
Posted by mirek on Mon, 28 Jul 2008 22:06:09 GMT
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dmcgeoch wrote on Mon, 28 July 2008 15:18As promised, here is an update on Solaris build.

I had to modify two files, Core/Cpu.cpp and Core/Core.h.

Patch applied.

Mirek

Subject: Re: Ultimate++ on Solaris 10 ia86
Posted by mirek on Mon, 28 Jul 2008 22:06:32 GMT
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BTW, what about installing Solaris in VM?

Mirek

Subject: Re: Ultimate++ on Solaris 10 ia86
Posted by dmcgeoch on Tue, 29 Jul 2008 18:32:27 GMT
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luzr wrote on Mon, 28 July 2008 18:06BTW, what about installing Solaris in VM?

Mirek

Unfortunately I don't have the installation media. I could install OpenSolaris, but it is not quite the same.

Dave

Subject: Re: Ultimate++ on Solaris 10 ia86
Posted by dmcgeoch on Tue, 29 Jul 2008 19:46:13 GMT
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Latest update.

The versions of the compiler etc are as follows:
gcc - 3.4.3
fontconfig - 1.3
ld - Solaris Link Editor 5.10-1.489

I have gotten everything to compile, The linker is my latest obstacle. Apparently, ld was not included as part of the gnu toolset.

I had to modify the following files:

Draw/DrawTextXft.cpp
CtrlCore/X11Proc.cpp

I used #define to protect the changes. The changes should be verified to make sure there is no impact on other systems.

Once I get the linker issues straightened out I should have a working version of TheIde.

The attached tar file has the two modified files.

Dave

File Attachments
1) SolarisUpdate.tar, downloaded 574 times

Subject: Re: Ultimate++ on Solaris 10 ia86
Posted by dmcgeoch on Wed, 30 Jul 2008 19:26:39 GMT
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Latest news...

The gnu linker is loaded, however gcc by default was using the Sun linker which does not accept most of the options in the Makefile. I was able to force the use of the Gnu Linker, however I am now having an issue locating the nanosleep function during the link.

Dave
