## Setting up the Xerces API for C++ on Mac OS X

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I decided to follow the source distribution and compile it by myself.

1. The first thing I did was downloading the source code from <a href="http://xerces.apache.org/xerces-c/download.cgi">http://xerces.apache.org/xerces-c/download.cgi</a>

You can just download the zip file and unzip to a folder (in my case the computing folder).

2. I went to <u>http://xerces.apache.org/xerces-c/install-3.html#Unix</u> and followed the build instructions. I did these three things:

./configure CFLAGS="-arch x86\_64" CXXFLAGS="-arch x86\_64
./configure --prefix=/opt
build: sudo make
install: sudo make install

- the sudo commands are important here otherwise it will return some 'permission denied' errors.
- the --prefix configure option will install development files such as include header files and libraries in "/opt". I got this from (<u>http://www.yolinux.com/TUTORIALS/XML-Xerces-C.html</u>)
- I also had issues where I got errors because my directory name 'Computing IV' contained a space and I was getting "computing: no such file of directory". So I renamed my directory to just Computing. My guess is that if any directory on the path to xerces-c-3.1.1 is more than just a single word, you might run into issues.

at the end of installation, I get these warnings:

## make[2]: Nothing to be done for `install-data-am'. make[2]: Nothing to be done for `install-exec-am'.

and after some Googling around, I found out that they are not necessarily a problem, so I kept on going.

The installation ends with:

```
test -z "/opt/lib/pkgconfig" || /opt/local/bin/gmkdir -p "/opt/lib/
pkgconfig"
/opt/local/bin/ginstall -c -m 644 xerces-c.pc '/opt/lib/pkgconfig'
Francks-MacBook-Pro:xerces-c-3.1.1 franckamayou$
```

- so I assume everything went fine.
- 3. At this point, I picked up at Part II of Jesse's tutorial to build one of the sample programs.

http://teaching.cs.uml.edu/~heines/91.204/91.204-2011-12s/204lecs/lecture14.jsp

EXCEPT that I do not have the g++ issue that breaks the -I option, so no need to worry about his step 6.

4. If you try to compile the NetBeans project now, you will get linker errors such as:

g++ -o dist/Debug/GNU-MacOSX/cppapplication\_1 build/Debug/GNU-MacOSX/\_ext/842610819/DOMPrintErrorHandler. o build/Debug/GNU-MacOSX/\_ext/842610819/DOMPrint.o build/Debug/GNU-MacOSX/\_ext/842610819/DOMTreeErrorReporter .o build/Debug/GNU-MacOSX/\_ext/842610819/DOMPrintFilter.o Undefined symbols for architecture x86\_64:

"xercesc\_3\_1::XMLPlatformUtils::fgMemoryManager", referenced from:

DOMPrintErrorHandler::handleError(xercesc\_3\_1::DOMError const&) in DOMPrintErrorHandler.o

\_main in DOMPrint.o StrX::StrX(unsigned short const\*)in DOMPrint.o StrX::~StrX() in DOMPrint.o StrX::StrX(unsigned short const\*)in DOMTreeErrorReporter.o StrX::~StrX() in DOMTreeErrorReporter.o

and this is because we need to point NetBeans to the xerces-c library (remember in /opt)

- 5. Navigate to the project properties (right click on the project) and select the **Build->Linker** category in the left-hand pane. Next, click the ... button to the right of the **Libraries->Libraries** option in the right-hand pane.
- 6. In the **Debug->Libraries** dialog box that opens, click the **Add Library...** button. That opens the **Select Library** dialog box (a standard Windows File Open dialog box). You DO have to navigate to the xerces-c library here.

lib		÷
Name		Date Modified
libxerces-c-3.1.dylib		Friday, March 16, 2012 8:01 PM
libxerces-c.a		Friday, March 16, 2012 8:01 PM
libxerces-c.dylib		Friday, March 16, 2012 8:01 PM
libxerces-c.la		Friday, March 16, 2012 8:01 PM
pkgconfig		Friday, March 16, 2012 8:02 PM
File Format:	All Libra	ries \$
File Format:	All Libra	ries 🗘

It's at **/opt/lib/libxerces-c.dylib**.

- 7. Click **OK** to close that dialog box and you will see **xerces-c** in the Libraries text box in the Project Properties dialog box. Click **OK** again to close that dialog box.
- 8. The sample program should now compile without error.