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Subject: Re: Building TheIDE with using CMake

Posted by [Sender Ghost](#) on Sun, 08 May 2011 13:03:31 GMT

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Hello, Lionel.

Thanks for kind words.

I looked at your Waf build script. It's kind of "universal" build system for U++ packages.

The purposes of this thread is a bit different. It shows the possibility to create and build (using various native generators) complex U++ application(s), with using CMake.

Currently, one of the problems with \*.icpp files solved directly, by renaming them to regular \*.cpp files and building them alongside with "main" sources of application. It have some drawback, - additional step before building - and advantage, - correctly builds inside other IDEs, supported by CMake, without additional custom build steps (which also may be the possibility, otherwise).

Also, it possible to "globbing" C/C++ files to create list of sources to build, using aux\_source\_directory CMake command. But it is not used, - full sources provided in the list.

The "general" solution, for using with different U++ applications, can be some kind of CMake module(s), which resolves possible U++ build flags (e.g. flagGCC, flagMSC, - for compilers; flagBSD, flagFREEBSD, flagLINUX, flagOSX11, flagPOSIX - for platforms/OS, etc.) and checks include/linker directories. Now, it just have some CMake equivalents.

Honestly to say, I created CMakeLists.txt files for all current uppsrc packages, which gives me some kind of global review of used build flags/libraries, etc. But much of them, is kind of

```
set(SRC_LIST
# C/C++ files
)
add_library(PackageName ${SRC_LIST})

set(USES_LIST) # dependent packages to link
set(LINK_LIST) # libraries to link

if(DEFINED USES_LIST)
add_dependencies(PackageName ${USES_LIST})
endif(DEFINED USES_LIST)

if(DEFINED USES_LIST OR DEFINED LINK_LIST)
target_link_libraries(PackageName ${USES_LIST} ${LINK_LIST})
endif(DEFINED USES_LIST OR DEFINED LINK_LIST)
```

Most of the "Core" packages is already there (Core, CtrlCore, CtrlLib, Draw, etc. packages).

Edit (08.05.2011): Added UppToCMakeLists.cmake script to attachments for partial conversion of U++ package to CMakeLists.txt file.

Edit: Fixed flag name for FreeBSD (flagFREEBSD).

### File Attachments

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1) [UppToCMakeLists.zip](#), downloaded 897 times

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