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yoohoow

Nov '15

I almost done ! but i encount problem 😊

[100%] Linking CXX executable bin\MyGame.exe

.../msys64/mingw64/bin/.../lib/gcc/x86\_64-w64-mingw32/5.2.0/.../.../.../x86\_64-w64-mingw32/bin/ld.exe: cannot find -lbullet

.../msys64/mingw64/bin/.../lib/gcc/x86\_64-w64-mingw32/5.2.0/.../.../.../x86\_64-w64-mingw32/bin/ld.exe: cannot find -lrecast

and I run

pacman -S mingw-w64-x86\_64-cocos2d-x-git

it told me --> target not found

what can I do ?

thanks.

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### 🔗 [Compile bullet library with cmake/make on msys2/mingw64](#)

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Levis

Nov '15

I've just updated Cocos v3.9 and I have tried a new compile, without success.

The same error like you.

Furthermore it seems that: mingw-w64-x86\_64-cocos2d-x-git no longer exists

So I have to install more things:

pacman -S mingw-w64-x86\_64-opengl mingw-w64-x86\_64-libvorbis mingw-w64-x86\_64-glfw mingw-w64-x86\_64-pkg-config mingw-w64-x86\_64-glew mingw-w64-x86\_64-mpg123 mingw-w64-x86\_64-freetype mingw-w64-x86\_64-libwebp mingw-w64-x86\_64-tinyxml2 mingw-w64-x86\_64-libwebsockets mingw-w64-x86\_64-xxhash mingw-w64-x86\_64-flatbuffers mingw-w64-x86\_64-bullet

I have found only bullet library in mingw, but not recast.

Anyway the errors after linking are both for Bullet and Recast

Somebody have fixed this?

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Alexander\_Boriskov

Dec '15

Hello, this is my solution, works with cocos2d-x v3.9.

### 1. Install and setup cocos2d-x as descibed in guide

2. Install msys2 as described in <http://msys2.github.io/>

3. Install additional “MSYS” build packages (copy-paste in msys shell, and press enter):

```
pacman -S base-devel \  
msys2-devel \  
mingw-w64-i686-toolchain \  
mingw-w64-x86_64-toolchain \  
git \  
mingw-w64-x86_64-gcc \  
mingw-w64-x86_64-gdb \  

```

4. Clone mingw-packages scripts repository:

```
git clone https://github.com/Alexpux/MINGW-packages.git
```

I create pull request to official repository, so i hope “cocos2dx-git” package will be available from “pacman” soon

5. Go to cocos2dx-git package build script folder:

```
cd MINGW-packages/mingw-w64-cocos2dx-git/
```

6 Build package:

```
makepkg-mingw -sLf
```

7. Install package, in my case it named “mingw-w64-x86\_64-cocos2d-x-git-r33416.d371ec2-1-any.pkg.tar.xz” (depends on version in package file, mingw-w64-x86\_64-cocos2d-x-git-\*.pkg.tar.xz will be placed in current folder) so need run command:

```
pacman -U mingw-w64-x86_64-cocos2d-x-git-r33416.d371ec2-1-any.pkg.tar.xz
```

8. You can close MSYS shell, no additional packages required

9. Now you may open CLion and setup toolchain path (Settings > Build, Execution, Deployment) as describe in guide

10. Then you need edit CMakeLists.txt (only CMakeLists in root of project, don't need edit cocos2d CMakeLists.txt or other). First add recast and bullet library dependences in CMakeLists.txt:

After string:

```
add_subdirectory(${COCOS2D_ROOT})
```

**Add:**

```
if(WIN32)
    add_subdirectory(${COCOS2D_ROOT}/external/bullet)
    add_subdirectory(${COCOS2D_ROOT}/external/recast)
endif()
```

**11. Then you need add tinyxml source path :**

**Replace**

```
elseif ( WIN32 )
set(PLATFORM_SPECIFIC_SRC
    proj.win32/main.cpp
)
set(PLATFORM_SPECIFIC_HEADERS
    proj.win32/main.h
    proj.win32/resource.h
)
endif()
```

**By:**

```
elseif ( WIN32 )
set(PLATFORM_SPECIFIC_SRC
    proj.win32/main.cpp
    ${COCOS2D_ROOT}/external/tinyxml2/tinyxml2.h
)
set(PLATFORM_SPECIFIC_HEADERS
    proj.win32/main.h
    proj.win32/resource.h
    ${COCOS2D_ROOT}/external/tinyxml2/tinyxml2.cpp
)
endif()
```

**12. If you try to build, you see some compilation errors. First error in cocos2d\cocos\ui\UIEditBox\UIEditBoxImpl-win32.cpp in function CWin32InputBox::DlgProc:**

**Need replace:**

```
TIMERPROC lpTiTorFunc = [](HWND, UINT, UINT, DWORD) {
```

**By:**

```
TIMERPROC lpTimerFunc = [](HWND, UINT, UINT_PTR, DWORD) {
```

### 13. If you get error message while compiling “bullet” library:

Replace all error lines with:

```
reinterpret_cast<uint64_t>
```

By:

```
reinterpret_cast<uintptr_t>
```

And:

```
btCollisionObject** eaPtr = (btCollisionObject**)
(taskDesc.m_mainMemoryPtr);
```

By:

```
btCollisionObject** eaPtr = reinterpret_cast<btCollisionObject**>
(taskDesc.m_mainMemoryPtr);
```

### 14. Then in file cocos2d/cocos/platform/win32/CCFileUtils-win32.cpp in function \_checkPath()

Replace:

```
WCHAR *pUtf16ExePath = nullptr;
_get_wpgmptr(&pUtf16ExePath);
```

By:

```
WCHAR pUtf16ExePath[CC_MAX_PATH];
HMODULE hModule = GetModuleHandle(NULL);
GetModuleFileName(hModule, pUtf16ExePath, (sizeof(pUtf16ExePath)));
```

### 15. To access to resource folder from app, you need edit CMakeLists.txt OR add line in AppDelegate.cpp in function AppDelegate::applicationDidFinishLaunching():

```
FileUtils::getInstance()->addSearchPath("Resources\\");
```

(VS copy resource in build folder, but in CMakeLists resource will be copied in Resources folder)

## 17. Build and run

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### [🔗 Type mismatch using CC\\_CALLBACK](#)

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Levis

Dec '15

Thank you for your contrib!!! Much appreciated!

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camkadev

Mar '16

it works, thanks.  
is anybody know how to import sdkbox and his plugins (in case of android project)?

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Arin

Aug '16

Could someone update this guide to latest Cocos2d-x-3.12 ?  
Thanks

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antidotcb

Sep '16

Here is an updated guide how to setup CLion devenv on Windows for **Cocos2d-x v3.13.1**

### Download MSYS2 64

from here: [http://repo.msys2.org/distrib/msys2-x86\\_64-latest.exe](http://repo.msys2.org/distrib/msys2-x86_64-latest.exe)  
Install it (c:\msys64\ - i will refer this path, if you choose another one - update paths correspondingly).

### Run MSYS2, and execute following commands, restarting it after each command:

```
pacman -Sy --noconfirm pacman
pacman -Syu --noconfirm
pacman -Su --noconfirm
```

### Run MSYS2 MinGW 64-bit and paste following command (you can copy&paste all following commands at once):

```
pacman -Sy --noconfirm --force \
  git \
  mingw-w64-x86_64-cmake \
  mingw-w64-x86_64-toolchain \
```



```
mingw-w64-x86_64-gcc \  
mingw-w64-x86_64-gdb \  
mingw-w64-x86_64-libvorbis \  
mingw-w64-x86_64-opengl \  
mingw-w64-x86_64-openssl \  
mingw-w64-x86_64-glew \  
mingw-w64-x86_64-glfw \  
mingw-w64-x86_64-pkg-config \  
mingw-w64-x86_64-freetype \  
mingw-w64-x86_64-mpg123 \  
mingw-w64-x86_64-glew \  
mingw-w64-x86_64-libwebp \  
mingw-w64-x86_64-libtiff \  
mingw-w64-x86_64-libjpeg \  
mingw-w64-x86_64-libpng \  
mingw-w64-x86_64-curl \  
mingw-w64-x86_64-zlib
```

```
mkdir $TMP/cocos2dx_installation  
cd $TMP/cocos2dx_installation  
git clone https://github.com/warmcat/libwebsockets.git libwebsockets  
cd libwebsockets  
git checkout v2.0-stable  
mkdir _build  
cd _build  
cmake -DLWS_WITHOUT_TESTAPPS=ON -DLWS_USE_BUNDLED_ZLIB=OFF -G "MinGW Makefiles"  
cmake -DLWS_WITHOUT_TESTAPPS=ON -DLWS_USE_BUNDLED_ZLIB=OFF -G "MinGW Makefiles"  
mingw32-make  
mingw32-make install DESTDIR=./install  
mkdir /mingw64/lib/cmake/libwebsockets  
cp ./install/Program\ Files\ \(\x86\)libwebsockets/lib/* /mingw64/lib  
cp ./install/Program\ Files\ \(\x86\)libwebsockets/include/* /mingw64/include  
cp ./install/Program\ Files\ \(\x86\)libwebsockets/bin/* /mingw64/bin  
cp ./install/Program\ Files\ \(\x86\)libwebsockets/cmake/* /mingw64/lib/cmak  
cp ./install/Program\ Files\ \(\x86\)libwebsockets/cmake/* /mingw64/lib/cmak  
cd ../../  
git clone https://github.com/slembcke/Chipmunk2D.git Chipmunk2D  
cd Chipmunk2D  
git checkout tags/Chipmunk-7.0.1  
sed -i "s/\#include <sys\/sysctl.h>\/g" src/cpHastySpace.c  
mkdir _build  
cd _build  
cmake -DBUILD_DEMOS=OFF -DBUILD_SHARED=ON -DBUILD_STATIC=ON -G "MinGW Makefile"  
cmake -DBUILD_DEMOS=OFF -DBUILD_SHARED=ON -DBUILD_STATIC=ON -G "MinGW Makefile"  
mingw32-make  
mingw32-make install DESTDIR=./install  
cp ./install/Program\ Files\ \(\x86\)chipmunk/lib/* /mingw64/lib  
cp -r ./install/Program\ Files\ \(\x86\)chipmunk/include/* /mingw64/include  
cp ./install/Program\ Files\ \(\x86\)chipmunk/bin/* /mingw64/bin
```

```
cd ../../..  
rm -rf $TMP/cocos2dx_installation  
exit
```

## Update your project CMakeLists.txt:

```
set( USE_SOURCES_EXTERNAL ON CACHE BOOL "Use some libraries from cocos2dx  
externals" )  
add_subdirectory(${COCOS2D_ROOT}) # this line already exists in your project
```

## Setup CLion

Set CLion MinGW location to: C:\msys64\mingw64

Set CLion CMake location to: C:\msys64\mingw64\bin\cmake.exe

This way you will have fully setup MinGW environment for cocos2dx + CLion.

P.S. If you want to use bullet+recast - update their sources according posts above.

## Bonus

### Disable default physics engine - Chipmunk

If you don't want to use Chipmunk physics engine (for example you use bullet+recast or Box2D)

```
set( USE_BULLET OFF CACHE BOOL "Turn off Bullet (3d physics)" )  
add_subdirectory(${COCOS2D_ROOT}) # this line already exists in your project  
add_definitions(-DCC_USE_PHYSICS=0)
```

### Disable 3D physics & path-finding for 2D-only game - Bullet+Recast

If you don't want to use 3D physics & path-finding (for example 2D game) to **shorten compile time**:

```
set( USE_BULLET OFF CACHE BOOL "Turn off Bullet (3d physics)" )  
set( USE_RECAST OFF CACHE BOOL "Turn off Recast (3d pathfinding)" )  
add_subdirectory(${COCOS2D_ROOT}) # this line already exists in your project
```

### Enable C++ physics engine - Box2D

If you want to use Box2D (don't forget to disable Chipmunk if it's not used):

```
SET( USE_BOX2D ON CACHE BOOL "Turn on Box2D for 2D physics" )  
add_subdirectory(${COCOS2D_ROOT}) # this line already exists in your project
```

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```
###Don't forget to invalidate project after any changes to CMakeLists.txt in CLion.
```

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Levis

Sep '16

Very nice, thank you!