

Emulator - Emulator Issues #11780

Failure to build on Musl

06/27/2019 01:40 PM - PureTryOut

Status:	New	% Done:	0%
Priority:	Normal		
Assignee:			
Category:			
Target version:			
Operating system:	N/A	Relates to performance:	No
Issue type:	Bug	Easy:	No
Milestone:		Relates to maintainability:	No
Regression:	No	Regression start:	
Relates to usability:	No	Fixed in:	

Description

Dolphin currently is impossible to build on Musl based systems like Alpine Linux due to using non-POSIX functions.

```
/usr/bin/c++ -DDATA_DIR=\"/usr/share/dolphin-emu/\" -DHAVE_BLUEZ=1 -DHAVE_EGL=1 -DHAVE_FFMPEG -DHAVE_HIDAPI=1 -DHAVE_LIBEVDEV=1 -DHAVE_LIBUDEV=1 -DHAVE_X11=1 -DHAVE_XRANDR=0 -DUSE_ANALYTICS=1 -DUSE_MEMORYWATCHER=1 -DUSE_PIPES=1 -DUSE_UPNP -D_ARCH_64=1 -D_DEFAULT_SOURCE -D_FILE_OFFSET_BITS=64 -D_LARGEFILE_SOURCE -D_M_X86=1 -D_M_X86_64=1 -D__LIBUSB__ -D__STDC_CONSTANT_MACROS -D__STDC_LIMIT_MACROS -I../Source/Core -I../Externals/enet/include -I../External/minizip -I/usr/include/libpng16 -I../Externals -I/usr/include/libusb-1.0 -ISource/Core -I../Externals/fmt/include -I../Externals/cubeb/include -Iexports -I../Externals/Bochs_disasm -isystem /usr/include/hidapi -Os -fomit-frame-pointer -O2 -g -DNDEBUG -msse2 -fdiagnostics-color -Wall -Wtype-limits -Wsign-compare -Wignored-qualifiers -Wuninitialized -Wlogical-op -Wshadow -Winit-self -Wmissing-declarations -fno-strict-aliasing -fno-exceptions -fvisibility-inlines-hidden -fvisibility=hidden -fomit-frame-pointer -std=c++17 -MD -MT Source/Core/Core/CMakeFiles/core.dir/HW/WiimoteReal/IOLinux.cpp.o -MF Source/Core/Core/CMakeFiles/core.dir/HW/WiimoteReal/IOLinux.cpp.o.d -o Source/Core/Core/CMakeFiles/core.dir/HW/WiimoteReal/IOLinux.cpp.o -c ../Source/Core/Core/HW/WiimoteReal/IOLinux.cpp
../Source/Core/Core/HW/WiimoteReal/IOLinux.cpp: In member function 'virtual int WiimoteReal::WiimoteLinux::IORead(u8*)':
../Source/Core/Core/HW/WiimoteReal/IOLinux.cpp:227:3: error: 'fd_set' was not declared in this scope
   fd_set fds;
   ^~~~~~
../Source/Core/Core/HW/WiimoteReal/IOLinux.cpp:227:3: note: suggested alternative: 'tzset'
   fd_set fds;
   ^~~~~~
   tzset
../Source/Core/Core/HW/WiimoteReal/IOLinux.cpp:228:12: error: 'fds' was not declared in this scope
   FD_ZERO(&fds);
   ^~~
../Source/Core/Core/HW/WiimoteReal/IOLinux.cpp:228:12: note: suggested alternative: 'ffs'
   FD_ZERO(&fds);
   ^~~
   ffs
../Source/Core/Core/HW/WiimoteReal/IOLinux.cpp:228:3: error: 'FD_ZERO' was not declared in this scope
   FD_ZERO(&fds);
   ^~~~~~
../Source/Core/Core/HW/WiimoteReal/IOLinux.cpp:228:3: note: suggested alternative: 'CPU_ZERO'
   FD_ZERO(&fds);
   ^~~~~~
   CPU_ZERO
../Source/Core/Core/HW/WiimoteReal/IOLinux.cpp:229:3: error: 'FD_SET' was not declared in this scope
```

```

    FD_SET(m_int_sock, &fds);
    ^~~~~~
../Source/Core/Core/HW/WiimoteReal/IOLinux.cpp:229:3: note: suggested alternative: 'L_SET'
    FD_SET(m_int_sock, &fds);
    ^~~~~~
    L_SET
../Source/Core/Core/HW/WiimoteReal/IOLinux.cpp:232:7: error: 'select' was not declared in this scope
    if (select(m_int_sock + 1, &fds, nullptr, nullptr, nullptr) == -1)
        ^~~~~~
../Source/Core/Core/HW/WiimoteReal/IOLinux.cpp:232:7: note: suggested alternative: 'setenv'
    if (select(m_int_sock + 1, &fds, nullptr, nullptr, nullptr) == -1)
        ^~~~~~
        setenv
../Source/Core/Core/HW/WiimoteReal/IOLinux.cpp:238:7: error: 'FD_ISSET' was not declared in this scope
    if (FD_ISSET(m_wakeup_pipe_r, &fds))
        ^~~~~~
../Source/Core/Core/HW/WiimoteReal/IOLinux.cpp:238:7: note: suggested alternative: 'CPU_ISSET'
    if (FD_ISSET(m_wakeup_pipe_r, &fds))
        ^~~~~~
        CPU_ISSET
../Source/Core/Core/HW/WiimoteReal/IOLinux.cpp:248:8: error: 'FD_ISSET' was not declared in this scope
    if (!FD_ISSET(m_int_sock, &fds))
        ^~~~~~
../Source/Core/Core/HW/WiimoteReal/IOLinux.cpp:248:8: note: suggested alternative: 'CPU_ISSET'
    if (!FD_ISSET(m_int_sock, &fds))
        ^~~~~~
        CPU_ISSET

```

History

#1 - 06/27/2019 02:07 PM - Shiz

This seems to be more an issue of missing includes: all these types and macros are defined in , which other libc implementations may implicitly include in one of their other headers and as such work by coincidence.

Does it work if you add an #include stanza at the top of said file?

#2 - 06/27/2019 02:08 PM - Shiz

Redmine ate my angle brackets -- the file in question is sys/select.h, to clarify.

#3 - 06/27/2019 06:32 PM - PureTryOut

- File build.log added

That did seem to fix this particular issue. Now a new one appeared though:

```

/usr/bin/c++ -DDATA_DIR=\"/usr/share/dolphin-emu/\" -DHAVE_EGL=1 -DHAVE_FFmpeg -DHAVE_LIBEVD=1 -DHAVE_LIBUD
EV=1 -DHAVE_X11=1 -DHAVE_XRANDR=0 -DUSE_ANALYTICS=1 -DUSE_MEMORYWATCHER=1 -DUSE_PIPES=1 -DUSE_UPNP -D_ARCH_64=
1 -D_DEFAULT_SOURCE -D_FILE_OFFSET_BITS=64 -D_LARGEFILE_SOURCE -D_M_X86=1 -D_M_X86_64=1 -D__LIBUSB__ -D__STDC_
CONSTANT_MACROS -D__STDC_LIMIT_MACROS -I../Source/Core -I../Externals/enet/include -I../External/minizip -I/us
r/include/libpng16 -I../Externals -I/usr/include/libusb-1.0 -ISource/Core -I../Externals/fmt/include -I../Exte
rnals/cpp-optparse/. -I../Externals/minizip/. -I../Externals/Bochs_disasm -Os -fomit-frame-pointer -O2 -g -DND
EBUG -msse2 -fdiagnostics-color -Wall -Wtype-limits -Wsign-compare -Wignored-qualifiers -Wuninitialized -Wlo
gical-op -Wshadow -Winit-self -Wmissing-declarations -fno-strict-aliasing -fno-exceptions -fvisibility-inlines
-hidden -fvisibility=hidden -fomit-frame-pointer -std=c++17 -MD -MT Source/Core/UICommon/CMakeFiles/uicommon.d
ir/UICommon.cpp.o -MF Source/Core/UICommon/CMakeFiles/uicommon.dir/UICommon.cpp.o.d -o Source/Core/UICommon/CM
akeFiles/uicommon.dir/UICommon.cpp.o -c ../Source/Core/UICommon/UICommon.cpp
../Source/Core/UICommon/UICommon.cpp:371:24: error: variable or field 'EnableScreenSaver' declared void
    void EnableScreenSaver(Window win, bool enable)
        ^~~~~~
../Source/Core/UICommon/UICommon.cpp:371:24: error: 'Window' was not declared in this scope

```

```

../Source/Core/UICommon/UICommon.cpp:371:24: note: suggested alternative: 'rindex'
void EnableScreenSaver(Window win, bool enable)
    ^~~~~~
    rindex
../Source/Core/UICommon/UICommon.cpp:371:36: error: expected primary-expression before 'bool'
void EnableScreenSaver(Window win, bool enable)
    ^~~~~

```

#4 - 06/28/2019 02:18 AM - Shiz

Looks like a typo in UICommon.cpp:371:

```
#if defined(HAVE_XRANDR) && HAVE_X11
```

should be

```
#if defined(HAVE_XRANDR) && HAVE_XRANDR
```

Does that fix it?

#5 - 06/28/2019 02:19 PM - PureTryOut

- File build.log added

It did indeed, I also needed to change the same thing on line 379 in that file.

Next error, we're getting there!:

```

/usr/bin/c++ -DDATA_DIR=\"/usr/share/dolphin-emu/\" -DHAVE_EGL=1 -DHAVE_FFmpeg -DHAVE_LIBEVDEV=1 -DHAVE_LIBUD
EV=1 -DHAVE_X11=1 -DHAVE_XRANDR=0 -DUSE_ANALYTICS=1 -DUSE_MEMORYWATCHER=1 -DUSE_PIPES=1 -DUSE_UPNP -D_ARCH_64=
1 -D_DEFAULT_SOURCE -D_FILE_OFFSET_BITS=64 -D_LARGEFILE_SOURCE -D_M_X86=1 -D_M_X86_64=1 -D_LIBUSB__ -D__STDC_
CONSTANT_MACROS -D__STDC_LIMIT_MACROS -I../Source/Core -I../Externals/enet/include -I../External/minizip -I/us
r/include/libpng16 -I../Externals -I/usr/include/libusb-1.0 -ISource/Core -I../Externals/fmt/include -I../Exte
rnals/cubeb/include -Iexports -I../Externals/cpp-optparse/. -I../Externals/minizip/. -isystem /usr/include/hid
api -Os -fomit-frame-pointer -O2 -g -DNDEBUG -msse2 -fdiagnostics-color -Wall -Wtype-limits -Wsign-compare -
Wignored-qualifiers -Wuninitialized -Wlogical-op -Wshadow -Winit-self -Wmissing-declarations -fno-strict-alias
ing -fno-exceptions -fvisibility-inlines-hidden -fvisibility=hidden -fomit-frame-pointer -std=c++17 -MD -MT So
urce/Core/DolphinNoGUI/CMakeFiles/dolphin-nogui.dir/PlatformX11.cpp.o -MF Source/Core/DolphinNoGUI/CMakeFiles/
dolphin-nogui.dir/PlatformX11.cpp.o.d -o Source/Core/DolphinNoGUI/CMakeFiles/dolphin-nogui.dir/PlatformX11.cpp
.o -c ../Source/Core/DolphinNoGUI/PlatformX11.cpp
../Source/Core/DolphinNoGUI/PlatformX11.cpp: In member function 'virtual bool {anonymous}::PlatformX11::Init()
':
../Source/Core/DolphinNoGUI/PlatformX11.cpp:96:5: error: 'XTextProperty' was not declared in this scope
    XTextProperty wmClientMachine = {reinterpret_cast<unsigned char*>(host_name), XA_STRING, 8,
    ^~~~~~
../Source/Core/DolphinNoGUI/PlatformX11.cpp:96:5: note: suggested alternative: 'XDeleteProperty'
    XTextProperty wmClientMachine = {reinterpret_cast<unsigned char*>(host_name), XA_STRING, 8,
    ^~~~~~
    XDeleteProperty
../Source/Core/DolphinNoGUI/PlatformX11.cpp:98:47: error: 'wmClientMachine' was not declared in this scope
    XSetWMClientMachine(m_display, m_window, &wmClientMachine);
    ^~~~~~
../Source/Core/DolphinNoGUI/PlatformX11.cpp:98:47: note: suggested alternative: 'ClientMessage'
    XSetWMClientMachine(m_display, m_window, &wmClientMachine);
    ^~~~~~
    ClientMessage
../Source/Core/DolphinNoGUI/PlatformX11.cpp:98:5: error: 'XSetWMClientMachine' was not declared in this scope

```

```
XSetWMClientMachine(m_display, m_window, &wmClientMachine);  
^~~~~~
```

#6 - 06/28/2019 07:46 PM - Shiz

Edit the top include section:

```
#include  
#include  
#include  
#include "UICommon/X11Utils.h"
```

to include

```
#include
```

in that file. That should fix it.

#7 - 06/28/2019 07:46 PM - Shiz

Agh, forgot about the angle brackets again. The missing include is X11/Xutil.h.

Files

build.log	248 KB	06/27/2019	PureTryOut
build.log	240 KB	06/28/2019	PureTryOut