

## Doomsday Engine - Bug #1049

### [OpenAL] Unable to compile on x86\_64 Linux

2012-05-25 18:24 - vvv1

<b>Status:</b>	Closed	<b>Start date:</b>	2012-05-25
<b>Priority:</b>	Normal	<b>% Done:</b>	100%
<b>Assignee:</b>	skyjake		
<b>Category:</b>			
<b>Target version:</b>	1.10		
<b>Description</b>			
I've tried to compile release-1.9.8 on Fedora 16 Linux x86_64 and got the following error messages:			
<pre>make<sup>2</sup>: Entering directory `/home/vvv/rpmbuild/BUILD/doomsday-1.9.8-build500/Build/plugins/openal' g++ -c -pipe -O2 -g -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fstack-protector --param=ssp-buffer-size=4 -m64 -mtune=generic -O2 -g -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fstack-protector --param=ssp-buffer-size=4 -m64 -mtune=generic -D_REENTRANT -Wall -W -fPIC -DNDEBUG -DHOST_IS_64BIT -DDENG_STABLE -DUNIX -DDENG_NO_FIXED_ASM -DDENG_NO_RANGECHECKING -DQT_NO_DEBUG -I/usr/lib64/qt4/mkspecs/linux-g++ -I../doomsday/plugins/openal -I/usr/include -I../doomsday/engine/api -I../doomsday/plugins/openal/include -I/home/vvv/rpmbuild/BUILD/doomsday-1.9.8-build500/Build/plugins/openal/ -I../doomsday/plugins/openal -I -o driver_openal.o ../doomsday/plugins/openal/src/driver_openal.cpp ../doomsday/plugins/openal/src/driver_openal.cpp: In function 'sfxbuffer_t* DS_SFX_CreateBuffer(int, int, int)': ../doomsday/plugins/openal/src/driver_openal.cpp:229:24: warning: cast to pointer from integer of different size [-Wint-to-pointer-cast] ../doomsday/plugins/openal/src/driver_openal.cpp:230:26: warning: cast to pointer from integer of different size [-Wint-to-pointer-cast] ../doomsday/plugins/openal/src/driver_openal.cpp: In function 'void DS_SFX_DestroyBuffer(sfxbuffer_t*)': ../doomsday/plugins/openal/src/driver_openal.cpp:245:15: error: cast from 'void*' to 'ALuint {aka unsigned int}' loses precision [-fpermissive] ../doomsday/plugins/openal/src/driver_openal.cpp:246:15: error: cast from 'void*' to 'ALuint {aka unsigned int}' loses precision [-fpermissive] ../doomsday/plugins/openal/src/driver_openal.cpp: In function 'void DS_SFX_Load(sfxbuffer_t*, sfxsample_s*)': ../doomsday/plugins/openal/src/driver_openal.cpp:266:18: error: cast from 'void*' to 'ALuint {aka unsigned int}' loses precision [-fpermissive] ../doomsday/plugins/openal/src/driver_openal.cpp: In function 'void DS_SFX_Play(sfxbuffer_t*)': ../doomsday/plugins/openal/src/driver_openal.cpp:295:14: error: cast from 'void*' to 'ALuint {aka unsigned int}' loses precision [-fpermissive] ../doomsday/plugins/openal/src/driver_openal.cpp:304:34: error: cast from 'void*' to 'ALuint {aka unsigned int}' loses precision [-fpermissive] ../doomsday/plugins/openal/src/driver_openal.cpp: In function 'void DS_SFX_Stop(sfxbuffer_t*)': ../doomsday/plugins/openal/src/driver_openal.cpp:317:20: error: cast from 'void*' to 'ALuint {aka unsigned int}' loses precision [-fpermissive] ../doomsday/plugins/openal/src/driver_openal.cpp: In function 'void DS_SFX_Refresh(sfxbuffer_t*)': ../doomsday/plugins/openal/src/driver_openal.cpp:327:18: error: cast from 'void*' to 'ALuint {aka unsigned int}' loses precision [-fpermissive] ../doomsday/plugins/openal/src/driver_openal.cpp: In function 'void DS_SFX_Set(sfxbuffer_t*, int, float)': ../doomsday/plugins/openal/src/driver_openal.cpp:377:14: error: cast from 'void*' to 'ALuint {aka unsigned int}' loses precision [-fpermissive] ../doomsday/plugins/openal/src/driver_openal.cpp: In function 'void DS_SFX_Setv(sfxbuffer_t*, int, float*)': ../doomsday/plugins/openal/src/driver_openal.cpp:420:14: error: cast from 'void*' to 'ALuint {aka unsigned int}' loses precision [-fpermissive] make<sup>2</sup>: * [driver_openal.o] Error 1 make<sup>2</sup>: Leaving directory `/home/vvv/rpmbuild/BUILD/doomsday-1.9.8-build500/Build/plugins/openal' make<sup>1</sup>: [sub-openal-make_default] Error 2 make<sup>1</sup>: Leaving directory `/home/vvv/rpmbuild/BUILD/doomsday-1.9.8-build500/Build/plugins' make: ** [sub-plugins-make_default-ordered] Error 2</pre>			
ALuint defined in AL/al.h:			
<pre>/** unsigned 32-bit integer */ typedef unsigned int ALuint;</pre>			
But sizeof(void*) = 8 on x86_64. Is it safe to add CXXFLAGS+=-fpermissive to plugins/openal/openal.pro?			

## History

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### #1 - 2012-08-28 05:12 - skyjake

*(originally posted by anonymous SF.net user)*

This bug has been marked closed for milestone 1.9.8, but it is still present in 1.9.10. Compilation does complete if -fpermissive is passed to gcc, but could this potentially lead to runtime errors?

### #2 - 2012-12-30 03:38 - skyjake

I've now properly fixed this in [commit 9c1fd1ee](<http://github.com/skyjake/Doomsday-Engine/commit/9c1fd1ee90d333332660c1aeef1addae93c2770e>).

It will be included in the next unstable build and/or a 1.9.10-1 patch release.

### #3 - 2012-12-30 15:09 - skyjake

- **milestone:** v1.9.8 --> v1.10.0

### #4 - 2012-12-30 15:10 - skyjake

*(originally posted by anonymous SF.net user)*

Thank you! I tested a patch on 1.9.10 applying this commit, and it compiles flawlessly now.

### #5 - 2013-07-15 16:38 - skyjake

- **assigned\_to:** Jaakko Keranen