Doomsday Engine - Bug #1049

[OpenAL] Unable to compile on x86_64 Linux

2012-05-25 18:24 - vvv1

Status:	Closed	**Start date:**	2012-05-25
Priority:	Normal	**% Done:**	100%
Assignee:	skyjake		
Category:			
Target version:	1.10		

Description

I've tried to compile release-1.9.8 on Fedora 16 Linux x86_64 and got the following error messages:

make[2]: 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[2]: *** [driver_openal.o] Error 1**
make[2]: Leaving directory `/home/vvv/rpmbuild/BUILD/doomsday-1.9.8-build500/Build/plugins/openal'
make[1]: [sub-openal-make_default] Error 2
make[1]: Leaving directory `/home/vvv/rpmbuild/BUILD/doomsday-1.9.8-build500/Build/plugins'
make: ** [sub-plugins-make_default-ordered] Error 2

ALuint defined in AL/al.h:

/** unsigned 32-bit integer */
typedef unsigned int ALuint;

But sizeof(void*) = 8 on x86_64. Is it safe to add CXXFLAGS+=-fpermissive to plugins/openal/openal.pro?

Labels: Sound (OpenAL)

History

#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