

Ryzom - Feature # 13

Status:	Closed	Priority:	Low
Author:	vl	Category:	NeL: General
Created:	09/01/2008	Assignee:	kaetemi
Updated:	09/30/2010	Due date:	
Subject:	Make a XAudio2 driver		
Description	Make a XAudio2 driver		

History

#1 - 09/01/2008 08:06 pm - kaetemi

- % Done changed from 0 to 70
- Estimated time set to 12.00

XAudio2 driver requires the following additional libraries: [libogg](#), [libvorbis](#), [libvorbisfile](#). These additional libraries may also be used in the other sound drivers at a later point in time. Additionally, a [DirectX SDK later than March 2008](#) is required for successfully compiling the driver, and the end-user needs to have the version used for compiling or later of the DirectX End-User runtimes (which always include all directx runtime versions up to the version installed, it is probably also possible to include the required directx dlls directly with the client distribution instead if the directx redistributable license allows this).

#2 - 09/02/2008 05:07 am - kaetemi

- % Done changed from 70 to 60
- Estimated time changed from 12.00 to 52.00

There's some weird design choices in the music channel system of NLSOUND, like for bnp files the name of the bnp file and the offset of the file inside is sent, which is pretty much not really necessary stuff for drivers that can handle nel files just fine. Something else that comes to mind is the fact that you need to call the music channel functions on the sound driver with a channel id, instead of on some sort of music channel interface similar to how the sample sources work.

#3 - 09/02/2008 03:57 pm - kaetemi

Sound in character selection OK. Music interface between nlsound and driver definitely needs to be changed.

#4 - 09/02/2008 10:12 pm - kaetemi

- Estimated time changed from 52.00 to 58.00

XAudio2 throws me errors on random sound samples, dunno why (and there's no documentation on the errors, yay)...

Will need to build some small sound test apps to find out why this is happening.

Some part of sound already seems to be working fine, anyways :)

```
- XAPO ASSERT: iSrcOffset (NWORD)uSrcSampleCount || iSrcOffset (NWORD)uSrcSampleCount-1 || iSrcOffset  
(NWORD)uSrcSampleCount-1*2, {ResampleLinearFromInt16MonoSse2, Line 1029}*****
```

```
#####  
1. XAUDIO2: src_fast.cpp:554:  
2. ASSERT FAILED: m_SRCParameters.iSrcOffset -m_SRCParameters.iChannelCount || m_SRCParameters.iSrcOffset  
0#####
```

```
- XAPO ASSERT: pSRCPParameters->iSrcOffset +||pSRCPParameters>iSrcOffset == 0, {ResampleLinearFromInt16MonoSse2, Line 917}*****  
*****
```

#5 - 09/03/2008 03:30 am - kaetemi

Identified source of XAudio2 assert errors to a problematic call from a source voice callback OnBufferStart to the source voice function SetFrequencyRatio.
CSourceXAudio2 implementation will be reviewed to work around this (undocumented) behaviour of XAudio2.

#6 - 09/03/2008 03:41 pm - kaetemi

- % Done changed from 60 to 70

Changed implementation of CSourceXAudio2 to fix issue with assert failure of XAudio2.

#7 - 09/03/2008 11:22 pm - kaetemi

- File 100_kipees_fmod_32.ogg added
- File 100_kipees_xaudio2_128.ogg added

Driver runs stable right now, not fully implemented yet.

#8 - 09/04/2008 05:19 pm - kaetemi

- % Done changed from 70 to 80
- Estimated time changed from 58.00 to 61.00

Eax listener environments work.

#9 - 09/09/2008 02:44 pm - kaetemi

- % Done changed from 80 to 90
- Estimated time changed from 61.00 to 74.00

#10 - 11/03/2008 04:55 pm - kaetemi

- Category changed from Sound to Sound Lowlevel
- Status changed from Assigned to Closed
- % Done changed from 90 to 100

Change of planning.

Replaced by #99 (buffer streaming, music)

Replaced by #100 (multi channel buffers)

Replaced by #167 (occlusion and obstruction)

#11 - 05/11/2009 07:47 pm - sfb

- Target version set to Version 0.7.0

Changing the target version for this issue to reflect changes applicable to this version.

#12 - 09/29/2010 09:04 pm - kervala

- Project changed from NeL to Ryzom

- Category deleted (Sound Lowlevel)

- Target version deleted (Version 0.7.0)

#13 - 09/30/2010 09:12 am - kervala

- Category set to NeL: General

- Target version set to Version 0.7.0

Files

100_kipees_fmod_32.ogg	769 kB	09/03/2008	kaetemi
100_kipees_xaudio2_128.ogg	989.5 kB	09/03/2008	kaetemi