

Enhancements to the NSpeex library

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What is Speex?

- Audio compression format designed for speech
- Uses code excited linear prediction for compression and series of preprocessing filters
 - Slow encoding, fast decoding
- Patent-free with libraries released under BSD license
- Used for VoIP communication over XMPP+Jingle protocol (Google Talk)

What is the NSpeex library?

- .NET library for the Speex codec
- BSD license
- Goals:
 - Initially a wrapper around the native C library
 - Aim to make full implementation of the codec in C# language
 - Demo application to transfer audio over the network

How will I contribute to the project?

- Write initial C# implementation of the codec based on the JSpeex Java port and the Speex C library
- Preliminary source code was submitted to the current project maintainer
 - Problems with quality of the output

Efficiency of the Speex codec

- Simple test data:
 - Uncompress file size: 42,505,390 bytes
 - Encoded using libspeex: 1,571,007 bytes
 - Encoded using NSpeex: 1,297,136 bytes

Links

- Speex
<http://www.speex.org>
- NSpeex
<http://nspeex.codeplex.com>
- NAudio
<http://naudio.codeplex.com>

Questions?

