SoX

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This file contains information specific to the Win32 version of SoX.

Please refer to the README file for general information.

The binary SOX.EXE can be installed anywhere you desire. The only

restriction is that the included ZLIB1..DLL and LIBGOMP-1.DLL must be

located in the same directory as SOX.EXE or somewhere within your PATH.

SoX Helper Applications

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SoX also includes support for SOXI.EXE, PLAY.EXE and REC.EXE and their

behaviors are documented in included PDF's. They have the same

install restrictions as SOX.EXE.

SOXI.EXE, PLAY.EXE, and REC.EXE are not distributed with this package to

reduce size requirements. They are, in fact, only copies of the original

SOX.EXE binary which changes SOX.EXE's behavior based on the

executable's filename.

If you wish to make use of these utils then you can create them

yourself.

copy sox.exe soxi.exe

copy sox.exe play.exe

copy sox.exe rec.exe

If you are concerned with disk space, the play and record

functionality can be equated using the "-d" option with SOX.EXE. soxi

functionality can be equated using the "--info" option with SOX.EXE. The

rough syntax is:

play: sox [input files and options] -d [effects]

rec: sox -d [output file and options] [effects]

soxi: sox --info [input files and options]

Acknowledgements

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SOX.EXE included in this package makes use of the following projects.

See the cygbuild script included with the source code package for

further information on how it was compiled and packaged.

SoX - http://sox.sourceforge.net

FLAC - http://flac.sourceforge.net

LADSPA - http://www.ladspa.org

libid3tag - http://www.underbit.com/products/mad

libsndfile - http://www.mega-nerd.com/libsndfile

Ogg Vorbis - http://www.vorbis.com

PNG - http://www.libpng.org/pub/png

WavPack - http://www.wavpack.com

wget - http://www.gnu.org/software/wget

Enjoy,

The SoX Development Team

Appendix - wget Support

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SoX can make use of the wget command line utility to load files over

the internet. A binary copy of wget has been included with this

package of SoX for your convience.

For SoX to make use of wget, it must be located either in your PATH or

within the same directory that SoX is ran from.

Custom configuration of wget can be made by editing the file wget.ini

contained in the same directory as wget.exe.

Please consult wget's homepage for access to source code as well as

further instructions on configuring.

http://www.gnu.org/software/wget

Appendix - MP3 Support

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SoX contains support for reading and writing MP3 files but does not ship

with the DLL's that perform decoding and encoding of MP3 data because

of patent restrictions. For further details, refer to:

http://en.wikipedia.org/wiki/MP3#Licensing\_and\_patent\_issues

MP3 support can be enabled by placing Lame encoding DLL and/or

MAD decoding DLL into the same directory as SOX.EXE. These

can be compiled yourself, they may turn up on searches of the internet

or may be included with other MP3 applications already installed

on your system. For encoding/writing, try searching for lame-enc.dll,

libmp3lame-0.dll, libmp3lame.dll, or cygmp3lame-0.dll. For

decoding/reading, try searching for libmad-0.dll, libmad.dll or cygmad-0.dll.

Instructions are included here for using MSYS to create the DLL's.

It is assumed you already have MSYS installed on your system

with a working gcc compiler. The commands are ran from MSYS

bash shell.

Obtain the latest Lame and MAD source code from approprate locations.

Lame MP3 encoder http://lame.sourceforge.net

MAD MP3 decoder http://www.underbit.com/products/mad

cd lame-398-2

./configure --disabled-static --enable-shared

make

cp libmp3lame/.libs/libmp3lame-0.dll /path/to/sox

MAD libraries up to 0.15.1b have a bug in configure that will not allow

building DLL under mingw. This can be resolved by adding LDFLAGS

to configure and editing the generated Makefile to remove an invalid

option.

cd libmad-0.15.1b

./configure --enable-shared --disable-static LDFLAGS="-no-undefined"

[edit Makefile, search for "-fforce-mem" and delete it.]

make

cp libmad-0.dll /path/to/sox/

Appendix - AMR-NB/AMR-WB Support

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SoX contains support for reading and writing AMR-NB and AMR-WB files but

does not ship with the DLL's that perform decoding and encoding of AMR

data because of patent restrictions.

AMR-NB/AMR-WB support can be enabled by placing required DLL's

into the same directory as SOX.EXE. These can be compiled yourself,

they may turn up on searches of the internet or may be included with other

MP3 applications already installed on your system. For AMR-NB support,

try searching for libamrnb-3.dll, libopencore-amrnb-0.dll, or

libopencore-amrnb.dll. For AMR-WB support, try searching for libamrwb-3.dll,

libopencore-amrwb-0.dll, or libopencore-amrwb.dll.

Instructions are included here for using MSYS to create the DLL's.

It is assumed you already have MSYS installed on your system with

working gcc compiler. These commands are ran from MSYS bash shell.

Obtain the latest amrnb and amrwb source code from

http://sourceforge.net/projects/opencore-amr .

cd opencore-amr-0.1.2

./configure --enable-shared --disable-static LDFLAGS="-no-undefined"

make

cp amrnb/.libs/libopencore-amrnb-0.dll /path/to/sox

cp amrwb/.libs/libopencore-amrwb-0.dll /path/to/sox

Appendix - LADSPA Plugins

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SoX has built in support for LADSPA Plugins. These plugins are

mostly built for Linux but some are available for Windows.

The Audacity GUI application has a page that points to a collection

of Windows LADSPA plugins.

http://audacity.sourceforge.net/download/plugins

SoX will search for these plugins based on LADSPA\_PATH

enviornment variable. See sox.txt for further information.