### **NAME**

wf2wav, wf2mp3, wf2dsp - convert runfile waveform into WAVE or MP3 file or sound output

## **SYNOPSIS**

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wf2wav [-V] [-v volume] [-r rate] [-t st,en] runname.wnn [sox-options] [outfile] wf2mp3 [-V] [-v volume] [-t st,en] runname.wnn [sox-options] [outfile] wf2dsp [-V] [-v volume] [-t st,en] runname.wnn [sox-options]
```

### DESCRIPTION

Wf2wav converts a runfile's waveform file (.wnn) into a RIFF WAVE (.wav) file. Wf2mp3 converts a runfile's waveform file into an MPEG layer 3 (.mp3) file. Wf2dsp outputs a waveform file to the Linux DSP sound output device. For a given runname.wnn file, wf2wav, wf2mp3 or wf2dsp reads the runname.frm file to get the sampling rate and waveform's rate divisor, from which it calculates the effective sampling rate for the waveform file. It them makes use of the sox(1) (Sound eXchange) program on Linux to do the conversion to an audio file, and in the case of wf2mp3, it uses the lame encoder to convert it to MP3. In the case of wf2dsp, it outputs the sound directly to Linux's /dev/dsp device.

# **Options**

-V Sets the verbose output option for sox, as well as generating some verbose output from the conversion script itself. This includes showing what sox options are used to convert the file.

#### **−v** volume

Sets the output gain factor for the signal volume. The default is **auto**, which will cause the waveform to be analysed to determine the best gain factor to maximise signal strength without clipping.

### -**r** rate

Sets the output sample rate in Hertz. The default output rate is 11025 Hz. This option only applies to wf2wav. For wf2mp3, the output rate is fixed at 16 KHz/24 kbps for the resulting MP3 file. For wf2dsp, the output rate is set to the waveform's own sampling rate, or upsampled to 4 KHz for waveforms of lower frequencies.

# -t st,en

Specifies the start time and end time in seconds. The start and end must be specified as a single argument with a comma in between, i.e. with no space or by putting the whole argument in quotes. Note that unit specifiers are not allowed after the two numbers, which must be specified in seconds, but can include decimal points to specify fractions of seconds. The default action is to convert the whole waveform.

If no *sox-options* or *outfile* is specified, the default is to output a .wav (or .mp3) file on the standard output. If an *outfile* is specified, it must have the correct file name extension (.wav or .mp3). For wf2dsp, no outfile can be specified as only /dev/dsp is used.

## --help

Causes the program to output a summary of command usage and options.

# SEE ALSO

```
sox(1), frmfile(5)
http://lame.sourceforge.net/
```

September 30, 2011 1