

**MOH(Music on Hold) ?????????**

??? Trixbox/Elastix/PBXinaFlash ??? IP PBX ?????????? MOH ?????? mp3 ???  
 ?????????????????? mp3 ???  
 ? WAV ?????A.Lang?????????? MP3 ?? WAV ???

**??? MP3 ?? WAV ?**

?????????

- sox ?? wav ?(???? Trixbox/Elastix ??????)

- lame ? mpg123 ? MP3 ?? WAV (????????????????????)

**Step.1 ? MP3 ?? WAV**

With lame)

```
shell>lame --decode old.mp3 new.wav
```

With mpg123)

```
shell>mpg123 -w new.wav old.mp3
```

**Step.2 ? WAV ??? Asterisk ??????**

?????????16 bits 8khz ??

????

```
shell>sox old.wav -r 8000 -c 1 -w -s new_8khz.wav resample
```

??? new\_8khz.wav ?? Asterisk ????????

**TIPs**

\* ?????? sox: invalid option -- w???????

sox old.wav -r 8000 -c 1 -s new\_8khz.wav

\* ????????? 8 bit ??????? 16 bit?

??????

????? MP3 ?????????????? script ??????????????????

? Shell ?????)

```
// ? *.wav ??? *.orig
```

```
for fname in $(ls *.wav);do echo -n "mv $fname ->"; echo $(echo $fname |sed 's/\.wav/\.orig/'); mv $fname  
$(echo $fname|sed 's/\.wav/\.orig/');done
```

```
// ? *.orig.wav ??? *.wav
```

```
for fname in $(ls *.orig);do echo "-> sox $fname -r 8000 -c 1 -w -s $(echo $fname|sed 's/\.orig/\.wav/')
```

```
resample"; sox $fname -r 8000 -c 1 -w -s $(echo $fname|sed 's/.orig/.wav/') resample; done
```

```
// ?? *.orig
rm -f *.orig
```

- <http://www.voip-info.org/wiki/view/sox>

Digium ????????????????

<http://www.digium.com/en/products/iv...-converter.php>

??????????

file ??

```
$ file MSG_01.wav
```

```
MSG_01.wav: RIFF (little-endian) data, WAVE audio, Microsoft PCM, 16 bit, mono 8000 Hz
```

```
sox ??
```

```
$ sox -V MSG_01.wav -n
```

```
sox: SoX v14.2.0
```

```
sox formats: detected file format type `wav'
```

```
Input File   : 'MSG_01.wav'
```

```
Channels     : 1
```

```
Sample Rate  : 8000
```

```
Precision    : 16-bit
```

```
Duration     : 00:00:09.15 = 73211 samples ~ 686.353 CDDA sectors
```

```
Sample Encoding: 16-bit Signed Integer PCM
```

```
Endian Type  : little
```

```
Reverse Nibbles: no
```

```
Reverse Bits  : no
```

```
Output File  : " (null)"
```

```
Channels     : 1
```

```
Sample Rate  : 8000
```

```
Precision    : 16-bit
```

```
Duration     : 00:00:09.15 = 73211 samples ~ 686.353 CDDA sectors
```

```
sox sox: effects chain: input   8000Hz 1 channels 16 bits (multi)
```

```
sox sox: effects chain: output  8000Hz 1 channels 16 bits (multi)
```