

Asterisk and music on hold (MOH)

While current versions of Asterisk can natively play mp3 files, they are compressed and take up processor cycles.

It is better to convert the mp3 to a friendlier format such as sln which is a wav type format that requires less processor time.

Debian

```
# apt-get install sox libsox-fmt-all libsox-fmt-mp3
```

Then, convert your MP3 file directly to the uncompressed SLN format, this example assumes you have a file called SilentCity.mp3 and wish to convert it to sln:

```
# sox SilentCity.mp3 -t raw -r 8000 -c1 SilentCity.sln
```

If you have lots of mp3 files to convert, just copy this into a bash script called mp32sln.sh.

```
#!/bin/sh
# name of this script: mp32sln.sh

for i in *.mp3; do
  if [ -e "$i" ]; then
    file=`basename "$i" .mp3`
    sox "$i" -t raw -r 8000 -S -c1 "$file.sln"
  fi
done
```

chmod 766 mp32sln.sh and place it in the folder where all of the mp3 files exist.

Run it by entering **./mp32sln.sh** and it will run through the files and convert them. The **-S** parameter causes it to display the information and progress of the file being converted.

Once you are satisfied that all files sound correct, then run an **rm *.mp3** in the same folder to delete the original mp3 files.

If you want to add additional folders for moh, just edit the `/etc/asterisk/musiconhold.conf` file and add something like this:

```
[general]

[default]
mode=files
```

```
directory=moh
sort=random
```

```
[rock]
mode=files
directory=/home/user/music
sort=random
```

The [default] folder is the one that plays by default. The new folder I created is [rock]
Note the absolute path to the sound files.

To test a moh folder, create an extension in extensions.conf similar to this:

```
exten => 2525,1,Answer()
exten => 2525,n,MusiconHold(rock) ;Specify the moh group
exten => 2525,n,Hangup()
```

To specify that a phone uses this moh group, add something like this to the top of its extensions.conf file:

```
exten => 6104,1,Set(CHANNEL(musicclass)=rock)
exten => 6104,n,Dial(SIP/6104,20,rt);
exten => 6104,n,Hangup()
```

Note: Calls to extension 6104 will hear the rock music if either the caller within the system or 6104 puts them on hold.

If 6104 makes a call to another phone in the system and places them on hold, they will hear the default music unless that phone also has a custom moh set.

This would be useful to provide different messages on hold to different departments, such as sales might have something promoting this week's special buys.

Also note that it is illegal in most cases to just grab a favorite cd from your personal collection and use it for music on hold. Music is typically licensed for personal use only and any commercial usage requires a license from one or all of the major licensing organizations, ASCAP, SESAC, or BMI.

There are sources on the Internet for free or low cost music licensing for music on hold.

One source that I have used in the past is <http://www.onholdplus.com/messagestudio/>

This is a software package along with over 70 music tracks that allows you to create your own custom on hold messages with music. Licensing for the music is included with the software package.