mod_shout

About

This module allow one to play local and remote mp3 files at any sample rate.

Configure and Install

Install Dependencies

- libvorbis
- libogg
- development libraries for both

On Debian:

```
apt-get install libvorbis0a libogg0 libogg-dev libvorbis-dev
```

On CentOS 5.x:

```
yum install libvorbis libvorbis-devel libogg libogg-devel
```

On CentOS 6.x:

```
yum install libshout-devel lame-devel libmpg123-devel
```

Enable module in build.

Edit modules.conf in source directory to add mod_shout.

```
formats/mod_sndfile
formats/mod_shout      <--- NEW
#languages/mod_perl
```

Configure/Make:

```
./configure && make install
```

Overview

Play Capabilities

Local MP3 Files

Can play local mp3 files at any sample rate (8khz, 16khz, 44.5khz) in mono/stereo, re-sampling happens on the fly. (note: re-sampling can be expensive for the CPU)

Remote MP3 Files

```
session.streamFile("shout://some.server.com/file.mp3", "")
```

Icecast Streams

Can play icecast streams. TODO: example

Shoutcast Streams

```
<extension name="shout">
  <condition field="destination_number" expression="^750$">
    <action application="answer"/>
    <action application="playback" data="shout://scfire-dll-aa02.stream.aol.com:80/stream/1074"/>
  </condition>
</extension>


<extension name="moh_for_bridges">
  <condition field="destination_number" expression="^(15145555555)$">
   <action application="set" data="hold_music=shout://scfire-dll-aa01.stream.aol.com:80/stream/1018"/>
   <action application="bridge" data="sofia/default/$1@1.2.3.4"/>
  </condition>
</extension>
```

Using shoutcast stream for MOH

To use shoutcast for moh you have to do three things.

NOTE: If you just use "hold_music=shout://url" you will have issues after the first time you place the call on hold.

- You have to create a folder that contains a single file called "something.loc" with the url of the shoutcast stream. (shout://theserver:8111 /the_stream.mp3)
- You have to edit "autoload_configs/local_stream.conf.xml" to contain a stream that points to the folder you just created.

```
<directory name="moh/shout" path="$${base_dir}/sounds/music/shout">
  <param name="rate" value="8000"/>
  <param name="shuffle" value="true"/>
  <param name="channels" value="1"/>
  <param name="interval" value="10"/>
  <param name="timer-name" value="soft"/>
</directory>
```

- You have to set your "hold_music" variable to point to the local_stream that you just created. In this case that would be local_stream://moh /shout.

- You may have to tweak the volume parameters if the hold music is too loud via autoload_configs/shout.conf

```
<configuration name="shout.conf" description="mod shout config">
  <settings>
    <!-- Don't change these unless you are insane -->
    <!--<param name="decoder" value="i586"/>-->
    <param name="volume" value="0.7"/>
    <!--<param name="outscale" value="8192"/>-->
  </settings>
</configuration>
```

Using mod_shout for TTS with online services

Using mod_shout for TTS is not recommend in a live environment due to lack of caching. For setup examples see http://wiki.freeswitch.org/wiki/Category: TTS#Via_mod_shout_using_online_TTS

Record Capabilities

Can record to local MP3 files.

Can record to icecast and/or shoutcast streams.

Caveats

Fast Forwarding / Rewind Bugs

Certain things like fast-forwarding and rewinding might not work especially if the mp3 is "badly encoded". If you need those features, one thing to try is to decode the mp3 to a wave, and re-encode it back to an mp3 in order to cleanse it of errors. If this still does not work, consider converting it to a wave and using it in that format.

Enable module in runtime

Edit /usr/local/freeswitch/conf/autoload_configs/modules.conf.xml to add mod_shout to the list.

```
    <load module="mod_native_file"/>
    <!--For icecast/mp3 streams/files-->
    <load module="mod_shout"/>            <------- NEW
```

Load the Module

from the CLI, run "load mod_shout"

Verifying

See Playing/Recording External Media for instructions on how to play an MP3 file into a conference call.

Debugging Problems

If its not working, try the following:

Configure libshout directly

Rather than relying on the overall configure script to invoke this, go to the src/lib/libshout directory and run configure directly. If you get an error like:

```
checking for libogg... not found
checking for VORBIS... checking for libvorbis... not found
configure: error: requisite Ogg Vorbis library not found
```

Delete lib directories

Also, try deleting both the libs/libshout-2.2.2 and libs/lame-3.97 directory and rerunning make.

Recording to Icecast server

To record to Icecast server from your conference or your call:

```
<action application="record" data="shout://source:pass@10.10.10.10:8000/stream.mp3"/>
```

For conference, I do it from console:

```
conference 3001-10.10.10.10 record shout://source:pass@10.10.10.10:8000/stream.mp3
```