

Direwolf Vs QtSoundModem (part 1)

This is about RX and not TX.

This has caused some headaches. I want to use one trx and one antenna for this test. (Icom 7300 and a Hyendfed) Now the problem is that Direwolf and QtSoundModem both use the sound card. Now you can't both use the same sound card at the same time. So we will have to use two virtual sound cards and route the audio to these sound cards. For this I use "pactl" with this I can manipulate the PulseAudio server.

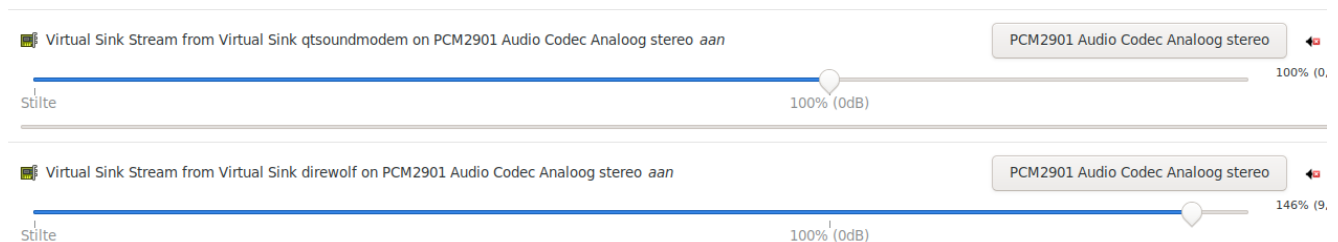
```
pactl load-module module-virtual-sink sink_name=direwolf
```

And

```
pactl load-module module-virtual-sink sink_name=qtsoundmodem
```

```
Sink Input #1
Driver: module-virtual-sink.c
Owner Module: 22
Client: n.v.t.
Sink: 1
Sample Specification: float32le 2ch 44100Hz
Channel Map: front-left,front-right
Format: pcm, format.sample_format = "\float32le\" format.rate = "44100" format.channels = "2" format.channel_map = "\front-left,front-right\"
Corked: no
Mute: no
Volume: front-left: 73001 / 111% / 2,81 dB, front-right: 73001 / 111% / 2,81 dB
balance 0,00
Buffer Latency: 0 usec
Sink Latency: 20076 usec
Resample method: copy
Properties:
media.name = "Virtual Sink Stream from Virtual Sink direwolf on PCM2901 Audio Codec Analog stereo"
media.role = "filter"
module-stream-restore.id = "sink-input-by-media-role:filter"
```

Actually we are making a virtual audio card for Direwolf and QtSoundModem. Now we need to route the Audio from the input to the virtual audio card. This is possible with PavuControl.



The screenshot shows four audio mixer sections:

- Virtual Sink qtsoundmodem on PCM2901 Audio Codec Analoog stereo:** Sliders for 'Voor links' and 'Voor rechts' are both set to 100% (0dB).
- Virtual Sink direwolf on PCM2901 Audio Codec Analoog stereo:** Sliders for 'Voor links' and 'Voor rechts' are both set to 100% (0dB).
- QtSM: Capture van PCM2901 Audio Codec Analoog stereo:** Sliders for 'Voor links' and 'Voor rechts' are both set to 53%.
- ALSA plug-in [direwolf]: ALSA Capture van PCM2901 Audio Codec Analoog stereo:** Slider for 'Voor links' is set to 128%.

Setup Direwolf

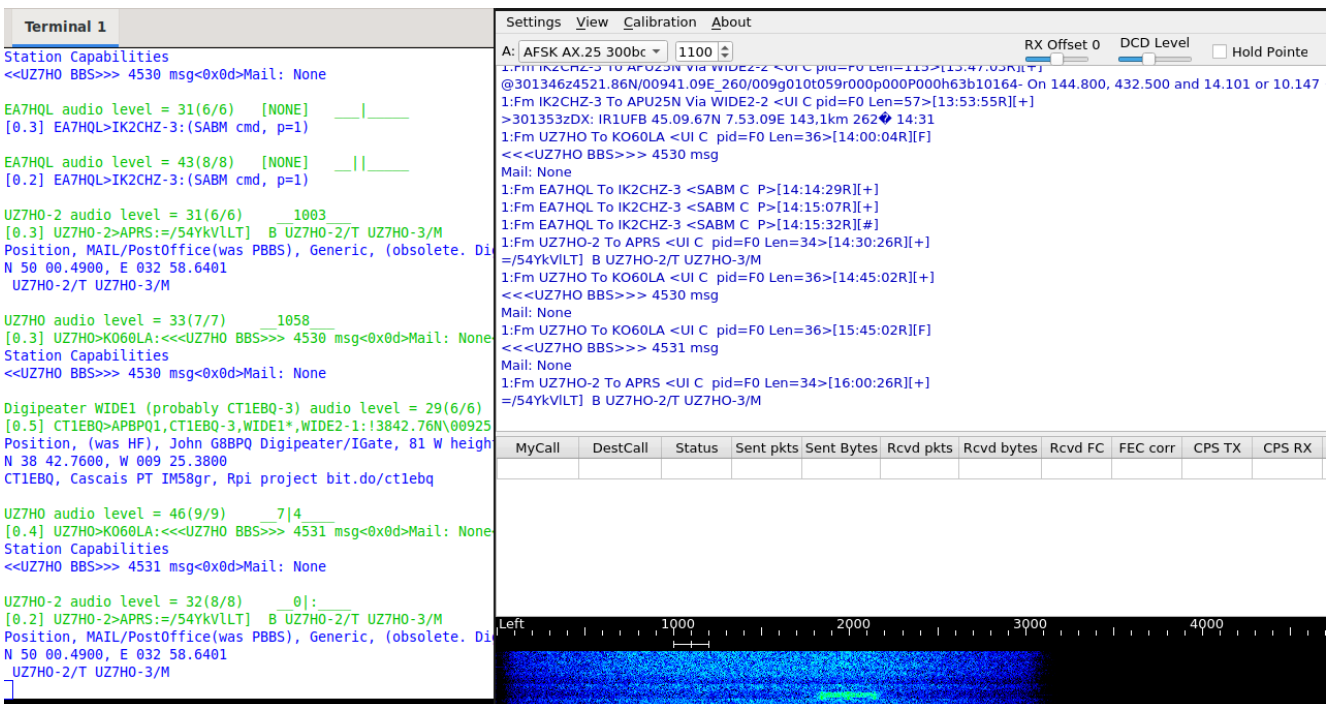
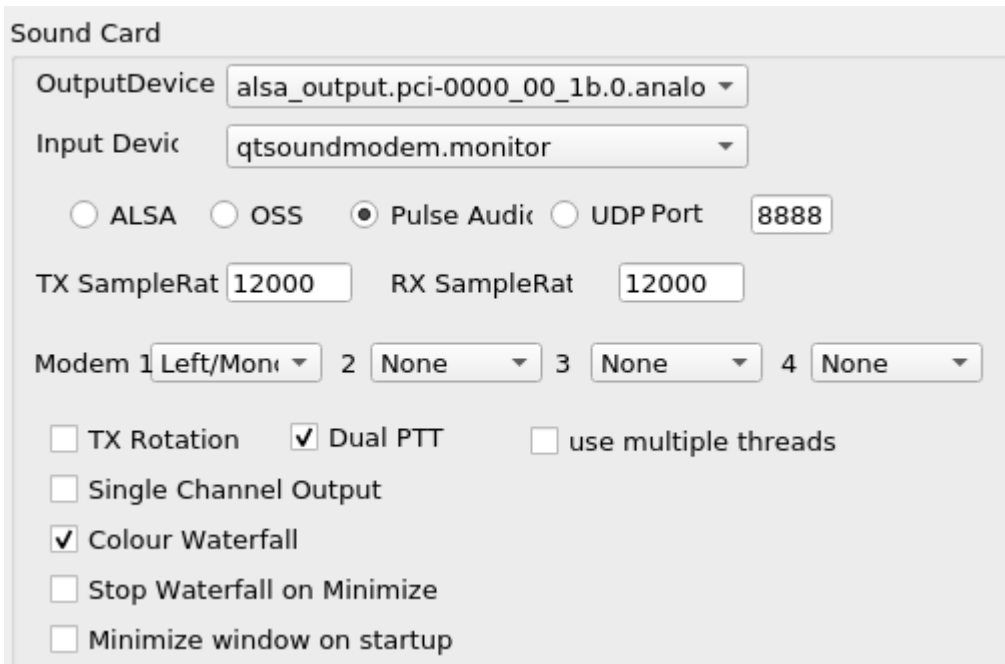
```
ADEVICE pulse
ACHANNELS 1
CHANNEL 0
MYCALL N0CALL
MODEM 300 1000 1200
AGWPORT 8008
KISSPORT 8009
```

```
Dire Wolf DEVELOPMENT version 1.7 C (Jan 23 2022)
Includes optional support for: hamlib cm108-ptt

Reading config file direwolf.conf
Line 157: Old style (pre version 1.2) format will no longer be supported in next version.
Audio device for both receive and transmit: pulse (channel 0)
Channel 0: 300 baud, AFSK 1000 & 1200 Hz, A+, 44100 sample rate / 3.
Note: PTT not configured for channel 0. (Ignore this if using VOX.)
Ready to accept AGW client application 0 on port 8008 ...
Ready to accept KISS TCP client application 0 on port 8001 ...
Ready to accept KISS TCP client application 0 on port 8009 ...
```

Uhhmmmm port 8001. I don't understand that yet, in the config it really is port 8009.

Setup QtSoundModem



Now I haven't fully read up on PulseAudio and pactl and the virtual cable/cards. Perhaps my wording and references are not quite correct.

Now I have the opportunity to test....