Remotes - Audio over ip

The Outside Broadcast is a way of bringing an event to the listener. With hospital radio, this is especially true when it comes to broadcasting to patients stuck in their hospital beds. Outside broadcasts give us some hurdles – not just technically but financially as broadcast equipment is often very expensive.

There are some considerations to make when we plan an OB.

- Connectivity availability
- Duration of remote broadcast
- Audio quality

Firstly we have to find out what connectivity is available at the remote site. Most often 3G or 4G wifi should be available. This gives us the option of a telephone quality call, or VoIP like Skype. See if the location has Broadband internet connection – this would give us a more stable internet connection for VoIP or audio over ip. An ordinary telephone line would also give us access to connect either via a telephone or a POTS (Plain Old Telephone System) connection (such as Comrex).

The second important consideration is the duration of the broadcast. Quick two minute segments can be done via a telephone call back to the studio, but a full on broadcast would be easier on the listener's ears if the connection used gave us better quality. Listening to 90 minutes of football down a telephone line is no longer acceptable and very tiresome for the listener! So point three, audio quality.

With the expansion of the internet, more radio stations across the world are turning to audio over ip (audio over the internet) to connect to the studio. And this can give us some excellent results with very little kit. There are a number of companies that have now embraced this idea and updated existing products to now connect via the internet. No more booking expensive ISDN lines!

Some systems use specialised kit with software (eg Telos Tieline Comrex) that can be expensive and out of financial reach of most small radio stations. Some just connect using the web browser Google Chrome with good results. Cleanfeed (http://cleanfeed.net) is an excellent example and free to sign up and use. ipDTL is also good but is subscription based. There is also some very cost effective software out and about. Fideliphone for example is software that was developed and released under Creative Commons licence – free for anyone to download and use.
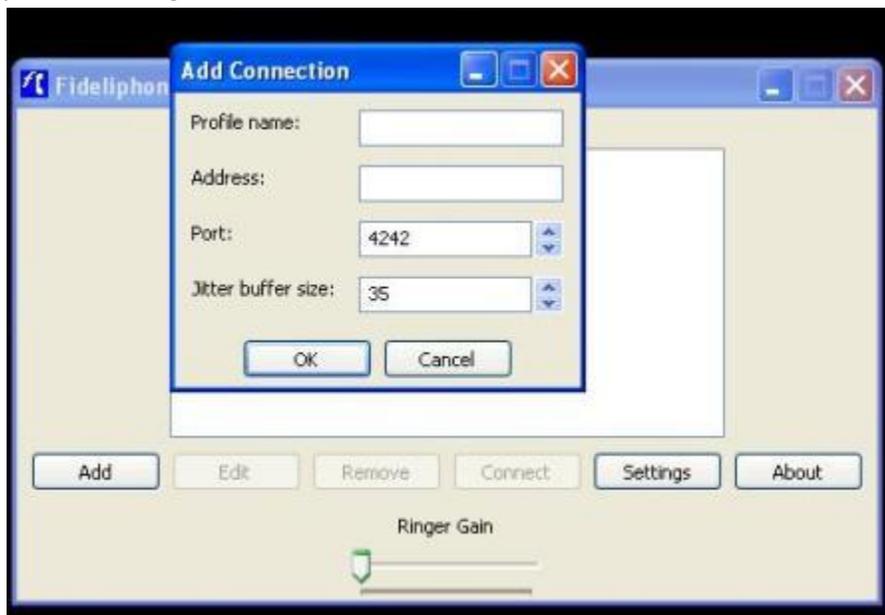
Fideliphone

Fideliphone was developed and released with the caveat that it would not be supported. The developers released it under a general creative commons licence for anyone to download and use. Sadly their website has gone and places like SourceForge no longer seem to have it to download. But you may be able to obtain a copy of the software from someone who already has it.

Imagine a stereo version of Skype – that's Fideliphone. The quality is as good as any stereo audio stream although there is a longer delay than that of Skype.

So if you manage to get a copy of the software, launch Fideliphone at both the studio and remote end.

1. Add your connection. This will depend on your studio broadband connection – if you don't have a fixed ip address, you will have to register for a NoIP dynamic name (eg xyzstudio.noip.com). This way the address stays the same even if your actual ip address from your internet service provider changes.
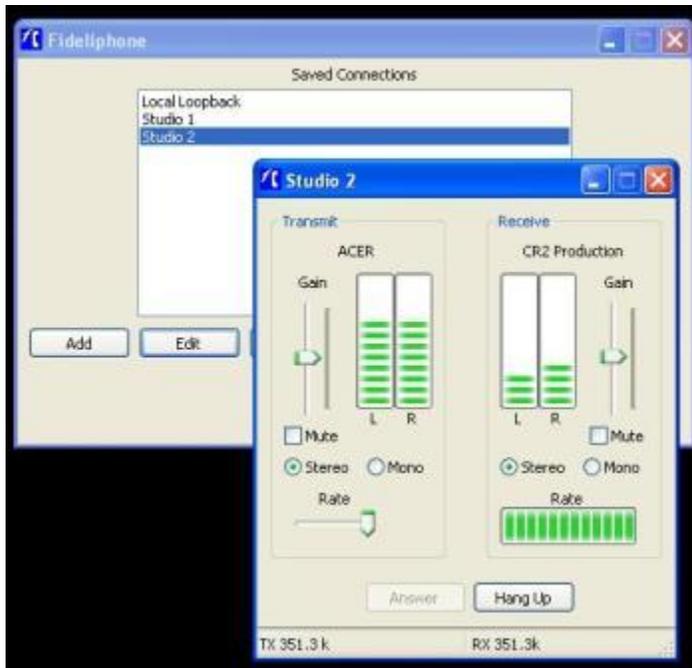

2. Fideliphone uses port 4242 so it may be wise to create an exception on your router's Firewall.

3. You can adjust the default audio level and default bit rate in the Transmit box.

4. When you connect, you can adjust the bit rate, audio level and stereo/mono mode if required.

Please ensure that the PC's/Laptop's used have the audio configured so a cleanfeed is sent to the other party. Hearing yourself with a three second delay is very off putting!