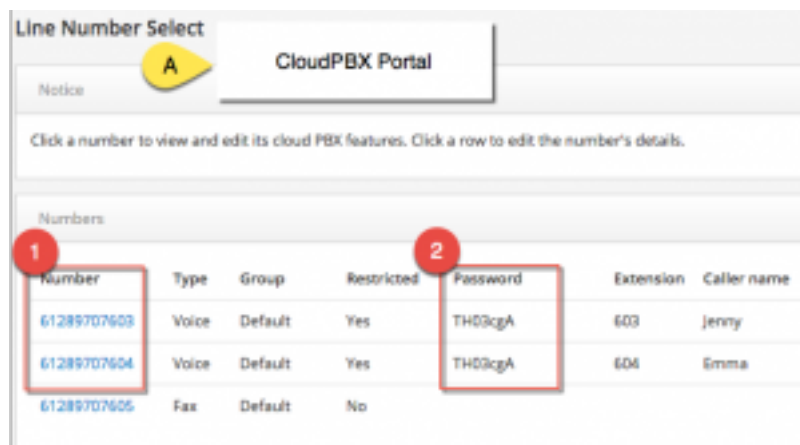# Technical Questions

SIP Registration, Peering and IAX2 explained

Tel2 supports SIP registration, SIP peering and IAX2 registration to connect your VoIP service.

SIP Registration

The simplest of the three connection types "Registration" is used to connect IP phones and some IP-PBX machines to our hosted cloud PBX. By configuring your IP-phone credentials (found in your CloudPBX portal – fig A) and the SIP Server / proxy host details (fig B) you'll be ready to start making calls.

SIP Peering

Enables a direct trusted network-to-network connection between your IP-PBX and our voice public IP. The main advantage of Peering is greater flexibility of number

routing within your onsite-PBX. To use Peering you will require a static WAN IP address.

IAX2 Registration

Tel2 also support the IAX2 Protocol aimed at customers with an Asterisk based IP-PBX system including Asterisk, Trixbox, FreePBX, Callweaver and others.

If your IP-PBX, gateway or phone supports the IAX2 protocol then it should be compatible with our IAX2 service. IAX2 has a number of advantages over the SIP protocol including:

- IAX2 trunking is more efficient with your Internet bandwidth when making multiple calls - often using less than half the bandwidth of the equivalent SIP calls using the same voice codec. For example eight G.729 calls using SIP will use around 250kbps with SIP but less than 100kbps using IAX2 trunking.
- With IAX2 it is easier to connect to us when behind a router or firewall as a single port number is used for both signalling (call setup information) and media (voice traffic). This removes the complexity of traversing some problematic firewalls etc. and removes problems with no audio or one way audio etc.
- DTMF traffic is always out of band removing any confusion about which DTMF method to use

For more benefits of IAX2 over SIP visit:
http://www.voip-info.org/wiki/view/IAX+versus+SIP

Technical Questions