

OrcaCom IAX2 service is aimed at customers with an 'Asterisk' based IP-PBX system including the following:

- Asterisk 1.2/1.4/1.6
- Trixbox
- FreePBX
- Callweaver
- Freeswitch etc.

If your IP-PBX, gateway or phone supports the IAX2 protocol then it should be compatible with OrcaCom's 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 OrcaCom 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>

To use the OrcaCom IAX2 Service you need to connect to 'iax2.orcacom.co.nz' (rather than sip.orcacom.co.nz). Below is a basic example configuration in the Asterisk 'iax.conf' file where the customer phone number is 099749000 and password is 'mypassword'. Obviously you replace these with your own phone number and password.

```
[general]

bandwidth=low
disallow=all
allow=gsm
allow=alaw
allow=ulaw
allow=ilbc
trunkfreq=20
trunktimestamps=yes
tos=ef

register => 099749000:mypassword@iax2.orcacom.co.nz

[099749000]
type=friend
username=099749000
trunk=yes
context=from-trunk    (* See below note on context)
host=iax2.orcacom.co.nz
secret=mypassword
auth=md5
disallow=all
allow=gsm
allow=alaw
allow=ulaw    (specify your own codec preferences in the allow's here)
```

* This is OrcaCom's default context, if you would like to you a different context name then please email us with the required name change (support@orcacom.co.nz).

NOTE: If you wish to have multiple numbers presented over IAX2 then you need to create a 'register' and 'peer' entry for each number in your IAX configuration file since each line on your account acts independantly.

Also a couple of other points to note:

- You MUST name your IAX trunk the same as your username. So if your OrcaCom login name is 099749000 then you should also name your trunk this as well. Using a separate name for your trunk/peer definition will cause problems with calls.
- You should also put an explicit 'context=xxxx' line (where xxxx is your preferred context) in your peer definition. (NOTE: Also be aware that there seems to be a bug some freepbx versions whereby if you change ONLY the context line in your IAX trunk definition, it doesn't write the changes out to the iax_additional file and if your context doesn't match up with the OrcaCom context, then calls will be rejected)

You then need to update your dial plan and replace the 'Dial' command(s) to use IAX2 instead of SIP. For example:

```
exten => _X.,1,Dial(IAX2/099749000/${EXTEN})
```

Happy Calling.