## Sipura back-to-back Config

This will allow the FXO connection of an SPA3000 to be accessed from another SPA unit connected to a network somewhere. Incoming calls on the SPA3000 FXO will be forwarded to the other Sipura unit (called the "remote SPA" in this example).

No registrations will be used, the communications will be done using IP addresses. When someone picks up the phone on the remote SPA, it will automatically connect to the FXO port on the 3000 to allow users to make normal PSTN calls.

In this example the IP Address of the SPA3000 is 81.187.73.20 & the IP Address of the remote SPA is 81.187.73.27. These will obviously have to be replaced for your own IP addresses when setting up. It would also be advisable to use static addresses on both the Sipuras.

## **How To Setup:**

In the web interface for the remote SPA in the tab for "line 1", "EXT1" or whichever line you want to use. Alter the following settings:

- "Make Call Without Reg" to "yes". This allows calls to be made without being registered to a SIP registrar.
- "Ans Call Without Reg" to "yes". This allows calls to be received without being registered.
- "Enable IP Dialing" to "yes". This enables the SPA to dial using IP addresses rather than SIP URIs which is ideally what should be used.
- Change the dial plan to read "(S0<:81.187.73.20>)". This sets up what is called a
  "hotline". So when the phone is picked up, it automatically dials the number (or IP
  address in this case) without the user doing anything.

In the web interface for the SPA3000, in the tab for "PSTN Line". Alter the following settings:

- "Make Call Without Reg" to "yes".
- "Ans Call Without Reg" to "yes".
- Change dialplan 2 to read "(S0<:81.187.73.27>)". This sets up a hotline which calls the remote SPA using it's IP address. It's wise to leave use dialplan 2 (or any number after that) & not dialplan 1 since most of the default settings on this page are set to use dialplan 1.
- "PSTN Ring Thru Line 1" if you have a phone connected to the 3000 & want it to ring when a call is received via the PSTN, leave this as "yes". If you only want the phone on connected to the remote SPA to ring, set this to "no".
- "PSTN Caller Default DP " to "2". This should match whichever dialplan you setup two steps ago. Again, try to avoid changing dialplan 1 in this case.
- "PSTN Answer Delay " change this to zero. Otherwise any incoming calls will not be forwarded to the remote SPA for 16 seconds (as the default value here is 16).

In the "line 1" tab, change the following settings:

- "make Call Without Reg" to "yes".
- "Ans Call Without Reg" to "yes".

Now in the "User 1" tab alter the following setting:

- "Cfwd All Dest" to "gw0". This forwards any incoming calls on the VoIP line to gateway-0 which is the FXO connected to the PSTN. Now when the remote SPA calls the IP address of this 3000, it is automatically forwarded to the PSTN & the user of the remote hears the PSTN dialtone.

## Security:

What has been done so far will work but so far anyone could type the IP address of the SPA3000 into an IP phone & make calls through your PSTN!

Alter these settings in the "PSTN Line" tab of the SPA3000:

- "VoIP Caller Auth Method" change to "PIN". This means that anyone accessing your PSTN line will be confronted by a set of beeps indicating that they should enter a PIN number. Failure to do so means they cannot access your PSTN line.
- "VoIP Access List" add the IP address of your remote SPA into here: 81.187.73.27 in this case. This allows your remote SPA to bypass the PIN number authorisation.
- "VoIP Caller 1 PIN" change this to any PIN number you want. This is what people will have to enter in to access the PSTN.

Whilst stopping un-authorised uses accessing your PSTN line this also means you can call your SPA3000's IP address from any IP phone & make calls using your own PSTN once you've entered your PIN number in!