

# Linksys Sipura FXS Gateways

## Linksys SPA3102

The following configuration has not been tested for PSTN failover. The FXS port is registering to a sipXcom 14.10 PBX and handles inbound/outbound fax transmissions as well as voice.

The first page as seen below shows the firmware and hardware version that this unit was running.

Info System SIP Provisioning Regional Line 1 PSTN Line User 1 PSTN User			
<b>Product Information</b>			
Product Name:	SPA-3102	Serial Number:	FM60P00995
Software Version:	3.3.6(070)	Hardware Version:	1.1.3
MAC Address:	00000003FCB	Clear Certificates:	Installed
Customization:	Open		
<b>System Status</b>			
Current Time:	4/1/2010 21:05:53	Elapsed Time:	1 day and 10:06:35
RTP Packets Sent:	6639	RTP Bytes Sent:	1361040
RTP Packets Recv:	8636	RTP Bytes Recv:	1381740
SIP Messages Sent:	126	SIP Bytes Sent:	59457
SIP Messages Recv:	126	SIP Bytes Recv:	77557
<b>Line 1 Status</b>			
Hook State:	On	Registration State:	Registered
Last Registration At:	4/1/2010 21:10:02	Next Registration In:	1279 s
Message Strategy:	No	Call Back Active:	No
Last Called Number:		Last Caller Number:	
<b>PSTN Line Status</b>			
Hook State:	On	Line Voltage:	0 (V)
Loop Current:	0.0 (mA)	Registration State:	Not Registered
Last Registration At:		Next Registration In:	
Last Called VSP Number:		Last Called PTTN Number:	
Last VSP Caller:		Last PTTN Caller:	
Last PSTN Disconnect Reason:		PSTN Activity Timer:	30000 (ms)
Registered SIP Trunk:		Call Type:	

Click on **Admin Login** and **Advanced** and then click on the **SIP** tab under the **Voice** settings. The following page will be displayed:

LINKSYS® A Division of Cisco Systems, Inc. Linksys Phone Adapter Configuration			
Router Voice			
Info System SIP Provisioning Regional Line 1 PSTN Line User 1 PSTN User			
<b>SIP Parameters</b>			
Max Proxies:	70	Max Redirects:	5
Max Auth:	2	SIP User Agent Name:	SIPVERSION
SIP Server Name:	SIPVERSION	SIP Reg User Agent Name:	SIPVERSION
SIP Server Language:	application/javascript	DTMF Relay Mode Type:	application/dtmfrelay
Hook Flash Hold Type:	application/hook-flash	Remove Last Reg:	no
Use Compact Headers:	no	Escape Outgoing Names:	no
RFC 2543 Call Hold:	yes	Mark All AVT Packets:	yes
<b>SIP Timer Values (sec)</b>			
SIP T1:	5	SIP T2:	4
SIP T3:	4	SIP Timer B1:	32
SIP Timer F1:	32	SIP Timer F2:	32
SIP Timer R1:	32	SIP Timer R2:	32
INVITE Expires:	240	Reinvite Expires:	30
Reg In Expires:	1	Reg In Expires Intvl:	7200
Reg Pcty Inact:	30	Reg Pcty Long Inact:	1200
<b>Response Status Code Handling</b>			
SIP1 RSC:		SIP1 RSC:	
SIP4 RSC:		SIP4 RSC:	
Tr. Backlog RSC:		Reg. Reg RSC:	
<b>RTP Parameters</b>			
RTP Port Hdr:	16394	RTP Port Hdr:	16462
RTP Packet Size:	0.020	Max RTP Send Buf:	0
RTP Tr. Interval:	0	No UDP Checksum:	no
Send In BIC:	no		
<b>SIP Preferred Types</b>			
ISB Dynamic Payload:	100	AVT Dynamic Payload:	101
ISB96Q Dynamic Payload:	97	OT206Q Dynamic Payload:	99
OT206Q Dynamic Payload:	97	OT206Q Dynamic Payload:	2
OT206Q Dynamic Payload:	96	OT206Q Dynamic Payload:	99
ISB Code Name:	ISB	AVT Code Name:	Telephone-event
OT206Q Code Name:	ISB96Q	OT206Q Code Name:	ISB96Q
OT206Q Code Name:	OT206Q	OT206Q Code Name:	OT206Q
OT206Q Code Name:	OT206Q	OT206Q Code Name:	OT206Q
OT206Q Code Name:	OT206Q	OT206Q Code Name:	OT206Q
OT206Q Code Name:	OT206Q	OT206Q Code Name:	OT206Q
<b>NAT Support Parameters</b>			
Handle VSP received:	no	Handle VSP sport:	no
Send VSP received:	no	Send VSP sport:	no
Substitute VSP Addr:	no	Send Pcty To Src Port:	no
STUN Enable:	no	STUN Tr. Enable:	no
STUN Server:	no	STUN:	no
STUN Port:	no	STUN Keep Alive Intvl:	15

Set RTP Packet Size to 0.020 and then click on the **Submit All Changes** button at the bottom of the page.

Next, click on the **Line 1** tab. Set the **Line Enable** to **yes**, set any QoS settings you may require, set the **SIP Transport** to **UDP**, set the **Proxy** to your **SIP domain** (for SRV sipXcom setup), set **Reigster** to **Yes**, set **Use DNS SRV** to **Yes**, set DNS SRV Auto Prefix to **Yes**.

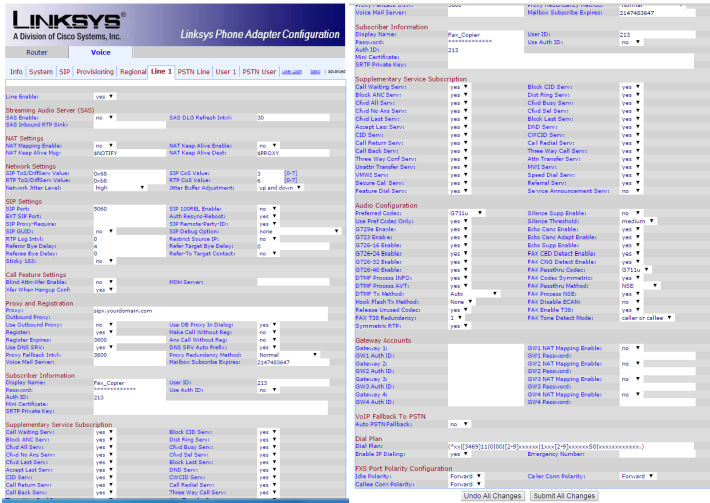
Set the **Display Name** to what you want local phone users to see for a user name, set **User ID** to the user's PBX extension, set the **Password** to the SIP password (not the PIN!), set **Use Auth ID** to **no**, set **Auth ID** to the user's PBX extension.

Set the **Preferred Codec** to **G711u**, set **Use Pref Codec Only** to **yes**.

The following dial plan will dial just about any valid number (depending on you Dial Plan in the PBX) . Just before the end of the page set the **Dial Plan** to: (\*xx[[3469]11|0|00][2-9]xxxxxx|1xxx[2-9]xxxxxxS0]xxxxxxxxxxxx.)

Click on 'Submit All Changes' when done with this page.

All of these settings can be seen in the following three screen shots:



If your DNS is configured properly the gateway should register and be able to make calls at this point.

# Linksys / Sipura PAP2

We need more detail here...

## PAP2 Notes:

PAP2 Settings to adjust.

Under the sip tab:

RTP Packet Size: 0.020

Under the line settings:

DTMF Process INFO: no  
 DTMF Process AVT: no  
 DTMF Tx Method: Auto  
 DTMF Tx Mode: Strict

I think that is all I changed from the defaults, and these settings work on both of my PAP2's. For some reason this does not work consistent with all the Linksys/Sipura models, for example I ended up using different settings on a SPA 2100.