How to configure Synway Gateway for a connection with Elastix System

Technical Department

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1. Abstract

Elastix is an Open Source Software to establish Unified Communications. About this concept, Elastix goal is to incorporate all the communication alternatives, available at an enterprise level, into a unique solution.

Synway SMG gateway family helps customers access to IP networks from legacy telephony applications more reliably and efficiently. Synway Gateway got certified and is now part of the Hardware that has been successfully tested to be interoperable with Elastix.

This document will help you to configure Synway Digital or Analog Gateway for a connection with Elastix System.

2. Test Environment

Elastix 2.4.0 (32 bit) Synway Digital Gateway: SMG2120, 1.6.1_2015062617 Synway Analog Gateway:SMG1032, 1.5.2_Release+2015052812

3. Installing Elastix

Please refer to http://blogs.elastix.org/en/manuals/#toggle-id-1, you can find Elastix 2 Installation Guide manual.



4. Configuring Synway Digital Gateway for a Connection with Elastix

Elastix IP Address: 192.168.10.163

Synway Digital Gateway IP Address: 192.168.10.248

Synway Digital Gateway E1 port PCM0 connects to E1 endpoint , here we use Synway SHD digital trunk board as the E1 endpoint, both are configured in PRI protocol

Below is the configuration among Elastix System, Eyebeam, and Synway Digital Gateway, try to make calls from these scenarios:

a) Eyebeam-->Elastix-->Digital Gateway-->E1 Endpoint

- b) E1 Endpoint-->Digital Gateway-->Elastix-->Eyebeam
- 1) To configure the Elastix system, start a web browser and enter the IP address of the Elastix System. Here is an example, http://192.168.10.163.





2) To add an extension, go to the 'PBX' menu, which by default goes to to the 'PBX Configuration' section, choose the option 'Extensions' on the left panel, select device type as 'Generic SIP Device', click 'Submit', then specify a user extension, display name and password for this extension, do not forget to click 'Apply Config' after any change at last.

♦ ▲ https://192	.168.10.163/config.ph	p?type=setup&displa	y=ext 👿 🔣 🔻 C	Q Google (Ctrl+K)	☆ 自 俞
PBX Configuration	Dperator Panel	stem Agei Voicemails	nda Email Calls Recordings	Fax Batch Configurations	PBX Conference
Basic	ifiguration				
Extensions Feature Code Outbound Ro Trunks Inbound Call Cont Inbound Call Cont Inbound Call Cont DAHDI Chan Announceme Blacklist CallerID Look Call Flow Con Follow Me IVR Queue Priorit Queues Ring Groups Time Conditio	es outes rol ites nel DIDs ints sup Sources itrol	Add an E Please select y - Device Device Ger Submit	xtension your Device below th	nen click Submit	



S PREEDOM TO COMMUNICATE	ystem Ager	nda Ema	il Fax	РВХ	
BX Configuration Operator Panel	Voicemails	Calls Recording	gs Batch Configu	rations Confere	ence
PBX Configuration					
BasicExtensionsFeature CodesOutbound RoutesTrunksInbound Call ControlInbound Call ControlInbound Call ControlAnnouncementsBlacklistCallerID Lookup SourcesCall Flow ControlFollow MeIVRQueue PrioritiesQueuesRing Groups	Add SIP E - Add Extension User Extension Display Name CID Num Alias SIP Alias	Extension	1001		

This device uses sip t	echnology.	extension password
secret	eyebeam1001	
dtmfmode 🤗	RFC 2833	~
nat®	No - RFC3581	~

A elastix®							
	System	Agenda	Email	Fax	РВХ	IM	Reports
PBX Configuration Operator P	anel Voice	emails Calls	Recordings B	atch Configurations	Conference	То	ols Flash
PBX Configuration)						
Basic					Apply	Config	
Extensions						ooning	
Feature Codes							
Outbound Routes							



3) To set an Eyebeam registering to the Elastix System, the User name and Password fields here must match the extension in the Elastix System.

	Settings			×
Logged in - enter phone number Your number is: 1001	Choose Setting Category SIP Accounts 192.168.10.163 Add a New SIP Account Add a New SIP Account Current of the set o	 ✓ Enable this SIP account User Details Display Name User name Password Authorization user name Domain Domain Proxy ✓ Register with domain Use as Outbound Proxy ✓ Manual Override SIP Listen Port Manual override Clear 	1001 1001 *********** 192.168.10.163 6594 6594 OK	Cancel



4) To add a Synway Digital Gateway as a Sip Trunk, click on 'Trunks' from the toolbar, follow below steps to add a 'Digital_SMG' sip trunk.

Aelastix					
	System	Agenda	Email	Fax	РВХ
PBX Configuration Operator Pa	nel Voice	mails Calls	Recordings	Batch Configuration	ons Conference
PBX Configuration					
Basic Extensions Feature Codes Outbound Routes Trunks Inbound Call Control Announcements Blacklist CallerID Lookup Sources Call Flow Control Follow Me IVR Queue Priorities Queues Ring Groups Time Conditions Time Groups	Add Add Add Add Add Add Add Add	a Trunk <u>J SIP Trunk</u> J DAHDi Trunk J IAX2 Trunk J ENUM Trunk J DUNDi Trunk J Custom Trunk	 c nk		



Basic		
Extensions		
Feature Codes		
Outbound Routes	Add SIP Trunk	
Trunks		
Inbound Call Control		
Inbound Routes	General Settings	
DAHDI Channel DIDs		
Announcements		
Blacklist	Trunk Name	
CallerID Lookup Sources		
Call Flow Control	Outbound CallerID ⁴ :	
Follow Me	CID Options	
IVR		
Queue Priorities	Maximum Channels	
Queues		
Ring Groups	Asterisk Trunk Dial Options	
Time Conditions	Continue if Busy	
Time Groups		
Internal Options & Configuration		
Conferences		
Languages	Dialed Number Manipulation Rules	
Misc Applications		
Misc Destinations		
Music on Hold	(prepend) + prefix match pattern 📀 🖀	
PIN Sets		
Paging and Intercom	+ Add More Dial Pattern Fields Clear all Fields	
Parking Lot	Diel Dulee Wiennete ?. (pick one)	
System Recordings	Diai Rules Wizards	
VoiceMail Blasting	Outbound Dial Prefix ¹² :	
Remote Access		
Callback	Outgoing Settings	
DISA	outgoing settings	
Option		
Unembedded FreePBX®	Trupk Name	
	PEER Details	
	host= 192.168.10.248 -Synway Digital Gateway IP address	
	type=peer is 192.168.10.248	



5) Create an outbound call rule to Synway Digital SMG. For example, when making an outbound call from the extension 1001, the other side will receive a call with caller Id 1001, here the dial pattern is '8.', which means the callee id starting with 8, can be routed to the 'Digital_SMG' SIP trunk.

Add Route	
Route Settings	
Route Name®:	Elastix_to_Digital_SM
Route CID:	
Route Password:	
Pouto Tupo: 0	
Route Type.	
Music On Hold?	default 🞽
Time Group.	Permanent Route 💌
finte oroup.	
Route Position	Last after Elastix_to_Digital_SMG
Additional Settings	
Call Recording [®] :	Allow
PIN Set [@]	None 💙
r in out .	
Dial Patterns that will use th	ns Route 🧐
(prepend) + prenx	
+ Add More Dial Pattern Fi	elde
* Add more biar Pattern in	cius
Dial patterns wizards ² :	(pick one)
Trunk Comonos for Matcho	d Pourtos 2
	u Roules ·
	Add Route Route Settings Route Name®: Route CID:® Route Password:® Route Type:® Music On Hold?® Time Group:® Route Position® Additional Settings Call Recording®: PIN Set®: Dial Patterns that will use th (prepend) + prefix + Add More Dial Pattern Fit Dial patterns wizards®: Trunk Sequence for Matched



6) Create an inbound call rule with DID Number '12345', which means call from the Synway Digital Gateway Sip Trunk with callee ID 12345 will be accepted by the Elastix System, and this call will be transferred to extension '1001'.

d Incoming Route escription ^(a) : SMG_to_Elastix D Number ^(a) : 12345 allerID Number ^(a) : D Priority Route ^(a) :
escription®: SMG_to_Elastix D Number®: 12345 allerID Number®: □ D Priority Route®: □
D Number [@] : 12345 allerID Number [@] : D Priority Route [®] : D
allerID Number [@] :
D Priority Route [®] :
tions
ert Info @:
D name prefix :
isic On Hold 🐏 🛛 🖉
anal RINGING [®] :
uce Refore Answer@
use before Answer
vacy
vacy
ivacy Manager®: No 💌
nguage



🗲 🕣 192. 168. 10. 248	B/en/navigation.php	👿 🐹 🔻 🤁 🔍 G	oogle 《Ctrl+K〉	☆ 自 俞	↑ - ●
			-	la. 1.	
045/40/40 7 20 40 47					
015/10/13 F+2:43:1/					
Operation into			System I	nfo	
System Info					
PSTN Status		LAN 1	00-00-00-40-40-00		
Call Count		IP Address	192 168 10 248	255 255 255 0	192 168 10 2
~		DNS Server	0.0.0.0	200.200.200.0	102.100.10.2
VolP	*	Receive Packets	All:3317907	Error:0	Drop:0
DCM	8	Transmit Packets	All:147575	Error:0	Drop:0
		Current Speed	Receive:11.7 KB/s	Transmit:10.5 KB/	s
ISDN	*	Work Mode	100Mb/s Full Duple	х	
Fax	*	LAN 2			
Route	8	MAC Address	00:00:E0:10:10:9C		
		IP Address	192.168.0.101	255.255.255.0	192.168.0.25
Number Filter	8	DNS Server	0.0.0.0		
Num Manipulate	8	Receive Packets	AII:0	Error:0	Drop:0
		Transmit Packets	All:0	Error:0	Drop:0
System Tools	*	Current Speed	Receive:0 B/s	Transmit:0 B/s	
		WOR WOUL	TOWD/S Hall Duplex		
		Runtime	13d 0h 39m 28s		
		Operating Mode	ISDN(user)		
		Current Version			
		Serial Number	000000106(4)		
		WEB	1.6.1_2015062617		
		Gateway	1.6.1_2015062617		
		Uboot	2.0.6_201407		
		Kernel	#208 Thu Mar 26 15	5:10:01 CST 2015	
		Firmware	10		

7) To configure Synway Digital Gateway connecting with Elastix System, start a web browser and enter the IP address of the Synway Digital Gateway.

8) Click on 'SIP Trunk' from the toolbar, add the Elastix System as a sip trunk, here the Elastix IP address is 192.168.10.163, and port is 5060.

Operation Info	*						
Se VolP	*						SIP Trunk
		Check	Index	Remote Address	Remote Port	WAN Option	Outgoing Voice I
SIP			0	192 168 10 163	5060	NET 1	128
SIP Trunk	>						
SIP Register			The short of	AU) [[[- 411	
SIP Account		Check All	Uncheck	All Inverse		r All	



9) Click on 'SIP Trunk Group' on the toolbar, add the SIP Trunk 0 into SIP Trunk Group 0

Operation Info	*						
VolP	*				SIP Trunk Group		
		Check	Index	SIP Trunks	SIP Trunk Select Mode	Description	Мо
SIP			0	0	Increase	Elastix	ſ
SIP Trunk							-
SIP Register			Linchook All	Inverse	listo Close All		Addit
SIP Account		d Itama Tatal 00	Uncreak All	L First Destinue Mart La	ote Cata Dana 1 wa di Danas Tatal		700011
SIP Trunk Group		Titems total 20	items/Page 1/1	FIRST PREVIOUS MEXT La	ist. Go to Page 1 💌 1 Pages Total		
Media							

10) Click on 'PCM Trunk Group' on the toolbar, according to the requirement, add related PCM Trunk(s) into PCM Trunk Group. Here add all the PCM Trunks 0,1,2,3 into PCM Trunk Group 0.

Operation Info	*				DOM Trupk Oroup		
VolP	*			n and and a second second	PCM Trunk Group	I exection and the second	11
	\$	Check	Check Index P		PCM Trunk Select Mode	Description	Modify
	1000 A		0	0,1,2,3	Increase	PRI	
PSTN			11				
Circuit Maintenan	ce	Check All	Uncheck All	E Inverse E Der	Clear All		Additiew
PCM		1 Items Total 20	Items/Page 1/1	I First Previous Next Las	t Go to Page 1 💌 1 Pages Total		
PCM Trunk							
PCM Trunk Group							
Num-Receiving R	ule						
Reception Timeou	ıt						

11) Click on 'Route\ IP->PSTN' on the toolbar, call from the Elastix System will be routed to PCM Trunk Group 0.

Operation Info	*									
VolP	*	_				Routing Rul	es			
	2	Check	Index	Call Initiator	CallerID Prefix	CalleeID Prefix	Number Filter	Call Destination	Description	Mo
ISDN	*		255	SIP Trunk Group [0]	*	8	none	PCM Trunk Group [0]	Elastix-SMG	(
 Fax 	*	Check All	Un	check All Inverse	E Delete	Clear All			Ad	ld Nev
Route	*	1 Items Tota	al 20 Item	s/Page 1/1 First Previo	us Next Last Goto	Page 1 💌 1 Page	s Total			
Routing Parameter	ers									
IP->PSTN		•								
PSTN->IP										

12) Click on 'Route\ PSTN->IP' from the toolbar, call from E1 Endpoint will be routed to SIP Trunk Group 0.



Operation Info	*											
VolP	*	Routing Rules										
D PCM	*	Check	Index	Call Initiator	CallerID Prefix	CalleeID Prefix	Number Filter	Call Destination	Description	Mo		
	*		255	PCM Trunk Group [0]	*	*	none	SIP Trunk Group [0]	SMG-Elastix	6		
<ii>Fax</ii>	*	Check Al	I 🗌 Un	check All Inverse		Clear All			Ac	d New		
Route	*	1 Items Tot	al 20 Item	s/Page 1/1 First Previou:	s Next Last Go to F	Page 1 ⊻ 1 Pages	Total					
Routing Paramete	ers											
IP->PSTN												
PSTN->IP		•										

13) Extension 1001 in the Elastix System made a call 8001 to Synway Digital Gateway, it finally reached to E1 Endpoint with caller Id 1001, and callee Id 8001.





14) E1 endpoint made a call '12345' to the Synway Digital Gateway, it finally reached to extension 1001 in the Elastix System.



5. Configuring Synway Analog Gateway for a Connection with Elastix

Elastix IP Address: **192.168.10.163** Synway Analog Gateway IP Address: **192.168.10.189**

Below is the configuration among Elastix System, and Synway Analog Gateway, FXS 9 and FXS 10 in the Synway Analog Gateway registered to Elastix, try to make calls from these scenarios: a) FXS-->Elastix-->FXS



- b) FXS-->Elastix-->Eyebeam
- c) Eybeam-->Elastix-->FXS
- d) Eybeam-->Elastix-->Analog Gateway-->PSTN
- e) PSTN-->Analog Gateway-->Elastix-->Eyebeam
- 1) Add two more extensions 1003 and 1004 in the Elastix System, for details how to add an extension, please refer to Chapter4, Section2 in this document.
- 2) Add the Synway Analog Gateway as a VoIP SIP Trunk, the Analog Gateway IP address is 192.168.10.189.

		100
Inbound Call Control	Delete Trunk Analog_SN	1G
Indound Routes	la construit and and a	
DAHDI Channel DIDs	In use by 1 route	
Announcements		
Blacklist	General Settings	
CallerID Lookup Sources		
Call Flow Control		(
Follow Me	Trunk Name	Analog_SMG
IVR	Outbound CallerID 2	
Queue Priorities	Odibodina Galerib .	
Queues	CID Options [®] :	Allow Any CID
Ring Groups		
Time Conditions	Maximum Channels .	
Time Groups	Asterisk Trunk Dial Options	Override
Internal Options & Configuration	Continue if Rucy	
Conferences	Conditide il Busy	
Languages	Disable Trunk :	Disable
Misc Applications		
Misc Destinations	Dialed Number Manipulation	n Rules [©]
Music on Hold		
PIN Sets		
Paging and Intercom	(prepend) + prefix ma	tch pattern 🛛 🔘 ଲ
Parking Lot		
System Recordings	+ Add More Dial Pattern Fields	Clear all Fields
VoiceMail Blasting	Dial Rules Wizards	(pick one)
Callback		
DISA	Outbound Dial Prefix :	
Ontion		
Unembedded FreePBX®	Outgoing Settings	
	Trunk Name [@] :	Analog_SMG
	PEER Details :	
	host=192.168.10.189	
	type=peer	



3) Create an outbound call rule to Synway Analog SMG. For example, when making an outbound call from the extension 1001, the other side will receive a call with caller Id 1001, here the dial pattern is '0.', which means the callee id starting with 0, can be routed to the 'Analog_SMG' SIP trunk.

Outbound Routes Trunks Inbound Call Control	Add Route	
DAHDI Channel DIDs Announcements	Route Settings	
Blacklist CallerID Lookup Sources Call Flow Control Follow Me IVR Queue Priorities Queues Ring Groups Time Conditions Time Groups Internal Options & Configuration Conferences Languages	Route Name Route CID: Route Password: Route Type: Music On Hold? Time Group: Route Position	Elastix_to_Analog_SN Override Extension Emergency Intra-Company default Permanent Route Last after Elastix_to_Analog_SMG
Misc Applications Misc Destinations Music on Hold PIN Sets	Additional Settings	Allow
Parking Lot System Recordings VoiceMail Blasting Remote Access	Dial Patterns that will use the	nis Route 😨
Callback DISA Option Unembedded FreePBX®	(prepend) + prefix + Add More Dial Pattern Fi Dial patterns wizards Trunk Sequence for Matcher	I [0. / CallerID] 🚡 Ields (pick one) 💌 ed Routes



4) To configure Synway Analog Gateway connecting with Elastix System, start a web browser and enter the IP address of the Synway Analog Gateway.

(() 192. 168. 10. 1	89/en/navigation.php	V 188 V (C Q Google (Ctrl+)	▷ ☆ 🖻	≙ 5 - 9
					h
Wed Oct 14 2015 10:2	9:02 GMT+0800				Language English 💌
Operation Info	*				
			System	Info	
Channel State		LAN 1 MAC Address	00:00:E0:10:0E:CD		
Call Count		IP Address	192.168.10.189	255.255.255.0	192.168.10.254
Quick Config	*	DNS Server	0.0.0.0	Eman0	Desail
		Transmit Packets	All.091 All:1372	Error 0	Drop:0
NoIP	*	Current Speed	Receive:2.2 KB/s	Transmit 866 B/s	Drop.0
Advanced	*	Work Mode	100Mb/s Full Duplex		
() Port	*	LAN 2	Disable		
D Pourto	×	LAN 2	DISable		
Koule		Runtime	6m 9s		
Num Manipulate	*				
System Tools	*	Current Version			
		Cotowov	1.5.2_Release+20150	J52812	
		Social Num	1.5.2_Release+20150	JJZ012	
		Authorization Code	00000014		
		Li-hoot	Nov 24 2014 - 09:24:5	2	
		Kernel	#186 PREEMPT Mon I	- Mar 2.09:06:53 CST 2	015
		Firmware	104		
		Device Type	1a4		
			Refresh		

5) Click on 'VoIP\SIP' from the toolbar, as two FXS extensions in the Analog Gateway should register to Elastix system, here set the Register IP Address is 192.168.10.163.



Hangzhou Synway Information Engineering Co., Ltd

. 17 GWI +0000		Language English 💌 Current
×		
*	SIP Setting	IS
8	SIP Address	LAN 1: 192.168.10.189 💌
	SIP Port	5060
	Register Status	Unregistered
	Register Gateway	No
	Registrar IP Address	192 168 10 163
*	Registrar Port	5060
*	Spare Registrar Septer	Enable
*	Spare Registral Server	
*	Registry Validity Period (s)	3600
8	Multi-Registrar Server Mode	Enable
	SIP Transport Protocol	UDP
	IMS Network	Enable
	x x x x x x x x x x x x x x x x x x x	SIP Setting SIP Address SIP Port Register Status Register Gateway Registrar IP Address Registrar Port Spare Registrar Server Registry Validity Period (s) Multi-Registrar Server Mode SIP Transport Protocol IMS Network

6) Port 9 and Port 10 are FXS type, set these two ports registering to Elastix with extension number 1003 and 1004.

Operation Info	*		
🕂 Quick Config	*	.FXS-M	Modify
VoIP	8	Port	9
Advanced	*	Туре	FXS
🚺 Port	*	Register Port	Yes
EVO		SIP Account	1003
FXS		Password	•••••
Port Group			
		Auto Dial Number	
Route	*	Wait Time before Auto Dial (s)	0
Num Manipulate	*		_
Evetern Teals	~	Echo Canceller	Enable
system rools	<u> </u>	Forbid Outgoing Call	Enable
		CID	Enable
		Call Waiting	Enable



Operation Info	*		
Quick Config	*	FXS-N	Aodify
VolP	*	Port	10
Advanced	*	Туре	FXS
🚺 Port	*	Register Port	Yes
110000000		SIP Account	1004
FXS		Password	•••••
FXO Port Group			
1 off of oup		Auto Dial Number	
Route	*	Wait Time before Auto Dial (s)	0
Num Manipulate	*		_
Custom Taolo	~	Echo Canceller	Enable
System tools	Č	Forbid Outgoing Call	Enable
		CID	Enable
		Call Waiting	Enable
		DND (Do Not Disturb)	Enable
		Call Forward	Enable
			-
		Advanced Configuration	Enable

	FXS Settings											
Туре	SIP Account	Authentication Username	Auto Dial Num	Forbid Outgoing Call	DND	Forward	FWD Type	FWD Number	CID	Call Waiting	Reg Statu	
FXS	1003			Disable	Disable	Disable			Enable	Disable	Registere	
FXS	1004			Disable	Disable	Disable			Enable	Disable	Registere	
FXS	200		1000	Disable	Disable	Disable	87788		Enable	Disable	Unregistere	
FXS	201	<u></u> 21		Disable	Disable	Disable			Enable	Disable	Unregistere	



7) FXS 9(1003) made a call to FXS 10 (1004).

8	_				Channe	el State			
	Channel	Type	Number	Voltage(v)	State	Direction	CallerID	CalleelD	Reg Status
		1360	Taditioor	volidge(v)	orare	Direction	Gallend	Galleelb	rteg otatao
	1	FXO	8001	29		1225	1443		Unregistered
	2	FXO	8002	27				2420	Unregistered
*	3	FXO	8003	0	6				Unregistered
*	4	EXO	8004	0	63				Unregistered
*	-	EX0	0007	~	623				U.S. States of
*	5	FXO	8005	0	640				Unregistered
0	6	FXO	8006	0	6			2220	Unregistered
	7	FXO	8007	0	5				Unregistered
*	8	FXO	8008	0	63				Unregistered
*									chiegietorea
	9	FXS	1003	0	6	TEL->IP	1003	1004	Registered
	10	FXS	1004	0		IP->TEL	1003	1004	Registered
	« « « « « « « « » » »	 Channel 1 2 3 4 5 6 7 8 9 10 	 Channel Type 1 FXO 2 FXO 3 FXO 4 FXO 4 FXO 5 FXO 6 FXO 8 FXO 8 FXO 9 FXS 10 FXS 	 Channel Type Number 1 FXO 8001 2 FXO 8002 3 FXO 8003 4 FXO 8004 5 FXO 8005 6 FXO 8006 7 FXO 8007 8 FXO 8008 9 FXS 1004 	 Channel Type Number Voltage(v) 1 FXO 8001 29 2 FXO 8002 27 3 FXO 8003 0 4 FXO 8004 0 5 FXO 8005 0 6 FXO 8006 0 7 FXO 8007 0 8 FXO 8008 0 9 FXS 1003 0 	Channel Type Number Voltage(v) State 1 FXO 8001 29 • 2 FXO 8002 27 • 3 FXO 8003 0 • 4 FXO 8004 0 • 5 FXO 8005 0 • 6 FXO 8007 0 • 7 FXO 8008 0 • 8 FXO 8008 0 • 9 FXS 1003 0 •	Channel Type Number Voltage(v) State Direction 1 FXO 8001 29 2 FXO 8002 27 3 FXO 8003 0 4 FXO 8004 0 5 FXO 8005 0 6 FXO 8006 0 7 FXO 8007 0 8 FXO 8008 0 9 FXS 1003 0 S	Channel State Channel Type Number Voltage(v) State Direction CallerID 1 FX0 8001 29 • 2 FX0 8002 27 • 3 FX0 8003 0 • 4 FX0 8004 0 • 4 FX0 8005 0 • 5 FX0 8005 0 • 6 FX0 8006 0 • 7 FX0 8007 0 • 8 FX0 8008 0 • 9 FXS 1003 0 • TEL->IP 1003	Channel State Channel Type Number Voltage(v) State Direction CallerID CalleeID 1 FXO 8001 29 2 2 FXO 8002 27 2 3 FXO 8003 0 2 4 FXO 8004 0 2 5 FXO 8005 0 2 6 FXO 8006 0 2 7 FXO 8007 0 2 8 FXO 8008 0 2 9 FXS 1003 0 S TEL->IP 1003 1004

8) FXS 9(1003) made a call to Eyebeam(1001)

				Channe	el State			_			
Channel	Туре	Number	Voltage(v)	State	Direction	CallerID	CalleeID	Reg Status	Channel	Туре	1
1	FXO	8001	27					Unregistered	17	87779	
2	FXO	8002	29		111			1 200 7	1 × ••		
3	FXO	8003	0	6			/		4002 (4002 64		
4	FXO	8004	0	6				incoming call on 1	: 1003 (1003@1	92.108.1C	
5	FXO	8005	0	5				1003 (1003@192.	168.10.163)	BAN	I
6	FXO	8006	0	63					2		1
7	FXO	8007	0	6						200	
8	FXO	8008	0	6				XFER HOLD PA			2
9	FXS	1003	0	2	TEL->IP	1003	1001				1
10	FXS	1004	0					FLASH	REC O REDIAL		1





9) Eyebeam(1001) made a call to FXS 10(1004).

				Channe	el State						
Channel	Туре	Number	Voltage(v)	State	Direction	CallerID	CalleeID	Reg Status	Channel	Туре	1
1	FXO	8001	29		-			Unregistered	17		
2	FXO	8002	27				· · · · ·	1			
3	FXO	8003	0	53			/	(Final and			
4	FXO	8004	0	5	1000			Kinging	201		
5	FXO	8005	0	6				1004@192.168.10	.163		I
6	FXO	8006	0	6	00				~		Л
7	FXO	8007	0	6						200	
8	FXO	8008	0	63				XFER HOLD PA			D
9	FXS	1003	0				· ·				T 81
10	FXS	1004	0		IP->TEL	1001	1004	FLASH	REC C REDIAL	E)	
11	FXS	200	0						5 6		

10) Eyebeam(1001) made a call to PSTN 088861158. Click on Port\Port Group from the toolbar, add FXO port into Port Group 1.

*									
*							Port (Group Settings	
*	Check	Index	Description	SIP Account	Authentication Username	Ports	Port Select Mode	Rule for Ringing by Turns	Timeout for Ringing b
*		1	FXO			1	Increase		
*									
	Check A	otal 20 lt	Uncheck All ems/Page 1/1	Inverse First Previous	Delete Clea Next Last Go to Page 1	T All	ges <mark>T</mark> otal		
	» » » » «	 Check Check Check Check Items To 	Check Index Check All Check All Items Total 20 It	Check Index Description Check Index Description T 1 FXO Check All Uncheck All I Items Total 20 Items/Page 1/1	 Check Index Description SIP Account Check Index Description SIP Account T T FXO Check All Uncheck All Inverse I tems Total 20 Items/Page 1/1 First Previous 	 Check Index Description SIP Account Authentication Username 1 FXO Check All Uncheck All Inverse Delete Clear 1 Items Total 20 Items/Page 1/1 First Previous Next Last Go to Page 1 	 Check Index Description SIP Account Authentication Username Ports Check Index Description SIP Account Authentication Username Ports 1 FXO 1 Check All Uncheck All Inverse Delete Clear All 1 Items Total 20 Items/Page 1/1 First Previous Next Last Go to Page 1 1 Page 	 Port of Check Index Description SIP Account Authentication Username Ports Port Select Mode 1 FXO 1 Increase Check All Uncheck All Inverse Delete Clear All Check All Uncheck All Inverse Delete Clear All 1 terms Total 20 Items/Page 1/1 First Previous Next Last Go to Page 1 1 Pages Total 	 Port Group Settings Check Index Description SIP Account Authentication Username Ports Port Select Mode Rule for Ringing by Turns 1 FXO 1 Increase Check All Uncheck All Inverse Delete Clear All 1 terms Total 20 Items/Page 1/1 First Previous Next Last Go to Page 1 1 Pages Total



Create the IP-TEL routing rule, when a call comes in to the gateway on a SIP channel, with callee ID prefix 0, this call will be routed to FXO port, then this FXO port will make an outbound call to PSTN.

Operation Info	*	Standard M	lode Chara	acter Mode				
Quick Config	*				IP-:	>Tel Routing Rule	5	
VolP	*	Check	Index	Source IP	CallerID Prefix	CalleeID Prefix	Call Destination	Description
Contract Advanced	*		63		IP->Tel Routing Rule		Port Group 1	default
🚺 Port	*			Index		2.44	,	
Route	*	Check All 1 Items Tota	Unche 20 Items/P	index.		1	Pages Total	
Routing Parameter	s			Description:	def	ault	7.	
IP>Tel		•		Source IP:		*		
Tel>IP				CallerID Pref	ix.	•		
Num Manipulate	*							
System Tools	*			CalleeID Pre	fix:	<u>م</u>		
				Route by Nur	mber]Enable		
				Call Destinat	ion:			
				Sav	/e C	lose		

Eyebeam(1001) made a call to PSTN 088861158.

						Chani	nel State			
System Info		Channel	Туре	Number	Voltage(v)	State	Direction	CallerID	CalleeID	Reg Status
Channel State					3-0-3-07					
Call Count		1	FXO	8001	7		IP->TEL	1001	088861158	Unregistered
	~	2	FXO	8002	0					registered
Quick Config	*	3	EXO	8003	0	63	1			be
VolP	*		1.1.1			-	Ca	II established	20	
Advanced	~	4	FXO	8004	0	1				a
2015 Advanced	•	5	FXO	8005	0	5	088861158@1		2.168.10.163	
🚺 Port	*		EVO	0006	0	10		D TO CONTA		0711a
D Pourto	*	6	FXU	8006	0			0.02	-	
- Nource		7	FXO	8007	0	ϕ				



11) PSTN 088861158 made a call to Eyebeam(1001).

Create the TEL-IP routing rule, when a call comes in to the gateway on a FXO port, this call will be routed to SIP channel, then the SIP channel will make an outbound call to the Elastix System.

	Standard	Mode	Character Mode					
*			1		Tel->IP Routin	ig Rule		
*	Check	Index	Call Initiator	CallerID Prefix	CalleeID Prefix	Destination IP	Destination Port	Descri
*		63	Port Group 1	*	*	192.168.10.163	5060	defa
*								ά.·
*	Check Al 1 Items Tol	al 20 Iter	Incheck All = ms/Page 1/1 Fil	Inverse = = = = = = = = = = = = = = = = = = =	Delete = Cl Last Go to Page	ear All 1 💌 1 Pages Total		
5								
	» » » « «	 Check Check Al Check Al 1 Items Tot 	 Check Index 63 Check All Check All I Items Total 20 Ite 	 Check Index Call Initiator 63 Port Group 1 Check All Uncheck All 1 1 Items Total 20 Items/Page 1/1 Fire 	 Check Index Call Initiator CallerID Prefix 63 Port Group 1 * Check All Uncheck All Inverse 1 Items Total 20 Items/Page 1/1 First Previous Next 	 Tel->IP Routin Check Index Call Initiator CallerID Prefix CalleeID Prefix 63 Port Group 1 * * Check All Uncheck All Inverse Delete Cl 1 Items Total 20 Items/Page 1/1 First Previous Next Last Go to Page 	 Tel->IP Routing Rule Check Index Call Initiator CallerID Prefix CalleeID Prefix Destination IP 63 Port Group 1 * 192.168.10.163 Check All Uncheck All Inverse Clear All Thems Total 20 Items/Page 1/1 First Previous Next Last Go to Page 1 1 Pages Total 	 Tel->IP Routing Rule Check Index Call Initiator CallerID Prefix CalleeID Prefix Destination IP Destination Port 63 Port Group 1 * 192.168.10.163 5060 Check All Uncheck All Inverse Delete Clear All 1 Items Total 20 Items/Page 1/1 First Previous Next Last Go to Page 1 1 Pages Total

PSTN 8357 made a call to Eyebeam(1001).

						Channe	el State			
System Info	Channel	Туре	Number	Voltage(v)	State	Direction	CallerID	CalleeID	Reg Status	
Channel State	<pre></pre>									
Call Count		1	FXO	8001	7		TEL->IP	8357	1001	Unregistered
		2	FXO	8002	0	5	-	110		aistered
Quick Config	*	3	FXO	8003	0	63	1		مت	
VolP	*	-	EVO	0004		103	Ca	II established	00	
Advancod	8	4	FXO	8004	0	6				0
Sc Auvanceu		5	FXO	8005	0	<i>f</i>	83	57 (8357@19	2.168.10.163)	
i) Port	*	6	EVO	2006	0	63	0:0	0:02	TS	g711a
Boute	*	0	FAU	0000	0					
	0	7	FXO	8007	0	5				