

Para iniciarmos a configuração do ponto a ponto, conecte o gateway GXW 4104 à rede pela porta LAN. O Grandstream GXW 4104 obtém IP DHCP, ou seja, recebe um endereço distribuído por um servidor da própria rede. Uma maneira bastante fácil de descobrir qual o IP foi atribuído ao equipamento, é utilizar um programa que lista todos os IP's da rede, por exemplo: Advanced IP

Scanner e verificar através do endereço MAC do dispositivo.



Notes 11 1 2 0 0 0 1 1 1 1	
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Agora que sabemos o IP que nosso gateway recebeu, vamos acessá-lo através do navegador web de sua preferência. Ao digitar o endereço no navegador aparecerá a tela de login. A senha padrão é admin



Gändstream		PSTN	_{GXW410X} Gateway
	Password	Login	

Conectado a interface do GXW4104 o primeiro passo é fixar um IP para evitar que o equipamento assuma outro endereço, tornando sem efeito as configurações ponto a ponto. Configure um IP dentro da sua rede.

>Networks>Basic Settings

Vietnoritis Status Account Settings Motivoritis Material Version: 14 it Motivoritis Basic Settings IP Address: © dynamically assigned via DHCP or PPPoE of configured DHCP hostname (Option 12) DHCP hostname (Option 15)			_			Logout	Reboot	
Basic Settings IP Address: dynamically assigned via DHCP or PPPoE of configured Date & Time DHCP bostname (Option 12)	Accounts Settings.	No	tworks	Maintena	-	D00 Lines	Line And p Version: 1	iana
Basic Settings Address: dynamically assigned via DHCP or PPPoE if configured DHCP domain (Option 12) Image: Configured Configured DHCP vendor class ID (Option 60) Grandstream GXW4104 PPPoE account D PPPoE account D PPPoE service name (option) PPPoE service name (option) Preferred DNS server 0 0 Venderes: * statically configured (default) as 11 IP Address: 11 11 DNS Server 2 0 0 DNS Server 2 0 0	ngs							
Abacced Settors IP Address:	7773							
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PPPoE account ID PPPoE account password PPPoE service name (option) Preferred DNS server 0 0 0 0 0 * statically configured (default) as IP Address 11 11 11 15 Subject Mask 285 255 255 0 Default Router 0 0 0 0 0 DNS Server 1 0 0 0 0 0 DNS Server 2 0 0 0 0 0	vendor class ID (Option 60)	Gran	Sstream GX	N4104				
PPPoE account password PPPoE service status (option) Preferred DNS server 0 0 0 0 0 * statucally configured (default) as IP Address 11 11 11 15 Submet Mask 255 255 0 Default Router 0 0 0 0 0 DNS Server 2 0 0 0 0 0 DNS Server 2 0 0 0 0 0	P99oE account ID					1		
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Preferred DNS server 0	Trive accoust passage					i		
Preferred DNS server 0	revols service name (option)	-			10			
* statically configured (default) as IP Address 11 11 11 15 Subnet Mask 255 255 0 Default Router 0 0 0 0 DNS Server 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Preferred DNS server		12 I.I.I.	0.225		42	0	
IP Address 11 11 11 15 Subset Mask 255 255 255 0 Default Router 0 0 0 0 DNS Server 1 0 0 0 0 DNS Server 2 0 0 0 0	tatically configured (default)	45						
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DNS Server 2 0 0 0 0	10000	0			0		1	
DNS Server 2 0 0 0 0	Default Router					(F)		
DNS Server 2 0 0 0	DNS Server 1	0	1	0	0		10	
DNS Server 2.000000000000000000000000000000000000		-	£	•			150	
	DNS Server 2	10		9	0		0	
DNS Overv Rate: 0 (in minutes, default 0 means no refreshement, max 45 days)			(in minute	default 0 a	means no	refreshemer	at max 45 days	5
DNS Query Rate: 0		DNS Server 2	DNS Server 2 0	DNS Server 2 0 (in minute	DNS Server 2. 0 0 0 (in minutes, default 0	DNS Server 2 0 0 0 0	DNS Server 2 0 0 0	DNS Server 2 0 0 0 0 0 0

Após fixarmos o IP do gateway, devemos conectar o equipamento através da porta WAN e acessálo novamente colocando o novo endereço no navegador web.

O segundo passo é configurar a aba FXO Lines, colocando os tons nacionais de sinalização. >FXO Lines>Settings



Dial Tone - ch1-4:f1=425@-10,f2=0@-10,c=0/0;

Ringback Tone - ch1-4:f1=425@-10,f2=0@-10,c=100/400;

Busy Tone - ch1-4:f1=425@-10,f2=0@-10,c=25/25;

Reorder Tone - ch1-4:f1=425@-10,f2=0@-10,c=25/25;

Tx to PSTN Audio Gain (dB): Troque 1 por 4 - Esta configuração oferece ganho no canal, aumentando a intensidade do áudio do equipamento para linha

Enable Tone Disconnect: Troque N por Y – permite o tom de desconexão, que informa que a ligação foi encerrada.

Ginétrean	Status Accounts Settings,	Notworks Halatenance (7201	ines Line Analysis Version: 1.4.1.4
FX0 Lines	FXO Settings		
Settings		Call Progress Tones	
Dialog	[Syntax: ch x-y: fl=val@vol.f2=va	diftyol.c=on1off1-on2off2-on3off3]	
	Note fl Cohemency(Hr) volum	mme(dB) c-cadence(10ms_0-continuous)	
	Dial Tone	201-411+425-8-10 (2+0-8-10 ++0.0	
	Rindback Tone	281-4 F1+425-00 F2+000-10 ++100-800	
	Party Town	51 4 Particle 10 Parts 10	
	Buty Lone:	Con-41-4208-10.0-08-10.0-10-02	
	Reorder Tone:	ch1-4 11+425(g-10.12+0g-10.c+25/25	
		Port Voice Setting	
	Tx to PSTN Audio Gain(dB):	ch1-4.4	(-12-12, default 1)
	Rx from PSTN Audio Gain(dB):	ch1-4.0;	(-12-12, default 0)
	Silence Suppression(Y/N):	ch1-4 Y	(default Yes)
	Echo Cancellation(Y/N):	cht-4 Y,	(default Yes)
		FXO Termination	
	Enable Current Disconnect(Y/N):	kht-4 Y.	(default Y-yes)
		use ch1-4 100	if yes (5 - 65530, defaul
		100ms)	Contraction of Security 2
	Enable Tone Disconnect:	(ent-4 M	(default No: Yes - busy
	South and the second second	toce)	
	Enable Polarity Reversal:	shire N	(orsault No. Conveit
	P. 11 C. 12	ch1-4 N	(default No. Consult
	Enable Call Supervision:	cansier)	
	Silence Timeout(X1s):	ch1-4 60;	(default 60s)

AC Termination Impedance: Troque 0 por 1 - corresponde a 900 Ohm (utilizado no Brasil) Number of Rings Before Pickup: Troque 4 por 1 – corresponde ao número rings no gateway antes de passar a chamada

Caller ID Scheme: Devemos colocar o valor de acordo com a sinalização da nossa linha para receber o caller id (detectar qual número de telefone ligou)





Feito isto, salvamos as configurações.

Ainda em FXO Lines devemos configurar o sub-menu Dialing.

>FXO Lines>Dialing

Stage Method: Troque 2 por 1 e Salve

			ı	ojan	nund	li	
COW410K PSTN Galeway						Logist	Reboot
Gadstrean	Status	Accounts	Settings	Ndeota	Halotonaco	FX0 Lines	Line Analysia Version: 1.4.1.4
FX0 Lines	Dialing						
Settings							
Dialing				Dialing to PS	IN		
		Wait for	Dial-Tone(Y/N)	ch1-4 N			(default No)
		Sta	ge Method(1/2)	ch1-4.1. dialong)			(definilt 2 stage
		Min Delay Bes	ore Dialing Out	ch1-4 500: 65000ma)			(default 500ma, 50 ~

O terceiro passo é configurar a aba Settings e o sub-menu Channels Settings.

>Settings>Channels Settings

DTMF Methods (1-7): Devemos selecionar o padrão que melhor atenda nossa estrutura e repeti-lo no GXW 4004

User ID: Configure desta forma ch1-4:444; - coloque o número 444 para ligação bater direto no

gateway FXS GXW 4004.

SIP Destination Port: ch1-4:5060++; - acrescentando o sinal ++ estamos dizendo que o equipamento se comunicará da porta 5060 em diante. Não é preciso alterar mais nenhuma configuração.

GRW430K PSTN Gateway				Lopout Reboot
Glebtren	Status Accounts	Settings Natworks	Halotonance	EXO Lines Line Analysis Version: 1.4.1.4
Settings	Channels Settings			
General Settings		SIP Channel !	Setting	
Call Settings	DTMF Methods(1-7);	ch1-4.1.	South and the second se	(default 1)
Channels Settings	5	(1 m-sudio, 2 RFC2833, 3 1+2,	4 SEP Info, 5 1+4, 6 2	+4, 7,1+2+4)
	No Key Entry Timeout(X1s):	ch1-4.4.		(1-9, default 4)
	Local SIP Listen Port:	ch1-4.5060++		(default ch1-8:5060++.)
	SRTP Mode(1-3):	sht-4.1]		(default 1)
		(1 doubled, 2 enabled but not for	rced. 3 enabled and fo	wced)
		Calling to V	olP	
	Unconditional Call Forwa	d to Following:		
	User ID:	ch1-2 444		(i.e.ch1-2/223.ch3/224)
	SIP Server:	ch1-4 p1		(ch1-2.p1:ch3.p2)
	SIP Destination Port:	ch1-4 5050++,		(ch1-2:5060.ch2:7080)

No quarto passo vamos configurar as contas, onde apontaremos para o gateway FXS GXW 4004

>Accounts>General Settings Podemos configurar até 3 contas. Mas neste tutorial configuraremos apenas a conta 1 (Account 1)

Account Active: Selecione Yes

Account Name: Crie um nome para o gateway GXW 4004

SIP Server: Digite o IP do gateway GXW 4004 e Salve

		lojar	nundi	
convecsor rom cuterway Genéstran	Status Accounts	Settings Reboord	a Maletenasce (XOLL)	opout Roboot nes Line Analysis Version: 1.4.1.4
Accounts	General Settings			
Account 1				
General Settings	Account Active:	* Yes O No		
Networks Settings	Account Name:	GXW-FXS	(Optional masse	of your peofile)
S2F Settings	SIP Server:	11.11.11.14	(Server domain n	nme or IP address)
Audo.Settops	Outbound Proxy:	£	(Domanin name or	IP address of an use)
Sall.Settiopa				
Account_2				
Nonet 3				
ther Account				
		Save Cancel		
			All Bridge Barriers & Bridge Barriers	the line of the last line and

>Accounts>SIP Settings

SIP Registration: Marque No. Não é necessário alterar as demais configurações, somente salve

GRW450K PSTN Galerway						Logout	Reboot
Gantstream	status Accounts) 5486	ga, Nota	sda	Haletenance	DKO Lines	Lies Analysis Version: 1414
Accounts	SIP Settings						
Account 1							
General Settings	SIP Registration:	© Yes	* No				
Networks Settings	Unregister On Reboot:	© Yes	* No				
S0P Settings	Register Expiration:	60	(in minutes	default 1	hour, max 45 da	5rd	
Audo Settings	SIP Reg Failure Retry Wait:	20	(in seconds	Between	1-3600, default	us 20)	
Call Settings	SIP Transport:	* UDP	0 TCP				
Account.2	Session Expiration:	160	(in seconds.	default]	80 seconds)		
Account_3	Min-SE:	90	(in seconds.	default a	od minimum 90	reconds)	
Unix Account	Caller Request Timer:	© Yes	* No (Reques	t for time	r when making o	utbound calls)	
	Callee Request Timer:	0 Yes	* No (When o	caller supp	orts timer but da	d not request on	e)
	Force Timer:	© Yes	* No (Use tim	er even v	ben remote part	does not suppo	(1%
	UAC Specify Refresher:	0 UAC	OUAS .	Omit (Re	commended)		
	UAS Specify Refresher:	# UAC	0 UAS (When	tuac di	d not specify refs	esher tag)	
	Force INVITE:	© Yes	* No (Always	refresh v	oth INVITE inst	and of UPDATE	G

Ainda em Accounts, vamos configurar o sub-menu User Account, onde definiremos qual será o SIP User ID e como os canais serão utilizados. Não é necessário criar senhas.

xwelce pstn Ga O	two)				Logout.	Reboot
Andstream		tas Accounts	Settings. Networks	Halatasance	EXO.Lines	Line Analysis Version: 1.4,1.4
ccounts	SIP User Acc	ounts				
Account_2			SIP UserID Setting			
ACCOUNT.2	Channel(s)	SIP User ID	Authenticate ID	Authen Pas	wword	SIP Account
wr Account	i	5060				Account 1 •
	2	5000				Account 1 .*
	3	5060				Account 1 .
	G	6060	C		_	Account 1 +

Pronto! Fizemos as configurações do GXW 4104, agora vamos para o GXW 4004.

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No quinto passo começaremos a configuração do gateway FXS GXW 4004 conectado pela porta LAN.

Este equipamento vem com o IP padrão 192.168.2.1 e a senha é admin, vamos colocá-lo na mesma rede do GXW 4104 fixando um IP no mesmo range.

>Basic Settings

Marque statically configured as e adicione o novo IP do equipamento

NAT/DHCP Server Information & Configuration: Selecione Bridge

Reply to ICMP on WAN port: Selecione Yes

WAN side HTTP/Telnet access: Selecione Yes



STATUS BA	SIC SETTINGS DUVANCED S	ETTINGS PROFILE 1 PROFILE 2	FXS PORTS
End User Password:		(purposely not displayed for	security protection)
Web Port:	80 (default for HTT	P is 80)	
Telnet Server:	No Yes		
IP Address:	o dynamically assigned via D	HCP	
	DHCP hostname:		(optional)
	DHCP vendor class ID:	HT500	(optional)
	use PPPoE		
	PPPoE account ID:		
	PPPoE password:		
	PPPoE Service Name:		
	Preferred DNS server: 0	.0.0.0	
	statically configured as:		
	IP Address:	11 .11 .11 .14	
	Subnet Mask:	255 .255 .255 .0	
	Default Router:	0.0.0.0	
	DNS Server 1:	0.0.0.0	
	DNS Server 2:	0.0.0.0	
Time Zone:	Using self-defined Time Zone		
Self-Defined Time Zone:	MTZ+6MDT+5,M3.2.0,M11.1.0	(For example: "MTZ+6N	(DT+5.M4.1.0.M11.1.0")
Language:	English •		
NAT/DHCP Server Information	& Configuration:		
Device Mode:	NAT Router Bridge		
NAT maximum ports:	1024 (range: 0 - 4096,	default is 1024)	
NAT TCP timeout:	3600 (range: 0 - 3600,	default is 3600)	
NAT UDP timeout:	300 (range: 0 - 3600,	default is 300)	
Uplink bandwidth:	Disabled T		
Downlink bandwidth:	Disabled •		
Enable UPnP support:	No Yes		
Reply to ICMP on WAN port:	No Yes (Unit will)	not respond to PING from WAN sid	e if set to No)
WAN side HTTP/Telnet	No Yes (WAN side	e access will be rejected if set to No)	

Agora que mudamos o IP do gateway, no sexto passo vamos conectá-lo à rede através da porta WAN e trocar os tons de sinalização para os padrões nacionais. Acesse a aba Advanced Settings.

>Advanced Settings

System Ring Cadence: c=1000/4000;

Dial Tone - ch1-4:f1=425@-10,f2=0@-10,c=0/0;

Ringback Tone - ch1-4:f1=425@-10,f2=0@-10,c=100/400;

Busy Tone - ch1-4:f1=425@-10,f2=0@-10,c=25/25;

Reorder Tone - ch1-4:f1=425@-10,f2=0@-10,c=25/25;



O sétimo passo é a configuração do Profile, onde iremos apontar o GXW 4004 para o GXW 4104.

>Profile1 **Profile Active: Selecione Yes**

Primary SIP Server: Digite o IP do gateway GXW 4104

SIP Registration: Selecione No

()	Grandstream Device Configuration
STATUS BASIC SETTIN	GS ADVANCED SETTING PROFILE E PROFILE 2 TXS PORTS
Profile Active:	U No Tes
Primary SIP Server:	(11.11.11.15 (e.g., sip mycompany.com, or IP address)
Failover SIP Server:	(Optional, used when primary server no
and a second second	(esponse)
Prefer Primary SIP Server:	 No O Yes (yes - will register to Primary Server if Failover registration expires)
Outbound Proxy:	(e.g., proxy myprovider com, or IP address, if any)
SIP Transport:	UDP O TCP O TLS (default is UDP)
NAT Traversal:	* No O Keep-Alave O STUN O UPaP
DNS Mode:	* A Record SRV SRV NAPTR SRV Use Configured IP
Primary IP:	
Backup IP1:	
Backup IP?	
7.1171	Decision al
000 0	Chapter -
Sur Reguration.	No Field
Chiregister On Repool.	No Tes
Chargoing Call without Registration:	No Tes

Ainda em Profile configure o Preferred DTMF method. A prioridade deve ser a mesma selecionada no GXW 4104.

•

	Preferred DTMF method: (in listed order)	Priority 1:	In-audio •
		Priority 2:	RFC2833 *
		Priority 3:	SIP INFO +

Caller ID Scheme: Devemos Selecionar de acordo com a sinalização da linha Caller ID Scheme: ETSI-DTMF during ringing

Por fim, no oitavo passo, vamos configurar a FXS Port.

>FXS PORT

Crie os SIP user ID e aponte para o GXW 4104, não é preciso criar senha.

Neste exemplo foram criadas as contas: 100, 200, 300 e 400

Em Map to FXO Port# foram criadas 1, 2, 3 e 4. Já em Map FXO Gateway IP, digite o endereço do gateway GXW 4104.



A porta para comunicação em todos os canais é a 5060.

_	5	TATUS	BASIC SETT	INGS	ADVANC	ED SETTINGS	PROFILE 1	PROFILE 2	TX5 PC	WRTS	
er Se	ttings										
rt S	IP User ID	Auther	nticate ID	Passwo	ord	Name	Profile ID	Hunting Group	Enabl	e Port	
1	100	100					Profile 1 •	None 🔻	0	No 💿	Yes
1	200	200					Profile 1 •	None •	0	No 💌	Yes
3	300	300					Profile 1 •	None •	0	No 🖲	Yes
4	400	400					Profile 1 •	None •	0	No 💌	Yes
ut (o moon a more a	urai	Map to FXC	Port#	Map	to FXO Gatewa	ay IP and P	ort			
rt ((e.g. \$001234	56)	Map to FXC	Port# ne# 1-n)	Map (e.g.	to FXO Gatew: 192.168.1.22)	ay IP and P (e.g. 50	ort 060)			
nt ((e.g. 8001234	56)	Map to FXC (e.g. valid lii 1	Port# ne# 1-n)	Map (e.g.	to FXO Gatewa 192,168.1.22) 1.11.15	ay IP and P (e.g. 50 5060	ort 060)			
nt ([[(e.g. \$001234	56)	Map to FXC (e.g. valid lii 1 2	Port# ne# 1-n)	Map (e.g.	to FXO Gatewa 192.168.1.22) 1.11.15 1.11.15	ay IP and P (e.g. 50 5060 5060	060)			
1 [2 [3 [(e.g. 8001234:	56)	Map to FXC (e.g. valid in 1 2 3	Port# ae# 1-n)	Map (e.g. 11.1 11.1 11.1	to FXO Gatewr 192.168.1.22) 1.11.15 1.11.15 1.11.15	ay IP and P (e.g. 50 5060 5060	060)			

Após estas configurações, o ponto a ponto entre o GXW 4104 e o GXW 4004 está pronto.

Até o próximo tutorial.