

This document applies to OpenVox GSM Gateway WGW1002G,VS-GW1202-4/8G and VS-GW1600 series. There are two RJ45 Network ports, ETH1 and ETH2. If you choose ETH1, you can access Board 1 only, and access other boards with the same IP address, different port numbers. This will help to avoid IP conflict. If you choose ETH2, you can access different Boards with different IP addresses. But there is only one RJ45 Network port on WGW1002G.

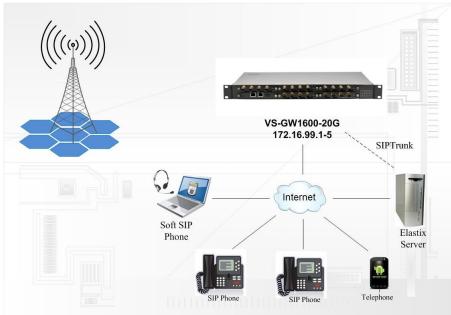
VoxStack provides 2 working modes: Stand-alone and Cluster.

Stack Num	IP	Username	Password
1	172.16.99.1	admin	admin
2	172.16.99.2	admin	admin
3	172.16.99.3	admin	admin
4	172.16.99.4	admin	admin
5	172.16.99.5	admin	admin

 $\Rightarrow$  Stand-alone: A single IP address manages one GSM modules (4 ports).

 $\Rightarrow$  Cluster: A single IP address manages up to 5 GSM modules (up to 20 ports).

Default IP: 172.16.99.1 User Name: admin Password: admin



## Step 1. Set Network Parameters in Web

If your system topology like the figure described, please enter the gateway default IP address In your browser to login web, and click "NETWORK—>LAN Settings" to set network parameters such as IP.

LAN IPv4	
Interface	eth0
Connection Type:	Static 👻
MAC:	00:56:64:75:7a:52
IPv4 Settings	
Address	172.16.99.5
Netmask	255.255.0.0
Default gateway	172.16.0.1

Save your changes. Please type in your DNS server in "DNS Server Address".

## Step 2. Create a SIP Endpoint in Web

Please select "SIP—>SIP Endpoints—>Add New SIP Endpoint" to set SIP trunk. The following figure shows detail information about how to set it.

▼ Main Endpoint Settings	
Name:	10001
Username:	10001
Password:	10001
Registration:	This gateway registers with the endpoint 🝷
Hostname or IP Address:	172.16.8.119
Transport:	UDP -
NAT Traversal:	Yes •

About other parameters in SIP, please set by your requirements for there is no need to set them in simple calls.

# Step 3. Set Routing Rules in Web

Click "ROUTING—> Call Routing Rules—> New Call Routing Rule" to set outbound and inbound routing rules like the following:

T Call Routing Rule	
Routing Name:	inbound
Call Comes in From:	gsm-1(13428690093_555) -
Send Call Through:	10001 -

Save the inbound call routing rules, please set the outbound rules as introduced. In order to make all calls successfully, please enable and set failover function in advanced routing rule like that:

Call Routing Rule	
Routing Name:	outbound
Call Comes in From:	10001 -
Send Call Through:	gsm-1(13428690093_555) ▼

V Advance Routing Rule

Please save all your changes to make effect.

### Step4. Create Gateways in VOS3000 Client

There are 2 kinds of Gateway in VOS3000 Operation Platform: Routing Gateway and Mapping Gateway. Routing Gateway is for VOS3000 to PSTN while Mapping Gateway is opposite. If you need both outbound and inbound calls from GSM gateway, then you need create both Routing Gateway and Maping Gateway to make it happen.

#### Section 1: Add a Routing Gateway in register mode:

Please select "Operation Management---> Gateway Operation----> Routing Gateway" to create a Routing Gateway:

System Operation I	Management A	udio Manage	ment Data G	uery Data Rep	oort CDR A	nalysis (	Cards Ma	anagement Sy	stem Management	Numbe	er Manageme	ent		
Dopen) 🔞 Fi	lter 👩 Copy	Paste	🚭 Add	🗿 Delete 【	Apply	Export	🖸 lm	01011111 port 101000 01111100						
Navigation Filter		Shortcut	Routing Gat	teway ×										
R.S.A. ID			Gateway Prefi	x 🔺 Prefix Mode			y Priorit		Additional Settings	IP	Password		Routing Settlement Account ID	
🔲 R.S.A. Name		1001	9	Extension	No Lock	30	1	All	Edit	00000	1001	connect VoxStack	20130410	20130410
🗹 GatewayID	1001													
🔲 Gateway Prefix														
IP														
🔲 Static	🔲 Dynamic													
Lock Type	01100000													
📄 No Lock 📄 B	Bar All Calls													
0000100100	Filter													
Total Gateway														
Number of Gateway	01.1.1.1													
Capacity	30													

Gateway ID:1001 ------Username of SIP trunk which GSM gateway registers to Password:1001 -----Password of SIP trunk which GSM gateway registers to Gateway Prefix:9 ------Specify calleeID 9+number goes out from GSM gateway Additonal Settings:

•Normal---->Gateway Type---->Dynamic

Gateway<1001>Additional Settings	x
Normal Routing Prefix Period Control Routing Settings Advanced Register	
Gateway Type 🔿 Static 🌀 Dynamic) Protocol H323 🔽	111
IP Signaling Port 1720	$110 \\ 111$
Local IP Auto Media Proxy Auto	000
Encryption Key	
Signaling Length	
Setup 5 CallProceeding 20 Alerting 120	
CallProceeding(RTP) 20 🔲 Stop Switch Gateway when RTP Start	őği
Number Length Limit	
Caller Number Allowable Length	
Callee Number Allowable Length	
Black and White List	
🗖 Caller List 💿 Allow 🔿 Forbidden	
🗖 Callee List 💿 Allow 💿 Forbidden	
Callee Transform	200 (
0.000100011110010000010111001000011110000101	
OK Cancel	

VOS3000 here acts as a SIP server, OpenVox GSM Gateway as a SIP client registers to it.

• Routing Prefix---->Routing Callee Rewrite

Add a Routing callee Rewrite Rule to remove the prefix '9' of CalleeID, then send it to GSM gateway.



Gateway≤1001≻Addit	iona Routing C	allee Rewrite Rule	×	×
Normal Routing Pr	efix Initial P	refix Destination Prefix		
Routing Caller Prefi Allow  Forbidd	× Ma	$\begin{array}{c} & & \\$	O Delete     O Copy     Paste	
Routing Callee Pref Allow  Forbidd	00011011		$\begin{array}{c} 0011 \\ 11100 \\ 01010101 \\ 0100010101 \\ 0110000000 \\ 01011000000 \\ 01011000000 \\ 010110000000 \\ 010110000000 \\ 01010000000 \\ 01010000000 \\ 0000000 \\ 0000000 \\ 0000000 \\ 000000$	
Call Restriction on ( Allow  Forbidd	01 110103		$\begin{array}{c} 010000010111\\ 10111010101\\ 001100010100\\ 111100010101\\ 10101010101\\ 00010101\\ 000000101\\ 000000000\\ 000000000\\ 0000$	
Routing Caller Rew	rite F		$\begin{array}{c} 00001 \\ 1101101 \\ 00000 \\ 0000111 \\ 01001110111$	
Routing Callee Rew 9:	rrite		$\begin{smallmatrix} 1 & 1 & 0 & 1 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0$	
00001000111		Selected0Row(s) Total:1	IRow(s)	
	889998888	OK Cancel	110101010001 101110110001	

### • Advanced---->SIP------Authentication User & Password

Sateway<1001>Additional Settings ×
Normal Routing Prefix Period Control Routing Settings Advanced Register
H323
Q.931 NumberingPlan Default
Q.931 NumberType Default
G729 Negotiation Mode Auto
🗹 FastStart 🗹 H245Tunneling 🗹 H245InSetup 🗹 Allow T38
-SIP
Reply Address Via Port 🛛 🚽 Request Address Contact Port 🔄
G729 Negotiation Mode G729 🛛 G729 annexb Auto
G723 annexa Auto
🗹 Enable Timer Protocol 🔲 Enable 100rel 🗹 Allow T38
Authentication User 1001 Authentication Password 1001
DTMF
DTMF Receive All 🛛 🔄 Payload 101
DTMF Send(H323) Auto
DTMF Send(SIP) Auto
OK Cancel

When Register enabled, Authentication Uaser and Password must be filled in.

#### •Register---->On

Normal	Routing Prefix	Period Control	Routing Settings	Advanced	Register	
00	O Off	101000111	$10000100010\\10001111011$	0001101	110100010	101001111110111 010100110111110
Register	Period 💿 Auto		🔵 Customize			
	60		(s)			
	lf you wan	t to use the name	of registered user	as Caller ID	, please set the	Caller Rewrite Rule of gatev
	Set Cal	ler Rewrite Rule	010110110			

This option is to choose register mode or ungister mode for GSM gateway.

#### Section 2: Add a Mapping Gateway in register mode:

Please select "Operation Management---> Gateway Operation----> Mapping Gateway" to create a Mapping Gateway:

Account ID	atewayID	Lock Type	1 a 11 - 1 - 11								
Account Name	000011 001011	No Lock	National	Type ^ Capaci 30	ty His SoftSwitch All	Additional Settings Edit	IP	Account ID 20130409	Account Name 20130409	Password 1001	Memo /oxStack2VOS3000 ]
GatewayID 1001											
Static Dynamic ock Type No Lock Bar All Calls											
Gateway Authorization											
National International Filter											

Gateway ID:1001------Username of SIP trunk which GSM gateway registers toPassword:1001-----Password of SIP trunk which GSM gateway registers to

Additonal Settings:

•Normal---->Gateway Type---->Dynamic

Gateway<1001>Additional Settings
Normal Mapping Prefix Period Control Routing Settings Advanced
Gateway Type 🕢 Bynamic 💿 Static
Process TimeOut 0 (s) Encryption Key
Media Proxy Auto Billing Method for Callee Call Transfer By Callee Number Length Limit Caller Number Allowable Length
Callee Number Allowable Length
Black and White List Caller List  Allow  Forbidden Callee List  Allow  Forbidden
Allow Phone Number Billing 🔄 Enable Phone Settings
Caller Transform
OTOOTTITITIOTOOTO OK Cancel



• Mapping Prefix---->Mapping Callee Rewrite

Add a RMapping callee Rewrite Rule to match all calls from GSM gateway, then send it to extension 4001.

Jormal M	apping Prefix	Period Control	Routing Settings	Advanced	
000011	Mapping Callee Rewrite Rule				× 00010
100001 011101 010110 011101 011101	Initial Pret *	fix De 4001	estination Prefix	Q Ad	ete ov
Mapping C Allow (	1000110 0010001 1011111 0101110			Pas	
Mapping C Allow (	1101100 0111011 1100111 01110100 00001100				
Mapping C	1101010 0100100 01001000 00000111			$\begin{array}{c} 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\$	
Mapping C					11 FILUIT
*:4001	01110001 00111000 1100100				
111000 100010 011111 100010		Selecte	d0Row(s) Total:1R	ow(s)	00110010 11111101 11111100 001111011
		ОК	Cancel		

# Step5. Call Test

Apply all changes on VOS3000 and GSM gateway, then you can try to make calls.

Taking advantage of SIP software such as Xlite, eyeBeam to register a SIP extension(4001) on VOS3000 server.

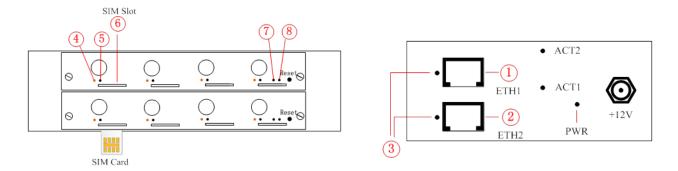
• Test call from VOS3000 to GSM geteway

Use Extension 4001 to call 9+number, then you will reach the number you want through GSM gateway, you can check it on GSM gateway.

• Test call from GSM geteway to VOS3000

Use your mobile to call numbers of SIM cards on GSM gateway, then Extension 4001will be ringing.

# **Front Panel**



LED Indicator	Color	Status			
③Network Status LED	Green and Flash	Network Connected			
	Green and Flash	Module Initiating			
	Red and Flash	No SIM Card			
④Signal Status LED	Red and No-flash	Worst Signal Quality			
	Yellow and No-flash	Medium Signal Quality			
	Green and No-flash	Best Signal Quality			
⑤Call Status LED	Flash (0.25s)	Communicating			
	Blind	Normal			
⑦Running Status LED	Green and Flash(0.5s)	Work Normally			
®Power Indicator	Always Green	Supply Power			
During reset, all LED indicators flash.					