NeoGate TG200 User Manual

Version 5.11.0.05

Yeastar Technology Co., Ltd



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1. Introduction

NeoGate-GSM Gateway for Maximum Efficiency & Cost Savings

NeoGate is a device for connecting GSM Network to VoIP Network directly, which can support two-way communication: GSM to VoIP or VoIP to GSM. It is the best solution ever to connect IP-based telephone systems, soft switches, and IP-PBXs to GSM network.

1.1 Features

1.2 Hardware Specification

1.2.1 Exterior Appearance

1) Back Side





Figure 1-1 NeoGate Front Panel Picture



No.	Identifying		
1)Power	Green shining: Connected, correct function.		
	Green flashing: Device error.		
	No light: Disconnected, malfunction.		
2 RUN	Green Light: Indicates the server system is in working order		
③Ready	Green Light: Indicates the system is ready.		
④Port2	Red Light: stands for GSM port		
	LED – Red and Green (fast blink): GSM port is in talking.		
⑤Port1	Red Light: stands for GSM port		
	LED – Red and Green (fast blink): GSM port is in talking.		



2. System set up

2.1 SIM Card Placement

Lift off the SIM card holder on the backside, insert the SIM card and replace the holder, securing the latch.

Note1: Remember to set call forwarding, call barring, preferential network(s), SMS centre and similar provider and SIM card services in your mobile phone before inserting the SIM card in NeoGate.

Note2: Disconnect NeoGate from the power supply before inserting the SIM cards.

2.2 Antenna Connection

NeoGate is equipped with two antenna connector for all the GSM modules. The external antenna should always be installed vertically on a site with a good wireless signal.

2.3 Ethernet Line Connection

NeoGate provides two 10/100M Ethernet ports with RJ45 interface and LED indicator. Plug Ethernet line into NeoGate's Ethernet port, and then connect the other end of the Ethernet line with a hub, switch, router, LAN or WAN. Once connected, check the status of the LED indicator. A yellow LED indicates the port is in the connection process, and a green LED indicates the port is properly connected.

2.4 Power Supply Connection

NeoGate utilizes the high-performance switch power, which supply the enough voltage and electrical energy that required by NeoGate system. AC Input: 100~240V DC Output: 12V,1A

Please follow the steps below to connect the NeoGate unit to a power outlet:

1. Connect the small end of the power cable to the power input port on the NeoGate back panel, and plug the other end of the cable into a 100VAC



power outlet.

2. Check the Power LED on the front panel. A solid green LED indicates that power is being supplied correctly.



3. NeoGate Configuration

3.1 Manager Login

IP Address: http://192.168.5.150

From your web browser, input the IP address of the NeoGate server.

If this is the first time you are configuring NeoGate, please use the default settings below:

Username: admin		
Password: password		
thtp://192.168.5.142/ - Microsoft Internet Explorer		
C Back → C → K Z C Search C Favorites C		
Address 🙆 http://192.168.5.142/	🖌 🏹 💽	Links »
NeoGate		<
NeoGate Configuration Panel		
Vser Login		
Username: admin		
Password:		=
Language: English		
Login		
Done	🌍 Internet	×

Figure 3-1



3.2 GSM Settings

3.2.1 Module List

NeoGate	;											
Modulo Sottings	5	Module Lis	tΦ									
Module List	1	Status	Signal	Trunk Name	Туре	Port	Volume	Max. Call Duration(min)	Call Duration(min)	Clear Stat.		
		Idle	Tail	GSM1	GSM	Port 1	40%	0	0	0	🔊 Edit	
VoIP Settings	9	Idle	Tail	GSM2	GSM	Port 2	40%	0	0	0	🔊 Edit	
IAX Settings Advanced Settings												
Route Settings												
Outgoing Routes												
Incoming Routes												
Callback Settings												
Diackinat												
SMS 🍣	ຍ											
Send SMS												
Received SMS Logs												
-												
Network Settings	2											
Firewall												
VLAN Settings												
VPN Settings												
DDNS Settings												
System Settings	2											
Options												
Password Settings												
Backup and Restore												
Reset and Reboot												
Firmware Update												
Reports 🏾 🏝	0											
Coll Loop										Internet	<i>6</i>	

Figure 3-2

NeoGate Status Description:

Status

Idle: The port is idle.

Busy: The port is in use.

- Error: The port has not inserted the SIM Card.
- Signal

 - ***** : Poor.
 - **Y**₁ : Average.
 - Yul : Good.
 - **Y**II: Excellent.



3.2.2 GSM Settings

Edit Module: GSM1	х
Trunk Name:	GSM1
Max. Call Duration(min) 🛈 :	0
Clear Stat. 🚺 :	0 💌
Volume Setting 🛈:	40%
PIN Code 🛈 :	
Warning:Be careful. If you fa code 3 times in success	iled to enter your correct PIN ion, SIM card will be blocked.
Save Save	X Cancel



Trunk Name: A name of this Trunk. Ex: 'GSM1' etc.

Max. Call Duration (min)/Per Month: Defines the maximum call duration within a month through this SIM card. (0 it means unlimited)

Clear Stat: Set the day in a month, in this day system will automate reset the SIM card's Max Call Duration to 0 min, (if selected 0, it means disable this functions)

Volume Setting: Define the volume of this GSM Trunk.

PIN Code: Defines the authority,only to enter the correct PIN code can be exhaled through the module.

Note: Be careful. If you failed to enter your correct PIN code 3 times in succession, SIM card will be blocked.



3.3 VoIP Settings

3.3.1 SIP Settings

NeoGate	
Module Settings 🍭 Module List	▶ SIP Settings ♥ SIP Settings Status: UNKNOWN
SIP Settings	O SIP Account
Advanced Settings	Type: SIP - Transport: UDP -
Route Settings 🖄 Outgoing Routes	Account: 20001 Password: pincode20001
Incoming Routes Callback Settings	Enable SKTP 🔮 : 🔲 Enable IP Restriction 🔮 : 🕅
SMS (*)	Register to SIP
Send SMS Sent SMS Logs	 Service Frovider You must click the "Save" button to save the changes.
Received SMS Logs	√ Save

Figure 3-4

3.3.1.1 SIP Account

It is an SIP Account that allows an IP Phone, IP Soft- Phone client, IPPBX and soft switch to register on NeoGate.

∙Туре

Choose the type(SIP, IAX, SIP/IAX)

Transport

Choose the protocol of the transport(UDP, TCP and TLS).

Account

The numbered extension, i.e. 1234, that will be associated with this particular User / Phone.

Password

The password for this extension, Ex: '12t3f6'.

•Enable SRTP

Enable SRTP for this account.

·Enable IP Restriction

Enable the restriction function .



NeoGate	
Module Settings	▶ SIP Settings ♥
Module List	SIP Settings
VoIP Settings 🄇	Status: UNKNOWN
SIP Settings	O SIP Account
IAX Settings	Type: SIP 🗸
Advanced Settings	Transport: UDP 🚽
Route Settings 🖄	Account: 20001
Outgoing Routes	Password: pincode20001
Incoming Routes	Enable SRTP 🚺: 🔲
Callback Settings	Enable IP Restriction 🛈: 🥅
Blacklist	
SMS 🎓	Accessed to sur-
Send SMS	Service Frovider
Sent SMS Logs	O You must click the "Save" button to save the changes.
Received SMS Logs	
Network Settings	<u>a bave</u>

Figure 3-5

3.3.1.2 Register to SIP

'Register to SIP', It use to register to SIP Server or SIP Proxy.

∙Туре

Choose the type(SIP, IAX)

Transport

Choose the protocol of the transport(UDP, TCP and TLS).

·Hostname/IP

Service provider's hostname or IP address.5060 is the standard port number used by SIP protocol. Don't change this part if it is not required.

.Domain

VoIP provider's server domain name.

•Username

Username of SIP account. Used for SIP trunk registration.

.Authorization name

Used for SIP authentication. Leave this blank if not required.

Password

Password of SIP account.

.From User

All outgoing calls from this SIP Trunk will use the From User (In this case the account name for SIP Registration) in From Header of the SIP Invite.

.Online number

Define the online number that expected by 'Skype Connect' and some other SIP service providers. Leave this field blank if it's no required.

·Enable Outbound Proxy Server

A proxy that receives requests from a client, even though which may not be the server resolved by the Request-URI.

·Enable SRTP

Enable SRT



NeoGate

1000000	
Module Settings	SIP Settings Ø
Module List	SIP Settings
VoIP Settings	Status: UNKNOWN
SIP Settings	SIP Account
IAX Settings	• Register to SIP
Advanced Settings	Type: SIP 🗸
Route Settings 🔕	Transport: UDP 🚽
Outgoing Routes	Hostname/IP: : 5060
Incoming Routes	Domain:
Callback Settings	lisername
Blacklist	
	Authorization name.
SMS 🔊	Password:
Send SMS	From User:
Sent SMS Logs	Online Number 0 :
Received SMS Logs	Enable Outbound Proxy Server :
Network Settings	
LAN Settings	ERADIE JAIF 🔷 . 🔚
Firewal1	Service Provider
VLAN Settings	• You must click the "Save" button to save the changes
VPN Settings	
DDNS Settings	Save

Figure 3-6

3.3.1.3 Service Provider

∙Туре

Choose the type(SIP, IAX)

Transport

Choose the protocol of the transport(UDP, TCP and TLS).

·Hostname/IP

Service provider's hostname or IP address.

Note: 5060 is the standard port number used by SIP protocol. Don't change this part if it is not required.

NeoGate	
Module Settings 🖄	▶ SIP Settings Φ
Module List	SIP Settings Status: UNKNOWN
SIP Settings	SIP Account
IAX Settings	Register to SIP
Auvanceu Settings	O Service Provider
Route Settings 🖄	Type: SIP 👻
Outgoing Routes	Transport: UDP 🚽
Incoming Routes	Hostname/IP: 5060
Callback Settings Blacklist	Vou must click the "Save" button to save the changes.
SMS 🛞	√ Save
Send SMS	

Figure 3-7



3.3.2 IAX Settings

General
 Bind Port
 The port used for IAX, Default is 4569.
 Bandwidth
 Choose the Bandwidth(Low, Medium, High)
 Minimum Registration Time
 Default is 60
 Maximum Registration Time
 Default is 1200.

2)Codecs

Tick the Codecs allowed.

NeoGate	
Module Settings 🍣 Module List	FIAX Settings 0 General
VoIP Settings SIP Settings <u>IAX Settings</u> Advanced Settings	Bind Port: <mark>#569</mark> Bandwidth: Low v Minimum Registration Time: 60
Callback Settings	Maximum Registration Time: 1200 Codecs
Blacklist SMS (8)	Allowed Codecs: Vu-law Vg-law VGSM SPEEX G726 ADPCM G729
Send SMS Sent SMS Logs Received SMS Logs	<pre>✓ Save] X Cancel</pre>

Figure 3-8

3.3.3 Advanced Settings

General
 UDP Port
 Port use for sip registrations, Default is 5060.
 TCP Port
 Port use for sip registrations, Default is 5060.
 TLS Port
 Port use for sip registrations, Default is 5061.
 TCP Port Start
 Beginning of RTP port range
 RTP Port End
 End of RTP port range



·DTMF Mode

Set default mode for sending DTMF. Default setting: rfc2833

Max Registration/Subscription Time

Maximum duration (in seconds) of a SIP registration. Default is 3600 seconds.

•Min Registration/Subscription Time

Minimum duration (in seconds) of a SIP registration. Default is 60 seconds.

·Default Incoming/Outgoing Registration Time

Default Incoming/Outgoing Registration Time: Default is 30 seconds.

•Register Attempts

The number of SIP REGISTER messages to send to a SIP Registrar before giving up. Default is 4 (no limit).

·Register Timeout

Number of seconds to wait for a response from a SIP Registrar before timed out. Default is 20 seconds.

·Max. Channels

Control the maximum number of outbound channels (simultaneous calls) that can be used. Inbound calls are not counted against the maximum.

2) NAT

Note: Configuration of this section is only required when using remote extensions.

•Enable STUN

STUN (Simple Traversal of UDP through NATs) is a protocol for assisting devices behind a NAT firewall or router with their packet routing.

•STUN Address

The STUN server allows clients to find out their public address, the type of NAT they are behind and the internet side port associated by the NAT with a particular local port. This information is used to set up UDP communication between the client and the VOIP provider and so establish a call.

•External IP Address

The IP address that will be associated with outbound SIP messages if the system is in a NAT environment.

External Host

Alternatively you can specify an external host, and the system will perform DNS queries periodically.

This setting is only required when your public IP address is not static. It is recommended that a static public IP address be used with this system. Please contact your ISP for more information.

·External Refresh Interval

If an external host has been supplied, you may specify how often the system will perform a DNS query on this host. This value is specified in seconds.

·Local Network Identification

Used to identify the local network using a network number/subnet mask pair when the system is behind a NAT or firewall.



Some examples of this are as follows:

'192.168.0.0/255.255.0.0' : All RFC 1918 addresses are local networks;

'10.0.0/255.0.0.0' : Also RFC1918;

'172.16.0.0/12': Another RFC1918 with CIDR notation;

'169.254.0.0/255.255.0.0' : Zero conf local network.

Please refer to RFC1918 for more information.

·NAT Mode

Global NAT configuration for the system. The options for this setting are as follows:

Yes = Use NAT. Ignore address information in the SIP/SDP headers and reply to the sender's IP address/port.

No = Use NAT mode only according to RFC3581.

Never = Never attempt NAT mode or RFC3581 support.

Route = Use NAT but do not include report in headers.

Allow RTP Reinvite

By default, the system will route media steams from SIP endpoints through itself. Enabling this option causes the system to attempt to negotiate the endpoints to route packets to each other directly, bypassing the system. It is not always possible for the system to negotiate endpoint-to-endpoint media routing.

3) QOS

QOS (Quality of Service) is a major issue in VOIP implementations. The issue is how to guarantee that packet traffic for a voice or other media connection will not be delayed or dropped due interference from other lower priority traffic.

When the network capacity is insufficient, QoS could provide priority to users by setting the value.

4) Codecs

A codec is a compression or decompression algorithm that used in the transmission of voice packets over a network or the Internet.

u-law: A PSTN standard codec, used in North America, that provides very good voice quality and consumes 64kbit/s in each direction (receiving and transmitting) of a VoIP call.

a-law: A PSTN standard codec, used outside of North America, that provides very good voice quality and consumes 64kbit/s in each direction (receiving and transmitting) of a VoIP call.

GSM: A wireless standard codec, used worldwide, that provides adequate voice quality and consumes 13.3kbit/s in each direction (receiving and transmitting) of a VoIP call. GSM is supported by many VoIP phones.

SPEEX: SPEEX is an Open Source/Free Software patent-free audio compression format designed for speech. The SPEEX Project aims to lower the barrier of entry for voice applications by providing a free alternative to



expensive proprietary speech codec. Moreover, SPEEX is well-adapted to Internet applications and provides useful features that are not present in most other codec.

G.726: A PSTN codec, used worldwide, that provides good voice quality and consumes 32kbit/s in each direction (receiving and transmitting) of a VoIP call. G.726 is supported by some VoIP phones.

ADPCM, G.729.

Note: If you would like to use G.729, please enter your license.



Figure 3-9

3.4 Route Settings

3.4.1 Outgoing Routes

Outbound routing mainly works for guides outgoing calls to go through trunks.

Click 'New Outbound Route' and fill in the corresponding information in the popup window.

1) General

•Route Name

Name of this Outbound Route. ex: 'Local' or 'Long Distance' etc.

·Dial Pattern

Outbound calls that match this dial pattern will use this outbound route. There



are a number of dial pattern characters that have special meanings:

- X : Any Digit from 0-9
- **Z** : Any Digit from 1-9
- **N** : Any Digit from 2-9

[12345-9] : Any digit in the brackets (in this example, 1,2,3,4,5,6,7,8,9) The '.' Character will match any remaining digits. For example, 9011. will match any phone number that starts with 9011, excluding 9011 itself.

The '!' will match any remaining digits, and causes the matching process to complete as soon as it can be determined that no other matches are possible.

Example 1: **NXXXXXX** will match any 7 digits phone number.

Example 2: **1NXXNXXXXX** will match a phone number starting with a 1, followed by a 3-digit area code, and then 6 digit number.

•Strip

Allows the user to specify the number of digits that will be stripped from the front of the phone number before the call is placed. For example, if users must press 0 before dialing a phone number, one digit should be stripped from the dial string before the call is placed.

·Prepend these digits before dialing

These digits will be prepended to the phone number before the call is placed. For example, if a trunk requires 10 digit dialing, but users are more comfortable with 7 digit dialing, this field could be used to prepend a 3 digit area code to all 7 digit phone numbers before calls are placed. When using analog trunks, a 'w' character may also be prepended to provide a slight delay before dialing.

·Direct Number

All the outgoing calls through this route will call to this phone number directly.

Strategy

Define the strategy to select trunk. Default: Select the trunk from the first. Sequence: Select the trunk next the last used. Balance: Select the trunk last recently used.

Time

The scope of time which is allowed to make calls via this route.

·Days of week

The days in a week when is allowed to make calls via this route.

·Generate Virtual Ring



The system can generate the virtual ring when you use this route.

Member Trunks

Define the trunks that can be used for this outbound route.



Figure 3-10

3.4.2 Incoming Routes

Inbound routing processes incoming call traffic to destination during office hours or outside office hours.

1) General

·Route Name

A name of this inbound route. ex: 'callin' etc.

·Caller ID Number

Define the Caller ID Number to be matched on incoming calls. Leave this field blank to match any or no CID info.

You can also use a pattern match (e.g. 2[345]X) to match a range of numbers. The following patterns may be used:

- X : Any Digit from 0-9
- **Z** : Any Digit from 1-9



N : Any Digit from 2-9

[12345-9] : Any digit in the brackets (in this example, 1,2,3,4,5,6,7,8,9) The '.' Character will match any remaining digits. For example, 9011. will match any phone number that starts with 9011, excluding 9011 itself.

The '!' will match any remaining digits, and causes the matching process to complete as soon as it can be determined that no other matches are possible.

Example 1: **NXXXXXX** will match any 7 digits phone number.

Example 2: **1NXXNXXXXX** will match a phone number starting with a 1, followed by a 3-digit area code, and then 6 digit number.

·Direct Number

All the incoming calls through this route will call to this phone number directly.

Note: Only 'SIP Settings' use 'Register to SIP' and 'Service Provider' mode can support this function.

·Auto Callback

You can enable the auto callback function here.

2) Member Trunks

This area allows you to select which trunks will be member trunks for this route. To make a trunk a member of this route, please move it to the 'Selected' box.

Edit Incoming Route: default	in			х
General				
	Route Name 🛈 : defaultir	1		
Calle	r ID Number 🛈 :			
Dir	rect Number 🛈 :			
	Auto Callback: 🔽 🛛 🖸	allback Settings		
Member Trunks				
Available Tru	inks		Selected	
	>>>	GSM2		
	<u>~</u>			
	»»»			
	🗸 Save 🎽	Cancel		

Figure 3-11



3.4.3 Callback Settings

NeoGate allows caller A to dial the number of the SIM card inserted in NeoGate, and after hearing the ring back tone, A can hang up the call or wait for NeoGate to cut off the call, then NeoGate will call A with this SIM card. When A pick up the call, A can dial the number he wants to call; NeoGate will forward this call to SIP server.

If user wants to use this function, please follow those steps.

Step1: Enable Auto Callback.

Edit Incoming Route: defaultin	Х
General	
Route Name 🛈 : defaultin	
Caller ID Number 🛈 :	
Direct Number 🛈 :	
Auto Callback: 🔽 Callback Settings	
C Member Trunks	
Available Trunks Selected	
S>>> GSM2 ← ≪≪	
Save Save	

Incoming Routes -> Tick Auto Callback and choose the trunk.

Figure 3-12

Step2: Configure the Callback number

Callback Settings -> Click 'New Callback number', and fill in the phone number in the pop-up windows.

Note: If you want to apply Callback function to all incoming numbers, please tick Allow All.

New Callback	х
Callback Number: 13405925798	
Save X Cancel	

Figure 3-13

Step3: Test.

In this case, configure the SIP Settings as the picture below.



🏉 NeoGate - GSE Gatem	vay for Maximum Efficiency & Cost-Savings - Vi	indows Internet Expl	orer	
🔆 🗢 🕈 http://192.	168.5.195/cgi/WebCGI?1000	📢 🖌 🗟 😽 🗙 😫	Google	P -
文件(E) 编辑(E) 查看(V)	收藏夹 (à) 工具 (ī) 帮助 (ł) 🗙 📢 转换 🔹 🚮 🤃	上择		
🚖 收藏夹 📝 NeoGate - G	SM Gateway for Maximum Efficie			
NeoGate				Logout
GSM Settings	► SIP Settings Φ			
Module List	SIP S	ettings		
VolP Settings	Status: Request Sent			
SIP Settings	SIP Account			
Advanced Settings	Register to SIP			
Route Settings 🏾 🍣	Hostname/IP:	192.168.5.100	: 5060	
Outgoing Routes	Domain:	192.168.5.100		Ξ.
Incoming Routes	Username:	501		
Caliback Settings Blacklist	Authorization name:	501		
	Password:	•••••		
SMS Send SMS	From User:	501		
Sent SMS Logs	Online Number 🛈 :			
Received SMS Logs	Enable Outbound Proxy Server :			
System Settings	Service Provider			
Options	O You must click the "Save" button to save the changes.			
Network Settings		Save		
Password Settings Date and Time				
Backup and Restore				
Reset and Reboot				
Firmware Update				
-			Internet	✓

Figure 3-14

Test:

Use mobile phone (whose number is 13405925798 which has already been added in the call back number) to call the SIM card inserted in the NeoGate. After hanging up the call, NeoGate will use SIM card to call user's mobile phone number. You pick up the call and then you can dial the number you want to call.

Note: Please ensure that the SIP account you set with NeoGate would allow you to call out directly.

3.4.4 Blacklist

Number Blacklist is used to block an incoming call you do not want to answer and block outgoing call.

If the incoming call or outgoing call number is registered in the number blacklist, the caller will hear the following: "The number you have dialed is not in service. Please check the number and try again". The system will then disconnect the call.



Ne	ew Blacklist	Х
	Blacklist Number 🛈 :	
	Save X Cancel	

Figure 3-15

3.5 SMS

3.5.1 Send SMS

Users can send the SMS in this page.

Note: Please select corresponding Calling Code when sending SMS. If the Calling Code isn't available in the list, please input it before the Destination Number. The format is: Country Code + Destination Number. (e.g.: In '861380592xxxx', '86' is the Calling Code of China, and '1380592xxxx' is Destination Number.)

Calling Code: please select corresponding Calling Code when sending SMS. If the Calling Code isn't available in the list, please input it before the Destination Number.

Destination: destination number.

Port: the port use to send SMS.

Content: content use to send out. (Max character is 300).



😫 NeoGate - GSM Gateway	for Maximum Efficiency & Cost-Savings - Microsoft Internet Explorer
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites	Iools Help
🚱 Back 🝷 🕥 🕤 😫	😫 🏠 🔎 Search 🧙 Favorites 🤣
Address 🕘 http://192.168.5.14	2/cgi/WebCGI?1000 🔽 🄁 Go Links 🎽
NeoGate	
GSM Settings 🔹	Send SMS Φ
Module List	Send SMS
VoIP Settings	Please select corresponding Calling Code when sending SMS. If the Calling Code isn't available in the list, please input it before the Destination Number. The format is: Country Code + Destination Number. (e.g.:In '861380592xxxt','86' Is the Calling Code of China, and '1380592xxxt' is Destination Number.)
Route Settings (*) Outgoing Routes Incoming Routes Blacklist	Calling Code: Destination: Port: GSM7
SMS (*) Send SMS Sended SMS Received SMS	Content:
System Settings 🛛 🙈	0/300
Options	V Send
Firewall	
Network Settings	
Password Settings	
Backup and Restore	
Reset and Reboot	
Firmware Update	
🕘 Done	internet

Figure 3-16

3.5.2 Sent SMS Logs

The Sent SMS logs capture all sent SMS details, including Account, Port, Destination, Time and Content.

Note: the maximum amount of messages sent that can be saved are 500.

3.5.3 Received SMS Logs

The Received SMS logs capture all received SMS details, including Port, From, Time and Content.

Note: The maximum amount of messages received that can be saved are 500.

3.6 Network Settings

3.6.2 LAN Setting

· DHCP

If this option is set, NeoGate will use DHCP to get an available IP address from your local network. Not recommended.



·Enable SSH

This is the advance way to access the device, you can use the putty software to access the device. In the SSH access, you can do more advance setting and debug.

·Port
the default is 8022,
·Hostname
Set the host name for NeoGate.
·IP Address
Set the IP Address for NeoGate.
•Subnet Mask
Set the subnet mask for NeoGate.
•Gateway
Set the gateway for NeoGate.
·Primary DNS
Set the primary DNS for NeoGate.
•Secondary DNS
Set the secondary DNS for NeoGate.
·IP Address2
Set the 2 nd IP Address for NeoGate.
Subpot Mack2

Subnet Mask2

Set the 2nd subnet mask for NeoGate.

Settings		
	DHCP: No 💌	
	Enable SSH: Yes 💌 Port: 8022	
	Hostname: TG200	
	IP Address: 192.168.5.161	
	Subnet Mask : 255, 255, 254, 0	
	Gateway : 192.168.5.1	
	Primary DNS : 192.168.5.1	
	Secondary DNS :	
	IP Address2:	
	Subnet Mask2:	

Figure 3-17

3.6.2 Firewall

Firewalls are used to prevent unauthorized Internet users from accessing private networks connected to the Internet, especially intranets. All messages entering or leaving the intranet pass through the firewall, which examines each message and blocks those that do not meet the specified security criteria.



1) Enable Firewall

Enable the firewall to protect the device.

2) Common Rules

•Name

A name of this rule, e.g. 'HTTP'.

Description

Simple description for this rule. eg: Accept the specific host to access the web interface for configuration.

Protocol

The protocols of this rule.

·Port

Initial port should be on the left and end port should be on the right.

The end port must be equal to or greater than start port.

٠IP

The IP address for this rule. The format of IP address is: IP/mask

Ex: 192.168.5.100/255.255.255.255 for ip 192.168.5.100

Ex: 216.207.245.47/255.255.255.255 for ip 216.207.245.47

Ex: 192.168.5.0/255.255.255.0 for ip from 192.168.5.0 to 192.168.5.255.

·MAC Address

The format of MAC Address is XX: XX: XX: XX: XX: XX, X means $0 \sim 9$ or $A \sim F$ in hex, the $A \sim F$ are not case sensitive.

Action

Accept: Accept the access from remote hosts.

Drop: Drop the access from remote hosts.

Ignore: Ignore the access.

New firewall rule	X	
Name🛈:		
Description 🛈 :		
Protocol 🛈 :	TCP 🗸	
Port ⁽¹⁾ :	0 : 0	
IP Û :	/	
MAC Address 🛈 :		
Action 🛈 :	Drop 💌	
	Save X Cancel	

Figure 3-18



3) Auto Defense
•Port
Auto defense port, e.g.: 8022.
•Protocol
Auto defense protocol, TCP or UDP.

Rate

The maximum packets or connections can be handled per unit time.

E.g.: (Port: 8022 Protocol: TCP Rate: 10/minute) means maximum 10 TCP connection to port 8022 can be handled per minute, the eleventh connection will be refused directly.

New auto defense rule	Х
Port ¹ : 0	
Protocol 🛈 : TCP 💌	
Rate 🛈 : 🛛 / Second 💌	
Save X Cancel	

Figure 3-19

4) SIP Defense

Port

The port used for SIP protocol.

Protocol

Choose the protocol need to be protect, etc: UDP.

·SIP Packets

The SIP packets allowed in specific time interval.

·Time Interval

The time interval to receive SIP packets.

For example, SIP packets 90, time interval 60 means 90 SIP packets are allowed in 60 seconds.

New SIP defense rule	X
Port: 5060	
Protocol 🛈 : UDP 💌	
SIP packets 🛈: 0	
Time interval 🛈: 0 seconds	
Save Save	

Figure 3-20



5) Other Settings

·Disable Ping

Enable this item, net ping from remote hosts will be dropped.

·Drop All

When you enable 'Drop All' feature, system will drop all packets or connection from other hosts if there are no other rules defined. To avoid locking the devices, at least one 'TCP' accept common rule must be created for port used for SSH access, port used for HTTP access and port sued for CGI access.

3.6.3 VLAN Settings

A VLAN is a logical local area network (or LAN) that extends beyond a single traditional LAN to a group of LAN segments, given specific configurations.

NeoGate supports 2 VLANs

VLAN Number

.The VLAN Number is a unique value you assign to each VLAN on a single device.

VLAN IP Address

Set the IP Address for NeoGate VLAN.

·VLAN Subnet Mask

Set the Subnet Mask for NeoGate VLAN.

VLAN Gateway

Set the Gateway for NeoGate VLAN.

NeoGate	
Module Settings 🙁	VLAN Settings \$
VoIP Settings (*) SIP Settings IAX Settings Advanced Settings	NO.1:
Route Settings (*) Outgoing Routes Incoming Routes Callback Settings Blacklist	VLAN Subnet Mask: VLAN Gateway: NO.2: VLAN Number: VLAN IP Address:
SMS Send SMS Sent SMS Logs Received SMS Logs	VLAN Subnet Mask: VLAN Gateway: Save Save Cancel
Network Settings 🍣	Figure 3-21



3.6.4 VPN Settings

You can import VPN configuration file in Neogate to take advantage of VPN.

NeoGate	
Hodule Settings & Module List VoIP Settings & SIP Settings	VPN Settings VPN Settings Enable VPN:
IAX Settings Advanced Settings Route Settings 🏾 Â	Import VPN Config : SELECT FILE
Outgoing Routes Incoming Routes Callback Settings Blacklist	Save Cancel
SMS 🍣	

Figure 3-22

3.6.5 DDNS Settings

DDNS allows you to access your network using domain names instead of IP address. The service manages changing IP address and updates your domain information dynamically.

Note:DDNS allows you to access your network using domain names instead of IP address.The service manages changing IP address and updates your domain information dynamically.You must sign up for service through dyndns.org, freedns.afraid.org, www.no-ip.com, www.zoneedit.com

•Enable DDNS

To Enable this function. •DDNS Server Choose the DDNS Server from dyndns.org, freedns.afraid.org, www.no-ip.com, www.zoneedit.com. •User Name The user name from the DDNS Server •Password The Password of this user name. •Host Name The name of the host.



NeoGate

neuvale	Logout
Module Settings 🔕	▶ DDNS Settings Φ
Module List	DDEC Settinge
VoIP Settings 🙁	Note:DDNS allows you to access your network using domain names instead of IP address. The service manages changing
SIP Settings IAX Settings	IP address and updates your domain information dynamically.You must sign up for service through <u>dyndms.org</u> , <u>freedns.afraid.org</u> , <u>www.no-ip.com</u> , <u>www.zoneedit.com</u>
Advanced Settings	DDNS is not running
Route Settings 🙁	Enable DDNS:
Outgoing Routes	DDNS Server: dyndns.org
Incoming Routes Callback Settings	User Name:
Blacklist	Password:
sms 🔹	Host Name:
Send SMS	Save Mancel
Sent SMS Logs	
Received SMS Logs	

Figure 3-23

3.7 System Settings

3.7.1 Options

1) General

·Ring Timeout

Number of seconds to ring a device before answering. Default value is 30s.

.MAX Call Duration

The absolute maximum amount of time permitted for a call. A setting of 0 disables the timeout. Default value is 6000s.

·HTTP Bind Port/Web Access Port

Port use for HTTP sessions. Default: 80



🐔 NeoGate - GSM Gateway	r for Maximum Efficiency & Cost-Savings - Microsoft Internet Explorer	
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites	Iools Help	
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Address 🙆 http://192.168.5.142	42/cgi/WebCGI?1000	🖌 🄁 Go 🛛 Links 🎽
NeoGate		Logout
GSM Settings	▶ General Preferences Ø	
Module List	General Preferences	
VolD Settings	Ring Timeout 🛈 : 30 s	
SIP Settings	MAX Call Duration 🛈 : 6000 s	
Advanced Settings	HTTP bind port : 80	
Route Settings (*) Outgoing Routes Incoming Routes Blacklist	Save Save	
SMS (Received SMS)		
System Settings (*) Options Firewall Network Settings Password Settings Date and Time Backup and Restore Reset and Reboot		
🙆 Done	1 🕘 🛛 🗍 👘	Internet

Figure 3-24

3.7.2 Password Settings

The default password is '**password**'. To change the password, enter the new password and click update. The system will then prompt you re-login using your new password.

Change Password						
Enter New Password:						
Retype New Password:						
🗹 Update						

Figure 3-25

3.7.3 Date and Time

Set the date and time for NeoGate.



Date & Time
Server Time: Tue Nov 30 00:35:34 2010
Time Zone: GMT+08:00 China, Philipines, Malaysia 💌
Automatically Synchronize With an Internet Time Server NTP Server: pool ntp org
C Set Date & Time Manually
Date
Time 💽 AM 💌
Save

Figure 3-26

3.7.4 Backup and Restore

You can backup your configure in this page. After back up, you can see the back up in the list. You can restore the configure in this page also. **Note**: the restore will only work after reboot.

Manage Configuration Backups
← Create a New Backup
List Of Previous Configuration Backups:
No backup files Found.
Please click on the 'Create New Backup' button
to take a backup of the current system configuration

Figure 3-27

3.7.5 Reset and Reboot

·Reboot System

Warning: Rebooting the system will terminate all active calls!

·Reset to Factory Defaults

Warning: A factory reset will erase all configuration data on the system. Please do not turn off the system until the RUN light begins blinking. Any power interruption during this time could cause damage to the system.



Reboot System				
Reboot System				
Warning: Rebooting the system will terminate all active calls!				
Reboot				
Reset to Factory Defaults				
Reset to Factory Defaults				
Warning: A factory reset will erase all configuration data on the system. Please do not turn off the system until the RUN light begins blinking. Any power interruption during this time could cause damage to the system.				
Reset to Factory Defaults				

Figure 3-28

3.7.6 Firmware Update

Upgrading of the firmware is possible through the Administrator web interface using a TFTP Server or an HTTP URL.

Enter your TFTP Server IP address and firmware file location, then click start to update the firmware.

More Information, please see http://www.yeastar.com/download/NeoGate/

Note:

- 1. If enabled 'Reset configs', System will restore to factory default settings.
- 2. When update the firmware, please don't turn off the power.

Firmware Download Source:
HTTP URL TFTP Server
HTTP URL:
Reset Configuration to Factory Defaults:
+ Start

Figure 3-29



3.8 Reports

3.8.1 Call Logs

The call Log captures all call details, including Source, Destination, Start Time, End Time, Duration, Billable Duration, Disposition, Communication Type, etc. Administrator can export CDR data to a CSV file.

► CE	R Viewe	er Ø						
Viewi	ng1-11	(ot)	Call	Log File: Master.csv	V 😽 Do	wnload Selected CDR	🗴 Delete Se	lected CDR 😕 Delete A
(inose	recentin	30					-	
ID	Source	Destination	Start time	End Time	Duration	Billable Duration	Disposition	Communication Type
1	20001	910086	2010-11-30 00:37:36	2010-11-30 00:37:41	5	4	ANSWERED	Outbound
2	20001	910086	2010-11-30 00:33:34	2010-11-30 00:33:38	4	3	ANSWERED	Outbound
3	20001	910086	2010-11-30 00:31:11	2010-11-30 00:31:15	4	3	ANSWERED	Outbound
4	20001	910086	2010-11-30 00:30:07	2010-11-30 00:30:12	5	4	ANSWERED	Outbound
5	20001	910086	2010-11-30 00:26:12	2010-11-30 00:26:17	5	4	ANSWERED	Outbound
6	20001	910	2010-11-30 00:26:00	2010-11-30 00:26:03	з	1	ANSWERED	Outbound
7	20001	910086	2010-11-30 00:24:30	2010-11-30 00:24:35	5	4	ANSWERED	Outbound
8	20001	910086	2010-11-30 00:23:52	2010-11-30 00:23:57	5	4	ANSWERED	Outbound
9	20001	910086	2010-11-29 23:56:08	2010-11-29 23:56:25	17	11	ANSWERED	Outbound
10	20001	910086	2033-05-21 11:57:03	2033-05-21 11:57:17	14	8	ANSWERED	Outbound
11	20001	910086	2010-12-06 19:55:01	2010-12-06 19:55:16	15	9	ANSWERED	Outbound
						Totle:11	<< Previous IIe	xt>> View: 25 💌
								🌍 Internet

Figure 3-30

3.8.2 System Info

•General:

Information about hardware version, firmware version and system uptime.

·LAN:

Information about hostname, MAC address, IP address, subnet mask, gateway, Primary DNS and Secondary DNS.

·Disk Usage:

Disk usage information.

•Memory Usage:

Memory usage information.



🗿 NeoGate - GSM Gateway	for Maximum Efficiency & Cost-Savings - Microsoft Internet Explorer			3
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites	Tools Help		.	
🚱 Back 👻 🛞 🕤 💌	📓 🏠 🔎 Search 🤺 Favorites 🚱			
Address 🛃 http://192.168.5.14	12/cgi/WebCGI?1000 🕑 🔁 Go	Lin	ks '	•>
NeoGate		ogout	:	
GSM Settings 🛞	System Information 🕸		^	
Module List	General ⊗			
VoIP Settings 🔊 SIP Settings Advanced Settings	Hardware Version: NeoGate-Standard V3 Firmware Version: 5.10.0.01			
Route Settings Outgoing Routes Incoming Routes Blacklist	Uptime: 01:47:55 up 1:12, load average: 1.00, 1.00, 0.98			
SMS 🔊	Hostname: NeoGate MAC Address: 00:15:65:55:01:2a			
System Settings Image: Control of the settings Parsword Settings Password Settings Date and Time Backup and Restore Reset and Reboot Resource	IP Address: 192.168.5.142 Gateway: 192.168.5.1 Primary DNS: 192.168.5.1			
🙆 Done	Contract Con	_		

Figure 3-31



4. Application

Application 1



Figure 4-1

Application 2



Figure 4-2

