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Trunking Gateway
VTG3306 Series

User Guide

www.edge-core.com

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VTG3300 Series

User Guide

Edition 1.0

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Table of Contents

1. Safety Instructions

1. Do not attempt to service the product yourself. Any servicing of this product should be referred to qualified service personal.
2. To avoid electric shock, do not put your finger, pin, wire, or any other metal objects into vents and gaps.
3. To avoid accidental fire or electric shock, do not twist power cord or place it under heavy objects.
4. The product should be connected to a power supply of the type described in the operating instructions or as marked on the product.
5. To avoid hazard to children, dispose of the product's plastic packaging carefully.
6. The phone line from PSTN Operator should always be connected to the LINE or FXO connector. It should not be connected to the PHONE/FAX or FXS connector as it may cause damage to the product.
7. Please read all the instructions before using this product.

2. Preface

VTG3300 series products were developed by using the latest VoIP technologies. It is not only a commercial PBX but also a VoIP Gateway with Auto Attendant to provide full services. High quality voice services for telephone and Fax are provided through the Internet, in addition, several value added services are provided. Due to the characteristics of the Internet, bills for telephone and FAX are extremely small. With its modularized hardware design, VTG3300 is also very simple to install, easy to carry and operate.

Models :

Model Name	Description
VTG3300A	4 Ports 2 FXO + 2 FXS
VTG3300C	4 Ports 4 FXO

VTG3300 is a commercial PBX. It can operate alone or connect to another VTG3300 to create one system and dial each other by extension number. When two sets of VTG3300 are installed in separate locations, and both are connected to an IP network, then the extension lines of each VTG3300 can dial each other by dialing the extension number as in the same PBX

3. Feature Descriptions

3.1. Basic and Advanced Features

- **Remote Transit Call**
  VTG3300 supports “Transit – In Call” and “Transit – Out Call” functions. User can access remotely.

- **Call Forward**
  VTG3300 supports “Call Forward” function. User can get the call at any location.

- **T.38 FAX**
  VTG3300 supports T.38 FAX services. Like voice services, FAX features “Call Forward” and “Follow me” functions.

- **Private IP Address**
  VTG3300 can be connected to any VTG3300 at any location around the world just through the private IP address behind NAT.

- **Life Line**
  Following the standard, VTG3300 keeps 2 lines alive when power outage happens.

- **Network Management Capabilities**
  VTG3300 provides management via telephone sets (Trunking Gateway with FXS port), system console, Telnet and Web Browser. Users can configure or modify the setting through any telephone set, system console, or Telnet. System manager can browse information through a PC and manage the system no matter where he is.

- **FTP Software Update**
  The FTP server is embedded into VTG3300. Via FTP server, software can be uploaded for updating.

3.2. PBX Features

- **Extension Line**
  The FXS ports on VTG3300 may act as extension lines. Each port can be assigned with an extension number from 11 to 14. If you like to connect to another extension line, you can dial the extension number directly or dial the prefix of the equipment first, followed by the extension number.

- **Through IP To another Extension line of VTG3300**
  Extension line are not limited to connect to extension lines within the same gateway, but it can also connect to extension lines of another VTG3300 via IP network by dialing the phone number of the VTG3300 followed by the extension number or by dialing the prefix.

- **Call Transfer**
  VTG3300 can transfer the call of extension line to

  - An extension line in the same gateway

- An extension line of any remote VTG3300

- **Abbreviated Dial**
  100 Abbreviated dialing numbers can be assigned to the VTG3300. Abbreviated dialing number can contain the numeric numbers and special character " * " and " # ".The priority of the first 70 indexes of abbreviated dialing is beyond the limitation of Barring rule.

- **Embedded Auto Attendant**
  VTG3300 provides auto attendant to any incoming call. The Greetings tone can be recorded via the telephone set by users. Only the Trunking Gateway with FXS port supports this feature.

- **Operator**
  Any extension line of VTG3300 can be assigned as an Operator. Any incoming call will be connected to the operator if the access code for Operator is dialed. The other extension lines which are assigned to the operator Group can act as operator if the operator is busy. The Operator can be forwarded to :

  - The extension line of the same gateway
  - The extension line of a remote VTG3300 gateway

- **Trunk Groups**
  "Trunk" is a general name for FXO lines that connect to PSTN. The trunks of VTG3300 can be separated into two groups. Each FXO port will belong to one of the trunk groups.

- **Barring set to each extension line**
  There are six barring classes embedded. Each extension line can be set by one of the barring class.

- **CDR**
  VTG3300 provides a dedicate RS-232 port for CDR (Call Detail Record), CDR can also be recorded through Internet for further accounting and data statistics.

3.3. Other Special Features

- **Remote Trunk Seizure**
  VTG3300 can seize the trunk groups of a remote VTG3300 gateway manually or automatically.

- **Softkey**
  Softkey can be defined on each FXS/FXO port of VTG3300 and be activated manually or automatically.

- **Caller ID Display**
  If a phone set that can display Caller-ID is connected to the extension line, the caller ID from another FXS port will be displayed. The display format is the Prefix of incoming gateway followed by the extension number. A Phone set with FSK standard is required.

- **Local Trunk Overflow**
  If the trunks in same gateway are not available, the extension line of VTG3300 can seize the local trunk of another gateway that is under the same Subnet Mask.

4. Package Contents

1.	The VTG3300 Gateway	X	1
2.	Power Cord	X	1
3.	Manual/Tools CD-ROM	X	1
4.	Rubber footer	X	1

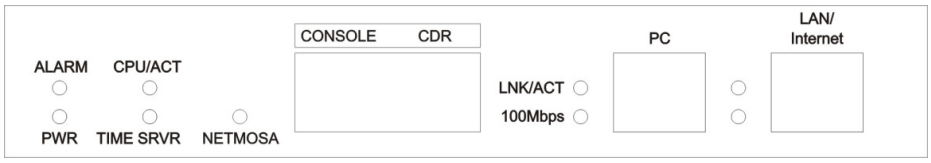
5. General Descriptions

5.1. Panel

- VTG3306A/C : model with 4 ports

On the front panel you can find two Ethernet ports, a console port, LED status indicator and the port special for CDR which can record the detailed data of the calls for accounting and statistics.

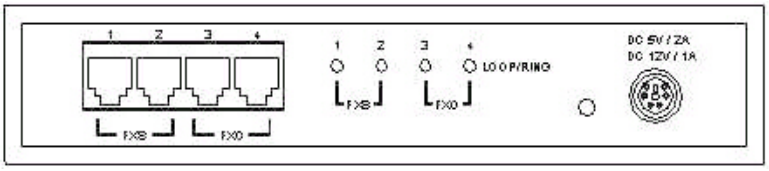
5.1.2. Front Panel



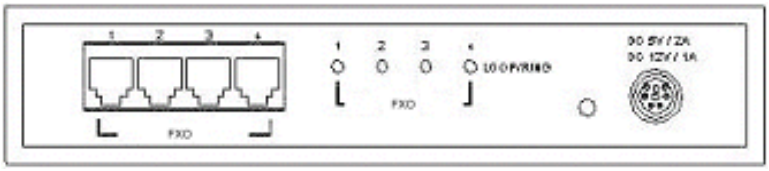
VTG3300 Front Panel

5.1.3. Rear Panel

There is a button on the rear panel of VTG3300 for special maintenance. Please don't touch this button under normal operation.



VTG3306A Rear Panel



VTG3306C Rear Panel

5.2. LED Indicator

	Label	LED	Description
10/100 Ethernet	Link/Act	ON	Network Linked Up
		FLASH	Sending/Receiving data packets
	100Mbps	ON	Transmission Rate is 100Mbps
		OFF	Transmission Rate is 10Mbps
Port Information	LOOP/ RING OUT (FXS)	ON	Off Hook, loop current detected
		FLASH	Ring signal sending
	LOOP/ RING IN (FXO)	ON	Answered, loop current detected
		FLASH	Ringing
Device	Power	ON	Power supply normal
	Alarm	ON	Errors detected when auto HW diagnostics ran: FXO Error detected or circuit break
	CPU/Act	ON	CPU in normal operation
		FLASH	CPU is Running
	Time Server	ON	Able to access to Time Server
		FLASH	Trying to access to Time Server
		OFF	NOT able to access to Time Server

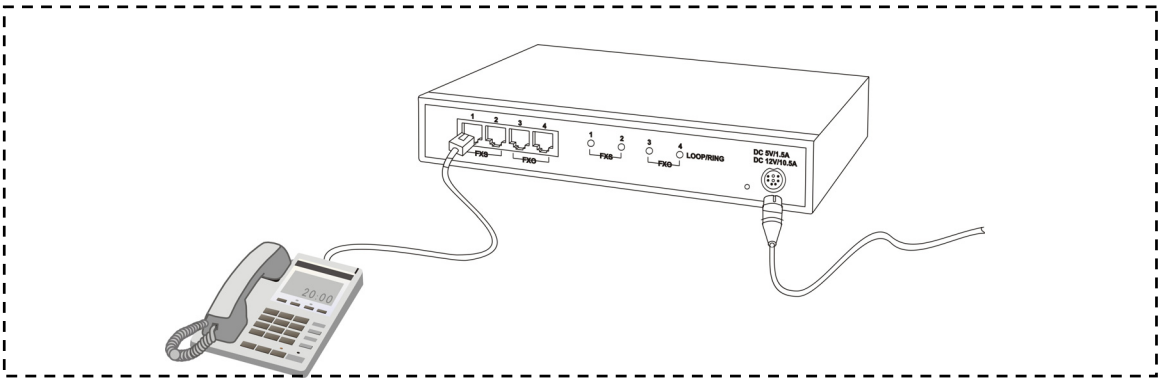
5.3. Connectors

Terminal	Label	Description
Voice	FXS	For analog phone set or FAX machine
	FXO	For public lines or trunk from PSTN Operator
Network	To WAN (MDI-X)	RJ-45 MDI-X terminal, for WAN
	To LAN (MDI)	RJ-45 MDI terminal, for LAN
RJ-45	CONSOLE	For system console

6. Basic Installation and Configuration

6.1. Phone Set Connection

Example : VTG3306A



6.2. Personal Computer Connection

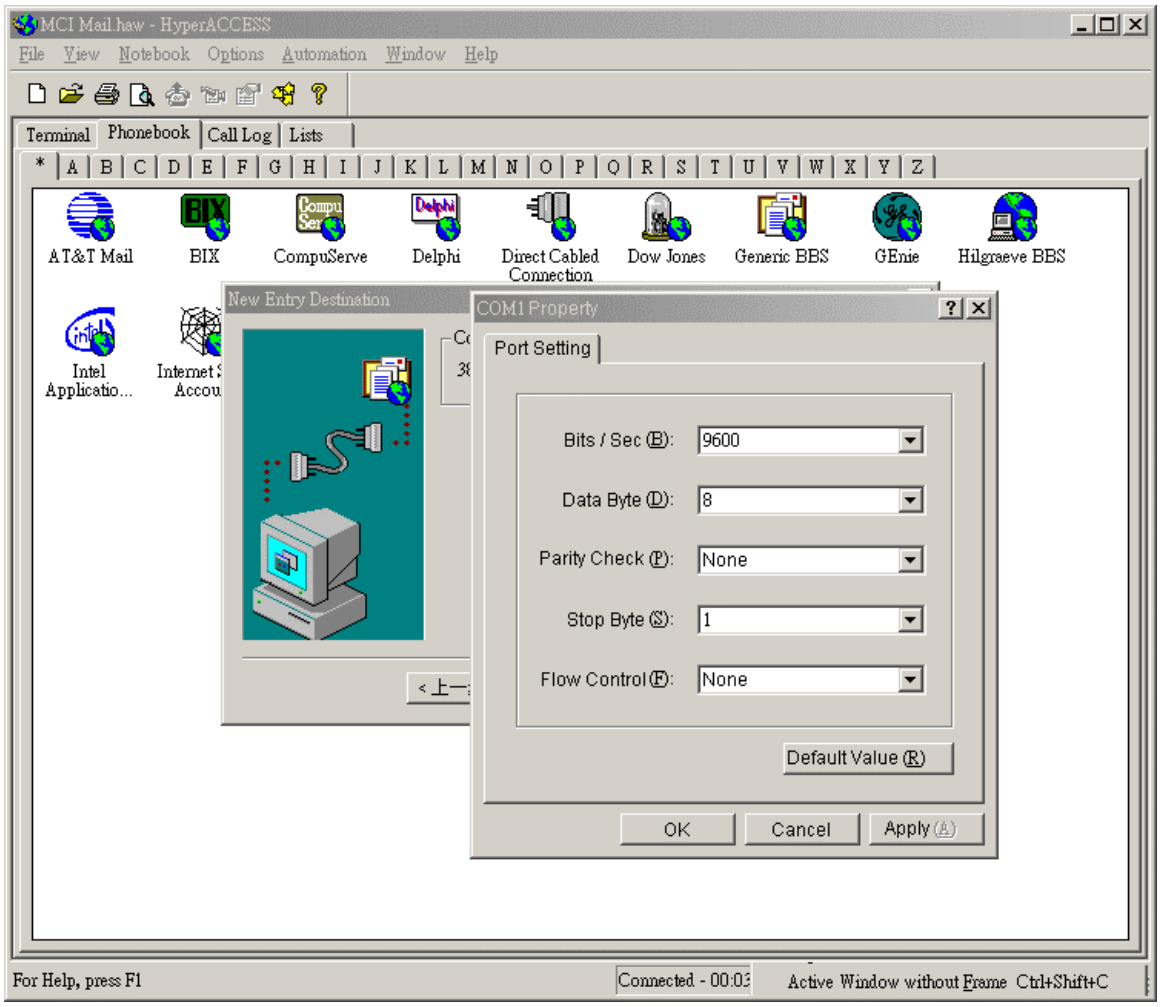
Example : VTG3306C

There is a **console** port on the panel of VTG3306C. Plug the attached Console cable into the console port and connect it with PC on the other side.

6.2.1. Configuration of Parameters for Console

After connecting the PC to VTG3300 via a RS-232 cable, Power on the PC and configure the PC parameters as following :

- Speed : 9600
- Data Byte : 8
- Parity Check : None
- Stop Byte : 1
- Flow Control : None



7. Configuration of Parameters for Function and Web Management Page

7.1. Steps for Configuration

7.1.1. General

7.1.1.1. VTG3300

(1) Connect the Console Terminal to VTG3300 Console port by RS-232 cable.

(2) Configure the parameters of Console Terminal. Please refer to Section 6.2.1Configuration of Parameters for Console.

(3) Set Region ID and restore to the default value. Please refer to Section 7.1.2 Configuration of Regional ID.

(4) Enter a fixed IP address by using the System Console (or use the default IP address 192.168.0.2) and the password (e.g. 123) to enter the Web Management Page. For security reason, please configure the password for verification when entering the Web Management page. Please refer to Section 7.1.3 Configuration of IP.

(5) Connect PC to the network port labeled “To WAN” on VTG3300 by LAN cable. The Indicator of LNK/ACT will be ON if the connection is working normally.

(6) Set IP address of PC to the same subnet as IP address of VTG3300. For example, the default IP address of VTG3300 is 192.168.0.2 , then you may set 192.168.0.3 as the IP address of the PC. (PC re-start may be required).

(7) Run the Broswer, enter the IP address of VTG3300 and then press ENTER key.

(8) In the window , USER ID and PASSWORD will be prompted. Enter “WEB” (all capital letter) as USER ID and the password you configured (e.g. 123), press ENTER key. Now you are entering the Home page of the Web Management page.

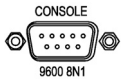
(9) On the Web Management Page, set the Region ID, Area Code, Phone Number, UDP port and other features. Please refer to Section 7.2.1 Configuration of Phone Number via Web Management.

(10) If you like to use DHCP or PPPoE services, you may set the parameters from Web Management Page or via Console terminal and restart VTG3300. Please be noted, new dynamic IP address will be applied after restarting. It causes the problem to enter the original Web Management Page. You have to check the new IP address from the Console terminal and enter the Web Management page by this new IP address.

(11) When all of the parameters had been configured, connect VTG3300 to Internet. The system will start after the indicator Time Server turns ON.

7.1.2. Configuration of Regional ID

The default value of VTG3300 series product is dependent on the location of purchase order. Please check if the Region ID is for the country where VTG3300 will be operated. From the label located at the bottom of the box, you may find the default value of Region ID, for example, **"43"**, the Region ID of Taiwan, is set as default value. If the Region ID is correct, skip to the next step, otherwise change the Region ID. Please refer the Section 12 Region ID to Telecom Country code.



The Instructions below showing how to set Region ID from Console terminal; using Telnet can also follow the same instructions.

(In the example, the Region ID is changed to 07 for China)

Voice Gateway>**enable**
Voice Gateway #**configure**
Enter configuration commands, one per line. End with CNTL/Z
Voice Gateway (config)#**regional_id *07***
Voice Gateway (config)#**exit**
Voice Gateway #**delete nvram**
This command resets the system to factory defaults
All system parameters will restore to their default factory settings. All static and dynamic addresses will be removed.
Reset system with factory defaults, [Y]es or [N]o? **Yes**

Attention :

1. After Changing the Region ID, the system has to be reset to the default value. Therefore this step should be done first.
2. In case the IP address is being set, the following instruction may keep the IP address unchanged after reset :

   "delete nvram keep_ip"

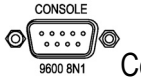
7.1.3. Configuration of IP

An IP Address is required for the VTG3300 series product. How to get the IP address depends on the network configuration to which the gateway will be connected. Please refer the following table for the network configuration and define the IP address before doing system configuration. If fixed IP address will be used, you have to apply for Internet service from Internet Service Provider (ISP) to get an available IP address. DHCP, which is not recommended, or PPPoE, which is provided by most of ADSL ISP, may be used for this gateway. In the following table, please find the information required for different network configurations.

IP Network Configuration		Information Required
Fixed IP Address	Public IP address	IP address Subnet mask Default Gateway Notes: Usually the IP address is assigned by the ISP to avoid conflict with the other equipment.
	Private IP address	IP address Subnet mask Default Gateway Notes: IP Sharing is required for private IP address. In the IP Sharing environment, IP address of VTG3300 has to be set as a virtual Server
DHCP		Please contact your MIS personnel. Using DHCP is not recommended
PPPoE (Applied to most ADSL service)		Account Number Password Notes: Information is assigned by the ISP, please contact your ISP if you don't know or you forget the account number.

You may perform the IP setting via System Console, then enter the Web Management page to perform the other settings.

7.1.3.1. Configuration of IP Address via System Console



Configuration via System Console

(In this example)

IP will be 10.13.6.21、

Subnet mask is 255.255.255.0、

Default Gateway is 10.13.6.130)

Voice Gateway>**enable**

Voice Gateway #**configure**

Enter configuration commands, one per line. End with CNTL/Z

Voice Gateway (config)#**ip state user**

Voice Gateway (config)#**ip address** ***10.13.6.21 255.255.255.0***

System need to restart

Voice Gateway (config)#**ip default-gateway** ***10.13.6.130***

Voice Gateway (config)#**exit**

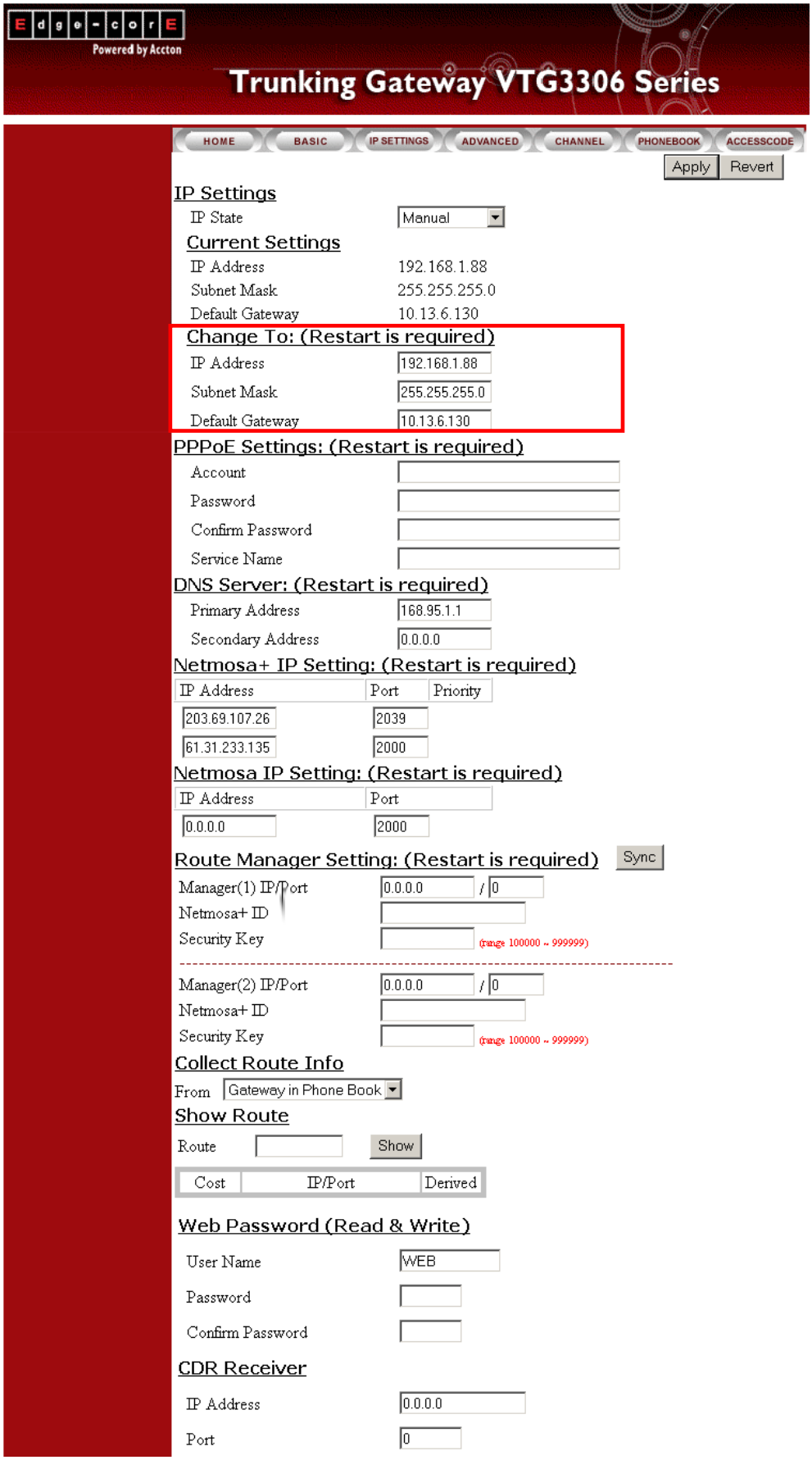
Voice Gateway #**restart**

This command resets the system. System will restart operation code agent.

Reset system, [Y]es or [N]o? **Yes**

7.1.4. Modify the Configuration via Web Management Page

On VTG3300 series Web Management Page, select folder "**IP SETTINGS**"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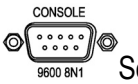
Trunking Gateway VTG3306 Series
HOME
BASIC
IP SETTINGS
ADVANCED
CHANNEL
PHONEBOOK
ACCESSCODE
Apply
Revert
IP Settings
IP State
Manual
Current Settings
IP Address 192.168.1.88
Subnet Mask 255.255.255.0
Default Gateway 10.13.6.130
Change To: (Restart is required)
IP Address 192.168.1.88
Subnet Mask 255.255.255.0
Default Gateway 10.13.6.130
PPPoE Settings: (Restart is required)
Account
Password
Confirm Password
Service Name
DNS Server: (Restart is required)
Primary Address 168.95.1.1
Secondary Address 0.0.0.0
Netmosa+ IP Setting: (Restart is required)
IP Address Port Priority
203.69.107.26 2039
61.31.233.135 2000
Netmosa IP Setting: (Restart is required)
IP Address Port
0.0.0.0 2000
Route Manager Setting: (Restart is required)
Sync
Manager(1) IP/Port 0.0.0.0 / 0
Netmosa+ ID
Security Key
(range 100000 ~ 999999)
Manager(2) IP/Port 0.0.0.0 / 0
Netmosa+ ID
Security Key
(range 100000 ~ 999999)
Collect Route Info
From Gateway in Phone Book
Show Route
Route
Show
Cost IP/Port Derived
Web Password (Read & Write)
User Name WEB
Password
Confirm Password
CDR Receiver
IP Address 0.0.0.0
Port 0

Group	Field	Descriptions	Default Value
IP Settings	IP State	The type of IP Address : **Manual**：User enters the assigned static IP address **Auto**(DHCP)：Dynamic IP address from DHCP server **PPPoE**：Through PPPoE to get the IP address from ISP. Please fill in the account information under PPPoE Settings, if PPPoE is selected.	**Manual**
	Current Setting	Display the current setting: IP information, including IP Address, Subnet Mask and Default Gateway. (Display only)	192.168.0.2 255.255.255.0 192.168.0.1
	Change To	Enter the information to be updated : 1. IP Address 2. Subnet Mask 3. Default Gateway (IP State must be set to “Manual”) After you have filled out these parameters, click “**Apply**” button to activate the updated values. Then Warm Start the system.	
PPPoE Settings	Account	PPPoE account, provided by ISP	Blank
	Password	PPPoE password of account	Blank
	Confirm Password	PPPoE password reconfirmed	Blank
	Service Name	Service Name of PPPoE account, provided by ISP. At this moment, it is not required for most of ISP, only a few exceptions.	Blank
DNS Server	Primary Address	IP Address of the Primary DNS server. The default value is configured in advance, depending on the region of shipment. 168.95.1.1 is default for Taiwan region.	168.95.1.1
	Secondary Address	IP Address of the Secondary DNS server.	Blank

Group	Field	Descriptions	Default Value
WEB Password	User Name	User name of Web Management Page	WEB
	Password	Password to enter the Web Management Page	Blank
	Password Confirm	Re-enter the Password for reconfirmation	Blank
Collect Route Info	Show (button)	Show available Route	
Show Route	Route	Enter the country code followed by the area code. Press Show.	Blank
CDR Receiver	IP Address	Enter the IP address of the remote PC of CDR Receiver	0.0.0.0
	Port	Enter the port of PC of CDR Receiver	0

7.1.5. Configuration Password for Web Management Page

Before entering the Web Management page, for security reason you have to set the password. The password consists of any numeric or alphabetic characters combination and is less than 6 characters. Please be noted that VTG3300 always requests the Password to enter the Home Page of WEB Management, no exceptions.



Setting Password by system console

(The password is set to 123 in this example)

Voice Gateway >**enable**

Voice Gateway #**configure**

Enter configuration commands, one per line. End with CNTL/Z

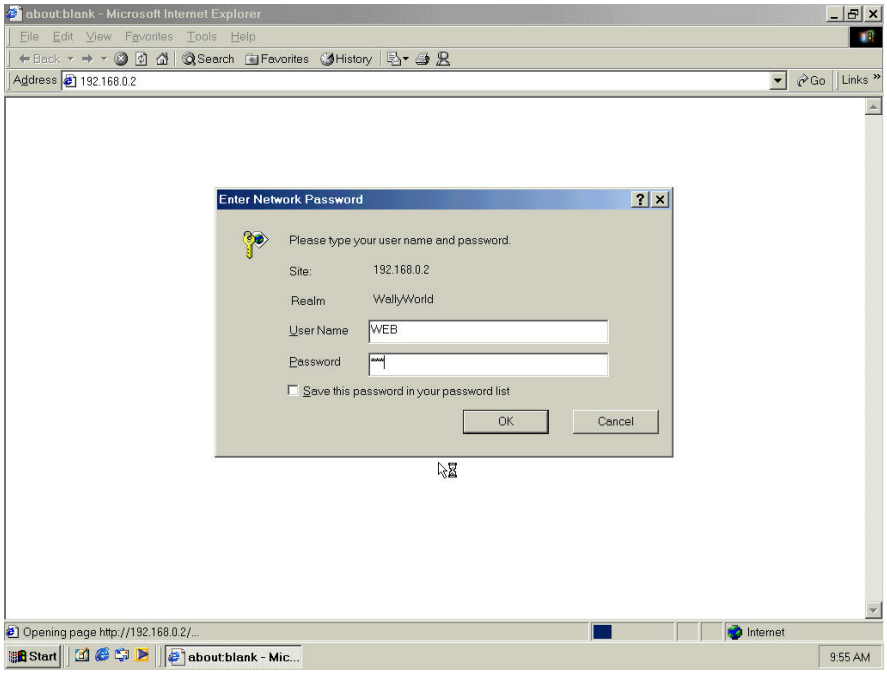
Voice Gateway (config)#**password web_write password 123**

Voice Gateway (config)#**exit**

7.2. Configuration the Basic Parameters via Web Management Page

Start the Browser, enter the IP address of VTG3300 and press **ENTER**. The window will pop out requesting

User ID and Password. Enter “WEB” (all capital letters) as User ID and the password as set before, and then click **OK**. The home page of Web Management will be displayed.



Some basic parameters of VTG3300 have to be set in order to perform the basic operation. The basic parameters include:

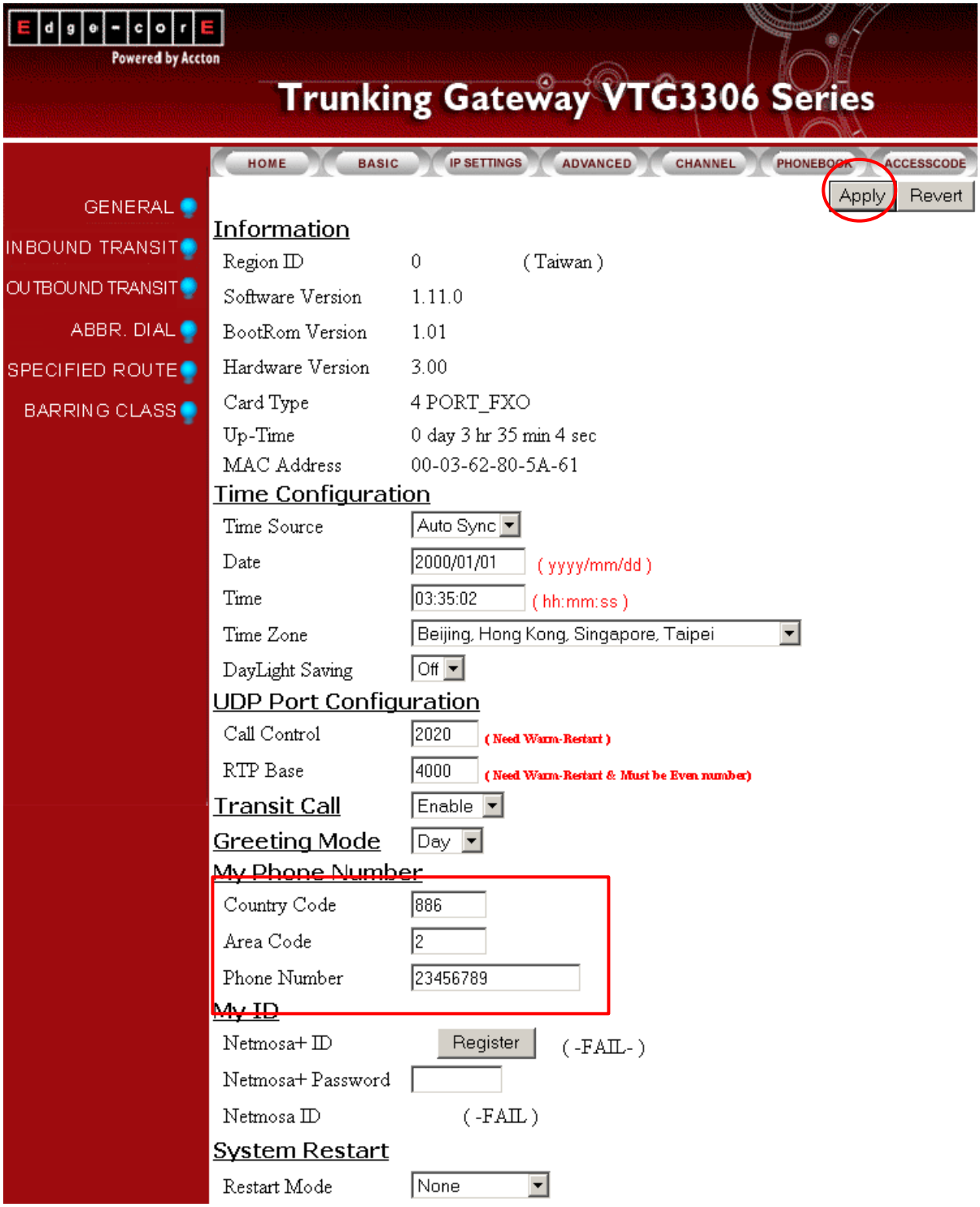
Items	**Description**
Area Code	Area Code of Telecom area, e.g. 2 for Taipei Notes : Area Code 2 for Taipei; 7 for Kaohsiung; 21 for Shanghai; 10 for Beijing
Phone Number	Phone Number of VTG3300, e.g. 82261111. You can make an IP-phone call from another Gateway by dialing this number. Use the same number as the public phone number connected to FXO port, i.e. the general phone number

After finishing the setting of the previous basic parameters, the following functions are now workable:

- The extension lines of the gateway can be connected to each other.
- Dial “9” to seize the line for PSTN calls.

7.2.1. Configuration of Phone Number via Web Management

To set Area Code and telephone number, go to Web Management page, select “**BASIC**” then find field under “My Phone Number”, enter information then press Apply.


Edge-corE
Powered by Accton
Trunking Gateway VTG3306 Series
HOME
BASIC
IP SETTINGS
ADVANCED
CHANNEL
PHONEBOOK
ACCESSCODE
Apply
Revert
GENERAL
INBOUND TRANSIT
OUTBOUND TRANSIT
ABBR. DIAL
SPECIFIED ROUTE
BARRING CLASS
Information
Region ID 0 (Taiwan)
Software Version 1.11.0
BootRom Version 1.01
Hardware Version 3.00
Card Type 4 PORT_FXO
Up-Time 0 day 3 hr 35 min 4 sec
MAC Address 00-03-62-80-5A-61
Time Configuration
Time Source Auto Sync
Date 2000/01/01 (yyyy/mm/dd)
Time 03:35:02 (hh:mm:ss)
Time Zone Beijing, Hong Kong, Singapore, Taipei
DayLight Saving Off
UDP Port Configuration
Call Control 2020 (Need Warm-Restart)
RTP Base 4000 (Need Warm-Restart & Must be Even number)
Transit Call Enable
Greeting Mode Day
My Phone Number
Country Code 886
Area Code 2
Phone Number 23456789
My ID
Netmosa+ ID Register (-FAIL-)
Netmosa+ Password
Netmosa ID (-FAIL)
System Restart
Restart Mode None

7.2.1.1. General Parameters

Group	Field	Description	Default Value
Information	Region ID	Displays the Region ID (Display Only)	
	Software Version	Displays the Software Version (Display Only)	
	BootRom Version	Displays the BOOT ROM version (Display Only)	
	Hardware Version	Displays the Hardware Version (Display Only)	
	Card Type 1 (S1)	Displays the card type of the 1st interface card (Display Only)	
	Card Type 2 (S2)	Displays the card type of the 2nd interface card (Display Only)	
	Up-Time	Displays the elapsed time since last start (Display Only)	
	MAC Address	Displays the MAC address of HW equipment (Display Only)	
Time Configuration	Time Source	Select the method to synchronize the system's date and time **AutoSync**：Synchronize automatically **Manual**：Entere manually	AutoSync
	Date	Enter the date manually, valid only if "**Manual**" is selected in Time Source, Format yyyy/mm/dd	Blank
	Time	Enter the time manually, valid only if "**Manual**" is selected in Time Source, Format hh:mm:ss	Blank
	Time Zone	Select the time zone which the system is located	
	DayLight Saving	Select for daylight saving **ON**：daylight saving applied **OFF**：daylight saving not applied	OFF

Group	Field	Description	Default Value
UDP Port Configuration	Call Control	Defines UDP port number for packet transmission . The number should be between the range of 0 – 65535. (It is activated after system has been re-started)	2000
	RTP Base	Defines UDP port number for voice packet transmission . The port number must be even and between the range of 0 – 65534. (It is activated after system has been re-started)	4000
Transit Call		Activate Inbound/Outbound Transit **Enable**： Activates Inbound Transit and Outbound Transit **Disable**： Shuts down Inbound Transit and Outbound Transit	Enable
Greeting Mode		Selects the Greeting Mode Day：Greeting of office hours is activated Night：Greeting of off duty is activated	Day
My Phone Number	Country Code	Enter the Country Code of the location where the system is. (e.g. 86 for China; 1 for America)	(Country Code by Region ID is displayed)
	Area Code	Enter the Area Code of the location where the system is. (e.g. 21 for Shanghai; 2 for Taipei)	Blank
	Phone Number	Enter the PSTN telephone number connected	Blank
System Restart	Restart Mode	Select Restart Mode for the gateway **None**：Don't restart system **Cold Restart**：Cold restart system **Warm Restart**：Warm restart system	None

7.3. Configuration of Features

7.3.1. Numbering Plan

The numbering plan for VTG3300 defines the access code for each kind of service and the manner of dialing. These codes will be applied often, and therefore the code should be simple, easy to remember, and unique. Prefixes of equipment should be put into consideration to prevent conflict. For the prefix of equipment, please refer to section 7.3.3 Prefix Map Table.

The access code consists of any combination of 0 ~ 9, * , and # ; and

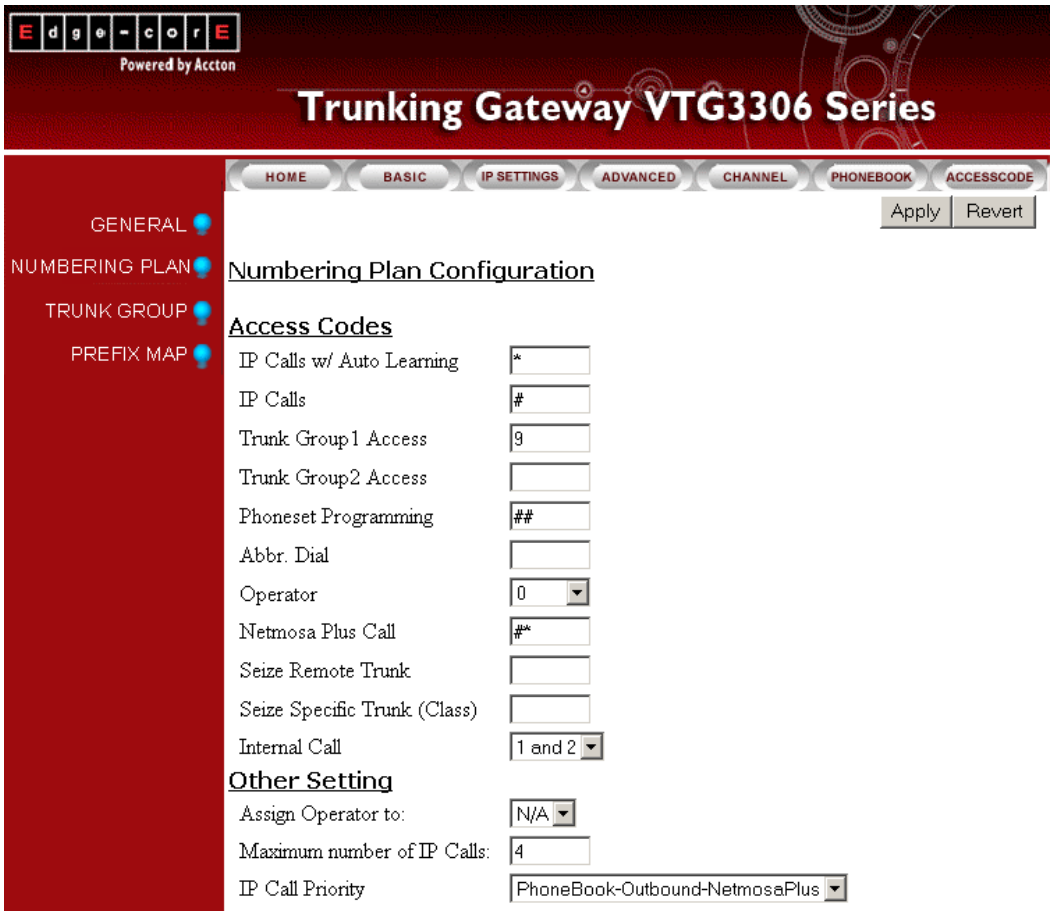
- Total length must be less than 6 characters.
- The first character can **not** be 0 , 1 , or 2.
- If an access code is defined, you can define another access code by this code followed by one extra character, only one character is allowed. For example, “9” is defined as Trunk Group Access Code, then “91” or “92” may be defined as another access code, but “921” or “9112” may not be defined as an access code.
- Code can not be used until it has been defined as a prefix in Prefix Map Table.

The default access codes are listed for your reference.

Items	Access Code
IP Calls w/ Auto Learning	*
IP Calls	#
Trunk Group 1 Access	9
Trunk Group 2 Access	8
Phoneset Programming	##
Abbr. Dial	*2
Call Pick Up	*3
Operator Code	0
NET Plus Call	#*
Seize Remote Trunk	*9

7.3.1.1. Numbering Plan WEB parameter

From the Web Management Page, select folder "**ADVANCED**" ; select "NUMBERING PLAN"



Group	Field	Description	Default Value
Access Code	IP Call w/ Auto Learning	Access Code to Make IP Call, and learning will start automatically when number is not found from Phone Book	*
	IP Calls	Access Code to Make IP Call	#
	Trunk Group1 Access	Access Code to Fetch trunk from trunk group 1	9
	Trunk Group2 Access	Access Code to Fetch trunk from trunk group 2	Blank
	Phone set Programming	Access Code to start configuration of gateway via Phone set	##
	Abbr. Dial	Access Code for Abbreviated dialing	Blank
	Operator	Access Code to Connect to Operator	0
	Seize Remote Trunk	Access Code to Seize the Trunk group of a remote gateway, but has to obtain the permission first. That means, in the seized side, the information of the other side is defined in the list of Outbound Transit, the Trunk Call Allowed is set to True, and Trunk Group is set to Enable. Dialing Method : <Seize Remote Trunk Access Code> + <Country Code> + <Area Code>+<#> ◦ For example, there is a system in Taipei, and a system in Shanghai. You may dial the access code of “Seize Remote Trunk”, e.g. *9 8621# , from the extension line in Taipei to seize the trunk of Shanghai	Blank

Group	Field	Description	Default Value
	Seize Specific Trunk (Class)	Access Code to Seize the Specific Trunk of the remote gateway, but you have to obtain the permission previously. That means, in the seized side, the information of the other side is defined in the list of Outbound Transit, the Trunk Call Allowed is set to True, and Trunk Group is set to Enable. Dialing Method: <Seize Specific Trunk Access Code> + <Prefix> +<Class ID>+<#>.	Blank
	Internal Call	An incoming call to FXO will hear the greetings first. System will check if the code you dial is an internal call or not before searching the entries in the Prefix Map. By default, the extension number is starting from 1 to 2, system will handle this call as an internal call if 1 or 2 is dialed first. Here you may change the way to : - 1 and 2 : the way is same as before - 1 only : only 1 will be treated as an extension number, otherwise search from the Prefix Map table. - 2 only : only 2 will be treated as extension number, otherwise search from Prefix Map table. - None : all numbers dialed will be searched from the Prefix Map table. It is a wrong number if it is not found from the Prefix Map table.	1 and 2

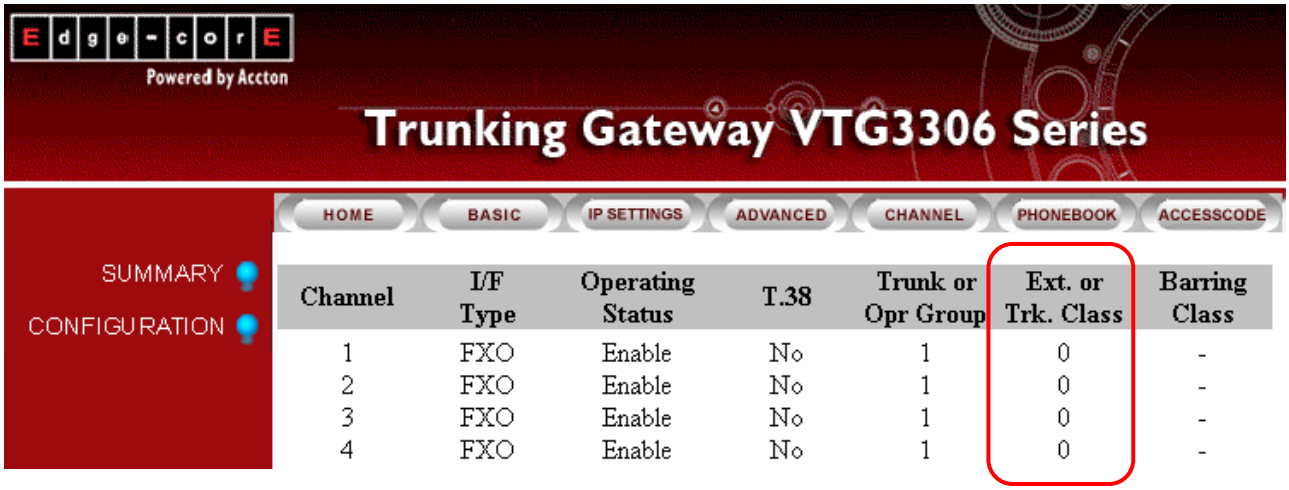
Group	Field	Description	Default Value
	Assign Operator to	Assigns an extension line as the Operator. If operator is not assigned in the gateway, set to N/A.	1
Other Setting	Maximum number of IP Calls	The maximum number of IP Call can be made. The default value is the number of extension lines. It is recommended to plan it depending on the bandwidth.	16
	IP Call Priority	Configure the phone number searching priority for outbound call. Please refer to related chapter of PhoneBook, Outbound, 1.PhoneBook-Outbound-NetPlus：The system search phone number according to this sequence. 2.PhoneBook-Net Plus-Outbound：Change to different sequence	PhoneBook-Outbound

7.3.2. Configuration of Ext. Line and Trunk (Channel)

The last 2 digit of the model name of VTG3300 series product presents the number of ports equipped.

If you would like to display the information of the extension lines, enter the folder "**CHANNEL**" of the Web Management Page, and select "SUMMARY", a summary page for all ports of extension will be displayed. From the summary page below, it shows the information using VTG3300A (2FXS + 2FXO). The extension numbers are from 11 to 14 and the port 1 (11/OP) is set as operator.

From the Web Management Page, select folder "**CHANNEL**" ; select "SUMMARY"



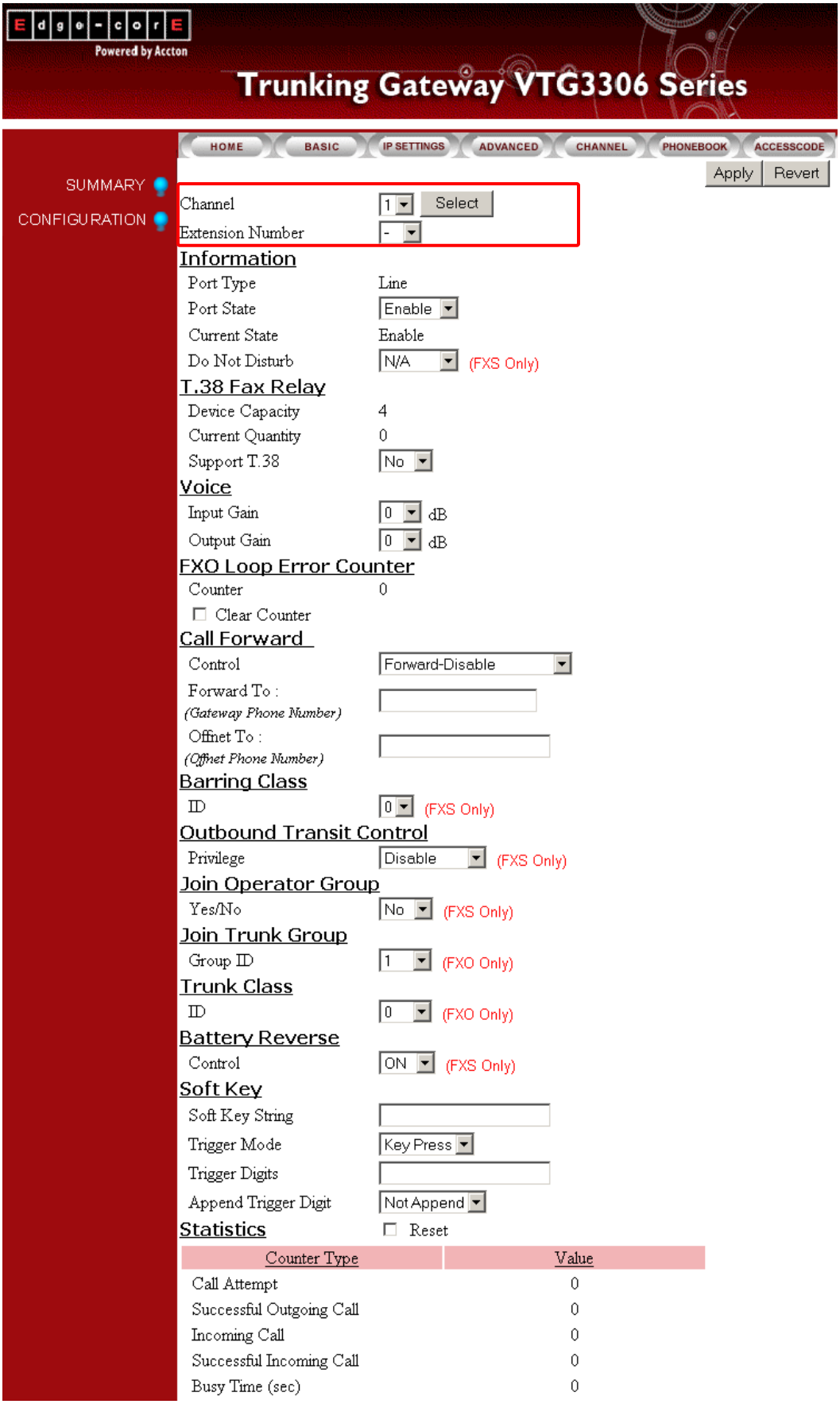
7.3.2.1. Summary Description

Group	Field	Description	Default Value
SUMMARY	Channel	Sequence number of port 1~16 (Display only)	1~16
	I/F Type	Type of interface (Display only)	FXS / FXO /NA
	Operating Status	Displays the status of operating (Display only)	Enable
	T.38	Support T.38 or not (Display only)	NO
	Trunk or Opr Group	Shows the characteristics (Display only) FXS : If Operator Group (Yes/No) FXO : number of the trunk group (1/2)	 -/Yes -1
	Ext. or Trk. Class	Displays the defined extension number. The extension line that has joined to operator group will also show "/OP" (Display only) FXO: Shows "Trunk Class ID"	-/11~26 0/-
	Barring Class	Displays the Barring Class (Display only)	0

7.3.2.2. Channel WEB Parameter

To configure the extension line, enter the folder "**CHANNEL**" of the Web Management Page, select the page "CONFIGURATION", enter the channel to be configured then click button **Apply**

From the Web Management Page, select folder "**CHANNEL**"; select "CONFIGURATION"


Edge-corE
Powered by Accton
Trunking Gateway VTG3306 Series
HOME
BASIC
IP SETTINGS
ADVANCED
CHANNEL
PHONEBOOK
ACCESSCODE
SUMMARY
CONFIGURATION
Apply
Revert
Channel
1
Select
Extension Number
-
Information
Port Type
Line
Port State
Enable
Current State
Enable
Do Not Disturb
N/A
(FXS Only)
T.38 Fax Relay
Device Capacity
4
Current Quantity
0
Support T.38
No
Voice
Input Gain
0
dB
Output Gain
0
dB
FXO Loop Error Counter
Counter
0
Clear Counter
Call Forward
Control
Forward-Disable
Forward To :
(Gateway Phone Number)
Offnet To :
(Offnet Phone Number)
Barring Class
ID
0
(FXS Only)
Outbound Transit Control
Privilege
Disable
(FXS Only)
Join Operator Group
Yes/No
No
(FXS Only)
Join Trunk Group
Group ID
1
(FXO Only)
Trunk Class
ID
0
(FXO Only)
Battery Reverse
Control
ON
(FXS Only)
Soft Key
Soft Key String
Trigger Mode
Key Press
Trigger Digits
Append Trigger Digit
Not Append
Statistics
Reset
Counter Type
Value
Call Attempt
0
Successful Outgoing Call
0
Incoming Call
0
Successful Incoming Call
0
Busy Time (sec)
0

7.3.2.3. Configuration Parameters

Group	Field	Description	Default Value
	Channel	Selects the port number to be configured	1
	Extension Number	The extension number that is defined to this selected port	11
Information	Port Type	Displays the type of port (Display only) Phone : FXS interface for phone set or FAX Line : FXO interface for telephone line NA : Not used	
	Port State	Activates or shuts down all functions of selected port **Enable** : Activates all functions to selected port **Disable** : Shuts down all functions to selected port	Enable
	Current State	Display the current status (Display only) Enable : Selected port is enabled Disable : Selected port is disabled	Enable
	Do Not Disturb	When DND function is enabled for this channel, only outgoing calls are available and incoming calls to this channel will be busy. **Enable/Disable**	Disable
T.38 Fax Relay	Device Capacity	Displays the total port number allowed for FAX (Display only)	16
	Current Quantity	Displays the port number that has been configured for FAX (Display only)	0
	Support T.38	Enables T.38 support on selected port **Yes** : Support **No** : No support	NO
Voice	Input Gain	Enter Input Gain	0 dB

Group	Field	Description	Default Value
	Output Gain	Enter output Gain	0 dB
FXO Loop Error Counter	Counter	Counter for FXO Loop Error	0
	Clear Counter	Clears the counter	
Call Forward	Control	Enables or disables the function “Call Forward” **Forward-Disable:** Disables the function. **Forward-All Calls:** Forwards all calls. **Forward-Busy:** When the FXS is busy, calls will be forwarded. **Forward-Busy-Slave:** When the FXS is busy calls will be forwarded. If the destination is also busy and is also configured as Forward-Busy-Slave. The call will continue forwarding to the next configured phone number. **No Answer-Forward:** When there is no answer for this FXS port, the call will be forwarded to a specified destination **Busy/NoAnswer-Forward:** When there is no answer or the line is busy for the FXS port, the call will be forwarded to the specified destination	Disable
	Forward to *(Gateway Phone Number)*	Forwards the call to the Gateway you specified. The entered telephone number must contain a full telephone number, including country code and area code. If the "Offnet to" number is also configured, the call will call to PSTN via the gateway that the phone number is configured. If the gateway need to be forwarded to the VM Product, please configure the "Forward To" number as the phone number or NET ID of the gateway that is connected to VM Product. FXS Port can be configured as “Forward to”. FXO port can be configured to forward the call to a FXS port.	Blank

Group	Field	Description	Default Value
	Offnet to *(Offnet Phone number)*	Forwards the IP calls that is coming (or forwarding) from other gateway to PSTN. The Offnet to number here is for the call offnet to PSTN. For example, the local gateway is located in Taipei. The that will forward your call is located at Shanghai, phone No. 21-6445-1111 (this No.+ country code is configured as "Forward to" No. 86-21-6445-1111) and you want to make a PSTN mobile phone call to Shanghai No. 1360567888, so you configured 1360567888 as "Offnet to" No here. And the “Permitted Phone Number for Offnet Forward” in Shanghai should be configured to “1360567888”.	Blank
Barring Class	ID	Enter the Barring class for selected port	0
Outbound Transit Control	Privilege	Define the privilege for Outbound Transit call **Disable** : Outbound Transit call is not allowed **Local** : Outbound Transit call to local call only **Toll** : Outbound Transit call to mobile phone and Toll call **International** : Outbound Transit call to international call The local call, toll call, or international call is judged from the point of the phone number defined in this gateway.	Disable
Join Operator Group	Yes/No	Define whether to join into Operator Group or not. **Yes** : join into Operator Group to behave as Operator **No** : Not join	Yes

Group	Field	Description	Default Value
Join Trunk Group	Group ID	Define which trunk group to be joined **1** : Trunk group 1 is joined **2** : Trunk group 2 is joined	N/A
Trunk Class	ID	Select Trunk Class ID for FXO port. Default value is 0. There are 0 to 15 for selections.	0
Battery Reverse	Control	Battery Reverse is an mechanism for traditional PBX to judge ON hook or Off hook status. **ON** : Battery reverse is enabled **OFF** : Battery reverse is disabled	FXS : OFF
Soft Key	Soft Key String	Define the characters string of softkey. When the softkey is triggered, the string of softkey will be dialed. The maximum length of string is 22 digits.	Blank
	Trigger Mode	Choose the Trigger mode to trigger the softkey : ■ **Key Press** : If the digits dialed matches with any one of the digits defined in Trigger Digits, the softkey is triggered and the number defined in softkey string will be dialed. ■ **Auto** : For FXS, it is triggered when phone-set in hook off status. For FXO, it is triggered when line is ringing.	Key Press
	Trigger Digits	Define the trigger digits to trigger the softkey e.g. define trigger digits as 123. softkey will be triggered if 1 or 2 or 3 is dialed.	Blank
	Append Trigger Digit	Define if the trigger digit will be appended to the softkey sting as the last digit when dial out ■ **Not Append** : Not appended ■ **Append** : Trigger digit is Append.	Not Append
Statistics	Reset	Mark the selection and click **Apply** to reset the traffic statistics.	

Group	Field	Description	Default Value
	Counter Type	Call Attempt：Volume of calls Successful Outgoing Call Incoming Call Successful Incoming Call Busy Time(sec)：Total using time of this port	

7.3.3. Prefix Map Table

In VTG3300, define a prefix ID for each VTG3300GW or VTG3300 in the Prefix Map Table. Then you can connect to the equipment by dialing the prefix ID defined for that equipment.

Definition

There are three fields in the Prefix Map Table :

1. **Prefix ID**

   The prefix ID for other equipment, maximum length is 6 characters.

2. **Phone Number**

   The phone number of VTG3300 is the mapping of Prefix ID to the equipment.

3. **Type** : There are two choices : **iPBX / Phone**
   - iPBX is selected for VTG3300 series

   If **iPBX** is defined in Type, system will start to create the call path after dialing prefix ID plus 2 digit extension number (prefix ID + Ext No), or prefix number plus “0” (prefix ID + 0). Actually, the corresponding telephone number of other equipment defined in the Prefix Map Table is sent out. In the later case, “0” will be treated as the access code for Operator if Operator is defined in the system, otherwise the “0” after the Prefix ID will be ignored.

   If **Phone** is defined in Type, system will start to create the call path after dialing the Prefix ID number.

The Prefix Map Table is only adapted to the trunks or extension lines of its own system. It can not be shared by the other equipments. That means that each equipment should define its own Prefix Map Table.

If you would like to connect to T.38 FAX port, you may define “phone No. + * “ in the Prefix Map Table.

For example :

Prefix	Phone Number	Type
300	886282263139	Phone
301	886282263139*	Phone

Dial “300” from whatever FXO or FXS port, system is always searching for a Non-T.38 port as the destination; while dial “301”, system will check if T.38 is supported by the calling side. If yes, system is searching for a T.38 port as the destination, otherwise searching for a Non-T.38 port.

Attention :

If there are two VTG3300 would like to dial each other by dialing Prefix + extension number, the prefix number defined for each VTG3300 must be identical. Besides the prefix of called equipment, the prefix for our own equipment has to be defined. If there are more than 3 equipment units would like to dial each other, the definition of prefix number for each equipment must be identical.

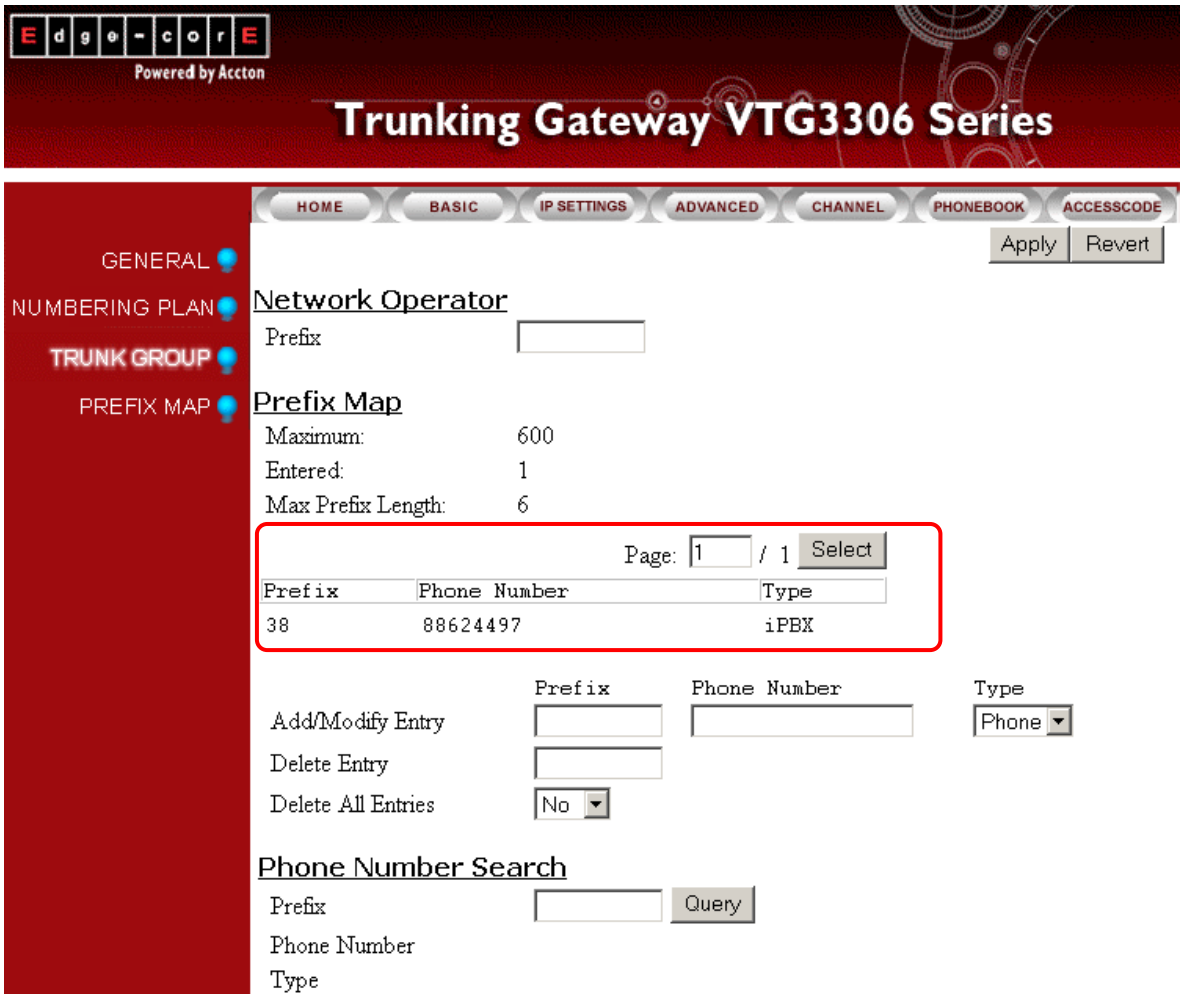
7.3.3.1. Restrictions in Prefix Map Table

Prefix Map Table is part of Numbering Plan, any confliction and duplication are not allowed. Please take care some restrictions.

- Avoid from defining the prefix number starting with digit “1” and “2”. If you have to use the number starting with digit “1” or “2”, please refer to the description of Internal Call in Numbering Plan. It may cause the confusion if the number presents extension number or prefix number.
- Avoid from defining the prefix number starting with digit “9”. In the normal numbering plan, “9” is the default value for Access Code of fetching the line from trunk group 1.
- Avoid from defining the prefix number starting with digit “0”. In the definition of tradition telephone numbering plan, “0” is defined as the starting digit for accessing long distance call or international oversea call.
- The maximum length of Prefix code is 6 characters. In principle, you can’t define a new prefix number starting with the number that has been defined previously. For example, “33” is defined as a prefix number, then any numbers starting with “33”, like “330”, “3312”, can not be defined as a prefix number. Of course, “31”, “32”, or “34” are OK. Another example, “555” is defined previously, then “5551” or “55522” can not be defined as a prefix number, but “551” or “552” or “553” …etc. is OK.

7.3.3.2. Web Page for Prefix Map

From Web Management Page, select folder "**ADVANCED**" ; selection "PREFIX MAP"



Group	Field	Description	Default Value
Network Operator	Prefix	Enter the prefix number of equipment that the Operator is defined. Normally the Operator of own system will be connected if Access Code for Operator (default is “0”) is dialed. If the Operator of own system is set to N/A, the call will be transferred to the Operator of other equipment whose prefix number is assigned here. e.g. the Prefix Map Table of own system : prefix phone type 33 886282268888 iPBX If the Operator is assigned to equipment with prefix 33 , then enter 33 in this field	Blank
Prefix Map (Display Only)	Maximum	The maximum number of equipment can be entered.	600
	Entered	The number of equipment has been entered	0
	Max Prefix Length	The maximum length of Prefix number	6

Group	Field	Description	Default Value
	Add/Modify Entry	Add/Modify a Prefix number **Prefix** : Enter the Prefix number for other equipment, maximum length is 6 **Phone Number** : Enter the phone number of VTG3300 or the Gateway that prefix is assigned to. This field may be the NET ID. That means the prefix number (phone number) is the equipment which you assigned to. **Type** : Type (iPBX / Phone) indicates this prefix number is assigned to VTG3300 series products or other products. **iPBX** is selected if it is assigned to VTG3300 or VTG3300 series product. If the type is iPBX, system will start to create the call path after dialing prefix number plus 2 digit extension number (prefix ID + Ext No), or prefix number plus “0” (prefix ID + 0). Actually, the corresponding telephone number of equipment defined in the Prefix Map Table is sent out. In the later case, “0” will be treated as the access code for Operator if operator is defined in the system, otherwise the “0” after the Prefix number will be ignored. If the type is phone, system will start to create the call path after dialing the Prefix ID number.	Blank
	Delete Entry	Delete the Prefix number	Blank
	Delete All Entry	Delete all Prefix number	No
Phone Number Search	Prefix	Enter the Prefix to be searched	Blank
	Phone Number	Display the phone number of equipment defined by the searched prefix	Blank
	Type	Display the type of equipment defined by the searched prefix.	Blank

7.3.4. Internal Call

Each FXS port in VTG3300 series product can be an extension line of PBX; the extension number is one of the number from11 to 26 only. FXS extension line can be connected by dialing the extension number or prefix number followed by the extension number.

From FXS line in VTG3300 series product can dial to the following product directly :

- To the extension line of another VTG3300 andVTG3300 gateway on the remote side.

For the dialing procedure, please refer to the following table:

Called side	Dialing from Calling side
The extension line of another VTG3300, VTG3300 gateway on remote side	Method-1: <IP Calls Access Code > + International Access Code + telephone number of 4400/4600 + Extension number + "#" e.g. # 002862164451111 22 # Method-2: Prefix + Extension number e.g. 3322 ; 33 is the prefix of 4400/4600 of called side

7.3.5. Dial to PSTN line

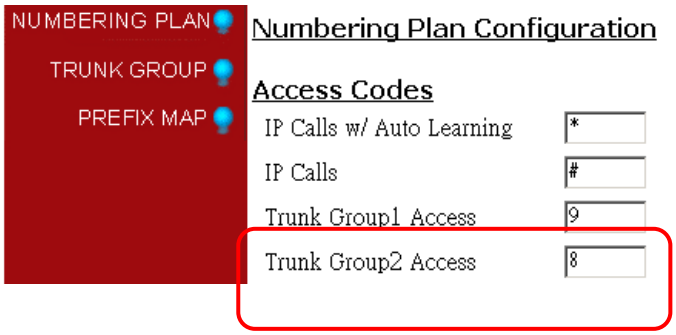
7.3.5.1. Access Trunk Group

All FXO ports are separated into two trunk groups : Trunk Group 1 and Trunk Group 2. Any extension line will access a free trunk from Trunk Group 1 if the Access Code for Trunk Group 1 is dialed, or from Trunk Group 2 if the Access Code for Trunk Group 2 is dialed. The access sequence is from the last ports upward, i.e. 16, then 15, 14, then 13.

All FXO port and Trunk Group will be configured via the Web Management Page, folder "CHANNEL", please refer to Session 7.3.2 Configuration of Ext. Line and Trunk (Channel).

I. Configuration of Trunk Group Access Code

From Web Management Page, select folder "**ADVANCED**" ; select "NUMBERING PLAN", via this page to configure the Access Code for Trunk Group.



Enter the digit in the field “Trunk Group 1 Access” to configure the Access Code for accessing the trunk group 1. It is “9” in the figure. Enter another digit for Access Code of Trunk Group 2, e,g. “8”.

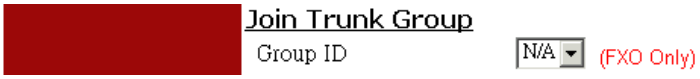
Attention : The Access Code in the Numbering Plan can not cause any confliction.

II. Configuration Each FXO to A Trunk Group

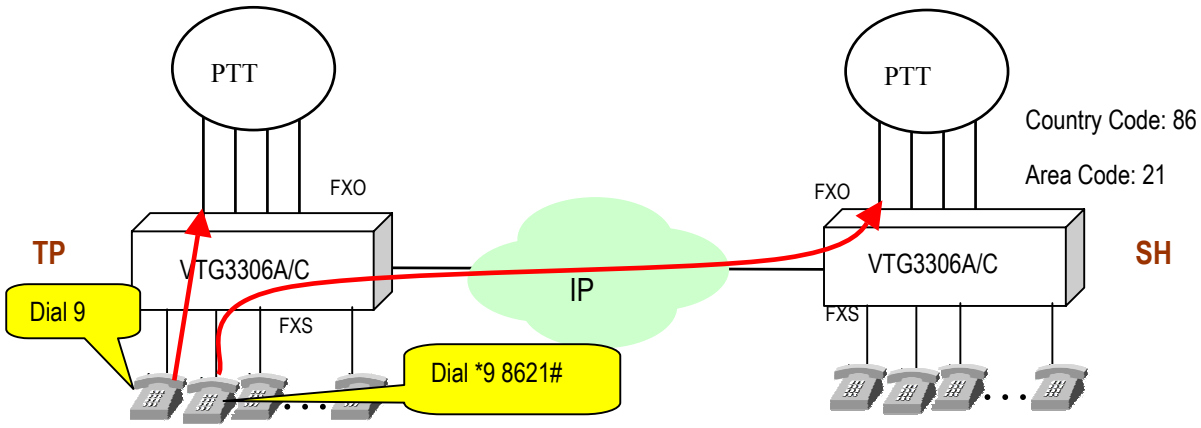
Each FXO port should be assigned to a trunk group, either Group 1 or Group 2.

From Web Management Page, select folder “**CHANNEL**” and select “CONFIGURATION”. In this page, enter the FXO port in the field of Channel and click the button **Select** . Then choose the trunk group 1 or 2 in the field of “Group IP”. Please refer to the following figure :

From Web Management Page, folder “**CHANNEL**” and select “CONFIGURATION”



7.3.6. Seize Remote Trunk



VTG3300 can access own trunk by dialing the Trunk Access Code “9”. In addition, it can seize the remote trunk by Seize Remote Trunk Access Code.

Dial Method :

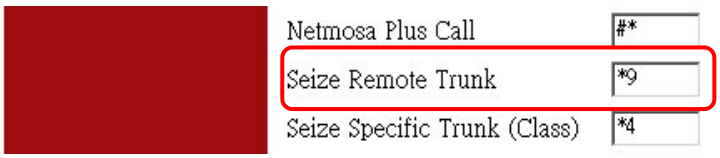
<Seize Remote Trunk Access Code> + <Country Code> + <Area Code>+<#>

Example :

There are two VTG3300, one in Taipei (8862), and the other one in Shanghai (8621). At Shanghai side, VTG3300 is configured as giving the permission for Taipei to place the Outbound Transit Call. The Trunk Call Allowed is set to TRUE for Country Code= 86 and Area Code=21. At Taipei side, Seize Remote Trunk Access Code is configured as “ *9 “. Under such configuration, Taipei can place a call to Shanghai PSTN line through the VTG3300 in Shanghai, and also can seize the remote trunk of VTG3300 in Shanghai by dialing “ *98621# “.

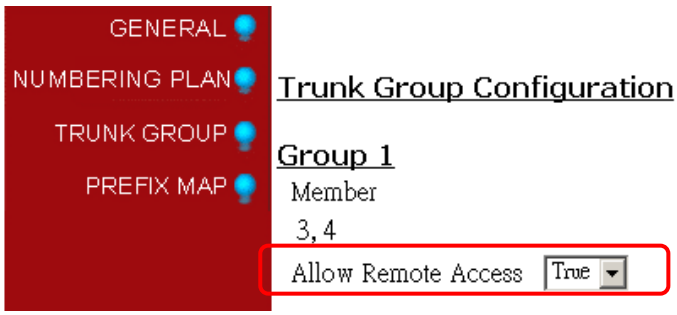
I. Configuration on the Line of Own Side

Define the Access Code of Seize Remote Trunk, from Web Management Page, folder “**ADVANCED**” and select “NUMBERING PLAN”



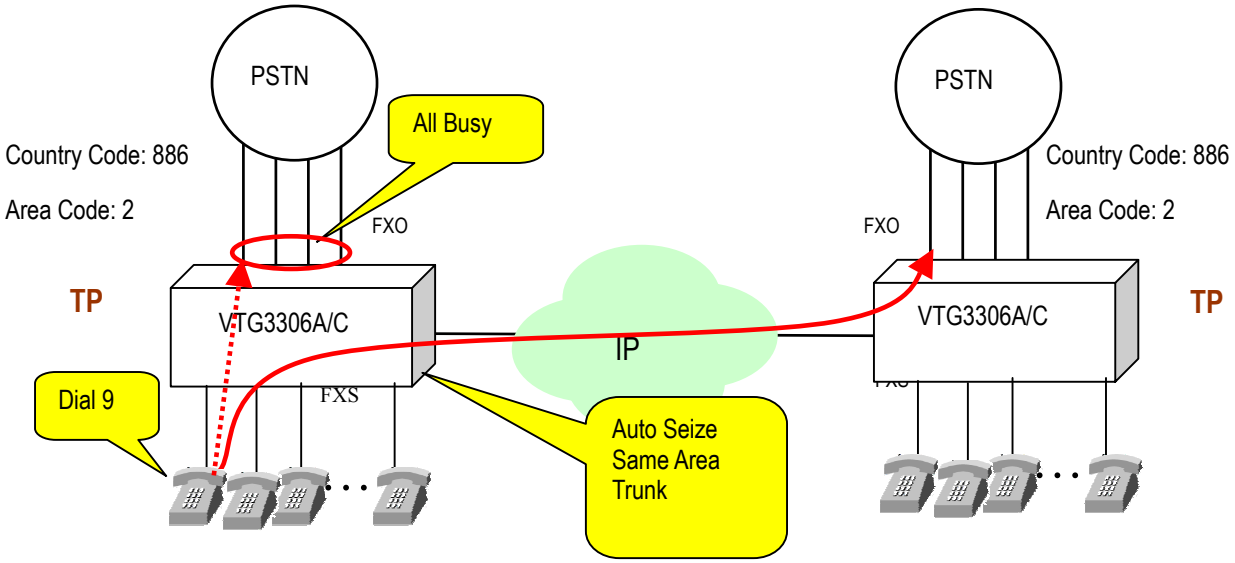
II. Configuration on the Remote Side

Give the permission to own gateway to make Outbound Transit Call, and set Trunk Call Allowed to TRUE (please refer section 7.3.17 Outbound Transit Calls) and set the field Allow Remote Access of Trunk Group to TRUE from Web Management Page, folder “**ADVANCED**” and select “NUMBERING PLAN”



7.3.7. Access Trunk of the Same Area

If there are no free trunks in own gateway or no trunks are connected to own gateway, you may use the function of Same Area Trunk Access to access the trunk of another VTG3300 gateway that is in the same area; same area means same country code and area code.



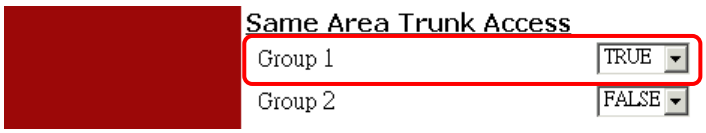
Dial Method :

<Trunk Access Code>

Dial Trunk Access Code " 9 " to access a free trunk of own gateway, system will access the free trunk from the other gateways in the same area automatically if no trunks are available in own gateway.

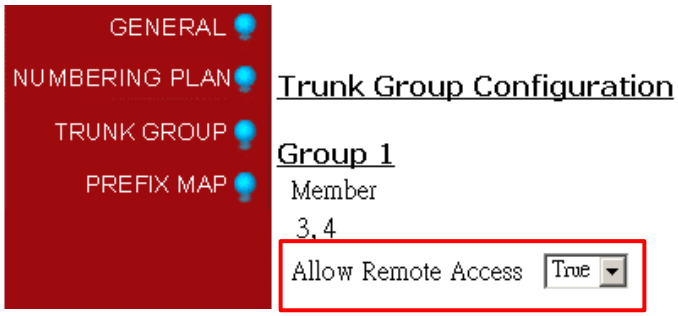
I. Configuration on the Line of Own Side

Define the field of Same Area Trunk Access to TRUE from Web Management Page, folder "**ADVANCED**" and select "GENERAL"



II. Configuration on the Remote Side

Give the permission to own gateway to make Outbound Transit Call, and set "Trunk Call Allowed" to "TRUE" (please refer session 7.3.16 Outbound Transit Calls) and set the field Allow Remote Access of Trunk Group to "TRUE" from Web Management Page, folder "**ADVANCED**" and select "NUMBERING PLAN"



7.3.8. Trunk Class (0~15)

General

1. Trunk Class ID (0~15) may be assigned to every FXO port; default value is 0.
2. By defining Trunk Class, the specific FXO port may be accessed by the remote gateway.
3. Dial Method:

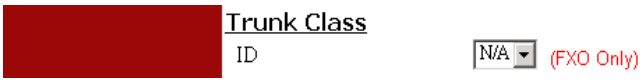
   <Seize-specific-Trunk-Access-Code> + <Prefix> +< Class(0~15)> +<*/#>

4. Note : The FXO port of own gateway has to give the permission of Outbound Transit to the remote side, and set Call Allowed to TRUE, please refer to sec.7.3.18 Outbound Transit Call. If there are several FXO ports have the same Trunk Class ID, the access sequence is from the last port upward.

Configuration

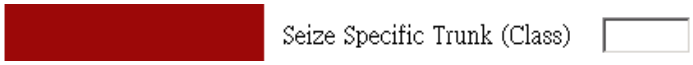
I. Configuration of own gateway

From Web Management Page folder "**CHANNE**L", select "CONFIGURATION" page

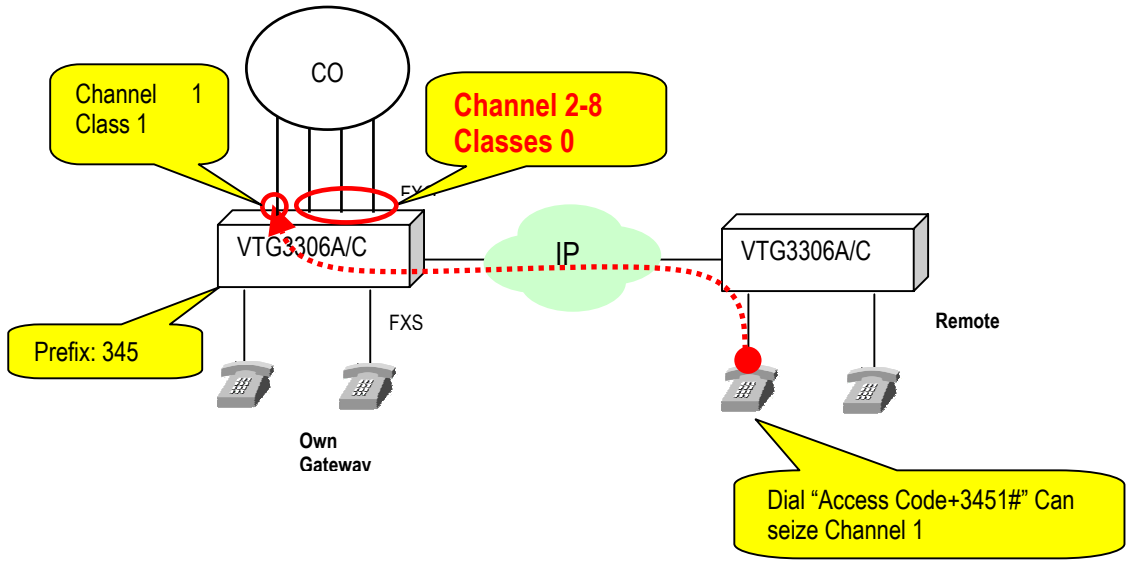


II. Configuration of remote gateway

From Web Management Page folder "ADVANCED", select "NUMBERING PLAN" page



III. Example



7.3.9. Trunk Group Telephony Workgroup

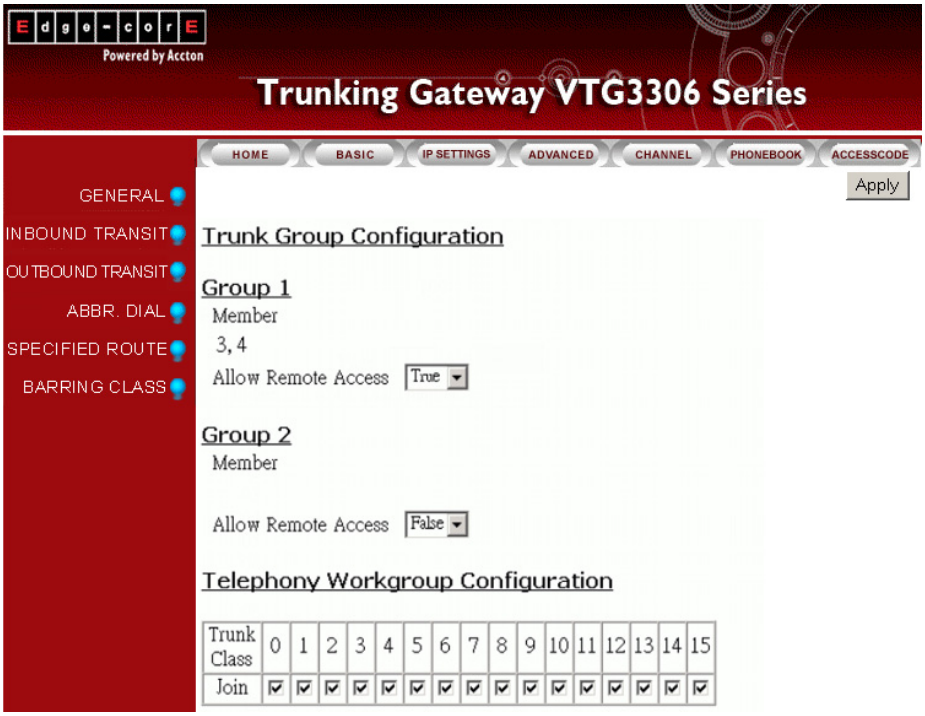
General

1. For accessing the specific FXO port of own gateway, each FXO port should define a Trunk Group ID and define if join to Trunk Group Telephony Workgroup.
2. If the FXO port will join to Trunk Group Telephony Workgroup, this port must connect to PSTN line. And the functions concerning the trunk access to this port must enable. (e.g. Trunk Group Access, Outbound Calls, etc.…)

Configuration

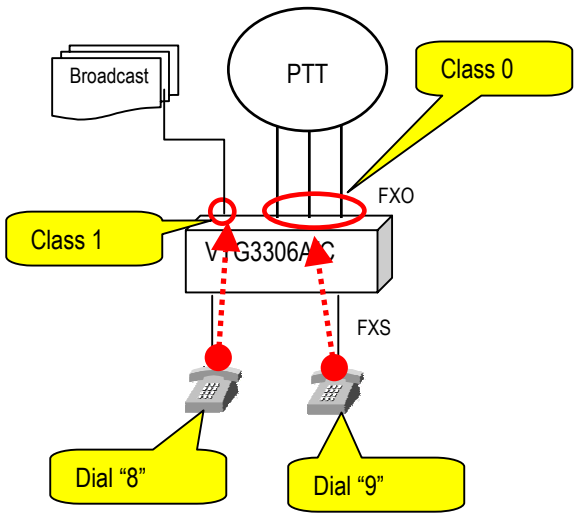
From Web Management Page folder “**ADVANCED**”, select “TRUNK GROUP” page :

Joining to Trunk Group Telephony Workgroup is on basis of Trunk Group ID. Therefore FXO port must have Trunk Group ID first, and then check if this Trunk Group ID will join to Trunk Group Telephony Workgroup or not.



Tick Telephony Workgroup means allow remote gateway to Seize Remote Trunk or do Outbound Transit call to seize the FXO port of this Trunk Class. If the table here is not ticked, FXO port of Trunk Class can be accessed by Seize Specific Trunk (Class) only.

Example



All FXO ports belong to Trunk Group 1

Ports of Class 0 connect to PSTN line, and only Class 0 joins Telephony Workgroup.

Dialing “9” PSTN line can be accessed.

Dialing “8”, the broadcast will be initiated if system is properly configured.

7.3.10.Call Transfer

Either Called Side or Calling side can do Call Transfer to the extension below if they use the FXS ports of VTG3300

- Any extension line of the same gateway
- The extension line of another VTG3300 series product at remote side

- **Dial Method**

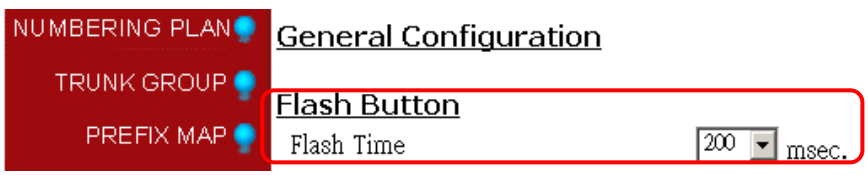
When you would like to transfer a call that is answered, just flash the phone set or press the Transfer key. When you will hear the dial tone, dial the extension number.

If VTG3300 is connected ahead PBX (FXS port of VTG3300 is connect to the FXO port of PBX), it is possible that the **Flash** (or **Transfer**) signal is unable to pass to VTG3300. If this happens, use "#" to replace **Flash** (or **Transfer**) button. Please disable "Manual IP Learning" for this function. For details, please refer to..7.3.23 Access Code..

Dialing Method is shown below.

Transferred To	Procedure
Extension line of same Gateway	Flash then dial the Extension number; or Flash then dial the Prefix of own Gateway+ Extension number Example：Flash → 14 、Flash → 33 14
Extension line of another VTG3300, VTG3300 in remote side	" * " + Telephone number + Extension number + " # " Or Flash → " * " + Telephone number + Extension number + " # " Or Flash → prefix + Extension number Example: 55 is the Prefix of remote VTG3300 (55 = 886282263368/iPBX), telephone number is 82263368, extension number is 14 Please dial *8226336814# or Flash → 55 14

Please adjust the flash time of the phone set to avoid from causing the disconnection when flash for transfer call. The flash time of the phone set should be same as configuration of VTG3300. The flash time can be adjusted from Web Management Page , folder "**ADVANCED**", Select "GENERAL" as the following figure. 200ms is default value for the default Flash Time.



Group	Field	Description	Default Value
Flash Button	Flash Time	Enter the time for “Flash” signal (or transfer key) to be recognized by system	200ms

7.3.11.Operator

VTG3300 series Gateway supports several types of Operator:

- DISA
- Operator for own Gateway
- Network Operator

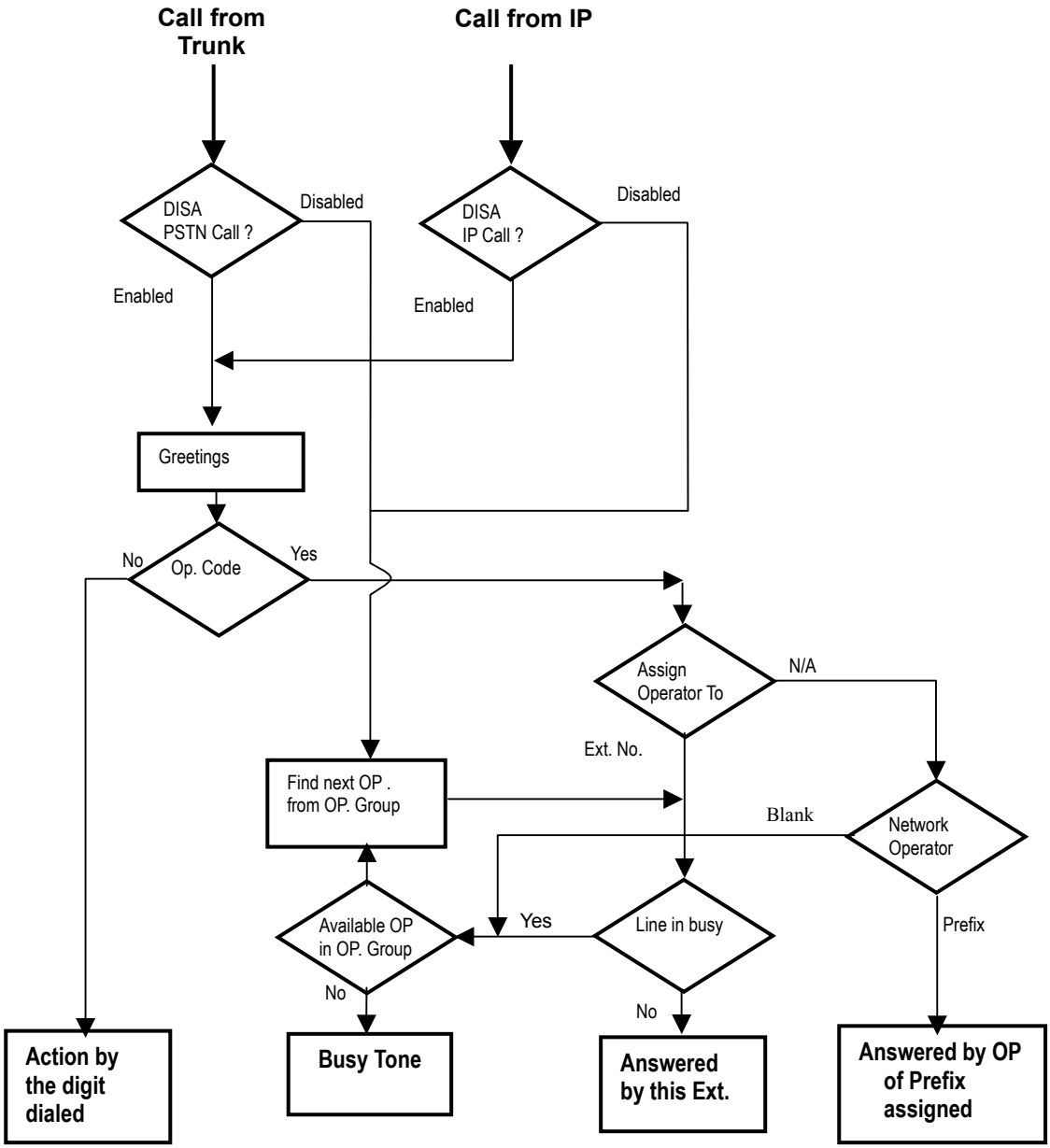
When a call is coming from trunk (i.e. FXO port) or from IP, VTG3300 will follow the “procedure to select Operator” in the following chart to distribute the calls to the correct type of Operator.

Parameters

The following parameters are involved in the procedure.

Parameter	Description	Web Page
DISA PSTN Call	DISA is activated automatically when call is coming from trunk Enable : Activate Disable : Shut Down	Folder "**ADVANCED** "/ select "GENERAL" Please refer to section 7.3.11.3 Build-In DISA.
DISA IP Call	DISA is activated automatically when call is coming from IP Enable : Activate Disable : Shut Down	
Assign Operator To	Assign a certain extension line as Operator	Folder "**ADVANCED**" / select "NUMBERING PLAN" Please refer to Section 7.3.11.4 Operator for own Gateway.
Operator Code	Access Code to access Operator	
Network Operator	Define the Prefix code of Network Operator	Folder "ADVANCED" \ Select "PREFIX MAP" Please refer to Section 7.3.11.5 Network Operator Prefix.
Join Operator Group	If a line join to Operator Group	Folder "**CHANNEL**" / select "CONFIGURATION" Please Refer to Section 7.3.11.4 III. Configuration Operator Group

7.3.11.1. Procedure to Select Operator



7.3.11.2. Call Flow

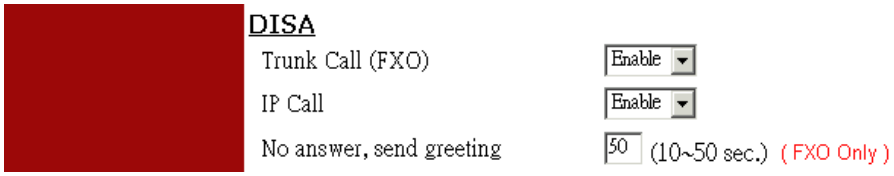
A call is coming from trunk by dialing the PSTN Number of VTG3300, DISA will answer the call. VTG3300 will handle the call according the number is dialed.

Number Dialed	Call Flow
Extension No. (11-26)	Call connects to the extension line assigned
Prefix Code	Call connects to other equipment assigned
Operator Code	Call connects to the port assigned for Operator
IP Call	Call connects to IP phone assigned
None of above	Broadcast the announcement “The number you dialed can not be recognized”. You have 3 times to correct the number, then VTG3300 will disconnect the line

7.3.11.3. Build-In DISA

The DISA is build-in to each port and whenever a call is coming from trunk or from IP via Internet, DISA is always available to broadcast the greetings. Please configure DISA if you need the Auto Attendant to deal with the incoming call from trunk or IP.

Web Management Page , folder “**ADVANCED**”, Select “GENERAL”



Group	Field	Description	Default Value
DISA	Trunk Call (FXO)	If the call from Trunk will be answered by DISA **Enable** : Yes, broadcast the Greetings **Disable** : No	Enable
	IP Call	If the call from IP will be answered by DISA **Enable** : Yes, broadcast the Greetings **Disable** : No, connect to OP directly. If OP is not defined, connect to the 1st port.	Disable
	No Answer，send greetings	50 seconds is set as default value. 30 seconds is recommended. That means if the call is not answered in 30 seconds, the call control is back to DISA.	50 seconds

7.3.11.4. Operator for own Gateway

When a call is coming and the Operator Code is dialed, VTG3300 will connect this call to the Operator.

Notes: When the Operator is busy, system will find a free extension line that is configured in Operator Group starting from channel 1. For better support, the seats of extension lines that are configured in Operator Group should be not far from their seat.

Please refer to Section 7.3.11.1 Procedure to Select Operator

I. Assign Operator Port and Operator Code

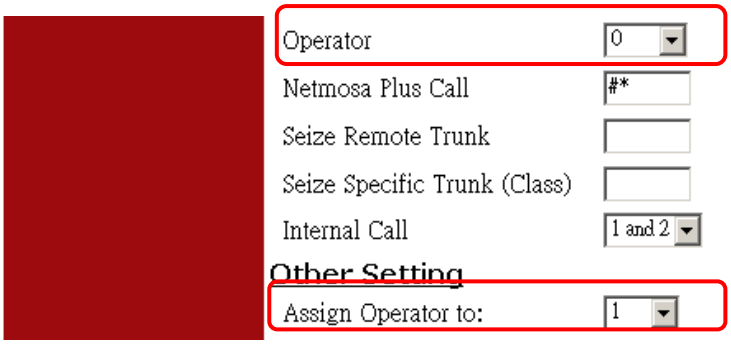
Steps of configuration:

(1) From Web Management Page , folder "**ADVANCED**", Select "NUMBERING PLAN" to enter the Page

(2) Enter/select a number in the field of "Operator"

(3) Enter/select a port in the field of "Assign Operator to" of group "Other Setting"

(4) Click button **Apply**

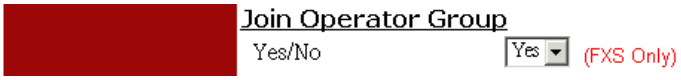


II. Operator Call Forward

When a call is coming and the Operator Code is dialed, VTG3300 will connect this call to the extension line of Operator. If the Call Forward is configured on the line of Operator, the incoming call to Operator will be forwarded to new destination. By this function, Operator can be forward to any line you like when the company is in off duty time or in holiday. Operator can be assigned to any extension line port, and if this port is configured as Call Forward, then any call for Operator will be forwarded.

III. Configuration Operator Group

When the Operator is busy, system will find a free extension line that is configured in Operator Group, starting from channel 1 to 16 as the Operator. To configure Operator Group from Web Management Page, Click folder "**CHANNEL**", and select "CONFIGURATION" to enter the Page



Notes: If an extension line is joined Operator Group and support T.38, this line will never be selected even all Operator extension lines are busy.

7.3.11.5. Network Operator Prefix

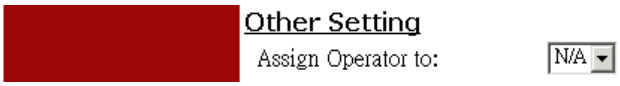
I. No Operator in own Gateway, Operator is located at other VTG3300

In VTG3300, Operator line may be assigned to another gateway through Internet. When a call is coming and dials the Operator Code, system will search the Operator in own gateway. If the Operator of own gateway is set to N/A, system will assume that Operator is defined on another gateway. From the Network Operator Prefix configuration, system will find the Operator for this call. Of course, the Network Operator Prefix has to be configured in advance.

In the following example, the Operator is configured on equipment with Prefix code 81, which is a VTG3300 with phone No. 886-2-8226-8881, as a Network Operator.

Steps of configuration :

(1) In own gateway, Web Management Page folder "**ADVANCED**", Select "NUMBERING PLAN" Page, in group "Other Setting", set field of "Assign Operator to" to N/A

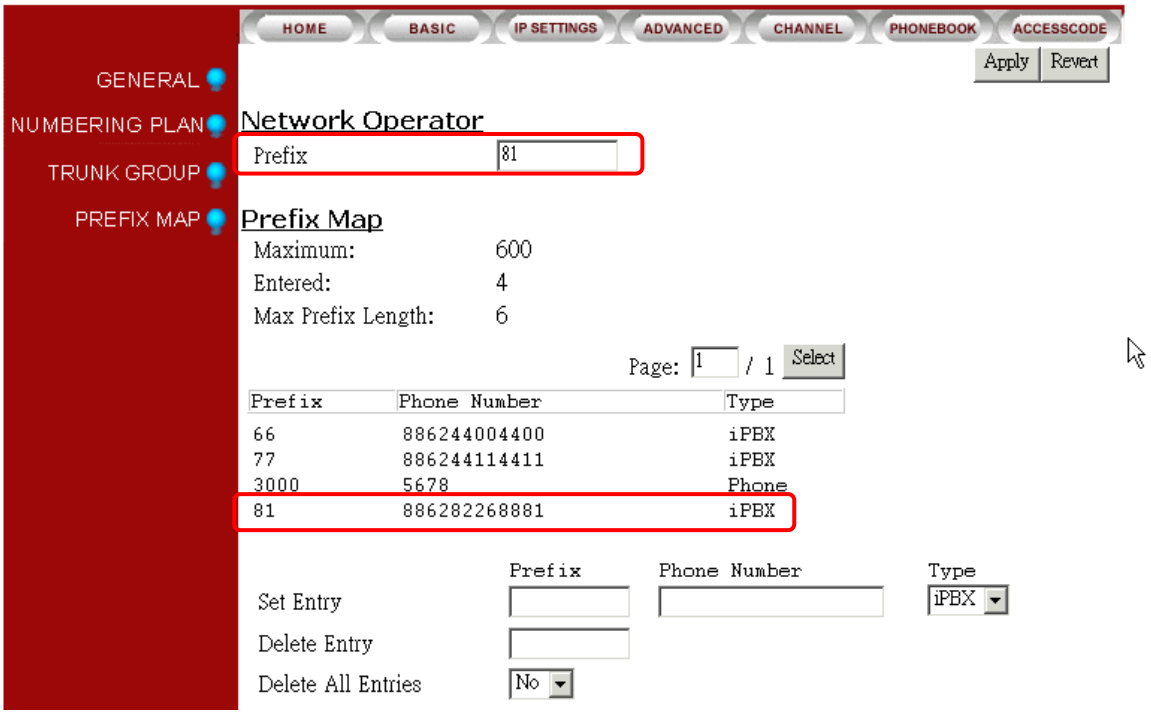


(2) Configure the Prefix data of the gateway, in which Operator will be assigned, into Prefix Map Table of own gateway.

(3) Enter the Prefix of gateway that Operator assigned into the field "Network Operator Prefix".

In Prefix Map table : Prefix 81 = 886282268881/iPBX

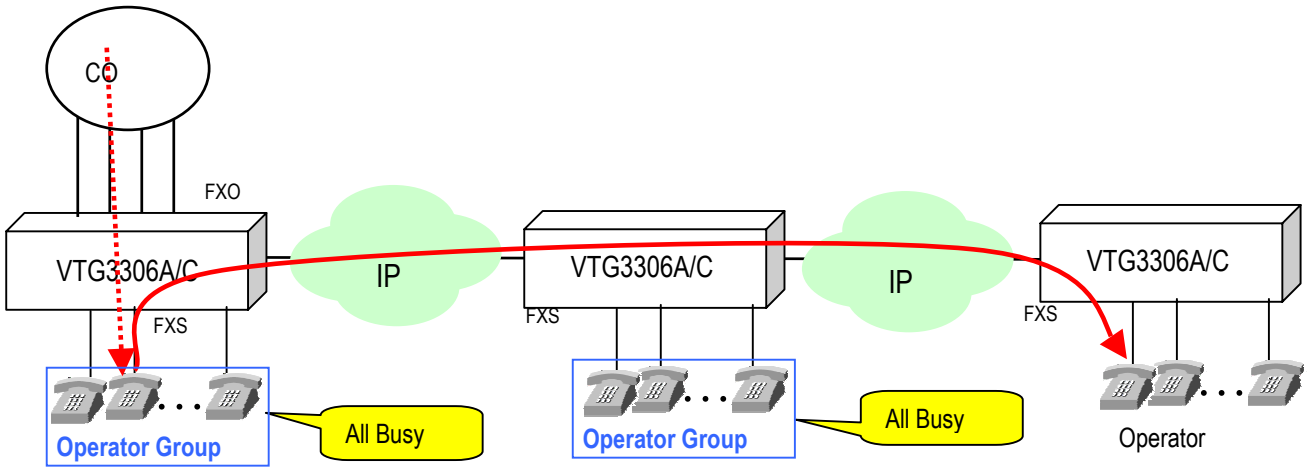
In Numbering Plan : set 81 in the field "Network Operator Prefix"



No matter what type (Phone/iPBX) of Prefix is assigned to the Prefix of the network operator, the procedure to access network operator is same as the one to local operator.

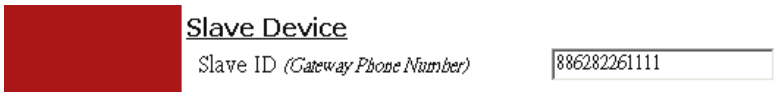
II. Operator defined in own Gateway

When a call is coming and the Operator Code is dialed, VTG3300 will find the Operators of own gateway for answering the call first. If the lines in Operator Group of own gateway are busy, and another gateway is assigned as backup Operator, then system will find an available Operator from the second gateway. If the second gateway has also assigned the third gateway as the backup Operator, and all Operators of the first and the second gateway are all busy; then system will find an available Operator from the third gateway. Maximum 15 equipments can be successive.



Configuration Procedure :

- In own gateway, Web Management Page folder "**ADVANCED**", Select "GENERAL" page, enter the telephone number of another gateway in the field of "Slave Device". The telephone number must be full number, i.e. Country Code + Area Code + Telephone Number.



- Note : It's better to make sure the calls between different parties are OK before configuring this function.

7.3.12.Recording Greetings

Message of Greetings

I. No special tools are required and any extension line can record the message of greetings. Totally you may have seven sections of greetings and one minute at most for each section. You may save the greetings in PC file and download the file to system via FTP.

For Example:

Type of Greetings	Description of Greetings	Example of Messages
Greeting (1)	The Greetings for office hour	Good day, this is XX XXX, please dial extension number or 0 for Operator
Greeting (2)	The message when line is busy	Line is busy, please dial other extension number or 0 for operator
Greeting (3)	The message when the number is wrong or can not be recognized	The number you dialed can not be recognized, please dial again
Greeting (4)	The message for waiting, the call is transferring	Thank you, please wait a moment
Greeting (5)	The greetings for company off duty or holiday	This is off duty time, please dial extension number directly or call in office hour again
Greeting (6)	The message for no answer	Call is no answer, please dial other extension number or 9 for Operator
Greeting (7)	The message for unable to answer the call, may be network problem or line problem	The line is unable to answer, please dial other extension number or 9 for operator

II. For Line of Operator

If the extension line is assigned as Operator, this line can activate the greetings for office hour and the greetings for off duty time

(1) Activate the greetings for office hour, hook off the phone set, dial ## , then 071#

(2) Activate the greetings for off duty time, hook off the phone set, dial ## , then 070#

III. For lines of Non Operator

If the extension line is not assigned as Operator, this line should enter to management mode, then activate the greetings for office hour and greetings for off duty time

(1) Activate the greetings for office hour, hook off the phone set,

dial ## , dial 09 9999# to enter the management mode, then dial 071#

(2) Activate the greetings for off duty hour, hook off the phone set,

dial ## , dial 09 9999# to enter the management mode, then dial 070#

7.3.12.1. Recording the Messages

(1) Entering the Management Mode

Hook off the phone set, when hear the dial tone, dial ## , → then 09 9999# to enter the management mode, → hear the tone of "DuDu….."

(2) Recording the 1st section

Dial 99 1 → * → start to record → # (end the record)

(3) Storing the 1st section

Dial 9# → hear the tone of "DuDu…"→ #

(4) Recording the 2nd section

Dial 99 2 → * → start to record → # (end the record)

(5) Storing the 2nd section

Dial 9# → hear the tone of "DuDu…"→ #

(6) Recording the 3rd section

Dial 99 3 → * → start to record → # (end the record)

(7) Storing the 3rd section

Dial 9# → hear the tone of "DuDu…"→ #

(8) Recording the 4th section

Dial 99 4 → * → start to record → # (end the record)

(9) 9 Storing the 4th section

Dial 9# → hear the tone of "DuDu…"→ #

(10) Recording the 5th section

Dial 99 5 → * → start to record → # (end the record)

(11) Storing the 5th section

Dial 9# → hear the tone of "DuDu…"→ #

(12) Recording the 6th section

Dial 99 6 → * → start to record → # (end the record)

(13) Storing the 6th section

Dial 9# → hear the tone of "DuDu…"→ #

(14) Recording the 7th section

Dial 99 7 → * → start to record → # (end the record)

(15) Storing the 7th section

Dial 9# → hear the tone of "DuDu…"→ #

Attention : Don't forget to dial additional "#" to end the last record, then start the next section.

7.3.12.2. Listening the Messages

(1) Entering the management mode

Hook off the phone set, when hear the dial tone, dial ## , → then 09 9999# to enter the management mode, → hear the tone of "DuDu….."

(2) Listening the 1st message : Dial 961 → If you like to stop, just dial #

(3) Listening the 2nd message : Dial 962 → If you like to stop, just dial #

(4) Listening the 3rd message : Dial 963 → If you like to stop, just dial #

(5) Listening the 4th message : Dial 964 → If you like to stop, just dial #

(6) Listening the 5th message : Dial 965 → If you like to stop, just dial #

(7) Listening the 6th message : Dial 966→ If you like to stop, just dial #

(8) Listening the 7th message : Dial 967 → If you like to stop, just dial #

7.3.13.Abbreviated Dial

General

The feature of Abbreviated Dial is to provide a simple and short dialing behavior to send out the complex and long telephone number instead of dialing the full telephone number. There are 100 entries for Abbreviated

Dial. The Abbreviated Dial Index is for every extension line to make a call by just hook off the phone set and dial

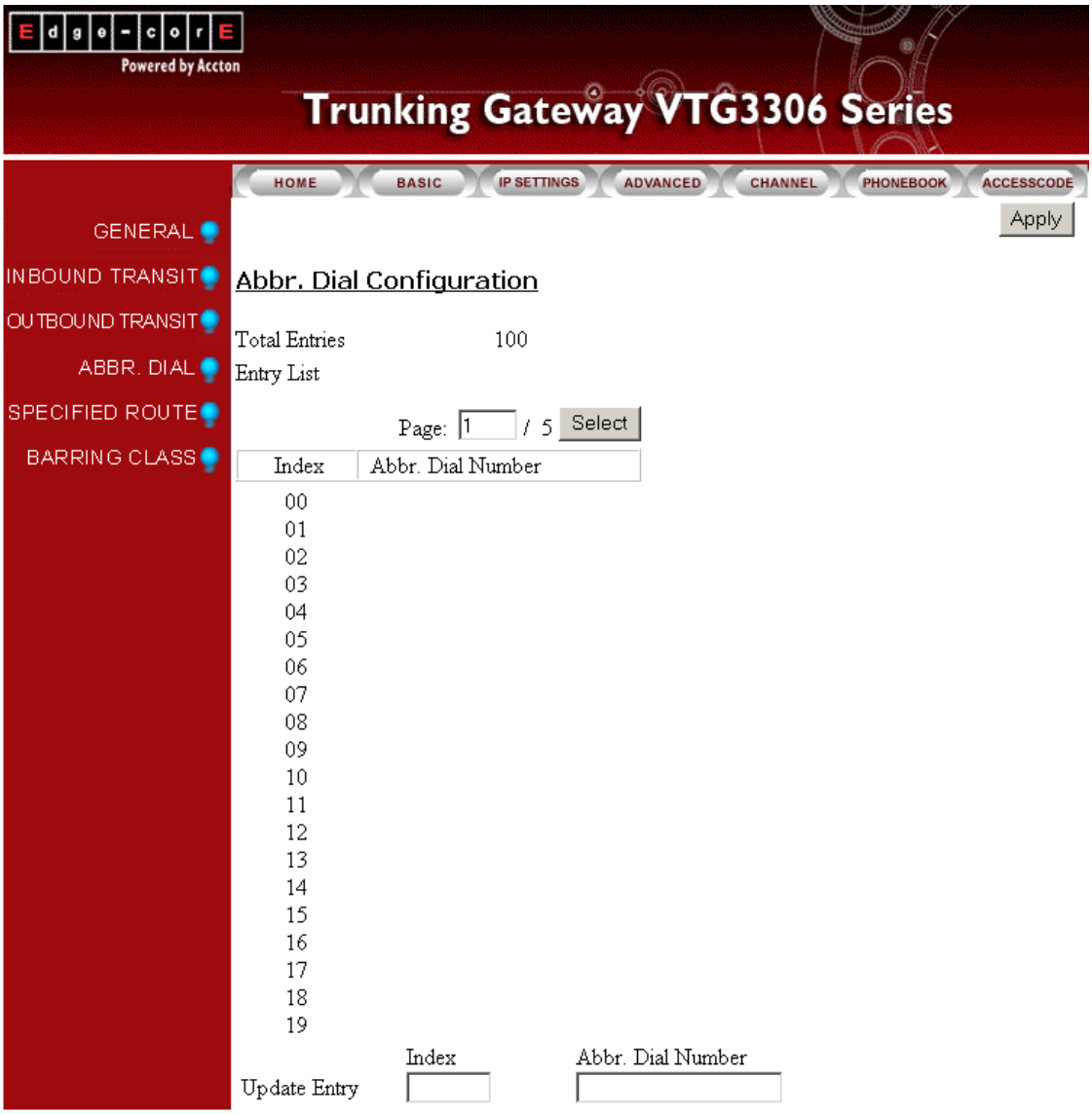
< Abbr. Dial Access code > + <Abbr. Dial Index (00 ~ 99) >

When you make a call by Abbreviated Dial, the call will override the restriction defined in the Barring Table if the code is from 00 to 69, and the call will be restricted by the definition in the Barring Table if the code is from 70 to 99.

0 ~ 9 , * , and # may be used to define the Abbr. Dial Index in Abbr. Dial Table. The number defined in the table is the actual digits to be dialed out for making a phone call. For example, if you would like to dial " 9 " then the call of telephone number " 0921888666 " will be made, and then you should configure the telephone number in the Abbr. Dial Table as " 90921888666 ". Another example, if you would like to make an IP call #82263368#, then you can configure the telephone number as " #82263368# " in Abbr. Dial.

Configuration

From Web Management Page folder "**BASIC**", Select "ABBR.DIAL" page, enter the number to define the Index as in figure



Parameters

Group	Field	Description	Default Value
Abbr. Dial Configuration	Total Entries	Total entries can be configured	100
	Entry List	Entry list for Abbr. Dial, consists : **Page** : Enter the page number to be displayed, page number from 1 to 5 **Index** : Display Abbr. Dial Index **Abbr. Dial Number** : Display the actual number to be dialed to make a call	Blank
	Update Entry	Configure the content of Abbr. Dial : **Index** : Enter the index to be configured **Abbr. Dial Number** : Enter the digits to be dialed , maximum 27 digits	Blank

7.3.14.Softkey

General

The function of Softkey can be configured on each extension line (FXS port) and Trunk (FXO port). The Trigger mode of Softkey may be defined. The Softkey may consists digits 0 ~ 9 , * , and # . Combine with the function of Softkey and Abbr. Dial you may have varied applications.

Configuration and Example

From Web Management Page folder "**CHANNEL**", select "CONFIGURATION" page.

I. Example 1 : Hot Line

User's Activities : User off-hooks the phone, number " #0921555666# " is sent out automatically.

Configuration :

Field	Value Entered
Soft key String	#0921555666#
Trigger Mode	Auto
Trigger Digits	Blank
Append Trigger Digits	Not Append

II. Example 2 : Dial IP-Phone without " # " in heading and ending (Simulate ISR Mode)

- User's Activities : User off-hooks the phone, dial " 8226 3386 " , system will send " #8226 3368 "
- Configuration

Field	Value Entered
Soft key String	#
Trigger Mode	Key Press
Trigger Digits	1234567890*#
Append Trigger Digits	Append

In addition, "Dial Ending Time" must be defined, please refer Section 7.3.24 Advance General Configuration

7.3.15.Abbr. Dial Combined with Softkey

Combine Abbr. Dial and Softkey can have varied and convenient application.

Example 1

I. Activities of User's expectation

- User off-hooks the phone and dial " 0 " , system will send out "#00286135556666# "
- User off-hooks the phone and dial " 1 " , system will send out "#0921666888# "
- User off-hooks the phone and dial " * " , system will send out "#6688# "
- User off-hooks the phone and dial " # " , system will send out "#668812# "

II. Configuration

- Abbr. Dial Access Code : Web Management Page folder "**ADVANCED**", select "NUNMBERING PLAN" page

Field	Value Entered
Abbr. Dial Access Code	5

- Abbr. Dial Configuration : Web Management Page folder "**BASIC**", select "ABBR. DIAL" page

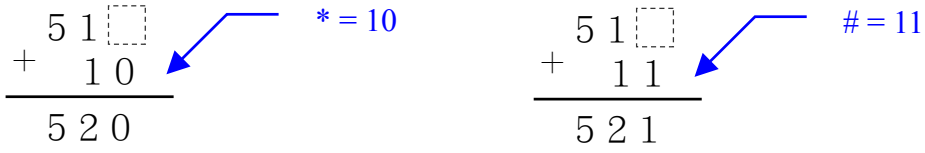
Field	Value Entered
Index 10	#00286135556666#
Index 11	#0921666888#
Index 20	#6688#
Index 21	#668812#

- Softkey : Web Management Page folder “**CHANNEL**”, select “CONFIGURATION” page

Field	Value Entered
Soft key String	51
Trigger Mode	Key Press
Trigger Digits	1234567890*#
Append Trigger Digits	Append

III. Explanation of how system works

- User dials “ 0 “ , Softkey is triggered and “ 510 “ is sent out. This number meets the definition of Abbr. Dial Access Code “ 5 “ , followed by Abbr. Dial Index “ 10 “, therefore the actual number dialed out is #00286135556666#
- User dials “ 1 “ , Softkey is triggered and “ 511 “ is sent out. This number meets the definition of Abbr. Dial Access Code “ 5 “ , followed by Abbr. Dial Index “ 11 “, therefore the actual number dialed out is #0921666888#
- User dials “ * “ , Softkey is triggered and system converts “ * “ to “ 10” , therefore “ 520 “ is sent out (Please refer the figure below). This number meets the definition of Abbr. Dial Access Code “ 5 “ , followed by Abbr. Dial Index “ 20 “, therefore the actual number dialed out is #6688#
- User dials “ # “ , Softkey is triggered and system converts “ # “ to “ 11” , therefore “ 521 “ is sent out (Please refer the figure below). This number meets the definition of Abbr. Dial Access Code “ 5 “ , followed by Abbr. Dial Index “ 21 “, therefore the actual number dialed out is #668812#



Example 2 : Seize the trunk of remote side by Abbr. Dial

There are four VTG3300 installed in Taiwan, Shanghai, Hong Kong, and Tokyo. Each Gateway is equipped the trunks to the local Telecom Operator.

I. Activities of Taiwan User’s expectation

- User off-hooks the phone and dial “ 1 “ . System will seize the trunk of Shanghai’s gateway and the dial tone from the FXO of Shanghai’s VTG3300 is heard.
- User off-hooks the phone and dial “ 2 “ , System will seize the trunk of Hong Kong’s gateway and the dial tone from the FXO of Hong Kong’s VTG3300 is heard

- User off-hooks the phone and dial " 3 " , System will seize the trunk of Tokyo's gateway and the dial tone from the FXO of Tokyo's VTG3300 is heard

II. Configuration

- Abbr. Dial & Seize Remote Trunk Access Code : Web Management Page folder "**ADVANCED**", select "NUNMBERING PLAN" page

Field	Value Entered
Abbr. Dial Access Code	*2
Seize Remote Trunk	*9

- Abbr. Dial Configuration : Web Management Page folder "**BASIC**", select "ABBR. DIAL" page

Field	Value Entered
Index 61	*9 8621#
Index 62	*9 852#
Index 63	*9 813#

- Softkey : Web Management Page folder "**CHANNEL**", select "CONFIGURATION" page

Field	Value Entered
Soft key String	*26
Trigger Mode	Key Press
Trigger Digits	123
Append Trigger Digits	Append

III. Explanation of how system works

- User dials " 1 " , Softkey is triggered and " *261 " is sent out. This number meets the definition of Abbr. Dial Access Code " *2 " , followed by Abbr. Dial Index " 61 ", therefore the actual number dialed out is *9_8621# . The number is the code to seize the remote trunk of 8621, that is the Country Code and Area Code of Shanghai.
- User dials " 2 " , Softkey is triggered and " *262 " is sent out. This number meets the definition of Abbr. Dial Access Code " *2 " , followed by Abbr. Dial Index " 62 ", therefore the actual number dialed out is *9_852# . The number is the code to seize the remote trunk of 852, that is the Country Code and Area Code of Hong Kong.
- User dials " 3 " , Softkey is triggered and " *263 " is sent out. This number meets the definition of Abbr.

Dial Access Code " *2 " , followed by Abbr. Dial Index " 63 ", therefore the actual number dialed out is *9_813# . The number is the code to seize the remote trunk of 813, that is the Country Code and Area Code of Tokyo.

7.3.16.Inbound Transit Calls

VTG3300 provides the feature to forward the call that is coming from the trunk (FXO) port, to FXS port of another VTG3300 or through VTG3300 FXO port to the phone outside the network (PSTN), so called transit call.

Dial Method

< IP Calls Access Code > + Password for Transit Call + < IP Calls Access Code > + Phone number of Forward to or NET ID + < # >

If the default value for IP Calls Access Code , i.e. # , is not changed, the dial number will be like this :

Password for Transit Call # Phone number of Forward to

If the transit call is offnet to PSTN (PSTN – IP –PSTN), then the password will limit the forwarded calls. Different passwords have different permission.

There are four types of permission :

- Disable : Call can not be forwarded to the line outside the IP network
- Local : Call can be forwarded to a local call of PSTN line
- Toll : Call can be forwarded to a local or toll call of PSTN line
- International : Call can be forwarded to a local, toll, or international call

The definition is relative to the "area code" of the equipment that caller dials into. Please refer to the following example.

Example :

User at Taipei would like to make a call to Taipei's VTG3300 with phone number 82268888; and then forward this call to 64452222 at Shanghai. This user must apply the password for Transit Call with privilege for international call, e.g. 2222. The steps to place the call are "

(1) Make a call to Taipei 82268888, which is VTG3300 in Taipei from any public phone line (PSTN)

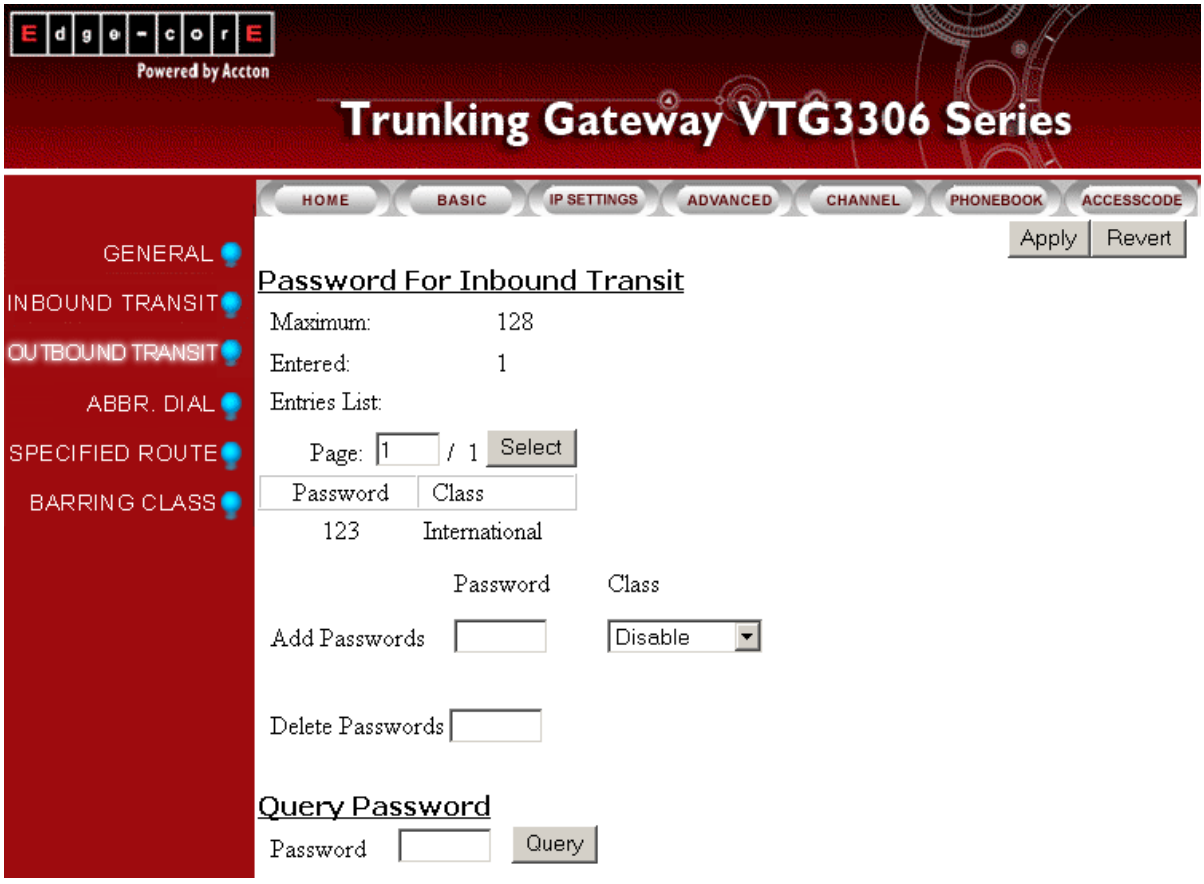
(2) After hearing the greetings, dial #2222#002862164452222#

Attention that the user is trying to forward a call from Taipei's VTG3300 to a public line in Shanghai, therefore this user needs the password for Transit Call with privilege for international call.

The password must be configured in advance, otherwise this function will not work. Enter from Web Management Page folder "**BASIC**", select "GENERAL" page, check if the field of "Transit Call" is set to "Enable", if not, please set it to "Enable".

7.3.16.1. Inbound Transit Web Configuration

Web Management Page folder "**BASIC**", select "INBOUND TRANSIT"



Group	Field	Description	Default Value
Password For Inbound Transit	Maximum	Display maximun no. of password can be accepted (Display Only)	128
	Entered	Display the no. of password had been entered (Display Only)	0
	Entries List	List the detail data of password had been entered (Display) Only)	Blank

Group	Field	Description	Default Value
	Add Passwords	Enter a new password, any combination of digits and * , # , less than 9 characters Class : **Disable** : Can NOT make the Inbound Transit call **Local** : Can make the Inbound Transit call to a local call **Toll** : Can make the Inbound Transit call to a local or toll call **Internationa**l : Can make the Inbound Transit call to a local or toll or international call ※The privilege is relative to the VTG3300 Country/Area Code of the equipment that caller dials to	Blank
	Delete Passwords	Enter the password to be deleted, refer the detail data under Entries List	Blank
Query Password	Password	Enter the password for query, click button **Query**, the privilege class will be displayed (one of Disable, Local, Toll, International is displayed)	Blank

7.3.17.Outbound Transit Calls

General

The feature Outbound Transit Call provides the possibilities for the remote equipment to make or transfer a call to PSTN line via your gateway.

Due to all charges for lines calling to PSTN will be paid by own gateway, only the calls from the remote gateway with permission are allowed to make the outgoing call through trunk of own gateway. VTG3300 defines three Route types to the different equipments. Each remote equipment will be assigned a Route Type for Outbound Transit Call to restrict the call type can be dialed out from own gateway.

- Local : Only local call is allowed
- Toll Call : Only local and Toll call is allowed
- Specified : Only the area code specified is allowed

There is a list of “Permission List of Outbound Transit” in own gateway; the equipments that have the permission of Outbound transit are listed. The list consists the data of :

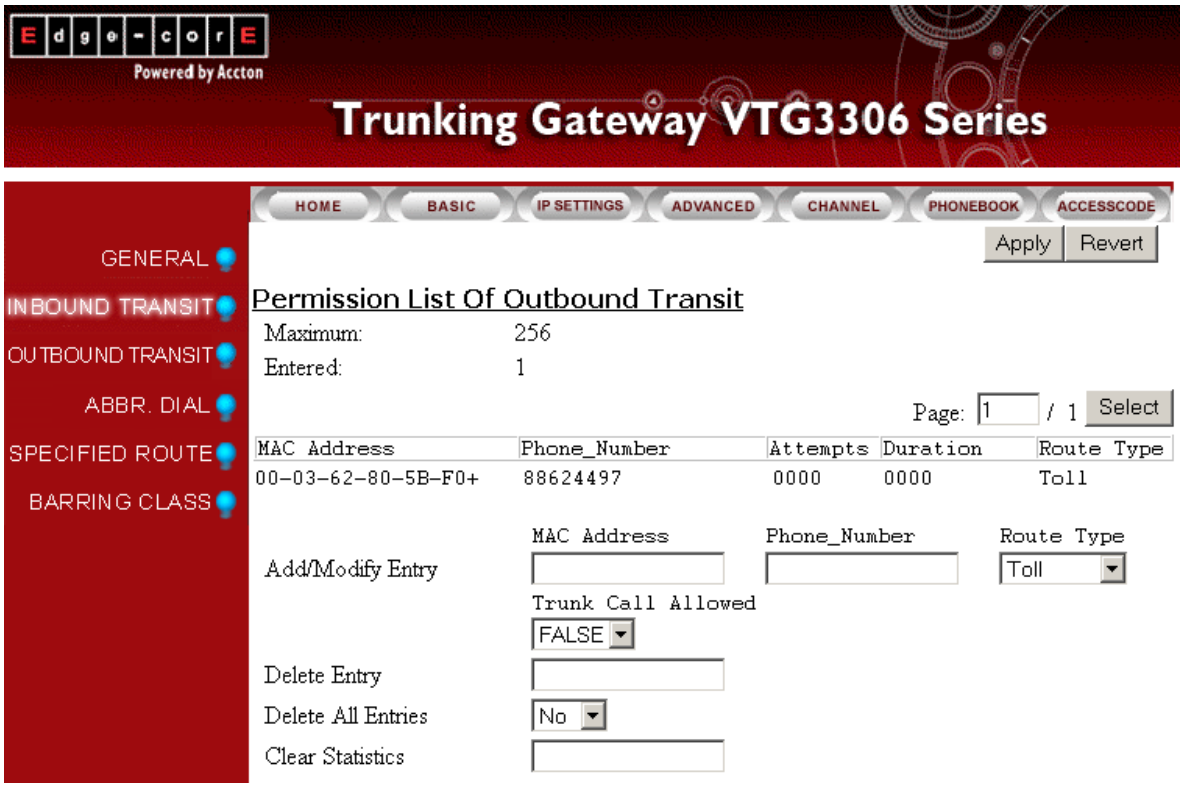
- MAC Address
- Phone Number

- Route Type

If Seize Trunk (FXO) from remote is Allowed

Configuration of Outbound Transit

- Steps of configuration
  - (1) Enter the MAC address and the telephone number of the remote equipment to be permitted.
  - (2) Choose the Route Type from Local, Toll, or Specified.
  - (3) Choose if the trunk can be seized from remote in the field “Trunk Call Allowed”.
  - (4) Click button **Apply**, a new line will be added in the list of “Permission List of Outbound Transit”



If the field of “Trunk Call Allowed” is set to TRUE, a “ + ” sign will be followed by MAC Address in the Permission List of Outbound Transit. In such condition, not only the Outbound Transit call is allowed, the seize remote trunk from the remote gateway to own FXO port is also allowed (Please refer to Sec. 7.3.6 Seize Remote Trunk).

7.3.17.1. Outbound Transit Web Configuration

Group	Field	Description	Default Value
Permission List Of Outbound Transit	Maximum	Display the Max No. of list can be entered (Display Only)	256
	Entered	Display the No. had been entered (Display Only)	0
	Entries List	Display the detailed data (Display Only) 1. MAC Address : MAC address of the remote equipment that is permitted for Outbound Transit Call. If " + " is followed means trunk port may be seized by this equipment 2. Phone Number : Phone number who has the permission for Outbound Transit 3. Attempts : The No. of times to make the outbound transit call (including the calls that are not successful) from this phone number through gateway, please refer to the field of "Clear Statistics" in same page if you like to clear the data 4. Duration : During time in second of all outbound transit call (including the calls are not successful) from this phone number, please refer the field of "Clear Statistics" in same page if you like to clear the data 5. Route Type : The route type of outbound transit call	Blank

Group	Field	Description	Default Value
	Add/Modify Entry	Enter the detail data of the remote equipment that the outbound transit call is permitted via my gateway. 1. MAC Address : MAC Address of the remote equipment (full address of six sections, e.g. 00-03-62-80-13-49) 2. Phone Number : Full range telephone number of the remote equipment including country code and area code, e.g. 886282263368704 3. Route Type : Type of the call can be made **Local** : Local call only **Toll** : Local, Toll call and Mobile call only **Specified** : call to the area specified only 4. Trunk Call Allowed : If the FXO port can be seized by this remote equipment (FALSE／TRUE) **True** : FXO port seized by remote is allowed **False** : FXO port seized by remote is NOT allowed	Blank
	Delete Entry	Enter the MAC Address of the equipment that will be deleted from the list of Permission List of Outbound Transit	Blank
	Clear Statistic	To clear the statistics data of certain entry in the list of Permission List of Outbound Transit, just enter the MAC Address of the equipment	Blank

7.3.18.Call Forward

General

The feature of Call Forward is to predefine a destination on the extension line, then all calls to this extension line will be forwarded to the destination automatically. The destination can be defined in VTG3300 is :

- the extension line in the same gateway
- the extension line of another VTG3300 or VTG3300
- the public line (PSTN) through the gateway at remote side (Off-net Forward). Remote the gateway has to support the Offnet Forward function to PSTN.

For the feature of Call Forward, there are 3 parameters to be configured :

Parameter	Description
Control	**Forward-Disable** : Disable Forward Feature **Forward-All Calls** : Forward all calls **Forward-Busy** : Forward only if this line is busy **Forward-Busy-Slave** : Forward only if this line is busy. And if the forwarded line is also busy and Forward-Busy-Slave is defined, this call will be forwarded to next destination as configured. **NoAnswer-Forward:** When there is no answer for this line, the call forward to the specified destination **Busy/NoAnswer-Forward:** When there is no answer or line busy for this channel, the call forward to the specified destination
Forward To	Phone number of the remote equipment that will be forwarded to. The phone number must be a full number including country code and area code.
Offnet to	The telephone number of PSTN or mobile phone that the call will be forwarded to. The telephone number is entered from the viewpoint of transfer gateway (the remote equipment that the phone number had entered in the field of “Forward To”).

In general, there are two types of Call Forward, one is Offnet Forward to remote PSTN, and another is Normal Call Forward. Here the Normal Call Forward is introduced in below section.

7.3.18.1. Configuration of Normal Call Forward

There are two parameters have to be configured. And there are two methods to perform the configuration, either by Web Management Page or by phone set. Each extension line may have different configuration for Call Forward. Please follow the steps :

I. Configured Call Forward by Phone set

(1) Off-hook the phone set and dial ##

(2) Dial 011 ; Activate Call Forward

(3) Dial 0286216666111 ; Define field of “Forward To”

(4) Hang up the phone set

II. Disable Call Forward by Phone set

(1) Off-hook the phone set and dial ##0000

(2) Dial 010 ; Disable Call Forward

(3) Hang up the phone set

III. Configuration via Web Management Page

(1) From Web Management Page folder "**CHANNEL**", select "CONFIGURATION" page to select the port to be configured.

(2) In the same page, follow the description of the table below to configure the fields under group "Call Forward".

	Activate Call Forward	Disable Call Forward
Control	Forward-All Calls	Forward-Disable
Forward To	The phone number of the destination	
Offnet To	Blank	

Attention : Please make sure that the IP call (FXS to FXS) between the two parties is OK before configuring call forward function.

7.3.18.2. Secretarial Intercept Feature

In a company, phone call of General Manager is pickup by secretary. Phone calls are filtered by secretary and it is transferred to GM if necessary.

Configuration:

1. Configure all calls dial to GM are forwarded to the extension line of secretary, then any calls that dial to GM will be forwarded to secretary.

	Activate Call Forward
Control	Forward-All Calls
Forward To：	The extension line of secretary

2. Secretary press phone-set
   Flash (or #) + extension of GM
   Then the incoming calls is transfer to GM. For Call Transfer function, please refer to 7.3.10 Call Transfer

3. Only the extension of secretary is allowed to Call Transfer or dial to the extension of GM.

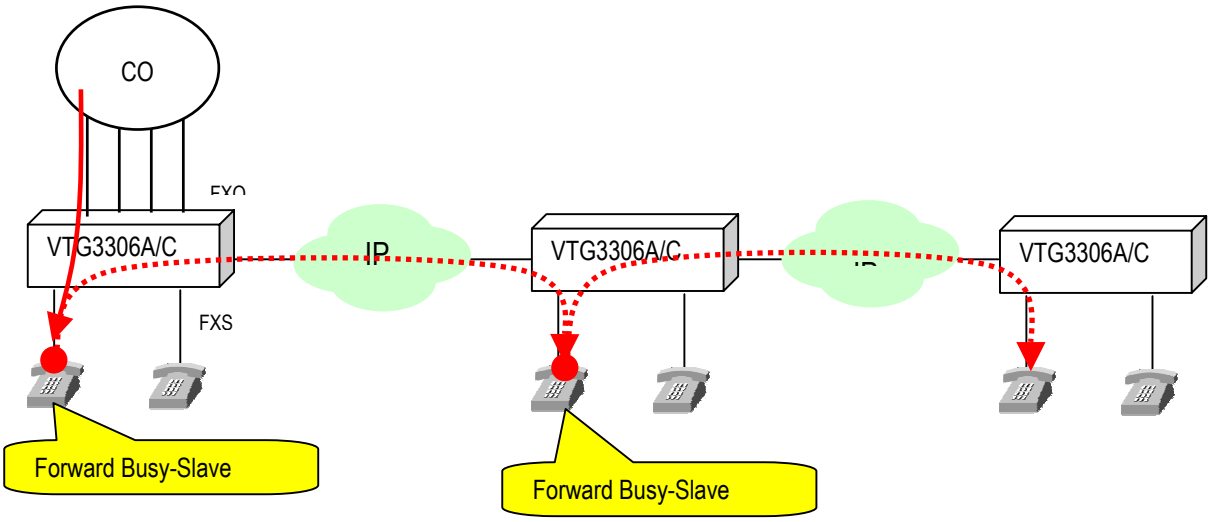
7.3.18.3. Line Group Function

(1) Select Forward-Busy-Slave in Control field.

(2) A incoming call is dialing to the FXS port, and it will be forwarded to the pre-defined destination Ext. line, we call it Line-A. If this FXS port is busy and it is also configured as Forward-Busy-Slave, then this call will be forwarded to the pre-defined destination line, we call it Line-B. The maximum cascade is up to 16.

(3) The configuration of Forward-Busy-Slave for the field can be done by Web Management Page

(4) Example

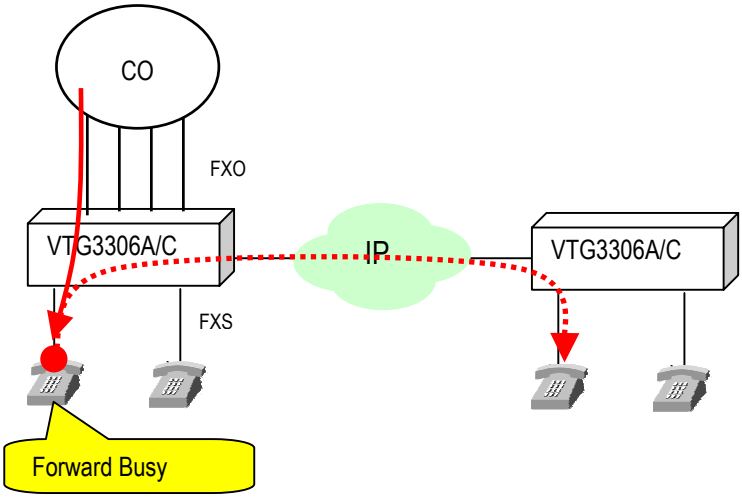


7.3.18.4. Busy Forward

(1) Select Forward-Busy in Control field.

(2) A incoming call that dial to the FXS port will be forwarded to the pre-defined destination line if this FXS port is busy.

(3) Example

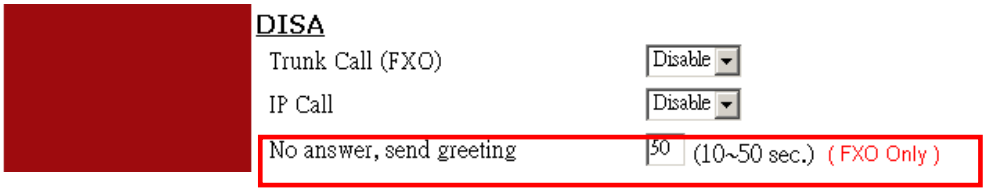


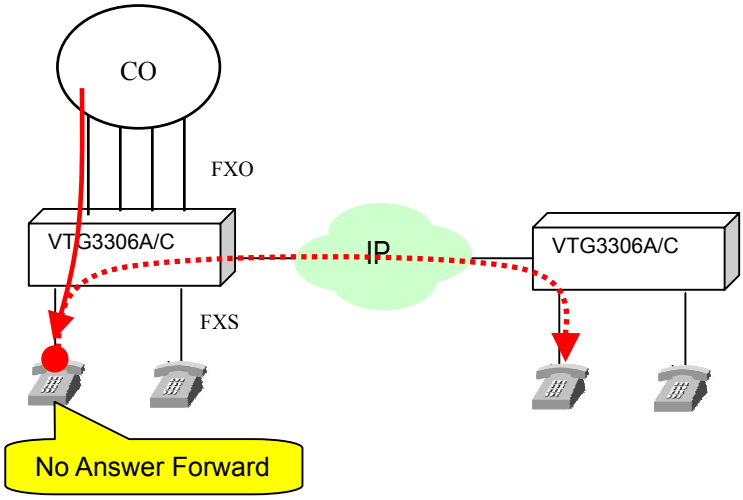
7.3.18.5. No Answer Forward

(1) Select NoAnswer-Forward in Control field.

(2) When there is no answer for that FXS port, the incoming calls to this FXS port will be forwarded to specified destination. How long will the gateway forward the call if there is no answer for this call? The duration can be adjusted in "No answer, send greeting" field in DISA function. The duration set here minus 5 seconds are the NoAnswer-Forward time. The default value is 50 seconds; it means the call is transferred if there is no answer for 45 seconds.

Web Folder: ADVANCED / GENERAL





7.3.19. Offnet Forward

7.3.19.1. Offnet Forward to remote PSTN line from Own Gateway

User may forward a call from the extension line of own gateway to a PSTN line in remote side via a transfer gateway.

The steps of configuration

(1) Configuration for the parameters of “Call Forward” of **own gateway**

Field	: Description
Control	: Enable
Forward To	: The telephone number of the remote gateway that will forward to.
Offnet To	: The telephone number of PSTN line that the call will be forwarded to. Because this call will be dialed from the remote gateway, the phone number must be entered from the point of view of the remote gateway. The phone number of remote "Forward To" gateway need to be entered for Offnet To function to PSTN

(2) Configuration for the equipment of **remote transfer gateway**

For remote transfer gateway, the telephone number, same as the telephone number configured in “Offnet to” of own gateway, need to be defined in the field of “Permitted Phone Number for Offnet Forward”

Example

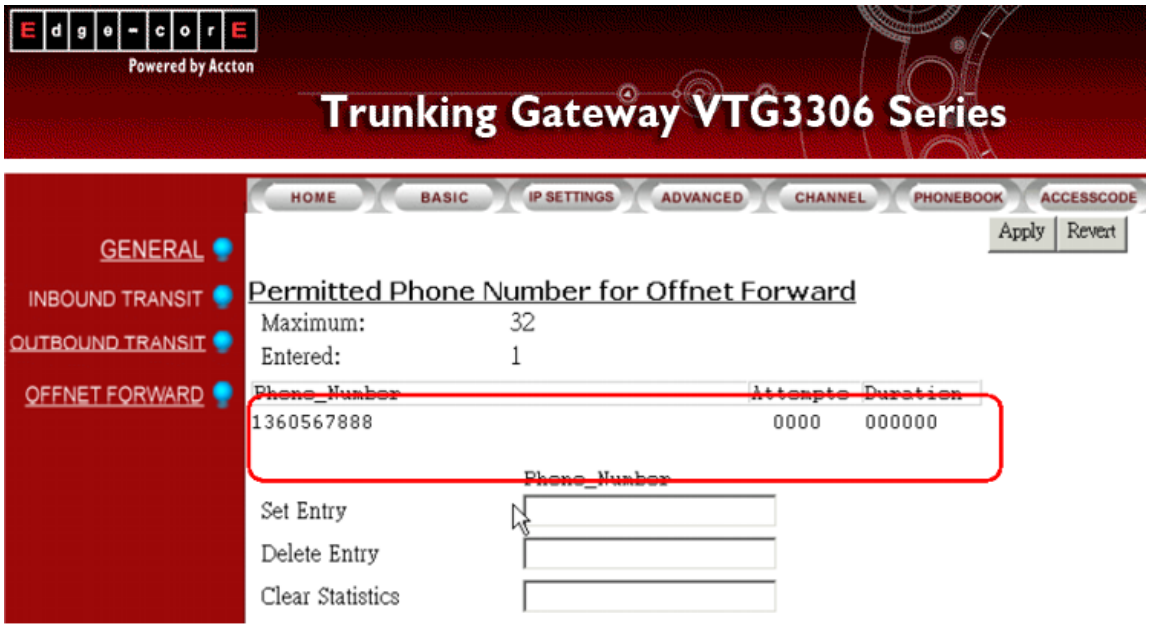
Own Gateway VTG3300 is located at Taipei and remote gateway as the transfer gateway is located at Shanghai. If an extension line at Taipei will forward a call offnet to a mobile phone 1360567888 in Beijing. The configuration for both parties is :

Parameters	Configuration of own Gateway at Taipei	Configuration of remote gateway (8621-6445-1111)
Control	Enable	-
Forward to	862164451111	-
Offnet to	1360567888	-
Permitted Phone Number for Offnet forward	-	1360567888

In order to forward the call to remote PSTN line, the “Offnet to” of own gateway needs be configured; The Web page to configure the remote gateway for the example is shown below :

Note: VTG3300 is unable to support Offnet Forward to PSTN. It can act as local gateway that forward call to remote gateway and offnet forward to PSTN by other gateway.

Example of other gateway at remote site.



Attention : The telephone number defined in the field of “Offnet To” is the number actually dialed from the remote transfer gateway. In this example, the call is forwarded to offnet mobile phone of China, therefore no area code is required when call is transferred from the gateway in Shanghai.

7.3.19.2. Privilege For Outbound Transit

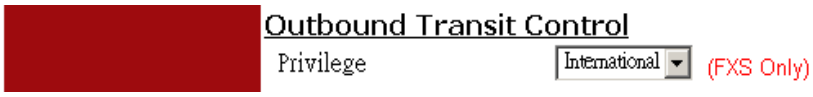
Privilege of the Extension for Outbound Transit

If a VTG3300 or the gateway in remote side gives the permission for our gateway to make Outbound Transit Call, any extension line in our gateway may make the outbound transit call via this remote gateway. The privilege for Outbound Transit call can be defined to different level on individual extension line. There are four classes of privilege, and it should be selected base on the view point of the country code and area code defined in our own gateway.

1. Disable : The ext. line is not allowed to make Outbound Transit Call
2. Local : The ext. line is allowed to make Outbound Transit Call via gateway in local
3. Toll : The ext. line is allowed to make Outbound Transit Call via gateway in different area code.
4. International : The ext. line is allowed to make Outbound Transit Call via gateway oversea

Configuration

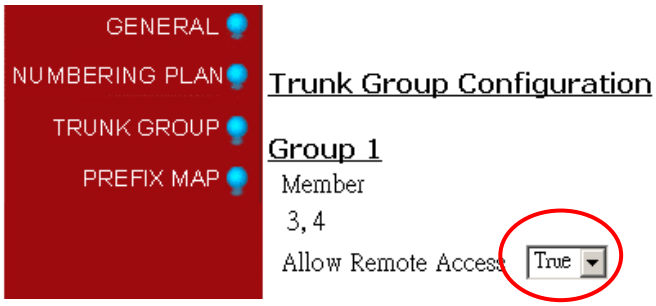
From Web Management Page folder "**CHANNEL**", select "CONFIGURATION"



The privilege of the extension line can not be higher than the privilege of the equipment. If the privilege of the equipment for Outbound Transit is defined as International, then it is possible to allow the extension line to make the international outbound transit call.

Also, remote gateway needs to enable Remote Trunk Group

1. Enter Web ADVANCED \ TRUNK GROUP
2. Set permission to TRUE for the Trunk Group that can do outbound transit to Allow Remote Access
3. Click Apply button



7.3.20.Specified Route

Specified Route for Outbound Transit Call

Specified route is to define some specified area as the destination of Outbound Transit Call. If "Specified Route" is selected when Outbound Transit is configured (please refer to Sec 7.3.17 Outbound Transit Call), that means only the call to the specified area can be transferred via this gateway.

Specified Route is defined by the starting digits of the telephone number, including country code or/and area code, to specify a certain range. For example

Route	Range Covered
86	Whole China (Country Code=86) is covered
8621	The area with Area Code 21 in China (Country Code=86), i.e. Shanghai area
8869	The area with Area Code 9 in Taiwan (Country Code=886), i.e. the mobile phone of Taiwan
1	Whole United State (Country Code=1) is covered
813	The area with area code 3 in Japan (country code=81), i.e. Tokyo area

7.3.20.1. Cost for Route (Priority)

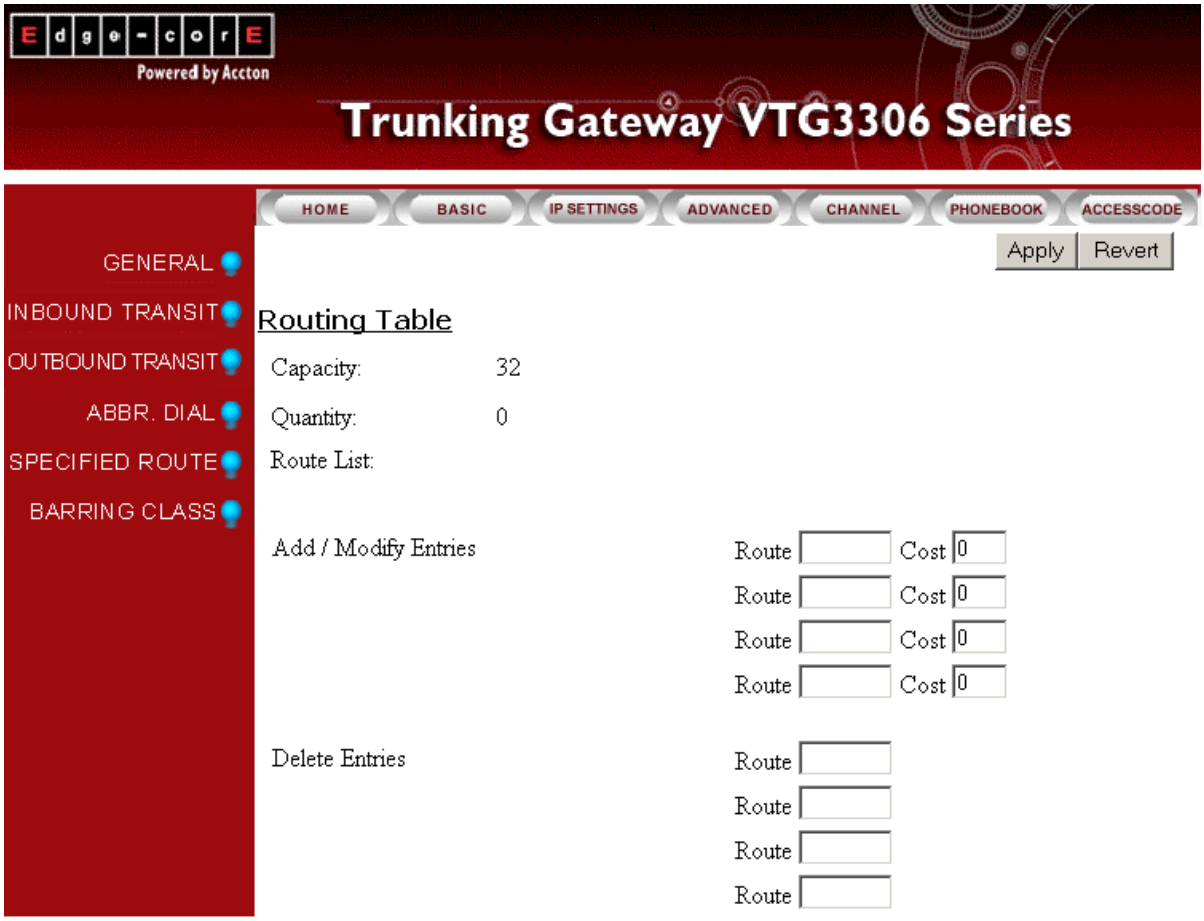
The concept of the cost for route is applied as the factor to select the route for Outbound Transit. The cost of range from 1 to 95 is assigned to the route of different equipment, The more the route with lower cost, the more higher priority the system will select. There is a default cost, i.e. 0, is assigned to the route specified the same Country Code and Area Code in the gateway.

For all models in the same product line, there is the default cost of each route :

- 4 : VTG3300 / VTG3300

Configuration for SPEPCIFIED ROUTE

Web Management Page folder “**BASIC**”, select “SPECIFIED ROUTE”



Group	Field	Description	Default Value
Routing Table	Capacity	Display the maximum number of route can be defined	32
	Quantity	Display the number of route defined	0
	Route List	Display the list of the route defined	Blank
	Add/Modify Entries	Add or modify the route Route : the specified route to be added (e.g. if the permission to the route of Taipei area is offered, then enter 8862) Cost : Priority of route being selected above (Route for the area same as the location of the equipment installed have highest priority with cost "0", , the cost sequence is from 0 to 95)	Blank
	Delete Entries	Delete the route from route table Route : the route to be deleted	Blank

7.3.21.Barring Classes

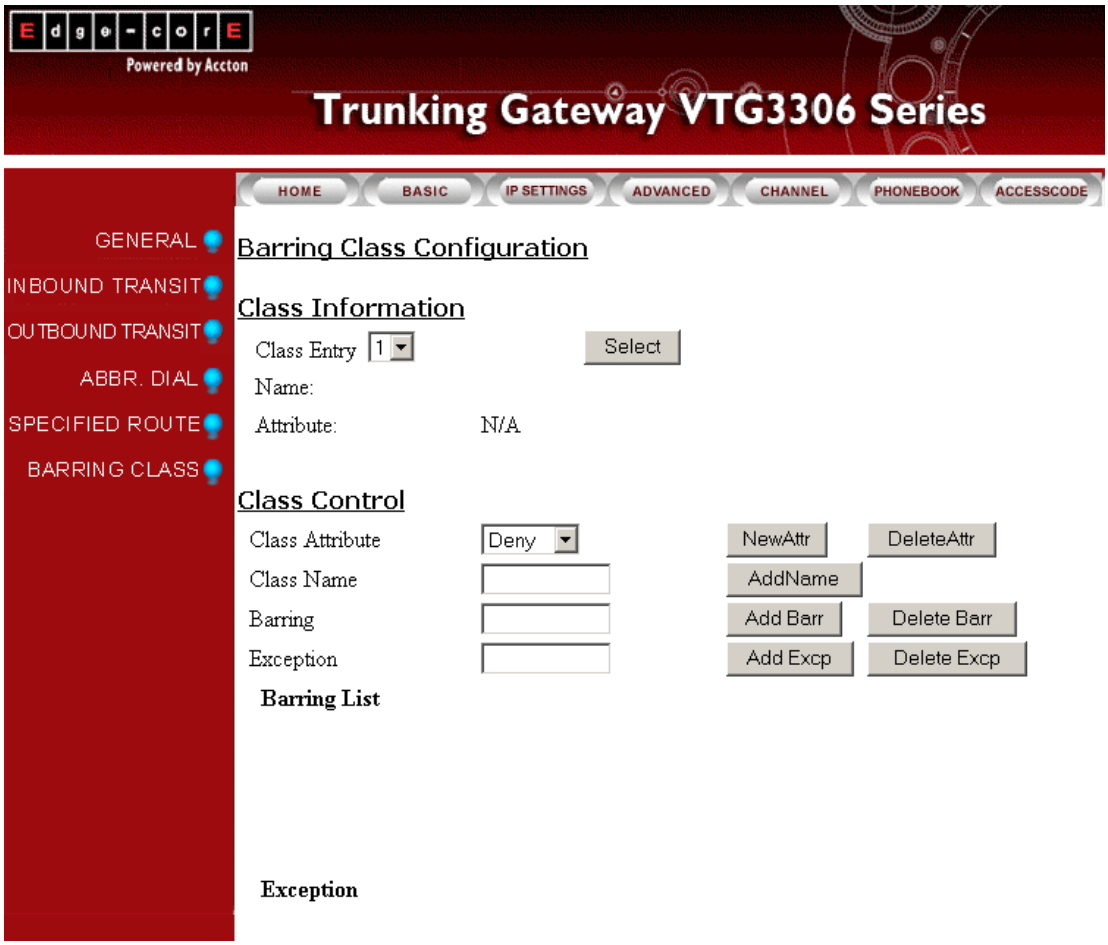
In VTG3300, there are maximum six Barring Classes to define the Barring rule of the individual extension line. For example, the destination phone number is allowed or disallowed to be dialed can be defined in the Barring Class table. For each extension line, only one Barring Class can be selected.

7.3.21.1. Create Barring Classes

The web page to configure Barring Classes is entered from Web Management Page folder "**BASIC"**, select "BARRING CLASSES". The parameter for Barring Classes defines "Accept" or "Deny" attributes. Each attribute can be defined in Barring Table and Exception Table. Only one Attribute can be defined for each Barring Class. The default values for the six classes are 0 and no data are defined.

Configuration Page

Web Management Page folder "**BASIC"**, select "BARRING CLASSES"



Group	Field	Description	Default Value
Class Information	Class Entry	Select of Barring Classes, Choice from 1 to 6	
	Name	Display the name of barring class (Display Only)	Blank
	Attribute	Display the attribute of Barring Class (Display Only)	N/A
Class Control	Class Attribute	The attribute of the class, Deny or Accept. There are Barring Table and Except Table may be defined for each attribute. **DENY** : All numbers are denied except the numbers listed in the Except Table. When DENY is selected, it is not necessary to define Barring Table, because DENY is to reject all numbers.. **ACCEPT** : Accept all numbers except number in the Barring Table . The number in the Except Table are exceptions. **New Attr** : Add the Attribute to selected Barring Class **Delete Attr** : Delete the Attribute to selected Barring Class	
	Class Name	Define a name for the selected Barring Class, any name less than 15 characters can be defined by the system Manager. **Add Name** : Add class name for Barring Class.	
	Barring	The phone number (less than 18 characters) that is limited to be dialed **Add Barr** : Add phone number to Baring Table for selected Barring Class **Delete Barr** : Delete phone number from Barring Table for selected Barring Class	
	Exception	The phone number (less than 18 characters) for exception **Add Excp** : Add phone number to Except Table for selected Barring Class **Delete Excp** : Delete phone number from Except Table for selected Barring Class	
	Barring List	Display all numbers to be barred that is related to the attribute (Display Only)	
	Exception	Display all exception in Except Table that is related to the attribute (Display Only)	

Steps to create the Barring Classes

1. Select a Barring Class (1~6) from the field of “Class Entry” under Class Information, then click button **Apply**.
2. Enter a name for Barring Class in the field of “Class Name” and click button **Add Name**.
3. Select an Attribute for the selected Barring Class, ACCEPT or DENY, and click button **New Attr**.
4. Now you may define the details based on the attribute selected. Create the Baring Table by clicking the button **Add Barr**, and create the Except Table by clicking button **Add Excp**.

After the Barring Classes are created, you may define the Barring Class to the gateway.

Examples

(1) Example-1

If the gateway is located at Shanghai, and only the calls to Beijing (Area Code = 010) and the calls to mobile phone (Area Code = 013) in China is allowed. The configuration for Barring of the equipment is to define the Area Code 010 and 013 as exception, the rest all number are denied.

Attribute	DENY	
Barring Table		
Exception Table	010	013

(2) Example-2

If the gateway is located at Shanghai, only local calls to Shanghai are allowed, all numbers starting with 0 (including toll call and international call) is not allowed except Beijing (Area Code = 010) and Shenzhen (Area Code = 0755).

Attribute	ACCEPT	
Barring Table	0	
Exception Table	010	0755

(3) Example-3

If the gateway is located at St. Jose, United State of America, only the local calls in St. Jose are allowed. Toll calls (starting with 1) and the international calls (starting with 011) are not allowed except calls to Beijing (011-86-10).

Attribute	ACCEPT	
Barring Table	011	1
Exception Table	011861	0

(4) Example-4

If the gateway is located at Tokyo, Japan, only local calls to Tokyo are allowed. The toll call (starting with 0) and international call (starting with 001) are not allowed except the call to Shanghai (001-86-21).

Attribute	ACCEPT
Barring Table	001 0
Exception Table	0018621

7.3.21.2. Modify the Attribute of Baring Classes

If the attribute of the Barring Class is defined, it is not allowed to define a new attribute (New Attr) to the same Barring Class. Any modification to the attribute of Barring Class has to delete the attribute (Delete Attr), then define a new one.

7.3.21.3. Barring Class Apply on Extension Line

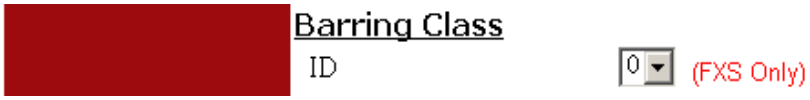
Each extension line may select a Barring Class from the six classes.

Configuration :

From Web Management Page folder "**CHANNEL**", select "CONFIGURATION" page

(1) Choose a channel in the field of "Channel" and click button **Select**

(2) Select a Barring Class in the field of "ID" under "Barring Class" and click button **Apply**



7.3.22.Phone Book

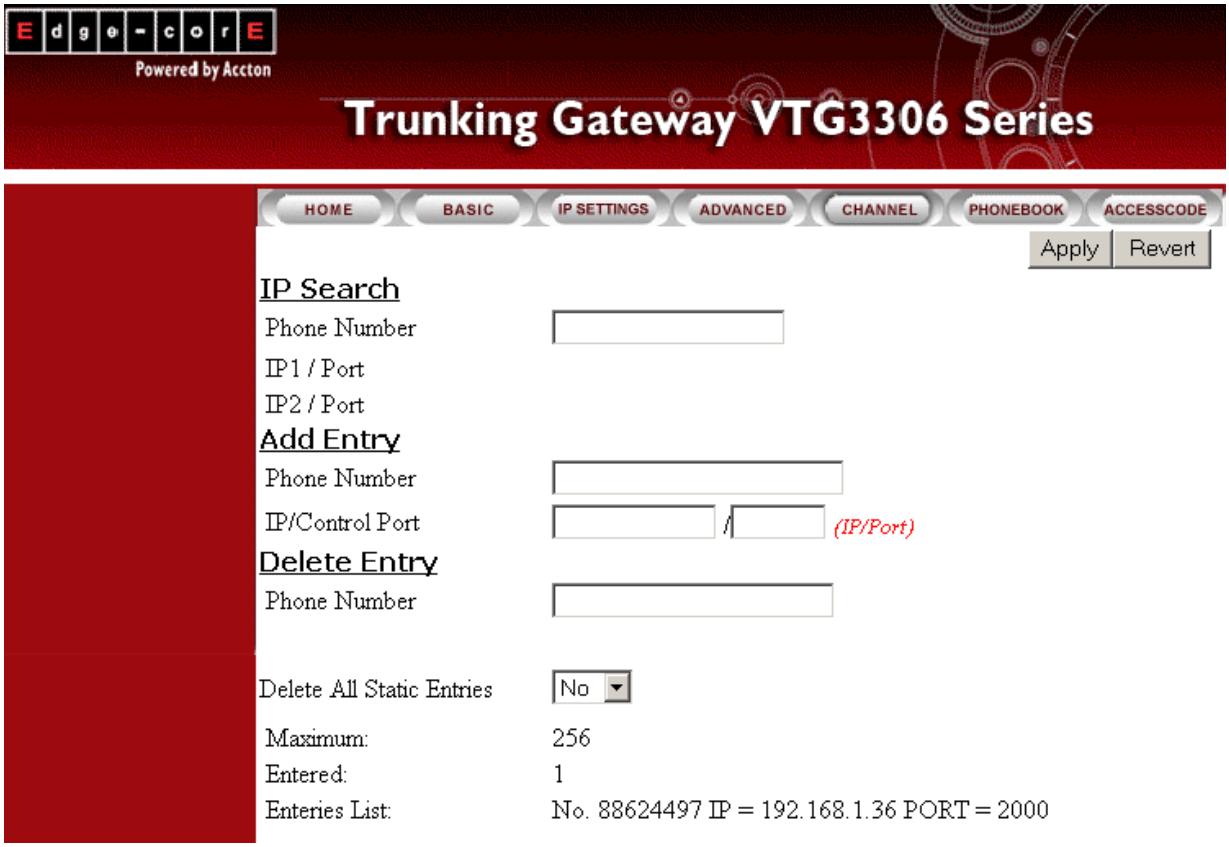
General

If the IP address of a frequently used remote gateway is a Static IP address, you may store the telephone number and the IP Address of this equipment into the Static Phone Book. It is not necessary to get the IP address of the other party through IP learning to get the IP Address of the other party. You should remember that VTG3300 will search the telephone number and IP Address from the Phone Book first. If any IP address is changed and the data in the Phone Book are not updated, VTG3300 will still take the wrong IP address from the Phone Book and try to create the path. Of course, the call will fail.

If the Private IP Address is used internally, but the global IP Address used is static IP Address, not DHCP or from PPPoE, this line may be included in the Pone Book. The public IP Address and the virtual port of IP Sharing are stored as corresponding data.

Configuration

Web Management Page folder "**PHONEBOOK**"



Group	Field	Description	Default Value
IP Search	Phone Number	Search the IP address of the frequently used equipment by telephone number. The full phone number including Country Code + Area Code + Telephone Number should be entered	Blank
	IP1/Port	Display IP Address of Public IP (Display Only)	
	IP2/Port	Display IP Address of Private IP (Display Only)	
Add Entry	Phone Number	Add or modify the telephone number (including Country Code and Area Code) in Phone Book	Blank
	IP/Control Port	Add or modify the IP Address or UDP	Blank
Delete Entry	Phone Number	Delete telephone number (including Country code and Area Code) from Phone book	Blank
	Delete All Static Entries	Delete all static entries from the Phone Book or not Yes : Yes, delete all No : No	No
	Maximum	The maximum number of telephone number can be entered (Display Only)	256

Group	Field	Description	Default Value
	Entered	The number of telephone number had been entered (Display Only)	0
	Entered List	List of telephone number entered (Display Only)	Blank

7.3.22.1. Add a Telephone Number

In the page of Web Management Page folder "**PHONEBOOK**" shown in Sec. 7.3.21.2, under "Add Entry" :

(1) Phone Number : Enter full telephone number including Country Code and Area Code, E.g. 886282268888

(2) IP/Control Port : Enter the Static Global IP address and UDP port number

(3) Click button **Apply**

7.3.22.2. Delete a Telephone Number

In the page of Web Management Page folder "**PHONEBOOK**" shown in Sec. 7.3.23.2, under "Delete Entry", enter the telephone number to be deleted in the field of "Phone Number" and click button **Apply**.

If you like to delete all static telephone number , please set "Delete All Static" to "Yes" and click button **Apply**.

7.3.22.3. Search the IP Address of a Telephone Number

You may search the IP address of a telephone number. The telephone number may be stored either in static Phone Book or dynamic Phone Book (through IP learning), hence you may find out the corresponding IP address and UDP port number used when he telephone is placed. In general, if the IP phone is failed, please search the IP address corresponding to the phone number, then check the IP address of the other party to see if it is correct. You may also search the phone number by entering NET ID.

In the page of Web Management Page folder "**PHONEBOOK**" shown in Sec. 7.3.23.2, under "IP Search", enter the phone number, which IP you like to search, in the field of "Phone Number" and click **Apply**. Two sets of IP address and UDP port will be displayed

- IP1/Port : IP Address of Public IP and UDP port
- IP2/Port : IP Address of Private IP and UDP port (for IP Sharing). If private IP address is not used, the same data as IP1/Port will be displayed.

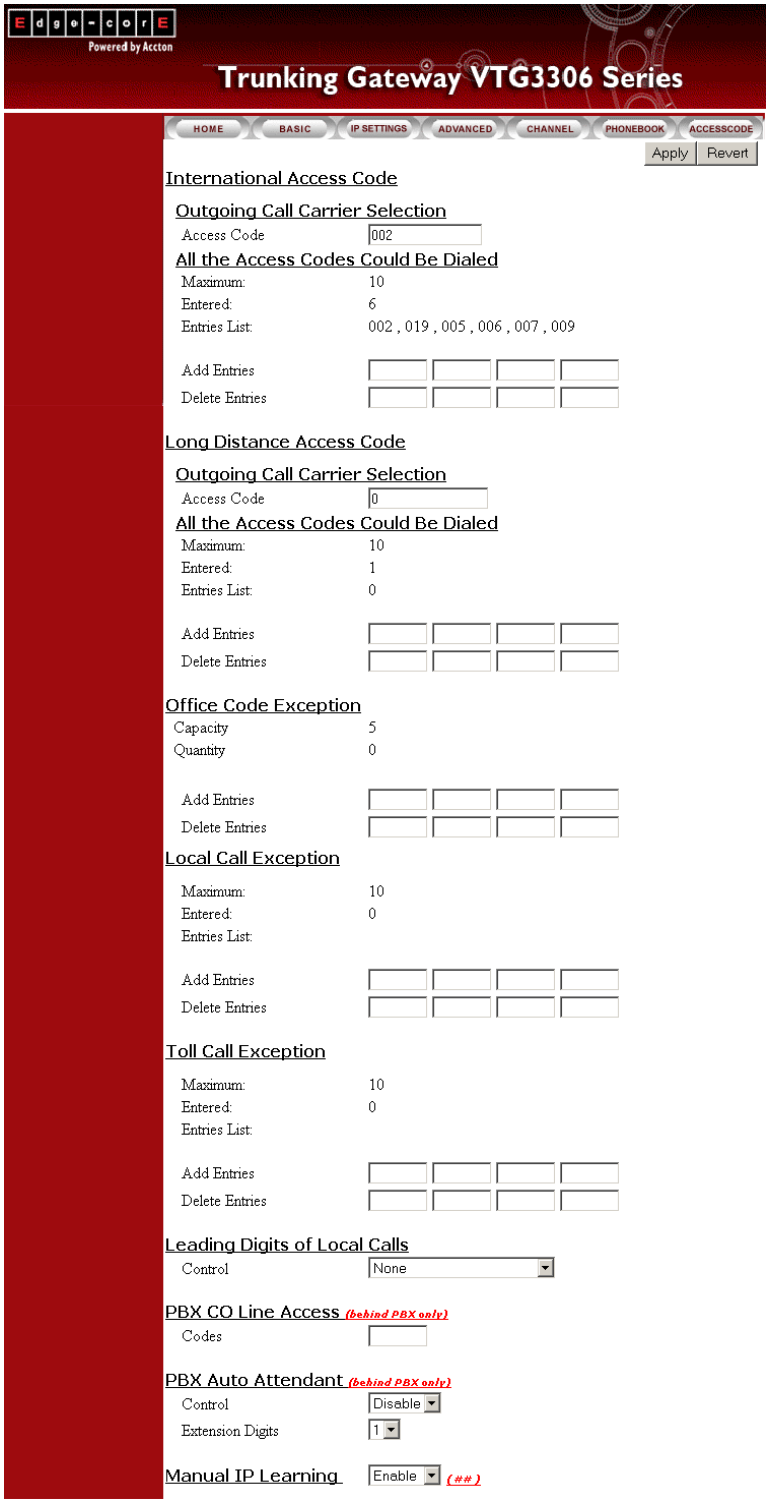
7.3.23.Access Code

General

All information defined in the Page of Access Code is to define the call type of IP phone. Based on this definition, system will know this IP call is a local or toll or international call. There are detail descriptions in the following section. The default value of the Access Code depends on Region ID.

Configuration for Access Code

Web Management Page folder "**ACCCESS CODE**"



Parameters for Access Code

Group	Field	Description	Default Value
International Access Code	Outgoing Call Carrier Selection Access Code	Code for an international call dialed from system, and only one code can be entered	
	All the Access Codes could be Dialed	System has to know all possible access code for making an international call, in order to check if the call is an international call. In some countries there are several access codes for making international call. All those access codes have to be entered, in case some access code can not be recognized. e.g. in Taiwan, 002/005/006/009/012/019 are the access code for international call.	
	Maximum	The maximum number of the access code for international call (Display only)	10
	Entered	The number of the access code had been entered (Display only)	6
	Entries List	Display the list of possible access code entered for international call (Display only)	002，019，005，006，007 ， 009
	Add Entries	Add the possible access code, four entries can be entered in one time	Blank
	Delete Entries	Delete the access code from the list, four entries can be entered in one time	Blank
Long Distance Access Code	Outgoing Call Carrier Selection Access Code	Code for a Toll call dialed from system, and only one code can be entered	0
	All the Access Codes Could be Dialed	System has to know all possible access code for making a toll call, in order to check if the call is a toll call. In some countries there are several access codes for making toll call. All those access codes have to be entered, in case some access code can not be recognized. e.g. in Taiwan 0/1805/1806/1807 are the access code for toll call.	

Group	Field	Description	Default Value
	Maximum	The maximum number of the access code for toll call (Display only)	
	Entered	The number of the access code had been entered (Display only)	1
	Entries List	Display the list of possible access code entered for toll call (Display only)	0
	Add Entries	Add the possible access code, four entries can be entered in one time	Blank
	Delete Entries	Delete the access code from the list, four entries can be entered in one time	Blank
Office Code Exception	In some countries, the conflict is existing in the numbering of Area Code. For instance, Area Code 4 is assigned to area-A, and 47 is assigned to area-B with the same starting digit. Therefore when a call is from area-A to area-B, the dial number will be the access code for toll call "0", then Area Code "47" and phone number. Those kinds of conflict make VTG3300 confused. In such cases, any exceptions must be stored in the system to avoid from any misunderstanding. For instance, VTG3300 is installed in area-A with Area code 4, then any Area Codes starting with 4 (47 for area-B, 49 for area-C..) but different areas to area-A are exceptions. All exceptions must be known by system.		
	Capacity	Maximum exceptions about Area Code can be entered (Display only)	5
	Quantity	The number of exception had been entered (Display only)	0
	Code List	Display the list of exceptions entered (Display only)	Blank
	Add Entries	Add the exceptional Access Code, four entries can be entered in one time	
	Delete Entries	Delete the exceptional Access Code from the list, four entries can be entered in one time	

Group	Field	Description		Default Value
Local Call Exception	In some countries, the phone number of the mobile phone is similar to the number of local call. Like a local call, no access code is required when you dial a mobile call, but the tariff is based on the toll call. For instance in China, the phone number of the mobile phone is starting with 13. Just dial 13xxxx directly without any access code such like “0” to make a mobile call. Normally VTG3300 will treat this kind of call as a local call, but actually the tariff should be a toll call. User should define such kind of phone number in Local Call Exception let system knows that those numbers are exceptions to the local call. e.g. define 13 in Local Call Exception, that means phone number starting with 13 is not a local call but a toll call			
	Maximum	Maximum exceptions can be entered	(Display only)	10
	Entered	The number of exception had been entered	(Display only)	0
	Entries List	Display the list of exceptions entered	(Display only)	Blank
	Add Entries	Add the exceptional Code, four entries can be entered in one time		Blank
	Delete Entries	Delete the exceptional Code from the list, four entries can be entered in one time		Blank
Toll Code Exception	In some countries, several area codes are applied in a big range. The calls between different area codes are treated as local calls; no access code for toll is required; the tariff is also based on the local call. Those area codes must be entered in Toll Code Exception otherwise VTG3300 will treat those calls as toll call			
	Maximum	Maximum exceptions can be entered	(Display only)	10
	Entered	The number of exception had been entered	(Display only)	0
	Entries List	Display the list of exceptions entered	(Display only)	Blank
	Add Entries	Add the exceptional Code, four entries can be entered in one time		Blank

Group	Field	Description	Default Value
	Delete Entries	Delete the exceptional Code from the list, four entries can be entered in one time	
Leading Digits of Local Calls	Control	In some areas, the area code is the must code even it is a local call. Or in some areas, the access code for toll and the area code is the must code whatever it is a local call or toll call. Define here for special control. None : Disable Area Code : the Area Code is always the leading digit when dialing Access Code + Area Code : the Access code and Area Code is always the leading digit when dialing	Disable
PBX CO Line Access*(behind PBX only)*	Codes	VTG3300 is an IP-PBX and also a gateway. If FXO port of VTG3300 is connected to an extension line of a PBX, this field must be defined. Format : <Trunk access code of PBX > + "P" ("P" means wait one second for fetching) **Attention**: If the FXO is fetched by remote access, the dial tone heard in the remote side is sent from FXO of VTG3300. The automatically fetching public line of PBX from VTG3300 is not fulfilled.	Blank
PBX Auto Attendant *(behind PBX only)*	Control	If the FXS of VTG3300 is connected to the port of PBX for public line, a remote user may make an IP call by dialing to VTG3300 and the extension line number of the PBX. VTG3300 will send out the extension number to PBX after PBX auto attendant answers if this field is set to "Enable". Enable : Yes, and define extension digits Disable : No	Disable
	Extension Digits	The length of the extension number of PBX	1

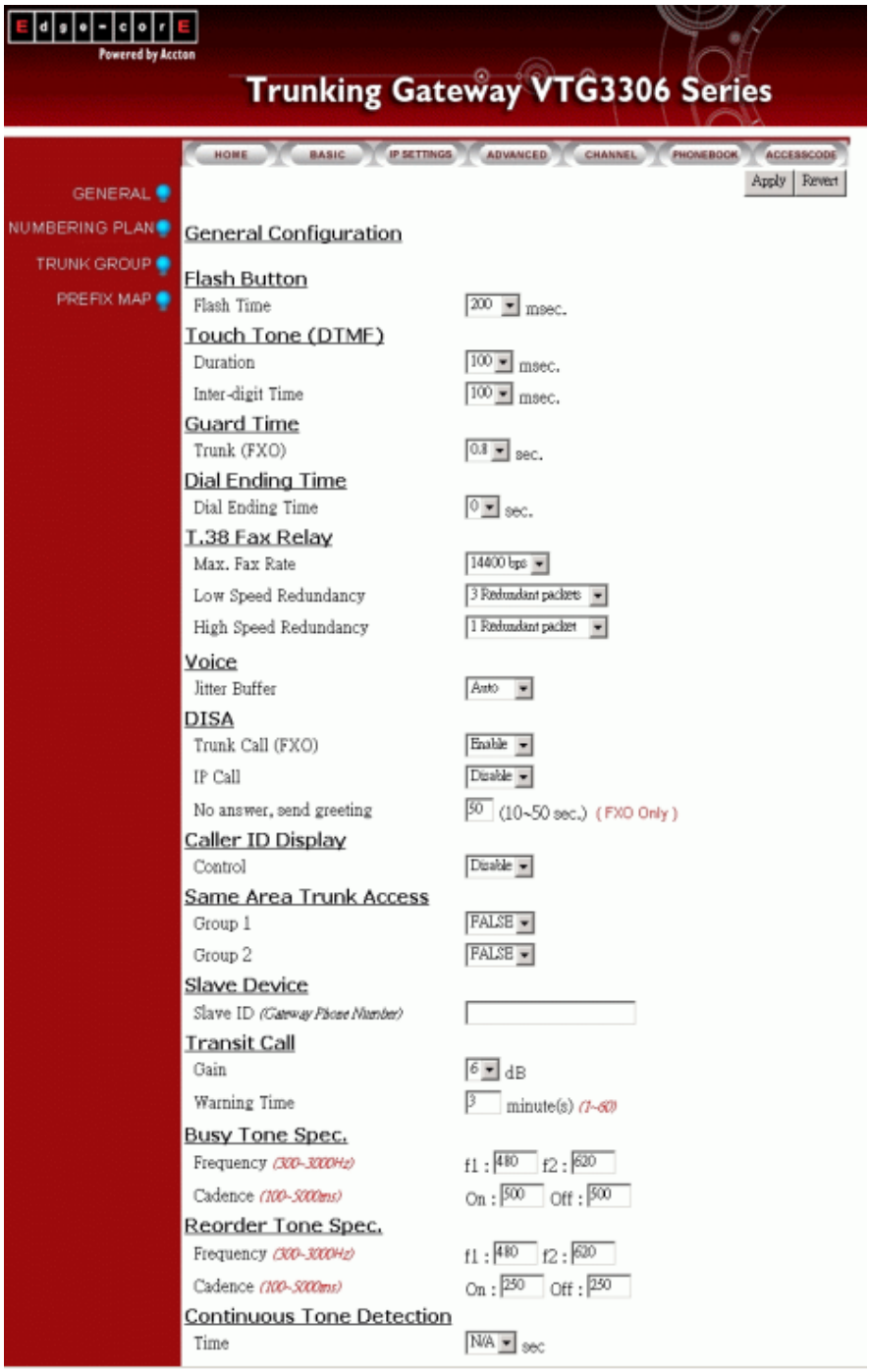
Group	Field	Description	Default Value
Manual IP Learning		Enable or Disable the feature Manual IP Learning Enable : Activate the feature Disable : Close the feature	Enable

7.3.24.Advance General Configuration

Advanced configuration may make some adjustment to equipment.

Page for Configuration

Web Management Page folder "**ADVANCED**", select "GENERAL"


Edge-corE
Powered by Accton
Trunking Gateway VTG3306 Series
HOME
BASIC
IP SETTINGS
ADVANCED
CHANNEL
PHONEBOOK
ACCESSCODE
Apply
Revert
GENERAL
NUMBERING PLAN
TRUNK GROUP
PREFIX MAP
General Configuration
Flash Button
Flash Time 200 msec.
Touch Tone (DTMF)
Duration 100 msec.
Inter-digit Time 100 msec.
Guard Time
Trunk (FXO) 0.8 sec.
Dial Ending Time
Dial Ending Time 0 sec.
T.38 Fax Relay
Max. Fax Rate 14400 bps
Low Speed Redundancy 3 Redundant packets
High Speed Redundancy 1 Redundant packet
Voice
Jitter Buffer Auto
DISA
Trunk Call (FXO) Enable
IP Call Disable
No answer, send greeting 50 (10~50 sec.) (FXO Only)
Caller ID Display
Control Disable
Same Area Trunk Access
Group 1 FALSE
Group 2 FALSE
Slave Device
Slave ID (Gateway Phone Number)
Transit Call
Gain 6 dB
Warning Time 3 minute(s) (1~60)
Busy Tone Spec.
Frequency (300~3000Hz) f1 : 480 f2 : 620
Cadence (100~5000ms) On : 500 Off : 500
Reorder Tone Spec.
Frequency (300~3000Hz) f1 : 480 f2 : 620
Cadence (100~5000ms) On : 250 Off : 250
Continuous Tone Detection
Time N/A sec

Group	Field	Description	Default Value
Flash Button	Flash Time	The time interval for “Flash” that system may accept	200 ms
Touch Tone (DTMF)	Duration	Duration time for DTMF transmit	100ms
	Inter-digit Time	Inter-digit time between two DTMF	100ms
Guard Time	Trunk (FXO)	The minimum time interval between two trunk calls	0.8 second
Dial Ending Time	Dial Ending Time	Generally “ # ” is the last character of the number, and that means “end of dialing”. If no “ # ” is dialed, system will wait until dial ending time out. If “0” is set, it means to disable this function	0 second
T.38 Fax Relay	Max. Fax Rate	Select the maximum FAX transmission rate 2400/4800/7200/9600/12000/14400	14400 bps
	Low Speed Redundancy	Select the number of low speed redundancy for frame transmission No Redundant Packet 1 Redundant Packet 2 Redundant Packet 3 Redundant Packet 4 Redundant Packet	3 Redundant Packet
	High Speed Redundancy	Select the number of high speed redundancy for frame transmission No Redundant Packet 1 Redundant Packet 2 Redundant Packet	1 Redundant Packet
Voice	Jitter Buffer	Select the method to suppress voice vibration 1. Auto, the system detects it automatically. 2. Other selection from 20ms~460ms	Auto
DISA	Trunk Call (FXO)	If DISA answers the call from trunk Enable : Answer Disable : No Answer	Enable
	IP Call	If DISA answers the call from IP Enable : Answer Disable : No Answer	Disable

Group	Field	Description	Default Value
	No Answer，send greeting	Define the time waiting for answer (if the extension line is not answer the call, DISA will be initiated). Default value is 50 seconds, but 30 seconds is recommended, i.e. the call will be connected to DISA , after 10 ringing tones.	50 seconds
Caller ID Display	Control	If the caller ID display is enable. It is valid only for the call from FXS to FXS. The caller ID from FXO is not displayed Disable : Not display Enable : can be displayed At moment, only the phone set with ITU Standard (FSK) has the feature of “Caller ID Display”. The number displayed can be called back. e.g. Taipei 8862 8226 1111 , Shanghai 8621 5556666 The number 00 8862 82261111 will be displayed in Shanghai if the call is coming from Taipei.	Disable
Same Area Trunk Access	Group 1	If the system will access the available trunk automatically from the other equipment in the same area when all trunks in your gateway are busy. Of course, the “Allow Remote Access” for Trunk Group of the other equipment must be “TRUE”.	FALSE
	Group 2		FALSE
Slave Device	Slave ID (Gateway Phone Number)	Define equipment in different location as the backup Operator. System will find the backup Operator if all lines in Operator group are busy. The phone number of the gateway has to be full number, i.e. Country Code + Area Code + Telephone Number	Blank
Transit Call	Gain	Adjust the voice gain for Transit Call	6 dB
	Warning Time	Time warning is sent to the caller for reminding when Transit Call from PSTN line to PSTN line is placed.	3 minutes
Busy Tone	Frequency	Specification of the frequency of busy tone	(300 ~ 3000Hz)

Group	Field	Description	Default Value
Spec	Cadence	Specification of the cadence of busy tone, system will base this cadence to detect the tone type	(100 ~ 5000ms)
Reorder Tone Spec	Frequency	Specification of the frequency of reorder tone	(300 ~ 3000Hz)
	Cadence	Specification of the cadence of reorder tone	(100 ~ 5000ms)
Continuous Tone Detect	Time	For Transit call, beside detecting the busy tone, detect the Continuous Tone is also applied to see if the phone call is still alive	N/A

7.3.25.Connection with PBX

I. General

VTG3300 can connect not only with other models of the same series, but also with commercial PBX. In general, headquarter of an enterprise may be equipped with a high capacity PBX, and in the other branches or offices around the world may be equipped with VTG3300. Just install a VTG3300 in headquarter and connect with PBX of headquarter, all extension lines of PBX can communication with the other VTG3300 installed in the remote. By defining the Prefix ID for the equipment, it is easy to combine VTG3300 with the original system.

II. Configuration of Prefix Map

	Shanghai VTG3300	Taipei VTG3300
Prefix Map	66 = 886-2-8226-8888／iPBX 7700 = 886-7-2955-3368／Phone 8800 = 111／Phone	7700 = 886-7-2955-3368／Phone 8800 = 111／Phone 4 = 8621-64451111／Phone 66 = 886-2-8226-8888／iPBX

III. How to Dial

		Called side			
		Shanghai	Taipei	Tokyo	Kaohsiung
Calling Side	Ext. line in Taipei	4 + Ext. number of Shanghai e.g. 4440／4550	6611~ 6626 or 11 ~ 26	8800	7700
	Ext. line in Shanghai	Ext. number of Shanghai	8, 6611 ~ 8, 6626	8, 8800	8, 7700
	Kaohsiung	#002862164451111# + Ext. number of Shanghai	#8226888811# ~ #8226888826#	#111#	NA

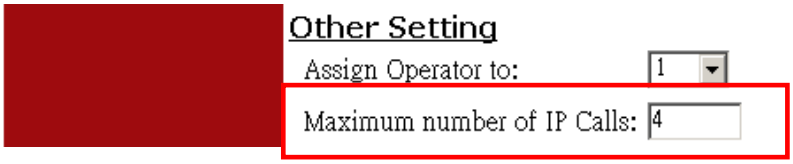
7.3.26.Budget Control VoIP Calls

General

For VTG3300 series product, the protocol for voice compression G.729AB is used, packet time is 40 ms, therefore around 12Kbps bandwidth is occupies for each IP call. Parameter “Budget Control VoIP Calls” is to control the number of IP call can be made simultaneously to avoid to impact the quality of service due to the bandwidth is insufficient. For example, there are 16 ports for one VTG3300; if 16 ports are all IP calls, the bandwidth of 144 Kbps is required for voice transmission (the bandwidth for data flow is not included). If the bandwidth you have is only 64 K, it is not enough for 16 IP calls. Therefore the parameter “Budget Control VoIP Calls” should be defined to “4” to maintain a better quality of service. Normally higher bandwidth network is recommend (e.g. 512 K for both direction).

Configuration

Web Management Page folder “**ADVANCED**”, select “NUMBERING PLAN”, the page will be shown :



7.3.27.CDR

General

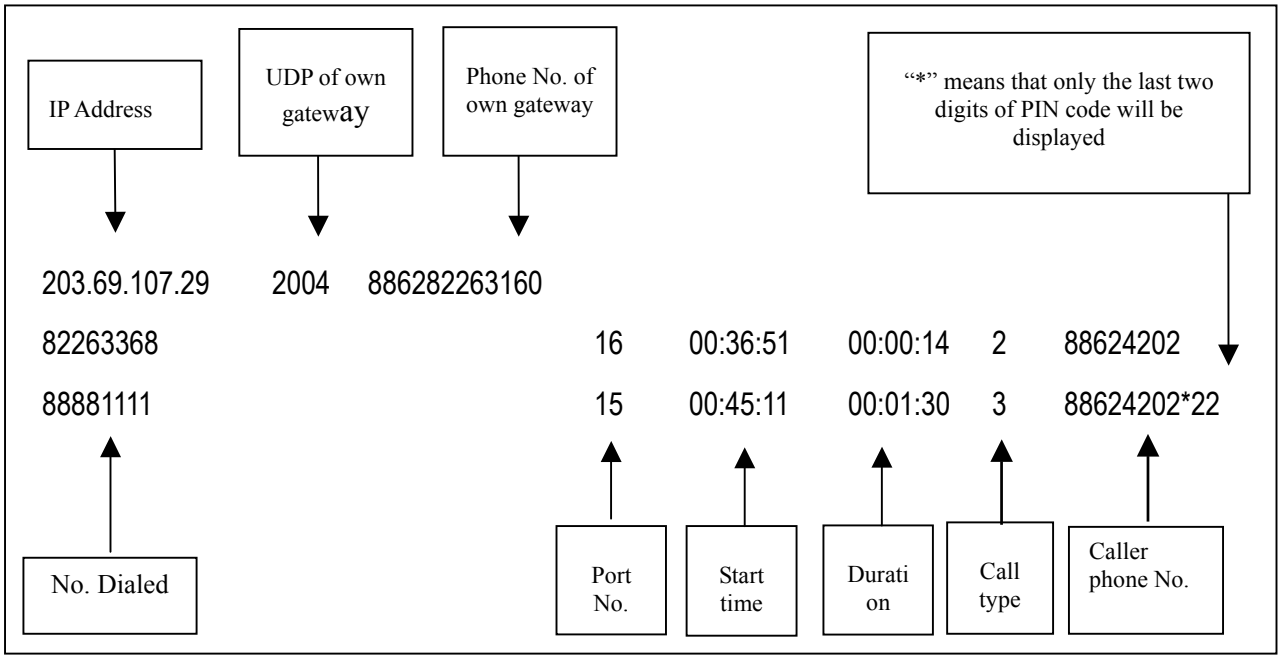
The detail information for a call to PSTN via FXO port of VTG3300 will be recorded automatically. The Call Detail Record (CDR) is a tool for telephone account system and also an effective debug tool. All CDR will be send out by a specific format via the interface of:

- Dedicate CDR port : It is a RS-232 interface, DTE mode, transmission rate (9600 , N , 8 , 1). If it is connected to RS232 port of PC, NULL MODEM is required. CDR is sent out real time for each record, no buffer area for temporary storage and no any backup files.
- Via IP Network : A CDR Receiver must be equipped at the remote side of IP Network to receive the CDR packet from VTG3300. The IP Address of the CDR Receiver and UDP used must be configured in VTG3300. CDR Receiver is optional Software, and is not including in this manual.

Format of CDR

There are two lines for each CDR record, the first line consists:

- The IP Address of own gateway
- The UDP port used on own gateway
- The telephone number of own gateway



The second line consists :

- No. Dialed Out : the telephone number be dialed out
- Port No. : the FXO port number used
- Start time : the time that call is made
- Duration : total time of the conversation time

- Call type : 0 = no meaning ; 1 = international call ; 2 = toll call ; 3 = local call
- Caller phone No. : the telephone number of the calling side, or the extension number (VTG3300 series product), format is " # + extension number", e.g. #21.

7.3.28.FAX

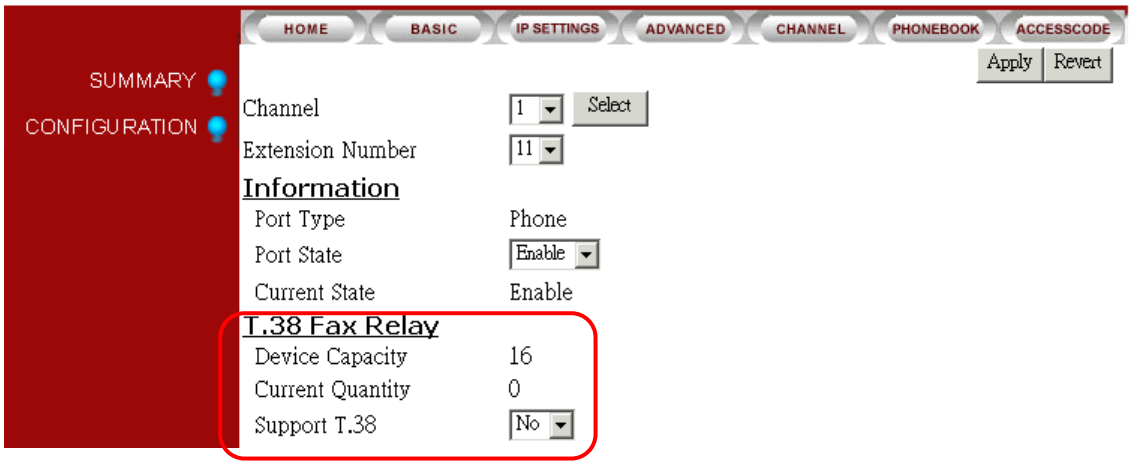
General

In VTG3300, each port can be configured to support T.38 FAX. Maximum 16 ports of one equipment may be configured to FAX. FAX machine can not be connected to the port that is not configured to FAX. The FAX machine connected to PSTN may dial to VTG3300 and forward to other VoIP gateway if at least one port for FAX is defined.

Configuration

Web Management Page folder "**CHANNE**L", select "CONFIGURATION" page :

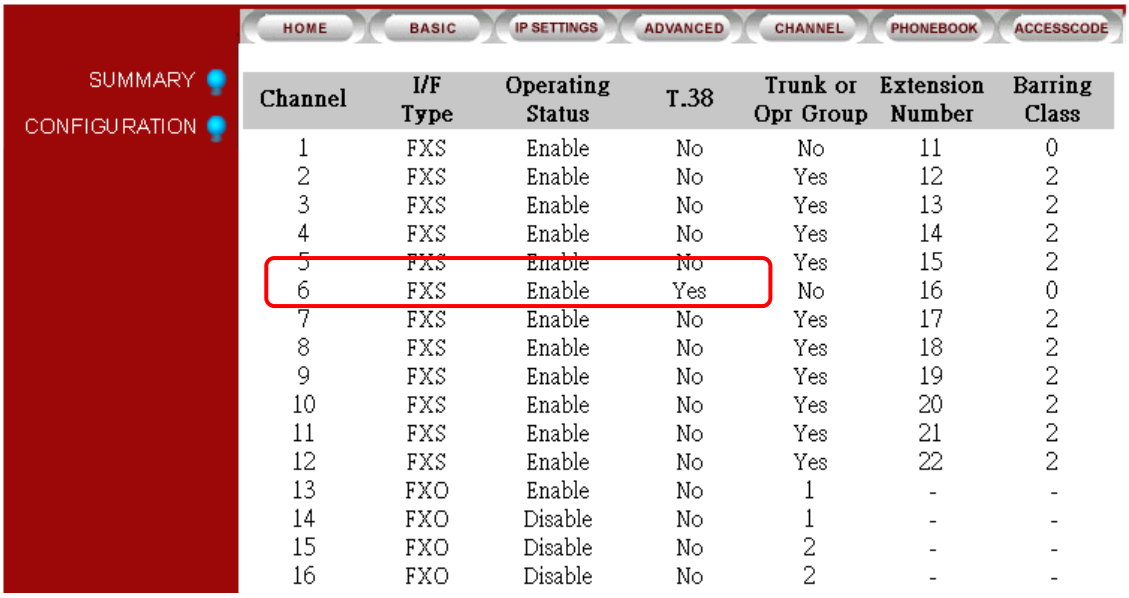
Choose "yes" in the field "Support T.38 under T.38 Fax relay, and click button **Apply**



Group	Field	Description	Default Value
T.38 Fax Relay	Device Capacity	Display the capacity of FAX port allowed (display only)	16
	Current Quantity	Display current quantity of FAX port (display only)	0
	Support T.38	If this port support T.39 for FAX Yes : support T.38 No : Not support	NO

Check If FAX port

To check if this port supports FAX, you can check the port summary via Web Management Page folder "CHANNEL", select "SUMMARY" page :



Channel	I/F Type	Operating Status	T.38	Trunk or Opr Group	Extension Number	Barring Class
1	FXS	Enable	No	No	11	0
2	FXS	Enable	No	Yes	12	2
3	FXS	Enable	No	Yes	13	2
4	FXS	Enable	No	Yes	14	2
5	FXS	Enable	No	Yes	15	2
6	FXS	Enable	Yes	No	16	0
7	FXS	Enable	No	Yes	17	2
8	FXS	Enable	No	Yes	18	2
9	FXS	Enable	No	Yes	19	2
10	FXS	Enable	No	Yes	20	2
11	FXS	Enable	No	Yes	21	2
12	FXS	Enable	No	Yes	22	2
13	FXO	Enable	No	1	-	-
14	FXO	Disable	No	1	-	-
15	FXO	Disable	No	2	-	-
16	FXO	Disable	No	2	-	-

7.3.29. Clock Alarm

VTG3300 provides the function of clock alarm to each extension line. Every extension line may set the time of alarm. There are two types of clock alarm :

- One time : Phone set will ring for one minute once when it is the time set.
- Periodic : Phone set will ring for one minute periodically when it is the time set in system.

Example-1 : Set the alarm on next 06 : 30 AM only

(1) Off-hook the phone and press ##

(2) Press 0404*30*1#

(3) Hang up the phone

Example-2 : Set alarm on 21 : 30 AM every day

(1) Off-hook the phone and press ##

(2) Press 0421*30*2#

(3) Hang up the phone

Example-3 : Clear the setting of periodic alarm

(1) Off-hook the phone and press ##

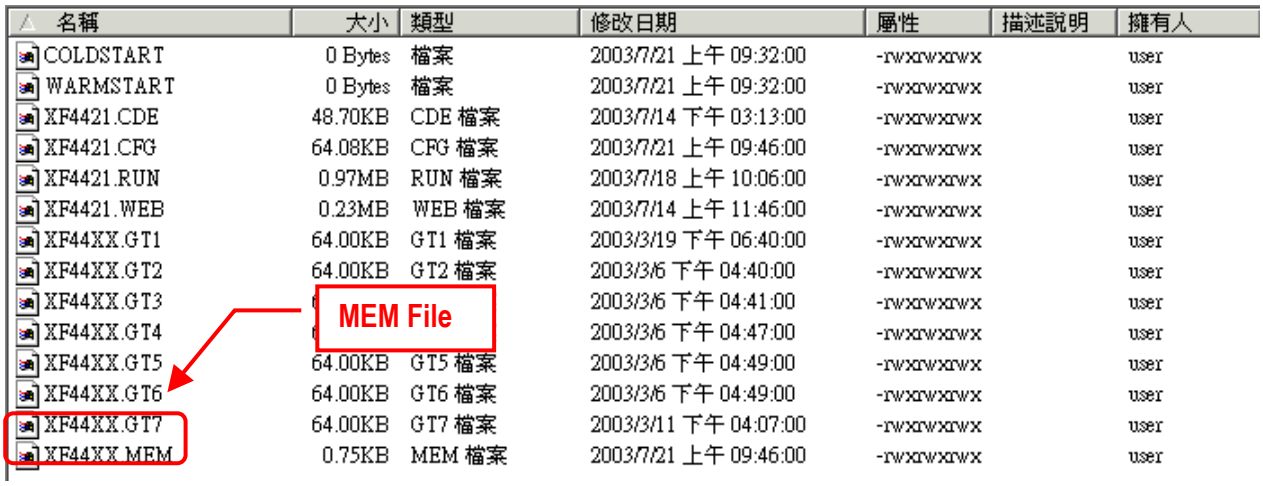
(2) Press 04#

(3) Hang up the phone

7.3.30.Modify File Type MEM

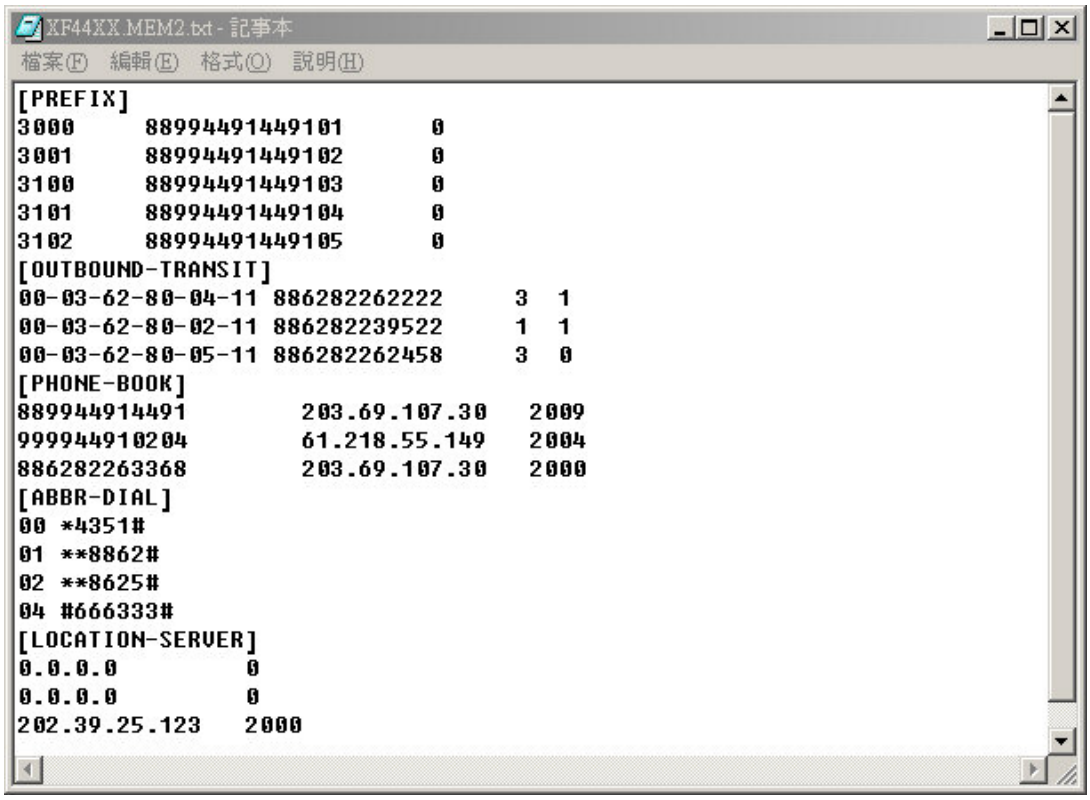
MEM file records lots of customized data which user creates from Web. MEM file can be downloaded from Gateway by FTP. Open the file either by Notepad or other word process software, and modify the data; then upload the file to Gateway. If there are lots of data need to create or modify, use this way can save lots of time.

You will find a new file XF44XX.MEM on the screen of FTP, it is data file of Prefix Map table, Permission list of Outbound transit, Abbr. Dial, Location-Server and static phone book refer to the following figure :



名稱	大小	類型	修改日期	屬性	描述說明	擁有人
COLDSTART	0 Bytes	檔案	2003/7/21 上午 09:32:00	-rwxrwxrwx		user
WARMSTART	0 Bytes	檔案	2003/7/21 上午 09:32:00	-rwxrwxrwx		user
XF4421.CDE	48.70KB	CDE 檔案	2003/7/14 下午 03:13:00	-rwxrwxrwx		user
XF4421.CFG	64.08KB	CFG 檔案	2003/7/21 上午 09:46:00	-rwxrwxrwx		user
XF4421.RUN	0.97MB	RUN 檔案	2003/7/18 上午 10:06:00	-rwxrwxrwx		user
XF4421.WEB	0.23MB	WEB 檔案	2003/7/14 上午 11:46:00	-rwxrwxrwx		user
XF44XX.GT1	64.00KB	GT1 檔案	2003/3/19 下午 06:40:00	-rwxrwxrwx		user
XF44XX.GT2	64.00KB	GT2 檔案	2003/3/6 下午 04:40:00	-rwxrwxrwx		user
XF44XX.GT3			2003/3/6 下午 04:41:00	-rwxrwxrwx		user
XF44XX.GT4			2003/3/6 下午 04:47:00	-rwxrwxrwx		user
XF44XX.GT5	64.00KB	GT5 檔案	2003/3/6 下午 04:49:00	-rwxrwxrwx		user
XF44XX.GT6	64.00KB	GT6 檔案	2003/3/6 下午 04:49:00	-rwxrwxrwx		user
XF44XX.GT7	64.00KB	GT7 檔案	2003/3/11 下午 04:07:00	-rwxrwxrwx		user
XF44XX.MEM	0.75KB	MEM 檔案	2003/7/21 上午 09:46:00	-rwxrwxrwx		user

Download XF44XX.MEM to PC, open file by Notepad like the figure below :



XF44XX.MEM2.txt - 記事本

檔案(F) 編輯(E) 格式(O) 說明(H)

```
[PREFIX]
3000      88994491449101       0
3001      88994491449102       0
3100      88994491449103       0
3101      88994491449104       0
3102      88994491449105       0
[OUTBOUND-TRANSIT]
00-03-62-80-04-11 886282262222      3  1
00-03-62-80-02-11 886282239522      1  1
00-03-62-80-05-11 886282262458      3  0
[PHONE-BOOK]
889944914491          203.69.107.30    2009
999944910204          61.218.55.149    2004
886282263368          203.69.107.30    2000
[ABBR-DIAL]
00 *4351#
01 **8862#
02 **8625#
04 #666333#
[LOCATION-SERVER]
0.0.0.0          0
0.0.0.0          0
202.39.25.123    2000
```

You are able to edit or add the text file by Windows Notepad software. After it is done, upload it back to gateway by FTP, then the data on gateway is updated.

Delete Record

Note: The Gateway had already kept all of the data before you download the .MEM file. So the data is not removed if you remove records (all or partial) of the .MEM file and upload to gateway by FTP again.

If you need to remove any records, you should.

- Remove record from Web page
- Add special mark to MEM file. Follow the way below:

Example 1: Delete a Prefix Number record
Original MEM data
3000 882994546 0
Add delete mark and remove its number as below
3000!
Save the file and upload it to gateway again, then the record is removed.

Example 2: Delete the whole Phone Book
Original MEM data
[PHONE-BOOK]
88994326 203.204.89.31 2000
88994381 10.13.6.185 2000
88956381 61.220.13.25 2000
Add delete mark and remove all record of Phone Book as below
[PHONE-BOOK]~

Save the file and upload it to gateway again, then all records of Phone Book is removed.

File Items

Here is the description of each item :

	Field 1	Field 2	Field 3	Field 4
PREFIX	Prefix	Phone Number	Type 1：iPBX 0：Phone	N/A
OUTBOUND-TRANSIT	MAC Address	Phone Number	Route Type 1：Local 2：Toll 3：Specified	Trunk Call Allowed 1：True 2：False
PHONE-BOOK	Phone Number	IP Address	Port Number	N/A
ABBR-DIAL	Abbreviated Number (index)	Full Number (Abbr. Dial Number)	N/A	N/A
LOCATION-SERVER	The first and 2nd lines are the IP of NET PLUS The third line is the IP of NET	The first and 2nd lines are the Port No. of NET PLUS The third line is the Port No. of NET	N/A	N/A

By Notepad, you may add or modify the entries and store file after it had been finished. By FTP, upload the file to the Gateway, and then the data of Permission List of Outbound Transit are updated.

Remarks for Update Software of File Type MEM

After the configuration is finished, please make a backup file for CFG file. It is in case that if the data is lost, you may upload the backup file of CFG file to gateway. If you upload the previous backup file of CFG file to gateway after the MEM file is uploaded, the MEM file will be ineffective because the backup file overwrites the Prefix Map table. You have to re-upload the updated MEM file to gateway to get the correct data.

8. Behind NAT & Firewall (Use Private IP)

VTG3300 series gateway may connect to IP Sharing and define the private IP Address to communicate with the other IP phone gateway.

Concerning about NAT, please refer to the documentation about NAT.

In the table followed, the port number used in VTG3300 series gateway is listed. If the packets for VTG3300 series gateway are blocked by the firewall, open the ports with port number listed in the table in the firewall.

Packet Type	UDP Number		
	4604	4608	4616
Packet for Voice	UDP 4000-4007	UDP 4000-4015	UDP 4000 – 4031
Packet for FAX	UDP 4008-4011	UDP 4032 – 4047	
Packet for control	UDP 2000		
FTP Software Upgrade	TCP 21		
WEB Server	TCP 80		
Telnet Server	TCP 23		

Normally every type of server uses the specific port number, e.g. WEB server uses the port of TCP 80, and FTP server uses the port of TCP 21. The configuration is to set mapping from the specific port number to the internal private IP Address. Therefore IP Sharing will transfer the packet, which is delivered to the specific port number, to the corresponding private IP Address. For example, if the private IP Address 192.168.1.1 is used in the internal network, it should be mapping to a corresponding port number (port 80 is for TCP of IP Sharing, 192.168.1.1 should be mapping to port 80). Hence, any packets to TCP port 80 will be transferred to TCP port 80 of IP Address “192.168.1.1” . In own gateway UDP port 2000 is used for Packet of Control, there should be a mapping port on the IP Sharing. (The IP of own gateway should be mapping to IP Sharing UDP port 2000).

9. File Management

9.1. File Types

The naming convention to the file type of VTG3300 is listed in the following table :

File Name	File Type	Description
XF4421.CFG	System configuration file	File of system configuration
XF44XX.GT1	1st greeting file	File of voice greeting record (have to record by yourself)
XF44XX.GT2	2nd greeting file	File of voice greeting record (have to record by yourself)
XF44XX.GT3	3rd greeting file	File of voice greeting record (have to record by yourself)
XF44XX.GT4	4th greeting file	File of voice greeting record (have to record by yourself)
XF44XX.GT5	5th greeting file	File of voice greeting record (have to record by yourself)
XF44XX.GT6	6th greeting file	File of voice greeting record (have to record by yourself)
XF44XX.GT7	7th greeting file	File of voice greeting record (have to record by yourself)
XF44XX.GT8	8th greeting file	When other gateway (VTG3300) activates Consult Transfer byVPS3302, the Calling Side of this VTG3300 hears this section of greeting.
XF44XX.VON	System voice file	Voice file for announcement
XF4421.RUN	Executing file	System Software
XF4421.WEB	Web page	Page for web browser
XF44XX.MEM	Text file	Prefix Map table may be downloaded by FTP to PC; open file and modify the contents using NOTEPAD or other word processing tool; then uploaded the file to system.
COLDSTART	Cold start	It is a pseudo file. VTG3300 will execute the cold start if this file is deleted via FTP. It is a convenient function if cold start is required after software updated via FTP

WARMSTART	Warm start	It is a pseudo file. VTG3300 will execute the warm start if this file is deleted via FTP. It is a convenient function to execute warm start via FTP.

9.2. Software Update

9.2.1. Software Update via FTP

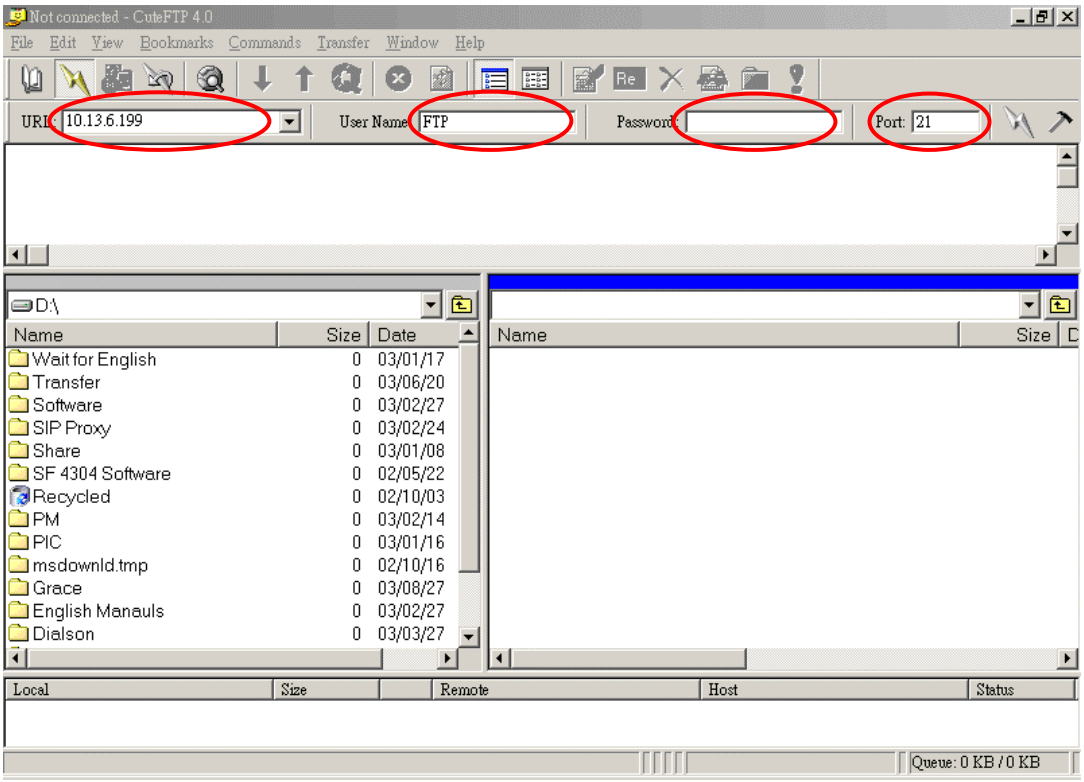
9.2.1.1. The preparation before updating FIRMWARE

1. Get the gateway power ON
2. Get PC power ON
3. Make sure the network cable connected (for FTP)
4. Configure the IP, Subnet, and Gateway of the gateway and PC
5. Get the file of “Update GW FIRMWARE” ready

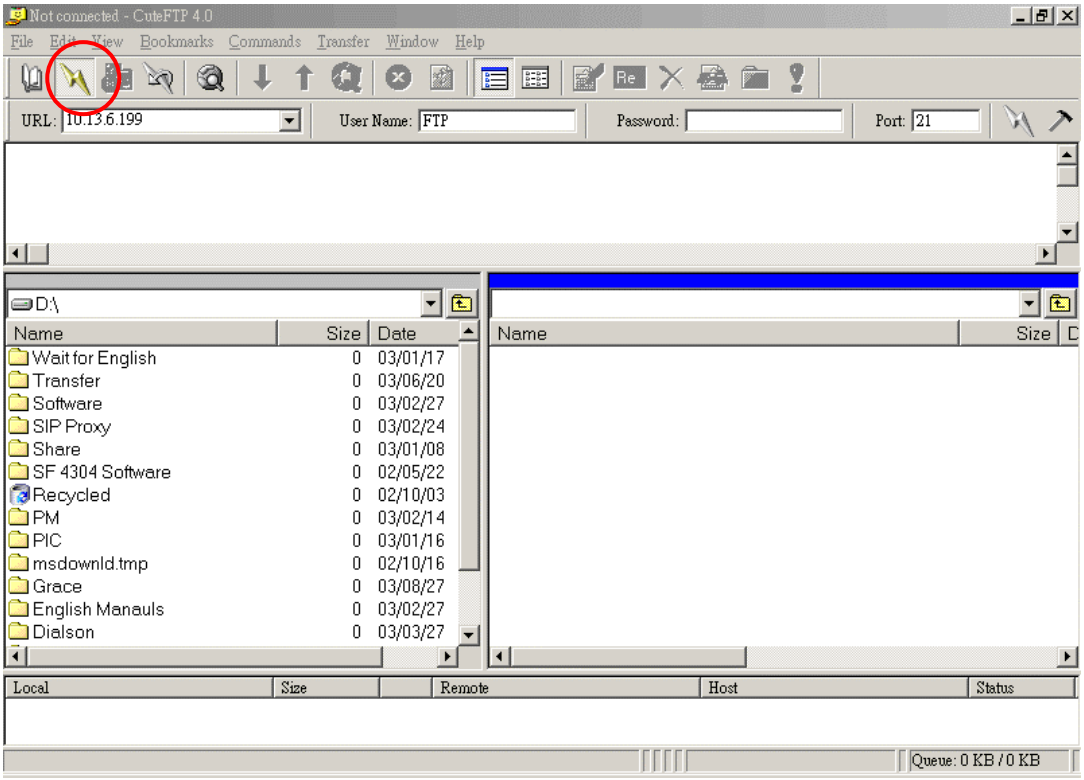
9.2.1.2. Software Update by FTP for File Type RUN and WEB

1. Execute FTP Client Software, e.g. CuteFTP

   Enter IP Address, User Name (default is FTP), Password (the password of FTP and Console is same, and the default is blank), and the Port Number to 21

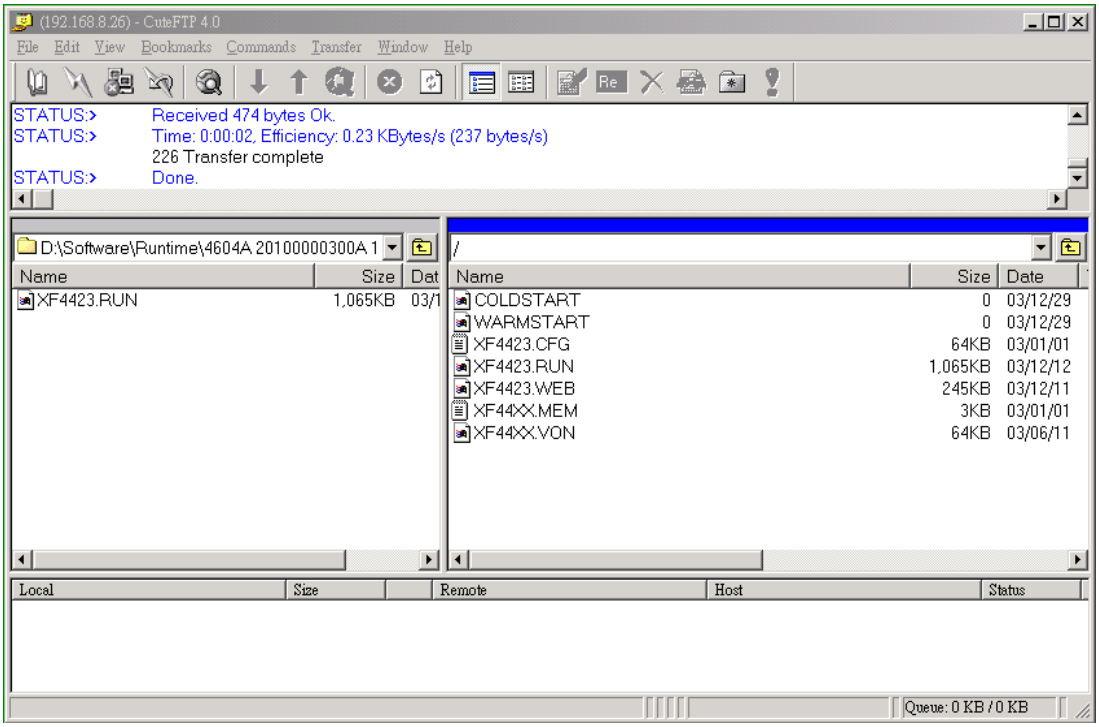


2. Click button **Connect** to get connection between gateway and FTP Client. The files of Gateway will be displayed on the display if the connection is successful.

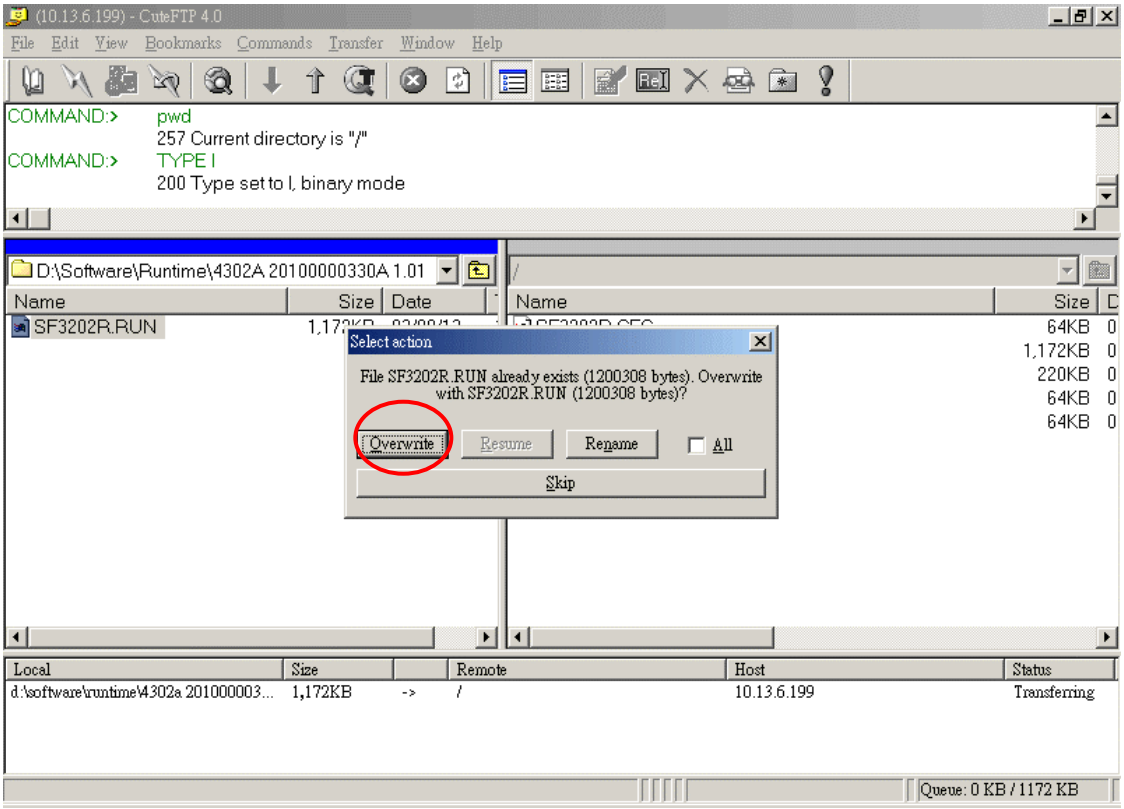


3. Be sure that the files to be uploaded are stored on the hard disk. Select the file with extension of .RUN and click button **Upload**. (Please notice that the file name must be same as the file name

in the Gateway, e.g. XF4423.run).



4. Select Overwrite to overwrite the file on the Gateway

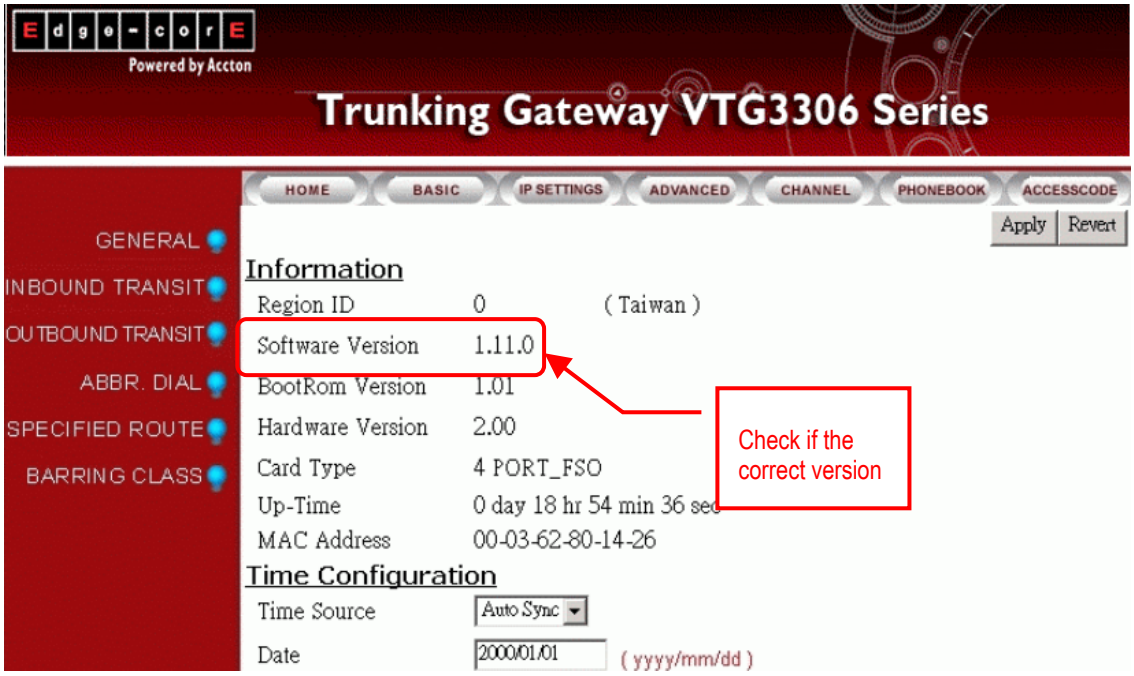


5. After the file is overwritten (you may check if the time of the file is updated), Gateway has to run Cold Start to restore the configure file, then the updating is effective.

6. Select the file with extension of .WEB and click button **Upload** (Please notice that the file name

must be same as the file name in the Gateway, e.g. XF4421.web). And repeat the step 4 ~ 5.

7. Check if the uploading is successful, you enter the Web Management Page to examine the version of software.



10. Network Management

10.1. Password Management

The password management depends on the interface. The detail descriptions are followed.

10.1.1. Password of Phone set

There are two level of managements password for the Phone set :

- User of phone set of the extension line : Each extension line has a password, to configure the privilege to this extension line only and to change the password of the extension line itself.
- System Management : A special password to configure the parameters concerning the system. You may clear the password of individual extension line if you enter the system by the password of System Management.

10.1.2. Password for Web Management Page

There is only one set of password, including User name and Password. By this password, you may enter the Web page and read/write the parameters. But by this password, you can not change any passwords, including password for Web and for Phone set.

It is able to setup the User Name of Web management to "(Local)", and then the system allows only the devices in the same Subnet to login.

10.1.3. Password for System Console and Telnet

There are two passwords for both System Console and Telnet. By one of these passwords, you can read data only, by the other one you can read and write all parameters of system, including the password of phone set and Web Page.

10.1.4. Password for FTP

The password for FTP is same as the password for system console that can read and write. This password can be used only for file management.

10.2. Management by System Console, and Telnet

Execute the command below may have next level command. Always input "?" and press Enter to view more commands and help.

10.2.1.List of all commands

User Exec commands

Enable	Turn on privileged commands
Exit	Exit from the EXEC
Help	Description of the interactive help system
Show	Show running system information

show

Dns	Show the IP address of domain name server
ethernet	FastEthernet port status and configuration
history	Display the session command history
Ip	Display IP configuration
running-config	Show current operating configuration
version	System hardware and software status

Privileged Mode

Configure	Enter configuration mode
Delete	Reset configuration
Disable	Turn off privileged commands
Exit	Exit from the EXEC
Help	Description of the interactive help system
Ping	Send echo request to destination
Probe-hook	probe busytone cadence
Probe-remove	stop probe busytone cadence
Reload	Halt and perform cold start
Restart	Halt and perform warm start
Show	Show running system information

Global Mode

Dbflush	DataBase flush
DNS	Set the IP address of domain name server
End	Exit from configure mode to privileged mode
Exit	Exit from configure mode
Help	Description of the interactive help system
IP	Global IP configuration subcommands
Log	Control log output
Manager	Enable/Disable the specific management function
No	Negate a command or set its defaults
Password	Modify password of enable command
PPPoE	PPPoE configuration subcommands
regional_id	Set regional id
service_port	Set service port number
terminate	Force channel clear down

10.3. Management by Web Page

If you would like to configure the parameters of VTG3300 by Web Management Page, you should enter the IP address and all basic information about VTG3300 through the system console first (please refer section 10.2 Management by System Console, and Telnet). Then, open the browser and enter the IP address of VTG3300 to enter the home page of Web Management Page for further configuration.

10.4. Management by Phone set

There are two level managements, the user of extension line and the system management.

10.4.1. User of Extension Line

Every extension line has a password. Off-hook the phone and hear the dial tone; dial # # and hear the tone of "Du..Du….". At this moment you may configure the parameters by following instructions.

Item	Description	Parameter	Remarks
01	Call Forward	0 / 1 / 2 / 3 / 4 / 5 0 : Forward None (Disable) 1 : Forward All Calls 2 : Forward Busy 3 : No Answer Forward 4 : Busy and No Answer Forward 5 : Busy Slave (Superuse Only)	Configure "Call Forward" type
02	Telephone number for Call Forward	1~19 Digits	Define the telephone number of Call Forward
03	Telephone number for Offnet To	1 ~ 22 Digits	Define the telephone number for Offnet To
04	Clock Alarm	hh*mm*c : hh : 00~23 Hours mm : 00~59 Minutes c : 1 : one time 2 : periodic Blank : clear the setting of periodic alarm	Phone will ring 3 times when the time is up. You can set alarm start once or periodically
05	Voice Gain	0 : Default 1 : +2 db 2/22/222 : -2/ -4/ -6 db	The Input Gain and Output Gain will be changed
06	Change Password	4 Digits	Default is no password. You may set or change password
07	Activate the Greetings of night mode	0 / 1 0 : Disable 1 : Enable	Only for Operator
09	Enter to system management mode	4 Digits	Please refer to the section 10.4.2 System Management

Item	Description	Parameter	Remarks
10	Play current time	2 Digits	Play the current time
11	Display Caller ID	0 / 1 0 : Disable 1 : Enable	Display caller ID or not
12	Do not disturb (DND)	0／1 0 ： Disable 1 ： Enable	Configure DND function. Enable it allows to dial call from that extension, but block all call dial to that extension

10.4.2.System Management

The system management has a special password (the default password is 9999). You can off-hook any phone and dial # # after dial tone, he will hear the tone of “Du ..Du….” then dial 0 9 <password> #, then hear the tone of “Du ..Du….” again. At this moment, the system management can dial the following item number for management. The password of system management can be changed only from system console.

Item	Description	Parameter	Remarks
40	Access internal IP Address		If under NAT, access to the current internal IP address
41	Access Subnet Mask		If under NAT, access to the current Subnet Mask
42	Access Default Gateway		If under NAT, access to the current Default Gateway
43	Access Signaling Port		If under NAT, access to the current UDP Port
44	Access the Global IP Address		Access to the current Global IP Address
45	Access Global Signaling Port		Access to the current Global UDP Port
50	Define Area Code	1~3 Digits ; from 1 to 999	Define the Area Code that the system is allocated
51	Define Phone Number	1~19 Digits of 0~9	Define the telephone number of the equipment
52	Define PSTN Call DISA Control	0 / 1 0 : Disable 1 : Enable	If DISA answers the PSTN call

Item	Description	Parameter	Remarks
53	Define IP Call DISA Control	0 / 1 0 : Disable 1 : Enable	If DISA answers the IP call
54	Set IP Status	0 / 1 / 2 0 : Manual 1 : DHCP 2 : PPPoE	Configure the method to get the IP Address
55	Define IP Address	x : 1 ~ 3 Digits ; 0~255 xxx*xxx*xxx*xxx	Define IP Address of own equipment
56	Define Subnet Mask	x : 1 ~ 3 Digits ; 0~255 xxx*xxx*xxx*xxx	Define Subnet Mask of own equipment
57	Define Default Gateway	x : 1 ~ 3 Digits ; 0~255 xxx*xxx*xxx*xxx	Define default Gateway of own equipment
58	Define Primary DNS Server IP	x : 1 ~ 3 Digits ; 0~255 xxx*xxx*xxx*xxx	Define Primary DNS Server IP of own equipment
59	Define Secondary DNS Server IP	x : 1 ~ 3 Digits ; 0~255 xxx*xxx*xxx*xxx	Define Secondary DNS Server IP of own equipment
60	Define Dial Ending Time	1 Digit ; from 0 to 9	It is dial ending if no digits are dialed before dial ending time out. Default is 0 second and the dial must be ended by #. If the dial ending time is defined and the dial is not ended by #, system will wait until dial ending time out.
61	Change Service Port	1：FTP，2：HTTP， 3：Telnet 0~65535	Can configure the port number of three kind services.
62	Remote Management Control	0／1 0：Disable 1：Enable	Enable or Disable Remote Management Control (FTP, Telnet and HTTP (Web)

Item	Description	Parameter	Remarks
91	Not restricted by Barring Table		You will hear the dial tone again after dialing “91”. Any numbers dial after above process is not restricted by barring table. System manager uses this function for checking and maintenance.
92	Reset the password of individual extension line	2 Digits ; from 11 to 26	When the user forgot the password, user can ask the system manager to reset the password to default value 0000
93	Define an extension line as Operator	2 Digits ; from 11 to 26	Enter the extension number that will be Operator
96	Play the greetings recode	1 Digit ; from 1 to 7 # stop	Enter the number of greeting to be played
97	Reset to recover all parameters to default value	1 / 2 1 : recovered by default value 2 : recovered by default value except IP	Recover all parameters to default value
98	Warm Restart	1 / 2 1: Warn restart 2: Cold restart	Execute Restart
99	Record Greeting records	1 Digit, from 1 to 7	Record the voice record of greetings, total 7 voice records

10.4.2.1. How to Record (refer to Section 7.3.12 Recording Greetings)

*	Start to record
#	Stop recording
0	Replay the record
#	Stop the replay
9	Store the record
#	End the store
#	Exit

11. Specification

Voice port interface : VTG3300 : 04 ports for FXS and FXO

FAX : T.30 / T.38

FXS Interface : Loop Start ; may connect to phone set, FAX machine, or trunk port of PBX

FXO Interface : Loop start, 2 wires ; may connect to trunk line of PSTN operator

Connector Interface : IDC Interface (8/16 ports model), RJ-11 Interface (4 ports model)

Voice Compression : G.711 / G.729AB / G.723 (optional)

Silence Suppression : VAD, CNG

Echo Cancellation : G.165/G.168 16 ms

Jitter Buffer : Adaptive Jitter buffer Management

Gain Control : In/Out +/-6db

Packet Time : 40 ms

Transport Protocol : RTP, RTCP

Call Control Protocol : Proprietary

Phone Book : Auto Learning, Manual Configuration

LAN Interface : 2 * Ethernet Ports; 10BASE-T/100BASE-TX Auto-negotiation; RJ-45 Connectors

Management

Management Tool : Web Browser, Phone set, System Console, Telnet

IP Address : Static IP / Dynamic IP / Private IP / PPPoE/ DHCP

Software Update : FTP

Power

External Power Adaptor, Voltage : 100VAC ~ 240VAC. Frequency: 50/60Hz

Power Consumption : 70 W (8/16 ports model), 12W (4 ports model)

Dimension

VTG3300 ; 172mm x 35mm x 176mm

Working Environment

Operating Temperature : 0 to 50 , Storage Temperature: -10 to 70

EMI Certification : FCC part 15 Class B.CE Mark

PSTN Regulation : FCC part 68, NALTE, iD A,JATE

Safety : cUL, CCIB, CB

12. Region ID to Telecom Country code

Country	Region ID	Country	Region ID
Australia	02	Korea	24
Philippines	03	Malaysia	26
Canada	06	Singapore	36
China	07	Slovenia	38
Vietnam	10	Spain	40
France	12	Taiwan	43
Germany	13	Thailand	44
Hong Kong	15	British	46
Italy	22	USA	47
Japan	23		

13. Sample Sheets for Numbering Plan

13.1. Sample Sheet

There are some sample tables for management and planning. If you can fill out all information in those tables, your planning is completed.

My Information

Name：
Prefix：
IP：
MAC Address：
Country Code：
Area Code：
Phone Number：
NET ID：

Numbering Plan	IP Calls w/ Auto Learning	
	IP Calls	
	Trunk Group1 Access	
	Trunk Group2 Access	
	Phone set Programming	
	Abbr. Dial	
	Call Pick Up	
	Operator Code	
	Net Plus Call	
	Seize Remote Trunk	
	Internal Call	
	Assign Operator to:	
	Maximum number of IP Calls:	
	My Pick Up Group:	

Prefix Map	Network Operator Prefix:	

Trunk Group	Ch	Trunk	Status	Same Area	Remote	Notes
	13	1				
	14	1				
	15	2				
	16	2				

Inbound Transit	Password	Class

Outbound Transit	MAC	Trunk Call Allowed	Phone Number	Type	Name

Offnet Forward	Permitted Number For Offnet Forward

Abbr. Dial	Index	Speed Dial Number

Specified Route	Route	Cost

Barring Class	Class Entry	Content
	1	
	2	

Channel (FXS)	Ch	Ext.	Name	Status	Operator	Barring	Outbound	Softkey	Trigger		Append
	1	11									
	2	12									
	3	13									
	4	14									
	5	15									
	6	16									
	7	17									
	8	18									
	9	19									
	10	20									
	11	21									
	12	22									

Prefix Map

Prefix Map	Prefix	Number	Type

13.2. Example of Numbering Plan

Here is an example of planning for your reference

My Information

Name：RD
Prefix：73
IP：192.168.1.1
MAC Address：00-03-62-80-11-55
Country Code：886
Area Code：2
Phone Number：8226-6673
NET ID：6673

Numbering Plan	IP Calls w/ Auto Learning	*
	IP Calls	#
	Trunk Group1 Access	9
	Trunk Group2 Access	*1
	Phone set Programming	##
	Abbr. Dial	*2
	Call Pick Up	*3
	Operator Code	0
	Net Plus Call	#*
	Seize Remote Trunk	
	Internal Call	1 and 2
	Assign Operator to:	N/A
	Maximum number of IP Calls:	16
	My Pick Up Group:	9

Prefix Map	Network Operator Prefix:	88

Trunk Group	Ch	Trunk	Status	Same Area	Remote	Notes
	13	1	Enable	FALSE	TRUE	
	14	1	Enable	FALSE	TRUE	
	15	2	Enable	TRUE	FALSE	
	16	2	Enable	TRUE	FALSE	

Inbound Transit	Password	Class
	123	International

Outbound Transit	MAC	Trunk Call Allowed	Phone Number	Type	Name
	00-03-62-80-11-11		886288881111	Specified	Sales
	00-03-62-80-22-22		886288882222	Specified	RD

Offnet Forward	Permitted Number For Offnet Forward

Abbr. Dial	Index	Speed Dial Number
	00	88881111

Specified Route	Route	Cost
	8862	2
	86	2

Barring Class	Class Entry	Content
	1	Name：Toll Only Attribute：Accept Barring Table： 00 01 Exception Table：
	2	Name：Local Only Attribute：Accept Barring Table： 0 Exception Table：

VTG3306

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