TECOM EG30WV

Administrator's Manual

(ver.1.2.x)

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1. Introduction

Congratulate on becoming the owner of the EUT.Your LAN (local area network) and WAN (wide area network) will now be able to access the Internet using your high-speed Ethernet connection. This Administrator Manual will show you how to install and set up your EUT.

The IG (Intelligent Gateway) provides a variety of functions for users and can support a wide range of application in a complicated environment. Therefore, it needs Administrator to plan, install and set the whole environment of VoIP communication. And the knowledge of modern network and Internet technologies are essential for administrator.

Figure 1-1. Router Connection Diagram

Interfaces

- WAN Interface: 10/100Base-T Ethernet port
- CO Interface: 3 FXO (Loop Start, for PSTN)
- Analog Device Interface: 1 FXS (for analog Telephone or FAX)
- LAN Interface: 4 Ethernet (10/100Base-T)
- Built-in 802.11g Wi-Fi access point

Terminals

- 1 Analog Terminal
- 24 IP Stations (Wired/Wi-Fi IP Phone)

In principle, the Administration is required to do the following things:

(1) To understand the architecture, resources, and devices of whole environment which will be involved with the VoIP communications.

(2) To build a common setting file for most users.

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(3) To configure each phone and install them into the network.

(4) To configure each interfaces and install them into IG.

(5) And to solve the problems what users encounter during operation.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Notice : The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

IMPORTANT NOTE: To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.The antenna used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC INFORMATION
The Federal Communication Commission Radio Frequency Interference Statement includes the following paragraph:
The equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. However, there is no grantee that interference will not occur in a particular installation. If this equipment dose cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on , the user is encouraged to try to correct the interference by one or more of the following measures:

--Reorient or relocate the receiving antenna.
--Increase the separation between the equipment and receiver.
--Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
--Consult the dealer or an experienced radio/TV technician for help.

The user should not modify or change this equipment without written approval form TECOM CO., LTD. Modification could void authority to use this equipment.

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2. Getting to Know the Router

2.1 Specifications

Feature	Additional Info	
Main Processor	240MHZ MIPS32 CPU	
Processor SDRAM	External 32MB	
Processor Flash ROM	External 4MB	
Supplementary Processor	1x DSP Voice Pump VP101-4 (4 channel/each)	
System Flash (Voice Mail)	128MB	
Switch controller	Broadcom BCM5325E	
System Power:	15V/1A	
Standards	IEEE802.11g,IEEE802.11b,IEEE802.3	
Ports	1×WAN，4×LAN，1×FXS，3×FXO	
Button	Reset, Power on/off	
Cabling	RJ-45,RJ-11	
LEDs	POWER, WIRELESS, 3×LINE, TEL, 4×ETHERNET, WAN	
EMI/EMC:	FCC Part15 Class B	
Environmental	Operating Temp	.0ºC to40ºC (32ºF to 104ºF)
	Storage Temp.	-20ºC to 70ºC (-4ºF to 158ºF)
	Operating Humidity	10% to 80% relative humidity, Non-Condensing
	Storage Humidity	10% to 90% Non-Condensing

2.2 Front Panel

The front panel contains several LEDs that indicate the status of the unit.

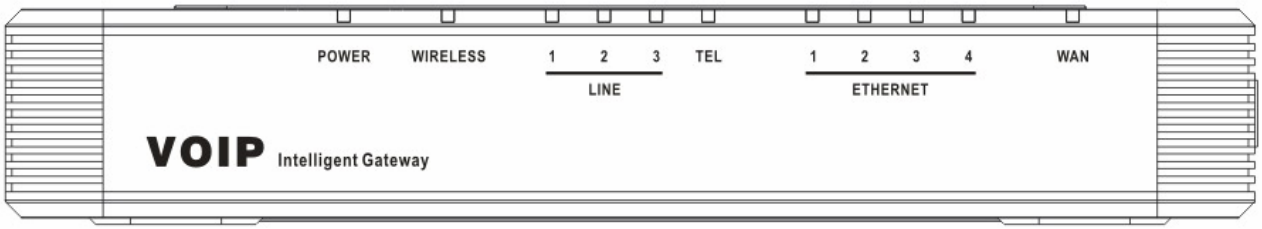

Figure 2-1. Front Panel of GW6000

LED Name	Color	Status	Description
POWER	Blue	On	Power on.
		Off	Power off.
WIRELESS	Blue	On	Wireless LAN initialization success.
		Off	Wireless LAN is not present.
LINE (1-3)	Blue	Off	PSTN Line is idle.
		On	PSTN Line is busy.
TEL	Blue	Off	Phone is idle.
		On	Phone is busy.
ETHERNET(1-4)	Blue	On	LAN connected.
		Off	LAN network connection not present.
		Flashing	LAN activity present (traffic in either direction).
INTERNET	Blue	On	WAN connected.
		Off	WAN network connection not present.
		Flashing	WAN activity present (traffic in either direction).

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2.3 Rear Panel

The rear panel contains the ports for the unit's data and power connections.

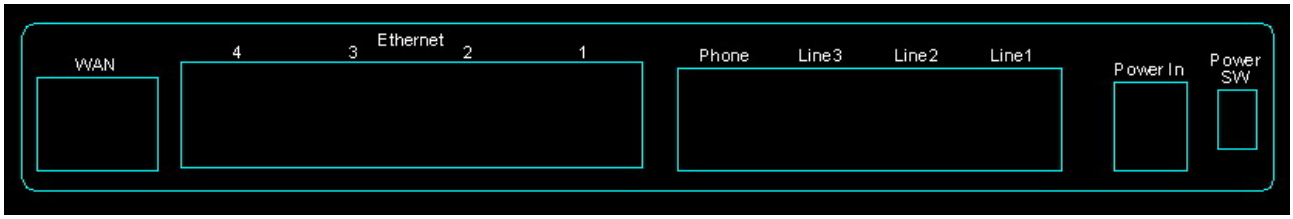

Figure 2-2. Rear Panel of EUT

Label	Function
WAN	RJ-45 connector: Connects the device to your cable modem, or to your ADSL Modem, It's to connect to the remote network
LAN1-4	RJ-45 connector: Connects the device to your PC's Ethernet port, or to the uplink port on your LAN's hub,
TEL1	RJ-11 connector: Connects the device to your analog phone,
Line 1-3	RJ-11 connector: Connects the device to your PSTN lines
Power	Connects to the supplied power converter cable
On/Off	Switches the device on and off

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3. System Features

3.1 Answering Position

For incoming calls from PSTN (FXO ports), system provides the flexibility to ring to different destinations. System also provides the ability to have the calls to ring to 1-6 different extensions according to the system service mode (day or night modes).

It is also for those incoming VoIP calls from the registered ISP (Uplink Server) to be routed with the same method.

3.2 Auto Attendant & Voice Mail

The IG Auto Attendant can greatly enhance business office productivity by providing either a full-duty automated attendant to handle all incoming system calls or part-duty automated attendant to handle overflow traffic.

The Automated Attendant & Voice Mail Module provides 128MB of programmable voice announcements. It provides four ports to handle four (4) simultaneous callers. It provides the following functions:

- Auto Attendant Functions

  It provides an incoming caller with a customized welcome greeting that describes the actions available to an incoming caller:
  - Provide four kinds of main greeting messages: Day, Night, Noon, and Holiday greeting messages.
  - Dial an extension number or operator code to reach the appreciate destination.
  - Press a digit to leave a message in a particular mailbox.
  - Press a digit to make an outside call via the specified check.
  - Provide the phone to forward the call to its voicemail box.
  - Provide the phone to set Direct Call Forward, Busy Call Forward or No Answer Call Forward. It will forward the incoming trunk call to another extension.
  - Provide the phone to set Do Not Disturb to stop the incoming line call from ringing.
- Voice Mail Functions

  All mailbox users have access to these mailbox features
  - Delete, save, or skip messages.
  - Send messages to other mailbox.
  - Receive message information indicating the date, time, and sender information, if available.
  - Change personal greeting, and password.
  - Playback controls when reviewing messages.
  - Record a temporary greeting.
  - Send a notification via email when getting a leaving message.
  - The maximum recording length for each call is 60 seconds.
  - The maximum total length for each user is about 18 minutes.
  - For each leaving message, it's saved 1 - 7 days
- Voice Messages
  - Provide two languages service for the all voice files.
  - Administrators can record the all voice messages by themselves.

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- Administrators can update, backup or delete the all voice messages on the PC.

3.3 Call Abandon

For every PSTN call, system provides the facility to monitor the call status. If the remote party hangs up, the ongoing call must be terminated.

3.4 Call Operator (Call Attendant)

One primary operator may be assigned in the system. The standard IP phone will serve as the operator telephone. When assigned as operator, this extension supports general system functions.

While the internal extension dials Operator Directory Number ("0" at default), or the outside party dials "0" when Auto Attendant plays the Welcome message, these calls will be stored into Operator Queue. The Operator is First-In-First-Out to service these calls. At the waiting time, the calling party will be on Music-On-Hold state.

3.5 Call Routing

The Call Routing feature automatically routes outgoing calls using the most appropriate route. The appropriate route is determined based on the number dialed. If necessary, GW6000 can automatically modify the dialed number by deleting and inserting digits.

The call routing destination is a PSTN line, an IP line, a line group or another EUT.

3.6 Caller ID

GW6000 provides the ability to detect the calling party identification provided by CO via PSTN lines or by Uplink Server via IP trunks. This data when received by the telephone carrier will be displayed on all ringing IP phones or Caller ID equipped Single Line Telephone.

3.7 Caller ID to Extension

When Caller ID data is received on PSTN Lines or IP Lines of the IG system, this caller ID data is re-broadcast to analog devices or IP phones. This means that Caller ID will be supported even when connected “behind” the IG system as a system extension.

3.8 Class Of Service (COS)

GW6000 provides eight (8) Classes of Service (COS) for assignment of outside line dialing-privileges. Each extension may be assigned one Day-COS and one Night-COS. The Extension COS is primarily used for restriction and control of long distance dialing.

COS 0 is the highest priority. COS 7 is the lowest one.

3.9 Daylight Saving Time

Daylight Saving Time (DST) feature supports auto adjustment for daylight saving time.

3.10 Default Set

When the feature is active, the extension will return to default settings. It will affect the following options:

Cancel any Call Forward via AA
Cancel DND via AA
Paging Accept

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Default Feature Key Setting

3.11 Direct Inward System Access (DISA) via Auto Attendant

The current PSTN/IP lines are all DISA lines. While ringing to AA, the outside callers have direct access to extensions, PSTN/IP lines, Call Routing and Trunk Groups.

3.12 Dynamic DNS

EUT support Dynamic DNS to see the DDNS host name as EUT's WAN IP address in SIP application. Let the EUT have a static domain name for dynamic IP address.

Before using the feature, you must register domains on DynDNS.org or TZO.

3.13 Extension Password

All extensions of the IG system have an associated User Password. Password length is system programmable from 0 to 24 characters.

3.14 Fax/Modem

EUT supports FAX/modem tone detection and auto-fallback to G.711.

3.15 Feature Key Programming

Feature Keys can be programmed by phone users. A feature key can be programmed for line appearance.

3.16 Flash - Analog Port (SLT) Flash Recognition

Flash is the momentary operation of the hook-switch at the analog device, which can be deciphered by the IG system in such a way that the previous call in progress is held, or placed in a status of transfer awaiting further instructions from the user.

3.17 IG to IG

While dialing a number, it may route to another EUT through Call Routing Table. It allows the user to make a direct call to an extension in another EUT. It also allows the user to share the PSTN or IP Trunks in another EUT to make an outside call.

3.18 IP Trunk

EUT can register up to 8 SIP Uplink Servers. The extensions may make a call to the users of the Uplink Servers, or any user in the world through the Uplink Servers.

- SIP message, including INVITE, re-INVITE, ACK, CANCEL, OPTIONS, BYE, REGISTER, INFO, REFER, SUSCRIBE/NOTIFY and REPLACE messages.
- SIP Outbound Proxy, SIP Proxy and Registrar
- Auto-Registration when power-on or period
- Session Timer support
- Support IP address, domain name, user name, display name for SIP URL

3.19 Line Group Assignment

System assigns each PSTN/IP line to a specific Line Group. Each line can be assigned to only one Line Group. The Line group assignment is used for Line pool access.

If setting some PSTN lines and some IP lines into the same Line Group, the line access depends on the access priority.

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3.20 Make an Outside Call

System provides three methods to make an outside call.

- The extension user dials the phone number directly. System automatically routes the outgoing call using the least expensive line via Call Routing Table.
- The extension user dials a Line number or a Line Group number first. After hearing the dial tone, the user dials the phone number.
- The extension presses a Line key first. After hearing the dial tone, the user dials the phone number.

3.21 Message Waiting Indication

It's a Voice Mail feature. When somebody leave messages, the router will inform the phones, and phones' LCD will display new voice mails information, and its led will flash accordingly.

3.22 Multi-Line Appearance

GW6000 provides PSTN line and IP line status to the phones.
Trunk LED:

Dark – the line is Null or Idle
Lit – the line is in Talk

3.23 Music On Hold

Any PSTN/IP line calls which placed on hold will give music to the other external party.

3.24 Night Switching

GW6000 provide Day and night settings in service mode page. And during different time, Trunk incoming call will be forwarded to different extensions according to the settings.

3.25 Numbering Plan

The Numbering Plan refers to the structure of dialed access to the various resources that are part of the system. EUT also allows for a very flexible configuration numbering for the various system resources.

3.26 Paging

A Page can be initiated from any extension in the system. Dialing a Paging Group Directory number allows an extension to broadcast a page to all assigned members of the selected paging group.

3.27 Plug and Play

While connecting IP2007/2008 phones to EUT LAN port, it will register to EUT automatically.

3.28 Polarity Reversal (PR) Detection

When making an outgoing PSTN call, the system must know if the remote party answers the call or not (for SMDR recording purpose). If the CO provides the PR signal, the system can monitor the signal to determine whether the remote party answers the call or not.

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3.29 PSTN Backup

In case of power failure, EUT automatically switches the first PSTN line to the Single-line analog phone. The other PSTN lines are not supported.

3.30 Registration

The IG combines Proxy and Registrar servers in its application. For a Registrar server, it acts as the front end to the location service for a domain, reading and writing mappings based on the contents of REGISTER requests. The location service is then typically consulted by a Proxy server.

3.31 Remote Management via PC

Programming the IG system database is possible via PC. IG build-in a web server for remote administration.

3.32 System Time & Date

The IG system provides a built-in time clock to track System Time for reference in certain features such as System Night Service Mode Change. This clock has the ability to automatically adjust with network NTP server through Internet.

3.33 Toll Restriction

EUT provides sophisticated monitoring of digits dialed on PSTN/IP Trunks. If a digit or range of digits dialed on a Trunk line is inconsistent with the dialing extension's COS, the call is denied. This calling COS criteria can be applied to local calls, long distance calls, and specific numbers that are considered allowed in areas where other numbers may be restricted.

3.34 Transfer

Transfer is used to deliver calls at your extension to another extension. It means that calls can be routed to IG system destinations: an extension or an outside phone number.

3.35 Trunk Group

System assigns each PSTN Trunk and IP Trunk to a specific Trunk Group. Each Trunk can be assigned to only one Trunk Group. The Trunk group assignment is used for Trunk pool access.

If setting some PSTN trunks and some IP trunks into the same Trunk Group, the trunk access depends on the access priority.

System provides up to 4 Trunk Groups. All PSTN Trunks and IP Trunks are assigned to default Trunk Group 1 and PSTN Trunks has higher access priority.

3.36 Wizard Setup

Wizard Setup allows system administrator to select the appropriate mode and configure the corresponding settings step by step to create a basic EUT operation.

The following eight operation setting items are supported

WAN Setting

LAN Setting

Wireless Basic

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Wireless Security

Internet Time

Numbering Plan

IP Trunk

Call Routing Table

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4. Phone Features

The following features depend on whether the phone provides.

Feature	Tecom IP 2007/8	FXS	Other SIP Phones
Alphanumeric Display	Yes	Depends	Depends
Basic Call	Yes	Yes	Yes
Call Forward via Auto Attendant	Yes	Yes	No
Call Hold	Yes	Yes	Yes
Call Transfer	Yes	Yes	Depends
Call Waiting	Yes	No	Depends
Conference	Yes	No	Depends
COS Following	Yes	No	No
Distinctive Ringing	Yes	No	No
Do Not Disturb via Auto Attendant	Yes	Yes	No
External Call Forward (ECF) via Auto Attendant	Yes	Yes	Yes
Feature Key Programming	Yes	No	No
Last Number Redial	Yes	Yes	Depends
LCD & Interactive Buttons	Yes	No	Depends
Mute	Yes	No	Depends
On Hook Dialing	Yes	No	Depends
Page Allow / Deny	Yes	No	No
Phone Book	Yes	No	Depends
Phone Lock/Unlock	Yes	No	No
Speed Dial	Yes	No	Depends
Volume Control	Yes	Depends	Depends

Tips: the word “Depends” means that the features depend on whether the phone provides.

4.1 Alphanumeric Display

The IP Phone extension provides a graphic LCD that supports 64 alphanumeric characters. The LCD enhances many system features.

4.2 Basic Call

To make an intercom call, dial a Station number (IP Terminal, POTS) or a Voice Mail number.

To make an outgoing call, dial a phone number. System chooses a line (PSTN line or IP trunk) via Call Routing Table to dial out. If it includes “*” in the phone number, and the call is dialed through PSTN Trunk, it will be as a one second Pause time.

To make an outgoing call, dial a PSTN, an IP Trunk or a Trunk Group number first. After hearing dial tone, dial the phone number.

4.3 Call Forward via Auto Attendant

Auto Attendant Call Forwarding reroutes incoming trunks calls from one extension to another destination. The destination of a call forward can be another extension or an outside phone number (External Call Forward; ECF).

EUT support the following Call Forwards:

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Direct Call Forward:

Forward all of the calls without regard to the extension status.
To enable, dial *21 + Ext No.
*21 + * + (PSWD) + * + Destination
To disable, dial **21.

Busy Call Forward

Forwards the calls if the extension is busy.
To enable, dial *22 + Ext No
*22 + * + (PSWD) + * + Destination
To disable, dial **22.

No Answer Call Forward

Forward the calls if the extension doesn't answer the call within No Answer Time.
To enable, dial *23 + Ext No + * + Time.
*23 + * + (PSWD) + * + Destination + * + Time.
To disable, dial **23.

Direct Call Forward to VM

Forward all of the calls to its own Voice Mail box.
To enable, dial *24.
To disable, dial **24.

4.4 Call Hold

Trunk and Intercom calls can be placed on hold at any extension. Callers on hold hear the Music On Hold.

For the Single Line phone, it's to put a call on hold, press flash then hang up (optional). It's to return to the original call, press flash or pick up the phone.

For Tecom IP2007/2008, please refer to "IP Phone User Guide".

4.5 Call Transfer

It allows a user to perform a screened or unscreened transfer to an extension or an outside phone number.

For the Single Line phone, it's to transfer a call, press flash then dial the new number. To transfer immediately, hang up (Unscreened). To transfer with consultation, wait for the party to answer, consult, and then hang up (Screened). To abort the transfer (if the third party does not answer), press flash to return to the original call.

For Tecom IP2007/2008, please refer to "IP Phone User Guide".

4.6 Call Waiting

If call waiting is disabled on a line, it returns busy response while getting second call at non-idle state.

To enable the call waiting feature, dial *99.

To disable the call waiting feature, dial **99.

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4.7 Conference

The Conference feature allows the user to connect to two or more parties into a single conversation.

For Tecom IP2007/2008, please refer to “IP Phone User Guide”.

4.8 COS Following

You can change the individual Class of Service of each extension temporarily. You may want to do this when the user goes to the office of low-priority COS extension and try to make an outgoing call, the user can use the function to use his/her own COS.

When setting COS following, the effective time of following is 1 minute.

To make a COS Following, dial *55+(phone number)+(password)

4.9 Distinctive Ringing

Distinctive ring cadences can be selected allowing adjacent users to discern which extension is ringing. It also provides the different ring tones for intercom and trunk calls.

4.10 Do Not Disturb (DND) via Auto Attendant

Extension users can enable DND to stop incoming PSTN or IP Trunk calls from ringing at their phone. The DND on an extension can be allowed or denied through the feature access code.

If an extension has DND and Call Forward enabled at the same time, Calls follow the DND.

To enable the do not disturb feature, dial *4.

To disable the do not disturb feature, dial **4.

4.11 External Call Forward (ECF) via Auto Attendant

Auto Attendant Call Forwarding reroutes incoming trunks calls from one extension to another destination. The destination of a call forward can be an outside phone number.

4.12 Feature Key Programming

Feature Keys can be programmed by phone users. A feature key can be programmed for line appearance, or a function such as Call Forward, Do Not Disturb.

It’s also allowed to program the Feature Keys by dialing feature Access Code:

*70 + (Feature Key number; 1 - 4) + (PSTN, IP Trunk or Trunk Group number)

4.13 Last Number Redial (LNR)

The features depend on whether the phone provides.

The Last Number Redial feature automatically dials the last number dialed from the phone. For the Single Line phone, it’s to dial *8. For Tecom IP2007/2008, please refer to “IP Phone User Guide”.

4.14 LCD & Interactive Buttons

The IP phone is equipped with Liquid Crystal Display to enhance features operation. And incorporates four-screen-prompt and interactive buttons that simplify feature operation.

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4.15 Mute

The Mute feature allows the user to disable the handset transmitter or the speakerphone microphone.

For Tecom IP2007/2008, please refer to “IP Phone User Guide”.

4.16 On Hook Dialing

IP phone extensions may make outgoing calls without lifting the handset and monitor the dialing status through the built-in speaker. The button lamp is lit when monitoring a call.

4.17 Page Allow/Deny

You can block one-way pages (internal, group, and all page) over the IP phone speaker by dialing the Page Deny code.

To enable Page Deny feature, dial *99.

To disable Page Deny feature, dial **99.

4.18 Phone Book

In Phone book, each entry is containing of Phone Number and User Name. The phone number could be extension number, phone number or IP address.

For Tecom IP2007/2008, please refer to “IP Phone User Guide”.

4.19 Phone Lock/Unlock

You can use the Lock feature to prevent unauthorized trunk calls from being made from extension. A locked extension continues to receive incoming trunk calls, and a user can continue to place and receive intercom calls. Outgoing Trunk calls are blocked.

To lock the phone, dial *97 + (password)

To unlock the phone, dial **97 + (password)

4.20 Speed Dial

Speed Dialing allows you to store frequently dialed numbers.

For Tecom IP2007/2008, please refer to “IP Phone User Guide”.

4.21 Volume Control

The IP phone is equipped with a volume control that is used to adjust the various volume settings of the telephone. The following functions can be adjusted:

- Ringing
- Handset
- Speaker
- Headset

For Tecom IP2007/2008, please refer to “IP Phone User Guide”.

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5. Quick Installation

This Quick Installation help to you install the product quickly and easily. For detailed instructions on installation, and further setup option, please refer to the configuration chapter.

5.1 Connecting the EUT

(1) Place GW6000 in an optimum location.
(2) Connect the included Category 5 Ethernet network cable to the EUT's LAN port or WAN port. Then connect the other end of the network cable to a switch or hub or directly your PC's Ethernet port. The EUT will then be connected to your 10/100 network.
(3) Connect the AC power adapter to the EUT's Power port. Only use the power adapter supplied with the EUT. Use of a different adapter may result in product damage.
(4) Press the reset button on the rear panel to set the EUT to factory default settings.
(5) Now that you have connected the EUT to your network, you are ready to begin setting it up. The Setup Wizard will take you through all necessary steps to help you to configure the EUT easily.

5.2 Wizard Setup

This system administrator can configure the EUT remotely or locally via a Web Browser. When EUT return to default factory settings, its LAN address is "192.168.1.1" , and username is "admin", password is "admin".

Wizard Setup allows system administrator to select the appropriate operation mode and configure the corresponding setting step by step. The following eight items are supported.

- WAN Settings
- LAN Settings
- Wireless Basic
- Wireless Security
- Internet Time
- Numbering Plan
- IP Trunk
- Call Routing Table

In the configuration, the administrator presses "Next" or "Back" button to choose the setting item. If pressing "Exit & Reboot", it will asks whether store settings. If choose Yes, the settings will be saved and the EUT will be reboot automatically. From now on, if entering the EUT Web configuration, it goes to home page "*Intelligent Gateway*" directly.

5.2.1 WAN Setting

There are three modes that you can configure WAN IP address: Static IP mode, DHCP mode and PPPoE mode. You can also select to enable or disable Firewall and IGMP.

Note that Network Address Translation function (NAT) is default enabled and is not showing on the page to prevent it from being disabled.

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This page shows that the current existing WAN interfaces in the system is Static IP mode. (Figure 5-1-1).

Figure 5-1-1. Wan Settings (Static IP mode)

The Dynamic Host Configuration Protocol (DHCP) is an Internet protocol for automating the configuration of computers that use TCP/IP. DHCP can be used to automatically assign IP addresses, to deliver TCP/IP stack configuration parameters such as the subnet mask and default router, and to provide other configuration information.

This page shows the current existing WAN interfaces in the system by DHCP mode (Figure 5-1-2).

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Figure 5-1-2. Wan Settings (DHCP mode)

The Point-to-Point Protocol over Ethernet (PPPoE) requires a user name and password that your ISP has provided to you to establish your connection. This page shows that the current existing WAN interfaces in the system is PPPoE mode (Figure 5-1-3).

Figure 5-1-3. Wan Settings (PPPoE mode)

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5.2.2 LAN Setting

It allows you giving LAN IP and Subnet Mask for LAN interface (Figure 5-2-1). You can also select to enable or disable DHCP Server and configure related settings for that mode.

Figure 5-2-1. Lan Settings

If necessary, check the “Secondary IP” to configure the secondary IP address and Subnet Mask for LAN (Figure 5-2-2). This IP address is used for management only.

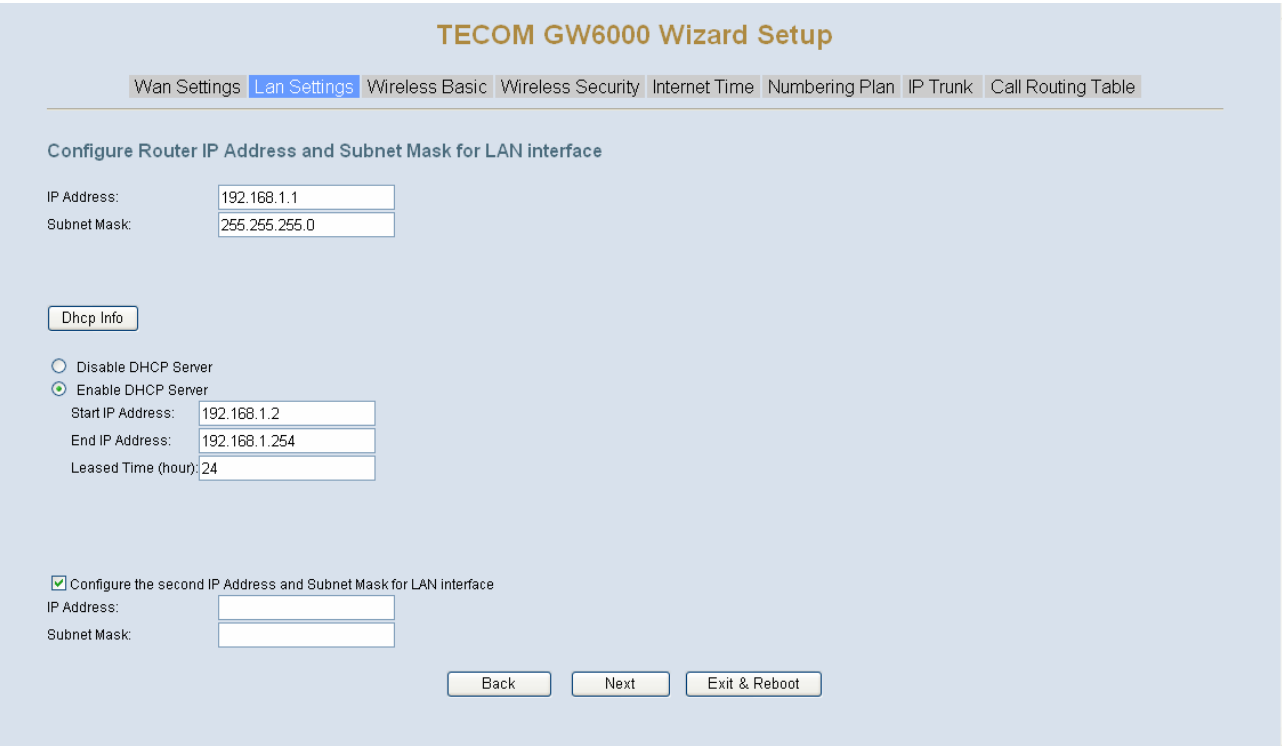

Figure 5-2-2. Lan Settings (Secondary LAN IP checked)

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5.2.3 Wireless Basic

The page (Figure 5-3) allows you to configure basic feature of the wireless LAN interface. You can enable or disable the wireless LAN interface, hide the network from active scans, set the wireless network name (also known as SSID) and restrict the channel set based on country requirement.

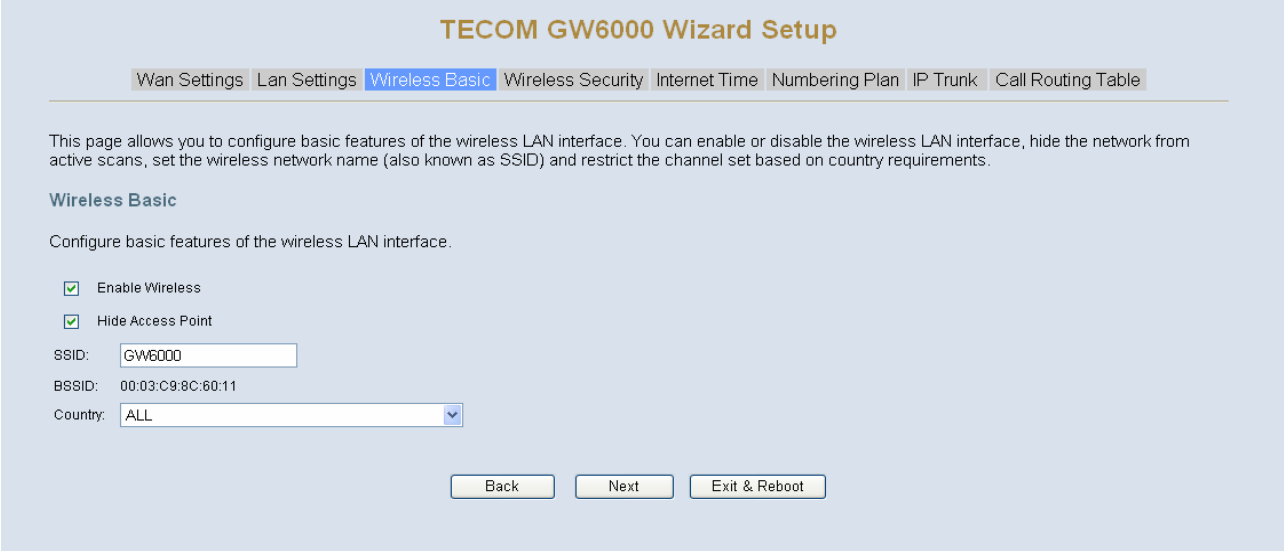

Figure 5-3. Wireless Basic

5.2.4 Wireless Security

The page (Figure 5-4) allows you to configure security features of the wireless LAN interface. You can set the network authorization method, select data encryption, specify whether a network key is required to authenticate to this wireless network and specify the encryption strength.

Figure 5-4. Wireless Security

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The item will be clearly described in 6.5.2.

5.2.5 Internet Time

The page allows you to configure the NTP time server so the EUT can have correct system time. It is useful such as reviewing the System Log.

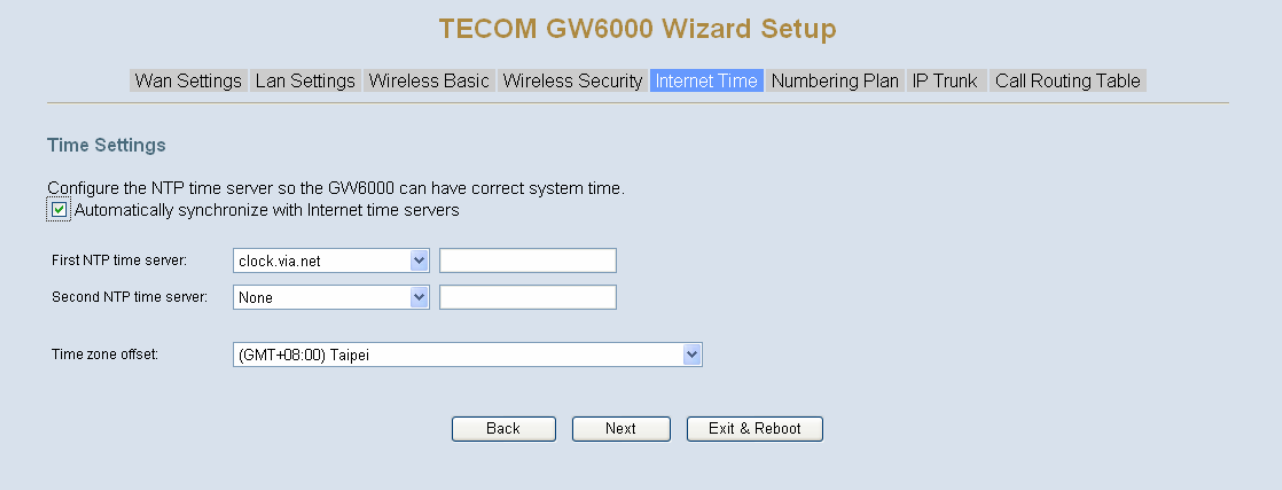

Figure 5-5. Internet Time

5.2.6 Numbering Plan

EUT has a flexible numbering plan so that phone or trunk numbers can be customized to meet a wild range of applications. It will check the numbers what you enter to prevent from conflicting among the all system resources.

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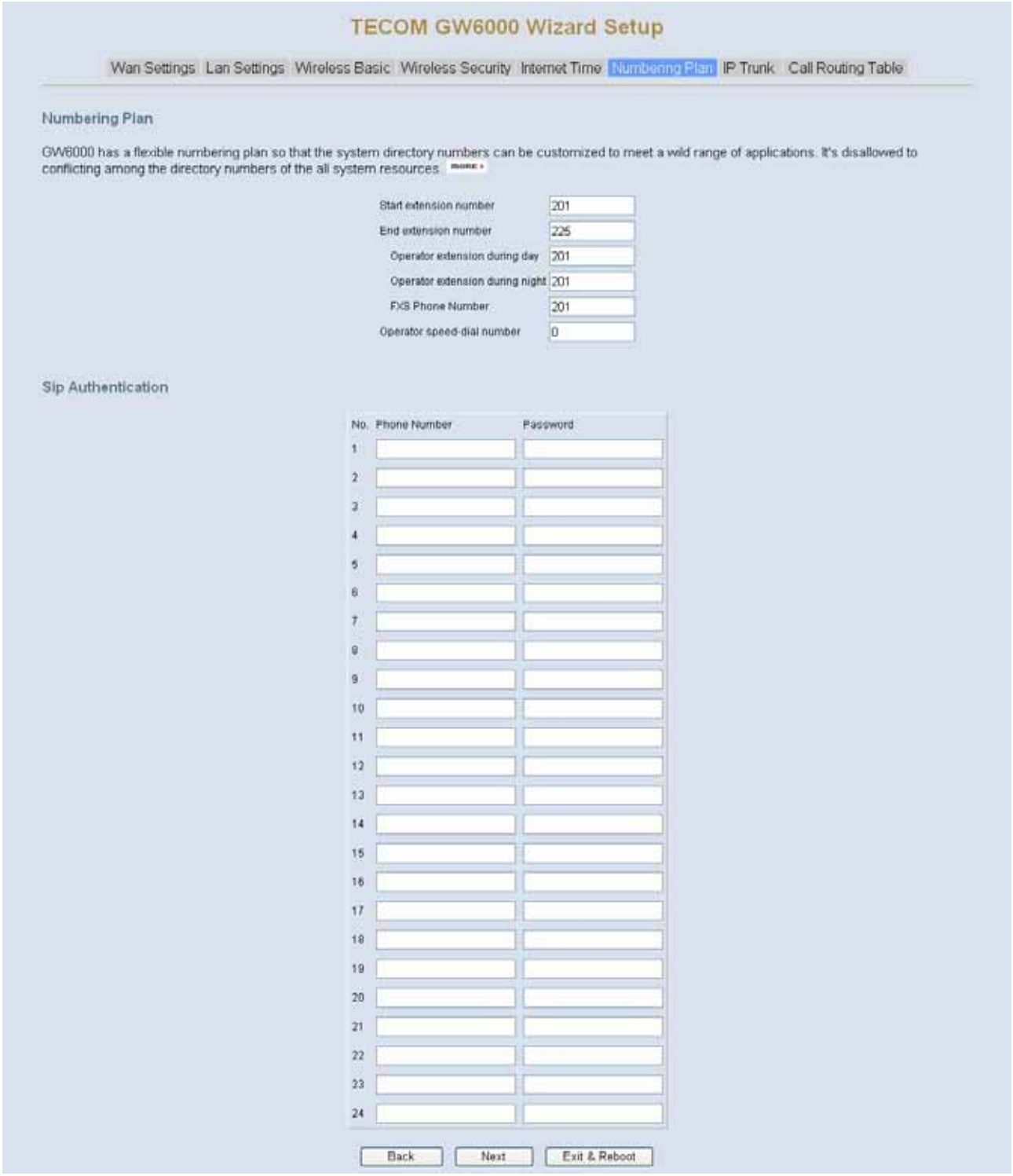

Figure 5-6. Numbering Plan

5.2.7 IP Trunk

EUT can register up to 8 SIP Uplink Servers. The extensions may make a call to the users of the Uplink Servers, or any user in the world through the Uplink Servers.

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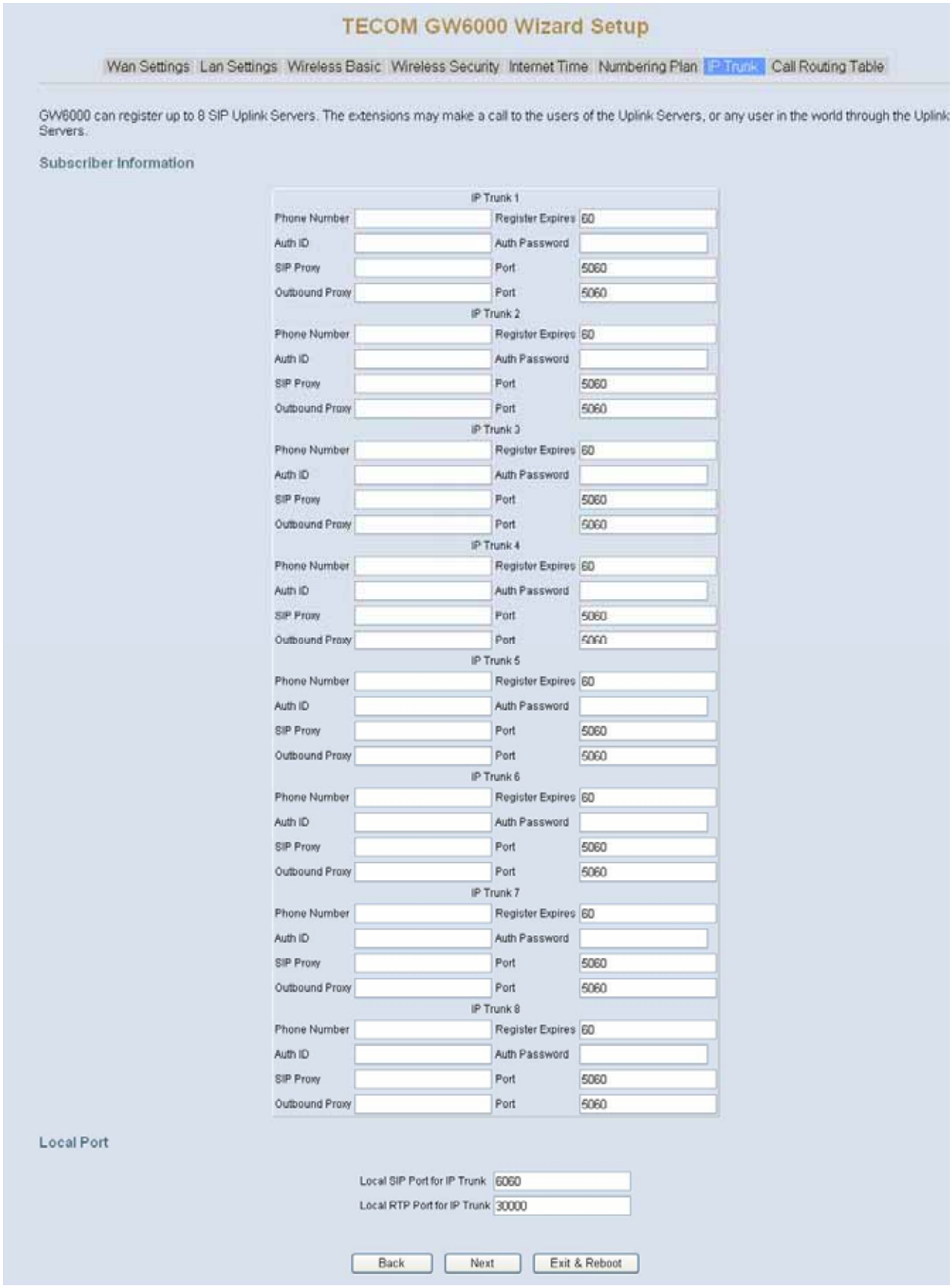

Figure 5-7. IP Trunk

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5.2.8 Call Routing Table

The Call Routing Table automatically routes outgoing calls using the most appropriate route. The appropriate route is determined based on the number dialed. If necessary, EUT can automatically modify the dialed number by deleting and/or inserting digits.

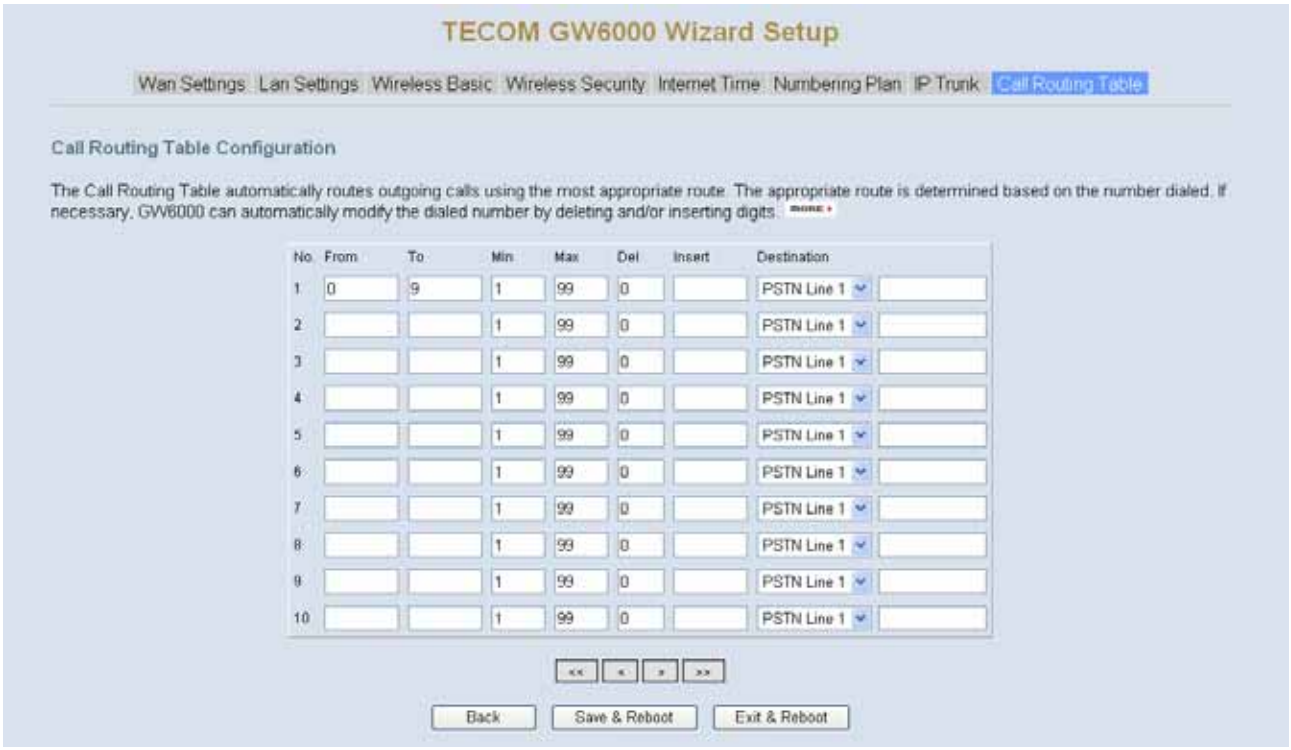

Figure 5-8. Call Routing Table

5.2.9 Wizard Setup Finished

When you click “Save & Reboot” Button at above page, the wizard setup will save your setting and the wizard setup will finished. Then the system will reboot as shown below.

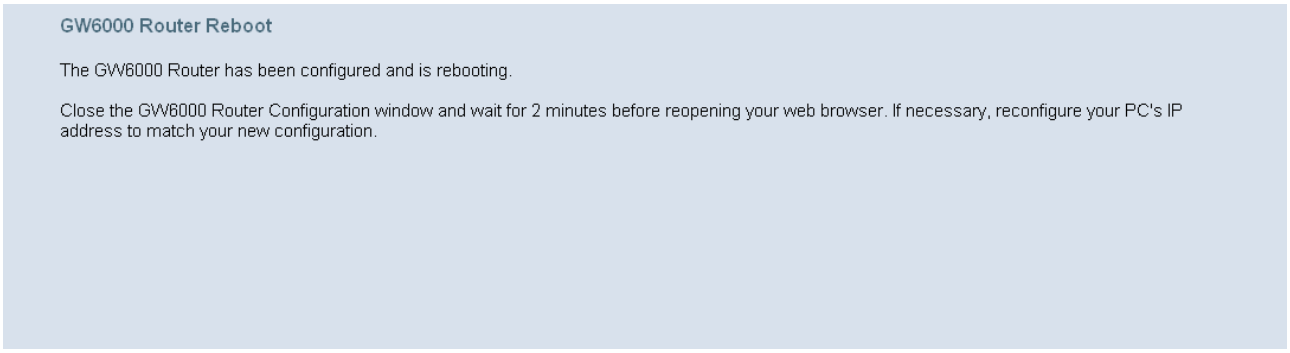

Figure 5-9. Wizard Setup finished

Congratulations! The installation of the GW6000 is complete.
For additional details, advanced configuration, or any other questions, refers to the next chapter.

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6. Configuration

6.1 Setup

- Connect the EUT and PC.
- The default LAN IP of the EUT is 192.168.1.1.
- The default WAN IP of the EUT is 192.168.10.210.
- For web login, the default user name is “admin”, the default password is “admin”.
- For telnet login, the default user name is “admin”, the default password is “admin” in LAN port. But in WAN port, the default user name is “support”, the default password is “support”.

6.2 Establish The Connection

Enter the IP address of EUT from the Web Browser.

A Dialogue Box will pop up to request the user to enter username and password. (Figure 6-1)

Figure 6-1. Authentication

Please enter the management username/password into the fields then click the OK button (default username/password is admin/admin).

When the authentication is OK, the home page “*Intelligent Gateway*” will be displayed on the browser (Figure 6-2).

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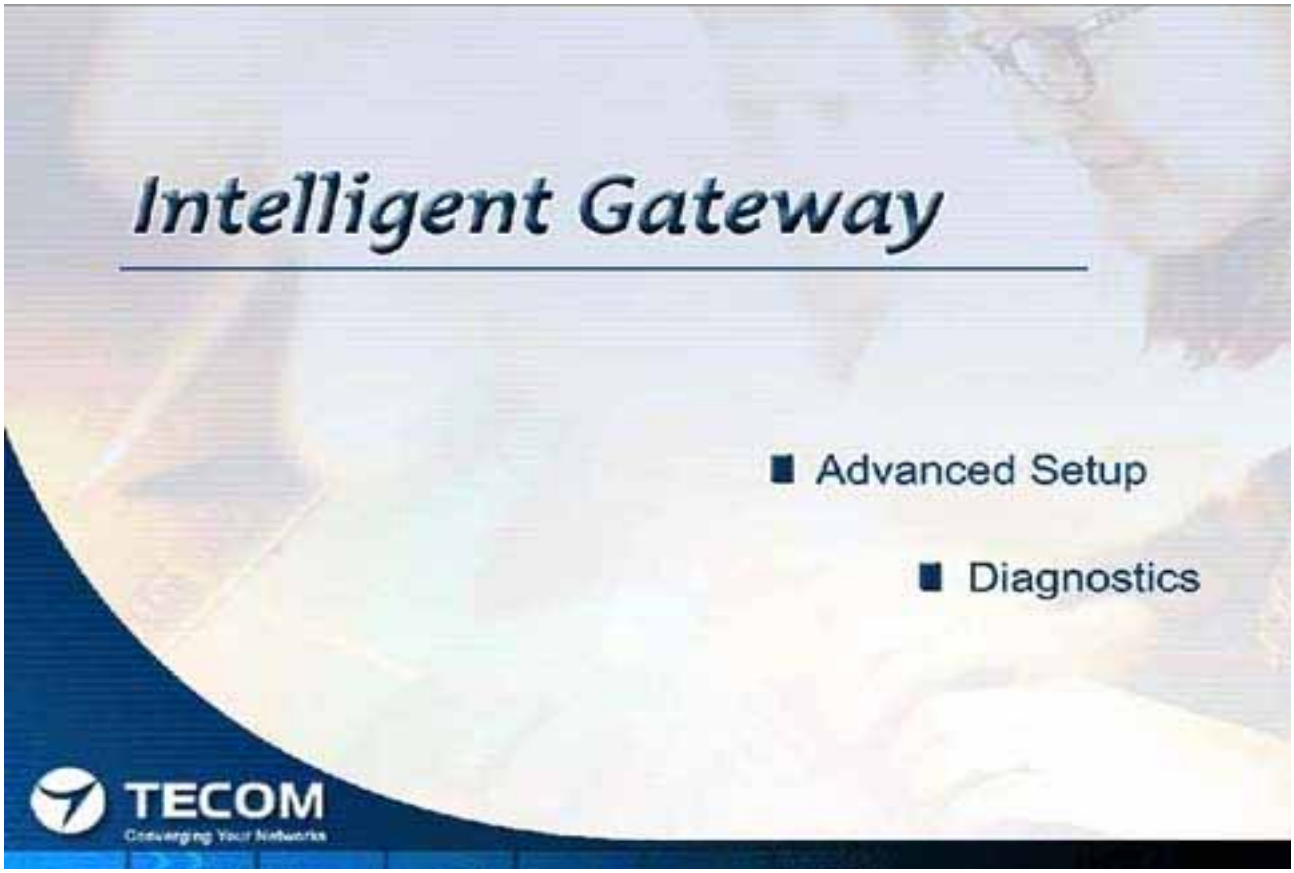

Figure 6-2. Intelligent Gateway

If choosing “Advanced Setup” in the Web Configuration of “*Intelligent Gateway*”, the home page “*Device Info – Summary*” will be displayed. In the Web Configuration, if a wireless card is in the EUT, it is divided into six categories (Figure 6-3):

- Device Info
- Advanced
- Wireless
- Voice
- Management
- Diagnostics

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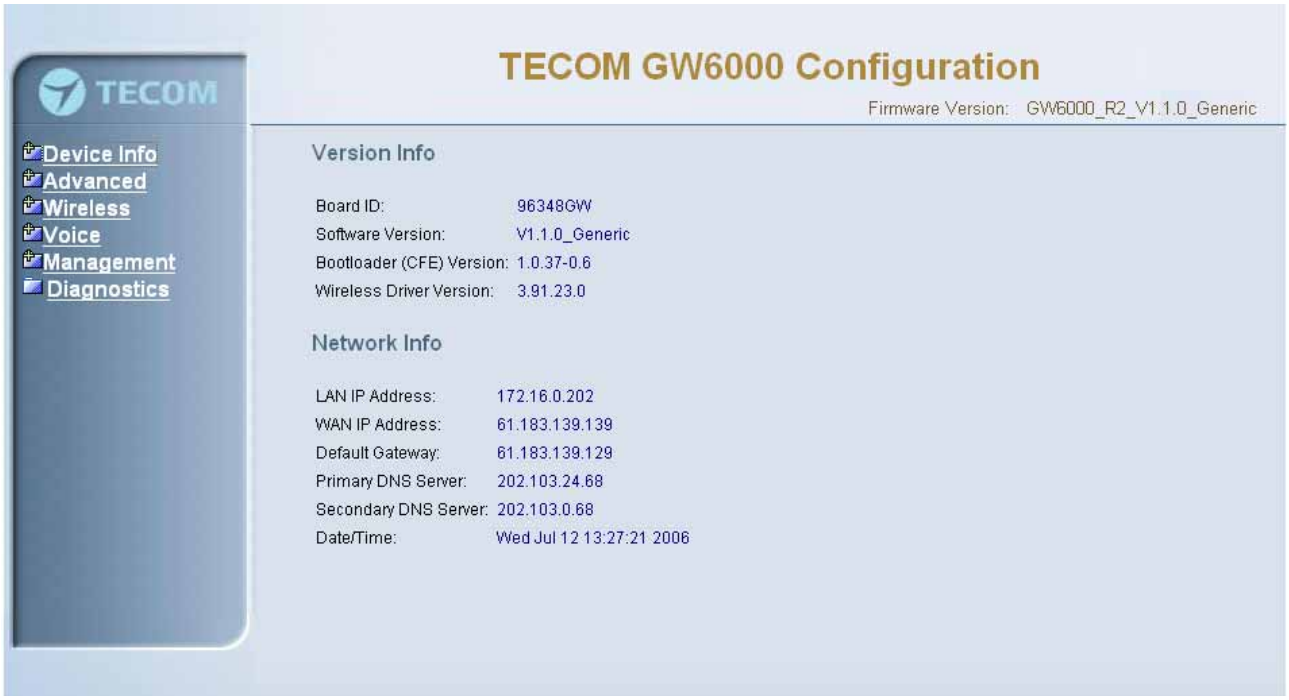

Figure 6-3. Device Info - Summery

If there is no wireless card plugged in the EUT, it is divided into five categories (Figure 6-4)

- Device Info
- Advanced
- Voice
- Management
- Diagnostics

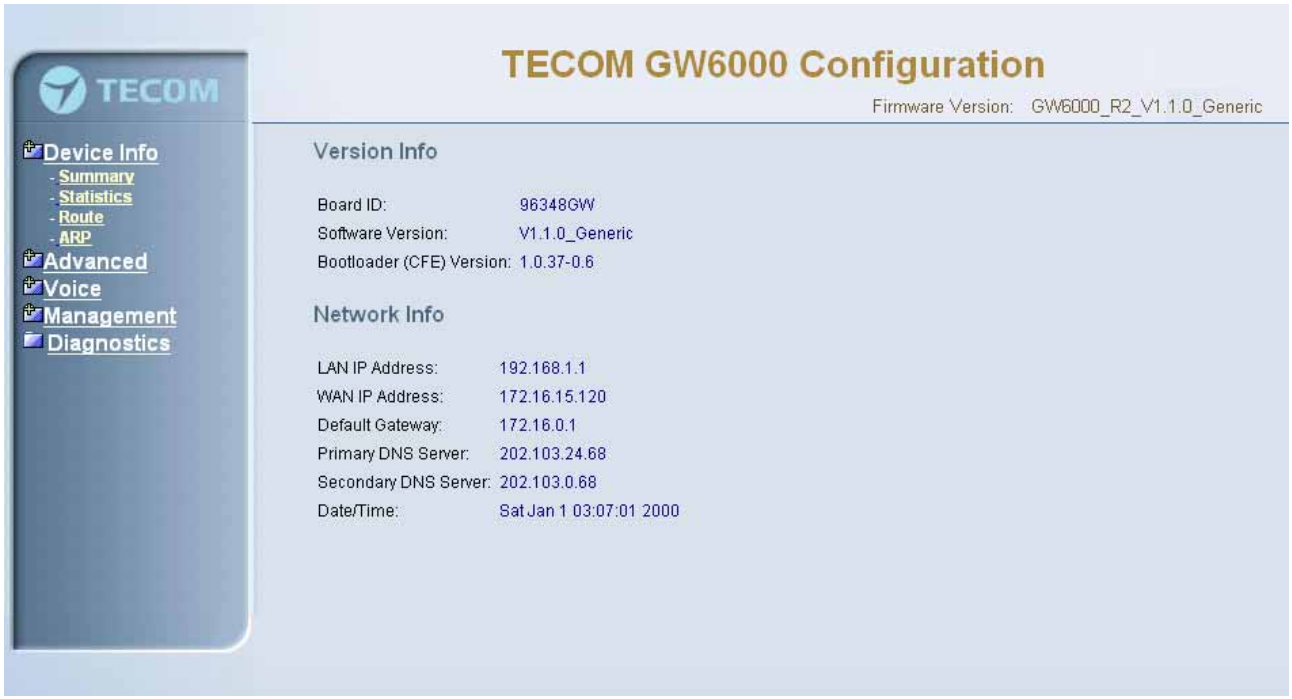

Figure 6-4. Device Info – Summary (no Wireless card)

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6.3 Device Info

This information reflects the current Status of EUT connection. It includes the following topics:

- Summary
- Statistics
- Route
- ARP

6.3.1 Summary

In the page (Figure 6-4) you can get the information reflects the current software version and connection status. It includes Version Info and Network Info.

6.3.2 Statistics

In this page (Figure 6-5) you can get the network statistics of the specific interface.

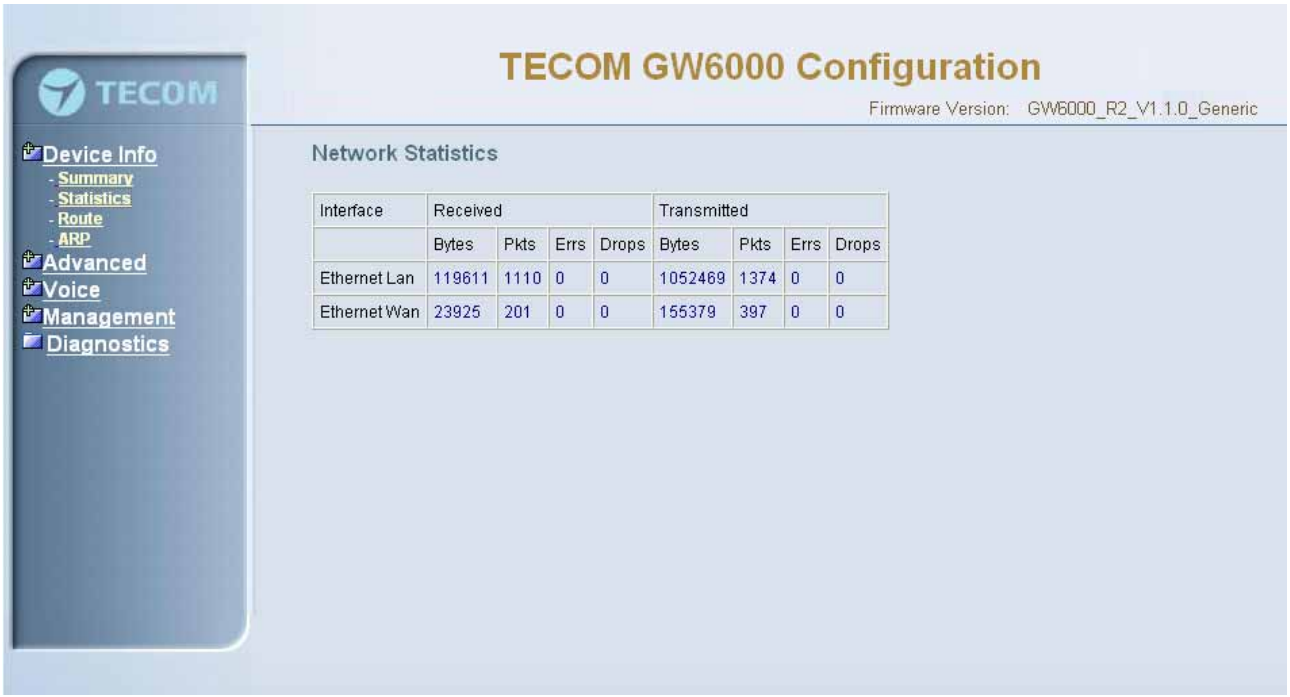

Figure 6-5. Device Info – Statistics

6.3.3 Route

In this page (Figure 6-6) you can get the IP route information of the device.

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Figure 6-6. Device Info – Route

6.3.4 ARP

This page (Figure 6-7) shows an ARP table which map IP network addresses to hardware addresses used by data link level protocol.

Figure 6-7. Device Info – ARP

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6.4 Advanced Setup

Advanced Setup allows system administrator to configure the following topics:

- LAN
- WAN
- Route
  - Static Route
  - RIP
- NAT
  - Virtual Servers
  - Port Trigger
  - DMZ
- Security
  - Incoming Filtering
  - Outgoing Filtering
  - Parental Service
- Quality of Service
  - Traffic Class
  - Bandwidth Control
- Dynamic DNS

6.4.1 LAN

It allows you to set LAN IP and Subnet Mask for LAN interface (Figure 6-8-1). You can also enable or disable DHCP Server and configure related settings for that mode.

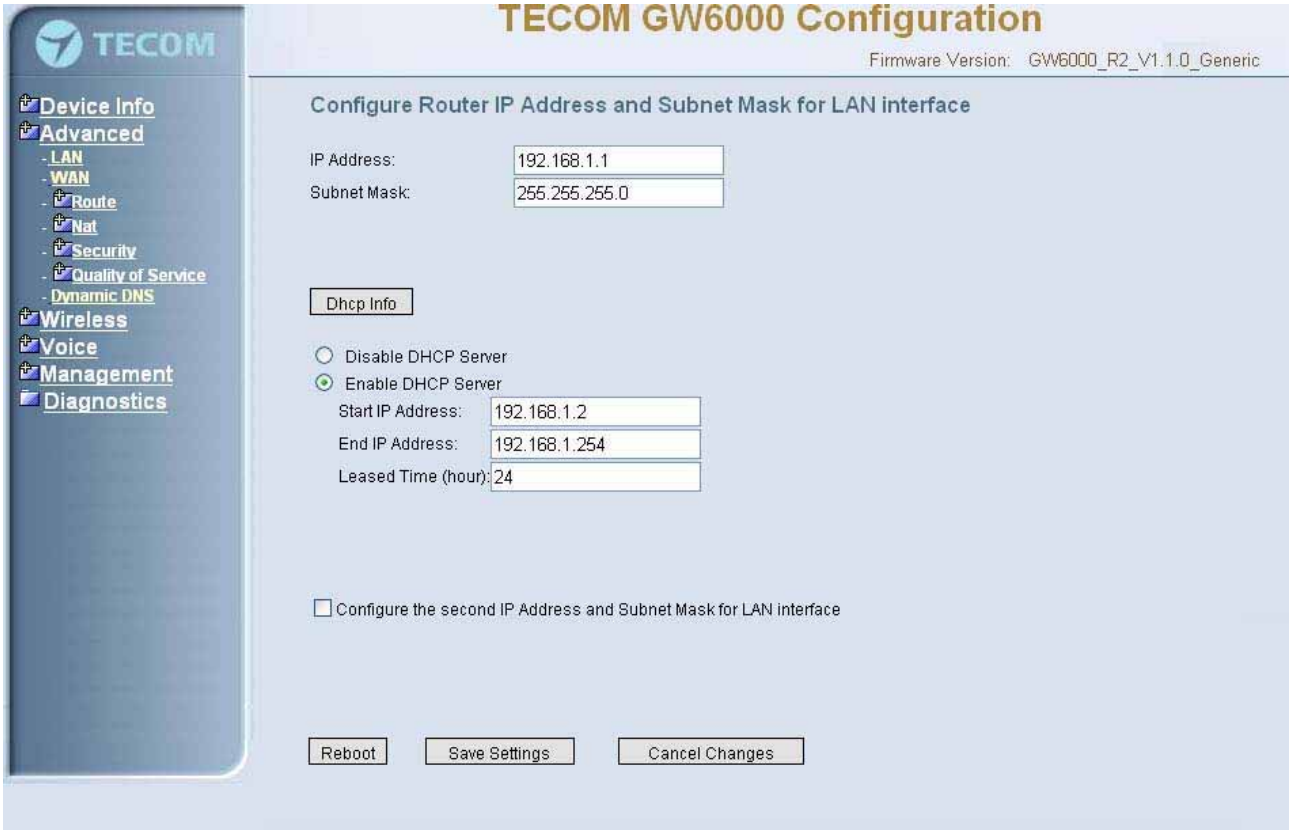

Figure 6-8-1. Advanced Setup – LAN

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If necessary, check the “Secondary IP” to configure the secondary IP address and Subnet Mask for LAN interface (Figure 6-8-2). This IP address is used for management only.

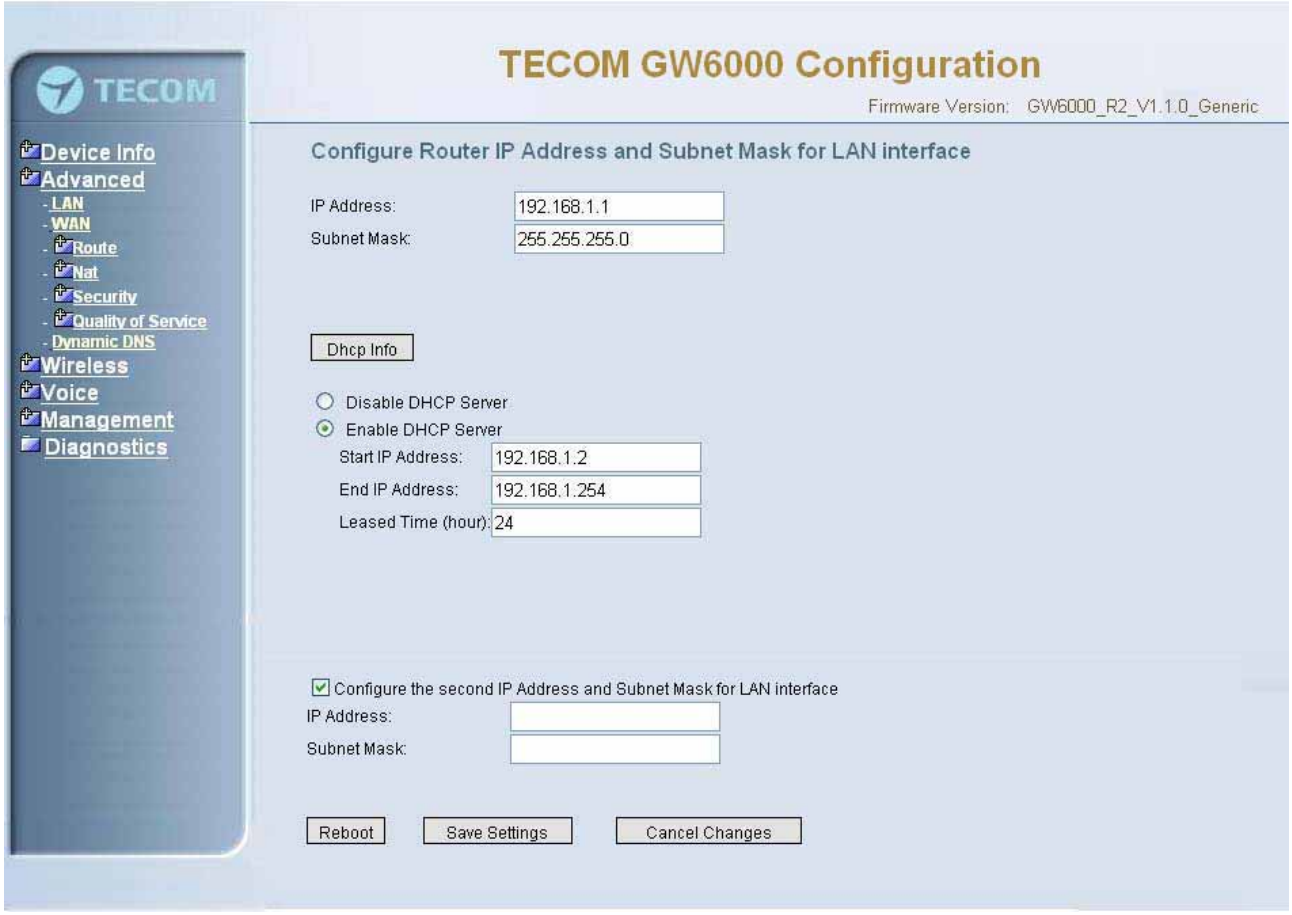

Figure 6-8-2. Advanced Setup – LAN (Secondary LAN IP checked)

6.4.2 WAN

There are three modes that you can give to WAN IP address: Static IP mode, DHCP mode and PPPoE mode. You can also enable or disable Firewall and IGMP.

When the Firewall option is selected, you can configure firewall settings in the followed Security directory. Or, the Security directory will hide and firewall settings is disabled.

Network Address Translation (NAT) allows you to share one Wide Area Network (WAN) IP address for multiple computers on your Local Area Network (LAN). In EUT, NAT is default enabled and is not showing on the page to prevent it from being disabled.

This page shows the current existing WAN interfaces in the system is Static IP mode (Figure 6-9-1).

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Figure 6-9-1 Advanced Setup – WAN (Static IP Mode)

The Dynamic Host Configuration Protocol (DHCP) is an Internet protocol for automating the configuration of computers that use TCP/IP. DHCP can be used to automatically assign IP addresses, to deliver TCP/IP stack configuration parameters such as the subnet mask and default router, and to provide other configuration information.

This page shows the current existing WAN interfaces in the system is DHCP mode (Figure 6-9-2).

Figure 6-9-2 Advanced Setup – WAN (DHCP Mode)

This page shows the current existing WAN interfaces in the system is PPPoE mode (Figure 6-9-3).

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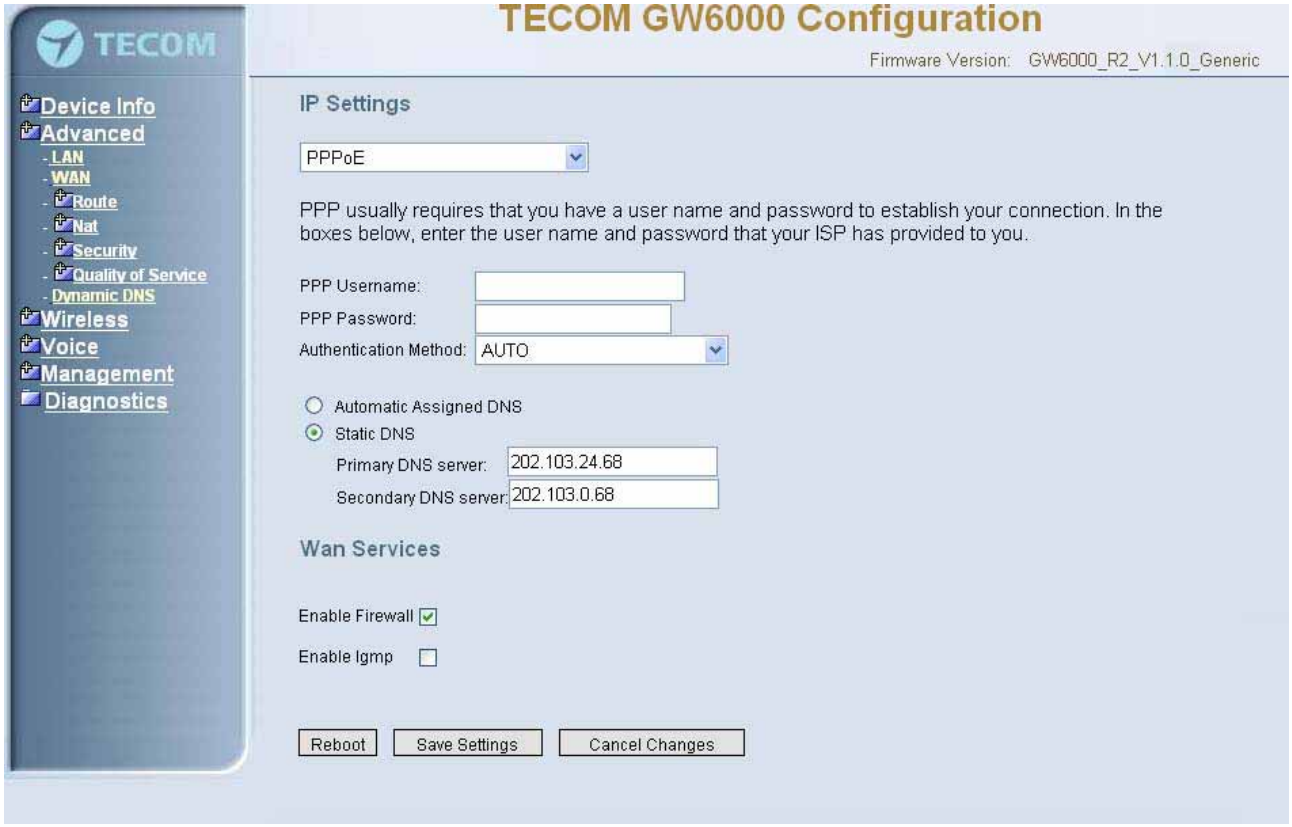

Figure 6-9-3 Advanced Setup – WAN (PPPoE Mode)

6.4.3 Route

It's separated into two parts: Static Route and RIP.

6.4.3.1 Static Route

Figure 6-10-1. Advanced Setup – Route – Static Route

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