Hot Spot

Wireless Subscriber Gateway

WSG-403

User's Manual

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Revision

User's Manual for PLANET Hot Spot Wireless Subscriber Gateway

Model: WSG-403

Rev: 1.0 (Jul. 2006)

Part No. EM-WSG403V1 (2081-B41050-000)

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1. Introduction

The PLANET Wireless Subscriber Gateway – WSG-403 is a compact intelligent gateway integrated with a four-port port-based VLAN switch. It provides Plug' Play Internet access, advanced security and network management.

The WSG-403 is designed for service providers, system integrator or hotspot venue operator without backend-RADIUS-Server to have integrated solution for rapid deployment, which can start hotspot service quickly and easily and enhance service performance.

The WSG-403 is an ideal solution for hotel lobbies, coffee bars, airport lounges, conference facilities and other sites that commonly host business travelers, and offers instant high-speed Internet connections. With its IP Plug and Play technology, it accepts any client configuration login, when client open browser the WSG-403 immediately recognizes new end-user and redirects their browser to customized Web pages. There's no need for end-user to change any of their default network (Static IP), e-mail (SMTP Server behind firewall), or browser settings (HTTP Proxy) or load any special software to access hotspot service. It's completely Plug' Play with any browser.

1.1 Package Contents

Please inspect your package. The following items should be included in the WSG-403 packages:

- One Wireless Subscriber Gateway
- Two antennas
- One AC Power Adapter for Wireless Subscriber Gateway
- One CD containing User's Manual
- Two screws for wall-mount
- One UTP Ethernet/Fast Ethernet cable (Cat.5 Twisted-pair)

If any of the above items are damaged or missing, please contact your dealer immediately.

Optional Product that can co-work with WSG-403:

WSG-ACG3 Account Generator Printer

- One AC Power Adapter for mini account generator printer
- One UTP Ethernet/Fast Ethernet cable (Cat.5 Twisted-pair)
- One Account Generator Printer User's Guide

In this guide, the information of WSG-ACG3 will also be included in some sections. This Account Generator is an optional device that can work with WSG-403. With this Account Generator it is much easier for operator to create the accounts for any guests. Without the Account Generator, all the account generation can be done through Administrator's Web management page. The demand of this Account Generator can vary on the install site.

1.2 Features

- Wireless data rates up to 54Mbps
- Supports 100 Simultaneous Users
- IP Plug and Play (iPnP)
- Comprehensive security

  64/128-bit WEP encryption

  WPA encryption

IP/URL filtering

- Intelligent Management
- Built-in AAA (Authentication/Accounting/Authorization) and Billing mechanism

Note: *The "PnP" Function only can be used with TCP/IP-based Network.*

1.3 Precautions

- Never remove or open the cover. You may suffer serious injury if you touch these parts.
- Never install the system in the wet locations.
- Use only the original fitting AC power adapter otherwise there is a danger of severe electrical shock.
- Avoid exposing the WSG-403 to direct sunlight or another heat source.
- Choose a well-ventilated area to position your WSG-403.

1.4 Outlook

Figure 1-1 WSG-403 Outlook

1.4.1 Top Panel

The top panel of the WSG-403 is shown below.

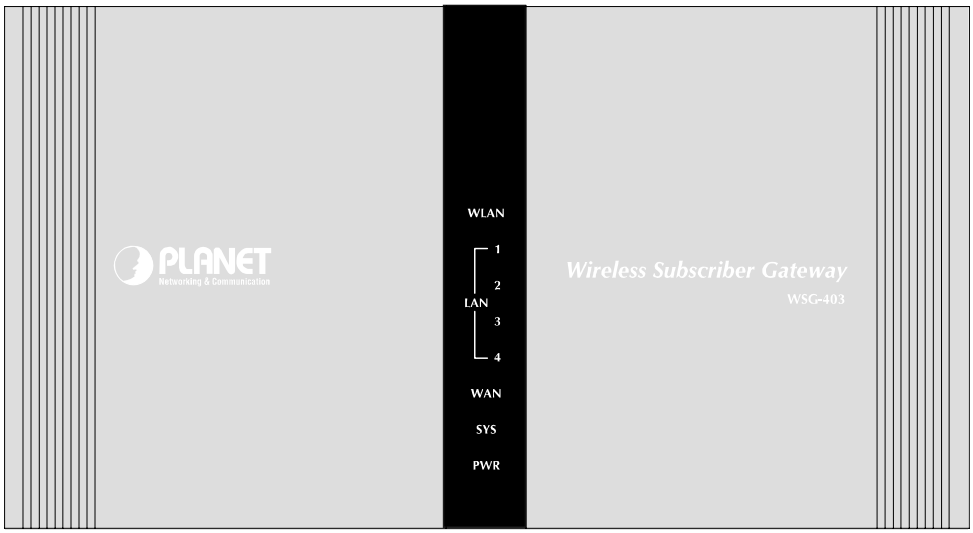


Figure 1-2 WSG-403 Top Panel

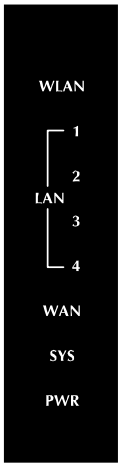


Figure 1-3 LEDs

LEDs Indication

LED	State	Description
PWR	Off	The WSG-403 is not receiving electrical power.
	Green*	The WSG-403 is receiving electrical power.
SYS	Off	The WSG-403 status is defective while PWR LED steady ON.
	Green	The WSG-403 status is complete.
	Green (Blinking)*	During firmware upgrades, this system LED will blink.
WAN	Off	WAN Port has not established any physical network connection.
	Green	The port has established a valid 10/100Mbps network connection.
	Green (Blinking)	10/100Mbps traffic is traversing WAN port.
LAN-1~	Off	The Port has not established any physical network connection.
LAN-4	Green	The port has established a valid 10/100Mbps network connection.
	Green (Blinking)	10/100Mbps traffic is traversing the port.
WLAN	Off	The Wireless is not ready.
	Green	The WSG-403 has established a valid wireless connection.
	Green (Blinking)	The Wireless connection is active.

***Note**:*

1. *Use only the bundled AC-DC adapter for the power system, other power adapter could damage the device permantly.*
2. *During the firmware upgrade process, please do not power off the device, otherwise it could damage the device permantly.*

1.4.2 Rear Panel

The rear panel of the WSG-403 is shown below.

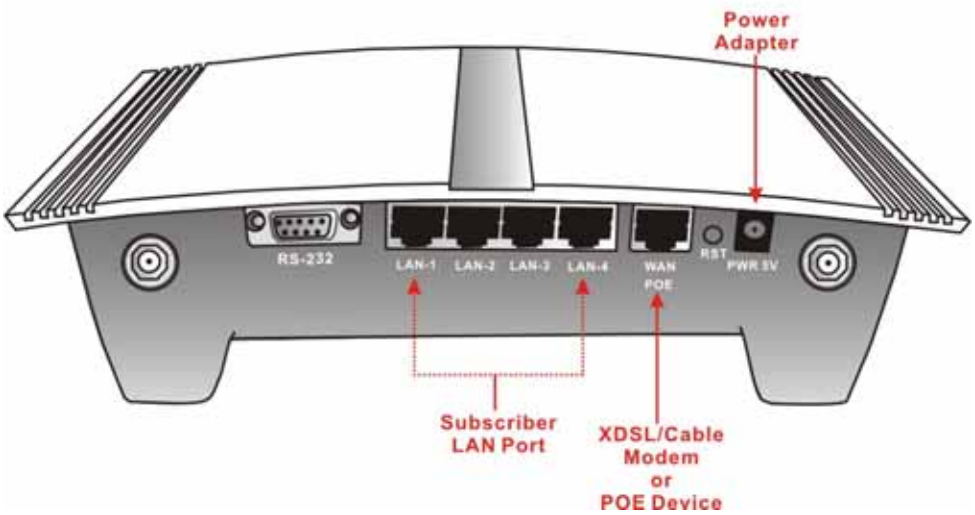


Figure 1-4 WSG-403 Rear Panel

1. RS-232: Reserve for manufacture use.

2. LAN (1-4):

The rear panel supports four auto-sensing RJ-45 ports and all ports can be auto-switched to MDI-II connections. The LAN ports used for linking hosts or other network devices. The individual port can be either connected to 100Base-TX networks or 10Base-T networks. When connecting to a 100Base-TX network, the ports operate at 100Mbps in half-duplex mode or 200Mbps in full-duplex mode. When connecting to a 10Base-T network, the ports operate at 10Mbps in half-duplex mode or 20Mbps in full-duplex mode.

3. WAN: One Ethernet port used for linking xDSL or Cable Modem. 10/100Base-TX auto-negotiation and auto MDI also supported. This WAN port also complied with IEEE802.3af Power over Ethernet that can direct connect to IEEE802.3af complied injector (Mid-span) or PSE (End-span) for WSG-403's power system.

***Note**:*

1. *Either 5C DC power or IEEE802.3af PoE is allowed for the device. Use of both power systems could damage the device permantly.*
2. *Please consult your local dealer about the IEEE802.3af Power over Ethernet equipments. Use of non 802.3af complied Power over Ethernet equipments could damage the device permantly.*

4. Reset Button:

The WSG-403 has a reset button at the rear panel of the device. Use this function to reset the system back to factory defaults. One push and release will reboot the system. Hold the button for 5 seconds and release will factory reset the WSG-403.

5. Power Jack: Used to connect the external power supply with the WSG-403.

1.5 Technical Specifications

1.5.1 Hardware Specifications

Network Specification

IEE802.3 10Base-T Ethernet

IEE802.3u 100Base-TX Fast Ethernet

IEE802.11g Wireless LAN

IEEE802.3af Power over Ethernet (mid-span)

Wi-Fi Compatible

Connectors

One RS-232 Port

Four LAN Ports (10Base-T/100Base-TX Auto MDI)

One WAN Port (10Base-T/100Base-TX Auto MDI)

Encryption

WEP (Wired Equivalent Privacy) 64/128-bit RC4

WPA (Wi-Fi Protected Access)

External Antenna Type

2dBi (Max) Dual detachable diversity antenna with reverse SMA

LED Indicators

One POWER LED

One WAN 10/100M Link/Activity LED

Four LAN 10M/100M Link/Activity LEDs

One Wireless Link/Activity LED

One System LED

Power Requirement

External Power Adapter

Input: 100-240 VAC, 50/60 Hz

Output: 5V DC, 2A

Environment Conditions

Operating Temperature: 0 to 50°C

Storage Temperature: -10 to 60°C

Operating Humidity: 10~80% non-condensing

Storage Humidity: 10% to 90% non-condensing

Certifications

FCC part 15 Class B, CE, CSA, VCCI Class B, CE / R&TTE, C-Tick

Dimension

Size: 242 (L) x 130.5 (W) x 77 (H) mm

Weight: About 420g (Net)

Mounting

Desktop, Wall mounted

1.5.2 Software Specifications

Networking

- IEEE802.3 10Base-T Ethernet
- IEEE802.3u 100Base-TX Fast Ethernet
- IEEE802.3af Power over Ethernet (mid-span)

- IEEE802.11b Wireless LAN
- IEEE802.11g Wireless LAN
- Supports 100 Simultaneous Users
- IP Plug and Play (iPnP)
- HTTP Proxy Support
- SMTP Server Redirection
- DHCP Server
- DHCP Relay
- Static IP WAN Client
- DHCP WAN Client
- PPPoE WAN Client
- PPTP WAN Client
- NAT
- NTP (Network Time Protocol) Support
- DDNS

Marketing Cooperation

- Advertisement URL link
- Walled garden
- Customizable log-on and log-off pages
- Portal Page
- WISPr Smart Client

User Accounting and Authentication

- Built-in Authentication
- Web-based Authentication
- RADIUS AAA Support (RFC 2865, 2866)
- Secondary RADIUS
- User Authentication and Accounting
- Logout Window Timer Control

Security and Firewall

- Layer 2 Isolation Security
- SSL User Login page/ Configuration Page
- SSL Administration
- VPN Pass through (IPSec/PPTP)
- Customize SSL Certificate
- Pass Through IP/MAC/URL Address
- Restricted Destination Filtering IP/URL
- VPN (IPSec/PPTP) Pass through
- PPTP VPN Client
- WEP

- WPA

Management

- Web-based Management Tool
- Firmware Upgrade via HTTP/TFTP
- Wizard setup for step-by-step Configuration
- Backup/Restore/Factory Default Setting
- Remote Authorized Management
- Real-time Session List
- LAN Device Management
- Syslog (System/Subscriber/LAN device)
- E-mail logs
- SNMP v1/v2 (MIB II, Private MIB)
- System Information Table
- Status Report (Daily/Monthly/System/Network)
- SSL certificate upload

Extra Function with optional WSG-ACG3

- Local Authentication
- Local Accounting
- Local Billing

WSG-ACG3 Account Generator (Thermal Printer)

Interface: Ethernet

Print Width: 48mm (Paper width: 58mm)

Paper Length: 50 M

2. Installation

The followings are instructions for setting up the WSG-403. Refer to the illustration and follow the simple steps below to quickly install your WSG-403.

2.1 Wall-Mounting

The WSG-403 can be wall-mounted on a wall by applying the two mounting brackets on screws.

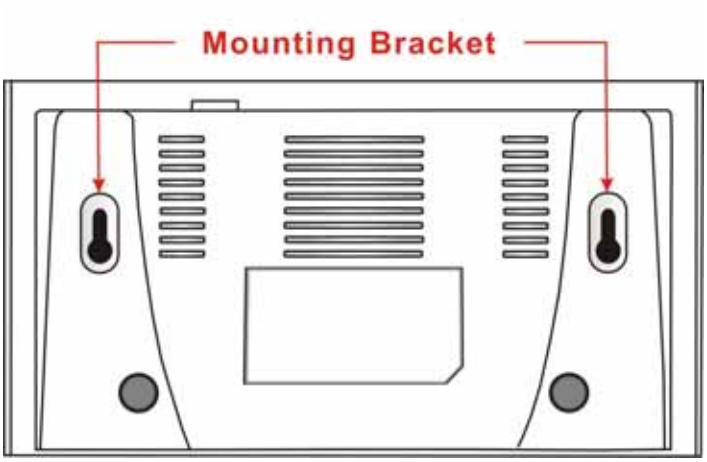


Figure 2-1 Wall-Mounting Bracket - Bottom of WSG-403

Please refer to the following instructions for mounting a WSG-403 on a wall or other surface.

1. Install two screws on a wall according to the relative positions shown below.

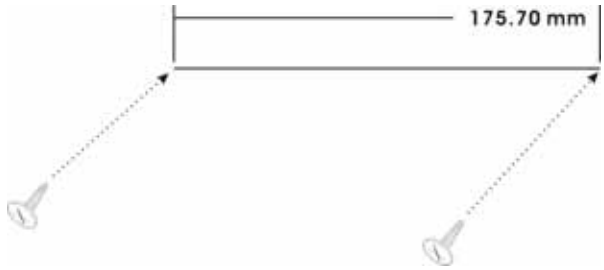


Figure 2-2

2. Hang WSG-403 on the wall by sliding the two screws in the mounting brackets.

***Note**: If the screws are not properly anchored, the strain of the cables connected to the WSG-403 rear panel connectors could pull out the WSG-403 from the wall.*

2.2 Connecting the Antennas

The WSG-403 provides two antenna connectors on the rear of the unit.

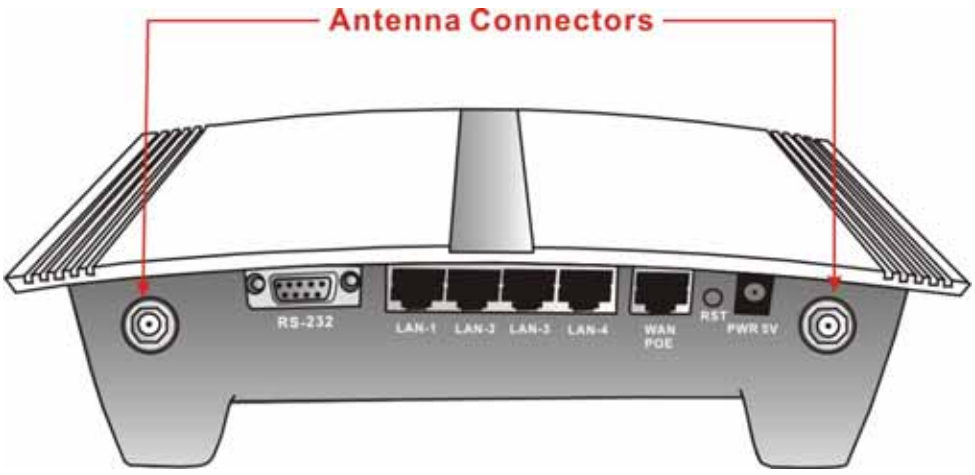


Figure 2-3 Antenna Connectors

2.3 Installation Requirements

Before installing the WSG-403, make sure your network meets the following requirements.

2.3.1 System Requirements

The WSG-403 requires one of the following types of software:

- Windows 98 Second Edition/NT/2000/XP
- Red Hat Linux 7.3 or later version
- MAC OS X 10.2.4 or later version
- Any TCP/IP-enabled systems like Mac OS and UNIX (TCP/IP protocol installed)
- Standard phone line for xDSL modem

  Or

  Coaxial cable for Cable modem
- Web Browser Software (Microsoft I.E 5.0 or later version or Netscape Navigator 5.0 or later version)
- One computer with an installed 10Mbps, 100Mbps or 10/100Mbps Ethernet card
- UTP network Cable with a RJ-45 connection (Package contents)

Note: *Prepare twisted-pair cables with RJ-45 plugs. Use Cat.5 cable for all connections. Make sure each cable not exceed 328 feet (Approximately 100 meters).*

2.3.2 ISP Requirements

Verify whether your ISP use fixed or dynamic IP. If it is a fixed IP, be sure to get the IP from your ISP. For dynamic IP, which is mostly used, the PC will get the IP automatically whenever it hooks up on the modem.

Dynamic IP

- Dynamic IP Setting

Fixed IP

- Your fixed IP address for the WSG-403
- Your subnet mask for the WSG-403
- Your default gateway IP address
- Your DNS IP address

PPPoE

- Your user name from your ISP

- Your password from your ISP

PPTP

- PPTP Server IP Address from your ISP
- PPTP Local IP address from your ISP.
- PPTP Local IP subnet mask from your ISP.
- Your user name from your ISP
- Your password from your ISP

2.3.3 Your PC Requirements

The Static IP settings for the PC

- Your PC's fixed IP address
- Your PC's subnet mask
- Your PC's default gateway IP address
- Your PC's primary DNS IP address

Note:

*1. The gateway's default IP address setting is "**192.168.0.1**".*

2. The gateway's default subnet mask setting is "255.255.255.0".

The Dynamic IP settings for the PC

We recommend that you leave your IP settings as automatically assigned. By default, the WSG-403 is a DHCP server, and it will give your PC the necessary IP settings.

Note:

Before turn on the WSG-403, make sure there is no other DHCP server in the LAN network, otherwise it will influence the whole network operation.

2.4 Getting Start

1. Place the WSG-403 and WSG-ACG3 Printer on a flat work surface.
2. Connect the Ethernet cable to the WSG-403's LAN port.
3. [optional] Connect the other end of the Ethernet cable to the WSG-ACG3Account Generator Printer's RJ45 port.
4. Ensure that your modem and computer are both switched on.
5. Use the supplied cable to connect the WSG-403's WAN port to the modem. Check that the Cable/xDSL Status LED lights.
6. Connect your computer to one of the 10/100 LAN ports on the WSG-403. Check that the LAN Port Status LED lights.
7. Configure the further parameters via a Web browser.

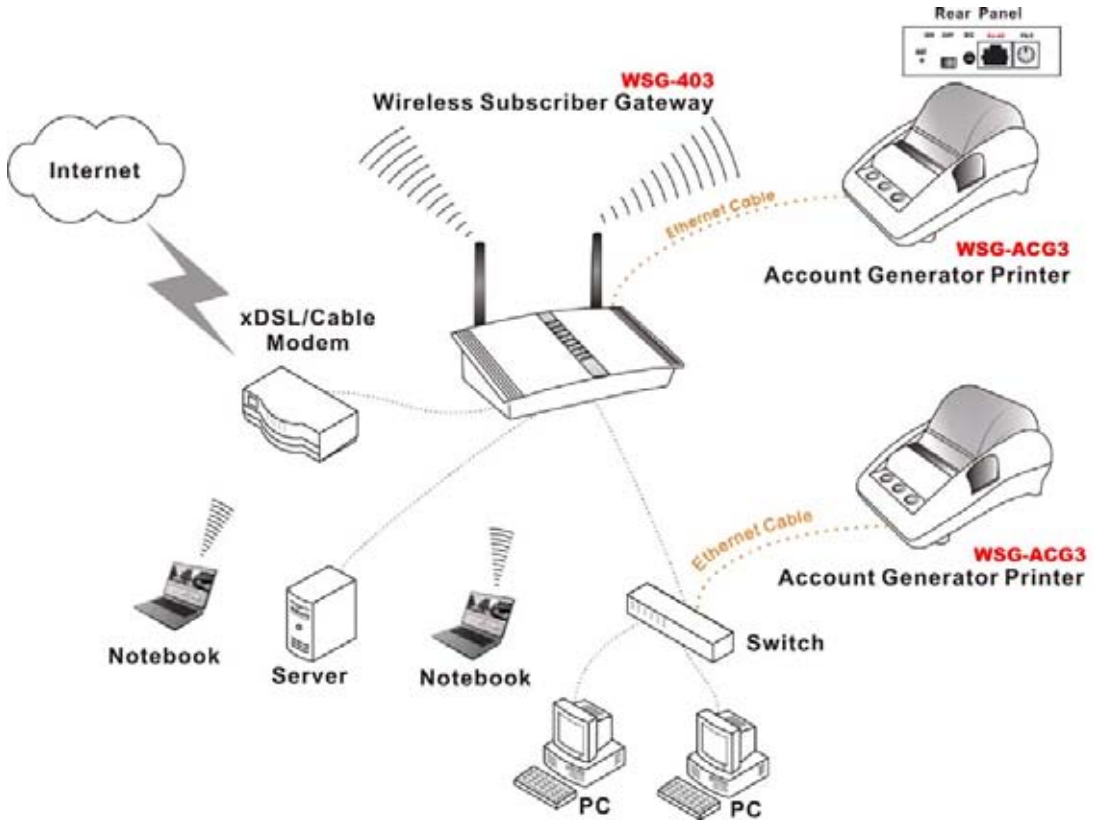


Figure 2-4 WSG-403 Connection

2.5 POE (Power over Ethernet) Application

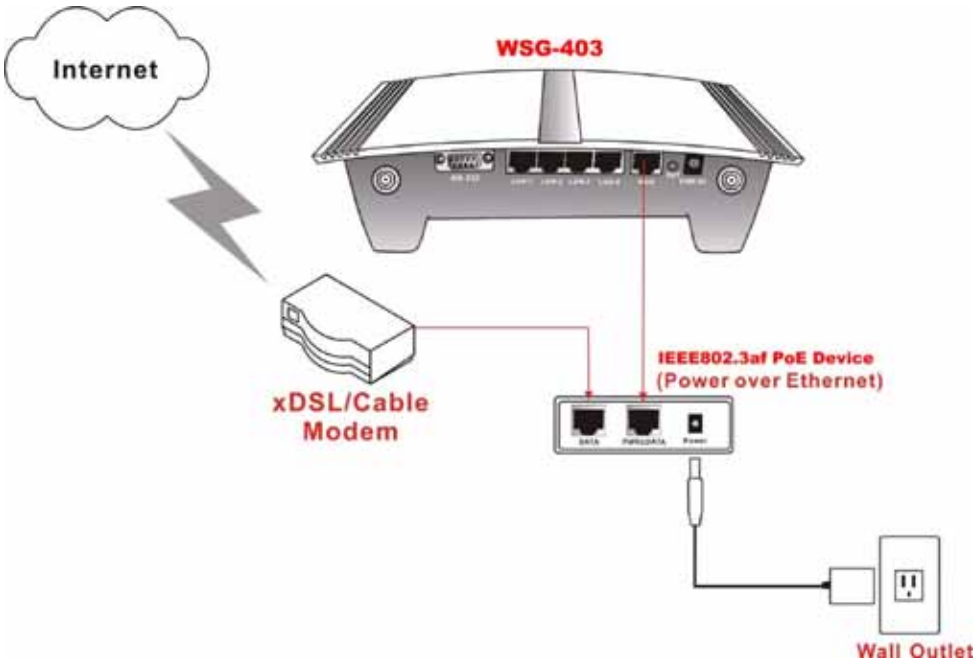


Figure 2-6 POE Connection

Note: *WSG-403 supports IEEE802.3af standard. To use the WSG-403's POE feature, follow the instructions for your specific POE device such as PLANET POE-151, POE injector.*

3. Configuring the WSG-403

3.1 Setting Wizard

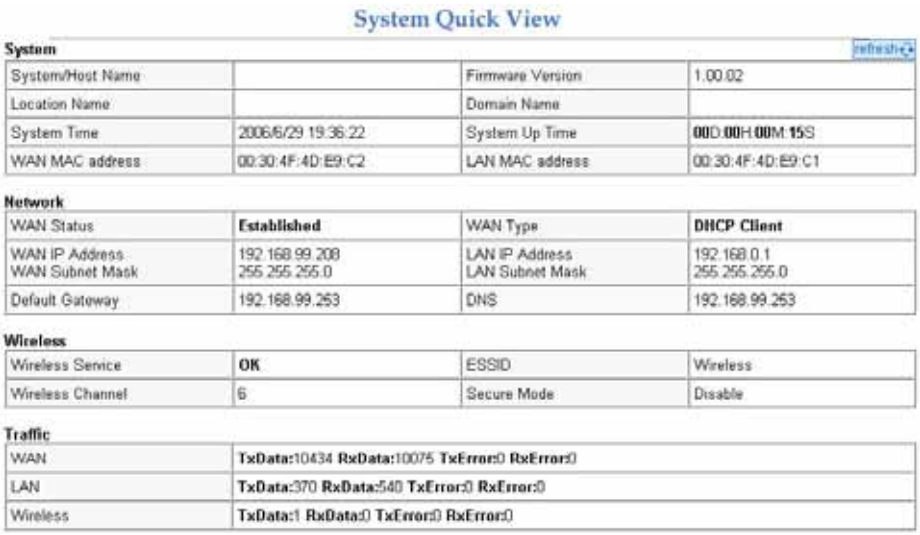
Step 1: Start your browser, and then enter the factory default IP address **191.168.0.1** in your browser's location box. Press **Enter**.

Figure 3-1 Web Browser Location Field (Factory Default)

Step 2: The WSG-403 configuration tools menu will appear. In the Username and Password field, type the factory default user name **admin** and password **password** and click **Login**. If you are first time setting the system, the wizard setup screen will appear. You will be guided, step-by-step, through a basic setup procedure.

Figure 3-2 Configuration Tools Menu

Figure 3-3 Wizard Setup Screen



System Quick View

System

System/Host Name		Firmware Version	1.00.02
Location Name		Domain Name	
System Time	2006/6/29 19:36:22	System Up Time	00D:00H:00M:15S
WAN MAC address	00:30:4F:4D:E9:C2	LAN MAC address	00:30:4F:4D:E9:C1

Network

WAN Status	Established	WAN Type	DHCP Client
WAN IP Address WAN Subnet Mask	192.168.99.208 255.255.255.0	LAN IP Address LAN Subnet Mask	192.168.0.1 255.255.255.0
Default Gateway	192.168.99.253	DNS	192.168.99.253

Wireless

Wireless Service	OK	ESSID	Wireless
Wireless Channel	6	Secure Mode	Disable

Traffic

WAN	TxData:10434 RxData:10075 TxError:0 RxError:0
LAN	TxData:370 RxData:540 TxError:0 RxError:0
Wireless	TxData:1 RxData:0 TxError:0 RxError:0

Figure 3-4 System Quick View

Click on reset button to clear the username and password data.

Note:

- ☞ *This Web agent is best viewed with IE 5.0 or Netscape 6.0 and above browsers.*
- ☞ *If you would like to change the password please see Step 10.*
- ☞ *Username and Password can consist of up to **20** alphanumeric characters and are case sensitive.*
- ☞ *If for some reason your password is lost or you cannot gain access to the WSG-403 Configuration Program, please press the reset button to load the device to manufacturer defaults.*
- ☞ *If the WSG-403 doesn't send packet in 5 minutes (default), the WSG-403 wills logout automatically.*
- ☞ *Proxy needs to set disable first when administrator accesses admin UI.*

Step 3: Internet Connection Setting

Select the appropriate Internet connection type to connect to your ISP. There are options for DHCP client, Static IP address, PPPoE and PPTP. Please consult your ISP for the collection connection type.

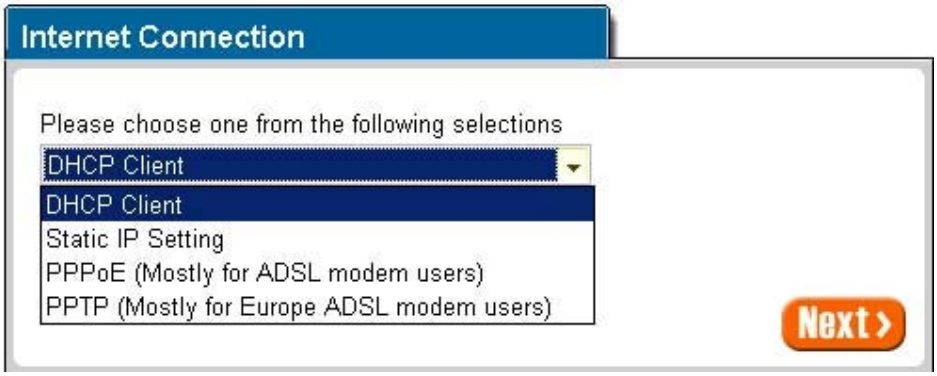


Figure 3-5 Internet Connection Setting Screen

- **DHCP Client**

The device can work as a DHCP client. This allows the device to obtain the IP address and other TCP/IP settings from your ISP. If your xDSL/Cable comes with this feature, please enable Use DHCP Client.

Figure 3-6 Internet Connection Setting Screen—DHCP Client Setting

- **Static IP Setting**

If **Static IP Setting** is selected, then this screen will appear. Enter the IP address information provided by your ISP.

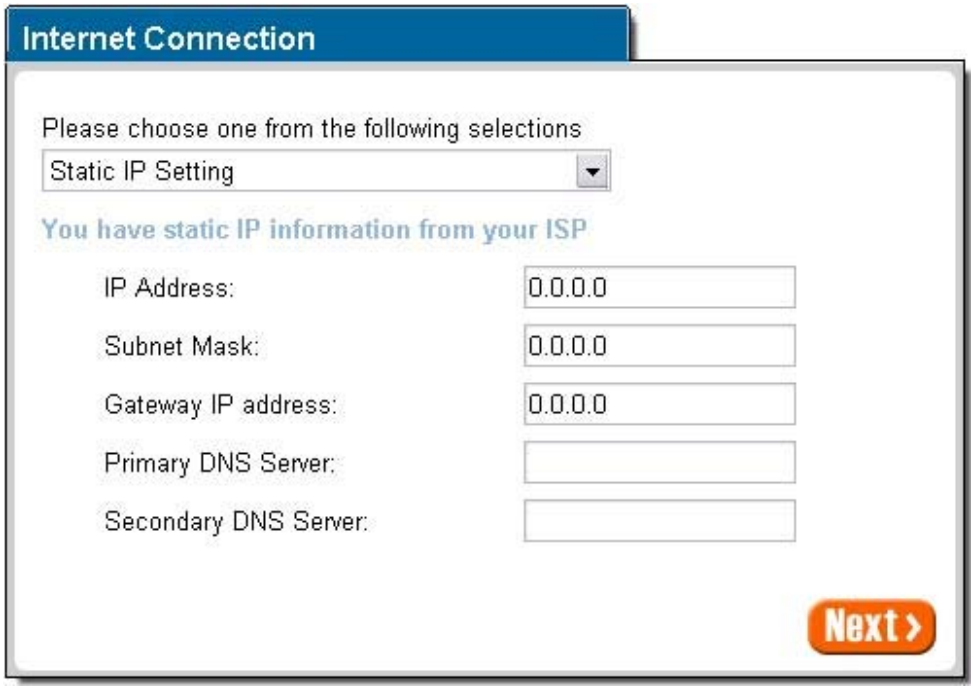


Figure 3-7 Internet Connection Setting Screen—Static IP Setting

Item	Default	Description
IP Address	0.0.0.0	Enter the IP address provided by your ISP.
Subnet Mask	0.0.0.0	Enter the subnet mask for the IP address.
Gateway IP Address	0.0.0.0	Enter the Gateway IP Address provided by your ISP.
Primary DNS Server	Empty	Enter the primary DNS server IP address for the xDSL/Cable connection (provided by your ISP).
Secondary DNS Server	Empty	Enter the secondary DNS server IP address for the xDSL/Cable connection (provided by your ISP). If the primary DNS Server IP were not available, meanwhile, Secondary DNS Server IP would start in the same time.

- **PPPoE (Point-to-Point Protocol over Ethernet)**

If “PPPoE” is selected, then this screen will appear. Enter the username, password and other major fields.

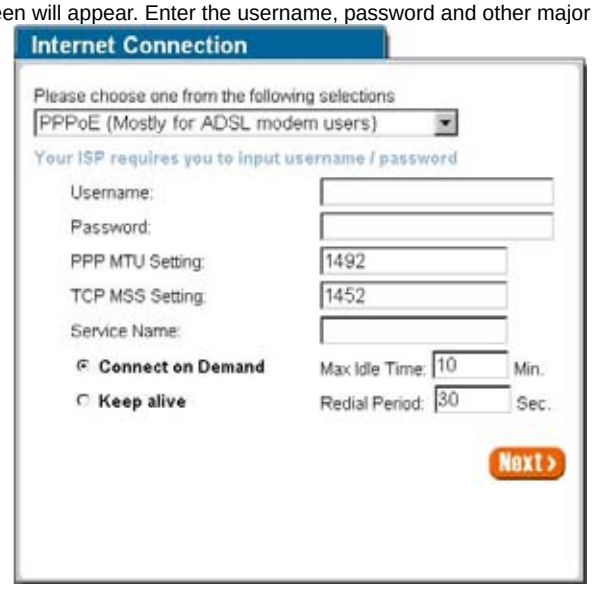


Figure 3-8 Internet Connection Setting Screen—PPPoE Setting

Item	Default	Description
Username	Empty	Enter the user name provided by your ISP. The user name can consist of up to 80 alphanumeric characters and is case sensitive.
Password	Empty	Enter the user password provided by your ISP. The password can consist of up to 80 alphanumeric characters and is case sensitive.
PPP MTU Setting	1492	MTU (Maximum Transfer Unit) specifies maximum transmission unit size.
TCP MSS Setting	1452	MSS (Maximum Segment Size) specifies maximum segment size.
Service Name	Empty	Enter the service name provided by your ISP. The service name can consist of up to 64 alphanumeric characters and is case sensitive.
Item	**Default**	**Description**
Connect on Demand and Max Idle Time		
Connect on Demand	Enable	You can configure your WSG-403 to cut your connection with your ISP after a specified period of time (Max Idle Time). If you have been disconnected due to inactivity, Connect on Demand enables your WSG-403 to automatically re-establish your connection as soon as you attempt to access the Internet again. If you wish to activate Connect on Demand, click the radio button. If you want your Internet connection to remain, click the radio button of keep alive. The Max Idle Time maximum value is 65535 minutes.
Max Idle Time	10 Minutes	
Keep alive and Redial Period		
Keep alive	Disable	This option keeps your PPPoE enabled Internet access connected indefinitely, even when it sits idle. The Redial Period maximum value is 65535 seconds.
Redial Period	30 Seconds	

- **PPTP Client (Point-to-Point Tunneling Protocol)**

If “PPTP” is selected, then this screen will appear. Fill out all the information provided by your ISP.

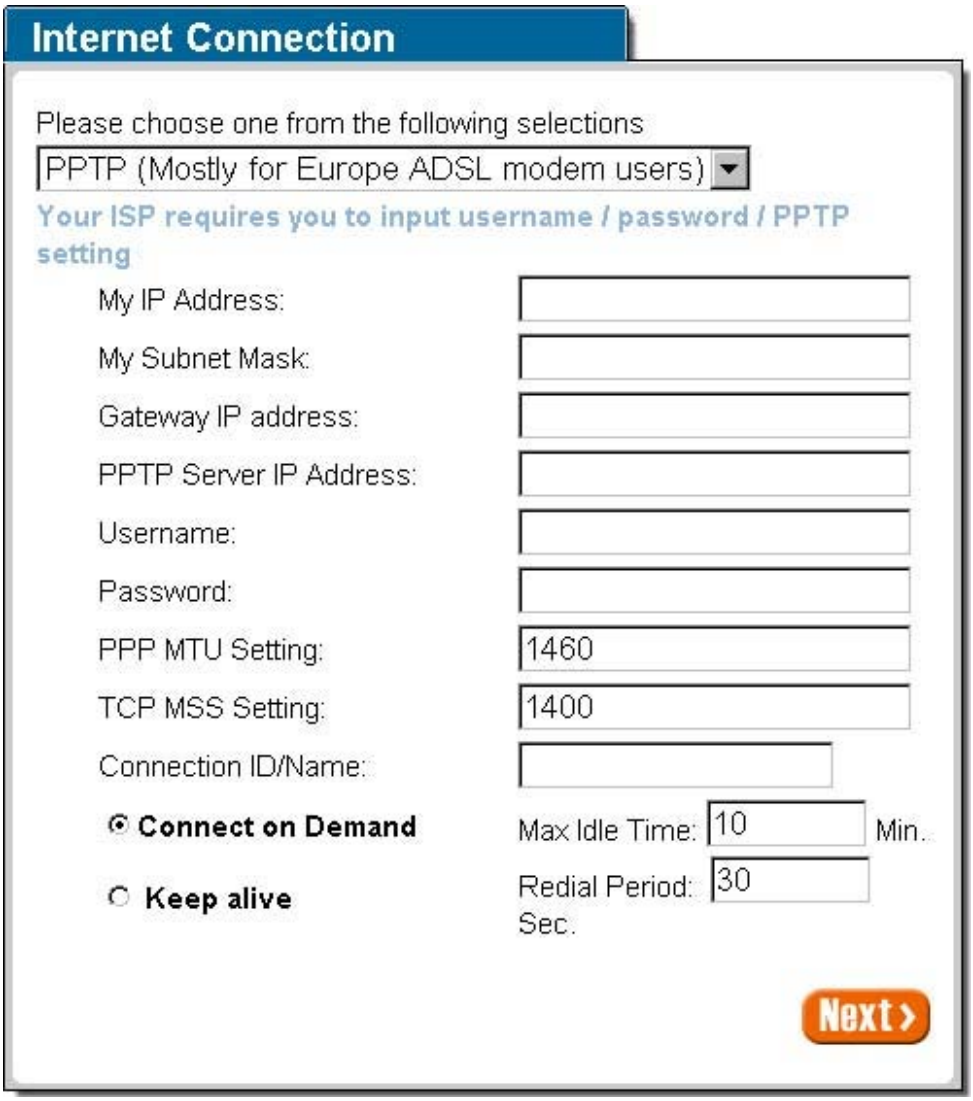


Figure 3-9 Internet Connection Setting Screen—PPTP Client Setting

Item	Default	Description
My IP Address	Empty	Enter the PPTP local IP address provided by your ISP.
My Subnet Mask	Empty	Enter the PPTP local Subnet Mask IP address for the IP address (My IP Address).
Gateway IP Address	Empty	Enter the PPTP server Gateway IP address provided by your ISP.
PPTP Server IP Address	Empty	Enter the PPTP server IP address provided by your ISP.
Username	Empty	Enter the user name provided by your ISP. The user name can consist of up to 80 alphanumeric characters and is case sensitive.
Password	Empty	Enter the user password provided by your ISP. The password can consist of up to 80 alphanumeric characters and is case sensitive.
PPP MTU Setting	1460	MTU (Maximum Transfer Unit) specifies maximum transmission unit size.
TCP MSS Setting	1400	MSS (Maximum Segment Size) specifies maximum segment size.

Item	Default	Description
Connection ID/Name	Empty	Enter the connection ID or connection name. The connection ID/Name can consist of up to 81 alphanumeric characters and is case sensitive.
Connect on Demand and Max Idle Time		
Connect on Demand	Enable	You can configure your WSG-403 to cut your connection with your ISP after a specified period of time (Max Idle Time). If you have been disconnected due to inactivity, Connect on Demand enables your WSG-403 to automatically re-establish your connection as soon as you attempt to access the Internet again. If you wish to activate Connect on Demand, click the radio button. If you want your Internet connection to remain, click the radio button of keep alive. The Max Idle Time maximum value is 65535 minutes.
Max Idle Time	10 Minutes	
Keep alive and Redial Period		
Keep alive	Disable	This option keeps your PPTP enabled Internet access connected indefinitely, even when it sits idle. The Redial Period maximum value is 65535 seconds.
Redial Period	30 Seconds	

Step 4: Wireless Setting

This page allows you to define ESSID, Channel ID for wireless connection.

Figure 3-10 Wireless Setting Screen

Item	Default	Description
ESSID	Wireless	The ESSID is the unique name that is shared among all points in a wireless network. It is case sensitive and must not exceed 32 characters.
Channel	6	Enter the channel ID for wireless connection.

Step 5: E-mail Server Setting

WSG-403 allows an extra Email server parameter to forward the subscriber's E-mail.

Figure 3-11 E-mail Service Setting Screen

Item	Default	Description
Email Server Redirect	No	Disables or enables email server redirect function. To prevent some subscriber's original Email server may protect by firewall or NAT network. WSG-403 provides an extra Email server parameter to forward the subscriber's Email. The WSG-403 not only forwards the subscribers' E-mail via other E-mail server but also changes the SMTP header. The recipient of your E-mail sees the message as if you sent it from your local Internet Service Provide, not form the hotel or other place.
Email Server's IP address or Domain name	Empty	Before setting this field, please make sure the E-mail sever relay function is opened. Enter the email server IP address or domain name. The field must not exceed 50 characters.
SMTP Port	25	Enter the SMTP port. The SMTP port allowed range is 25 or 2500 to 2599.

Step 6: Authentication Service Setting

Figure 3-12 Authentication Service Setting Screen

Item	Default	Description
Built-in Authentication/ No Authentication	No No Authentication)	**Yes—** WSG-403 provides Built-in Authentication for service provider to build up an Internet service without any extra authentication software. If **Yes** is selected, service provider can generate the

		subscriber account inside WSG-403, and the system will authenticate the subscriber login according to the generated account. **No—** Subscriber can direct access the Internet without enter username and password.

Step 7: Billing Profile Setting

The function is used to setup a billing profile. A billing profile is a description of how you want to charge your customer.

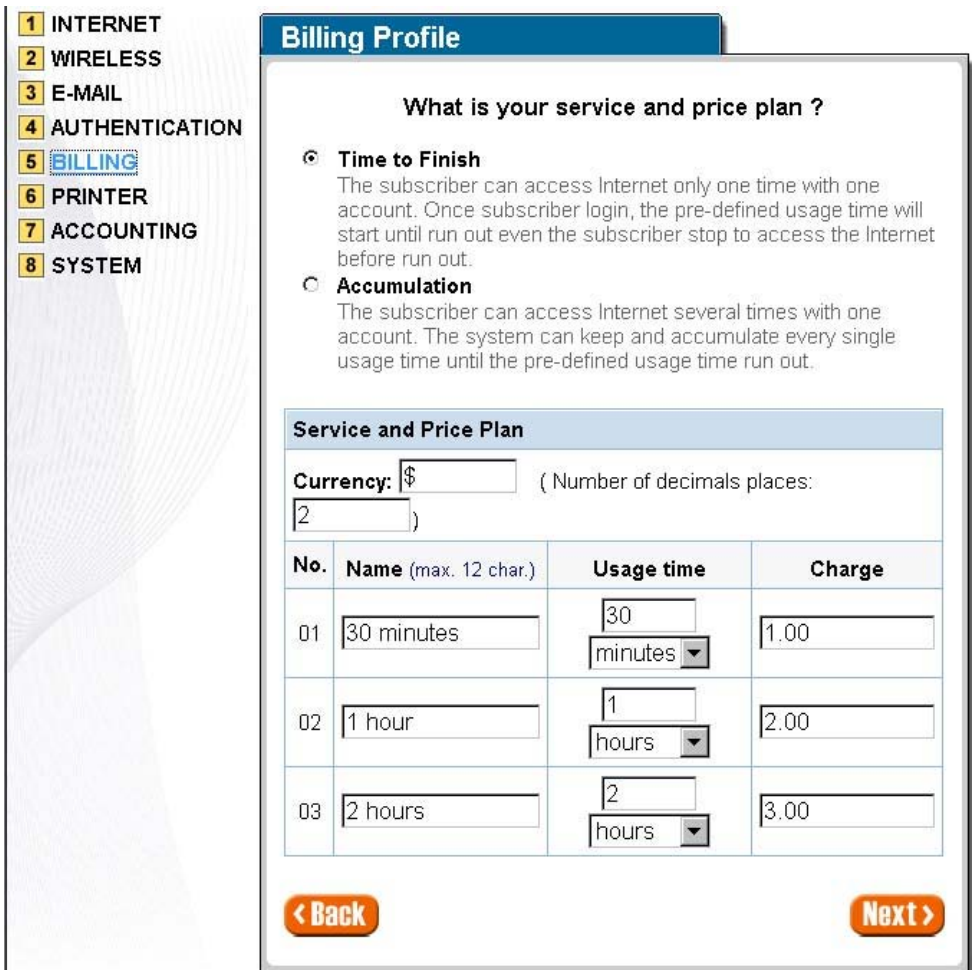


Figure 3-13 Billing Profile Setting Screen

Item	Default	Description
Service	Time to Finish	Options: **Time to Finish** or **Accumulation**. **Time to Finish—** The subscriber can access Internet only one time with one account. Once subscriber login, the pre-defined usage time will start until run out even the subscriber stop to access the Internet before run out. **Accumulation—** The subscriber can access Internet many times with one account. The system can keep and accumulate every single usage time until the pre-defined usage time run out.
Item	Default	Description
Currency	$	Enter the appropriate currency unit or currency symbol.
Number of decimals places	2	Enter the billing decimal value. The field maximum value is 3.

No	01~03	The index number of billing profile. In Wizard setup, we provide only 3 billing profile.
Name	30 minutes/ 1 hour/ 2 hours	It is the name of billing profile. The maximum allowed characters length is 12.
Usage Time	30 minutes/ 1 hour/ 2 hours	The duration of the billing period. When this period expires, user account will be discontinued.
Charge	1.00/2.00/3.00	Enter the amount of Internet service. The amount maximum value is 999999.

Step 8: Account Generator Printer Setting

There are two different choices, one is exclusive printer (Account Generator Printer – the WSG-ACG3), and the other is non-exclusive printer. Exclusive printer is a portable thermal printer that is integrated with WSG-403 to press one button to generate accounts and receipt immediately without PC operating. Non-exclusive printer can use the PC Web-based browser to print out user account.

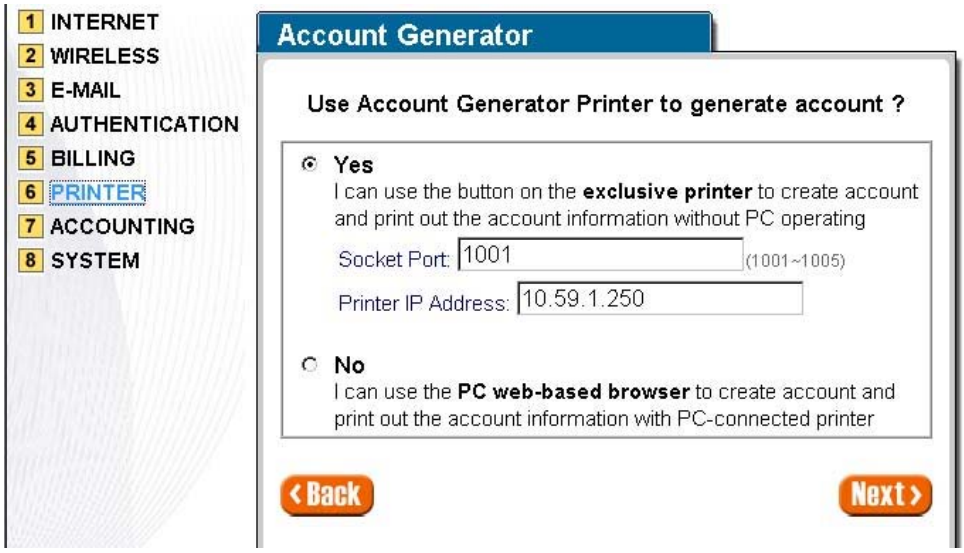


Figure 3-14 Printer Setting Screen

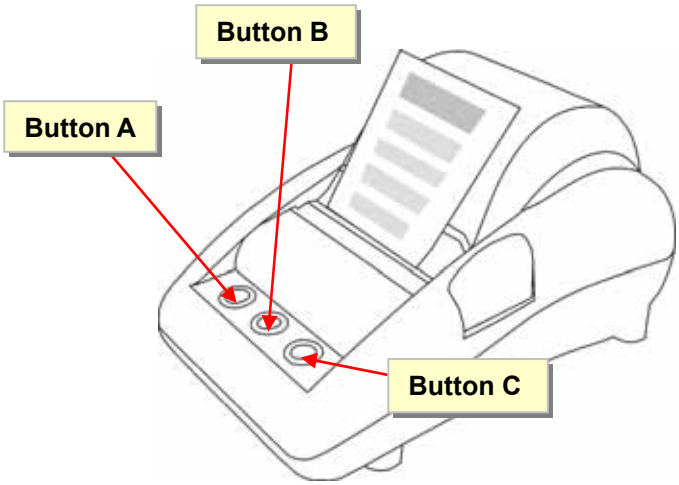


Figure 3-15 Account Generator / Thermal Printer

Step 9: Accounting Setting

- **Three-buttons Printer Setting**

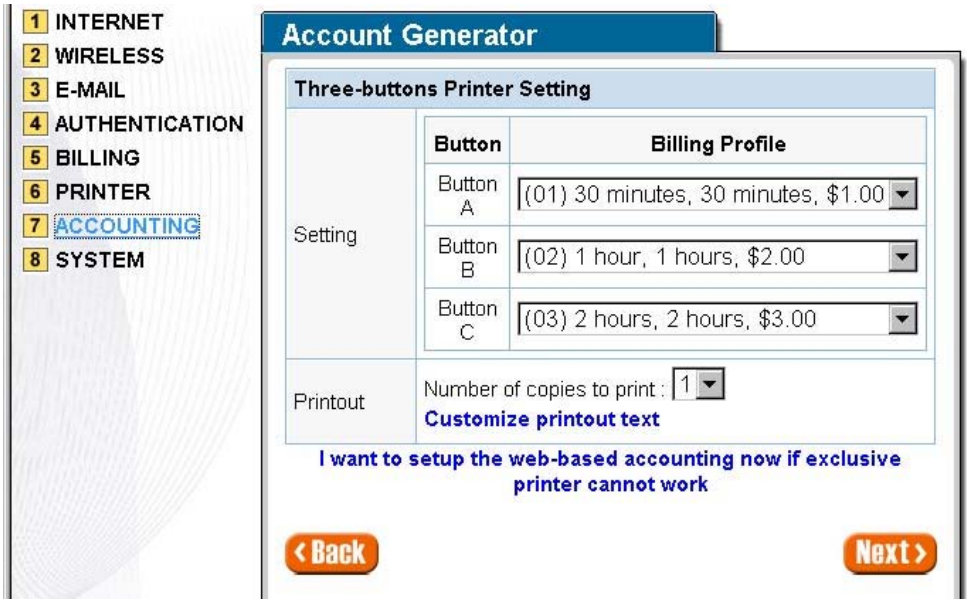


Figure 3-16 Accounting Setting Screen (Three Buttons Printer)

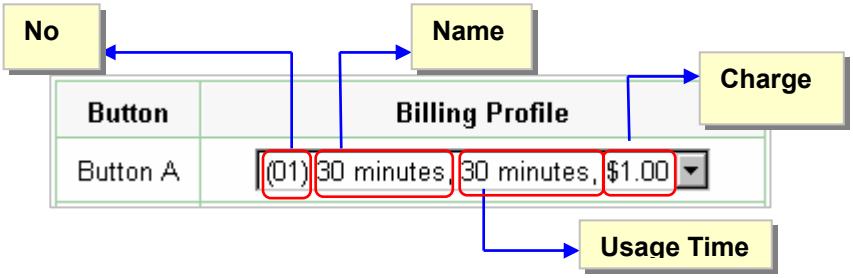


Figure 3-17 Billing Profile Setting Screen

Item	Default	Description
Button A~ C	01	Define each button's billing profile. Select one billing profile by clicking in the list box.
Printout		
Number of copies to print	1	The system allows you to print all your bills. This value is number of copies.
Customize printout text	This function allows you to produce custom bill based on your requirements.	
I want to setup the web-based accounting now if exclusive printer cannot work		
Click "I want to setup the web-based accounting now if exclusive printer cannot work" to open the "Web-based Account Generator Setting" screen to start the web-based accounting function.		

- **Web-based Account Generator Setting**

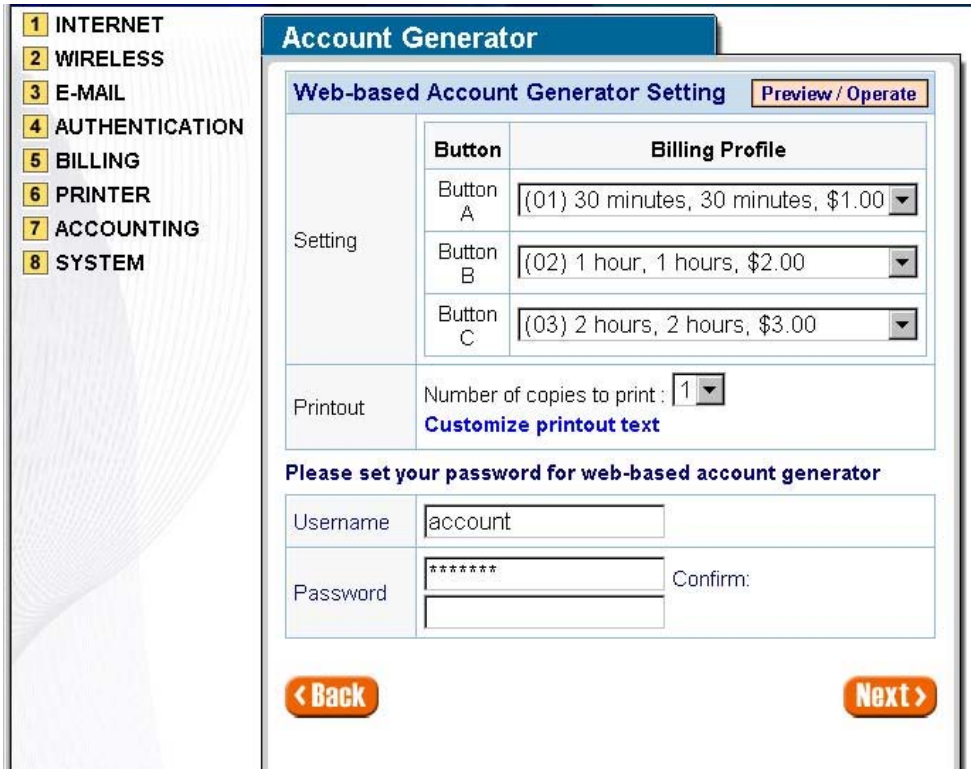


Figure 3-18 Web-based Account Generator Setting Screen

Item	Default	Description
Billing Profile (Button A~C)	Define each button's billing profile. Select one billing profile by clicking in the list box.	
Printout		
Number of copies to print	1	The system allows you to print all your bills. Select one number of copies by clicking in the list box.
Customize printout text	-	This function allows you to produce custom bill based on your requirements.
Web-based Account		
Username	account	Enter the user name for web-based account generator. The user name can consist of up to 80 alphanumeric characters and is case sensitive.
Password	account	Enter the password for web-based account generator. The password can consist of up to 80 alphanumeric characters and is case sensitive.
Confirm	Empty	Enter the password for confirmation.

Preview / Operate *Click on button to preview and operate account generator panel.*

While click on the customization hyper link, the following screen shall show up for customized printing for account information list.

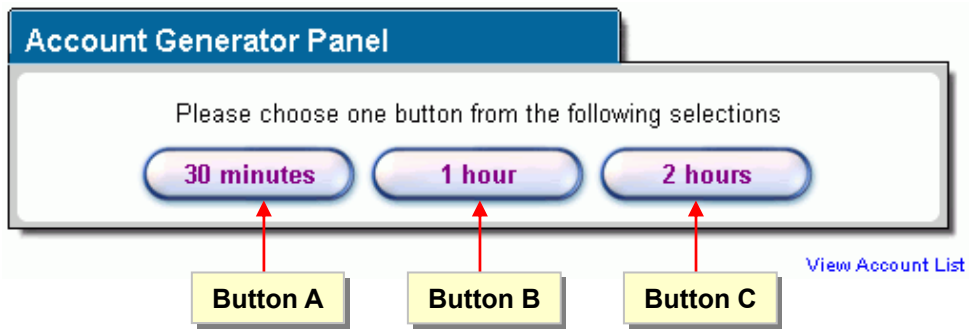


Figure 3-19 Account Generator Panel

Click on button to create a new account.

Figure 3-20 Example-Account Printout

View Account List

Click “View Account List” to display current account information.

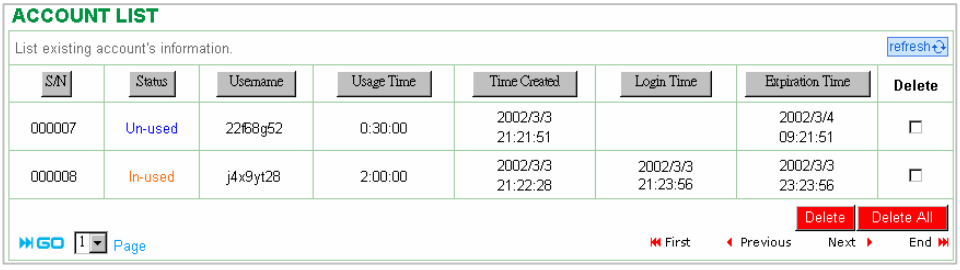


Figure 3-21 Account List

Click on refresh button to update the account list page.

The field name button in this list show that this list can be sorted in ascending/descending order according to the corresponding field name.

*Select the check boxes and click '**Delete**' to delete accounts.*

Delete all accounts in account list.

Note: *This page will refresh automatically every 5 minutes.*

Customize Printout Text Customize printout text

This function allows you to produce custom bill based on your requirements.

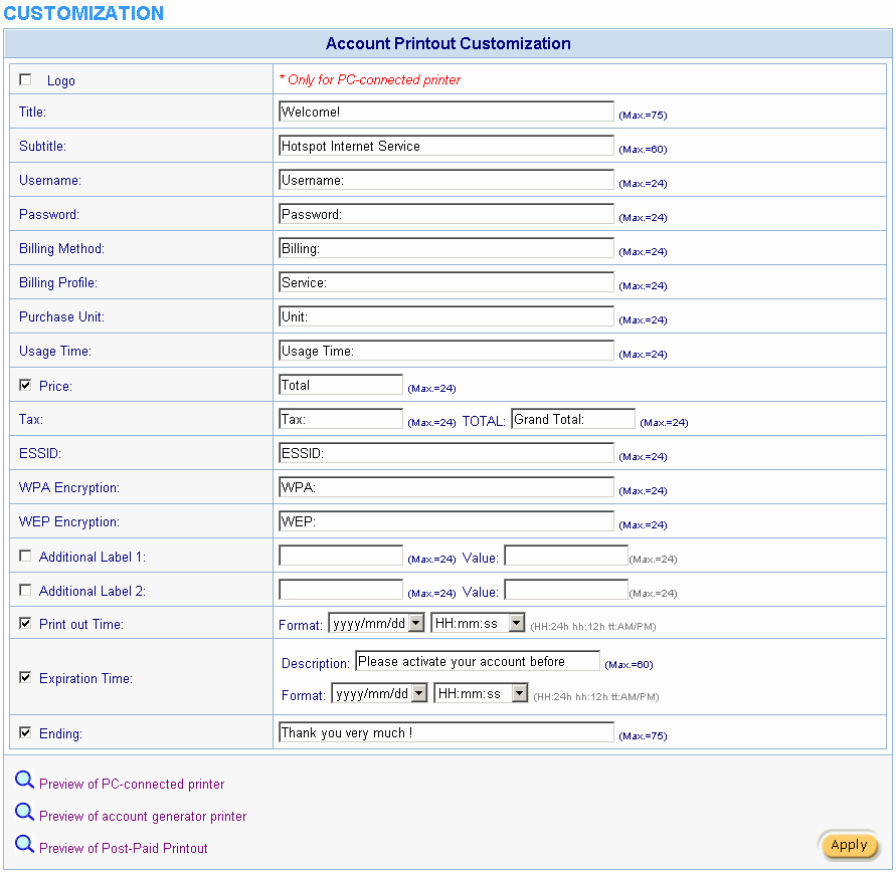


Figure 3-22 Customize Printout Text Setting Screen

Preview of PC-connected printer

Preview of account generator printer

Preview of Post-Paid Printout

Click the button to displays the account on the screen as it would appear when printed.

Welcome!

Hotspot Internet Service

Username:	xxxxxxxx
Password:	xxxxxxxx
Billing:	Time to Finish
Service:	30 minutes
Unit:	1
Usage Time:	0:30:00
Total	**$1.00**
ESSID:	Wireless

S/N:000001 2004/12/13 17:03:13

Please activate your account before 2004/12/14 05:03:13

Thank you very much !

Close Print

Figure 3-23 Example- PC-connected printer Printout (Time to Finish)

Welcome!

Hotspot Internet Service

Username:	xxxxxxxx
Password:	xxxxxxxx
Billing:	Accumulation
Service:	30 minutes
Unit:	1
Usage Time:	0:30:00
Total	**$1.00**
ESSID:	Wireless

S/N:000001 2004/12/13 18:48:17

Please activate your account before 2004/12/14 06:48:17

Please finish your usage time within 3 months after your first login

Thank you very much !

Close Print

Figure 3-24 Example- PC-connected printer Printout (Accumulation)

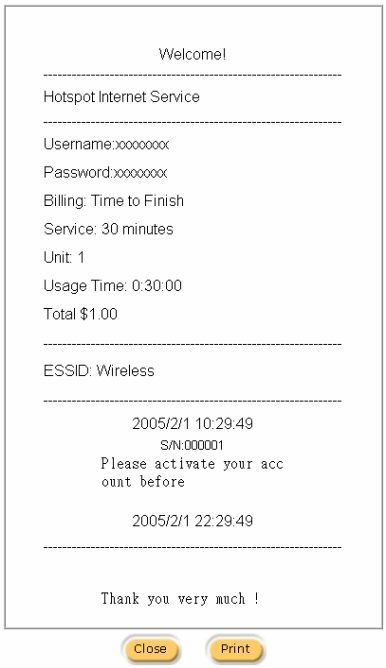


Figure 3-25 Example- Account Generator Printer Printout (Time to Finish)

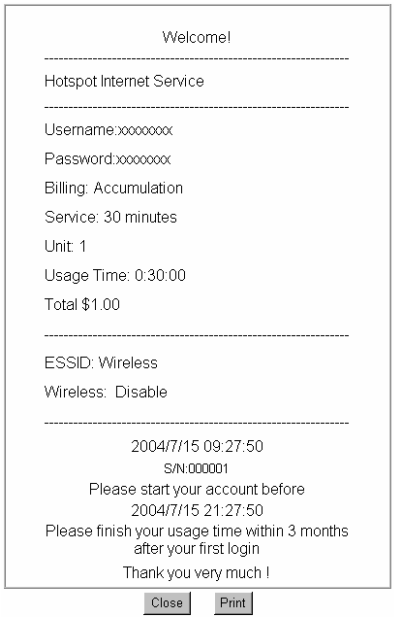


Figure 3-26 Example- Account Generator Printer Printout (Accumulation)

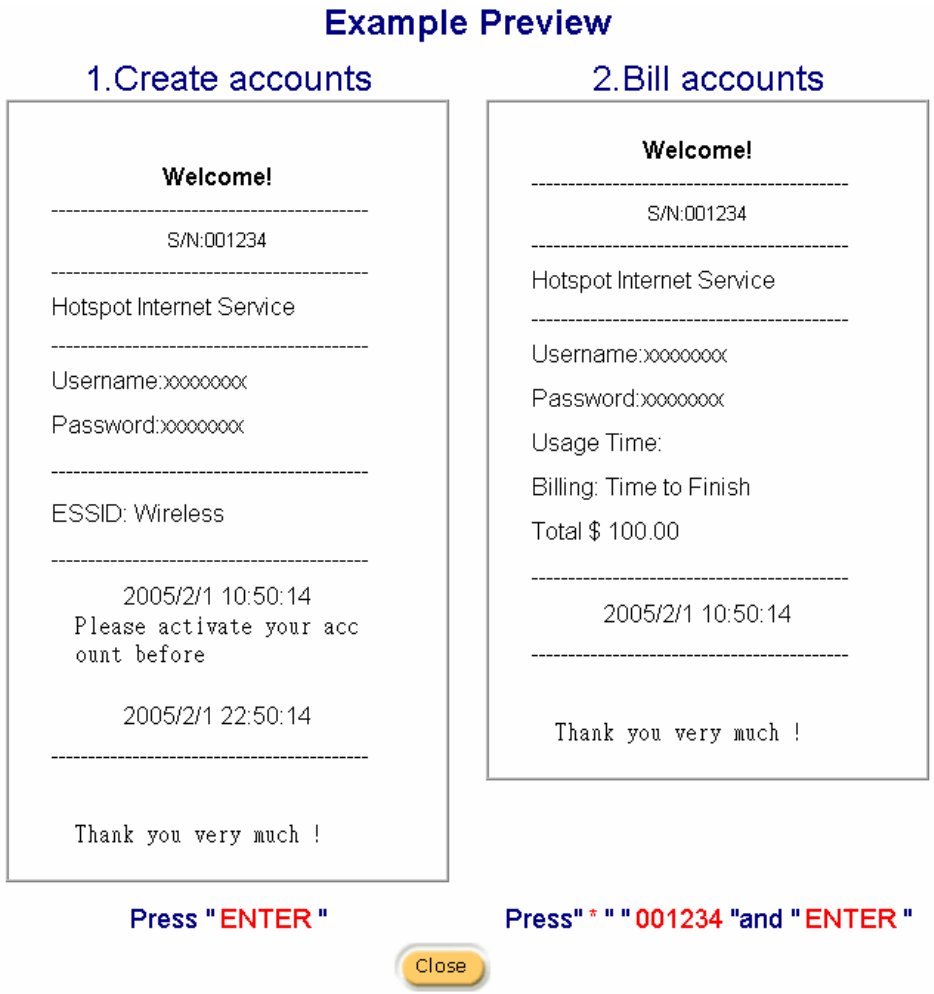


Figure 3-27 Example-Post-paid Printout

Step 10: System Setting

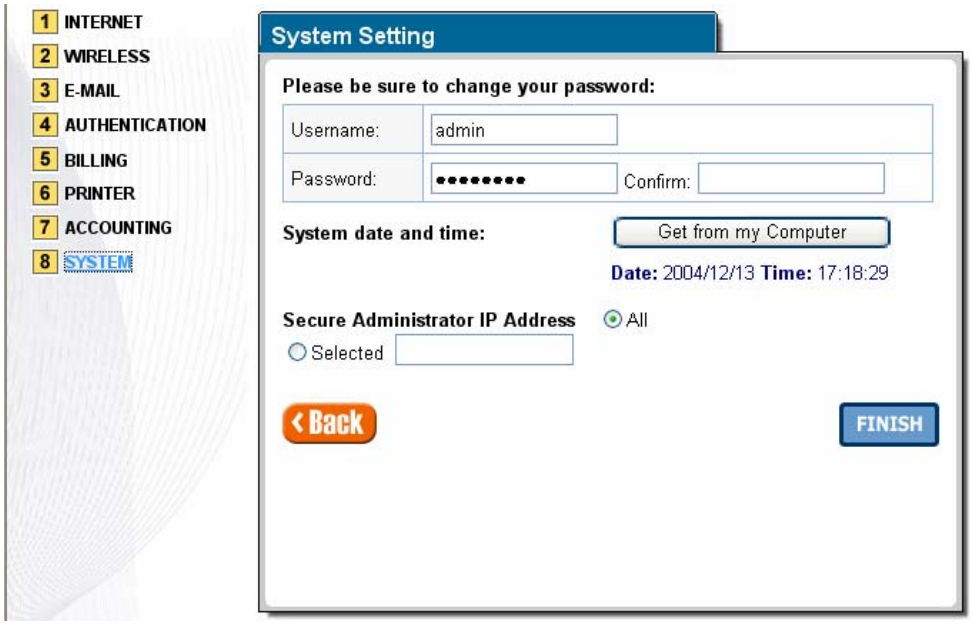


Figure 3-28 System Setting Screen

Item	Default	Description
Username	admin	Enter the user name. The user name can consist of up to 80 alphanumeric characters and is case sensitive.

Password	admin	Enter the user password. The password can consist of up to 80 alphanumeric characters and is case sensitive.
Confirm	Empty	Enter the password of administrator for confirmation.
System date and time	YYYY/MM/DD HH:MM:SS	Get from my Computer Click **Get from my Computer** button to correct the system date and time.
Secure Administrator IP Address	All	This function allows remote user to management the device. You can specify one or any IP addresses for remote control the system.

FINISH *Click the button to save the settings then the system will restart.*

3.2 Advanced Setup

The Advanced Setting enables you to configure advanced settings related to accessing the Internet, including,

1. System
2. WAN/LAN
3. Server
4. Authentication
5. RADIUS
6. Billing
7. Accounting
8. Credit Card
9. Keypad
10. Customization
11. Pass Through
12. Filtering
13. Share
14. Portal Page
15. Advertisement
16. Walled Garden
17. DDNS
18. LAN Devices
19. Syslog
20. Session Trace
21. Bandwidth
22. Secure Remote
23. SNMP
24. Wireless
25. Account Generator

Figure 3-29 Advanced Setting Item Screen

Note: *After change the settings of device, please click* ***apply*** *button to save the new settings.*

3.2.1 System

Define the WSG-403 System configuration.

SYSTEM

System/Host Name	
Domain Name	
Location Information	Location Name: (Max.=50) Address: (Max.=200) City: (Max.=50) State / Province: (Max.=50) Zip / Postal Code: (Max.=10) Country: (Max.=50) Contact Name: (Max.=50) Contact Telephone: (Max.=50) Contact FAX: (Max.=50) Contact Email: (Max.=50)
Date/Time	Date: 2004 / 12 / 13 (Year/Month/Day) Time: 17 : 19 : 58 (Hour : Minute : Second) Get from my Computer Get from NTP server ☐ **NTP Setting** Server IP/Domain Name Time Zone: GMT -12:00 Update Time: 0 hours ☐ Daylight Saving Time Start Date: 4 Month / 1 Day End Date: 10 Month / 31 Day

Figure 3-30 System Setting Screen

NAT (Network Address Translation)	◉ **Enable** ☑ IP Plug and Play ☑ DNS Fake IP Reply ○ **Disable**
Layer 2 Isolation Security	◉ Enable ○ Disable
Secure administrator IP addresses	◉ **Any** ○ **Specify** 1 ~ 2 ~ 3 ~ 4 ~ 5 ~
Multicast Pass Through	○ Enable ◉ Disable
Allow remote user to ping the device	◉ Enable ○ Disable
SSL Certificate	◉ Default ○ Customer Certificate
	Apply

Figure 3-31 System Setting Screen

Item	Default	Description
System/Host Name	Empty	The system name can consist of up to 40 alphanumeric characters.
Domain Name	Empty	The Domain name can consist of up to 80 alphanumeric characters.
Location Information	Empty	Enter your location information.
Date/Time		
Date (Year/Month/Day)	System Date	The system date of the WSG-403. The valid setting of year is from 2002 to 2035.
Time (Hour:Minute:Second)	System Time	The system time of the WSG-403.
Get from my Computer	-	Click "Get from my Computer" button to correct the system date and time.
Get from NTP server	-	Click "Get from NTP server" button to correct the system date and time.
NTP Setting	Disable	Enables or disables NTP (Network Time Protocol) Time Server. Network Time Protocol can be utilized to synchronize the time on devices across a network. A NTP Time Server is utilized to obtain the correct time from a time source and adjust the local time.
Server IP/Domain Name	Empty	Enter the IP address/domain name of NTP server. The maximum allowed characters length is 100.
Time Zone	GMT-12:00	Select the appropriate time zone for your location.
Update Time	0 hours	Enter the number of hours for update time.
Daylight Saving Time	Disable	Enables or disables Daylight Saving Time (DST).
	Month/Day	Set the Daylight Saving Time (DST) on the WSG-403. Adjust the begin time and end time.
NAT (Network Address Translation)		
NAT	Enable	Enables or disables NAT Address Translation function.
User Session Limited	Enable,30	Enables or disables user session limit function. This feature provides you an ability to control a number of sessions allowed for particulars user(s) at the one time.
IP Plug and Play (iPnP Technology)	Enable	Enables or disables plug & play function. When enabled, the user needn't change their network configuration to access the Internet.
Layer 2 Isolation Security	Enable	If enable plug and play is selected, you can enable Layer 2 Isolation Security function. When the "Layer 2 Isolation Security" enabled, everyone cannot communicate with each other.

Item	Default	Description
Secure administrator IP Addresses	Any	Options: Any and Specify. Administrator can specify 5 IP addresses or a range to allow remote control access from network.
Multicast Pass Through	Disable	This function allows for multiple transmissions to specific recipients at same time.
Allow remote user to ping the device	Enable	This function allows remote user to ping the WSG-403 through Internet. Ping is normally used to test the physical connection between two devices, to ensure that everything is working correctly.
SSL Certificate	Default	Option: default or customize certificate, These are two ways to create a certificate, one is purchase a certificate from a certificate authority (Ex. Verisign or Thawte), and another is creating a self-certificate (For example: Uses OpenSSL tool).

Apply *Click **Apply** button to save the new settings.*

Click **Apply** button, then Restart dialog box will appear. Click **Apply** to restart the system.

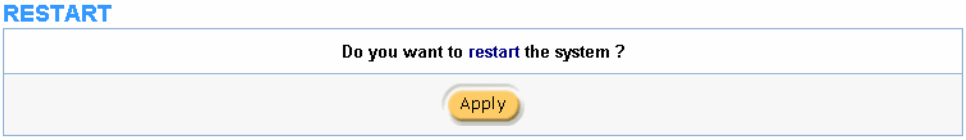


Figure 3-32 Restart Dialog Box

3.2.2 WAN/LAN

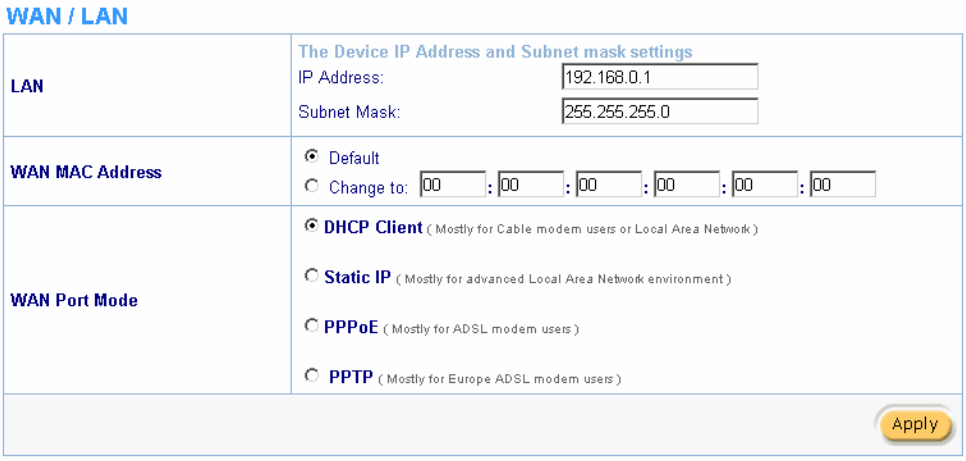


Figure 3-33 WAN/LAN Setting Screen

Apply *Click **Apply** button to save the new settings.*

Click **Apply** button, then Restart dialog box will appear. Click **Apply** to restart the system.

Figure 3-34 Restart Dialog Box

- **Device IP (LAN IP) Setting**

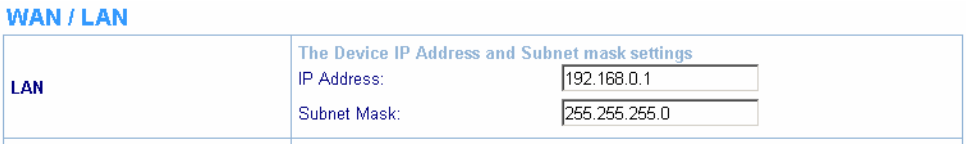


Figure 3-35 Device IP (LAN IP) Setting

Item	Default	Description
IP Address	10.59.1.1	The internal LAN IP address of your Wireless Subscriber Server Gateway.
Subnet Mask	255.0.0.0	Enter the subnet mask for the IP address.

- **WAN MAC Address**

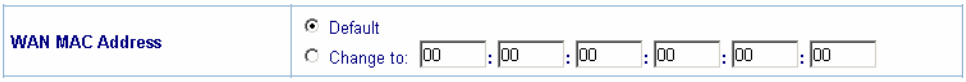


Figure 3-36 WAN MAC Address Setting

Item	Description
IP Address	The default MAC address is set to the WAN physical interface on device.

- **WAN Port Mode**

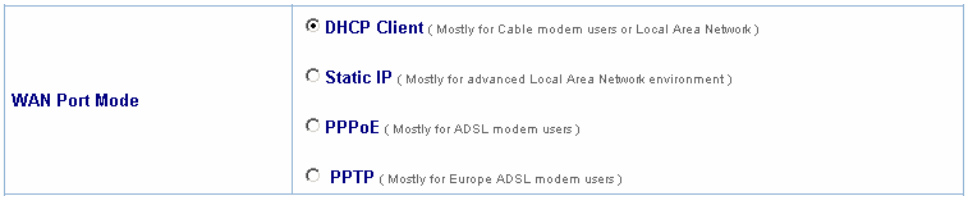


Figure 3-37 WAN Port Mode Setting

DHCP Client

The device can work as a DHCP client. This allows the device to obtain the IP address and other TCP/IP settings from your ISP. If your xDSL/Cable comes with this feature, please enable Use DHCP Client.

Figure 3-38 DHCP Client Setting Screen

Static IP

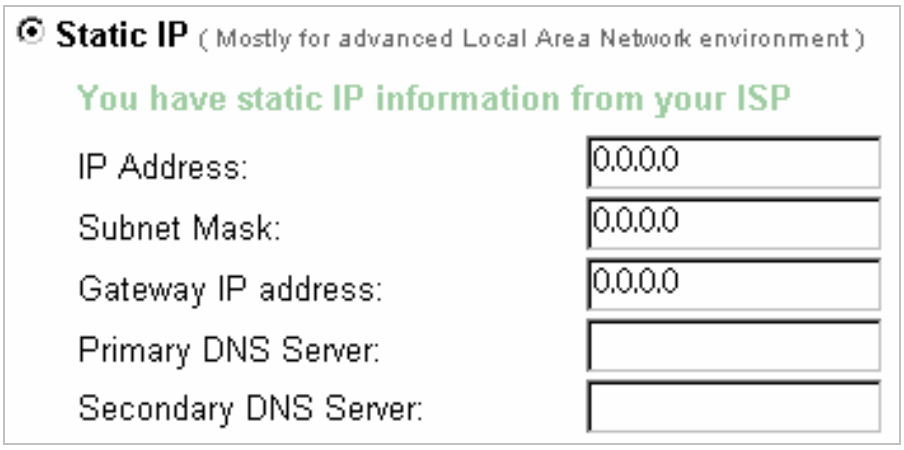


Figure 3-39 Static IP Setting Screen

Item	Description
IP Address	Enter the IP address for the xDSL/Cable connection (provided by your ISP).

Subnet Mask	Enter the subnet mask for the IP address.
Gateway IP Gateway	Enter the Gateway IP address for the xDSL/Cable connection (provided by your ISP).
Primary DNS Server	A primary DNS server IP address for the xDSL/Cable connection (provided by your ISP).
Secondary DNS Server	A secondary DNS server IP address for the xDSL/Cable connection (provided by your ISP). If the primary DNS Server IP were not available, meanwhile, Secondary DNS Server IP would start in the same time.

PPPoE

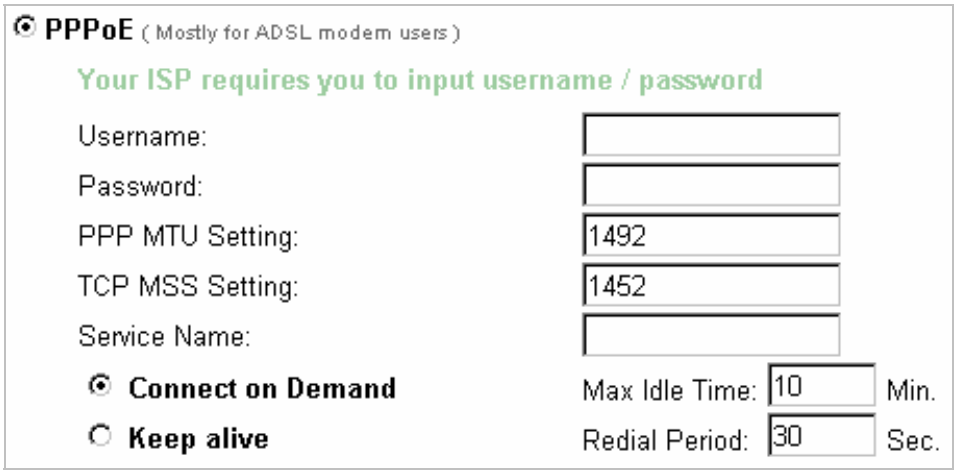


Figure 3-40 PPPoE Setting Screen

Item	Default	Description
User Name	Empty	Enter your PPPoE account name. The user name can consist of up to 80 alphanumeric characters and is case sensitive.
Password	Empty	Enter your PPPoE password. The password can consist of up to 80 alphanumeric characters and is case sensitive.
PPP MTU Setting	1492	MTU (Maximum Transfer Unit) specifies maximum transmission unit size.
TCP MSS Setting	1452	MSS (Maximum Segment Size) specifies maximum segment size.
Item	**Default**	**Description**
Service Name	Empty	Enter the service name provided by your ISP. The service name can consist of up to 64 alphanumeric characters and is case sensitive.
Connect on Demand and Max Idle Time		
Connect on Demand	Enable	You can configure your WSG-403 to cut your connection with your ISP after a specified period of time (Max Idle Time). If you have been disconnected due to inactivity, Connect on Demand enables your WSG-403 to automatically re-establish your connection as soon as you attempt to access the Internet again. If you wish to activate Connect on Demand,
Max Idle Time	10 Minutes	

		click the radio button. If you want your Internet connection to remain, click the radio button of keep alive. The Max Idle Time maximum value is 65535 minutes.
Keep alive and Redial Period		
Keep alive	Disable	This option keeps your PPPoE enabled Internet access connected indefinitely, even when it sits idle. The Redial Period maximum value is 65535 seconds.
Redial Period	30 Seconds	

- **PPTP**

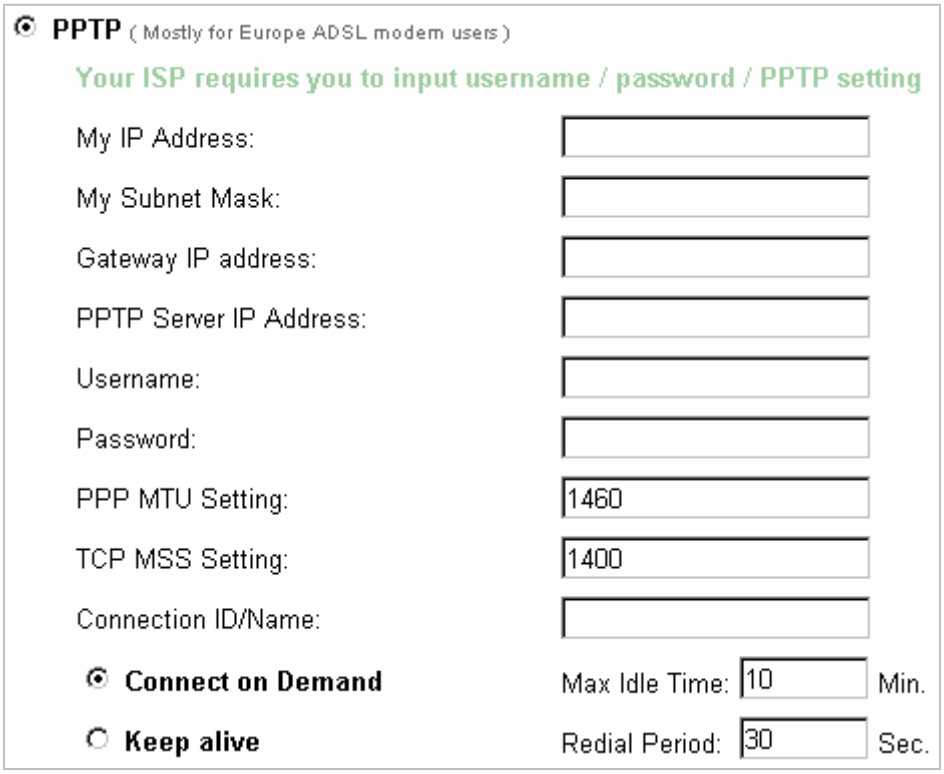


Figure 3-41 PPTP Setting Screen

Item	Default	Description
My IP Address	Empty	A PPTP local IP address for the xDSL/Cable connection (provided by your ISP).
My Subnet Mask	Empty	Enter the PPTP local IP address for the xDSL/Cable connection.
Gateway IP Address	Empty	A PPTP local default gateway for the xDSL/Cable connection (provided by your ISP).
PPTP Server IP Address	Empty	Enter the PPTP server IP address for the xDSL/Cable connection (provided by your ISP).
Username	Empty	Enter your PPTP account name. The user name can consist of up to 80 alphanumeric characters and is case sensitive.
Password	Empty	Enter your PPTP password. The password can consist of up to 80 alphanumeric characters and is case sensitive.

Item	Default	Description
PPP MTU Setting	1460	MTU (Maximum Transfer Unit) specifies maximum transmission unit size.
TCP MSS Setting	1400	MSS (Maximum Segment Size) specifies maximum segment size.
Connection ID/Name	Empty	Enter the connection ID or connection name. The connection ID/Name can consist of up to 81 alphanumeric characters and is case sensitive.
Connect on Demand and Max Idle Time		
Connect on Demand	Enable	You can configure your WSG-403 to cut your connection with your ISP after a specified period of time (Max Idle Time). If you have been disconnected due to inactivity, Connect on Demand enables your WSG-403 to automatically re-establish your connection as soon as you attempt to access the Internet again. If you wish to activate Connect on Demand, click the radio button. If you want your Internet connection to remain, click the radio button of keep alive. The Max Idle Time maximum value is 65535 minutes.
Max Idle Time	10 Minutes	
Keep alive and Redial Period		
Keep alive	Disable	This option keeps your PPTP enabled Internet access connected indefinitely, even when it sits idle. The Redial Period maximum value is 65535 seconds.
Redial Period	30 Seconds	

3.2.3 Server

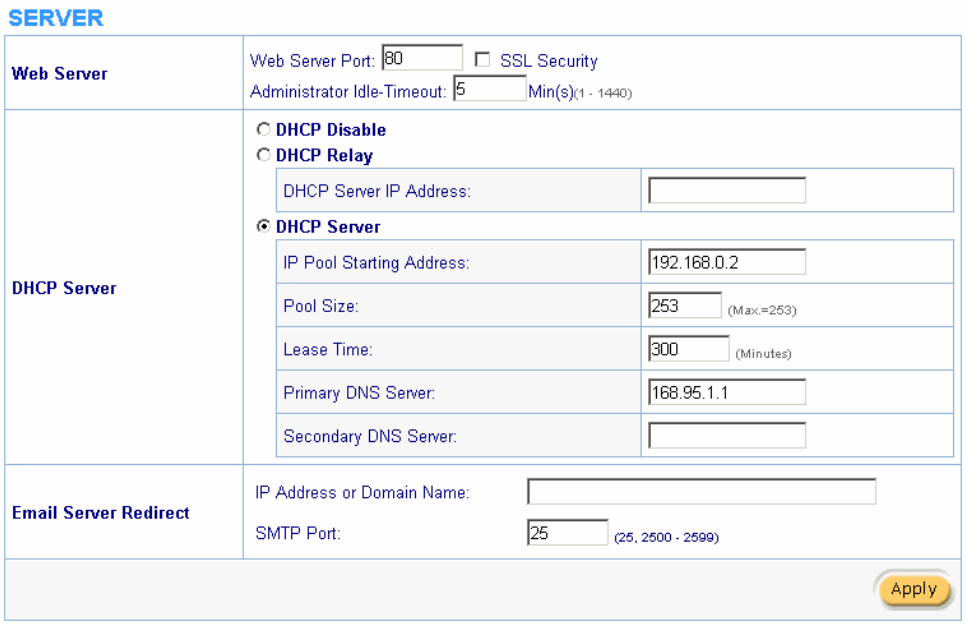


Figure 3-42 Server Setting Screen

Item	Default	Description
Web Server		

HTTP Port	80	Enter the HTTP port number. The HTTP port allowed range is 80 or 8010 to 8060. For access the WSG-403 system under NAT, please tab the “http://HTTP Port IP Address: Port Number”.
HTTPS Port	443	Enter the HTTPS port number. The HTTPS port allowed range is 443 or 4430 to 4440. For access the WSG-403 system, please tab the “https://HTTPS Port IP Address: Port Number”.
Administrator Idle-Timeout	5 Minutes	The idle time out valid range is 1-1440. If the idle time out is set as 5 minutes, it means if the administrator doesn’t send packet in 5 minutes, the administrator will logout automatically.
DHCP Server	Enable	There are three types of DHCP Services. DHCP Disable—Disable the DHCP server function. DHCP Relay—Enable DHCP Relay function. DHCP Server—Enable DHCP server function.
DHCP Relay	To route DHCP through an external server, the administrator needs to enable the DHCP relay and assign a valid DHCP server IP address.	
DHCP Server IP Address	Empty	Enter the IP address of DHCP server.
DHCP Server	The WSG-403's DHCP server is turned on and running by default when you install it in your network.	
DHCP Pool Starting Address	10.59.1.2	Enter the DHCP Pool Starting IP address.
Pool Size	253	The DHCP pool size range is 1 to 512.
Lease Time	300 Minutes	The DHCP lease time. The DHCP lease time range is 1 to 71582788 minutes.
Primary DNS Server	168.95.1.1	Enter the IP address of the network’s primary DNS server.
Secondary DNS Server	Empty	Enter the IP address of a second DNS server on the network.
Email Server Redirect	To prevent some subscriber’s original Email server may protect by firewall or NAT network. WSG-403 provides an extra Email server parameter to forward the subscriber’s Email. The WSG-403 not only forwards the subscribers’ E-mail via other E-mail server but also changes the SMTP header. The recipient of your E-mail sees the message as if you sent it from your local Internet Service Provide, not form the hotel or other place. Note: Before setting this sever, please make sure the e-mail sever relay function is opened. It must not exceed 50 characters.	
IP Address or Domain Name	Empty	Enter the E-mail server IP address or domain name.

SMTP Port	25	Enter the SMTP port number for mail server. The SMTP port allowed range is 25 or 2500 to 2599.

Apply *Click **Apply** button to save the new settings.*

3.2.4 Authentication

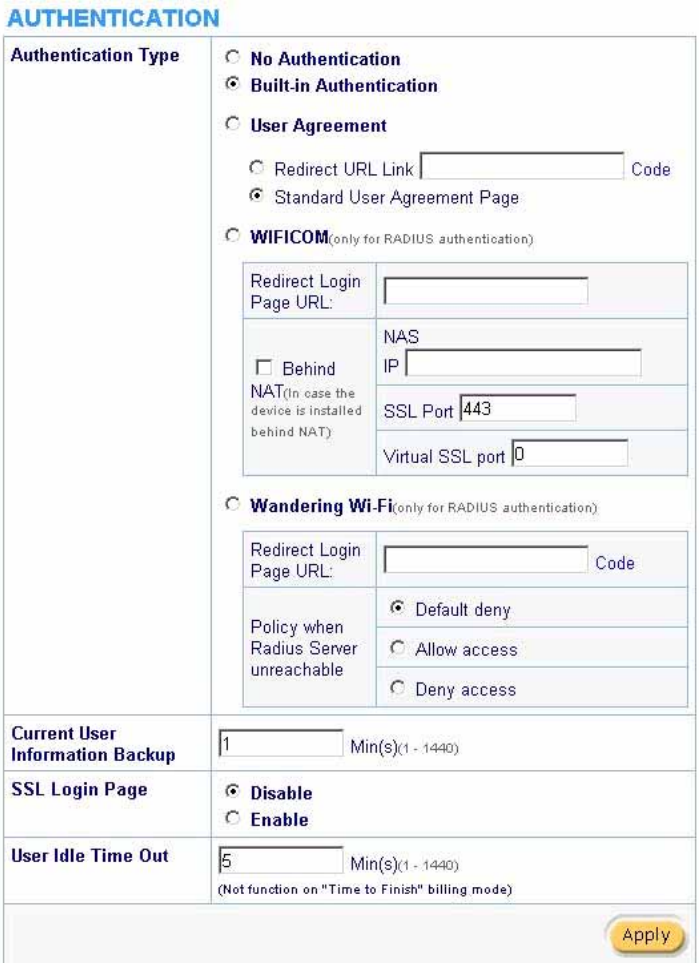


Figure 3-43 Authentication Setting Screen

Item	Default	Description
Authentication Type	No Authentication	Option: No Authentication, Built-in Authentication or User Agreement. **No Authentication—** Subscriber can direct access the Internet without enter username and password.
Item	**Default**	**Description**
Authentication Type	No Authentication	**Built-in Authentication—** WSG-403 provides "Built-in Authentication" for service provider to build up an Internet service without any extra authentication software. If "Built-in Authentication" is selected, service provider can generate the subscriber account inside WSG-403, and the system will authenticate the subscriber login according to the generated account. **User Agreement—** Subscriber must accept the service usage agreement before they can access the Internet. **WIFICOM—** WSG-403 provides this Authentication for WIFICOM service provider to build up an Internet service with RADIUS server. For the detail setup, please contact WiFicom. (http://www.wificom.com) **Wandering Wi-Fi—**

		WSG-403 provides this Authentication for Wandering Wi-Fi service provider to build up an Internet service with RADIUS server. For the detail setup, please contact Wandering Wi-Fi. (http://wanderingwifi.com)
Current User Information Backup	1 Min(s)	The system provides automatically backup account information and unused account to flash ROM. This function allow administrator to adjust the backup time. The default value is 1 minute. The Current User Information Backup valid range is 1 to 1440.
Redirect Login Page URL	Empty	The input format can be http://www.yahoo.com. The maximum character of the URL Link is 200.
Code Code	Copy and paste the following HTML Code into your home page to produce redirect subscriber login page.	

Copy and paste the following HTML Code into your home page to produce user agreement login page.

Redirect Page Sample Code

```
<html>
<body>
<center>
<table width="100%" border="0">
<tr>
<td align="right" width="45%">
<form method="post" action="http://1.1.1.1/agree.cgi" name="agree">
<input type="submit" name="agree" value="Agree">
</form>
</td>
<td width="10%"> </td>
<td width="45%">
<form method="post" action="http://1.1.1.1/disagree.cgi" name="disagree">
<input type="submit" name="disagree" value="Do not agree">
</form>
</td>
</tr>
</table>
</center>
</body>
</html>
```

Close

Figure 3-44 Preview Redirect Login Page Code

Item	Default	Description
SSL Login Page	Disable	Enables or disables SSL security of login page.
User Idle Time Out	5 Minutes	The user idle time out valid range is 1-1440.

Apply *Click **Apply** button to save the new settings.*

3.2.5 RADIUS Authentication

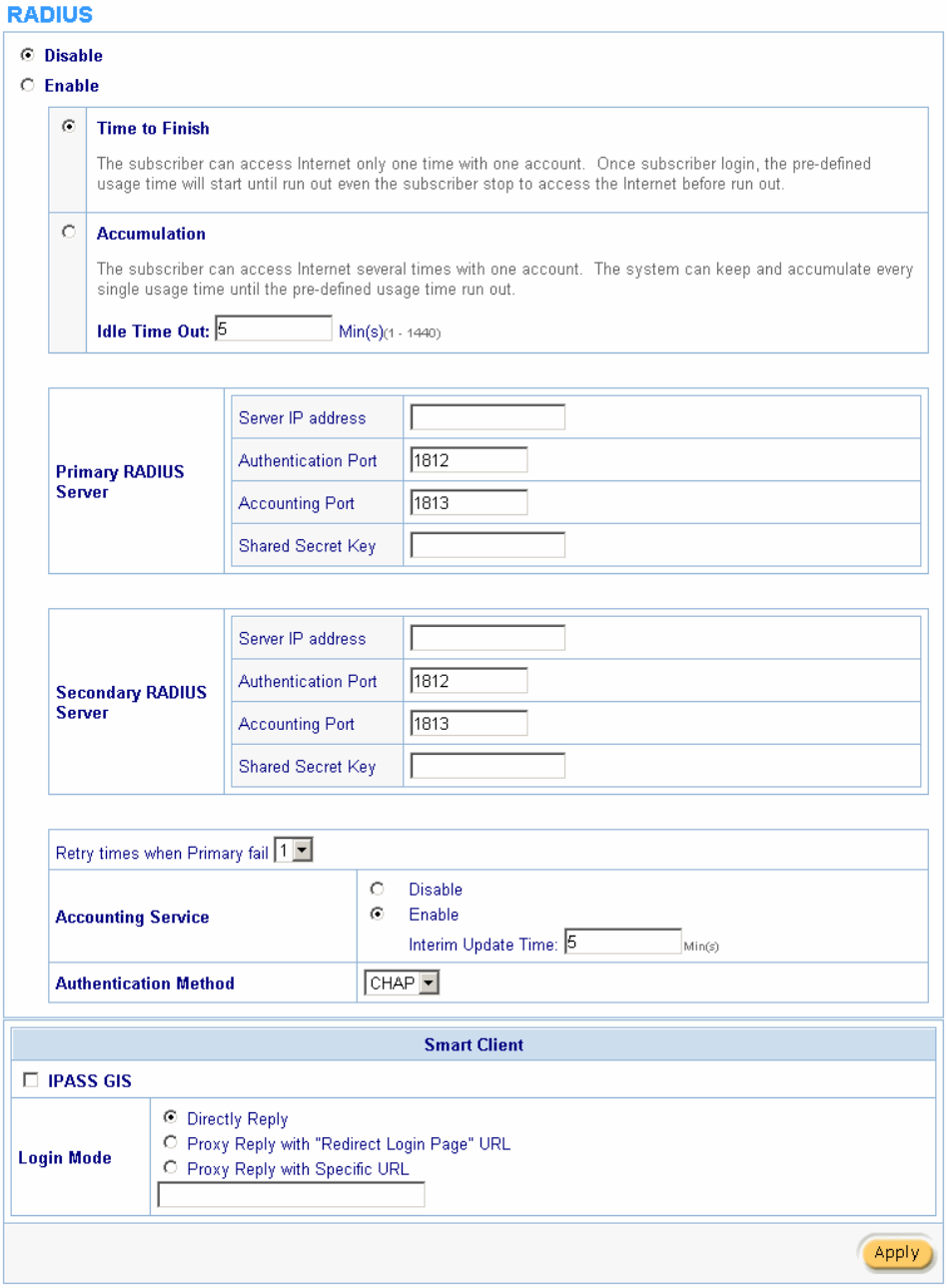


Figure 3-45 Authentication Setting Screen

Item	Default	Description
RADIUS Authentication	Disable	Option: No Authentication or RADIUS Server. **Disable (No Authentication) —** Subscriber can direct access the Internet without enter username and password. **Enable (RADIUS Authentication) —** WSG-403 provides "RADIUS Authentication" for service provider to build up an Internet service with RADIUS server. If RADIUS Authentication is enabled, all subscribers' authentication will send to RADIUS Server by RADIUS protocol (RFC 2865, 2866).
Time to Finish/	Enable	Service provider provides two different accounting calculate

Accumulation		for the Internet service.
Primary RADIUS Server		
Server IP	Empty	Enter the IP address of RADIUS server.
Authentication Port	1812	Enter the authentication port number; the authentication port number must match with the RADIUS server setting. The allowed numbers are from 0 to 65535.
Accounting Port	1813	Enter the accounting port number; the accounting port number must match with the RADIUS server setting. The allowed numbers are from 0 to 65535.
Share Secret Key	Empty	The share secret key, the key number also has to match with the Server setting. Up to 64 characters are allowed.
Secondary RADIUS Server		
Server IP	Empty	Enter the IP address of RADIUS server.
Authentication Port	1812	Enter the authentication port number; the authentication port number must match with the secondary RADIUS server setting. The allowed numbers are from 0 to 65535.
Accounting Port	1813	Enter the accounting port number; the accounting port number must match with the secondary RADIUS server setting. The allowed numbers are from 0 to 65535.
Share Secret Key	Empty	The share secret key, the key number also has to match with the secondary RADIUS Server setting. Up to 64 characters are allowed.
Retry times when Primary fail	1	Specify the retry times when primary fail.
Item	**Default**	**Description**
Retry Frequency ~ Seconds	3	The field default value is 3 seconds.
Accounting Service	Enable	Enables or disables the accounting service.
Interim Update Time	5 Minutes	Specify the interim update time.
Authentication Method	CHAP	Enter the authentication method of RADIUS server.
WISPr Smart Client		
Enable	Disable	Enables or disables WISPr Smart Client roaming function.
Login Mode	Directly Reply	Options: Directly Reply, Proxy Reply with “Redirect Login Page” URL and Proxy Reply with Specific URL. The login mode information for the IPASS GIS connection. (Provided by your ISP).

3.2.6 Billing

The function is used to setup a billing profile. A billing profile is a description of how you want to charge your customer.

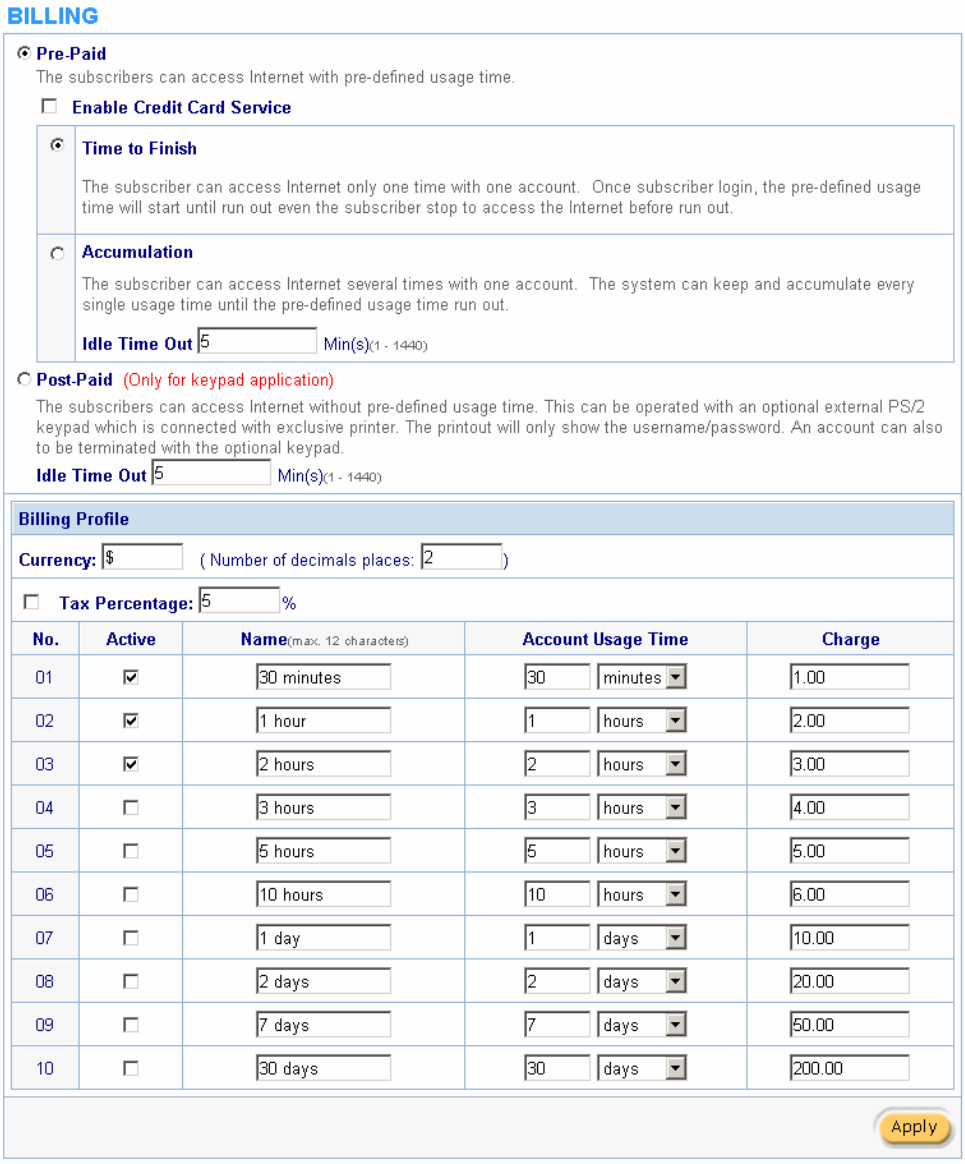


Figure 3-46 Billing Setting Screen

Item	Default	Description
Pre-Paid	Enable	The subscribers can access Internet with pre-defined usage time.

If you change billing mode (Pre-paid→Post-paid or Post-paid→Pre-paid), the system will erase all account and disconnect all on-line users.

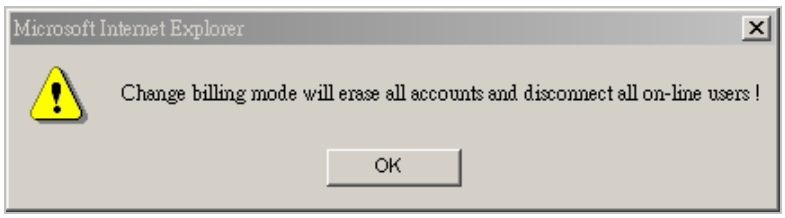


Figure 3-47 Message Box

Item	Default	Description
Enable Credit Card Service	Disable	Enables or disables the credit card service. Before you enable credit card service, make sure that your credit service is configured to work and the currency is American

		dollars. You must be converting all prices on your billing page into American dollars (U.S. dollars). For details, see section 3-2-8 Credit Service. The credit card function only supports the American dollars.

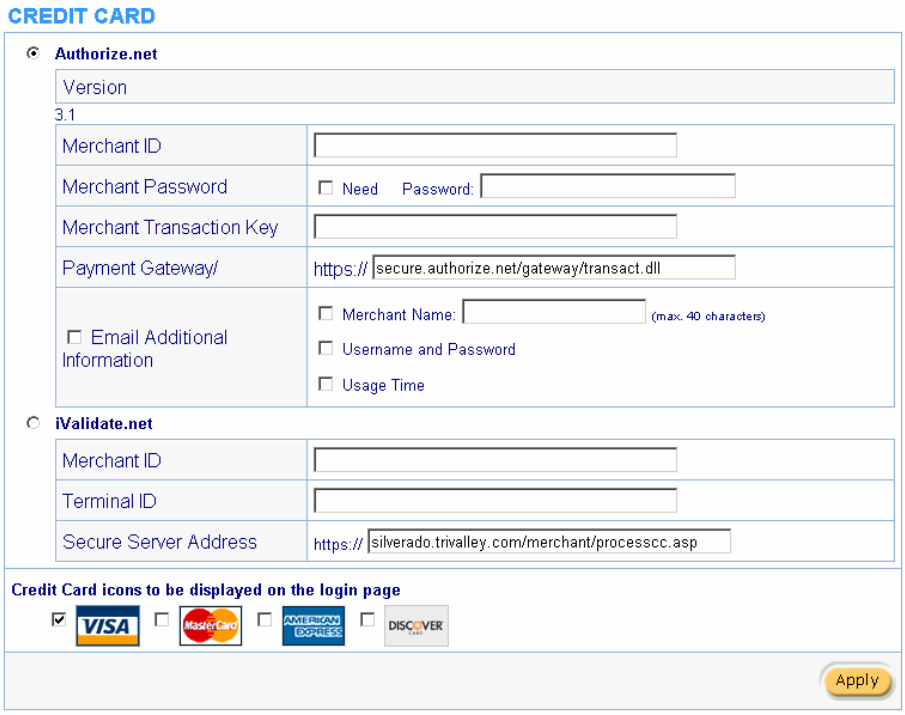


Figure 3-48 Credit Service Setting Screen

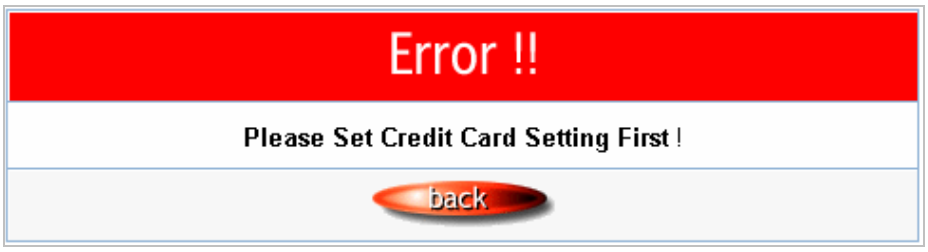


Figure 3-49 Error Dialog Box (Credit Card Service=Enable)

Item	Default	Description
Time to Finish	Enable	The subscriber can access Internet only one time with one account. Once subscriber login, the pre-defined usage time will start until run out even the subscriber stop to access the Internet before run out.
Accumulation		
Accumulation	Disable	The subscriber can access Internet many times with one account. The system can keep and accumulate every single usage time until the pre-defined usage time run out.
Idle Time Out	5 Min(s)	The idle time out valid range is 1-1440. If the idle time out is set as 5 minutes, it means if the account doesn't send packet in 5 minutes, the account will logout automatically.

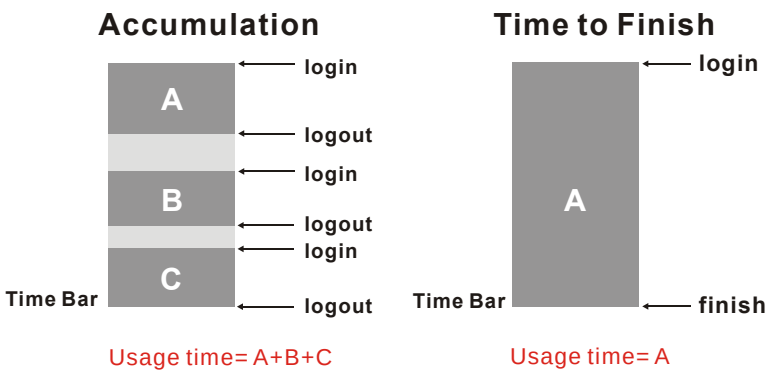


Figure 3-50 Accumulation and Time to Finish

Item	Default	Description
Post-Paid	Disable	The subscribers can access Internet without pre-defined usage time. This can be operated with an optional external PS/2 keypad that is connected with exclusive printer. The printout will only show the username/password. An account can also to be terminated with the optional keypad.
Idle Time Out	5 Min(s)	The idle time out valid range is 1-1440. If the idle time out is set as 5 minutes, it means if the account doesn't send packet in 5 minutes, the account will logout automatically.
Billing Profile		
Currency	$	Enter the appropriate currency unit or currency symbol.
Number of decimals places	2	Enter the number. The field maximum value is 3.
Tax Percentage	Disable	This check box is used to indicate the taxable status of the account.
	5%	Enter the tax rate (i.e. a 5% sales tax is entered as 5).
No.	+1~+10	The index number of billing profile. In Advanced setup, we provide 10 billing profile.
Active	-	Click on check box, active or inactive the billing profile.
Name	-	It is the name of billing profile. The maximum allowed characters length is 12.
Account Usage time	-	The duration of the billing period. When this period expires, user account will be discontinued.
Charge	-	Enter the unit rate amount (i.e. 35.00) that most of your accounts are charged for one day of service.

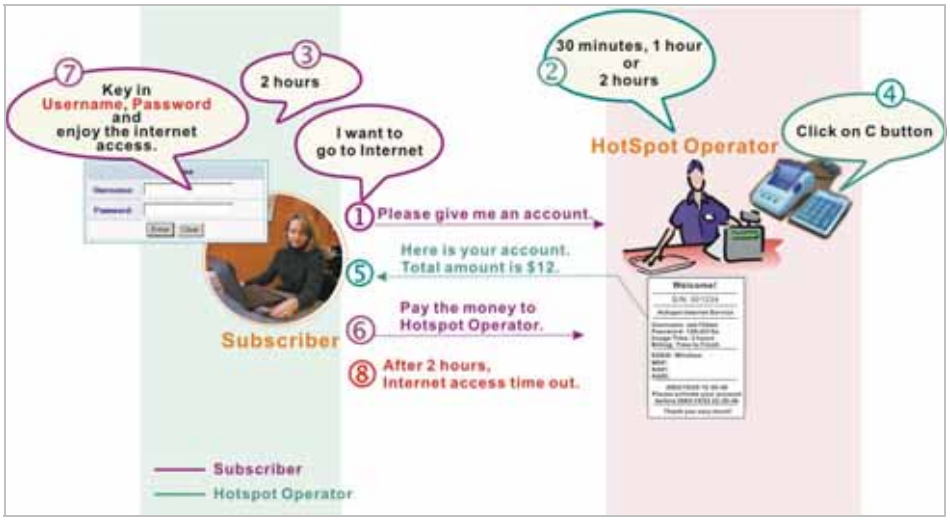


Figure 3-51 Pre-paid Procedure Diagram

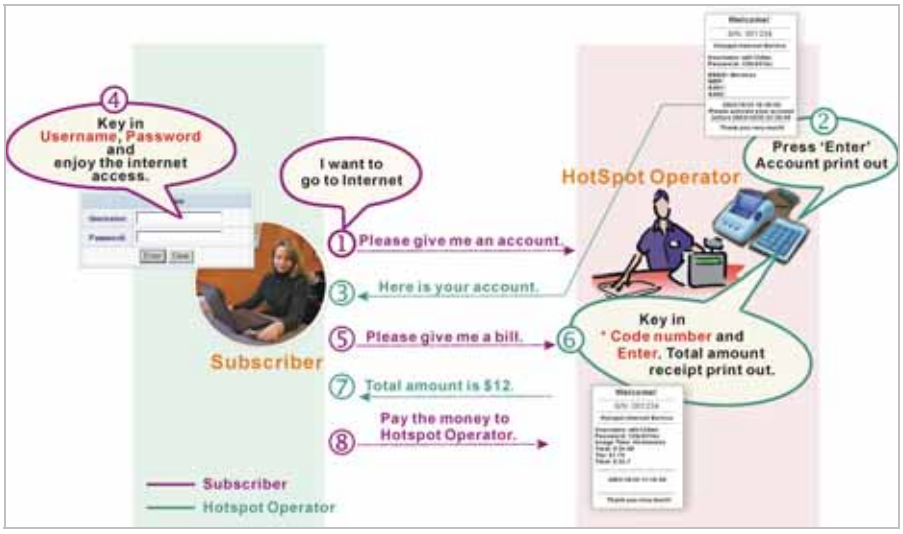


Figure 3-52 Post-paid Procedure Diagram

*Click **Apply** button to save the new settings.*

Click **Apply** button, the success dialog box appears. Click on **Back** to return to Billing setting screen.

Figure 3-53 Success Dialog Box

3.2.7 Accounting

This function allow service provider to generate the subscriber accounts.

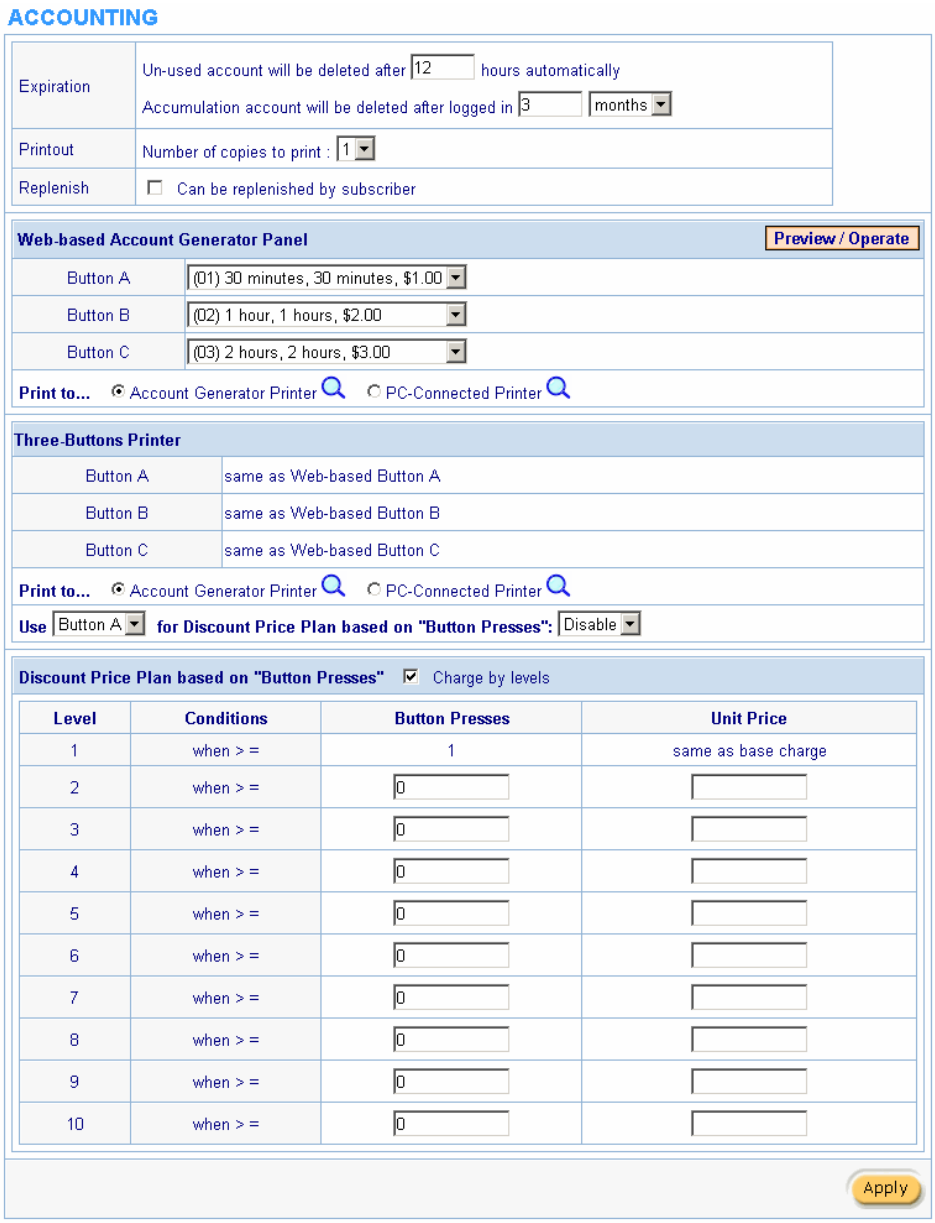


Figure 3-54 Accounting Setting Screen

Figure 3-55

Item	Default	Description
Expiration		
Un-used account will be deleted after ~hours automatically	12 hours	Enter the number of hours/minutes/days. The field maximum value is 30 hours/minutes/days.
Accumulation account will be deleted after logged in ~	3 months	Enter the number and select time unit from list box. The field maximum value is 30 month/ days/ hours.
Printout		

Number of copies to print	1	The system allows you to print all your bills. Select one number of copies by clicking in the list box.
Can be replenished by subscriber	Enable	Click the check box to enable the replenish function.

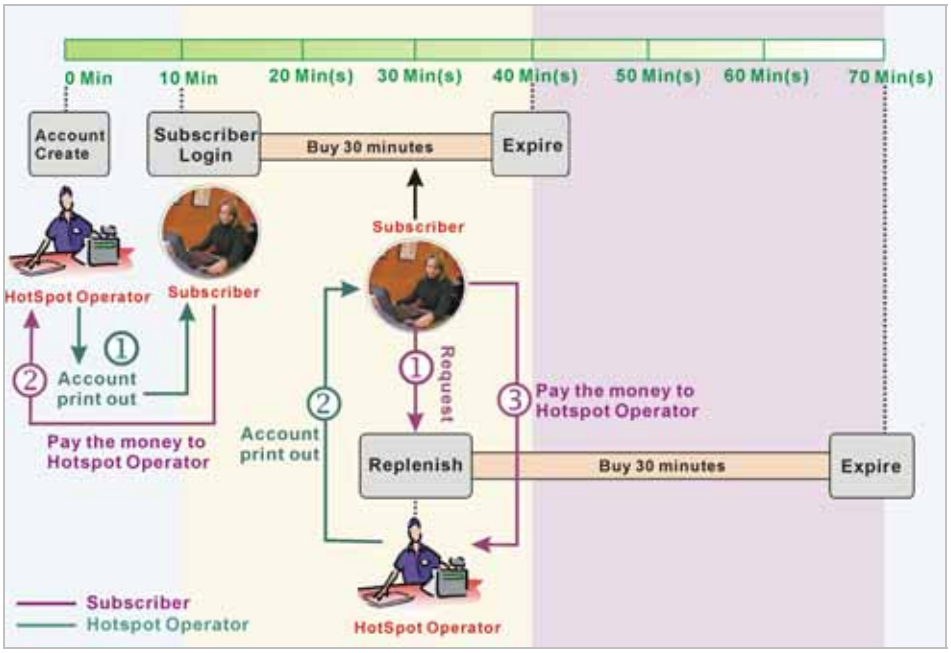


Figure 3-56 Account Process Diagram

Can be replenished by subscriber=Enable

- **Three-Button Printer/ Web-based Account Generator Panel**

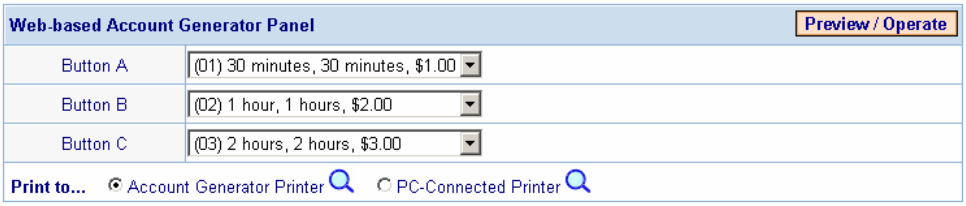


Figure 3-57 Three-Button Printer/ Web-based Account Generator Panel Setting Screen

Item	Default	Description
Button A~C	-	Define each button's billing profile. Select one billing profile by clicking in the list box.
Print to…	Account Generator Printer	Select a printer to print out your account.
Item	**Default**	**Description**
Use ~ for Discount Price Plan based on "Button Presses"	Button A, Disable	Select one button (A~C) by clicking in the list box to assign the base charge and select enable to active the discount price plan.

Preview / Operate *Click on button to preview and operate account generator panel.*

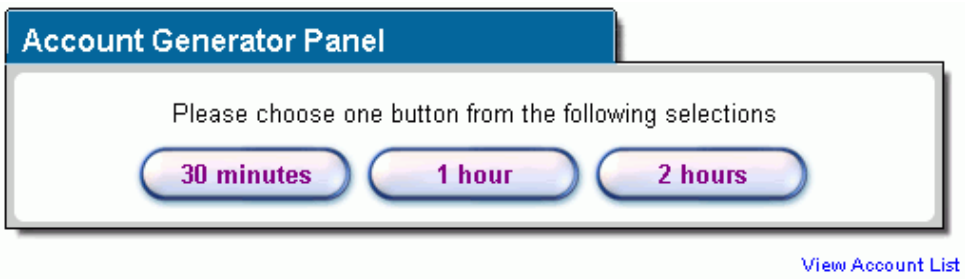


Figure 3-58 Account Generator Panel

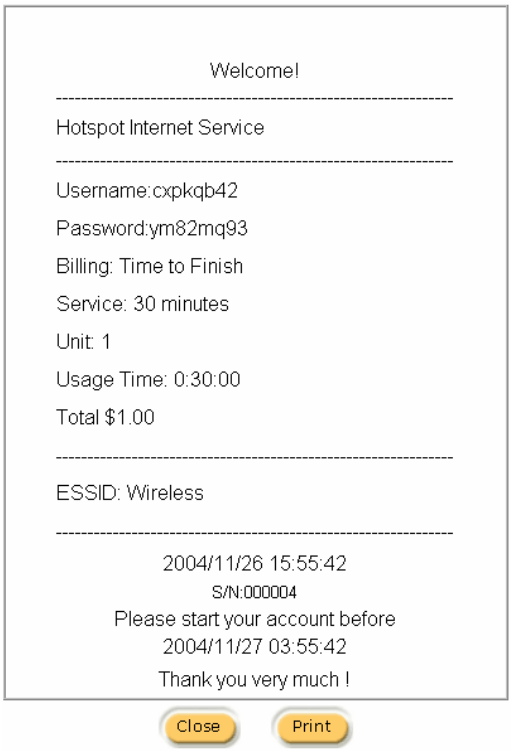


Figure 3-59 Web-based Account Generator Printout (Time to Finish)

Figure 3-60 PC-connected Printer Printout (Time to Finish)

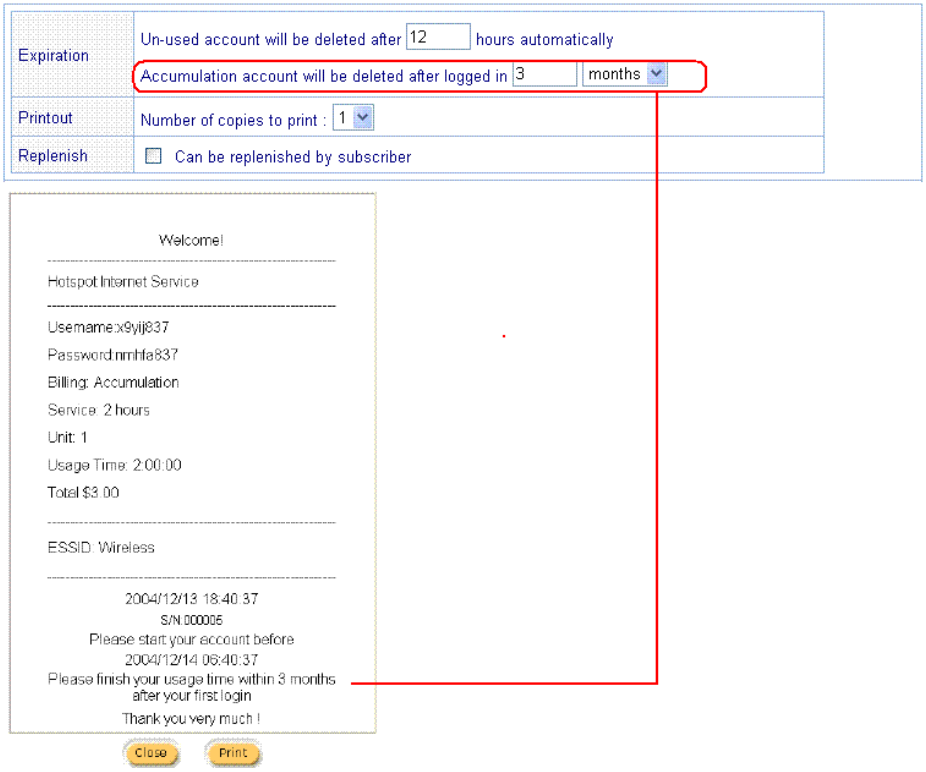


Figure 3-61 Web-based Account Generator Printout (Accumulation)

Figure 3-62 PC-connected Printer Printout (Accumulation)

Note: *Before configuring the accounting, you have to setting the billing profile of Web-based account generator panel.*

Example: If press 7 times

- Discount Price Plan based on “Button Presses” is disabled.

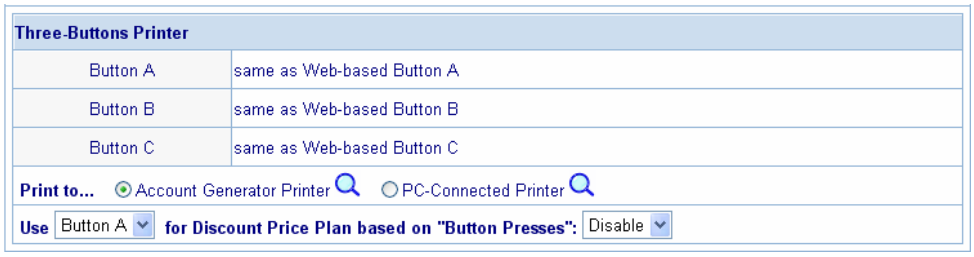
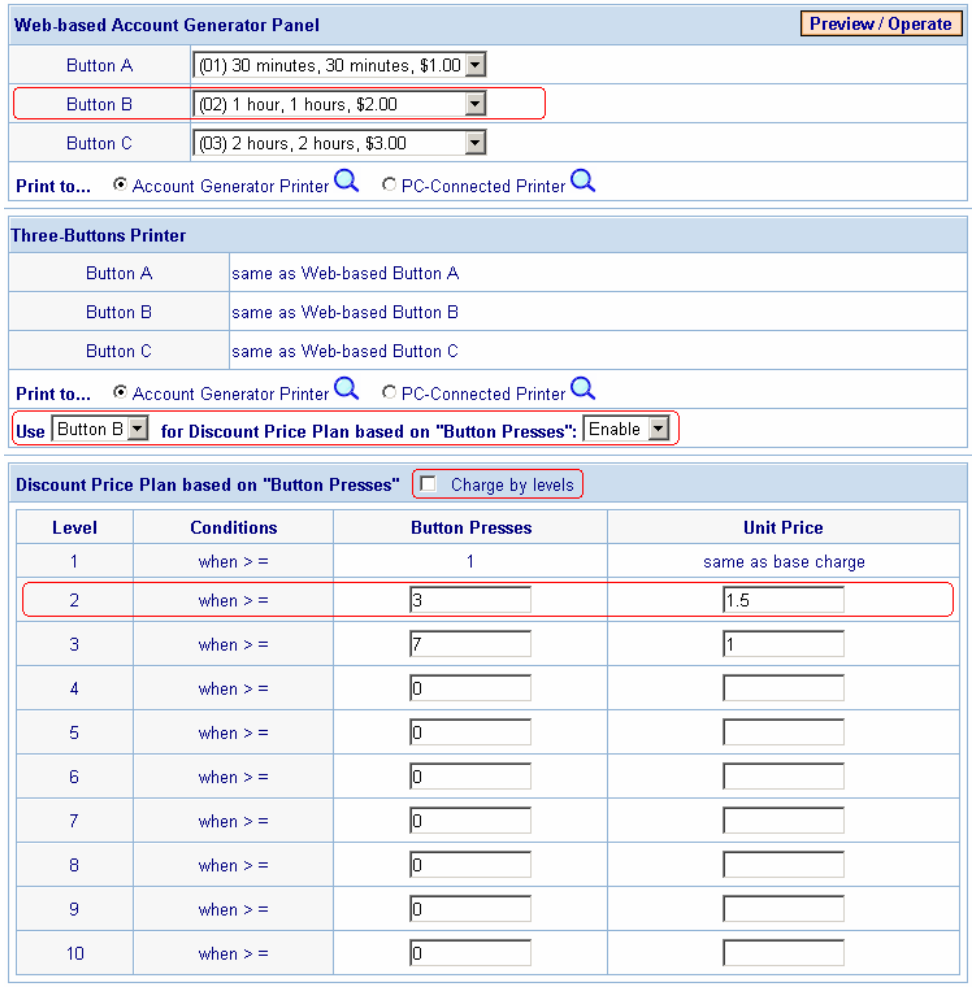


Figure 3-63 Example 1

Amount: 7 x $2.00= $14.00

Figure 3-64 Account Printout

- Discount Price Plan based on “Button Presses” is enabled.
- The Charge by level is disabled.



Web-based Account Generator Panel | Preview / Operate

Button A	(01) 30 minutes, 30 minutes, $1.00
Button B	(02) 1 hour, 1 hours, $2.00
Button C	(03) 2 hours, 2 hours, $3.00

Print to... Account Generator Printer / PC-Connected Printer

Three-Buttons Printer

Button A	same as Web-based Button A
Button B	same as Web-based Button B
Button C	same as Web-based Button C

Print to... Account Generator Printer / PC-Connected Printer

Use Button B **for Discount Price Plan based on "Button Presses":** Enable

Discount Price Plan based on "Button Presses" Charge by levels

Level	Conditions	Button Presses	Unit Price
1	when > =	1	same as base charge
2	when > =	3	1.5
3	when > =	7	1
4	when > =	0	
5	when > =	0	
6	when > =	0	
7	when > =	0	
8	when > =	0	
9	when > =	0	
10	when > =	0	

Figure 3-65 Example 2

Amount: 7 x $ 1 = $ 7.00

Below is an example of the account printout.

Welcome!

Hotspot Internet Service

Username: 2ds5ke24
Password: 8e3zte33
Billing: Time to Finish
Service: 1 hour
Unit: 7
Usage Time: 07:00:00
Total: $7.00

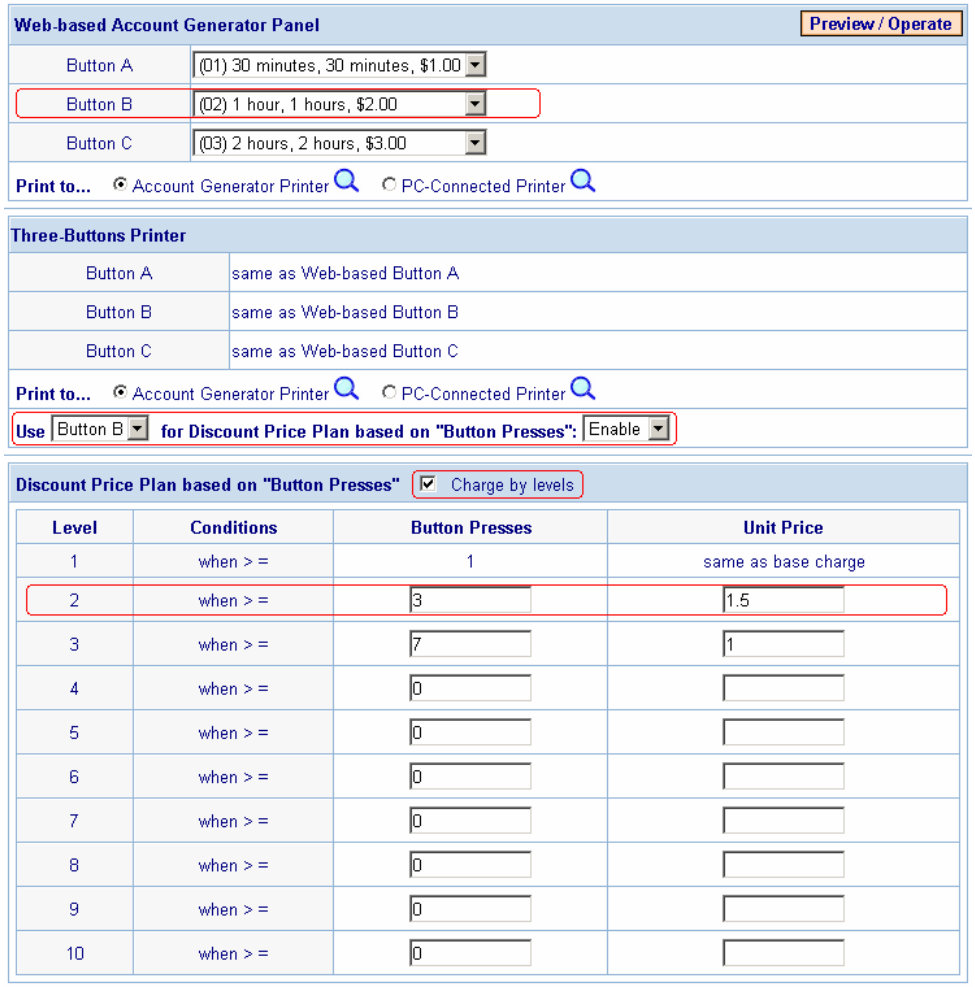
ESSID: Wireless

2004/11/29 10:45:14
S/N:000012
Please activate your account before
2004/11/29 22:45:14

Thank you very much!

Figure 3-66 Account Printout

- Discount Price Plan based on “Button Presses” is enabled.



Web-based Account Generator Panel | Preview / Operate

Button A	(01) 30 minutes, 30 minutes, $1.00
Button B	(02) 1 hour, 1 hours, $2.00
Button C	(03) 2 hours, 2 hours, $3.00

Print to... Account Generator Printer / PC-Connected Printer

Three-Buttons Printer

Button A	same as Web-based Button A
Button B	same as Web-based Button B
Button C	same as Web-based Button C

Print to... Account Generator Printer / PC-Connected Printer

Use Button B **for Discount Price Plan based on "Button Presses":** Enable

Discount Price Plan based on "Button Presses" ☑ Charge by levels

Level	Conditions	Button Presses	Unit Price
1	when > =	1	same as base charge
2	when > =	3	1.5
3	when > =	7	1
4	when > =	0	
5	when > =	0	
6	when > =	0	
7	when > =	0	
8	when > =	0	
9	when > =	0	
10	when > =	0	

.

Figure 3-67 Example 3 Charge by level is enabled

Amount: 2 x $2.00 + 4 x$ 1.50+1x$1= $11.00

Below is an example of the account printout.

Figure 3-68 Account Printout

Discount Price Plan based on "Button Presses" ☑ Charge by levels

Level	Conditions	Button Presses	Unit Price
1	when > =	1	same as base charge
2	when > =	0	
3	when > =	0	
4	when > =	0	
5	when > =	0	
6	when > =	0	
7	when > =	0	
8	when > =	0	
9	when > =	0	
10	when > =	0	

- **Discount Price Plan based on "Button Presses"**

Figure 3-69 Discount Price Plan Setting Screen

Item	Default	Description
Charge by levels	Enable	Enables or disables the charge by levels function.
Level	1~10	This field displays the level number of charge rate.
Conditions	When>=	The discount condition.
Button Presses	-	Enter the times of pressing button.

Unit Price	-	Enter the amount of charge level.

*Click **Apply** button to save the new settings.*

Click **Apply** button, the success dialog box appears. Click on **Back** to return to Accounting setting screen.

Figure 3-70 Success Dialog Box

3.2.8 Credit Card

WSG-403 provides three credit card services (**Authorize.net**, **iValidate.net and Secure Pay**) that allow service provider to authorize, process, and manage credit transactions directly from Internet.

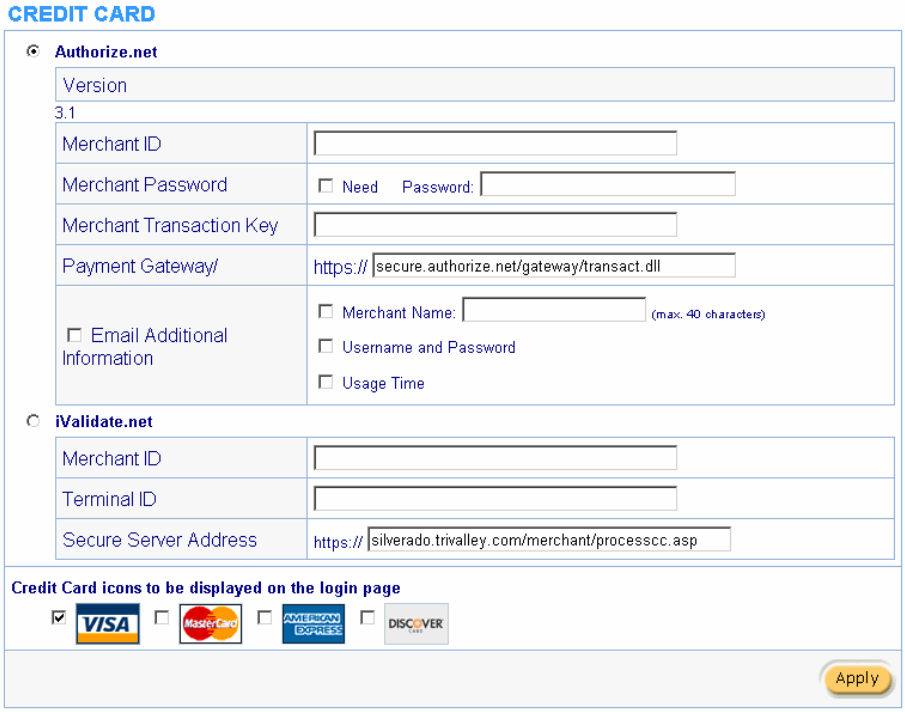


Figure 3-71 Credit Card Setting Screen

Item	Default	Description
Authorize.net		
Version	3.1	This field displays the merchant version.
Merchant ID	Empty	Enter your Merchant ID. This is a Merchant Identification Number that you're received from your Merchant Provider. The maximum character of the Merchant ID is 50.
Merchant Password	This is a Merchant password that you're received from your Merchant Provider.	
Item	**Default**	**Description**
Need	Disable	If your Merchant Provider need password to authorize, click the check box to enable this function.

Password	Empty	Enter your Merchant password.
Merchant Transaction Key	Empty	The Merchant Transaction Key can be obtained directly from “Authorize.net”. The Merchant Transaction Key is similar to a password and is used by the Payment Gateway to authenticate transactions. The maximum character of the Merchant Transaction Key is 50.
Payment Gateway	https://secure.authorize.net/gateway/transact.dll	Enter the address of Payment Gateway.
Email Additional Information	The Email Additional Information included subscriber username and password would be sent to subscriber.	
Email Additional Information	Disable	Indicates whether Email additional information should be sent to the subscriber (customer).
Merchant Name Enable/Disable	Disable	Indicates whether Merchant Name should be sent to the Email of subscriber.
Merchant Name	Empty	Enter the merchant’s company name. The maximum allowed characters length is 40.
Username and Password Enable/Disable	Disable	The Email Additional Information included subscriber username and password would be sent to subscriber.
Usage Time Enable/Disable	Disable	The Email Additional Information included subscriber usage time would be sent to the subscriber.
iValidate.net		
Merchant ID	Empty	Enter your Merchant ID. This is a Merchant Identification Number that you’re received from your Merchant Provider. The maximum character of the Merchant ID is 20.
Device ID	Empty	Enter your Device ID. This is a Device Identification Number that you’re received from your Merchant Provider. The maximum character of the Device ID is 20.
Secure Server Address	https://www.vious.net/merchant/processcc.asp	Enter the secure server address.
Secure Pay		
Merchant ID	Empty	Enter your Merchant ID. This is a Merchant Identification Number that you’re received from your Merchant Provider. The maximum character of the Merchant ID is 7.
SecurePay Address	https://www.securepay.com.au/secur	Enter the address of SecurePay Payment Gateway.

	epay/payments/process2.asp	
Credit Card icons to be displayed on the login page	VISA	Click on check box to display credit card icon on the login page.

*Click **Apply** button to save the new settings.*

Click **Apply** button, the success dialog box appears. Click on **Back** to return to Accounting setting screen.

Figure 3-72 Success Dialog Box

Please follow steps below to pay using credit card.

Step 1: Choose Credit Card service on the login page.

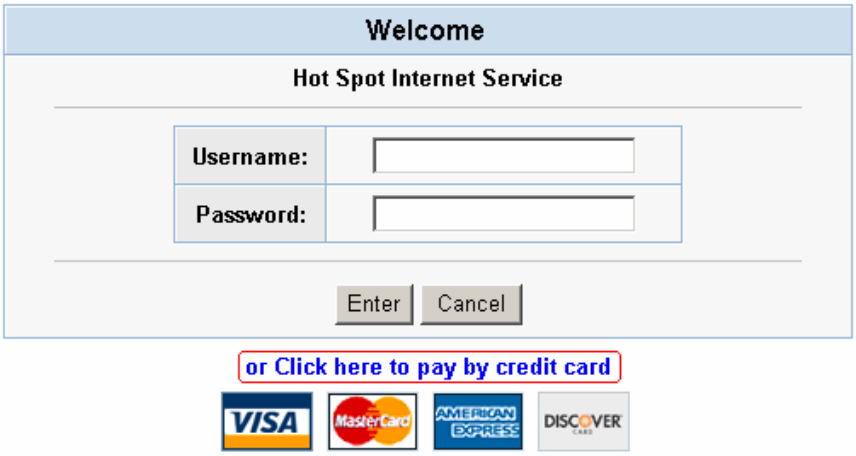


Figure 3-73 Login Page

Step 2: Select Service and enter payment information.

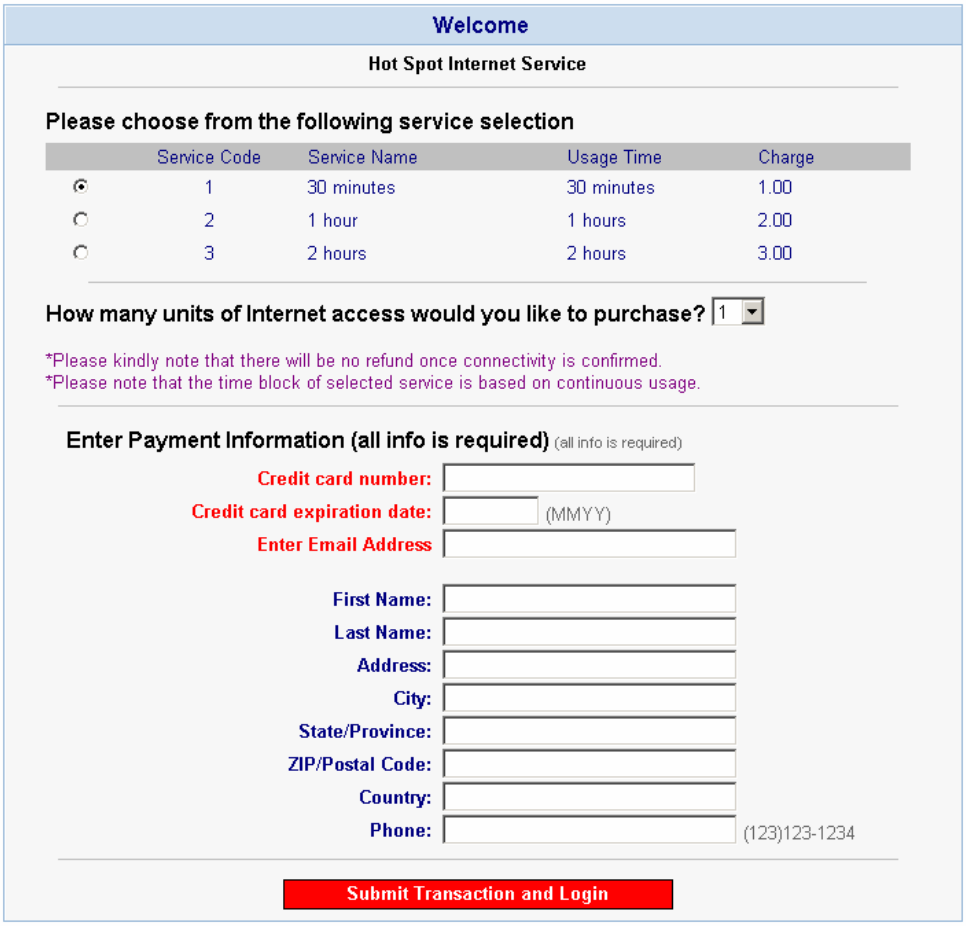


Figure 3-74 Service & Payment Information Setting Screen (Authorize.net)

Item	Default	Description
Payment Information		
Credit card number	Empty	Enter your credit card number.
Credit card expiration date	Empty	Enter the credit card expiration date. The allowed format is MMYY.
Enter Email Address	Empty	Enter your email address. The system will e-mail you account information once your payment information has been successfully authorized.
First Name, Last Name…..	Empty	Enter the customer information, including name, city, country and country.

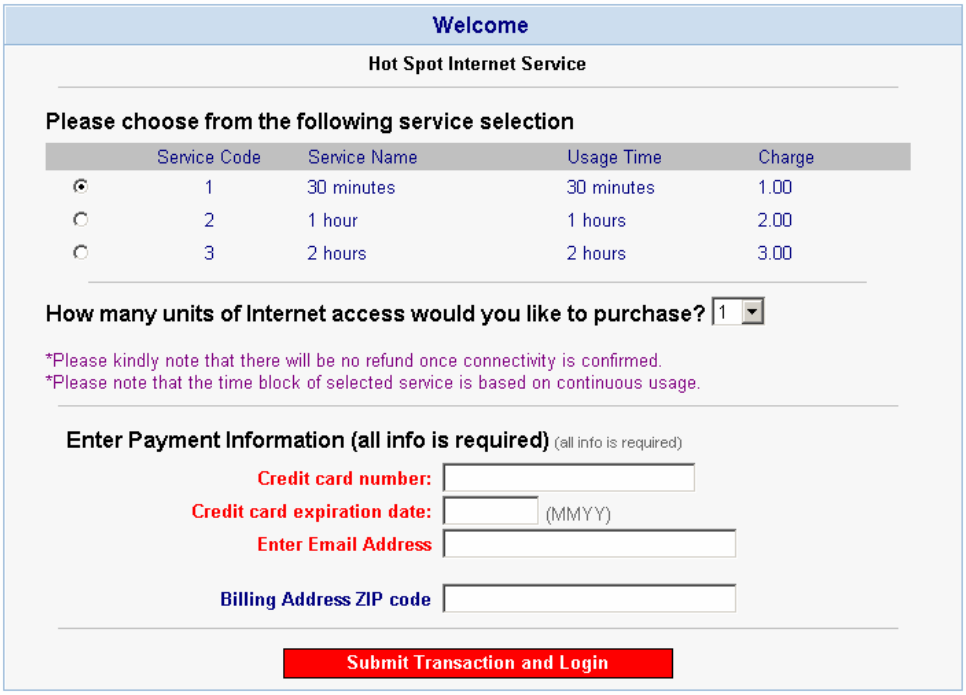


Figure 3-75 Service & Payment Information Setting Screen (iValidate.net)

Item	Default	Description
Payment Information		
Credit card number	Empty	Enter your credit card number.
Credit card expiration date	Empty	Enter the credit card expiration date. The allowed format is MMYY.
Enter Email Address	Empty	Enter your email address. The system will e-mail your account information once your payment information has been successfully authorized.
Billing Address ZIP code	Empty	Enter the ZIP code.

Step 3: After valid payment information has been provided, the subscriber will obtain one valid account to login or the *Figure 3-78* screen will appear.

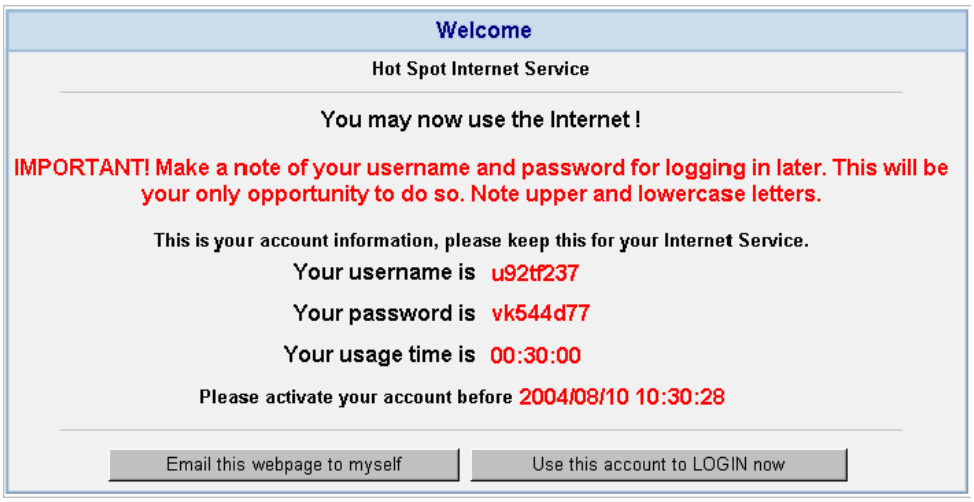


Figure 3-76 User Account Information

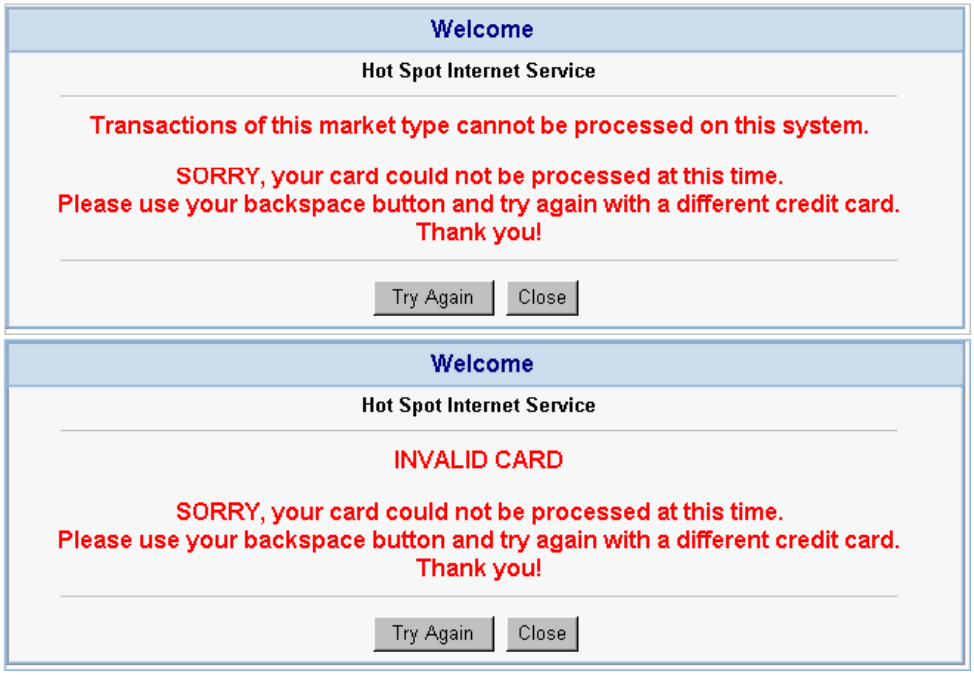


Figure 3-77

3.2.9 Keypad

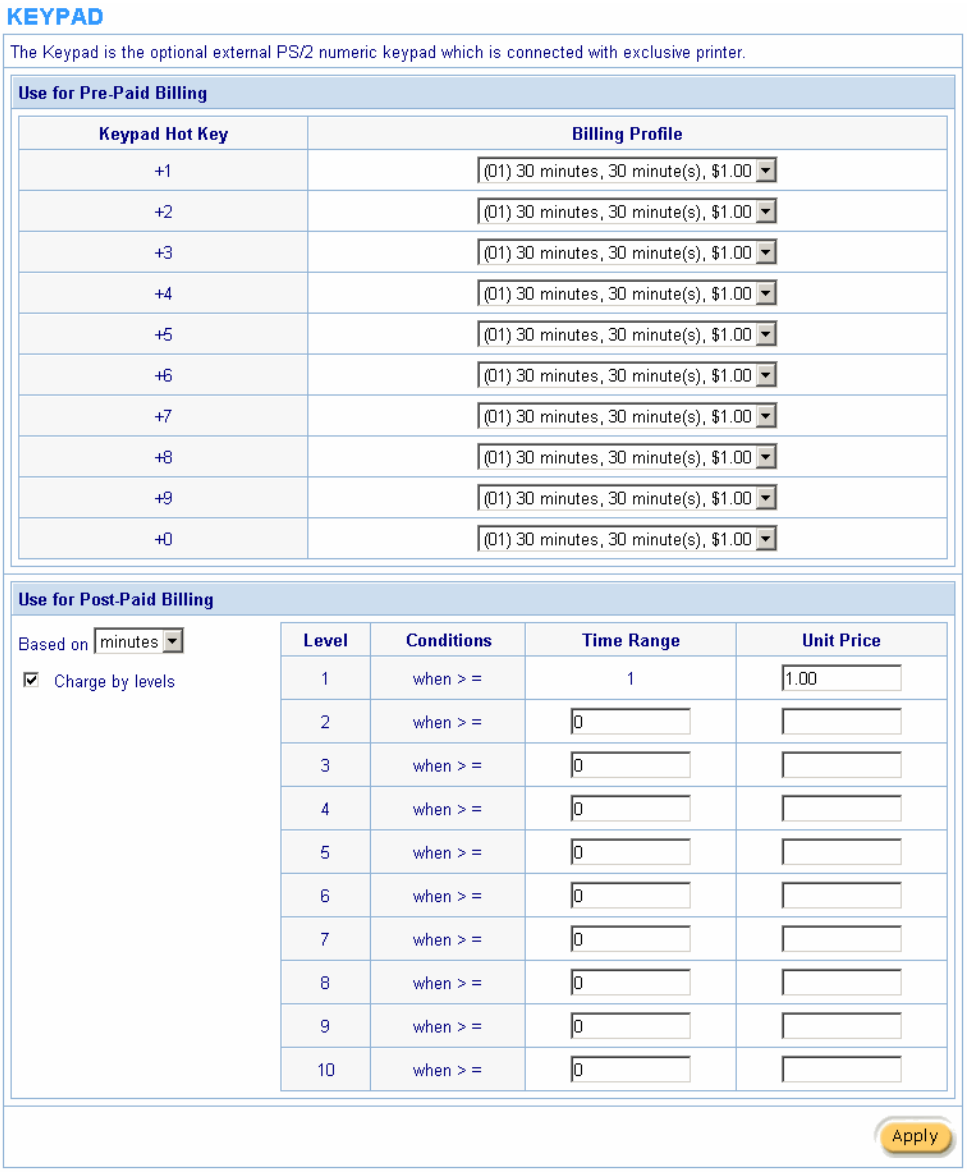


Figure 3-78 Keypad Setting Screen

Item	Default	Description
Use for Pre-Paid Billing	The system provides ten user definable hot keys through the use of the + Key plus the 1 through 0 keys across the top of the keypad.	
Keypad Hot Key	+1~+0	It is the combination hot key for keypad application.
Billing Profile	-	Select the billing profile you want to assign to the combination hot key.
Use for Post-Paid Billing	**Define the basic rate of accounts.**	
Base on ~	Minutes	Select the billing unit by clicking in the list box.
Charge by levels	Enable	Enables or disables the charge by levels function.
Level (1~10)	1~10	This field displays the level number of charge rate.
Time Range	0	Enter the number.
Unit Price	-	Enter the amount of charge level.

Please follow steps below to create accounts using keypad function.

- **Use for Pre-Paid Billing**

Step 1: Click the Billing in the Advanced Setup menu, select enable Pre-Paid, click **Apply**.

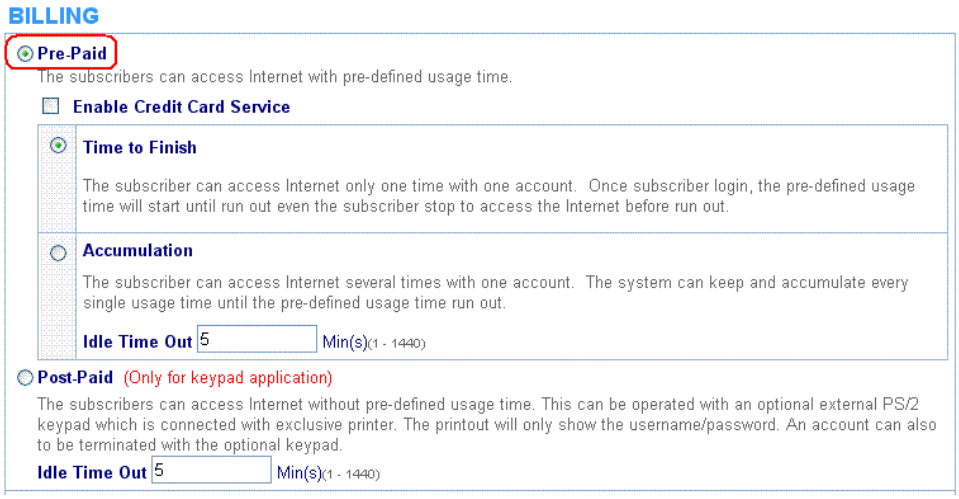


Figure 3-79 Billing Setting Screen

Step 2: Click the Keypad in Advanced Setup Menu, define the Billing plan of pre-paid, and click **Apply**.

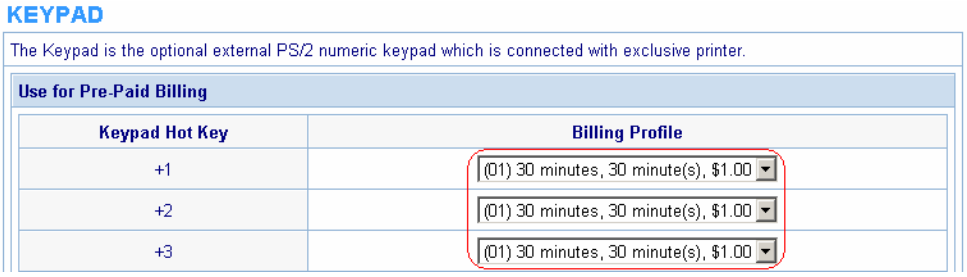


Figure 3-80 Keypad's Hot Key Setting Screen

Step 3: You can use keypad to create subscriber accounts now. Press keypad hot key and then press **Enter**. A new subscriber account is generated, and the account information should be printed.

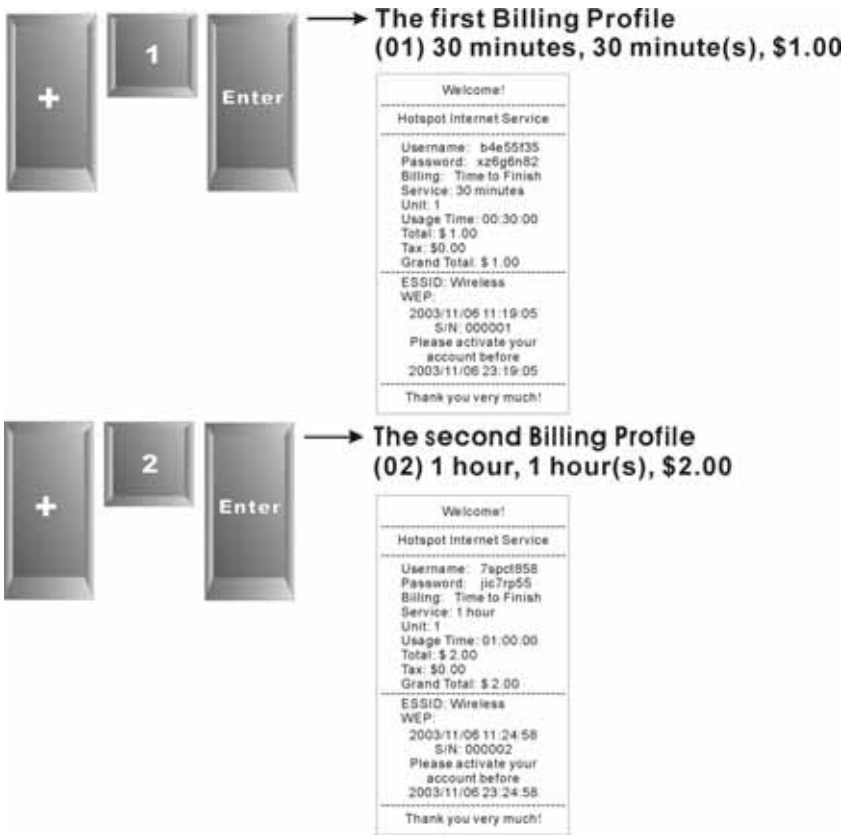


Figure 3-81

Step 4: Subscriber can use this account to access Internet now.

- **Use for Post-Paid Billing**

Step 1: Click the Billing in the Advanced Setup menu, select enable Post-paid, click **Apply**.

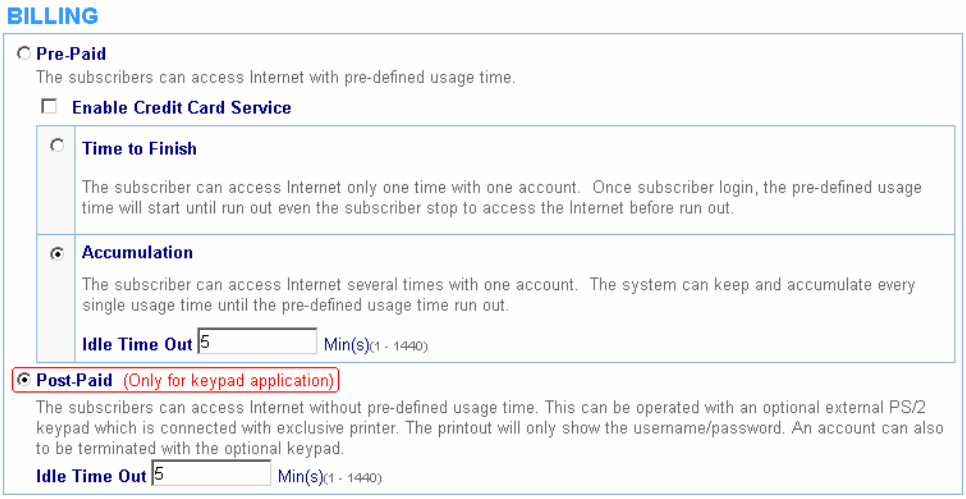


Figure 3-82 Billing Setting Screen

Step 2: Click the Keypad in Advanced Setup Menu, Define the billing plan of post-paid, click **Apply**.

Use for Post-Paid Billing

Based on hours

☑ Charge by levels

Level	Conditions	Time Range	Unit Price
1	when > =	1	1.00
2	when > =	5	0.80
3	when > =	10	0.70
4	when > =	15	0.60
5	when > =	20	0.50
6	when > =	301	0.40
7	when > =	601	0.30
8	when > =	1440	0.20
9	when > =	2880	0.10
10	when > =	3000	0.05

Figure 3-83 Keypad's Hot Key Setting Screen

Step 3: You can use keypad to create subscriber accounts now. Press **Enter**, a new subscriber account is generated, and the account information should be printed. This account information is including serial number, username, password and account create time.

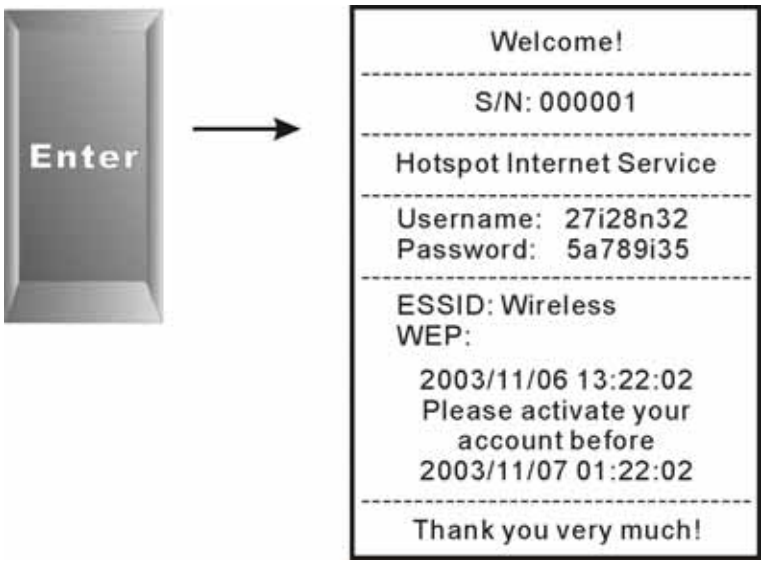


Figure 3-84

Step 4: When subscriber wants to terminate the Internet service, press *, **serial number** and then press **Enter**, a bill should be printed.

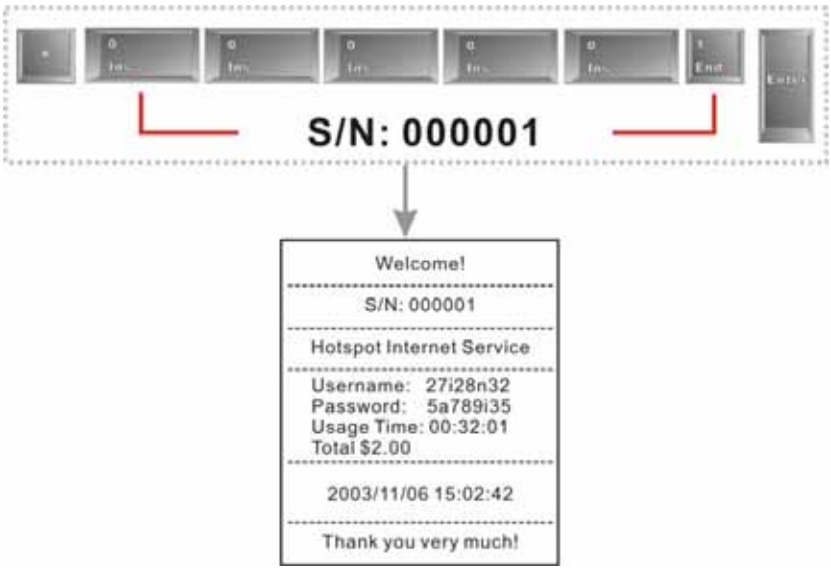


Figure 3-85

Account Generator Printer

Status Report	
Items	Keypad Hot Key
Daily Account Report Printout	Press **ABCAA**
Monthly Account Report Printout	Press **ABCBB**
System Status Report Printout	Press **ABCCC**
Network Report Printout	Press **ABCAB**

PS/2 Keypad

Enter the date (MonthDate)

Status Report	
Items	Keypad Hot Key
Daily Account Report Printout	Press ***1mmdd**
Monthly Account Report Printout	Press ***2mm**
System Status Report Printout	Press ***3**
Network Report Printout	Press ***4**

Figure 3-86 Keypad's Hot Key List

- **Daily Account Report Printout**

Press ABCAA

```
Daily Account
-----------------------------------------
2003/11/26
-----------------------------------------
S/N     Username  B  UN     Price
000001  bvnbc332  1   1      1.00
000002  i293qt32  1   1      1.00
000003  b4e55f56  2   1      2.00
000004  n5faixz26 1   1      1.00
000005  t877ji46  1   1      1.00
-----------------------------------------
TOTAL ACCOUNTS: 5
TOTAL PRICE:  $6.00
-----------------------------------------
2003/11/26 10:36:03

---End---
```

B: Billing Profile

UN: Purchase Unit

Figure 3-87 Daily Account

- **Monthly Account Report Printout**

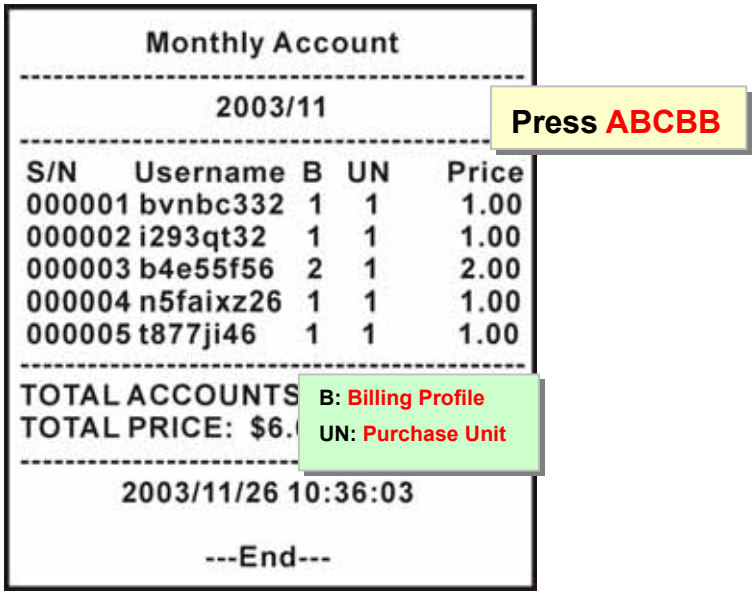


Figure 3-88 Monthly Account

- **System Status Report Printout**

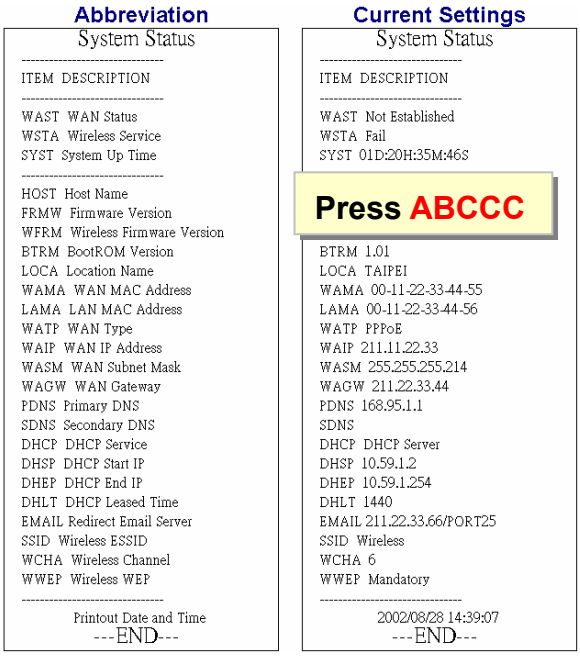


Figure 3-89 System Status Report Printout

- **Network Report Printout**

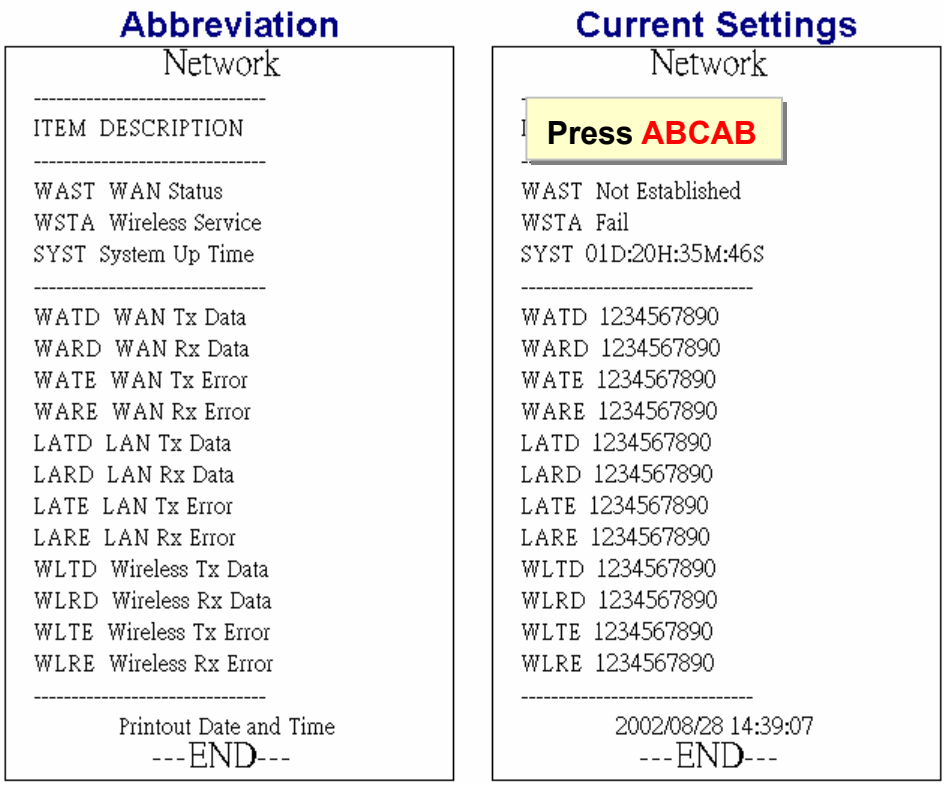


Figure 3-90 Network Report Printout

3.2.10 Customization

- **Login Page**

The WSG-403 provides three different login page formats, including standard, redirect, advanced and frame format.

Standard

For some service providers, they may hope to have a customize subscriber's login page to the users. This function helps them to realize the ideal. The page elements are including login page title, background color, subtitle etc.

Figure 3-91 Standard Login Page Customization Setting Screen

Item	Default	Description
Logo	Disable	Select the check box to display service provider's logo.
Title	Welcome	Enter the title name of subscriber login page. The maximum allowed characters length is 80.
Subtitle	Hot Spot	Enter the subtitle name of subscriber login page. The maximum

	Internet Service	allowed characters length is 80.
Footnote	Disable	Allow the administrator to input the footnote such like “Pleas Contact to our Customer Service Center, EXT 141”. The maximum character of the footnote is 240.
Item	**Default**	**Description**
Copyright	Enable	The copyright is allowed the administrator to input a paragraph in the subscriber login page for copyright information. The maximum character of the copyright is 80.
Background Color	FFFFFF	The background text color can be specified color. For the specified text color format please views the color grid. The allowed format is Hexadecimal.

Figure 3-92 Login Page Screen

Before you add logo to the login page, please make sure the logo image file is defined. For details, see section 3-2-10

Customization->Logo.

Figure 3-93 Error Dialog Box

Redirect

This allow service provider to redirect the subscriber’s browser to a specified home page.

Figure 3-94 Redirect Login Page Setting Screen

Copy and paste the following HTML Code into your home page to produce redirect subscriber login page.

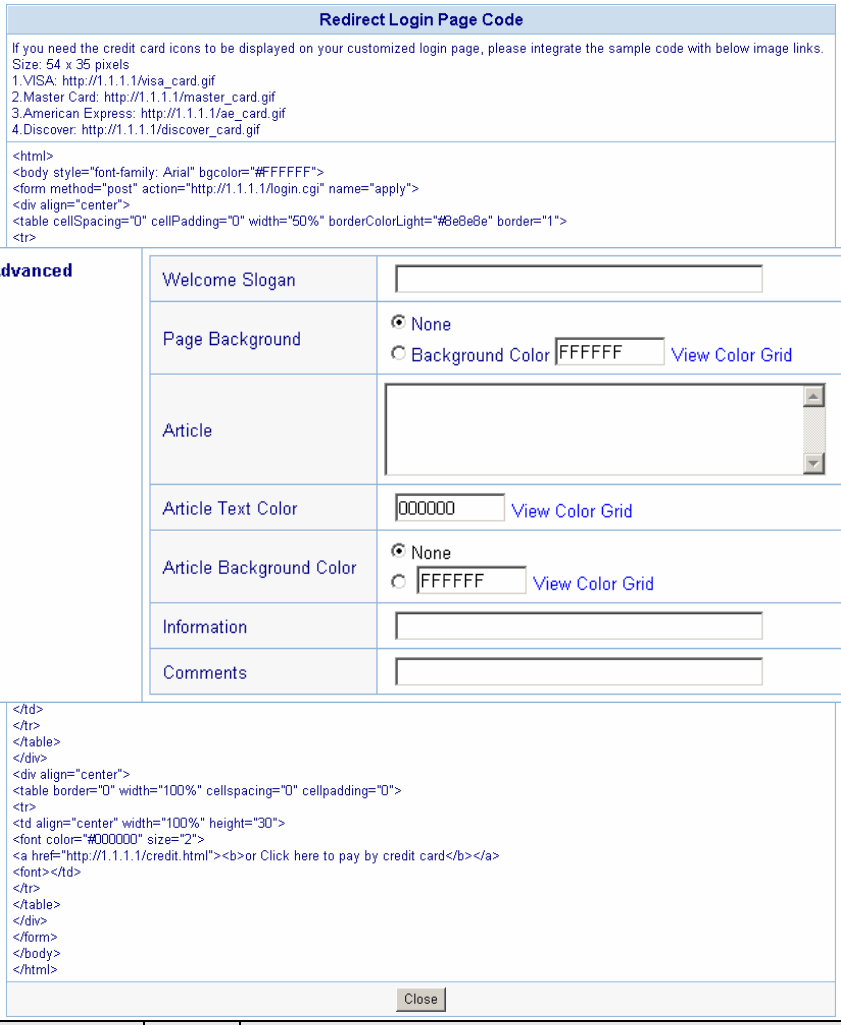


Figure 3-95 Redirect Login Page Code Screen

Advanced

This function allow user to design login page of WSG-403.

Figure 3-96 Advanced Login Page Setting Screen

Item	Default	Description
Welcome Slogan	Welcome	The maximum allowed characters length is 80.
Page Background	None	The page background can be none or specified color. For the background color format please views the color grid. The allowed format is Hexadecimal.
Article	Empty	The article is allowed the administrator to input a paragraph in the subscriber login page for advisement or announcement. The maximum character of the article is 1024.
Article Text Color	000000	The article text color can be specified color. For the specified text color format please views the color grid. The allowed format is Hexadecimal.
Article Background Color	None	The article background can be specified color. For the background color format please views the color grid. The allowed format is Hexadecimal.
Information	Empty	Allow the administrator to input the text information such like address, telephone number and fax information. The maximum character of the information is 80.
Comments	Empty	Allow the administrator to input the text comments such like “Pleas Contact to our Customer Service Center, EXT 141”. The maximum

		character of the comment is 80.

Figure 3-97 Color Gird

Frame

If “Frame” is selected the subscriber login page will be separate into Top Frame and Bottom Frame. Bottom Frame is a default format for username and password input, Top Frame is allowed to be specified a URL to link.

Figure 3-98 Frame Login Page Setting Screen

Item	Default	Description
Top Frame URL Link	Empty	The input format can be http://www.yahoo.com. The maximum character of the URL Link is 200.
Bottom Frame	-	This frame will show the standard login page.

Figure 3-99 Example-Login Page Screen

- **Logo**

This function allows service provider to upload the customer’s logo image file which can be shown on the standard login page and account printout of PC-connected printer.

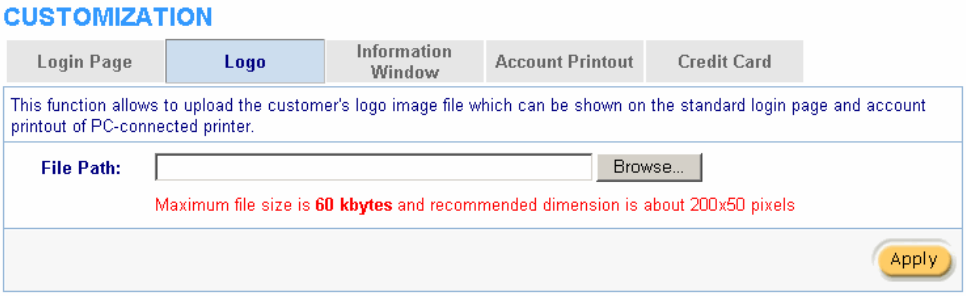


Figure 3-100 Logo Setting Screen

Item	Default	Description
File Path	Empty	Enter the file pathname of the logo file in the File Path field.
Apply	Click **Apply** button to save the logo file to system.	
Delete	Click **Delete** button to delete the logo file.	

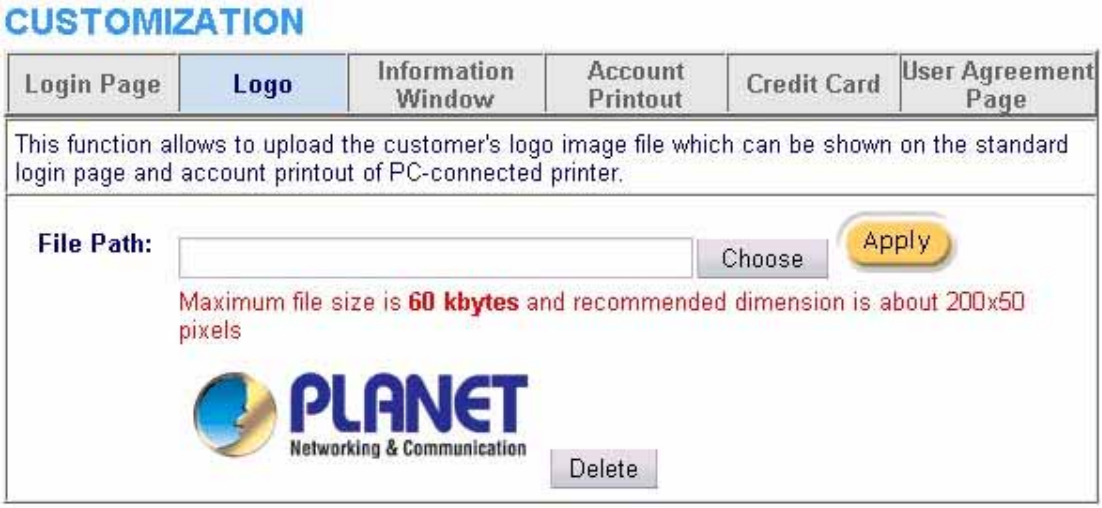


Figure 3-101 Logo Setting Screen

Figure 3-102 Login Page

- **Information Window**

This function allow service provider can decide whether they want an “Information Window” pop-up on subscriber PC when authenticate successful or not and specified text of information window. Subscriber can type “http://1.1.1.1/info” to open the information window again or enter “http://1.1.1.1/logout” to logout immediately if accumulation billing selected.

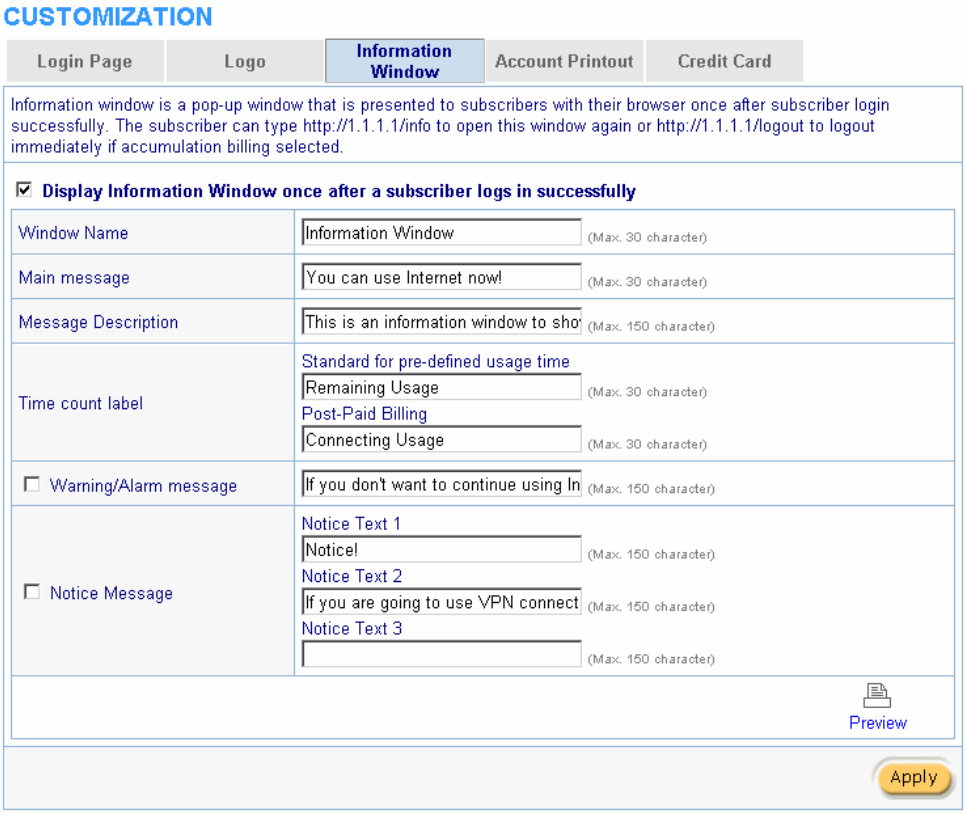


Figure 3-103 Example-Login Page Screen

Figure 3-104 Example-Login Page Screen

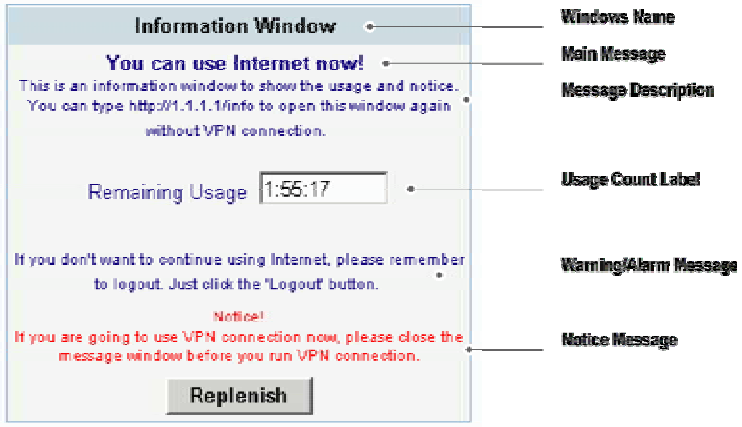


Figure 3-105 Information Window

Billing Type=Time to Finish Can be replenished by subscriber=Disable

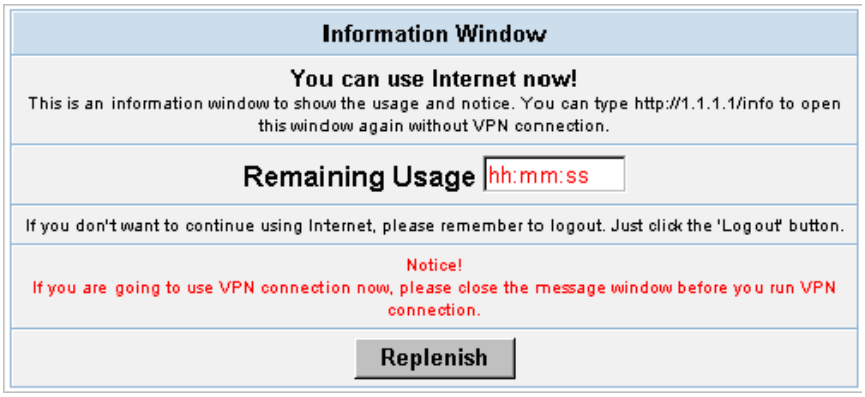


Figure 3-106 Information Window

Billing Type=Time to Finish Can be replenished by subscriber=Enable

Figure 3-107 Information Window

Billing Type=Accumulation

Can be replenished by subscriber=Disable

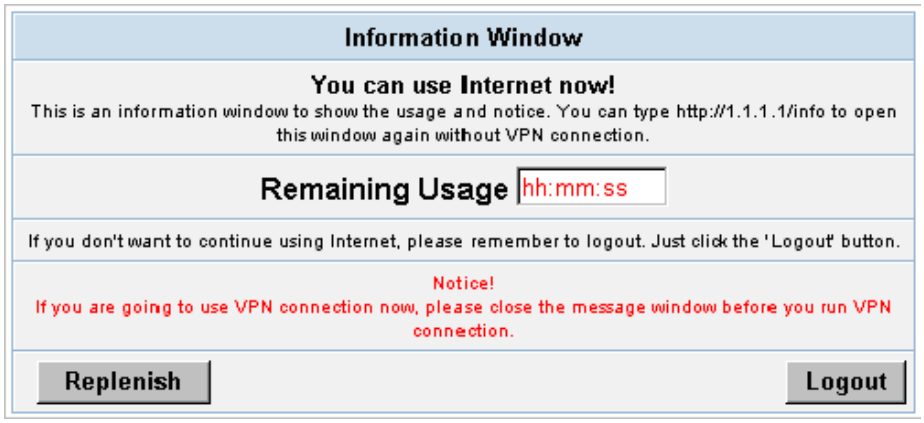


Figure 3-108 Information Window

Billing Type=Accumulation

Can be replenished by subscriber=Enable

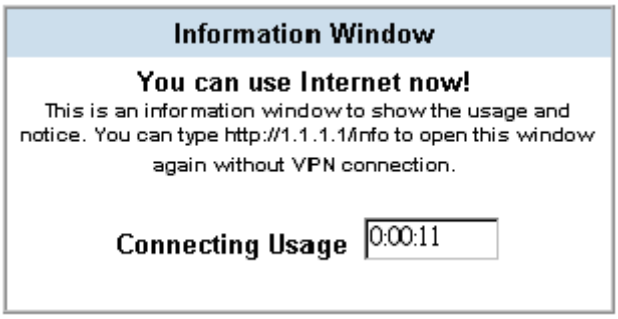


Figure 3-109 Information Window

Super Subscriber Account (Default username="super" & password="super")

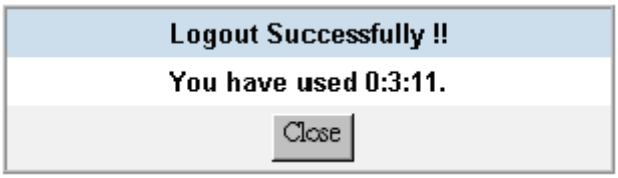


Figure 3-110 Logout Successfully Dialog Box

Billing Type=Accumulation

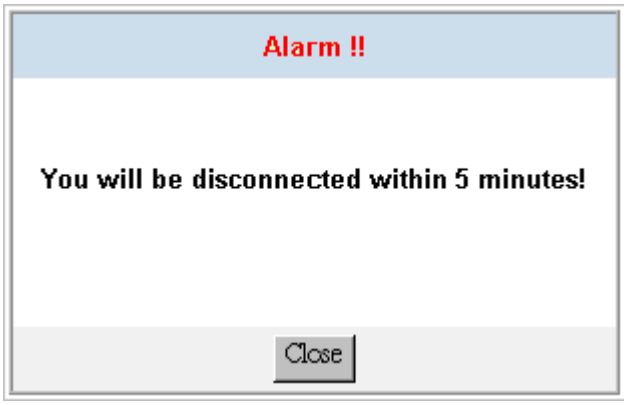


Figure 3-111 Alarm Dialog Box1

- **Account Printout**

This function allow service provider to specified text of account printout.

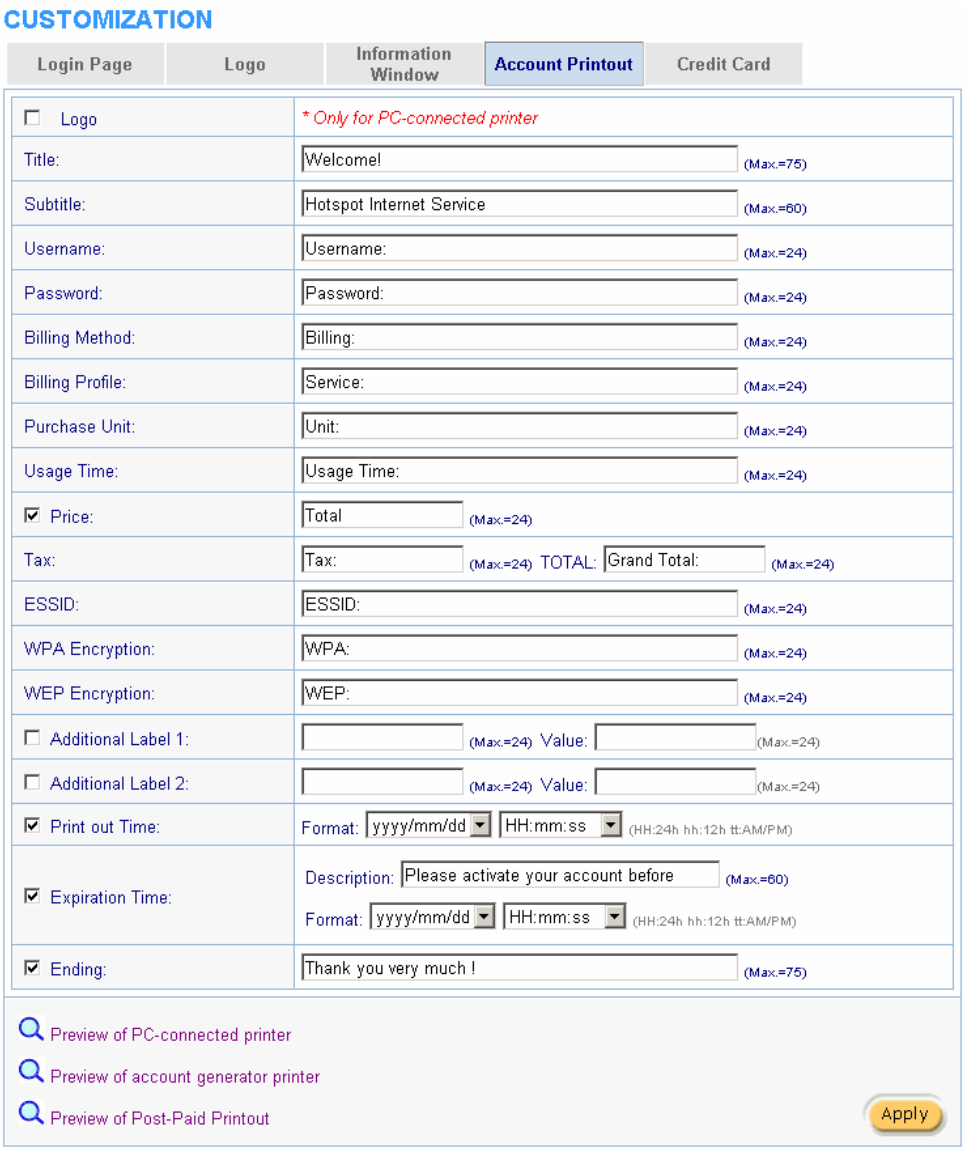


Figure 3-112 Account Printout Customization Setting Screen

*Click **Apply** button to save the new settings.*

Click **Apply** button, the success dialog box appears. Click on **Back** to return to Account Printout Customization setting screen.

Figure 3-113 Success Dialog Box

Welcome!

Hotspot Internet Service

Username:	xxxxxxxx
Password:	xxxxxxxx
Billing:	Time to Finish
Service:	30 minutes
Unit:	1
Usage Time:	0:30:00
Total	**$1.00**
ESSID:	Wireless

S/N:000001 2004/12/13 17:03:13

Please activate your account before 2004/12/14 05:03:13

Thank you very much !

Close Print

Figure 3-114 PC-connected Printer Printout

Example Preview

1.Create accounts

Welcome!

S/N:001234

Hotspot Internet Service

Username:xxxxxxxx

Password:xxxxxxxx

ESSID: Wireless

WEP:

2002/4/14 03:14:31

Please start your account before

2002/4/14 15:14:31

Thank you very much !

Press " ENTER "

2.Bill accounts

Welcome!

S/N:001234

Hotspot Internet Service

Username:xxxxxxxx

Password:xxxxxxxx

Usage Time:

Billing: Time to Finish

Total $ 100.00

2002/4/14 03:14:31

Thank you very much !

Press" * " " 001234 "and " ENTER "

Close

Figure 3-115 Account Generator Printer Printout

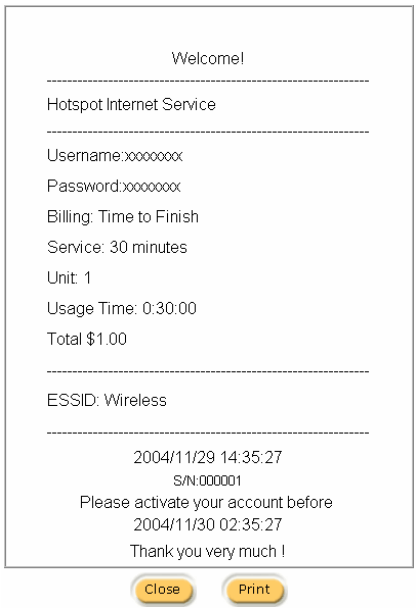


Figure 3-116 Account Generator Printer Printout

- **Credit Card**

Standard Login Page

This function allow service provider to customize the additional credit card message for the standard login page.

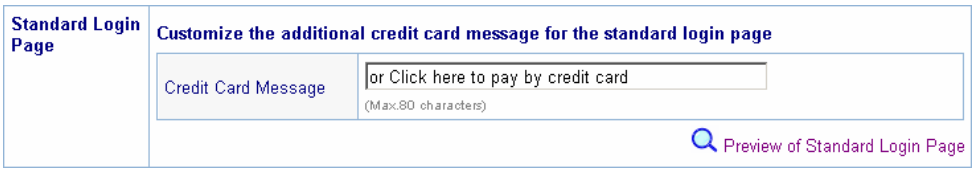


Figure 3-117 Credit Customization Setting Screen

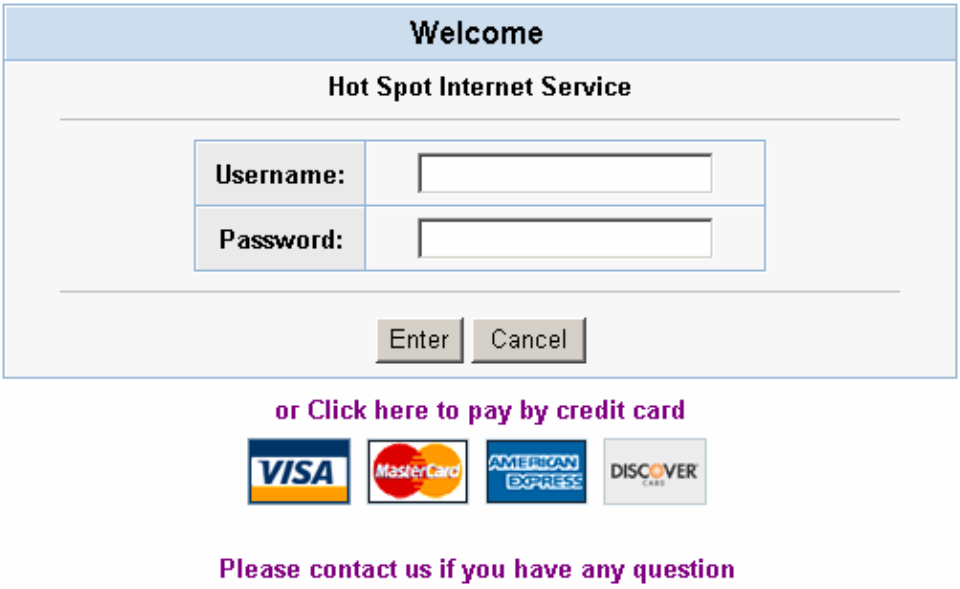


Figure 3-118 Standard Login Page
(Enable Credit Card Service=enable)

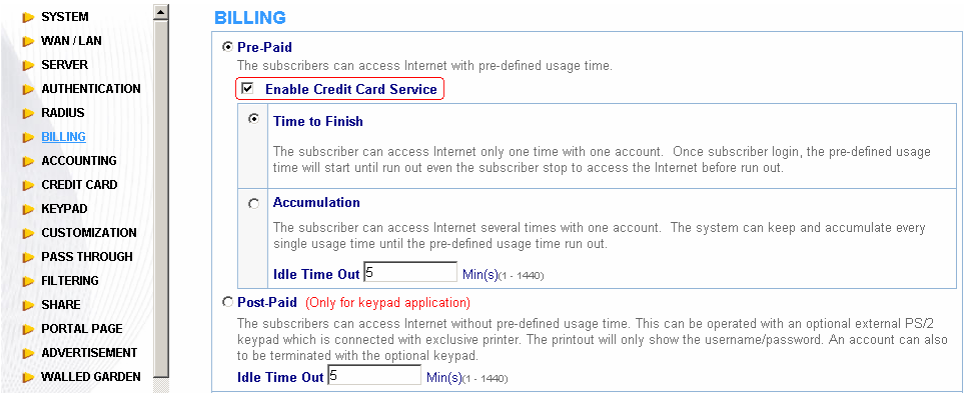


Figure 3-119 Billing Setting Screen

Service Selection Page

This function allow service provider to customize the additional credit card message for the standard login page.

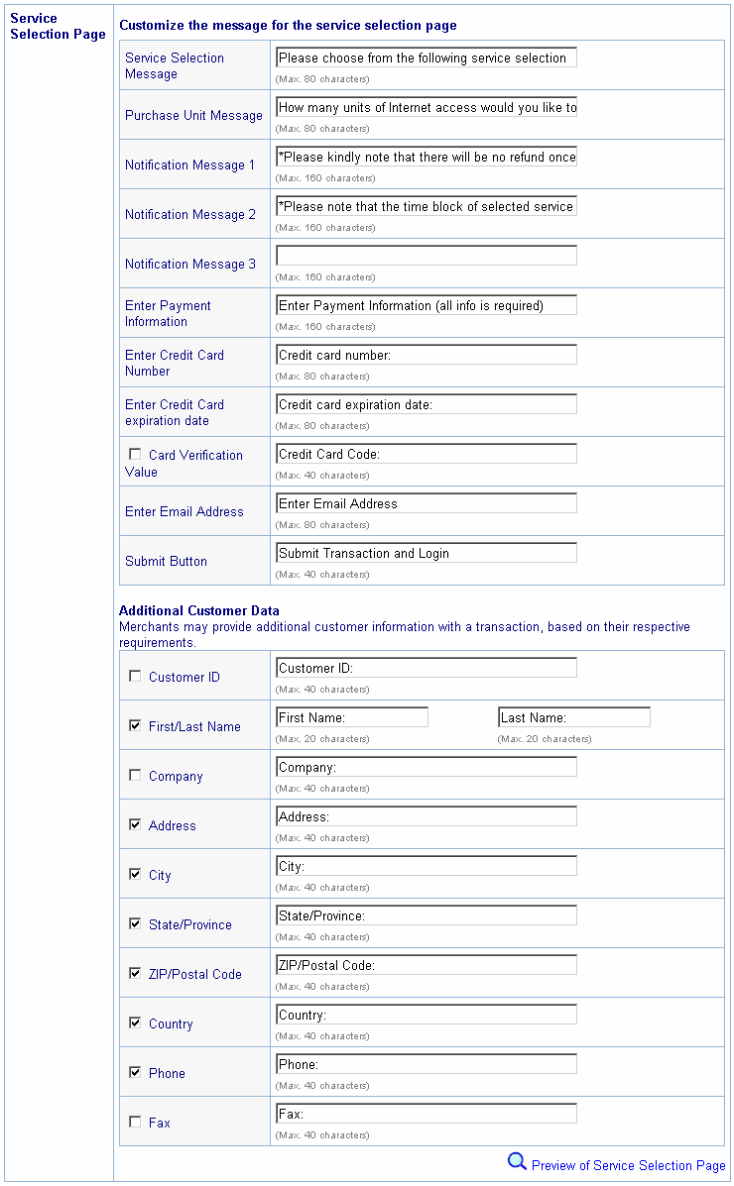


Figure 3-120 Service Selection Page Setting Screen (Authorize.net)

Service Selection Page

Customize the message for the service selection page

Service Selection Message	Please choose from the following service selection (Max. 80 characters)
Purchase Unit Message	How many units of Internet access would you like to (Max. 80 characters)
Notification Message 1	*Please kindly note that there will be no refund once (Max. 160 characters)
Notification Message 2	*Please note that the time block of selected service (Max. 160 characters)
Notification Message 3	(Max. 160 characters)
Enter Payment Information	Enter Payment Information (all info is required) (Max. 160 characters)
Enter Credit Card Number	Credit card number: (Max. 80 characters)
Enter Credit Card expiration date	Credit card expiration date: (Max. 80 characters)
☐ Card Verification Value	Credit Card Code: (Max. 40 characters)
Enter Email Address	Enter Email Address (Max. 80 characters)
Submit Button	Submit Transaction and Login (Max. 40 characters)

Additional Customer Data

Merchants may provide additional customer information with a transaction, based on their respective requirements.

☐ First/Last Name	First Name (Max. 20 characters)	Last Name (Max. 20 characters)
☑ Billing Address ZIP code	Billing Address ZIP code (Max. 40 characters)	

Preview of Service Selection Page

Figure 3-121 Service Selection Page Setting Screen (iValidate.net)

Service Selection Page

Customize the message for the service selection page

Service Selection Message	Please choose from the following service selection (Max. 80 characters)
Purchase Unit Message	How many units of Internet access would you like to (Max. 80 characters)
Notification Message 1	*Please kindly note that there will be no refund once (Max. 160 characters)
Notification Message 2	*Please note that the time block of selected service (Max. 160 characters)
Notification Message 3	(Max. 160 characters)
Enter Payment Information	Enter Payment Information (all info is required) (Max. 160 characters)
Enter Credit Card Number	Credit card number: (Max. 80 characters)
Enter Credit Card expiration date	Credit card expiration date: (Max. 80 characters)
☐ Card Verification Value	Credit Card Code: (Max. 40 characters)
Enter Email Address	Enter Email Address (Max. 80 characters)
Submit Button	Submit Transaction and Login (Max. 40 characters)

Preview of Service Selection Page

Figure 3-122 Service Selection Page Setting Screen (Secure Pay)

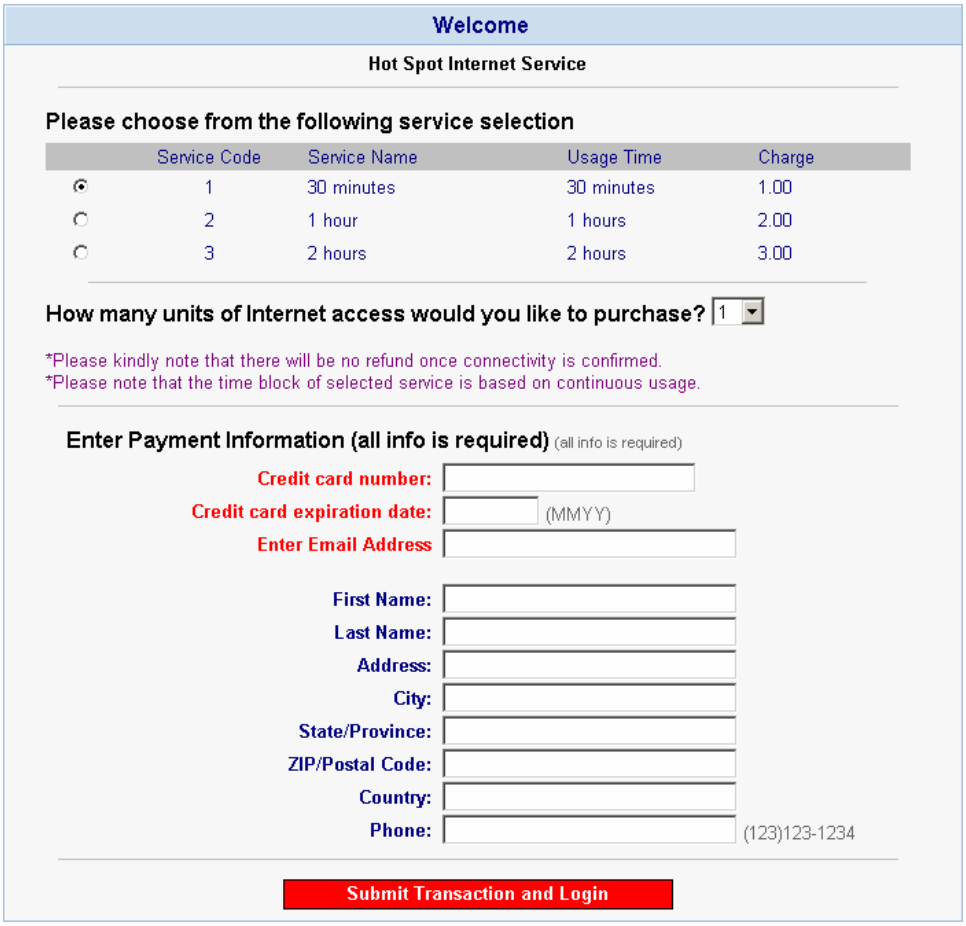


Figure 3-123 Service Selection Page (Authorize.net)

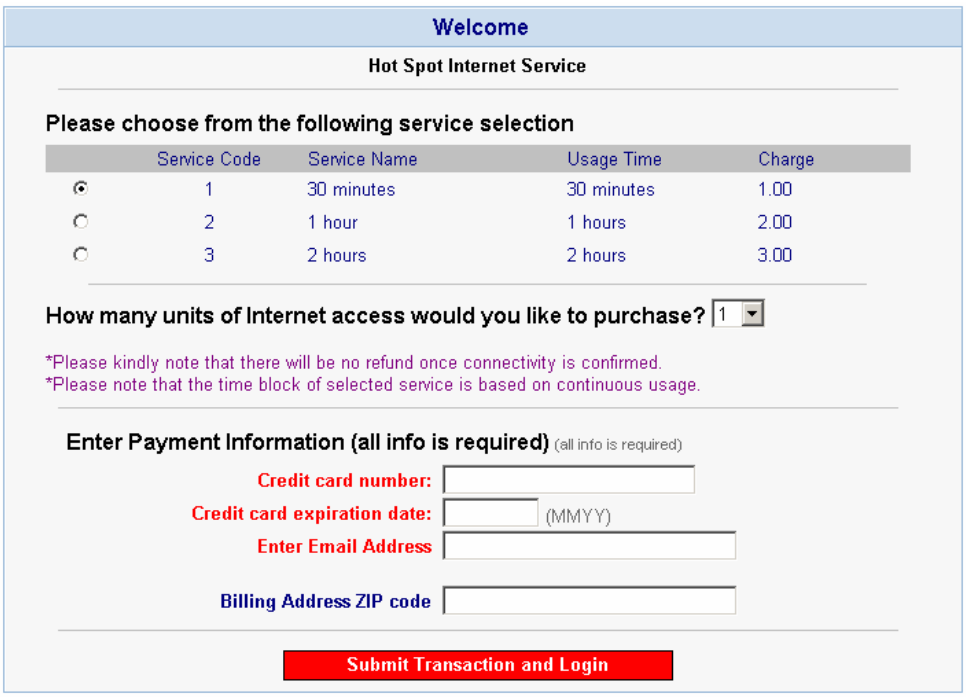


Figure 3-124 Service Selection Page (iValidate.net)

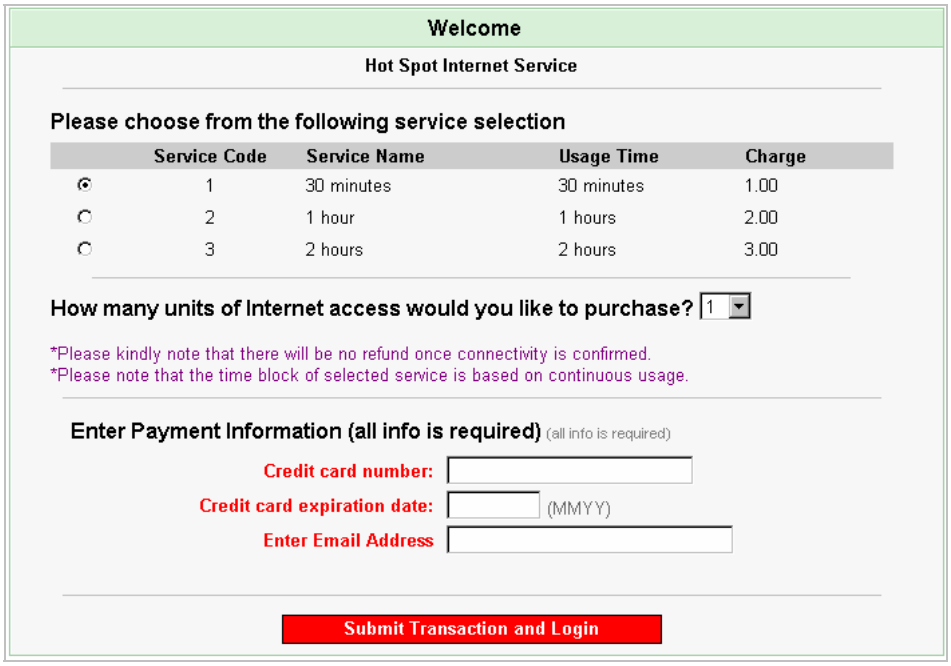


Figure 3-125 Service Selection Page (SecurePay)

Successful Page

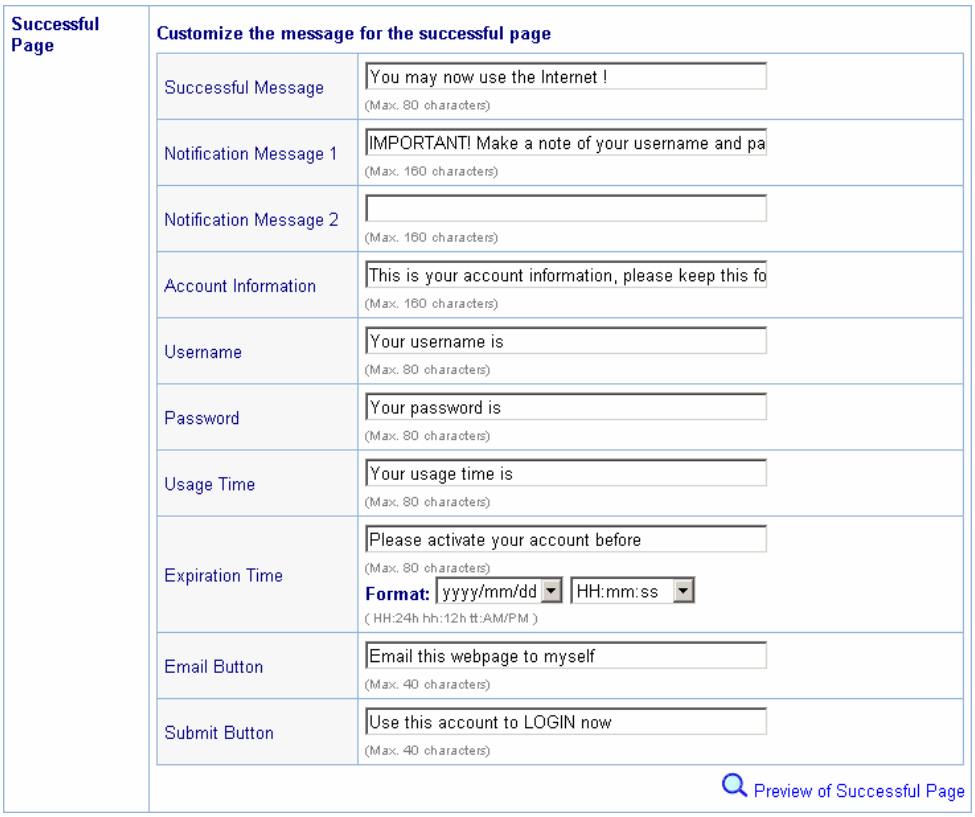


Figure 3-126 Successful Page Setting Screen

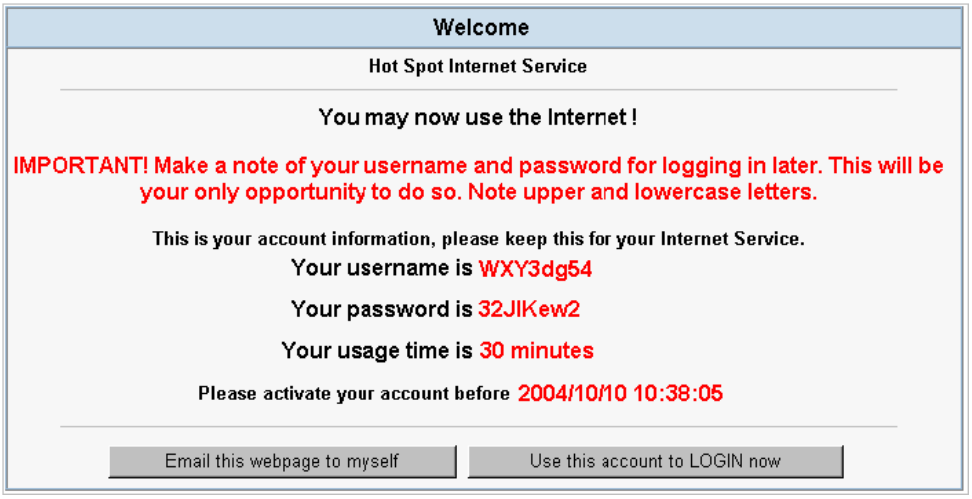


Figure 3-127 Example-Successful Page

Fail Page

This function allow service provider to customize the message for the fail page.

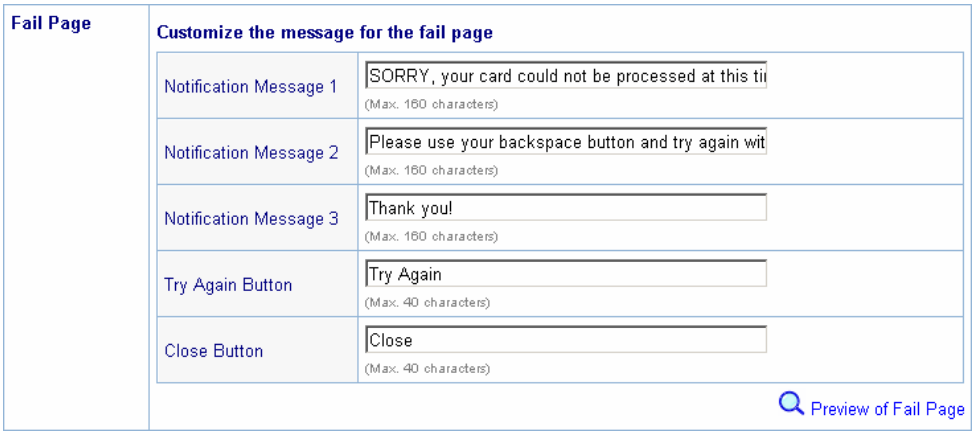


Figure 3-128 Fail Page Setting Screen

*Click **Apply** button to save the new settings.*

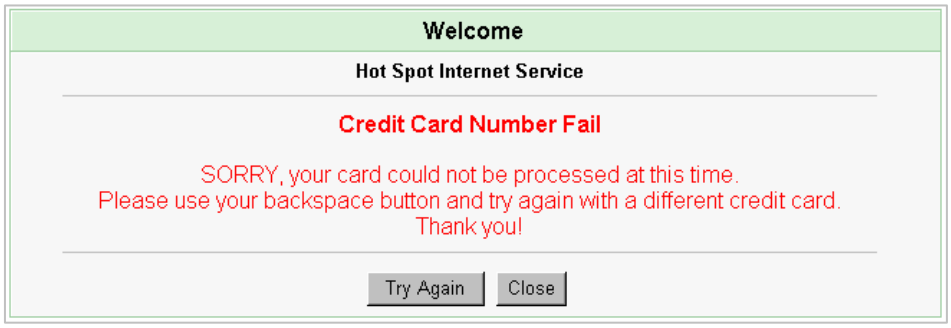


Figure 3-129 Fail Page

Click **Apply** button, the success dialog box appears. Click on **Back** to return to Credit Card Customization setting screen.

Figure 3-130 Success Dialog Box

- **User Agreement Page**

This function allow user to design user agreement page of Internet Subscriber Server.

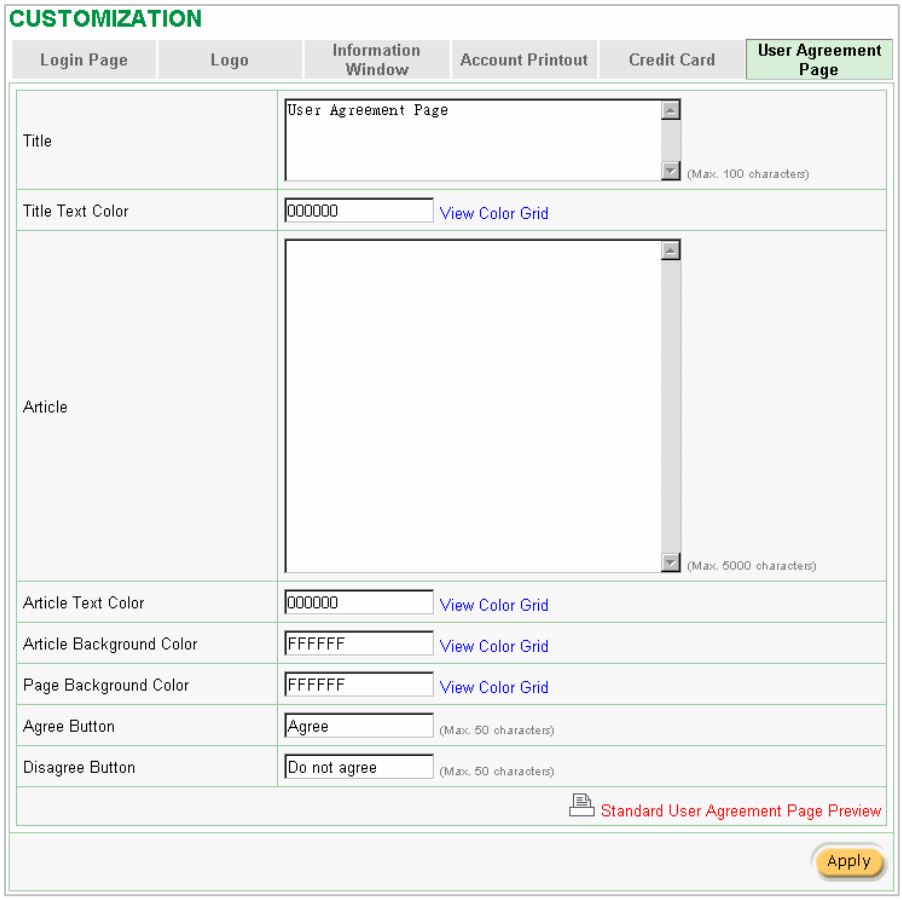


Figure 3-131 User Agreement Page Setting Screen

Figure 3-132 User Agreement Page

3.2.11 Pass Through

This function allow administrator to set some special devices pass through the WSG-403 system. Because some network devices might be constructed under the WSG-403. However these devices needn't be checked and authorized. The WSG-403 provides a pass through list and the administrator can control which devices can be pass through with authentication.

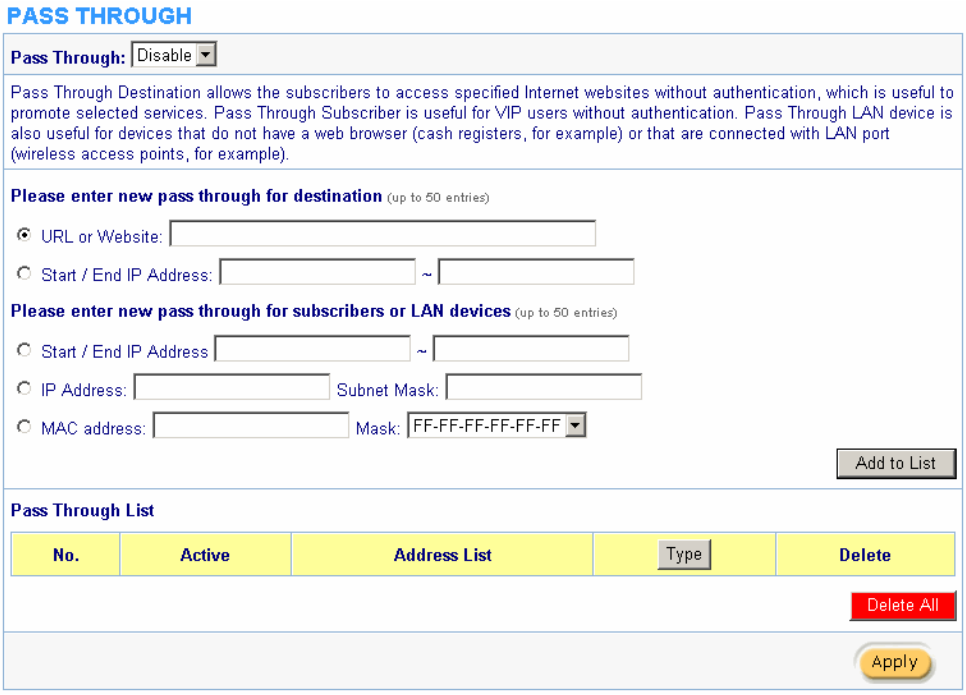


Figure 3-133 Pass through Setting Screen

Item	Default	Description
Pass Through	Disable	Enables or disables the pass through function.
Destination URL/IP Address Pass Through		
URL or Website:		
URL or Website	Empty	Enter the URL Page; please use this format such like "http://www.yahoo.com". The maximum character of the URL Page is 50.
Start / End IP Address: ~		
Start IP Address	Empty	Enter the start IP address of you wants pass through.
End IP Address	Empty	Enter the end IP address of you wants pass through.
Subscriber IP/MAC Address or LAN Device Pass Through		
Start / End IP Address: ~		
Start IP Address	Empty	Enter the start IP address of you wants pass through.
End IP Address	Empty	Enter the end IP address of you wants pass through.
IP Address: Subnet Mask:		
IP Address	Empty	Enter the IP address of you wants pass through.
Subnet Mask	Empty	Enter the subnet mask of you wants pass through.
MAC address: Mask: FF-FF-FF-FF-FF-FF		
MAC Address	Empty	Enter the MAC address of you wants pass through.
Mask	Empty	Enter the subnet mask of you wants pass through.

Pass Through List	Display the pass through Information of WSG-403.	
No.	-	The index number of pass through address.
Active	Disable	Click on check box, active or inactive the pass through address.
Address List	-	Display the pass through address(s).
Type	-	Display the type of pass through address.
Delete	Disable	Select the check boxes and click '**Delete**' to delete the pass through address(s).

Add to List *Click **Add to List** button to add a new entry.*

Apply *Click **Apply** button to save the new settings.*

Delete All *Click **Delete All** & **Apply** button to delete all entries.*

***Note:** The priority of "pass through" is higher than "Filtering".*

3.2.12 Filtering

Filtering allows the system administrator to have a list of restricted destinations, which is useful to block specified Internet websites or Intranet areas.

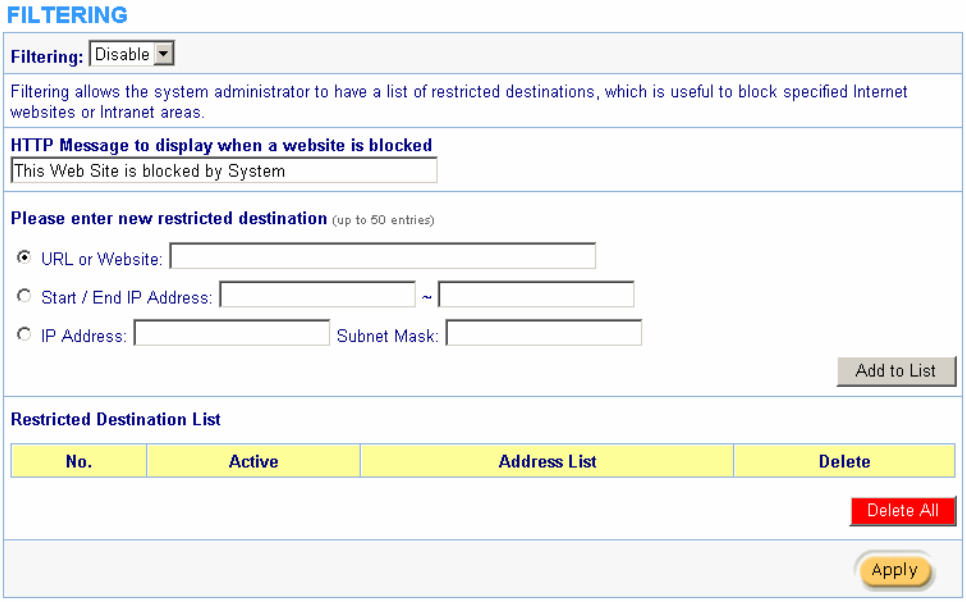


Figure 3-134 Filtering Setting Screen

Item	Default	Description
Filtering	Disable	Enables or disables filtering function.
HTTP Message to display when a website is blocked	The Web Site is blocked by System	Enter the http message. The maximum character of the HTTP message is 200.

Figure 3-135 Error Dialog Box

Item	Default	Description
Restrict Destination URL or Website:		
URL or Website	Empty	Enter the URL Page of you wants to filter; please use this format such like "http://www.yahoo.com". The maximum character of the URL Page is 50.
Start / End IP Address: ~		
Start IP Address	Empty	Enter the start IP address of you wants to filter.
End IP Address	Empty	Enter the end IP address of you wants to filter.
IP Address: Subnet Mask:		
IP Address	Empty	Enter the destination IP address of you wants to filter.
Subnet Mask	Empty	Enter the destination subnet mask.
No	-	The index number of filtering address.
Active	Disable	Click on check box, active or inactive the filtering address.
Address List	-	Display the filtering address(s).
Delete	Disable	Select the check boxes and click '**Delete**' to delete the filtering address(s).

Add to List *Click **Add to List** button to add a new entry.*

Apply *Click **Apply** button to save the new settings.*

Delete All *Click **Delete All** & **Apply** button to delete all entries.*

***Note:** The priority of "pass through" is higher than "Filtering".*

3.2,13 Share

This feature allows sharing the network devices after subscriber successful login.

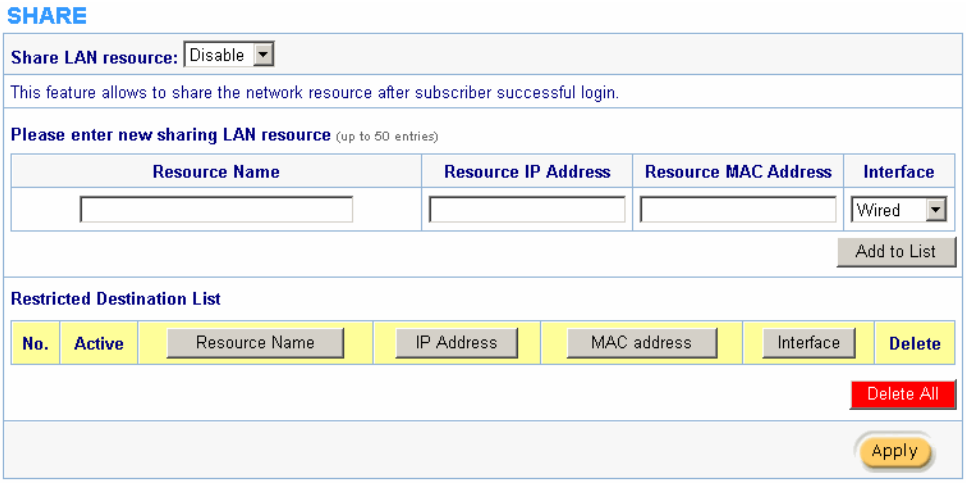


Figure 3-136 Share Device Setting Screen

Item	Default	Description
Share LAN resource	Disable	Enables or disables share LAN resource function.
Resource Name	Empty	Enter the device name. The maximum character of the resource name is 30.
Resource IP Address	Empty	Enter the IP address of device in the format “xxx.xxx.xxx.xxx”.
Resource MAC Address	Empty	Enter the MAC address of device. For input the device MAC address, please use this format such like”0050BA8D2296”.
Interface	Wired	Select the interface.
Share LAN resource List		
No.	-	The index number of share LAN device.
Active	Disable	Click on check box, active or inactive the share LAN device.
Resource Name	-	Display the device name.
IP Address	-	Display the IP address of device.
MAC Address	-	Display the MAC address of device.
Interface	-	Display the interface of device.
Delete	Disable	Select the check boxes and click ‘**Delete**’ to delete the share device(s).

Note:

*1. You must use the “**Search IP**” method to search for a device on the network. Please follow steps below to search your device.*

- *Click **Start**, and then click **Search**.*
- *Click **Computers or People**.*
- *Click “**A computer on the network**”.*
- *In Computer, type the IP address of the device you want to find. Click **Search**.*

2. The function support only Unicast and IP Protocol.

*Click **Add to List** button to add a new entry.*

*Click **Apply** button to save the new settings.*

*Click **Delete All** & **Apply** button to delete all entries.*

3.2.14 Portal Page

This feature allows redirecting subscriber’s browser to a specified portal page after successful login.

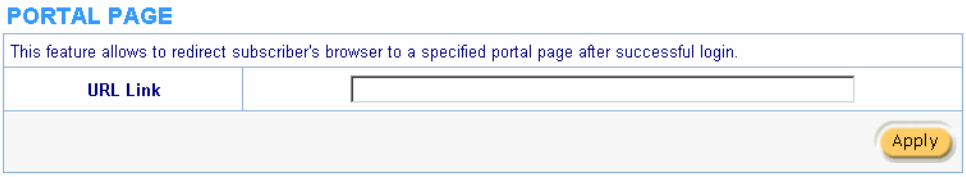


Figure 3-137 Portal Page Setting Screen

Item	Default	Description
URL Link	Empty	Enter the URL Link page. The input format can be "http://www.yahoo.com". The maximum character of the URL Link is 200.

*Click **Apply** button to save the new settings.*

Click **Apply** button, the success dialog box appears. Click on **Back** to return to Portal Page setting screen.

Figure 3-138 Success Dialog Box

3.2.15 Advertisement

The system allow service provider to input 10 URL links for advertisement link purpose.

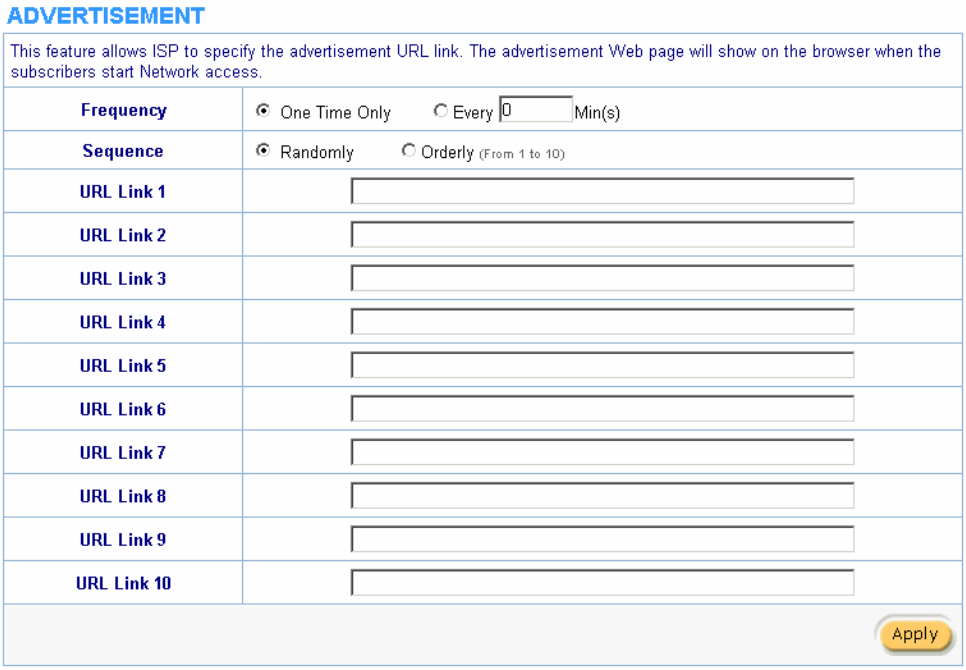


Figure 3-139 Advertisement URL Link Setting Screen

Item	Default	Description
Frequency	One Time Only	One Time Only—One Time Only means to send the advertisement link once after the subscriber Login. Every~Min(s)—The field means to send the advertisement link every interval minutes. The value range is 1 to 60 (minutes).
Sequence	Randomly	Randomly—Display the advertisement page in the random order.

		From 1 to 10 —Display the advertisement page in the order as setting.
URL Link 1~10	Empty	This function allows the administrator to input ten different websites in the table for advertisement. And these 10 websites will display to the subscribers at random when the subscribers login in the WSG-403 system. The input format can be “http://www.yahoo.com”. The maximum character of the URL Link # is 200.

*Click **Apply** button to save the new settings.*

Click **Apply** button, the success dialog box appears. Click on **Back** to return to Advertisement URL Link setting screen.

Figure 3-140 Success Dialog Box

3.2.16 Walled Garden

We prepare ten URL links that allows subscriber to access the specific Web pages even they didn’t have a username or password. It’s free trying and can use for advertisement.

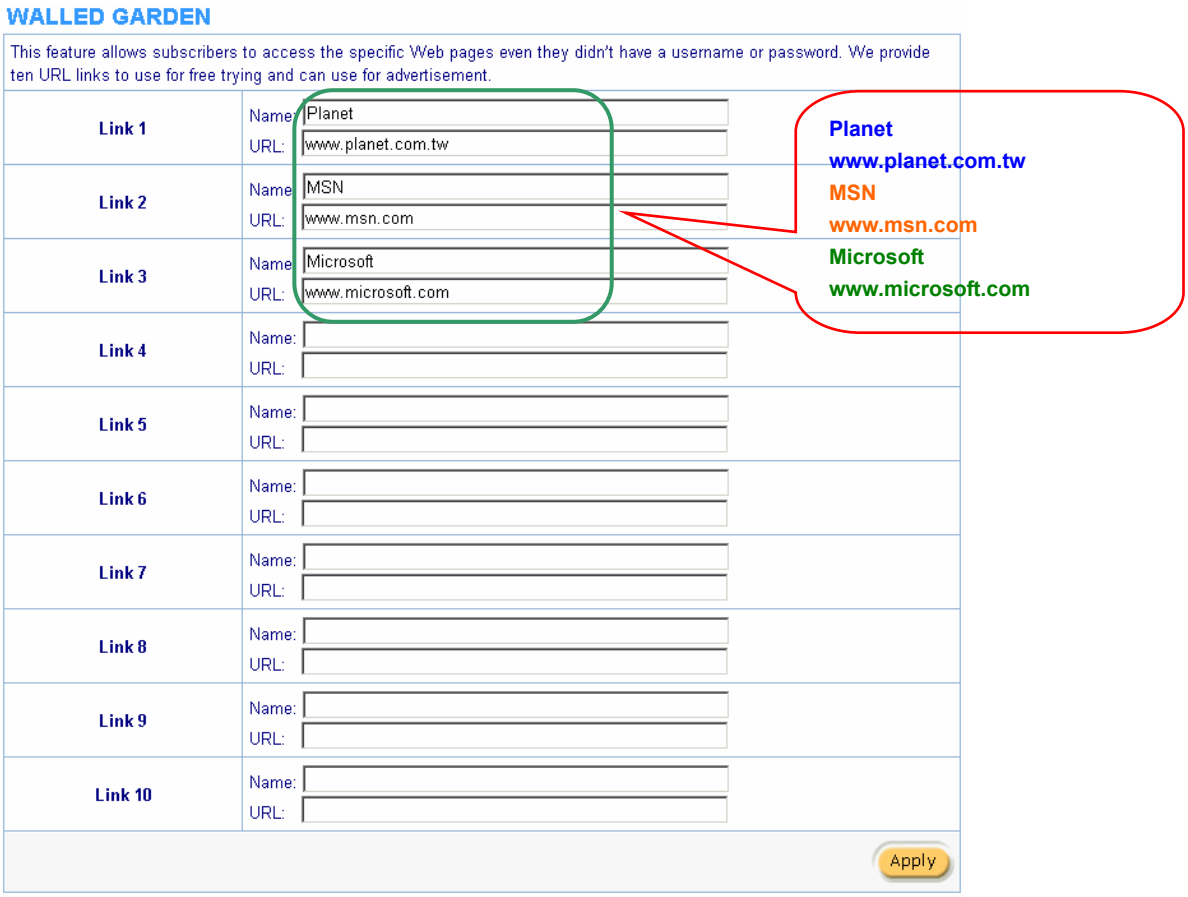


Figure 3-141 Walled Garden

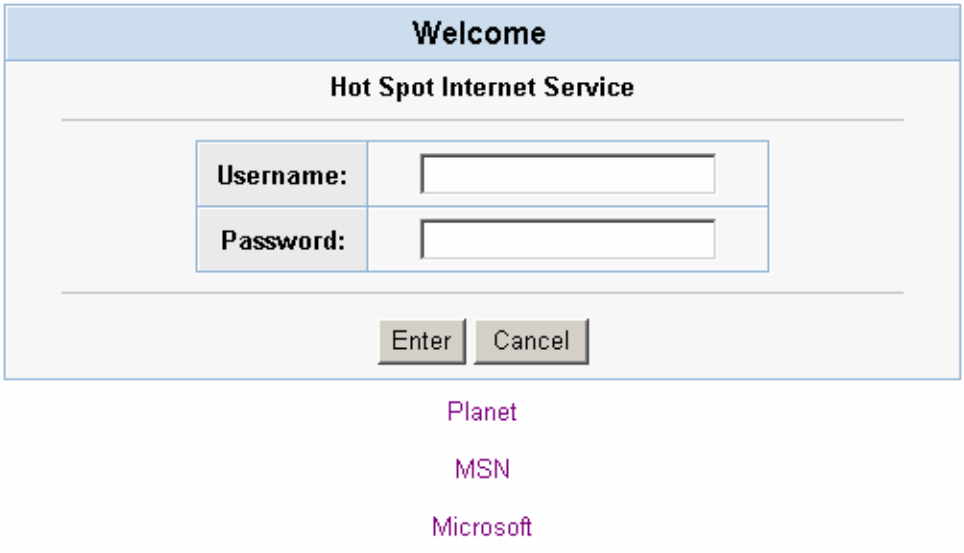


Figure 3-142 Login Page

Item	Description
Link 1~10	
Name	The name is allowed user to set the prompt string in user customize login page. The maximum allowed characters length is 80.
URL 1~10	The input format can be “http://www.yahoo.com”. The maximum character of the Link# is 200.

Click **Apply** button, the success dialog box appears. Click on **Back** to return to Walled Garden setting screen.

Figure 3-143 Success Dialog Box

3.2.17 DDNS

The DDNS service (Dynamic Domain Name Service), an IP Registry provides a public central database where information such as email addresses, host names, IP addresses etc. can be stored and retrieved. This solves the problems if your DNS server uses an IP associated with dynamic IP addresses. When the ISP assigns the WSG-403 a new IP, the WSG-403 must inform the DDNS server the change of this IP so that the server can update its IP-to-DNS entry. Once the IP-to-DNS table in the DDNS server is updated, the DNS name for your web server (i.e., xyz.dyndns.org) is still usable.

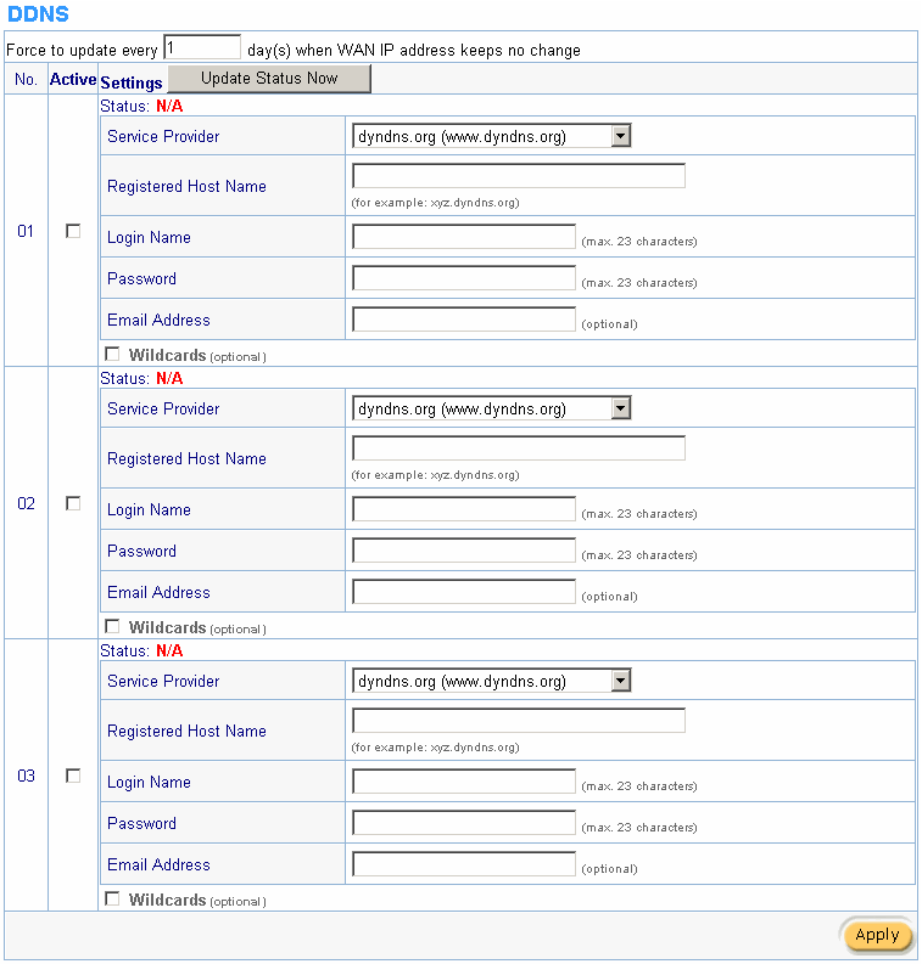


Figure 3-144 DDNS Setting Screen

Item	Default	Description
Force to update every ~day(s) when WAN IP address keeps no change	1 day	Enter a number in the field to set the force update interval (in days).
No	01~03	The index number of a DDNS account.
Active	Disable	Click on check box, active or inactive the DDNS record.
Update Status Now	Click the **Update Status Now** button to do manual update.	
Settings	Enter the account information of DDNS Server.	
Status	YY/MM/DD HH:MM:SS:	Display the update date, time and status. The Status area shows the update time and current state of the DDNS Client. N/A—DDNS Client service not installed. Update Successfully—DDNS Client service installed; service running. Update Fail—DDNS Client service installed; service not running.
Service Provider	Dyndns.org (www.dyndns.org)	Select a DDNS service provider by clicking in the list box. Note: Before configuring the DDNS settings, you have to

		register a dynamic domain at one of the dynamic domain service providers' list box.
Registered Host Name	Empty	Enter the host name of DDNS server. The maximum character of the registered host name is 100.
Login Name	Empty	Enter the user name of DDNS server.
Password	Empty	Enter the user password of DDNS server.
Email Address	Empty	Enter your email address. The DDNS Server will e-mail you important information once your Internet Name has been successfully registered.
Wildcards (optional)	Disable	Enable this function to be able to use *.mydomain.dyndns.org and not only mydomain.dyndns.org.

*Click **Apply** button to save the new settings.*

Click **Apply** button, the success dialog box appears. Click on **Back** to return to DDNS setting screen.

Figure 3-145 Success Dialog Box

3.2.18 LAN Devices

Administrator can direct remote control to LAN Devices via the WSG-403 implemented the feature.

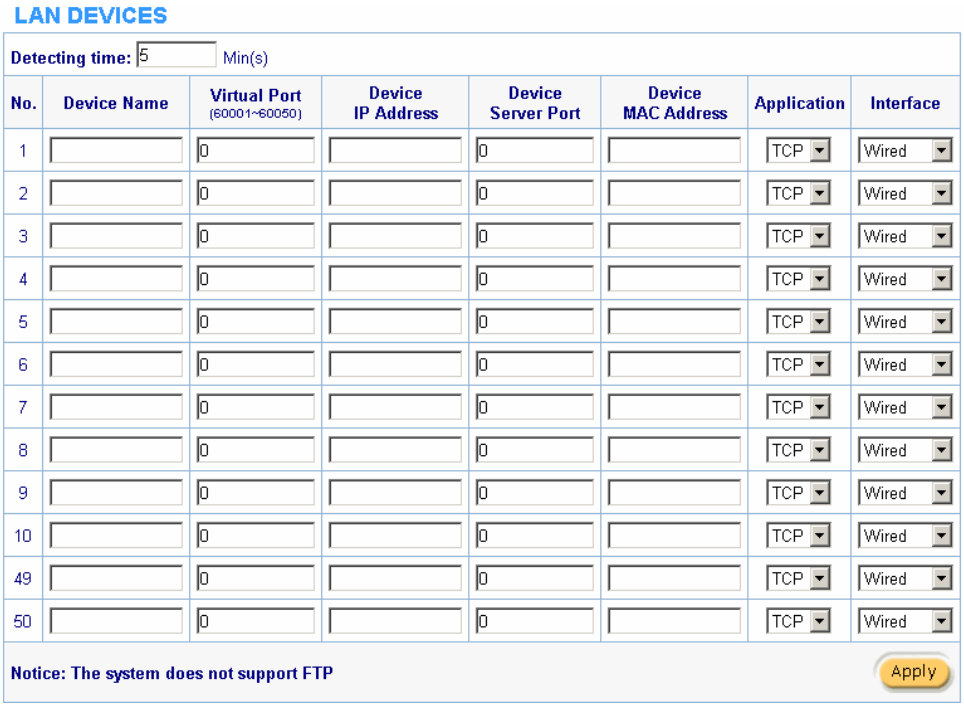


Figure 3-146 LAN Devices Setting Screen

Item	Default	Description
Polling Interval	5 Min.	The default value is 5 minutes. The Polling Interval valid range is 1 to 1440.
Device Name	Empty	The LAN device name. The maximum character of the device name is 20.
Virtual Port	0	The virtual port number valid range is 60001 to 60050 or 5900 to 5910.
Device IP Address	Empty	Enter the IP address of LAN device in the format “xxx.xxx.xxx.xxx”
Device Server Port	0	Enter the server port of LAN device.
Device MAC Address	Empty	The MAC address of LAN device. For input the device MAC address, please use this format such like”0050BA8D2296”.
Application	TCP	Select one protocol type of LAN device by clicking in the list box.
Interface	Wired	Select one interface of LAN device by clicking in the list box.

Delete All *Click **Delete All** button to delete all entries.*

Apply *Click **Apply** button to save the new settings.*

Note: *The system does not support FTP.*

3.2.19 Syslog

The function allows the device to transmit event messages to your syslog server or your email address for monitoring and troubleshooting.

- **Syslog Setting**

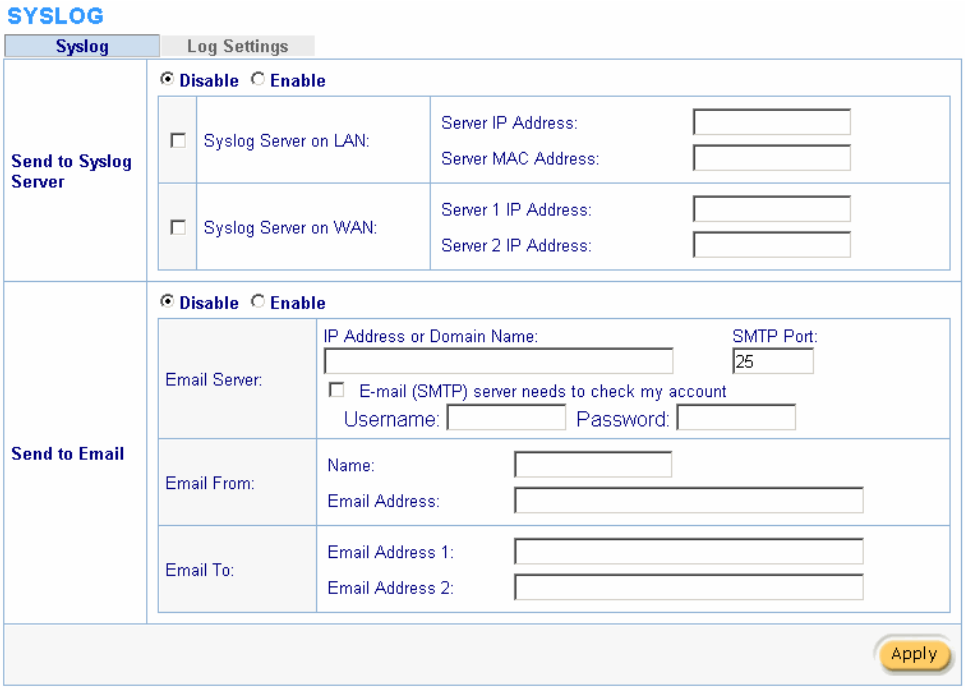


Figure 3-147 Syslog Setting Screen

Item	Default	Description
Syslog	Disable	Enables or disables the syslog server function.
Syslog on LAN		

Server IP Address	Empty	Enter syslog server's IP address. The WSG-403 will send all of its logs to the specified syslog server.
Server MAC Address	Empty	Enter the syslog server's MAC address. The WSG-403 will send all of its logs to the specified syslog server.
Item	**Default**	**Description**
Syslog on WAN		
Server 1 IP Address	Empty	Enter IP address of first syslog server.
Server 2 IP Address	Empty	Enter IP address of second syslog server.
Send to Email	Disable	Enables or disables the send to e-mail function.
E-mail Server		
IP Address or Domain Name	Empty	Enter the SMTP server IP address or domain name. The maximum allowed characters length is 50.
SMTP Port	25	The SMTP port allowed range is 25 or 2500 to 2599.
E-mail (SMTP) Server needs to check my account	Disable	If your SMTP server requires authentication before accepting e-mail, click on check box. These values (username and password) are supplied by your network administrator, SMTP server provider or ISP.
Username	Empty	Enter the username for the SMTP server. The maximum allowed characters length is 64.
Password	Empty	Enter the password for the SMTP server
Email From		
Name	Empty	Enter the name you would like to appear in the "message from" field of your outgoing message. The maximum allowed characters length is 20.
Email Address	Empty	Enter your e-mail address. This is the address others will use to send email to Email Address 1/Email Address 2.
Email To		
Email Address 1	Empty	Enter your first e-mail address to receive the logs.
Email Address 2	Empty	Enter your second e-mail address to receive the logs.

*Click **Apply** button to save the new settings.*

Click **Apply** button, the success dialog box appears. Click on **Back** to return to Syslog setting screen.

Figure 3-148 Success Dialog Box

- **Log Categories**

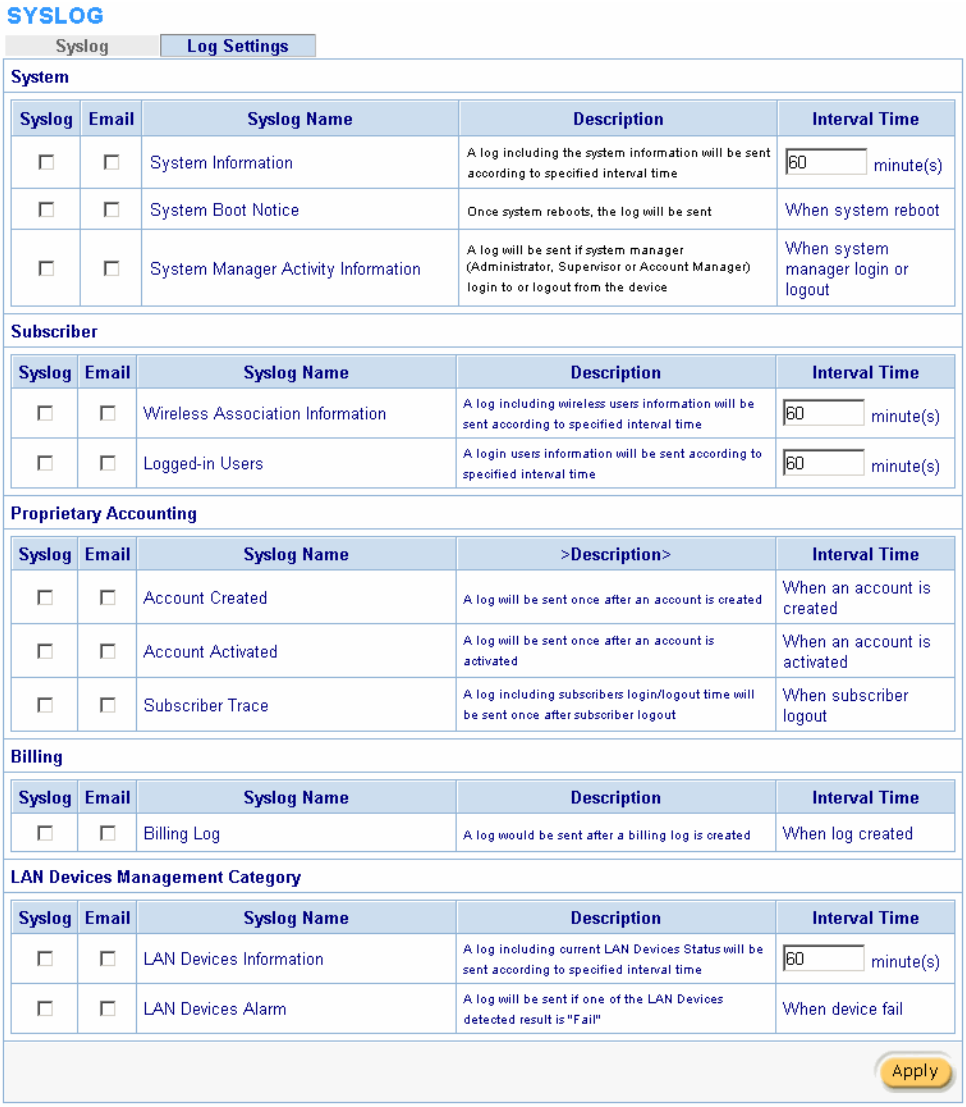


Figure 3-149 Log Settings Screen

Item	Interval Time	Description
Syslog	Disable	Click on check box, send log information to your syslog server.
Email	Disable	Click on check box, send log information to your e-mail address.
Item	**Interval Time**	**Description**
System		
Syslog Information	60 minutes	The log included system information would be sent according to specified interval time. **Format:** (Id, Mac Address) (System Uptime, 0 days 00h:04m:00s) (Location Name, Location Name) (WAN, FrameTxOK, FrameRxOK, FrameTxError, FrameRxError) (LAN, FrameTxOK, FrameRxOK, FrameTxError, FrameRxError) (Wireless, FrameTxOK, FrameRxOK, FrameTxError, FrameRxError)
System Boot Notice	When System reboot	If device have been rebooted, the log would be sent. **Format:** (Id, MAC Address) (System Up)

System Manager Activity Information	When system manager login or logout	A log will be sent if system manager (Administrator, Supervisor or Account Manager) login to or logout from the device. **Format:** (Id, Mac Address) (System Account Activity Information, Username, User IP, Status) **Username**: Administrator | Supervisor | Accounting Operator **Status**: Login | Logout | Idle Time Out
Subscriber		
Wireless Association Information	60 minutes	A log included wireless associated users information would be sent according to specified interval time. **Format:** (Id, Mac Address) (Wireless Association Information, Number of associated users, Start Number, End number) (Signal strength, Signal quality, Connection speed, MAC address)(…)(…)(…)
Item	**Interval Time**	**Description**
Logged-in Users	60 minutes	A log included logged-in users information would be sent according to specified interval time. **Format:** (Id, Mac Address) (Logged-in Users, Type, Number of logged-in users, Start Number, End number) (Username, User IP, User MAC, Interface, Login time, RxData count, TxData count)(…)(…) **Type:** Dynamic | Super | User agreement | No Authentication If the type of Logged-in user is Super Subscriber, Username will be "********". If the build-in account mode is disabled, Username is "Anonymous".
Proprietary Accounting		
Account Created	When an account is created.	A log would be sent if account were created. **Format:** (Id, Mac Address) (Account Create, Type, S/N, Username, Unit, Account usage time, Billing profile information) **Type:** TimeToFinish | Accumulation | PostPaid **Billing profile information:** [index, name] **Account usage time:** 00:59:59 (example)
Account Activated	When an account is activated	A log would be sent if account were activated. **Format:** (Id, Mac Address) (Account Activate, username, user IP, user MAC, Interface)
Subscriber Trace	When subscriber logout	A log including subscriber's login or logout time will be sent once after subscriber logout. **Format:** (Id, MAC Address) (Subscriber Trace, Type, Event, S/N, Username, User IP, User MAC, Interface, Login time, Logout

		time, Usage Time, Time Left, RxData count, TxData count) **Type**: TimeToFinish | Accumulation | PostPaid | Super **Event**: Finished | Replenished | Logout | Idle-Timeout | Account Expired | Deleted If the type of Subscriber Trace is Super, the Username will be "********", and S/N will be "******". **Usage time**: 00:59:59 (example)

Subscriber Trace Relationship

Type	Event	Time Left
TimeToFinish	Finished	00:00:00
TimeToFinish	Replenished	00:12:00 to S/Nxxxxxx
TimeToFinish	Deleted	00:12:00
Accumulation	Finished	00:00:00
Accumulation	Replenished	00:12:00 to S/Nxxxxxx
Accumulation	Logout	00:48:00
Accumulation	Idle-Timeout	00:48:00
Accumulation	Deleted	00:48:00
Accumulation	Account Expired	00:48:00
PostPaid	Logout	******
PostPaid	Idle-Timeout	******
PostPaid	Deleted	******
PostPaid	Finished	******
PostPaid	Account Expired	******
Super	Idle-Timeout	******
Super	Deleted	******

Item	Interval Time	Description
Billing		
Billing Log	When log created	A log would be sent after a billing log is created. **Format:** (Id, MAC Address) (Billing Log, Type, S/N, Username, Billing profile information, Units, Usage time, Bill, Payment) **Type**: TimeToFinish | Accumulation | PostPaid **Billing profile name:** [Name] **Usage time:** "00:59:59" (example) **Billing profile information:** [index, name] **Payment:** Cash | Credit Card "Credit Card" does not support "PostPaid". If Type is "PostPaid", the billing profile information and Units will be "*".
Item	**Interval Time**	**Description**
LAN Devices Management Category		
LAN Devices Information	60 minutes	A log including current LAN Devices Status will be sent according to specified interval time. **Format:** (Id, MAC Address) (LAN Devices Information, Number of devices, Start Number, End number) (Device name, Status)(…)(…)
LAN Devices Alarm	When device fail	A log will be sent if one of the LAN Devices detected results is "Fail". **Format:** (Id, MAC Address) (LAN Device Alarm, Device name, **FAIL**)

*Click **Apply** button to save the new settings.*

Click **Apply** button, the success dialog box appears. Click on **Back** to return to Logs setting screen.

Figure 3-150 Success Dialog Box

3.2.20 Session Trace

Session Trace is an intelligent function to help service provider to trace every user's access behavior. When "session trace" is enable , the system will collect information such like destination IP, destination port, source IP, source MAC, source port by every user and send the collected information in text format file to specified TFTP server.

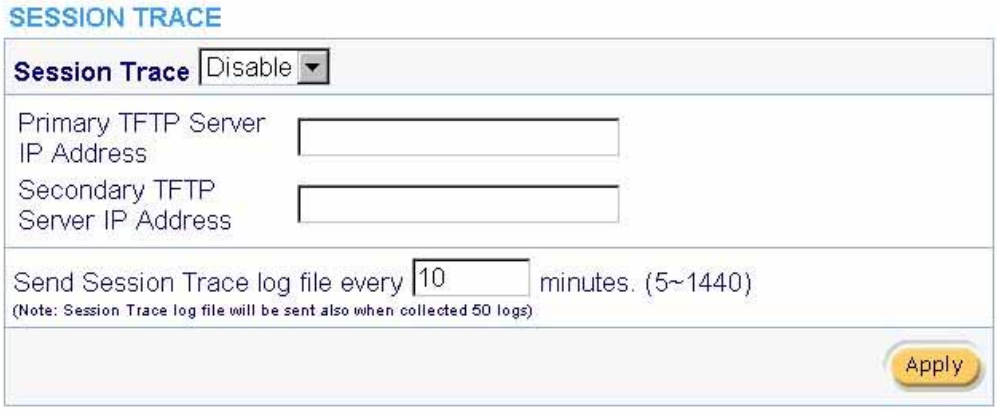


Figure 3-151 Session Trace Setting Screen

Item	Default	Description
Session Trace	Disable	Disables or enables session trace function.
Primary TFTP Server IP Address	Empty	Enter the IP address of the primary TFTP server.
Secondary TFTP Server IP Address	Empty	Enter the IP address of the second TFTP server.
Send Session Trace log file every~ minutes.	10 minutes	The field means to send the session trace log file every interval minutes. The value range is 5 to 1440 (minutes).

3.2.21 Bandwidth

The function enables administrator to limit bandwidth usage on a per user basis (MAC address). That prevents users from consuming a disproportionately large amount of bandwidth so every user gets a fair share of the available bandwidth.

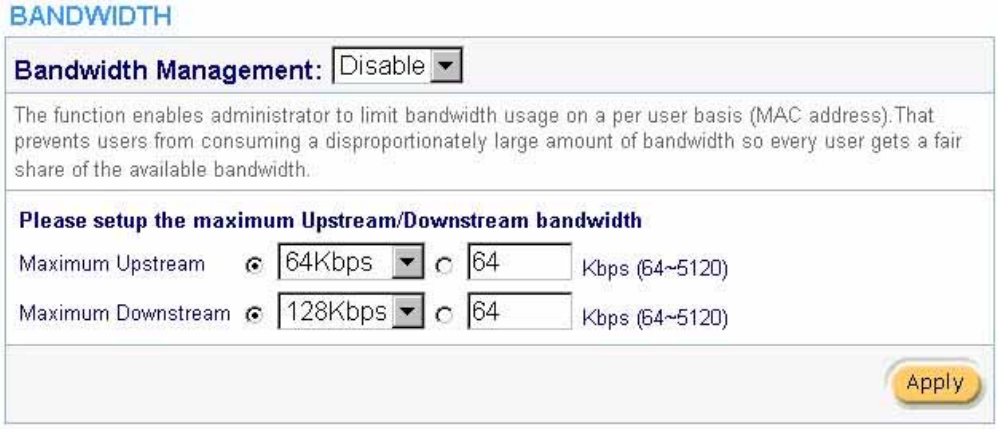


Figure 3-152 Bandwidth Setting Screen

Item	Default	Description
Bandwidth	Disable	Enables or disables Bandwidth Management.
Maximum Upstream	64Kbps	Specify the amount of upstream bandwidth.
Maximum Downstream	128Kbps	Specify the amount of downstream bandwidth.

3.2.22 Secure Remote

This feature allows you to create a secure connection to a remote site or back end system with VPN PPTP Client. If “Secure Remote” is enabled, the RADIUS packet/ syslog will be transferred to this secure connection.

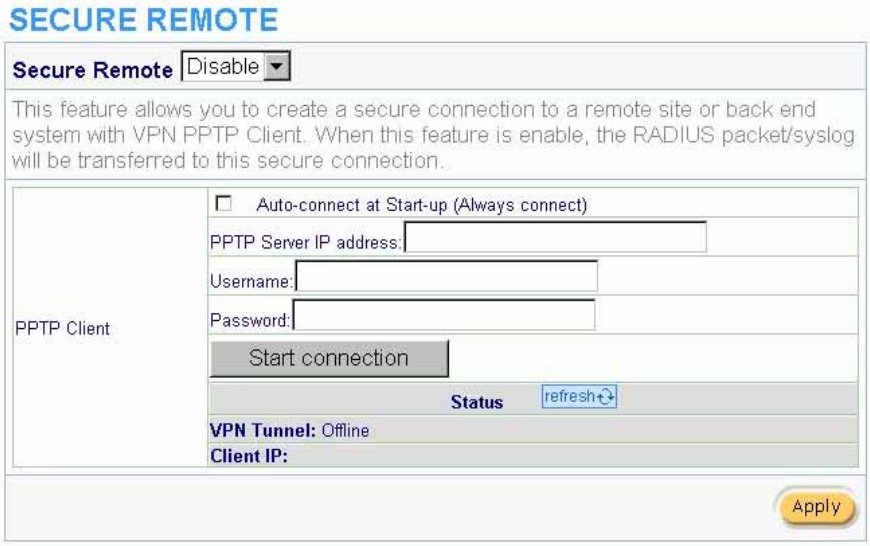


Figure 3-153 Secure Remote Setting Screen

Item	Default	Description
Auto-connect at Start-up (Always connect)	Disable	Enable the check box to automatically establish the PPTP connection.
PPTP Server IP address	Empty	Enter the PPTP server IP address provided by your ISP.
Username	Empty	Enter the user name provided by your ISP. The user name can consist of up to 80 alphanumeric characters and is case

		sensitive.
Password	Empty	Enter the user password provided by your ISP. The password can consist of up to 80 alphanumeric characters and is case sensitive.
Start connection		Click on Start/Stop connection button to start/stop PPTP connection.
refresh	Click on refresh button to update the status.	
VPN Tunnel	Display the status.	
Client IP	Display the IP address.	

3.2.23 SNMP

The SNMP Agent Configuration screen enables you to access to your device via Simple Network Management Protocol. If you are not familiar with SNMP, please consult your Network Administrator or consult SNMP reference material. You must first enable SNMP on the SNMP Agent Configuration screen.

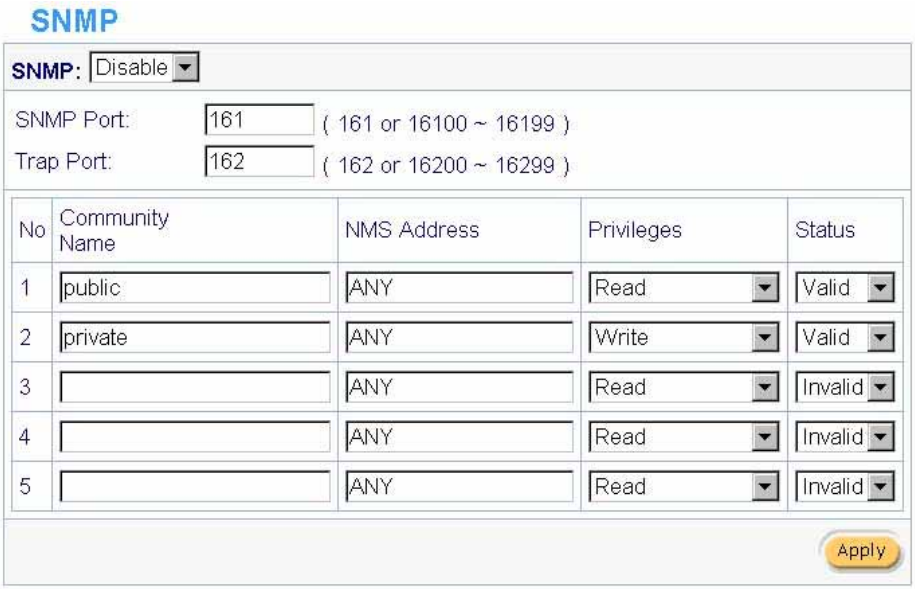


Figure 3-154 SNMP Setting Screen

Item	Default	Description
SNMP	Disable	Disables or enables the SNMP management.
SNMP Port	161	If the SNMP enables, also allowed to specific the SNMP port number via NAT. The allowed SNMP port numbers are 161 (default), 16100-16199 and Trap port numbers are 162 (default), 16200-16299. This Port setting is useful for remote control via NAT network.
Trap Port	162	
Configuration		
Community Name	public/private	Every unit with SNMP enable must be configured to recognize one or more community names up to 20 characters. The default setting for the community of entry 1 is “public” and for the entry 2 is “private” and others are empty.

Item	Default	Description
NMS Address	ANY	The address of the NMS. The default settings for the NMS Networking are “ANY”.
Privileges	Read/Write	Choose “Read”, “Write”, “Trap Recipients” and “All” for different privileges. The default setting of the entry 2 is “write” and others are “read”.
Status	Valid/Invalid	Chosen “Valid” or “Invalid”. The default setting of entry 1, 2 are valid and others are invalid.

3.2.24 Wireless

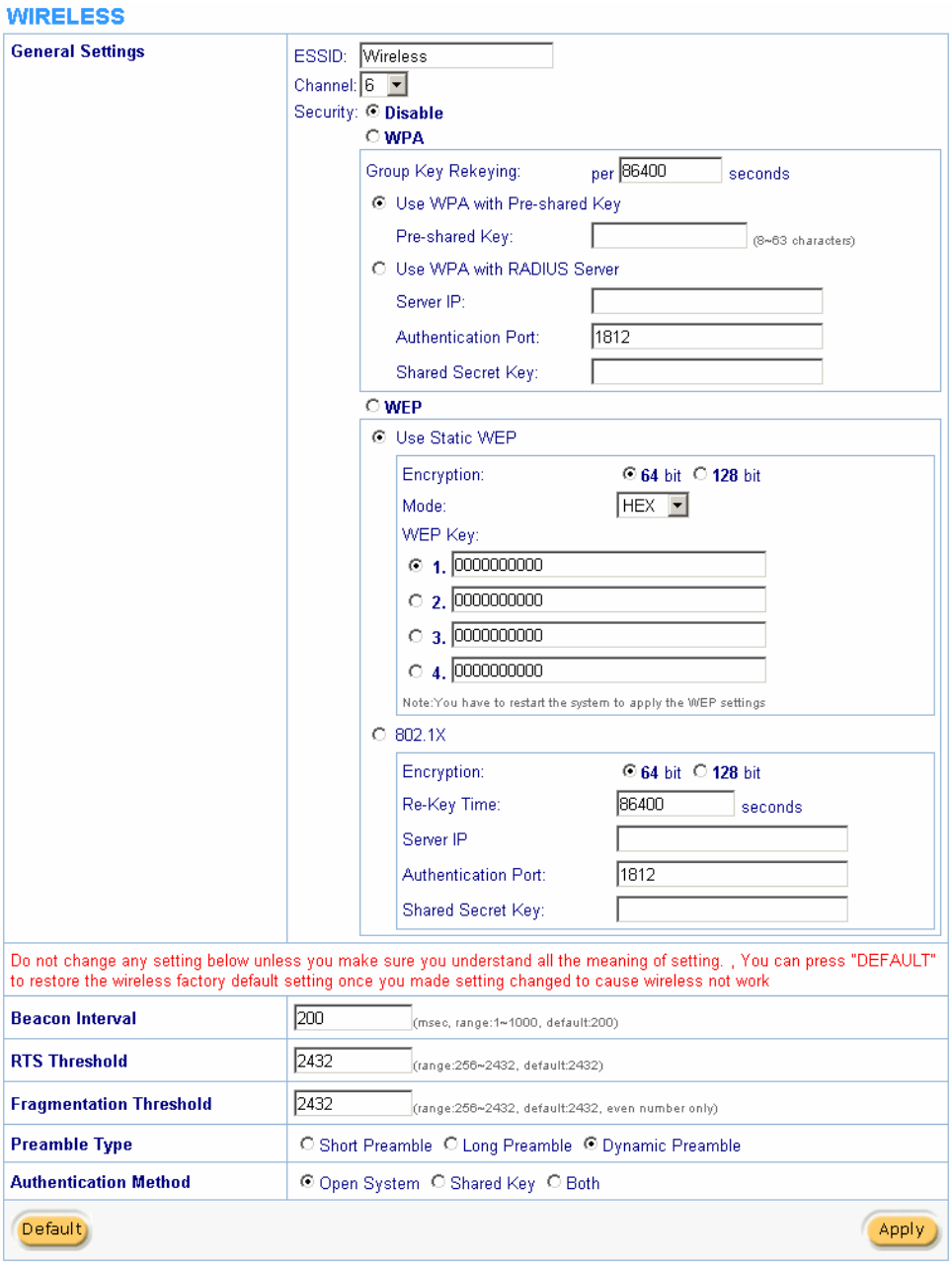


Figure 3-155 Wireless Setting Screen

Item	Default	Description
General Settings		
ESSID	Wireless	The ESSID is the unique name that is shared among all points in a wireless network. It is case sensitive and must not exceed 32 characters.
Channel	6	Select the channel ID for wireless connection.
Security	Disable	Select disable to allow wireless station to communicate with the device without any data encryption. Select enable to enable WPA or WEP data encryption.
WPA Encryption	Wi-Fi Protected Access Encryption	
Pre-shared Key	Empty	Enter a pre-shared key from 8 to 63 case sensitive ASCII characters.
Group Key Re-Keying	86400 Seconds	Enter a number in the field to set the force re-keying interval.
Use WPA with Pre-shared Key	Enable	
Pre-Shared Key	Empty	Enter a pre-shared key from 8 to 63 case sensitive ASCII characters.
Use WPA with RADIUS	Disable	
Server IP	Empty	Enter the RADIUS server IP address or domain name. The maximum allowed characters length is 15.
Authentication Port	1812	Enter the authentication port number. The allowed numbers are from 0 to 65535.
Share Secret Key	Empty	Enter the RADIUS secret key
WEP Encryption	Wired Equivalent Privacy Encryption	
Encryption	64 bit	The WSG-403 supports 64-bit or 128 bit WEP encryption.
Mode	HEX	Options: HEX (Hexadecimal) and ASCII (American Standard Code for Information Interchange).
WEP Key	1	This selects which of the Keys the WSG-403 uses when it transmits. You can change the selected encryption key every now and then to increase the security of your network. Note: You have to configure all WEP keys (1~4), and select one of the four WEP key. Enter 5 characters (case sensitive) for ASCII 64-bit WEP Key. Enter 10 characters (case sensitive) for Hex 64-bit WEP Key. Enter 13 characters (case sensitive) for ASCII 128-bit WEP Key. Enter 26 characters (case sensitive) for Hex 128-bit WEP Key.

Item	Default	Description
802.1x	Disable	Enables or disables the 802.1x function.
Encryption	64 bit	The WSG-403 supports 64-bit or 128 bit 802.1x encryption.
Re-key Time	86400 Seconds	Enter a number in the field to set the force re-keying interval.
Server IP	Empty	Enter the RADIUS server IP address or domain name. The maximum allowed characters length is 15.
Authentication Port	1812	Enter the authentication port number. The allowed numbers are from 0 to 65535.
Share Secret Key	Empty	Enter the RADIUS secret key.
Beacon Interval	200	This value valid range is 1 to 1000 indicates the frequency interval of the beacon.
RTS Threshold	2347	This value valid range is 256-2342. This setting determines the packet size at which the WSG-403 issues a request to send (RTS) before sending the packet. A low RTS Threshold setting can be useful in areas where many client devices are associating with the WSG-403, or in areas where the clients are far apart and can detect only the WSG-403 and not each other.
Fragmentation Threshold	2432	This setting determines the size at which packets are fragmented. Enter a setting ranging from 256 to 2432 bytes. Use a low setting in areas where communication is poor or where there is a great deal of radio interference.
Preamble Type	Long Preamble	The preamble type is a section of data at the head of a packet that contains information the WSG-403 and client devices need when sending and receiving packets. The setting menu allows you to select a long, short or dynamic preamble type.
Authentication Method	Open System	Select open system, shared Key or both. **Open System—**Allows any device to authenticate and then attempt to communicate with the WSG-403. Using open authentication, any wireless device can authenticate with the WSG-403, but the device can only communicate if its WEP keys match the WSG-403. Devices not using WEP do not attempt to authenticate with a Wireless Service Gateway that is using WEP. **Shared Key—**During shared key authentication, the WSG-403 sends an unencrypted challenge text string to any device attempting to communicate with the WSG-403. The device-requesting authentication encrypts the challenge text and sends it back to the WSG-403. If the challenge text is encrypted correctly, the WSG-403 allows the requesting device to authenticate. Both the unencrypted challenge and the encrypted challenge can be monitored, however, which leaves the WSG-403 open to attack from an intruder who calculates the WEP key by comparing the unencrypted and encrypted text strings. Because of this weakness, shared key authentication can be less secure than open authentication. **Both—**With this setting wireless stations can communicate with or without data encryption.

*Click **Apply** button to save the new settings.*

Click **Apply** button, the restart dialog box appears. Click on **Apply** to restart the system.

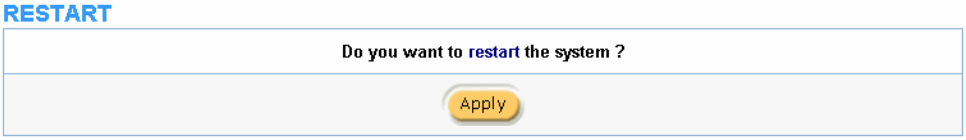


Figure 3-156 Restart Dialog Box

This operation will load the default manufacturer configuration to the system. All this page (Wireless) configuration setup will be replaced by default settings.

3.2.25 Account Generator

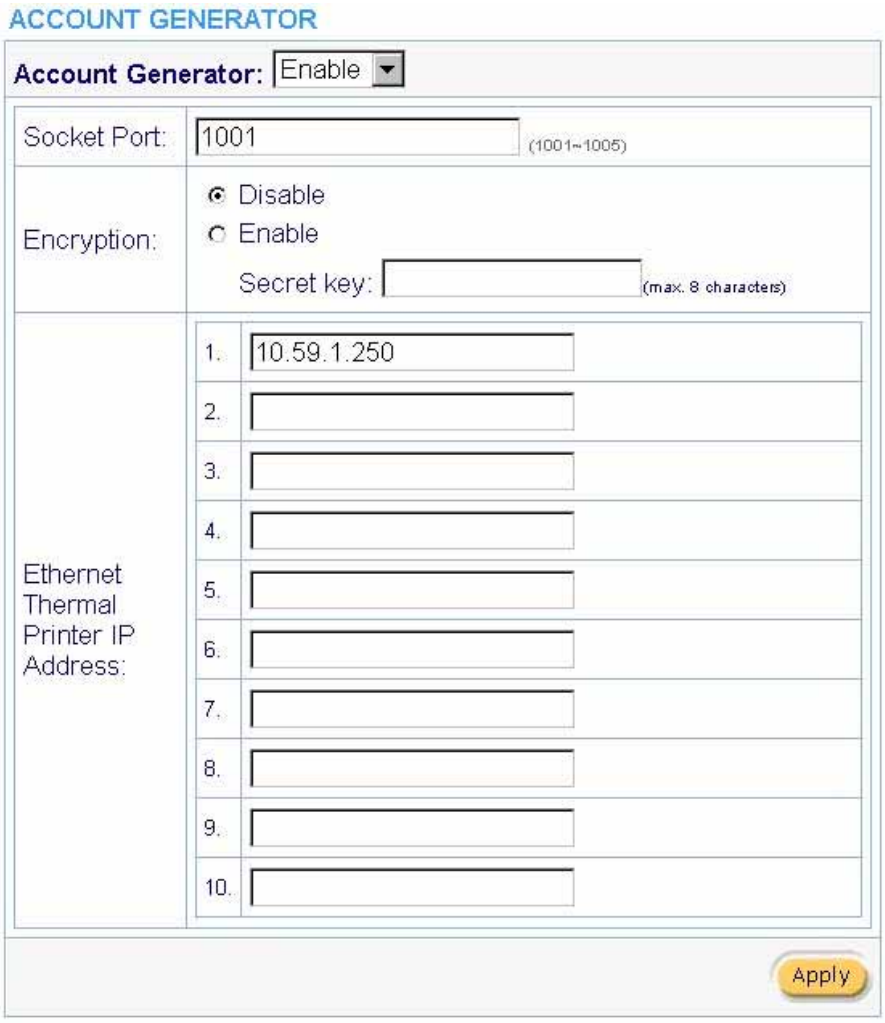


Figure 3-157 Account Generator Printer Setting Screen

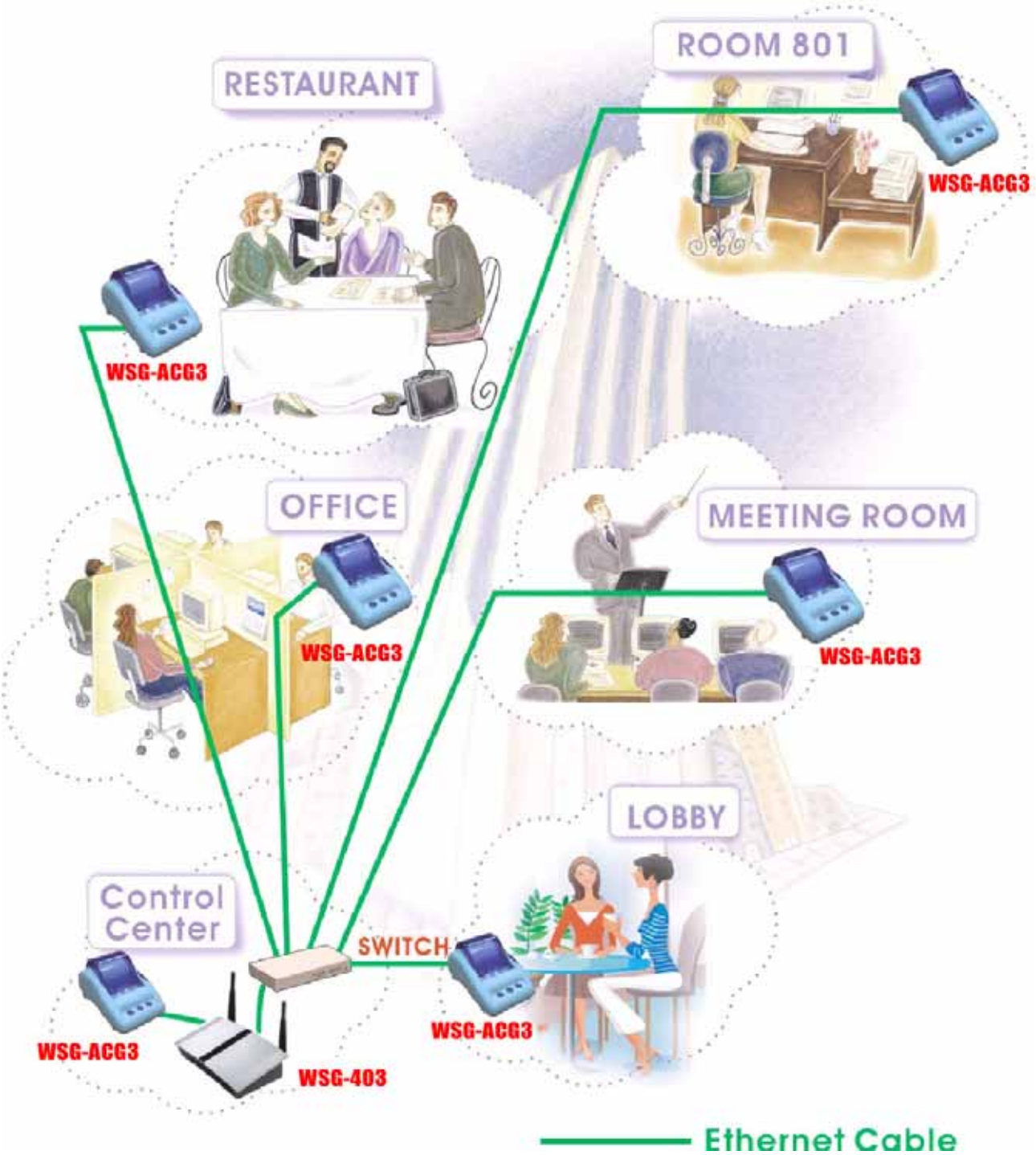


Figure 3-158 Application

3.3 System Status

Display WSG-403 system basic status, including,

1. System
2. Account List
3. Account Log
4. Current User
5. DHCP Clients
6. Session List
7. LAN Devices

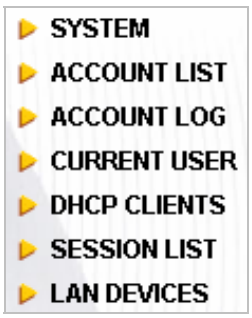


Figure 3-159 System Status Item Screen

3.3.1 System

The System Information Menu displays current system basic information including the service connection message, host name, LAN, WAN, DHCP Configuration, DNS, E-mail Redirection, SSL Certificate, network traffic Information and the system firmware version number.

SYSTEM

Display the detailed system information

Service	Internet Connection	**OK**
	Wireless Service	**OK**
System	System Name	Richard
	Domain Name	planet.com.tw
	Firmware Version	1.00.03
	Wireless Version	1.0.4
	Bootrom Version	1.02
	WAN MAC Address	00:90:0E:01:11:C5
	LAN MAC Address	00:90:0E:01:11:C4
	System Time	2004/12/9 18:52:04
	System Up Time	**00**D:**02**H:**58**M:**55**S
LAN IP	IP Address	192.168.0.1
	Subnet Mask	255.255.255.0
WAN IP	WAN Port Mode	**Static IP**
	IP Address	210.66.155.89
	Subnet Mask	255.255.255.224
	Gateway IP address	210.66.155.94
DNS	Primary DNS Server	139.175.252.16
	Secondary DNS Server	168.95.1.1
DHCP	DHCP Status	Server
	Start IP Address	192.168.0.2
	End IP Address:	192.168.0.254
	Lease Time	300
Wireless	ESSID	Wireless
	Channel	6
	Secure Mode	Disable
E-Mail		

Figure 3-160 System Status Screen

Network Traffic	WAN Traffic	**Tx Data:** 252210 **Rx Data:** 4397041 **Tx Error:** 0 **Rx Error:** 0
	LAN Traffic	**Tx Data:** 4994896 **Rx Data:** 1106482 **Tx Error:** 0 **Rx Error:** 0
	Wireless Traffic	**Tx Data:** 2255 **Rx Data:** 53 **Tx Error:** 7844 **Rx Error:** 0
Location Information	Location	
	Address	
	City	
	State	
	Zip	
	Country	
	Contact Name	
	Contact Telephone	
	Contact FAX	
	Contact Email	
SSL Certificate	Country	00
	State	Local State
	Local City	Local City
	Organization	Local Group
	Organization Unit	Local Host
	Common Name	1.1.1.1
	Email Address	mail@1.1.1.1

Figure 3-161 System Status Screen

3.3.2 Account List

You can display a list of all the account information on this device. This table includes the username, password, usage time, time created, login time, expiration time and status.

ACCOUNT LIST

List existing account's information. refresh

S/N	Status	Username	Usage Time	Time Created	Login Time	Time Left	Delete
000005	In-used	x9yij837	2:00:00	2004/12/13 18:40:37	2004/12/13 19:20:04	1:59:50	☐
000006	Un-used	v43ch428	2:00:00	2004/12/13 19:20:18		2:00:00	☐

Delete Delete All

GO 1 Page First Previous Next End

Figure 3-162 Account List

refresh

Click on refresh button to update the account list page.

S/N Status Username Usage Time Time Created Login Time Expiration Time

Click the column button to sort the column in ascending/descending order.

Delete

*Select the check boxes and click '**Delete**' to delete the accounts.*

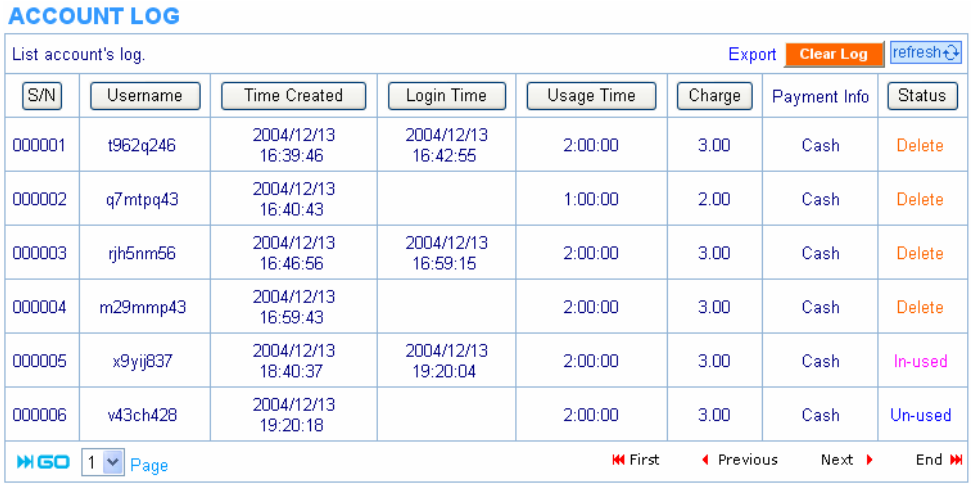
Delete All

Delete all accounts in account list.

Note: *This page will refresh automatically every 5 minutes.*

3.3.3 Account Log

The account log shows the accounts' log information.



S/N	Username	Time Created	Login Time	Usage Time	Charge	Payment Info	Status
000001	t962q246	2004/12/13 16:39:46	2004/12/13 16:42:55	2:00:00	3.00	Cash	Delete
000002	q7mtpq43	2004/12/13 16:40:43		1:00:00	2.00	Cash	Delete
000003	rjh5nm56	2004/12/13 16:46:56	2004/12/13 16:59:15	2:00:00	3.00	Cash	Delete
000004	m29mmp43	2004/12/13 16:59:43		2:00:00	3.00	Cash	Delete
000005	x9yij837	2004/12/13 18:40:37	2004/12/13 19:20:04	2:00:00	3.00	Cash	In-used
000006	v43ch428	2004/12/13 19:20:18		2:00:00	3.00	Cash	Un-used

Figure 3-163 Account Log

Export

This allow you to export the account logs to a text file format. (export.log)

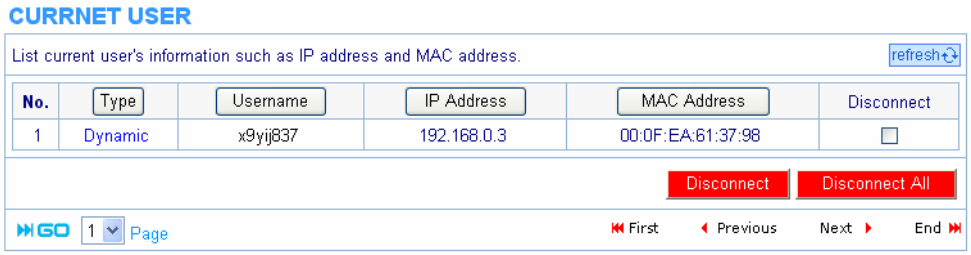
Click on ***Clear Log*** *to remove all account log entries.*

Click on refresh button to update the account log page.

Click the column button to sort the column in ascending/descending order.

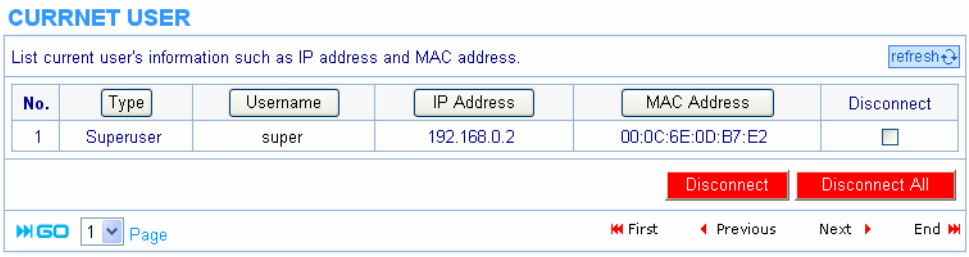
3.3.4 Current User

Display the current logged-in subscribers' status. It allow service provider to disconnect any subscribers.



No.	Type	Username	IP Address	MAC Address	Disconnect
1	Dynamic	x9yij837	192.168.0.3	00:0F:EA:61:37:98	☐

Figure 3-164 Current User List



No.	Type	Username	IP Address	MAC Address	Disconnect
1	Superuser	super	192.168.0.2	00:0C:6E:0D:B7:E2	☐

Figure 3-165 Current User List (super account)

CURRNET USER

List current user's information such as IP address and MAC address. refresh

No.	Type	IP Address	MAC Address
1	Non_Auth	192.168.0.2	00:0C:6E:0D:B7:E2

GO 1 Page First Previous Next End

Figure 3-166 Current User List (No Authentication)

refresh

Click on refresh button to update the current user list page.

Type | Username | IP Address | MAC Address

Click the column button to sort the column in ascending/descending order.

Disconnect

*Select the check boxes and click '**Disconnect**' to disconnect accounts.*

Disconnect All

Disconnect all accounts in current user list.

3.3.5 DHCP Clients

The DHCP client table shows the current DHCP users on the LAN.

DHCP CLIENTS

DHCP Client's Information, including assigned IP address and MAC address.

No.	MAC Address	IP Address
1	00:0C:6E:0D:B7:E2	192.168.0.2
2	00:0F:EA:61:37:98	192.168.0.3

Figure 3-167 Current User Screen

3.3.6 Session List

The remote site administrator could monitor the real time usage status of WSG-403 via this page.

SESSION LIST

List of sessions of Network events, and records or the newest 2048 incoming and outgoing packet information, including source IP address, destination IP address, and port number.

GO 1 Page First Previous Next End

No.	TCP/UDP	Client IP	Client Port	Port Fake	Remote IP	Remote Port	Idle
1	UDP	192.168.0.2	1114	50001	168.95.1.1	53	25
2	TCP	192.168.0.2	1432	50004	210.244.31.247	80	0
3	TCP	192.168.0.2	1436	50008	202.43.194.245	80	0
4	TCP	192.168.0.2	1437	50009	210.244.31.247	80	0
5	TCP	192.168.0.2	1439	50011	202.43.194.245	80	0
6	TCP	192.168.0.2	1442	50014	210.244.31.233	80	0
7	TCP	192.168.0.2	1443	50015	210.244.31.233	80	0
8	TCP	192.168.0.2	1445	50017	202.43.194.245	80	0
9	TCP	192.168.0.2	1446	50018	202.43.194.245	80	0

GO 1 Page First Previous Next End

Figure 3-168 Session List Screen

3.3.7 LAN Devices

You can manage all devices by clicking on device name to access device's Web-based interface.

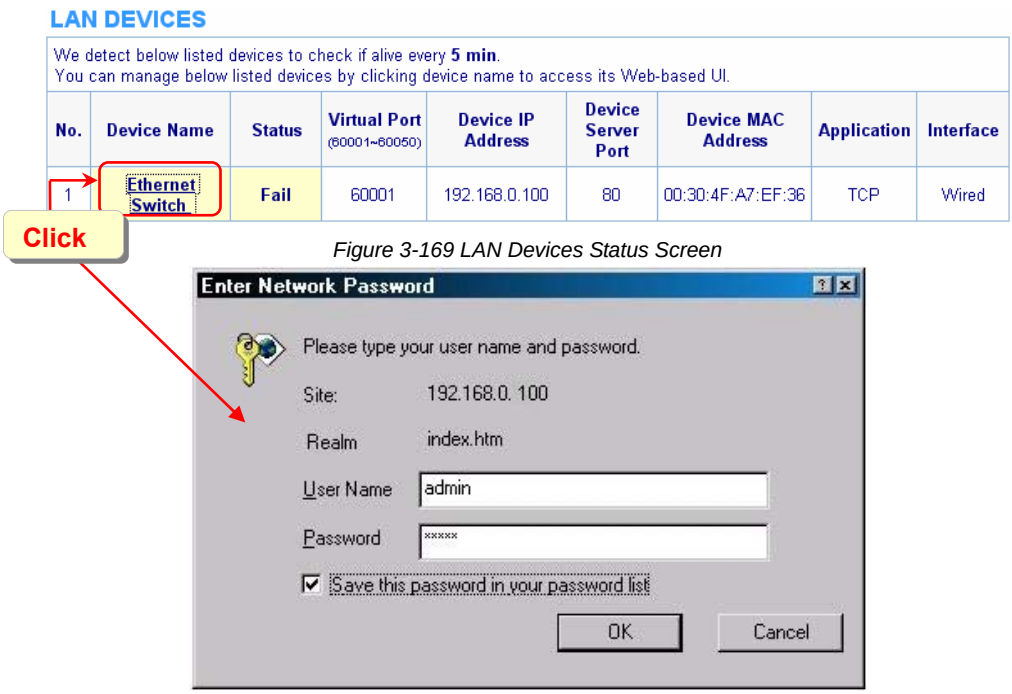


Figure 3-169 LAN Devices Status Screen

Figure 3-170 Example- Ethernet Switch Management Screen

3.4 System Tools

This allows service provider or administrator to process Firmware upgrade, change password and backup or restore configuration.

1. Configuration
2. Firmware
3. Boot Code
4. System Account
5. SSL Certificate
6. Ping Command
7. Restart
8. Logout

Figure 3-171 System Tools Item

3.4.1 Configuration

Use the Configuration item to save, restore or reset configuration parameters of the WSG-403.

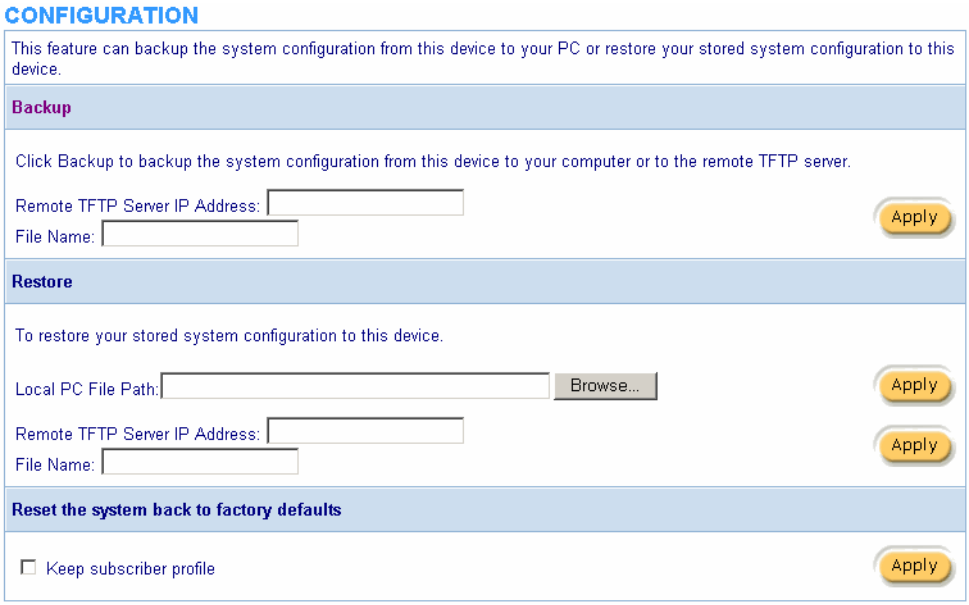


Figure 3-172 Configuration Setting Screen

Item	Default	Description
Backup	Click it to save the system configuration to your computer. (export.cfg)	
Remote TFTP Server IP Address	Empty	Enter the IP address of TFTP Server.
File Name	Empty	Enter the file name in the File Name field.
Restore	Click it to restore your system configuration.	
Local PC File Path	Empty	Enter the file pathname of the system configuration file in the Local PC File Path field.
Remote TFTP Server IP Address	Empty	Enter the IP address of TFTP Server.
File Name	Empty	Enter the file name in the File Name field.
Reset the system back to factory defaults	Erase all setting and back to factory setting.	
Keep subscriber profile	Disable	Click the keep subscriber profile to change all the parameters into factory setting but still reserve the subscriber profiles.

3.4.2 Firmware Upgrade

The Firmware Upgrade menu loads updated firmware to be permanent in flash ROM. The download file should be a binary file from factory; otherwise the agent will not accept it. After downloading the new firmware, the agent will automatically restart it.

- **Manual Firmware Upgrade**

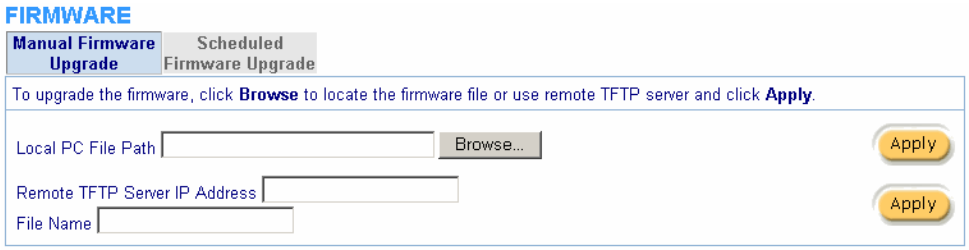


Figure 3-173 Manual Firmware Upgrade Setting Screen

Item	Default	Description
This allow administrator to upgrade the firmware via HTTP.		
Local PC File Path	Empty	Enter the file name and location in the Local PC File Path field.
This allows administrator use TFTP server to upgrade firmware.		
Remote TFTP Server IP Address	Empty	Enter the IP address of TFTP Server.
File Name	Empty	Enter the file name in the File Name field.

Note:

1. Before downloading the new firmware, users must save the configuration file for restore configuration parameters of the device.

2. Do not turn the power off during the upgrade process. This will damage the unit.

- **Scheduled Firmware Upgrade**

Scheduled Firmware Upgrade is a program that enables an automatic upgrade to the latest firmware version through the TFTP server.

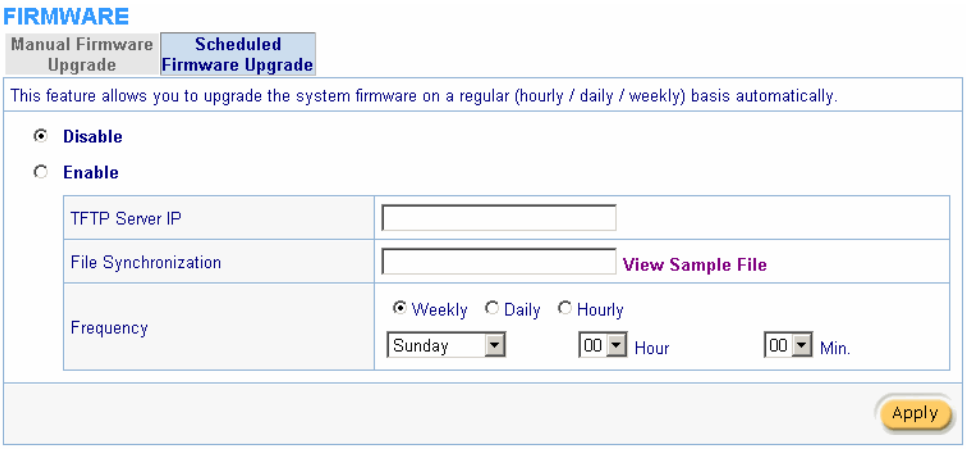


Figure 3-174 Scheduled Firmware Upgrade Setting Screen

Item	Default	Description
Disable/Enable	Disables or enables the scheduled firmware upgrade function.	
TFTP Server IP	Empty	Enter the IP address of TFTP Server.
File Synchronization	Empty	Enter the file name and location in the File Synchronization field.
View Sample File	Click the button to display synchronization file example.	
Frequency	Weekly	Set the firmware upgrade time. The default value is "Weekly".

Figure 3-175 Synchronization File Sample Code

Note: *Do not turn the power off during the upgrade process. This will damage the unit.*

3.4.3 Boot Code

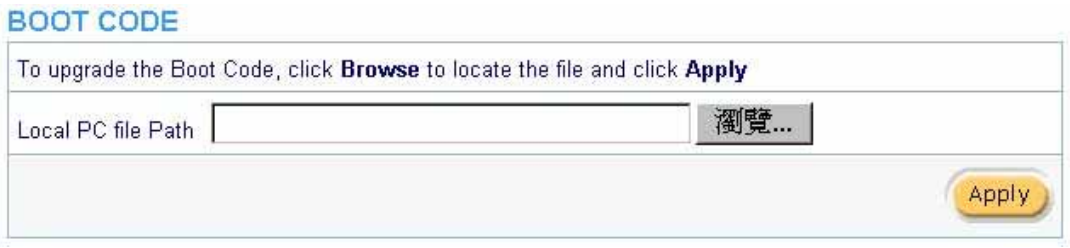


Figure 3-176 Boot Code Upgrade Setting Screen

3.4.4 System Account

Use the System Account screen to change the system accounts.

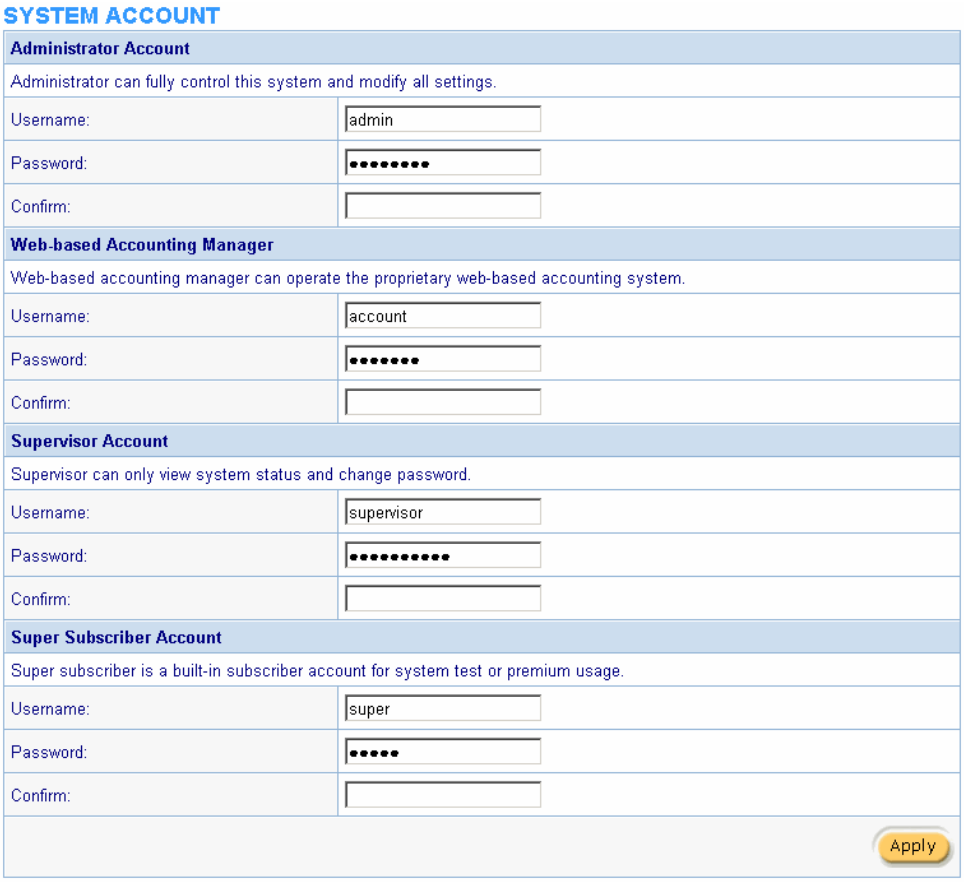


Figure 3-177 System Account Setting Screen

Item	Description
Username	The username can consist of up to 20 alphanumeric characters and is sensitive.
Password	The password can consist of up to 20 alphanumeric characters and is sensitive.
Confirm	The password for confirmation.
Super Subscriber	Disables or enables the super account function.
Idle Time Out	The user idle time out valid is 1 to 1440 minutes. If the idle time out is set as 5 minutes, it means if the account doesn't send packet in 5 minutes, the account will logout automatically.

- **Administrator Account**

Step 1: Start your Web browser and enter the factory default IP address **10.59.1.1** in your browser's location box. Press Enter.

Figure 3-178 Web Browser Location Field (Factory Default)

Step 2: The WSG-403 configuration main menu will appear. Enter **admin** (default) as the Username and **admin** (default) as the password and click **Login**. If you are first time setting the system, the wizard setup screen will appear.

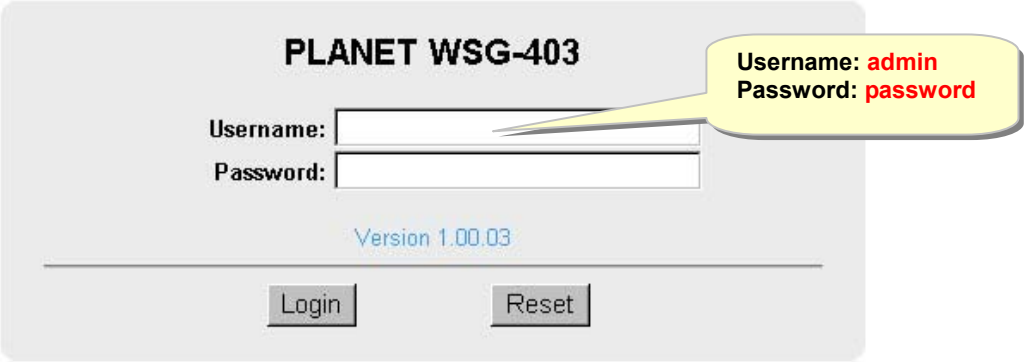
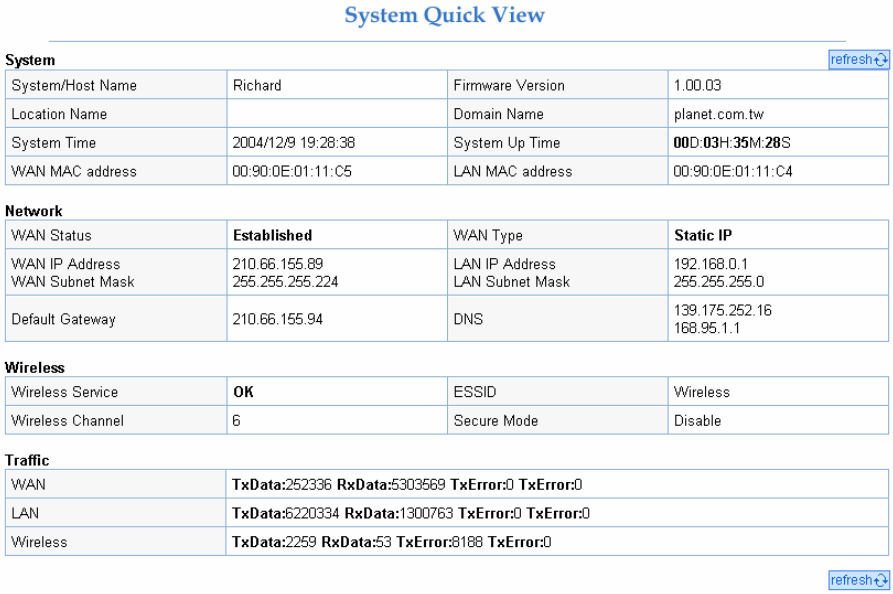


Figure 3-179 Administrator Account Login Screen (First Time)

Or



System Quick View

System refresh

System/Host Name	Richard	Firmware Version	1.00.03
Location Name		Domain Name	planet.com.tw
System Time	2004/12/9 19:28:38	System Up Time	**00**D:**03**H:**35**M:**28**S
WAN MAC address	00:90:0E:01:11:C5	LAN MAC address	00:90:0E:01:11:C4

Network

WAN Status	**Established**	WAN Type	**Static IP**
WAN IP Address WAN Subnet Mask	210.66.155.89 255.255.255.224	LAN IP Address LAN Subnet Mask	192.168.0.1 255.255.255.0
Default Gateway	210.66.155.94	DNS	139.175.252.16 168.95.1.1

Wireless

Wireless Service	**OK**	ESSID	Wireless
Wireless Channel	6	Secure Mode	Disable

Traffic

WAN	**TxData:**252336 **RxData:**5303569 **TxError:**0 **TxError:**0
LAN	**TxData:**6220334 **RxData:**1300763 **TxError:**0 **TxError:**0
Wireless	**TxData:**2259 **RxData:**53 **TxError:**8188 **TxError:**0

refresh

Figure 3-180 System Quick View

- **Web-Based Accounting Manager**

Step 1: Start your Web browser and enter the factory default IP address **10.59.1.1** in your browser's location box. Press Enter.

Figure 3-181 Web Browser Location Field (Factory Default)

Step 2: The WSG-403 configuration main menu will appear. Enter **account** as the Username and **account** as the password and click **Login**

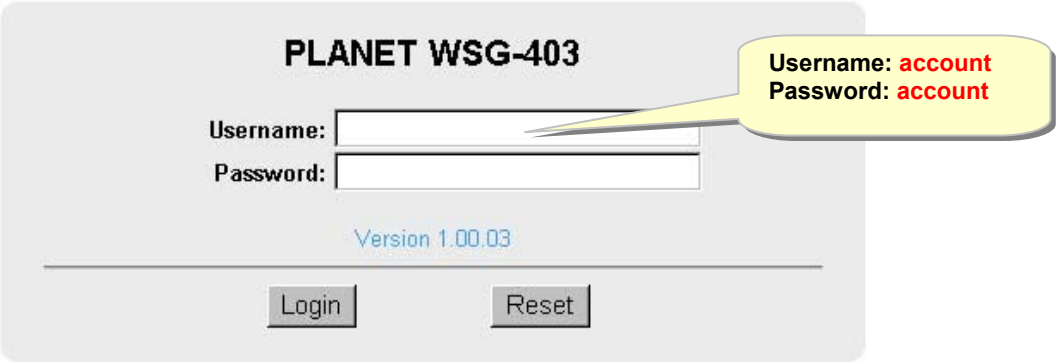


Figure 3-182 Web-Based Accounting Manager Login Screen

Step 3: After a valid user name and password have been provided, the account Generator Panel homepage will appear.

Figure 3-183 Account Generator Panel

- **Supervisor Account**

Step 1: Start your Web browser and enter the factory default IP address **10.59.1.1** in your browser's location box. Press Enter.

Figure 3-184 Web Browser Location Field (Factory Default)

Step 2: The WSG-403 configuration main menu will appear. Enter **supervisor** as the Username and **supervisor** as the password and click **Login**.

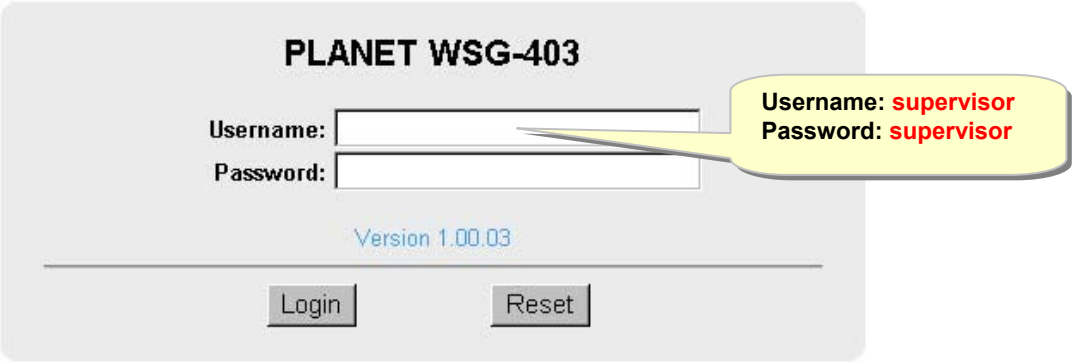


Figure 3-185 Supervisor Account Login Screen

Step 3: After a valid user name and password have been provided, the WSG-403 configuration homepage will appear.

Figure 3-186 System Status Screen

- **Super Subscriber Account**

Start your Web Browser; a subscriber login page will appear. Enter **super** as the Username and **super** as the password and click **Enter**, you can use Internet now.

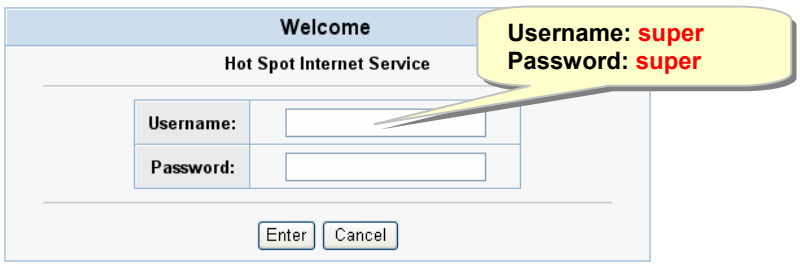


Figure 3-187 Subscriber Login Page

3.4.5 SSL Certificate

The function allows you to download the registered CA certificate into the WSG-403.

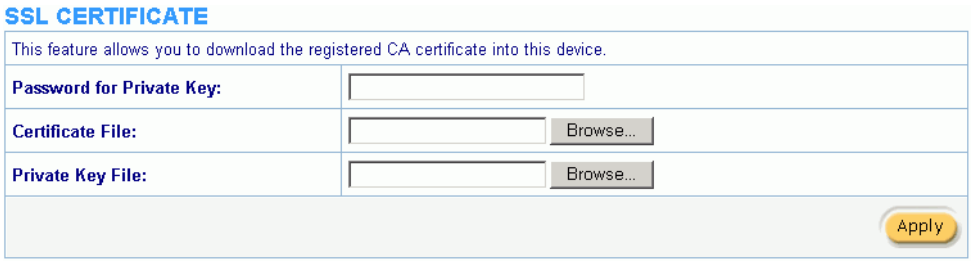


Figure 3-188 SSL Certificate Download Setting Screen

Note: *The password field must the same as the CA's registered password.*

3.4.6 Ping Command

The Ping function can check the WSG-403 networking connective or not.

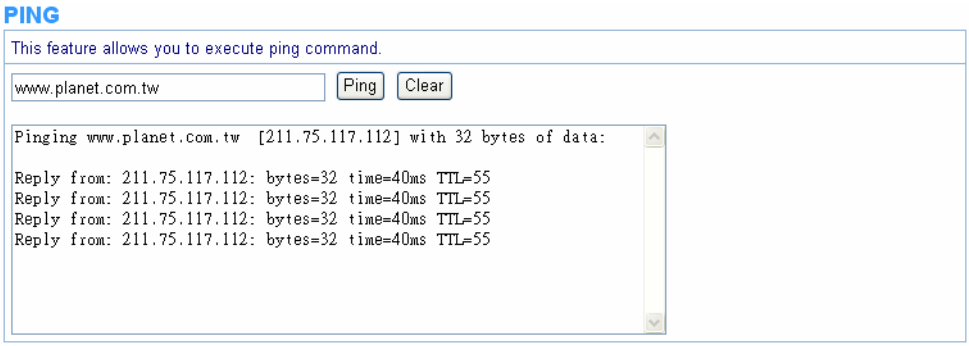


Figure 3-189 Ping Command Screen

Item	Description
IP or URL	Enter the IP address or the URL link.

3.4.7 Restart

If your WSG-403 is not operating correctly, you can choose this option to display the restart WSG-403 screen. Clicking the apply button restart the WSG-403, with all of your settings remaining intact.

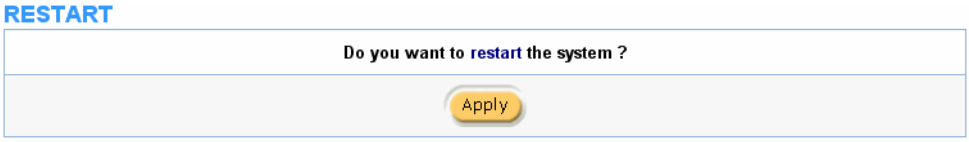


Figure 3-190 Restart Screen

3.4.8 Logout

If you would like to leave the configuration page, please click apply to exit.

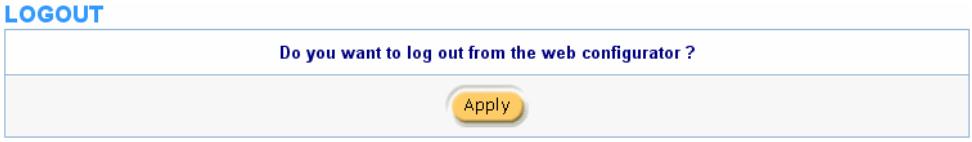


Figure 3-191 Logout Screen

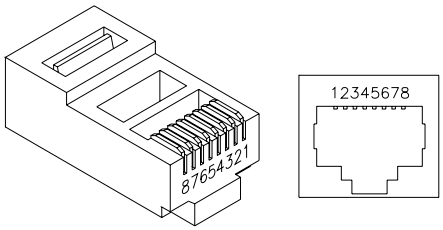
Appendix A Signal Connection Arrangements

RJ-45 Ethernet Port

The WSG-403 RJ-45 Ethernet port can connect to any networking devices that use a standard LAN interface, such as a Hub/Switch Hub or Router. Use unshielded twisted-pair (UTP) or shield twisted-pair (STP) cable to connect the networking device to the RJ-45 Ethernet port.

Depending on the type of connection, 10Mbps or 100Mbps, use the following Ethernet cable, as prescribed.

10Mbps: Use EIA/TIA-568-100-Category 3, 4 or 5 cable.



100Mbps: Use EIA/TIA-568-100-Category 5 cable.

Figure A-1 RJ-45 Connector and Cable Pins

Note: *To prevent loss of signal, make sure that the length of any twisted-pair connection does not exceed 100 meters.*

Appendix B Regulations/EMI Compliance

FCC Regulatory Statement

Part 15-Class B compliant device

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

1. This device may not cause harmful interference, and

2. This device must accept any interference received, including that which may cause undesired operation.

This equipment has been test and found to comply with the limits for a computing device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does 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:

1. Reorient or relocate the receiving antenna.

2. Increase the separation between the equipment and receiver.

3. The equipment and the receiver should be connected the outlets on separate circuits.

4. Consult the dealer or an experienced radio/television technician for help.

Changes or modification not expressly approved be the party responsible for compliance could void the user's authority to operate the equipment.

LIMITED WARRANTY

WSG-403

What the warranty covers:

We warrant its products to be free from defects in material and workmanship during the warranty period. If a product proves to be defective in material or workmanship during the warranty period, we will at its sole option repair or replace the product with a like product with a like product. Replacement product or parts may include remanufactured or refurbished parts or components.

How long the warranty is effective:

The Easy Hotspot Kit is warranted for one year for all parts and one year for all labor from the date of the first consumer purchase.

Who the warranty protects:

This warranty is valid only for the first consumer purchaser.

What the warranty does not cover:

1. Any product, on which the serial number has been defaced, modified or removed.
2. Damage, deterioration or malfunction resulting from:
   a. Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
   b. Repair or attempted repair by anyone not authorized by us.
   c. Any damage of the product due to shipment.
   d. Removal or installation of the product.
   e. Causes external to the product, such as electric power fluctuations or failure.
   f. Use of supplies or parts not meeting our specifications.
   g. Normal wears and tear.
   h. Any other cause that does not relate to a product defect.
3. Removal, installation, and set-up service charges.

How to get service:

1. For information about receiving service under warranty, contact our **Customer Support**.
2. To obtain warranted service, you will be required to provide (a) the original dated sales slip, (b) your name, (c) your address (d) a description of the problem and (e) the serial number of the product.
3. Take or ship the product prepaid in the original container to your dealer, and our service center.
4. For additional information, contact your dealer or our **Customer Service Center**.

Limitation of implied warranties:

THERE ARE NOWARRANTIED, EXPRESSED OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION CONTAINED HEREIN INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Exclusion of damages:

Our LIABILITY IS LIMITED TO THE COST OF REPAIR OR REPLACEMENT OF THE PRODUCT. We SHALL NOT BE LIABLE FOR:

1. DAMAGE TO OTHER PROPERTY CAUSED BY ANY DEFECTS IN THE PRODUCT, DAMAGES BASED UPON INCONVENCE, LOSS OF USE OF THE PRODUCT, LOSS OF TIME, LOSS OF PROFITS, LOSS OF BUSINESS OPPORTUNITY, LOSS OF GOODWILL, INTERFERENCE WITH BUSINESS RELATIONSHIPS, OR OTHER COMMERCIAL LOSS, EVEN IF ADVISED OF THE POSSIBLITY OF SUCH DAMAGES.
2. ANY OTHER DAMAGES, WHETHER INCIDENTAL, CONSEQUENTIAL OR OTHERWISE.
3. ANY CLAIM AGAINST THE CUSOMER BY ANY OTHER PARTY.