Air Live®
Powered by OvisLink Corp.

IAS-2000 v2

Internet Access Gateway

User's Manual

www.airlive.com

Declaration of Conformity

We, Manufacturer/Importer

OvisLink Corp.
5F., NO.6, Lane 130, Min-Chuan Rd.,
Hsin-Tien City, Taipei County, Taiwan

Declare that the product

Internet Access Gateway
AirLive IAS-2000 v2
is in conformity with

In accordance with 2004/108 EC Directive and 1999/5 EC-R & TTE Directive

Clause	Description
■ **EN 55022:1998**	Limits and methods of measurement of radio disturbance characteristics of information technology equipmen
■ **EN 61000-3-2:2000**	Disturbances in supply systems caused by household appliances and similar electrical equipment "Harmonics
■ **EN 61000-3-3:1995/ A1:2001**	Disturbances in supply systems caused by household appliances and similar electrical equipment "Voltage fluctuations
■ **EN 55024:1998/A1 :2001/A2:2003**	Information Technology equipment-Immunity characteristics-Limit And methods of measurement
■ **CE marking**	CE

Manufacturer/Importer

Signature : Albert Yeh

Name : **Albert Yeh**

Position/ Title : **Vice President** (Stamp) Date : **2008/10/9**

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Country	Declaration	Country	Declaration
cs Česky [Czech]	OvisLink Corp. tímto prohlašuje, že tento AirLive IAS-2000 v2 je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.	**lt** Lietuvių [Lithuanian]	Šiuo OvisLink Corp. deklaruoja, kad šis AirLive IAS-2000 v2 atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
da Dansk [Danish]	Undertegnede OvisLink Corp. erklærer herved, at følgende udstyr AirLive IAS-2000 v2 overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.	**nl** Nederlands [Dutch	Hierbij verklaart OvisLink Corp. dat het toestel AirLive IAS-2000 v2 in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
de Deutsch [German]	Hiermit erklärt OvisLink Corp., dass sich das Gerät AirLive IAS-2000 v2 in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.	**mt** Malti [Maltese]	Hawnhekk, OvisLink Corp, jiddikjara li dan AirLive IAS-2000 v2 jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
et Eesti [Estonian]	Käesolevaga kinnitab OvisLink Corp. seadme AirLive IAS-2000 v2 vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.	**hu** Magyar [Hungarian]	Az OvisLink Corporation kijelenti, hogy az AirLive IAS-2000 v2 megfelel az 1999/05/CE irányelv alapvető követelményeinek és egyéb vonatkozó rendelkezéseinek.
en English	Hereby, OvisLink Corp., declares that this AirLive IAS-2000 v2 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.	**pl** Polski [Polish]	Niniejszym OvisLink Corp oświadcza, że AirLive IAS-2000 v2 jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
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el Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ OvisLink Corp. ΔΗΛΩΝΕΙ ΟΤΙ AirLive IAS-2000 v2 ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.	**sl** Slovensko [Slovenian]	OvisLink Corp izjavlja, da je ta AirLive IAS-2000 v2 v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
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CE Declaration of Conformity

This equipment complies with the requirements relating to electromagnetic compatibility,
EN 55022:1998, EN 61000-3-2, EN 61000-3-3/A1, EN 55024/A1/A2, Class A.

Contents

Chapter 1. Before You Start

1.1 Audience

This manual is for Hotspot owners or administrators in enterprises to set up network environment using IAS-2000 v2. It contains step by step procedures and graphic examples to guide MIS staff or individuals with slight network system knowledge to complete the installation.

1.2 Document Conventions

For any caution or warning that requires special attention of readers, a highlight box with the eye-catching italic font is used as below:

Warning: *For security purposes, you should immediately change the Administrator's password.*

 Indicates that clicking this button will return to the homepage of this section.

 Indicates that clicking this button will return to the previous page.

Indicates that clicking this button will apply all of your settings.

Indicates that clicking this button will clear what you set before these settings are applied.

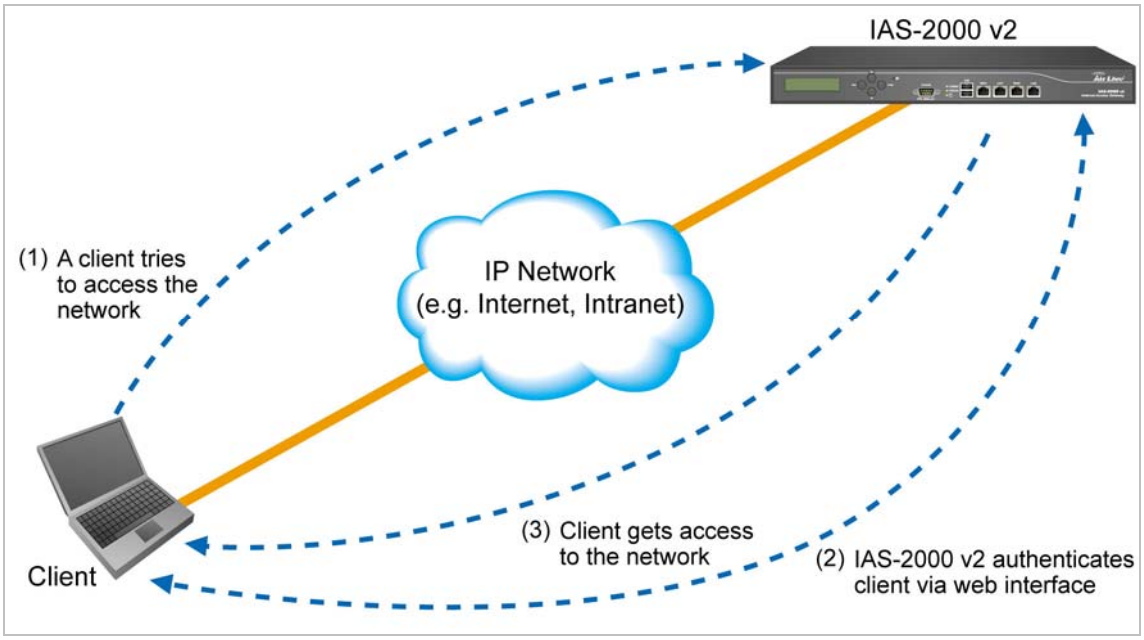
Chapter 2. Overview

2.1 Introduction of IAS-2000 v2

IAS-2000 v2 is a Network Access Control System specially designed for middle-scaled or large network environments while retaining network efficiency. IAS-2000 v2 delivers **"manageability"**, **"efficiency"** and **"friendly interface"** and suits perfectly for campuses, libraries, gymnasiums, small and middle enterprises, factories, Hotspots and community hospitals.

2.2 System Concept

IAS-2000 v2 is dedicatedly designed for controlling all network data passing through the system. The users under the managed network must be authenticated to access the network beyond the managed area. The authentication mechanism at the user's end is provided by the IAS-2000 v2 server, and the SSL encryption is used to protect the webpage. In the system, IAS-2000 v2 is responsible for authentication, authorization, and management functions. The user account information is stored in the IAS-2000 v2 database, or other specified external authentication databases.

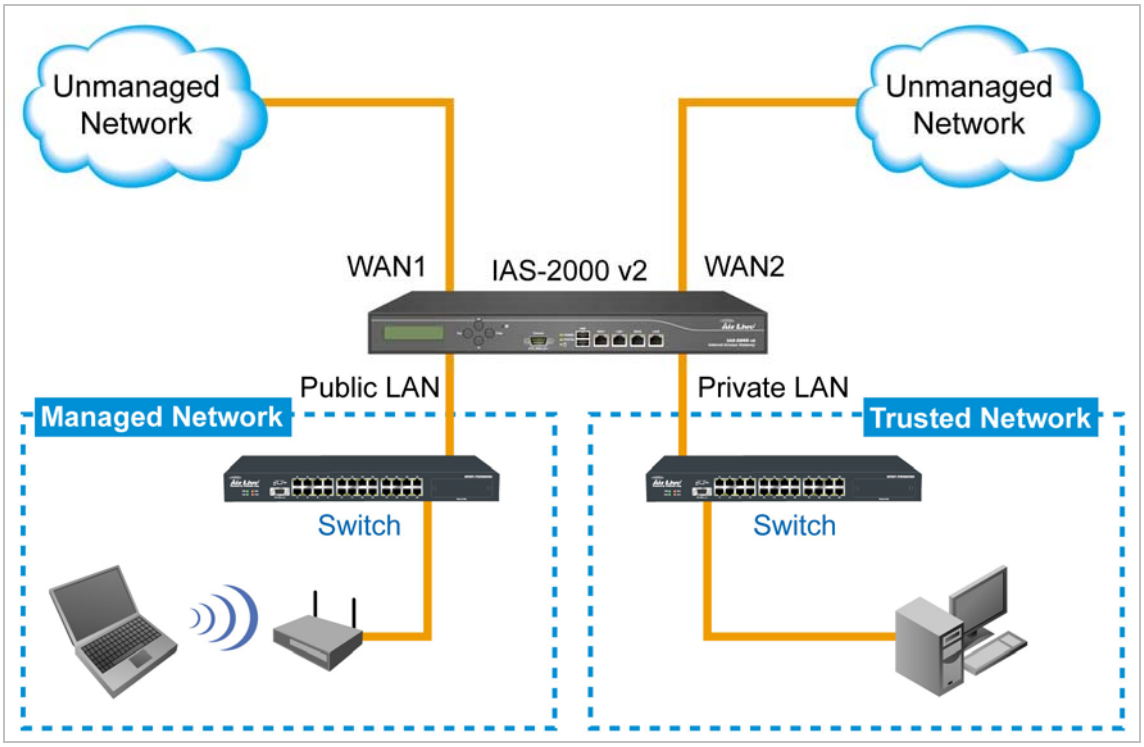


The process of authenticating the user's identity is executed via the SSL encrypted webpage. Using the web interface, it can be ensured that the system is compatible to most desktop systems and palm computers. When a user authentication is requested, the IAS-2000 v2 server software will check the authentication database at the rear end to confirm the user's access right. The authentication database can be the local database of IAS-2000 v2 or any external database that IAS-2000 v2 supports. If the user is not an authorized user, IAS-2000 v2 will refuse the user's

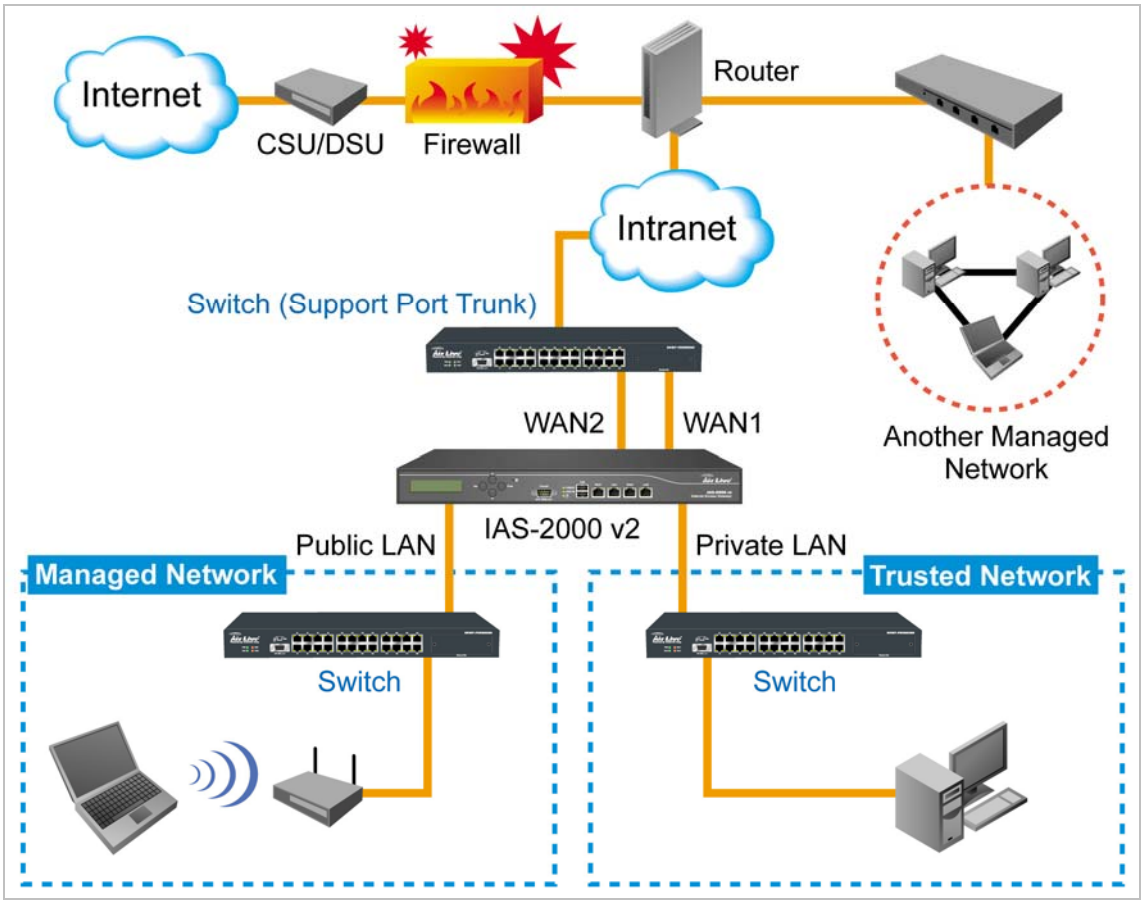
request for the access. In the meantime, IAS-2000 v2 will also continue blocking the user from accessing the network. If the user is an authorized user, then IAS-2000 v2 will authorize the user with an appropriate access right, so that the user can use the network. If the online user remains idle without using the network for a time exceeding a predetermined idle time on IAS-2000 v2 or the online user logs out of the system, IAS-2000 v2 will exit the working stage of such user and terminate the user's access right of the network.

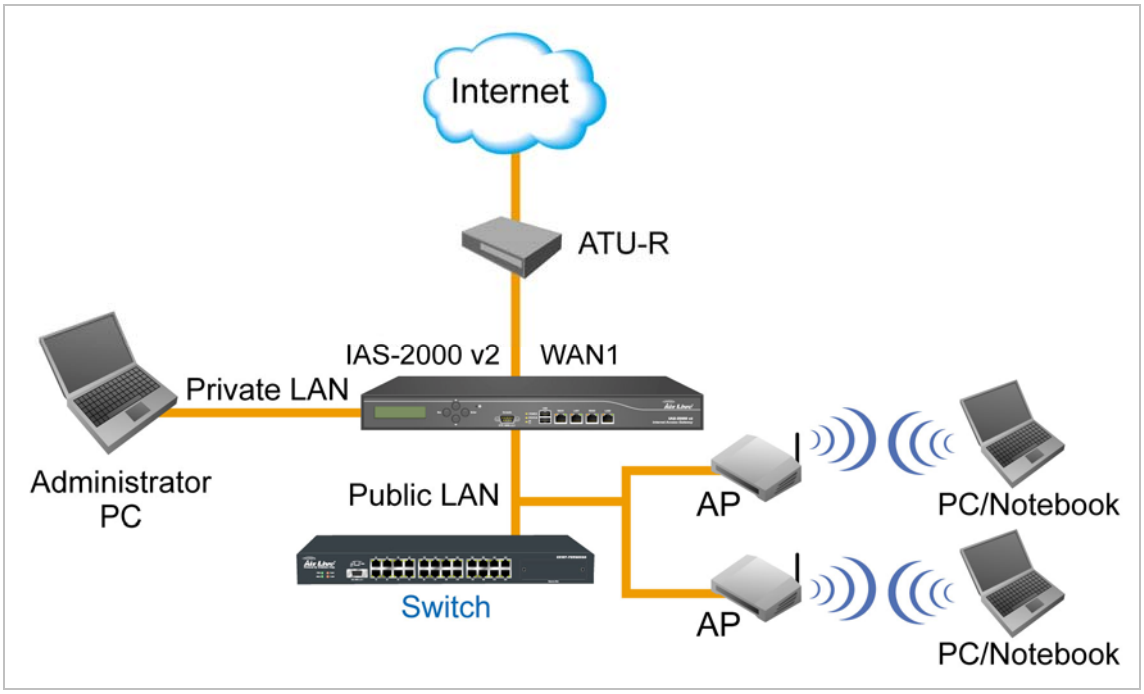
The following figure provides a simple example of setting up a small enterprise network. IAS-2000 v2 is set to control a part of the company's intranet. The whole managed network includes cable network users and wireless network users. In the beginning, any user located at the managed network is unable to access the network resource without permission. If the access right to the network beyond the managed area is required, an Internet browser such as the Internet Explorer must be opened and a connection to any website must be performed. When the browser attempts to connect to a website, IAS-2000 v2 will force the browser to redirect to the user login webpage. The user must enter the username and password for authentication. After the identity is authenticated successfully, the user will gain proper access right defined on IAS-2000 v2.

***Attention: Public LAN** is referred to as the LAN port with the authentication function enabled from where the Authentication is required for the users to get access of the network; And, **Private LAN** is referred to as the LAN port with the authentication function disabled.*



Another setup example is shown in the following figure. The WAN1 and WAN2 of IAS-2000 v2 simultaneously supports the Switch of 802.3ad (Support Port Trunk), and the bandwidth of the Switch will be the sum of the WAN1 and WAN2 bandwidths, which aims at eliminating the bottleneck caused by the narrow bandwidth between IAS-2000 v2 and the 802.3ad Switch.


Internet
CSU/DSU
Firewall
Router
Intranet
Switch (Support Port Trunk)
WAN2
WAN1
Another Managed Network
IAS-2000 v2
Public LAN
Private LAN
Managed Network
Trusted Network
Switch
Switch


Internet
ATU-R
IAS-2000 v2
WAN1
Private LAN
Administrator PC
Public LAN
AP
PC/Notebook
Switch
AP
PC/Notebook

Chapter 3. Hardware Installation

3.1 Panel Function Descriptions

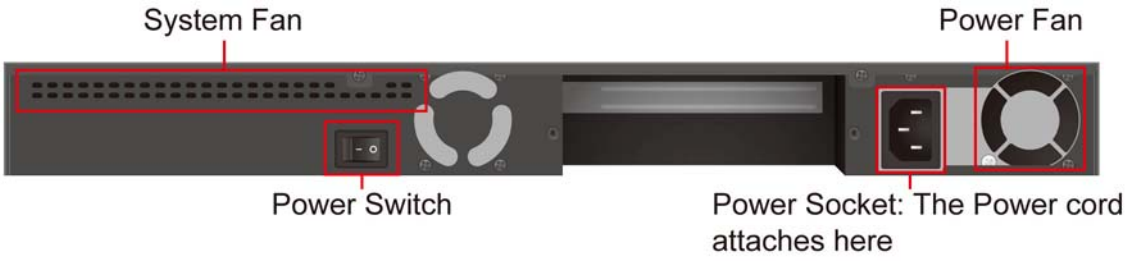
Front Panel

LED	Color	Status	Description
POWER	Green	On	Power on the device
Status LED	Green	Off	BIOS running
		Blink	OS running
		On	System ready
WAN1, LAN1, WAN2, LAN2 (L)	Orange	Blink	Sending / Receiving
WAN1, LAN1, WAN2, LAN2 (R)	Green	Off	10 Mbps
		On	100 Mbps
	Orange	On	1000 Mbps

Port	Description
WAN1 / WAN2	Connect to Internet or Intranet
LAN1 / LAN2	Connect to the open environment. It can be chosen to require authentication to access network resources and Internet.
Console Port	9-pin serial port connector to resume the factory defaults or reconfigures the system.
Panel Button	LCD Panel to display system info and network interface info

LED: There are four kinds of LED, power, status, port speed and link/act, to indicate different status of the system.
Console Port: The system can be configured via HyperTerminal. For example, if you need to set the Administrator's Password, you can connect a PC to this port as a Console Serial Port via a terminal connection program (such as the super terminal with the parameters of 9600, 8, N, 1, None flow control) to change the Administrator's Password.
LAN1/LAN2: The two LAN ports can be independently configured such that users cannot access Internet before authentication. Thus, administrators can choose to force the authentication for users connected to these ports.
WAN1/WAN2: The two WAN ports are connected to a network which is not managed by the IAS-2000 v2 system, and this port can be used to connect the ATU-Router of ADSL, the port of Cable Modem, or the Switch or Hub on the LAN of a company.

Rear Panel



System Fan: Keep the machine cool.

Power Fan: Keep the power cool.

Power Socket: The power cord attaches here.

Power Switch: Turn on and off the machine.

3.2 Package Contents

The standard package of IAS-2000 v2 includes:

- IAS-2000 v2 x 1
- CD-ROM x 1
- Power Cord x 1
- Ethernet Cable (Crossover) x 1
- Ethernet Cable (Straight) x1
- Console Cable x 1
- Accessory Packing x 1

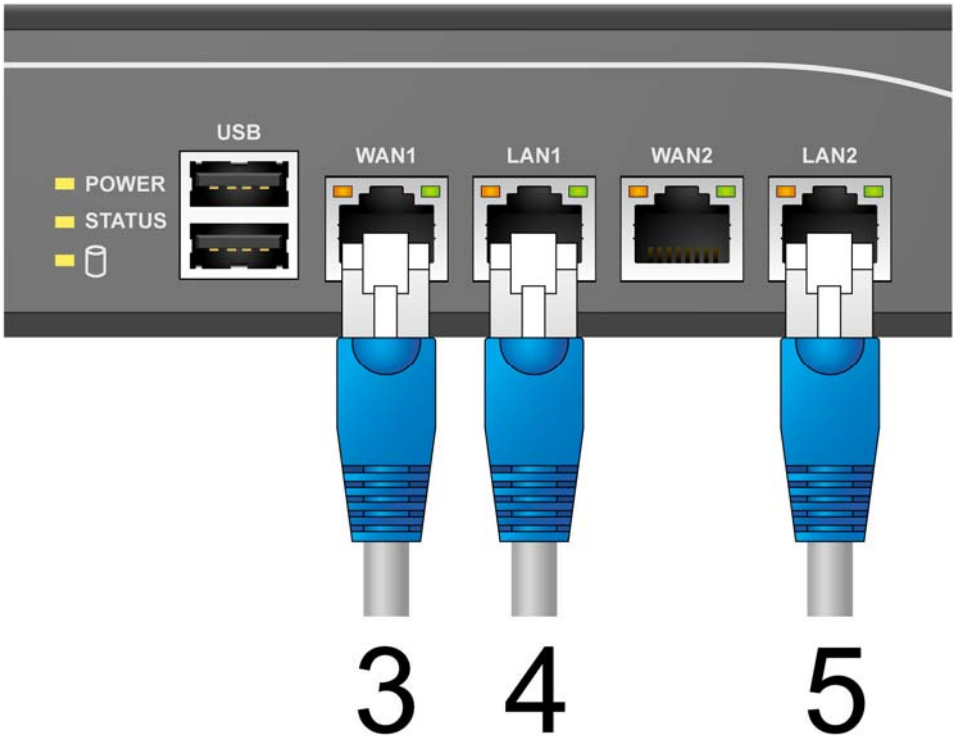
3.3 System Requirement

- Standard 10/100BaseT including five network cables with RJ-45 connectors
- All PCs need to install the TCP/IP network protocol

3.4 Installation Steps

Please follow the following steps to install IAS-2000 v2:

1. Connect the power cord to the power socket on the rear panel.
2. Turn on the power switch on the rear panel. The Power LED will light up.



3. Connect an Ethernet cable to one LAN port with the user authentication function enabled on the front panel. The default port is LAN1 port. (Note: Authentication is required for the users to access the network via this LAN port. The LAN port with authentication function is referred to as ***Public LAN***.) Connect the other end of the Ethernet cable to an AP or switch. The LED of this LAN port should be on to indicate a proper connection.

4. Connect an Ethernet cable to one LAN port with the user authentication function disabled on the front panel. The default port is LAN2 port. (Note: No authentication is required for the users to access the network via this LAN port. The LAN port without authentication function is referred to as ***Private LAN*** and the administrator can enter the administrative user interface to perform configurations via ***Private LAN***.) Connect the other end of the Ethernet cable to a client's PC. The LED of this LAN port should be on to indicate a proper connection.
5. Connect an Ethernet cable to one of the WAN ports on the front panel. Connect the other end of the Ethernet cable to ADSL modem, cable modem or a switch/hub of the internal network. The LED of this WAN should be on to indicate a proper connection.

Attention: *Usually a straight RJ-45 could be applied if IAS-2000 v2 is connected to a hub/computer which supports automatic crossover, such as the Access Point. However, after the Access Point hardware reset, IAS-2000 v2 should not be able to connect to Access Point while connecting with a straight cable unless the cable was pulled out and plug-in again. This scenario does NOT occur while using a crossover cable.*

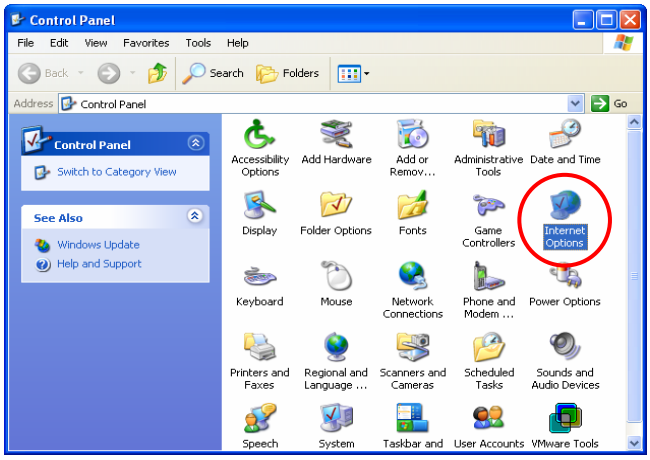
After the hardware of IAS-2000 v2 is installed completely, the system is ready to be configured in the following sections. The manual will guide you step by step to set up the system using a single IAS-2000 v2 to manage the network.

Chapter 4. Network Configuration on PC

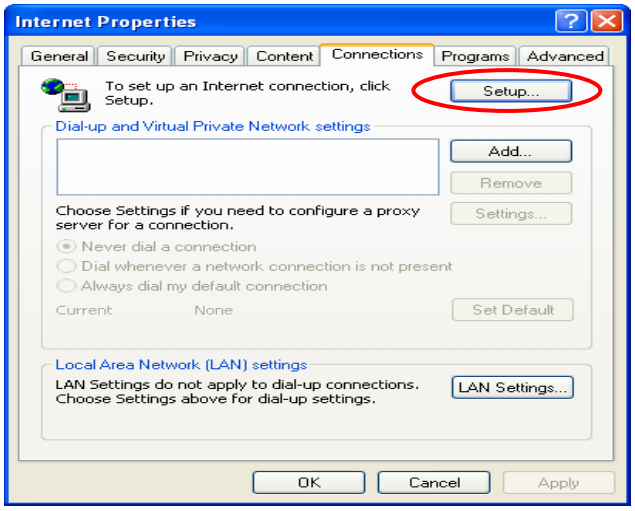
After IAS-2000 v2 is installed, the following configurations must be set up on the PC: **Internet Connection Setup for Windows XP** and **TCP/IP Network Setup**.

4.1. Internet Connection Setup for Windows XP

1. Choose **Start** > **Control Panel** > **Internet Options**.

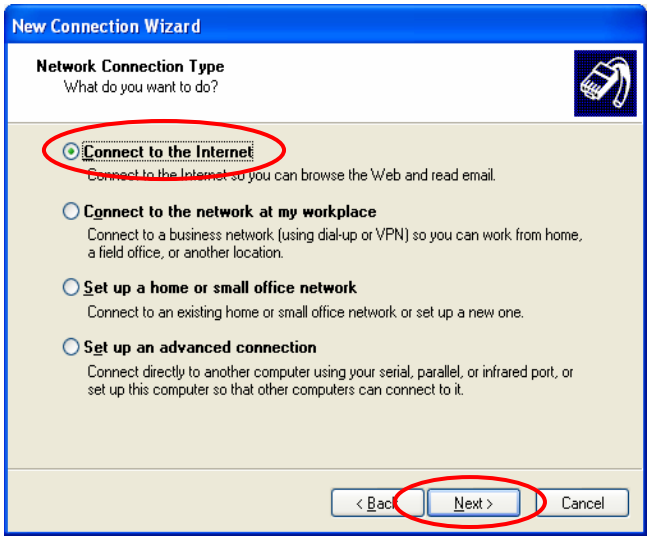


2. Choose the **"Connections"** label, and then click ***Setup***.

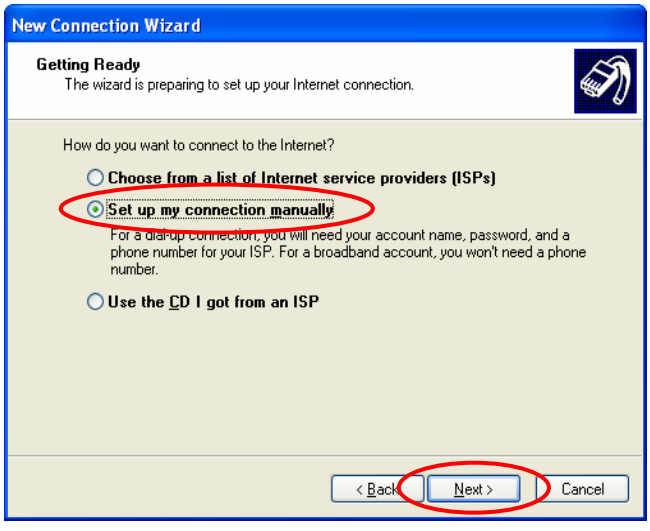


3. Click ***Next*** when **Welcome to the New Connection Wizard** screen appears.

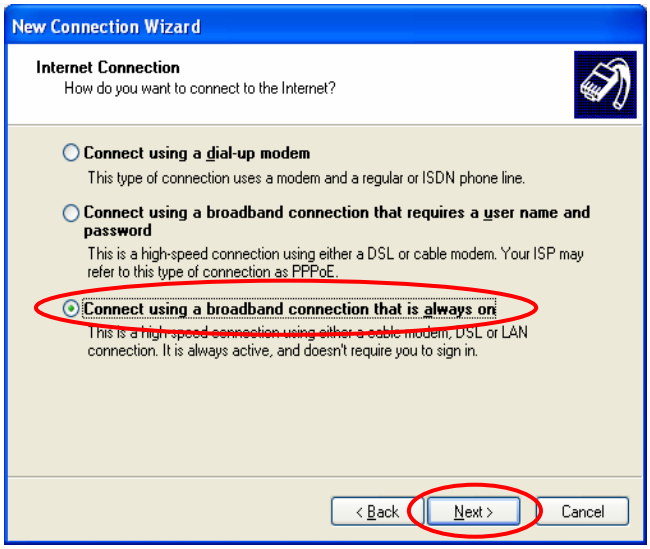
4. Choose **"Connect to the Internet"** and then click ***Next***.



5. Choose **"Set up my connection manually"** and then click ***Next***.



6. Choose **"Connect using a broadband connection that is always on"** and then click ***Next***.



7. Finally, click ***Finish*** to exit the **Connection Wizard**. Now, the setup has been completed

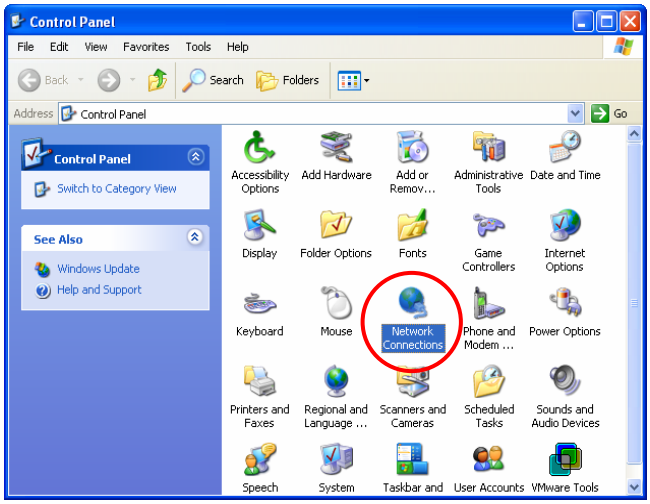
4.2. TCP/IP Network Setup

If the operating system of the PC in use is Windows 95/98/ME/2000/XP, keep the default settings without any change to directly start/restart the system. With the factory default settings, during the process of starting the system, IAS-2000 v2 with DHCP function will automatically assign an appropriate IP address and related information for each PC. If the Windows operating system is not a server version, the default settings of the TCP/IP will regard the PC as a DHCP client, and this function is called **"Obtain an IP address automatically"**.

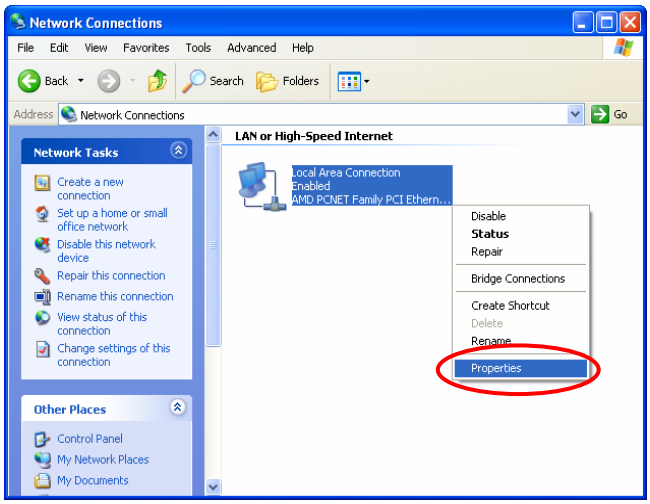
If checking the TCP/IP setup or use the static IP in the LAN1 or LAN2 section is needed, please follow the steps below

Check the TCP/IP Setup of Window XP

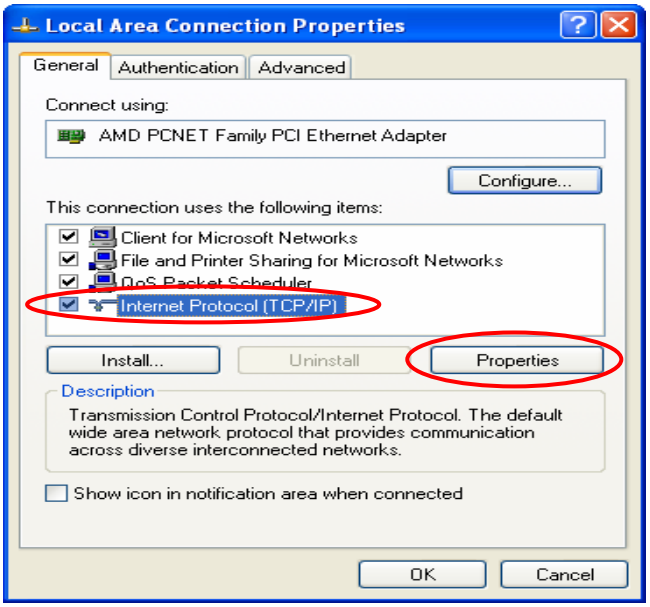
1. Select **Start > Control Panel > Network Connections**.



2. Click the right button of the mouse on the **"Local Area Connection"** icon and select **"Properties"**

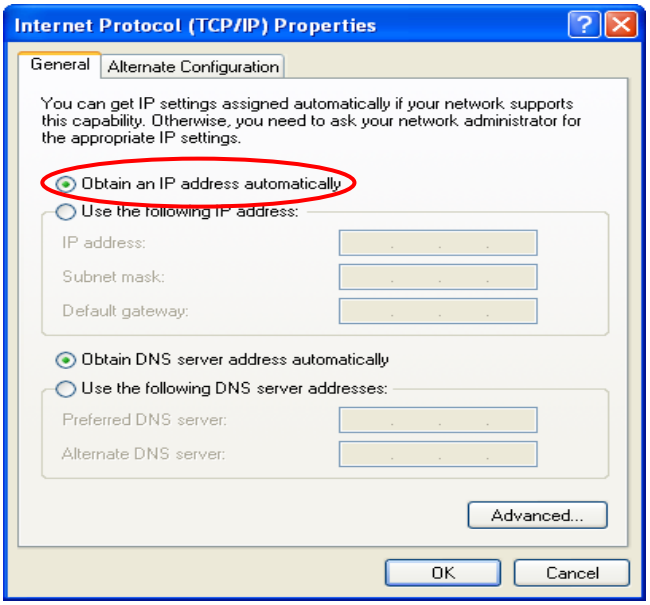


3. Select **"General"** label and choose **"Internet Protocol (TCP/IP)"** and then click ***Properties***. Now, choose to use **DHCP** or **specific IP address**.



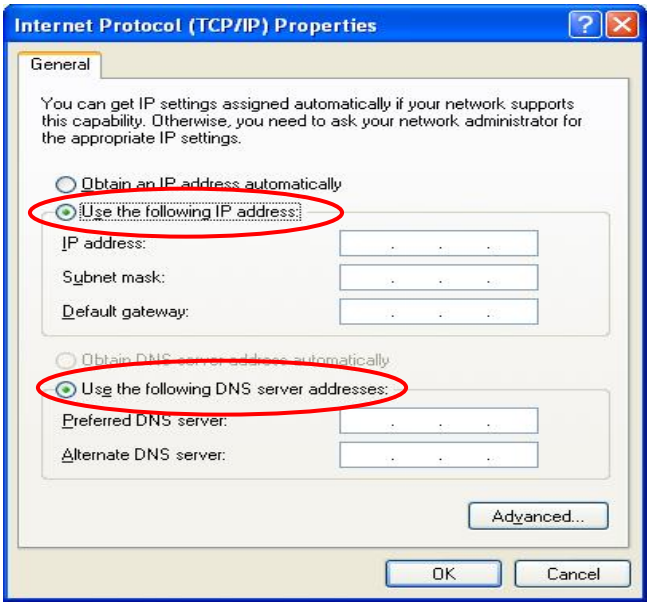
4-1. **Using DHCP:** If using DHCP is desired, please choose **"Obtain an IP address automatically"** and click ***OK***. This is also the default setting of Windows. Then, reboot the PC to make sure an IP address is obtained from IAS-2000 v2.

4-2. **Using Specific IP Address:** If using specific IP address is desired, ask the network administrator for the information of the IAS-2000 v2: ***IP address***, ***Subnet Mask***, ***New gateway*** and ***DNS server address***.

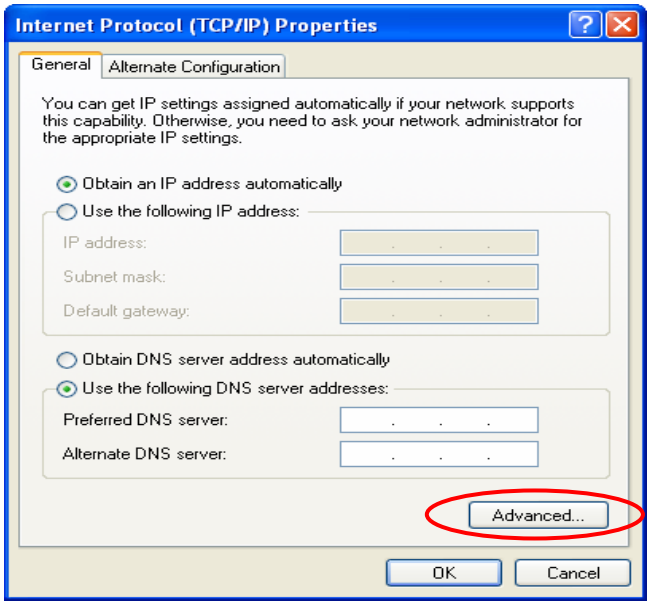


Caution: *If your PC has been set up completed, please inform the network administrator before modifying the following setup.*

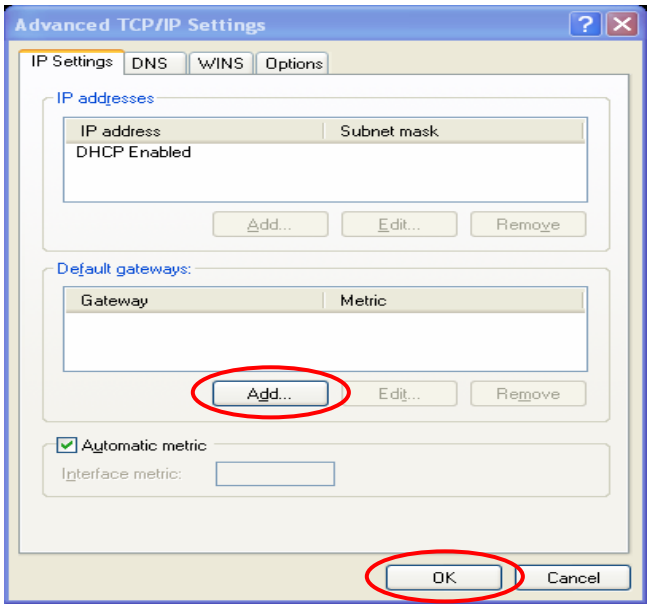
- Please choose **"Use the following IP address:"** and enter the information given from the network administrator in **"IP address:"** and **"Subnet mask:"** as well as **"Default gateway"** If the DNS Server column is blank, please choose **"Use the following DNS server addresses:"** and then enter a known DNS address or the DNS address provided by ISP and then click ***OK***.

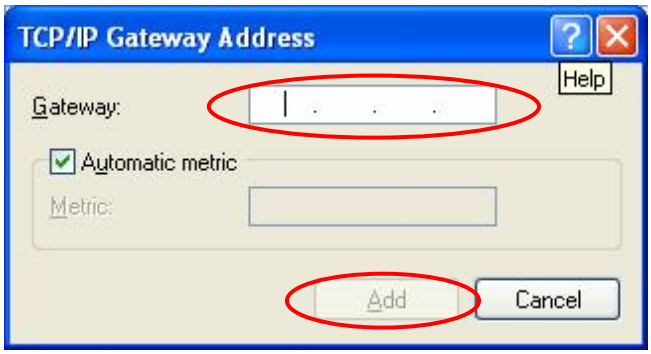


- Then, click ***Advanced*** in the window of **"Internet Protocol (TCP/IP) Properties"**.



- Choose the **"IP Settings"** label and click **"Add"** below the **"Default gateways"** column and the **"TCP/IP Gateway Address"** window will appear. Enter the gateway address of IAS-2000 v2 in the **"Gateway:"** of **"TCP/IP Gateway Address"** window, and then click ***Add***. After returning to the **"IP Settings"** label, click ***OK*** to finish.





Chapter 5. Web Interface Configuration

This chapter will present further detailed settings. The following table shows all the functions of IAS-2000 v2.

OPTION	System Configuration	Network Configuration	User Authentication	Utilities	Status
FUNCTION	Configuration Wizard	Network Address Translation	Authentication Configuration	Change Password	System Status
	System Information	Privilege List	Policy Configuration	Backup/Restore Setting	Interface Status
	WAN1 Configuration	Monitor IP List	Black List Configuration	Firmware Upgrade	Current Users
	WAN2 & Failover	Walled Garden List	Guest User Configuration	Restart	Traffic History
	LAN1 Configuration	Proxy Server Properties	Additional Configuration		Notification Configuration
	LAN2 Configuration	Dynamic DNS			Online Report
		IP Mobility			

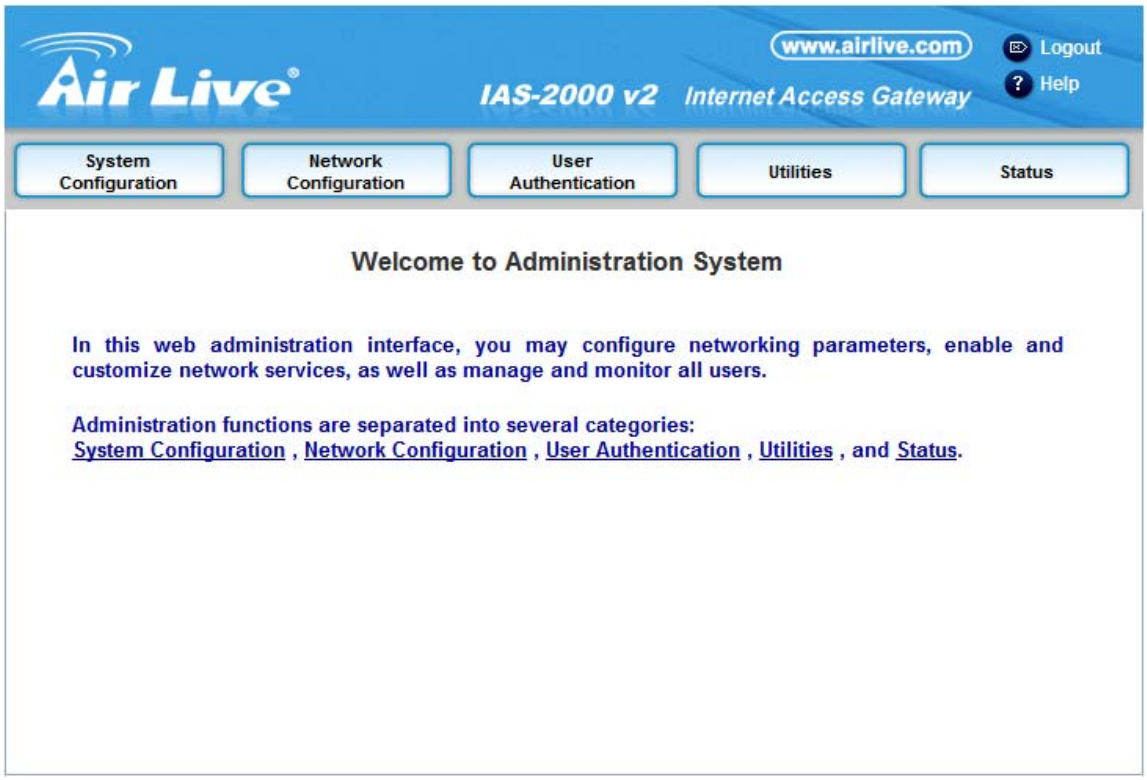
Caution: *After finishing the configuration of the settings, please click* ***Apply*** *and pay attention to see if a restart message appears on the screen. If such message appears, system must be restarted to allow the settings to take effect. All on-line users will be disconnected during restart.*

After the basic installation shown previously has been completed, IAS-2000 v2 can be further configured with the following steps

1. Use the network cable of the 10/100BaseT to connect a PC to the ***Private Port***, and then start a browser (such as Microsoft IE). Next, enter the gateway address for that port, the default is https://192.168.2.254. In the opened webpage, an administrative login page will appear. Enter ***"admin"*** as the default username and password ***"airlive"***. Click ***Enter*** to log in.

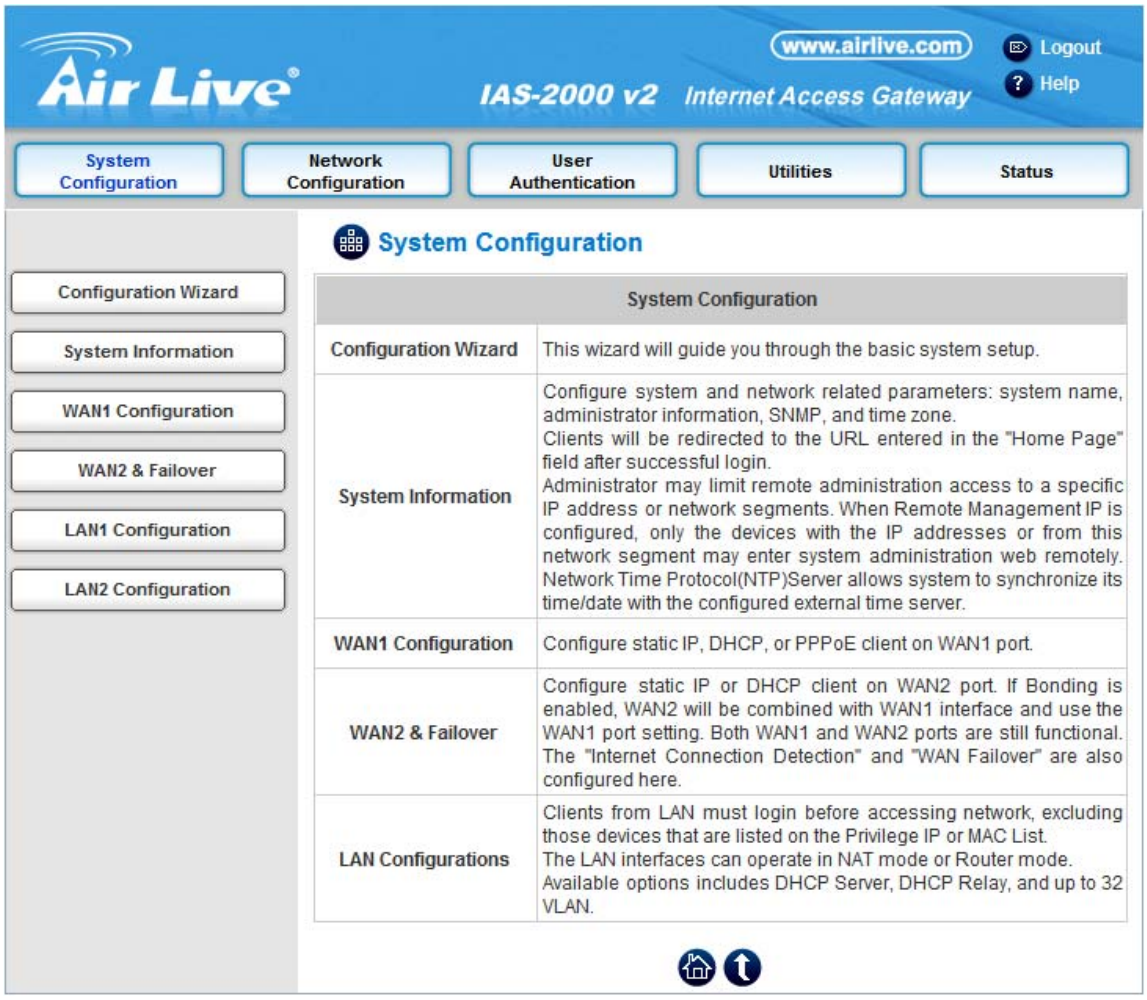
Caution: *If you can't get the login page, you may have incorrectly set your PC to obtain an IP address automatically from authentication LAN port or the IP address used does not have the same subnet as the URL. Please use default IP address such as 192.168.2.xx in your network and then try it again.*

2. After successfully logging into IAS-2000 v2, enter the web management interface and see the welcome page. There is a ***Logout*** button on the upper right corner to log out the system.



5.1 System Configuration

This section includes the following functions: **Configuration Wizard**, **System Information**, **WAN1 Configuration**, **WAN2 & Failover**, **LAN1 Configuration** and **LAN2 Configuration**.

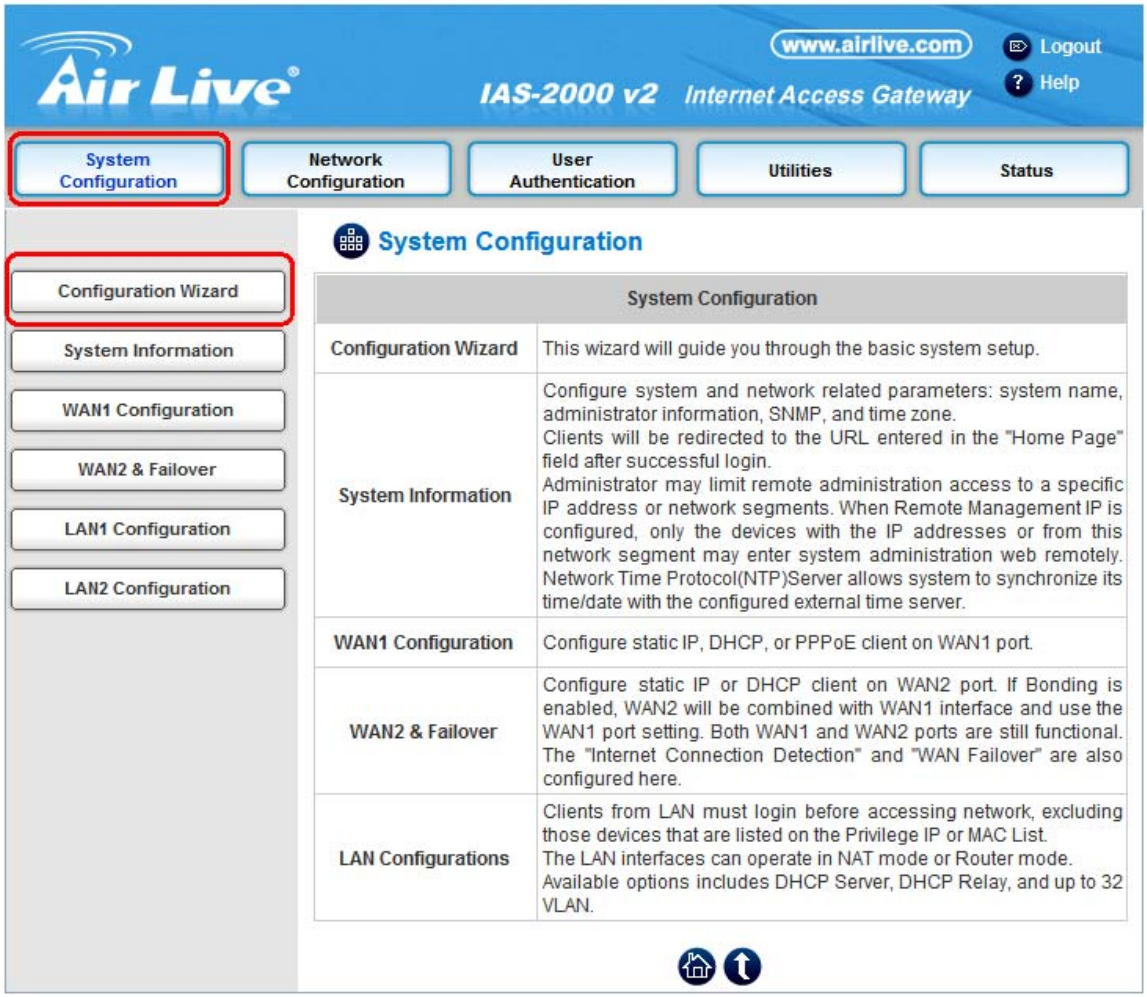


5.1.1 Configuration Wizard (Also served as Quick Installation)

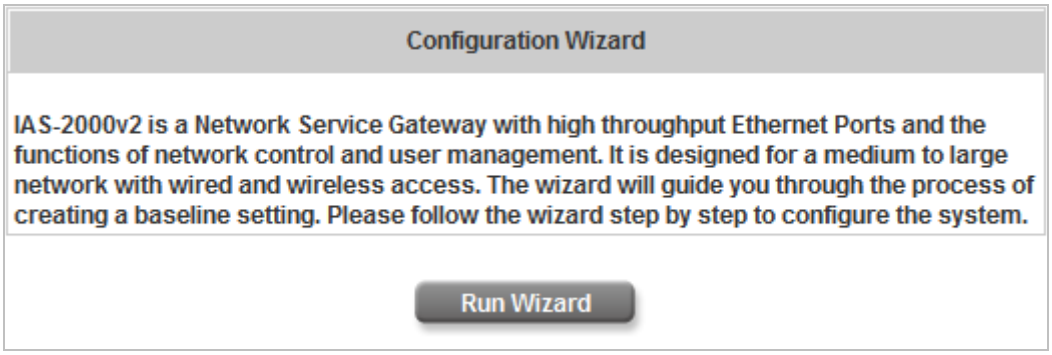
There are two ways to configure the system: using **Configuration Wizard** or change the setting by demands manually. The Configuration Wizard has 7 steps providing a simple and easy way to set up IAS-2000 v2 and can be served as Quick Installation. There are **7** steps as listed below:

1. **Change Admin's Password**
2. **Choose System's Time Zone**
3. **Set System Information**
4. **Select the Connection Type for WAN1 Port**
5. **Configure LAN1**
6. **Select Authentication Method**
7. **Restart**

Now, click the ***System Configuration*** from the top menu and the **System Configuration** page will appear.

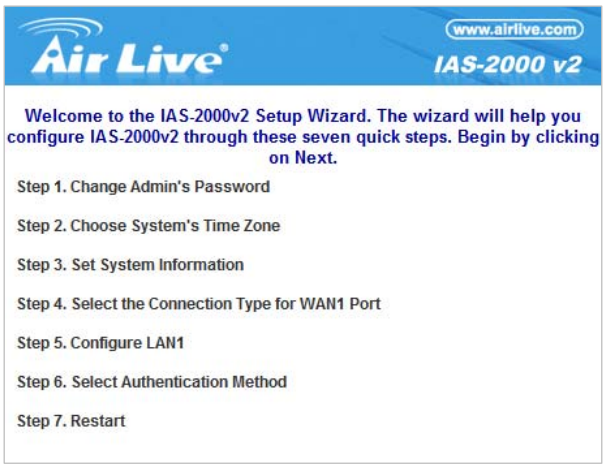


Then, click on ***Configuration Wizard*** and click the ***Run Wizard*** button to start the wizard.



- **Running the Wizard**

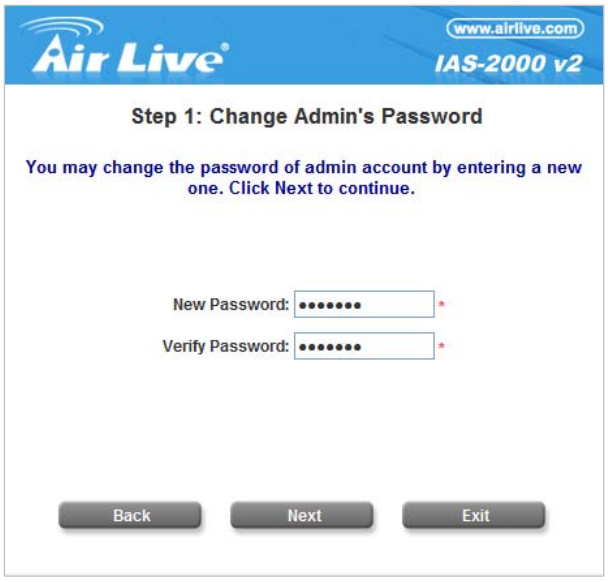
  A welcome screen that briefly introduces the 7 steps will appear. Click ***Next*** to begin.



- **Step 1: Change Admin's Password**

  Enter a new password for the admin account and retype it in the verify password field (twenty-character maximum and no spaces).

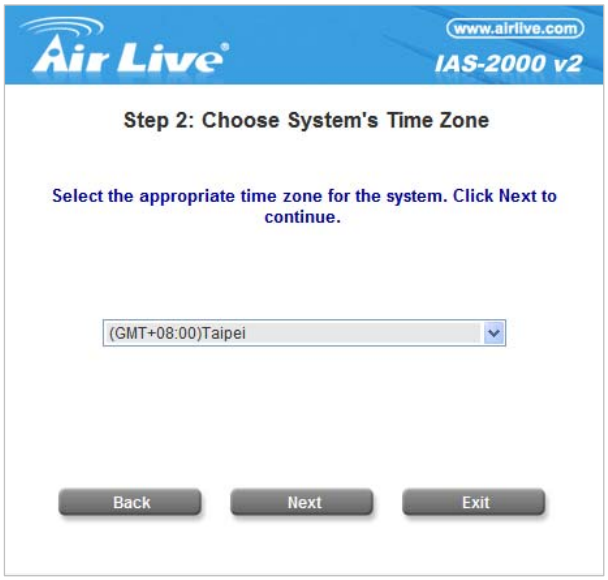
  Click ***Next*** to continue.



- **Step 2: Choose System's Time Zone**

  Select a proper time zone via the pull-down menu.

  Click ***Next*** to continue.



- **Step 3: Set System Information**

  Home Page: Enter the URL to where the clients should be directed when they are properly authenticated.

  NTP Server: Enter the URL of external time server for IAS-2000 v2 time synchronization or use the default.

  DNS Server: Enter a DNS Server provided by the ISP (Internet Service Provider). Contact the ISP if the DNS IP Address is unknown.

  Click ***Next*** to continue.

- **Step 4: Select the Connection Type for WAN1 Port**

  There are three types that WAN1 port supports: **Static IP Address**, **Dynamic IP Address** and **PPPoE Client**. Select a proper Internet connection type and click ***Next*** to continue.

  - **Dynamic IP Address**

    If this option is selected, an appropriate IP address and related information will be assigned automatically.

    Click ***Next*** to continue.

- **Static IP Address: Set WAN1 Port's Static IP Address**

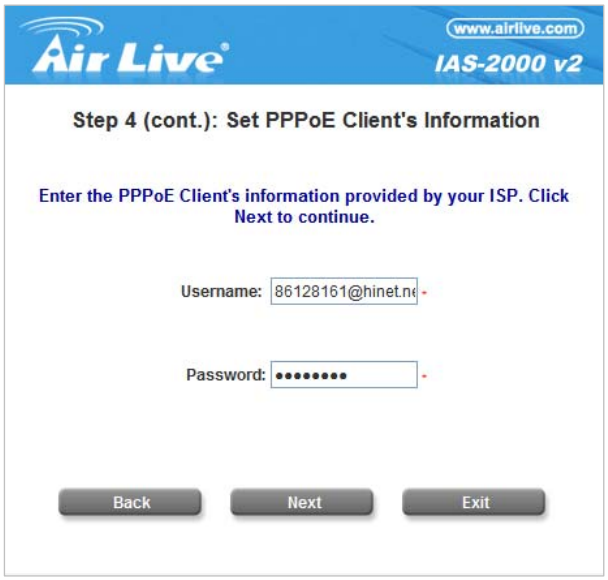
  Enter the **"IP Address"**, **"Subnet Mask"** and **"Default Gateway"** provided by the ISP.

  Click ***Next*** to continue.

- **PPPoE Client: Set PPPoE Client's Information**

  Enter the **"Username"** and **"Password"** provided by the ISP.

  Click ***Next*** to continue.



- **Step 5: Configure LAN1's Information**

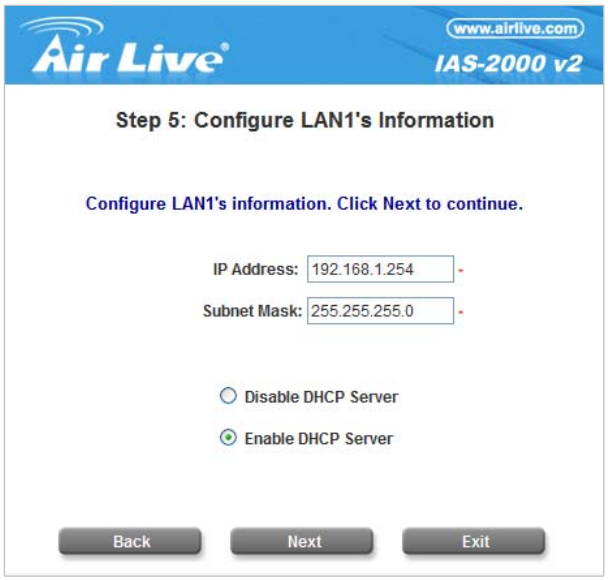
  IP Address: Enter the Public LAN port IP Address or use the default.

  Subnet Mask: Enter the Public LAN port Subnet Mask or use the default.

  Disable DHCP Server: If the DHCP server is disabled, the clients in Public LAN must be configured with an IP address manually.

  Enable DHCP Server: When the option is selected, IAS-2000 v2 will automatically provide the necessary IP address to all clients in Public LAN.

  Click ***Next*** to continue.



- **Step 5: Set LAN1 DHCP Server**

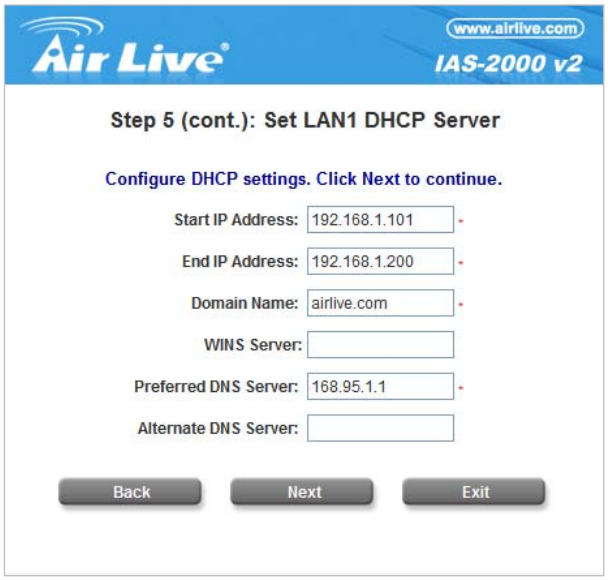
  If Enable DHCP Server option is selected, fields marked with red asterisk must be filled in.

  Start IP Address: The start IP address that will be assigned to the Public LAN clients.

  End IP Address: The end IP address that will be assigned to the Public LAN clients.

  (Note: Be sure that IP addresses assigned from Start IP address to End IP address are NOT used in other settings by IAS-2000 v2.)

  Domain Name: Enter a domain name provided by the ISP (e.g. airlive.com).



WINS Server: Enter the IP address of the WINS Server (Windows Internet Naming Service Server). This field is optional.

Preferred DNS Server: The DNS Server settings are provided by the ISP. Only the Preferred DNS Server field is mandatory. Contact the ISP if the DNS Server settings are unknown.

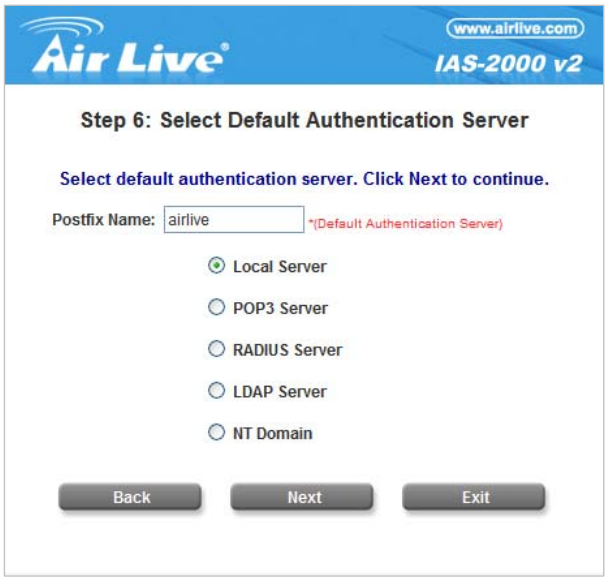
Alternate DNS Server: The DNS Server settings are provided by the ISP. This field is optional.

Click ***Next*** to continue.

- **Step 6: Select Default Authentication Server**

  Set the user's information in advance. Enter an easy identified name as the postfix name in the ***Postfix Name*** field (e.g. airlive) and choose an authentication method.

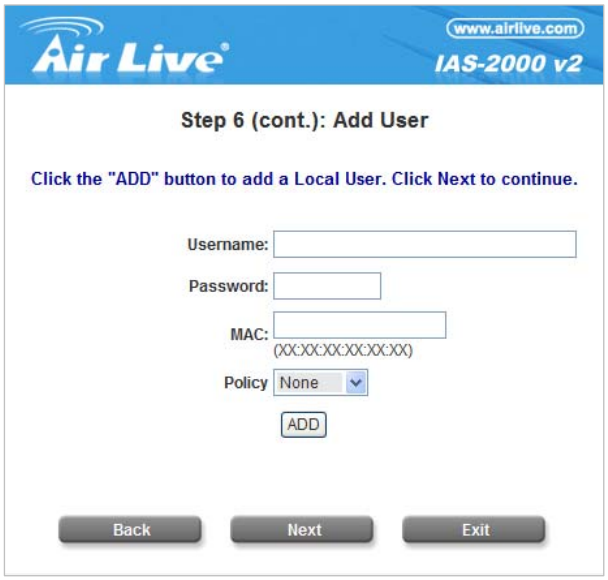
  Click ***Next*** to continue.



➢ **Local User- Add User**

A new user can be added to the local user data base. To add a user here, enter the ***Username*** (e.g. test), ***Password*** (e.g. test), ***MAC*** (optional) and assign it a policy (or use the default). Upon completing a user adding, more users can be added to this authentication method by clicking the ***ADD*** bottom.

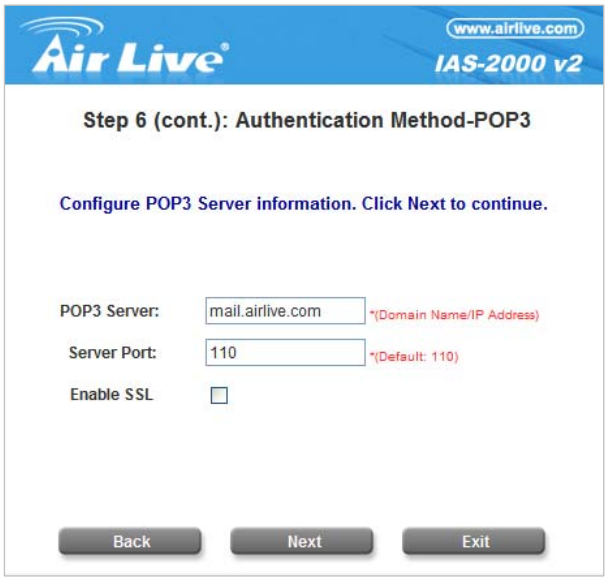
Click ***Next*** to continue.



➢ **POP3 User- Authentication Method-POP3**

Enter IP/Domain Name and server port of the POP3 server provided by the ISP, and then choose enable SSL or not.

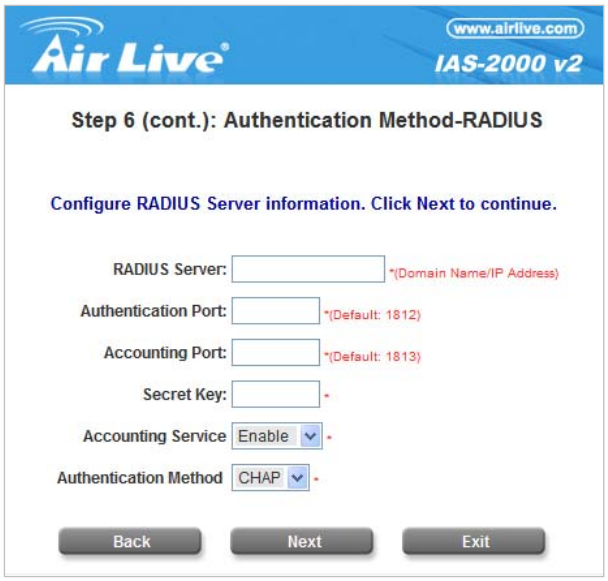
Click ***Next*** to continue.



➢ **RADIUS User- Authentication-RADIUS**

Enter RADIUS server IP/Domain Name, authentication port, accounting port and secret key. Then choose to enable accounting service or not, and choose the desired authentication method.

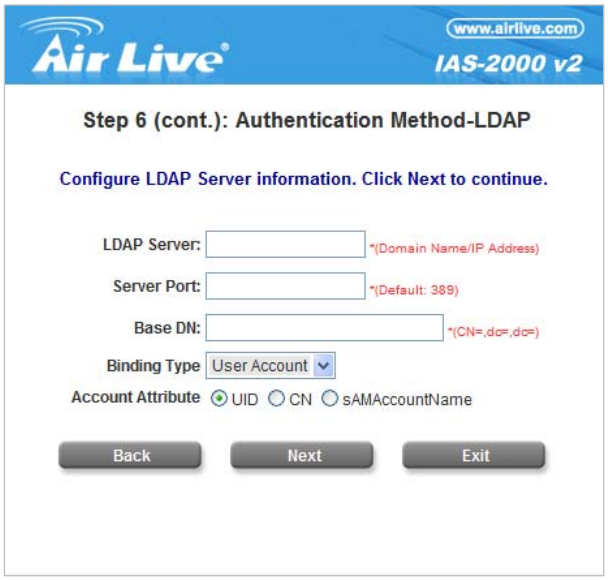
Click ***Next*** to continue.



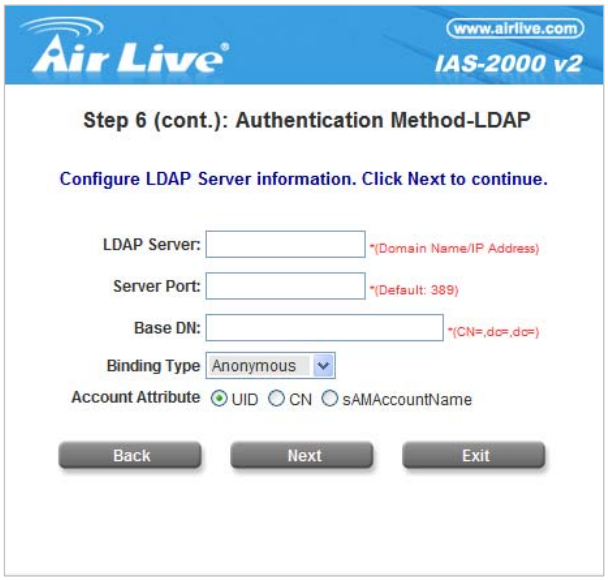
➢ **LDAP User- Authentication Method-LDAP**

Add a new user to the LDAP user data base. Enter the **"LDAP Server"**, **"Server Port"** and **"Base DN"** and select one kind of **Binding Type** and **Account Attribute** to access the LDAP server.

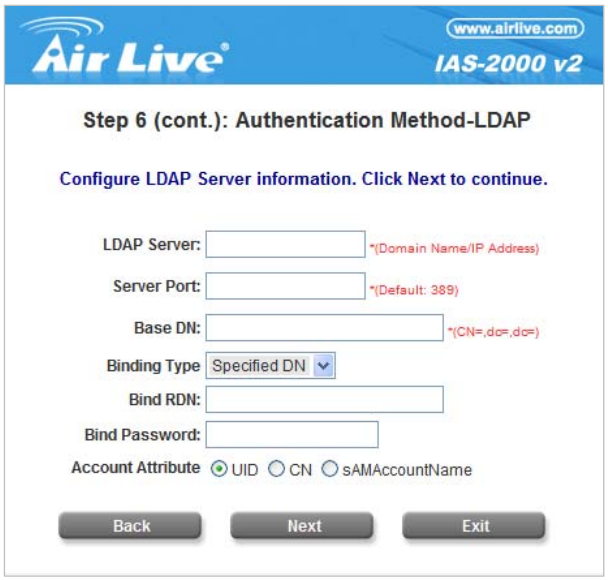
If **User Account** binding type is selected, the system will use the **Base DN** to be the user account to access the LDAP server.



If **Anonymous** binding type is selected, the system will access the LDAP servers without requiring authentication.

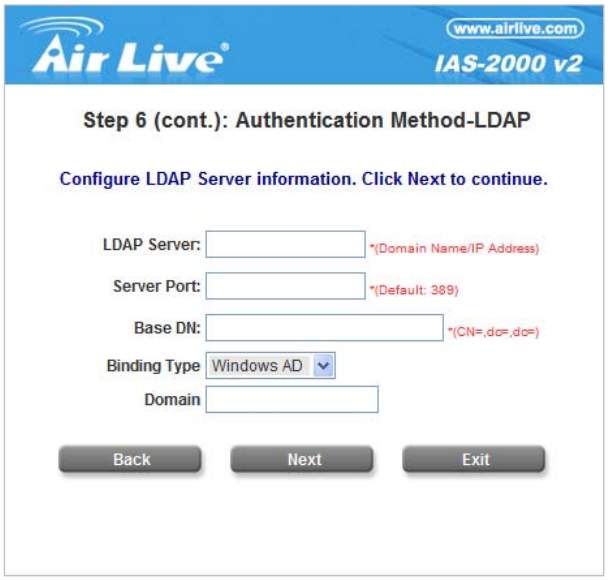


If **Specified DN** binding type is selected, ***username*** and ***password*** in the **"Bind RDN"** and **"Bind Password"** fields must be entered to access the LDAP server.



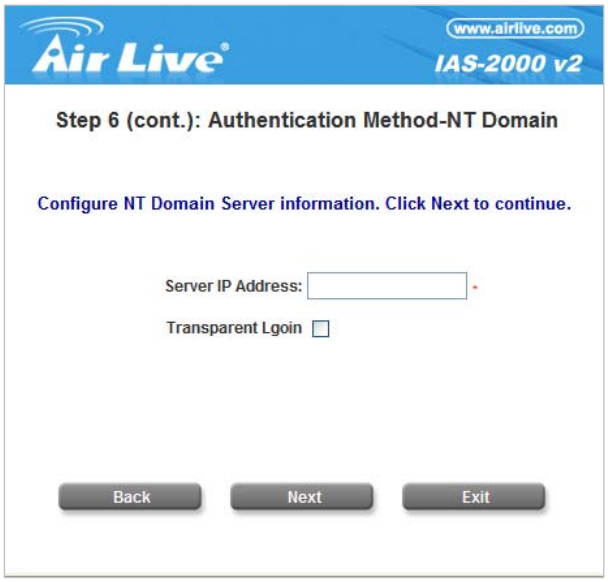
If **Windows AD** binding type is selected, please enter the domain name of Windows AD to access the LDAP server.

Click ***Next*** to continue.



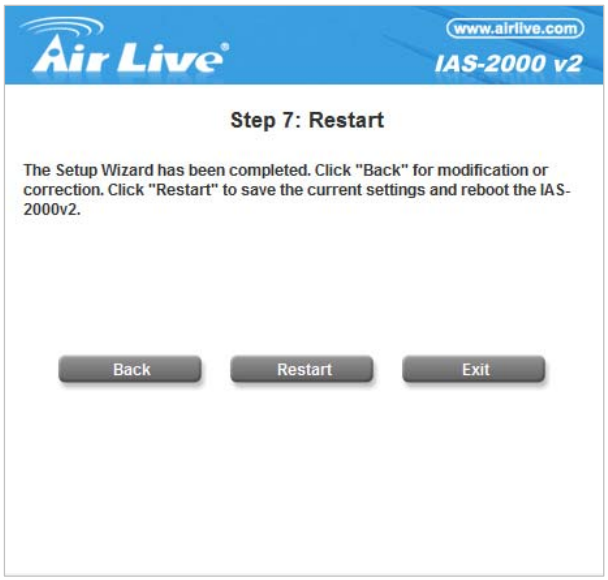
➢ **NT Domain User- Authentication Method-NT Domain**

When NT Domain User is selected, enter the information for **"Server IP Address"**, and enable/disable **"Transparent Login"**. After this setup is completed, click ***Next*** to continue.

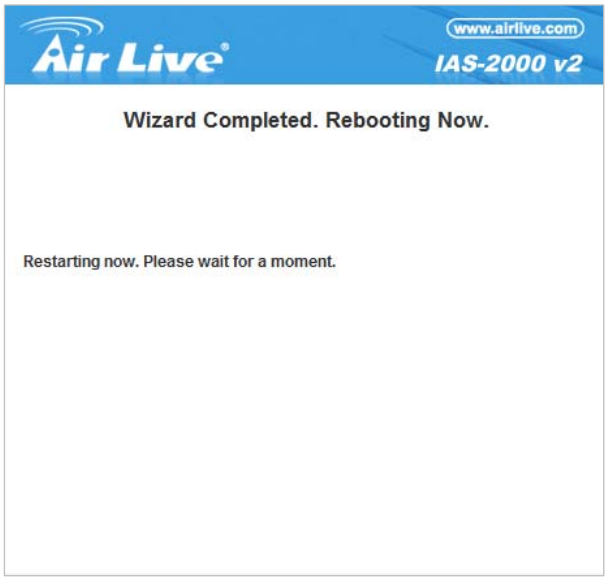


- **Step 7: Restart**

Click ***Restart*** to save the current settings and restart IAS-2000 v2. The Setup Wizard is now completed.



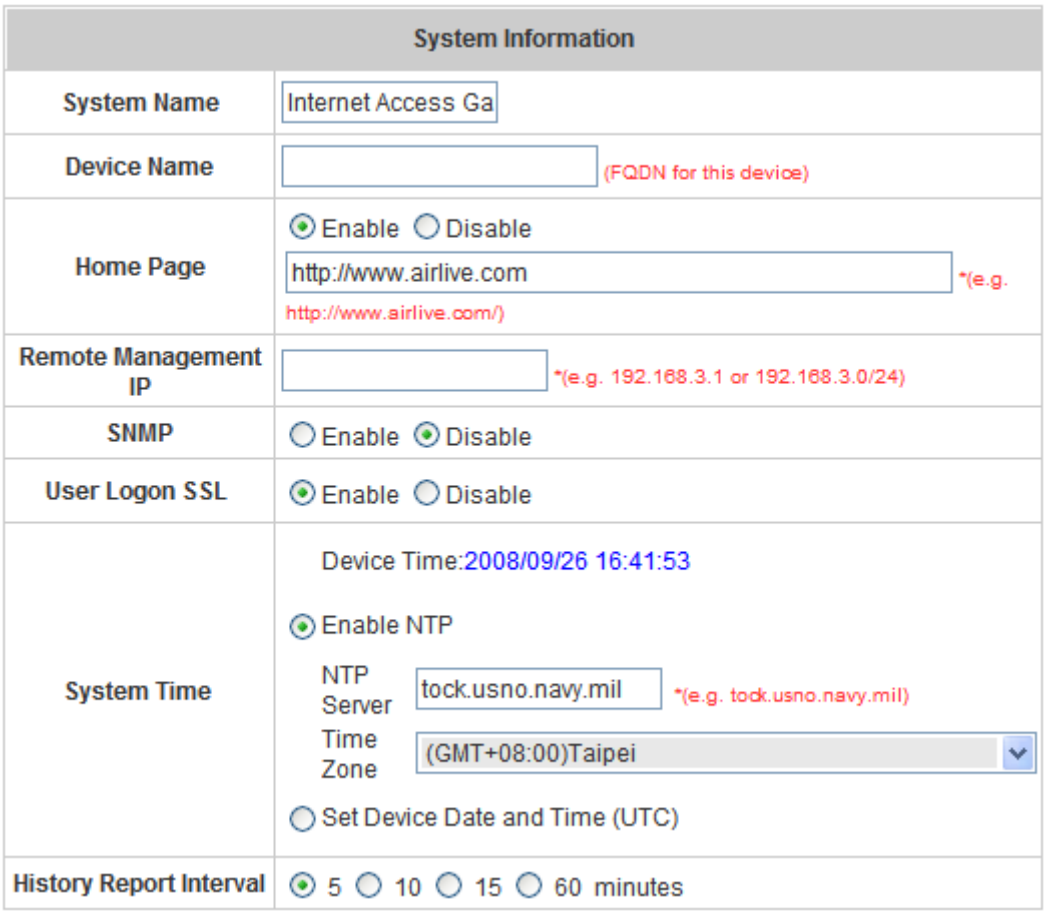
- During IAS-2000 v2 restart, a **"Restarting now. Wait for a minute."** message will appear on the screen. Please do not interrupt IAS-2000 v2 until the message has disappeared. This indicates that a complete and successful restart process has finished.



Caution: *During every step of the wizard, if you wish to go back to modify the setting. Please click the* ***Back*** *button to go back to the previous step.*

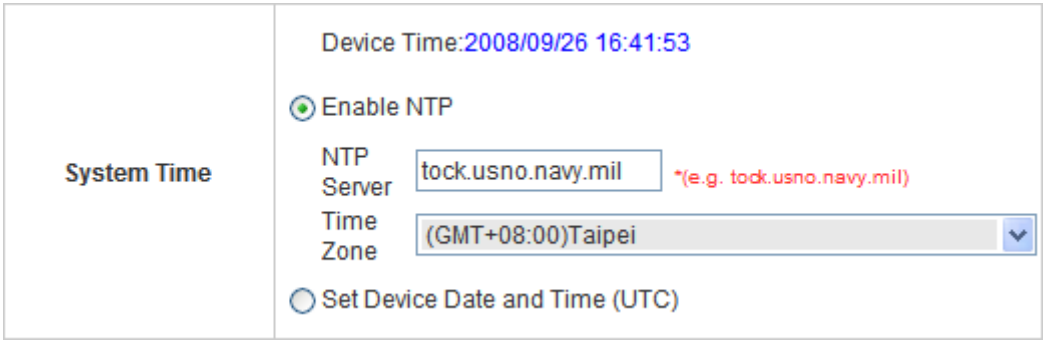
5.1.2 System Information

These are some main information about IAS-2000 v2. Please refer to the following description for these blanks:



- **System Name:** Set the system's name or use the default.
- **Device Name:** FQDN (Fully-Qualified Domain Name). This is used as the domain name used in login page. For example, if Device Name=IAS-2000v2.com, the URL of login page will be https://IAS-2000v2.com/loginpages/login.shtml
- **Home Page:** Enter the website of a Web Server to be the homepage. When users log in successfully, they will be directed to the homepage set here. Usually, the homepage is the company's website or a popular website, such as http://www.airlive.com. Regardless of the original webpage set in the users' computer, they will be redirect to this page after login.
- **Remote Management IP:** Set a specific IP or the IP range or subnet with a system which is able to connect to the web management interface via the WAN port. For example, 10.2.3.0/24 means that as long as an administrator is within the IP address range of 10.2.3.0/24, user can reach the administration page of IAS-2000.
- **SNMP:** IAS-2000 v2 supports SNMPv2 and SNMPv3. If the function is enabled, assign the Manager IP and the community of SNMPv2 and SNMPv3 to access the management information base (MIB) of the system.
- **User Logon SSL:** Enable SSL when user login with encryption to have a safer login process.

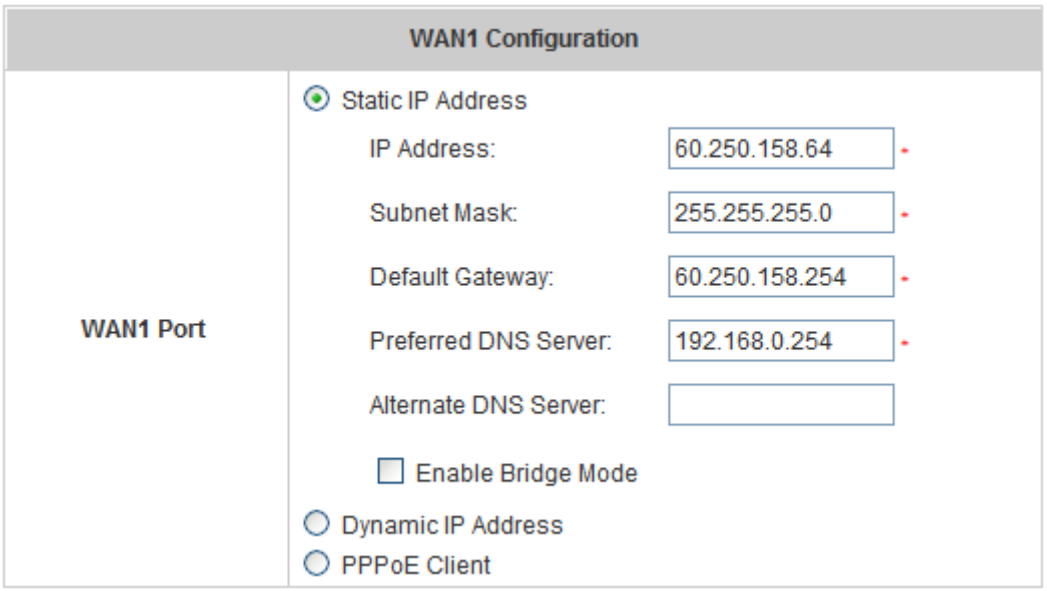
- **System Time:** IAS-2000 v2 supports NTP communication protocol to synchronize the network time. Please specify the IP address of a NTP server and select the desired time zone in the system configuration interface for adjusting the time automatically. (Universal Time is Greenwich Mean Time, GMT). Time can also be set manually when by selecting **"Set Device Date and Time"**. Please enter the date and time for these fields.



- **History Report Interval:** Time interval for sending the history notice.

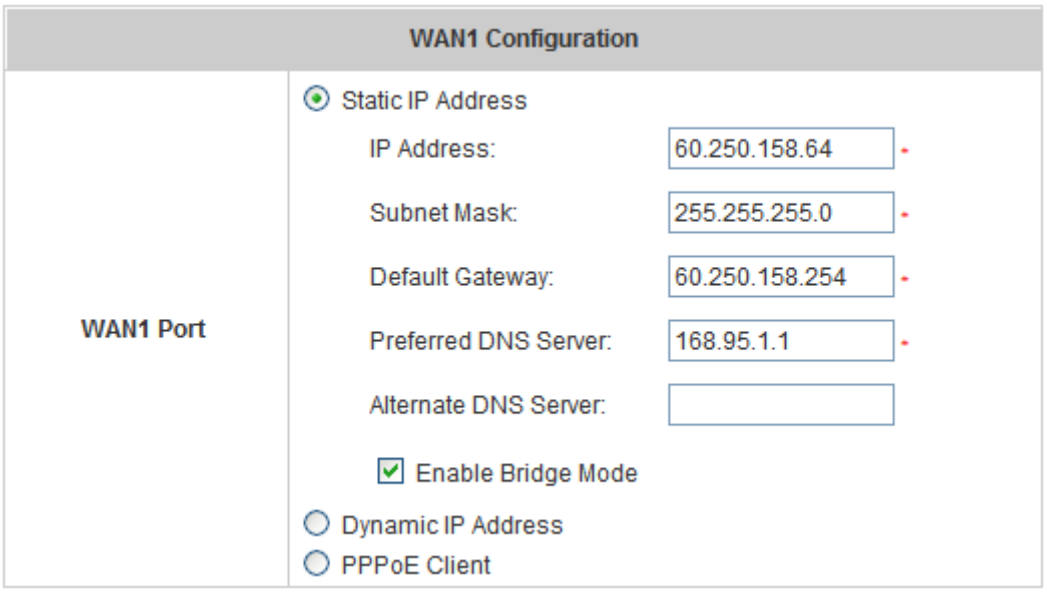
5.1.3 WAN1 Configuration

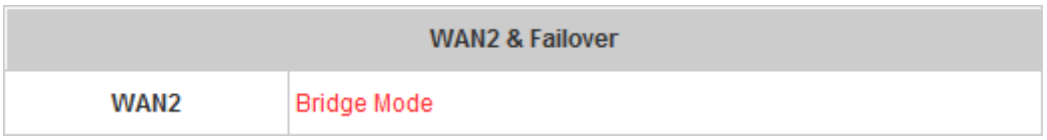
There are 3 methods that WAN1 Port supports: **Static IP Address**, **Dynamic IP Address**, and **PPPoE Client**.



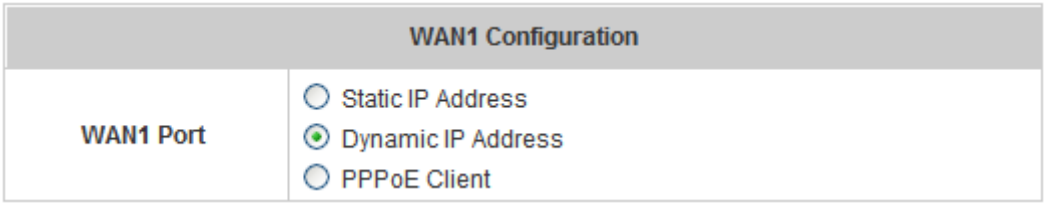
- **Static IP Address:** Manually specifying the IP address of the WAN1 Port which is applicable for the network environment where the DHCP service is unavailable. The option of 802.3ad for WAN2 is only available when WAN1 is using a static IP address. The fields with red asterisks are required. Please fill in these fields.

  - **IP Address:** The IP address of the WAN1 port.
  - **Subnet Mask:** The subnet mask of the WAN1 port.
  - **Default Gateway:** The gateway of the WAN1 port.
  - **Preferred DNS Server:** The primary DNS Server of the WAN1 port.
  - **Alternate DNS Server:** The substitute DNS Server of the WAN1 port. This is not required.
  - **Enable Bridge Mode:** WAN1 is set to use a static IP address and **"Enable Bridge Mode"** is checked, WAN2 and all LAN ports will share the WAN1 IP address and go into bridge mode as well. See the following figures. The PC connected to LAN1 or LAN 2 must be set to static IP address manually, or it can receive the IP address from upper DHCP server via WAN1. The IP address they received is the same IP subnet with WAN1 IP.

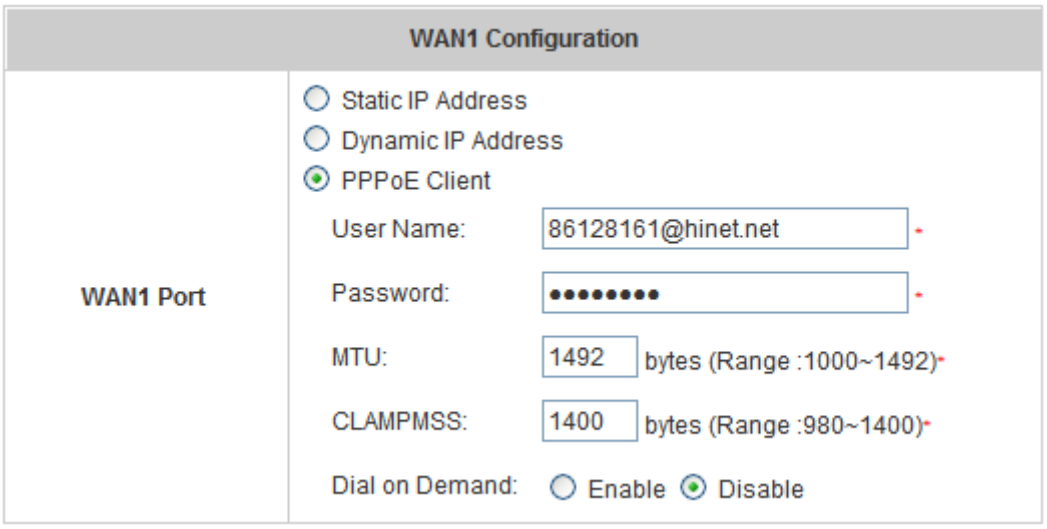




- **Dynamic IP address:** It is only applicable for the network environment where the DHCP Server is available in the network. Click the ***Renew*** button to get an IP address.



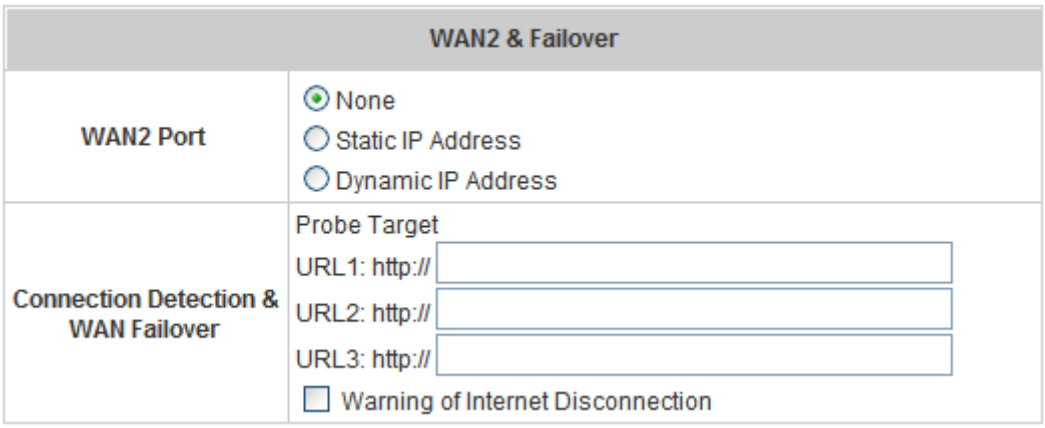
- **PPPoE Client:** When selecting PPPoE to connect to the network, please enter the **"Username"** and **"Password"**. There is a **Dial on demand** function under PPPoE. If this function is enabled, you can set a **Maximum Idle Time**. When the idle time is reached, the system will automatically disconnect itself.



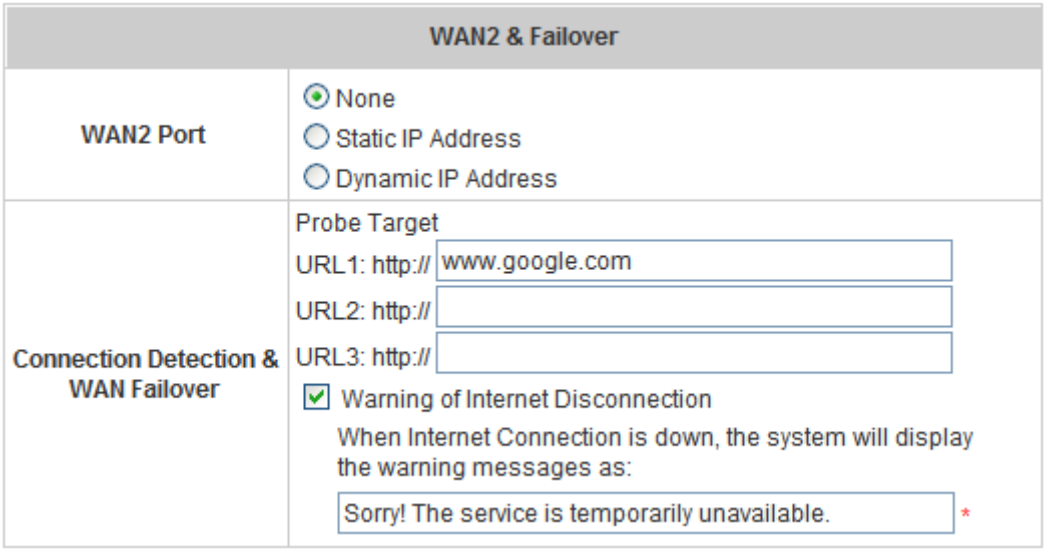
5.1.4 WAN2 & Failover

There are 3 methods of obtaining an IP address for the WAN2 Port: **None**, **Static IP Address**, and **Dynamic IP Address**.

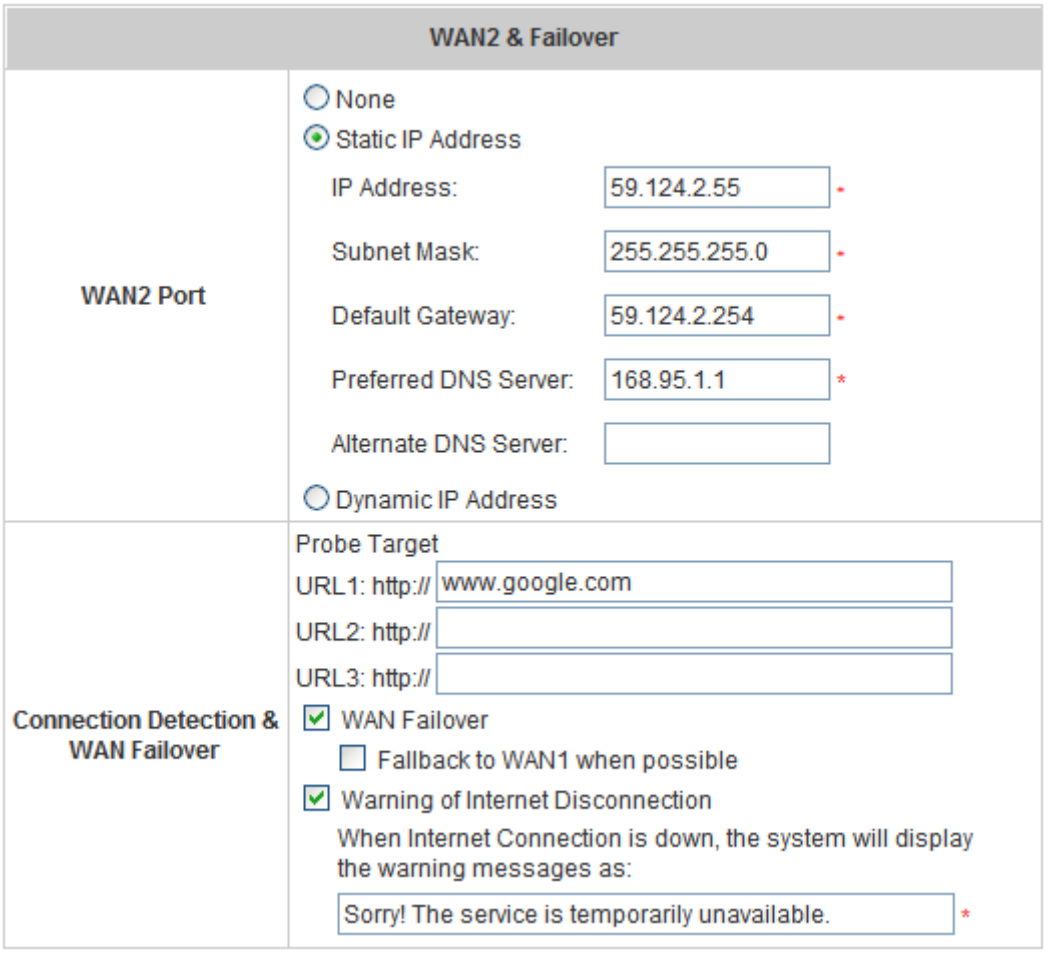
- **None:** The WAN2 Port is not functional.



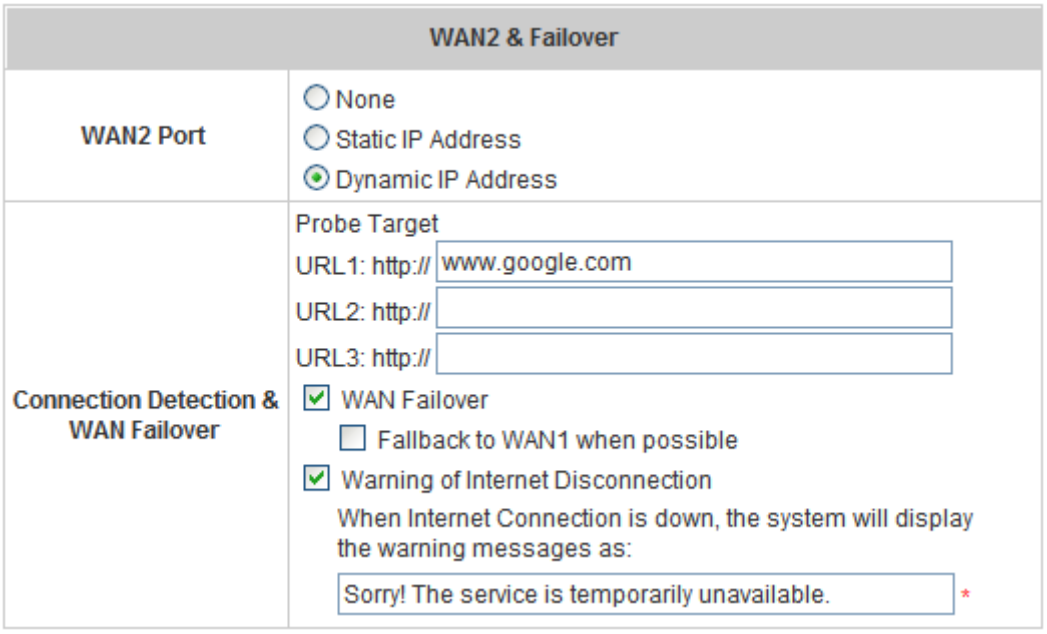
  - **Warning of Internet Disconnection:** Enable to detect the WAN1 port connection status.



- **Static IP Address:** Specify the IP Address, Subnet Mask, Default Gateway of WAN2 Port and Preferred DNS Server, which should be applicable for the network environment. Up to three URLs can be entered. Check **"Warning of Internet Disconnection"** to work with the **WAN Failover** function.
  - **WAN Failover:** When WAN1 connection fails, the traffic will be routed to WAN2 automatically.
  - **Fallback to WAN1 when possible:** When WAN1 connection is recovered, the routed traffic will be back to WAN1.



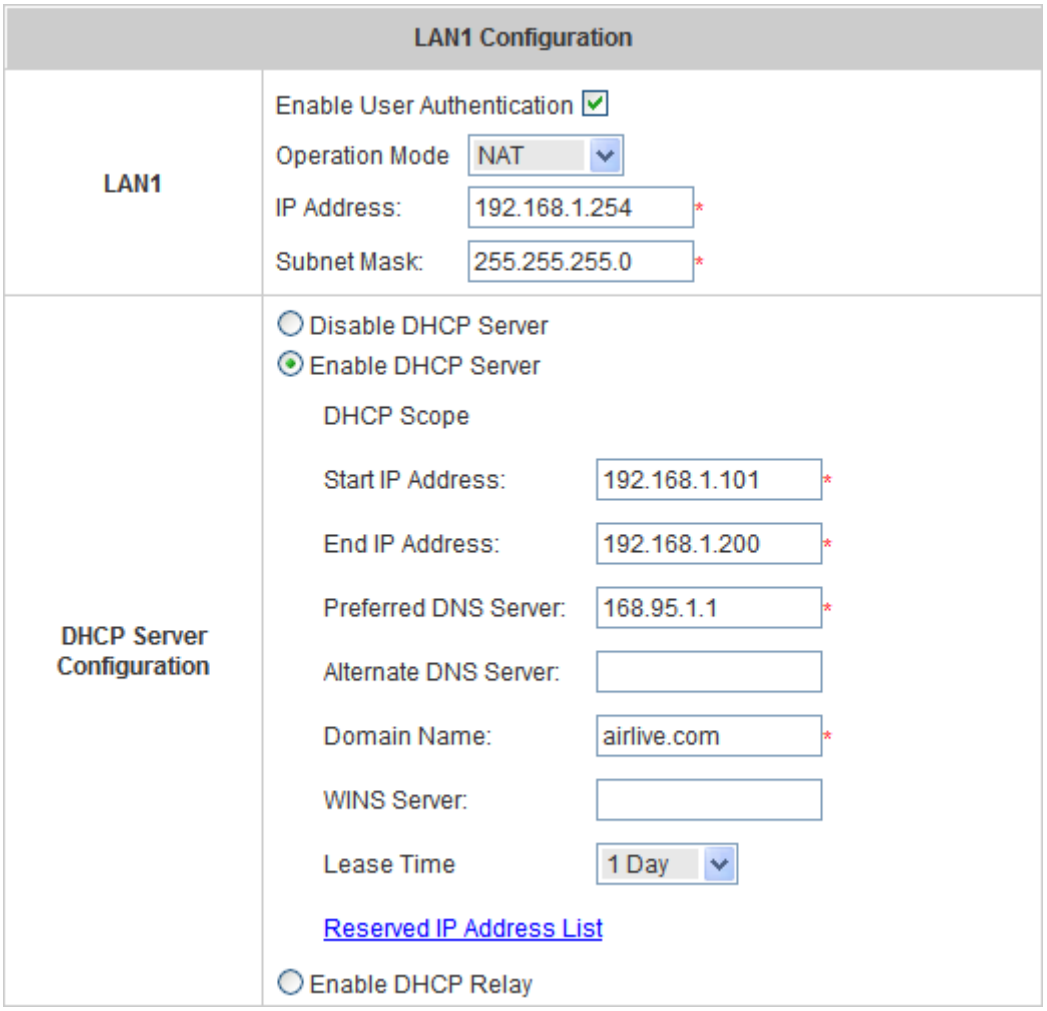
- **Dynamic IP Address:** Select this when WAN2 Port can obtain IP address automatically, such as a DHCP Server available from WAN2 Port. Up to three URLs can be entered. Check **"Warning of Internet Disconnection"** to work with the **WAN Failover** function.



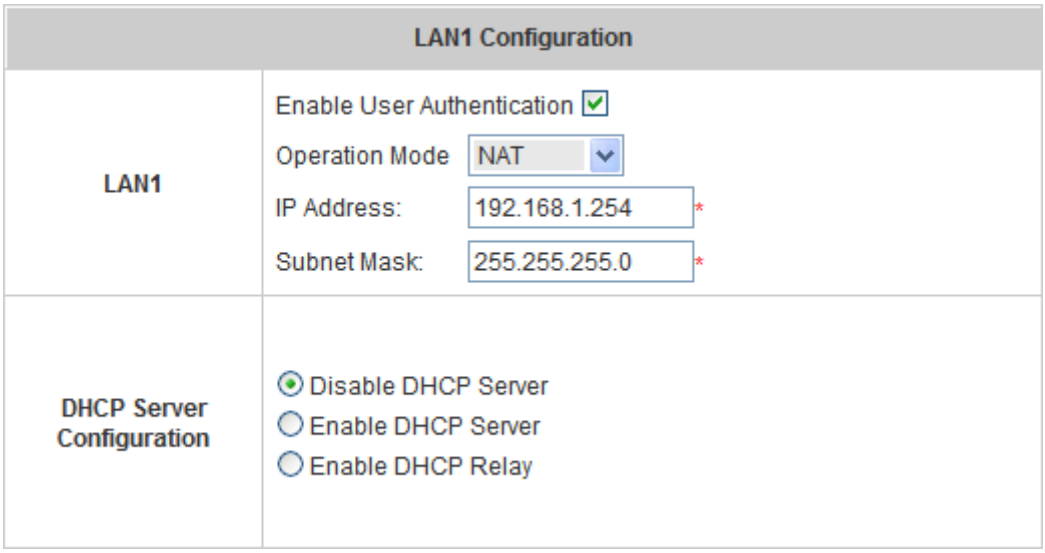
For Dynamic IP Address, **WAN Failover** and **Fallback to WAN1 when possible** also can be enabled like as the function for **Static IP Address**. If **Warning of Internet Disconnection** is enabled, a warning message can be entered to indicate what the system should display when Internet connection is down.

5.1.5 LAN1 Configuration

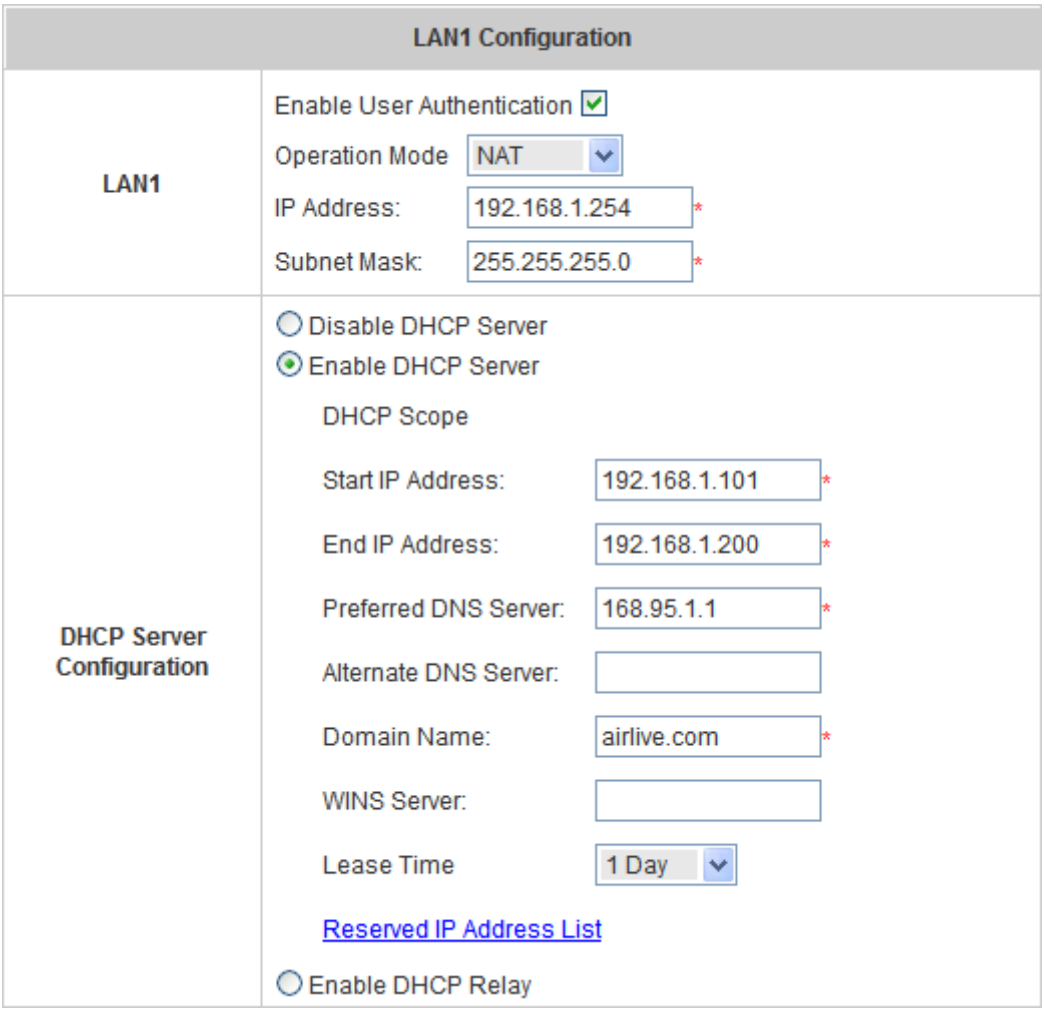
User authentication can be chosen to enable or disable in LAN1 port. In this part, you can set the related configurations about LAN1 port and DHCP server.



- **DHCP Server Configuration**
  - **Disable DHCP Server:** Disable the function of the DHCP Server.



  - **Enable DHCP Server:** Enter proper setting of Start IP Address, End IP Address, Preferred DNS Server, Alternate DNS Server, Domain Name, WINS Server, Lease Time, and Reserved IP Address List. See the following figure. Fields marked with red asterisks must be filled in.



◆ **Reserved IP Address List:** Click on the **Reserved IP Address List** on the management interface to fill in the reserved IP addresses if desired. Then, the setup of the Reserved IP Address List as shown in the following figure will appear. Enter the related Reserved IP Address, MAC, and Description (not compulsory). When finished, click ***Apply*** to complete the setup.

Reserved IP Address List -- LAN 1			
Item	Reserved IP Address	MAC	Description
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
(Total:40) First Prev Next Last			

➢ **Enable DHCP Relay：**Specify other DHCP Server IP address if using DHCP Relay is desired. See the following figure.

LAN1 Configuration	
LAN1	Enable User Authentication ☑ Operation Mode NAT IP Address: 192.168.1.254 * Subnet Mask: 255.255.255.0 *
DHCP Server Configuration	○ Disable DHCP Server ○ Enable DHCP Server ◉ Enable DHCP Relay DHCP Server IP: *

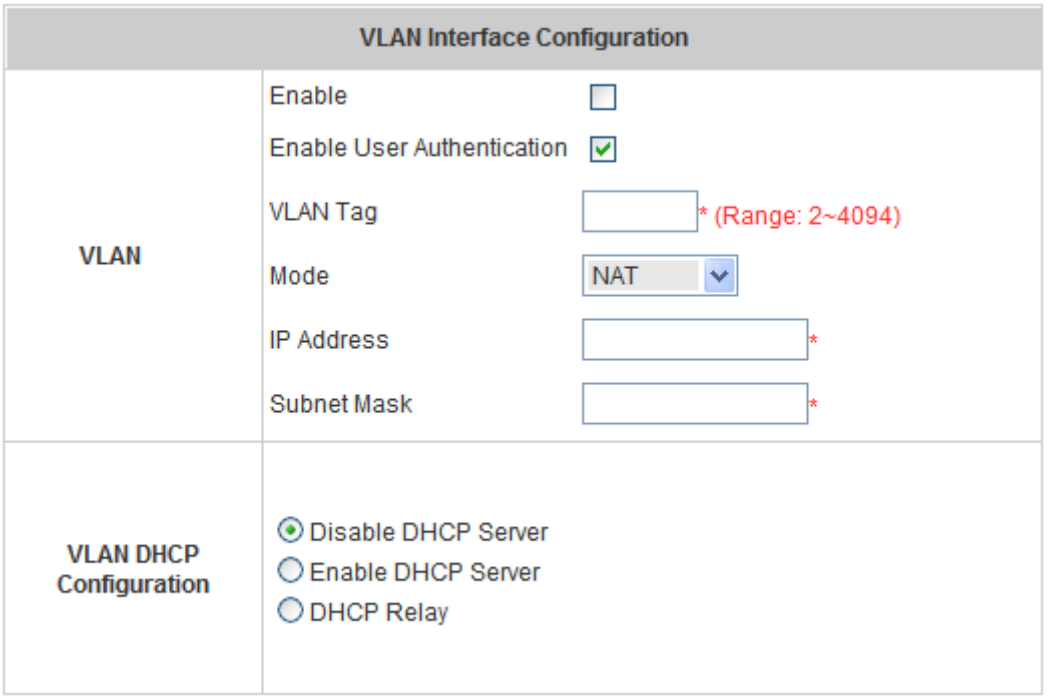
- **Enable VLAN:** If you want to split LAN1 to several VLANs, please select the ***Enable VLAN***. After ***Enable VLAN*** is selected, the following screen will appear. Choose the desired Item and click ***Edit*** for further configuration. See the following figure.

VLAN	Activate VLAN and Edit VLAN List ☑		
VLAN List			
Item	Tag	Status	
1		Disabled	Edit
2		Disabled	Edit
3		Disabled	Edit
4		Disabled	Edit
5		Disabled	Edit
6		Disabled	Edit
7		Disabled	Edit

The system will need confirmation for enabling individual VLAN segment. Click ***Enable*** to continue. See the following figure.

After enabling this VLAN segment, the following screen will appear. See the following description and figure for details.

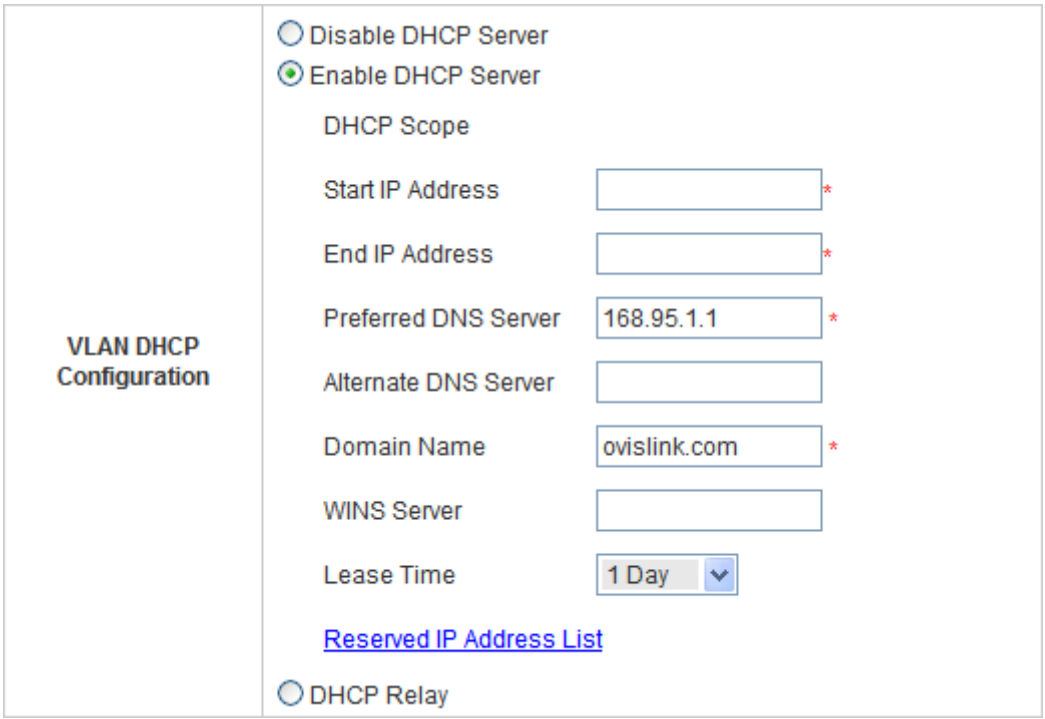
- **Enable User Authentication (on this individual VLAN):**



- **Enable:** Enable this VLAN segment.
- **Enable User Authentication:** Choose to enable or disable user authentication for this individual VLAN segment.
- **VLAN Tag:** Enter any integer number within the range of 2~4094 as the Tag for this VLAN segment.
- **Mode:** Two modes are provided: NAT mode and ROUTER mode.
  - **NAT:** All IP addresses externally connected through the VLAN port (these IP addresses must belong to the same network of the VLAN port) will be converted into the IP address of the WAN1 port by IAS-2000 v2 and onward to outside the network.
  - **Router:** All IP addresses externally connected through the VLAN port use its original IP addresses for external connection. Thus, IAS-2000 v2 acts like a Router.
- **IP Address:** Enter the desired IP address for this VLAN.
- **Subnet Mask:** Enter the desired Subnet Mask for this VLAN.

- **VLAN DHCP Configuration**
  - **Disable DHCP Server:** Disable the function of the DHCP Server of IAS-2000 v2.

  - **Enable DHCP Server:** If you want to use the DHCP Server function of IAS-2000 v2, set proper configurations is necessary. Related information needed on setting up the DHCP Server is described as follows: **Start IP Address**, **End IP Address**, **Preferred DNS Server**, **Alternate DNS Server**, **Domain Name**, **WINS Server**, **Lease Time**, and **Reserved IP Address List**. See the following figure.



- **Reserved IP Address List:** If you want to use the reserved IP address function, click on the **Reserved IP Address List** on the management interface. Then, the setup of the Reserved IP Address List as shown in the following figure will appear. Enter the related Reserved IP Address, MAC, and Description (not compulsory). When finished, click ***Apply*** to complete the setup.

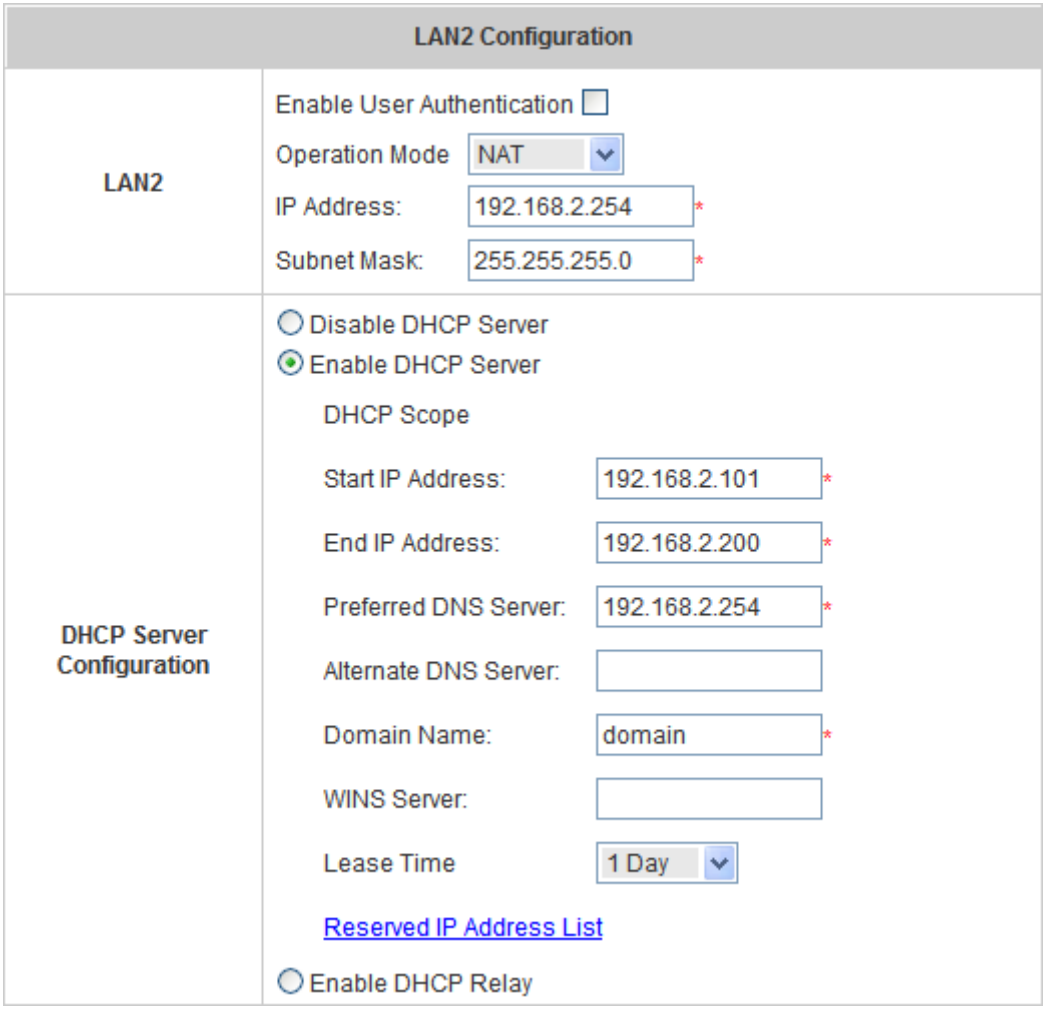
Reserved IP Address List -- VLAN Tag:			
Item	Reserved IP Address	MAC	Description
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
(Total:40) First Prev Next Last			

- **Enable DHCP Relay**: If you want to enable this function, you must specify a DHCP Server IP address. See the following figure.

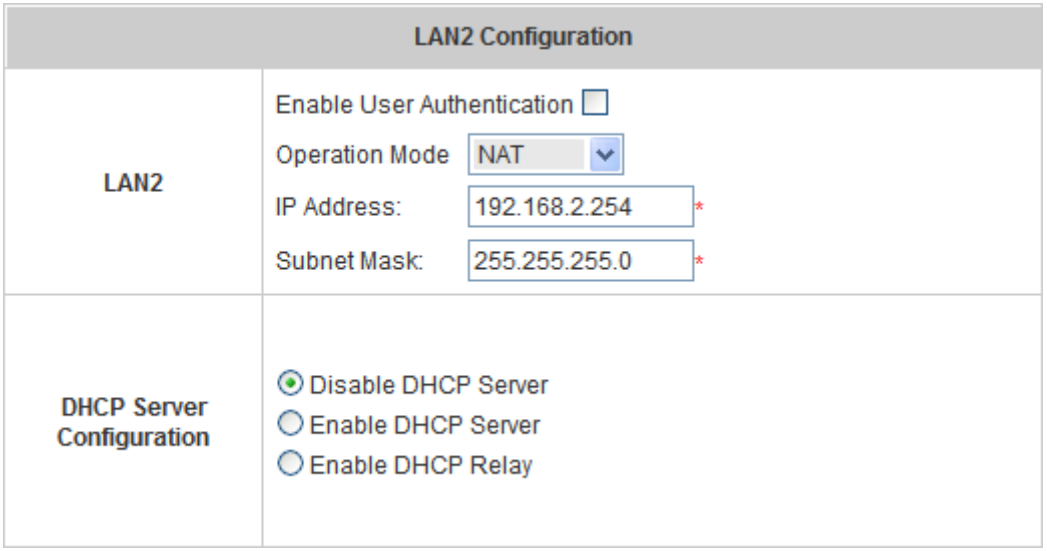
VLAN DHCP Configuration	○ Disable DHCP Server ○ Enable DHCP Server ◉ DHCP Relay DHCP Server IP *

5.1.6 LAN2 Configuration

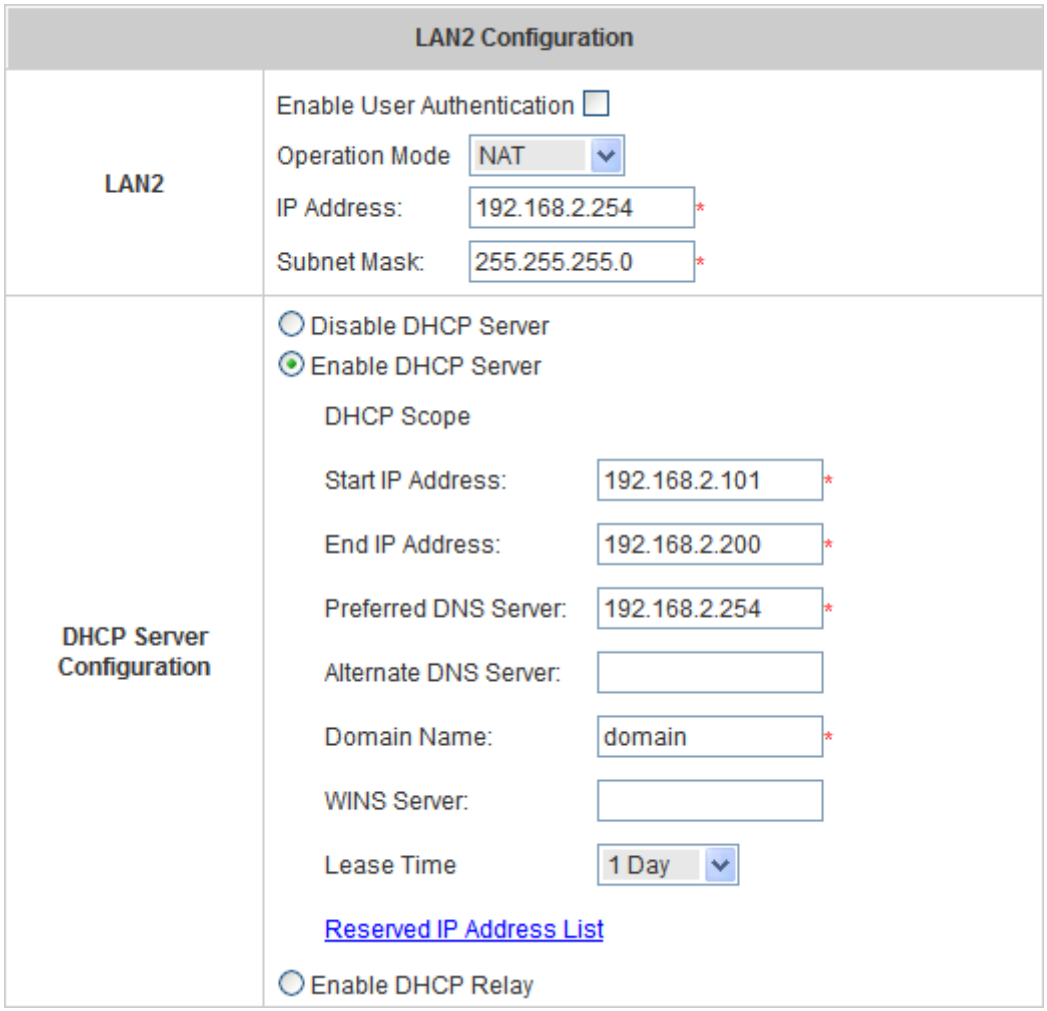
User authentication can be chosen to enable or disable in LAN2 port. In this part, you can set the related configurations about LAN2 port and DHCP server.



- **DHCP Server Configuration**
  - **Disable DHCP Server:** Disable the function of the DHCP Server.



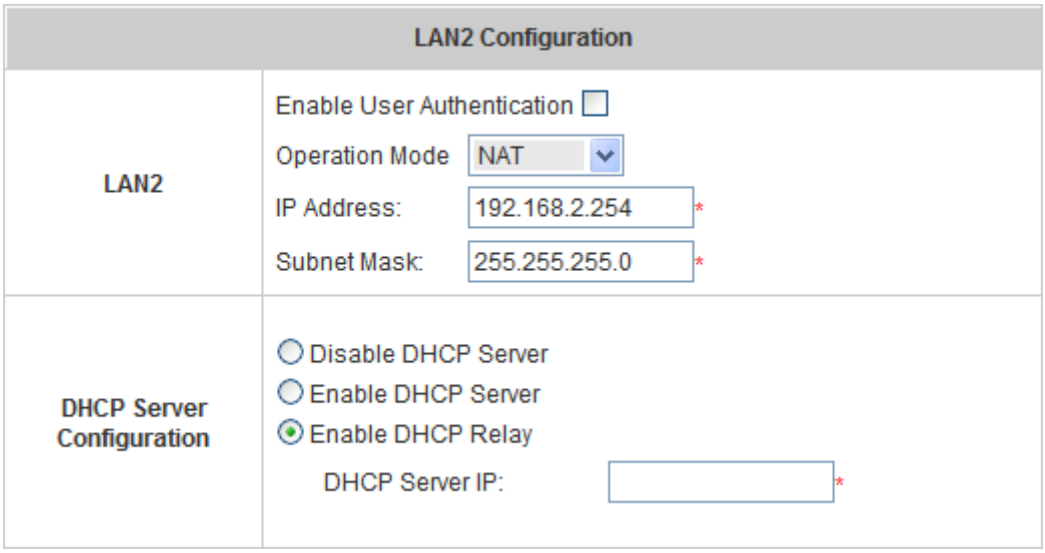
  - **Enable DHCP Server:** Enter proper setting of Start IP Address, End IP Address, Preferred DNS Server, Alternate DNS Server, Domain Name, WINS Server, Lease Time, and Reserved IP Address List. See the following figure. Fields marked with red asterisks must be filled in.



◆ **Reserved IP Address List:** Click on the **Reserved IP Address List** on the management interface to fill in the reserved IP addresses if desired. Then, the setup of the Reserved IP Address List as shown in the following figure will appear. Enter the related Reserved IP Address, MAC, and Description (not compulsory). When finished, click ***Apply*** to complete the setup.

Reserved IP Address List -- LAN 2			
Item	Reserved IP Address	MAC	Description
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
(Total:40) First Prev Next Last			

➢ **Enable DHCP Relay：**Specify other DHCP Server IP address if using DHCP Relay is desired. See the following figure.



- **Enable VLAN:** If you want to split LAN2 to several VLANs, please select the ***Enable VLAN***. After ***Enable VLAN*** is selected, the following screen will appear. Choose the desired Item and click ***Edit*** for further configuration. See the following figure.

VLAN	Activate VLAN and Edit VLAN List ☑

VLAN List			
Item	Tag	Status	
1		Disabled	Edit
2		Disabled	Edit
3		Disabled	Edit
4		Disabled	Edit
5		Disabled	Edit
6		Disabled	Edit
7		Disabled	Edit

The system will need confirmation for enabling individual VLAN segment. Click ***Enable*** to continue. See the following figure.

After enabling this VLAN segment, the following screen will appear. See the following description and figure for details.

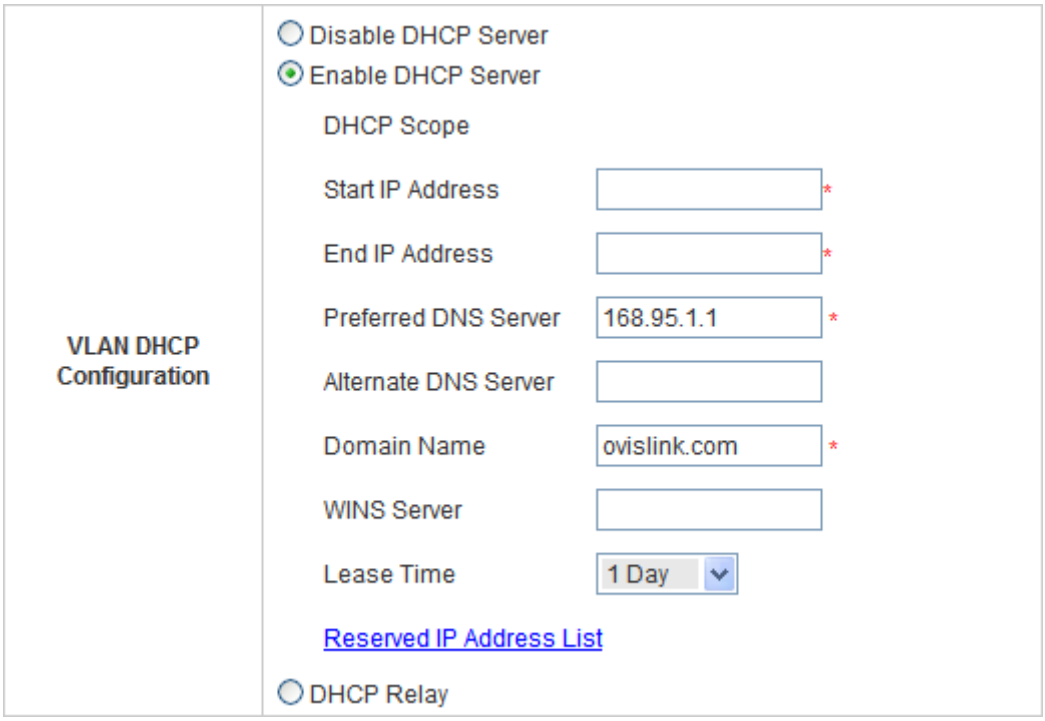
- **Enable User Authentication (on this individual VLAN):**

VLAN Interface Configuration		
VLAN	Enable	☐
	Enable User Authentication	☑
	VLAN Tag	* (Range: 2~4094)
	Mode	NAT
	IP Address	*
	Subnet Mask	*
VLAN DHCP Configuration	◉ Disable DHCP Server ○ Enable DHCP Server ○ DHCP Relay	

- **Enable:** Enable this VLAN segment.
- **Enable User Authentication:** Choose to enable or disable user authentication for this individual VLAN segment.
- **VLAN Tag:** Enter any integer number within the range of 2~4094 as the Tag for this VLAN segment.
- **Mode:** Two modes are provided: NAT mode and ROUTER mode.
  - **NAT:** All IP addresses externally connected through the VLAN port (these IP addresses must belong to the same network of the VLAN port) will be converted into the IP address of the WAN1 port by IAS-2000 v2 and onward to outside the network.
  - **Router:** All IP addresses externally connected through the VLAN port use its original IP addresses for external connection. Thus, IAS-2000 v2 acts like a Router.
- **IP Address:** Enter the desired IP address for this VLAN.
- **Subnet Mask:** Enter the desired Subnet Mask for this VLAN.

- **VLAN DHCP Configuration**
  - **Disable DHCP Server:** Disable the function of the DHCP Server of IAS-2000 v2.

  - **Enable DHCP Server:** If you want to use the DHCP Server function of IAS-2000 v2, set proper configurations is necessary. Related information needed on setting up the DHCP Server is described as follows: **Start IP Address**, **End IP Address**, **Preferred DNS Server**, **Alternate DNS Server**, **Domain Name**, **WINS Server**, **Lease Time**, and **Reserved IP Address List**. See the following figure.



- **Reserved IP Address List:** If you want to use the reserved IP address function, click on the **Reserved IP Address List** on the management interface. Then, the setup of the Reserved IP Address List as shown in the following figure will appear. Enter the related Reserved IP Address, MAC, and Description (not compulsory). When finished, click ***Apply*** to complete the setup.

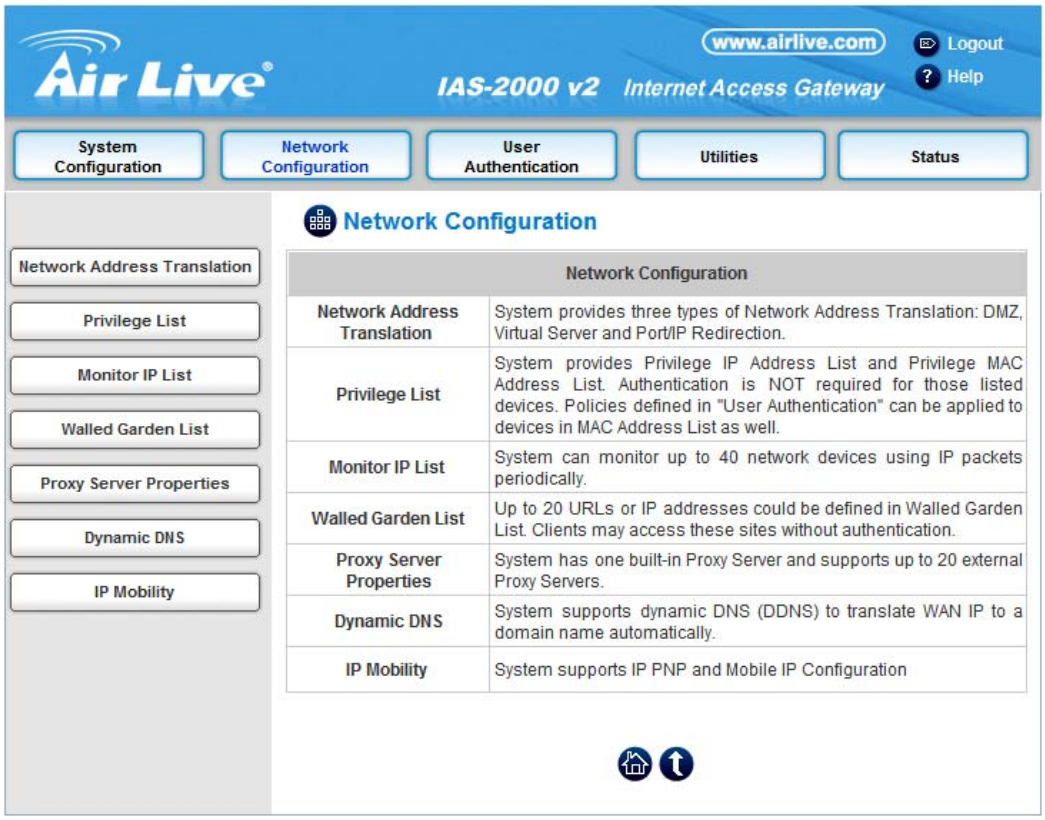
Reserved IP Address List -- VLAN Tag:			
Item	Reserved IP Address	MAC	Description
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
(Total:40) First Prev Next Last			

- **Enable DHCP Relay**: If you want to enable this function, you must specify a DHCP Server IP address. See the following figure.

VLAN DHCP Configuration	○ Disable DHCP Server ○ Enable DHCP Server ◉ DHCP Relay DHCP Server IP *

5.2 Network Configuration

This section includes the following functions: **Network Address Translation**, **Privilege List**, **Monitor IP List**, **Walled Garden List**, **Proxy Server Properties**, **Dynamic DNS** and **IP Mobility**.



5.2.1 Network Address Translation

There are three parts, **DMZ, Virtual Servers** and **Port and IP Redirect**, need to be set.

Network Address Translation
DMZ
Virtual Servers
Port and IP Redirection

- **DMZ**

  DMZ (**D**e-**M**ilitarized **Z**one) allows administrators to define mandatory external to internal IP mapping; hence a user on WAN side network can access the private machine via the external IP (similar to DMZ usage in firewall product). There are 40 sets of static **Internal IP Address** and **External IP Address** available. If a host needs a static IP address to access the network through WAN port, set a static IP for the host. These settings will become effective immediately after clicking the ***Apply*** button.

DMZ		
Item	Internal IP Address	External IP Address
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

- **Virtual Servers**

  This function allows the administrator to set 40 virtual servers at most, so that the computers not belonging to the managed network can access the servers in the managed network via WAN port IP of IAS-2000 v2. Please enter the **"External Service Port"**, **"Local Server IP Address"** and **"Local Server Port"**. According to the different services provided, the network service can use the **TCP** protocol or the **UDP** protocol. In the **Enable** column, check the desired server to enable. These settings will become effective immediately after clicking the ***Apply*** button.

Virtual Servers					
Item	External Service Port	Local Server IP Address	Local Server Port	Type	Enable
1				○ TCP ○ UDP	☐
2				○ TCP ○ UDP	☐
3				○ TCP ○ UDP	☐
4				○ TCP ○ UDP	☐
5				○ TCP ○ UDP	☐
6				○ TCP ○ UDP	☐
7				○ TCP ○ UDP	☐
8				○ TCP ○ UDP	☐
9				○ TCP ○ UDP	☐
10				○ TCP ○ UDP	☐

- **Port and IP Redirection**

  This function allows the administrator to set 40 sets of the IP addresses at most for redirection purpose. When the user attempts to connect to a destination IP address listed here, the connection packet will be converted and redirected to the corresponding destination. Please enter the **"IP Address"** and **"Port"** of **Original Destination**, and the **"IP Address"** and **"Port"** of **Redirect to**. According to the different services provided, choose the **"TCP"** protocol or the **"UDP"** protocol. These settings will become effective immediately after clicking ***Apply***.

Port and IP Redirection					
Item	Original Destination		Redirect to		Type
	IP Address	Port	IP Address	Port	
1					○ TCP ○ UDP
2					○ TCP ○ UDP
3					○ TCP ○ UDP
4					○ TCP ○ UDP
5					○ TCP ○ UDP
6					○ TCP ○ UDP
7					○ TCP ○ UDP
8					○ TCP ○ UDP
9					○ TCP ○ UDP
10					○ TCP ○ UDP

5.2.2 Privilege List

There are two parts, **Privilege IP Address List** and **Privilege MAC Address List**, need to be set.

Privilege List
Privilege IP Address List
Privilege MAC Address List

- **Privilege IP Address List**

  If there are some workstations belonging to the managed server that need to access the network without authentication, and enter the IP addresses of these workstations in this list. The **"Remark"** blank is not necessary but is useful to keep track. IAS-2000 v2 allows 100 privilege IP addresses at most. These settings will become effective immediately after clicking ***Apply***.

Privilege IP Address List		
Item	Privilege IP Address	Remark
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

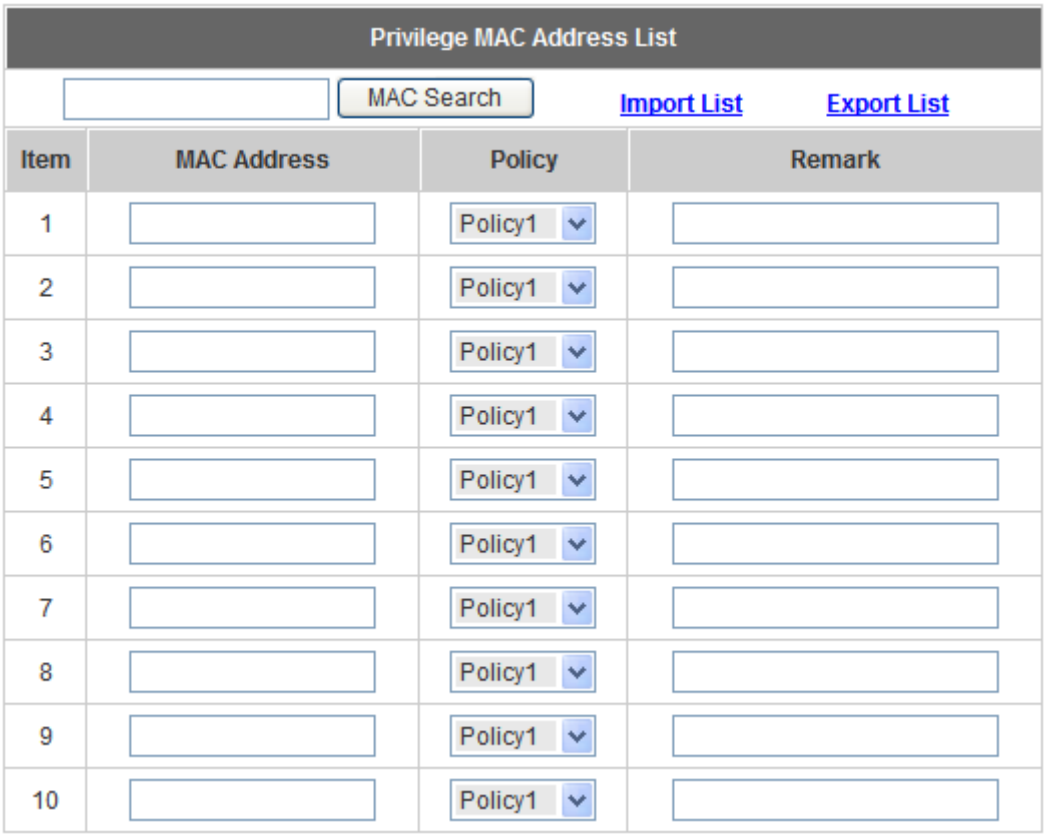
Warning: *Permitting specific IP addresses to have network access rights without going through standard authentication process at the authenticated LAN may cause security problems.*

- **Privilege MAC Address List**

  In addition to the IP address, the MAC address of the workstations that need to access the network without authentication can also be set in this list. IAS-2000 v2 allows 100 privilege MAC addresses at most. The list can be created by entering data in the table or by import from a file. The list can be exported as well.

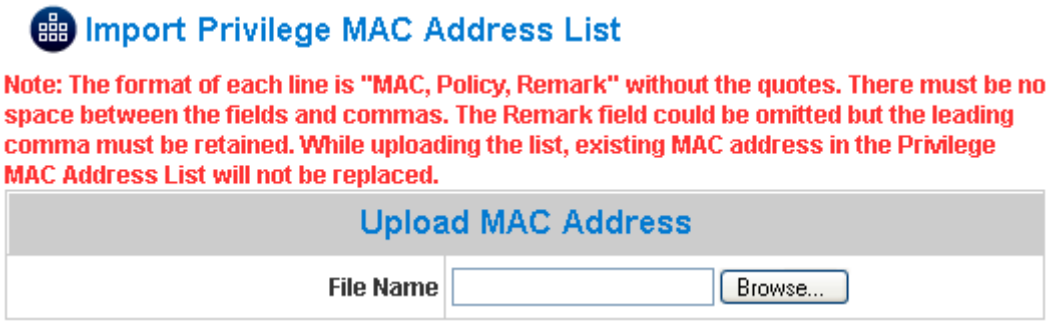
  Be sure to enter the MAC address (the format is xx:xx:xx:xx:xx:xx) as well as the remark (not necessary) if manually creating the list is desired, and select a policy for the individual entry. These settings will become effective immediately after clicking ***Apply***.

Attention: *No matter how you choose to create the list, you must select an* ***Access Gateway*** *first.*

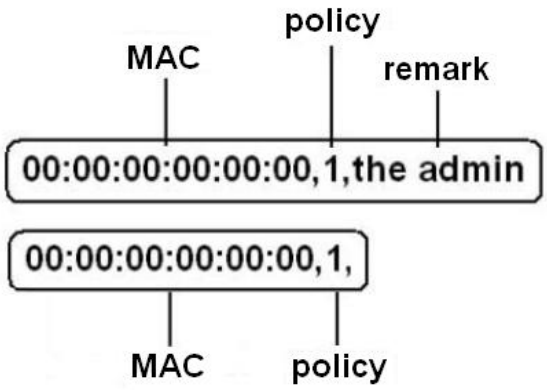


Warning: *Permitting specific MAC addresses to have network access rights without going through standard authentication process at the authenticated LAN may cause security problems.*

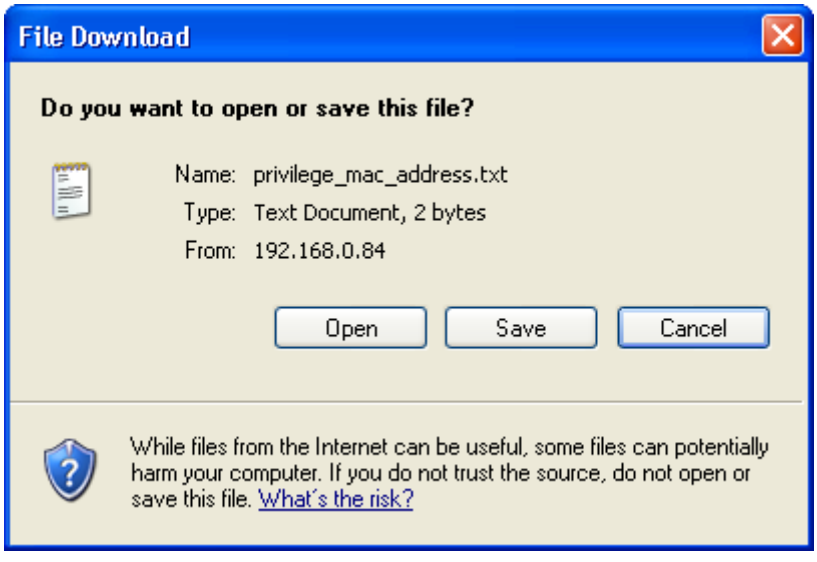
- **Import List:** Select an Access Gateway and then click ***Import List*** to enter the **Upload Privilege MAC Address List** interface. Click the **Browse** button to select the text file for the user account upload. Then click ***Submit*** to complete the upload.



The uploading file should be a text file and the format of each line is ***" MAC, Policy, Remark"*** without the quotes. There must be no spaces between the fields and commas. The MAC field could be omitted but the trailing comma must be retained. When adding user accounts by uploading a file, the existing accounts in the embedded database will not be replaced by new ones.



- **Export List:** Click this to export the Mac List to create a .txt file and then save it on disk.



5.2.3 Monitor IP List

The system will send out a packet periodically to monitor the connection status of the IP addresses on the list. If the monitored IP address does not respond, the system will send an e-mail to notify the administrator that such destination is not reachable. After entering the related information, click ***Apply*** and these settings will become effective immediately. Click ***Monitor*** to check the current status of all the monitored IP. The system provides 40 IP addresses a most on the **"Monitor IP List"**.

- **Send From:** The e-mail address of the administrator in charge of the monitoring. This will show up as the sender's e-mail.
- **Send To:** The e-mail address of the person whom the monitoring result is for. This will be the receiver's e-mail.
- **Interval:** The time interval to send the e-mail report.
- **SMTP Server:** The IP address of the SMTP server.

- **Auth Method:** The system provides four authentication methods, **PLAIN**, **LOGIN**, **CRAM-MD5** and **NTLMv1**, or **"NONE"** to use none of the above. Depending on which authentication method selected, enter the **Account Name**, **Password** and **Domain**.
- **Send Test Email:** Click "Send" to send out a test e-mail of the IP monitoring report.
- **IP Address:** The IP addresses under monitoring.

In the **Monitor IP result** page, green light means the IP address is alive and reachable. On the other hand, red light means the IP address is not reachable now. The administrator can understand the some networking devices by this feature.

Monitor IP Result		
Item	IP Address	Result
1	192.168.0.201	
2	192.168.0.145	
3	192.168.0.245	

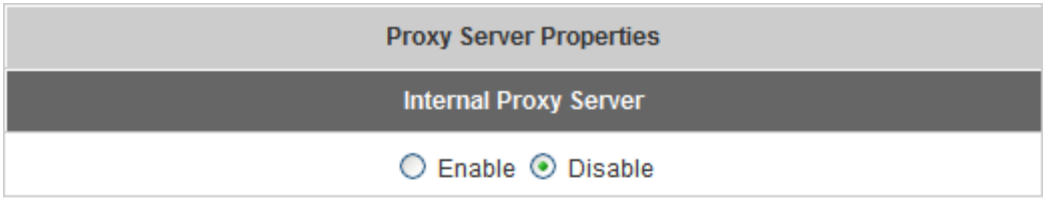
5.2.4 Walled Garden List

This function provides some free services to the users to access websites listed here before login and authentication. Up to 20 addresses or domain names of the websites can be defined in this list. Users without the network access right can still have a chance to experience the actual network service free of charge. Please enter the website **IP Address** or **Domain Name** in the list and these settings will become effective immediately after clicking ***Apply***.

Walled Garden List			
Item	Address	Item	Address
1		2	
3		4	
5		6	
7		8	
9		10	
11		12	
13		14	
15		16	
17		18	
19		20	

5.2.5 Proxy Server Properties

IAS-2000 v2 supports Internal Proxy Server and External Proxy Server functions. Please perform the necessary configurations.



External Proxy Server

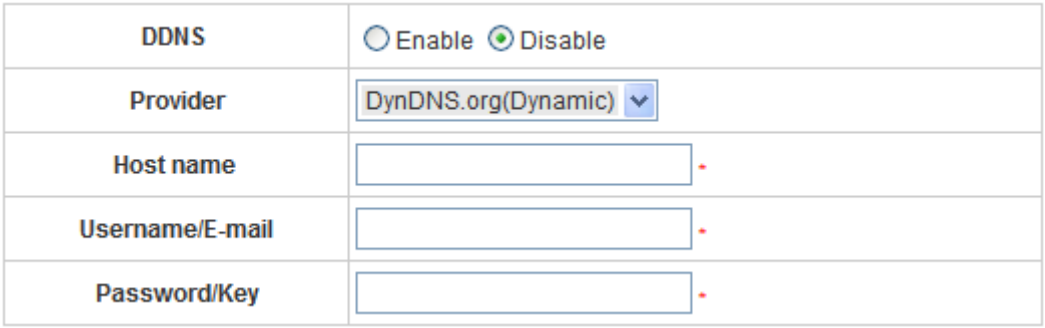
Item	Server IP	Port
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

- **Internal Proxy Server:** IAS-2000 v2 has a built-in proxy server. If this function is enabled, the end users will be forced to treat IAS-2000 v2 as the proxy server regardless of the end-users' original proxy settings.
- **External Proxy Server:** Under the IAS-2000 v2 security management, the system will match the External Proxy Server list to the end-users' proxy setting. If there isn't a matching, then the end-users will no be able to reach the login page and thus unable to access the network. If there is a matching, then the end-users will be directed to the system first for authentication. After a successful authentication, the end-users will be redirected back to the desired proxy servers depending on various situations.

Please click ***Apply*** and these settings will become effective immediately.
For more details about how to set proxy servers, please see Appendix D and E.

5.2.6 Dynamic DNS

IAS-2000 v2 provides a convenient DNS function to translate the IP address of WAN port to a domain name that helps the administrator memorize and connect to WAN port. If the DHCP is activated at WAN port, this function will also update the newest IP address regularly to the DNS server. These settings will become effective immediately after clicking ***Apply***.



- **DDNS:** Enabling or disabling of this function.
- **Provider:** Select the DNS provider.
- **Host name:** The IP address/domain name of the WAN port.
- **Username/E-mail:** The register ID (username or e-mail) for the DNS provider.
- **Password/Key:** The register password for the DNS provider.

Please click ***Apply*** and these settings will become effective immediately.

5.2.7 IP Mobility

IP PNP	☐ Enable
Mobile IP	☐ Enable

- **IP PNP**

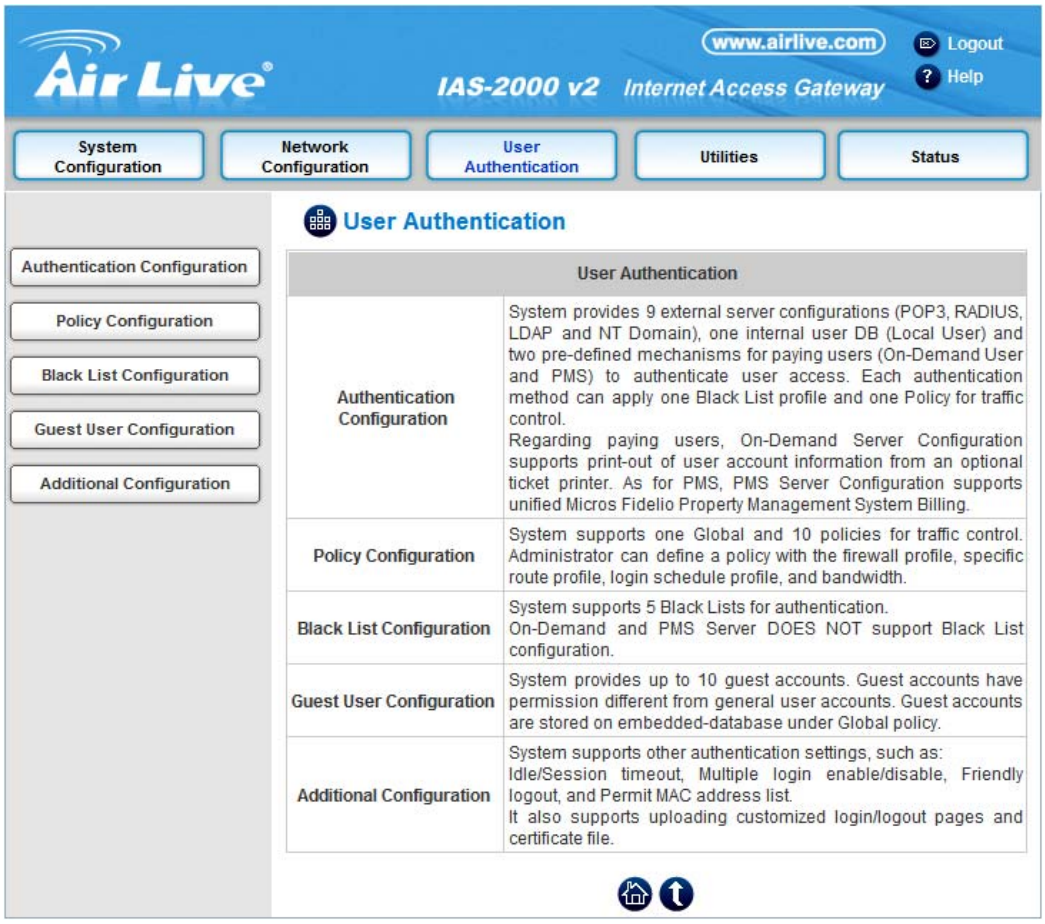
  Clients can use any IP address to connect to the system. Regardless of what the IP address at the client end is, he or she can still authenticate through IAS-2000 v2 and access the network.

- **Mobile IP**

  If several sets of IAS-2000 v2 are used to construct a network environment, a client can use the same group of IP configurations. When a client roams into different locations, the connection will be kept alive; therefore no disconnection will occur when, for example, downloading data.

5.3 User Authentication

This section includes the following functions: **Authentication Configuration**, **Policy Configuration**, **Black List Configuration**, **Guest User Configuration** and **Additional Configuration**.



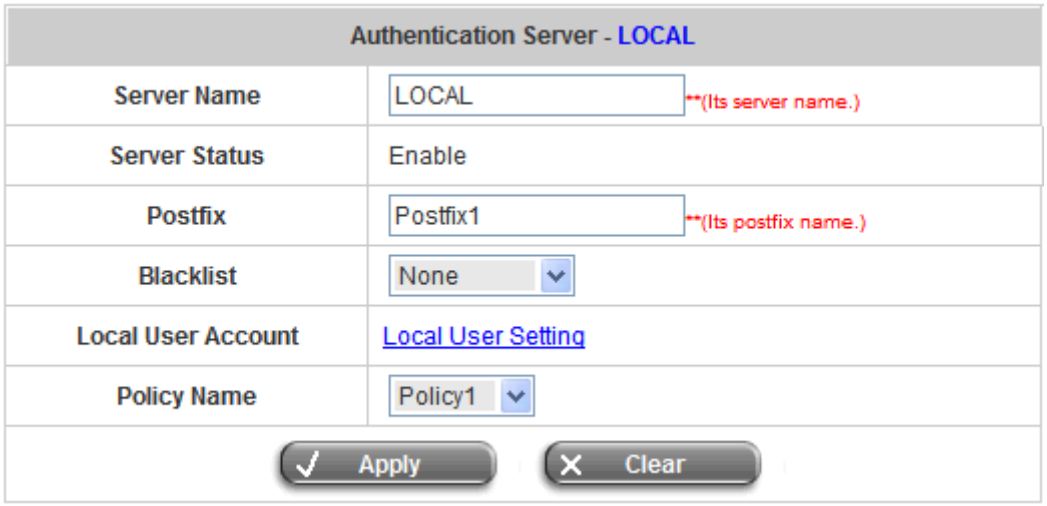
5.3.1 Authentication Configuration

This function is to configure the settings for different authentication servers. The system provides 10 servers (Local, POP3, RADIUS, LDAP and NT Domain), one On-demand User and one PMS User that the administrator can apply with different policies. Click on the server name to set the related configurations for that particular server. After completing and clicking ***Apply*** to save the settings, go back to the previous screen to choose a server to be the default server and enable or disable any server on the list.

Authentication Configuration					
Server Name	Auth Method	Postfix	Policy	Default	Enable
LOCAL	LOCAL	Postfix1	Policy1	◉	☑
LDAP	LDAP	Postfix2	Policy1	○	☐
RADIUS Server	RADIUS	Postfix3	Policy1	○	☐
LDAP Server	LDAP	Postfix4	Policy1	○	☐
NT Domain	NTDOMAIN	Postfix5	Policy1	○	☐
POP3 Server	POP3	Postfix6	Policy1	○	☐
RADIUS Server	RADIUS	Postfix7	Policy1	○	☐
LDAP Server	LDAP	Postfix8	Policy1	○	☐
NT Domain	NTDOMAIN	Postfix9	Policy1	○	☐
POP3 Server	POP3	Postfix10	Policy1	○	☐
On Demand User	ONDEMAND	ondemand	Policy1	○	☐
PMS User	PMS	pms	Policy1	○	☐

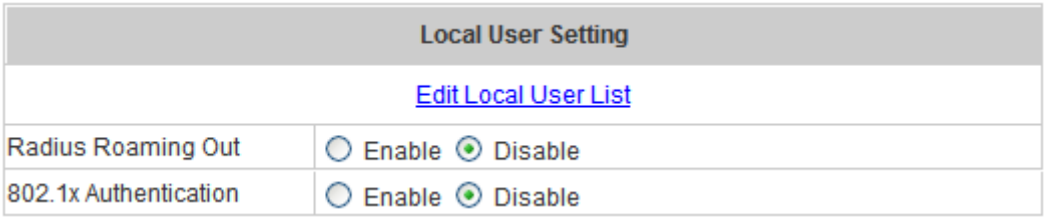
5.3.1.1 Local Server

This server is only for **"Local User"** and the authentication method can not be changed for this server.

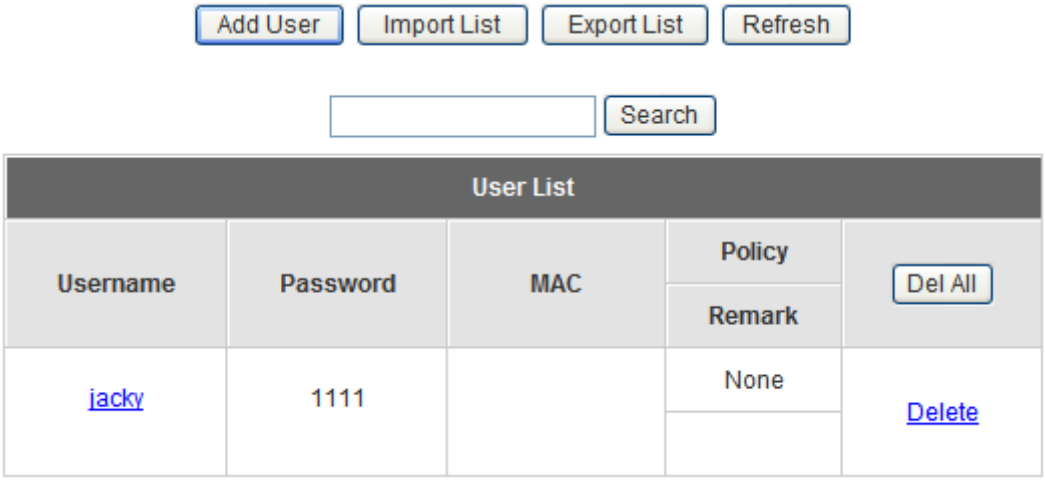


- **Server Name:** Set a name for the server using numbers (0 to 9), alphabets (a to z or A to Z), dash (-), underline (_) and dot (.) with a maximum of 40 characters, all other letters are not allowed.
- **Sever Status:** The status shows that the server is enabled or disabled.
- **Postfix:** Set a postfix that is easy to distinguish (e.g. Local) for the server by using numbers (0 to 9), alphabets (a to z or A to Z), dash (-), underline (_) and dot (.) with a maximum of 40 characters, all other letters are not allowed.
- **Blacklist:** There are five sets of the black lists. Select one of them or choose **"None"**. Please refer to **5.3.3 Black List Configuration**
- **Local User Account:** Click the Local User Setting hyperlink to set the further configuration.
- **Policy Name:** There are ten policies to choose from to apply to this particular server.

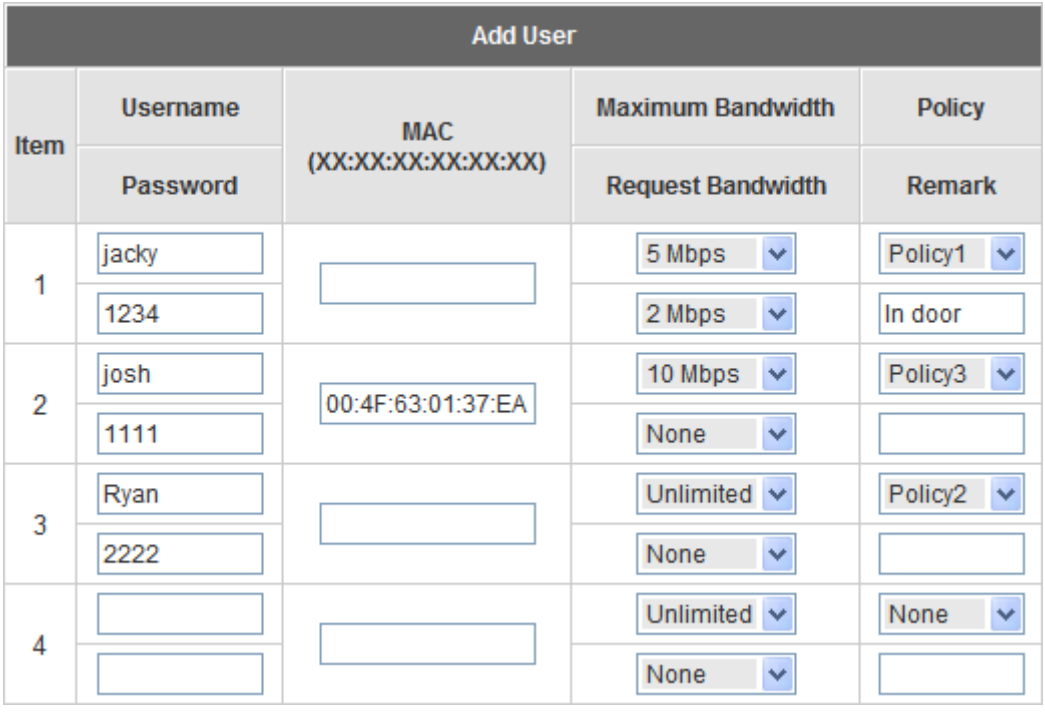
Click the ***Local User Setting*** hyperlink for further configuration.



- **Edit Local User List:** Click this to enter the **"Local User List"** screen.



➢ **Add User:** Click this button to enter the **Add User** page. Fill in the necessary information such as **"Username"**, **"Password"**, **"MAC"** (optional) and **"Remark"** (optional). Select a desired **Maximum Bandwidth**, **Request Bandwidth** and **Policy**.



Click ***Apply*** to complete adding the user or users

Successfully added user(s):
jacky josh ryan

Add User				
Item	Username Password	MAC (XX:XX:XX:XX:XX:XX)	Maximum Bandwidth Request Bandwidth	Policy Remark
1			Unlimited None	None
2			Unlimited None	None
3			Unlimited None	None

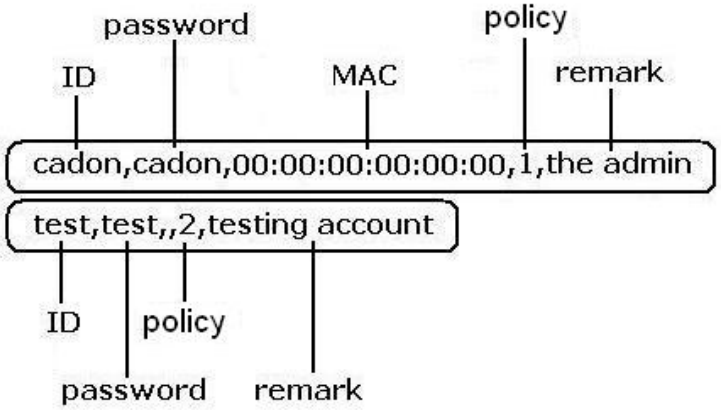
- **Import User:** Click this to enter the **Upload User Account** page. Click the ***Browse*** button to select the text file for the user account upload. Then click ***Submit*** to complete the upload process.

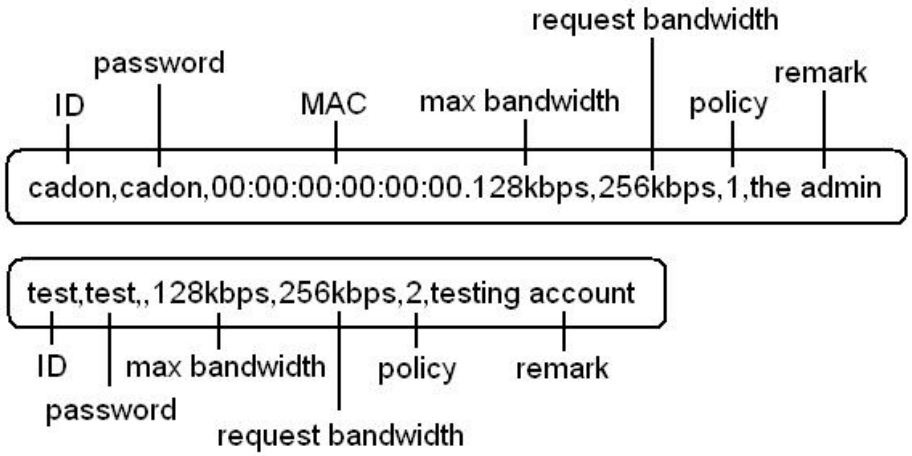
Upload User

Note: The format of each line is "ID, Password, MAC, Policy, Remark" or "ID, Password, MAC, Max bandwidth, Request bandwidth, Policy, Remark" without the quotes. There must be no space between the fields and commas. The MAC field could be omitted but the trailing comma must be retained. When adding user accounts by uploading a file, existing accounts in the embedded database that are also defined in the data file will not be replaced by the new ones.

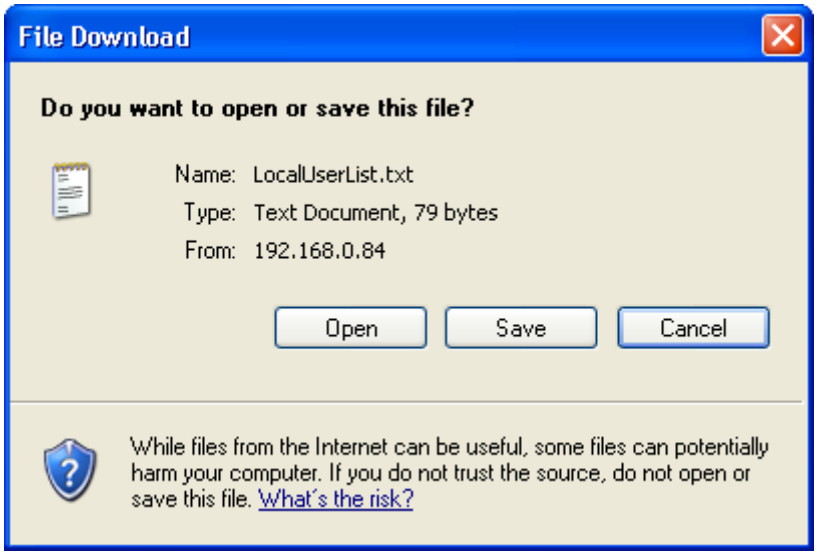
Upload User Account	
File Name	Browse...

The uploading file should be a text file and the format of each line is ***"ID, Password, MAC, Policy, Remark"*** or ***"ID, Password, MAC, Max bandwidth, Request bandwidth, Policy, Remark"*** without the quotes. There must be no spaces between the fields and commas. The MAC field could be omitted but the trailing comma must be retained. When adding user accounts by uploading a file, the existing accounts in the embedded database will not be replaced by new ones.

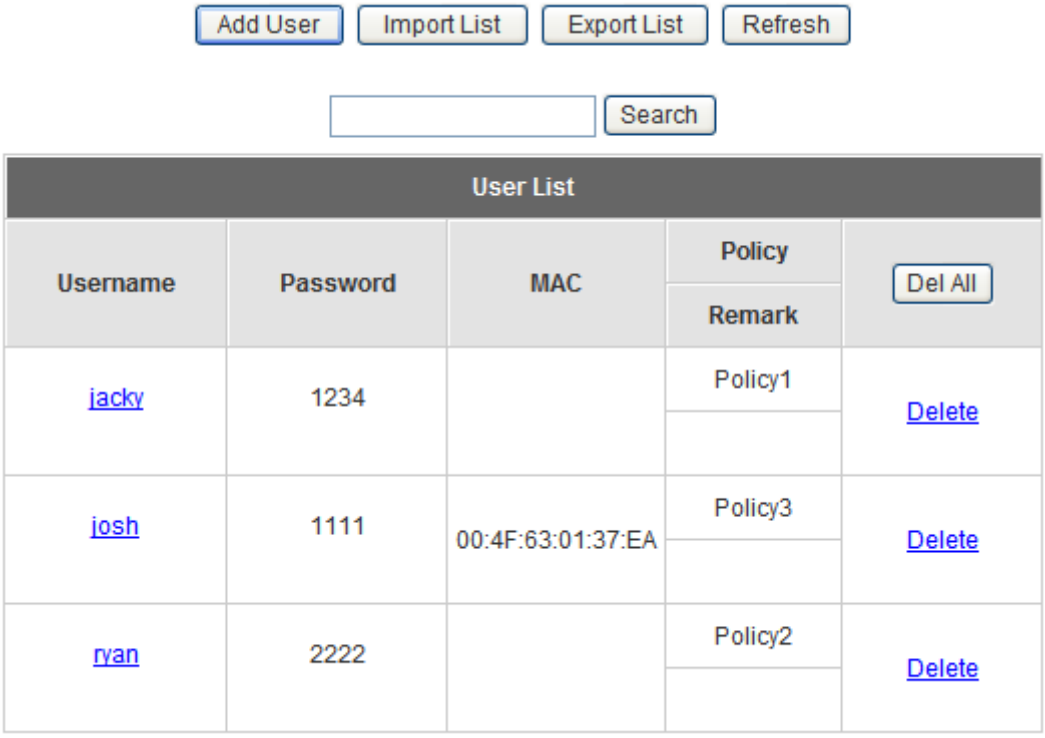




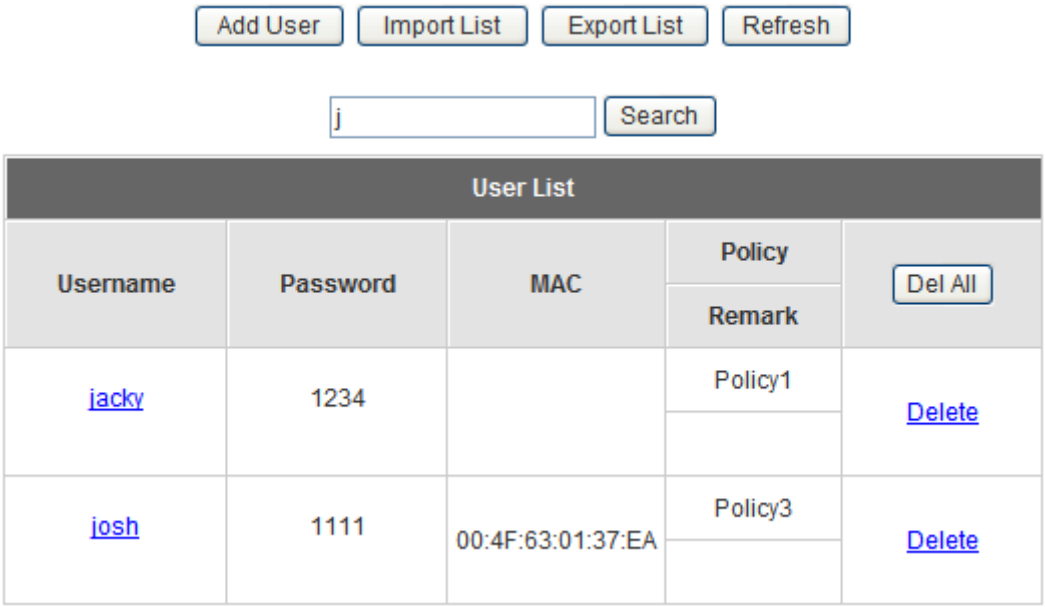
- **Export List:** Click this to create a .txt file and then save it on disk.



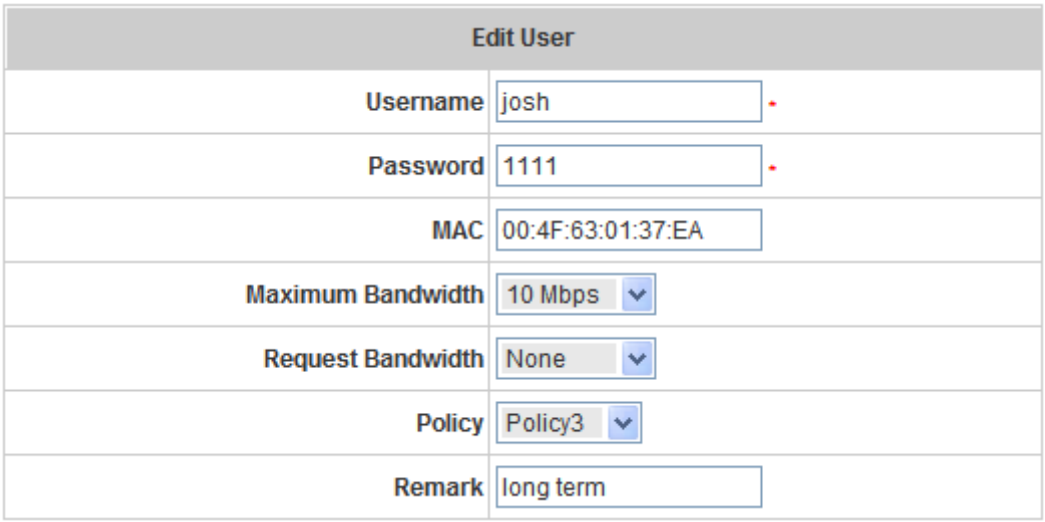
- **Refresh:** Click this to refresh the list.



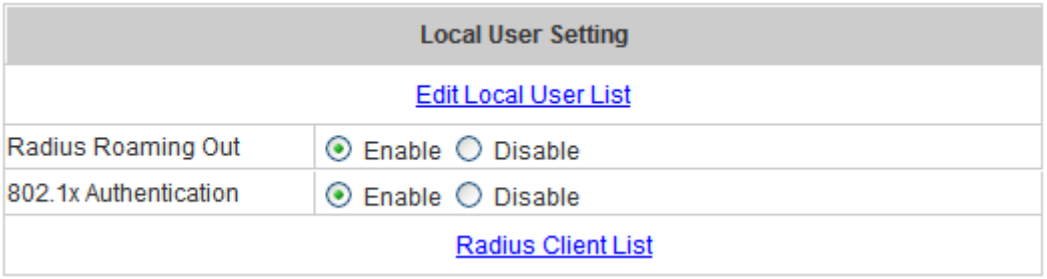
- **Search:** Enter a keyword of a username to be searched in the text filed and click this button to perform the search. All usernames matching the keyword will be listed.



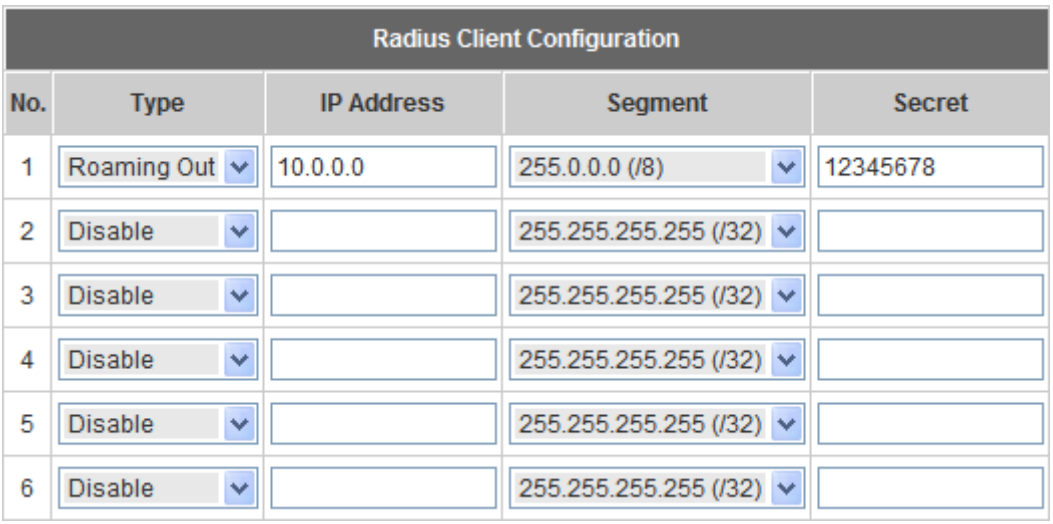
- **Del All:** This will delete all the users at once.
- **Delete:** This will delete the users individually.
- **Edit User:** If editing the content of individual user account is needed, click the username of the desired user account to enter the **Edit User** Interface for that particular user, and then modify or add any desired information such as **"Username"**, **"Password"**, **"MAC"**, **"Maximum Bandwidth"**, **"Request Bandwidth"**, **"Policy"** and **"Remark"** (optional) . Then, click ***Apply*** to complete the modification.



- **Radius Roaming Out / 802.1x Authentication:** These 2 functions can be enabled or disabled by checking the radio button. Checking either of them makes the hyperlink called ***Radius Client List*** show up.



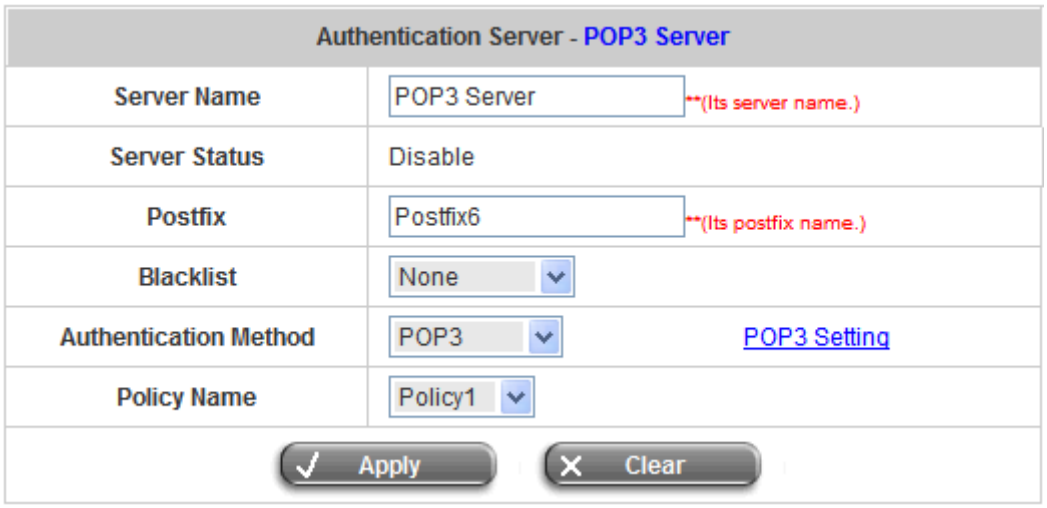
Click the hyperlink of ***Radius Client List*** to enter the **Radius Client Configuration** interface. Choose the desired type, **Disable**, **Roaming Out** or **802.1x** and key in the related data and then click ***Apply*** to complete the settings.



- **Radius Roaming Out:** When **"Radius Roaming Out"** is selected, local users can login from other domains by using their original accounts.
- **802.1x Authentication:** 802.1x is a security standard for wired and wireless LANs. It encapsulates EAP (Extensible Authentication Protocol) processes into Ethernet packets instead of using the protocol's native PPP (Point-to-Point Protocol) environment, thus reducing some network overhead. It also puts the bulk of the processing burden upon the client (called a supplicant in 802.1x parlance) and the authentication server (such as a RADIUS), letting the "authenticator" middleman simply pass the packets back and forth.

5.3.1.2 POP3 Server

POP3, RADIUS, LDAP and NT Domain Server can be chosen to be the authentication method. Choose **"POP3"** in the **Authentication Method** field, the hyperlink beside the pull-down menu will become **"POP3 Setting"**.



- **Server Name:** Set a name for the server using numbers (0 to 9), alphabets (a to z or A to Z), dash (-), underline (_) and dot (.) with a maximum of 40 characters, all other letters are not allowed.
- **Sever Status:** The status shows that the server is enabled or disabled.
- **Postfix:** Set a postfix that is easy to distinguish (e.g. Local) for the server by using numbers (0 to 9), alphabets (a to z or A to Z), dash (-), underline (_) and dot (.) with a maximum of 40 characters, all other letters are not allowed.
- **Blacklist:** There are five sets of the black lists. Select one of them or choose **"None"**. Please refer to **5.3.3 Black List Configuration**
- **Authentication Method:** There are four authentication methods, **POP3**, **Radius**, **LDAP** and **NTDomain** to configure from. Select the desired method and then click the link besides the pull-down menu for more advanced configuration.
- **Policy Name:** There are ten policies to choose from to apply to this particular server.

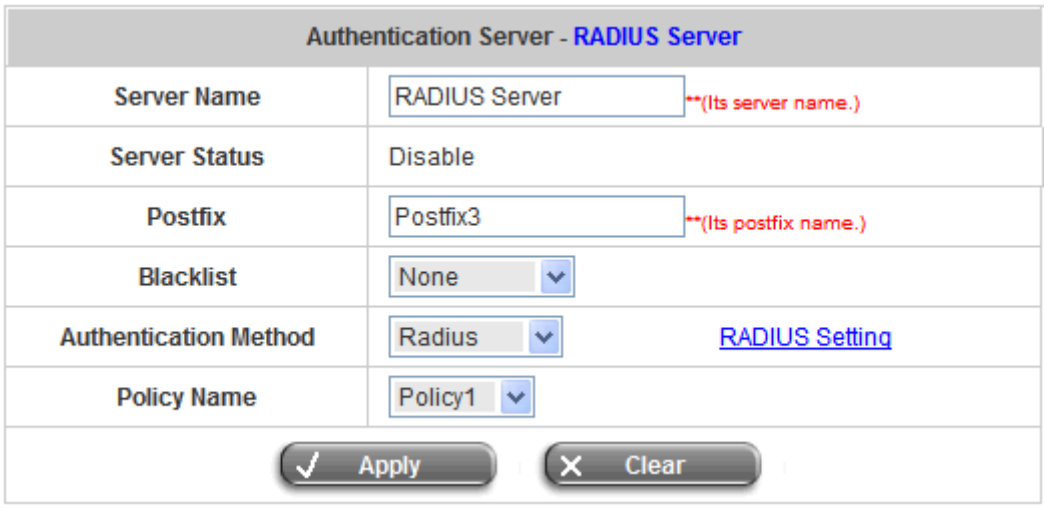
Click the hyperlink of **POP3 Setting** for further configuration. Enter the related information for the primary server and/or the secondary server (the secondary server is not required). The blanks with red asterisks are necessary information. These settings will become effective immediately after clicking the ***Apply*** button.

Primary POP3 Server	
Server IP	mail.airlive.com *(Domain Name/IP Address)
Port	110 *(Default: 110)
SSL Setting	☐ Enable SSL Connection
Secondary POP3 Server	
Server IP	
Port	
SSL Setting	☐ Enable SSL Connection

- **Server IP:** Enter the IP address/domain name given by the ISP.
- **Port:** Enter the Port given by the ISP. The default value is 110.
- **SSL Setting:** If this option is enabled, the POP3 protocol will perform the authentication.

5.3.1.3 Radius Server

Choose **"Radius"** in the **Authentication Method** field, the hyperlink beside the pull-down menu will become **"RADIUS Setting"**.



- **Server Name:** Set a name for the server using numbers (0 to 9), alphabets (a to z or A to Z), dash (-), underline (_) and dot (.) with a maximum of 40 characters, all other letters are not allowed.
- **Sever Status:** The status shows that the server is enabled or disabled.
- **Postfix:** Set a postfix that is easy to distinguish (e.g. Local) for the server by using numbers (0 to 9), alphabets (a to z or A to Z), dash (-), underline (_) and dot (.) with a maximum of 40 characters, all other letters are not allowed.
- **Blacklist:** There are five sets of the black lists. Select one of them or choose **"None"**. Please refer to **5.3.3 Black List Configuration**
- **Authentication Method:** There are four authentication methods, **POP3**, **Radius**, **LDAP** and **NTDomain** to configure from. Select the desired method and then click the link besides the pull-down menu for more advanced configuration.
- **Policy Name:** There are ten policies to choose from to apply to this particular server.

Click the hyperlink of **RADIUS Setting** for further configuration. The Radius server sets the external authentication for user accounts. Enter the related information for the primary server and/or the secondary server (the secondary server is not required). The blanks with red asterisks are necessary information. These settings will become effective immediately after clicking the ***Apply*** button.

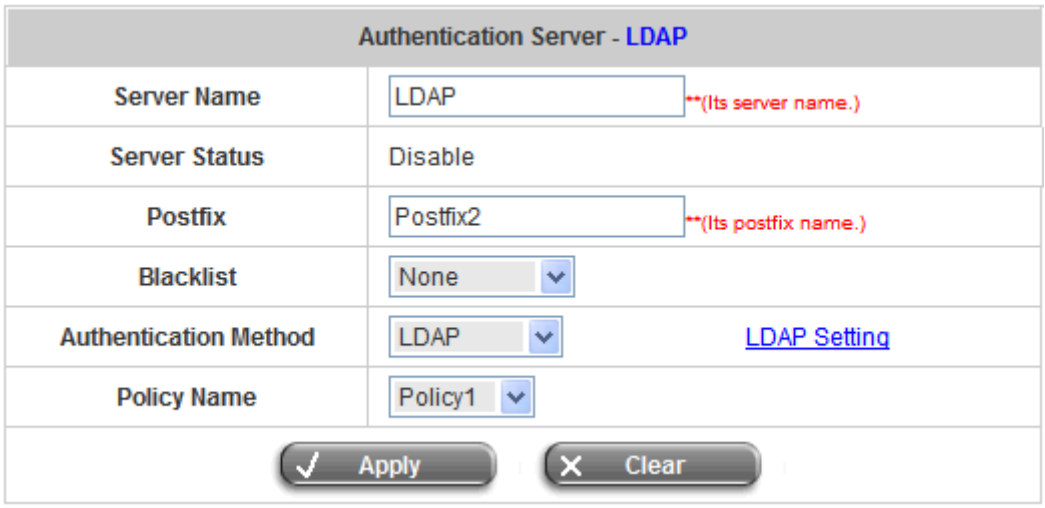
RADIUS Setting	
802.1x Authentication	Enable Disable Radius Client List
Trans Full Name	Enable Disable
Primary RADIUS Server	
Server IP	*
Authentication Port	*(Default: 1812)
Accounting Port	*(Default: 1813)
Secret Key	*
Accounting Service	Enable Disable
Authentication Protocol	CHAP
Secondary RADIUS Server	
Server IP	
Authentication Port	
Accounting Port	
Secret Key	
Accounting Service	Enable Disable
Authentication Protocol	CHAP

- **802.1X Authentication:** Enable this function and the hyperlink of ***Radius Client List*** will appear. Click the hyperlink to get into the Radius Client Configuration list for further configuration. Please refer to **Radius Roaming Out/802.1x Authentication** in **5.3.1.1 Local User**.
- **Trans Full Name:** When enabled, the ID and postfix will be transferred to the RADIUS server for authentication. When disabled, only the ID will be transferred to RADIUS server for authentication.
- **Server IP:** Enter the IP address/domain name of the RADIUS server.
- **Authentication Port:** Enter the authentication port of the RADIUS server and the default value is 1812.
- **Accounting Port:** Enter the accounting port of the RADIUS server and the default value is 1813.
- **Secret Key:** Enter the key for encryption and decryption.
- **Accounting Service:** Select this to enable or disable the **"Accounting Service"** for accounting capabilities.
- **Authentication Protocol:** There are two methods, CHAP and PAP for selection.

Notice: *If Radius Server does not assign idle-timeout value, IAS-2000 v2 will use the local idle-timeout instead.*

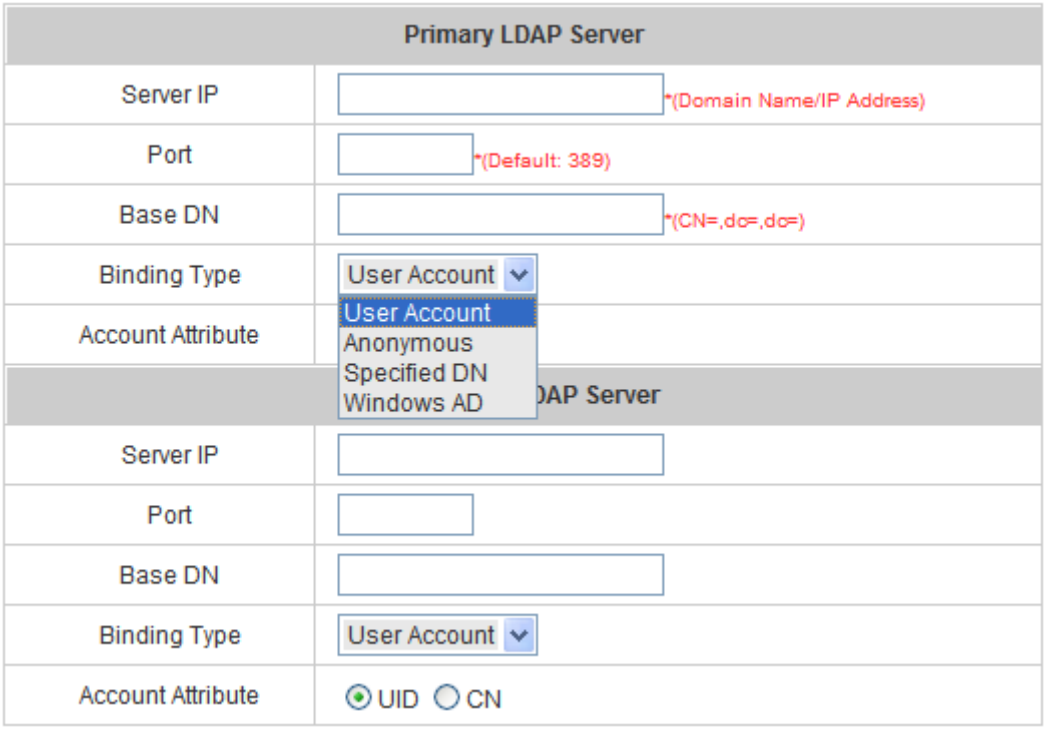
5.3.1.4 LDAP Server

Choose **"LDAP"** in the **Authentication Method** field, the hyperlink beside the pull-down menu will become **"LDAP Setting"**.

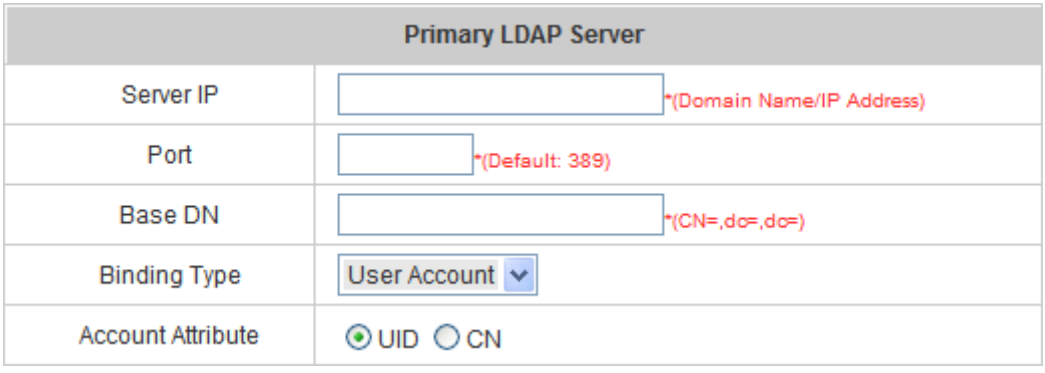


- **Server Name:** Set a name for the server using numbers (0 to 9), alphabets (a to z or A to Z), dash (-), underline (_) and dot (.) with a maximum of 40 characters, all other letters are not allowed.
- **Sever Status:** The status shows that the server is enabled or disabled.
- **Postfix:** Set a postfix that is easy to distinguish (e.g. Local) for the server by using numbers (0 to 9), alphabets (a to z or A to Z), dash (-), underline (_) and dot (.) with a maximum of 40 characters, all other letters are not allowed.
- **Blacklist:** There are five sets of the black lists. Select one of them or choose **"None"**. Please refer to **5.3.3 Black List Configuration**
- **Authentication Method:** There are four authentication methods, **POP3**, **Radius**, **LDAP** and **NTDomain** to configure from. Select the desired method and then click the link besides the pull-down menu for more advanced configuration.
- **Policy Name:** There are ten policies to choose from to apply to this particular server.

Click the hyperlink of **LDAP Setting** for further configuration. Enter the related information for the primary server and/or the secondary server (the secondary server is not required). The blanks with red asterisks are necessary information. These settings will become effective immediately after clicking the ***Apply*** button.



- **Server IP:** Enter the IP address/domain name of the LDAP server.
- **Port:** Enter the Port of the LDAP server, and the default value is 389.
- **Base DN:** Enter the distinguished name of the LDAP server.
- **Binding Type:** There are four binding types, User Account, Anonymous, Specific DN and Windows AD to select.
  - **User Account:** Use the user account's login username and password of the system, and then select one **Account Attribute** (UID, CN or sAMAccountName) to access the LDAP server.



- **Anonymous:** Access the LDAP servers without requiring authentication but only select one **Account Attribute** (UID, CN or sAMAccountName).

Primary LDAP Server	
Server IP	*(Domain Name/IP Address)
Port	*(Default: 389)
Base DN	*(CN=,dc=,dc=)
Binding Type	Anonymous
Account Attribute	UID CN sAMAccountName

- **Specified DN:** Enter more information for the specific DN username and password in the **"Bind RDN"** and **"Bind Password"** fields, and then select one **Account Attribute** (UID, CN or sAMAccountName) to access the LDAP server.

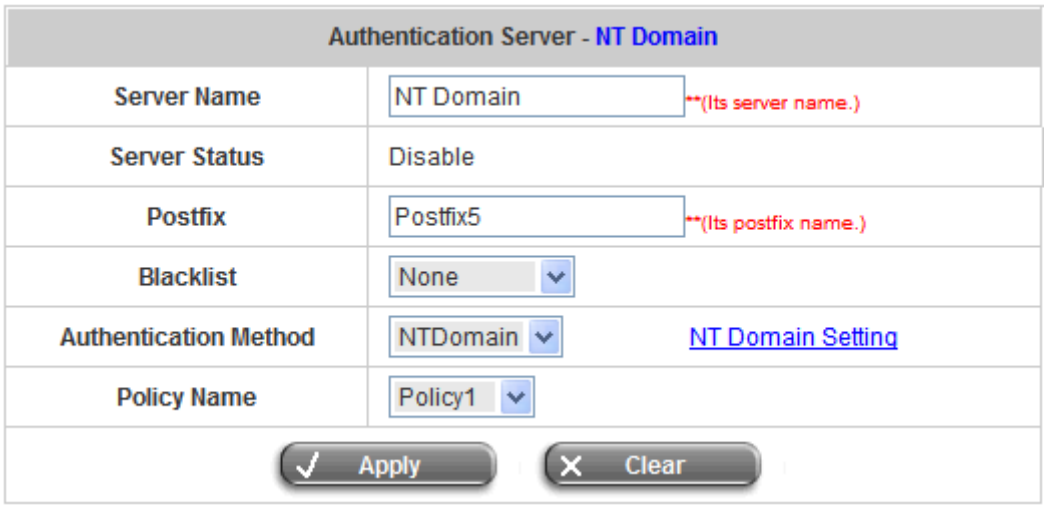
Primary LDAP Server	
Server IP	*(Domain Name/IP Address)
Port	*(Default: 389)
Base DN	*(CN=,dc=,dc=)
Binding Type	Specified DN
Bind RDN:	
Bind Password:	
Account Attribute	UID CN sAMAccountName

- **Windows AD:** Enter the domain name of Windows AD to access the LDAP server.

Primary LDAP Server	
Server IP	*(Domain Name/IP Address)
Port	*(Default: 389)
Base DN	*(CN=,dc=,dc=)
Binding Type	Windows AD
Domain	

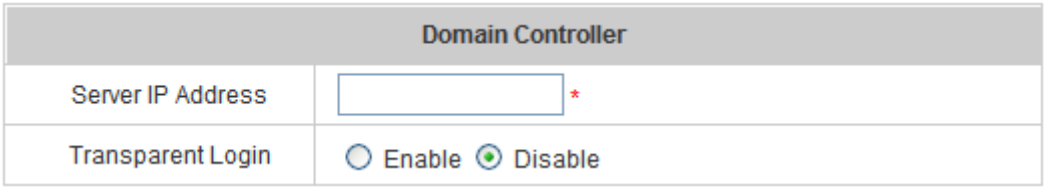
5.3.1.5 NT Domain Server

Choose **"NTDomain"** in the **Authentication Method** field, the hyperlink beside the pull-down menu will become **"NT Domain Setting"**.



- **Server Name:** Set a name for the server using numbers (0 to 9), alphabets (a to z or A to Z), dash (-), underline (_) and dot (.) with a maximum of 40 characters, all other letters are not allowed.
- **Sever Status:** The status shows that the server is enabled or disabled.
- **Postfix:** Set a postfix that is easy to distinguish (e.g. Local) for the server by using numbers (0 to 9), alphabets (a to z or A to Z), dash (-), underline (_) and dot (.) with a maximum of 40 characters, all other letters are not allowed.
- **Blacklist:** There are five sets of the black lists. Select one of them or choose **"None"**. Please refer to **5.3.3 Black List Configuration**
- **Authentication Method:** There are four authentication methods, **POP3**, **Radius**, **LDAP** and **NTDomain** to configure from. Select the desired method and then click the link besides the pull-down menu for more advanced configuration.
- **Policy Name:** There are ten policies to choose from to apply to this particular server.

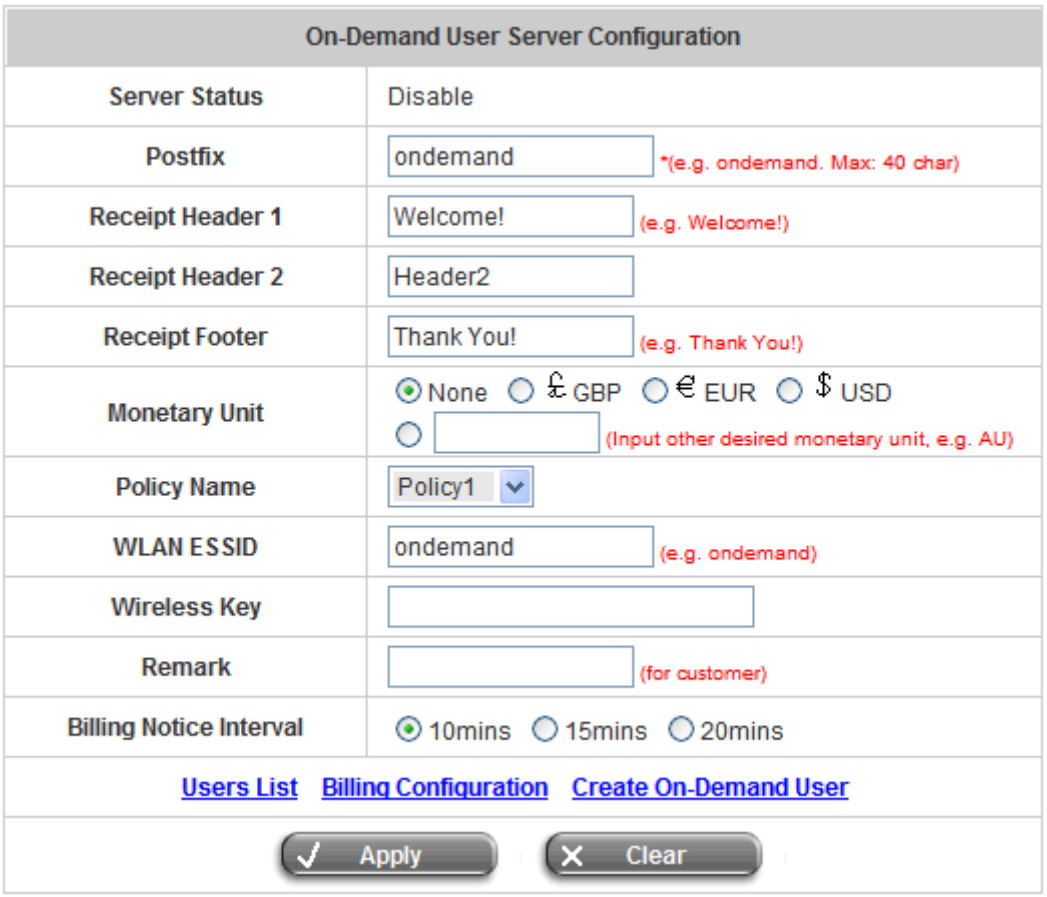
Click the hyperlink of NT Domain Setting for further configuration. Enter the server IP address and enable/disable the transparent login function. These settings will become effective immediately after clicking the ***Apply*** button.



- **Server IP address:** Enter the server IP address of the NT domain controller.
- **Transparent Login:** If this function is enabled, when users log into the Windows domain, they will log into IAS-2000 v2 automatically.

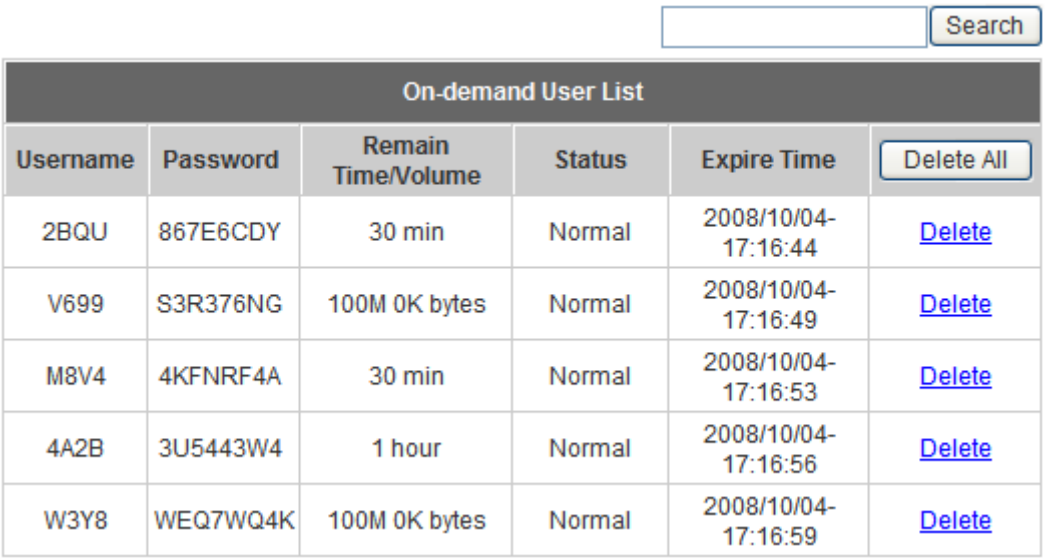
5.3.1.6 On Demand User

This is for the customer's need in a store environment. When the customers need to use wireless Internet in the store, they have to get a printed receipt with username and password from the store to log in the system for wireless access. There are 2000 On-demand User accounts available.



- **Server Status:** The status shows that the server is enabled or disabled.
- **Postfix:** Set a postfix that is easy to distinguish (e.g. Local) for the server by using numbers (0 to 9), alphabets (a to z or A to Z), dash (-), underline (_) and dot (.) with a maximum of 40 characters, all other letters are not allowed.
- **Receipt Header:** There are two fields, **Receipt Header 1** and **Receipt Header 2**, for the receipt's header. Enter receipt header message or use the default.
- **Receipt Footer:** Enter receipt footer message here or use the default.
- **Monetary Unit:** Select the desired monetary unit for a region or input the needed monetary unit if not listed.
- **Policy Name:** Select a policy for the on-demand user.
- **WLAN ESSID:** Enter the ESSID of the AP.
- **WEP Key:** Enter the WEP key of the AP.
- **Remark:** Enter any additional information that will appear at the bottom of the receipt.
- **Billing Notice Interval:** While the on-demand user is still logged in, the system will update the billing notice of the login successful page by the time interval defined here.

- **Users List:** Click to enter the **On-demand User List** screen. In the **On-demand User List**, detailed information will be documented here. By default, the On-demand user database is empty.



- **Search:** Enter a keyword of a username to be searched in the text filed and click this button to perform the search. All usernames matching the keyword will be listed.
- **Username:** The login name of the on-demand user.
- **Password:** The login password of the on-demand user.
- **Remain Time/Volume:** The total time/Volume that the user can use currently.
- **Status:** The status of the account. Normal indicates that the account is not in-use and not overdue. Online indicates that the account is in-use and not overdue. Expire indicates that the account is overdue and cannot be used.
- **Expire Time:** The expiration time of the account.
- **Delete All:** This will delete all the users at once.
- **Delete:** This will delete the users individually.

- **Billing Configuration:** Click this to enter the **Billing Configuration** screen. In the **Billing Configuration** page, Administrator may configure up to 10 billing plans.

Billing Configuration					
Plan	Status	Type	Expired Info	Valid Duration	Price
1	◉ Enable ○ Disable	○ Data 0 Mbyte ◉ Time 0 Hrs 30 Mins	3 Days 0 Hrs	3 Days	20
2	◉ Enable ○ Disable	○ Data 0 Mbyte ◉ Time 1 Hrs 0 Mins	3 Days 0 Hrs	3 Days	30
3	◉ Enable ○ Disable	◉ Data 100 Mbyte ○ Time 0 Hrs 0 Mins	3 Days 0 Hrs	3 Days	30

- **Status:** Select to enable or disable this billing plan.
- **Type:** Set the billing plan by **"Data"** (the maximum volume allowed is 999,999 Mbyte) or **"Time"** (the maximum days allowed is 999 Hrs).
- **Expired Info:** This is the duration of time that the user can use the account after the generation of the account. If the account is not activated during this duration, the account will self-expire.
- **Valid Duration:** This is the duration of time that the user can use the account after the activation of the account. After this duration, the account will self-expire.
- **Price:** The price charged for this billing plan.

- **Create On-demand User:** Click this to enter the **On-demand User Generate** page.

On-Demand User Generation			
Plan	**Type**	**Status**	**Function**
1	0 hrs 30 mins	Enabled	Create
2	1 hrs 0 mins	Enabled	Create
3	100Mbyte	Enabled	Create
4	N/A	Disabled	Create

➢ Pressing the ***Create*** button for the desired plan, an On-demand user will be created, then click ***Printout*** to print a receipt which will contain this on-demand user's information. There are 2000 On-demand user accounts available.

Welcome!
Header2

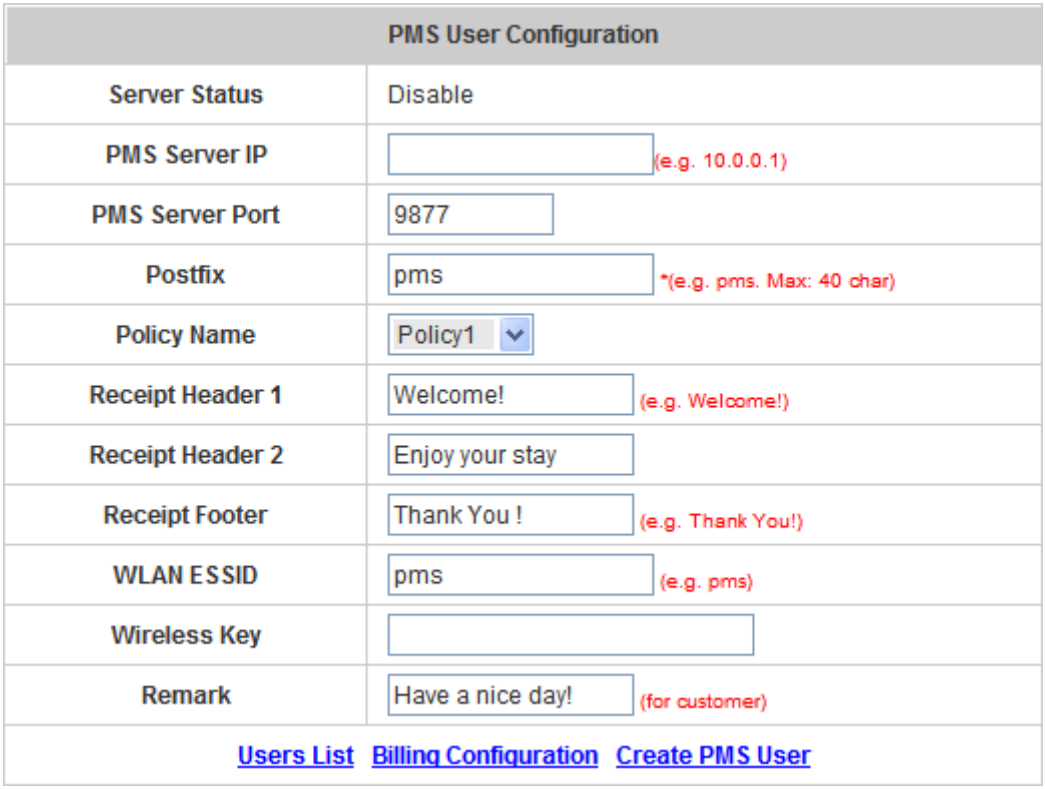
Username	9K57@ondemand
Password	M762XK67
Price	20
Usage	0 hrs 30 mins
ESSID : ondemand	
Shared Wireless Key:	
Vaild to use until: 2008/10/04 17:24:13	

Thank You!

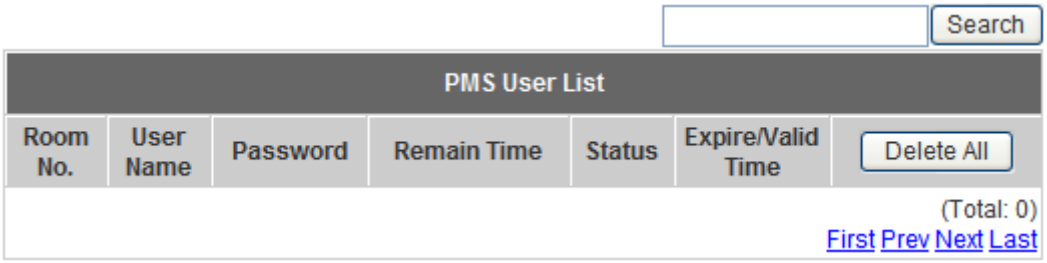
Printout Close

5.3.1.7 PMS User

The system integrates a hotel in-door billing system, PMS, developed by Micros Fidelio, and it is usually used in the hotel environment. When the customers need to use wireless Internet in the hotel, they have to get printed receipts with usernames and passwords from the hotel to log in the system for wireless access.



- **Server Status:** The status shows that the server is enabled or disabled.
- **PMS Server IP:** Enter the IP address of the PMS server.
- **PMS Server Port:** Enter the Port of the PMS server.
- **Postfix:** Set a postfix that is easy to distinguish (e.g. Local) for the server by using numbers (0 to 9), alphabets (a to z or A to Z), dash (-), underline (_) and dot (.) with a maximum of 40 characters, all other letters are not allowed.
- **Policy Name:** There are ten policies to select from.
- **Receipt Header:** There are two fields, **Receipt Header 1** and **Receipt Header 2**, for the receipt's header. Enter receipt header message or use the default.
- **Receipt Footer:** Enter receipt footer message here or use the default.
- **WLAN ESSID:** Enter the ESSID of the AP.
- **WEP Key:** Enter the WEP key of the AP.
- **Remark:** Enter any additional information that will appear at the bottom of the receipt.
- **Users List:** Click to enter the **PMS User List** page. In the **PMS User List** page, detailed information will be documented here. By default, the PMS user database is empty.



Search

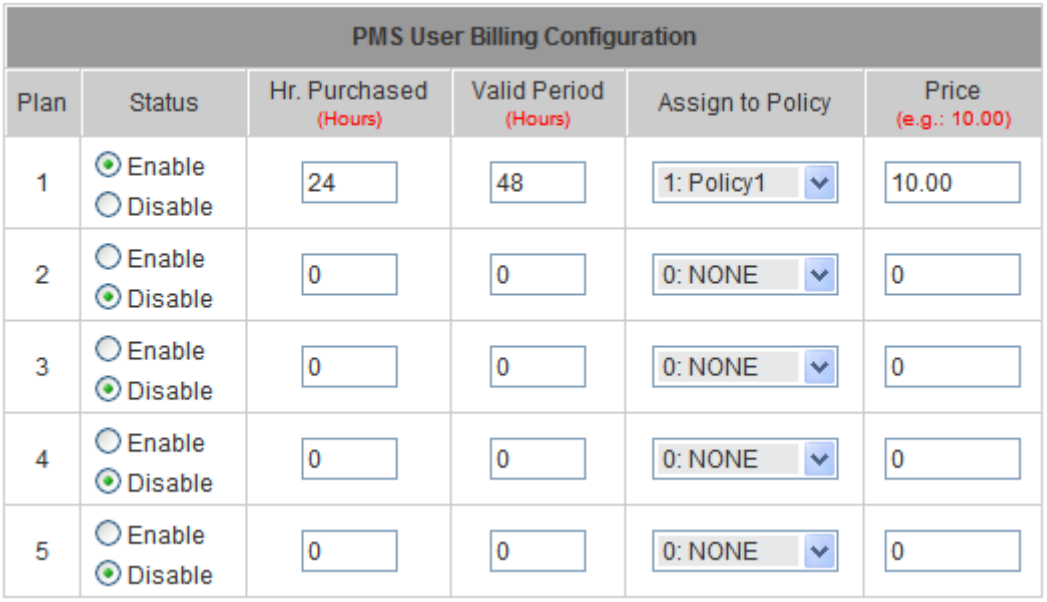
PMS User List

Room No.	User Name	Password	Remain Time	Status	Expire/Valid Time	Delete All

(Total: 0)
First Prev Next Last

- **Search:** Enter a keyword of a username to be searched in the text filed and click this button to perform the search. All usernames matching the keyword will be listed.
- **Room No.:** The room number of the PMS user.
- **User Name:** The login name of the PMS user.
- **Password:** The login password of the PMS user.
- **Remain Time:** The total Time/Volume that the user can use currently.
- **Status:** The status of the account. Normal indicates that the account is not in-use and not overdue. Online indicates that the account is in-use and not overdue. Expire indicates that the account is overdue and cannot be used.
- **Expire/Valid Time:** The ***Valid Time*** indicates the duration of time that the user can use the Internet service after the account is activated. After this duration, the account will self-expire. The ***Expire Time*** indicates the duration of time that the account needs to be activated after the generation. If the account is not activated during this duration, the account will self-expire.
- **Delete All:** This will delete all the users at once.
- **Delete:** This will delete users individually.

- **Billing Configuration:** Click this to enter the **PMS User Billing Configuration** page. In the **PMS Billing Configuration** page, the administrator may configure up to 5 billing plans.



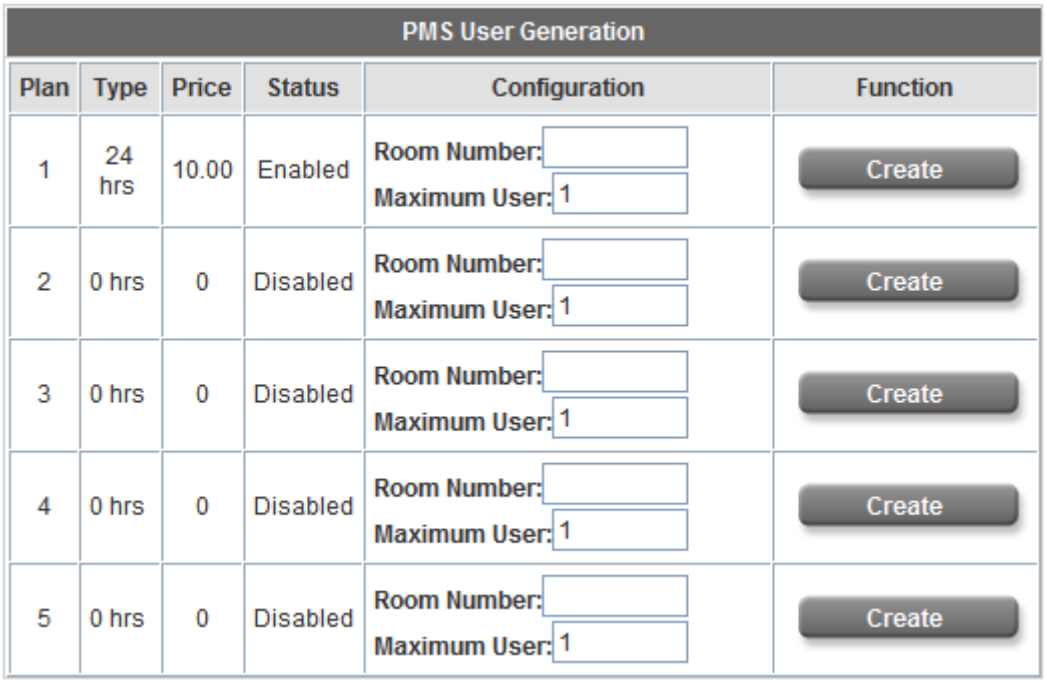
PMS User Billing Configuration

Plan	Status	Hr. Purchased (Hours)	Valid Period (Hours)	Assign to Policy	Price (e.g.: 10.00)
1	Enable / Disable	24	48	1: Policy1	10.00
2	Enable / Disable	0	0	0: NONE	0
3	Enable / Disable	0	0	0: NONE	0
4	Enable / Disable	0	0	0: NONE	0
5	Enable / Disable	0	0	0: NONE	0

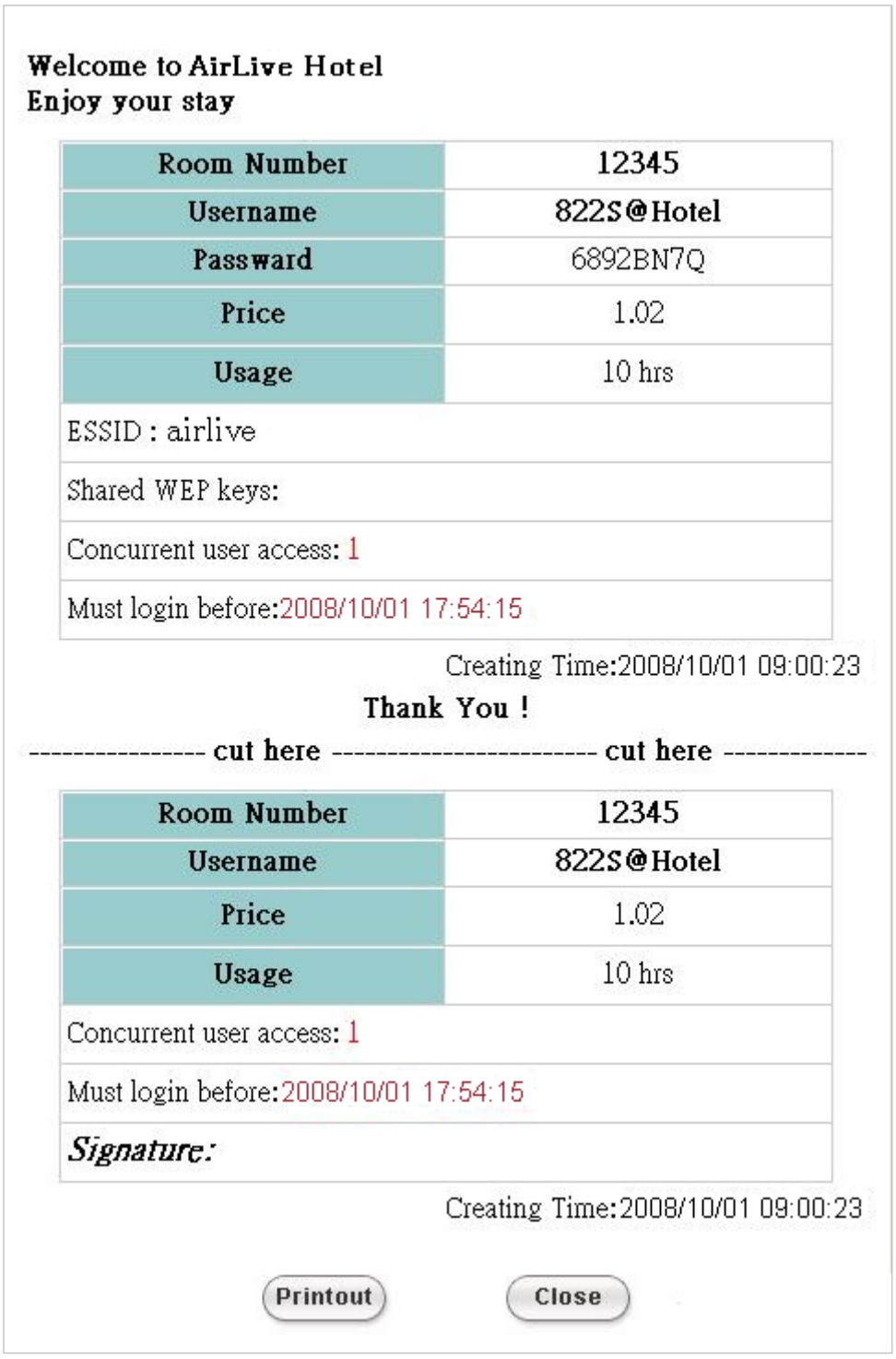
- **Status:** Select to enable or disable this billing plan.
- **Hr. Purchased:** This is the duration of time that the user purchases. 1-999 hour(s) can be entered.
- **Valid Period:** This is the duration of time that the user can use the Internet service after the activation of the account. After this duration, the account will self-expire. 1-999 hours can be entered.
- **Assign to Policy:** Assign a policy for this billing plan.
- **Price:** The price charged for this billing plan.

Note: *There is an* ***Auto Expired*** *mechanism is for preventing that an account is created but never logged in. If the account is created but never been logged in, the account will be invalid after a period.*

- **Create PMS User:** Click this to enter the **PMS User Generation** page. There are 5000 PMS user accounts available.



By default, the PMS user database is empty. After entering **"*Room Number*"** and **"*Maximum User*"** then pressing ***Create*** button by the desired plan, a PMS user will be created. Click ***Printout*** to print a receipt which will contain this PMS user's information. See the following figure.



Welcome to AirLive Hotel
Enjoy your stay

Room Number	12345
Username	822S@Hotel
Passward	6892BN7Q
Price	1.02
Usage	10 hrs
ESSID : airlive	
Shared WEP keys:	
Concurrent user access: 1	
Must login before:2008/10/01 17:54:15	

Creating Time:2008/10/01 09:00:23

Thank You !

---------- **cut here** ---------- **cut here** ----------

Room Number	12345
Username	822S@Hotel
Price	1.02
Usage	10 hrs
Concurrent user access: 1	
Must login before:2008/10/01 17:54:15	
Signature:	

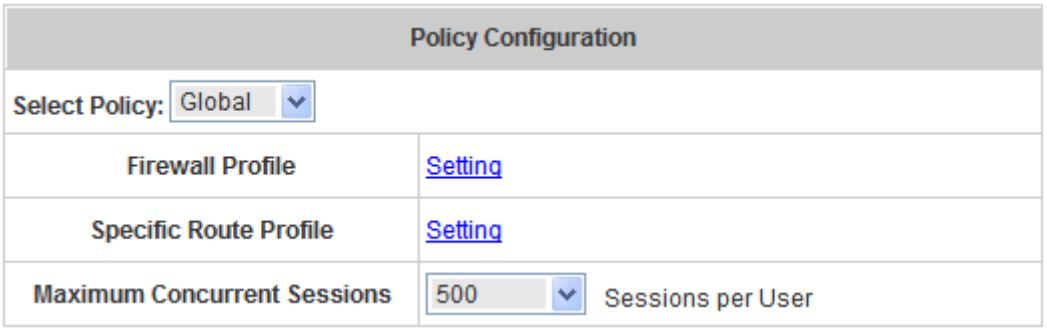
Creating Time:2008/10/01 09:00:23

Printout Close

5.3.2 Policy Configuration

There are ten policies that IAS-2000 v2 supports and a Global policy. Every Policy has three profiles, **Firewall Profile**, **Specific Route Profile**, and **Schedule Profile** as well as one **Bandwidth** setting for that policy. But **Global** policy only has **Firewall Profile** and **Specific Route Profile** settings.

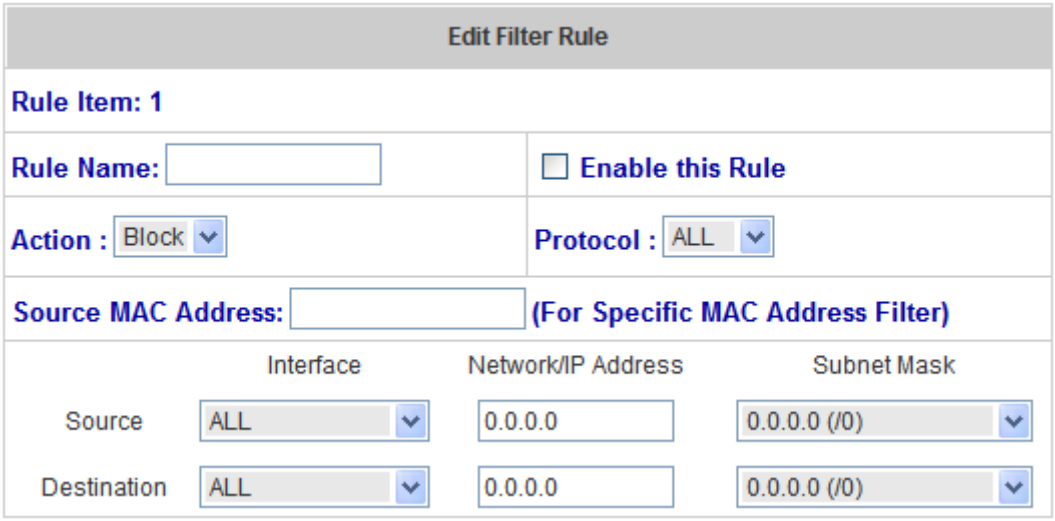
- **Global Policy**



- **Select Policy:** Select **Global** to set the **Firewall Profile** and **Specific Route Profile**.
- **Firewall Profile:** Click the hyperlink of ***Setting*** for **Firewall Profile**, the Firewall Profiles page will appear. Click the numbers of ***Filter Rule Item*** to edit individual rules and click ***Apply*** to save the settings. The rule status will show on the list. Check **"Active"** to enable that rule.

Profile Name: Global

Firewall Profile							
Filter Rule	Active	Action	Name	Source IP	Destination IP	Protocol	MAC
1	☐	Block		Any	Any	ALL	
2	☐	Block		Any	Any	ALL	
3	☐	Block		Any	Any	ALL	
4	☐	Block		Any	Any	ALL	
5	☐	Block		Any	Any	ALL	
6	☐	Block		Any	Any	ALL	
7	☐	Block		Any	Any	ALL	
8	☐	Block		Any	Any	ALL	
9	☐	Block		Any	Any	ALL	
10	☐	Block		Any	Any	ALL	



- **Rule Item:** This is the rule selected.
- **Rule Name:** The rule name can be changed here.
- **Enable this Rule:** After checking this function, the rule will be enabled.
- **Action:** There are two options, **Block** and **Pass**. **Block** is to prevent packets from passing and **Pass** is to permit packets passing.
- **Protocol:** There are three protocols to select, **TCP**, **UDP** and **ICMP**, or choose **ALL** to use all three protocols.
- **Source MAC Address:** The MAC address of the source IP address. This is for specific MAC address filter.
- **Source/Destination Interface:** There are five interfaces to choose, **ALL**, **WAN1**, **WAN2**, **LAN1** and **LAN2**.
- **Source/Destination IP:** Enter the source and destination IP addresses.
- **Source/Destination Subnet Mask:** Enter the source and destination subnet masks.

➢ **Specific Route Profile:** Click the hyperlink of ***Setting*** for **Specific Route Profile**, the Specific Route Profile page will appear.

View System Route Table

Profile Name: Global Specific Route

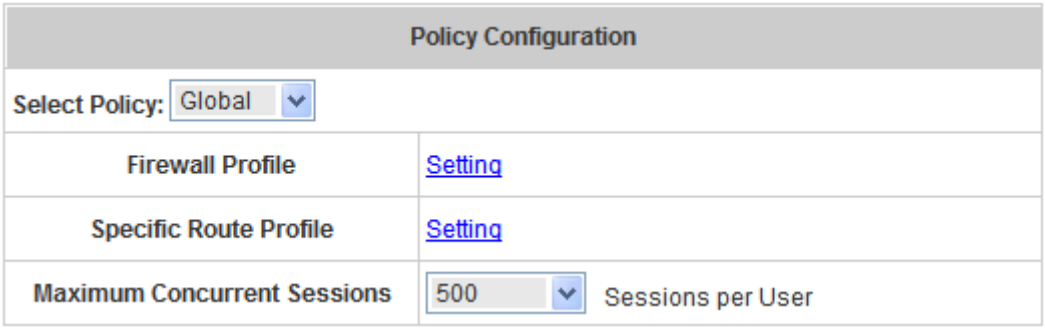
Global Route Table			
Route No.	Destination		Gateway
	Network/IP Address	Subnet Mask	IP Address
1		255.255.255.255 (/32)	
2		255.255.255.255 (/32)	
3		255.255.255.255 (/32)	
4		255.255.255.255 (/32)	
5		255.255.255.255 (/32)	
6		255.255.255.255 (/32)	
7		255.255.255.255 (/32)	
8		255.255.255.255 (/32)	
9		255.255.255.255 (/32)	
10		255.255.255.255 (/32)	

- **Profile Name:** The profile name can be changed here.
- **Destination IP Address:** The destination IP address of the host or the network.
- **Destination Subnet Netmask:** Select a destination subnet netmask of the host or the network.
- **Gateway IP Address:** The IP address of the next router to the destination.

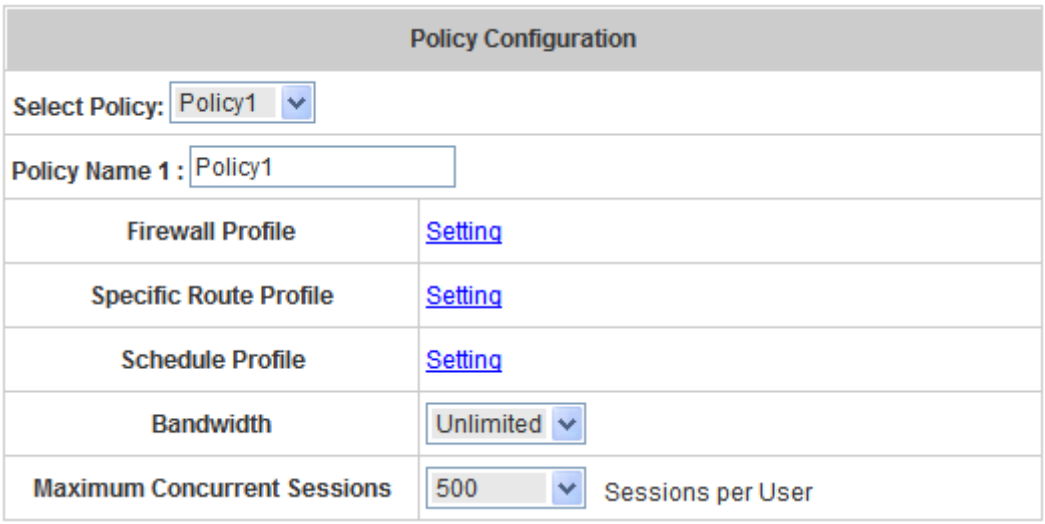
System Route Table				
Network Address	Netmask	Gateway	Interface	Metric
192.168.2.0	255.255.255.0	0.0.0.0	LAN2	0
192.168.1.0	255.255.255.0	0.0.0.0	LAN1	0
192.168.0.0	255.255.255.0	0.0.0.0	WAN1	0
127.0.0.0	255.0.0.0	0.0.0.0	lo	0
0.0.0.0	0.0.0.0	192.168.0.254	WAN1	0

- **View System Route Table:** Click the hyperlink of **View System Route Table** to see the information of the hosts or the networks.

- **Maximum Concurrent Sessions:** The concurrent sessions for each user; it can be restricted by administrator. When a user reaches the session limit, this user will be implicitly suspended from any new connection for a fixed time period.



- **Policy 1~Policy 10**



- **Select Policy / Policy Name:** Select a desired policy and rename it in the Policy Name field if desired.
- **Firewall Profile:** Click the hyperlink of ***Setting*** for **Firewall Profile**, the Firewall Profiles page will appear. Click the numbers of ***Filter Rule Item*** to edit individual rules and click ***Apply*** to save the settings. The rule status will show on the list. Check **"Active"** to enable that rule.

Profile Name: IP Filter 1

Firewall Profile							
Filter Rule	Active	Action	Name	Source IP	Destination IP	Protocol	MAC
1	☐	Block		Any	Any	ALL	
2	☐	Block		Any	Any	ALL	
3	☐	Block		Any	Any	ALL	
4	☐	Block		Any	Any	ALL	
5	☐	Block		Any	Any	ALL	
6	☐	Block		Any	Any	ALL	
7	☐	Block		Any	Any	ALL	
8	☐	Block		Any	Any	ALL	
9	☐	Block		Any	Any	ALL	
10	☐	Block		Any	Any	ALL	

Edit Filter Rule

Rule Item: 1

Rule Name: ☐ **Enable this Rule**

Action : Block **Protocol :** ALL

Source MAC Address: **(For Specific MAC Address Filter)**

	Interface	Network/IP Address	Subnet Mask
Source	ALL	0.0.0.0	0.0.0.0 (/0)
Destination	ALL	0.0.0.0	0.0.0.0 (/0)

- **Rule Item:** This is the rule selected.
- **Rule Name:** The rule name can be changed here.
- **Enable this Rule:** After checking this function, the rule will be enabled.
- **Action:** There are two options, **Block** and **Pass**. **Block** is to prevent packets from passing and **Pass** is to permit packets passing.
- **Protocol:** There are three protocols to select, **TCP**, **UDP** and **ICMP**, or choose **ALL** to use all three protocols.
- **Source MAC Address:** The MAC address of the source IP address. This is for specific MAC address filter.

- **Source/Destination Interface:** There are five interfaces to choose, **ALL**, **WAN1**, **WAN2**, **LAN1** and **LAN2**.
- **Source/Destination IP:** Enter the source and destination IP addresses.
- **Source/Destination Subnet Mask:** Enter the source and destination subnet masks.

➢ **Specific Route Profile: C**lick the hyperlink of ***Setting*** for **Specific Route Profile**, the Specific Route Profile page will appear.

Profile Name: Specific Route 1

Specific Route Profile				
Route No.	Destination		Gateway	Default
	Network/IP Address	Subnet Mask	IP Address	
1		255.255.255.255 (/32)		☐
2		255.255.255.255 (/32)		☐
3		255.255.255.255 (/32)		☐
4		255.255.255.255 (/32)		☐
5		255.255.255.255 (/32)		☐
6		255.255.255.255 (/32)		☐
7		255.255.255.255 (/32)		☐
8		255.255.255.255 (/32)		☐
9		255.255.255.255 (/32)		☐
10		255.255.255.255 (/32)		☐

- **Profile Name:** The profile name can be changed here.
- **Destination IP Address:** The destination IP address of the host or the network.
- **Destination Subnet Netmask:** Select a destination subnet netmask of the host or the network.
- **Gateway IP Address:** The IP address of the next router to the destination.
- **Default:** Check this option to apply to the default values.

➢ **Schedule Profile:** Click the hyperlink of ***Setting*** for **Schedule Profile** to enter the Schedule Profile list. Select **"Enable"** to show the list. This function is used to restrict the time the users can log in. Please enable/disable the desired time slot and click ***Apply*** to save the settings. These settings will become effective immediately after clicking the ***Apply*** button.

Profile Name: Schedule1 ◉ Enable ○ Disable

Login Schedule Profile							
HOUR	SUN	MON	TUE	WED	THU	FRI	SAT
0	☑	☑	☑	☑	☑	☑	☑
1	☑	☑	☑	☑	☑	☑	☑
2	☑	☑	☑	☑	☑	☑	☑
3	☑	☑	☑	☑	☑	☑	☑
4	☑	☑	☑	☑	☑	☑	☑
5	☑	☑	☑	☑	☑	☑	☑
6	☑	☑	☑	☑	☑	☑	☑
7	☑	☑	☑	☑	☑	☑	☑
8	☑	☑	☑	☑	☑	☑	☑
9	☑	☑	☑	☑	☑	☑	☑
10	☑	☑	☑	☑	☑	☑	☑

- **Bandwidth:** Choose one bandwidth limit for that particular policy.

Policy Configuration

Select Policy: Policy1

Policy Name 1 : Policy1

Firewall Profile	Setting
Specific Route Profile	Setting
Schedule Profile	Setting
Bandwidth	Unlimited
Maximum Concurrent Sessions	Sessions per User

Apply Clear

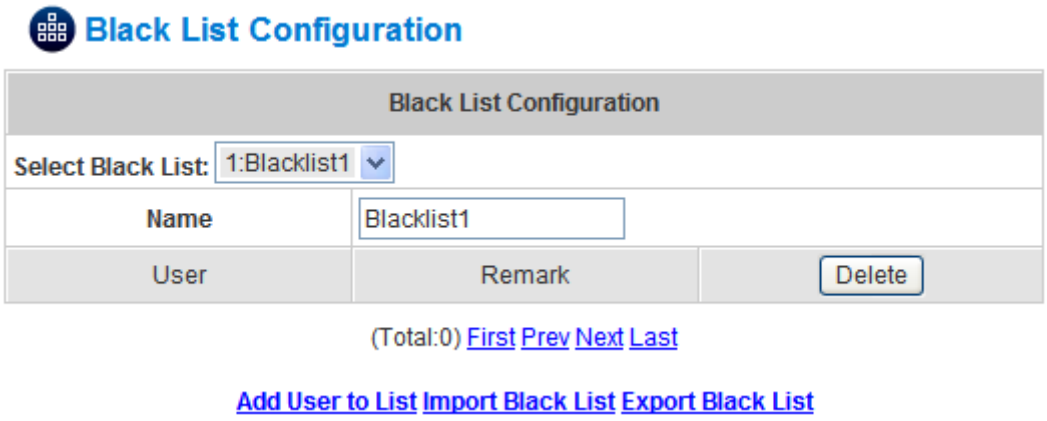
Unlimited
16 Kbps
32 Kbps
64 Kbps
128 Kbps
256 Kbps
512 Kbps
1 Mbps
2 Mbps
3 Mbps
5 Mbps
8 Mbps
11 Mbps
22 Mbps
54 Mbps

- **Maximum Concurrent Sessions:** The concurrent sessions for each user; it can be restricted by administrator. When a user reaches the session limit, this user will be implicitly suspended from any new connection for a fixed time period.

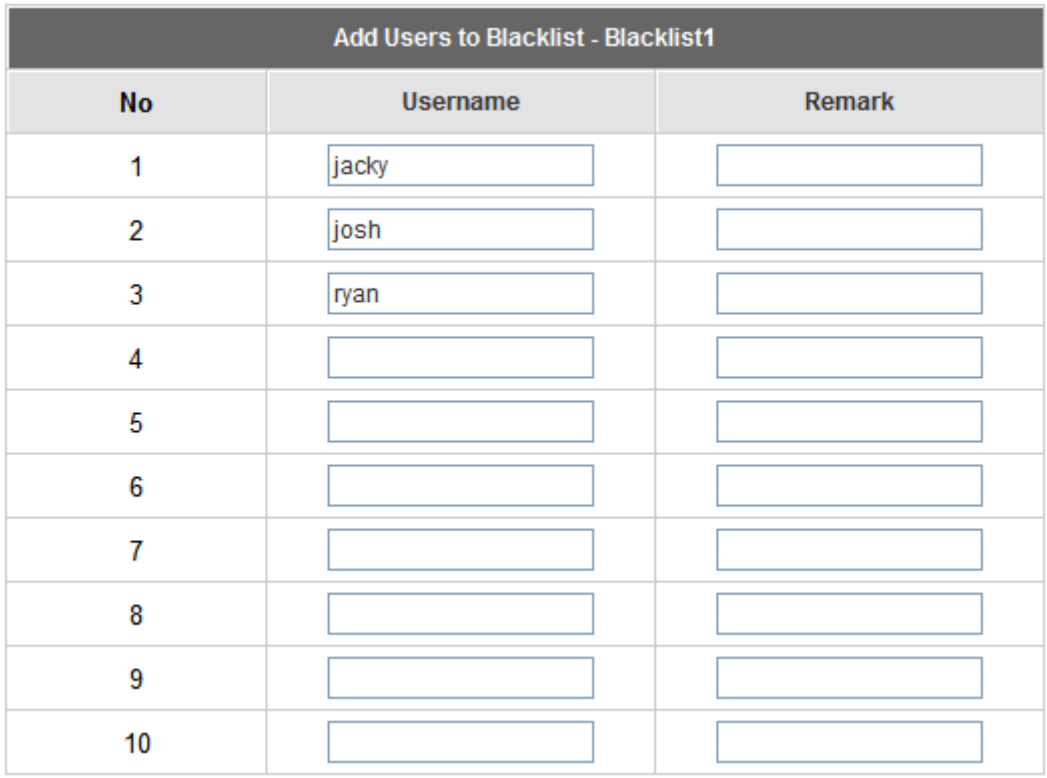
Policy Configuration	
Select Policy: Policy1	
Policy Name 1 : Policy1	
Firewall Profile	Setting
Specific Route Profile	Setting
Schedule Profile	Setting
Bandwidth	Unlimited
Maximum Concurrent Sessions	500 Sessions per User

5.3.3 Black List Configuration

The administrator can add, delete, or edit the black list for user access control. Each black list can include 500 users at most. If a user in the black list wants to log into the system, the user's access will be denied. The administrator can use the pull-down menu to select the desired black list.



- **Select Black List:** There are 5 lists to select from for the desired black list.
- **Name:** Set the black list name and it will show on the pull-down menu above.
  - **Add User to List:** Click the hyperlink to add users to the selected black list, click ***Apply*** to add the users.



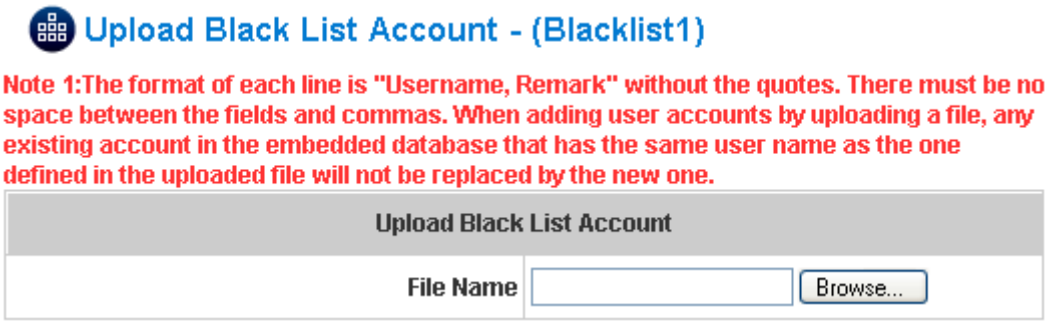
Added User(s) : jacky , josh , ryan

Add Users to Blacklist - Blacklist1		
No	**Username**	**Remark**
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

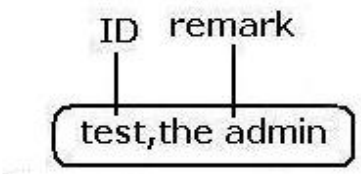
Black List Configuration		
Select Black List: 1:Blacklist1		
Name	Blacklist1	
User	Remark	Delete
jacky		☐
josh		☐
ryan		☐

If the administrator wants to remove a user from the black list, just select the user's **"Delete"** check box and then click the ***Delete*** button to remove that user from the black list.

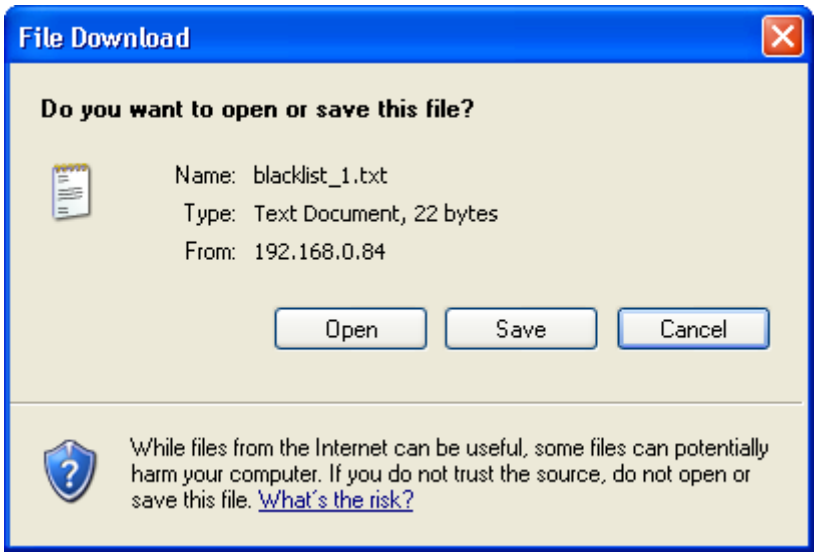
- **Import Black List:** Click this to enter the **Upload black List Account – (Blacklist1)** page. Click the ***Browse*** button to select the text file for the user account upload to the black list. Then click ***Submit*** to complete the upload process.



The uploading file should be a text file and the format of each line should be ***"ID, Remark"*** without the quotes. There must be no spaces between the fields and commas. When adding user accounts by uploading a file, existing accounts in the embedded database that are also defined in the data file will not be replaced by the new ones.

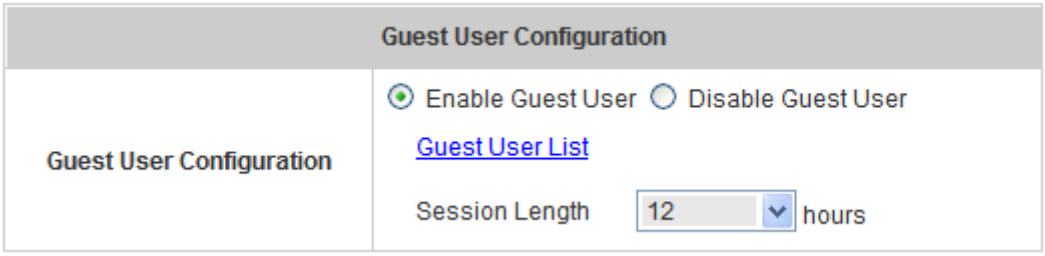


- **Export Black List:** Click ***Export List*** to create a .txt file and then save it on disk.

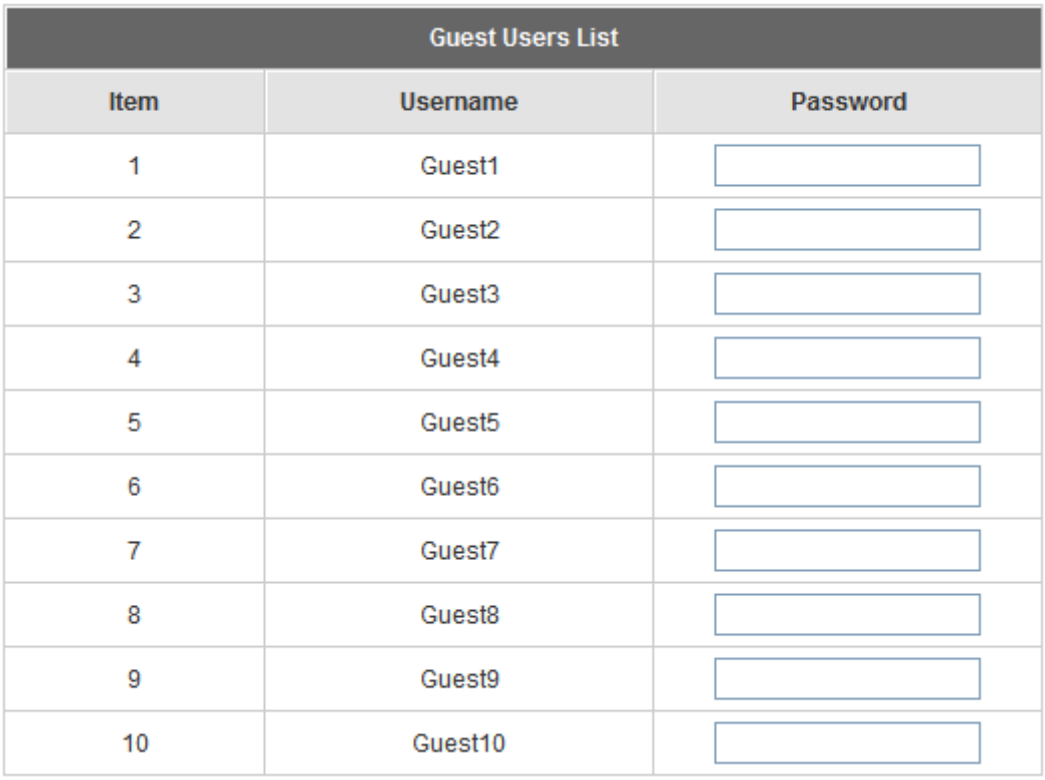


5.3.4 Guest User Configuration

This function can permit guests to log into the system. Select **"Enable Guest User"** and click ***Apply*** to save the settings.

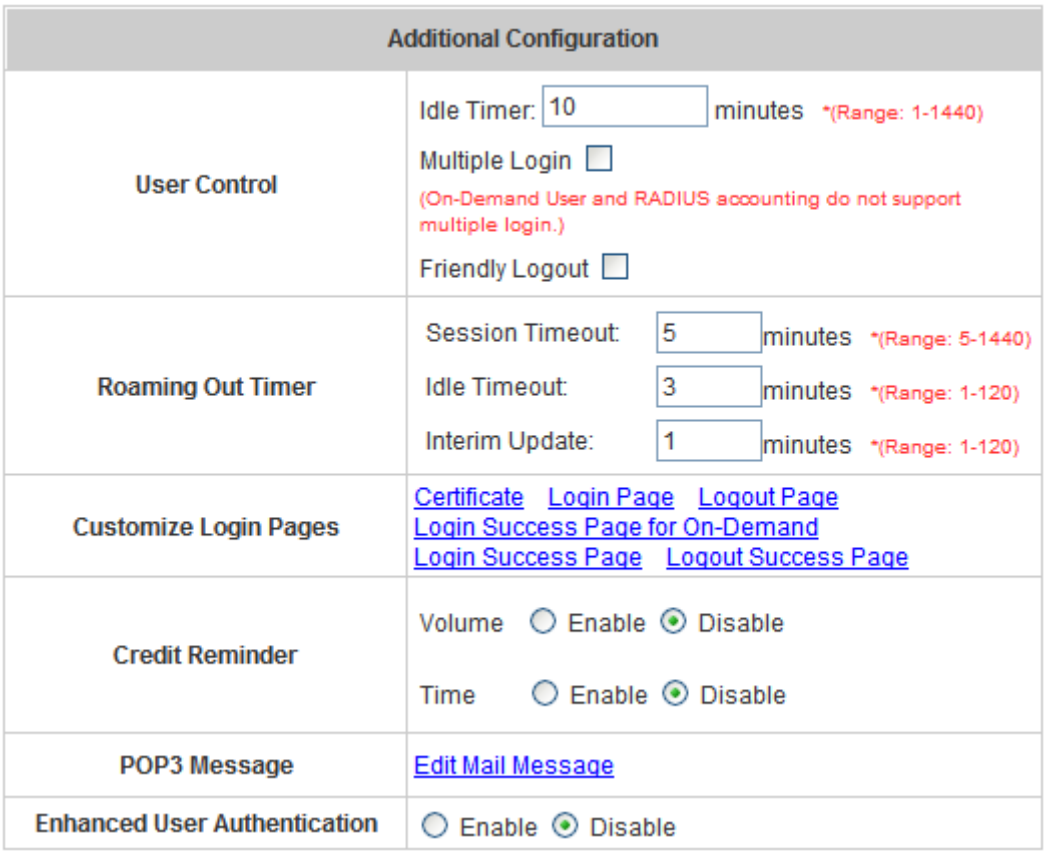


- **Guest User List:** IAS-2000 v2 offers ten guest user accounts. To activate a guest user, just enter the password in the corresponding **"Password"** field for that guest account. Guest accounts with blank password will not be activated.



- **Session Length:** This restricts the connection time of the guest users. The default session length is 6 hours and the available session time ranges from 1 to 12 hours or unlimited.

5.3.5 Additional Configuration

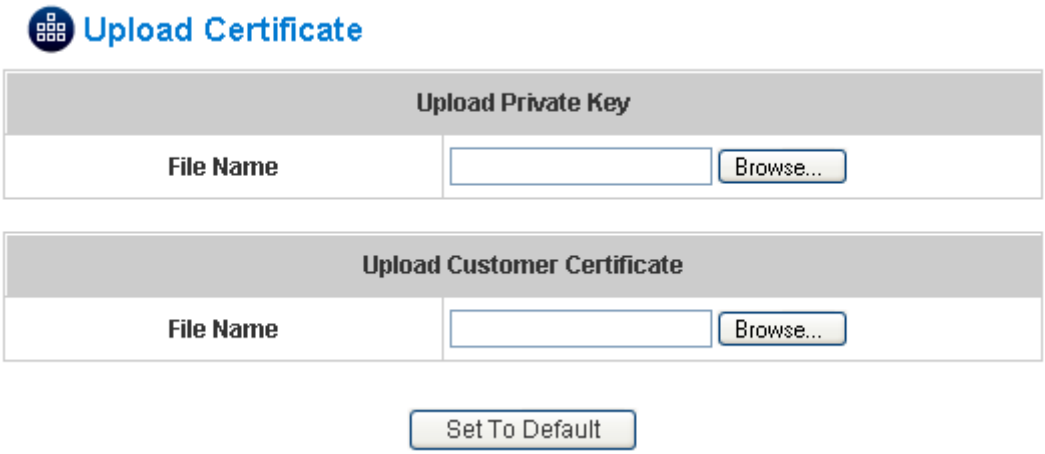


- **User Control:** Functions under this section applies for all general users.
  - **Idle Timer:** If a user has been idled with no network activities, the system will automatically kick out the user. The logout timer can be set in the range of 1~1440 minutes, and the default logout time is 10 minutes.
  - **Multiple Login:** When enabled, a user account can be logged in from different computers at the same time. (This function doesn't support for On-demand users and RADIUS authentication method.)
  - **Friendly Logout:** When a user logs into the network, a small login successful window will appear to show the user's information. If enabled, when users try to close the small window, a confirming popup window will appear to notify users in case users close the small window by accident.

- **Roaming Out Timer**
  - **Session Timeout:** The time that the user can access the network while roaming. When the time is up, the user will be kicked out automatically.
  - **Idle Timeout:** If a user has been idled with no network activities for more than the idle time, the system will automatically kick out the user.
  - **Interim Update:** The system will update the users' current status and usage according to this time value periodically.

- **Customize Login Pages**

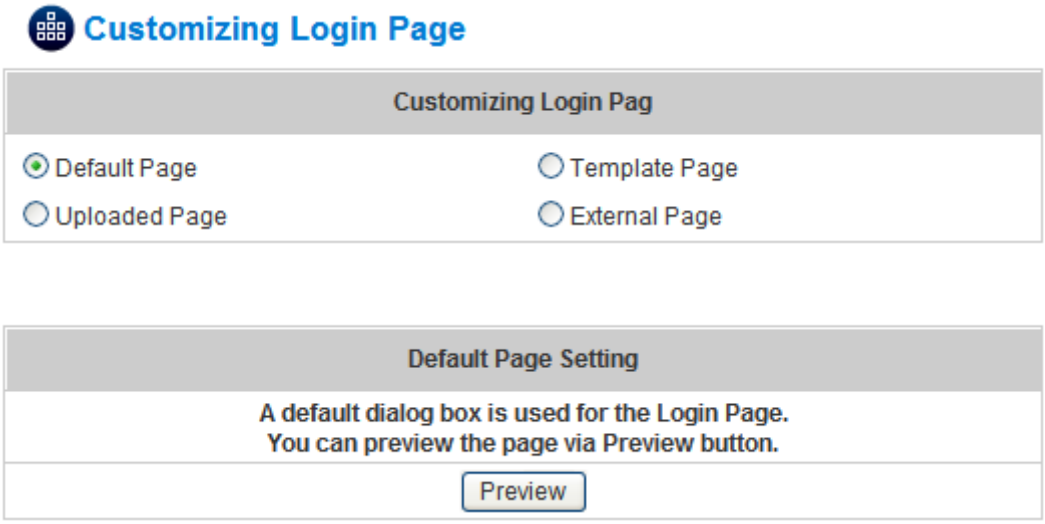
1. **Certificate:** The administrator can upload a new private key and a customer certificate. Click the ***Browse*** button to select the file for the certificate to upload. Then click ***Submit*** to complete the upload process.



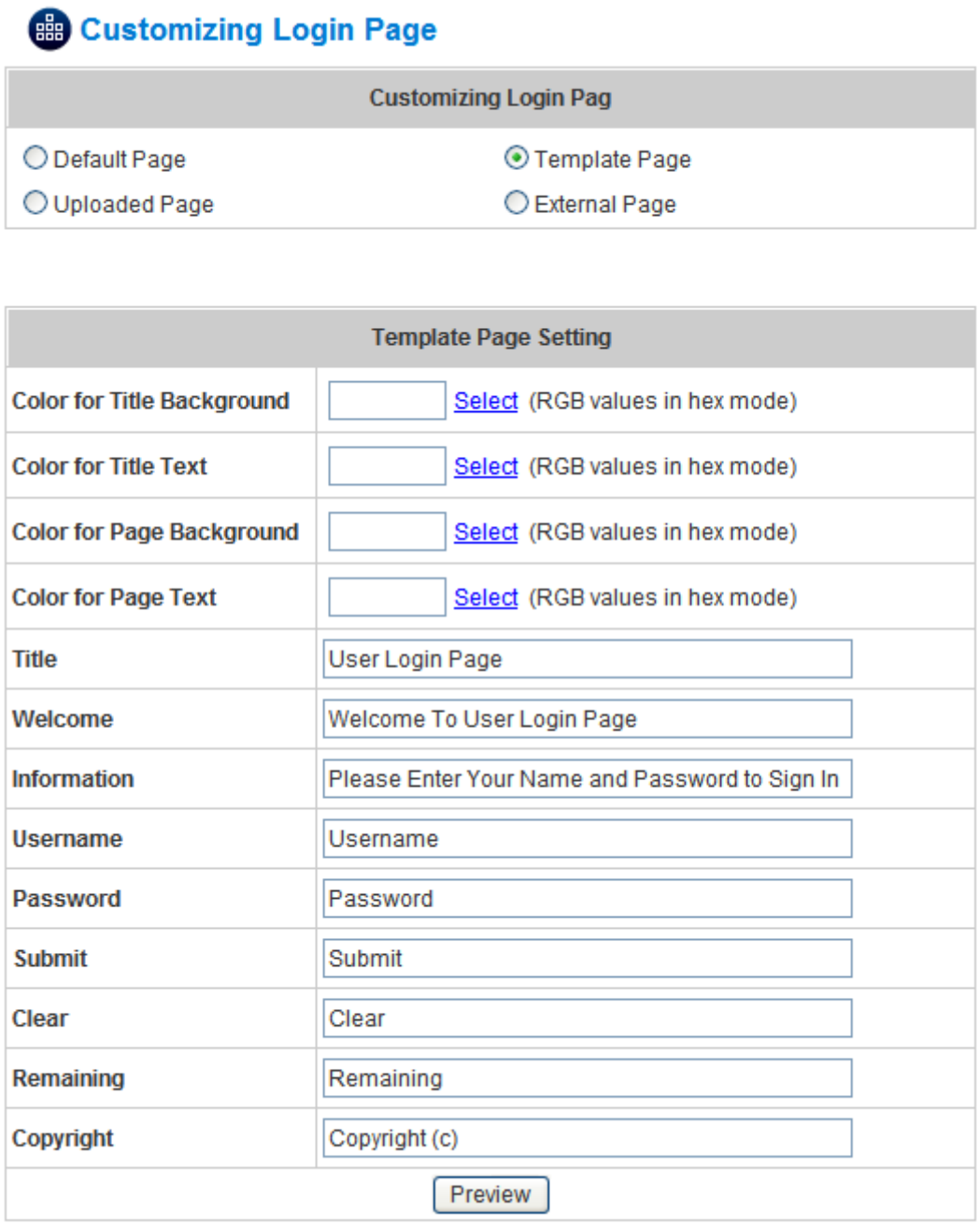
Click ***Set To Default*** and then click ***restart*** to use the default certificate and key.

2. **Login Page:** The administrator can use the default login page or get the customized login page by setting the template page, uploading the page or downloading from the specific external website. After finishing the setting, Click ***Preview*** to see the login page.

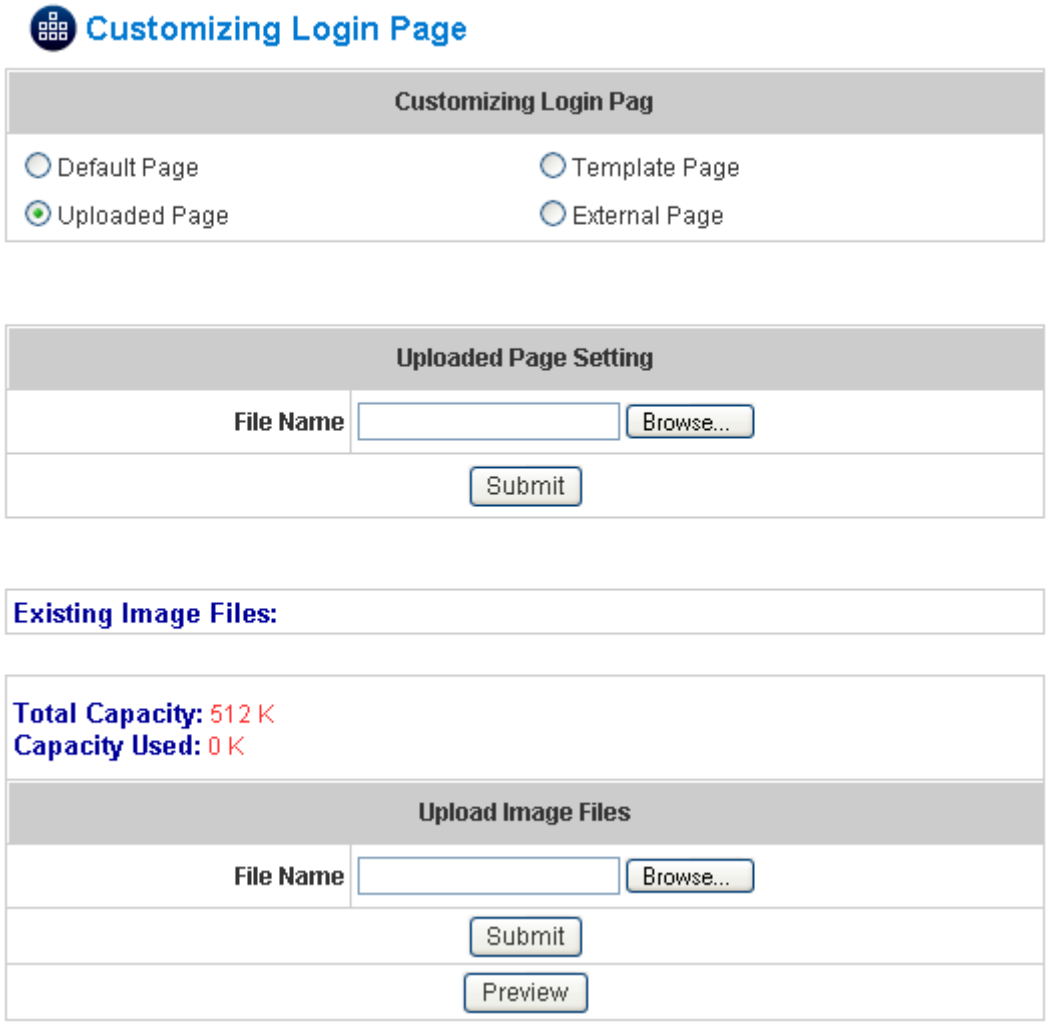
a. Choose ***Default Page*** to use the default login page.



b. Choose ***Template Page*** to make a customized login page here. Click ***Select*** to pick up a color and then fill in all of the blanks. Click ***Preview*** to see the result first.



c. Choose ***Uploaded Page*** and upload a login page. Click the ***Browse*** button to select the file to upload. Then click ***Submit*** to complete the upload process.



After the upload process is completed, the new login page can be previewed by clicking ***Preview*** button at the bottom.

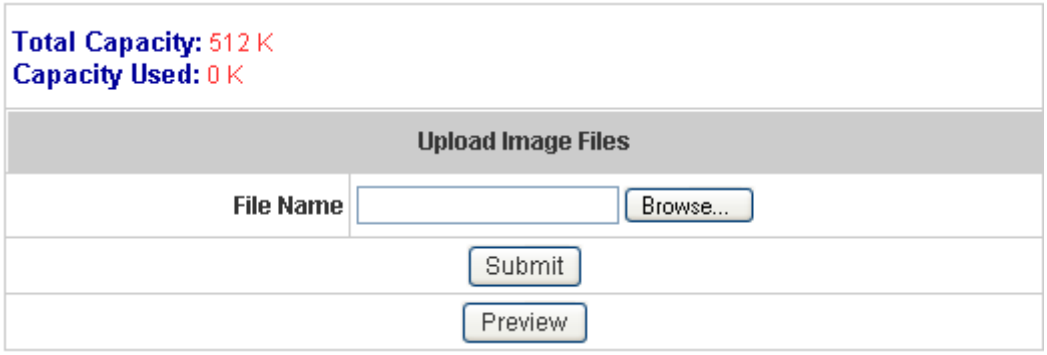
The user-defined login page must include the following HTML codes to provide the necessary fields for username and password.

```
<form action="userlogin.shtml" method="post" name="Enter">
<input type="text" name="myusername">
<input type="password" name="mypassword">
<input type="submit" name="submit" value="Enter">
<input type="reset" name="clear" value="Clear">
</form>
```

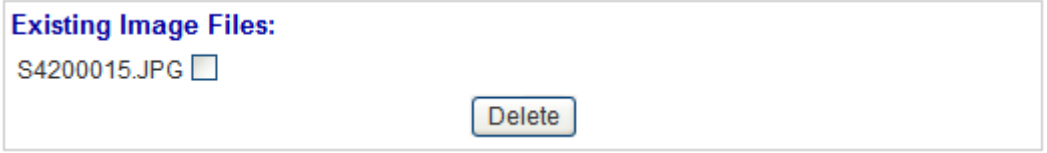
If the user-defined login page includes an image file, the image file path in the HTML code must be the image file to be uploaded.

```
<img src="images/xx.jpg">
```

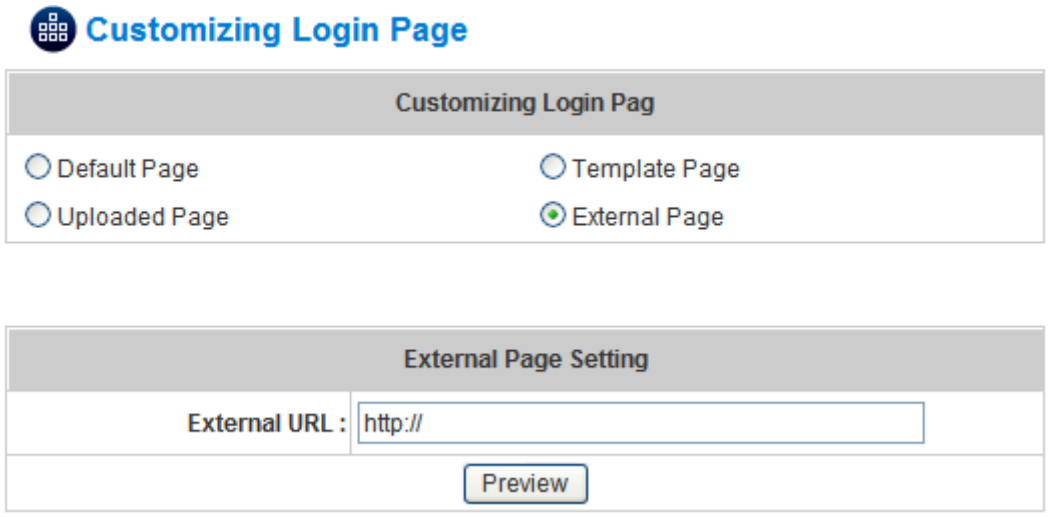
Then, enter or browse the filename of the images to upload in the **Upload Images** field on the **Upload Images Files** page and then click ***Submit***. The system will show the used space and the maximum size of the image file of 512K. If the administrator wishes to restore the factory default of the login page, click the ***Use Default Page*** button to restore it to default.



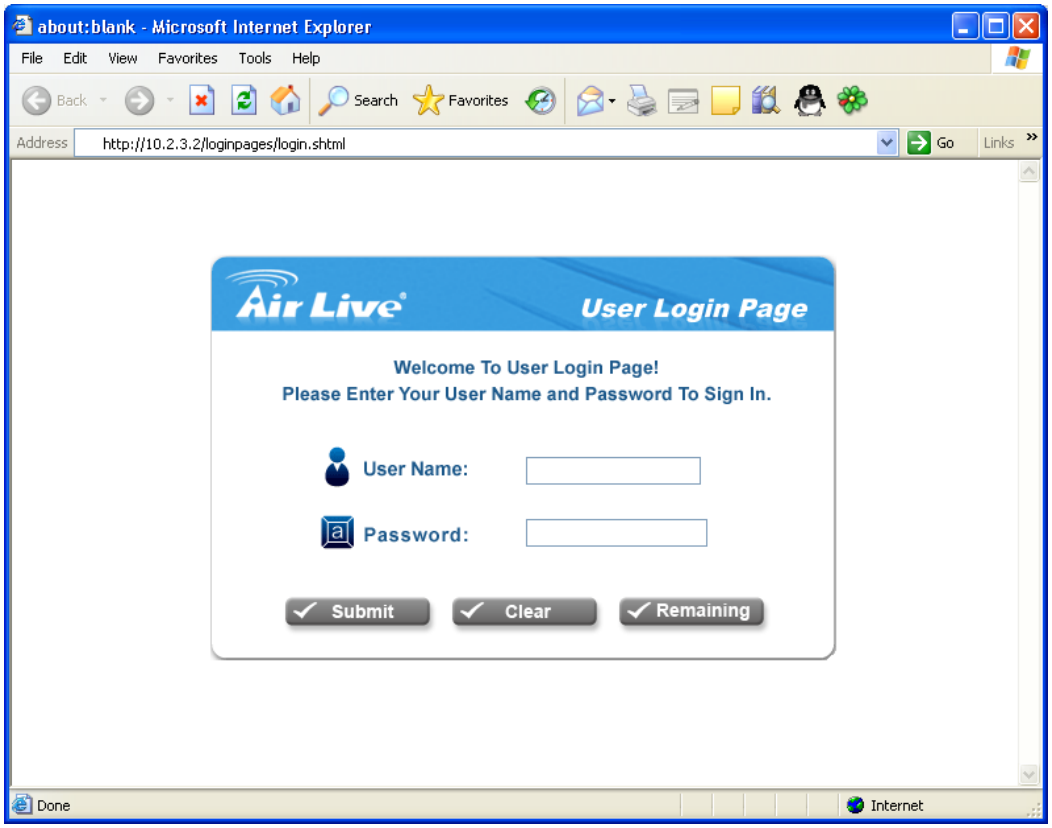
After the image file is uploaded, the file name will show on the **"Existing Image Files"** field. Check the file and click ***Delete*** to delete the file.



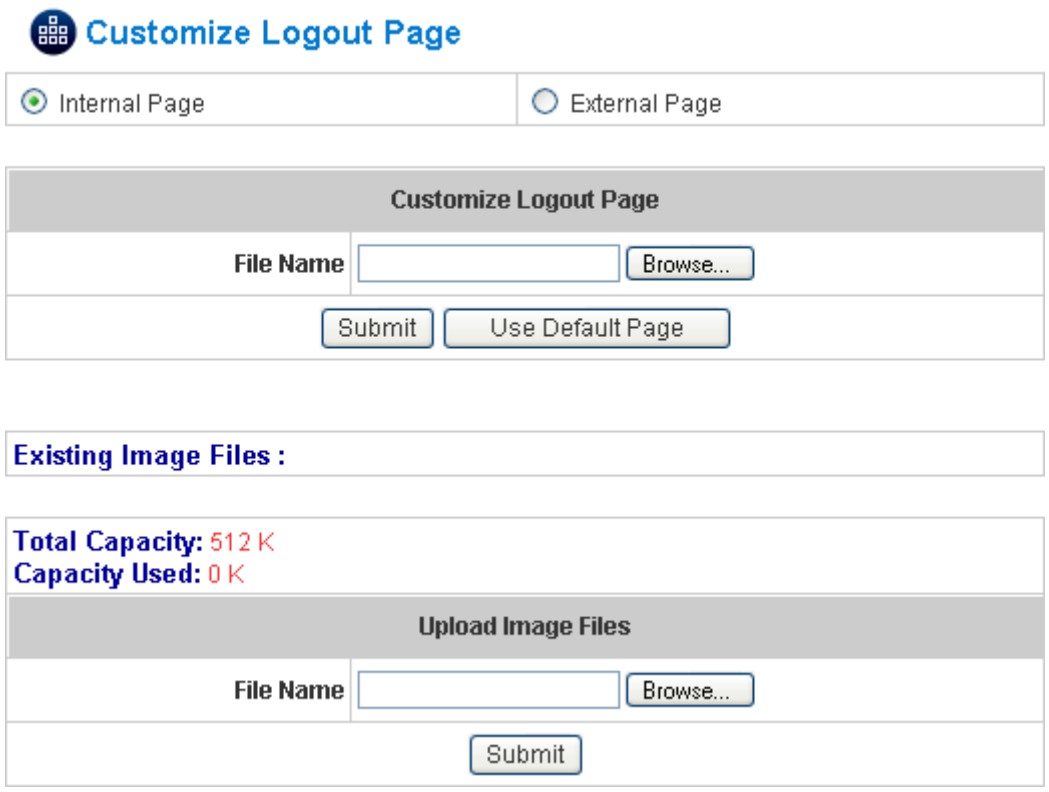
d. Choose the ***External Page*** selection and get the login page from the specific website. Enter the website address in the **"External Page Setting"** field and then click ***Apply***.



After applying the setting, the new login page can be previewed by clicking ***Preview*** button at the bottom of this page.



3. **Logout Page:** The users can apply their own logout page here. The process is similar to that of Login Page.

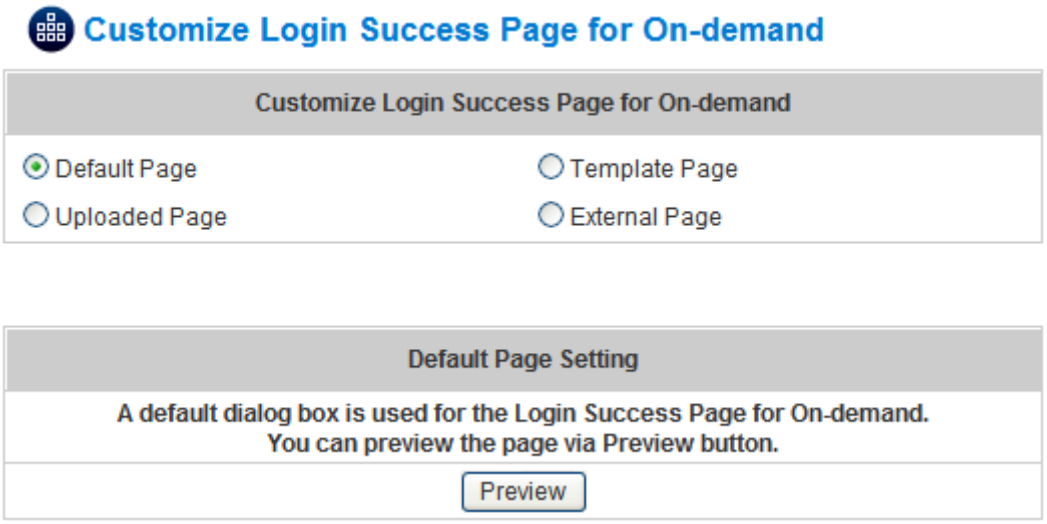


The different part is the HTML code of the user-defined logout interface must include the following HTML code that the user can enter the username and password. After the upload is completed, the user-defined login user interface can be previewed by clicking ***Preview*** at the bottom of this page. If want to restore the factory default setting of the logout interface, click the "**Use Default Page"** button.

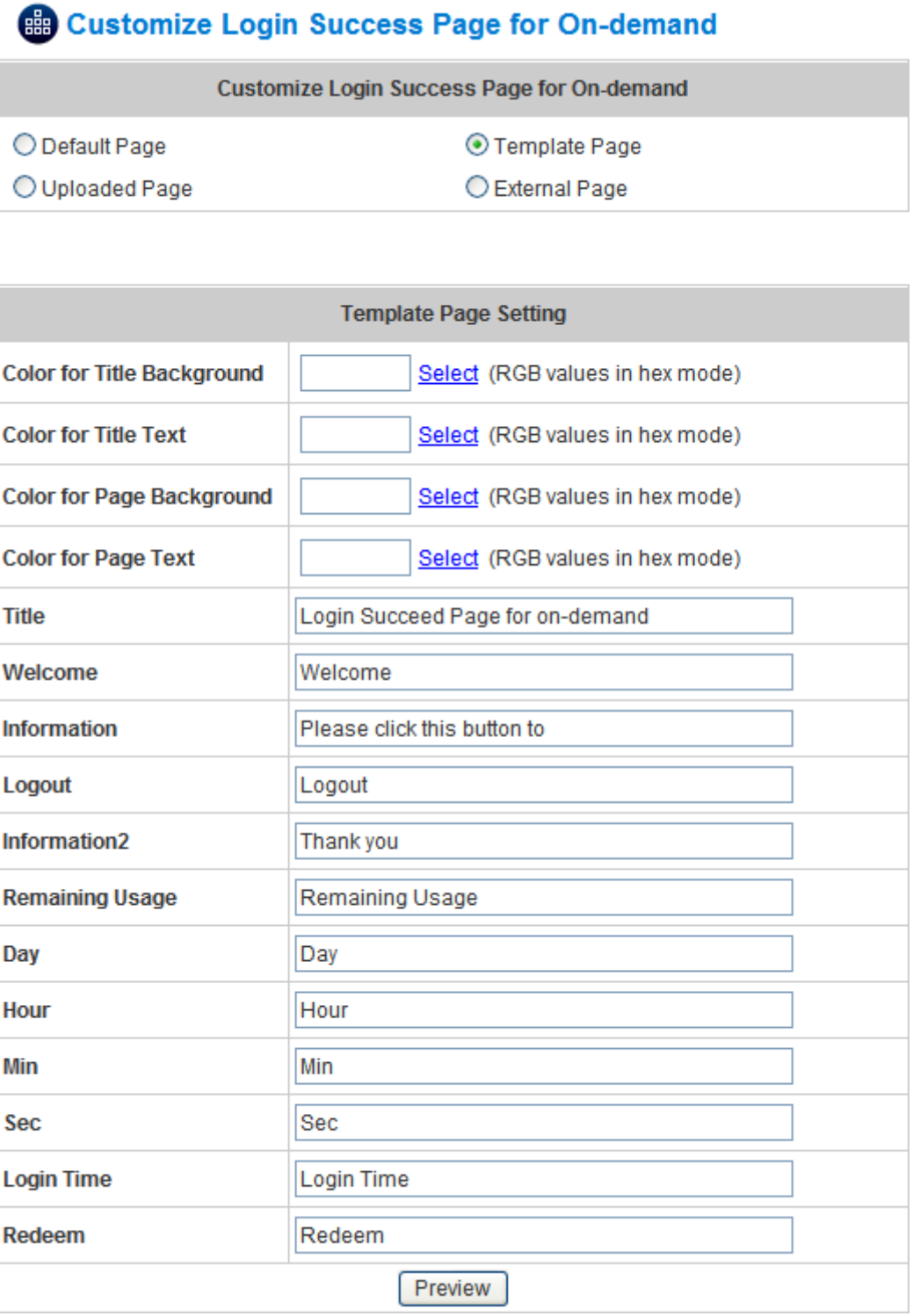
```
<form action="userlogout.shtml" method="post" name="Enter">
<input type="text" name="myusername">
<input type="password" name="mypassword">
<input type="submit" name="submit" value="Enter">
<input type="reset" name="clear" value="Clear">
</form>
```

4. **Login Success Page for On-Demand:** The administrator can use the default login success page for On-Demand or get the customized login success page for On-Demand by setting the template page, uploading the page or downloading from the specific website. After finishing the setting, click ***Preview*** to see the login success page for On-Demand.

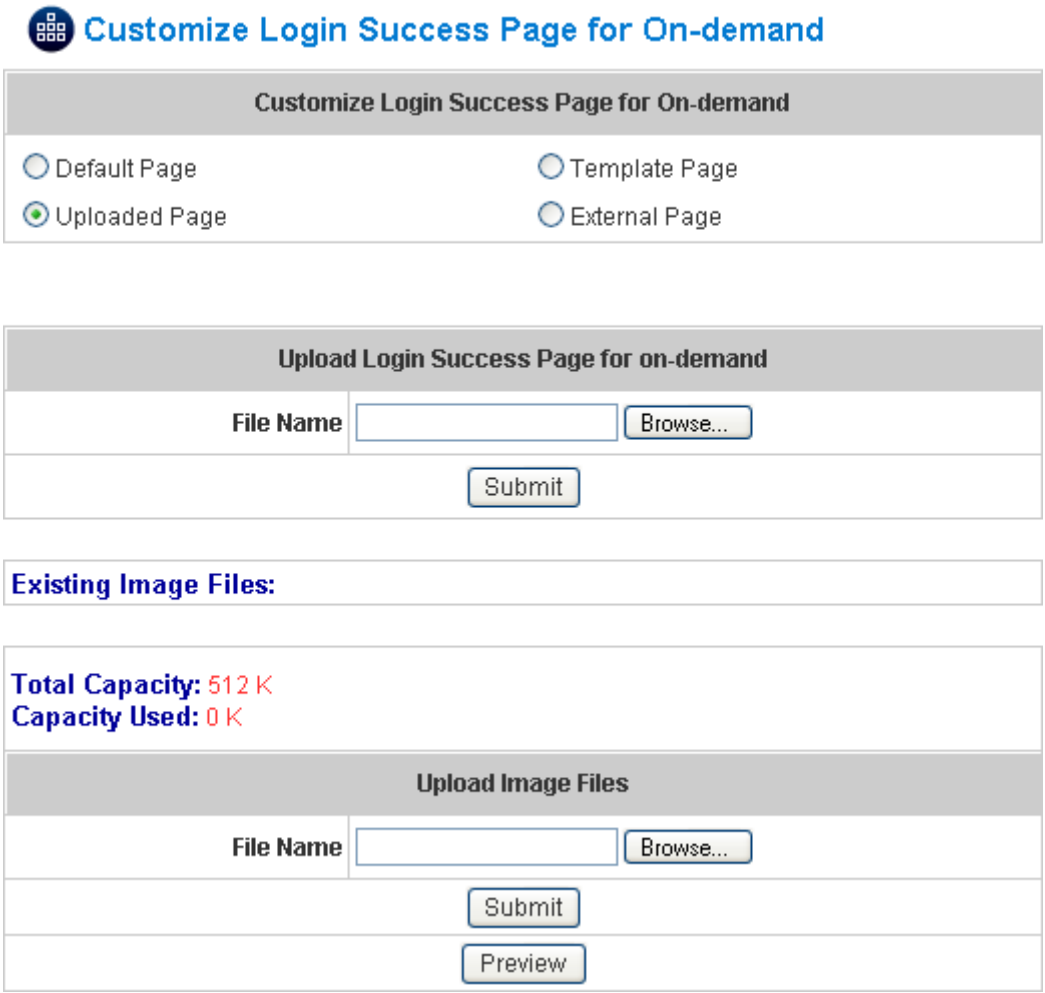
a. Choose ***Default Page*** to use the default login success page for On-Demand.



b. Choose ***Template Page*** to make a customized login success page for On-Demand here. Click ***Select*** to pick up a color and then fill in all of the blanks. Click ***Preview*** to see the result first.



c. Choose ***Uploaded Page*** and get the login success page for On-Demand by uploading. Click the ***Browse*** button to select the file for the login success page for On-Demand upload. Then click ***Submit*** to complete the upload process

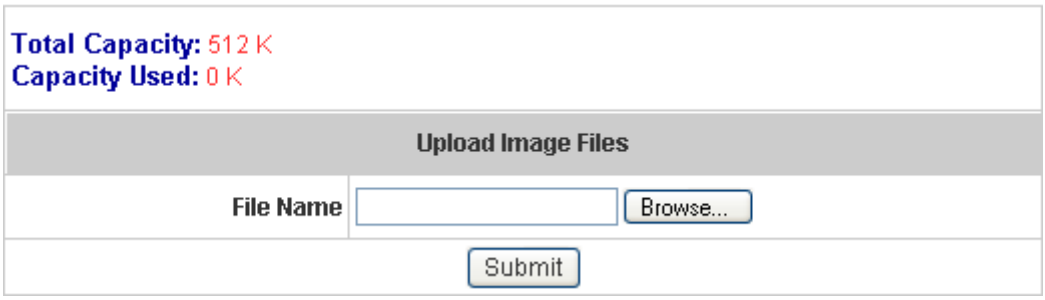


After the upload process is completed, the new l login success page for On-Demand can be previewed by clicking ***Preview*** button at the bottom.

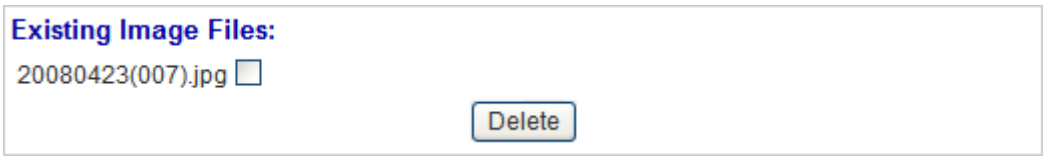
If the user-defined login success page for On-Demand includes an image file, the image file path in the HTML code must be the image file to be uploaded.

<img src="images/xx.jpg">

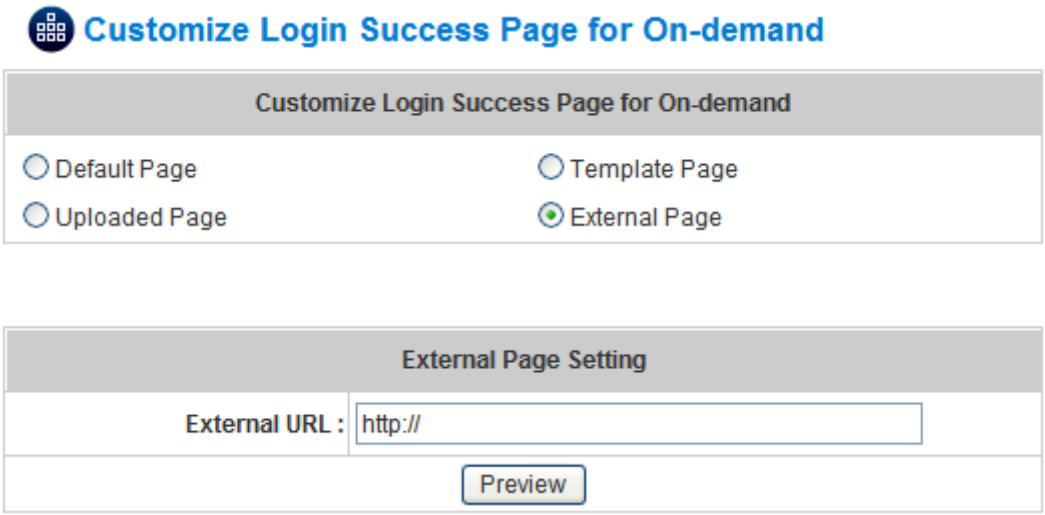
Then, enter or browse the filename of the images to upload in the **Upload Images** field on the **Upload Images Files** page and then click ***Submit***. The system will show the used space and the maximum size of the image file of 512K. If the administrator wishes to restore the factory default of the login success page for On-Demand, click the ***Use Default Page*** button to restore it to default.



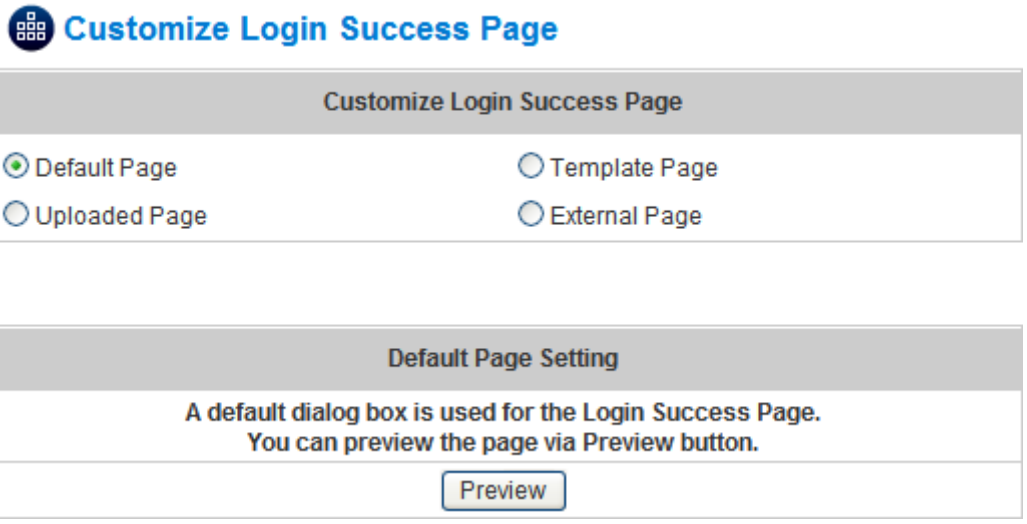
After the image file is uploaded, the file name will show on the **"Existing Image Files"** field. Check the file and click ***Delete*** to delete the file.



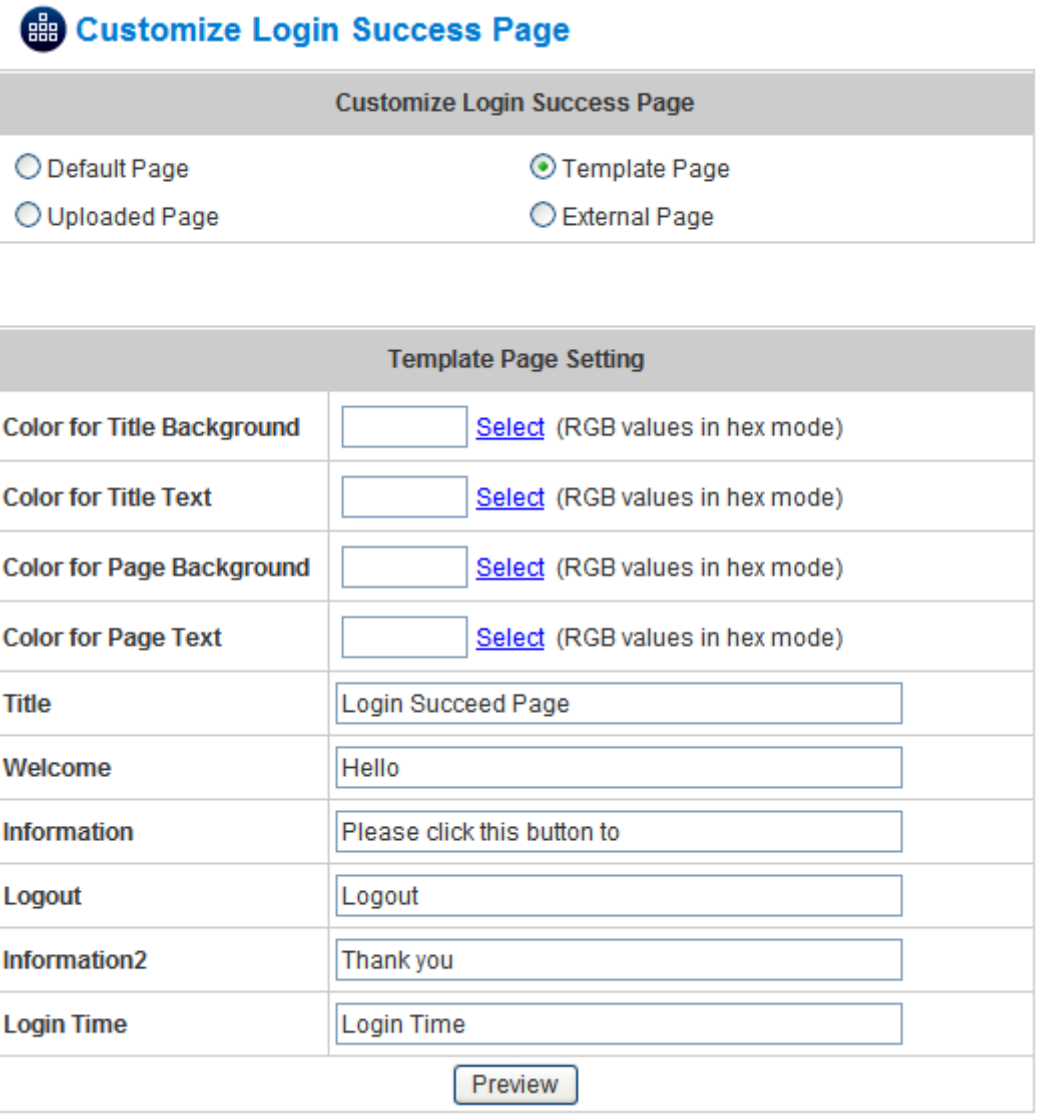
d. Choose the ***External Page*** selection and get the login success page from the specific website. Enter the website address in the **"External Page Setting"** field and then click ***Apply***. After applying the setting, the new login success page for On-Demand can be previewed by clicking ***Preview*** button at the bottom of this page.



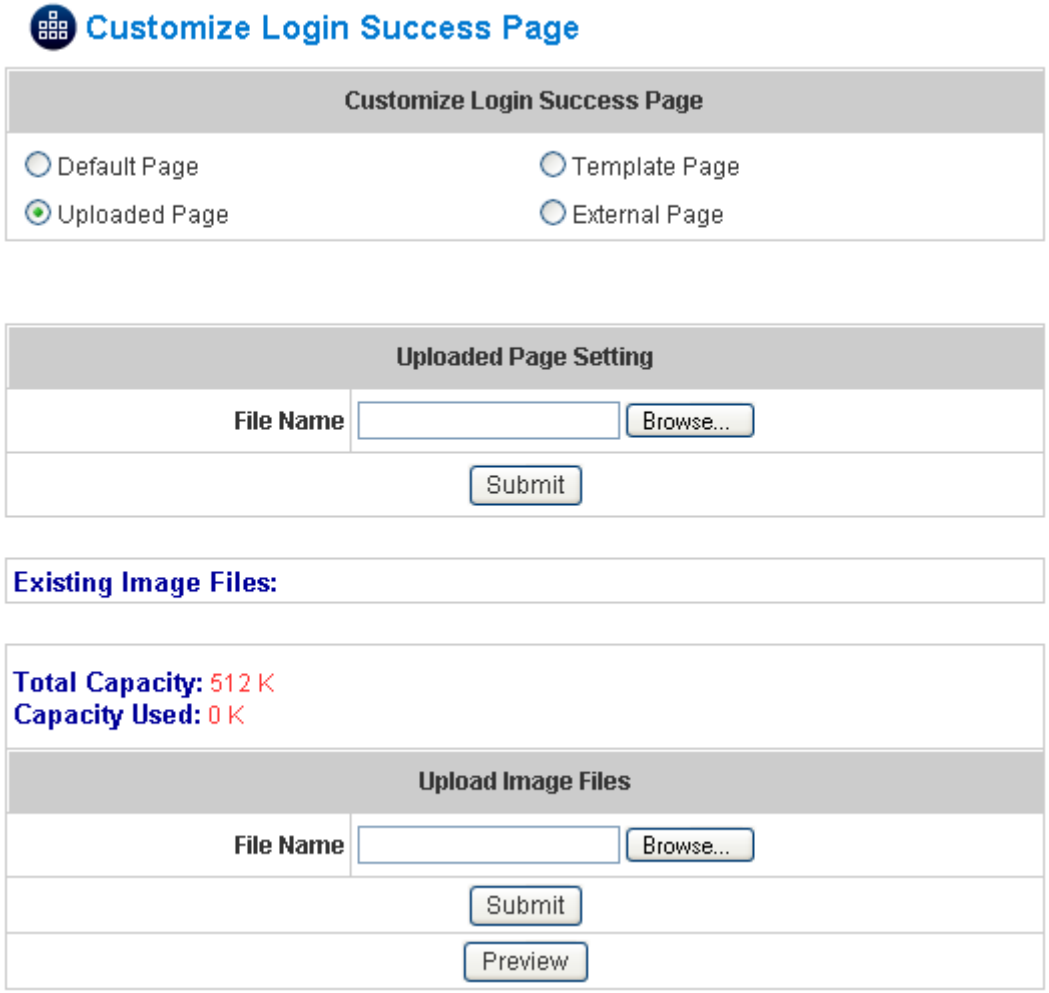
5. **Login Success Page:** The administrator can use the default login success page or get the customized login success page by setting the template page, uploading the page or downloading from the specific website. After finishing the setting, click ***Preview*** to see the login success page.
   a. Choose ***Default Page*** to use the default login success page.



b. Choose ***Template Page*** to make a customized login success page here. Click ***Select*** to pick up a color and then fill in all of the blanks. Click ***Preview*** to see the result first.



c. Choose ***Uploaded Page*** and get the login success page to upload. Click the ***Browse*** button to select the file for the login success page upload. Then click ***Submit*** to complete the upload process.

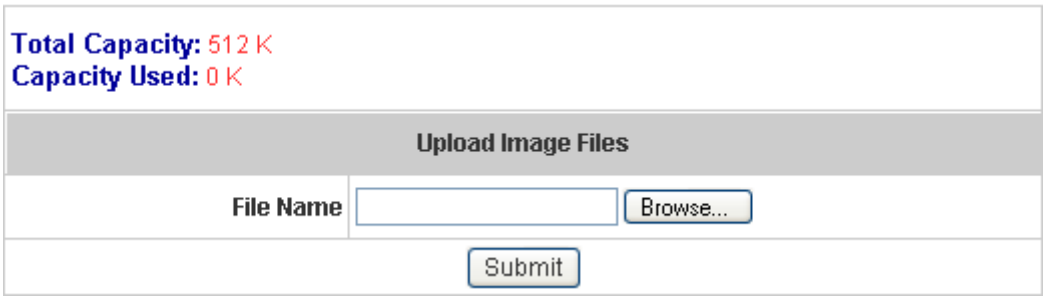


After the upload process is completed, the new login success page can be previewed by clicking ***Preview*** button at the bottom.

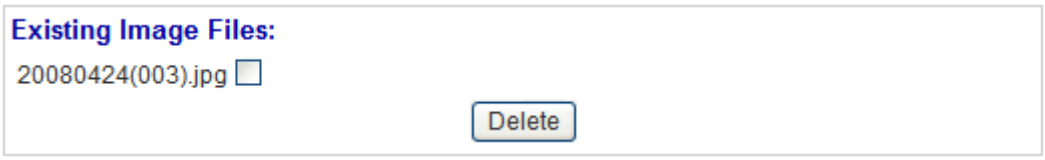
If the user-defined login success page includes an image file, the image file path in the HTML code must be the image file to be uploaded.

<img src="images/xx.jpg">

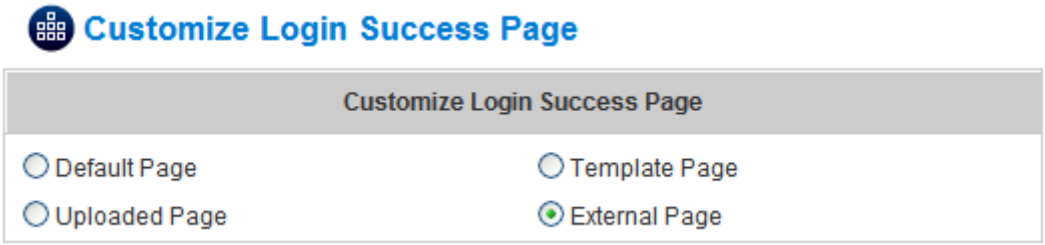
Then, enter or browse the filename of the images to upload in the **Upload Images** field on the **Upload Images Files** page and then click ***Submit***. The system will show the used space and the maximum size of the image file of 512K. If the administrator wishes to restore the factory default of the login success page, click the ***Use Default Page*** button to restore it to default.

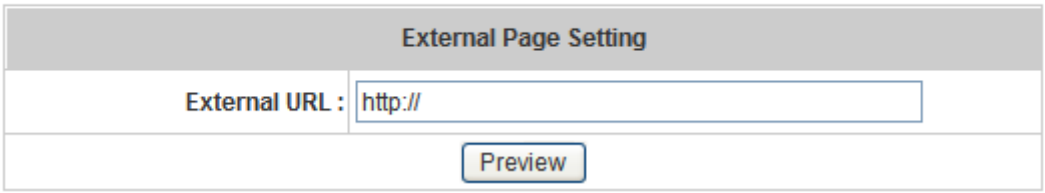


After the image file is uploaded, the file name will show on the **"Existing Image Files"** field. Check the file and click ***Delete*** to delete the file.



d. Choose the ***External Page*** selection and get the login success page from the specific website. Enter the website address in the **"External Page Setting"** field and then click ***Apply***. After applying the setting, the new login success page can be previewed by clicking ***Preview*** button at the bottom of this page.

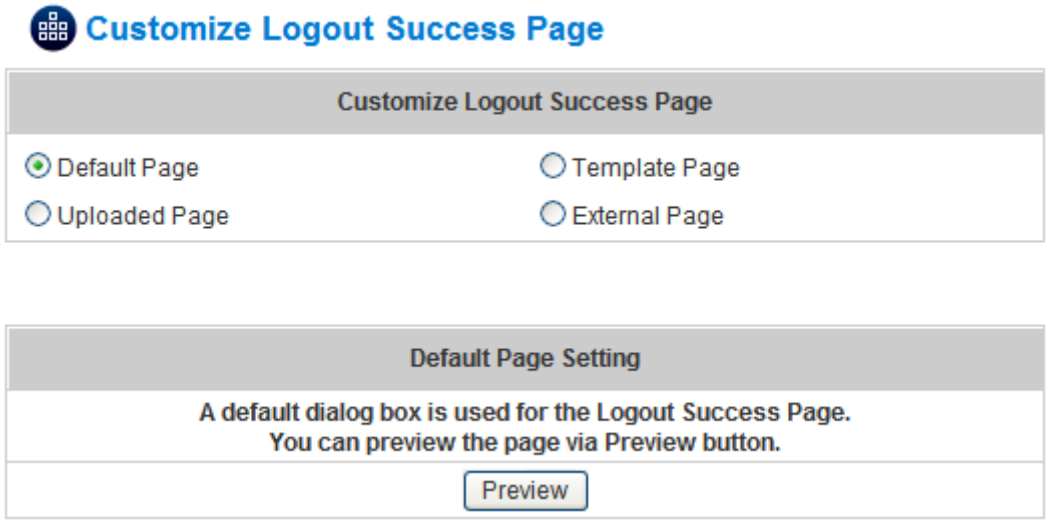




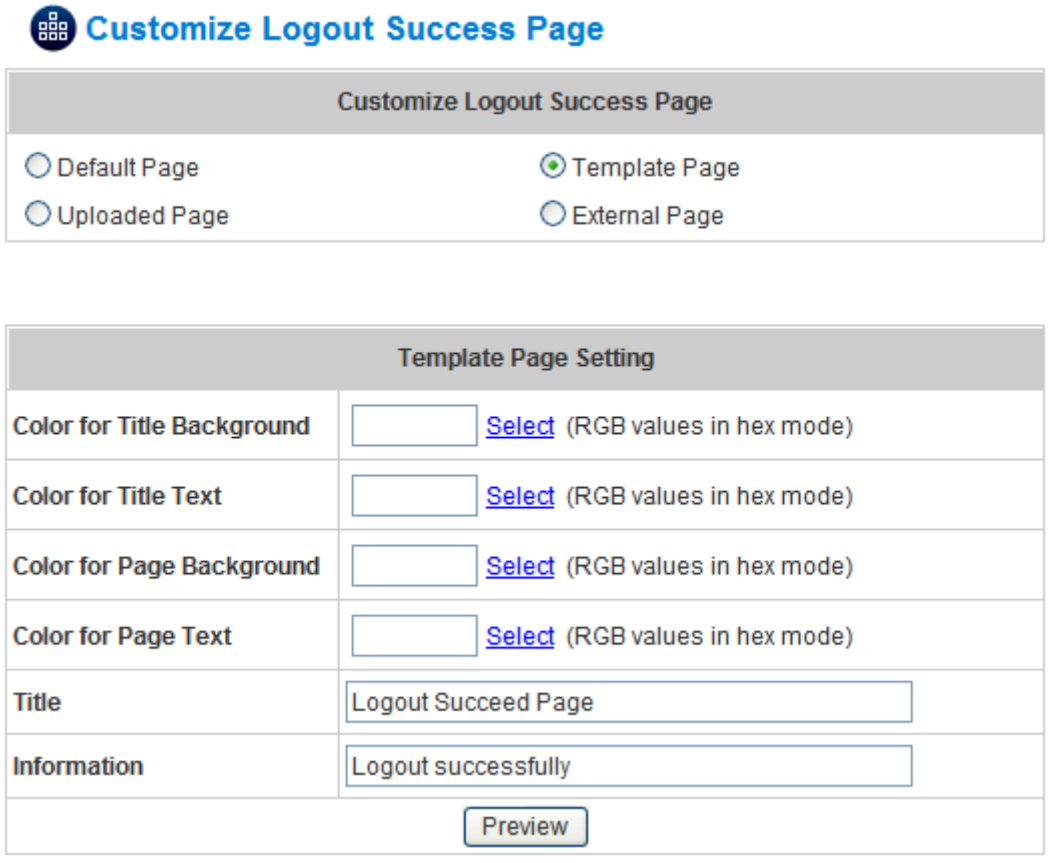
Please note that is needed in your HTML code to make sure the page works correctly.

```
<form action="userlogin.shtml" method="post" name="Enter">
<input type="text" name="myusername">
<input type="password" name="mypassword">
<input type="submit" name="submit" value="Enter">
<input type="reset" name="clear" value="Clear">
</form>
```

6. **Logout Success Page:** The administrator can use the default logout success page or get the customized logout success page by setting the template page, uploading the page or downloading from the specific external website. After finishing the setting, click ***Preview*** to see the logout success page.
   a. Choose ***Default Page*** to use the default logout success page.



   b. Choose ***Template Page*** to make a customized logout success page here. Click ***Select*** to pick up a color and then fill in all of the blanks. Click ***Preview*** to see the result first.



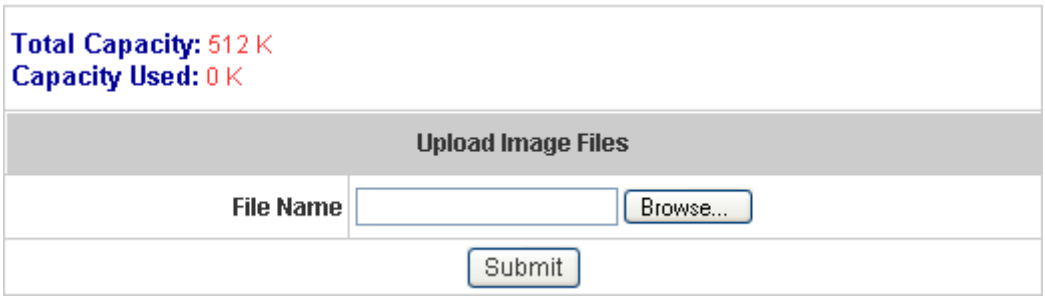
c. Choose ***Uploaded Page*** and get the logout success page to upload. Click the ***Browse*** button to select the file for the logout success page to be uploaded. Then click ***Submit*** to complete the upload process.

After the upload process is completed, the new logout success page can be previewed by clicking ***Preview*** button at the bottom.

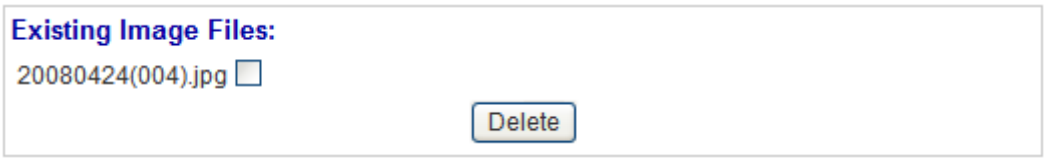
If the user-defined logout success page includes an image file, the image file path in the HTML code must be the image file to be uploaded.

<img src="images/xx.jpg">

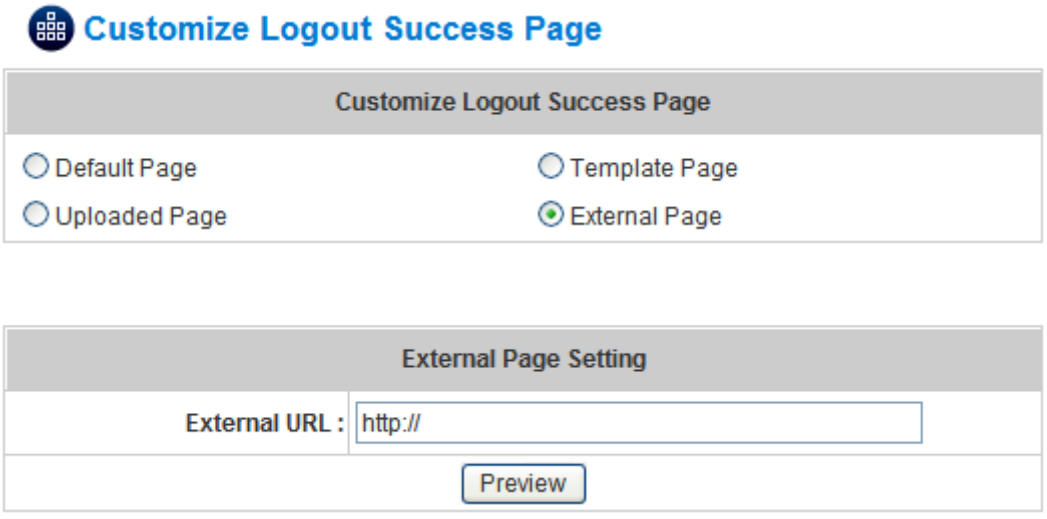
Then, enter or browse the filename of the images to upload in the **Upload Images** field on the **Upload Images Files** page and then click ***Submit***. The system will show the used space and the maximum size of the image file of 512K. If the administrator wishes to restore the factory default of the login success page, click the ***Use Default Page*** button to restore it to default.



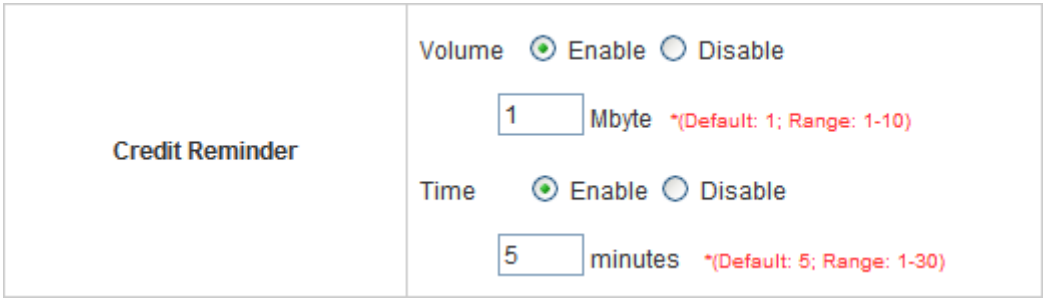
After the image file is uploaded, the file name will show on the **"Existing Image Files"** field. Check the file and click ***Delete*** to delete the file.



d. Choose the ***External Page*** selection and get the logout success page from the specific external website. Enter the website address in the **"External Page Setting"** field and then click ***Apply***. After applying the setting, the new logout success page can be previewed by clicking ***Preview*** button at the bottom of this page.

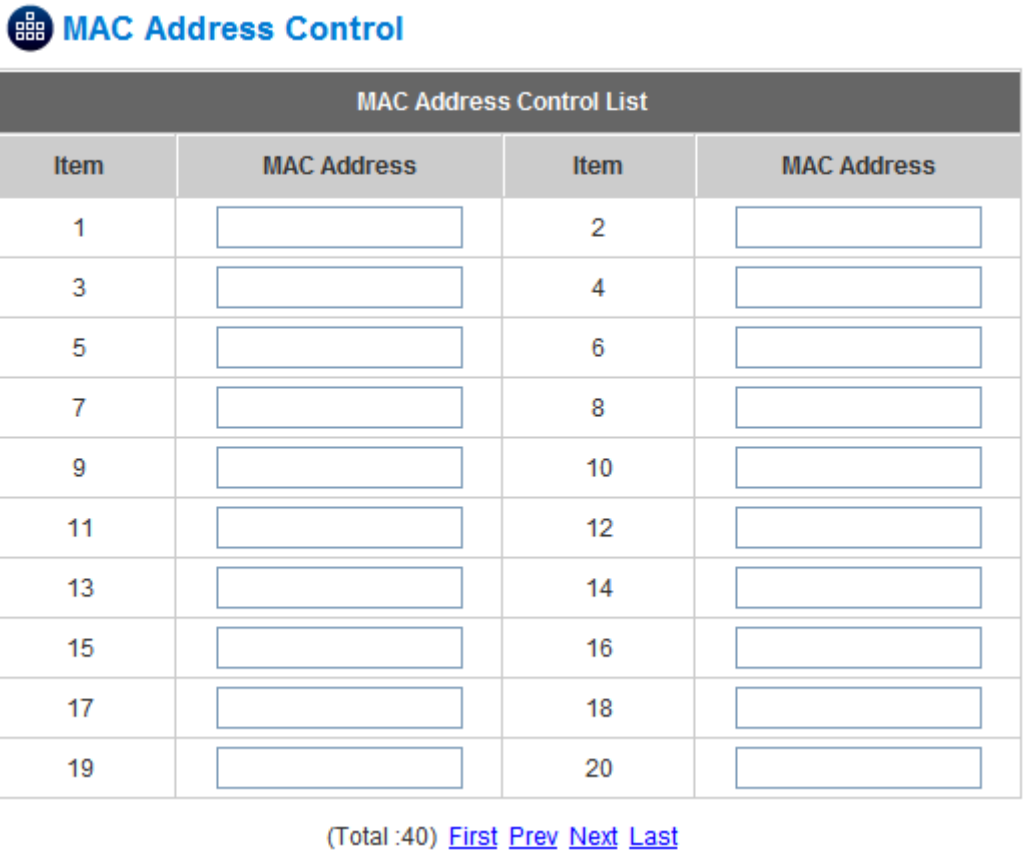


- **Credit Reminder:** The administrator can enable this function to remind the on-demand users before their credit run out. There are two kinds of reminder, **Volume** and **Time**. The default reminding trigger level for **Volume** is 1Mbyte and the level for **Time** is 5 minutes.



- **POP3 Message:** If a user tries to retrieve mail from POP3 mail server before login, the users will receive a welcome mail from IAS-2000 v2. The administrator can edit the content of this welcome mail.

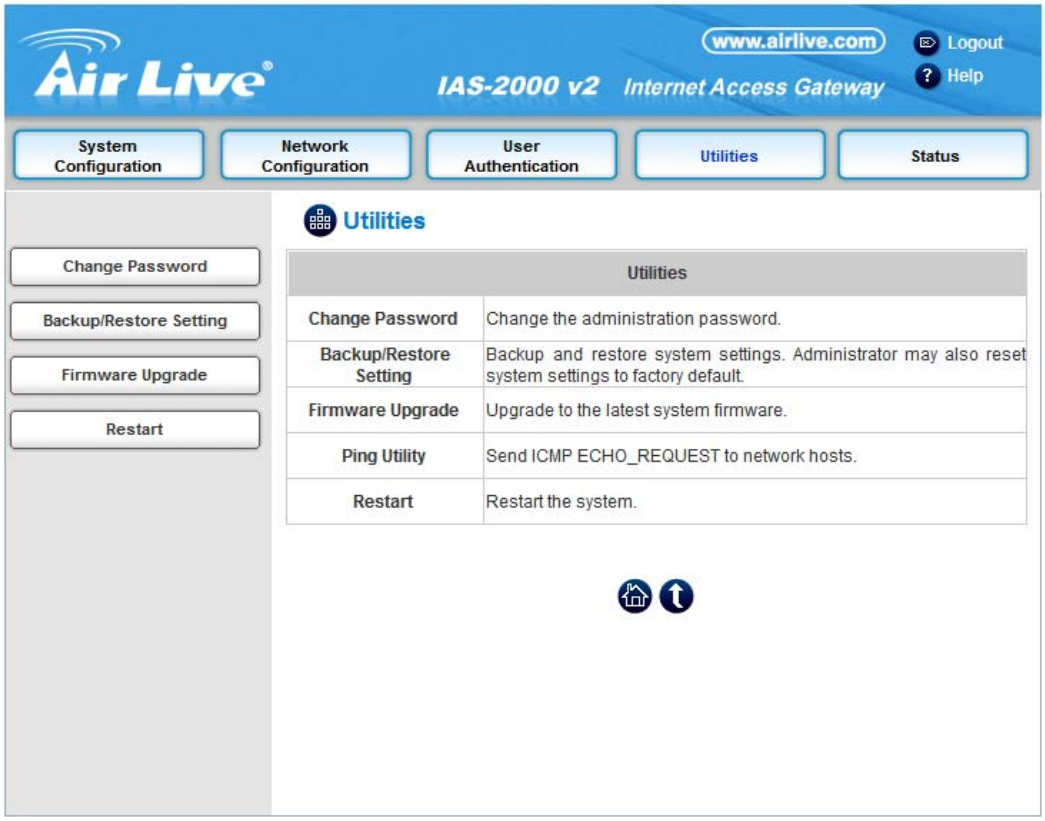
- **Enhance User Authentication:** With this function, only the users with their MAC addresses in this list can log into IAS-2000 v2. There will only be 40 users allowed in this MAC address list. User authentication is still required for these users. Please click the hyper link of **Permitted MAC Address List** to enter the MAC Address Control page and fill in the wanted MAC addresses.



Caution: *The format of the MAC address is: xx:xx:xx:xx:xx:xx or xx-xx-xx-xx-xx-xx.*

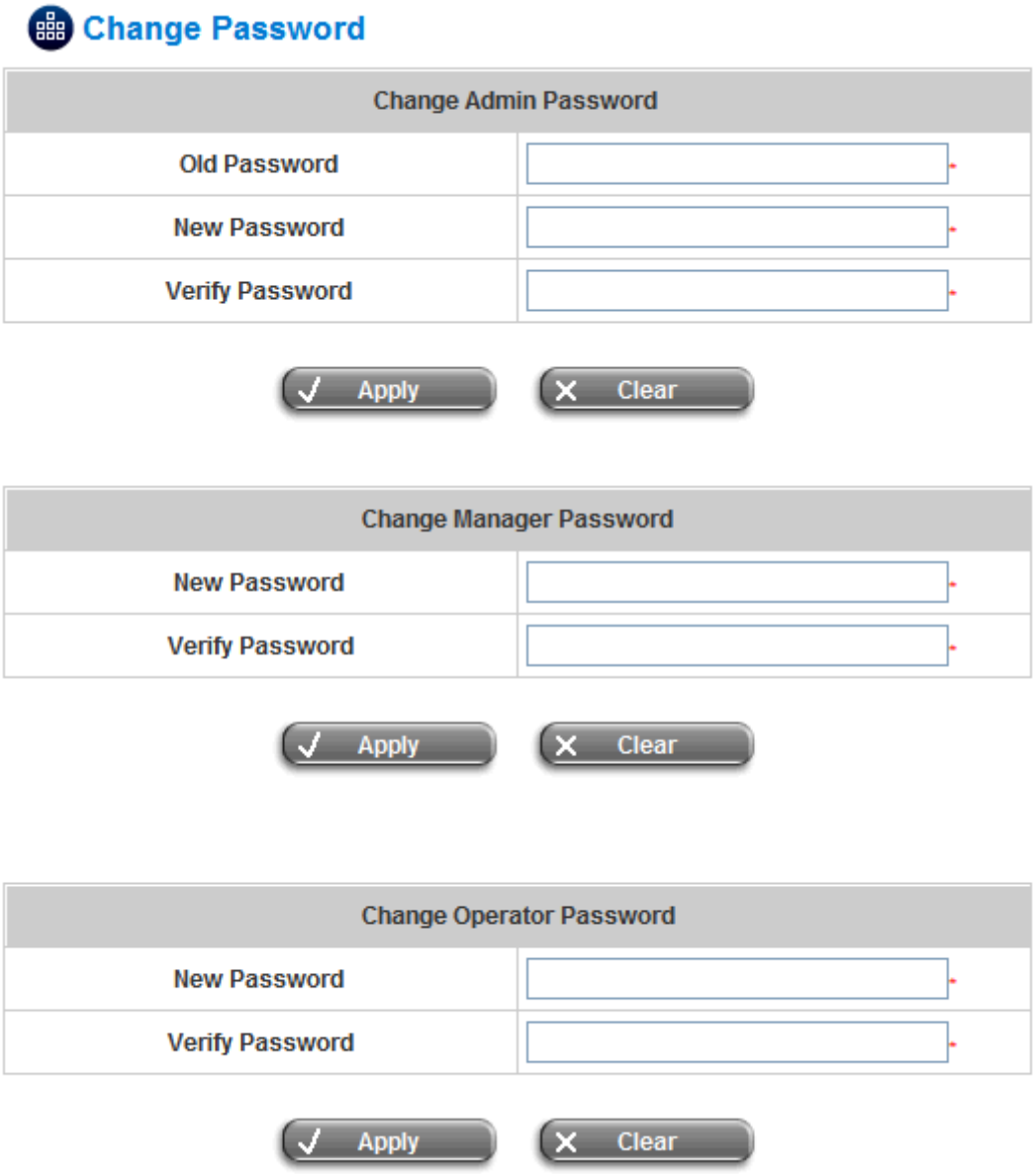
5.4 Utilities

This section provides four utilities to customize and maintain the system including **Change Password**, **Backup/Restore Setting**, **Firmware Upgrade** and **Restart**.



5.4.1 Change Password

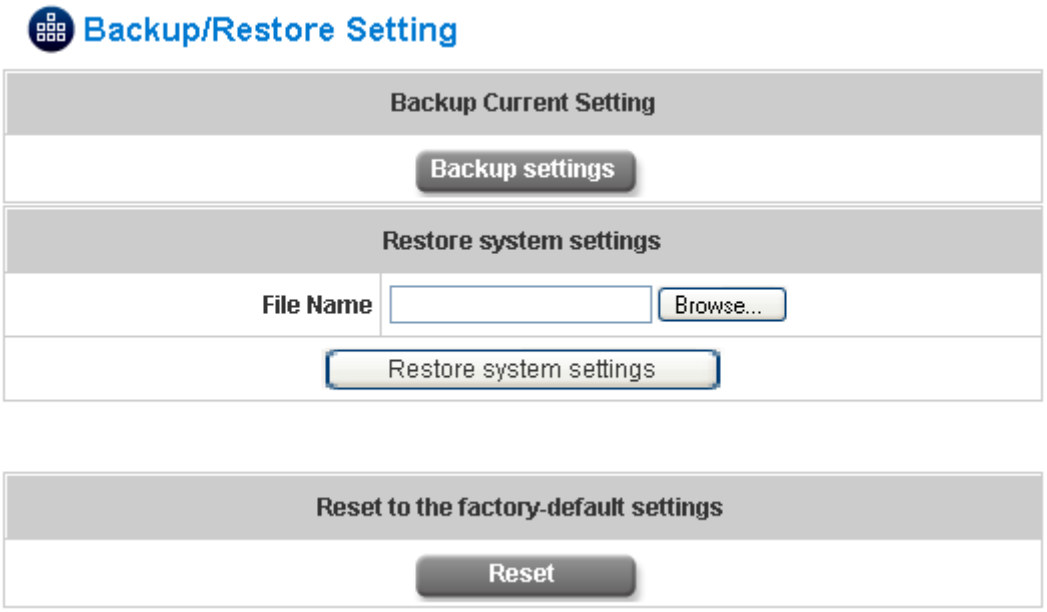
The administrator can change passwords here. Please enter the required fields marked with red asterisks. Click ***Apply*** to activate the new passwords.



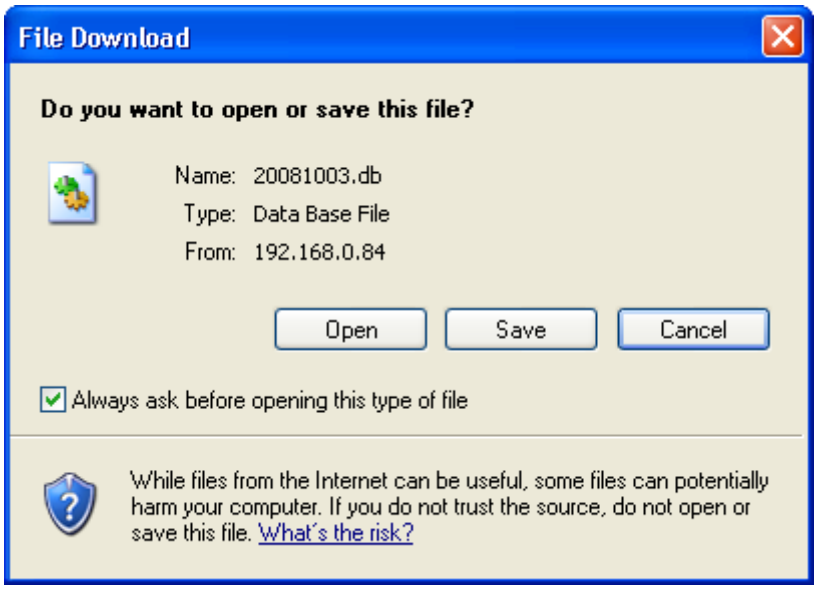
Caution: *If the administrator's password is lost, the administrator's password still can be changed through the text mode management interface on the serial port, console/printer port.*

5.4.2 Backup/Restore Setting

This function is used to backup/restore the IAS-2000 v2 settings. Also, IAS-2000 v2 can be restored to the factory default settings here.



- **Backup Current Setting:** Click ***Backup Settings*** to create a .db database backup file and save it on disk.

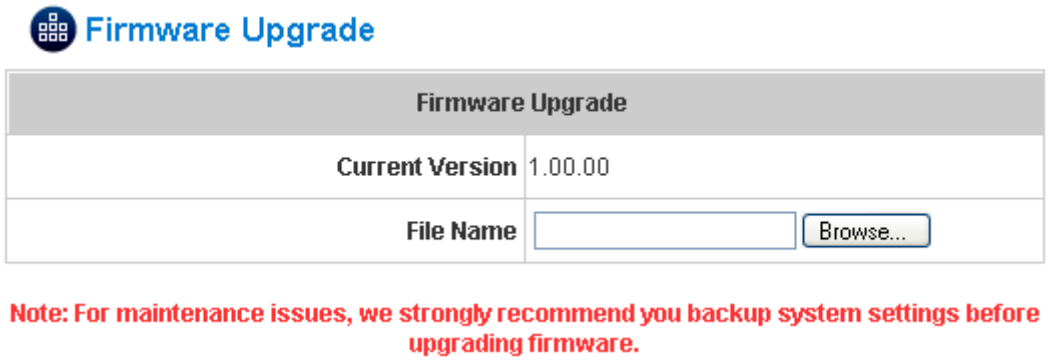


- **Restore system settings:** Click ***Browse*** to search for a .db database backup file created by IAS-2000 v2 and click ***Restore system settings*** to restore to the backup settings saved previously.
- **Reset to the factory-default settings:** Click ***Reset*** to load the factory default settings of IAS-2000 v2.

Caution: *Resetting to factory default settings will clear/restore all settings such as policies, billing plans, all user databases, and any configuration to the initial states.*

5.4.3 Firmware Upgrade

The administrator can download the latest firmware from the website and upgrade the system here. Click ***Browse*** to search for the firmware file and click ***Apply*** to go on with the firmware upgrade process. It might be a few minutes before the upgrade process completes and the system needs to be restarted afterwards to make the new firmware effective.

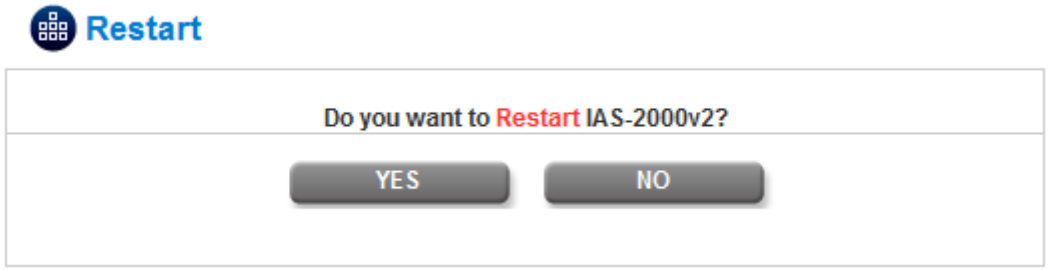


Warning: *1. Firmware upgrade may cause the loss of some of the data. Please refer to the release notes for the limitation before upgrading the firmware.*

2. Please restart the system after upgrading the firmware. Do not power on/off the system during the upgrade or the restart process. It may damage the system and cause it to malfunction.

5.4.4 Restart

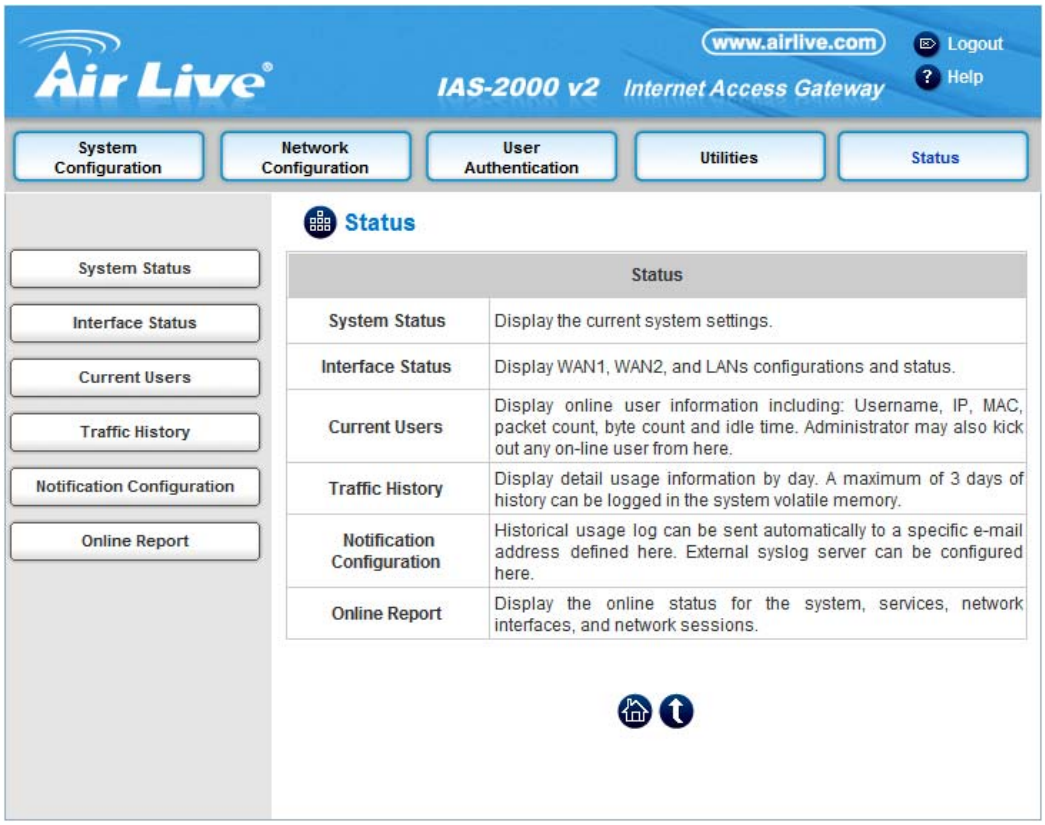
This function allows the administrator to safely restart IAS-2000 v2 and the process should take about three minutes. Click ***YES*** to restart IAS-2000 v2; click ***NO*** to go back to the previous screen. If turning off the power is necessary, restarting IAS-2000 v2 first and turning off the power after completing the restart process is recommended.



Caution: *The connection of all online users of the system will be disconnected when system is in the process of restarting.*

5.5 Status

This section includes **System Status**, **Interface Status**, **Current Users**, **Traffic History**, **Notification Configuration** and **Online Report** to provide system status information and online user status.



5.5.1 System Status

This section provides an overview of the system for the administrator.

System Status		
Current Firmware Version		1.00.00
Build		00400
System Name		Internet Access Gateway
Home Page		http://www.airlive.com
Syslog Server - Traffic History		N/A:N/A
Proxy Server		Disabled
Friendly Logout		Disabled
Internet Connection Detection		Disabled
WAN Failover		Disabled
Management	Remote Management IP	0.0.0.0/0.0.0.0
	SNMP	Disabled
History	Retainable Days	3 Day(s)
	Traffic log Email To	N/A
Time	NTP Server	tock.usno.navy.mil
	Date Time	2008/10/03 15:11:50 +0800
User	Idle Timer	10 Min(s)
	Multiple Login	Disabled
	Guest Account	Disabled
DNS	Preferred DNS Server	192.168.0.254
	Alternate DNS Server	N/A
PMS	Server Status	Disabled
	IP:Port	N/A:9877
Session Log	Syslog Server	Disabled
	Email To	Disabled
	FTP Server	Disabled

The description of the table is as follows:

Item		***Description***
Current Firmware Version		The present firmware version of IAS-2000 v2
System Name		The system name. The default is Internet Access Gateway
Home Page		The page the users are directed to after initial login is successful.
Syslog server- Traffic History		The IP address and port number of the external Syslog Server. **N/A** means that it is not configured.
Proxy Server		Enabled / Disabled stands for the system is currently using the proxy server or not.
Friendly Logout		Enabled / Disabled stands for the setting of hiding or displaying an extra confirmation window when users click the logout button.
Internet Connection Detection		Show a warning message when Internet connection is down.
WAN Failover		Show WAN1 and WAN2 status when WAN Failover is enabled.
Manage	**Remote Management IP**	The IP or IP range that is allowed for accessing the management interface.
	SNMP	Enabled / Disabled stands for the current status of the SNMP management function.
History	**Retainable Days**	The maximum number of days for the system to retain the users' information.
	Traffic log Email To	The email address that the traffic history information will be sent to.
Time	**NTP Server**	The network time server that the system is set to align.
	Date Time	The system time is shown as the local time.
User	**Idle Timer**	The number of minutes allowed for the users to be inactive.
	Multiple Login	Enabled / Disabled stands for the current setting to allow or disallow multiple logins form the same account.
	Guest Account	Enabled / Disabled stands for the current status of allowing Guest Accounts to log in.
DNS	**Preferred DNS Server**	IP address of the preferred DNS Server.
	Alternate DNS Server	IP address of the alternate DNS Server.
PMS	**Server Status**	The current status of the PMS server.
	IP:Port	The IP and Port information of the PMS server.

Session Log	**Syslog Server**	Enabled / Disabled stands for the current setting to allow or disallow recording logs at syslog server.
	Email	Enabled / Disabled stands for the current setting to allow or disallow mailing out logs to specific recipient.
	FTP Server	Enabled / Disabled stands for the current setting to allow or disallow sending out logs at FTP server.

5.5.2 Interface Status

Provide an overview of the interface for the administrator including **WAN1**, **WAN2**, **LAN1** and **LAN2**.

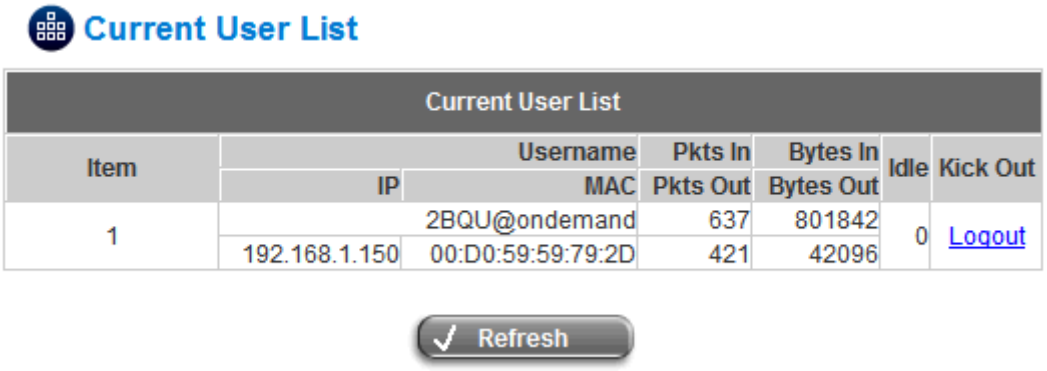
Interface Status		
WAN1	MAC Address	00:90:0B:08:D9:90
	IP Address	192.168.0.84
	Subnet Mask	255.255.255.0
	Connection Status	Up
WAN2	MAC Address	00:90:0B:08:D9:92
	IP Address	N/A
	Subnet Mask	N/A
	Connection Status	Down
LAN1	Mode	NAT
	MAC Address	00:90:0B:08:D9:91
	IP Address	192.168.1.254
	Subnet Mask	255.255.255.0
	Connection Status	Down
LAN1 DHCP Server	Status	Enabled
	Preferred DNS Server	168.95.1.1
	Alternate DNS Server	N/A
	WINS IP Address	N/A
	Start IP Address	192.168.1.101
	End IP Address	192.168.1.200
	Lease Time	1440 Min(s)
LAN2	Mode	NAT
	MAC Address	00:90:0B:08:D9:93
	IP Address	192.168.2.254
	Subnet Mask	255.255.255.0
	Connection Status	Down
LAN2 DHCP Server	Status	Enabled
	Preferred DNS Server	192.168.2.254
	Alternate DNS Server	N/A
	WINS IP Address	N/A
	Start IP Address	192.168.2.101
	End IP Address	192.168.2.200
	Lease Time	1440 Min(s)

The description of the table is as follows:

Item		***Description***
WAN1	**MAC Address**	The MAC address of the WAN1 port.
	IP Address	The IP address of the WAN1 port.
	Subnet Mask	The Subnet Mask of the WAN1 port.
WAN2	**Mode**	The mode of the WAN2 port.
	MAC Address	The MAC address of the WAN2 port.
	IP Address	The IP address of the WAN2 port.
	Subnet Mask	The Subnet Mask of the WAN2 port.
LAN1	**Mode**	The mode of the LAN1 port.
	MAC Address	The MAC address of the LAN1.
	IP Address	The IP address of the LAN1.
	Subnet Mask	The Subnet Mask of the LAN1.
LAN1 DHCP Server	**Status**	Enable / Disable stands for status of the DHCP server on the LAN1.
	Preferred DNS Server	The primary DNS server of the LAN1.
	Alternate DNS Server	The secondary DNS server of the LAN1.
	WINS IP Address	The WINS server IP. **N/A** means that it is not configured.
	Start IP Address	The start IP address of the DHCP IP range of LAN1.
	End IP Address	The end IP address of the DHCP IP range of LAN1.
	Lease Time	Minutes of the lease time of the IP address of LAN1.
LAN2	**Mode**	The mode of the LAN2.
	MAC Address	The MAC address of the LAN2.
	IP Address	The IP address of the LAN2.
	Subnet Mask	The Subnet Mask of the LAN2.
LAN2 DHCP Server	**Status**	Enable / Disable stands for status of the DHCP server on the LAN2.
	Preferred DNS Server	The primary DNS server of the LAN2.
	Alternate DNS Server	The secondary DNS server of the LAN2.
	WINS IP Address	The WINS server. **N/A** means that it is not configured.
	Start IP Address	The start IP address of the DHCP IP range of LAN2.
	End IP Address	The end IP address of the DHCP IP range of LAN2.
	Lease Time	Minutes of the lease time of the IP address of LAN2.

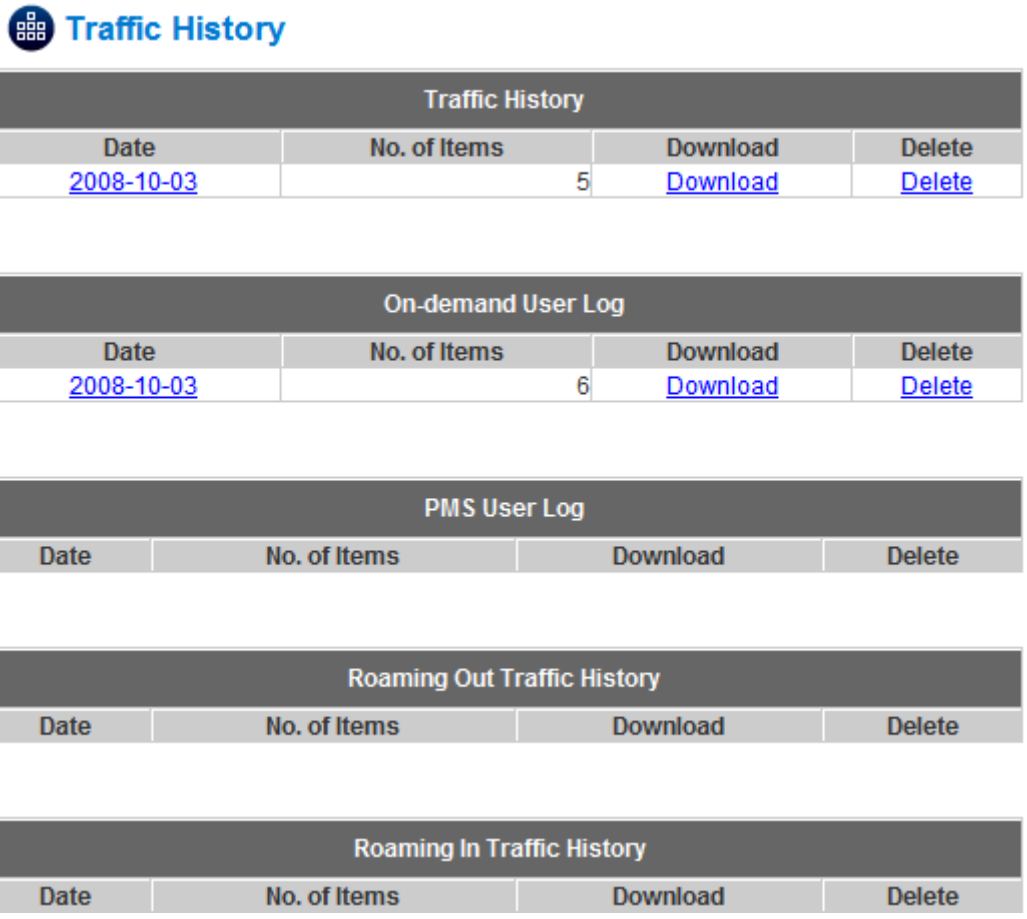
5.5.3 Current Users

In this function, each online user's information including **Username**, **IP**, **MAC**, **Pkts In**, **Bytes In**, **Pkts Out**, **Bytes Out, Idle** and **Kick Out** can be obtained. Administrator can use this function to force a specific online user to log out. Just click the hyperlink of ***Kick Out*** next to the online user's name to logout that particular user. Click ***Refresh*** to renew the Current User List.



5.5.4 Traffic History

This function is used to check the history of IAS-2000 v2. The history of each day will be saved separately in the DRAM for 3 days.



Interface Performance			
Date	No. of Items	Download	Delete
2008-10-03	4	Download	Delete

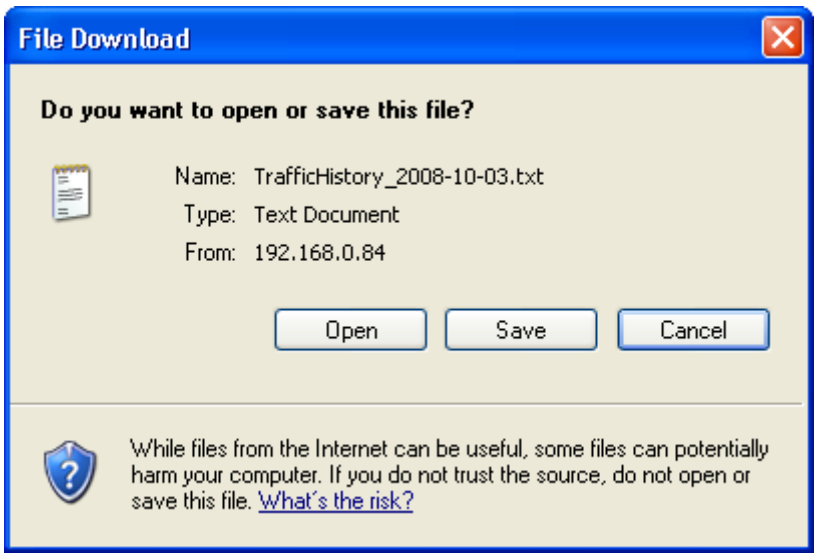
Internal Service			
Date	No. of Items	Download	Delete
2008-10-03	9	Download	Delete

System Performance			
Date	No. of Items	Download	Delete
2008-10-03	1	Download	Delete

Monthly Report			
Date	No. of Items	Download	Delete
2008-10	5	Download	Delete
2008-09	5	Download	Delete

Caution: *Since the history is saved in the DRAM, if you need to restart the system and also keep the history, then please manually copy and save the information before restarting.*

Click ***Download*** to save every history log in a text file.



If the **History Email** has been entered under the **Notification Configuration** page, then the system will automatically send out the history information to that email address.

- **Traffic History**

  As shown in the following figure, each line is a traffic history record consisting of 9 fields, **Date**, **Type, Name**, **IP**, **MAC**, **Pkts In**, **Bytes In**, **Pkts Out,** and **Bytes Out**, of user activities.

Traffic History 2008-10-03

Date	Type	Name	IP	MAC	Pkts In	Pkts Out	Bytes In	Bytes Out
2008-10-03 18:28:08 +0800	LOGOUT	jacky@Postfix1	192.168.1.150	00:D0:59:59:79:2D	4332	2563	4605523	305833
2008-10-03 17:22:32 +0800	LOGIN	jacky@Postfix1	192.168.1.150	00:D0:59:59:79:2D	0	0	0	0
2008-10-03 17:18:40 +0800	LOGOUT	jacky@Postfix1	192.168.1.150	00:D0:59:59:79:2D	3939	2292	4431235	546035
2008-10-03 17:11:47 +0800	LOGIN	jacky@Postfix1	192.168.1.150	00:D0:59:59:79:2D	0	0	0	0
2008-10-03 17:09:39 +0800	LOGOUT	jacky@Postfix1	192.168.1.150	00:D0:59:59:79:2D	147	142	120692	28918
2008-10-03 17:08:58 +0800	LOGIN	jacky@Postfix1	192.168.1.150	00:D0:59:59:79:2D	0	0	0	0

- **On-demand User Log**

  As shown in the following figure, each line is a on-demand user log record consisting of 13 fields, **Date**, **System Name**, **Type**, **Name**, **IP**, **MAC**, **Pkts In**, **Bytes In**, **Pkts Out, Bytes Out, Expiretime**, **Validtime** and **Remark**, of user activities.

On-demand User Log 2005-03-22

Date	System Name	Type	Name	IP	MAC	Pkts In	Bytes In	Pkts Out	Bytes Out	Expiretime	Validtime	Remark
2005-03-22 17:55:58 +0800	My Service	Create_OD_User	P4SP	0.0.0.0	00:00:00:00:00:00	0	0	0	0	2005-03-25 17:55:58	None	2 hrs 0 mins
2005-03-22 17:56:03 +0800	My Service	Create_OD_User	62H6	0.0.0.0	00:00:00:00:00:00	0	0	0	0	2005-03-25 17:56:03	None	2 hrs 0 mins
2005-03-22 17:56:07 +0800	My Service	Create_OD_User	886D	0.0.0.0	00:00:00:00:00:00	0	0	0	0	2005-03-25 17:56:07	None	2 hrs 0 mins

- **PMS User Log**

  As shown in the following figure, each line is a on-demand user log record consisting of 14 fields, **Date**, **Posting Number**, **Type**, **Name**, **Room ID**, **IP**, **MAC**, **Packets In**, **Packets Out**, **Bytes In**, **Bytes Out**, **Expiretime**, **Validtime** and **Remark**, of user activities.

PMSUserLogName 2005-08-23

date	postingNum	type	name	roomID	ip	mac	packetsIn	packetsOut	bytesIn	bytesOut	expirtime	validtime	remark
2005-08-23 10:50:15 +0800	2724	Create_PMS_User	T744	1234	0.0.0.0	00:00:00:00:00:00	0	0	0	0	0	999 hr.	3596400

- **Roaming Out Traffic History**

  As shown in the following figure, each line is a roaming out traffic history record consisting of 14 fields, **Date**, **Type, Name**, **NSID**, **NASIP**, **NASPort**, **UserMAC**, **SessionID**, **SessionTime**, **Bytes in**, **Bytes Out**, **Pkts In**, **Pkts Out** and **Message**, of user activities.

Roaming Out Traffic History 2005-03-22													
Date	Type	Name	NASID	NASIP	NASPort	UserMAC	sessionID	sessionTime	Bytes In	Bytes Out	Pkts In	Pkts Out	Message

- **Roaming In Traffic History**

  As shown in the following figure, each line is a roaming in traffic history record consisting of 15 fields, **Date**, **Type, Name**, **NSID**, **NASIP**, **NASPort**, **UserMAC**, **UserIP**, **SessionID**, **SessionTime**, **Bytes in**, **Bytes Out**, **Pkts In**, **Pkts Out** and **Message**, of user activities.

Roaming In Traffic History 2005-03-22													
Date	Type	Name	NASID	NASIP	NASPort	UserMAC	UserIP	SessionID	SessionTime	Bytes In	Bytes Out	Pkts In	Pkts Out	Message

- **Interface Performance**

  As shown in the following figure, the history record consists of 5 fields, **Interface**, **Speed-IN (bps)**, **Speed-OUT (bps)**, **Packet-IN (pps)** and **Packet-OUT (pps)** for WAN and LAN status.

Interface Performance (2008-10-03)				
Interface	Speed-In (bps)	Speed-Out (bps)	Packet-In (pps)	Packet-Out (pps)
--16:20--				
WAN2	0.00	0.00	0.00	0.00
WAN1	8.673828 K	0.398438 K	8.25	0.50
LAN2	0.00 K	0.00 K	0.00	0.00
LAN1	0.00 K	0.00 K	0.00	0.00
--16:15--				
WAN2	0.00 K	0.00 K	0.00	0.00
WAN1	235.307617 K	50.837891 K	53.50	43.00
LAN2	0.00 K	0.00 K	0.00	0.00
LAN1	50.347656 K	229.060547 K	42.38	47.88
--16:10--				
WAN2	0.00 K	0.00 K	0.00	0.00
WAN1	8.685547 K	0.523438 K	7.25	0.75
LAN2	0.00 K	0.00 K	0.00	0.00
LAN1	0.00 K	0.00 K	0.00	0.00

- **Internal Service**

  As shown in the following figure, the history record consists of 6 fields, **DHCP Server**, **Syslog Server**, **SNMP Server**, **HTTP Server**, **Agent**, **SSH Server**, **EMS Server**, **RADIUS Server**, **Proxy Server** and **Redirector Server** for network service status.

Internal Service Status (2008-10-03)

Service	Status
--16:20--	
DHCP	Running
Syslog	Stop
SNMP	Stop
HTTP	Running
Agent	Running
SSH	Running
RADIUS	Stop
PROXY	Running
Redirector	Running

- **System Performance**

  As shown in the following figure, the history record consists of 5 fields, **CPU Usage %**, **Memory Usage %**, **Total Memory (KB)**, **Memory Used (KB)** and **Memory Free (KB)** of IAS-2000 v2 status.

System Performance (2008-10-03)

CPU Usage (%)	Memory Usage (%)	Total Memory (KB)	Memory Used (KB)	Memory Free (KB)
--16:20--				
0	81.09	125268	101592	23676
--16:15--				
0	81.09	125268	101592	23676
--16:10--				
0	80.9	125268	101352	23916
--16:05--				
18	79.33	125268	99380	25888
--16:00--				
5	79.63	125268	99752	25516
--15:55--				
1	79.66	125268	99792	25476

- **Monthly Report**

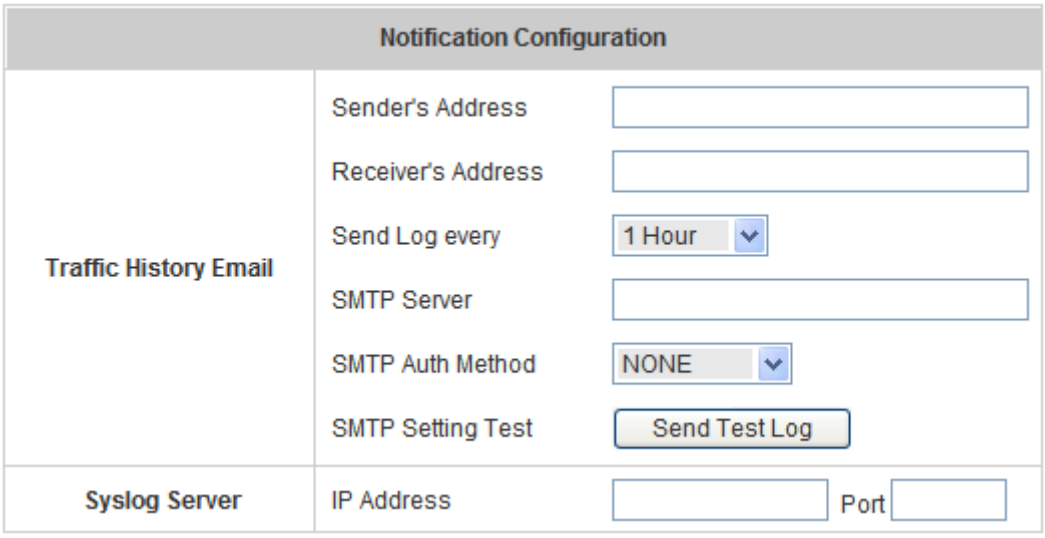
  As shown in the following figure, 5 fields, **Local**, **Roaming in**, **Roaming out**, **On Demand Users**, **PMS Users** is provided.

Monthly Report (2008-10)

	Number of People	Total Time
Local	0	0 min 0 sec
Roaming In	0	0 min 0 sec
Roaming Out	0	0 min 0 sec
On-Demand Users	0	0 min 0 sec
PMS Users	0	0 min 0 sec

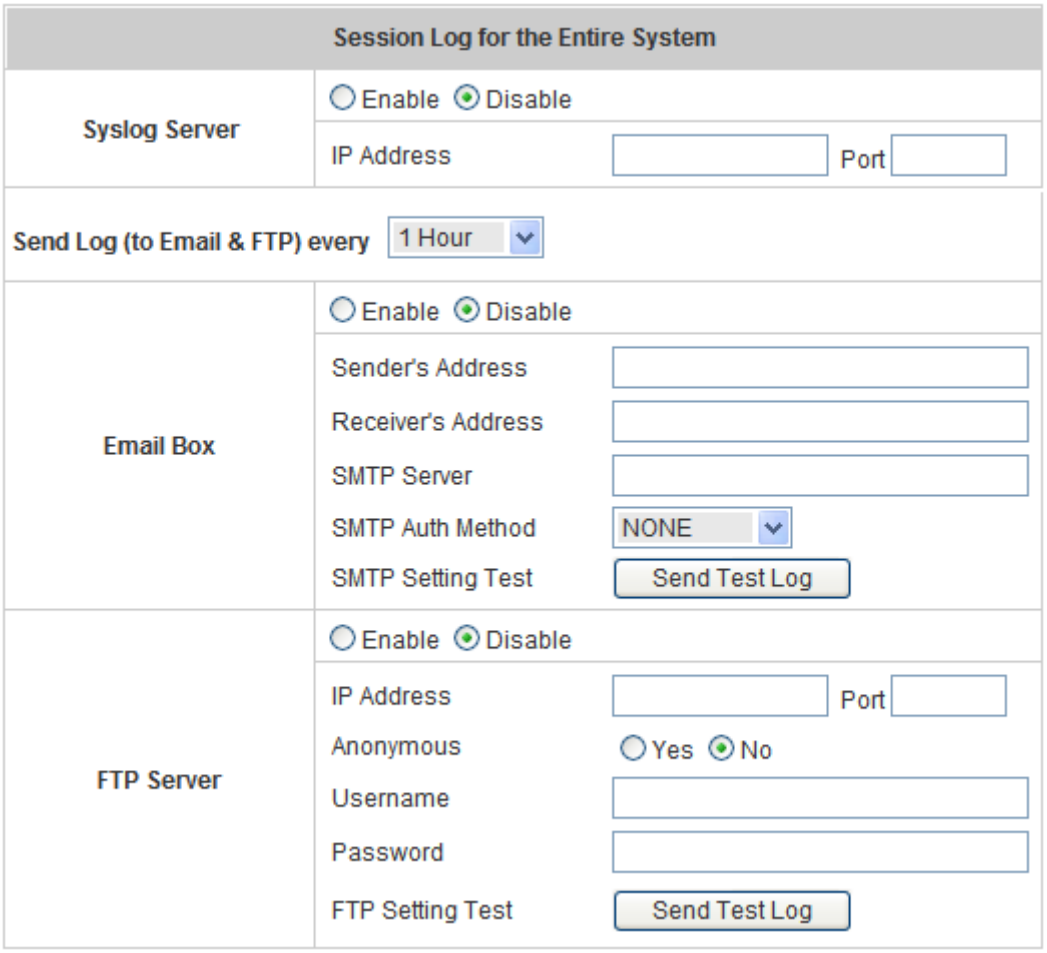
5.5.5 Notification Configuration

IAS-2000 v2 will save the traffic history and session logs into the internal DRAM. If the administrator wants the system to automatically send out the history to a particular email address, please enter the related information in these fields.



Notification Configuration:

- **Sender's Address:** The e-mail address of the administrator in charge of the monitoring. This will show up as the sender's e-mail.
- **Receiver's Address:** The e-mail address of the person whom the history email is for. This will be the receiver's e-mail.
- **Send Log every:** The time interval to send the e-mail report.
- **SMTP Server:** The IP address of the SMTP server.
- **SMTP Auth Method:** The system provides four authentication methods, **PLAIN**, **LOGIN**, **CRAM-MD5** and **NTLMv1**, or **"NONE"** to use none of the above. Depending on which authentication method selected, enter the **Account Name**, **Password** and **Domain**.
  - **NTLMv1** is not currently available for general use.
  - **Plain** and **CRAM-MD5** are standardized authentication mechanisms while **LOGIN** and **NTLMv1** are Microsoft proprietary mechanisms. Only **PLAIN** and **LOGIN** can use the UNIX login password. Netscape uses **PLAIN**. Outlook and Outlook express uses **LOGIN** as default, although they can be set to use **NTLMv1**.
  - Pegasus uses **CRAM-MD5** or **LOGIN** but which method to be used can not be decided manually.
- **SMTP Setting Test**: Click "Send Test Log" button to send a test email of the report.
- **Syslog Server:** Enter the IP and Port of the Syslog server.



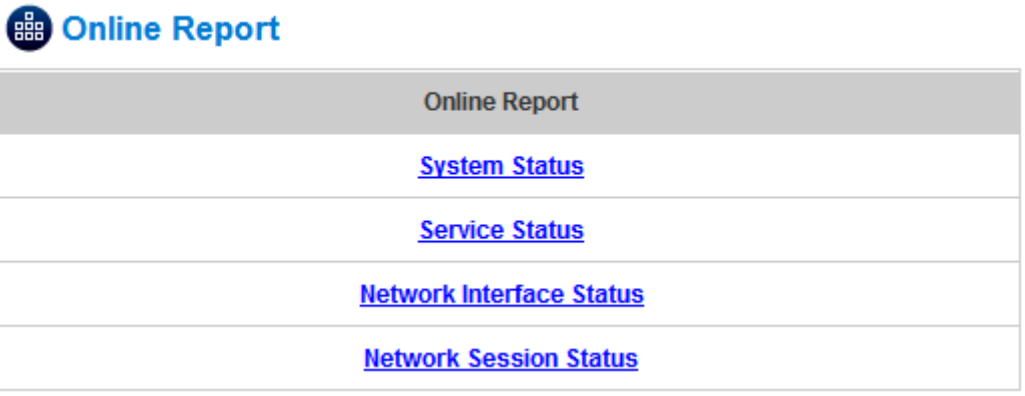
Session Log for the Entire System:

- **Syslog Server:** Enter the IP and Port of the Syslog server.
- **Send Log (to Email & FTP) every:** The time interval to send the e-mail report, for upload logs to FTP server.
- **Email Box:**
  - **Enable / Disable:** Enable or Disable the feature to export session log via email.
  - **Sender's Address:** The e-mail address of the administrator in charge of the monitoring. This will show up as the sender's e-mail.
  - **Receiver's Address:** The e-mail address of the person whom the history email is for. This will be the receiver's e-mail.
  - **SMTP Server:** The IP address of the SMTP server.
  - **SMTP Auth Method:** The system provides four authentication methods, **PLAIN**, **LOGIN**, **CRAM-MD5** and **NTLMv1**, or **"NONE"** to use none of the above. Depending on which authentication method selected, enter the **Account Name**, **Password** and **Domain**.
  - **SMTP Setting Test**: Click "Send Test Log" button to send a test email of the report.
- **FTP Server:**
  - **Enable / Disable:** Enable or Disable the feature to export session log to FTP server.
  - **IP Address:** Specify FTP server IP address and FTP port number.
  - **Anonymous:** Allow or Disallow Anonymous account login to FTP server.
  - **Username:** Specify FTP user name.

- **Password:** Specify FTP account password.
- **FTP Setting Test**: Click "Send Test Log" button to send a test report to FTP server.

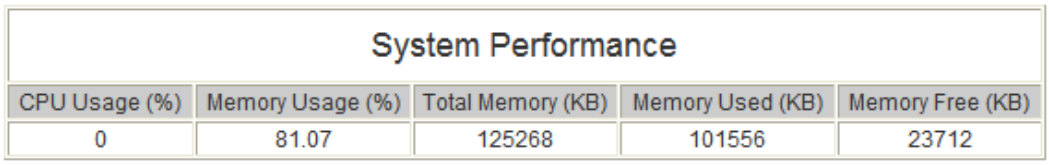
5.5.6 Online Report

This function provides real time on-line report of the IAS-2000 v2 system including **System Status**, **Service Status**, **Network Interface Status** and **Network Session Status**.



- **System Status**

  As shown in the following figure, the online report consists of 5 fields, **CPU Usage**, **Memory Usage**, **Total Memory**, **Memory Used** and **Memory Free** of IAS-2000 v2 status.

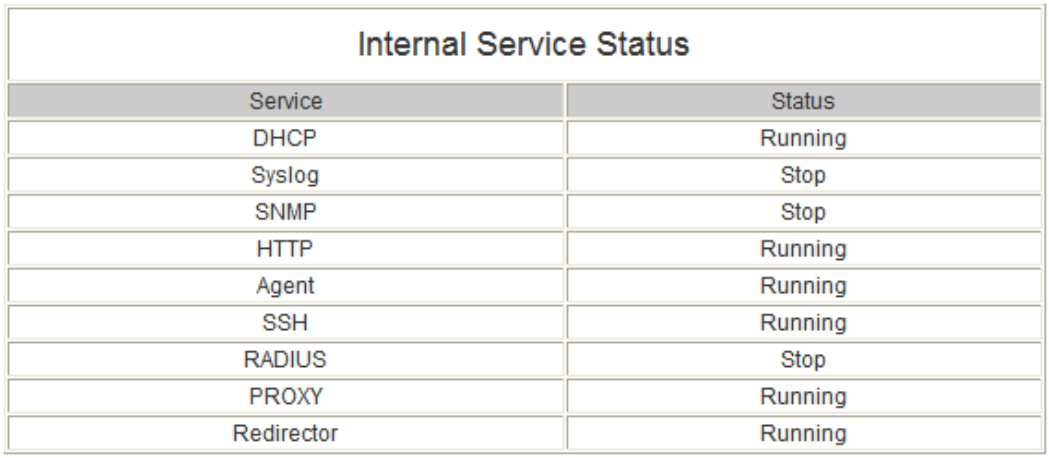


System Performance

CPU Usage (%)	Memory Usage (%)	Total Memory (KB)	Memory Used (KB)	Memory Free (KB)
0	81.07	125268	101556	23712

- **Service Status**

  As shown in the following figure, the online report consists of 6 fields, **DHCP Server**, **Syslog Server**, **SNMP Server**, **HTTP Server**, **Agent**, **SSH Server**, **RADIUS Server**, **Proxy Server** and **Redirector Server** for network service status.



Internal Service Status

Service	Status
DHCP	Running
Syslog	Stop
SNMP	Stop
HTTP	Running
Agent	Running
SSH	Running
RADIUS	Stop
PROXY	Running
Redirector	Running

- **Network Interface Status**

  As shown in the following figure, the online report consists of 5 fields, **Interface**, **Speed-IN (bps)**, **Speed-OUT (bps)**, **Packet-IN (pps)** and **Packet-OUT (pps)** for WAN and LAN status.

Interface Performance					
Interface	Speed-In (bps)	Speed-Out (bps)	Packet-In (pps)	Packet-Out (pps)	Status
WAN1	7.429688 K	0.398438 K	7.62	0.50	UP
WAN2	0.00	0.00	0.00	0.00	DOWN
LAN1	0.00	0.00	0.00	0.00	UP
LAN2	0.00	0.00	0.00	0.00	DOWN

- **Network Session Status**

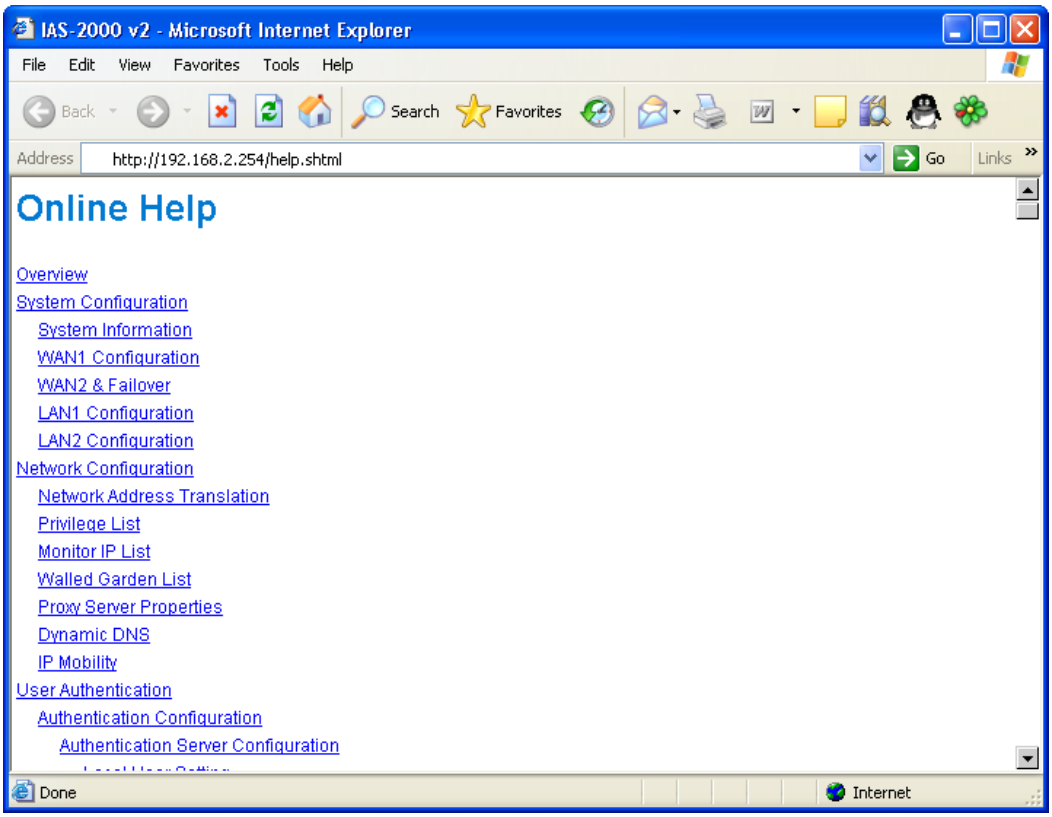
  As shown in the following figure, the online report consists of 3 fields, **IP**, **TCP session count** and **UDP session count**. This report tells how many connections each IP address uses now.

Session Information		
IP	TCP Session Counted	UDP Session Counted
127.0.0.1	5	0
192.168.0.75	0	1
192.168.99.220	0	1
192.168.0.201	3	0
192.168.99.29	0	1
192.168.0.128	0	1
192.168.0.8	0	1
192.168.0.231	0	1
192.168.0.66	0	3
192.168.0.39	0	3
192.168.0.157	0	2
192.168.99.25	0	2
192.168.0.236	0	1

5.6 Help

On the screen, the **Help** button is on the upper right corner.

Click ***Help*** to the **Online Help** window and then click the hyperlink of the items to get the information.



Appendix A. External Network Access

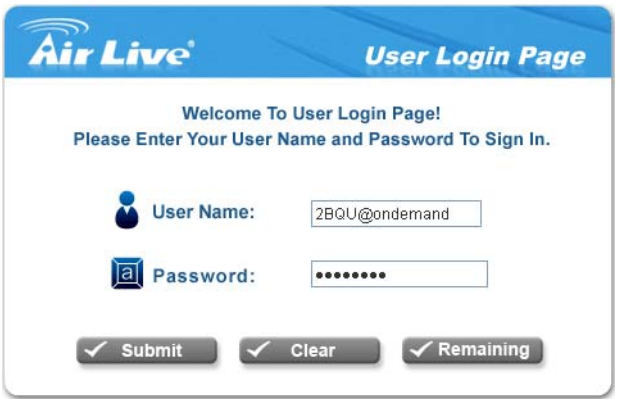
If all the steps are set properly, IAS-2000 v2 can be further connected to the managed network to experience the controlled network access environment. Firstly, connect an end-user device to the network at IAS-2000 v2's LAN1 and set to obtain an IP address automatically. After the network address is obtained at the user end, open an Internet browser and link to any website. Then, the default logon webpage will appear in the Internet browser.

1. First, connect a user-end device to LAN1 port of IAS-2000 v2, and set the dynamical access network. After the user end obtains the network address, please open an Internet browser and the default login webpage will appear on the Internet browser.
   Key in the username and password created in the local user account or the on-demand user account in the interface and then click ***Submit*** button. Here, we key in the local user account (e.g. ***jacky*** for the username and ***1234*** for the password) to connect the network.

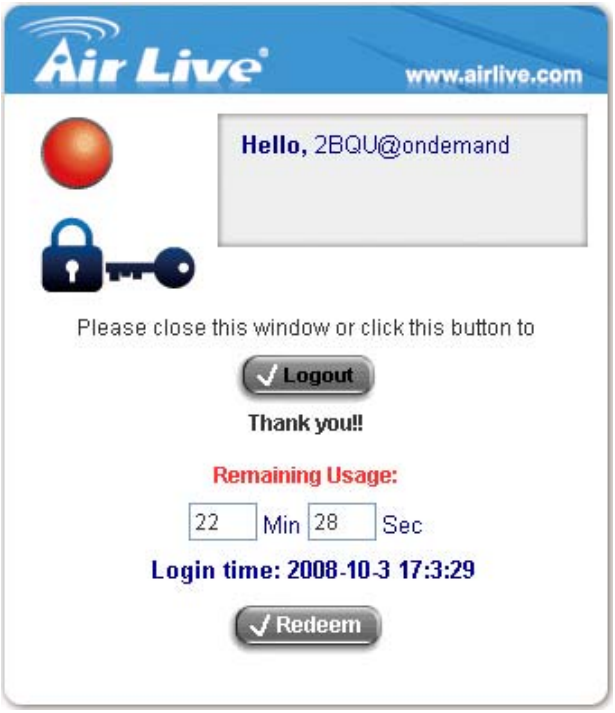
2. Login page appearing means IAS-2000 v2 has been installed and configured successfully. Now, a client can browse the network or surf the Internet!

3. But if **"Sorry, this feature is available for on-demand or PMS user only."** appears, it means a wrong button has been clicked. **"*Remaining*"** is only for on-demand users. Please click the ***Submit*** button instead.

4. An on-demand user can enter the username and password in the **"User Login Page"** and click ***Remaining*** button to know the remaining time or data quota of the account.



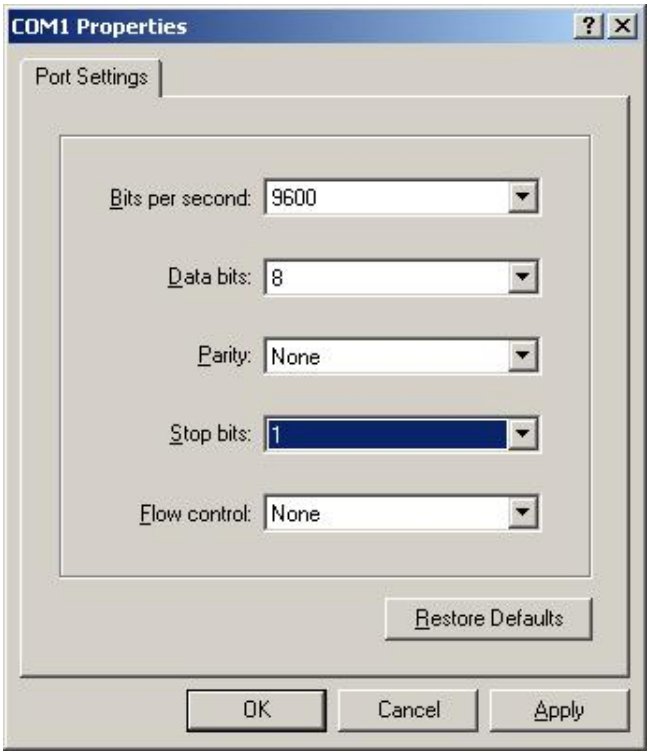
5. When an on-demand user logs in successfully, the following **Login Successfully** screen will appear and it is a little different from the normal user's login successfully screen. There is an extra line showing **"Remaining usage"** and a **"Redeem"** button.
   - **Remaining usage:** Show the rest of use time that the on-demand user can surf Internet.
   - **Redeem:** When the remaining time or data size is insufficient, the user has to pay for adding credit at the counter, and then, the user will get a new username and password. After clicking the ***Redeem*** button, the following screen will show up. Please enter the new username and password obtained and click ***Redeem*** button to merge the two accounts and add up the available use time and data size by the system. Total available use time and data size after adding credit will be shown.



Appendix B. Console Interface Configuration

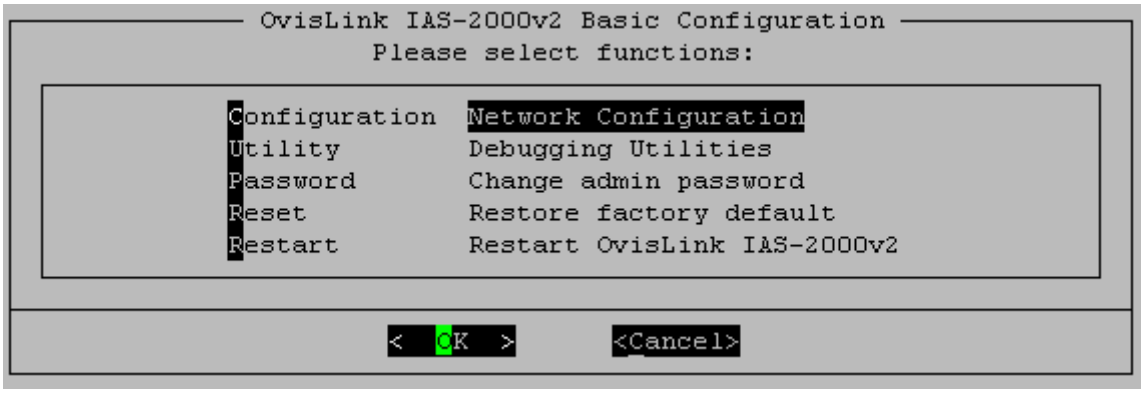
Via this port to enter the console interface for the administrator to handle the problems and situations occurred during operation.

1. To connect the console port of IAS-2000 v2, a console, modem cable and a terminal simulation program, such as the Hyper Terminal are required.
2. Please set the parameters as **9600,8,n,1** for Hyper Terminal.



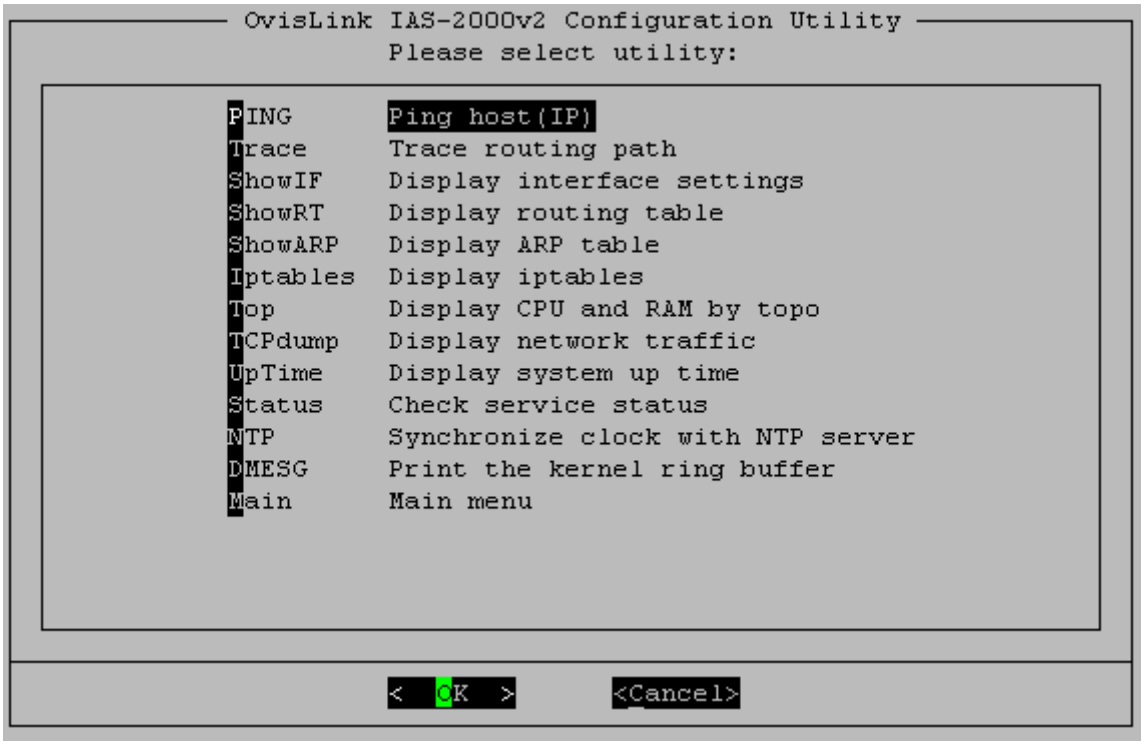
Caution: *the main console is a menu-driven text interface with dialog boxes. Please use arrow keys on the keyboard to browse the menu and press the* ***Enter*** *key to make selection or confirm what you enter.*

3. Once the console port of IAS-2000 v2 is connected properly, the console main screen will appear automatically. If the screen does not appear in the terminal simulation program automatically, please try to press the arrow keys, so that the terminal simulation program will send some messages, and the welcome screen or the main menu will appear. If the welcome screen or the main menu of the console still does not appear, please check the connection of the cables and the settings of the terminal simulation program.



- **Utilities for network debugging**

  The console interface provides several utilities to assist the Administrator to check the system conditions and debugging. The utilities are described as following:



  - **Ping host (IP):** By sending ICMP echo request to a specified host and wait for the response to test the network status.
  - **Trace routing path:** Trace and inquire the routing path to a specific target.
  - **Display interface settings:** It displays the information of each network interface setting including the MAC address, IP address, and netmask.
  - **Display the routing table:** The internal routing table of the system is displayed, which may help to confirm the Static Route settings.
  - **Display ARP table:** The internal ARP table of the system is displayed.
  - **Display iptables:** The internal iptables of the system is displayed.
  - **Display CPU and RAM by top:** The CPU and RAM usage of the system is displayed by Linux utility, Top.
  - **Display network traffic:** The network traffic of the system is displayed.
  - **Display system up time:** The system live time (time for system being turn on) is displayed.
  - **Check service status:** Check and display the status of the system.
  - Set device into "safe mode": If administrator is unable to use Web Management Interface via the browser for the system failed inexplicitly. Administrator can choose this utility and set IAS-2000 V2 into safe mode, then administrator can management this device with browser again.
  - **Synchronize clock with NTP server:** Immediately synchronize the clock through the NTP protocol and the specified network time server. Since this interface does not support manual setup for its internal clock, therefore we must reset the internal clock through the NTP.

- **Print the kernel ring buffer:** It is used to examine or control the kernel ring buffer. The program helps users to print out their boot-up messages instead of copying the messages by hand.

- **Change admin password**

  Besides supporting the use of console management interface through the connection of null modem, the system also supports the SSH online connection for the setup. When using a null modem to connect to the system console, we do not need to enter that administrator's password to access the console management interface. But connecting the system by SSH, we have to enter the username and password.

  The username is "**admin**" and the default password is also "**airlive**", which is the same as for the web management interface. The administrator's password can be changed here. Even if the password is forgotten and the management interface can not be accessed from the web or the remote end of the SSH, use the null modem to connect the console management interface and set the administrator's password again.

Caution: *Although it does not require a username and password for the connection via the serial port, the same management interface can be accessed via SSH. Therefore, we recommend you to immediately change the IAS-2000 v2 Admin username and password after logging into the system for the first time.*

- **Restore factory default**

  Choose this option to reset the system configuration to the factory default settings.

- **Restart IAS-2000 v2**

  Choose this option to restart IAS-2000 v2.

Appendix C. Specifications

a. Hardware Specification

- Dimensions: 42.6cm(W) x 4.4cm(H) x 27cm(D)
- Weight: 6kg
- Power: 90-264 VAC 43~63Hz
- Operating Temperature: 5-40°C
- 19" 1U Rack Mount Design
- 4 Gigabyte Ethernet (10/100/1000)
- RS-232 DB9
- Supports 10/100/1000Mbps Full / Half Duplex Transfer Speed

b. Technical Specification

- **Networking**

  WAN interface supports Static IP, DHCP client, and PPPoE client

  Interface supports static IP

  Supports NAT mode and router mode

  Built-in DHCP server

  Built-in NTP client

  Supports Redirect of network data

  Supports IPSec (ESP), PPTP and H.323 pass through (under NAT)

  Customizable static routing table

  Supports Virtual Server

  Supports DMZ Server

  Supports machine operation status monitoring and reporting system

  Supports roaming across networks

- **Firewall**

  Provides Several DoS protection mechanisms

  Customizable packet filtering rules

  Customizable walled garden (free surfing area)

- **User Management**

  Supports at least 500 on-line users concurrently

  Supports Local, POP3 (+SSL), RADIUS, and LDAP LAN1/LAN2 mechanisms

  Supports LAN1& LAN2 mechanisms simultaneously

  Can choose MAC address locking for built-in user database

  Can set the time for the user to log in to the system

  Can set the user's idle time

  Can specify the MAC addresses to enter the managed network without authentication

  Can specify the IP addresses to enter the managed network without authentication

  Supports web-based login

  Supports several friendly logout methods

  Supports RADIUS accounting protocol to generate the billing record on RADIUS server

- **Administration**

  Provides online status monitoring and history traffic

  Supports SSL encrypted web administration interface and user login interface

  Customizable user login & logout web interface

  Customizable redirect after users are successfully authenticated during login & logout

  Supports Console management interface

  Supports SSH remote administration interface

  Supports web-based administration interface

  Supports SNMP v2

  Supports user's bandwidth restriction

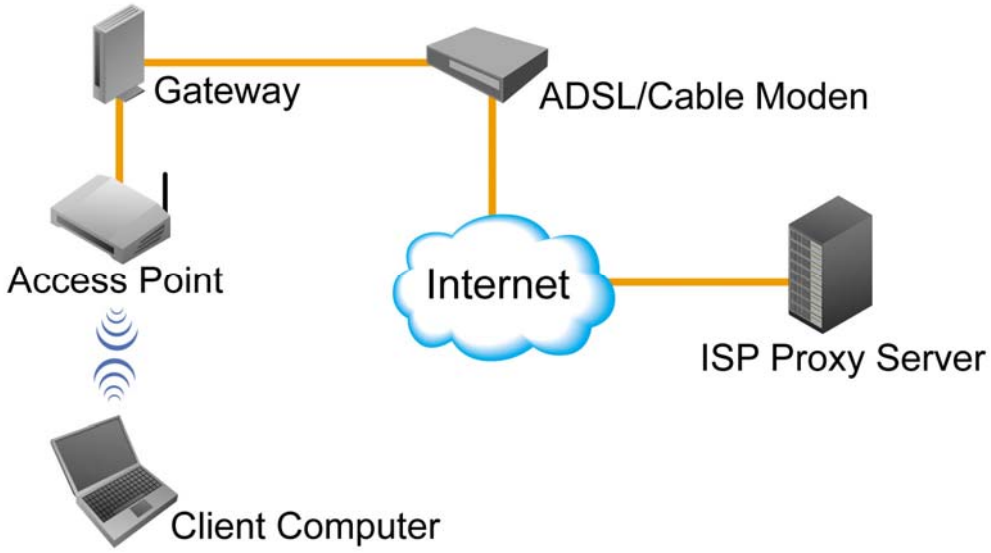
  Supports remote firmware upgrade

- **Accounting**

  Supports built-in user database and RADIUS accounting

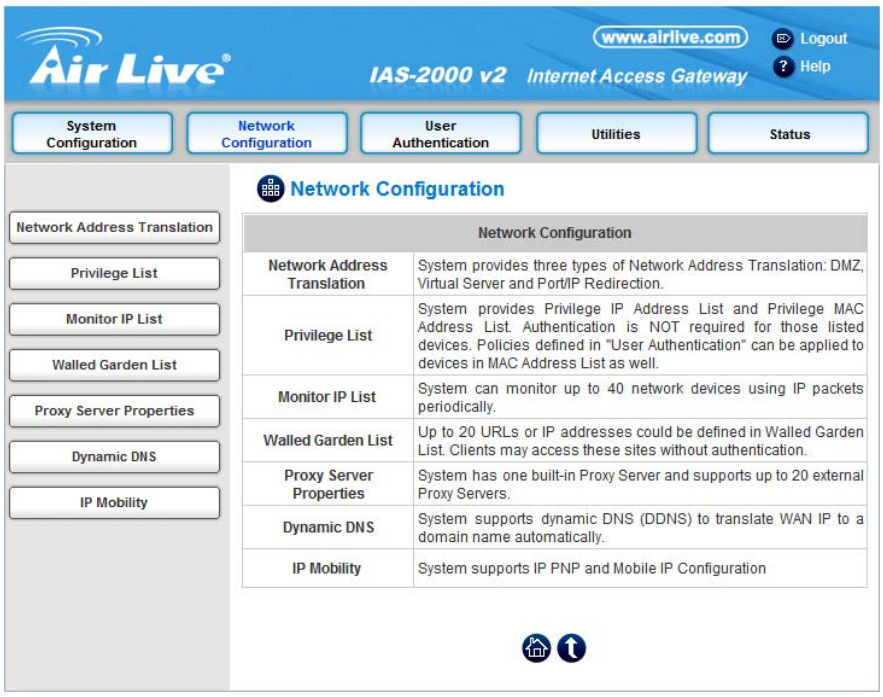
Appendix D. Proxy Setting for Hotspot

HotSpot is a place such as a coffee shop, hotel, or a public area where provides Wi-Fi service for mobile and temporary users. HotSpot is usually implemented without complicated network architecture and using some proxy servers provided by Internet Service Providers.



In Hotspots, users usually enable their proxy setting of the browsers such as IE and Firefox. Therefore, so we need to set some proxy configuration in the Gateway need to be set. Please follow the steps to complete the proxy configuration：

1. Login Gateway by using "***admin***".
2. Click the ***Network Configuration from top menu*** and the homepage of the ***Network Configuration*** will appear.



3. Click the ***Proxy Server Properties*** from left menu and the homepage of the **Proxy Server Properties** will appear.

Proxy Server Properties
Internal Proxy Server
○ Enable ◉ Disable

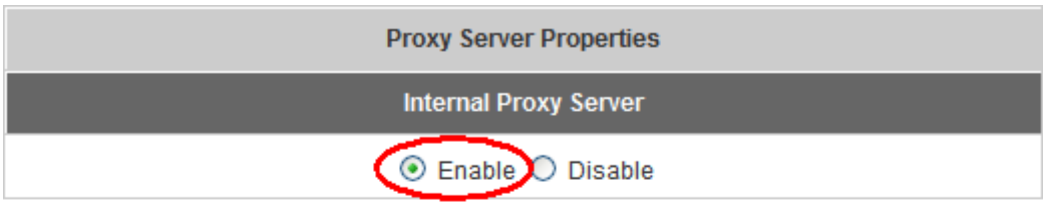
External Proxy Server		
Item	Server IP	Port
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

4. Add the ISP's proxy Server IP and Port into ***External Proxy Server*** Setting.

Proxy Server Properties
Internal Proxy Server
○ Enable ◉ Disable

External Proxy Server		
Item	Server IP	Port
1	10.2.3.203	6588
2		
3		
4		
5		

5. ***Enable Built-in Proxy Server*** in ***Internal Proxy Server*** Setting.

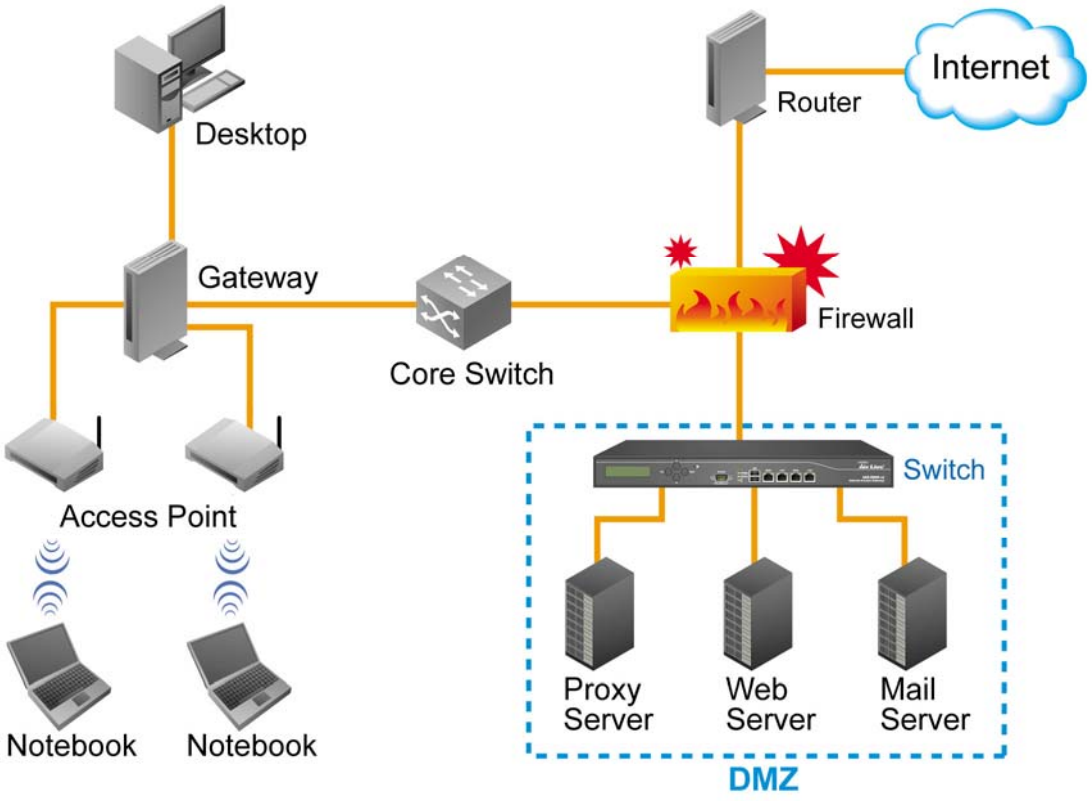


External Proxy Server		
Item	Server IP	Port
1	10.2.3.203	6588
2		
3		
4		
5		

6. Click ***Apply*** to save the settings.

Appendix E. Proxy Setting for Enterprise

Enterprises usually isolate their intranet and internet by using more elaborated network architecture. Many enterprises have their own proxy server which is usually at intranet or DMZ under the firewall protection.



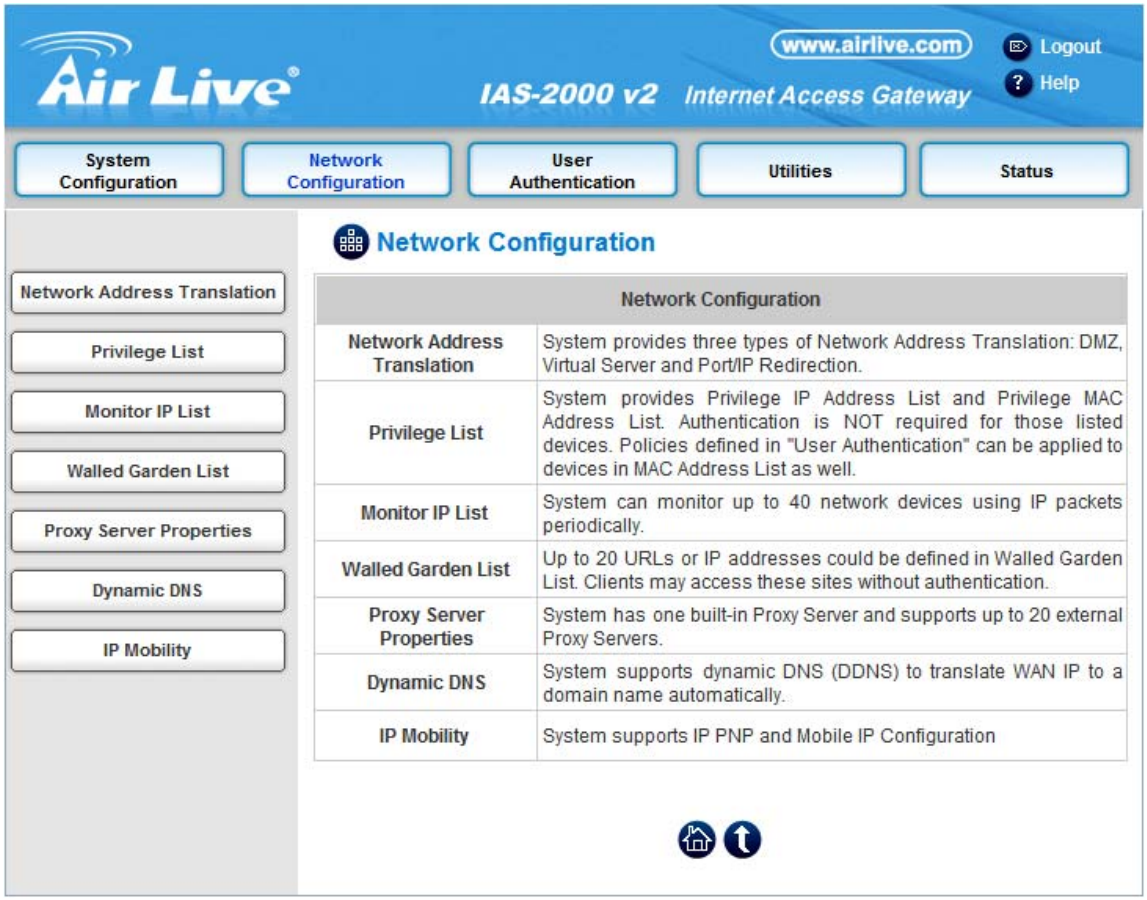
In enterprises, network managers or MIS staff may often ask their users to enable their proxy setting of the browsers such as IE and Firefox to reduce the internet access loading. Therefore some proxy configurations in the Gateway need to be set.

Caution : Some enterprises will automatically redirect packets to proxy server by using core switch or Layer 7 devices. By the way, the clients don't need to enable their browsers' proxy settings, and administrators don't need to set any proxy configuration in the Gateway.

Please follow the steps to complete the proxy configuration :

■ Gateway setting

1. Login Gateway by using "***admin***".
2. Click the ***Network Configuration from top menu*** and the homepage of the ***Network Configuration*** will appear.



3. Click the ***Proxy Server Properties*** from left menu and the homepage of the ***Proxy Server Properties*** will appear.

Proxy Server Properties
Internal Proxy Server
○ Enable ◉ Disable

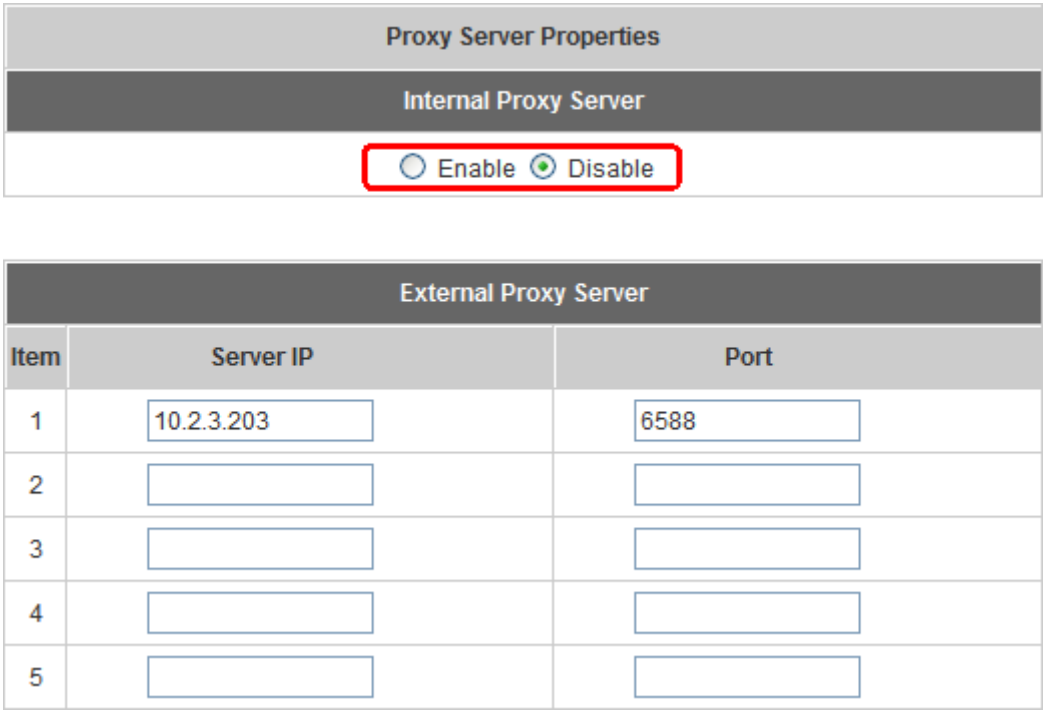
External Proxy Server		
Item	Server IP	Port
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

4. Add your proxy Server IP and Port into ***External Proxy Server*** Setting.

Proxy Server Properties
Internal Proxy Server
○ Enable ◉ Disable

External Proxy Server		
Item	Server IP	Port
1	10.2.3.203	6588
2		
3		
4		
5		

5. ***Disable Built-in Proxy Server*** in ***Internal Proxy Server*** Setting.



Proxy Server Properties		
Internal Proxy Server		
○ Enable ◉ Disable		

External Proxy Server		
Item	Server IP	Port
1	10.2.3.203	6588
2		
3		
4		
5		

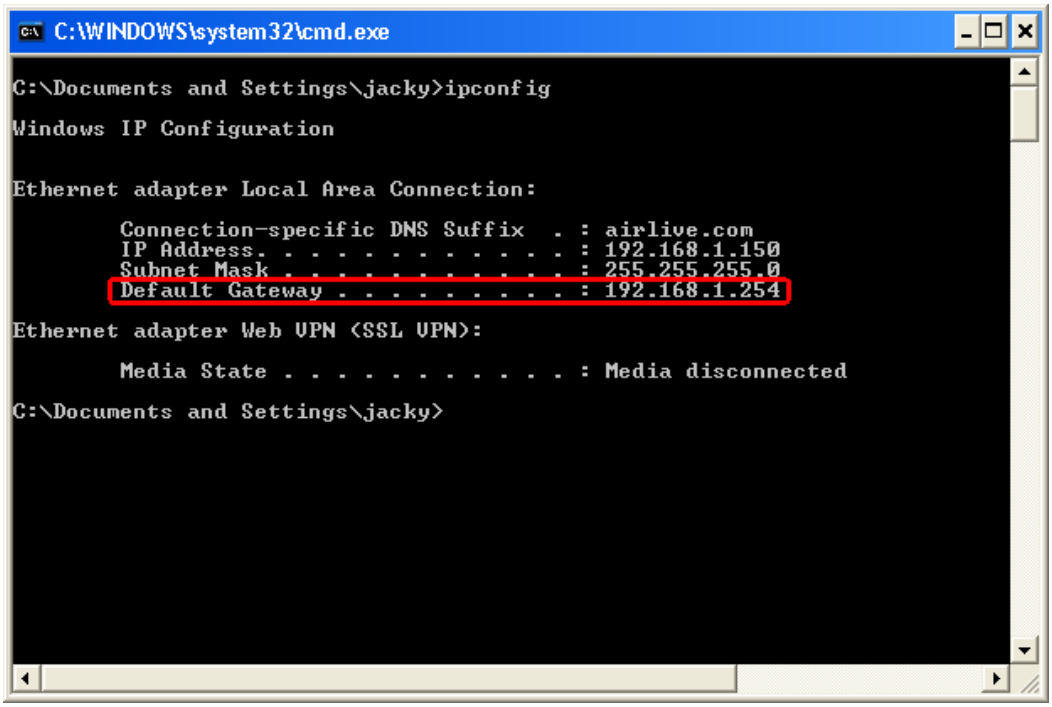
6. Click ***Apply*** to save the settings***.***

Warning : If your proxy server is disabled, it will make the user authentication operation abnormal. When users open the browser, the login page won't appear because the proxy server is down. Please make sure your proxy server is always available.

■ Client setting

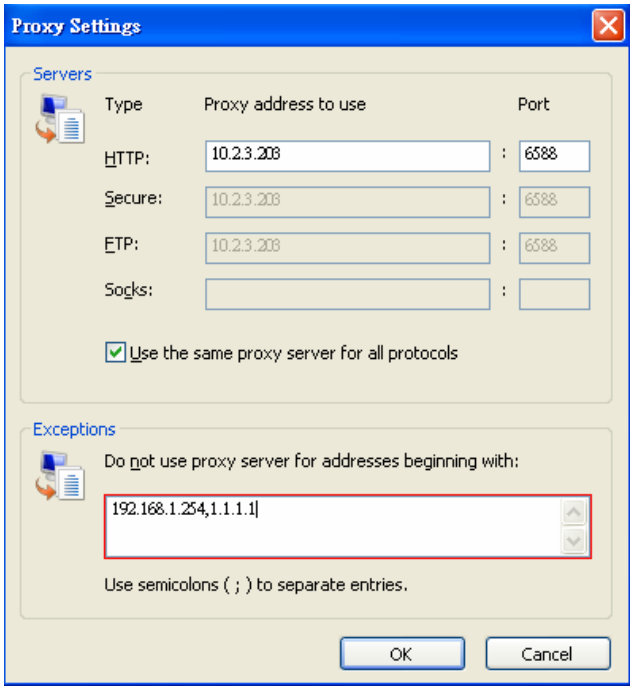
It is necessary for clients to add default gateway IP address into proxy exception information so the user login successful page can show up normally.

1. Use command "***ipconfig***" to get Default Gateway IP Address.

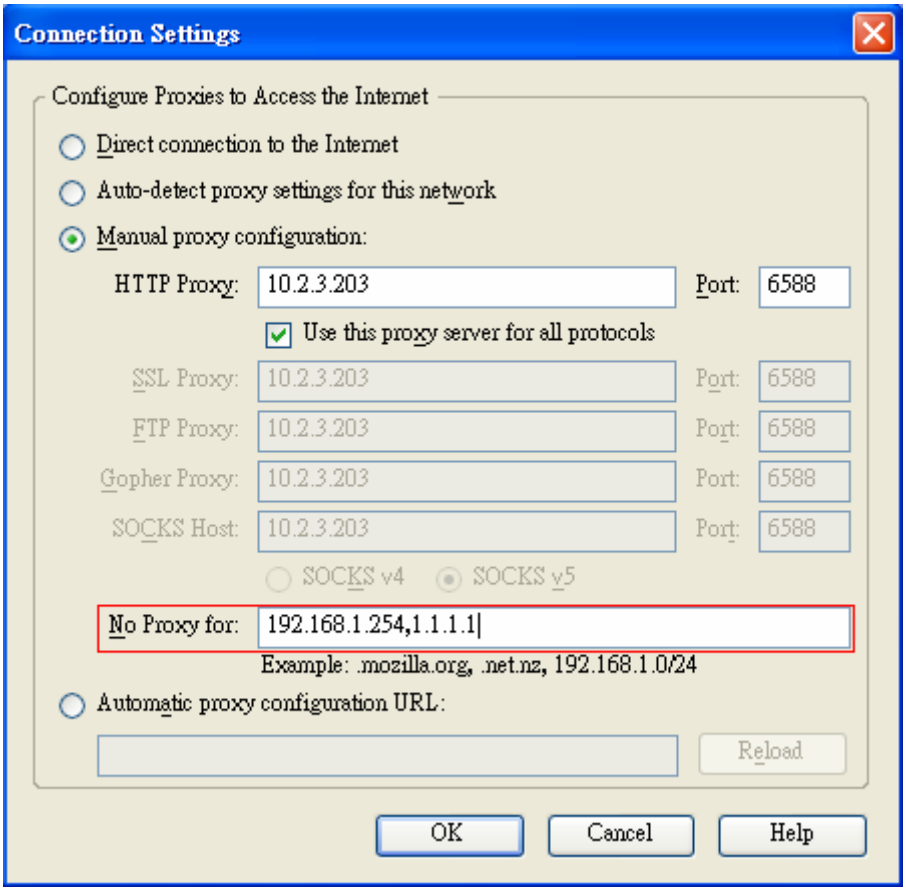


2. Open browser to add ***default gateway IP address (e.g. 192.168.1.254)*** and ***logout page IP address "1.1.1.1"*** into proxy exception information.

   - **For I.E.**



- **For Firefox**


Connection Settings
Configure Proxies to Access the Internet
Direct connection to the Internet
Auto-detect proxy settings for this network
Manual proxy configuration:
HTTP Proxy: 10.2.3.203
Port: 6588
Use this proxy server for all protocols
SSL Proxy: 10.2.3.203
Port: 6588
FTP Proxy: 10.2.3.203
Port: 6588
Gopher Proxy: 10.2.3.203
Port: 6588
SOCKS Host: 10.2.3.203
Port: 6588
SOCKS v4
SOCKS v5
No Proxy for: 192.168.1.254,1.1.1.1
Example: .mozilla.org, .net.nz, 192.168.1.0/24
Automatic proxy configuration URL:
Reload
OK
Cancel
Help