

# **Internet Server Appliance**

## **ISA-4000**



## **User's Manual**

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## Regulations

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

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

**Note!**

**Only digital device equipment certified CLASS B having shielded cables should be attached to this equipment.**

## Safety Information

Please heed the following safeguards and instructions before using the ISA-4000:

- Read all instructions, warnings, and safety instructions thoroughly
- Turn off the ISA-4000 correctly (refer to page 6)
- Do not obstruct the ISA-4000 chassis ventilation grids
- To reduce the danger of electrical shock, avoid disassembling the ISA-4000
- The ISA-4000 mainboard has a lithium battery that provides power for the realtime CMOS RAM. This battery should last from 5 ~ 10 years. If the system does not keep time and date accurately, you may need to have the battery changed. Contact your dealer for assistance.

**Warning:** There is danger of explosion if the battery replaced with the wrong battery type. Only use the same (or equivalent) type of battery to replace the mainboard lithium battery. Consult the manufacturer for more information. Dispose of the battery according to the manufacturer's recommendations or according to local regulations.

## Customer Service

For information on customer service and support for the ISA-4000, please refer to the following email address and Website URL:

**Email:** support@planet.com.tw

**WWW:** www.planet.com.tw

Before contacting customer service, please take a moment to gather the following information:

- ISA-4000 serial number and MAC address
- Additional software installed on the ISA-4000
- Any error messages that displayed when the problem occurred
- Any software running when the problem occurred
- Steps you took to resolve the problem on your own

## Revision

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## About this Manual

This manual has seven chapters and three appendices.

<b>Chapter 1</b> Introducing the ISA-4000	This chapter introduces the product packaging, the ISA-4000's front and rear panels, the services provided, and the system requirements for administration.
<b>Chapter 2</b> Setting up the Hardware	This chapter explains how to set up the ISA-4000 and how to turn the ISA-4000 on and off.
<b>Chapter 3</b> Using the Setup Wizard	This chapter explains a quick and easy way to setup the ISA-4000 using a powerful setup wizard.
<b>Chapter 4</b> Client-Side Settings	This chapter explains how to setup your computer to be a client of the ISA-4000.
<b>Chapter 5</b> Administrator's Guide	This chapter shows administrators how to configure and maintain the system.
<b>Chapter 6</b> User's Guide	This chapter shows users how to maintain their personal accounts.
<b>Chapter 7</b> System Install and Restore	This chapter explains how to install a hard disk drive into the ISA-4000 system, and how to configure the hard drive for use.
<b>Appendix A</b> LCD Console	This appendix explains the function and usage of the three buttons on the front panel, and also explains the function of the LCD to either display the ISA-4000 messages, or act as a system console.
<b>Appendix B</b> Specifications	This appendix describes the specifications of the ISA-4000.
<b>Appendix C</b> Licenses	This appendix contains all of the licensing information.

# Table of Contents

<b>Chapter 1: Introducing the ISA-4000 .....</b>	<b>1</b>
1.1 Features.....	1
1.2 Package Contents.....	1
1.3 Software Requirements.....	1
1.4 Front View.....	2
1.5 ISA-4000 Rear Panel.....	2
1.6 ISA-4000 Services.....	3
1.7 Configuration Options.....	3
<b>Chapter 2: Setting up the Hardware.....</b>	<b>5</b>
2.1 Connecting to the WAN, LAN, and ADSL Modem.....	5
2.2 Connecting the Power Cable and Turning on the ISA-4000 .....	5
2.3 Turning off the ISA-4000 .....	6
2.4 Resetting the ISA-4000 .....	7
<b>Chapter 3: Using the Setup Wizard .....</b>	<b>8</b>
3.1 Configuration of the ISA-4000 using the Wizard.....	8
3.2 Logging in as Administrator.....	13
<b>Chapter 4: Client-Side Settings .....</b>	<b>16</b>
4.1 Email Client Settings.....	16
4.2 Sharing Files from ISA-4000.....	16
4.2.1 Sharing Files in Windows XP/2000/98/95 .....	16
4.2.2 Sharing Files in Windows NT 4.0 .....	17
4.2.3 Sharing Files in the Macintosh OS .....	17
4.2.4 Connecting to the ISA-4000 using FTP.....	17
4.3 DHCP Client Setup .....	17
4.3.1 DHCP Client Setup in WINDOWS 98/95.....	17
4.3.2 DHCP Client Setup in WINDOWS 2000/XP.....	17
4.3.3 DHCP client setup in WINDOWS NT4.0 .....	18
4.3.4 DHCP Client Setup on Mac OS .....	18
4.4 Web Publishing.....	18
4.4.1 Publishing Web Pages with FrontPage 2000.....	18
4.4.2 Publishing Web Pages using FTP.....	19
4.5 Setting Up the Client to Use the Web Caching Server .....	19
4.5.1 Force Client Site Browsing Through a Web Caching Server .....	19
4.5.2 Setting up WINDOWS 2000/98/95/NT4.0 to Access the Web Caching Server .....	19
4.5.3 Setting up MAC OS to Access the Web Caching Server .....	20
<b>Chapter 5: Administrator's Guide .....</b>	<b>21</b>
5.1 Logging in as an Administrator.....	21
5.2 Users and Groups.....	22
5.2.1 User List .....	23
5.2.1.1 Adding a new user .....	23
5.2.1.2 Editing user settings .....	24
5.2.1.3 Delete a user .....	24
5.2.1.4 Edit user defaults .....	24
5.2.2 Group List.....	24

5.2.2.1	Adding a new group .....	25
5.2.2.2	Editing group settings.....	25
5.2.2.3	Deleting a group .....	25
5.2.2.4	Editing group defaults .....	25
5.2.3	Import Users .....	26
5.3	<i>Network Services</i> .....	26
5.3.1	DNS .....	27
5.3.1.1	Enabling the Domain Name Server .....	27
5.3.1.2	Adding a new domain name .....	28
5.3.1.3	Adding a new host name to a domain.....	28
5.3.1.4	Editing a host name in a domain name list .....	30
5.3.1.5	Modifying the SOA .....	31
5.3.1.6	Adding a secondary service.....	32
5.3.1.7	Editing a secondary service .....	32
5.3.2	Email Service .....	33
5.3.2.1	Email servers setting.....	33
5.3.3	Mailing Lists.....	34
5.3.3.1	Mailing list settings .....	34
5.3.4	File Services .....	35
5.3.4.1	File services settings.....	36
5.3.5	Web Services .....	37
5.3.5.1	Web services settings .....	37
5.3.6	DHCP (Dynamic Host Configuration Protocol).....	38
5.3.6.1	DHCP settings .....	38
5.3.7	Basic Firewall.....	40
5.3.7.1	Enabling the firewall .....	40
5.3.7.2	Adding rules to input/forward/output chains .....	41
5.3.7.3	Modifying a rule in a input/forward/output chain .....	42
5.3.7.4	Deleting a rule in a input/forward/output chain .....	42
5.3.7.5	Changing a chain priority .....	42
5.3.7.6	Changing a default policy.....	42
5.3.8	Telnet.....	42
5.4	<i>System</i> .....	43
5.4.1	Configuring TCP/IP.....	43
5.4.1.1	TCP/IP settings.....	43
5.4.1.2	Dynamic DNS settings .....	44
5.4.2	Configuring Internet Settings .....	46
5.4.2.1	Intranet use only .....	46
5.4.2.2	Connection Mode .....	47
5.4.3	Shutting Down and Restarting the ISA-4000 .....	48
5.4.4	Setting the Time .....	48
5.4.5	Checking the System Information .....	49
5.5	<i>Maintenance</i> .....	49
5.5.1	Backing Up Data .....	50
5.5.2	Restore.....	51
5.6	<i>Usage Information</i> .....	53
5.6.1	Web Usage .....	54
5.6.2	Disk Usage .....	56
5.6.3	Network Usage .....	58
5.7	<i>Software Update</i> .....	58
5.7.1.1	Software update.....	59
5.7.1.2	Uninstall software.....	59
5.8	<i>Personal Profile</i> .....	60
5.8.1	Account .....	60
5.8.2	Email .....	61
5.8.3	Personal Info.....	62
5.8.4	Disk Usage .....	62
<b>Chapter 6:</b>	<b>User's Guide.....</b>	<b>64</b>
6.1	<i>Logging in as an User</i> .....	64
6.1.1	Account .....	65
6.1.2	Email .....	65

6.1.3	Personal Info.....	66
6.1.4	Disk Usage .....	67
<b>Chapter 7:</b>	<b>System Install and Restore.....</b>	<b>68</b>
7.1	<i>Installing the HDD .....</i>	<i>68</i>
7.2	<i>System Restoration Procedure.....</i>	<i>73</i>
<b>Appendix A:</b>	<b>LCD Console .....</b>	<b>74</b>
A.1	<i>LCD Console Overview .....</i>	<i>74</i>
A.2	<i>Displaying Network Settings.....</i>	<i>74</i>
A.3	<i>Setup Network.....</i>	<i>74</i>
A.4	<i>Reboot.....</i>	<i>74</i>
A.5	<i>Reset Network .....</i>	<i>75</i>
A.6	<i>Reset Firewall.....</i>	<i>75</i>
A.7	<i>Exit.....</i>	<i>75</i>
A.8	<i>Shutdown.....</i>	<i>75</i>
<b>Appendix B:</b>	<b>Product Specifications .....</b>	<b>76</b>
B.1	<i>PLANET Internet Server Appliance 4000 .....</i>	<i>76</i>
B.1.1	<i>Software Features .....</i>	<i>76</i>
B.1.2	<i>Hardware.....</i>	<i>76</i>
B.2	<i>Supported Network Interface Card.....</i>	<i>77</i>
B.2.1	<i>PCI Cards.....</i>	<i>77</i>
B.2.2	<i>PCMCIA Cards.....</i>	<i>77</i>
B.2.3	<i>Cables .....</i>	<i>77</i>
<b>Appendix C:</b>	<b>Licenses.....</b>	<b>78</b>
C.1	<i>BSD Copyright.....</i>	<i>78</i>
C.2	<i>GNU GENERAL PUBLIC LICENSE.....</i>	<i>78</i>
C.3	<i>GNU GENERAL PUBLIC LICENSE.....</i>	<i>79</i>
C.4	<i>How to Apply These Terms to Your New Programs .....</i>	<i>82</i>
C.5	<i>SSL License.....</i>	<i>83</i>

# Chapter 1: Introducing the ISA-4000

Thank you for purchasing the ISA-4000 Internet Server. The ISA-4000 was designed specifically for SOHO type enterprises and home users.

The ISA-4000 has many versatile functions for use in supporting SOHO Internet and Intranet services. You can configure your office setup using a single ISA-4000 that provides an interface between several workstations operating different operating systems and the Internet. Alternatively, you can configure several ISA-4000 devices to act as Web, email, and file servers for the company Intranet. Refer to **1.7 Configuration Options** for more information.

The ISA-4000 enables users to share a single ADSL or cable modem among all workstations in your SOHO environment, and has basic firewall features integrated to enhance Intranet security. The server also has cross-platform support, enabling users on Mac and Windows workstations maximum flexibility in sharing files.

The ISA-4000 is the best choice for your SOHO Internet server requirements.

**Note!**

**If you want to install a new hard disk in the ISA-4000, first refer to Chapter 7: System Install and Restore.**

## 1.1 FEATURES

The ISA-4000 Internet Server comes with the following features:

- Integrated web caching, proxy services, and DHCP and DNS support provide fast, secure, and reliable Internet access for all workstations in your SOHO environment
- Website hosting functionality enables you to create a website and host it within the ISA-4000
- IP sharing enables users to share one cable or ADSL modem with the entire office
- Email server capability lets you create and manage company and individual email accounts, create group mailing lists, and schedule automated email delivery
- The basic packet filter firewall feature is easy to configure and protects local data while providing users with full Internet access
- Cross-platform functionality enables users on Macintosh, Windows, and Linux systems file sharing capability

## 1.2 PACKAGE CONTENTS

The ISA-4000 package should contain the following items:

- ISA-4000 device
- The ISA-4000 System Installation Guide
- One power cord
- One System Installation and user's manual CD-ROM
- Eight screws
- The ISA-4000 Quick Installation Guide

If any of the contents are missing or damaged, please contact your dealer or distributor immediately.

## 1.3 SOFTWARE REQUIREMENTS

The ISA-4000 supports a browser-based user interface, so you will need a browser application running on your personal computer. The ISA-4000 can be accessed with the following browsers:

- Netscape Navigator, version 4.7 or later
- Microsoft Internet Explorer, version 5.0 or later

In order for the browser to work properly with the ISA-4000, you also need to enable cookies and JavaScript on your browser. Refer to your browser's online help for more information on enabling cookies and JavaScript.



## 1.4 FRONT VIEW

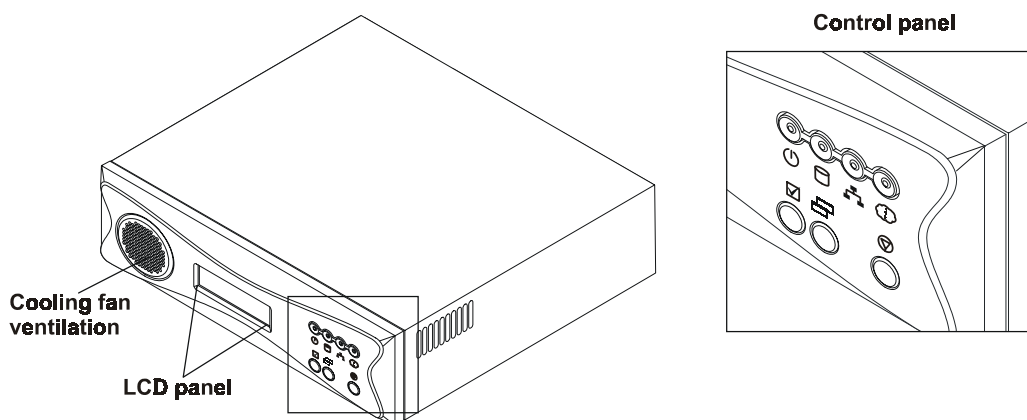


Figure 1-1: ISA-4000 front panel.

The LCD can be used to display ISA-4000 messages, or it can act as a console while using the control panel.

**Note!**

Detailed information about the LCD console can be found in Appendix A.

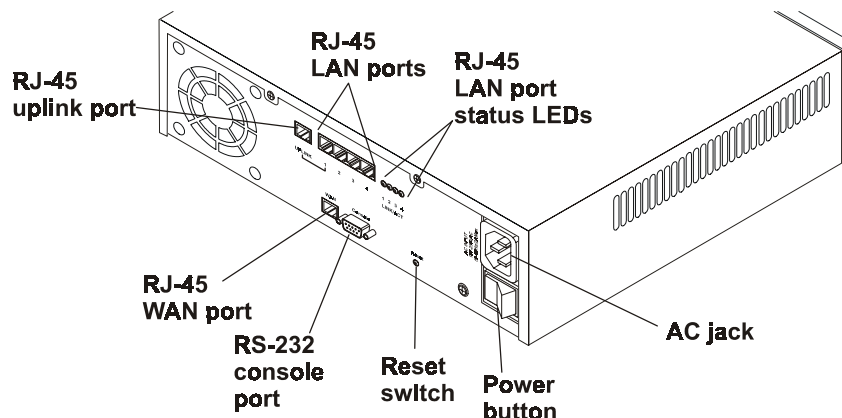
The ISA-4000 control panel has four LEDs and three buttons. They are described as follows:

	<b>Power-on LED:</b> lights when power is turned on
	<b>Hard disk activity LED:</b> blinks when HDD activity occurs
	<b>LAN port LED:</b> lights when the LAN port is connected to an active hub or switch; it blinks when packets are being transmitted or received
	<b>WAN port LED:</b> lights when the WAN port is connected to an active ADSL router or cable modem; blinks when packets are being transmitted or received
	<b>Select button:</b> press this button to execute the function currently displayed on the LCD
	<b>Menu button:</b> press this button to scroll through the console menus
	<b>System Shutdown button:</b> press this button twice to shut down the system (refer to 2.3 Turning off the ISA-4000) <b>Note:</b> To turn the ISA-4000 off, you must press the power button on the rear panel.

## 1.5 ISA-4000 REAR PANEL

The ISA-4000 rear panel has one 10/100Mbit Ethernet port, a four-port 10/100Mbit Ethernet switch, and a RS-232 manufacture console port. The four-port Ethernet switch connects to a local LAN network and the Ethernet port connects to an ADSL router or a cable modem as a WAN port.

The RS-232 console port is for the manufacturer use only.



**Figure 1-2: ISA-4000 rear panel**

The status LEDs indicate the following:

LED	MEANING
<b>Act</b>	Indicates transmit or receive activity. It is normally off. When there is packet transmit or receive activity, this LED is on.
<b>Link</b>	Indicates whether the link is active or not. When lit, indicates that the link is active. When off, indicates that the link is inactive.

**Note!**

For information on resetting the system, refer to **2.4 Resetting the ISA-4000**.

## 1.6 ISA-4000 SERVICES

The ISA-4000 provides nine main services, including:

- Email server
- Web server
- File server
- Web caching server
- Basic firewall
- DHCP (Dynamic Host Configuration Protocol) server
- DNS (Domain Name System) server
- IP masquerading (also known as NAT [Network Address Translation])
- Mailing lists

These services are described in more detail in Chapter 4.

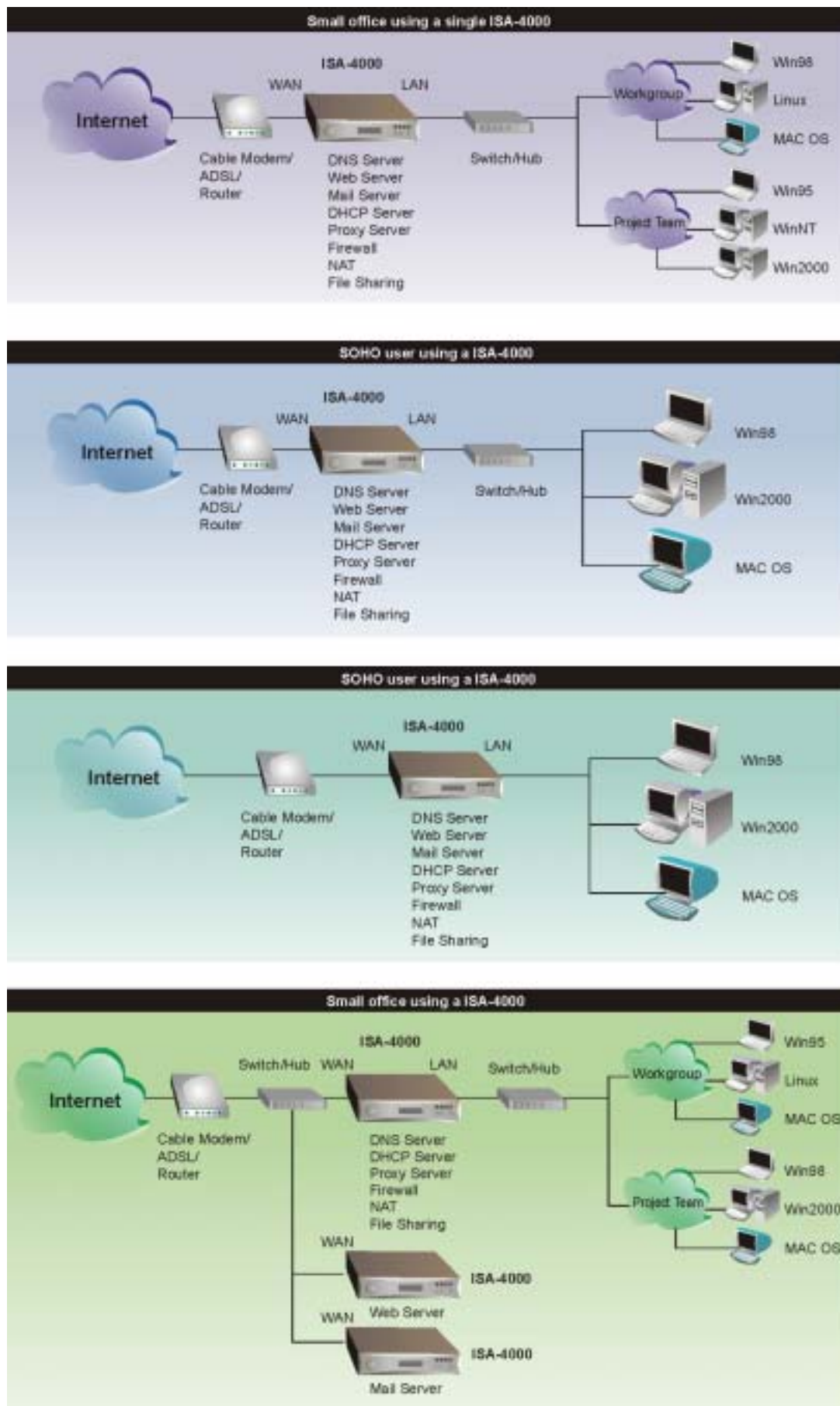
The ISA-4000 also offers an easy-to-use, browser-based, user-friendly interface, allowing users to setup and administer the ISA-4000 in an intuitive way. The ISA-4000 GUI (Graphical User Interface) has two groups of functions:

- one group is for system administrators, and administers the ISA-4000 systems
- one group is for users, and administers each user's personal account

More detailed information can be found in **Chapter 4: Administrator's Guide**, and in **Chapter 5: User's Guide**.

## 1.7 CONFIGURATION OPTIONS

The ISA-4000 provides many scenarios for configuring your SOHO server environment, including those shown as follows:



**Figure 1-3 The configuration of ISA-4000**

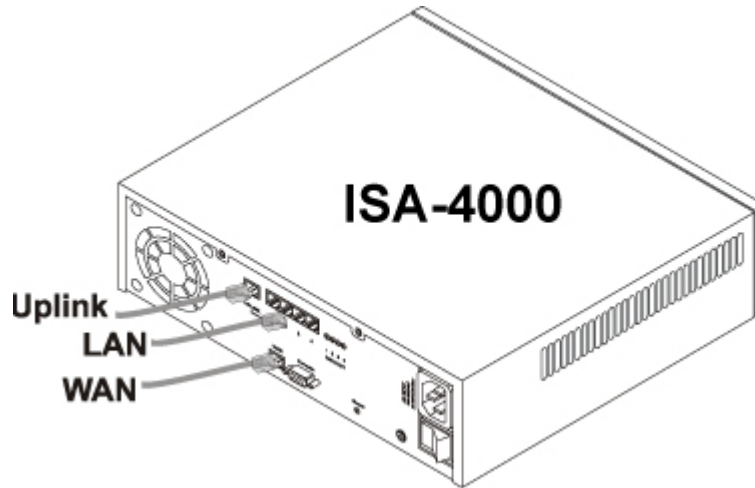
This concludes Chapter 1. The next chapter helps you to get started using the ISA-4000.

## Chapter 2: Setting up the Hardware

This chapter explains how to make LAN and WAN connections, and how to turn on and shut down the ISA-4000.

### 2.1 CONNECTING TO THE WAN, LAN, AND ADSL MODEM

Before turning on the ISA-4000, connect all required WAN, LAN, and ADSL modem cables. Refer to the following illustration and table:



**Figure 2-1: Connecting WAN, LAN, and ADSL/cable modems**

<b>Uplink</b>	Connect a straight cable to connect the ISA-4000 to a switch or hub.
<b>LAN</b>	Connect a crossover cable or an isolated Ethernet hub between the host PC and the LAN port of the ISA-4000.
<b>WAN</b>	Connect this jack to an ADSL router or a cable modem as a WAN port.

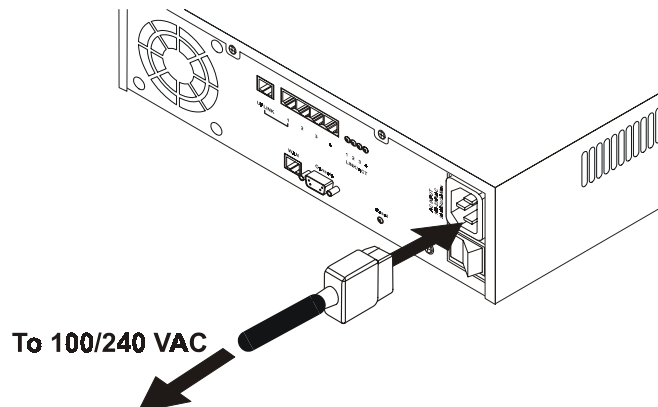
### 2.2 CONNECTING THE POWER CABLE AND TURNING ON THE ISA-4000

Refer to the following instructions and illustrations to connect the power cable:

**Note!**

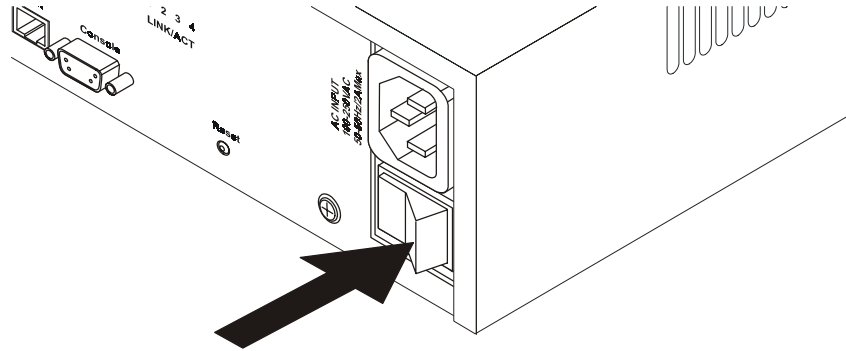
The ISA-4000 internal power supply auto-senses the AC voltage and automatically adjusts for 100 or 240 VAC input.

1. Insert the power cable into the AC jack at the rear of the ISA-4000:



**Figure 2-2: Connecting the power cord**

2. Press the rear power switch to supply power to the ISA-4000:



**Figure 2-3: Turning on the power**

After you press the rear power button, the ISA-4000 goes through a boot-up procedure; the boot messages can be viewed on the LCD screen. When the system has finished booting, the LCD displays the host, domain, and IP address:

```
host.domain
10.1.2.3
```

**Note!**

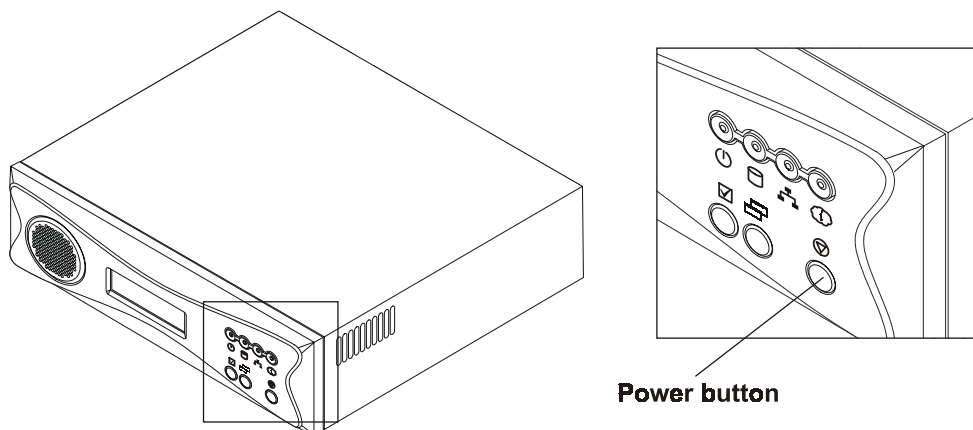
Refer to Chapter 3 to help you set up the ISA-4000 browser interface.

## 2.3 TURNING OFF THE ISA-4000

Follow these instructions to turn off the ISA-4000:

**Warning:** Ensure that you turn off the ISA-4000 as described in this section to avoid corrupting or damaging operating system files.

1. Press the ISA-4000 front power button once:



The LCD displays the following message:

One more to  
Shutdown

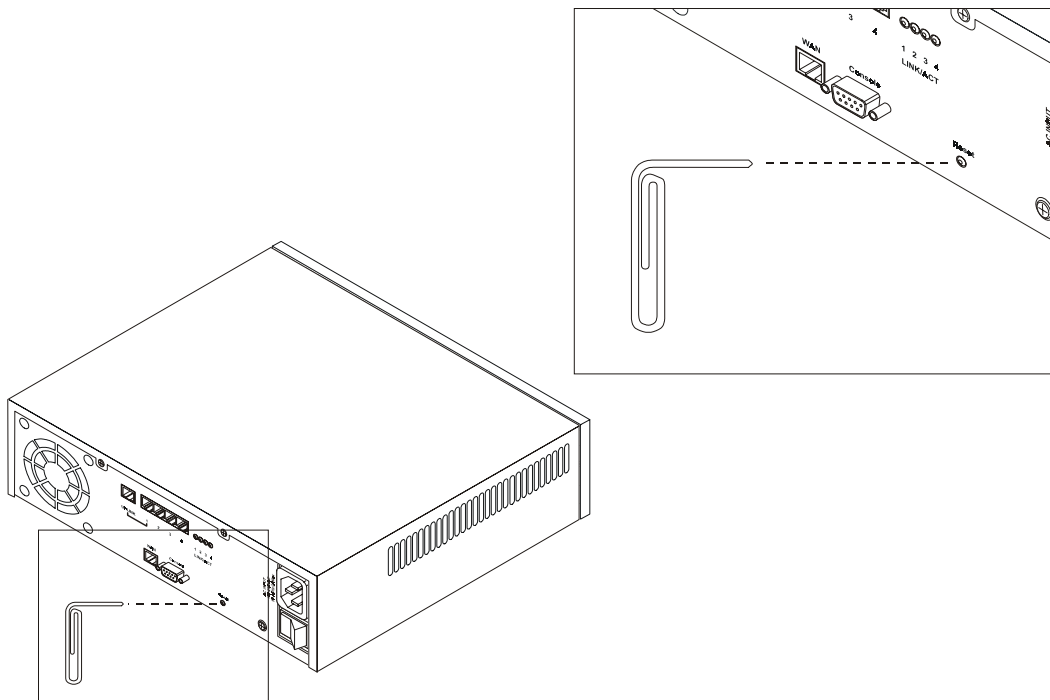
2. Press the front power button again. The system goes through a power down sequence. After the power down sequence completes, the following message is displayed:

System  
Halt

3. Press the rear power button to turn the server off.

## 2.4 RESETTING THE ISA-4000

If the ISA-4000 locks up, you can reset the system by inserting an unbent paper clip into the reset hole at the rear of the server:



**Figure 2-4: Resetting the ISA-4000**

After inserting the paper clip, the system reboots.

This concludes this chapter. The next chapter helps you set up the ISA-4000 browser interface.

## Chapter 3: Using the Setup Wizard

The ISA-4000 GUI provides a powerful and easy-to-use installation wizard. Using the wizard, an administrator can setup the ISA-4000 in just a few minutes. After using the wizard, the user and administrator will have access to all of the following services:

- Email server
- Web server
- File server
- Web caching server
- Basic firewall
- DHCP (Dynamic Host Configuration Protocol) server
- DNS (Domain Name System) server
- IP masquerading (also known as NAT [Network Address Translation])
- Mailing lists

Detailed information on how to use the wizard is provided in the next section.

### 3.1 CONFIGURATION OF THE ISA-4000 USING THE WIZARD

1. Type the IP address of the ISA-4000 in the Address bar of your browser and press <Enter>. The welcome screen appears:

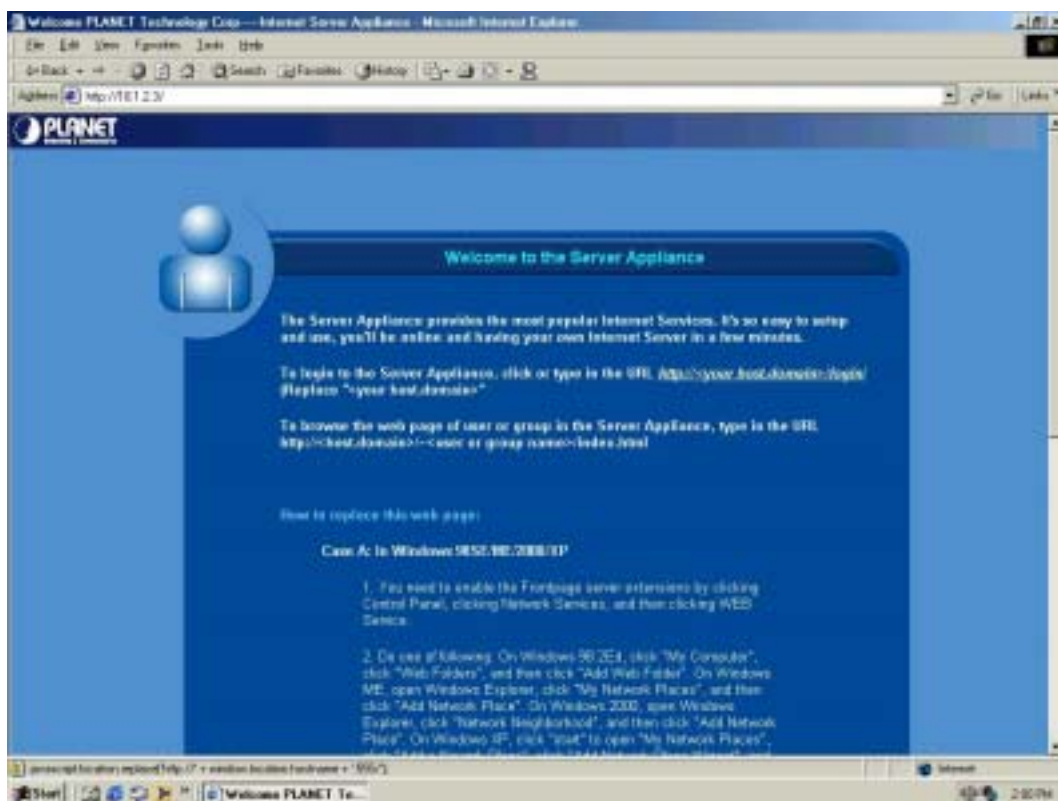


Figure 3-1: ISA-4000 browser interface welcome screen

**Note!**

If you can't connect

If ISA-4000 does not respond, check the following:

Machine is properly installed, LAN connection is OK, and it is powered ON.  
You can test the connection by using the "Ping" command:

Open the MS-DOS window or command prompt window.

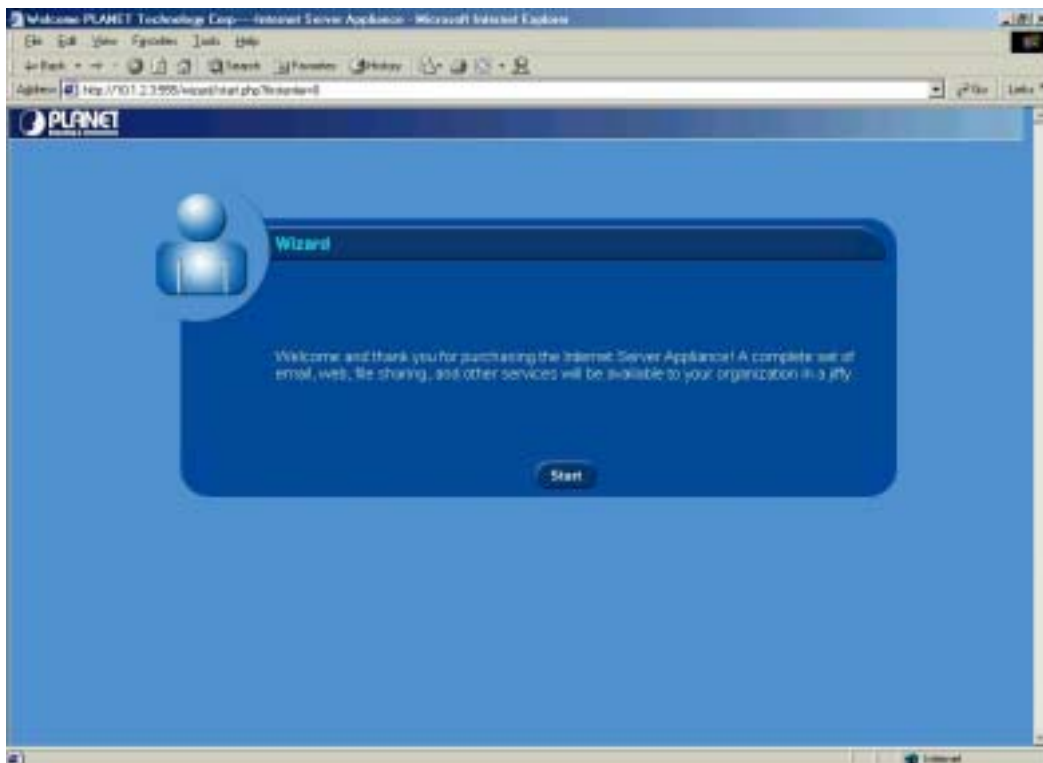
Enter the command:

```
ping 192.168.0.1
```

If no response is received, either the connection is not working, or your PC's IP address is not compatible with ISA-4000's IP Address.

- ♦ If your PC is using a fixed IP Address, its IP Address must be within the range 10.1.2.4 to 10.1.2.254 to be compatible with ISA-4000's default IP Address of 10.1.2.3. Also, the *Network Mask* must be set to 255.255.255.0.
- ♦ If you want to use DHCP to get IP address, please make sure you have followed the setup procedure on 4.3 DHCP Client Setup.

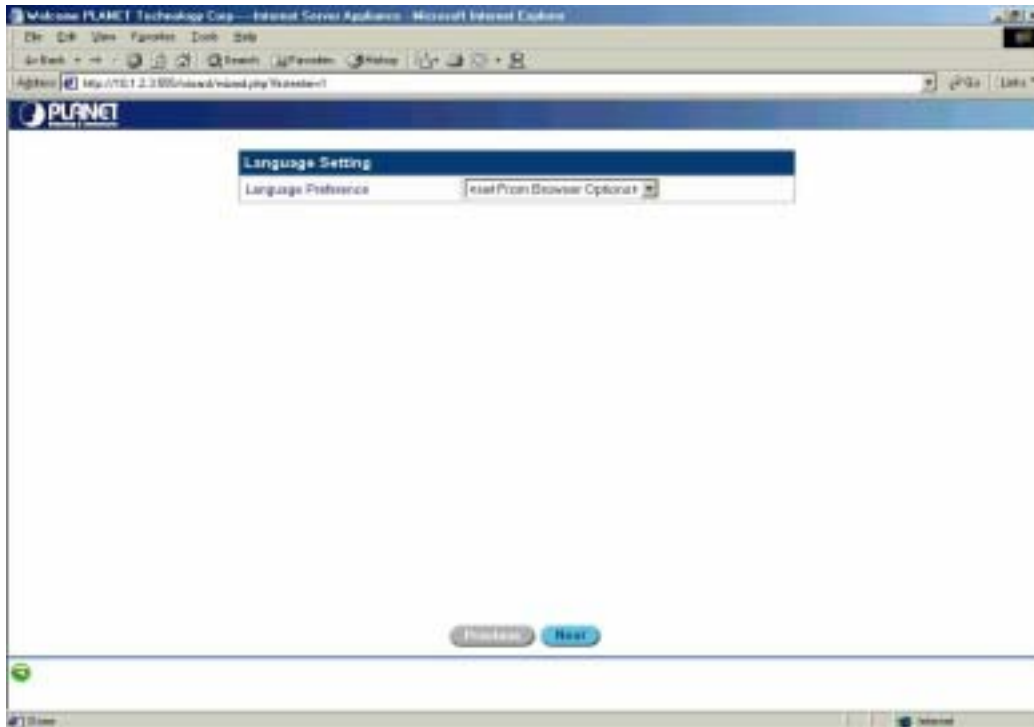
2. Click **http://<your host.domain>/login/**. The next screen appears prompting you to start the wizard:



**Figure 3-2: ISA-4000 configuration wizard start screen**

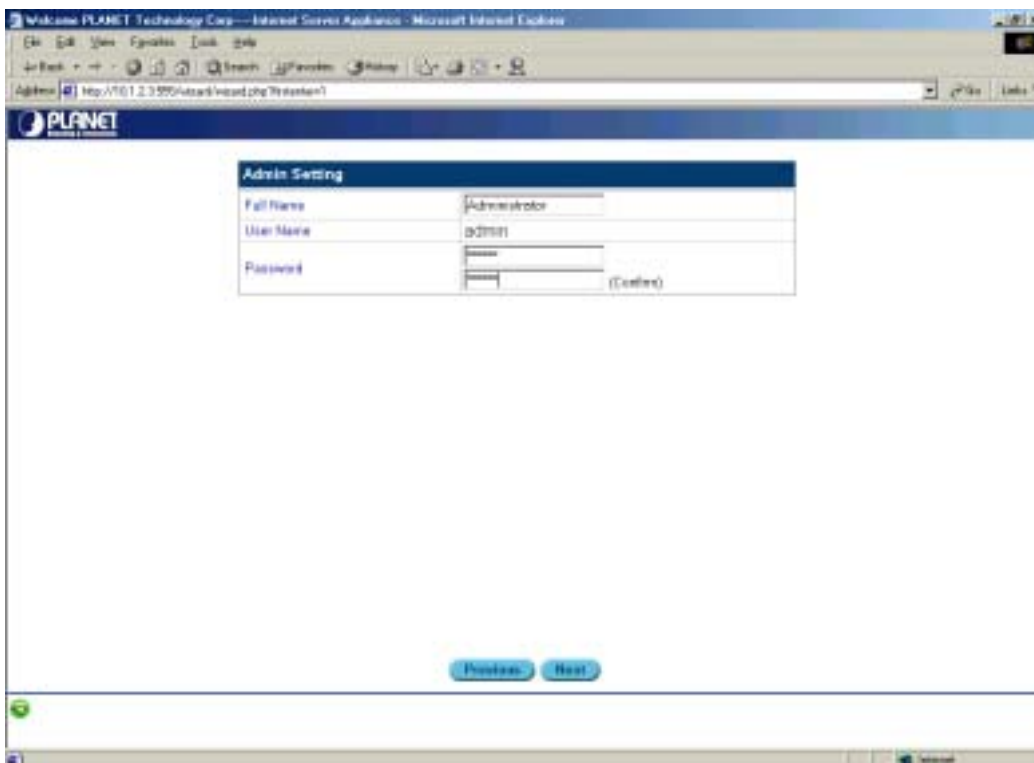
3. Click **Start**. You are prompted to select the display language:





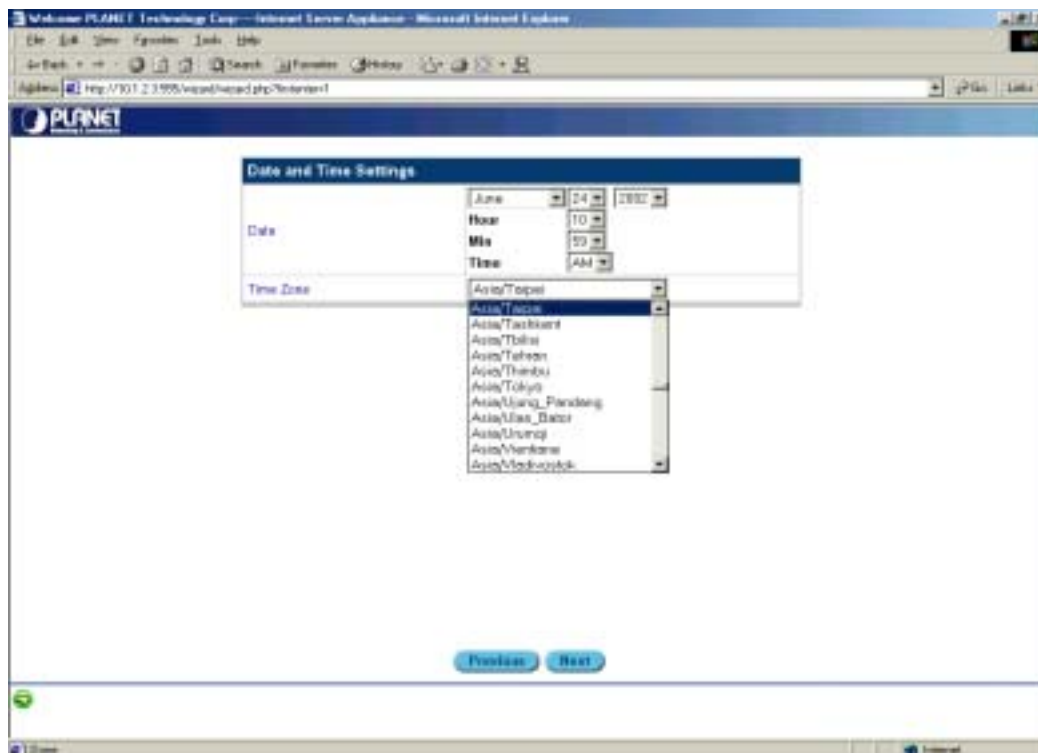
**Figure 3-3: Configuration wizard – selecting the browser language**

4. Select the desired display language and click **Next**. You are prompted to select an administrator password:



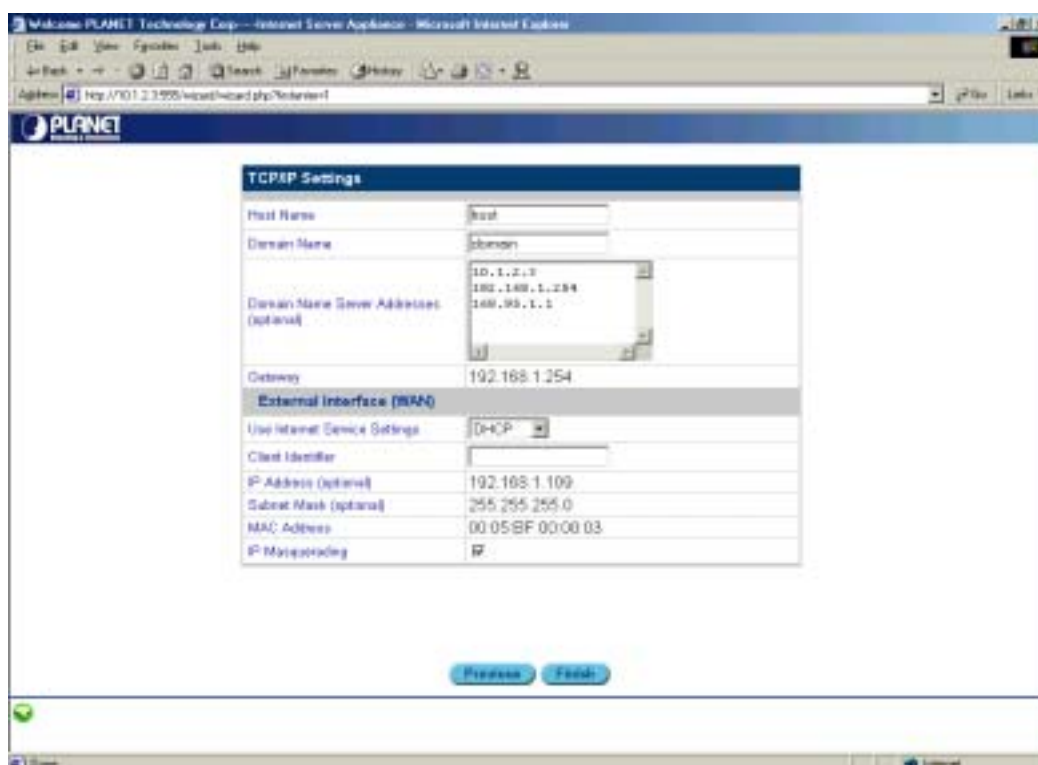
**Figure 3-4: Configuration wizard – selecting an administrator password**

5. Key in the password and click **Next**. The Time Settings menu appears:



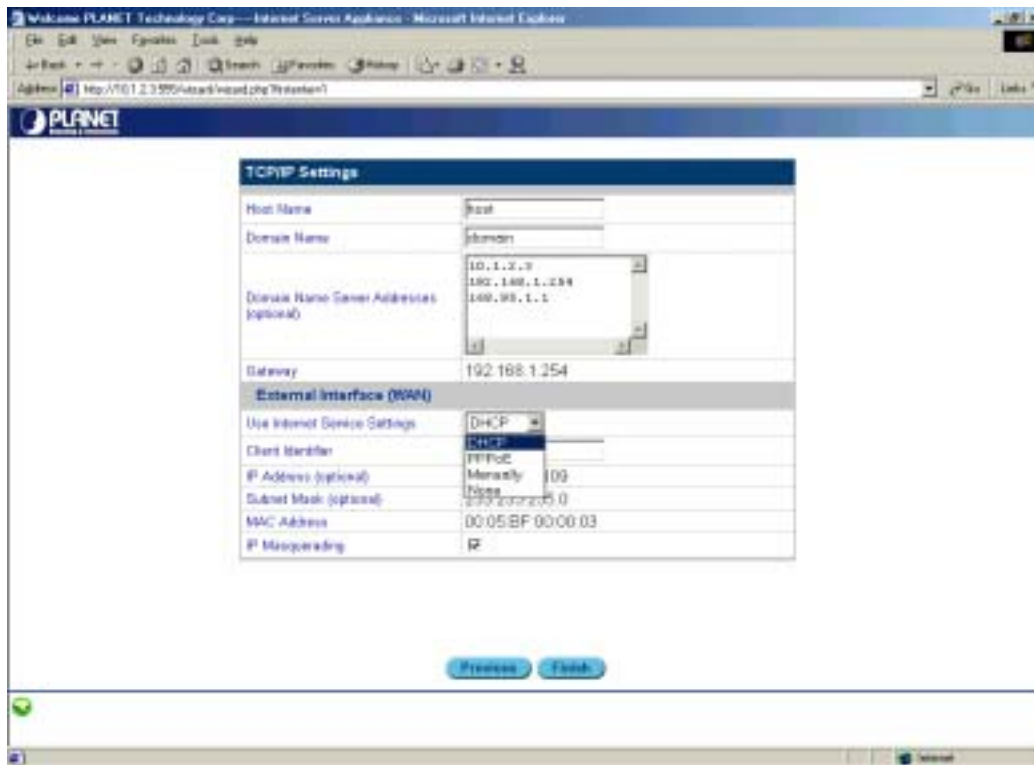
**Figure 3-5: Configuration wizard – setting the time**

6. Select the appropriate Date and Time Zone. Click **Next**. The TCP/IP Settings menu appears:



**Figure 3-6: Configuration wizard – setting TCP/IP parameters**

7. Type the Host Name (for example "isa4000"), the Domain Name (for example "planet.com.tw" or "YourCompany.com"), and the Domain Name Server Address (for example "168.95.1.1"). Select the Use Internet Service Settings. The Internet Settings menu appears:



**Figure 3-7: Configuration Wizard – setting Internet options**

Specify your Internet service settings (WAN port) as DHCP or PPPoE, Manually, or No Internet. The four fields are described as follows:

No Internet	
<p>The screenshot shows the Planet Internet Server Assistant configuration wizard. The "Use Internet Service Settings" dropdown menu is set to "None".</p>	<p>Selecting No Internet means that a connection to the Internet is absent.</p>

## DHCP

TCP/IP Settings	
Host Name	host
Domain Name	domain
Domain Name Server Addresses (optional)	10.1.2.3 192.168.1.254 169.95.1.1
Gateway	192.168.1.254
External Interface (WAN)	
Use Internet Service Settings	DHCP
Client Identifier	
IP Address (optional)	192.168.1.109
Subnet Mask (optional)	255.255.255.0
MAC Address	00:05:BF:00:00:03
IP Masquerading	IP

## PPPoE

TCP/IP Settings	
Host Name	host
Domain Name	domain
Domain Name Server Addresses (optional)	10.1.2.3 192.168.1.254 169.95.1.1
Gateway	192.168.1.254
External Interface (WAN)	
Use Internet Service Settings	PPPoE
User Name	
Password	
IP Address (optional)	192.168.1.109
Subnet Mask (optional)	255.255.255.0
MAC Address	00:05:BF:00:00:03
IP Masquerading	IP

## Manually

TCP/IP Settings	
Host Name	host
Domain Name	domain
Domain Name Server Addresses (optional)	10.1.2.3 192.168.1.254 169.95.1.1
Gateway	192.168.1.254
External Interface (WAN)	
Use Internet Service Settings	Manually
IP Address (optional)	192.168.1.109
Subnet Mask (optional)	255.255.255.0
MAC Address	00:05:BF:00:00:03
IP Forwarding and Masquerading	Forward and Masquerade IP Packets

If you select DHCP, PPPoE or Manually, you must specify values for External Interface and IP Masquerading.

**External Interface:** The external interface lets you obtain an IP address using one of three methods:

- **DHCP:** specify the Client Host Name and the Client Identifier. If you do not have this information, you do not need to fill it in.
- **PPPoE:** specify the User Name and Password (twice). Your ISP should provide you with the user name and password.
- **Manually:** type the IP Address, Subnet Mask, and Gateway in the fields. You can obtain this information from your ISP or network administrator.

When enabled, IP Masquerading configures the ISA-4000 to provide NAT (Network Address Translation) service.

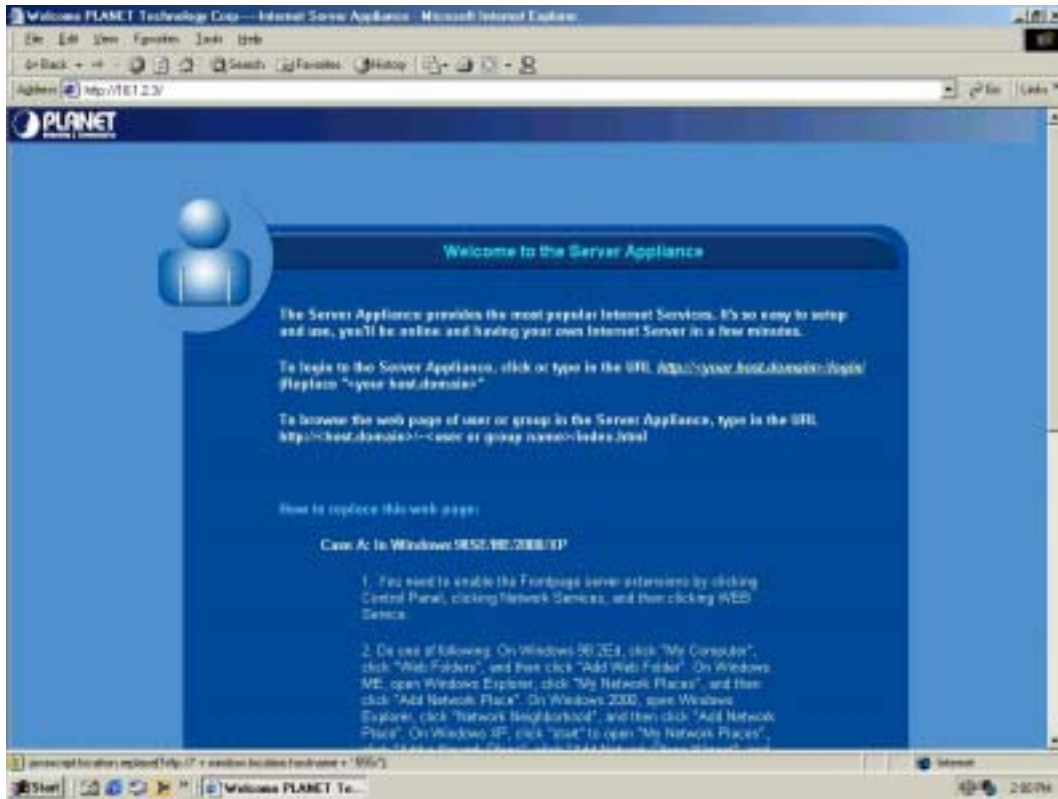
**Note:** Network Address Translation is an IETF standard that allows an organization to have an Internet presence with one address. NAT converts the address of each LAN node into one IP address for the Internet (and vice versa), and serves as a firewall by keeping individual IP addresses hidden from the outside world.

8. Click **Finish** to complete the wizard.

## 3.2 LOGGING IN AS ADMINISTRATOR

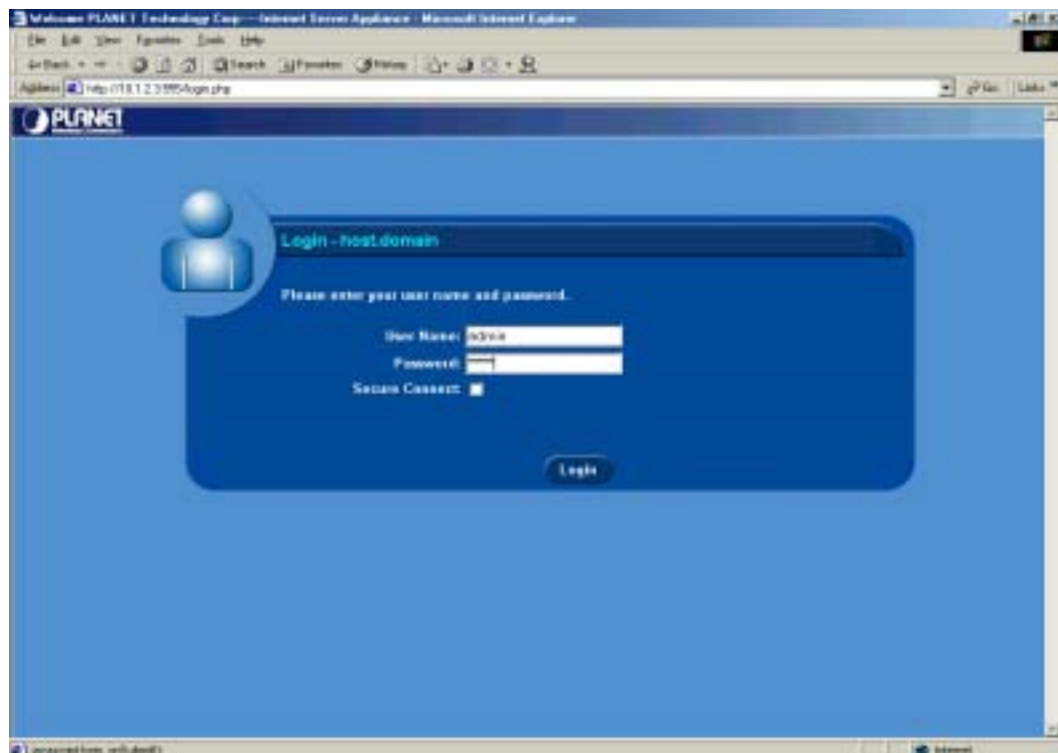
After you have finished the Configuration Wizard, you can log in as administrator. Follow these instructions.

1. Type the IP address of the ISA-4000 in the Address bar of your browser and press <Enter>. The welcome screen appears:



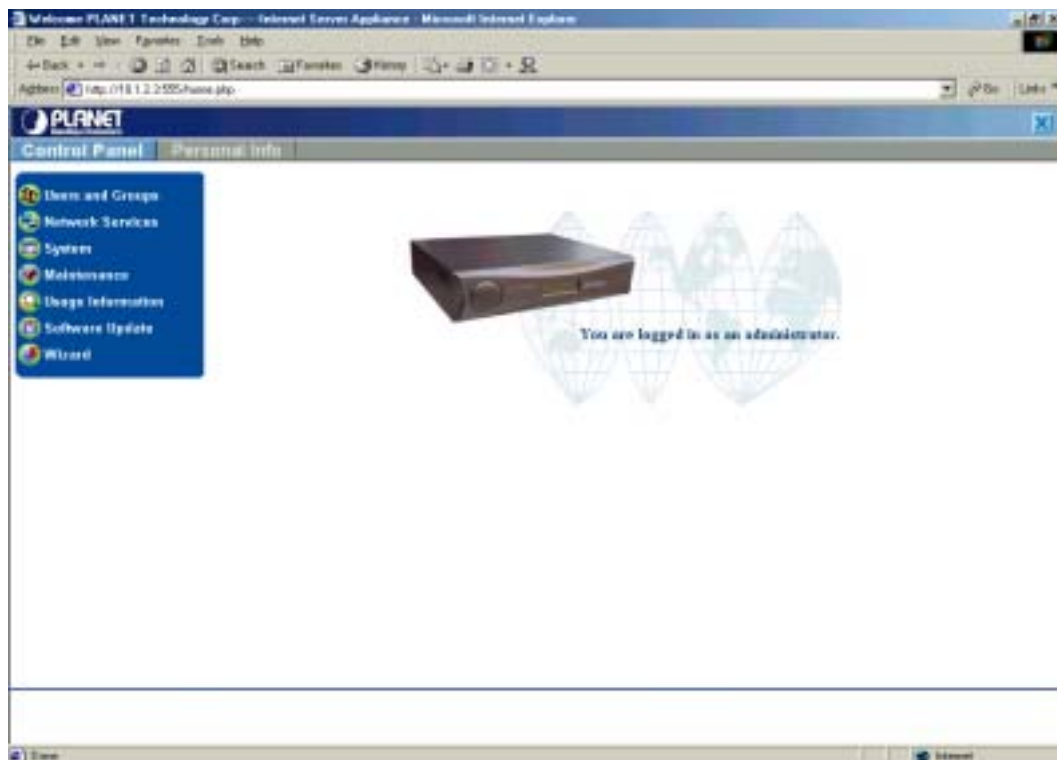
**Figure 3-8: Logging in as administrator – welcome screen**

2. Click <http://<your host.domain>/login/>.



**Figure 3-9: Logging in as the administrator – user name and password**

3. Login as the system administrator (default User Name is **admin** and Password is the one you key in on step 5 of chapter 3.1) and click **Login**. The main menu appears:



**Figure 3-10: Administration main menu**

From this menu you can perform all necessary administrative tasks for the server. Refer to Chapter 5 for more information.

This concludes this chapter. The next chapter covers client side settings.

## Chapter 4: Client-Side Settings

This chapter covers settings that can be made at the client workstation.

### 4.1 EMAIL CLIENT SETTINGS

If you use an external client to check your email (for example, Microsoft Outlook or Netscape Messenger), then you must specify the following items in the external client's email configuration:

- Your personal email address
- The SMTP server name (some email applications call it an "outgoing mail server")
- The POP3 server name (some email applications call it an "incoming mail server")
- The IMAP server.

The format of the email address is <username>@<domainname>

**Example:** isa4000@planet.com.tw

<b>Username</b>	This is the user name assigned to you. In this example, "isa4000" is the user name.
<b>Domain Name</b>	Domain names are the familiar, easy-to-remember names for computers on the Internet (in this example, planet.com.tw is the domain name). They correspond to a series of numbers, called Internet Protocol numbers, which serve as routing addresses on the Internet. Domain names are generally used as a convenient way of locating information and reaching others on the Internet. <b>A domain name may be obtained from ICANN</b> (Internet Corporation for Assigned Names and Numbers, <a href="http://www.icann.org">www.icann.org</a> ) or your local ISP.

In the preceding example, the POP3 server name, the IMAP server name, and the SMTP server name are all "mail.planet.com.tw"

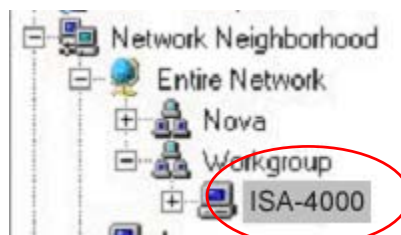
### 4.2 SHARING FILES FROM ISA-4000

The ISA-4000 can act as a cross-platform file server for users. Users can access files from Windows XP/2000/98/95/NT using SMB (Server Block Message) protocol or CIFS (Common Internet File System). Macintosh computers may use AppleShare or FTP (File Transfer Protocol). The procedures to connect to the ISA-4000 from each operating system are listed below.

Before following these instructions, you must log in as either a user (refer to **6.1 Logging in as an User**) or an administrator (refer to **5.1 Logging in as an Administrator**). To log in as user, the user name and password must exist in the ISA-4000's user list (see **5.2.1 User List**).

#### 4.2.1 Sharing Files in Windows XP/2000/98/95

1. Double-click the Network Neighborhood icon; the name of the ISA-4000 is listed:



2. Double-click the server name, and then wait for the available folders to appear. Right-click the share name and select Map to Network Drive from the drop-down menu to assign a driver letter to the server and allow it to be listed in Windows Explorer.



#### **4.2.2 Sharing Files in Windows NT 4.0**

1. Double-click the Network Neighborhood icon.
2. Double-click the name of the ISA-4000 and enter any registered user name and password to log in to the ISA-4000.

#### **4.2.3 Sharing Files in the Macintosh OS**

1. Click **Chooser** from the Apple menu.
2. Select AppleShare.
3. Select the name of the ISA-4000 and click **OK**.
4. Type the User Name and Password and click **Connect**.
5. Select a directory to connect to; click **OK**.

#### **4.2.4 Connecting to the ISA-4000 using FTP**

There are two ways to connect to ISA-4000 using FTP. One way is to use a dedicated FTP application, and the other way is to use a web browser to access the FTP server via its URL.

##### **Using an FTP application**

1. Run your FTP application and enter the IP address or hostname of the ISA-4000.
2. Enter the user name and password to login to the ISA-4000.
3. Choose the files or directories that you want to access.

##### **Using a web browser**

1. Run the web browser application.
2. Enter the URL or IP of the ISA-4000 (for example, ftp://10.1.2.3).
3. Enter the user name and password to login to the ISA-4000.

### **4.3 DHCP CLIENT SETUP**

You can use the client workstation to obtain the IP address, subnet mask, and gateway address from the ISA-4000, if the client is set to be a DHCP (Dynamic Host Configuration Protocol) client.

#### **4.3.1 DHCP Client Setup in WINDOWS 98/95**

1. Click **Start**.
2. Click **Settings**, and then select Control Panel.
3. Click **Network**.
4. Select the TCP/IP protocol.
5. Click **Properties**.
6. Click **IP Address** and select "Obtain IP address automatically."
7. Click the **DNS Configuration** tab and select **Disable DNS**.
8. Click **OK**.

#### **4.3.2 DHCP Client Setup in WINDOWS 2000/XP**

1. Click **Start**.
2. Click **Settings**, and then select Control Panel.
3. Click **Network and Dial-up Connections**.
4. Click **Local Area Connection**.
5. Click **Properties**.
6. Select Internet Protocol (TCP/IP).
7. Click **Properties**.



8. Select "Obtain an IP address automatically."
9. Select "Obtain a DNS address automatically."
10. Click **OK**.

#### 4.3.3 DHCP client setup in WINDOWS NT4.0

You can configure your WINDOWS NT 4.0 to be a DHCP client during installation, or it can be set manually after the system is already installed. The steps to manually set it up are listed below.

1. Click **Start**.
2. Select **Settings**, and then select Control Panel.
3. Click **Network**.
4. Click **Protocol**.
5. Select TCP/IP Protocol.
6. Select "Obtain an IP address from a DHCP Server" and click **OK**.

#### 4.3.4 DHCP Client Setup on Mac OS

1. Click **Apple Menu**.
2. Select Control Panel, and then select TCP/IP.
3. Select "Connect via Ethernet" and "Configure: Using DHCP Server," and then close the TCP/IP menu.
4. Click **Save**.

### 4.4 **WEB PUBLISHING**

The ISA-4000 allows users to publish their web pages using FrontPage and FTP.

#### 4.4.1 Publishing Web Pages with FrontPage 2000

The ISA-4000 includes the FrontPage 2000 Server Extensions, which permit the use of the client-side FrontPage application to publish and edit web pages on the ISA-4000.

Before you use FrontPage to publish and edit your web pages, you should enable FrontPage Server Extensions on the ISA-4000 as follows:

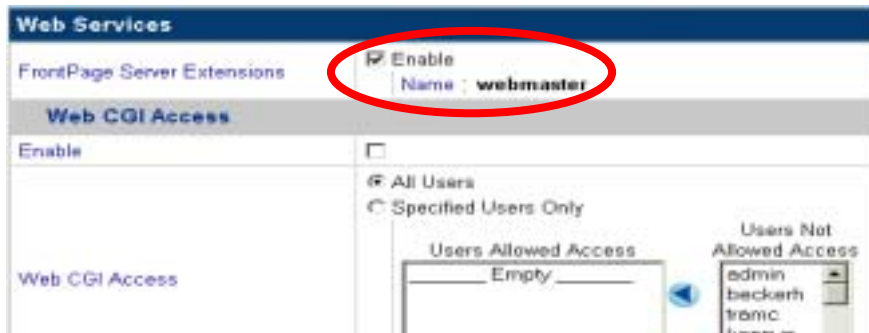
1. Log in to the ISA-4000 as the administrator (refer to **5.1 Logging in as an Administrator**).
2. Click **Control Panel**.



3. In the Administration menu, click **Network Services**, and then click **Web Services**:



4. Click Enable FrontPage Server Extensions:



After the FrontPage 2000 Server Extensions are enabled, a webmaster account is created that users can use to login to the ISA-4000 and maintain its web pages ( <http://10.1.2.3/~username> ).

#### 4.4.2 Publishing Web Pages using FTP

Web pages may also be published to the ISA-4000 using standalone FTP applications.

1. Run the FTP application and use your personal account to login to the ISA-4000.
2. Upload your web pages into your personal web pages directory. The personal web pages directory is located at:  
/home/users/<username>/web/

The file "index.html" is created in the directory as the user's default page, after the user's account had been created by the administrator (refer to **5.2.1.1 Adding a new user**).

### 4.5 SETTING UP THE CLIENT TO USE THE WEB CACHING SERVER

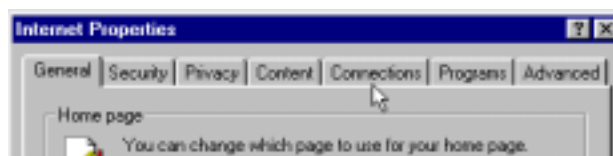
The Web Caching Server stores (caches) the web pages read by its clients, and the client's web access is redirected to the Web Caching Server. Once a cached web page is visited again, Web Caching Server directly responds to the client with the cached web page. This reduces network traffic and speeds up web access.

#### 4.5.1 Force Client Site Browsing Through a Web Caching Server

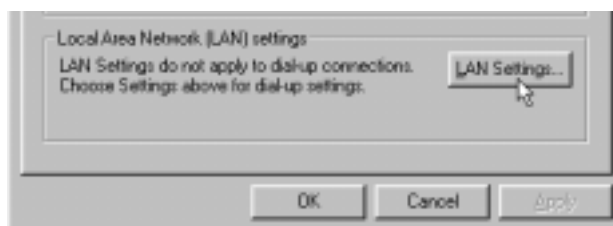
After finishing the ISA-4000 GUI Wizard, the ISA-4000 enables the Web Caching Server and forces all browsing access to be redirected to the Web Caching Server. This is done by adding a default rule in the firewall's Input Chain.

#### 4.5.2 Setting up WINDOWS 2000/98/95/NT4.0 to Access the Web Caching Server

1. Click **Start**, **Settings**, and click **Control Panel**.
2. Click **Internet Options**.
3. Click the **Connections** tab:



4. Click the **LAN Settings** button:



The LAN settings dialog box opens.

5. Select “Use a Proxy Server” and enter the ISA-4000’s proxy server name or IP (for example 10.1.2.3) for the proxy. Enter 3128 for the port number:



6. Click **OK**.

#### **4.5.3 Setting up MAC OS to Access the Web Caching Server**

1. Click the **Apple** menu.
2. Click **Control Panel** and then click **Internet**.
3. Click the **Advanced** button.
4. Click the **Firewall** icon.
5. Check the web proxy checkbox and enter the proxy server (for example 10.1.2.3) and port number 3128.
6. Close the Internet menu.

This concludes this chapter. The next chapter covers administrative tasks using the ISA-4000 and its software.

## Chapter 5: Administrator's Guide

This chapter explains the administration and maintenance of the ISA-4000 using the administrator account.

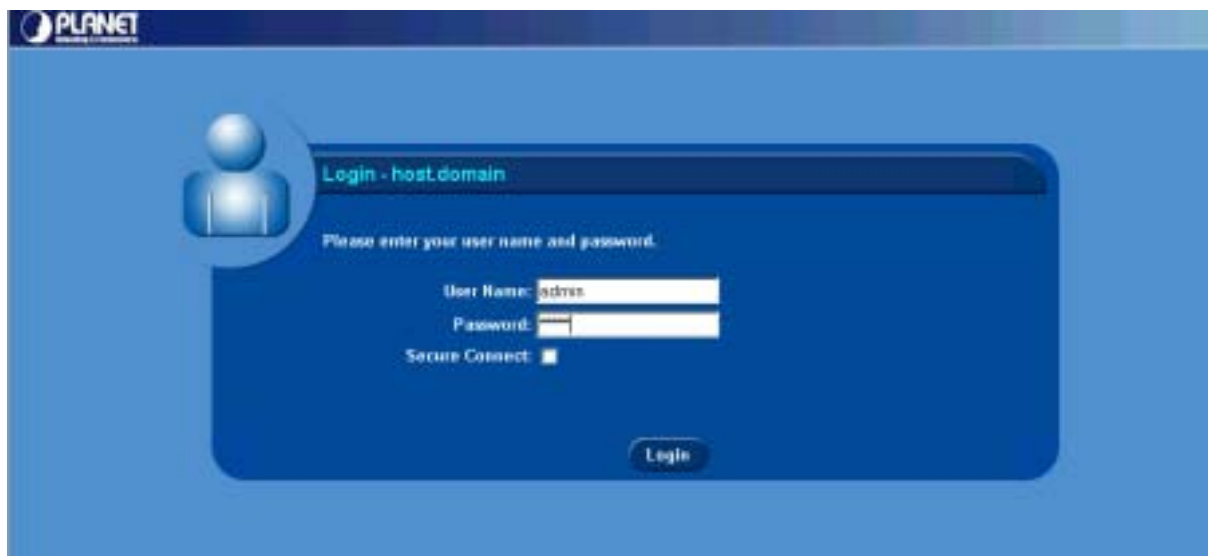
There are two groups of management functions that can be performed by the administrator; the first group is "Administration" and the second is "Personal." The Administration group allows administrators to manage the ISA-4000 and all associated functions, while the Personal group allows administrators to maintain their personal accounts.

### 5.1 LOGGING IN AS AN ADMINISTRATOR

1. Type the following URL in the Address bar of your browser:  
*http://<hostname>.<domainname>:555 or http://< IP address>:555*
2. In the login menu type the user name "admin" and the password.

**Note!**

Refer to 5.8.1 Account for information on changing the administrative password.



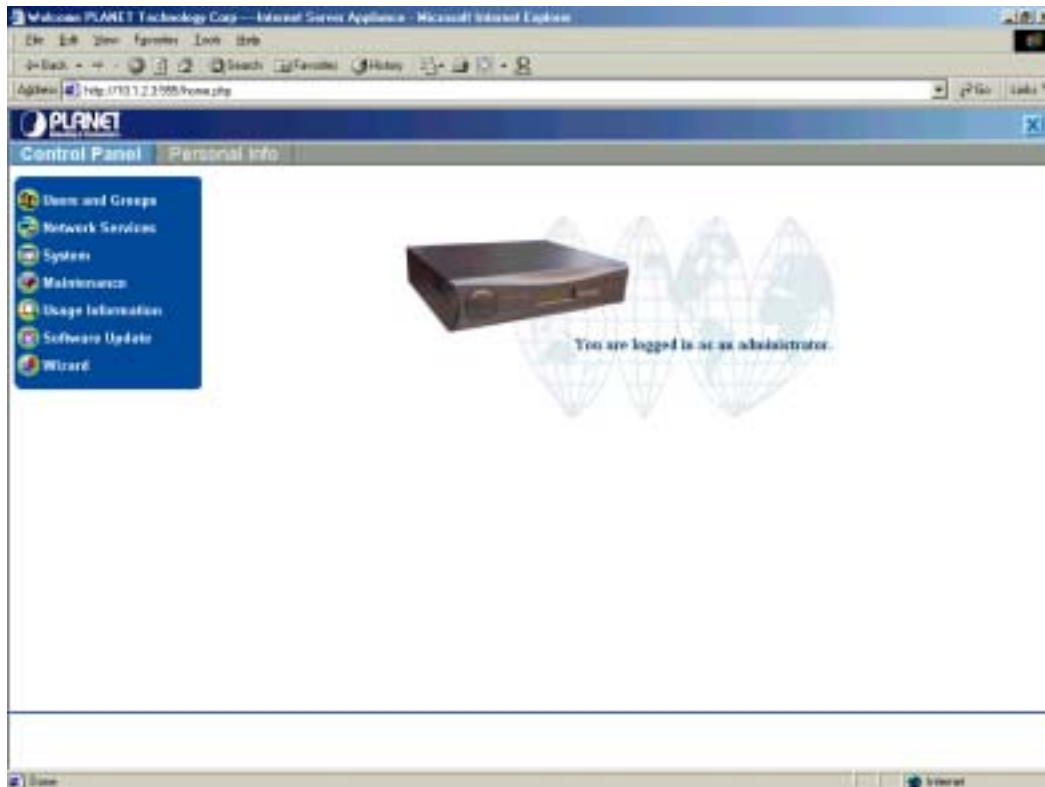
**Figure 5-1: Administrator login**

If you want to establish a secure connection, click the Secure Connect checkbox; it will establish an SSL (Secure Sockets Layer) connection between your browser and the ISA-4000.

**Note!**

Compatibility issues allow the SSL security protocol to be used only with Internet Explorer 5.5 service pack 2 (IE5.5 SP2) and above, and Netscape 6.2 and above.

3. Click **Login**. The Administration menu appears:

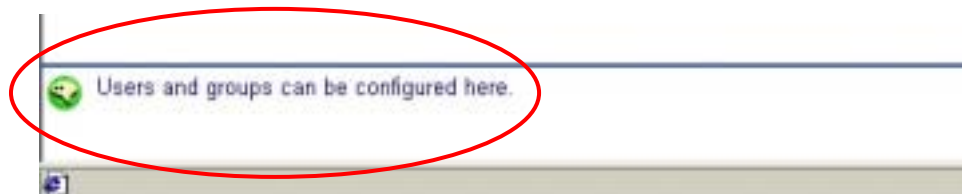


**Figure 5-2: Administrator menu**

The administration menu may be used by the administrator to manage the ISA-4000 functions. This chapter describes how to use the administrator menu.

**Note!**

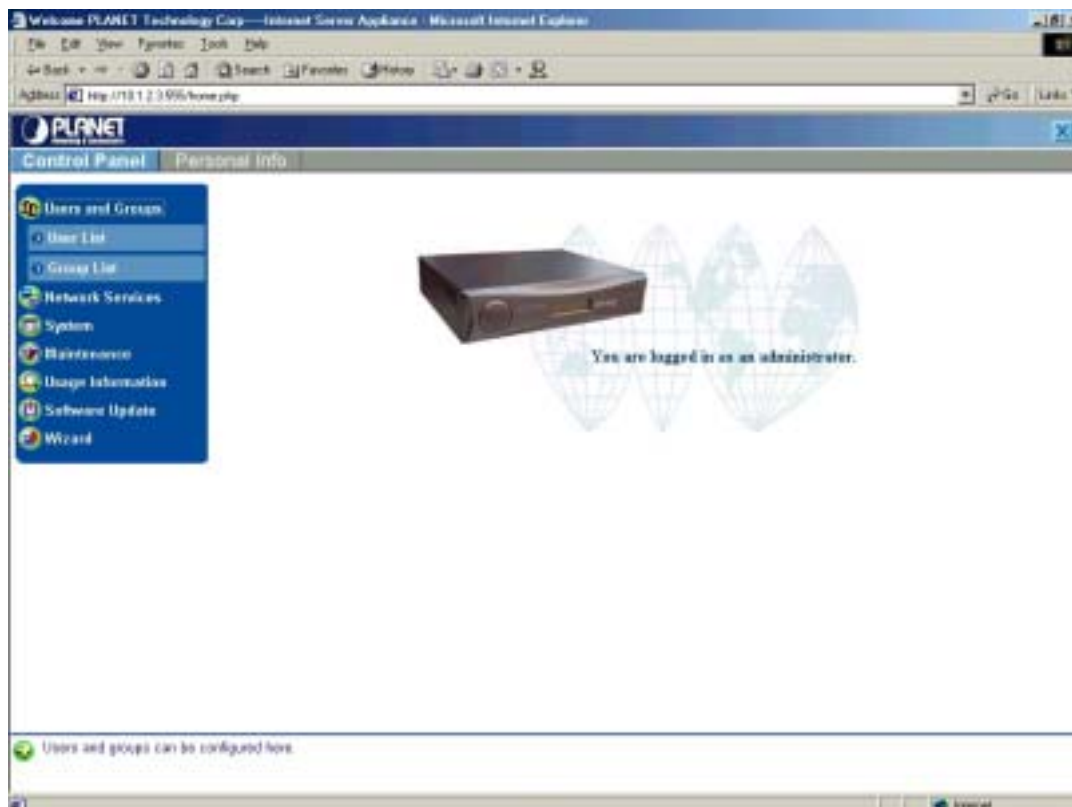
The status line area of the ISA-4000 browser interface provides you with context sensitive help:



## **5.2 USERS AND GROUPS**

The Users and Groups menu enables administrators to configure user and group access, set passwords, and perform other administrative tasks.

On the Administration menu, click **Users and Groups** to view the options for this field:



**Figure 5-3: Administrator – Users and Groups menu**

The Users and Groups menu enables the administrator to create and maintain users and groups information in the ISA-4000. While maintaining user information, users may be listed, users' information and settings can be edited, new users can be added, and users can be deleted. While maintaining group information, groups can be listed, groups can be added and deleted, and group settings may be edited.

### 5.2.1 User List

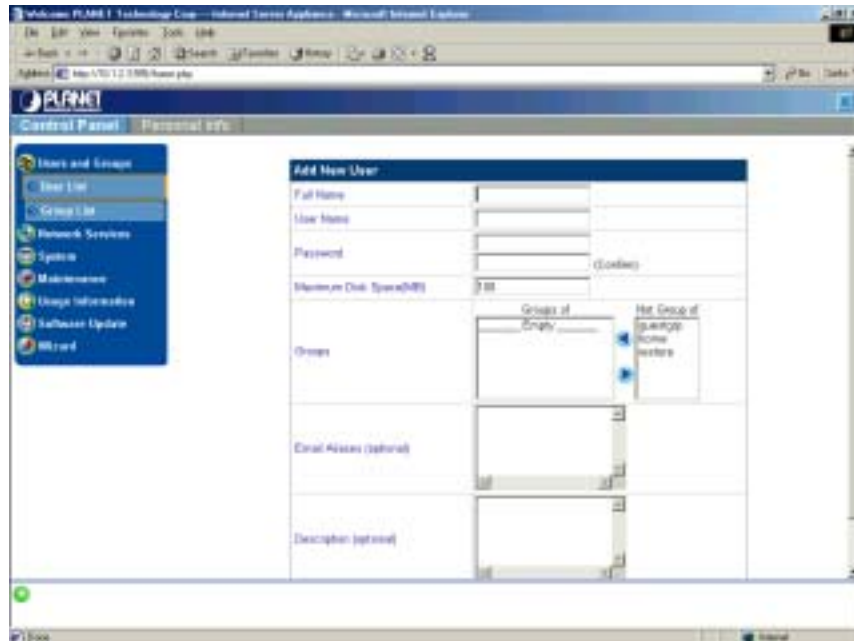
1. Click **Users and Groups**.
2. Click **User List** to display the User List screen:

User List				
<a href="#">Add New User</a> <a href="#">Edit User Defaults</a> <a href="#">Import Users</a>				
22 Entries				
User Name ▲	Full Name	Description	Edit	Delete
aaa	aaa			
aaronh	Aaron Heidel			
abbottl	Shau-Hung Lai			
angelay	Angela Yu			

**Figure 5-4: Users and Groups user list**

#### 5.2.1.1 ADDING A NEW USER

1. In the user list screen, click **Add New User**; the Add New User screen appears.




**Figure 5-5: Adding a new user**

The field definitions are as follows:



- **Full Name:** in most cases, the user's first and last name.
- **User Name:** the name that the user will use to login to the system.
- **Password:** the password that the user will use to login to the system. You will be required to type in the password twice for verification—the GUI replaces the characters typed with asterisks (\*) for security.
- **Maximum Disk Space (MB):** the total disk storage space that is allocated to the user.
- **Groups:** shows which groups a user is affiliated with (belongs to). To choose which groups a user is affiliated with, select a group from the list and click the appropriate arrow. The left arrow adds membership in the selected group, and the right arrow removes the user from affiliation with the group.
- **Email Aliases:** enter any aliases the user has for their email account.
- **Description:** enter additional information for this account.

2. After typing the required information, click **Save**.

#### 5.2.1.2 EDITING USER SETTINGS

1. In the User List screen, click the edit icon  for the user that you want to edit.
2. Modify the fields in the Edit User Settings screen as described in Adding a New User.
3. Click **Save**.

#### 5.2.1.3 DELETE A USER

In the User List screen, click the delete icon  for the user that you want to delete. If the delete icon is gray , then you are not allowed to delete the item.

#### 5.2.1.4 EDIT USER DEFAULTS

1. In the User List screen click **Edit User Defaults** to view the following screen:

2. Enter the total amount of disk space allocated for user storage.
3. Click **Save**.

## 5.2.2 Group List

1. Click **Users and Groups**.
2. Click **Group List** to display the Group List screen:

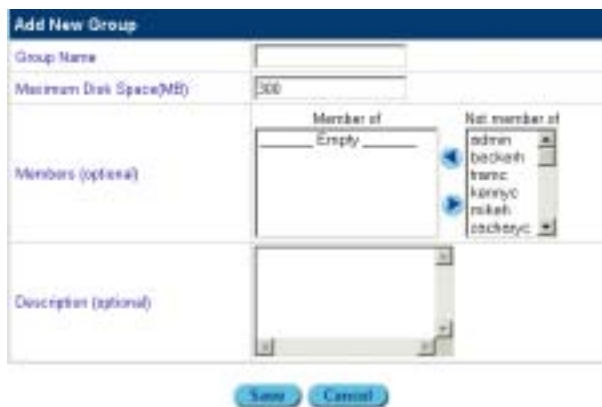


Group Name	Group Members	Description	Edit	Delete
guestgrp	admin	guest workgroup		
home	admin	Base workgroup - unremovable		
restore	admin	The backup data can be restore...		

**Figure 5-6: Users and Groups group list**

#### 5.2.2.1 ADDING A NEW GROUP

1. In the Group List screen, click the **Add New Group** button to display the following screen:



**Add New Group**

Group Name:

Maximum Disk Space(MB):

Members (optional):

Member of:

Not member of:

Description (optional):

**Save** **Cancel**

**Figure 5-7: Adding a new group**

The field definitions are as follows:

- **Group Name:** the name of the group.
  - **Maximum Disk Space (MB):** the total disk storage space allocated to the group.
  - **Members:** to choose which users are affiliated to the group, select a user from the list and click the appropriate arrow. The left arrow adds membership in the selected group, and the right arrow removes the user from affiliation with the group.
  - **Description:** additional information for this group.
2. After typing in the required information, click **Save**.

#### 5.2.2.2 EDITING GROUP SETTINGS

1. In the Group List screen, click the edit icon for the group that you want to edit.
2. Modify the fields in the Edit Group Settings screen as described in Adding a New Group.
3. Click **Save**.

**Note!**

**You cannot change a group name in this screen. To change a group name, delete the group as described in the next section and create a new group.**

#### 5.2.2.3 DELETING A GROUP

In the Group List screen, click the Delete icon for the group that you want to delete. If the delete icon is gray , then you are not allowed to delete the item.

#### 5.2.2.4 EDITING GROUP DEFAULTS

1. In the Group List screen click **Edit Group Defaults** to view the following screen:



2. Enter the total amount of disk space allocated for group storage.
3. Click **Save**.

### 5.2.3 Import Users

The Import feature enables you to import group and user lists.

1. Click **Users and Groups**.
2. Click **User List**.
3. Click **Import Users** to display the Import screen:

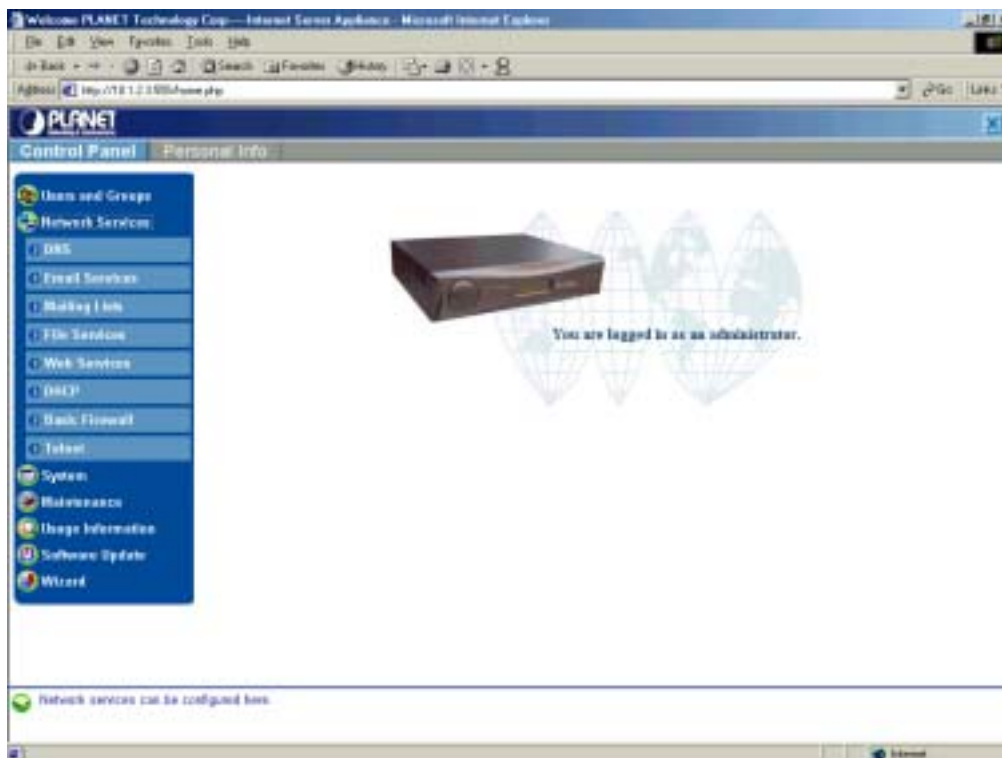
**Figure 5-8: Importing user lists**

4. Click **Browse** and go to the location of the file to be imported. The file must be a text tab-delimited file in the following format:  
**Full Name [TAB] User Name [TAB] Password [TAB] Email Aliases [NEW LINE]**

## 5.3 NETWORK SERVICES

The Network Services menu includes settings for DNS, email services, file services, web services, DHCP, a basic firewall, and telnet. The Network Services menu provides a way to configure all the Internet services that are provided by the ISA-4000.

On the Administration menu, click **Network Services** to view the options for this field:



**Figure 5-9: Network Services**

### 5.3.1 DNS

"DNS" stands for Domain Name System. DNS converts machine names to the IP addresses that all machines on the net have. It translates from name to address and from address to name.

There are two kinds of domain name servers: one is the primary domain name server; the other is the secondary domain name server. Each domain name needs a primary domain name server to keep track of all the names on the domain, and some secondary domain name servers to act as backup servers for the information on the primary domain name server. Information is configurable only on the primary domain name server; secondary domain name servers only hold a copy of the information on the primary domain name server, and are not configurable.

The primary domain name server has three configurable records: the A/PTR record, the MX record and the CNAME record. The A/PTR is automatically divided into an Address record and PTR record once the A/PTR record is created. The four kinds of records together make up all of the names in a domain.

Also, there is a Start of Authority (SOA record), which contains the domain's primary name server, its secondary name server, the domain administrator's email address, and some additional parameters that are set by the ISA-4000.

The definitions of the three configurable records are as follows:

- **A/PTR record:** this is a name-to-address mapping record; the ISA-4000 automatically reverses it to an address-to-name mapping (this record is also called a PTR [Pointer Record]). A/PTR records contain all of the qualified names in the domain.
- **CNAME record:** this is an alias to another name in the forward record; the alias should map to a real name that exists in a forward record.
- **MX record:** this is a mail server name in the domain.

#### 5.3.1.1 ENABLING THE DOMAIN NAME SERVER

1. Click **Network Services**.
2. Click **DNS**.
3. Check Enable DNS Server:



**Figure 5-10: Enabling the Domain Name Server**

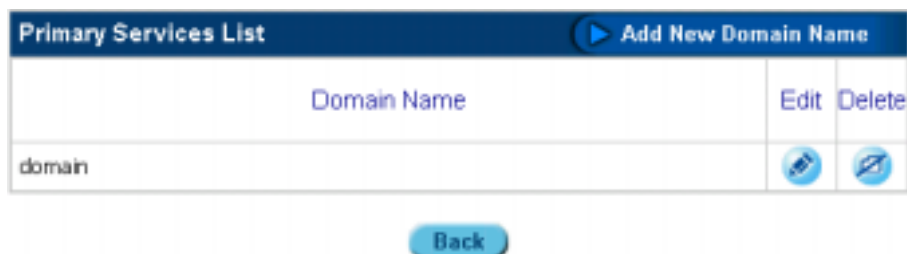
4. Click **Save**.

#### 5.3.1.2 ADDING A NEW DOMAIN NAME

1. Click **Network Services**.
2. Click **DNS**.
3. Click **Edit Primary Services**:



4. Click **Add New Domain Name**.



5. Type the Domain Name in the text box:



**Figure 5-11: Adding a new domain name.**

6. Click **Save**.

#### 5.3.1.3 ADDING A NEW HOST NAME TO A DOMAIN

1. Click **Network Services**.
2. Click **DNS**.
3. Click **Edit Primary Services** to view the following screen:



4. Click the **Edit** icon in the edit field. The Domain Record List appears.

Domain Record List - domain					▶ Add New Record	▶ Modify SOA
Query	Type	Response	Edit	Delete		
host.domain	A	192.168.1.109				
host-lan.domain	A	10.1.2.3				
www.domain	CNAME	host.domain				
ftp.domain	CNAME	host.domain				
mail.domain	CNAME	host.domain				
domain	MX	host.domain				
192.168.1.109/255.255.255.0	PTR	host.domain				
10.1.2.3/255.255.255.0	PTR	host-lan.domain				

[Back](#)

5. Click **Add New Record**. The following screen appears:

**Figure 5-12: Adding a new record.**


6. Select the type of record you want: A/PTR, MX, or CNAME. They are described as follows:

















<b>A/PTR record</b>	<p>In the A/PTR record section, enter the Host Name (for example "is4000"), the IP Address, and the Subnet Mask.</p>
<b>MX record</b>	<p>In the MX record section, enter the Host Name and the Mail Server Name (this is the real email server's name. If this field is entered, the name may be the same as "HostName.DomainName" or any host name that acts as an email server for a domain.), and select the appropriate delivery priority for this email server.</p>

	<div> <div>Add New Record</div> <div> <div>A/PTR</div> <div>MX</div> <div>CNAME</div> </div> <div> <div>Host Name (optional)</div> <div></div> </div> <div> <div>Domain Name</div> <div>domain</div> </div> <div> <div>Mail Server Name</div> <div></div> </div> <div> <div>Delivery Priority</div> <div> <div>Very High (10)</div> <div>Very High (10)</div> <div>High (20)</div> <div>Low (30)</div> <div>Very Low (40)</div> </div> </div> </div>
<b>CNAME record</b>	<p>In the CNAME record section, enter the Alias Host Name (for example "aries"), the Alias Domain Name (for example "zodiac.com") and the Real Host Name (for example " zodiac.com ").</p> <div> <div>Add New Record</div> <div> <div>A/PTR</div> <div>MX</div> <div>CNAME</div> </div> <div> <div>Alias Host Name</div> <div></div> </div> <div> <div>Alias Domain Name</div> <div>domain</div> </div> <div> <div>Real Host Name (optional)</div> <div></div> </div> <div> <div>Real Domain Name</div> <div>domain</div> </div> <div> <div>Save</div> <div>Cancel</div> </div> </div>

- Click **Save** or click **Apply Changes Now** to immediately inform the domain name server of this change.

#### 5.3.1.4 EDITING A HOST NAME IN A DOMAIN NAME LIST

- Click **Network Services**.
- Click **DNS**.
- Click **Edit Primary Services**.
- Click the **Edit** icon  in the edit field; the Primary Service List appears:

Domain Record List - domain				
<div> <div>Add New Record</div> <div>Modify SOA</div> </div>				
Query	Type	Response	Edit	Delete
host.domain	A	192.168.1.109		
host-lan.domain	A	10.1.2.3		
www.domain	CNAME	host.domain	 Edit	
ftp.domain	CNAME	host.domain		
mail.domain	CNAME	host.domain		
domain	MX	host.domain		
192.168.1.109/255.255.255.0	PTR	host.domain		
10.1.2.3/255.255.255.0	PTR	host-lan.domain		


Back

- Click the **Edit** icon  in the edit field. The following screen appears:

Edit Record	
Host Name (optional)	hostLen
Domain Name	domain
IP Address	10.1.2.3
Subnet Mask	255.255.255.0

6. Modify the fields in the record:
  - **Host Name:** this is the name assigned to the computer.
  - **Domain Name:** the domain name of the primary server.
  - **IP Address:** the address of the primary server.
  - **Subnet Mask:** the subnet mask of the primary server.
7. Click **Save** or click **Apply Changes Now** to immediately inform the domain name server of this change.

#### 5.3.1.5 MODIFYING THE SOA

1. Click **Network Services**.
2. Click **DNS**.
3. Click **Edit Primary Services**.
4. Click the edit  icon in the edit field.
5. Click **Modify SOA**.

Domain Record List - domain				
				
Query	Type	Response	Edit	Delete
host.domain	A	192.168.1.109		

The following screen appears:

Modify Start of Authority(SOA) Record	
Domain Authority	domain
Primary Name Server(NS) (optional)	host.domain
Secondary Name Servers(NS) (optional)	<div>ns1.domain</div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>
Delegate Name Servers (optional)	<div>dns.rd.domain</div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>
Administrator Email Address	admin@domain

**Figure 5-13: Modifying the SOA (Start of Authority)**

The fields are described as follows:

- **Domain Authority:** displays the domain name of the ISA-4000
- **Primary Name Server:** type the primary name server (for example "planet.com.tw")
- **Secondary Name Servers:** type the names of any secondary name servers (for example "hinet.net") that enables users under the Primary Name Server to setup their own website and email servers
- **Administrator's Email Address:** the domain administrator's email address (for example "admin@planet.com.tw")

You can get this information from your ISP or network administrator.

6. Click **Save**.

#### 5.3.1.6 ADDING A SECONDARY SERVICE

1. Click **Network Services**.
2. Click **DNS**.
3. Click **Edit Secondary Services**.  
The Secondary Service list appears.
4. Click **Add Secondary Service**:

Secondary Services List				Add Secondary Service Setting	
Domain Name	IP Address	Subnet Mask	Primary DNS Servers IP Address	Edit	Delete

5. . The Add Secondary Service screen appears

Add Secondary Service Setting	
Domain Name	<input type="text" value="ns1.domain"/>
IP Address	<input type="text" value="10.1.3.3"/>
Subnet Mask	<input type="text" value="255.255.255.0"/>
Primary DNS Server's IP Address	<input type="text" value="host.domain"/>

**Figure 5-14: Adding a secondary service**

6. The field definitions are as follows:
  - **Domain Name:** type the domain name of the primary server
  - **IP Address:** type the address of the secondary server
  - **Subnet Mask:** type the subnet mask of the secondary server
  - **Primary DNS Server's IP Address:** type the IP address of the Primary Domain Server
 You can get this information from your ISP or network administrator.
7. Click **Save** or click **Apply Changes Now** to immediately inform the domain name server of this change.

#### 5.3.1.7 EDITING A SECONDARY SERVICE

1. Click **Network Services**.
2. Click **DNS**.
3. Click **Edit Secondary Services**.

4. Click **Modify Secondary Service**; the **Add Secondary Service** screen appears. The field definitions are as follows:
  - **Domain Name:** the domain name of the primary server.
  - **IP Address:** the address of the primary server.
  - **Subnet Mask:** the subnet mask of the primary server.
  - **Primary DNS Server's IP Address:** the IP address of the Primary Domain Server.
5. Click **Save** or click **Apply Changes Now** to immediately inform the domain name server of this change.

### 5.3.2 Email Service

The email service supports three server types: SMTP, POP3, and IMAP. SMTP (Simple Mail Transfer Protocol) is used to send and receive email from the Internet. POP3 (Post Office Protocol 3) and IMAP4 (Internet Message Access Protocol 4) are used to retrieve email from email servers. Users can retrieve email using either POP3 or IMAP4, and can send email using SMTP.

#### 5.3.2.1 EMAIL SERVERS SETTING

1. Click **Network Services**.
2. Click **Email Services**. The Email Servers Settings screen appears:

Email Service Settings	
Enable Email Server	<input checked="" type="checkbox"/>
Delivery Mode	Immediate
Enable POP Authenticated Relaying	<input type="checkbox"/>
Relay Server (optional)	
<b>Relay Email From</b>	
Domains or IP Addresses (optional)	
<b>Block Email From</b>	
Users (optional)	
Domains (optional)	

**Figure 5-15: Email servers settings.**

3. Check the boxes to enable or disable the Email server.  
The field definitions are as follows:
  - **Delivery Mode:** this sets the frequency at which emails are sent out from the email server.
  - **Relay Server:** type the host name for the email server that will relay your email.
  - **Enable POP Authenticated Relaying:** check this box to enable SMTP relays based on POP authentication.









- **Relay Email From Domains/IP Addresses:** Users' email may be relayed through the ISA-4000 if their domain name, or IP address are on this list. Users not on the list may not relay email through the ISA-4000.
  - **Block Email From Domains:** these domains may not send email to this server.
  - **Block Email From Users:** the email server will not send email from the users specified here.
4. Click **Save**.

### 5.3.3 Mailing Lists

The ISA-4000 features a mailing list feature that enables users to sent email to multiple recipients without having to enter individual addresses.




#### 5.3.3.1 MAILING LIST SETTINGS

1. Click Network Services.
2. Click **Mailing Lists**, and the Mailing Lists screen appears:

Mailing Lists <span>▶ Add</span>					
Name ▲	Local Subscribers	Remote Subscribers	Description	Edit	Delete
guestgrp	All members of the guestgrp group				
home	All members of the home group				
restore	All members of the restore group				

**Figure 5-16: Mailing lists**

The field definitions are as follows:

- **Name:** displays the name assigned to a mailing list
  - **Local Subscribers:** shows the LAN groups or individuals who are members of the list
  - **Remote Subscribers:** shows the WAN (or Internet) groups or individuals who are members of the list
  - **Description:** information pertinent to the mailing list
3. Click edit  to edit the information for the group, or click delete  to delete the group. If the delete icon is gray , then you are not allowed to delete the group.
  4. Click **Add** to add another group to the mailing list. The following screen appears:

**Add Mailing List - Basic**

List Name: Documentation

Owner/Moderator: admin

Password:

Description (optional):

**Subscribers**

Local (optional):

Users Subscribed: aaa, admin

Users Not Subscribed: aaronh, abbottl, angeley, beckerh, charlest, ezyserver

Remote (optional): jsmith@abc.com

**Policies**

**Figure 5-17: Mailing lists basic options**

The field definitions are as follows:

<b>List Name</b>	Type a name of the mailing list.
<b>Local Subscribers</b>	Add local LAN users to the Users Subscribed list to enter the users in the mailing list.
<b>Remote Subscribers</b>	Type the email address of WAN or Internet users in the text box to enter the users in the mailing list.
<b>Description</b>	Type any further information here.
<b>Owner/Moderator</b>	Select the owner or moderator (creator) of this list from the drop-down list. The creator must have already been added in the Users menu.
<b>Password</b>	Enter the password of the owner/moderator.
<b>Policies</b>	<p>This item enables the owner/moderator to set email policies related to the mailing lists:</p> <p><b>Posting Policy:</b> Select which users can post messages from the drop-down list.</p> <p><b>Subscription Policy:</b> Select subscription requirements from the drop-down list.</p> <p><b>Maximum Message Length:</b> Select the maximum size allowable for emails.</p> <p><b>Reply Policy:</b> Select whether replies will be sent to the sender or to all members of the list.</p>

5. Click **Save**.

### 5.3.4 File Services

The ISA-4000 provides a cross-platform file service supporting FTP, Apple file sharing, and Windows file sharing. As long as the file services are correctly configured, users may share files with the ISA-4000.

#### 5.3.4.1 FILE SERVICES SETTINGS

1. Click Network Services.
2. Click **File Services**, and the File Services Settings screen appears:

File Services Settings	
<b>FTP Server</b>	
Enable	<input checked="" type="checkbox"/>
Maximum Simultaneous Connections	<input type="text" value="30"/>
<b>Apple File Sharing</b>	
Enable	<input checked="" type="checkbox"/>
Maximum Simultaneous Connections	<input type="text" value="30"/>
<b>Windows File Sharing</b>	
Enable	<input checked="" type="checkbox"/>
Maximum Simultaneous Connections	<input type="text" value="30"/>
Workgroup	<input type="text" value="WORKGROUP"/>
<b>Guest/Anonymous Access</b>	
Enable	<input type="checkbox"/>
Allow Uploads	<input type="checkbox"/> Enable <div>             Maximum Disk Space (MB)             <input type="text" value="0"/> </div>

[Save](#)

**Figure 5-18: File services settings**

The field definitions are as follows:

<b>FTP Server</b>	<p><b>Enable</b> – check the box to enable the FTP server.</p> <p><b>Maximum Simultaneous Connections</b> – type a value to specify the maximum number of connections that may be made to the FTP server at the same time. The default value is 25 connections.</p>
<b>Apple File Sharing</b>	<p><b>Enable</b> – check the box to enable the AppleShare service.</p> <p><b>Maximum Simultaneous Connections</b> – type a value to specify the maximum number of connections that may be made to the AppleShare service at the same time. The default value is 25 connections.</p>
<b>Windows File Sharing</b>	<p><b>Enable</b> – check the box to enable the SAMBA service (an SMB server in Linux).</p> <p><b>Maximum Simultaneous Connections</b> – type a value to specify the maximum number of connections that may be made to the SAMBA service at the same time. The default value is 25 connections.</p> <p><b>Workgroup</b> – type a user-friendly name to specify the workgroup or NT domain that the ISA-4000 will belong to. This entry determines where the ISA-4000 will appear in the Windows client machine's Network Neighborhood.</p>
<b>Guest / Anonymous</b>	<p><b>Enable</b> – check this box to specify whether guest users may be allowed access to the AppleShare and SAMBA services. Checking it</p>

<b>Access</b>	also enables anonymous access to the FTP server. <b>Allow Uploads</b> – check this box to specify whether guest users may be allowed to upload to the file server. In the text box, type the amount of disk space on the ISA-4000 that the guest is allowed to use. The default value is 300 MB.
---------------	---

3. Click **Save**.

### 5.3.5 Web Services

In the Web Services screen, FrontPage Server Extensions and the web caching server may be enabled, and the users with CGI access on the ISA-4000 web server may be specified.

#### 5.3.5.1 WEB SERVICES SETTINGS

1. Click **Network Services**.
2. Click **Web Services**. The Web Services screen appears:

**Figure 5-19: Web services**

The field definitions are as follows:

<b>FrontPage Server Extensions</b>	<b>Enable</b> – check the box to enable FrontPage Server Extensions. <b>Note:</b> Microsoft FrontPage Server Extensions extend the functionality of the web by adding page elements such as hit counters, search forms, and confirmation fields.
<b>Web CGI Access</b>	Three radio buttons set Web CGI options: <ul style="list-style-type: none"> <li>• <b>None</b> – no users have CGI access to CGI programs,</li> <li>• <b>All Users</b> – all users have access (this is the default value)</li> <li>• <b>Specified Users Only</b> – only the specified users have access to</li> </ul>

	CGI programs. Users may be allowed or denied access to CGI programs by selecting the user and clicking the arrows to deny or allow access.
<b>Web Caching Server</b>	<p><b>Enable</b> – check the box to enable the Web Caching Server.</p> <p><b>Note:</b> The Web Caching Server Web option enables the ISA-4000 to keep copies of the most-recently requested Web pages in memory or on disk in order to speed up retrieval.</p> <p><b>Restriction Policy</b> – Machines that may access the web caching server can be specified in one of three ways: those permitted, those restricted, or all machines may access the caching server.</p> <p><b>Hosts/Domains/IP Addresses</b> – Type the domains or IP addresses that the access policy applies to.</p>

3. Click **Save**.

### 5.3.6 DHCP (Dynamic Host Configuration Protocol)

The Dynamic Host Configuration Protocol is a protocol that allows clients to obtain IP addresses automatically from the DHCP server. It is a very convenient way to obtain IP addresses in a TCP/IP network.

#### 5.3.6.1 DHCP SETTINGS

1. Click **Network Services**.
2. Click **DHCP**. The DHCP Screen appears:

**Figure 5-20: DHCP settings**

The field definitions are as follows:

<b>Enable DHCP Server</b>	<p><b>Enable</b> – check the box to enable the ISA-4000 to act as a DHCP Server.</p> <p><b>Note:</b> A DHCP server is server in the network or a service within a server that assigns IP addresses.</p>
<b>DHCP Client Settings</b>	<p><b>Domain Name Server Addresses</b> – the IP address or addresses of your local domain name servers that the clients will be automatically configured to use.</p> <p><b>Subnet Mask</b> – the subnet mask that the ISA-4000 will assign to DHCP clients.</p> <p><b>Gateway</b> – the router address that the ISA-4000 will assign to DHCP clients.</p> <p><b>Maximum Lease Time</b> – The networking information that is assigned to these clients by the DHCP server is "leased," "or rented out," and</p>

	thus expires after a certain period of time. Enter the maximum period of time in seconds before the lease expires. Please enter an integer greater than zero. The default value is 86400 seconds (that is, one day).
--	--

3. Click **Save**.
4. In the DHCP Settings screen, click **Dynamic Lists**. The following screen appears:

Dynamic Lists		Add	
IP Address (Beginning of Range)	IP Address (End of Range)	Edit	Delete
10.1.2.10	10.1.2.100		

**Back**

**Figure 5-21: DHCP dynamic assignment list**

5. Click **Add** to open the following screen:

Add New Dynamic Address	
IP Address (Beginning of Range)	<input type="text" value="10.1.2.120"/>
IP Address (End of Range)	<input type="text" value="10.1.2.150"/>

**Save** **Cancel**

6. Enter the beginning and ending values for the IP Address Range. IP addresses assigned to DHCP clients will be taken from this range of IP addresses.
7. Click **Save**.  
To edit a dynamic IP address, click the edit button next to the address in the Dynamic Lists screen.
8. Click Static Lists to view the following screen:

Static Lists		Add	
IP Address	MAC Address	Edit	Delete
10.1.2.120	00:05:8F:85:11:04		

**Back**

**Figure 5-22: DHCP static assignment list**

9. Click **Add**. The following screen appears:

Add New Static Address	
IP Address	<input type="text"/>
MAC Address	<input type="text"/>

**Save** **Cancel**

10. Type an IP Address to be assigned to a specific MAC address, and enter a MAC address as the owner of the IP address.
11. Click **Save**.

To edit a static IP address, click the edit button  next to the address in the Static Lists screen.

### 5.3.7 Basic Firewall

The ISA-4000 provides basic firewall functions, by filtering all the packets that enter the ISA-4000 using a set of rules. The rules are in an order sequence list—the lower the rule number, the higher the priority the rule has. Each rule has four characteristics:

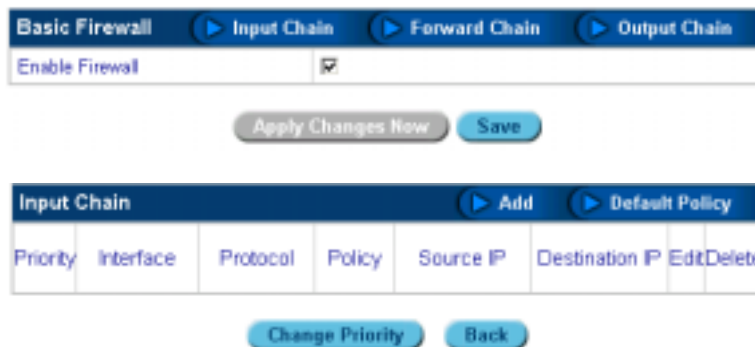
<b>Priority</b>	This is an order sequence list; the lower number the rule, the higher the priority.
<b>Interface</b>	This specifies which interface the rule applies to.
<b>Protocol</b>	This specifies which protocol the rule applies to.
<b>Policy</b>	<p>This determines what will happen to any packets that match this firewall rule. The ISA-4000 supports five policies: ACCEPT, DENY, REJECT, MASQ, and REDIRECT. The definitions of the five policies are as follows:</p> <ul style="list-style-type: none"><li>• <b>ACCEPT:</b> if the packet matches the rule, the ISA-4000 will accept it.</li><li>• <b>DENY:</b> if the packet matches the rule, the ISA-4000 will discard it.</li><li>• <b>REJECT:</b> if the packet matches the rule, the ISA-4000 will discard it and notify the sender that the packet was discarded.</li><li>• <b>MASQ:</b> if the packet matches the rule, the packet will be masqueraded, or rewritten to appear as if it originated from the ISA-4000. When this policy is selected, the ISA-4000 will provide NAT (Network Address Translation) service. This policy is for forward rules only.</li><li>• <b>REDIRECT:</b> If the packet matches the rule, it will be redirected to one of the ISA-4000's local ports. This port number is specified in the Redirect to Port Number field. This feature is used for the applications such as proxy server, etc. This policy is for input rules only.</li></ul>

In the firewall, a collection of rules is called a "chain." Three chains are provided:

- **InputChain:** Incoming packets (those originating from an outside network and addressed to the internal network) are filtered by the ISA-4000 according to the InputChain rules.
- **ForwardChain:** When an incoming packet from an external network requests forwarding to another computer, it is filtered by the ISA-4000 according to the ForwardChain rules.
- **OutputChain:** Outgoing packets (those originating from the internal network, addressed to the outside network) are filtered by the ISA-4000 according to the OutputChain rules.

#### 5.3.7.1 ENABLING THE FIREWALL

1. Click **Network Services**.
2. Click **Basic Firewall**. The Basic Firewall screens appears:



Priority	Interface	Protocol	Policy	Source IP	Destination IP	Edit	Delete
----------	-----------	----------	--------	-----------	----------------	------	--------

Figure 5-23: Basic firewall configuration

3. Check **Enable Firewall**.
4. Click **Save**. Click **Apply Changes Now** to activate the changes.

### 5.3.7.2 ADDING RULES TO INPUT/FORWARD/OUTPUT CHAINS

1. Click **Network Services**.
2. Click **Basic Firewall**.
3. Click the **Input Chain**, **Forward Chain**, or **Output Chain** button.
4. In the Input/Forward/Output Chain screen, click **Add**. The Input/Forward/Output Chain screen appears:

**Figure 5-24: Input, forward, and output chain settings**


For IP addresses and port numbers, leave the appropriate field empty to match any value. The field definitions are as follows:

<b>Source Address</b>	<p><b>Source IP Address (Beginning of Range)</b> – This beginning (or lowest) source IP address should be applied to the input chain.</p> <p><b>Source IP Address (End of Range)</b> – This ending (or highest) source IP address should be applied to the input chain.</p> <p><b>Source Port Number(s)</b> – This source port number, or range thereof, should be applied to the input chain. If you want to specify a range of ports, use a colon (:) as a separator. For example, 10:20 corresponds to the range from port 10 to port 20.</p>
<b>Destination Address</b>	<p><b>Destination IP Address (Beginning of Range)</b> – This beginning (or lowest) destination IP address should be applied to the input chain.</p> <p><b>Destination IP Address (End of Range)</b> – This ending (or highest) destination IP address should be applied to the input chain.</p> <p><b>Destination Port Number(s)</b> – This destination port number, or range thereof, should be applied to the input chain. If you want to specify a range of ports, use colon (:) as a separator. For example, 10:20 corresponds to the range from port 10 to port 20.</p>
<b>Protocol &amp; Interface</b>	<p><b>Network Protocol</b> – this network protocol of the packets should be applied to the input chain.</p> <p><b>Network Interface</b> – this network interface of the packets should be applied to the input chain.</p>
<b>Policy</b>	<p><b>Policy</b> – this is what happens to any packets that match this firewall rule. The four policies to choose from are ACCEPT, DENY, REJECT, and REDIRECT.</p> <p><b>Redirect to Local Port Number</b> – If the REDIRECT policy is selected above, packets that match this firewall rule will be directed to this port number on the ISA-4000. For other policies, this field is ignored.</p> <p><b>Note:</b> The Forward and Output Chain screens do not have the Redirect to Local Port Number option.</p>


5. Click **Save**.



#### 5.3.7.3 MODIFYING A RULE IN A INPUT/FORWARD/OUTPUT CHAIN





1. In the Basic Firewall screen, click the Input/Forward/Output Chain button, and then click the edit icon . The Modify the Firewall Chain screen appears.
2. Edit the fields according to the steps from Adding Rules to the Input/Forward/Output Chain.

#### 5.3.7.4 DELETING A RULE IN A INPUT/FORWARD/OUTPUT CHAIN

1. Click **Network Services**.
2. Click **Basic Firewall**.
3. Click **Input/Forward/Output Chain**.
4. Click the delete icon .

#### 5.3.7.5 CHANGING A CHAIN PRIORITY

In the Input/Forward/Output Chain screens, click **Change Priority** to open a screen that enables you to change the priority of the chain.

Input Chain							
 							
Priority	Interface	Protocol	Policy	Source IP	Destination IP	Edit	Delete
<div>1</div>	Any Network Interface	all	DENY	start=10.1.2.3 stop=10.1.2.10 port=80	start=211.23.181.185 stop=211.23.181.189 port=80		




Change Priority

Back

Figure 5-25: Changing the priority of an input/forward/output chain

#### 5.3.7.6 CHANGING A DEFAULT POLICY

In the Input/Forward/Output Chain screens, click **Default Policy** to open a screen that enables you to change the policy of the chain.

Input Chain							
 							
Priority	Interface	Protocol	Policy	Source IP	Destination IP	Edit	Delete
<div>1</div>	Any Network Interface	all	DENY	start=10.1.2.3 stop=10.1.2.10 port=80	start=211.23.181.185 stop=211.23.181.189 port=80		

Change Priority

Back

Figure 5-26: Changing the default policy of a chain

### 5.3.8 Telnet

The Telnet settings allow you to specify who may access telnet. Telnet is a terminal emulation protocol commonly used on the Internet and TCP/IP-based networks which allows users at terminals to log into a remote device and run a program.

1. Click **Network Services**.
2. Click **Telnet**. The Telnet screen appears:

Telnet	
Allowed to Login Remotely	<input type="radio"/> No Logins Allowed <input type="radio"/> Administrator Logins <input checked="" type="radio"/> All Users
<input type="button" value="Save"/>	

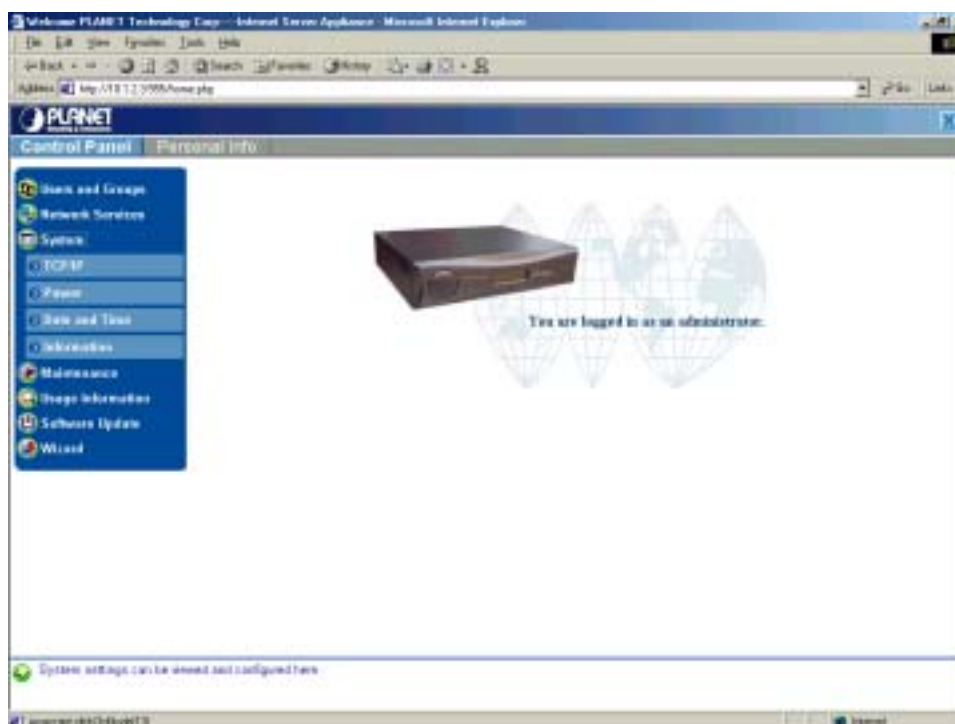
**Figure 5-27: The Telnet screen.**

3. Select the Access mode.
  - **No Logins Allowed:** No one may telnet into the ISA-4000.
  - **Administrator Logins:** Only the administrator may telnet into the ISA-4000.
  - **All Users:** All registered users may telnet into the ISA-4000.
4. Click **Save**.

## 5.4 SYSTEM

The System menu includes settings for TCP/IP, Power, Date and Time, Information

Click **System**. The System menu opens:



**Figure 5-28: System menu options**

The System menu provides a way to configure all the basic settings for the ISA-4000.

### 5.4.1 Configuring TCP/IP

The TCP/IP item enables you to set the ISA-4000 IP address.

#### 5.4.1.1 TCP/IP SETTINGS

1. Click **System**.
2. Click **TCP/IP**. The TCP/IP screen appears:

**Figure 5-29: TCP/IP settings.**

The field definitions are as follows:

<b>Dynamic DNS Settings</b>	<p><b>Host Name</b> – this is the name of the ISA-4000. For example, "isa4000."</p> <p><b>Domain Name</b> – The domain name of the ISA-4000. For example, "planet.com.tw."</p> <p><b>Domain Name Server Addresses</b> – the IP address or addressees of the domain name server or servers.</p>
<b>Internal Interface (LAN)</b>	<p><b>IP Address</b> – (internal, eth0): the IP address of the ISA-4000's LAN port.</p> <p><b>Subnet Mask</b> – (internal, eth0): the subnet mask of the ISA-4000's LAN port.</p> <p><b>MAC Address</b> – This is the serial number that identifies that network card from all others. This is a display only field.</p>
<b>External Interface (WAN)</b>	<p><b>IP Address</b> – (external, eth1): the IP address of the ISA-4000's WAN port.</p> <p><b>Subnet Mask</b> – (external, eth1): the subnet mask of the ISA-4000's WAN port.</p> <p><b>MAC Address</b> – this is the serial number that identifies that network card from all others. This is a display only field.</p>

3. Click **Save**.

#### 5.4.1.2 DYNAMIC DNS SETTINGS

The dynamic DNS (Domain Name Server) features enables cable and DSL modem users to assign a Dynamic or Static IP address alias to a static host name allowing the computer to be easily accessed from anywhere over the Internet. When enabled, this service allows you to create your own Website, email server, and FTP server on the ISA-4000.

1. Click **System**.
2. Click **TCP/IP** to open the TCP/IP settings screen.
3. Click **Dynamic DNS Settings**:

The Dynamic DNS Settings screen opens:

**Figure 5-30: Dynamic DNS settings screen**

The field definitions are as follows:

<b>Enable</b>	Check the box to enable the Dynamic Domain Name Server feature.
<b>Service Providers</b>	Select a service provider from the drop-down list.
<b>Host Name</b>	Type a host name and select the service provider name from the drop-down list.
<b>User Name</b>	Type a user name in the text box.
<b>Password</b>	Type a password in the text box. The password should be at least eight alphanumeric characters with a combination of upper and lower case (for example, 'moTO1776').  <b>Note:</b> The password appears as asterisks when you type it in the text box.

- Click **Sign Up** to view the following screen:

**Figure 5-31: Signing up for dynamic DNS services**

- This screen enables you to sign up for the dynamic DNS service on the ISA-4000. Fill in the information and click **Sign Up Now** to open the service provider's web page in your default browser:



6. Follow the instructions on the site to sign up for the service.

## 5.4.2 Configuring Internet Settings

The Internet setting specifies how the ISA-4000 connects to the Internet. Three modes of Internet connections may be selected:

- **No Internet:** the ISA-4000's WAN port is not connected to the Internet
- **Cable Modem or DSL:** the ISA-4000's WAN port is connected to the Internet via Cable Modem or DSL
- **Gateway:** the ISA-4000's WAN port is connected to another gateway on the LAN

### 5.4.2.1 INTRANET USE ONLY

1. Click **System**.
2. Click **TCP/IP**.
3. Click **None**. The following screen appears:

TCP/IP Settings		▶ Dynamic DNS Settings
Host Name	<input type="text" value="host"/>	
Domain Name	<input type="text" value="domain"/>	
Domain Name Server Addresses (optional)	<div> <div>10.1.2.3</div> <div>192.168.1.254</div> <div>168.95.1.1</div> </div>	
Gateway	<input type="text" value="192.168.1.254"/>	
<b>Internal Interface (LAN)</b>		
IP Address	<input type="text" value="10.1.2.3"/>	
Subnet Mask	<input type="text" value="255.255.255.0"/>	
MAC Address	<input type="text" value="00:05:BF:00:00:02"/>	
<b>External Interface (WAN)</b>		
Connection Mode	<input type="text" value="None"/>	

Save

**Figure 5-32: Intranet use only**

- Click **Save**. The Internet will not be available through the ISA-4000.

#### 5.4.2.2 CONNECTION MODE

- Click **System**.
- Click **TCP/IP**.
- Select Connection **Mode**. The following screen appears:

Internal Interface (LAN)	
IP Address	<input type="text" value="10.1.2.3"/>
Subnet Mask	<input type="text" value="255.255.255.0"/>
MAC Address	<input type="text" value="00:05:BF:00:00:02"/>
External Interface (WAN)	
Connection Mode	<input type="text" value="DHCP"/>
Client Identifier	<input type="text" value=""/>
IP Address (optional)	<input type="text" value="109"/>
Subnet Mask (optional)	<input type="text" value="255.255.255.0"/>
MAC Address	<input type="text" value="00:05:BF:00:00:03"/>
IP Masquerading	<input checked="" type="checkbox"/>

Refresh IP

Save

**Figure 5-33: TCP/IP settings**

The field definitions are as follows:

<b>External Interface</b>	<b>Use DHCP</b> – obtains an IP address through DHCP: enter the Client Host Name and the Client Identifier, if you have this information. If you
---------------------------	--

<b>(WAN)</b>	<p>don't know, leave it blank.</p> <p><b>Use PPPoE</b> – obtains an IP address from PPPoE: enter the User Name and the Password, twice. Your ISP should provide you with the user name and password.</p> <p><b>Manually Specify an IP address</b> – enter the IP Address, Subnet Mask and Gateway. You can get this information from your ISP or network administrator.</p>
<b>IP Masquerading</b>	Checking this box enables the ISA-4000 to provide NAT (Network Address Translation) service.

- Click **Save**.
- To refresh the IP address for the ISA-4000, click **Refresh IP**:

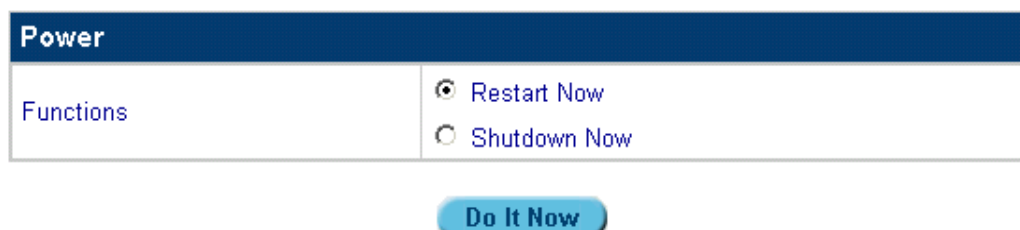


A horizontal bar containing two blue buttons: "Refresh IP" and "Save".

### 5.4.3 Shutting Down and Restarting the ISA-4000

The Power item enables you to restart the ISA-4000 or turn off the ISA-4000 and all services connected with it.

- Click **System**.
- Click **Power**. The following screen appears:



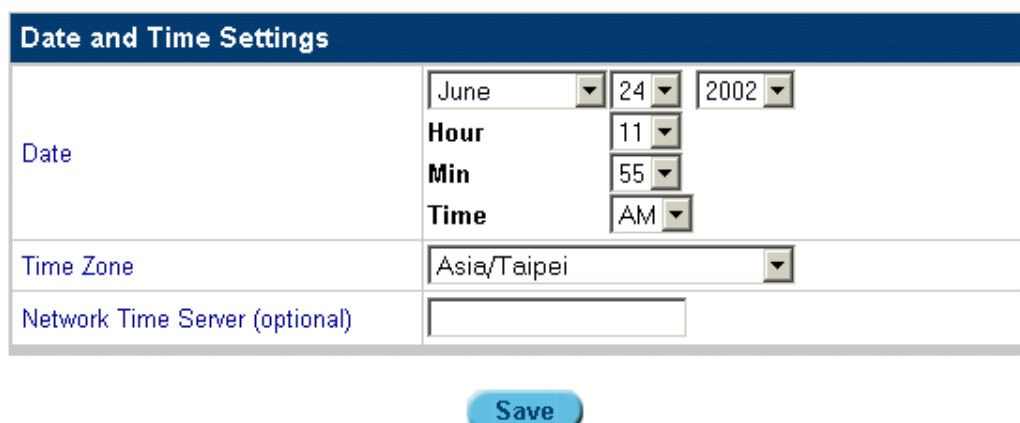
The "Power" screen has a dark blue header. Below it, on the left, is a "Functions" link. On the right, there are two radio buttons: "Restart Now" (selected) and "Shutdown Now". At the bottom center is a blue "Do It Now" button.

**Figure 5-34: Restarting and shutting down the server**

- Click **Restart Now** or **Shutdown Now**.

### 5.4.4 Setting the Time

- Click **System**.
- Click **Date and Time**. The Date and Time Settings screen appears



The "Date and Time Settings" screen has a dark blue header. Below it, there are four rows of settings:
 

- Date**: Three dropdown menus for month (June), day (24), and year (2002).
- Hour**: A dropdown menu showing 11.
- Min**: A dropdown menu showing 55.
- Time**: A dropdown menu showing AM.
- Time Zone**: A dropdown menu showing Asia/Taipei.
- Network Time Server (optional)**: An empty text input field.

 At the bottom center is a blue "Save" button.

**Figure 5-35: Setting the time**

The field definitions are as follows:

<b>Date</b>	Set the date and time of the ISA-4000.
-------------	--

<b>Time Zone</b>	Set the time zone of the ISA-4000 (for example, US/Pacific)
<b>Network Time Server</b>	The ISA-4000 can automatically update its time from the server specified here. For example: if the time server is set to "ntp.nasa.gov," the ISA-4000 will synchronize with NASA's time server.

3. Click **Save**.

### 5.4.5 Checking the System Information

Click **System** and then click **Information** to display a screen that shows the ISA-4000 configuration:

Server Information	
Product Name	ISA-4000
Machine Serial Number	ES1000000100000103
Internal Interface (LAN) MAC Address	00:05:BF:00:00:02
External Interface (WAN) MAC Address	00:05:BF:00:00:03
Hard Disk Size	4 GB
Memory Size	128 MB

**Figure 5-36: System information screen**

The field definitions are as follows:

<b>Product Name</b>	ISA-4000 product name
<b>Machine Serial Number</b>	ISA-4000 serial number
<b>Internal Interface MAC Address</b>	MAC address for the LAN interface.
<b>External Interface MAC Address</b>	MAC address for the WAN interface.
<b>Hard Disk Size (GB)</b>	The capacity of the ISA-4000 hard disk drive in gigabytes
<b>Memory Size (MB)</b>	The capacity of the onboard DRAM in megabytes

## 5.5 MAINTENANCE

The maintenance feature enables you to schedule backups and restores of system, user, and group files.

On the Administration menu, click **Maintenance** to view the options for this field:



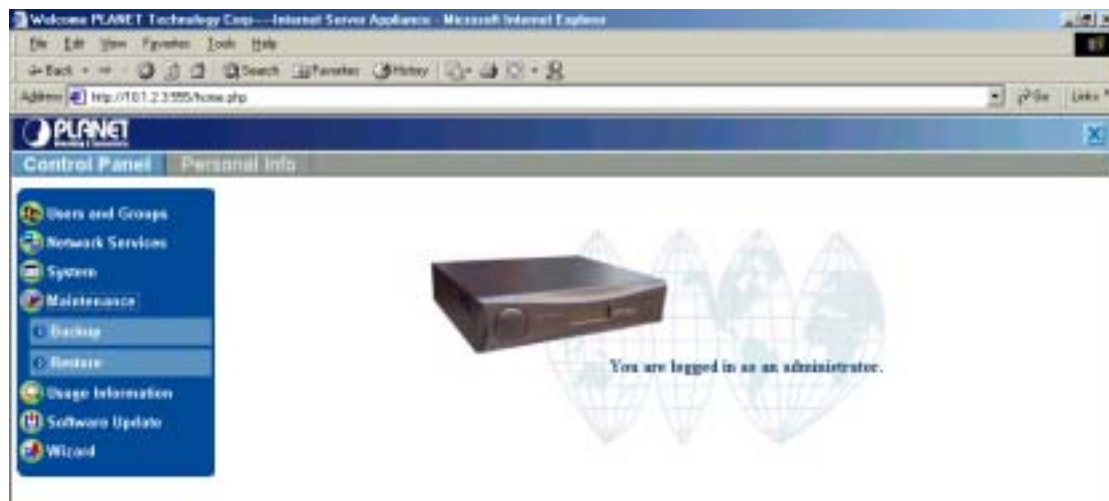


Figure 5-37: Maintenance menu

### 5.5.1 Backing Up Data

The Backup option lets you backup files on the ISA-4000 HDD. Follow these instructions:

1. Click **Maintenance**.
2. Click **Backup**. The Backup Job List screen appears:

Backup Job List <span>Add</span>			
Backup Name	Backup Job	Detail	Delete
2002Jun211642	Backup immediately		

Figure 5-38: Maintenance backup list

3. Click **Add** to setup a new backup job. The following screen appears:

Add Backup Job

Backup Name

2002Jun240539

Files to Backup

All

Backup Interval

Backup immediately

☒ All Members (Include configuration file)
 ☐ Specific Users and Groups (Not include configuration file)

Users selected

Empty

Members to Backup

Workgroups Selected

Empty

Users Unselected

admin  
backadm  
hmanic  
hmanyc  
mishah  
mishahyc

Workgroups Unselected

guestpp  
hmanic  
hmanic

Windows File Sharing(SMB)

Figure 5-39: Adding a scheduled backup job

The field definitions are as follows:

<b>Backup Name</b>	Type a name for this backup. The default name is today's date and time.
<b>Members to Backup</b>	<b>All Members</b> – click this radio button to backup all system, user, and workgroup files. <b>Specific Users and Groups</b> – click this radio button to specify

	which users and groups will be backed up. Move the users and groups to be backed up to the “Users selected” and “Workgroups Selected” list boxes by clicking the appropriate arrows.
<b>Files to Backup</b>	Select which files are to be backed up from the drop-down list. You can choose to backup all files or files in a range of from 1 to 31 days old.
<b>Method of Backup</b>	<p>Select the backup method:</p> <p><b>Windows File Sharing (SMB)</b> – select this method when using the SMB protocol:</p> <ul style="list-style-type: none"> <li>• <b>Computer Name:</b> type the name of the server or PC that the files will be backed up to.</li> <li>• <b>Share Directory:</b> type the destination backup directory.</li> <li>• <b>User Name:</b> type the user name to access the backup directory drive.</li> <li>• <b>Password:</b> type the password to access the backup directory drive.</li> </ul> <p><b>File Transfer Protocol (FTP)</b> – select this method to use FTP to backup files:</p> <ul style="list-style-type: none"> <li>• <b>Location:</b> type the location that the files will be backed up to</li> <li>• <b>Share Directory:</b> type the destination backup directory</li> <li>• <b>User Name:</b> type the user name to access the backup directory drive.</li> <li>• <b>Password:</b> type the password to access the backup directory drive.</li> </ul> <p><b>Network File System (NFS)</b> – select this method to use NFS to backup files:</p> <ul style="list-style-type: none"> <li>• <b>Location:</b> type the location of the files to be backed up</li> <li>• <b>Share Directory:</b> type the destination backup directory</li> </ul>
<b>Backup Interval</b>	Select when you want the backup to occur from the drop-down menu

4. Click **Save**.
5. Click **Detail** next to a backup file entry on the Scheduled Backup List screen to view information about the backup job:

Scheduled Backup Details	
Backup Name	2002Jun241532
Backup Job	Immediately
Method of Backup	Windows File Sharing (SMB)
Destination	//m3/temp
Backup Configuration Data	Yes
Users of Backup	All
Groups of Backup	All

6. Click **Remove** to delete the selected backup job.

## 5.5.2 Restore

The Restore option lets you restore backed up files to the ISA-4000 HDD. Follow these instructions:

### Automatic Restore

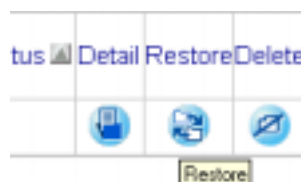
1. Click Maintenance.

2. Click **Restore**. The Restore screen appears:

Backup File List						Restore Manually
Backup Name	Backup Started	Status	Last Restore Status	Detail	Restore	Delete
2002Jun211642	Fri Jun 21 2002 16:44:27 CST	Success				

**Figure 5-40: Maintenance restore screen**

3. Click the **Restore** button



The following screen appears:

Restore a Backup	
Backup Name	2002Jun211642
Backup Started	Fri Jun 21 2002 16:44:27 CST
Destination	//m3/temp
Location to Restore Files	To directory /home/groups/restore

4. Click **Restore**. to restore files from backup:

#### Manual Restore

1. Click **Maintenance**.
2. Click **Restore**. The Restore screen appears:

Backup File List						Restore Manually
Backup Name	Backup Started	Status	Last Restore Status	Detail	Restore	Delete
2002Jun211642	Fri Jun 21 2002 16:44:27 CST	Success				

**Figure 5-41: Maintenance restore screen**

3. Click **Restore Manually** to view the following screen:

**Figure 5-42: Restore manually screen**

The field definitions are as follows:

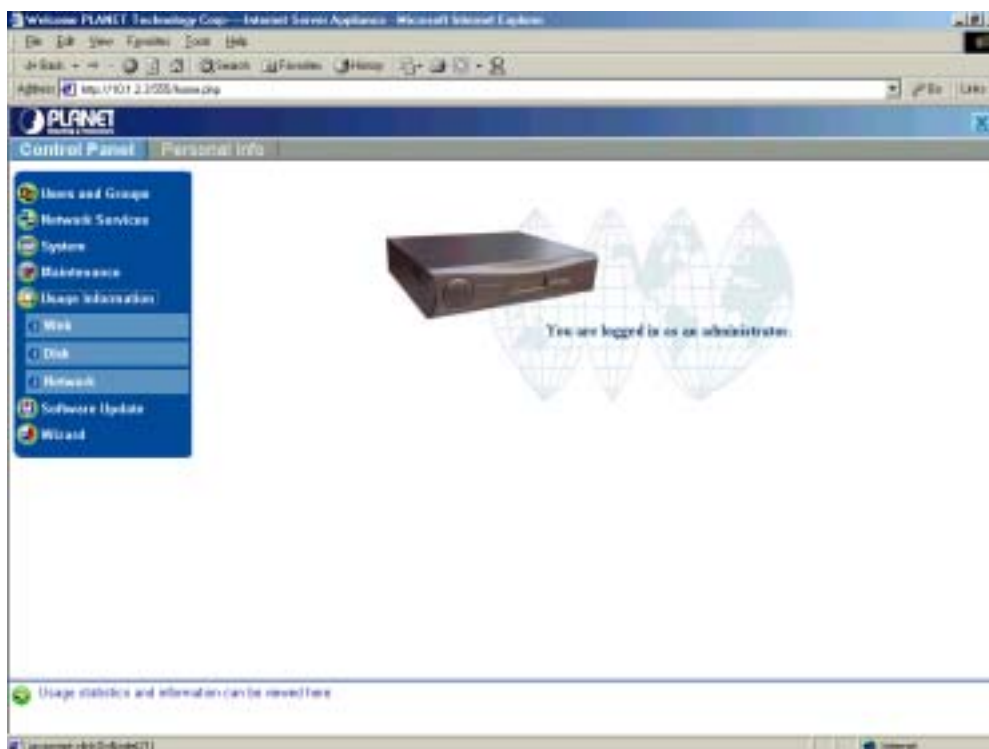
<b>Backup Name</b>	Type the name of the backup to be restored.
<b>Original Method of Backup</b>	<p>Select the method that was used to backup the file:</p> <ul style="list-style-type: none"> <li>• Windows File Sharing (SMB)</li> <li>• File Transfer Protocol (FTP)</li> <li>• Network Files System (NFS)</li> </ul> <p><b>Note:</b> refer to the previous section for more detailed information on these fields.</p>
<b>Location to Restore Files</b>	Select where you want the files to be restored from the drop-down list. The default is /home/groups/restore/. Choose Replace Existing Files if you want the files to be restored in their original location.

4. After filling in the required fields, click **Restore**.

## 5.6 USAGE INFORMATION

The Usage Information menu provides you with tools to monitor web page, network, and HDD user activity.

On the Administration menu, click **Usage Information** to view the options for this field:



**Figure 5-43: Usage Information menu**

### 5.6.1 Web Usage

This feature enables you to monitor web page traffic.



1. Click Usage Information.
2. Click **Web**. The following screen appears:



**Figure 5-44: Web Page Usage screen**

The Web Usage screen provides several options for viewing web traffic statistics. These options are described as follows:

<b>Web Usage</b>	<p>This item enables you to view the length of time the reports cover for monitoring web usage.</p> <p>Statistics from June 21 2002 3:17 AM to June 24 2002 9:27 AM</p>
------------------	---

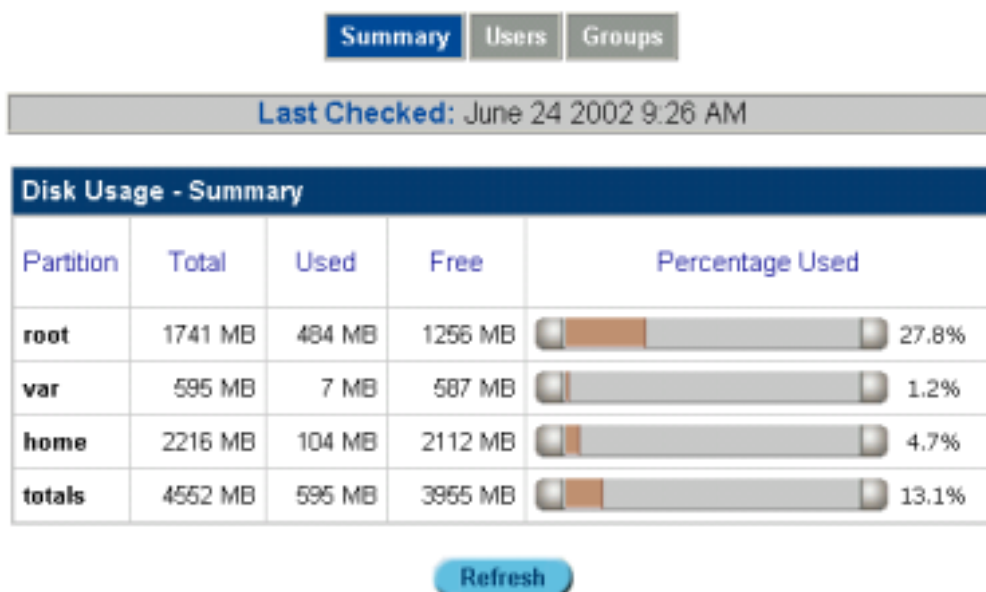
	<p><b>Statistics from</b> – displays the start date for monitoring web usage statistics. To set the current date for this field, click <b>Reset</b></p> <p style="text-align: center;">   </p> <p><b>To</b> – displays the end date for monitoring web usage statistics.</p> <p><b>Refresh</b> – click this button to display the latest web usage statistics</p>												
<b>Web Usage – Summary</b>	<p>This item displays an overview of web usage statistics. Click Summary at the top of the screen to view the summary item:</p> <table border="1"> <thead> <tr> <th colspan="2">Web Usage - Summary</th></tr> </thead> <tbody> <tr> <td>Total Number of Requests</td><td>5</td></tr> <tr> <td>Number of Bad Requests</td><td>5</td></tr> <tr> <td>Number of Client Hosts Accessed</td><td>4</td></tr> <tr> <td>Number of Page Views</td><td>1</td></tr> <tr> <td>Number of Bytes Transferred</td><td>249271</td></tr> </tbody> </table> <p><b>Total Number of Requests</b> – displays the number of times the website was accessed in the coverage period.</p> <p><b>Number of Bad Requests</b> – displays the number of times users tried and then failed to access the website.</p> <p><b>Number of Client Hosts Accessed</b> – displays the number of individual computers that accessed the website.</p> <p><b>Number of Pages Views</b> – displays the number of individual pages accessed on the website.</p> <p><b>Number of Bytes Transferred</b> – displays the total number of bytes transferred by visitors to the website.</p>	Web Usage - Summary		Total Number of Requests	5	Number of Bad Requests	5	Number of Client Hosts Accessed	4	Number of Page Views	1	Number of Bytes Transferred	249271
Web Usage - Summary													
Total Number of Requests	5												
Number of Bad Requests	5												
Number of Client Hosts Accessed	4												
Number of Page Views	1												
Number of Bytes Transferred	249271												
<b>Client Hosts Accessed</b>	<p>This item showing the name and IP address of the visitors who most often access the website:</p> <table border="1"> <thead> <tr> <th colspan="2">Web Usage - Client Hosts Accessed</th></tr> <tr> <th>Client Host</th><th>Accesses</th></tr> </thead> <tbody> <tr> <td>Unknown – 192.168.1.19</td><td>2</td></tr> <tr> <td>Unknown – 192.168.1.22</td><td>1</td></tr> <tr> <td>Unknown – 10.1.2.11</td><td>1</td></tr> <tr> <td>Unknown – 10.1.2.10</td><td>1</td></tr> </tbody> </table> <p><b>Client Host</b> – shows the name and IP address of the visitor's computer.</p> <p><b>Accesses</b>– displays the numbers of how many times the visitor accessed the website.</p>	Web Usage - Client Hosts Accessed		Client Host	Accesses	Unknown – 192.168.1.19	2	Unknown – 192.168.1.22	1	Unknown – 10.1.2.11	1	Unknown – 10.1.2.10	1
Web Usage - Client Hosts Accessed													
Client Host	Accesses												
Unknown – 192.168.1.19	2												
Unknown – 192.168.1.22	1												
Unknown – 10.1.2.11	1												
Unknown – 10.1.2.10	1												
<b>Page Views</b>	<p>This item showing the file name of the most commonly visited website pages and frequency of visits:</p> <table border="1"> <thead> <tr> <th colspan="2">Web Usage - Page Views</th></tr> <tr> <th>Page</th><th>Accesses</th></tr> </thead> <tbody> <tr> <td>/index.html</td><td>5</td></tr> </tbody> </table> <p><b>Page</b> – shows the name of the web page.</p> <p><b>Accesses</b> – displays the numbers of times the page is visited.</p>	Web Usage - Page Views		Page	Accesses	/index.html	5						
Web Usage - Page Views													
Page	Accesses												
/index.html	5												
<b>Daily Statistics</b>	<p>This item showing how often the website is viewed by date:</p>												

	<div> <div>Web Usage - Daily Statistics</div> <table> <tr> <th>Date</th><th>Accesses</th></tr> <tr> <td>June 21 2002</td><td>5</td></tr> </table> <p><b>Date</b> – date the statistics were gathered  <b>Accesses</b> – displays the numbers showing the frequency of website visits.</p> </div>	Date	Accesses	June 21 2002	5										
Date	Accesses														
June 21 2002	5														
<b>Hourly Requested</b>	<div> <p>This item showing how often the website is viewed by hour:</p> <div> <div>Web Usage - Hourly Statistics</div> <table> <tr> <th>Hour</th><th>Accesses</th></tr> <tr><td>00</td><td>0</td></tr> <tr><td>01</td><td>0</td></tr> <tr><td>02</td><td>0</td></tr> <tr><td>03</td><td>1</td></tr> <tr><td>04</td><td>0</td></tr> <tr><td>05</td><td>0</td></tr> </table> <p><b>Hour</b> – time (24-hour clock) that the statistics were gathered.  <b>Requests</b> – displays the numbers showing the frequency of website visits during the time period.</p> </div> </div>	Hour	Accesses	00	0	01	0	02	0	03	1	04	0	05	0
Hour	Accesses														
00	0														
01	0														
02	0														
03	1														
04	0														
05	0														

## 5.6.2 [Disk Usage](#)

This feature enables you to monitor how much HDD space is being used.

1. Click **Usage Information**.
2. Click **Disk**. The following screen appears:


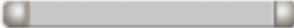




**Figure 5-45: Disk usage screen**

The Disk Usage screen provides options for viewing hard disk drive use statistics. These options are described as follows:

Disk Usage	<div>This item enables you to view the last date that the statistics were made:</div> <div><div>Last Checked: June 24 2002 9:26 AM</div><div>Refresh</div></div> <div>Last Checked – displays the date for monitoring disk drive usage statistics.</div> <div>Refresh – click this button to display the latest disk drive usage statistics</div>																																				
Disk Usage – Summary	<div>This item displays an overview of disk drive usage statistics. Click <b>Summary</b> at the top of the screen to view the summary item:</div> <div><div>Disk Usage - Summary</div><table><tr><th>Partition</th><th>Total</th><th>Used</th><th>Free</th><th>Percentage Used</th></tr><tr><td>root</td><td>1741 MB</td><td>484 MB</td><td>1256 MB</td><td><div><div></div></div> 27.8%</td></tr><tr><td>var</td><td>595 MB</td><td>7 MB</td><td>587 MB</td><td><div><div></div></div> 1.2%</td></tr><tr><td>home</td><td>2216 MB</td><td>104 MB</td><td>2112 MB</td><td><div><div></div></div> 4.7%</td></tr><tr><td>totals</td><td>4552 MB</td><td>595 MB</td><td>3955 MB</td><td><div><div></div></div> 13.1%</td></tr></table><div>Partition – displays the HDD partition</div><div>Used (MB) – displays the HDD space used</div><div>Free (MB) – displays the HDD space not being used</div><div>Total (MB) – displays the total capacity of the partition</div><div>Percentage Used – displays bar graphs and a numerical value showing what percentage of the partition is being used</div></div>	Partition	Total	Used	Free	Percentage Used	root	1741 MB	484 MB	1256 MB	<div><div></div></div> 27.8%	var	595 MB	7 MB	587 MB	<div><div></div></div> 1.2%	home	2216 MB	104 MB	2112 MB	<div><div></div></div> 4.7%	totals	4552 MB	595 MB	3955 MB	<div><div></div></div> 13.1%											
Partition	Total	Used	Free	Percentage Used																																	
root	1741 MB	484 MB	1256 MB	<div><div></div></div> 27.8%																																	
var	595 MB	7 MB	587 MB	<div><div></div></div> 1.2%																																	
home	2216 MB	104 MB	2112 MB	<div><div></div></div> 4.7%																																	
totals	4552 MB	595 MB	3955 MB	<div><div></div></div> 13.1%																																	
Users	<div>Shows disk drive usage statistics based on individual users.</div> <div><div>Disk Usage - Users</div><table><tr><th>User Name</th><th>Allowed</th><th>Used</th><th>Percentage Used</th></tr><tr><td>iu</td><td>100 MB</td><td>0.02 MB</td><td><div><div></div></div> 0%</td></tr><tr><td>winniet</td><td>100 MB</td><td>0.02 MB</td><td><div><div></div></div> 0%</td></tr><tr><td>jamesl</td><td>100 MB</td><td>0.02 MB</td><td><div><div></div></div> 0%</td></tr><tr><td>admin</td><td>2216 MB</td><td>0.08 MB</td><td><div><div></div></div> 0%</td></tr><tr><td>beckerh</td><td>100 MB</td><td>0.02 MB</td><td><div><div></div></div> 0%</td></tr><tr><td>jennytl</td><td>100 MB</td><td>0.02 MB</td><td><div><div></div></div> 0%</td></tr><tr><td>irenem</td><td>100 MB</td><td>0.02 MB</td><td><div><div></div></div> 0%</td></tr><tr><td>tranc</td><td>100 MB</td><td>0.02 MB</td><td><div><div></div></div> 0%</td></tr></table><div>User Name – displays the name of the user</div><div>Used (MB) – displays the number of megabytes the user is currently using</div><div>Allowed (MB) – displays the total number of megabytes the user is allowed to use</div><div>Percentage Used – displays bar graphs and a numerical value showing what percentage of the allowable disk space is being used</div></div>	User Name	Allowed	Used	Percentage Used	iu	100 MB	0.02 MB	<div><div></div></div> 0%	winniet	100 MB	0.02 MB	<div><div></div></div> 0%	jamesl	100 MB	0.02 MB	<div><div></div></div> 0%	admin	2216 MB	0.08 MB	<div><div></div></div> 0%	beckerh	100 MB	0.02 MB	<div><div></div></div> 0%	jennytl	100 MB	0.02 MB	<div><div></div></div> 0%	irenem	100 MB	0.02 MB	<div><div></div></div> 0%	tranc	100 MB	0.02 MB	<div><div></div></div> 0%
User Name	Allowed	Used	Percentage Used																																		
iu	100 MB	0.02 MB	<div><div></div></div> 0%																																		
winniet	100 MB	0.02 MB	<div><div></div></div> 0%																																		
jamesl	100 MB	0.02 MB	<div><div></div></div> 0%																																		
admin	2216 MB	0.08 MB	<div><div></div></div> 0%																																		
beckerh	100 MB	0.02 MB	<div><div></div></div> 0%																																		
jennytl	100 MB	0.02 MB	<div><div></div></div> 0%																																		
irenem	100 MB	0.02 MB	<div><div></div></div> 0%																																		
tranc	100 MB	0.02 MB	<div><div></div></div> 0%																																		
Groups	<div>Shows disk drive usage statistics based on groups.</div>																																				



Disk Usage - Groups			
Group Name	Allowed	Used	Percentage Used
guestgrp	300 MB	0.03 MB	 0%
home	300 MB	0.83 MB	 0.3%
restore	unlimited	0.02 MB	 0%
totals	600 MB	0.88 MB	 0.1%

**Group Name** – displays the name of the group

**Used (MB)** – displays the number of megabytes the group is currently using

**Allowed (MB)** – displays the total number of megabytes the group is allowed to use

**Percentage Used** – displays bar graphs and a numerical value showing what percentage of the allowable disk space is being used

### 5.6.3 Network Usage

This feature enables you to monitor network traffic.

1. Click **Usage Information**.
2. Click **Network**. The following screen appears:

Network Usage				
Network Interface	Sent	Received	Errors	Collisions
Internal Interface (LAN)	2079111 Bytes	25002253 Bytes	0	0
External Interface (WAN)	74173941 Bytes	115987 Bytes	0	0

**Figure 5-46: Network usage screen**

The field definitions are as follows:

<b>Network Interface</b>	Displays the WAN (eth1) and LAN (eth0) interfaces being monitored
<b>Sent</b>	Displays the number of bytes sent on the interface
<b>Received</b>	Displays the number of bytes received on the interface
<b>Errors</b>	Displays the number of packet errors
<b>Collisions</b>	Displays the number of collisions

## 5.7 SOFTWARE UPDATE

The software update is an enhanced function allowing the user to update his or her ISA-4000 system software to the newest version from the Internet. It also uninstalls the previously-installed system software, and allows the user specify an interval of time for the server to periodically check for software updates from the Internet. Please regularly check PLANET's website to see if any new software version of the ISA-4000 available

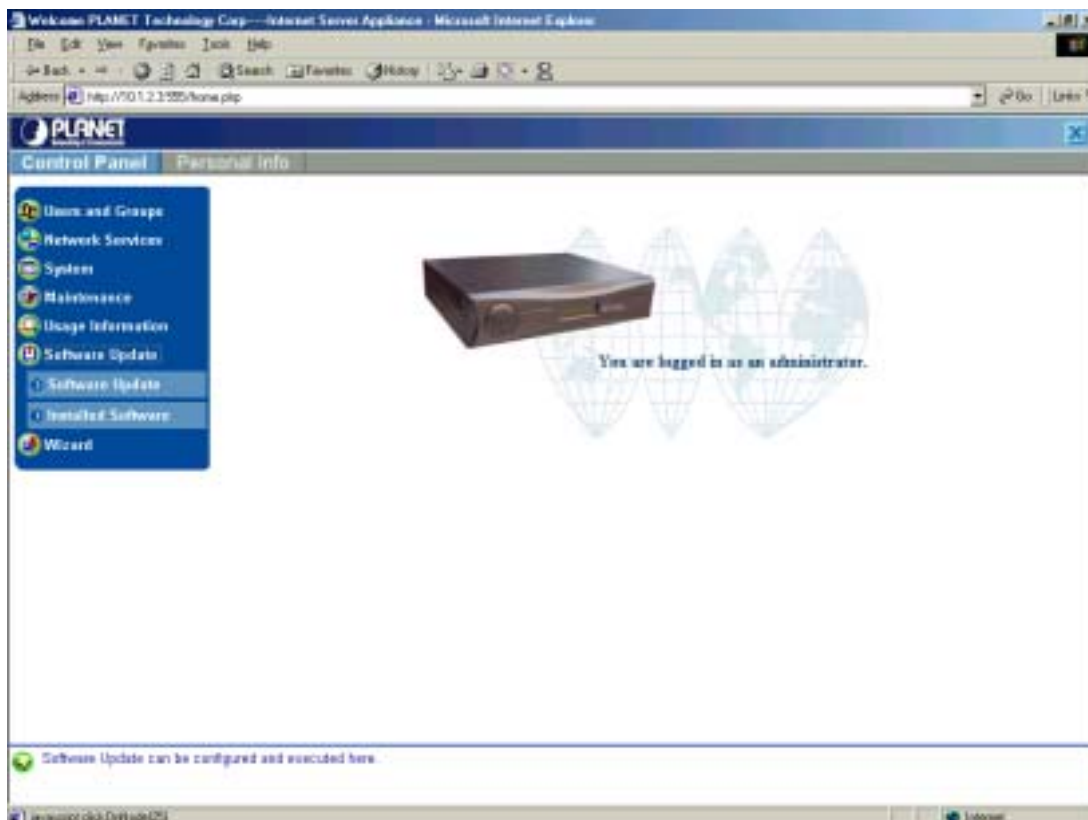


Figure 5-47: Software update menu

#### 5.7.1.1 SOFTWARE UPDATE

1. Click **Software Update**.
2. Click **Install Manually**. The New Software List menu appears:

Install Manually

Location

C:\temp\SW-UP-Test.p

Browse...

Prepare

Cancel

Figure 5-48: Software update

3. Click **Browse** and go to location of the file to be update software.
4. Click the **Prepare** button to install the new software.

#### 5.7.1.2 UNINSTALL SOFTWARE

1. Click **Software Update**.
2. Click **Installed Software**. The Installed Software List appears:

Installed Software List				
				1 Entry
Name ▲	Version ▲	Vendor ▲	Description	Delete
OS	v6.2	PLANET		

Figure 5-49: Installed software list

3. Click the **Delete** icon next to the software that you want to uninstall. You are prompted to confirm deletion:



4. Click **OK** to uninstall the software.

**Note!**

Software items with the gray delete icon  cannot be uninstalled.

## 5.8 PERSONAL PROFILE

In the Personal Profile menu, the administrator's account, personal information and disk usage may all be managed. Click **Personal Profile**:



The Personal Profile menu appears:



**Figure 5-50: Administrator personal profile**

### 5.8.1 Account

In the Account screen, the administrator's account may be maintained. Click **Account**; the Account screen appears:

**Figure 5-51: Personal profile account screen**

Field definitions are as follows:

<b>Full Name</b>	the full name of the administrator
<b>Language Preference</b>	select the display language
<b>Change Password</b>	the administrator's password. This must be entered twice.

After making your changes click **Save**.

### 5.8.2 Email

This screen enables you to set email preferences. Click Email. The **Email Settings** screen opens:

**Figure 5-52: Personal Profile Email settings**

Field definitions are as follows:

<b>Email Forwarding</b>	<p><b>Enable</b> – check the box to enable your emails to be forwarded to the email addresses listed in the text list box.</p> <p><b>Email addresses</b> – type the email addresses you want your email to be forwarded to.</p> <p><b>Save copy</b> – check the box to save a copy of the email to your local email account.</p>
<b>Auto-Reply</b>	<p><b>Enable</b> – Check the box to enable a vacation message reply to be sent to any incoming messages.</p>

	<b>Message</b> – sends an automatic response to all emails informing the sender that you are on vacation.
--	---

After making your changes click **Save**.

### 5.8.3 Personal Info

This is the information for the company that owns this ISA-4000. Click **Personal Info**. The Personal Info screen appears:

Account - admin

Account Email **Personal Info** Disk Usage

Home Page Address (optional)

Phone Number (optional)

Fax Number (optional)

Address (optional)

Description (optional)

Save

**Figure 5-53: Personal profile personal information screen**

The field definitions are as follows

<b>Home Page Address</b>	Type the URL of your company home page
<b>Phone Number</b>	Type your company's phone number
<b>Fax Number</b>	Type your company's fax number
<b>Address</b>	Type your company's address
<b>Description</b>	Type additional information about your company here.

After making your changes click **Save**.

### 5.8.4 Disk Usage

The Disk Usage screen displays how the total disk space is being utilized. Click **Disk Usage**; the **Disk Usage** screen appears:

Account - admin

Account Email Personal Info **Disk Usage** 1 Entry

Disk Space Used(MB)	Disk Space Free(MB)	Percentage Used
0.08	2216.27	0%

**Figure 5-54: Personal Profile Disk Usage screen**

The field definitions are as follows:

<b>Disk Space Used (MB)</b>	The disk space for administrator that is currently being used
<b>Disk Space Free (MB)</b>	The disk space for administrator that is currently not being used.
<b>Percentage Used</b>	The percentage of the disk space for administrator that is currently being used.

This concludes this chapter. The next chapter explains how to configure user settings.

## Chapter 6: User's Guide

This chapter shows users how to maintain their personal accounts. The Personal Profile screen appears after a user has logged into the ISA-4000. The personal profile menu allows users to configure their account, personal info and disk usage settings.

### 6.1 LOGGING IN AS AN USER

Follow these instructions to log in as a user.

1. Enter the following URL in your browser:

`http://<hostname>.<domainname>:555`

The login screen appears:

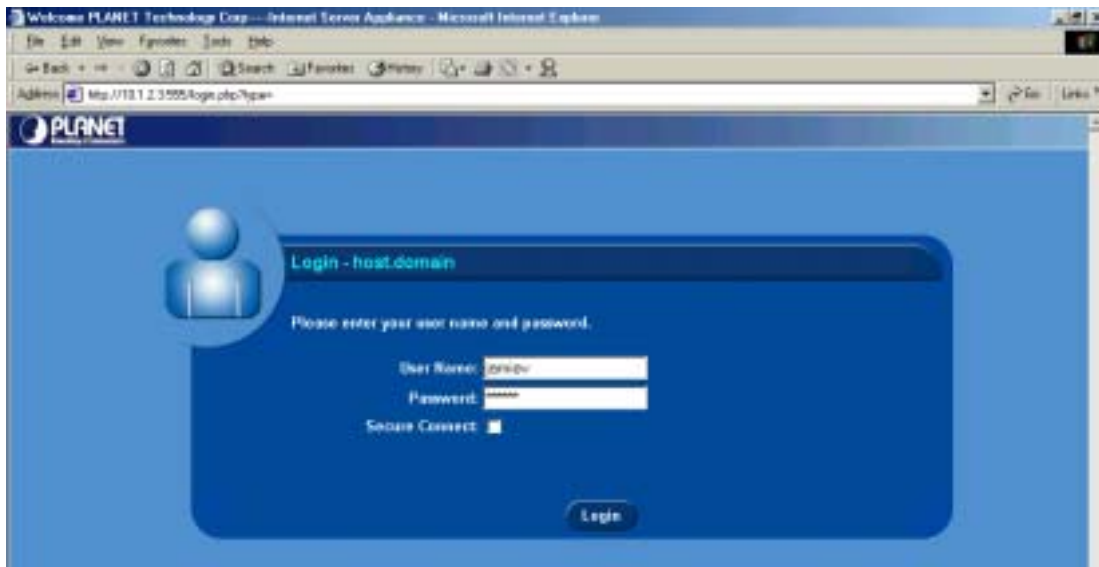


Figure 6-1: Login screen

2. Enter a registered user name and password. If you want to establish a secure connection, click the Secure Connect checkbox; an SSL (Secure Sockets Layer) connection between your browser and the ISA-4000 will then be established.
3. Click **Login**. After you have logged into the ISA-4000, the Users screen appears:



Figure 6-2: User's personal profile screen

The menu items are described as follows.

6.1.1 Account

The Account settings allow you to maintain your personal account. Click **Account**; the **Account** screen appears

Account - jamiev

Account | Email | Personal Info | Disk Usage

Full Name: Jamie Vogt

Language Preference: <set From Browser Options>

Change Password (optional): [ ] (Confirm)

Save

Figure 6-3: User account screen

The field definitions are as follows:

Full Name	Your account name
Language Preference	Select the display language
Change Password	Your account password. This must be entered twice. To change the password, you must enter it twice.

After making your changes click **Save**.

6.1.2 Email

This screen enables you to set email preferences. Click **Email**. The Email Settings screen opens:

Account - jamiev

Account | Email | Personal Info | Disk Usage

Email Forwarding

Enable [ ]

Email Addresses [ ]

Save Copy [ ]

Auto-Reply

Enable [ ]

Message [ ]

Save

Figure 6-4: User personal – profile email settings



Field definitions are as follows:

<b>Email Forwarding</b>	<p><b>Enable</b> – check the box to enable your emails to be forwarded to the email addresses listed in the text list box.</p> <p><b>Email addresses</b> – type the email addresses you want your email to be forwarded to.</p> <p><b>Save copy</b> – check the box to save a copy of the email to your local email account.</p>
<b>Auto-Reply</b>	<p><b>Enable</b> – Check the box to enable a vacation message reply to be sent to any incoming messages.</p> <p><b>Message</b> – sends an automatic response to all emails informing the sender that you are on vacation.</p>

After making your changes click **Save**.

### 6.1.3 Personal Info

This screen contains your personal information. Click **Personal Info**. The Personal Info screen appears:

**Figure 6-5: User personal profile – personal information screen**


The field definitions are as follows

<b>Web Page Address</b>	Type the URL of your personal home page
<b>Phone Number</b>	Type your phone number
<b>Fax Number</b>	Type your fax number
<b>Address</b>	Type your address
<b>Remarks</b>	Type additional information about yourself here.

After making your changes click **Save**.

### 6.1.4 Disk Usage

The Disk Usage screen displays how the total disk space is being utilized. Click **Disk Usage**; the **Disk Usage** screen appears:

Account - jamiev		
Account	Email	Personal Info
Disk Usage		1 Entry
Disk Space Used(MB)	Disk Space Free(MB)	Percentage Used
0.02	99.98	 0%

**Figure 6-6: User personal profile – disk usage screen**

The field definitions are as follows:

<b>Disk Space Used (MB)</b>	The disk space you are currently using
<b>Disk Space Free (MB)</b>	The disk space you are not using
<b>Percentage Used</b>	The percentage of the disk space that is allocated to you that is currently being used

This concludes this chapter. The next chapter explains how to configure user settings.

## Chapter 7: System Install and Restore

Included with the ISA-4000 is a System Installation CD-ROM that allows users to install the system onto a new hard disk, or to restore a fresh OS to a corrupted system hard disk. This chapter explains how to install an HDD onto the ISA-4000 and how to install the system.

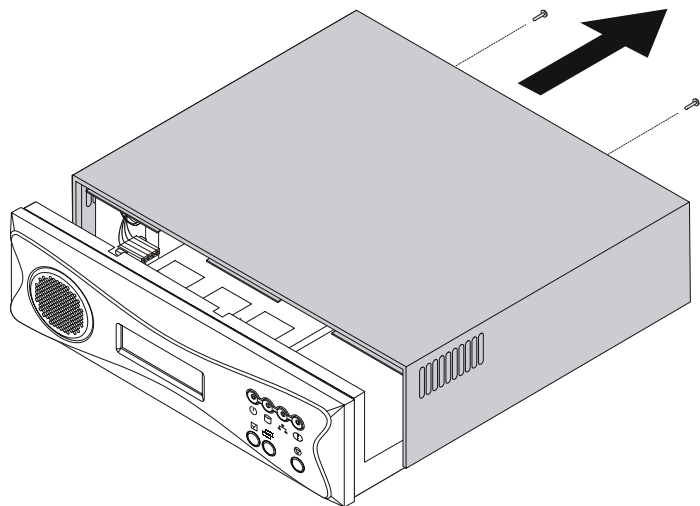
**Note!**

The System Installation CD-ROM erases all the data on the hard disk. Make sure to backup your data before performing the system restore procedure!

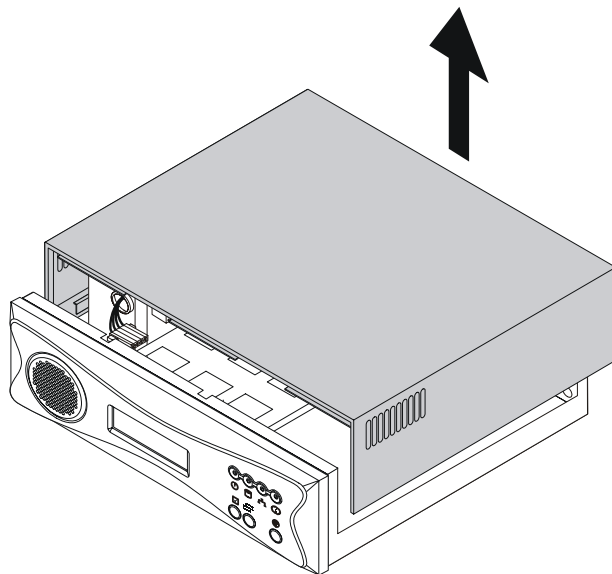
### 7.1 INSTALLING THE HDD

Follow these instructions to install an HDD in the ISA-4000:

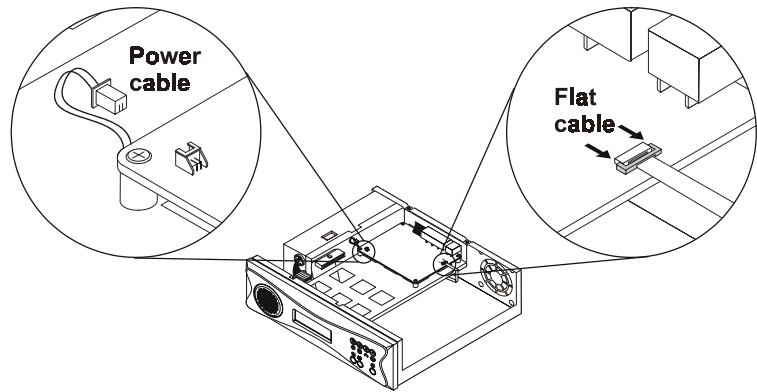
1. Unscrew the mounting screws that secure the cover of your ISA-4000 unit, and slide the cover in the direction of the arrow:



2. Lift up to remove the cover:

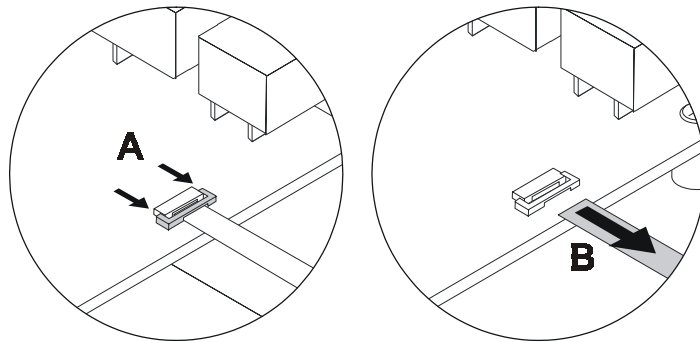


3. Disconnect the LAN array PCB card power cable and flat cable:

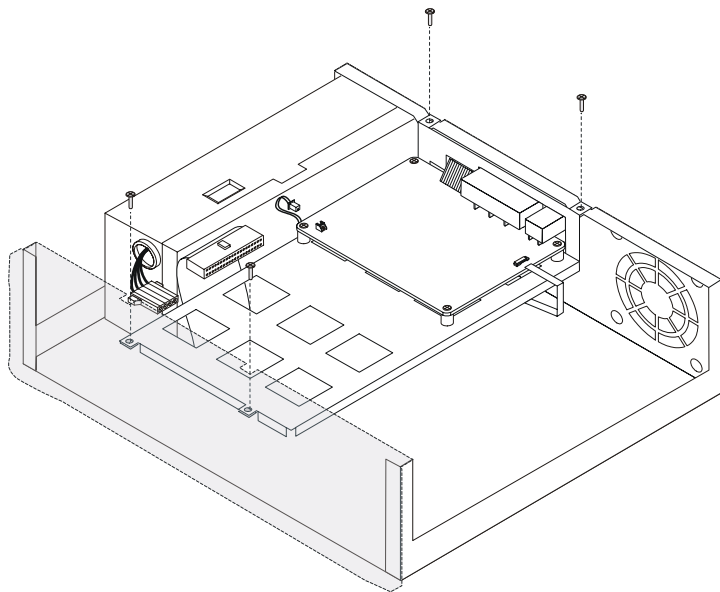


**ISA-4000 cable disconnection**

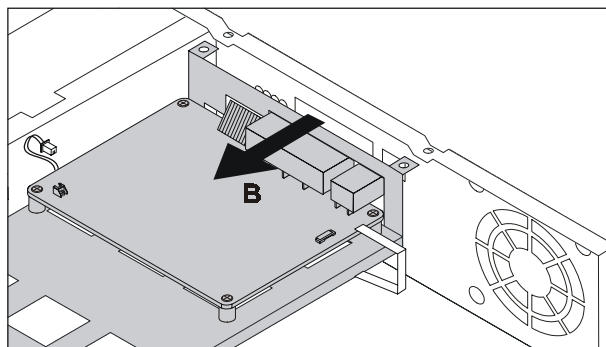
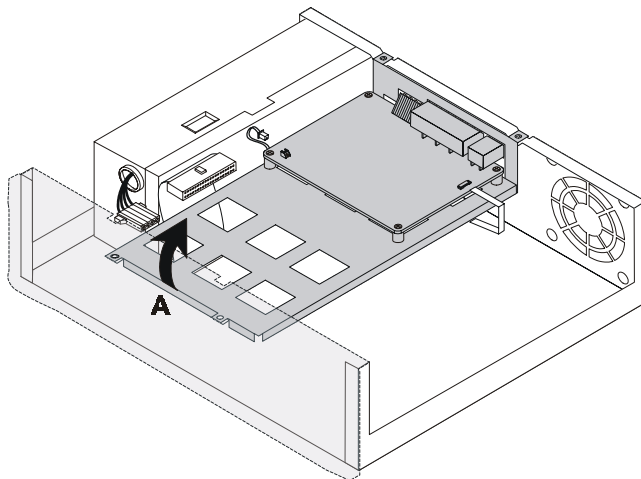
To remove the flat cable, press both sides of the flat cable connector in the direction of the arrows (A) to loosen the flat cable, and slide the flat cable out (B):



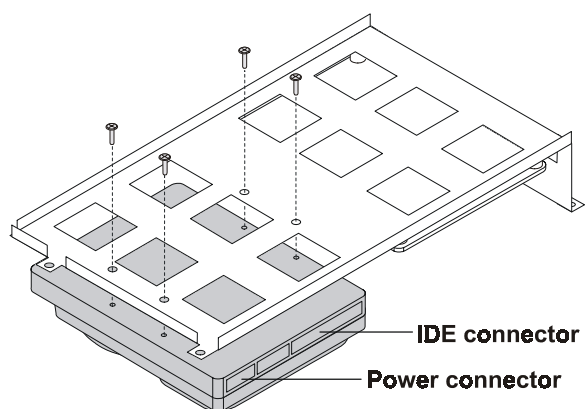
4. Unscrew the four screws and remove the drive mounting tray from the ISA-4000 chassis as shown:



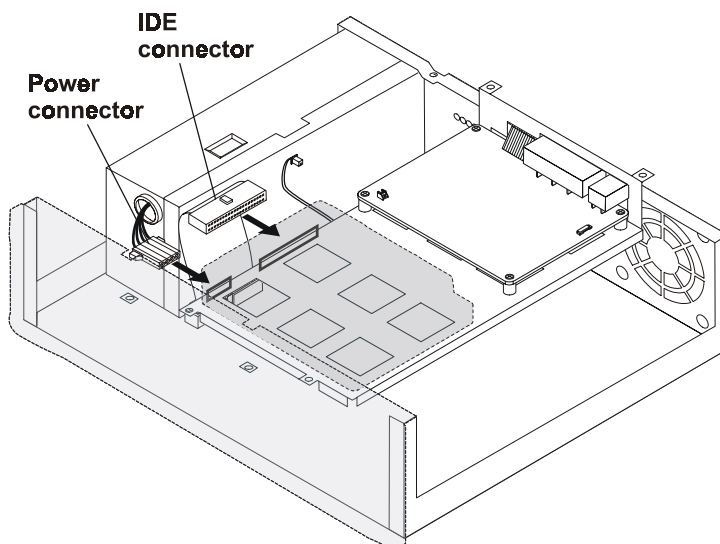
5. First rotate the end of the drive mounting tray in the direction of the arrow (A), then slide the LAN port array from the rear bracket (B):



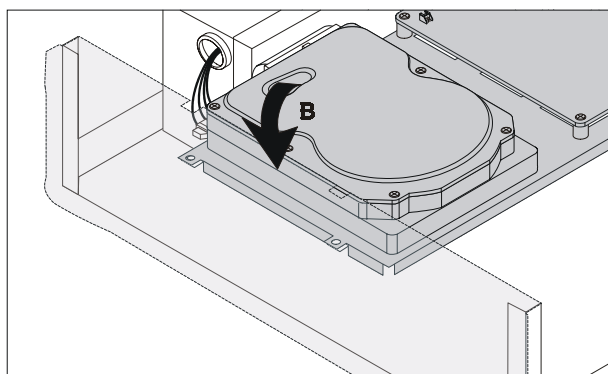
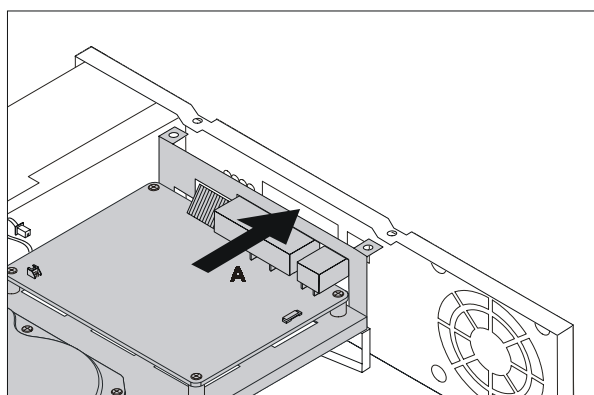
6. Flip the drive mounting tray over and secure the HDD to it using four screws as shown:



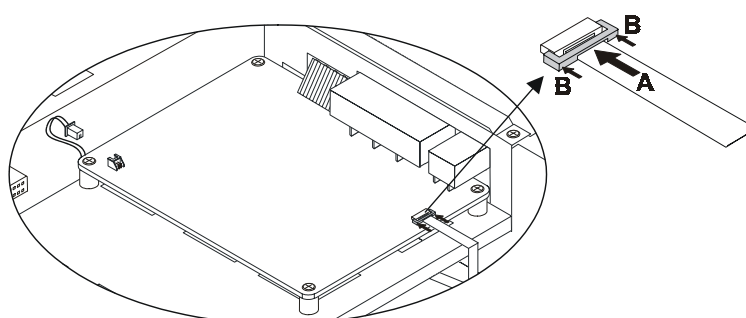
7. Before reinstalling the drive mounting tray, connect the HDD power and IDE connectors:



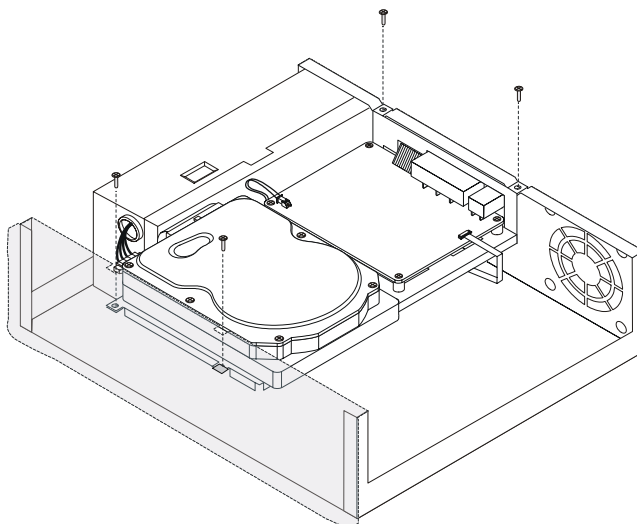
8. First insert the LAN array into the rear bracket (A), and then slide the end of the hard disk mounting tray down (B):



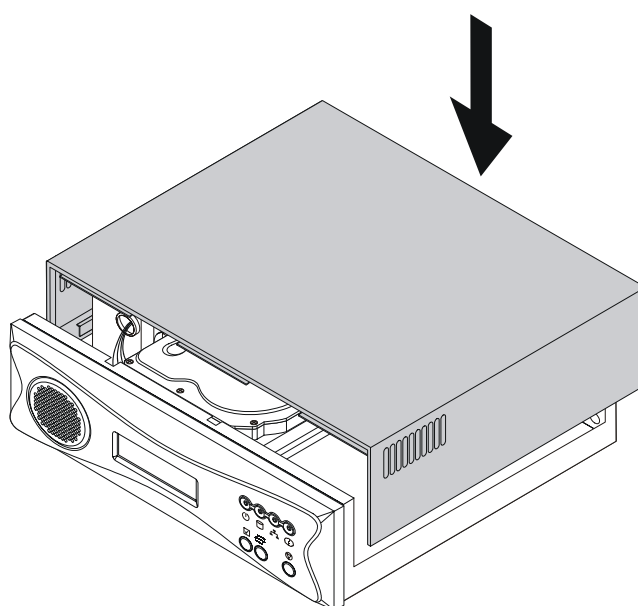
9. Reconnect the LAN array power cable and flat cable. To install the flat cable, first insert the flat cable into the connector (A), and then push the connector clamp in (B):



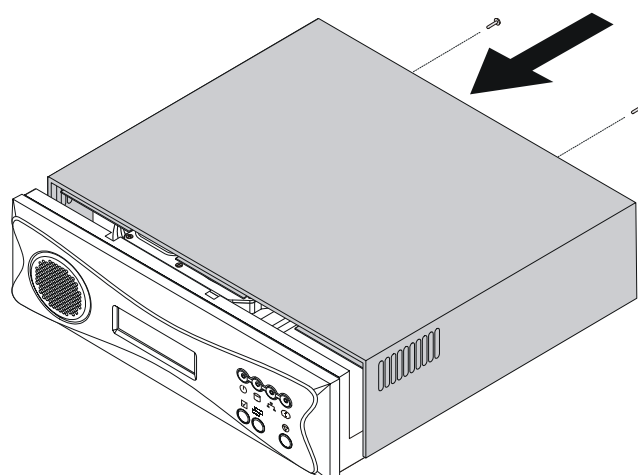
10. Reinsert the hard disk mounting tray screws:



11. Slide the chassis cover over the chassis as shown:



12. Slide the chassis cover in and reinsert the chassis cover screws:



## 7.2 SYSTEM RESTORATION PROCEDURE

Before performing the system restoration procedure, ensure that the CD-ROM is set as the first bootable device in BIOS. Refer to your BIOS documentation or online help for information on setting the boot devices.

1. Insert the System Installation CD into the bootable CD-ROM drive of the host PC.
2. Reboot the host PC with the Restore CD in the drive. The following screen appears:

```
PLANET Technology, Inc.  
PLANET OS Restore CD Version 1.0  
-----  
Welcome to the PLANET OS Restore Disc. The PLANET OS Restore  
disc is a self-booting CD-ROM. It allows you to install/restore the  
factory-default software on your Internet Server Appliance 4000.  
Please read this document before proceeding with the software  
install/restore procedure.  
  
Warning! The OS Restore CD-ROM erases all the data on the hard disk.  
Make sure to backup your data before performing the system restore  
procedure.  
  
After you successfully restore software on the Internet Server Appliance 4000,  
be sure to download the latest version of the system software from  
PLANET Technology web site (http://www.planet.com.tw) and perform the  
system software update. The detailed information about the system  
software update is specified in the section "System Software Update"  
in Chapter 4 of the manual.  
-----
```

**Note!**

If setup does not detect a supported network card installed on your system, you will see the following screen:

```
PLANET Technology, Inc.  
PLANET OS Restore CD Version 1.01  
-----  
A compatible network interface card was not found in this computer!  
Please make sure you have properly installed one of the network  
interface cards that are listed in the System Requirements below.  
Although other cards might work, only the following specific cards  
had been tested that they work with the disc.  
  
-----  
System Requirements  
-----  
Intel-Compatible PC Desktop or Notebook:  
Your Computer must have an IDE (ATAPI) CD-ROM Drive with CD-ROM  
bootable function.  
Your Computer must have one of the following Network Interface Cards:  
PCI Cards:  
PLANET Gigabit Ethernet Adapter (ENW-9601T/ENW-9601T)  
PLANET Fast Ethernet PCI Adapter (ENW-9601+)
```

Refer to your network card documentation to see if your card is one that is on the list shown. If it is listed, and you still see the screen above, contact your dealer for assistance.




3. Connect a straight cable between the ISA-4000 uplink port and a hub or switch, and a straight cable between the ISA-4000 LAN port and a PC.
4. Connect a power cord (connected to an AC power source) to the ISA-4000.
5. Locate the buttons on the front panel of the ISA-4000.
6. Hold down any of the buttons on the front panel as the ISA-4000 is powering up.
7. Release the button after the LCD displays the text "boot from net."
8. The LCD displays the text "please power off now" after done.
9. Remove the CD from your PC, and reboot your computer and ISA-4000.



### A.1 LCD Console Overview

The ISA-4000 has a simple LCD console. A 2x16-character LCD display, it acts as a system console when used with the three buttons.

When the system starts up, the systems console displays the ISA-4000's local host name and IP address, for example, "host.domain" on the first line and "10.1.2.3" on the second line. This screen displaying the local host and IP address is called the "main screen."








The ISA-4000 has three buttons. The  button is for shutting down the system. The  button is for menus, and the  button is for selecting items. Using these three buttons, users may perform the following functions:

- Display Network Settings
- Setup Network
- Reboot
- Reset the Network
- Reset the Firewall
- Exit
- Shutdown



The detailed procedures for each function are as follows.





### A.2 Displaying Network Settings

1. Press the Menu button (  ) until "SELECT:" and "Network Settings" is displayed on the console.
2. Press the Select button (  ); "Default Gateway:" and "10.1.2.254" will be displayed on the console.
3. Press the Select button (  ) again; "Internal IP:" and "10.1.2.3" will be displayed on the console.
4. Press the Select button (  ) again; "Internal NetMask" and "255.0.0.0" will be displayed on the console.
5. Press the Select button (  ) again; "External IP:" and "61.218.188.88" will be displayed on the console.
6. Press the Select button (  ) again; "External NetMask:" and "255.255.255.248" will be displayed on the console.
7. Press the Select button (  ) again to return to the main screen.



### A.3 Setup Network

1. Press the Menu button (  ) twice; "SELECT:" and "Setup Network" will be displayed on the console.
2. Press the Select button (  ) and the ISA-4000 refreshes the LAN Port IP address.



### A.4 Reboot

1. Press the Menu button (  ) three times; "SELECT:" and "REBOOT" will be displayed on the console.
2. Press the Select button (  ) and the ISA-4000 will reboot the system.



## A.5 Reset Network

1. Press the Menu button (  ) four times; "SELECT:" and "RESET NETWORK" will be displayed on the console.
2. Press the Select button (  ) twice, and the ISA-4000 will reset the network.




## A.6 Reset Firewall

1. Press the Menu button (  ) five times; "SELECT:" and "RESET FIREWALL" will be displayed on the console.
2. Press the Select button (  ) twice, and the ISA-4000 will clear out all of the firewall's filtering policies.

## A.7 Exit

1. Press the Menu button (  ) six times; "SELECT:" and "EXIT" will be displayed on the console.
2. Press the Select button (  ), and the LCD console will return to the main screen.

## A.8 Shutdown

1. Press the Shutdown button (  ) once; "One More to Shutdown" will be displayed on the console.
2. The console will return to the main screen if the Menu button (  ) is pressed.
3. The system will shutdown if the Shutdown button (  ) is pressed again.

## Appendix B: Product Specifications

### B.1 PLANET Internet Server Appliance 4000

#### B.1.1 Software Features

<b>Browser-Based User Interface</b>	IE and Netscape
<b>International Language Support</b>	118N
<b>Auto Configure Network</b>	DHCP, DNS and NAT
<b>Web Publishing</b>	CGI, Perl and PHP scripting
<b>Web Caching</b>	Proxy and Web Caching server
<b>Email Service</b>	POP3, IMAP4, SMTP
<b>Security</b>	128-bit SSL
<b>IP Sharing</b>	NAT
<b>Cross-Platform file service</b>	Windows, Mac OS and FTP
<b>Internet Authentication</b>	PPPoE
<b>Enhanced Backup/Restore</b>	Scheduled backup and restore policy

#### B.1.2 Hardware

<b>CPU</b>	AMD SC520ssor 16KB on-chip L1 Cache
<b>Memory</b>	128 MB 66 MHz 32-bit SDRAM (up to 256MB)
<b>Network</b>	WAN - 10/100 Base-T Ethernet network interface LAN - 10/100 Base-T Ethernet network interface
<b>Storage</b>	One ATA IDE interface
<b>Communication</b>	One RS-232 manufacture console interface
<b>Display</b>	16X2 characters LCD panel
<b>LED</b>	Power, HD Activity, LAN LINK/ACT, WAN LINK/ACT LEDs Rear – 4 LAN LINK/ACT LEDs for switch
<b>Power</b>	Switching power supply Input rating from 100V~240V, 50/60Hz Power consumption: MAX 8 watts (256MB RAM, HD excluded)
<b>Environment</b>	Operating - 32° to 108° F (0° to 40° C), 10% to 90% Humidity (non-condensing) Non-operating - 14° to 122° F (-10° to 50° C), 5% to 93% Humidity (non-condensing)
<b>Regulatory</b>	CE Class B, FCC Part 15 Subpart B, VCCI Class B
<b>Dimensions</b>	8.5 x 5.75 x 1.625 inches (21.59 x 14.605 x 4.128 cm)

## **B.2 Supported Network Interface Card**

Your Computer must have one of the Following Network Interface Cards:

### **B.2.1 PCI Cards**

- PLANET Gigabit Ethernet Adapter (ENE-9601T / ENW-9602T)
- PLANET Fast Ethernet PCI Adapter (ENW-9501+)
- PLANET Fast Ethernet PCI Adapter (ENW9503 / ENW-9504)
- Intel PRO/100 S Desktop Adapter (PILA8460)
- Intel PRO/100+ Server Adapter (PILA8470B)
- Linksys EtherFast 10/100 LAN Card (LNE100TX)
- Netgear Fast Ethernet PCI Adapter (FA311TX)
- 3Com Fast EtherLink XL PCI NIC (3C905B-TX)
- 3Com EtherLink 10/100 PCI Network Interface Card (3C905C-TX-M)
- 3Com OfficeConnect Fast Ethernet NIC (3CSOHO100-TX)
- D-Link DFE-530TX+ (DFE-530TX+)

### **B.2.2 PCMCIA Cards**

- Netgear Fast Ethernet PCMCIA Adapter (FA410TX)
- 3Com Megahertz 10/100 LAN PC Card (3CCFE574BT)
- Xircom CardBus Ethernet 10/100 (CBE2-100BTX)
- D-Link 32-bit 10/100 Mbps CardBus Card (DFE-680TX)

### **B.2.3 Cables**

Either one 100Base-T Ethernet Hub and two Standard Category 5 Cables, or one Category 5 Crossover Cable are required for installation.

## Appendix C: Licenses

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