13.8 Configuring Security

To change your 1500WR Wireless Router's security settings, click **ADVANCED**, **REMOTE MANAGEMENT** and then the **Security tab**. The screen appears as shown.

If an outside user attempts to probe an unsupported port on your 1500WR Wireless Router, an ICMP response packet is automatically returned. This allows the outside user to know the 1500WR Wireless Router exists. The 1500WR Wireless Router series support anti-probing, which prevents the ICMP response packet from being sent. This keeps outsiders from discovering your 1500WR Wireless Router when unsupported ports are probed.

Respond to Ping on: LAN & WAN

☐ Do not respond to requests for unauthorized services

The following table describes the labels in this screen.

Security

LABEL	DESCRIPTION
ICMP	Internet Control Message Protocol is a message control and error-reporting protocol between a host server and a gateway to the Internet. ICMP uses Internet Protocol (IP) datagrams, but the messages are processed by the TCP/IP software and directly apparent to the application user.
Respond to Ping on	The 1500WR Wireless Router will not respond to any incoming Ping requests when **Disable** is selected. Select **LAN** to reply to incoming LAN Ping requests. Select **WAN** to reply to incoming WAN Ping requests. Otherwise select **LAN&WAN** to reply to both incoming LAN and WAN Ping requests.
Do not respond to requests for unauthorized services	Select this option to prevent hackers from finding the 1500WR Wireless Router by probing for unused ports. If you select this option, the 1500WR Wireless Router will not send ICMP response packets to port request(s) for unused ports, thus leaving the unused ports and the 1500WR Wireless Router unseen. If the firewall blocks a packet from the WAN, the 1500WR Wireless Router sends a TCP reset packet. Use the "sys firewall tcprst rst off' command in the command interpreter if you want to stop the 1500WR Wireless Router from sending TCP reset packets.
Apply	Click **Apply** to save your changes back to the 1500WR Wireless Router.
Reset	Click **Reset** to begin configuring this screen afresh.

Part VI

UPnP and LOGS

This part provides information and configuration instructions for UPnP (Universal Plug and Play) and the logs.

Chapter 14

UPnP Screen

This chapter introduces the Universal Plug and Play feature of the 1500WR

14.1 Universal Plug and Play Overview

Universal Plug and Play (UPnP) is a distributed, open networking standard that uses TCP/IP for simple peer-to-peer network connectivity between devices. A UPnP device can dynamically join a network, obtain an IP address, convey its capabilities and learn about other devices on the network. In turn, a device can leave a network smoothly and automatically when it is no longer in use.

14.1.1 How Do I Know If I'm Using UPnP?

UPnP hardware is identified as an icon in the Network Connections folder (Windows XP). Each UPnP compatible device installed on your network will appear as a separate icon. Selecting the icon of a UPnP device will allow you to access the information and properties of that device.

14.1.2 NAT Traversal

UPnP NAT traversal automates the process of allowing an application to operate through NAT. UPnP network devices can automatically configure network addressing, announce their presence in the network to other UPnP devices and enable exchange of simple product and service descriptions. NAT traversal allows the following:

- Dynamic port mapping
- Learning public IP addresses
- Assigning lease times to mappings

Windows Messenger is an example of an application that supports NAT traversal and UPnP. See the SUA/NAT chapter for further information about NAT.

14.2 Cautions with UPnP

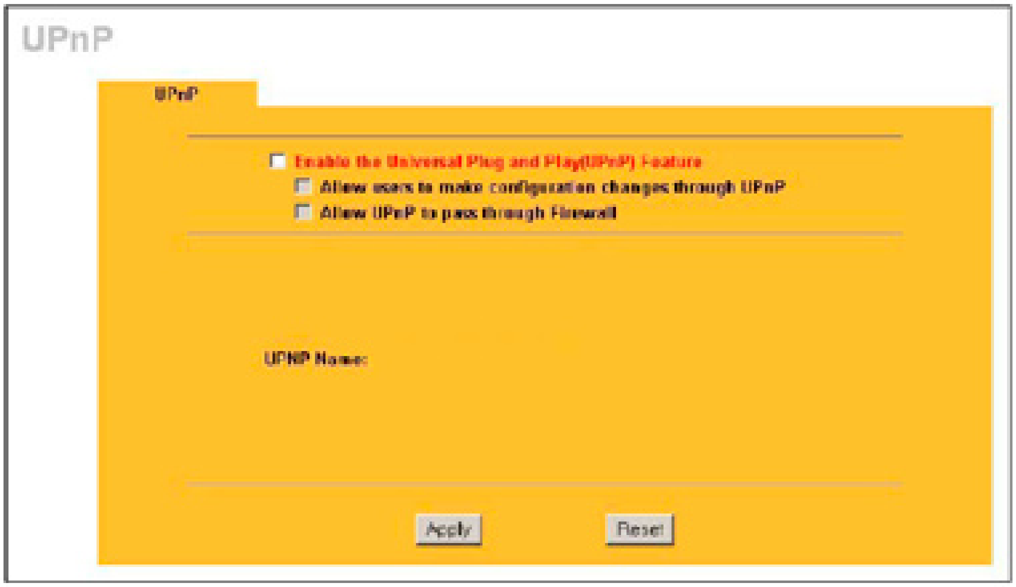
The automated nature of NAT traversal applications in establishing their own services and opening firewall ports may present network security issues. Network information and configuration may also be obtained and modified by users in some network environments.

All UPnP-enabled devices may communicate freely with each other without additional configuration. Disable UPnP if this is not your intention.

14.3 Configuring UPnP

Click **ADVANCED** and then **UPnP** to display the screen shown on the next page.

14.3 Configuring UPnP - Continued



The following table describes the labels in this screen.

Configuring UPnP

LABEL	DESCRIPTION
Enable the Universal Plug and Play (UPnP) feature	Select this check box to activate UPnP. Be aware that anyone could use a UPnP application to open the web Web Configuration Utility's login screen without entering the 1500WR Wireless Router's IP address (although you must still enter the password to access the web Web Configuration Utility).
Allow users to make configuration changes through UPnP	Select this check box to allow UPnP-enabled applications to automatically configure the 1500WR Wireless Router so that they can communicate through the 1500WR Wireless Router, for example by using NAT traversal, UPnP applications automatically reserve a NAT forwarding port in order to communicate with another UPnP enabled device; this eliminates the need to manually configure port forwarding for the UPnP enabled application.
Allow UPnP to pass through Firewall	Select this check box to create a static LAN to LAN/1500WR Wireless Router rule that allows forwarding of ports 1900 and 80. Selecting this check box also creates a dynamic firewall rule every time a NAT forwarding port is reserved for UPnP. This setting remains active until you disable UPnP or clear this check box. Clear this check box to have the firewall block all UPnP application packets (for example, MSN packets) instead of creating a firewall rule for them.
UPnP Name	This identifies the 1500WR Wireless Router in UPnP applications.
Apply	Click **Apply** to save your changes back to the 1500WR Wireless Router.
Reset	Click **Reset** to begin configuring this screen afresh.

14.4 Installing UPnP in Windows Example

This section shows how to install UPnP in Windows XP

14.4.2 Installing UPnP in Windows XP

Follow the steps below to install UPnP in Windows XP.

Step 1. Click Start and Control Panel.

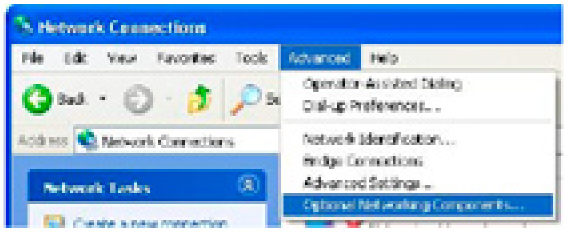
Step 2. Double-click Network Connections.

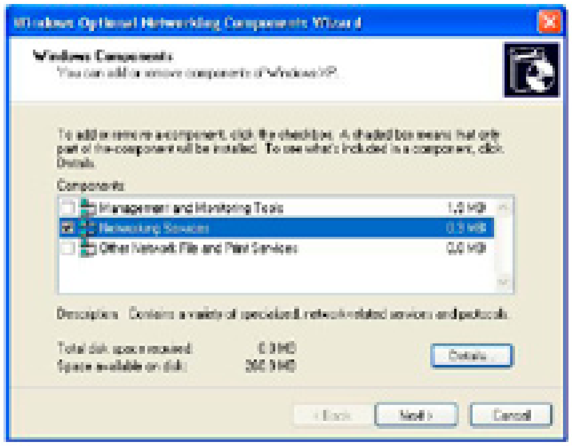
Step 3. In the Network Connections window, click Advanced in the main menu and select Optional Networking Components ....
The Windows Optional Networking Components Wizard window displays.

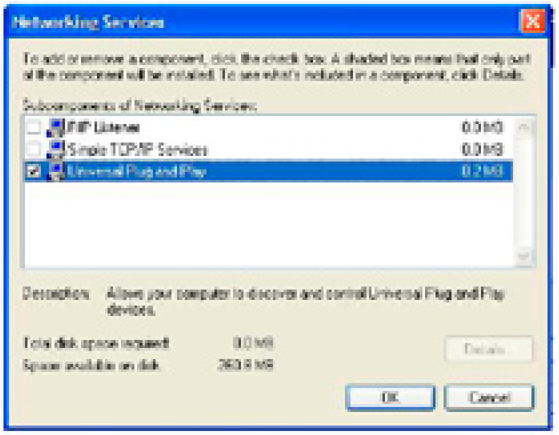
Step 4. Select Networking Service in the Components selection box and click Details.

Step 5. In the Networking Services window, select the Universal Plug and Play check box.

Step 6. Click OK to go back to the Windows Optional Networking Component Wizard window and click Next.







Description: Allows your computer to discover and control Universal Plug and Play devices.

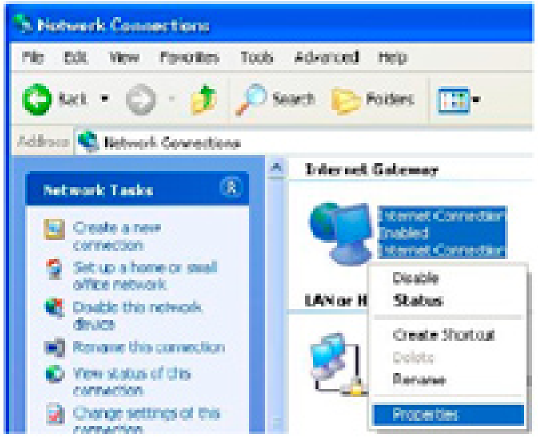
14.5 Using UPnP in Windows XP Example

This section shows you how to use the UPnP feature in Windows XP. You must already have UPnP installed in Windows XP and UPnP activated on the 1500WR Wireless Router.

Make sure the computer is connected to a LAN port of the 1500WR Wireless Router. Turn on your computer and the 1500WR Wireless Router.

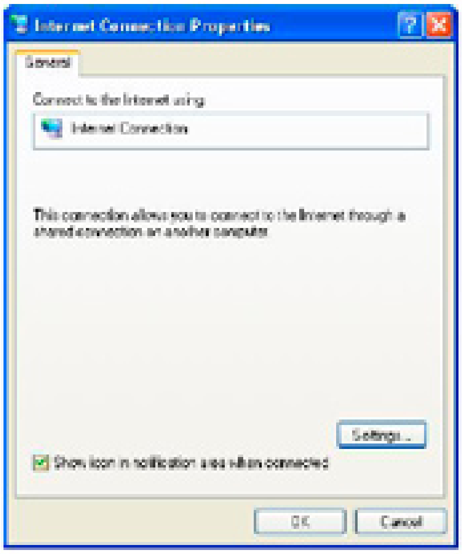
14.5.1 Auto-discover Your UPnP-enabled Network Device

Step 1. Click Start and Control Panel. Double-click Network Connections. An icon displays under Internet Gateway.



Step 2. Right-click the icon and select Properties.

Step 3. In the Internet Connection Properties window, click Settings to see the port mappings that were automatically created.



Connect to the Internet using:

Internet Connection

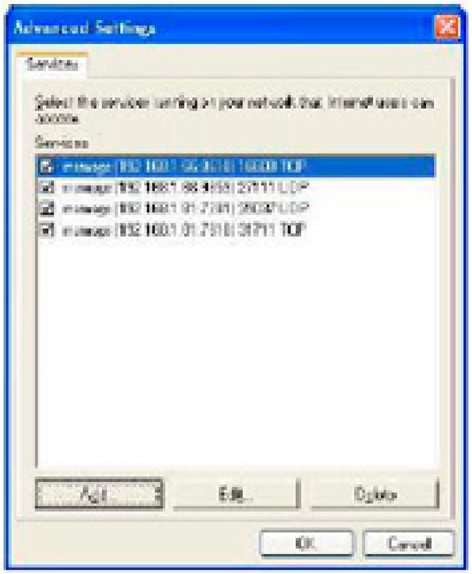
This connection allows you to connect to the Internet through a shared connection on another computer.

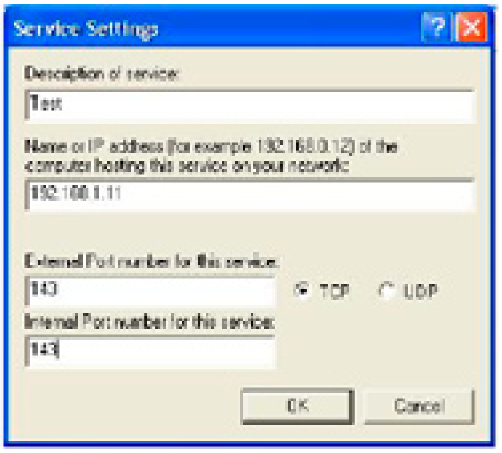
☑ Show icon in notification area when connected

Continued next page

14.5.1 Auto-discover Your UPnP-enabled Network Device - Continued

Step 4. You may edit or delete the port mappings or click Add to manually add port mappings.





Description of service: Test

Name or IP address (for example 192.168.0.12) of the computer hosting this service on your network: 192.168.1.11

External Port number for this service: 143 ● TCP ○ UDP

Internal Port number for this service: 143

When the UPnP-enabled device is disconnected from your computer, all port mappings will be deleted automatically.

Step 5. Select the Show icon in notification area

Step 6. Double-click the icon to display your current Internet connection status.

Internet Connection is now connected

Click here for more information...

Status		Connected
Duration		00:00:56
Speed		100.0 Mbps
Packets		
Sent	0	618
Received	5,943	746

14.5.2 Web Web Configuration Utility Easy Access

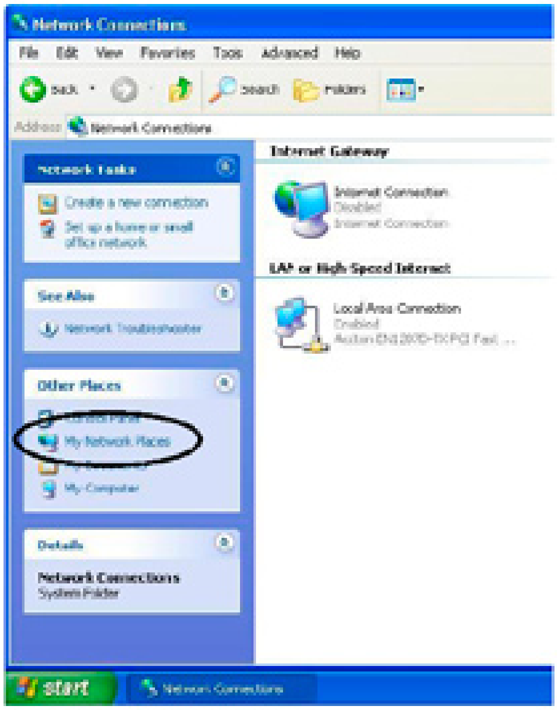
With UPnP, you can access the web-based Web Configuration Utility on the 1500WR Wireless Router without finding out the IP address of the 1500WR Wireless Router first. This is helpful if you do not know the IP address of the 1500WR Wireless Router.

Follow the steps below to access the web Web Configuration Utility.

Step 1. Click start and then Control Panel.

Step 2. Double-click Network Connections.

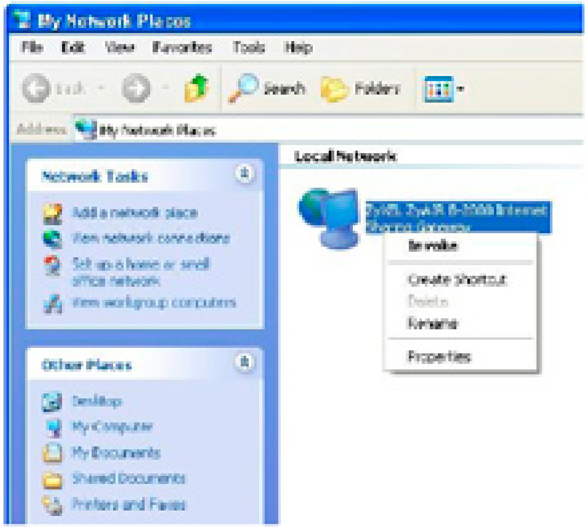
Step 3. Select My Network Places under Other Places.



Step 4. An icon with the description for each UPnP-enabled device displays under Local Network.

Step 5. Right-click the icon for your 1500WR Wireless Router and select Invoke. The web Web Configuration Utility login screen displays.

Step 6. Right-click the icon for your 1500WR Wireless Router and select Properties. A properties window displays with basic information about the 1500WR Wireless Router. (Screen not shown)



Chapter 15

Logs Screens

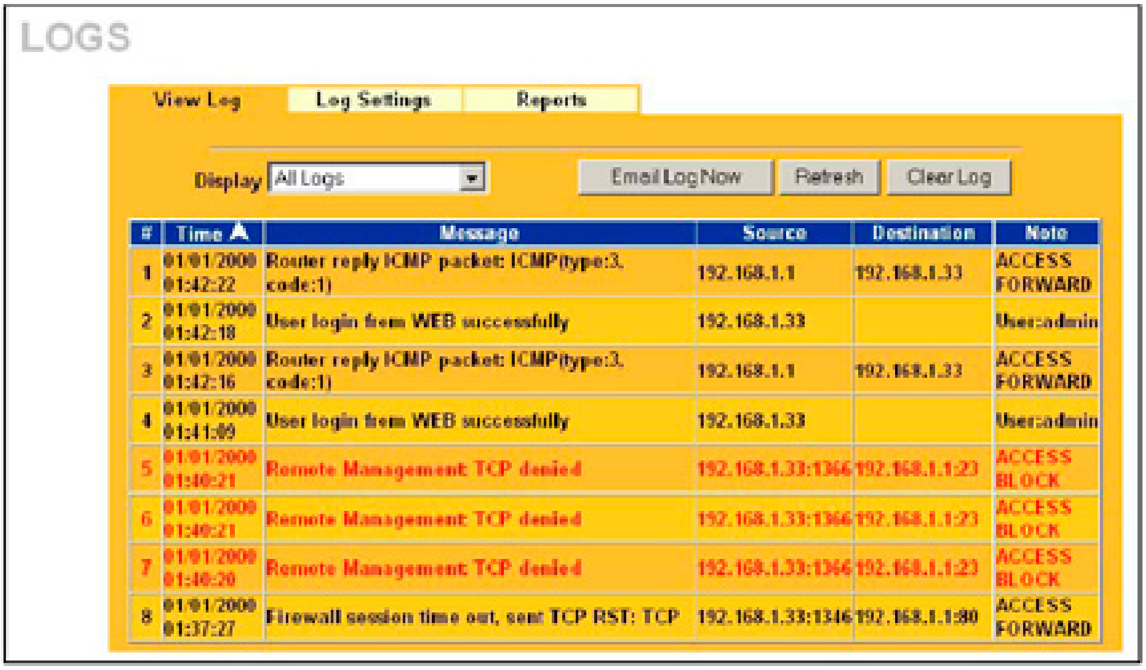
This chapter contains information about configuring general log settings and viewing the 1500WR Wireless Router's logs. Refer to the appendix for example log message explanations.

15.1 Using the View Log Screen

The web Web Configuration Utility allows you to look at all of the 1500WR Wireless Router's logs in one location.

Click **ADVANCED** and then **LOGS** to open the View Log screen. Use the View Log screen to see the logs for the categories that you selected in the Log Settings screen (see section 15.2). Options include logs about system maintenance, system errors, access control, allowed or blocked web sites, blocked web features (such as ActiveX controls, Java and cookies), attacks (such as DoS) and IP-Sec.

You can view logs and alert messages in this page. Log entries in red indicate system error logs. Once the log entries are all used, the log will wrap around and the old logs will be deleted. Click a column heading to sort the entries. A triangle indicates the direction of the sort order.



Display: All Logs

#	Time ▲	Message	Source	Destination	Note
1	01/01/2000 01:42:22	Router reply ICMP packet: ICMP(type:3, code:1)	192.168.1.1	192.168.1.33	ACCESS FORWARD
2	01/01/2000 01:42:18	User login from WEB successfully	192.168.1.33		User:admin
3	01/01/2000 01:42:16	Router reply ICMP packet: ICMP(type:3, code:1)	192.168.1.1	192.168.1.33	ACCESS FORWARD
4	01/01/2000 01:41:09	User login from WEB successfully	192.168.1.33		User:admin
5	01/01/2000 01:40:21	Remote Management TCP denied	192.168.1.33:1366	192.168.1.1:23	ACCESS BLOCK
6	01/01/2000 01:40:21	Remote Management TCP denied	192.168.1.33:1366	192.168.1.1:23	ACCESS BLOCK
7	01/01/2000 01:40:20	Remote Management TCP denied	192.168.1.33:1366	192.168.1.1:23	ACCESS BLOCK
8	01/01/2000 01:37:27	Firewall session time out, sent TCP RST: TCP	192.168.1.33:1346	192.168.1.1:80	ACCESS FORWARD

The table on the following page describes the labels in the screen above.

15.1 Using the View Log Screen - Continued

The following table describes the labels in the screen on the proceeding page.

View Log

LABEL	DESCRIPTION
Display	Select a log category from the drop down list box to display logs within the selected category. To view all logs, select **All Logs.** The number of categories shown in the drop down list box depends on the selection in the **Log Settings** page.
Time	This field displays the time the log was recorded.
Message	This field states the reason for the log.
Source	This field lists the source IP address and the port number of the incoming packet.
Destination	This field lists the destination IP address and the port number of the incoming packet.
Notes	This field displays additional information about the log entry.

Email Log Now	Click **Email Log Now** to send the log screen to the e-mail address specified in the **Log Settings** page.
Refresh	Click **Refresh** to renew the log screen.
Clear Log	Click **Clear Log** to clear all the logs.

15.2 Configuring Log Settings

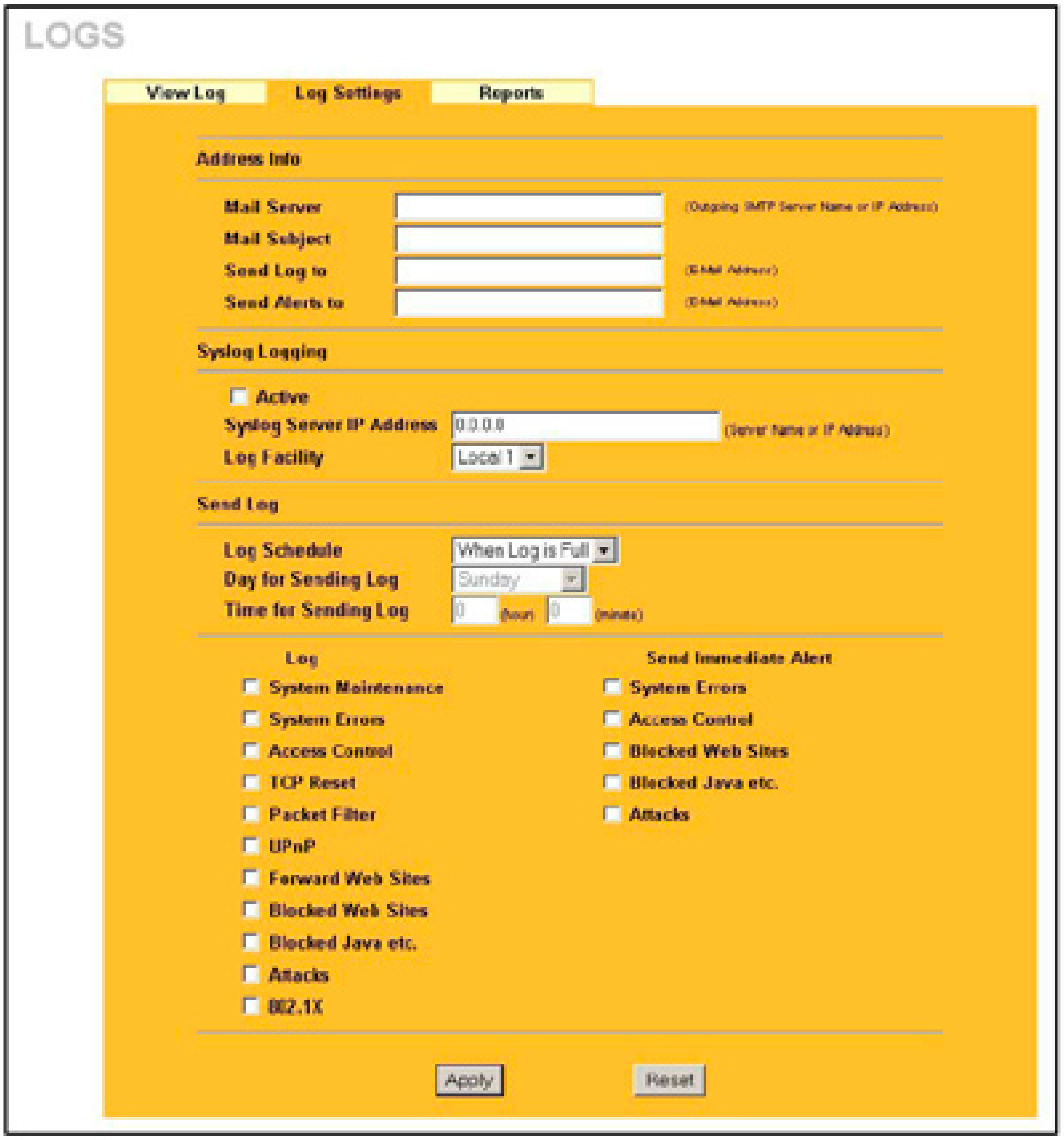
To change your 1500WR Wireless Router's log settings, click **ADVANCED, LOGS** and then the **Log Settings** tab. The screen appears as shown.

Use the Log Settings screen to configure to where the 1500WR Wireless Router is to send the logs; the schedule for when the 1500WR Wireless Router is to send the logs and which logs and/or immediate alerts the 1500WR Wireless Router is to send.

An alert is a type of log that warrants more serious attention. They include system errors, attacks (access control) and attempted access to blocked web sites or web sites with restricted web features such as cookies, Active X and so on. Some categories such as System Errors consist of both logs and alerts. You may differentiate them by their color in the View Log screen.

Alerts are displayed in red and logs are displayed in black.

15.2 Configuring Log Settings - Continued



LOGS

View Log | Log Settings | Reports

Address Info

Mail Server: (Outgoing SMTP Server Name or IP Address)
Mail Subject:
Send Log to: (E-Mail Address)
Send Alerts to: (E-Mail Address)

Syslog Logging

☐ Active
Syslog Server IP Address: 0.0.0.0 (Server Name or IP Address)
Log Facility: Local 1

Send Log

Log Schedule: When Log is Full
Day for Sending Log: Sunday
Time for Sending Log: 0 (hour) 0 (minute)

Log	Send Immediate Alert
☐ System Maintenance	☐ System Errors
☐ System Errors	☐ Access Control
☐ Access Control	☐ Blocked Web Sites
☐ TCP Reset	☐ Blocked Java etc.
☐ Packet Filter	☐ Attacks
☐ UPnP	
☐ Forward Web Sites	
☐ Blocked Web Sites	
☐ Blocked Java etc.	
☐ Attacks	
☐ 802.1X	

The table on the following page describes the labels in the screen above.

15.2 Configuring Log Settings - Continued

The following table describes the labels in the screen on the proceeding page.

Log Settings

LABEL	DESCRIPTION
Address Info	
Mail Server	Enter the server name or the IP address of the mail server for the e-mail addresses specified below. If this field is left blank, logs and alert messages will not be sent via e-mail.
Mail Subject	Type a title that you want to be in the subject line of the log e-mail message that the 1500WR Wireless Router sends.
Send Log to	Logs are sent to the e-mail address specified in this field. If this field is left blank, logs will not be sent via e-mail.
Send Alerts to	Enter the e-mail address where the alert messages will be sent. Alerts include system errors, attacks and attempted access to blocked web sites. If this field is left blank, alert messages will not be sent via e-mail.
Syslog Logging	UNIX syslog sends a log to an external UNIX server used to store logs.
Active	Click **Active** to enable UNIX syslog.
Syslog Server IP Address	Enter the server name or the IP address of the syslog server that will log the CDR (Call Detail Record) and system messages.
Log Facility	Select the Local from the drop down list box. The log facility allows you to log the messages to different files in the syslog server. Refer to your UNIX manual for more information.
Send Log	
Log Schedule	This drop-down menu is used to configure the frequency of log messages being sent as E-mail: • **Daily** • **Weekly** • **Hourly** • **When the Log is Full** • **None.** If the **Weekly** or the **Daily** option is selected, specify a time of day when the E-mail should be sent. If the **Weekly** option is selected, then also specify which day of the week the E-mail should be sent. If the **When Log is Full** option is selected, an alert is sent when the log fills up. If you select **None,** no log messages are sent.
Day for Sending Log	This field is only available when you select **Weekly** in the **Log Schedule** field. Use the drop down list box to select which day of the week to send the logs.
Time for Sending Log	Enter the time of the day in 24-hour format (for example 23:00 equals 11:00 pm) to send the logs.
Log	Select the categories of logs that you want to record.
Send Immediate Alert	Select the categories of alerts for which you want the 1500WR Wireless Router to immediately send e-mail alerts.
Apply	Click **Apply** to save your changes back to the 1500WR Wireless Router.
Reset	Click **Reset** to begin configuring this screen afresh.

15.3 Configuring Reports

To change your 1500WR Wireless Router’s log reports, click **ADVANCED, LOGS** and then the **Reports tab.** The screen appears as shown.

The Reports screen displays which computers on the LAN send and receive the most traffic, what kinds of traffic are used the most and which web sites are visited the most often. Use the Reports screen to view information about bandwidth usage :

> Web sites visited the most often

> Number of times the most visited web sites were visited

> The most-used protocols or service ports

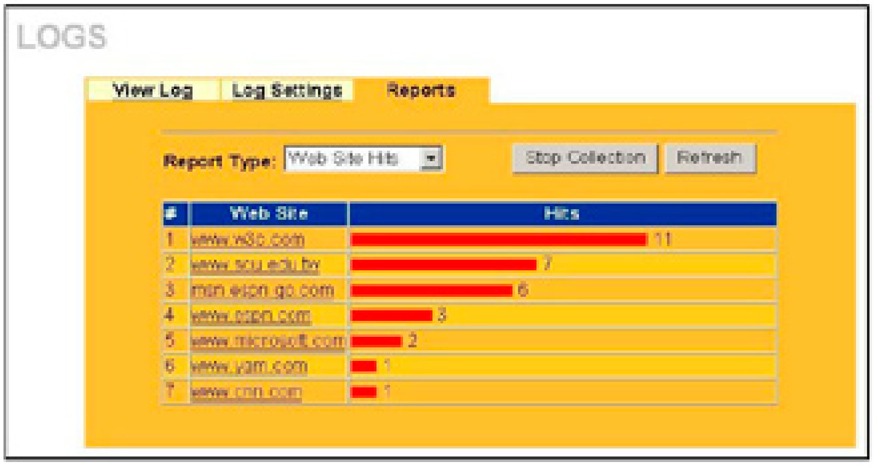
> The amount of traffic for the most used protocols or service ports

> The LAN IP addresses to and/or from which the most traffic has been sent

> How much traffic has been sent to and from the LAN IP addresses to and/or from which the most traffic has been sent

The web site hit count may not be 100% accurate because sometimes when an individual web page loads, it may contain references to other web sites that also get counted as hits.

The 1500WR Wireless Router records web site hits by counting the HTTP GET packets. Many web sites include HTTP GET references to other web sites and the 1500WR Wireless Router may count these as hits, thus the web hit count is not (yet) 100% accurate.



Report Type: Web Site Hits

#	Web Site	Hits
1	www.w3c.com	11
2	www.scu.edu.tw	7
3	msn.espn.go.com	6
4	www.espn.com	3
5	www.microsoft.com	2
6	www.yam.com	1
7	www.cnn.com	1

Enabling the 1500WR Wireless Router’s reporting function decreases the overall throughput by about 1 Mbps.

The table on the following page describes the labels in the screen above.

15.3 Configuring Reports - Continued

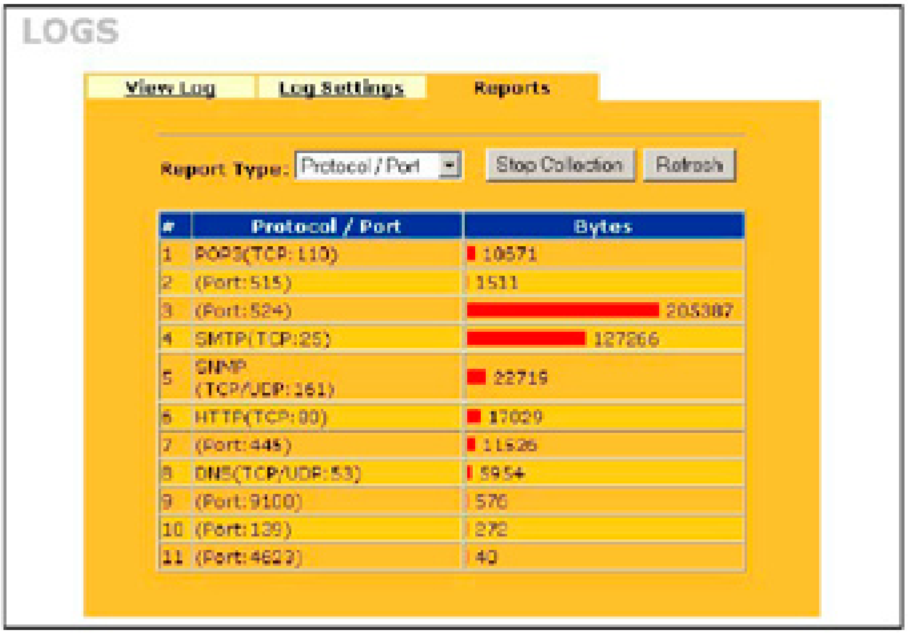
The following table describes the labels in the screen on the proceeding page.

Reports

LABEL	DESCRIPTION
Report Type	Use the drop-down list box to select the type of reports to display. **Web Site Hits** displays the web sites that have been visited the most often from the LAN and how many times they have been visited. **Protocol/Port** displays the protocols or service ports that have been used the most and the amount of traffic for the most used protocols or service ports. **LAN** IP **Address** displays the LAN IP addresses to and /or from which the most traffic has been sent and how much traffic has been sent to and from those IP addresses.
Start Collection/ Stop Collection	The button text shows **Start Collection** when the 1500WR Wireless Router is not recording report data and **Stop Collection** when the 1500WR Wireless Router is recording report data. Click **Start Collection** to have the 1500WR Wireless Router record report data. Click **Stop Collection** to halt the 1500WR Wireless Router from recording more data.
Refresh	Click **Refresh** to update the report display. The report also refreshes automatically when you close and reopen the screen.
#	This field displays the index number of an individual web site.
Web Site	**Web Site** displays the web site address(es) that have been visited the most often from the LAN.
Hits	**Hits** displays the total number of visits to each web site.

15.3.1 Viewing Protocol/Port

In the **Reports** screen, select **Protocol/Port** from the **Report Type** drop-down list box to have the 1500WR Wireless Router record and display which protocols or service ports have been used the most and the amount of traffic for the most used protocols or service ports.



Report Type: Protocol / Port

#	Protocol / Port	Bytes
1	POP3(TCP:110)	10571
2	(Port:515)	1511
3	(Port:524)	205387
4	SMTP(TCP:25)	127266
5	SNMP (TCP/UDP:161)	22719
6	HTTP(TCP:80)	17029
7	(Port:445)	11626
8	DNS(TCP/UDP:53)	5954
9	(Port:9100)	576
10	(Port:139)	272
11	(Port:4623)	40

The following table describes the labels in this screen.

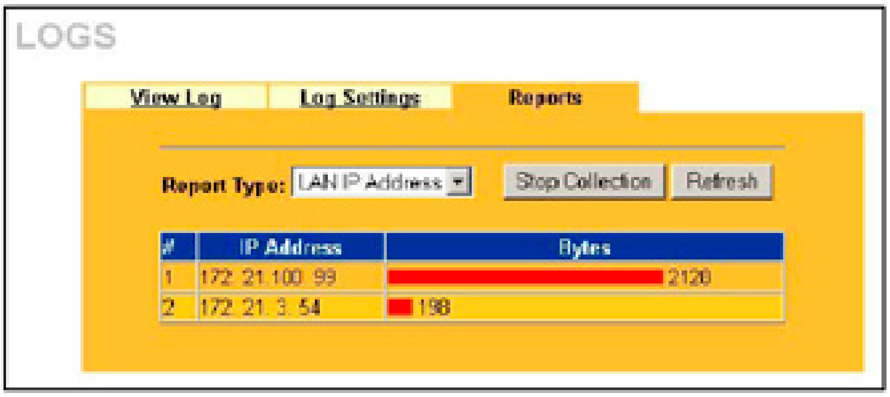
Protocol/Port Report

LABEL	DESCRIPTION
Protocol/Port	This column lists the protocols or service ports for which the most traffic has gone through the 1500WR Wireless Router. The protocols or service ports are listed in descending order with the most used protocol or service port listed first.
Start Collection/ Stop Collection	The button text shows **Start Collection** when the 1500WR Wireless Router is not recording report data and **Stop Collection** when the 1500WR Wireless Router is recording report data. Click **Start Collection** to have the 1500WR Wireless Router record report data. Click **Stop Collection** to halt the 1500WR Wireless Router from recording more data.
Refresh	Click **Refresh** to update the report display. The report also refreshes automatically when you close and reopen the screen.
Bytes	This column lists how much traffic has been sent and/or received for each protocol or service port. The measurement unit shown (bytes, Kbytes, Mbytes or Gbytes) varies with the amount of traffic for the particular protocol or service port. The count starts over at 0 if a protocol or port passes the bytes count limit (see *Table 15-6).*

15.3.2 Viewing LAN IP Address

In the **Reports** screen, select **LAN IP Address** from the Report Type drop-down list box to have the 1500WR Wireless Router record and display the LAN IP addresses that the most traffic has been sent to and/or from and how much traffic has been sent to and/or from those IP addresses.

Computers take turns using dynamically assigned LAN IP addresses.
The 1500WR Wireless Router continues recording the bytes sent to or from a LAN IP address when it is assigned to a different computer.



Report Type: LAN IP Address

#	IP Address	Bytes
1	172.21.100.99	2120
2	172.21.3.54	198

LAN IP Address Report

LABEL	DESCRIPTION
Start Collection/ Stop Collection	The button text shows **Start Collection** when the 1500WR Wireless Router is not recording report data and **Stop Collection** when the 1500WR Wireless Router is recording report data. Click **Start Collection** to have the 1500WR Wireless Router record report data. Click **Stop Collection** to halt the 1500WR Wireless Router from recording more data.
Refresh	Click **Refresh** to update the report display. The report also refreshes automatically when you close and reopen the screen.
IP Address	This column lists the LAN IP addresses to and/or from which the most traffic has been sent. The LAN IP addresses are listed in descending order with the LAN IP address to and/or from which the most traffic was sent listed first.
Bytes	This column displays how much traffic has gone to and from the listed LAN IP addresses. The measurement unit shown (bytes, Kbytes, Mbytes or Gbytes) varies with the amount of traffic sent to and from the LAN IP address. The count starts over at 0 if the total traffic sent to and from a LAN IP passes the bytes count limit (see *Table 15-6).*

15.3.3 Reports Specifications

The following table lists detailed specifications on the reports feature.

Report Specifications

LABEL	DESCRIPTION
Number of web sites/protocols or ports/IP addresses listed:	20
Hit count limit:	Up to 2^{32} hits can be counted per web site. The count starts over at 0 if it passes four billion.
Bytes count limit:	Up to 2^{64} bytes can be counted per protocol/port or LAN IP address. The count starts over at 0 if it passes 2^{64} bytes.

Part VII

Maintenance

This part describes the Maintenance web Web Configuration Utility screens.

Chapter 16

Maintenance

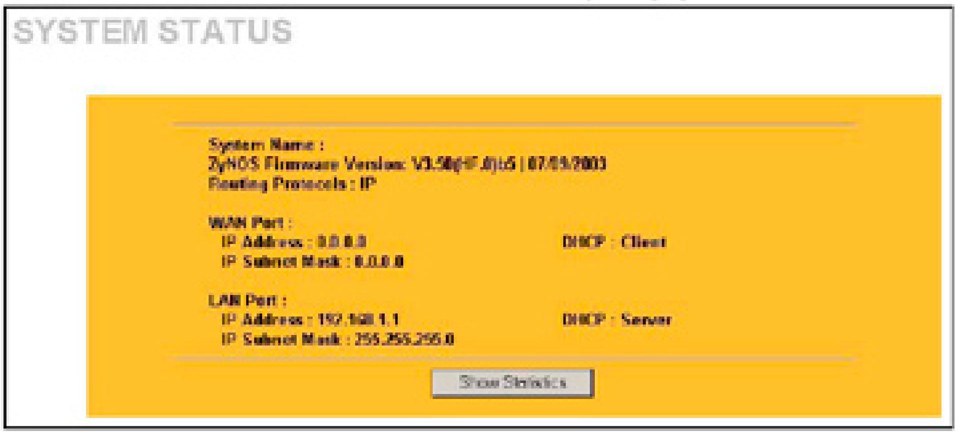
This chapter displays system information such as firmware, port IP addresses and port traffic statistics.

16.1 Maintenance Overview

The maintenance screens can help you view system information, upload new firmware, manage configuration and restart your 1500WR Wireless Router.

16.2 System Status Screen

Click **MAINTENANCE** to open the **System Status** screen, where you can use to monitor your 1500WR Wireless Router. Note that these fields are READ-ONLY and are meant to be used for diagnostic purposes.



SYSTEM STATUS

System Name :
ZyNOS Firmware Version: V3.50(HF.0)b5 | 07/09/2003
Routing Protocols : IP

WAN Port :
IP Address : 0.0.0.0 DHCP : Client
IP Subnet Mask : 0.0.0.0

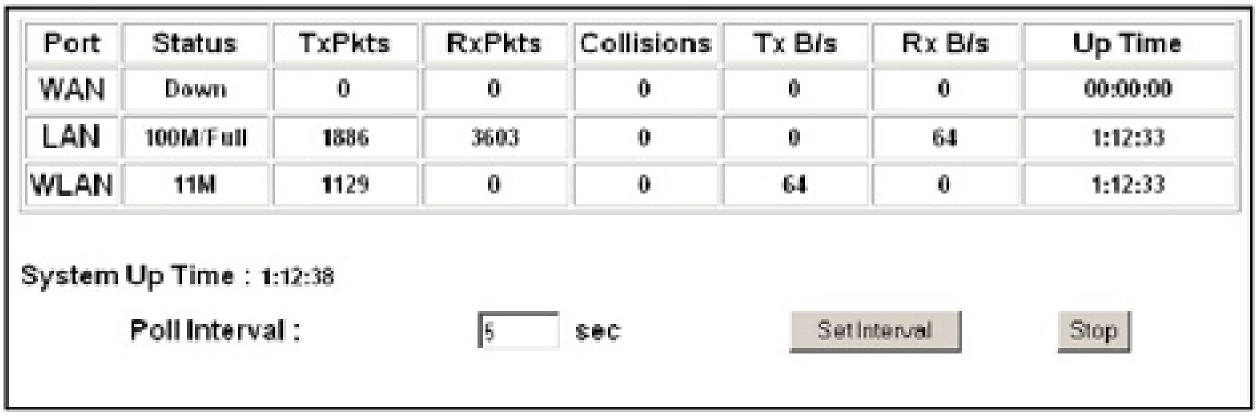
LAN Port :
IP Address : 192.168.1.1 DHCP : Server
IP Subnet Mask : 255.255.255.0

The following table describes the information in the **SYSTEM STATUS** screen:

LABEL	DESCRIPTION
System Name	This is the **System Name** you enter in the first Internet Access Wizard screen. It is for identification purposes.
Firmware Version	This is the firmware version and the date created.
Routing Protocols	This shows the routing protocol - **IP** for which the 1500WR Wireless Router is configured.
WAN Port	
IP Address	This is the WAN port IP address.
IP Subnet Mask	This is the WAN port subnet mask.
DHCP	This is the WAN port DHCP role - **Client** or **None.**
LAN Port	
IP Address	This is the LAN port IP address.
IP Subnet Mask	This is the LAN port subnet mask.
DHCP	This is the LAN port DHCP role - **Server, Client** or **None.**
Show Statistics	Click **Show Statistics** to see router performance statistics such as number of packets sent and number of packets received for each port.

16.2.1 System Statistics

Read-only information here includes port status and packet specific statistics. Also provided are “system up time” and “poll interval(s)”. The Poll Interval field is configurable.



Port	Status	TxPkts	RxPkts	Collisions	Tx B/s	Rx B/s	Up Time
WAN	Down	0	0	0	0	0	00:00:00
LAN	100M/Full	1886	3603	0	0	64	1:12:33
WLAN	11M	1129	0	0	64	0	1:12:33

System Up Time : 1:12:38

Poll Interval : 5 sec

The following table describes the labels in this screen.

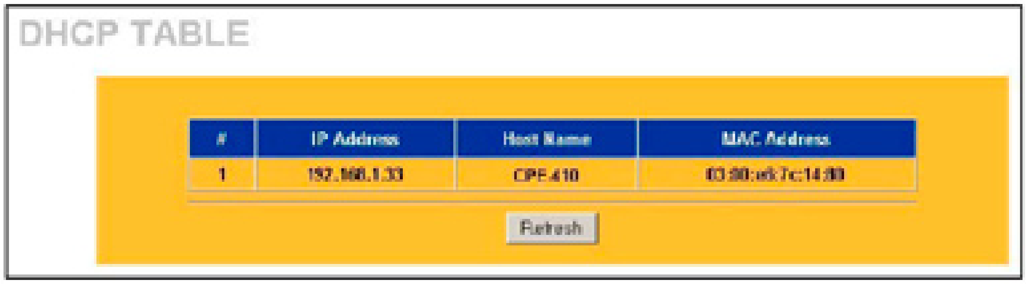
System Status: Show Statistics

LABEL	DESCRIPTION
Port	This is the LAN or WAN port.
Status	This shows the port speed and duplex setting if you are using Ethernet encapsulation for the Ethernet port. This shows the transmission speed only for wireless port.
TxPkts	This is the number of transmitted packets on this port.
RxPkts	This is the number of received packets on this port.
Collisions	This is the number of collisions on this port.
TxB/s	This shows the transmission speed in bytes per second on this port.
RxB/s	This shows the reception speed in bytes per second on this port.
Up Time	This is the total amount of time the line has been up.
System Up Time	This is the total time the 1500WR Wireless Router has been on.
Poll Interval	Enter the time interval for refreshing statistics.
Set Interval	Click this button to apply the new poll interval you entered above.
Stop	Click this button to stop refreshing statistics.

16.3 DHCP Table Screen

DHCP (Dynamic Host Configuration Protocol, RFC 2131 and RFC 2132) allows individual clients to obtain TCP/IP configuration at start-up from a server. You can configure the 1500WR Wireless Router as a DHCP server or disable it. When configured as a server, the 1500WR Wireless Router provides the TCP/IP configuration for the clients. If set to None, DHCP service will be disabled and you must have another DHCP server on your LAN, or else the computer must be manually configured.

Click **MAINTENANCE** and then **DHCP TABLE**. Read-only information here relates to your DHCP status. The DHCP table shows current DHCP client information (including IP Address, Host Name and MAC Address) of all network clients using the DHCP server.



#	IP Address	Host Name	MAC Address
1	192.168.1.33	CPE410	00:80:c8:7c:14:80

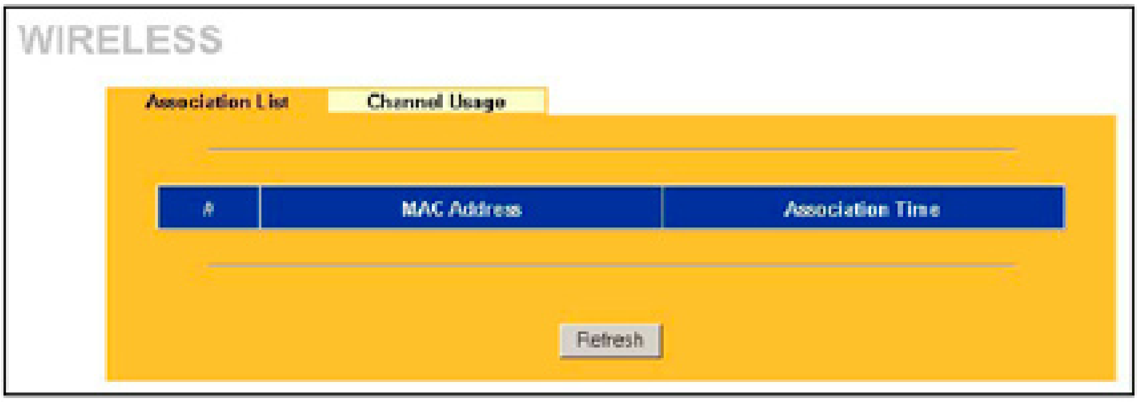
The following table describes the labels in this screen.

DHCP Table

LABEL	DESCRIPTION
#	This is the index number of an associated wireless station.
IP Address	This field displays the IP Address relative to the # field listed above.
Host Name	This field displays the computer host name.
MAC Address	The MAC (Media Access Control) or Ethernet address on a LAN (Local Area Network) is unique to your computer (six pairs of hexadecimal notation). A network interface card, such as an Ethernet adapter, has a hardwired address that is assigned at the factory. This address follows an industry standard that ensures no other adapter has a similar address.
Refresh	Click **Refresh** to reload the DHDCP table.

16.4 Wireless Screen

View the wireless stations that are currently associated to the 1500WR in the **Association List Screen**. Click **Maintenance**, and then **Wireless** to bring up the screen shown below.



The following table describes the labels in this screen.

Association List

LABEL	DESCRIPTION
#	This is the index number of an associated wireless station.
MAC Address	This field displays the MAC address of an associated wireless station.
Association Time	This field displays the time a wireless station first associated with the 1500WR Wireless Router.
Refresh	Click **Refresh** to reload the screen.

Index

Index

Glossary

Channel: The radio channel of a wireless network, 1 through 11.

Connect: Connect to an available network, or connect to a network using a specific profile.

Delete: Delete a named profile.

Done: Save changes and close the window.

Edit: Edit a named profile.

Name: Profile name, such as, “Work” or “Home”.

Options: Used to create ad hoc and infrastructure networks, and start the Horizons-D2D user interface in the system tray.

Password: Enter a password, if required, to connect to a wireless network.

Profile: A record that contains information about a wireless network such as SSID, WEP keys, channel, and type of connection, e.g. AP or ad hoc.

Scan: Activates a search of all channels (1 through 11) searching for wireless networks.

Scanning…: Active indication of the scanning activity. If the radio seems to be in a state of continuous “Scan”, it is likely that there are no wireless networks available.

Signal: Signal strength.

Status: State of the wireless connection, either connected or not connected.

Speed: The speed of the connection measured in Mbps, (Megabits per second).

SSID: Service Set Identifier. An identification broadcast, (or not), by an Wireless Router or ad hoc node.

Type: Type of network, either infrastructure/Wireless Router, (AP), or ad hoc.

WEP: Wired equivalent privacy. A means of encrypting the radio signals, can be 40 bit, 64 bit, or 128 bit encryption.