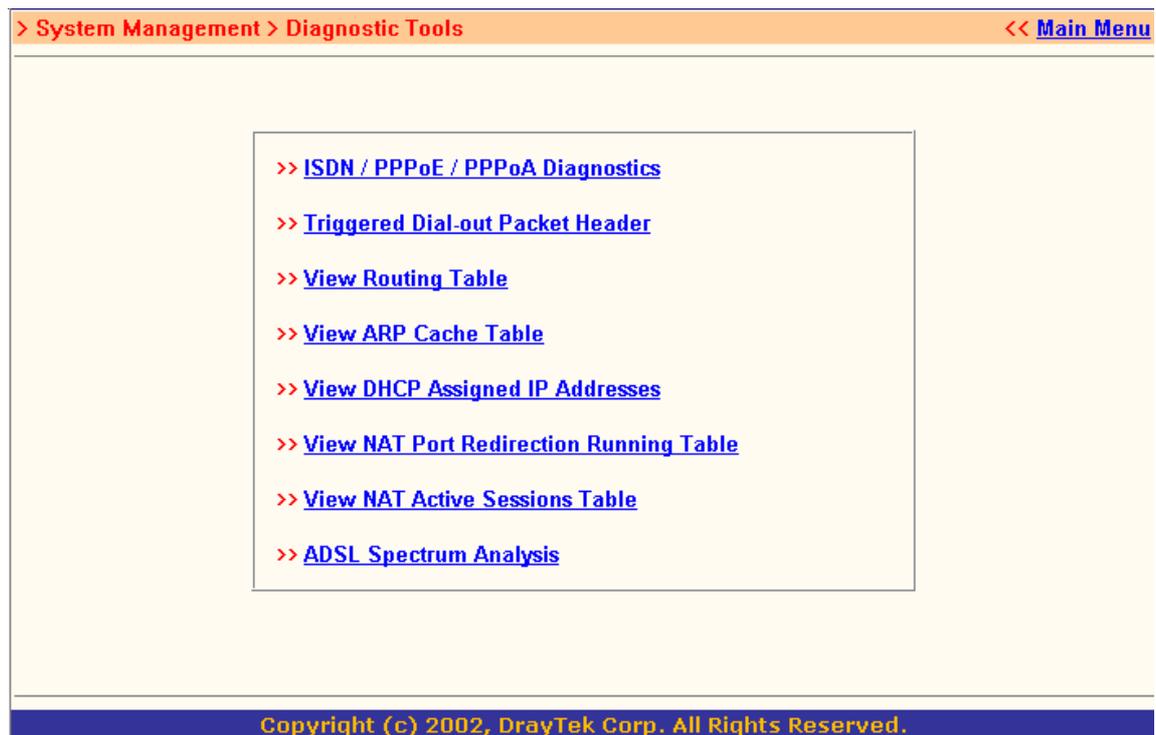

Diagnostic Tools

Introduction

Diagnostic Tools provide useful tools for viewing or diagnosing the router. Click **Diagnostic Tools** to enter the following page. Following sections will explain details for each tool.



Descriptions

- ISDN / PPPoE / PPTP Diagnostics

Click here to open the following page. The page shown here is for reference only; individual networks will show different results.

The page has been grouped into two subgroups, the upper is for ISDN link status, the lower is for broadband access status.

> System Management > Diagnostic Tools		<< Main Menu
ISDN/PPPoE/PPPoA Diagnostics		<< Back Refresh
ISDN Link Status		DOWN
Internet Access	>> Dial ISDN	
B Channel	B1	B2
Activity	Idle	Idle
Drop Connection	>> Drop B1	>> Drop B2
Broadband Access Mode/Status		---
Internet Access	>> Dial PPPoE/PPPoA	
WAN IP Address	---	
Drop Connection	>> Drop PPPoE/PPPoA	

Refresh: To obtain the latest information, click here to reload the page.

ISDN Link Status: If the link is active, this field will show **UP**. Otherwise, it shows **DOWN**.

Dial ISDN: Clicking here causes the router to dial to the preset ISP. Click **Internet Access Setup > Dial to a Single ISP** to configure dial-up settings.

Activity: Displays the connection name for each B channel. If the B channel is idle, it will show **Idle**.

Drop B1: Click to disconnect the B1 channel.

Drop B2: Click to disconnect the B2 channel.

Broadband Access Mode/Status: Display the broadband access mode and status. If the broadband connection is active, it will show **PPPoE**, **PPPoA**, **Static IP**, or **DHCP Client** depending on which access mode is enabled. If the connection is idle, it will show " ---".

WAN IP Address: The WAN IP address for the active connection.

Dial PPPoE or PPPoA: Click to force the router to establish a PPPoE or PPPoA connection.

Drop PPPoE or PPPoA: Click to force the router to disconnect the current active PPPoE or PPPoA connection.

- Triggered Dial-out Packet Header

Triggered Dial-out Packet Header shows the last IP packet header that triggered the router to dial out.

The screenshot shows a web-based diagnostic tool interface. At the top, there is a navigation bar with "> System Management> Diagnostic Tools" on the left and "<< Main Menu" on the right. Below this is a title bar for the tool: "Dial-out Triggered Packet Header" with "<< Back | Refresh |" on the right. The main content area is divided into two sections: "HEX Format:" and "Decoded Format:". The HEX format section displays a long string of hexadecimal characters: "00 50 7F 00 00 00-00 50 BA 26 17 D2-08 00" followed by a multi-line block: "45 00 00 59 33 06 00 00-7F 11 DC 7A C0 A8 03 0A", "A8 5F C0 01 05 80 00 35-00 45 BD 41 00 01 01 00", "00 01 00 00 00 00 00 00-04 77 70 61 64 14 63 63", "77 65 6E 64 72 61 79 74-65 6B 61 6C 61 6E 30 31", "30 37 11 64 72 61 79 74-65 6B 6A 6A 6A 6A 6A 6A". The Decoded Format section shows: "192.168.3.10,1408 -> 168.95.192.1,domain" and "Pr udp HLen 20 TLen 89". At the bottom of the interface, a blue footer bar contains the text: "Copyright (c) 2002, DrayTek Corp. All Rights Reserved."

Refresh: Click to reload the page.

- View Routing Table

Click **View Routing Table** to view the router's routing table.

The table provides current IP routing information held in the router. To the left of each routing rule you will see a key. These keys are defined as:

- C** --- Directly connected.
- S** --- Static route.
- R** --- RIP.
- *** --- Default route.
- ~** --- Routes for private routing domain.

To the right of each routing rule you will see an interface identifier:

- IF0** --- Local LAN interface.
- IF1** --- ISDN B1 channel.
- IF2** --- ISDN B2 channel.
- IF3** --- WAN interface.

> System Management > Diagnostic Tools << Main Menu

Current Running Routing Table << Back | Refresh |

```

Key: C - connected, S - static, R - RIP, * - default, ~ - private

*          0.0.0.0/          0.0.0.0 via 203.69.175.30, IF3
C    203.69.175.0/ 255.255.255.224 is directly connected, IF3
S~   192.168.10.0/ 255.255.255.0 via 192.168.1.2, IF0
C~   192.168.1.0/ 255.255.255.0 is directly connected, IF0
S~   211.100.88.0/ 255.255.255.240 via 192.168.1.3, IF0

```

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Refresh: Click to reload the page.

- View ARP Cache Table

Click **View ARP Cache Table** to view the ARP (Address Resolution Protocol) cache held in the router. The table shows a mapping between an Ethernet hardware address (MAC Address) and an IP address.

> System Management > Diagnostic Tools << Main Menu

Ethernet ARP Cache Table << Back | Refresh |

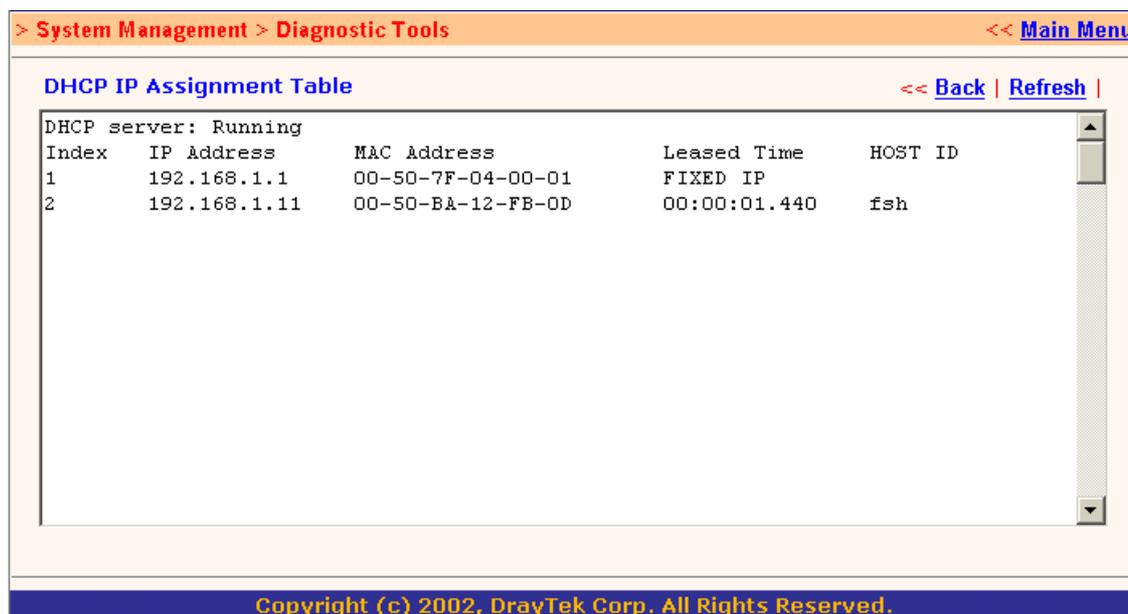
IP Address	MAC Address
192.168.1.10	00-50-BA-26-17-D2
203.69.175.29	00-04-76-DB-62-DD
203.69.175.2	00-50-7F-00-0F-DD
203.69.175.1	00-50-7F-00-EF-45
203.69.175.17	00-C0-26-BA-56-36
203.69.175.5	00-50-7F-00-00-2E
203.69.175.30	00-50-7F-01-0A-84

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Refresh: Click to reload the page.

- View DHCP Assigned IP Addresses

View DHCP Assigned IP Addresses provides information on IP address assignments. This information is helpful in diagnosing network problems, such as IP address conflicts, etc.



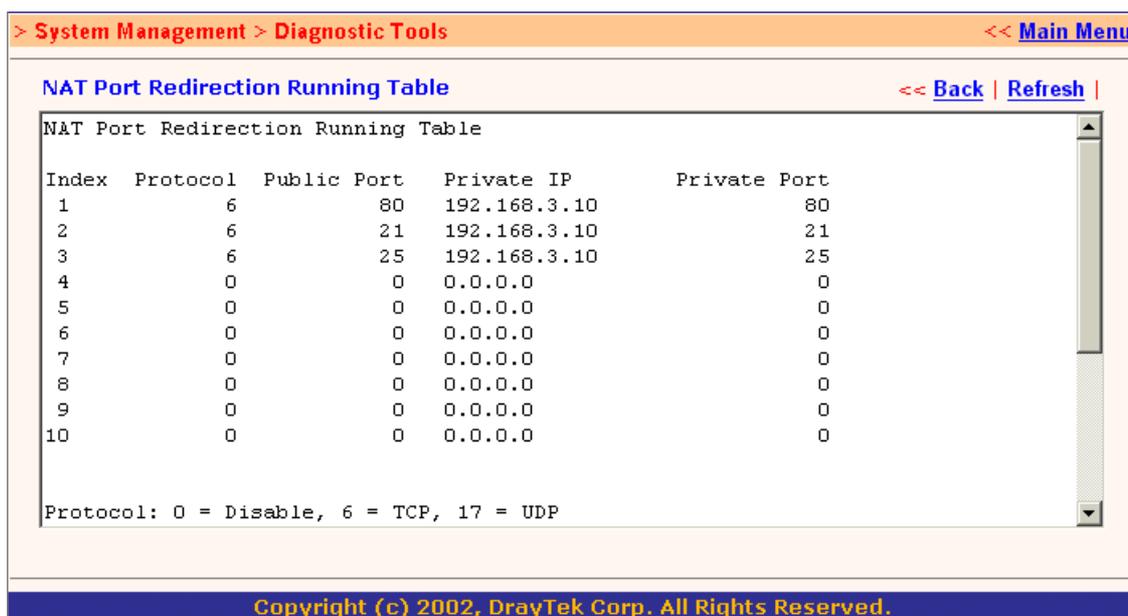
The screenshot shows a web interface for 'System Management > Diagnostic Tools'. It features a 'DHCP IP Assignment Table' with a 'Back' and 'Refresh' button. The table lists DHCP server status as 'Running' and shows two entries:

Index	IP Address	MAC Address	Leased Time	HOST ID
1	192.168.1.1	00-50-7F-04-00-01	FIXED IP	
2	192.168.1.11	00-50-BA-12-FB-0D	00:00:01.440	fish

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- View NAT Port Redirection Running Table

If you have configured **Port Redirection** (under **NAT Setup**), click to verify that your settings are correct for redirecting specific port numbers to specified internal users.



The screenshot shows a web interface for 'System Management > Diagnostic Tools'. It features a 'NAT Port Redirection Running Table' with a 'Back' and 'Refresh' button. The table lists NAT port redirection settings for 10 entries:

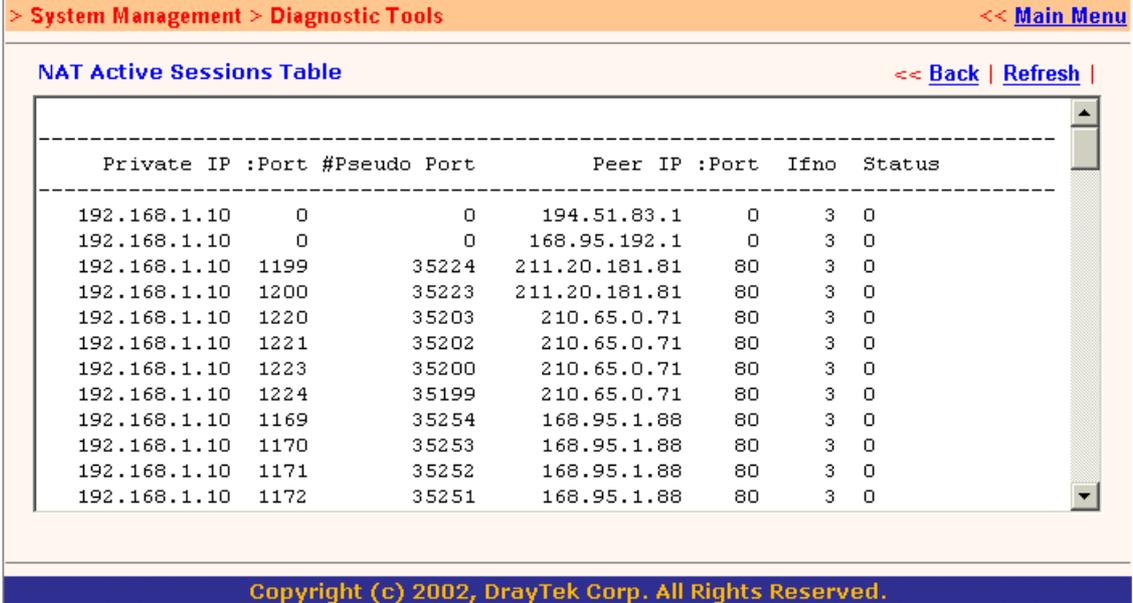
Index	Protocol	Public Port	Private IP	Private Port
1	6	80	192.168.3.10	80
2	6	21	192.168.3.10	21
3	6	25	192.168.3.10	25
4	0	0	0.0.0.0	0
5	0	0	0.0.0.0	0
6	0	0	0.0.0.0	0
7	0	0	0.0.0.0	0
8	0	0	0.0.0.0	0
9	0	0	0.0.0.0	0
10	0	0	0.0.0.0	0

Protocol: 0 = Disable, 6 = TCP, 17 = UDP

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- View NAT Active Sessions Table

As the router accesses the Internet through the built-in NAT engine, click **View NAT Active Sessions Table** to see which active outgoing sessions are online.



The screenshot shows a web interface with a breadcrumb trail: > System Management > Diagnostic Tools. In the top right corner, there is a link: << Main Menu. The main content area is titled "NAT Active Sessions Table" and includes navigation links: << Back | Refresh |. Below the title is a table with the following columns: Private IP :Port, #Pseudo Port, Peer IP :Port, Ifno, and Status. The table contains 13 rows of data. At the bottom of the interface, there is a copyright notice: Copyright (c) 2002, DrayTek Corp. All Rights Reserved.

Private IP :Port	#Pseudo Port	Peer IP :Port	Ifno	Status		
192.168.1.10	0	0	194.51.83.1	0	3	0
192.168.1.10	0	0	168.95.192.1	0	3	0
192.168.1.10	1199	35224	211.20.181.81	80	3	0
192.168.1.10	1200	35223	211.20.181.81	80	3	0
192.168.1.10	1220	35203	210.65.0.71	80	3	0
192.168.1.10	1221	35202	210.65.0.71	80	3	0
192.168.1.10	1223	35200	210.65.0.71	80	3	0
192.168.1.10	1224	35199	210.65.0.71	80	3	0
192.168.1.10	1169	35254	168.95.1.88	80	3	0
192.168.1.10	1170	35253	168.95.1.88	80	3	0
192.168.1.10	1171	35252	168.95.1.88	80	3	0
192.168.1.10	1172	35251	168.95.1.88	80	3	0

Each line across the screen indicates an active session. The following information is displayed:

Private IP, Port: The internal user's (PC's) IP address and port number.

#Pseudo Port: The public port number.

Peer IP, Port: The peer user's (PC's) IP address and port number.

Ifno: Stands for interface number. The definition is listed below:

0 --- LAN interface.

1 --- B1 interface

2 --- B2 interface.

3 --- WAN interface.

- ADSL Spectrum Analysis

ADSL uses 249 channels(DMT modulation) for data transmission. It will show bits, Gain, SNR spectrum analysis for every Bin.

- BIN-bits (255) ▾
- BIN-bits (255)
- BIN-Gain (255)
- BIN-SNR (255)

Refresh

