
CHAPTER 19

Diagnostic Tools

19.1 Introduction

Diagnostic Tools provide useful tools to view or diagnose the router. Click **Diagnostic Tools** to enter the following page. More details for each tool will be explained below.

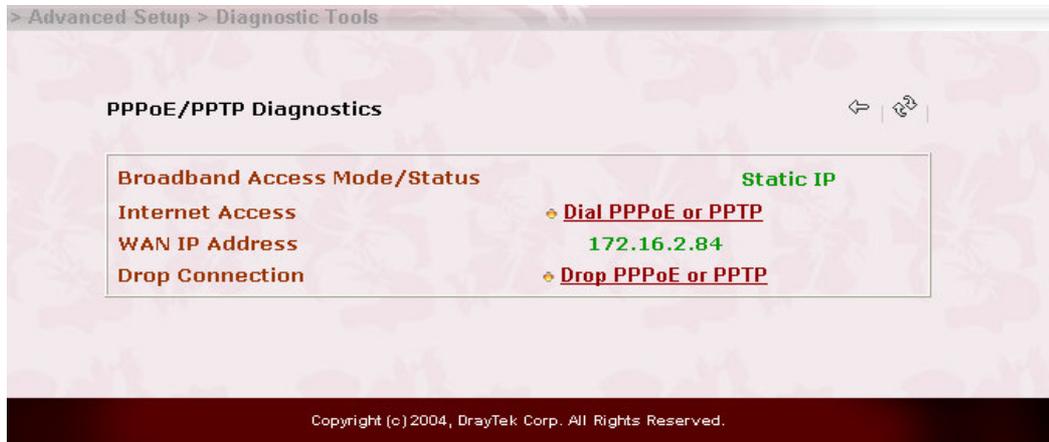


19.2 Descriptions

19.2.1 PPPoE / PPTP Diagnostics

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

Diagnostic Tools



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

Broadband Access Mode/Status: Display the broadband access mode and status. If the broadband connection is active, it will show **PPPoE**, **PPTP**, **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.

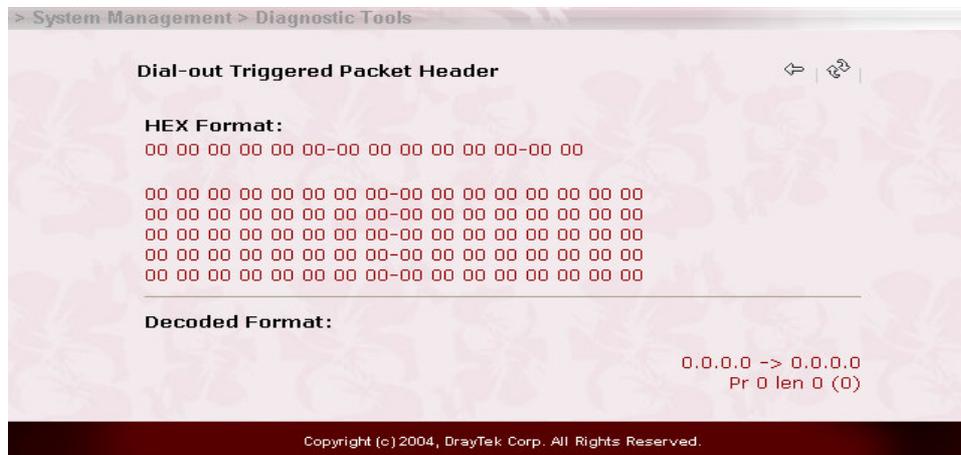
Dial PPPoE or PPTP: Click it to force the router to establish a PPPoE or PPTP connection.

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

19.2.2 Triggered Dial-out Packet Header

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

Diagnostic Tools



(Refresh): Click to reload the page.

19.2.3 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. In 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.

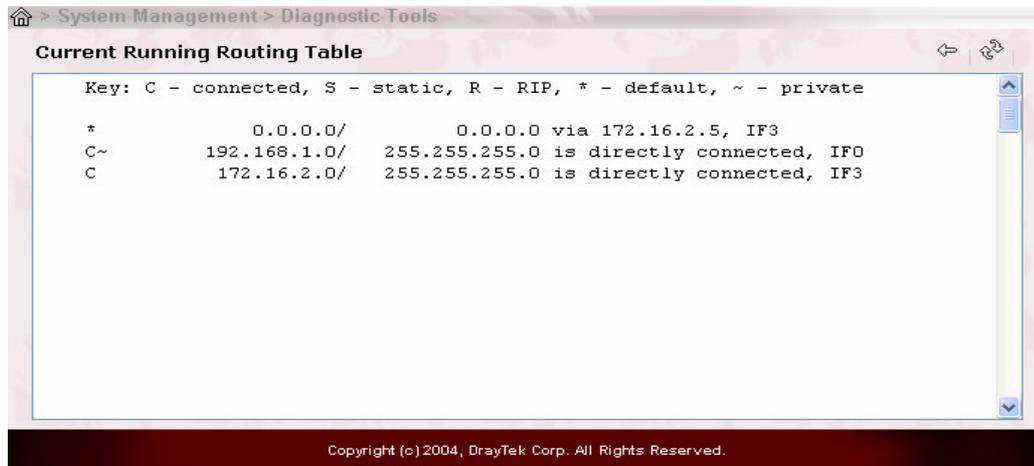
~ --- Routes for private routing domain.

In the right of each routing rule, you will see an interface identifier which are defined as follows.

IF0 --- Local LAN interface.

IF3 --- WAN interface.

Diagnostic Tools



The screenshot shows a web-based diagnostic tool interface. At the top, there is a breadcrumb trail: > System Management > Diagnostic Tools. Below this, the title of the window is "Current Running Routing Table". A key is provided: "Key: C - connected, S - static, R - RIP, * - default, ~ - private". The routing table itself contains three entries:

Key	Destination	Next Hop / Interface
*	0.0.0.0/	0.0.0.0 via 172.16.2.5, IF3
C~	192.168.1.0/	255.255.255.0 is directly connected, IF0
C	172.16.2.0/	255.255.255.0 is directly connected, IF3

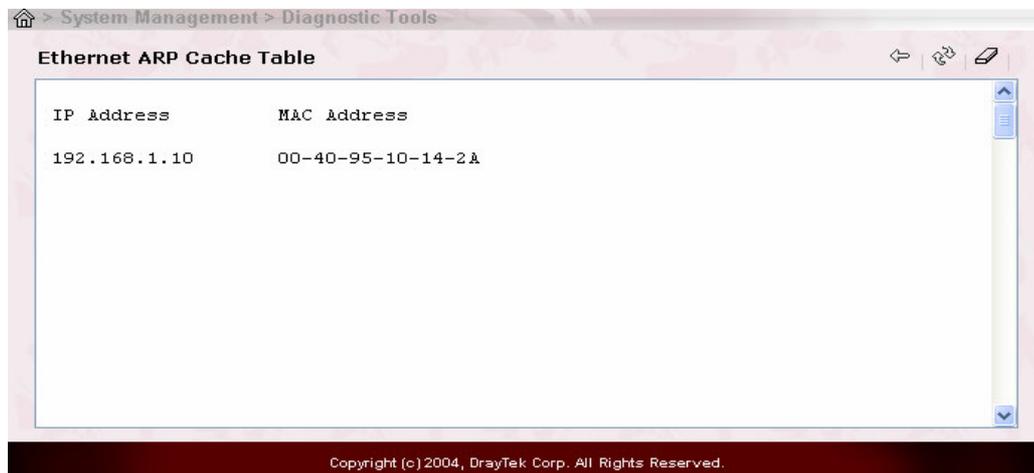
At the bottom of the interface, there is a copyright notice: "Copyright (c) 2004, DrayTek Corp. All Rights Reserved."



Refresh: Click it to reload the page.

19.2.4 View ARP Cache Table

Click **View ARP Cache Table** to view the content of 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.



The screenshot shows the same web-based diagnostic tool interface. The breadcrumb trail is > System Management > Diagnostic Tools. The title of the window is "Ethernet ARP Cache Table". The table displays the following data:

IP Address	MAC Address
192.168.1.10	00-40-95-10-14-2A

At the bottom of the interface, there is a copyright notice: "Copyright (c) 2004, DrayTek Corp. All Rights Reserved."



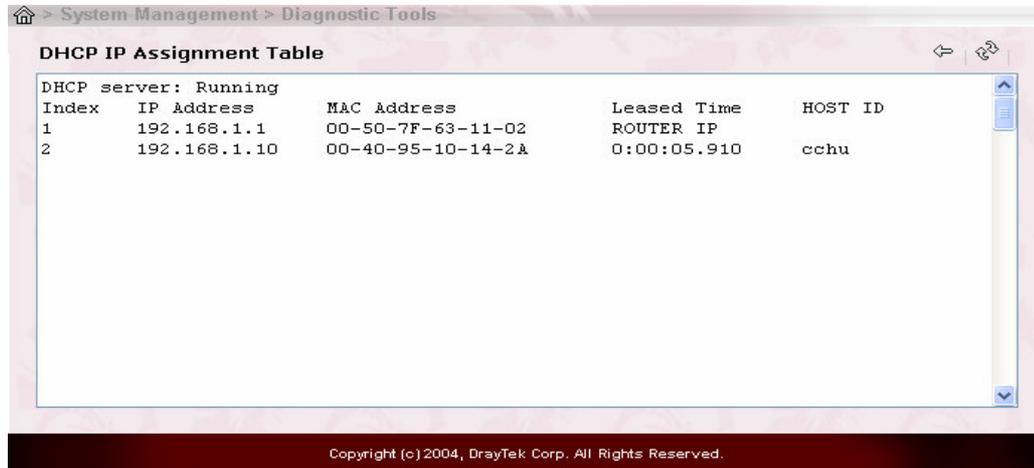
Refresh: Click it to reload the page.

19.2.5 View DHCP Assigned IP Addresses

The facility of **View DHCP Assigned IP Addresses** provides

Diagnostic Tools

information on IP address assignments. This information is helpful in diagnosing network problems, such as IP address conflicts, etc.



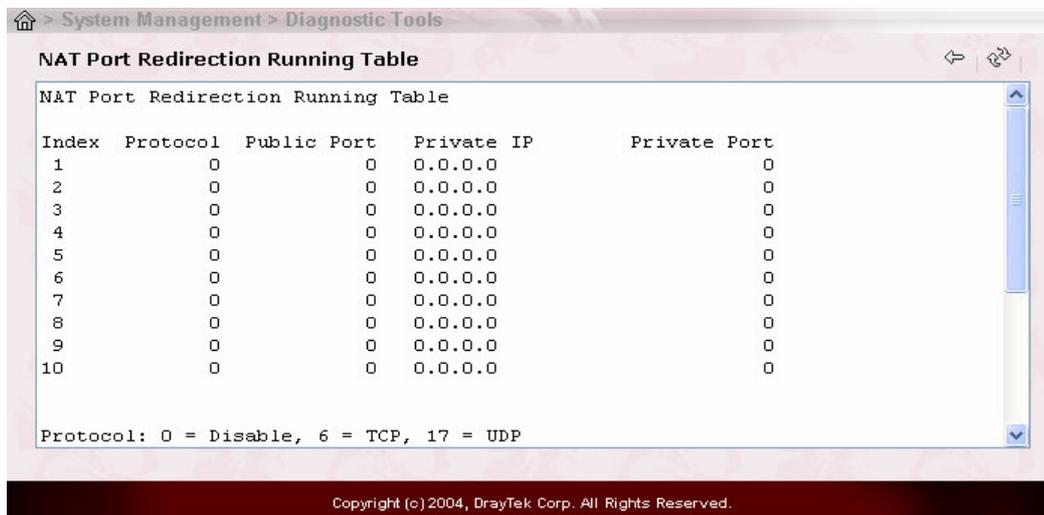
The screenshot shows a web interface with a breadcrumb trail: > System Management > Diagnostic Tools. The main content area is titled "DHCP IP Assignment Table". Below the title, it says "DHCP server: Running". A table displays the following data:

Index	IP Address	MAC Address	Leased Time	HOST ID
1	192.168.1.1	00-50-7F-63-11-02	ROUTER IP	
2	192.168.1.10	00-40-95-10-14-2A	0:00:05.910	cchu

At the bottom of the interface, there is a copyright notice: Copyright (c) 2004, DrayTek Corp. All Rights Reserved.

19.2.6 View NAT Port Redirection Running Table

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



The screenshot shows a web interface with a breadcrumb trail: > System Management > Diagnostic Tools. The main content area is titled "NAT Port Redirection Running Table". Below the title, it says "NAT Port Redirection Running Table". A table displays the following data:

Index	Protocol	Public Port	Private IP	Private Port
1	0	0	0.0.0.0	0
2	0	0	0.0.0.0	0
3	0	0	0.0.0.0	0
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

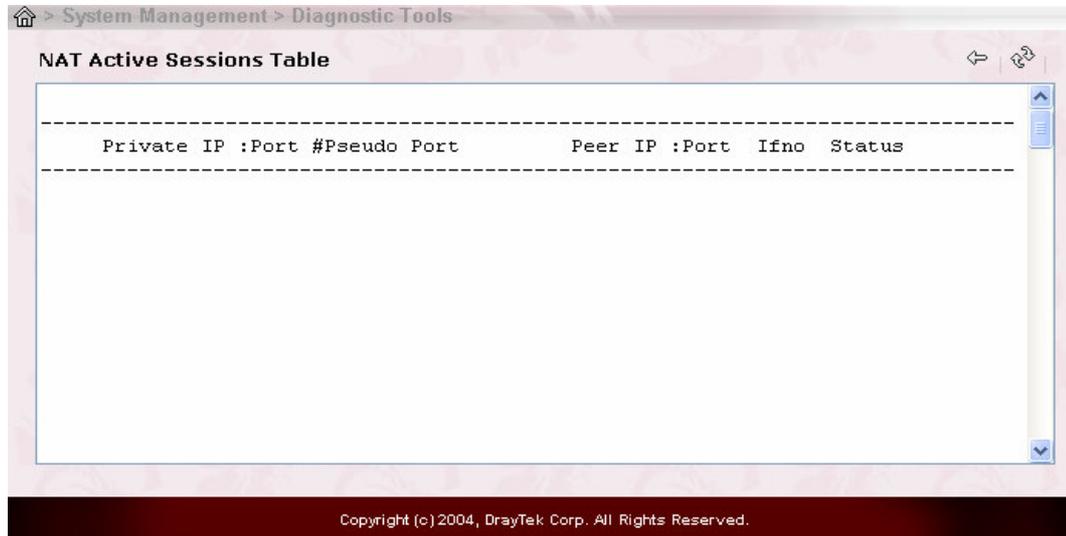
Below the table, there is a legend: Protocol: 0 = Disable, 6 = TCP, 17 = UDP. At the bottom of the interface, there is a copyright notice: Copyright (c) 2004, DrayTek Corp. All Rights Reserved.

19.2.7 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

Diagnostic Tools

outgoing sessions are online.



The screenshot shows a web-based diagnostic tool interface. At the top, there is a breadcrumb navigation: > System Management > Diagnostic Tools. Below this is a window titled "NAT Active Sessions Table". The table has a header row with the following columns: "Private IP :Port", "#Pseudo Port", "Peer IP :Port", "Ifno", and "Status". The table body is currently empty. The interface includes a scroll bar on the right side of the table area. At the bottom of the window, there is a copyright notice: "Copyright (c) 2004, DrayTek Corp. All Rights Reserved."

Private IP :Port	#Pseudo Port	Peer IP :Port	Ifno	Status
------------------	--------------	---------------	------	--------

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.

3 --- WAN interface.