



Firmware Release Note

**P-660HN-T1A
OBM Version**

Release 3.40(BYF.10)C0

Date:
Author:

Dec 06 2012
Thomas

ZyXEL P-660HN-T1A OBM Version

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Release Note

Date: Dec 06, 2012

Supported Platforms: TC3162U+TC3086+RT3390+2M Flash+16M SDRAM

Wireless Driver: 2.5.0.2

ZyXEL P-660HN-T1A

Versions:

RAS version: 3.40(BYF.10)C0

bootbase version: VTC_SPI1.22 | 2012/4/12

Notes:

1. Support ADSL2+ by TrendChip modem code 3.12.8.146
2. Support Trendchip Multiple Upgrade Tool
3. Support multiboot for 2206F

Known Issues:

1. UBR/CBR/VBR all can set the value of PCR/SCR/MBS
2. when countrycode set to 00, CPE will crash
3. sometimes, there will show TrendChip AP but not P-660HN-T1A on Win7 system
4. step 1, on lan pc, open device web GUI"192.168.1.1", you will see the title like as '...', please see the picture in the attached file
5. don't support InternetGatewayDevice.LANDevice.1.WLANConfiguration.1.KeyPassphrase.
6. ICQ,Real Vedio/Audio can still work when disable them on Application filter
7. In wan , click save , rip will change from none to both

Features:

Modification in 3.40(BYF.10)C0 | 12/06/2012

Change to FCS version

[Romfile Change]

1. Change the "Advanced > Remote MGMT > SNMP" Server Access option from Disable to LAN

Modification in 3.40(BYF.10)b1 | 11/21/2012

[Enhancement]

1. Modify that use productline use command "sys atwz" also have the MAC must end with 0/4/8/C limitation.
2. Add ZyXEL DDNS function, If item of "ZyXEL DDNS" in DDNS Drop down list is clicked, DDNS "myzyxel.in.th" will be appeared automatically in "Host Name" column

Modification in 3.40(BYF.9)C0 | 09/19/2012

[romfile change]

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1. Changr romfile back to BYF8C0 OBM default setting
2. Change wireless mode to b+g+n mix mode, and Channel Bandwidth as 20/40M Hz

Modification in 3.40(BYF.9)b1 | 09/07/2012

[Enhancement]

1. Add 40M Hz down select item in Channel bandwidth.

[romfile change]

1. Change wireless mode to b+g+n mix mode, and Channel Bandwidth as 40M Hz.

Modification in 3.40(BYF.8)H0 | 05/24/2012

[romfile change]

1. ip nat loopback change back to be on
2. Encapsulation change to PPPoE
3. SSID2~4 change to be deactive
4. DHCP pool chang back to be stated from 192.168.1.33
5. Annex Type change to "Annex A/L/M"

Modification in 3.40(BYF.8)C0 | 05/24/2012

Change to FCS.

Modification in 3.40(BYF.8)b1 | 05/24/2012

[enhancement]

1. The no-ip DDNS setted, but can't visit the CPE through GUI from wan

Modification in 3.40(BYF.7)C0 | 05/18/2012

[enhancement]

1. Wireless clients modify to 16
2. Add no -ip DDNS

Modification in 3.40(BYF.6)C0 | 05/16/2012

Change to FCS.

Modification in 3.40(BYF.6)b3 | 04/27/2012

[bug fix]

1. The MAC must be end with 0,4,8,C/c
2. Change the release note "wan no in 1, wan no disp" show
3. support adsl down redirect

Modification in 3.40(BYF.6)b2 | 03/04/2012

[bug fix]

1. solve the atgo error in debug mode

Modification in 3.40(BYF.6)b1 | 11/09/2011

[romfile change]

110527498 Change the Lan DHCP start IP to 192.168.1.33

1104022016 Enable SPI as default

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[Enhancement]

110818067

support adsl down redirect

GUI will redirect to wizard PPPoE username/password page when adsl up but ppp username/password wrong

add PPP uptime in status page

[bug fix]

101216508 Solve the rom-t can't change remote MGMT issue

Modification in 3.40(BYF.5)C0 | 09/14/2011

1. Change to FCS FW

Modification in 3.40(BYF.5)b1 | 09/05/2011

[bug fix]

2. # solve the SST Flash issue
3. # solve the issue that romfilebackup function can't work

Modification in 3.40(BYF.4)C0 | 05/27/2011

Change to FCS

Modification in 3.40(BYF.4)b2 | 05/27/2011

[bug fix]

1. # 110125621 there are many buttons written by up-case on the GUI

Modification in 3.40(BYF.4)b1 | 05/13/2011

[bug fix]

1. # 110307713 can't dial successfully through rom-t when PPPoE username over 34 bit
2. # 110325201 when lan pc was set as static wan ip ,the internet led should be green and can connect to the internet
3. # 110325201 only need to configure wan ip when the mode is static PPPoE

Modification in 3.40(BYF.3)C0 | 02/24/2011

Change to FCS

Modification in 3.40(BYF.3)b5 | 02/21/2011

[bug fix]

1. # 110121273 change the string "except for the following time" to "open during the following time" on wireless scheduling page.
 2. # 110120088 can't set month 12
 3. # 110125621 there are many buttons written by up-case on the GUI
 4. # 110125626 when sync fail, system time will change to year 2033
 5. # 110125627 some GUI error : Network > WAN > Internet Connection Bridge **Interfac**, need to change to Bridge Interface
- Network > Wireless LAN > Advanced Bandwidth**R**Manage_SNP**M**_ConfigText=SNMP Configuration, need to delete red character

Modification in 3.40(BYF.3)b4 | 01/17/2011

[bug fix]

Solve the issue which rom-t can't put issue after set this parameter

[1(WPA) |2(WPA-PSK) |3(WPA2) |4(WPA2-PSK) |5 (Others)] =4

Modification in 3.40(BYF.3)b3 | 01/14/2011

[bug fix]

Delete rom-D issue

Modification in 3.40(BYF.3)b2 | 01/07/2011

[bug fix]

Solve the issue "CPE will reset when do reboot"

Modification in 3.40(BYF.3)b1 | 01/04/2011

[enhancement]

1. when rom-d have parameters, we need to use rom-d after reboot or reset
2. update wifi driver to 2.3.2.17
3. Key Management Protocol [1(WPA)|2(WPA2)|3(other)]=3
need to be [1(WPA) |2(WPA-PSK) |3(WPA2) |4(WPA2-PSK) |5 (Others)] =4
4. add NAT session reserve feature for HTTP
5. in the static DHCP Client table page, dynamic ip address can be reserved into static dhcp table.

[bug fix]

1. solve the wizard issue in Swizerland
2. solve the port revers issue
3. solve the UK DMT issue

When P-660HN-T1A dsl-mode was set to multimode with Annex A/L/M, DUT and DSLAM got link up always with g.dmt even DSLAM profile provides ADSL2+ with Annex M. Sync time was also very long, it took several minutes before DUT and DSLAM got showtime.

4. solve the WDS can't link issue
5. when do connection request, the CPE will reboot
6. the last day of October in 2010 is 24, it should be 31.

[romfile change]

1. disable ssid 2/3/4
2. hide cwmp page

Modification in 3.40(BYF.2)b1 | 12/10/2010

[enhancement]

1. While more than one PVC are up, the return value of tr069 ippingdiagnostic from ACS is ERROR_Other, while complete is expected.
2. in LAN webpage, when modem reboot , if Multicast is none, it still can be broadcast.
3. When use CLI :sys defaultTC 1, WPS will be configured status.
4. Set the interface status to "T" in 8021Q/1P summary page when VLAN select tag is selected
5. Modify SNMP port to any value but default, LAN and WAN can visit using new port.

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6. when vc hunt , in wizard , sometimes it jump to probe fail webpage
7. Solve the issue that Wizard screen can't pop up directly
8. when NAT is disabled on webpage , the value of "Single User Account [0(No) | 1(Yes)]" is 1, it should be 0.
9. When change the MAC filter status (allow or deny), in the WLAN page it still show old status
10. Click capture all logs button , it will reset adsl line
11. In StaticRoute page, the destination IP address textbox can't be set to IP segment
12. Add new SPIFLASH (ESMT:F25L32PA)support
13. Th interface of Qos Rule page show wrong information.
14. Add SSID active or deactive setting at wizard page .
15. MTU is 1492, but MSS is not 1452
16. add SNMP configuration page on remote MGMT> SNMP page
17. support white list
18. support rom-d feature
19. make SPI and Firewall to be the same switch button

Modification in 3.40(BYF.1)C0 | 09/27/2010

1.change to FCS

[bug fix]

1. Solve the issue that PPPoA connection error with Wizard function.
2. Solve the issue that Wizard screen can't pop up directly.

Modification in 3.40(BYH.0)C0 | 08/31/2010

1. change to FCS

[bug fix]

1. solve logout don't effect.
2. set 4 DHCP CLI_cmd as following :
 - ip dhcp enif0 server hostname ZyXEL
 - ip dhcp enif0 server leasetime 86400
 - ip dhcp enif0 server renew 43200
 - ip dhcp enif0 server rebind 75600

Modification in 3.40(BYH.0)b9 | 08/24/2010

[bug fix]

2. solve the WIFI crash issue

Modification in 3.40(BYH.0)b8 | 08/18/2010

[rom file change]

Change the romfile as attachment

SSID2: ZyXEL_2

SSID3: ZyXEL_3

SSID4: ZyXEL_4

Security Mode: WPA2-PSK

PVC0 ENET ENCAP/ LLC/8 35

VC Hunt Table: (User setting)

Flags: Active(1)

RN VPI VCI serv| RN VPI VCI serv|

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RN VPI VCI serv| RN VPI VCI serv

1 8 35 3fH| 1 0 35 3fH| 1 0 33
3fH| 1 0 101 3fH|
1 1 33 3fH| 1 8 36 3fH| 1 8 37
3fH| 0 0 0 3fH|
0 0 0 0H| 0 0 0 0H|

SIP ALG: Disable

WWW: port 80, LAN only.

Telnet: port 23, LAN only.

FTP: port 21, LAN only.

ICMP: LAN only.

DNS: port 53, LAN only.

SNMP: port 161, LAN only

[enhancement]

Had include SSID wpa-psk key auto generation

Modification in 3.40(BYH.0)b7 | 08/16/2010

[bug fix]

3. solve the country code can't take effect issue

Modification in 3.40(BYH.0)b6 | 08/10/2010

[bug fix]

4. User can get rom-0 via http://<IP Address>/rom-0 without authentication

[Enhancement]

1. User can get rom-0 via http://<IP Address>/rom-0 without authenticatio
2. support multiboot for 2206F
3. add new parameter in rom-t
4. support countrycode feature

firstly type command : s atwz atwz <mac_address> <country code> <debug flag> < main feature bits>

then reset to default, the country code will change and the wifi channel will match the countrycode
countrycode 0 , channel 14

countrycode 8,12,32 etc, channel 13

countrycode 124,170,214 etc, channel 11

Modification in 3.40(BYH.0)b5 | 07/31/2010

[bug fix]

- 1.change the model name to be P-660-HN-T1A
- 2.Click Logout button, it can not redirect to login page
- 3.remove the SUA button when set PVC as bridge mode
4. the hyperlink "UPnP" in WPS page can't link to UPnP page.
5. Multicast can't be forward to wireless client
6. WPS:IN Win7 System >Network>,we found a AP,the name of the AP show "TrendChipAP".

[bug fix]

1. Add the IGMPsnoop switch in the lan page

2. remove the active & delete button on More AP page
3. Add string to guild user that the URL will be block

Modification in 3.40(BYF.0)b4 | 05/31/2010

[bug fix]

- 1.5032 Wizard page and Wan page don't check the error IP address.
- 2.5045 Wan page don't check the error VPI/VCI.
- 3.5079 there were not any value of WPS and Wireless rate in the Status page
- 4.5141 When in M-M-O mode , server function can't work
- 5.5056 The max IP pool count is 253, and also can get 192.168.1.255 by HostSimulate tool.
- 6.5504 Change the pppoe username for solve the Javascript error issue
- 7.5539 When set WIFI channel in manual , it is different between wireless page and status page.
- 8.5540 The radio button is in manual channel after we have select auto channel and save the setting when we re-browse wireless page.
- 9.5142 The chariot can't work from wan when open server and DMZ function in the rules of many to one or many to many
10. 5503 After test stress 3 hours ,console hang but other operation were OK

CI Command List

No	Command	Description
1	ether config	Display the Ethernet configuration
2	ether driver cnt disp <ch-name>	Display the specified interface's Ethernet statistics
3	ether driver cnt disp <ch-name>	Set an interface's connection speed and duplex mode.
4	ether driver status <ch-name>	Display the specified interface information, including the channel ID number and MAC address
5	exit	Logs you out of the CLI
6	ip address	Display the host IP address
7	ip alias <interface>	Set an alias for the specified interface
8	ip arp status	Display an interface's ARP table
9	ip icmp discovery <interface>	Turn ICMP discovery (ICMP type 10,RFC1256) off or on for the sepcified interface
10	ip ifconfig	Display all or the specified network interface settings.
11	ip igmp debug [0:off 1:normal 2:detailed]	Set the IGMP debug level
12	ip igmp forwardall [on off]	Activate or deactivate IGMP forwarding to all interfaces
13	ip igmp iface	Set the IGMP group timeout (in seconds) for the specified interface.
14	ip igmp proxy [0 1]	Set 1 to send the IGMP leave message immediately while set 0 to wait a time interval (260 seconds) before sending the leave message.
15	ip igmp querier [on off]	Turn the IGMP stop query flag on or off.
16	ip igmp robustness [2-2147483647]	Set the IGMP robustness variable.
17	ip igmp status	Display the IGMP status.
18	ip ping <address>	Ping a remote host IP address or domain name.
19	ip route add	Add a route.

	<dest-ip default>[/<mask-bits>] <gateway-ip> <metric> 1	Notice, need to put last “1” than will save to flash
20	ip route add iface <dest-ip>[/<mask-bits>] <interface>[metric] 1	Add an entry to the routing table for the specified interface. Notice, need to put last “1” than will save to flash
21	ip route addprivate <dest-ip default>[/<mask-bits>]<g ateway-ip>[metric] 1	Adds a private route. Notice, need to put last “1” than will save to flash
22	ip route addrom active [on off]	Activates or deactivates the static route.
23	ip route addrom clear [index]	Deletes the static route
24	ip route addrom display	Displays all static routes
25	ip route addrom freememory	Clears working buffer
26	ip route addrom index <index>	Adds a static route.
27	ip route addrom name <name>	Sets the name for a static route
28	ip route addrom private [yes no]	Sets this route as private
29	ip route addrom save	Saves the static route configuration
30	ip route addrom set <destip>[/<mask-bits>] <gateway-ip><metric>	Sets the static route settings
31	ip route drop <ip-address>[/<mask-bits>]	Drops a route.
32	ip route status	Displays the routing table
33	ip status	Displays IP statistics counters
34	ip tcp status	Displays the TCP statistics counters
35	ip udp status	Displays UDP status
36	lan active <yes no>	Enables or disables the LAN interface
37	lan clear	Clears the working buffer for the specified configuration. Any unsaved changes are lost
38	lan dhcp mode <none server relay>	Sets the DHCP mode.
39	lan dhcp relay server <ip>	Sets the IP address of the DHCP relay server.
40	lan dhcp server dnsserver <dns-ip1> [<dns-ip2>]	Sets the IP address of the DNS server assigned to DHCP clients on this interface.
41	lan dhcp server gateway <ip>	Sets the IP address of the default gateway assigned to DHCP clients on this interface.
42	lan dhcp server leasetime <seconds>	Specifies how long a device can use the same IP address before it needs to send a new request for an IP address.
43	lan dhcp server netmask <netmask>	Specifies the subnet mask assigned to DHCP clients by the ZyXEL Device.
44	lan dhcp server pool <startip> <numip>	Specifies the range of IP address for DHCP clients. startip - first IP address in the IP pool. numip - number of IP addresses in the IP pool.
45	lan dhcp server rebindtime <seconds>	Specifies the time interval from address assignment to the time the client transitions to rebinding state. A client in rebinding state broadcasts DHCP request messages.
46	lan dhcp server renewalttime <seconds>	Specifies the time interval from assigning an address assignment to the time the client transitions to renewing state. A client in renewing state can try to renew the IP address lease.
47	lan display	Displays the configuration details for the LAN interface being configured.

48	lan display	Applies the specified filter set to this interface. Filter sets can be configured via the sys filter set command. 1-4: are the index numbers of filters configured via the sys filter set command.
49	lan index <interface>	Sets the LAN interface for configuration. interface: type one of the following numbers <ul style="list-style-type: none"> • 1 - to select the main LAN interface; in CLI this interface is displayed as enif0. • 2 - to select IP Alias #1 interface; in CLI this interface is displayed as enif0:0. • 3 - to select IP Alias #2 interface; in CLI this interface is displayed as enif0:1. • 4 - to select the DMZ interface; in CLI this interface is displayed as enif0:2.
50	lan ipaddr <ip> <mask>	Sets the LAN interface's IP address and subnet mask.
51	lan multicast <none igmpv1 igmpv2>	Sets the multicast mode.
52	lan rip <none in out both><rip1 rip2b rip2m>	Sets the RIP direction and mode.
53	lan save	Saves the LAN interface configuration in the working buffer to non-volatile memory. The working buffer is a volatile memory space. The settings in the working buffer are not applied to the ZyXEL Device until you execute this command.
54	sys adjtime	Retrieve the date and time from the Internet.
55	sys adjtime	Display system information, including hardware and firmware details.
56	sys adminPassword <password>	Change the administrator password
57	sys countrycode [country-code]	Set or display the country code
58	sys cpu display	Display the CPU utilization
59	sys date	Set or display the current date in year/month/date format
60	sys ddns debug <level>	Enable or disable DDNS debug mode
61	sys ddns display <interface>	Display DDNS information for specified interface, including DDNS status and connection details
62	sys ddns logout <interface>	This logs our DDNS on the specified interface. This should be a WAN interface
63	sys ddns restart <interface>	Restart DDNS on the specified interface. This should be a WAN interface
64	sys default	Reset the device to its default values, except for LAN settings which are reserved. If default LAN settings are also required, use "sys romrest"
65	sys diag	Display the sys version, CPU usage, and mbuf status. Mbuf is the memory buffer used to store network packets
66	sys display	Display system information on the hostname, location and system modes
67	sys edit <file-name>	Edit the system preset text files such as autoexec.net
68	sys feature	Display information on available features
69	sys hostname [hostname]	Set or display the system hostname
70	sys log clear	Clear all logs
71	sys log display	Display all logs

72	sys log online	Enable or disable the error log online display
73	sys romreset	Restore the default romfile (configuration)
74	sys save	Avoid using this command as it may result in system instability
75	sys snmp clear	Reset SNMP related fields to default values
76	sys snmp discard	Discard any changes made to the device SNMP configuration and return to the previous settings
77	sys snmp display	Display the status of the SNMP Get, Set and Trap Community, and the Trusted Host's and Trap Host's IP address
78	sys snmp get <community>	Set the SNMP Get Community
79	sys snmp save	Save any changes made to the device SNMP configuration to non-volatile memory
80	sys snmp set <community>	Set the SNMP Set Community
81	sys snmp trap community <community>	Set the SNMP Trap Community
82	sys snmp trap destination <ip-address>	Set the IP address of the station to send SNMP traps to
83	sys snmp trusthost <ip-address>	Set the IP address of the SNMP trusted host. If an SNMP trusted host is specified, the device will respond only to SNMP messages from this IP address. If this field is left blank, the device will respond to all SNMP messages it receives, regardless of their source.
84	sys socket	Display the system socket's ID number, type, control block address(PCB) (this is a memory address), IP address and port number of the peer device connected to the socket (Remote Socket) and task control block (Owner).
85	sys stdio [minute]	Set the management session inactivity timeout value.
86	sys syslog facility [local-id]	Log the messages to different files located on the syslog server. local-id: The number of files available depends on the syslog utility used. For example, the Kiwilog supports seven files.
87	sys time	Set or display the current system time.
88	sys upnp active	Activate or deactivate the saved UPnP settings
89	sys upnp config	Allow users to make configuration changes
90	sys upnp display	Display the UPnP configuration
91	sys upnp load	Load the UPnP setting buffer. Use this command to be able to configure the settings. Use "sys upnp save" after you configure the settings.
92	sys upnp save	Save the UPnP settings to the long term memory.
93	sys password	Change the user password
94	sys version	Display the firmware and bootbase versions
95	sys view <filename>	Display the specified text file
96	sys wdog cnt [value]	Set or display the current watchdog count. This value represents the time interval at which the system is checked for normal operation.If watchdog detects a system crash the system is restarted.Use sys wdog switch to activate watchdog before configuring. value: This is a value from 0-34463.
97	sys wdog switch [on off]	Turn the watchdog firmware protection feature on or off
98	wan adsl cellcnt	Display the Rx/Tx cell number
99	wan adsl chandata	Show the ADSL channel data and line rate
100	wan adsl close	Close the ADSL line

101	wan adsl defbitmap	Current near-end/farend defects bitmaps(los,lof, lop,lod,lom)
102	wan adsl diag	Show w adsl c/p/l,wan dmt rates1/msg1/rates_ra/msg_ra/rates2/msg2/bng/initbng/show snr wan hwdmt show afe param, etc.
103	wan adsl driver info	Display the firmware and hardware version of the driver.
104	wan adsl farituid	Far end itu identification: 0 0 0 0 0 0 0
105	wan adsl fwversion	Display the current firmware and hardware version
106	wan adsl linedata far	Show ADSL far end noise margin and carrier load information.
107	wan adsl linedata near	Show ADSL near end noise margin and carrier load information
108	wan adsl nearituid	near end itu identification: 0 0 54 43 54 4e 0 0
109	wan adsl open	Open the ADSL line
110	wan adsl opencmd	Open the ADSL line with the specified standard
111	wan adsl opmode	Show the ADSL operational mode (standard).
112	wan adsl perfdata	Show performance information such as the CRC,FEC, error seconds
113	wan adsl reset	Reset the ADSL modem to the saved configuration.
114	wan adsl snroffset	Set snr offset. usage: set snr offset (offset(db)*512) current value:0
115	wan adsl status	Display ADSL status (up, down or initializing).
116	wan adsl targetnoise <target_noise_margin>	Set the target noise margin.target_noise_margin: -31 ~ 32.
117	wan adsl txfilter <tx_filter_type>	Set Tx filter
118	wan adsl txtones <start tone> <end tone>	Set Tx gain. tone=0x6~0x1F current value: start_tone=6 end_tone=1f
119	wan adsl uptime	Show link up time
120	wan adsl vendorid	Display near-end/far-end vendorid
121	wan adsl version	Display near-end/far-end version
122	wan atm vcpool active<yes no>	Enable or disable the virtual circuit (VC) autohunting feature
123	wan atm vcpool add <node-id> <vpi><vci> <service-bit-hex>	Configure a virtual circuit hunting pool entry. <node-id> : input the remote node index 1-8 <vpi>: VPI value <vci>: VCI value <service-bit-hex>: This is a six-bit field which controls the services the ZyXEL Device searches. The bits control the following services: Bit 0 (1): PPPoE/VC Bit 1 (2): PPPoE/LLC Bit 2 (4): PPPoA/VC Bit 3 (8): PPPoA/LLC Bit 4 (16): Enet/VC Bit 5 (32): Enet/LLC You must enter the parameter value in hexadecimal format. For example, if you want to enable PPPoA/VC (4 in decimal) and Enet/LLC (32 in decimal),enter “24” (4 + 32 = 36 in decimal = 24 in hexadecimal). Note: Use the wan atm vchunt save command to add the entry to the hunt pool.
124	wan atm vcpool clear	Clear the virtual circuit configuration working buffer.
125	wan atm vcpool disp	Display the virtual circuit hunt pool (the group of parameters the

		ZyXEL Device checks for an active VC).
126	wan atm vcpool remove <node#> <vpi><vci>	Remove the entry with the specified profile number, VPI and VCI from the hunt pool. <node#>: input the remote node index 1-8 <vpi>: VPI value <vci>: VCI value
127	wan atm vcpool waittime <seconds>	Set the length of time the ZyXEL Device waits before checking the virtual circuit hunt result.
128	wan hwsar clear	Reset SAR and HAL incoming and outgoing packet counters.
129	wan hwsar disp	Display SAR (Segmentation And Reassembly) and HAL (Hardware Abstraction Layer) incoming and outgoing packet statistics.
130	wan hwsar sendoam <vpi> <vci> <f5><end-to-end> <type:0(AIS) 1(RDI)2(LoopBack) 3(Continuity Check)>	Send OAM calls to test the connection of ATM physical layer.
131	wan node bridge <on off>	Activate or deactivate bridge mode on the previously-specified WAN node profile.
132	wan node callsch	Set the call scheduling profile(s) used by the previously-specified WAN node profile. Use the wan callsch commands to configure call scheduling profiles
133	wan node clear	Return the WAN node you previously specified with the wan node index <node#> command to its defaults.
134	wan node disable	Deactivate the previously-specified WAN node profile
135	wan node display	Display configuration details of the previouslyspecified WAN node currently in the working buffer
136	wan node enable	Activate the previously-specified WAN node profile.
137	wan node encap <1483 pppoa pppoe enet ether>	Set the encapsulation method used by the previously-specified WAN node profile. <1483>: RFC1483 <pppoa>: Point-to-Point Protocol over ATM <pppoe>: Point-to-Point Protocol over Ethernet <enet>: Ethernet encapsulation. <ether>: Sets the WAN type to Ethernet WAN.
138	wan node filter <incoming outgoing call> <tcpip generic> <profile>	Specify the filter action, type and profile to be used for traffic to or from the previously-specified WAN node profile. incoming: the filter applies to traffic coming from the WAN to the LAN. outgoing: the filter applies to traffic coming from the LAN to the WAN. call: determines whether a packet should be allowed to trigger a call. tcpip: filters IP packets only. generic: filters based on a packet's MAC address. profile: profile number 1 ~ 4. Use the sys filter set commands to configure filter profiles.
139	wan node index <node#>	Set the node pointer to the specified WAN node profile. • 1 is the ISP node profile.

		<ul style="list-style-type: none"> • 9 is the backup node profile. <p>Note: Use this command to specify the node profile before using other wan node commands.</p>
140	wan node ispname <name>	Set the ISP name for the node you previously specified with the wan node index <node#> command.
141	wan node mbs <mbs>	Set the Maximum Burst Size (MBS) of the previously-specified WAN node profile.
142	wan node multicast <none igmpv1 igmpv2>	Set the multicast mode of the previously-specified WAN node profile.
143	wan node mux <vc llc>	Set the multiplexing protocol used by the previously-specified WAN node profile. <vc>: virtual circuit-based <llc>: logical link control-based
144	wan node nailedup <on off>	Activate or deactivate a nailed-up (always on) connection for the previously-specified WAN node profile.
145	wan node nat	Set the Network Address Translation (NAT) method of the previously-specified WAN node profile.
146	wan node pcr <pcr>	Set the Peak Cell Rate (PCR) of the previously-specified WAN node profile.
147	wan node ppp authen <pap chap both>	Set the PPP authentication method for the previously-specified WAN node profile.
148	wan node ppp idletime <seconds>	Set the PPP idle timeout.
149	wan node ppp password <password>	Set the PPP password for the previously-specified WAN node profile
150	wan node ppp poePassSel <yes/no>	Enable or disable PPPoE pass through for the previously-specified WAN node profile.
151	wan node ppp service <name>	Set the PPPoE service name of the previously-specified WAN node profile.
152	wan node ppp username <username>	Set the PPP user name for the previously-specified WAN node profile
153	wan node qos <ubr cbr vbr_nrt vbr_rt>	Set the QoS (Quality of Service) type used by the previously-specified WAN node profile. <ubr>: Unspecified Bit Rate <cbr>: Constant Bit Rate <vbr_nrt>: Variable Bit Rate (Non-Real-Time) <vbr_rt>: Variable Bit Rate (Real-Time)
154	wan node remoteip <ip-address> <subnet>	Set the remote gateway IP address of the previously-specified WAN node profile.
155	wan node rip <none in out both><rip1 rip2 rip2m>	Set the Routing Information Protocol (RIP) mode and type of the previously-specified WAN node profile.
156	wan node routeip <on off>	Activate or deactivate IP routing on the previously-specified WAN node profile.
157	wan node save	Save configured information about the WAN node you previously specified with the wan node index <node#> command to the permanent memory. Note: Change to the configuration in the working buffer are not saved or used until you enter this command.
158	wan node scr <scr>	Set the Sustainable Cell Rate (SCR) of the previously-specified

		WAN node profile.
159	wan node vci <vci>	Set the VCI (Virtual Channel Identifier) of the previously-specified WAN node profile.
160	wan node vpi <vpi>	Set the VPI (Virtual Path Identifier) of the previously-specified WAN node profile.
161	wan node wanip <<static><ip>> <dynamic>	Set the WAN IP address of the previously-specified WAN node profile.
162	ip nat timeout generic <seconds>	To set the timeout of UDP packets
163	ip nat timeout tcp <seconds>	To set the timeout of TCP packets
164	ip nat timeout tcpport <port> <seconds>	To set the timeout and TCP Port
165	ip nat timeout udpport <port> <seconds>	To set the timeout and UDP Port
166	ppp retry <seconds>	To set PADI interval
167	ip igmp igmppvc switch usage: ip igmp igmppvc switch <on off>	To enable or disable the feature
168	ip igmp igmppvc pvcindex usage: ip igmp igmppvc pvcindex <0~7>	To choose the PVC on which IPTV will work
169	ip igmp igmppvc svrmac usage: ip igmp igmppvc svrmac <macIndex><mac> IPTV server MAC are MAC 0 = MAC 1 = MAC 2 = MAC 3 = MAC 4 =	To set the MAC allowed to pass
170	ip nat natperuser switch <on off>	To enable or disable the feature
171	ip nat natperuser mode <same-session diff-session>	To set the modem to same session or different session Same session: each clients uses the same number Different session: can customize session numbers that can be used with each clients(By IP).
172	ip nat natperuser same-session I <0~1024>	In “same-session” mode. To set the numbers of NAT session allowed to each clients.
173	ip nat natperuser sessionperuser <add> <ip> <session number>	In “diff-session “ mode. To set each client’s allowed numbers of NAT session.
174	ip nat natperuser sessionperuser <remove> <ip>	In “diff-session “ mode. To remove each client’s allowed numbers of NAT session.
175	ip nat natperuser sessionperuser <modify> <ip> <session number>	In “diff-session “ mode. To modify each client’s allowed numbers of NAT session.
176	ip nat natperuser sessionperuser <disp>	In “same-session” mode. To display setting
177	ip nat natperuser debug	To enable or disable debug mode

	<on off>	
178	lp dns dns2tr069pvc <on off>	On means dns from TR069 PVC