



Firmware Release Note

**P-660HW-T3 v2
Standard Version**

Release 3.40(ANR.0)C0

Date: Junly 04, 2006
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ZyXEL P-660HW-T3 v2 Standard Version

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Supported Platforms:

ZyXEL P-660HW-T3 v2

Versions:

ZyNOS Version : V3.40(ANR.0) | 06/19/2006 9:42:37

Bootbase Version : V1.04 | 6/28/2006 10:10:34

Notes:

The P-660HW-T3 v2, is 4th generation of ZyXEL ADSL product family. It is a high performance ADSL/ADSL2/ADSL2+ router for small/medium office to have Internet access and LAN-to-LAN application over the existing copper line. P-660HW-T3 v2 takes advantage of much higher data rate than ADSL, speed up to 12Mbps (ADSL2) or 24Mbps (ADSL2+), greater reach, faster start-up, advanced diagnostics and better power management. This high performance ADSL router is a high integrated advanced Firewall, Bandwidth Management and IEEE 802.11g wireless features to meet the demand of high-end market.

P-660HW-T3 v2 provides an embedded mini-PCI module for 802.11g Wireless LAN connectivity, four single auto-sensing, auto-detection 10/100BASE-T Ethernet ports for connection to the user's local network, and a single RJ-11/RJ-45 port for connection to ADSL/ADSL2/ADSL2+ line.

1. Support Multiboot client V2.3
2. Support ADSL2+ by TrendChip modem code 3.5.6.0

Known Issues:

1. Set ATM QoS Type= VBR, Peak Cell Rate (PCR) =1000, Sustain Cell Rate (SCR) = 500, Maximum Burst Size (MBS) = 500, Test result it is not steady
2. Step1: set remote node 1 ATM QoS Type= VBR_RT, Step2: set remote node 2 ATM QoS Type= VBR_nRT, Step3: set remote node 3 ATM QoS Type= CBR, Then the priority remote node 1>remote node 3>remote node 2, (use one node with CBR and two nodes with VBR in any remote node will case priority confusedly)
3. The Throughput does not meet the ADSL2+ criteria.
4. When set multi PVCs and to get Dynamic IP, the TriplePlay and IPRP function doesn't work properly
5. When DUT is power on and link up, if there are many multicast packets on the wan sides, the DUT will reboot sometimes.
6. IOP issue with Intel 2200BG at WPA2 and WPA2-PSK Mixed mode.

Features:

Modification in 3.40(ANR.0)C0 | 06/19/2006

1. Change to FCS

Modification in 3.40(ANR.0)b3 | 06/13/2006

1. [Bug Fix] SPRID: 060602141

[Symptom] Backup configuration file in eWC/Advanced setup/Maintenance/Tools/Configuration leads to crash.

[Condition] Backup configuration file in eWC/Advanced setup/Maintenance/Tools/Configuration leads to crash.

- 2.[Bug Fix] SPRID: 060602143

[Symptom] Tcpiip filter applied in lan side can't be removed correctly.

[Condition] Step1 Setup a tcpiip filter rule.

Step2 When apply the filter in lan side using CI command like "lan filter incoming tcpiip 1 0 0 0", it shows error information, and using "lan filter incoming tcpiip 1" can apply the filter successfully.

Step3 When you want to remove the filter in lan side, you can't use "lan filter incoming tcpiip 0 0 0 0", and you must use CI command like "lan filter incoming tcpiip 2" to set to another rule.

- 3.[Bug Fix] SPRID: 060602144

[Symptom] Ip policy rules can't be save correctly.

[Condition] Setp1 Configure an ip policy rule in CI command.

Setp2 When you save the rule, it shows error message.

Setp3 Restart device and check the rule. The rule has not been saved.

- 4.[Bug Fix] SPRID: 060602145

[Symptom] Rom-d function (change default romfile in ras) can't work correctly.

[Condition] Step1 Change "system name" to romd.

Step2 Open DOS ftp and use "get rom-0 rom.rom" to backup rom setting.

Step3 Rom reset the device, and check the system name is P-660HW-T3 V2.

Step4 Open DOS ftp and use "put rom.rom rom-d" to change default romfile in ras, but it shows "checksum error" and show you to upload firmware.

- 5.[Bug Fix] SPRID: 060606364

[Symptom] Firewall rules can't be added correctly with range address of source address or destination address.

[Condition] Step1 Enter GUI->Advance->Security->Firewall->Rules->Edit Rules.

Step2 Select "Range Address" in Source Address or Destination Address and enter IP Range like this "192.168.100.22-192.168.100.36", add this range to the list and remove "Any" then apply this rule, it will shows error information.

Step3 Edit the address range you entered to "192.168.99.22-192.168.99.36" then apply the rule, it will be saved correctly.

- 6.[Bug Fix] SPRID: 060607447

[Symptom] G162 wireless client can not connect to AP steadily.

[Condition] G162 wireless client can not connect to AP steadily.

- 7.[Bug Fix] SPRID: 060607448

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[Symptom] B220 wireless client can also connect to AP when 802.11 mode in g only.

[Condition] B220 wireless client can also connect to AP when 802.11 mode in g only.

8.[Bug Fix] SPRID: 060608531

[Symptom] There is an additional page in Wan->More Connection Setup->SUA Only Edit.

[Condition] Step1 Restore default romfile.

Step2 Enter GUI->Advance Setup->Wan->More Connections, Edit one connection and Enter NAT SUA Only Edit in this page, After Edit the port forwarding then apply it. It will show a Full feature Address Mapping Rule edit page, and the configuration in this page can't be saved.

9.[Bug Fix] SPRID: 060608532

[Symptom] Bridge RFC1483 can't be set correctly in GUI->Wizard Setup->Internet Setup.

[Condition] Step1 Enter Wizard Setup and start Internet/Wireless Setup.

Step2 When DSL Auto detected fails, select Bridge RFC1483 mode and apply it. It will still show this configuration page.

Step3 Enter Advance Setup and the configuration have been saved successfully.

10.[Bug Fix] SPRID: 060606362

[Symptom] OTIST with 64 bit static WEP key passphrase and 128 bit static WEP key can't start correctly.

[Condition] Step1 Enable wireless LAN and set security as static WEP, input key in passphrase, such as "12345", then generate a key and apply it.

Step2 Enter OTIST page and start OTIST. It will show "HTML Item value can't be empty". And OTIST can't start.

Step3 This symptom also come out when you choose 128 bit WEP key passphrase generate or enter WEP key directly.

Step4 In P-661HW-D1, this symptom only come out when you choose 128 bit static WEP key passphrase generate or enter WEP key directly.

Step5 In P-660HW-D1, the OTIST can start correctly when you choose 128 WEP key, this symptom doesn't come out.

11.[Bug Fix] SPRID: 060608567

[Symptom] The configuration pages in administrator mode can be log in in user mode.

[Condition] The configuration pages in administrator mode can be log in in user mode.

12.[Bug Fix] SPRID: 060607454

[Symptom] In GUI bandwidth management, when you add the ninth rule, it will show "Number of classes reaches the upper bound. Max classes is 9", but the ninth rule will not be added.

[Condition] In GUI bandwidth management, when you add the ninth rule, it will show "Number of classes reaches the upper bound. Max classes is 9", but the ninth rule will not be added.

13.[Bug Fix] SPRID: 060608526

[Symptom] when set a BM rule, enter into it and edit the bandwidth budget larger than the bandwidth of the parent, it can't save. But enter it again and set like before, it can save.

[Condition] step1: In summary, speed=1000. In Rule setup, BW Budget=50 and save it. But if the BW Budget is 2000, it can't save at the first time.

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step2:Enter the rule again, and set up bandwidth budget larger than the bandwidth of the parent class(ex:BW Budget=2000), but it can save.

14.[Bug Fix] SPRID: 060606361

[Symptom] GUI status page-> interface status shows “2M” of WLAN when summary->Packet Statistics page shows “54M”.

[Condition] GUI status page-> interface status shows “2M” of WLAN when summary->Packet Statistics page shows “54M”.

15. [Change default Romfile]

Default user password is “user”

16. [Change default Romfile]

Enable Anyip

17. [Change default Romfile]

Uncheck all logs type in log settings

Modification in 3.40(ANR.0)b2 | 05/15/2006

1. Create this project.

Annex B CI Command List

No	Command	Description	Comment
	sys general load	Load system general info to buffer	Menu 1
	sys general bridge [on/off]	Set system bridge on/off	Menu 1
	sys general routeip [on/off]	Set system IP routing on/off	Menu 1
	sys general location [geographic location]	Set the geographic location of your prestige.	Menu 1
	sys general hostname [hostname]	Set system name	Menu 1
	sys general contactname [contactname]	Set contact person's name	Menu 1
	sys general domainname [domainname]	Set domainname	Menu 1
	sys general save	Save general info to flash.	Save Menu 1
	sys general display	Display information in menu 1	Display Menu 1
	sys ddns debug	Open dynamic DNS debug mode	Menu 1.1
	sys ddns display	Display dynamic DNS information	Menu 1.1
	sys ddns restart	Restart dynamic DNS	Menu 1.1
	sys ddns logout	Logout dynamic DNS	Menu 1.1
	sys ddns config load	Load dynamic DNS to buffer	Menu 1.1
	sys ddns config active [0 1]	Active dynamic DNS	Menu 1.1
	sys ddns config hostname	Set the domain name assigned by dynamic DNS provider	Menu 1.1
	sys ddns config emailaddress	Set your E-mail address	Menu 1.1
	sys ddns config username	Set your user name	Menu 1.1
	sys ddns config password	Set the password assigned to you	Menu 1.1
	sys ddns config save	Save dynamic DNS setting to flash	Menu 1.1
	sys default	Load All Default Settings Except LAN and DHCP.	
	sys save	Save all the parameters which will include menu1, menu 3.2 LAN, menu 4 or menu 11 WAN, menu 12 static route, menu 15 NAT server set, menu 21 filter sets, menu 22 SNMP, menu 24.11 remote management and 3.5 Wireless LAN	
	wan backup display	Display the backup information	Menu 2
	wan backup load	Load the setting	Menu 2
	wan backup free	Free the load setting	Menu 2
	wan backup checkmech [ICMP DSL]	Setting check mechanism	Menu 2
	wan backup checkip1 [IP address]	Setting Check WAN IP Address1	Menu 2
	wan backup checkip2 [IP address]	Setting Check WAN IP Address2	Menu 2
	wan backup checkip3 [IP address]	Setting Check WAN IP Address3	Menu 2
	wan backup tolerance [num]	Setting the KeepAlive Fail Tolerance	Menu 2
	wan backup recoveryInterval [num]	Setting the recovery interval	Menu 2
	wan backup icmptimeout [num]	Setting the ICMP timeout	Menu 2
	wan backup traffickedirect active [yes no]	Enable the traffic redirect	Menu 2.1
	wan backup traffickedirect backupgateway [IP address]	Setting the Backup Gateway IP Address	Menu 2.1
	wan backup traffickedirect metric [num]	Setting the gateway IP address metric	Menu 2.1
	#ifdef DIAL_BACKUP		
	wan backup dialbackup active [yes no]	Enable dial backup	Menu 2.2
	wan backup dialbackup portspeed [num]	Setting the dial backup port speed	Menu 2.2
	wan backup dialbackup atcommand init [init]	Setting the AT Command String of init.	Menu 2.2

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	Wan backup dialbackup atcommand dial [Dail]	Setting the AT Command String of dial.	Menu 2.2.1
	wan backup dialbackup atcommand drop [Drop]	Setting the AT Command String of drop.	Menu 2.2.1
	wan backup dialbackup atcommand answer [Answer]	Setting the AT Command String of answer.	Menu 2.2.1
	wan backup dialbackup dropDTR [yes no]	Drop DTR When Hang Up	Menu 2.2.1
	wan backup dialbackup atresponse clid [CLID]	Setting the AT Response String of CLID.	Menu 2.2.1
	wan backup dialbackup atresponse callid [Called Id]	Setting the AT Response String of Called ID	Menu 2.2.1
	wan backup dialbackup atresponse speed [Speed]	Setting the AT Response String of speed	Menu 2.2.1
	wan backup dialbackup callctl dialtimeout [second]	Setting dial backup call control dial timeout	Menu 2.2.1
	wan backup dialbackup callctl retrycount [num]	Setting dial backup call control retry count	Menu 2.2.1
	wan backup dialbackup callctl retryinterval [second]	Setting dial backup call control retry interval	Menu 2.2.1
	wan backup dialbackup callctl droptimeout [second]	Setting dial backup call control drop timeout	Menu 2.2.1
	wan backup dialbackup callctl callbackdelay [second]	Setting dial backup call control call back delay	Menu 2.2.1
	#endif		
	wan backup save	Save the setting	Menu 2
	lan index [1 2 3] 1: Select main LAN Interface 2: Select IP Alias 1 3: Select IP Alias 2	Select a LAN interface to edit	Menu 3.2
	lan active [on off]	Turn on or off on IP Alias Interface	Menu 3.2.1
	lan ipaddr [address] [subnet mask]	Set LAN IP address and subnet mask Example: > lan ipaddr 192.168.1.1 255.255.255.0	Menu 3.2
	lan rip [none in out both] [rip1 rip2b rip2m]	Set LAN IP RIP mode and RIP version, if you choose none in the first parameter, the second parameter is also necessary	Menu 3.2
	lan multicast [none igmpv1 igmpv2]	Set LAN IP multicast mode	Menu 3.2
	lan filter [incoming outgoing] [tcpip generic] [set#1] [set#2] [set#3] [set#4]	Set LAN filter to be incoming/outgoing or protocol /device and the filter set could be 1-12, 0 means empty Example: Lan filter incoming tcpip 1 0 0 0	Menu 3.1
	lan dhcp mode [server relay none]	Set DHCP mode to be "server", "relay", "none"	Menu 3.2
	lan dhcp server dnsserver [pri dns] [sec dns]	Set primary and secondary LAN DNS server	Menu 3.2
	lan dhcp server pool [start-address] [num]	Set DHCP start address and pool size	Menu 3.2
	lan dhcp server gateway [IP address]	Set DHCP gateway	Menu 3.2
	lan dhcp server netmask [subnet mask]	Set DHCP subnet mask	Menu 3.2
	lan dhcp server leasetime [second]	Set DHCP lease time	Menu 3.2
	lan dhcp server renewalttime [second]	Set DHCP renew time	Menu 3.2
	lan dhcp server rebindtime [second]	Set DHCP rebind time	Menu 3.2
	lan dhcp relay server [IP address]	Set IP address of DHCP relay server	Menu 3.2
	lan display	Display LAN or IP alias parameters	Display Menu 3
	lan clear	Clear the Working Buffer	
	lan save	Save LAN related parameters	

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	wan node index [1-8]	Set the node pointer to specific wan profile. If you want to set WAN profile, please use this command first, system will use the index number for pointing to specific PVC (remote node), and for consequent commands reference, if index = 1 means it's ISP node	Menu 11.1
	wan node clear	Clear the parameters of the temporary WAN profile	Menu 11.1
	wan node ispname [ISP name]	Enable the name of wan node	Menu 11.1
	wan node enable	Enable the wan profile	Menu 11.1
	wan node disable	Disable the wan profile	Menu 11.1
	wan node encap [1483 pppoa pppoe enet]	Set the wan protocol	Menu 11.1
	wan node mux [vc llc]	Set the wan multiplex	Menu 11.1
	wan node ppp authen [chap pap both]	Set PPP authentication type	Menu 11.1
	wan node ppp username [name]	Set PPP username	Menu 11.1
	wan node ppp password [password]	Set PPP password	Menu 11.1
	wan node service [name]	Set PPPoE service name	Menu 11.1
	wan node bridge [on off]	Set the wan bridge mode	Menu 11.1
	wan node routeip [on off]	Set the wan IP routing mode	Menu 11.1
	wan node callsch [set1#][set2#][set3#][set4#]	Set call schedule set, set number 0 means empty	Menu 11.1
	wan node nailedup [on off]	Set nailed up connection on/off	Menu 11.1
	wan node vpi [num]	Set the wan vpi. Range : 0~255	Menu 11.6
	wan node vci [num]	Set the wan vci. Range : 32~65535	Menu 11.6
	#ifndef VBR-RT		
	wan node qos[ubr cbr vbr]	Set the wan QoS type to be UBR ,CBR,or VBR	Menu 11.6
	#else		
	wan node qos[ubr cbr vbr_nrt vbt_rt]	Set the wan QoS type to be UBR, CBR,VBR_nrt or VBT-rn	Menu 11.6
	#endif		
	wan node pcr [num]	Set the wan PCR value	Menu 11.6
	wan node scr [num]	Set the wan SCR value	Menu 11.6
	wan node mbs [num]	Set the wan MBS value	Menu 11.6
	wan node wanip [static dynamic] [address]	Set the wan IP address	Menu 11.3
	wan node remoteip [address] [subnet mask]	Set the remote gateway IP address and subnet mask	Menu 11.3
	wan node nat [off sua full] [address mapping #]	Set type wan NAT mode to be off or SUA or Full feature	Menu 11.3
	wan node metric [num]	Set the wan metric number	Menu 11.3
	wan node private [yes no]	Set the wan private or not.	Menu 11.3
	wan node rip [none in out both] [rip1 rip2b rip2m]	Set the wan RIP mode and RIP version	Menu 11.3
	wan node multicast [none igmpv1 igmpv2]	Set the wan IP multicast mode	Menu 11.3
	wan node ippolicy [set #1] [set #2] [set #3] [set #4]	Set WAN IP policy can be specified, and policy set can be 1-12, value 0 means empty	Menu 11.3
	wan node bridgetimeout [min#]	Set wan bridge mode, Ethernet address timeout minutes.	Menu 11.3
	wan node filter [incoming outgoing] [tcpip generic] [set #1] [set #2] [set #3] [set #4]	Set WAN filter, incoming or outgoing can be specified, and filter set can be 1-12, value 0 means empty	Menu 11.5
	wan node ppp idletimeout [second]	Set idle timeout.	Menu 11.1
	#ifdef DIAL_BACKUP and index = the last remote node		
	wan node backup ispname [ISP name]	Enable the name of wan node	Menu 11.1
	wan node backup enable	Enable the wan profile	Menu 11.1
	wan node backup disable	Disable the wan profile	Menu 11.1
	wan node backup ppp authen [chap pap both]	Set PPP authentication type	Menu 11.1
	wan node backup ppp username [name]	Set PPP username	Menu 11.1

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	wan node backup ppp password [password]	Set PPP password	Menu 11.1
	wan node backup priph [Pri Phone]	Set backup ISP primo phone	Menu 11.1
	wan node backup secph [Sec Phone]	Set backup ISP second phone	Menu 11.1
	wan node backup pppopt encap [std cisco]	Set PPP option, standard PPP or CISCO	Menu 11.2
	wan node backup pppopt com [yes no]	Set PPP option, compression or not	Menu 11.2
	wan node backup wanip [static dynamic] [address]	Set the wan IP address	Menu 11.3
	wan node backup remoteip [address] [subnet mask]	Set the remote gateway IP address and subnet mask	Menu 11.3
	wan node backup nat [off sua full] [address mapping #]	Set type wan NAT mode to be off or SUA or Full feature	Menu 11.3
	wan node backup metric [num]	Set the wan metric number	Menu 11.3
	wan node backup private [yes no]	Set the wan private or not.	Menu 11.3
	wan node backup rip [none in out both] [rip1 rip2b rip2m]	Set the wan RIP mode and RIP version	Menu 11.3
	wan node backup multicast [none igmpv1 igmpv2]	Set the wan IP multicast mode	Menu 11.3
	wan node backup script active [yes no]	Active remote node script	Menu 11.4
	wan node backup script set1 [expect] [send]	remote node script setting	Menu 11.4
	wan node backup script set2 [expect] [send]	remote node script setting	Menu 11.4
	wan node backup script set3 [expect] [send]	remote node script setting	Menu 11.4
	wan node backup script set4 [expect] [send]	remote node script setting	Menu 11.4
	wan node backup script set5 [expect] [send]	remote node script setting	Menu 11.4
	wan node backup script set6 [expect] [send]	remote node script setting	Menu 11.4
	wan node backup nailedup [on off]	Set nailed up connection on/off	Menu 11.1
	wan node backup filter [incoming outgoing] [tcpip generic] [set #1] [set #2] [set #3] [set #4]	Set WAN filter, incoming or outgoing can be specified, and filter set can be 1-12, value 0 means empty	Menu 11.5
	wan node backup idletimeout [second]	Set idle timeout.	Menu 11.1
	#endif		
	wan node save	Save the related parameters of WAN node	
	wan node display	Display WAN profile configuration in buffer	Display Menu 11
	ip route addrom index [Rule #]	Select a Static Route index 1-16 to edit	Menu 12.1
	ip route addrom name [Name]	Set Rule Name	Menu 12.1
	ip route addrom active [on off]	Set Active or Inactive Flag	Menu 12.1
	ip route addrom set [dest address/ mask bits] [gateway] [metric]	Set IP static route Example: > ip ro addrom set 192.168.1.33/24 192.168.1.1 2	Menu 12.1
	ip route addrom private [yes no]	Set Private Flag	Menu 12.1
	ip route addrom disp	Display both working buffer and Editing Entry	Menu 12.1
	ip route addrom freememory	Discard all changes	Menu 12.1
	ip route addrom save	Save edited settings	Menu 12.1
	ip route addrom clear [Index #]	Clear Static Route Index	Menu 12.1
	bridge staticRoute index [Rule #]	Select a bridge Static Route index 1-16 to edit	Menu 12.3
	bridge staticRoute name [Name]	Set Rule Name	Menu 12.3
	bridge staticRoute active [on off]	Set Active or Inactive Flag	Menu 12.3
	bridge staticRoute set [ether address] [ipaddress] [gatewayNode]	Set bridge static route Example: >bridge staticRoute set 001349012345 192.168.1.1 1	Menu 12.3
	bridge staticRoute display	Display both working buffer and Editing Entry	Menu 12.3
	bridge staticRoute freememory	Discard all changes	Menu 12.3
	bridge staticRoute save	Save edited settings	Menu 12.3

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	bridge staticRoute clear [Index #]	Clear Static Route Index	Menu 12.3
	sys dialinUser index [index #]	Set the index of dial-in user, you may apply this command first before you begin to configure the dial-in user.	Menu 14
	sys dialinUser username [username]	Set the name of dial-in user	Menu 14
	sys dialinUser active [yes no]	Active the dial-in user	Menu 14
	sys dialinUser password [password]	Set password	Menu 14
	sys dialinUser display	Display configuration	Menu 14
	sys dialinUser save	Save configuration	Menu 14
	sys dialinUser free	Free buffer info of the dial-in user	Menu 14
	sys dialinUser clear	Delete the dial-in user	Menu 14
	ip nat addrmap map [map#] [set name]	Select NAT address mapping set and set mapping set name, but set name is optional Example: > ip nat addrmap map 1 myset	Menu 15.1
	ip nat addrmap rule [rule#] [insert edit] [type] [local start IP] [local end IP] [global start IP] [global end IP] [server set #]	Set NAT address mapping rule. If the “type” is not “inside-server” then the “type” field will still need a dummy value like “0”. Type is 0 - 4 = one-to-one, many-to-one, many-to-many-overload, many-to-many-non overload, inside-server Example: > ip nat addrmap rule 1 edit 3 192.168.1.10 192.168.1.20 192.168.10.56 192.168.1.56 0	Menu 15.1
	ip nat addrmap clear [map#] [rule#]	Clear the selected rule of the set	Menu 15.1
	ip nat addrmap freememory	Discard Changes	Menu 15.1
	ip nat addrmap disp	Display nat set information	Menu 15.1
	ip nat addrmap save	Save settings	Menu 15.1
	ip nat server load [set#]	Load the server sets of NAT into buffer	Menu 15.2
	ip nat server disp [1]	“disp 1” means to display the NAT server set in buffer, if parameter “1” is omitted, then it will display all the server sets	Menu 15.2
	ip nat server save	Save the NAT server set buffer into flash	Menu 15.2
	ip nat server clear [set#]	Clear the server set [set#], must use “save” command to let it save into flash	Menu 15.2
	ip nat server edit [rule#] active	Activate the rule [rule#], rule number is 1 to 24, the number 25-36 is for UPNP application	Menu 15.2
	ip nat server edit [rule#] svrport <start port> <end port>	Configure the port range from <start port > to <end port>	Menu 15.2
	ip nat server edit [rule#] remotehost <start IP> <end IP>	Configure the IP address range of remote host (Leave it to be default value if you don’t need this command)	Menu 15.2
	ip nat server edit [rule#] leasetime <seconds>	Configure the lease time (Leave it to be default value if you don’t want this command)	Menu 15.2
	ip nat server edit [rule#] rulename <string>	Configure the name of the rule (Leave it to be default value if you don’t want this command)	Menu 15.2
	ip nat server edit [rule#] forwardip <IP address>	Configure the LAN IP address to be forwarded	Menu 15.2
	ip nat server edit [rule#] protocol <TCP UDP ALL>	Configure the protocol to be used TCP , UDP or ALL (it must be capital)	Menu 15.2
	sys filter set index [set#] [rule#]	Set the index of filter set rule, you must apply this command first before you begin to configure the filter rules	Menu 21 filter sets
	sys filter set name [set name]	Set the name of filter set	Menu 21 filter sets
	sys filter set type [tcpip generic]	Set the type of filter rule	Menu 21 filter sets

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	sys filter set enable	Enable the rule	Menu 21 filter sets
	sys filter set disable	Disable the rule	Menu 21 filter sets
	sys filter set protocol [protocol #]	Set the protocol ID of the rule	Menu 21 filter sets
	sys filter set sourceroute [yes no]	Set the sourceroute yes/no	Menu 21 filter sets
	sys filter set destip [address] [subnet mask]	Set the destination IP address and subnet mask of the rule	Menu 21 filter sets
	sys filter set destport [port#] [compare type = none equal notequal less greater]	Set the destination port and compare type (compare type could be 0(none) 1(equal) 2(not equal) 3(less) 4(greater))	Menu 21 filter sets
	sys filter set srcip [address] [subnet mask]	Set the source IP address and subnet mask	Menu 21 filter sets
	sys filter set srcport [port#] [compare type = none equal not equal less greater]	Set the source port and compare type (compare type could be 0(none) 1(equal) 2(not equal) 3(less) 4(greater))	Menu 21 filter sets
	sys filter set tcpEstab [yes no]	Set TCP establish option	
	sys filter set more [yes no]	Set the more option to yes/no	Menu 21 filter sets
	sys filter set log [type 0-3= none match notmatch both]	Set the log type (it could be 0-3 =none, match, not match, both)	Menu 21 filter sets
	sys filter set actmatch[type 0-2 = checknext forward drop]	Set the action for match	Menu 21 filter sets
	sys filter set actnomatch [type 0-2 = checknext forward drop]	Set the action for not match	Menu 21 filter sets
	sys filter set offset [#]	Set offset for the generic rule	Menu 21, it's for generic filter
	sys filter set length [#]	Set the length for generic rule	Menu 21, it's for generic filter
	sys filter set mask [#]	Set the mask for generic rule	Menu 21, it's for generic filter
	sys filter set value [(depend on length in hex)]	Set the value for generic rule	Menu 21, it's for generic filter
	sys filter set clear	Clear the current filter set	Menu 21
	sys filter set save	Save the filter set parameters	
	sys filter set display [set#][rule#]	Display Filter set information. W/o parameter, it will display buffer information.	
	sys filter set freememory	Discard Changes	
	sys snmp disp	Display SNMP parameters	Menu 22
	sys snmp get [community]	Set the community string of get	Menu 22 SNMP
	sys snmp set [community]	Set the community string of set	Menu 22 SNMP
	sys snmp trusthost [IP address]	Set the IP address of trusted host	Menu 22 SNMP
	sys snmp trap community [community]	Set the community string of trap	Menu 22 SNMP
	sys snmp trap destination [IP address]	Set the destination address of trap	Menu 22 SNMP
	sys snmp discard	Discard changes	
	sys snmp clear	Clear Working Buffer	
	sys snmp save	Set the SNMP parameters	Menu 22 SNMP
	sys password	Set system password: input current password->input new password-> confirm new password	Menu 23 system password
	sys baud [1:38400 2:19200 3:9600 4:57600 5:115200]	Index 1,2,3 will be 38400,19200, 9600, 57600, 115200 bps [save immediately]	Menu 24.2.2 console speed
	Wan adsl version	Display chipset vendor and modem code version	Menu 24.2.1
	Wan adsl opmode display	Display DSL setting mode	Menu 24.2.1
	sys timeserver load	Load time server info to buffer.	Menu 24.10 time server
	sys timeserver protocol [0: daytime RFC 867	Set time protocol	Menu 24.10 time

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	1:time RFC 868 2: NTP RFC 1305]		server
	sys timeserver address [address]	Set time server address, it can be an IP address or domain name	Menu 24.10 time server
	sys timeserver timezone [-12 ~12]	Set time zone, -12 means GMT-12, 0 mean GMT, 12 means GMT+12.	Menu 24.10 time server
	sys timeserver daylightsaving active[yes no]	Set daylight saving	Menu 24.10 time zone
	sys timeserver daylightSaving start [month] [day]	Set daylight saving start day	Menu 24.10 daylight saving
	sys timeserver daylightSaving end [month] [day]	Set daylight saving end day	Menu 24.10 daylight saving
	sys timeserver save	Save time server and daylight saving setting	Menu 24.10 daylight saving
	sys timeserver checktime	Connect to time server and check time.	Menu 24
	sys timeserver display	Display time server and daylight saving setting	Menu 24
	sys server load	Load setting before editing	
	sys server access [ftp telnet web] [access type]	Set the server access type to be 0: ALL, 1: None, 2:LAN only, 3:WAN only	Menu 24.11 remote management
	sys server port [ftp telnet web] [port]	Set the server port number	Menu 24.11 remote management
	sys server secureip[ftp telnet web] [address]	Set the server security IP address	Menu 24.11 remote management
	sys server disp [1]	Display server settings in buffer, [1] means display flash	
	sys server save	Save the embedded server (remote management) parameters	
	ip policyRouting set index [set#] [rule#]	Set the index of IP routing policy set rule. You must apply this command first before you begin to configure the IP routing policy rules	Menu 25 IP routing policy
	ip policyRouting set name [set name]	Set the name of IP routing policy set	Menu 25 IP routing policy
	ip policyRouting set active [yes no]	Enable/Disable the rule	Menu 25 IP routing policy
	ip policyRouting set criteria protocol [protocol #]	Set the protocol ID of the rule	Menu 25 IP routing policy
	ip policyRouting set criteria serviceType [0: don't care 1: normal 2: min delay 3: max thruput 4: max reliable 5: min cost]	Set the IP routing policy criteria type of service	Menu 25 IP routing policy
	ip policyRouting set criteria precedence [0~7 8 =don't care]	Set the IP routing policy precedence	Menu 25 IP routing policy
	ip policyRouting set criteria packetlength [#]	Set the IP routing policy packet length	Menu 25 IP routing policy
	ip policyRouting set criteria lencomp [0: greater 1: less or equal 2: greater or equal 3: equal 4: not equal 5: less]	Set the IP routing policy len comp	Menu 25 IP routing policy
	ip policyRouting set criteria srcip [start ip] [end ip]	Set the IP routing policy source IP address	Menu 25 IP routing policy
	ip policyRouting set criteria srcport [start port] [end port]	Set the IP routing policy source port	Menu 25 IP routing policy
	ip policyRouting set criteria destip [start ip] [end ip]	Set the IP routing policy destination IP address	Menu 25 IP routing policy
	ip policyRouting set criteria destport [start port] [end port]	Set the IP routing policy destination port	Menu 25 IP routing policy
	ip policyRouting set action actmatched	Set the IP routing policy matched action	Menu 25 IP routing policy

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	ip policyRouting set action actnomatched	Set the IP routing policy no matched action	Menu 25 IP routing policy
	ip policyRouting set action gatewaytype [1 gateway node 0 gateway addr]	Set IP routing policy gateway type	Menu 25 IP routing policy
	ip policyRouting set action gatewayaddr [gateway address #]	Set IP routing policy gateway address	Menu 25 IP routing policy
	ip policyRouting set action gatewaynode [gateway node #]	Set IP routing policy gateway node	Menu 25 IP routing policy
	ip policyRouting set action serviceType [0: don't care 1: normal 2: min delay 3: max thruput 4: max reliable 5: min cost]	Set IP routing policy type of service	Menu 25 IP routing policy
	ip policyRouting set action precedence [0~7 8 =don't care]	Set IP routing policy precedence	Menu 25 IP routing policy
	ip policyRouting set action log [yes no]	Set IP routing policy log	Menu 25 IP routing policy
	ip policyRouting set display	Display the current IP routing policy setting	Menu 25 IP routing policy
	ip policyRouting set save	Save the current IP routing policy setting	Menu 25 IP routing policy
	ip policyRouting set freememory	free the current IP routing policy setting	Menu 25 IP routing policy
	ip policyRouting set clear	Clear the IP routing policy setting	Menu 25 IP routing policy
	ip policyRouting clear	Clear the IP routing policy count	Menu 25 IP routing policy
	ip policyRouting display	Display the IP routing policy count	Menu 25 IP routing policy
	ip policyRouting switch	Switch on or off IP routing policy count.	Menu 25 IP routing policy
	wlan load	Load system parameters into working buffer	Menu 3.5 for Wireless LAN
	wlan essid [name]	Set the wireless ESSID	Menu 3.5 for wireless LAN
	wlan hideessid [on off]	Set to hide ESSID or not	Menu 3.5 for wireless LAN
	wlan chid [#=1~13]	Set channel ID 1-13	Menu 3.5 for wireless LAN
	wlan threshold rts [value]	Set the RTS threshold value	Menu 3.5 for wireless LAN
	wlan threshold fragment [value]	Set fragment threshold	Menu 3.5 for wireless LAN
	wlan wep type [none 64 128]	Set the wep type to be none, 64bit or 128bits	Menu 3.5 for wireless LAN
	wlan wep key set [key set#1-4] [key value]	Set wep key value	Menu 3.5 for wireless LAN
	wlan wep key default [key set # 1-4]	Set default key set value	Menu 3.5 for wireless LAN
	wlan macfilter enable	Enable mac filter	Menu 3.5.1 for wireless LAN
	wlan macfilter disable	Disable mac filter	Menu 3.5.1 for wireless LAN
	wlan macfilter action [allow deny]	Set the action type of filter	Menu 3.5.1 for wireless LAN

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	wlan macfilter set [set# 1-12] [mac address]	Set the mac address of filter	Menu 3.5.1 for wireless LAN
	wlan clear	Clear Working Buffer	
	wlan save	Save wireless MAC filter parameters	
	wlan active[on/off] [0/1]	Turn on/off wireless lan	
	wlan association	Show association list	
	wlan removeSTA MAC_Addr(00a0c5123456)		
	wlan filter[incoming outgoing] <generic>[set#1][set#2][set#3][set#4]	To set generic filter for wireless channel	
	sys adjtime	retrive date and time from Internet	
	sys callhist add		
	sys callhist display	display call history	
	sys callhist display<index>	remove entry from call history	
	sys countrycode [countrycode]	set country code	
	sys date [year month date]	set/display date	
	sys domainname	display domain name	
	sys edit <filename>	edit a text file	
	sys extraphnum add <set 1-3> <1st phone num> [2nd phone num]	add extra phone numbers	
	sys extraphnum display	display extra phone numbers	
	sys extraphnum node	set all extend phone number to remote node <num>	
	sys extraphnum remove	remove extra phone numbers	
	sys extraphnum reset	reset flag and mask	
	sys feature	display feature bit	
	sys hostname [hostname]	display system hostname	
	sys logs category access [0:none/1:log]	record the access control logs	
	sys logs category attack [0:none/1:log/2:alert/3:both]	record and alert the firewall attack logs	
	sys logs category display	display the category setting	
	sys logs category error [0:none/1:log/2:alert/3:both]	record and alert the system error logs	
	sys logs category ipsec [0:none/1:log]	record the access control logs	
	sys logs category mten [0:none/1:log]	record the system maintenance logs	
	sys logs category upnp [0:none/1:log]	record upnp logs	
	sys logs category urlblocked [0:none/1:log/2:alert/3:both]	record and alert the web blocked logs	
	sys logs category urlforward [0:none/1:log]	record web forward logs	
	sys logs category ike [0:none/1:log/2:alert/3:both]	record the access control logs	
	sys logs category pki [0:none/1:log/2:alert/3:both]	record the pki logs	
	sys logs category cac[0:none/1:log]	record thecac logs	
	sys logs category anyip[0:none/1:log]	record the anyip logs	
	sys logs category antivirus [0:none/1:log/2:alert/3:both]	record the antivirus logs	
	sys logs category 8021x[0:none/1:log]	record the 8021x logs	
	sys logs clear	clear log	
	sys logs display	display all logs	
	sys logs errlog clear	clear log error	
	sys logs errlog disp	display log error	

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	sys logs errlog online	turn on/off error log online display	
	sys logs load	load the log setting buffer	
	sys logs mail alertAddr [mail address]	send alerts to this mail address	
	sys logs mail display	display mail setting	
	sys logs mail logAddr [mail address]	send logs to this mail address	
	sys logs mail schedule display	display mail schedule	
	sys logs mail schedule hour [0-23]	hour time to send the logs	
	sys logs mail schedule minute [0-59]	minute time to send the logs	
	sys logs mail schedule policy [0:full/1:hourly/2:daily/3:weekly/4:none]	mail schedule policy	
	sys logs mail schedule week [0:sun/1:mon/2:tue/3:wed/4:thu/5:fri/6:sat]	weekly time to send the logs	
	sys logs mail server [domainName/IP]	mail server to send the logs	
	sys logs mail subject [mail subject]	mail subject	
	sys logs mail sendmail		
	sys logs save	save the log setting buffer	
	sys logs syslog active [0:no/1:yes]	active to enable unix syslog	
	sys logs syslog display	display syslog setting	
	sys logs syslog facility [Local ID(1-7)]	log the messages to different files	
	sys logs syslog server [domainName/IP]	syslog server to send the logs	
	sys smt on	display smt	
	sys smt off	hide smt	
	sys stdio [second]	change terminal timeout value	
	sys datetime period		
	sys time [hour [min [sec]]]	display/set system time	
	sys tos display	display all runtime TOS	
	sys tos listPerHost	display all host session count	
	sys tos debug [on/off]	turn on or off TOS debug message	
	sys tos sessPerHost <number>	configure session per host value	
	sys tos dump		
	sys tos timeout display	display all TOS timeout information	
	sys tos timeout icmp <idle timeout>	set idle timeout value	
	sys tos timeout igmp <idle timeout>	set idle timeout value	
	sys tos timeout tcpsyn <idle timeout>	set idle timeout value	
	sys tos timeout tcp <idle timeout>	set idle timeout value	
	sys tos timeout tcpfin <idle timeout>	set idle timeout value	
	sys tos timeout udp <idle timeout>	set idle timeout value	
	sys tos timeout gre <idle timeout>	set idle timeout value	
	sys tos timeout esp <idle timeout>	set idle timeout value	
	sys tos timeout ah <idle timeout>	set idle timeout value	
	sys tos timeout other <idle timeout>	set idle timeout value	
	sys trcdisp	monitor packets	
	sys trclog switch [on/off]	set system trace log	
	sys trclog online [on/off]	set on/off trace log online	
	sys trclog level [level]	set trace level of trace log #:1-10	
	sys trclog type <bitmap>	set trace type of trace log	
	sys trclog disp	display trace log	
	sys trclog clear	clear trace	
	sys trclog call	display call event	

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	sys trclog encapmask [mask]	set/display tracelog encapsulation mask	
	sys trcpacket create <entry> <size>	create packet trace buffer	
	sys trcpacket destroy	packet trace related commands	
	sys trcpacket channel <name> [none incoming outgoing bothway]	<channel name>=enet0,sdsl00, fr0 set packet trace direction for a given channel	
	sys trcpacket string	enable smt trace log	
	sys trcpacket switch [on off]	turn on/off the packet trace	
	sys trcpacket disp	display packet trace	
	sys trcpacket udp switch [on off]	set tracepacket upd switch	
	sys trcpacket udp addr <addr>	send trace packet to remote udp address	
	sys trcpacket udp port <port>	set tracepacket udp port	
	sys trcpacket parse	parse packet content	
	sys trcpacket brief	display packet content briefly	
	sys version	display RAS code and driver version	
	sys view	view a text file	
	sys wdog switch [on off]	set on/off wdog	
	sys wdog cnt [value]	display watchdog counts value: 0-34463	
	sys romreset	restore default romfile	
	sys fwnotify load	load fwnotify entry from spt	
	sys fwnotify save	save fwnotify entry to spt	
	sys fwnotify url <url>	set fwnotify url	
	sys fwnotify days <days>	set fwnotify days	
	sys fwnotify active <flag>	turn on/off fwnotify flag	
	sys fwnotify disp	display firmware notify information	
	sys fwnotify check	check firmware notify event	
	sys fwnotify debug <flag>	turn on/off firmware notify debug flag	
	sys socket	display system socket information	
	sys filter clear	clear filter statistic counter	
	sys filter disp	display filter statistic counters	
	sys filter sw [on off]	set filter status switch	
	sys filter set <set>	display filter rule	
	sys filter netbios disp	display netbios filter status	
	sys filter netbios config <0:LAN to WAN, 1:WAN to LAN, 2:LAN to DMZ, 3:IPSec passthrough, 4:Trigger Dial> <on off>	config netbios filter	
	sys cpu display	display CPU utilization	
	sys upnp active [0:no/1:yes]	Activate or deactivate the saved upnp settings	
	sys upnp config [0:deny/1:permit]	Allow users to make configuration changes. through UPnP	
	sys upnp display	display upnp information	
	sys upnp firewall [0:deny/1:pass]	Allow UPnP to pass through Firewall.	
	sys upnp load	save upnp information	
	sys upnp reserve [0:no/1:yes]	Reserve UPnP NAT rules in flash after system bootup.	
	sys upnp save	save upnp information	
	sys packetscan display		

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	sys packetscan active		
	sys packetscan type [email http ftp] [yes no]		
	sys packetscan autoupdate display		
	sys packetscan autoupdate set [0:none 1:1hr 2:12hr 3:24hr]		
	sys packetscan autoupdate query		
	sys packetscan monitor session		
	sys packetscan monitor ftable		
	sys packetscan monitor create[number of session]		
	sys packetscan debug [0:Off 1:Pkt Scan 2:Online update level 1 3:Online update level 2 4:Virus detect]		
	sys packetscan backscan		
	sys packetscan save		
	sys packetscan version		
	sys packetscan overflowaction [forward block]		
	sys packetscan expire		
	sys packetscan lk		
	sys packetscan register [yes no]		
	sys atsh		
	sys atmu	display multi boot version	
	sys modemmode [crc checksum]		
	sys diag		
	sys routeip <on off>		
	sys bridge <on off>		
	sys save		
	sys display		
	sys password		
	sys default	Restore default Romfile.	
	sys winmes send [Host IP][Messages string][Retry]		
	sys winmes debug [0 1 2]		
	exit	exit smt menu	
	ether config	display LAN configuration information	
	ether driver cnt disp <name>	display ether driver counters	
	ether driver cnt clear <name>	clear ether driver counters	
	ether driver iface <ch_name> <num>	send driver iface	
	ether driver mac <ch_name> <mac_addr>	Set LAN Mac address	
	ether driver reg <ch_name>	display LAN hardware related registers	
	ether driver rxmod <ch_name> <mode>	set LAN receive mode. mode: 1: turn off receiving 2: receive only packets of this interface 3: mode 2+ broadcast 5: mode 2 + multicast 6: all packets	
	ether driver status <ch_name>	see LAN status	
	ether driver init <ch_name>	initialize LAN	
	ether driver config [0 1=auto normal]		

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	[0 1=10 100] [0 1=HD FD] <ch-name>		
	ether version	see ethernet device type	
	wan adsl chandata	ADSL channel data, line rate	
	wan adsl close	Close ADSL line	
	wan adsl linedata near	Show ADSL near end noise margin	
	wan adsl linedata far	Show ADSL far end noise margin	
	wan adsl open	Open ADSL line	
	wan adsl opencmd Glite	Open ADSL line with specific standard	
	wan adsl opencmd T1.413		
	wan adsl opencmd Gdmt		
	wan adsl opencmd multimode		
	wan adsl opencmd adsl2		
	wan adsl opencmd adsl2+		
	wan adsl opencmd adsl2_delt		
	wan adsl opencmd adsl2+_delt		
	wan adsl opencmd readsl2		
	wan adsl opencmd readsl2_delt		
	wan adsl opmode	Show the operational mode	
	wan adsl rateadap [on off]	Turn on/off rate adaptive mechanism	
	wan adsl perfdata	Show performance information,CRC,FEC, error seconds..	
	wan adsl reset	Reset ADSL modem, and must reload the modem code again	
	wan adsl Status	ADSL status (ex: up, down or wait for init)	
	wan adsl errorsecond shutdown		
	wan adsl targetnoise [value]	Adjust target noise offset	
	wan adsl driver		
	wan adsl vchunt Add <remoteNodeIndex> <vpi> <vci> <service bit(hex)>	Add a entry to hunting pool <remote node> : input the remote node index 1-8 <vpi> : vpi value <vci> : vci value <service>: it's a hex value, bit0:PPPoE/VC (1), bit1:PPPoE/LLC (2) , bit2:PPPoA/VC (4), bit3:PPPoA/LLC (8), bit4:Enet/VC (16), bit5 :Enet/LLC (32) For examples: If you need service PPPoE/LLC and Enet/LLC then the service bits will be 2+32 = 34 (decimal) = 22 (hex), you must input 22 Need to perform save after this command	
	wan adsl vchunt Remove <removeNodeId> <vpi> <vci>	Input remote node ID and vpi, vci value to remove the specific entry. System will save automatically.	
	wan adsl vchunt Active <yes no>	Enable VC auto hunting featurer	
	wan adsl vchunt display	Display the hunt pool	
	wan adsl vchunt Clear	Clear the configure buffer	
	wan adsl vchunt Save	Save current setting into ROM file	
	wan adsl vchunt timer	The waiting time before checking the hunting table result	
	wan adsl vchunt Send	Send VC hunt pattern again	
	wan adsl vchunt result	Check the result of VC auto hunting	
	wan adsl vchunt debug		
	wan adsl vchunt again		
	wan adsl vchunt webredir<enable:0 disable:1>		
	wan hwsar disp	Display hwsar packets incoming/outgoing information	

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	wan hwsar clear	Clear hwsar packets information	
	wan hwsar sendoam <vpi> <vci> <f5> <end-to-end> <type:0(AIS) 1(RDI) 2(LoopBack) 3(Continuity Check)>		
	wan hwsar driver config		
	wan hwsar driver register		
	wan hwsar driver oammode<mode:0(firmware mode) 1(disable firmware mode)>		
	wan hwsar driver dischan<channel>		
	wan hwsar driver tearoam <vpi> <vci> <f5> <end-to-end> <type:0(AIS) 1(Continuity Check)>		
	wan hwsar driver test<vpi> <vci> <count> <mode:0(send packet) 1(internal loopback)>		
	wan hwsar debug [on off]		
	wan zeroCfg status		
	wan zeroCfg on		
	wan zeroCfg off		
	wan zeroCfg flag <disable (1:zeroCfh / 2:auto-hunt / 4:password / 7:all)>		
	wan zeroCfg debug 1:enable / 0:disable		
	ip address [addr]	display host ip address	
	ip alias <iface>	alias iface	
	ip aliasdis <0 1>	disable alias	
	ip arp status <iface>	display ip arp status	
	ip dhcp <iface>		
	ip dhcp client release	release DHCP client IP	
	ip dhcp client renew	renew DHCP client IP	
	ip dhcp status [option]	show dhcp status	
	ip dns query address <ipaddr> [timeout]	resolve ip-addr to name	
	ip dns query debug <num>	enable dns debug value	
	ip dns query name <hostname> [timeout]	resolve name to ip-addr	
	ip dns query status	display dns query status	
	ip dns query table	display dns query table	
	ip dns stats clear	clear dns statistics	
	ip dns stats disp	display dns statistics	
	ip httpd debug [on off]	set http debug flag	
	ip ifconfig [iface] [ipaddr] [broadcast <addr> [mtu <value>]dynamic]	configure network interface	
	ip ping <hostid>	ping remote host	
	ip route status [if]	display routing table	
	ip route add <dest_addr default>[/<bits>] <gateway> [<metric>]	add route	
	ip route addiface <dest_addr default>[/<bits>] <gateway> [<metric>]	add an entry to the routing table to iface	
	ip route addprivate <dest_addr default>[/<bits>] <gateway>	add private route	

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	[<metric>]		
	ip route drop <host addr> [/<bits>]	drop a route	
	ip status	display ip statistic counters	
	ip udp status	display udp status	
	ip telnet <host> [port]	execute telnet client command	
	ip traceroute <host> [ttl] [wait] [queries]	send probes to trace route of a remote host	
	ip xparent join <iface1> [<iface2>]	join iface2 to iface1 group	
	ip xparent break <iface>	break iface to leave ipxparent group	
	ip igmp debug [level]	set igmp debug level	
	ip igmp forwardall [on/off]	turn on/off igmp forward to all interfaces flag	
	ip igmp querier [on/off]	turn on/off igmp stop query flag	
	ip igmp iface <iface> grouptm <timeout>	set igmp group timeout	
	ip igmp iface <iface> interval <interval>	set igmp query interval	
	ip igmp iface <iface> join <group>	join a group on iface	
	ip igmp iface <iface> leave <group>	leave a group on iface	
	ip igmp iface <iface> query	send query on iface	
	ip igmp iface <iface> rsptime [time]	set igmp response time	
	ip igmp iface <iface> start	turn on of igmp on iface	
	ip igmp iface <iface> stop	turn off of igmp on iface	
	ip igmp iface <iface> ttl <threshold>	set ttl threshold	
	ip igmp iface <iface> v1compat [on/off]	turn on/off v1compat on iface	
	ip igmp robustness <num>	set igmp robustness variable	
	ip igmp status	dump igmp status	
	ip igmp proxy		
	ip des test		
	ip des reset		
	ip urlfilter customize display	display customize action flags	
	ip urlfilter customize actionFlags [filterList disableAllExceptTrusted unblockR WFTToTrusted keywordBlock fullPath caseIns ensitive fileName][enable disable]	set action flags	
	ip urlfilter customize logFlags [type(1-3)][enable disable]	set log flags	
	ip urlfilter customize add [string] [trust untrust keyword]	add url string	
	ip urlfilter customize delete [string] [trust untrust keyword]	delete url string	
	ip urlfilter customize reset	clear all information	
	ip urlfilter general enable	enable/disable url filter function	
	ip urlfilter general display	display content filter's general setting	
	ip urlfilter general exemptZone display	display exemptzone information	
	ip urlfilter general exemptZone actionFlags [type(1-3)][enable disable]	set action flags	
	ip urlfilter general exemptZone add [ip1] [ip2]	add exempt range	
	ip urlfilter general exemptZone delete [ip1] [ip2]	delete exempt range	
	ip urlfilter general exemptZone reset	clear exemptzone information	
	ip urlfilter general reset	reset content filter's general setting	

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ip urlfilter general webFeature	[block/nonblock] [activex/java/cookie/webproxy]	
ip urlfilter general timeOfDay	[always/hh:mm] [hh:mm]	
ip urlfilter general blockingText	[text]	
ip urlfilter webControl enable	enable cbr_filter	
ip urlfilter webControl display	display cbr_filter's setting	
ip urlfilter webControl logAndBlock [log block both]	set log or block on matched web site	
ip urlfilter webControl category	set blocked categories	
ip urlfilter webControl serverList display	display current cbr_filter servers	
ip urlfilter webControl serverList refresh	refresh cbr_filter servers	
ip urlfilter webControl queryURL [url][Server localCache]	query url need to block or forward according the database on server or local cache	
ip urlfilter webControl cache display	display the local cache entries	
ip urlfilter webControl cache delete [entrynum All]	delete the local cache entries	
ip urlfilter webControl cache timeout [hour]	Set timeout value of cache entries	
ip urlfilter webControl blockonerror [log block][on off]	choose log or block when server is unavailable	
ip urlfilter webControl unratedwebsite[block log][on off]	choose log or block for unrated web site	
ip urlfilter webControl waitingTime [sec]	set waiting time for server	
ip urlfilter webControl list		
bridge cnt disp	display bridge route counter	
bridge cnt clear	clear bridge route counter	
bridge stat disp	display bridge route packet counter	
bridge stat clear	clear bridge route packet counter	
radius auth	show current radius authentication server configuration	
radius acct	show current radius accounting server configuration	
8021x debug level [debug level]	set ieee802.1x debug message level	
8021x debug trace	show all supplications in the supplication table	
8021x debug user [username]	show the specified user status in the supplicant table	
bm interface lan enable <bandwidth xxx>	Enable bandwidth management in LAN with bandwidth xxx bps. If the user doesn't set the bandwidth, the default value is 100Mbps.	
bm interface lan enable <wrr prr>	Select fairness-based(WRR) or priority-based(PRR) mechanism. the default value is fairness-based.	
bm interface lan enable <efficient>	Enable work-conserving feature.	
bm interface lan disable	Disable bandwidth management in LAN	
bm interface wan enable <bandwidth xxx>	Enable bandwidth management in WAN with bandwidth xxx bps. If the user doesn't set the bandwidth, the default value is 100Mbps.	
bm interface wan enable <wrr prr>	Select fairness-based(WRR) or priority-based(PRR) mechanism. the default value is fairness-based.	
bm interface wan enable <efficient>	Enable work-conserving feature.	
bm interface wan disable	Disable bandwidth management in WAN	
bm interface dmz enable <bandwidth xxx>	Enable bandwidth management in DMZ with bandwidth xxx bps. If the user doesn't set the bandwidth, the default value is 100Mbps.	
bm interface dmz enable <wrr prr>	Select fairness-based(WRR) or priority-based(PRR) mechanism. the default value is fairness-based.	

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	bm interface dmz enable <efficient>	Enable work-conserving feature.	
	bm interface dmz disable	Disable bandwidth management in DMZ	
	bm interface wlan enable <bandwidth xxx>	Enable bandwidth management in WLAN with bandwidth xxx bps. If the user doesn't set the bandwidth, the default value is 100Mbps.	
	bm interface wlan enable <wrr pr>	Select fairness-based(WRR) or priority-based(PRR) mechanism. the default value is fairness-based.	
	bm interface wlan enable <efficient>	Enable work-conserving feature.	
	bm interface wlan disable	Disable bandwidth management in WLAN	
	bm class lan add # bandwidth xxx <name xxx>	Add a class with bandwidth xxx bps in LAN. The name is for users' information.	
	bm class lan add # bandwidth xxx <priority x>	Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The default value is 3.	
	bm class lan add # bandwidth xxx <borrow on off>	The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The default value is off.	
	bm class lan mod # <bandwidth xxx>	Modify the parameters of the class in LAN. The bm bandwidth is unchanged if the user doesn't set a new value.	
	bm class lan mod # <name xxx>	Set the class' name.	
	bm class lan mod # <priority x>	Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The priority is unchanged if the user doesn't set a new value.	
	bm class lan mod # <borrow on off>	The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The borrow is unchanged if the user doesn't set a new value.	
	bm class lan del #	Delete the class # and its filter and all its children class and their filters in LAN.	
	bm class wan add # bandwidth xxx <name xxx>	Add a class with bandwidth xxx bps in WAN. The name is for users' information.	
	bm class wan add # bandwidth xxx <priority x>	Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The default value is 3.	
	bm class wan add # bandwidth xxx <borrow on off>	The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The default value is off.	
	bm class wan mod # <bandwidth xxx>	Modify the parameters of the class in WAN. The bandwidth is unchanged if the user doesn't set a new value.	
	bm class wan mod # <name xxx>	Set the class' name.	
	bm class wan mod # <priority x>	Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The priority is unchanged if the user doesn't set a new value.	
	bm class wan mod # <borrow on off>	The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The borrow is unchanged if the user doesn't set a new value.	
	bm class wan del #	Delete the class # and its filter and all its children class and their filters in WAN.	
	bm class dmz add # bandwidth xxx <name xxx>	Add a class with bandwidth xxx bps in DMZ. The name is for users' information.	
	bm class dmz add # bandwidth xxx <priority x>	Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The default value is 3.	
	bm class dmz add # bandwidth xxx <borrow on off>	The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The default value is off.	
	bm class dmz mod # <bandwidth xxx>	Modify the parameters of the class in DMZ. The bandwidth is unchanged if the user doesn't set a new value.	
	bm class dmz mod # <name xxx>	Set the class' name.	
	bm class dmz mod # <priority x>	Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The priority is unchanged if the user doesn't set a new value.	

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	bm class dmz mod # <borrow on off>	The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The borrow is unchanged if the user doesn't set a new value.	
	bm class dmz del #	Delete the class # and its filter and all its children class and their filters in DMZ.	
	bm class wlan add # bandwidth xxx <name xxx>	Add a class with bandwidth xxx bps in WLAN. The name is for users' information.	
	bm class wlan add # bandwidth xxx <priority x>	Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The default value is 3.	
	bm class wlan add # bandwidth xxx <borrow on off>	The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The default value is off.	
	bm class wlan mod # <bandwidth xxx>	Modify the parameters of the class in WLAN. The bandwidth is unchanged if the user doesn't set a new value.	
	bm class wlan mod # <name xxx>	Set the class' name.	
	bm class wlan mod # <priority x>	Set the class' priority. The range is between 0 (the lowest) to 7 (the highest). The priority is unchanged if the user doesn't set a new value.	
	bm class wlan mod # <borrow on off>	The class can borrow bandwidth from its parent class when the borrow is set on, and vice versa. The borrow is unchanged if the user doesn't set a new value.	
	bm class wlan del #	Delete the class # and its filter and all its children class and their filters in WLAN.	
	bm filter lan add # Daddr <mask Dmask> Dport Saddr <mask Smask> Sport protocol	Add a filter for class # in LAN. The filter contains destination address (netmask), destination port, source address (netmask), source port and protocol. You may set the value as 0 if you do not care the item.	
	bm filter lan del #	Delete a filter which belongs to class # in LAN.	
	bm filter wan add # Daddr <mask Dmask> Dport Saddr <mask Smask> Sport protocol	Add a filter for class # in WAN. The filter contains destination address (netmask), destination port, source address (netmask), source port and protocol. You may set the value as 0 if you do not care the item.	
	bm filter wan del #	Delete a filter which belongs to class # in WAN.	
	bm filter dmz add # Daddr <mask Dmask> Dport Saddr <mask Smask> Sport protocol	Add a filter for class # in DMZ. The filter contains destination address (netmask), destination port, source address (netmask), source port and protocol. You may set the value as 0 if you do not care the item.	
	bm filter dmz del #	Delete a filter which belongs to class # in DMZ.	
	bm filter wlan add # Daddr <mask Dmask> Dport Saddr <mask Smask> Sport protocol	Add a filter for class # in WLAN. The filter contains destination address (netmask), destination port, source address (netmask), source port and protocol. You may set the value as 0 if you do not care the item.	
	bm filter wlan del #	Delete a filter which belongs to class # in WLAN.	
	bm show interface lan	Show the interface settings of LAN	
	bm show interface wan	Show the interface settings of WAN	
	bm show interface dmz	Show the interface settings of DMZ	
	bm show interface wlan	Show the interface settings of WLAN	
	bm show class lan	Show the classes settings of LAN	
	bm show class wan	Show the classes settings of WAN	
	bm show class dmz	Show the classes settings of DMZ	
	bm show class wlan	Show the classes settings of WLAN	
	bm show filter lan	Show the filters settings of LAN	
	bm show filter wan	Show the filters settings of WAN	
	bm show filter dmz	Show the filters settings of DMZ	
	bm show filter wlan	Show the filters settings of WLAN	
	bm show statistic lan	Show the statistics of the classes in LAN	

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	bm show statistic wan	Show the statistics of the classes in WAN	
	bm show statistic dmz	Show the statistics of the classes in DMZ	
	bm show statistic wlan	Show the statistics of the classes in WLAN	
	bm monitor lan <#>	Monitor the bandwidth of class # in LAN. If the class is not specific, all the classes in LAN will be monitored. The first time you key the command will set it on; the second time you will set it off, and so on.	
	bm monitor wan <#>	Monitor the bandwidth of class # in WAN. If the class is not specific, all the classes in WAN will be monitored. The first time you key the command will set it on; the second time you will set it off, and so on.	
	bm monitor dmz <#>	Monitor the bandwidth of class # in DMZ. If the class is not specific, all the classes in DMZ will be monitored. The first time you key the command will set it on; the second time you will set it off, and so on.	
	bm monitor wlan <#>	Monitor the bandwidth of class # in WLAN. If the class is not specific, all the classes in WLAN will be monitored. The first time you key the command will set it on; the second time you will set it off, and so on.	
	bm config save	Save the configuration.	
	bm config load	Load the configuration.	
	bm config clear	Clear the configuration.	
	bm debug		
	bm defaultClassBw		
	sys firewall acl disp	Display specific ACL set # rule #, or all ACLs.	
	sys firewall active <yes no>	Active firewall or deactivate firewall	
	sys firewall cnt disp	Display firewall log type and count.	
	sys firewall cnt clear	Clear firewall log count.	
	sys firewall pktdump	Dump the 64 bytes of dropped packet by firewall	
	sys firewall update	Update firewall	
	sys firewall dynamicrule		
	sys firewall tcprst rst	Set TCP reset sending on/off.	
	sys firewall tcprst rst113	Set TCP reset sending for port 113 on/off.	
	sys firewall tcprst display	Display TCP reset sending setting.	
	sys firewall icmp		
	sys firewall dos smtp	Set SMTP DoS defender on/off	
	sys firewall dos display	Display SMTP DoS defender setting.	
	sys firewall dos ignore	Set if firewall ignore DoS in lan/wan/dmz/wlan	
	sys firewall ignore triangle	Set if firewall ignore triangle route in lan/wan/dmz/wlan	
	sys firewall schedule load [set # rule #]		
	sys firewall schedule display		
	sys firewall schedule save		
	sys firewall schedule week		
	sys firewall schedule timeOfDay [always/hh:mm]		
	autoSec start		
	autoSec duration <value(sec)>		
	autoSec port <port_num>		
	autoSec key <USER_KEY>		
	autoSec gui_start		