NCM HGU ONU (Optical Network Unit) WEB INTERFACE

NCM ONU Web Interface Indice

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Status

Device Basic Info

Display Device Type, Device ID, Hardware Version, Software Version

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Status

WAN Info

IPv4 Info

Display Interface Description, Type, NAT, State, DNS Address, IPv4 Address, PPPoE UP Time, Default Gateway, Subnet Mask, Primary DNS Server and Secondary DNS Server.

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Status

WAN Info

IPv6 Info

Display Interface Description, Type, State, DNS Address, Prefix, IPv6 Address, PPPoE UP Time, Default IPv6 Gateway, Primary IPv6 DNS Server, Secondary IPv6 DNS Server.

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

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Continue GPON Info

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<td>17204</td>
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<td>5910</td>
<td>391</td>
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<td>Frames</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
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<tr>
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<td>10</td>
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Warning Message

- Auto-power control failure: No
- Loss of signal: No
- Loss of link: No
- Loss of frame: No
- Loss of GEM channel delineation: No
- Failed signal: No
- Degraded signal: No
- Start-up failure: No
- Message error message: No
- Deactivate ONU-ID: No
- Disabled ONU: No
- Physical equipment error: No

LAN Info

GPON Info
Display GPON Info, Optical Module Info, The Package of Receive and Transmit and Warning Message

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Status

LAN Info

WLAN Info

Display WLAN Interface Info, WIFI Connection Status to display Enable or Disable Wi-Fi, Current Channel to display the channel our use, SSID-1 to display the name of SSID, SSID-1 Encryption and Authentication Method to display Encryption and Authentication Method. Receive and Transmit Package Statistics to display the packages send and receive.

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Status

LAN Info

ETH Info

Display ETH Info, IP Address to display LAN IPv4 Address, LAN IPv6 Address and MAC Address. Receive and Transmit Package Statistics to display the packages send and receive. Intranet Device Info to display IP Address of intranet devices, MAC Address and Device Type of LAN side.

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## NCM HGU ONU (Optical Network Unit) WEB INTERFACE

### Status

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**Access Terminal Limit**

Display Access Terminal limit number info.

---

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CATV Info
Display CATV Output Level acceptance and real value. Also Display accept optical power and real value.
NCM HGU ONU (Optical Network Unit) WEB INTERFACE
Status

Quick setup
Display a setup wizard to configure your way online and WLAN ID

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Network

WAN Connection

Connected Name: The WAN connection name. If you want to modify the WAN connection, choose the corresponding the WAN connection. If you want to add a WAN connection, choose the "Add new WAN".

Mode: Configuration bridge or route WAN connection. Bridge: need the PC of LAN side to dial. Route: the PC no needs to do dial.

IP Mode: You can select IPv4, IPv6 or IPv4 and IPv6 mode.

DHCP: The method of get IP address is DHCP; Static: Need to manually configure the IP address; PPPOE: The method of get IP address is PPPOE. When select PPPOE, the default disable "PPPOE Agent or PPPoE Hybrid Model of Route and Bridge". If you enable "PPPOE Proxy", the PC of LAN side will dial. If you enable "PPPoE Hybrid Model of Route and Bridge", the ONT will work at the route and bridge mode.

Get Address Mode: DHCP, through DHCP protocol; Static, manual configuration wan IP address; PPPOE, through PPPOE protocol get IP address.

MTU: The Maximum Transmission Unit.

NAT: Network Address Translation. If you make a IPv4 WAN connection, please enable NAT.

VLAN: If the WAN connection needs a VLAN, please enable VLAN and input the VLAN ID.

802.1p: The priority of VLAN, usually the server of ISP needs this parameter to make QoS.

Service model: Select TR069-specific channel or user access channel.

Bind Port: The port bind to the WAN connection, the data form the port will pass through the corresponding the WAN connection. And you need know, the last bind port will be available

IP Address: The IP address when you choose the static mode.

Subnet Mask: The subnet mask when you choose the static mode.

Default Gateway: The Default Gateway when you choose the static mode.

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE
Network

Continue WAN Connection

Primary DNS: The Primary DNS when you choose the static mode.

Secondary DNS: The Secondary DNS when you choose the static mode.

Get Address: The IPv6 Address form Server when choose the IP MODE is "IPv6" or "IPv6 and IPv4". When the Server is stateful, you need enable. When the Server is stateless, you no need.

Get Prefix: Get the prefix form Server. When Server support PD, enable it.

Automatic configuration DS-Lite: IPv6 parameter. When the ISP support DS-lite, enable it. Usually it no need to enable.

Default IPv6 Gateway: The IPv6 gateway address when you choose the static mode.

IPv6 Address: The IPv6 address of WAN connection when you choose the static mode.

IPv6 Prefix Length: The prefix length of the IPv6 address.

Primary IPv6 DNS: The IPv6 Primary DNS when you choose the static mode.

Second IPv6 DNS: The IPv6 Secondary DNS when you choose the static mode.

Manual Config DS-Lite: Enable the manual config the Ds-Lite.

DS-Lite Opposite end IPv6 addresses: The DS-Lite IPv6 address. When you select the "Manual Config DS-Lite", you need configure it.

Bind Data: This is a feature of VLAN Bind (ONLY for OTHER bridge WAN connection). The port has been bound with port can’t do VLAN bind, the final WAN connection binding VLAN data operation will flush out other WAN connection to the port VLAN data binding.

Username: The username for the PPPOE.

Password: The password for the PPPOE.

Service Name: The service name for the PPPOE. Usually it is NULL.

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Network

Continue WAN Connection

Dial Mode: The dial mode of PPPPOE. Usually choose the Automatic Connection. The PPPOE WAN connection will dial auto. "Connection by need" will dial when there are data form the LAN side.

IPTV

Connection Name: The WAN connection name which you use to watch IPTV live programs.

Public Multicast VLAN: The VLAN of OLT setting for live programs. When its value is -1, this feature is disabled.
NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Network

Bind
Here you can configure Port Binding and VLAN Binding

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Network

Unless otherwise noted, the above specifications reflect typical device performance at stated reference levels in the recommended operating configuration(s). Specifications are subject to change without notice.
IPv4 Setup

IP Address: IP address is a specific location on the LAN. This the local IP address for ONT.

Subnet Mask: The local IP address subnet mask, usually be 255.255.255.0.

Enable Loopback-Detection Control: Enable the loopback-detection control, mean enable the STP feature of LAN side.

Enable DHCP Server: Enable the LAN DHCP Server, then the address pool will enable.

PC Start Address: The start IP address of an available IP address pool. The IP address will follow the ONT local IP address. For example, the local IP address is 192.168.1.1, the available IP address must be as 192.168.1.x, and the IP address must not be the same to the local IP address of the ONT.

PC End Address: The end IP address of an available IP address pool. The max IP address is calculated the local IP address and the subnet mask. If the subnet mask is 255.255.255.0 and the local IP address is 192.168.1.1, the max IP address will be 192.168.1.254

Camera Start Address: Available IP range start address. The IP address must be follow the "PC End Address". The "STB Start Address" and "IP Phone Start Address" will comply with such rules.

Camera End Address: Available IP range end address. This IP address will be bigger than the Camera Start Address. The "STB End Address" and "IP Phone End Address" will comply with such rules.

Duration: IP address lease time.

DNS Relay: Two modes, Auto or Manual. When “Auto”, the PC of LAN side will get the DNS address form the local IP address. When “Manual”, the PC of LAN side will get the DNS address form Web GUI settings.

Enable DHCP Server Relay: If you enable DHCP Relay, the dhcp server address pool will not work. And you will input an available DHCP Server IP address.
NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Network

Continue IPv4 Setup

Reserved IP Address

At the bottom of Reserved IP Address table, you can find a "ADD" button. You can add a rule with a MAC address corresponding to a IP address. If you want to delete this rule, choose the delete after this rule, then click the Delete button.

MAC Address: MAC address is a specific location on the LAN.

IP Address: The reserved IP address for a MAC address.
NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Network

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Network

IPv6 Setup

IPv6 Address: The local IPv6 address for ONT. You can access Web GUI from LAN side with this IP address.

Enable RADVD: Choose means enable.

Enable DHCPv6 Server: Choose means enable.

LAN Address Access Mode: Two mode, Stateful and Stateless, choose one mode.

Stateful Address Generate Mode: When you select the "LAN Address Access Mode" is stateful, then have two generating address modes. The mode of From MAC Address means the IP address is calculated by DHCP + PC's MAC. The mode of From Host Number means the IP address is calculated by DHCP + Host Number. Start Interface ID, End Interface ID, DHCPv6 Lease Time and DHCPv6 Valid Time are used for the mode of From Host Number.

IPv6 DNS Relay: Enable, the DNS of LAN side will be the local IPv6 address of ONT. Disable, you can config it.

Get Prefix Mode: Two modes, one is get form WAN connection, another is static.
NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Network

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Network

WLAN
Here you can configure the wireless settings, advance security settings and you have also an example in each field.

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Network

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Network

QoS

QoS is a network security mechanism is used to solve issues such as network latency and blocking a technology. QoS refers to the messaging throughput, delay, delay jitter, loss rate performance.

US Bandwidth: The upstream bandwidth, when its value is 0kbps and the Enable QoS, but there is no QoS rule, it means the QoS disable.

Policy: Three policy. PQ, it is queue priority, there are four queues; WRR, it is Weighted Round Robin, there are four queues; CAR, you can configure the flow as you wish.

DSCP Mark: Differentiated Services Code Point bit mask. When you add a rule, you can input a DSCP value for it. The data flow will carry corresponding DSCP values.

TC Mark: Traffic control Mark, this mark for the IPv6 flow, enable this mark, if you add a rule, you can set this mark value.

802-1_P Mark: The 802.1 p field in the VLAN. Three modes, “0 mark”, “Transparent”, “Remark”. 0 mark: the QOS will not modify the 802.1p value of the flow. Transparent: the same to the 0 mark. Remark: the QOS will modify the 802.1p value of the flow into the configuration value.

PQ Queue Table: The table for PQ. There are four queues. Q1 is the highest, Q4 is the low. Usually enable the all queue. You can disable one queue, but it is not a good choice.

App Class Table: You can make rules based on the business. The ONT only support make rule based on TR069 business. If you add App class rule, you will see the rule in this table.

Traffic Class Table: You can make rules based on the traffic. You can choose the queue number, IP protocol, classification and so on. The classification is important.

Forced Bandwidth: Use for the WRR. Enable, the ONT will assign bandwidth according to the proportion of WRR. Disable, the ONT will assign like PQ.

WRR Queue Table: The table of WRR, you can configure the weight of every queue.

Flow Control: The table of the CAR flow table. If you add a CAR rule, then the rule will display in the table.
NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Network

Continue QoS

How to add a PQ rule? For example: we will make a rule for TR069(1), VOIP (2), IPTV (3), INTERNET (4). First, make sure you want to every business priority. Second, make rule in accordance with the order. TR069 is the first. Click the "add class" button, choose the "APP class" or "Traffic class". We choose the "App class", "App Name" is TR069; "Queue" is 1. Then click the "confirm" button. VOIP is second, add class and choose the "Traffic class". "Queue" is 2, "Protocol" is "New IPv4"(usually is IPv4), "Classification" is "WAN Interface", "Maximum" is the connection of VOIP, "Minimum" is the connection of VOIP, "Protocol" is "NONE"(if you have no requirements). Then click the "confirm" button. NOTE: 1. Config the "Maximum" first and the "Minimum" second. The IPTV and the INTERNET is the same to the VOIP. THEN YOU MUST click the "Save/Apply" button at the last. It is very important.

How to delete a PQ rule? First, choose the "Delete" at the rule list. Second, click the "delete class" button. At the last, click the "Save/Apply" button.

How to edit a PQ rule? First, choose the "Edit" at the rule list. Second, modify the rule. Third, click the "confirm" button and "Save/Apply" button.

How to add a WRR rule? This is the same to the add a PQ rule.

How to delete a WRR rule? This is the same to the delete a PQ rule.

How to edit a WRR rule? This is the same to the edit a PQ rule.

How to add a CAR rule? For example: we want to make a rule which the flow from the LAN1, the source IP address is 192.168.1.4, the destination IP address is 192.168.1.5, the source port is 78, the destination port is 79, the uplink rate is the 12kbps. First, click the "ADD" button. Second, make the rule, "IP Mode" is "IPV4"(usually is IPv4), "Protocol" is TCP, "Interface" is "LAN1", "Src IP" is "192.168.1.4", "src Subnet Mask" is "255.255.255.0", "Dest IP" is "192.168.1.5", "Dest Subnet Mask" is "255.255.255.0", "Src Port" is "78", "Dest Port" is "79", "Uplink rate" is 12. Third, click the "Apply" button. Fourth, make sure the value of the "US Bandwidth" is bigger than the "Uplink rate". If it right, then click the "Save/Apply" button.

How to delete a CAR rule? Frist, choose the "Delete" of the rule. Second, click the "Delete" button and "Save/Apply" button.
NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Network

Continue QoS

The Parameters of PQ or WAR

Queue: The queue number of rule.

IP Mode: IP mode, IPv4 or IPv6.

Classification: Eleven Classifications, SMAC is the source MAC address of flow; DMAC is destination MAC address of flow; 8021P is the flow 802.1p value of flow; SIP is the source IP address of flow; DIP is the destination IP address of flow; SPORT is the source port of flow; DPORT is the destination port of flow; TOS is the flow TOS bits in IPv4; DSCP is the flow DSCP bits in IPv4; WAN Interface is the WAN connection, it is mean the flow of this WAN connection; LAN Interface is the flow from this LAN interface.

Minimum: The minimum value of the match range. If you select a classification which can configure a range, you can input the minimum. If you select the WAN Interface or Lan Interface, please ensure that the maximum and minimum values are consistent. You may select the maximum first, then select the minimum.

Maximum: The maximum value of the match range. If you select a classification which can configure a range, you can input the maximum.

Protocol: Six modes, TCP means the TCP flow; UDP means the UDP flow; TCP, UDP means a TCP or UDP flow; ICMP means the ICMP flow; RTP means the RTP flow; NONE means any kinds of protocol flow.

The Parameters of CAR

IP Mode: IP mode, IPv4 or IPv6.

Protocol: Five protocols, TCP, UDP, ICMP, ICMPV6, mean the protocol of the flow; NONE means any kind of the protocol of flow.

Interface: The LAN interface, LAN1-LAN4, WLAN1-WLAN4.

Src IP: The source IP address of flow.

Src Subnet Mask: The subnet mask of source IP address.

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Network

Continue QoS

Dest IP: The destination IP address of flow.

Dest Subnet Mask: The subnet mask of destination IP address.

Src Port: The source port of flow.

Dest Port: The destination port of flow.

Uplink Rate: The maximum rate you want to allow the rule.
NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Network

QoS
Flowcache Settings
Here you can enable or disable flowcache

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Network

SNTP Settings

Configure the time of router to synchronize with Internet time servers, this need router connected to public network and NTP server is effective.

Current Time: 2018.02.15-10:59:07

Automatically Synchronize with Internet Time Servers

NTP Server Synchronize WAN Interface: With INTERNET Attributes

NTP Server Synchronize Interval [Units]: 06400

First NTP Server: time.nist.gov
Second NTP Server: ntp1.tummy.com
Third NTP Server: None
Fourth NTP Server: None
Fifth NTP Server: None

Time Zone Offset: (GMT-05:00) Eastern Time

Save/Apply

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Network

SNTP
NTP Server

In this page you can configure the time of router to synchronize with internet time servers, this need router connected to public network and NTP server is effective.

Time Settings

If you do not check the "Automatically Synchronize with Internet Time Servers", ONT will not synchronize the time. If check the "Automatically Synchronize with Internet Time Servers", you can select "NTP Server Synchronize WAN Interface", "NTP Server Synchronize Interval [Unit: s]", "NTP server".

NTP Server Synchronize WAN Interface: If you select "With INTERNET Attribute", the time will synchronize with Internet WAN connection. If you select "With VOICE Attribute", the time will synchronize with VOIP WAN connection. If you select "With TR069 Attribute", the time will synchronize with TR069 WAN connection. If you select "With OTHER Attribute", the time will synchronize with the OTHER WAN connection.

NTP Server Synchronize Interval [Unit: s]: The time interval to synchronize time with the WAN connection which you select.

First NTP Server: Select the first NTP time server to access from the pull-down list or select other and configure the IP address.

Second NTP Server: Select the second NTP time server to access from the pull-down list or select other and configure the IP address.

Third NTP Server: Select the third NTP time server to access from the pull-down list or select other and configure the IP address.

Fourth NTP Server: Select the fourth NTP time server to access from the pull-down list or select other and configure the IP address.

Fifth NTP Server: Select the fifth NTP time server to access from the pull-down list or select other and configure the IP address.

Time Zone Offset: Select the GMT offset from the pull-down list.

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Network

RIP Configuration

NOTE: RIP CANNOT BE CONFIGURED on the WAN interface which has NAT enabled (such as PPPoE).

To activate RIP for the WAN Interface, select the desired RIP version and operation and place a check in the 'Enabled' checkbox. To stop RIP on the WAN Interface, uncheck the 'Enabled' checkbox. Click the 'Apply' button to start/stop RIP and save the configuration.
NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Network

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Network

Route
In this page you can set "Static Routing" and "IPv6 Static Routing". Enter the destination network address, subnet mask, gateway AND/OR available WAN interface then click "Apply/Save" to add the entry to the routing table.

Static Routing
Destination IP Address: You can input the Destination IP address.

Gateway Address: If you want to use a gateway, you can set it in this, when you set, the static route will use the gateway, if you do not want to set, please do not check the box.

Interface: Please select a WAN connection as the interface. The packet will go through with the interface which you select.

IPv6 Static Routing
Destination IPv6 Address: You can input the Destination IPv6 address.

Subnet Prefix Length: Destination IP subnet mask length, you should fill the right length calculation "Destination IPv6 Address".

Gateway IPv6 Address: Input the Gateway IPv6 address.

Interface: Please select a WAN connection as the interface. The packet will go through with the interface which you select.

Metric: Metric is a routing algorithm is used to determine the best route to the destination of measurement standard
NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Security

URL Filter Settings

Please select the list type first then configure the list entries. Maximum 100 entries can be configured.

URL Address Filter:  ○ Enable  ○ Disable

URL List Type:  ○ Blacklist  ○ Whitelist

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Security

URL filter

URL Filter is used to refuse to the LAN to access a particular Web client computer side with URL. URL is a specific schedule for the regional network and a string. If any section of characters in the URL included in the block will not be accessed. If any section of the URL contains the word in the block, the page will not be displayed.

URL Address Filter: Enable or Disable. Default is Disable.

URL List Type: Two type, Blacklist and Whitelist. When you enable the Blacklist, the default is all URL can be accessed from LAN side. The URL in the Blacklist table will can't. The Whitelist is on the other hand. The default is all URL can't be accessed except the URL in the Whitelist table.

URL Address: If you click the "ADD" button, then you will see a page. Then you can input the URL address that you want to filter.
NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Security

Firewall

Firewall Level: Here you have three levels. High, Middle and Low. High, the firewall will disable the RTSP, SNMP, FTP, TELNET, NNTP, the VOIP service and the illegal access. Middle, the firewall will disable the RTSP, DNS, the VOIP service and the illegal access. Low, only drop the illegal access.

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Security

DDOS Setup

Enable or Disable. DDoS: (Distributed Denial of Service), if you enable, the ONT will enable the feature of protect from the DOS.

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Security

MAC Filter Settings

- MAC Filter: Enable/Disable
- Filter Mode: Blacklist/Whitelist

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MAC Filter

MAC (Media Access Control) Filtering Based on the user computer's MAC address to allow or deny access to LAN and the Internet. We can filter by MAC Filter to connect to the LAN port users and wireless users. Note: MAC Filter work on the ONT bridge mode.

MAC Filter: Enable or Disable, default value is disable.

Filter Mode: Two mode, Blacklist and Whitelist. After enabling the Blacklist, the default for all the MAC address can pass, but the MAC in the MAC Filter table is limited according to the corresponding rules. When enable the Whitelist, the default for all the MAC address can't pass, the MAC in the MAC Filter table is permitted according to the corresponding rules. The rules will be empty between Blacklist and Whitelist.
NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Security

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Security

IP Filter

Use the IP address filter refused to specific IP addresses access to information on the Internet. You can deny specific ports or specific IP address of all ports. The screen will show the defined ports. Want to use them, you can choose edit item. You only need to enter the LAN IP address of the computer to access the Internet can be defined.

IP Filter: Enable or Disable IP Filter. When the ONT have a route WAN connection, you can enable it.

Select Filter Type: Two types. Blacklist and Whitelist. Blacklist for LAN to WAN, Whitelist for WAN to LAN.

To add a Blacklist: First, choose the Blacklist in the Select Filter Type. Second, click the "ADD" button at the bottom of table. Third, full the rule and click the "Save/Apply" button. Filter Name: The name of rule, you can take any one name. IP Version: IPv4 or IPv6. Protocol: The protocol for the rules. Src IP Address(Range): A range of IP address, you can make a range for the source IP address. Src Subnet Mask: The subnet mask of source IP address. Des IP Address(Range): A range of IP address, you can make a range for the destination IP address. Des Subnet Mask: The subnet mask of destination IP address.

To delete a Blacklist? First, choose the "delete" of rule. Second, click the "Delete" button.

To add a Whitelist: This operation is the same to how to add a Blacklist. The only different is that we must choose one or more WAN connection as the interface. This means form this interface to the ONT will be allowed.

To del a Whitelist: First, choose the "delete" of rule. Second, click the "Delete" button.
NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Security

Access Control List

Here you can enable or disable each service and set a port.

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Application

DDNS Settings

Here you can enable or disable DNS Service.
NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Application

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Advance NAT

(Advance NAT can set ALG, DMZ, Virtual Server and Multi-NAT)

ALG Setup

H323: H.323 protocol is used to initiate sessions, it can control multiple participants take part in the establishment of multimedia session and an end, and can dynamically adjust and modify session attributes, such as session bandwidth requirement, transmission media types (voice, video, etc.), media codecs format support, radio, etc. H.323 protocol adopts Client/Server model, mainly through the Gateway (Gateway) and net keep communications between (Gatekeeper) to complete the user call for the establishment of the process. Gateway (Gateway) : used to connect H323 telephone terminal; Keep (Gatekeeper) : registration/location/proxy server, the gateway management, usually, we should enable it.

RTSP: Real time streaming protocol, is an application layer protocol in the TCP/IP protocol system, submitted by the Columbia, Netscape and RealNetworks company IETF RFC standards. The protocol defines a one-to-many application how to effectively transmit multimedia data over IP networks. Similar to the HTTP protocol flow control protocol. They all use plain text to send information, syntax is similar to HTTP and RTSP protocol, compared with the HTTP protocol RTSP protocol is different, the RTSP protocol is a stateful protocol, HTTP is a stateless protocol. RTSP by maintaining a session to maintain its state of transformation. The RTSP protocol's default port is 554, the default protocol for the TCP. Usually, we should enable it.

IPSEC: IPSEC through the end-to-end security to provide proactive protection from the attack of private network and the Internet. In communication, only the sender and the receiver must understand the IPSec protects the computer. In Windows 2000, Windows XP and Windows Server 2003 family, IPsec provides a kind of ability, in order to protect the group client and the Server, LAN computer, domain, branches (physically) for remote institutions, Extranet, and roaming communications between the client. Usually wo should enable it.

SIP: SIP (Session Initiation Protocol) is used to establish, change and terminate multimedia Session Control Protocol of application layer, the Session can be IP telephone and multimedia Session or multimedia conference. SIP is through a variety of head in the domain of information to manage the interaction of the session. And head in the domain related to the call setup contains the IP address and port information fields need to be ALG treatment, otherwise unable to correct the call. If you want to use IP telephone and multimedia Session or multimedia conference you should enable it. sipPort1: you can set the port. If you check SIP, when you make a call, the IP address will transform to public IP address. If you do not check SIP, when you make a call, the IP address will remain LAN IP address.
NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Application

Continue ALG Setup

L2TP: Layer 2 Tunnel Protocol, if enable L2TP the Gateway will allow the LAN side pc to use VPN eEmployee access by means of the specific number to the enterprise internal network.

FTP: FTP have two different working modes: PORT (active mode) and PASV (passive mode). FTP need two connections: the control connection and data connection, the control connection to FTP control commands and command information transmission; Data connection is dedicated to transfer data (upload/download). Active mode (PORT) connection process is: the client program will be randomly assigned to a TCP PORT for yourself first, it USES the PORT to the server of FTP PORT (default is 21) issued a connection request, the server accepts requests after will set up a control link, then the client send a PORT command to the server (usually format for PORT A1, A2, A3, A4, P1, P2, A1, A2, A3, A4 for the client IP address, P1, P2 for random a data connection PORT, the PORT number is equal to P1 * 256 + P2), tell the server it’s data channel ports opened. When need to transmit data, the server to the client to provide the random PORT connection request, the request is accepted after began to transmit data, active mode, you need to do to ALG is dealing with the PORT a message from the client. Passive Mode (PASV) connection process is the client program for their first randomly assigned a TCP port, use the port to the server of FTP port connection request, the server accepts requests after will set up a control link, and then the client program from PASV command requires that the server USES the PASV model data connection, the server then randomly assigned to a data channel port for yourself, and tell the port number to the client program (usually format for: if Passive Mode (A1, A2, A3, A4, P1, P2), A1, A2, A3, A4 for the server IP address, P1, P2 as random port number). When need to transmit data, the client program using a random port channel port to send data to the server provides the connection request, the request is accepted after began to transmit data, the data link channel open, passive mode, you need to do to PASV from ALG treatment is the server response message. Usually, we should enable it.

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Advance NAT

DMZ Setup

Enable DMZ host: If you do not check Enable DMZ host, the DMZ function will not come into effect.

DMZ Host IP Address: You can fill the IP address of LAN side. If you set up a HTTP server on the IP address, when visit internet WAN connection IP address such as “http://133.2.3.4/test.html”, it will visit the test.html on IP address of LAN side.

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Application

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Application

Advance NAT

Virtual Server

Server Name: Select a service, such as (SMTP), (POP3), (HTTP), FTP Server, and TFTP. The selected entries will be displayed in the table below the box.

Custom Service: If the "Server Name" have not you want to select, you can enter the service name to establish a new type of service specified by the user.

Server IP Address: the IP address of LAN side that you want to use to assign to a specific virtual server.

External Port Start/External Port End: When you select a service, port number is automatically displayed, but also can change.

Protocol: Select the correct protocol for the service.

Internal Port Start/Internal Port End: When you select a service, port number is automatically displayed, but also can modify. From the Internet to the external port all data will be forwarded to the Server IP Address, you should set up the server of protocol, which you select.

Multi-NAT Settings

Select WAN Connection: You can select a WAN connection.

Local Start IP Address: You can set start IP address of LAN side.

Local End IP Address: You can set end IP address of LAN side. The addresses will be mapped to the corresponding section of public IP address.

Public IP Address: You can set one Public IP Address that you get from the ISP.
NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Application

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Application

UPnP

UPnP (Universal Plug and Play). If you want to use this, you must make sure the operating system of PC support UPNP, and the software of PC support UPnP, for example BitComet.

UPnP Service: Enable or Disable, default value is disable, if you want to use, please enable it.

Start IP: The start IP address of IP address range that you want to disable the UPnP of PC from LAN side.

End IP: The end IP address of IP address range that you want to disable the UPnP of PC from LAN side. If you want to disable one IP address, you can make the start IP address and the end IP address the same. Then click the "add" button.

Block IP list of LAN side: The list of block IP, if you want to delete one rules, you can choose the "delete" of rule, then click the "Delete" button.
IGMP

IGMP Snooping

Enable IGMP Snooping: Default value is enable. If you use a bridge WAN connection, please enable IGMP snooping, then you can watch IPTV. If enable "the IGMP Snooping", the multicast group, multicast data will not be on the second floor is broadcast, and on the second floor be multicast to the specified recipient. If disable "IGMP Snooping", the second floor is broadcast multicast data, all PC of LAN side will receive the multicast data.

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IGMP

IGMP Proxy

The WAN connection table of IGMP Proxy: IGMP Proxy is used for the INTERNET route WAN connection, you can enable the corresponding WAN connection for IPTV. If enable the "IGMP Proxy", only the PC of LAN side which join the multicast group can receive multicast data. If disable the "IGMP Proxy", all PC of LAN side can receive multicast data.

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MLD

MLD Snooping Settings

Here you can enable or disable MLD (Multicast Listener Discovery) Snooping. MLD Snooping allows the switch to examine MLD packets and make forwarding decisions based on their content.

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Application

MLD

MLD Snooping Proxy

Here you can save/apply MLD proxy configuration

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Application

Daily Application

IPTV

Here you can enable IPTV

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Management

User Info

Here you can modify the password of admin and user account. You can input a new password up to 16 characters.

Modify admin password: for change the password of "admin", but you must know the old password of this account.

Modify user password: for change the password of "user" account.

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Management

Device

Device Restart

Here you can restart the Router.

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Device

Factory default

Here you can go back to the factory values.
NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Management

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</table>

Step 1: Get the image file from your ISP.
Step 2: Select the image file to be upgraded.
Step 3: Click the "Upgrade image" button to upload the image file.

Note: The upgrade process takes about 2 minutes to complete, and then the device will restart.

Choose File: No file chosen

Upgrade image

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Management

System Log Settings

If log level is open, the system will begin to record the event have been selected.
For log level, all the event which equal or above the selected level will be recorded.
For select level, all the event which equal or above the selected level will be recorded.

If the selected mode is "Remote", events will be sent to the specific IP address and UDP port of the remote server (Usually it is a ACS log server). If the selected mode is "Local", events will be recorded by local storage. If you select mode is "Both", events will be recorded by local storage and sent to the remote system log server.

Select the value you want and click on "Save/Apply" to configure these system log options.

Log
- Disable
- Enable

Log Level
- Debugging

Display Level
- Debugging
- Local

Mode
- Local

Save/Apply

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Management

Log File

System Log

To set the system log level option.

Log: enable or disable the system log.

Log Level: for select level of writing in system log. The low level is Emergency, the high level is Debugging. If the higher level, log will have more detail.

Display Level: for select level of log display. When you view the log, it will display the log follow the settings.

Mode: the mode of storage, three modes. "Remote", the ONT will send the log to the remote log server. "Local", the ONT will store the log at local. "Both", the ONT will send the log to remote and store the log at local.

Server IP: IP address of remote log server.

Server UDP Port: UDP port of remote log server.
NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Management

System Record Settings:
You can view the system record.
View the system access record by clicking "Access Record".
View the system safety record by clicking "Safety Record".

Besides after enable logging, you can create a log file and clear the system records.

Safely Record  Access Record  Create Log file  Clear History
NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Management

Log File

System Record

To display the system log information.

Access Record: To display the access Record log of ONT.

Safety Record: To display the safety Record log of ONT.

Create Log File: To create two log files at the /var/log, access record and safety record.

Clear History: To clear all logs.
NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Management

Maintain

Here you can click "Maintenance End" button and the system will automatically modified data reported to the server.

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Diagnosis

Line Test

For diagnose the current connections in your local network, including the LAN and wireless connection. You can click "Rerun Diagnostic Tests" to confirm the status is consistent. The result will display the connection state.

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Diagnosis

Ping Test
To diagnose IPv4 and IPv6 addresses to communicate with the destination IP address or domain name. The result will display the connection state.

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NCM HGU ONU (Optical Network Unit) WEB INTERFACE

Diagnosis

Tracert Test

To determine the IP datagram access to the target path taken, you can track the IP address or domain name. The result will display the connection path.
Interface: you can select the connection you want to test.
Destination IP address or Host Name: you can input IP address or URL you want to test.

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