

ZXHN H3600

Home Gateway

Maintenance Management Guide

Version:V1.0

ZTE CORPORATION

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Chapter 1

Safety Precautions



Before using the device, read the following safety precautions. ZTE bears no liability to the consequences incurred by violation of the safety instructions.

Usage Cautions

- Read all the safety cautions carefully before using the device.
- Only use the accessories included in the package, such as power supply adapter.
- Do not extend the power cord, otherwise the device will not work.
- The power supply voltage must meet the requirements of the device input voltage (
 The voltage fluctuation range is less than 10%).
- Keep the power plug clean and dry to prevent any risk of electric shock or other dangers.
- Disconnect all the cables during a lightning storm to prevent the device from damage.
- Power off and unplug the power plug when the device is not in use for a long time.
- Do not attempt to open the covers of the device. It is dangerous to do so when the device is powered on.
- Power off and stop using the device under the conditions such as, abnormal sound, smoke, and strange smell. Contact the service provider for maintenance if the device is faulty.

Environment Requirements

- Ensure proper ventilation to the device. Place the device away from direct sunlight.
- Keep the device ventilated and dry. Never spill any liquid on the device.
- Do not place any object on the device to prevent any deformation or damage to the device.
- Do not place the device near any source of heat or water.

 Keep the device away from any household appliances with strong magnetic or electric fields, such as microwave oven and refrigerator.

Cleaning Requirements

- Before cleaning, power off the device, and unplug all the cables connected to the device, such as power cable, optical fiber, and Ethernet cable.
- Do not use any liquid or spray to clean the device. Use a soft dry cloth.

Environment Protection

- Do not dispose the device or battery improperly.
- Observe the local regulations about the equipment disposal or treatment.

Restrictions in the 5 GHz Band

According to Article 10(10) of Directive 2014/53/EU, the packaging shows that this radio equipment will be subject to some restrictions when placed on the market in Belgium (BE), Bulgaria (BG), the Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL),Spain (ES), France (FR), Croatia (HR), Italy (IT),Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE), Turkey (TR), Norway (NO), Switzerland (CH), Iceland (IS), and Liechtenstein (LI).

The WLAN function for this device is restricted to indoor use only when operating in the 5150 MHz to 5350 MHz frequency range.

RF Exposure Information

The Maximum Permissible Exposure (MPE) level is calculated based on a distance of d=20 cm between the device and the human body. To maintain compliance with the RF exposure requirement, a separation distance of 20 cm between the device and the human should be maintained.

EU Declaration of Conformity

Hereby, ZTE Corporation declares that the radio equipment type ZXHN H3600 is in compliance with Directive 2014/53/EU, The full text of the EU declaration of conformity is available at the following Internet address:

http://support.zte.com.cn/support/cer/EU

Environmental Information

The equipment you purchased has required the extraction and use of natural resources for its production. It may contain substances that are hazardous to people's health and to the environment. To avoid putting such substances into our environment and to reduce pressure on our natural resources, we ask that you reuse or recycle your end-of-life equipment by using an accredited electronics take-back system.

The symbols below indicate that this product should be reused or recycled and not simply discarded. Please locate and use an appropriate reuse and recycling site.

If you need more information on collection, reuse and recycling systems, contact your local or regional waste administration. You may also contact your equipment provider for more information on the environmental performances of these products.





Chapter 2 Product Overview

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Hardware Connection1	

The ZXHN H3600 is an advanced home gateway that supports Dual-band concurrent 11 ac Wi-Fi. It provides High Speed Internet, IPTV services through the GE uplink. Those services are delivered by the gateway on your home network to the PCs, STBs, gaming devices and so on via the integrated interfaces: Ethernet, Wi-Fi.

It supports the following features:

- Gigabit Ethernet WAN Uplink
 The ZXHN H3600 can provide Internet access through Gigabit Ethernet WAN connection. So it is possible for ZXHN H3600 to provide Internet access choices to suit various broadband access network.
- GE LAN Ports
 The ZXHN H3600 is equipped with 2 Gigabit Ethernet LAN interfaces which provides higher bandwidth and speed for networking and makes the device more future-proof.
- Dual Band Concurrent Wi-Fi
 The ZXHN H3600 supports Dual-Band concurrent Wi-Fi up to 300Mbps(802.11n 2x2 @ 2.4GHz) and 1.7Gbps(802.11ac 4x4 @5GHz). Wi-Fi is a key feature for the end users to build up a home network without any cabling in the house or in the office.
- IPv4 / IPv6 Dual Stack
 The ZXHN H3600 supports IPv4 / IPv6 dual stack mechanism for IPv6 network migration.
- Remote management
 The ZXHN H3600 supports TR-069, including TR-098 data model. It is convenient
 for operators to facilitate the large-scale deployment and maintenance by zero-touch
 provisioning.

2.1 Package Check

Please ensure the ZXHN H3600 package contains the following items.

Name	Quantity
ZXHN H3600	1
Power Adapter	1
RJ-45 Ethernet cable	1
User Manual	1

The actual items included in the package are subject to the telecommunication operator. If any of the components is incorrect, or damaged, contact the product agency. If you want to change the product, keep the packing box and components.

2.2 Product Specifications

Table 2-1 describes the product specification of the ZXHN H3600.

Table 2-1 Product Specification

Technical Specifications			
Dimensions	226 mm (H) × 32 mm (D) × 156 mm (W)		
Power adapter	Input: AC 100 V – 240 V, 50 Hz/60 Hz		
	Output: DC 12.0 V, 1.5 A		
Environment Requirements			
Operation temperature	0 °C to 40 °C (32 °F to 104 °F)		
Storage temperature	-40 °C to 70 °C (-40 °F to 158 °F)		
Operation humidity/ Storage humidity	5% – 95% (non-condensing)		
Wi-Fi Radio Specifications			
Radio Frequencies	Maximum Output Power		
Wi-Fi 2.4 GHz band: 2400 MHz–2483.5 MHz	EIRP: 20 dBm		
Wi-Fi 5 GHz band: 5150 MHz–5250 MHz	EIRP: 23 dBm		
Wi-Fi 5 GHz band: 5250 MHz–5350 MHz	EIRP: 23 dBm		
Wi-Fi 5 GHz band:	EIRP: 30 dBm		

5470 MHz–5725 MHz

2.3 Hardware Description

Front Panel

Figure 2-1 shows the indicators on the front panel of the ZXHN H3600

Figure 2-1 The Front Panel

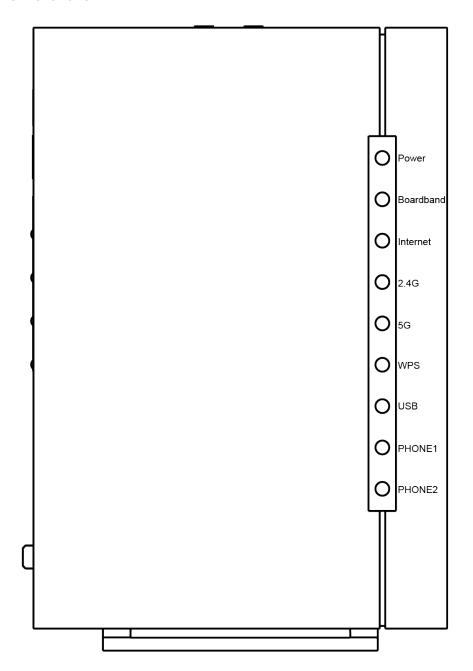


Table 2-2 describes the indicators on the front panel of the ZXHN H3600 unit.

Table 2-2 Descriptions of Indicators

LED Indicator	Status	Description
	Off	The device is powered off.
Power	Solid green	The device is powered on properly.
	Solid red	The device is performing self-detection or the self-detection fails.
Broadband	Off	The equipment is not powered on or the WAN port is disabled.
(WAN)	Solid green	The Ethernet connection has been established.
	Off	The gateway is switched off.
Internet	Solid green	The WAN connection is online. The device has a WAN IP address from IPCP, DHCP or statically configured. LED remains green in the case of disconnection due to idle timeout when PPP dial-on-demand is enabled. Green LED indicates that the routing connection state is up.
	Solid red	The WAN connection is dialing up or fails to get online. Device attempted to become IP connected and failed (no DHCP response, no PPPoE response, PPP authentication failed, no IP address from IPCP, etc).
	Flashing green	The Internet connection has been established and the data is being transmitted or received.
	Off	WLAN RF switch is off.
	Solid green	WLAN RF switch is on.
2.4G	Flashing green	WLAN RF switch is on and the data is being transmitted or received, and the flashing frequency indicates Wi-Fi network traffic.
	Off	WLAN RF switch is off.
	Solid green	WLAN RF switch is on.
5G	Flashing green	WLAN RF switch is on and the data is being transmitted or received, and the flashing frequency indicates Wi-Fi network traffic.
WDS	Off	No WPS access or the WPS access of the terminal exceeds 5 minutes.
WPS	Solid green	WPS access is successful. This solid-on light will be automatically off after 5 minutes.

LED Indicator	Status	Description
	Flashing slowly green	WLAN terminal is in WPS accessing process.
	Flashing fast green	The WPS accessing of the WLAN terminal is faulty.
	Off	The device is powered off or the USB interface is not connected.
USB	Solid green	The USB interface is connected with USB device.
	Flashing green	Data is being transmitted or received via the USB interface.
PHONE1	Off	The device has not been registered to the VOIP network.
PHONE2	Solid green	The device has registered to the VOIP network.
	Flashing green	The associated telephone is off-hook.
	Off	The LAN connection has not been established.
LAN1\LAN2\	Solid green	The LAN connection has been established.
LAN3\LAN4	Flashing green	Data transmission is in processing, The indicator flashes according to the LAN traffic.

 The LAN1\LAN2\LAN3\LAN4 status indicator is on the LAN1\LAN2\LAN3\LAN4 port of the ZXHN H3600.

Top Panel

Figure 2-2 shows the buttons on the top panel of the ZXHN H3600.

Figure 2-2 The Top Panel

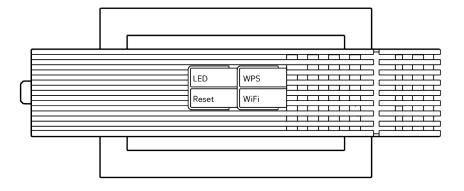


Table 2-3 describes the buttons on the top panel of the ZXHN H3600.

ZTE

Table 2-3 Descriptions of the Top Panel

Button	Function
Reset	Reset push button. During power on period, press this button for more than 5 seconds to reset the current settings to the factory default.
LED	LED control button. Press the button to turn off all the indicators on the panel. To turn on the indicators, press the button again.
WPS	WPS Push Button. Press this button to enable or disable the WPS function.
WiFi	Wi-Fi dual-interfaces on/off button.

Side Panel

Figure 2-3 shows the buttons on the side panel of the ZXHN H3600.

Figure 2-3 The Side Panel

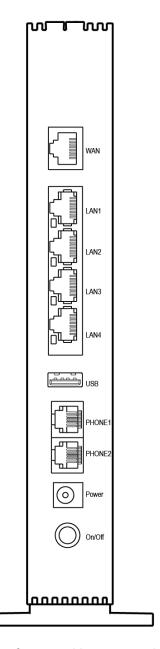


Table 2-4 describes the interfaces and buttons on the side panel of the ZXHN H3600.

Table 2-4 Descriptions of the Side Panel

Interface/Button	Function
WAN	RJ-45 port. It is used to connect to the uplink Ethernet access network.
LAN1\LAN2\ LAN3\LAN4	RJ-45 port. It is used to connect the modem to computer, STBs or other network devices.
USB	Standard USB 2.0 interface, connected to a USB storage device, printer or 3G Dongle connection.
PHONE1	RJ-11 port. It is used to connect to the phone through the telephone line.

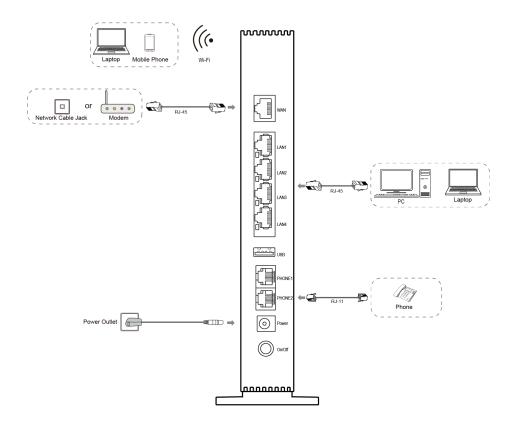
ZTE 2 Product Overview

Interface/Button	Function
PHONE2	
Power	Power supply port. It is connected to the power adapter.
On/Off	Power switch. Power on or power off the device.

2.4 Hardware Connection

Figure 2-4 shows the devices that are connected to interfaces of the ZXHN H3600

Figure 2-4 Cable Connection



After the devices are connected to the ZXHN H3600 device, press the power button. When the corresponding indicators on the front panel are on, you can enjoy various services provided by the service provider.

The factors affecting the wireless network coverage range include the location of the product, distance between the product and a wireless terminal, number of obstacles, obstacle material and density, and interference source. It is recommended that you place the product in accordance with the following principles to maximize the strength of wireless signals.

- The product should be far away from the objects affecting wireless signal propagation, for example, an object with a high reflectivity such as a metallic object or a mirror.
- The product should be far away from an electrical appliance with a strong magnetic or electric field, for example, a microwave oven, a refrigerator, a wireless router, a cordless phone, or a Bluetooth product.
- The product should be installed on the same floor as the applied area.
- Do not put other objects on the product. Try to reduce the number of obstacles between the product and a wireless terminal.
- Horizontally place the product in the middle of the applied area and do not put it in a corner.
- Do not place the product at a high position while it is placed horizontally. The recommended height is 1.2 to 1.5 meters.

Chapter 3

Configuration Preparation

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Login	14

This manual uses the Windows operating system as an example for describing how to configure the ZXHN H3600. Before configuring the ZXHN H3600, you need to perform the following operations:

- Ensure that a crossover or straight-through Ethernet cable connects a computer to the device.
- Ensure that the TCP/IP configuration on the computer is correct.
- Stop any firewall or other security software operating on the computer.
- Disable the proxy setting of Internet Explorer.

3.1 Configure TCP/IP

To log in to the ZXHN H3600 on a computer, you need to set the IP address of the computer to ensure that the IP address of the computer and the maintenance IP address of the ZXHN H3600 are in the same network segment.

Context

The default maintenance IP address of the ZXHN H3600 is as follows:

IP address: 192.168.1.1

Subnet mask: 255.255.255.0Default gateway: 192.168.1.1

Steps

- Use an Ethernet cable to connect a local computer to the LAN interface of the ZXHN H3600
- 2. On the local computer, double-click **Local Area Connection** and click **Properties**. The **Local Area Connection Properties** dialog box is displayed.

- 3. Double-click Internet Protocol (TCP/IP). The Internet Protocol (TCP/IP) Properties dialog box is displayed. Set the IP address to 192.168.1.200, subnet mask to 255.255.255.0, and default gateway to 192.168.1.1.
- 4. Click OK.

Postrequisite

After the IP address of the computer is set, you can run the **Ping** command to ping the IP address 192.168.1.1. If the ping operation is successful, it indicates that the TCP/IP configuration is correct and the computer is properly connected to the ZXHN H3600.

3.2 Login

The ZXHN H3600 provides a Web-based configuration and management system. You can enter a specified IP address in the address bar of Internet explorer to access the system.

Prerequisite

A computer is directly connected to the LAN port of ZXHN H3600, and their IP addresses are in the same network segment.

Steps

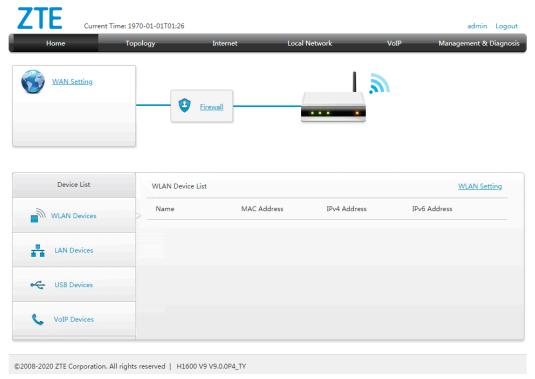
 Open Internet explorer, and enter http://192.168.1.1 (default maintenance IP address of the ZXHN H3600) in the address field. Press the Enter key. The login page is displayed, see Figure 3-1.

Figure 3-1 Login Page



2. Enter your username and password and click **Login**. The configuration page is displayed, see Figure 3-2.

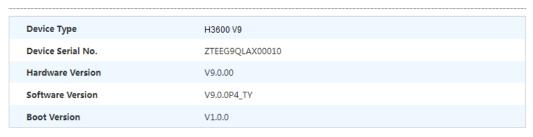
Figure 3-2 Configuration Page



Check the device Information. select Management & Diagnosis > Status. The page indicates whether the hardware version and software version are correct, see Figure 3-3. Click Refresh to get the latest information.

Figure 3-3 Device Information Page

▼ Device Information



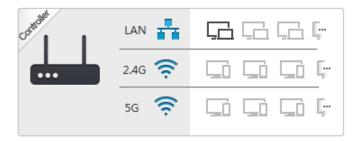
Refresh

Chapter 4 Topology

In the controller status and agent status, the corresponding topologies are different.

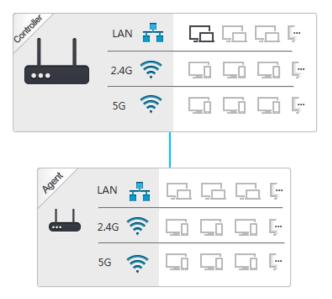
 If ZXHN H3600 is set to controller status, the corresponding topology diagram is shown in Figure 4-1.

Figure 4-1 Controller Status



 If ZXHN H3600 is set to agent status, the corresponding topology diagram is shown in Figure 4-2.

Figure 4-2 Agent Status



Chapter 5

Configure the Internet

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5.1 Check the Status

5.1.1 Check the Ethernet Interface Information

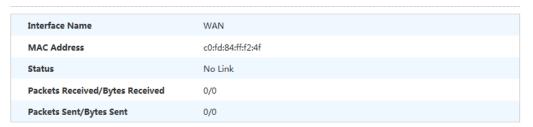
The section describes how to check the Ethernet interface status.

Steps

1. On the main page of the ZXHN H3600, select Internet > Status > Ethernet Interface Information to the Ethernet Interface Information page, see Figure 5-1.

Figure 5-1 Ethernet Interface Information

▼ Ethernet Interface Information



Refresh

2. Click **Refresh** to refresh the information.

5.1.2 Check the Ethernet Connection Status

The section describes how to check the Ethernet connection status.

Steps

On the main page of the ZXHN H3600, select Internet > Status > Ethernet Connection Information to the Ethernet Connection Information page, see Figure 5-2.

Figure 5-2 Ethernet Connection Information

▼ Ethernet Connection Status

Connection Name	DHCP	
Туре	DHCP	
IP Version	IPv4	
NAT	On	
IP Address	0.0.0.0/0.0.0	
DNS	0.0.0.0/0.0.0.0/0.0.0.0	
IPv4 Gateway	0.0.0.0	
Remaining Lease	0 h 0 min 0 s	
IPv4 Connection Status	Disconnected	Renew Release
IPv4 Online Duration	0 h 0 min 0 s	
Disconnect Reason	No Carrier	
WAN MAC	d4:b7:09:bf:ef:ec	

Refresh

2. Click Refresh to refresh the information.

5.1.3 Check the 3G Status

Abstract

The section describes the 3G status.

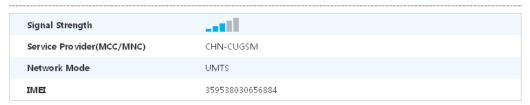
Steps

Check the Mobile Network Information

On the main page of the ZXHN H3600, select Internet > Status > 3G > Mobile Network to go to the Mobile Network page. The signal strength can verify the network card is plugged, see Figure 5-3.

Figure 5-3 Mobile Network

▼ Mobile Network



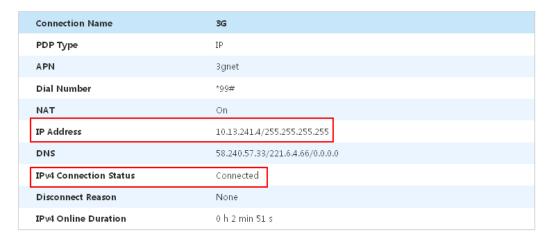
Refresh

2. Click **Refresh** to refresh the information.

Check the 3G Connection Status

On the main page of the ZXHN H3600, select Internet > Status > 3G > 3G Connection Status to go to the 3G Connection Status page, see Figure 5-4.

Figure 5-4 3G Connection Status



Refresh

2. Click **Refresh** to refresh the information.

5.2 Configure the WAN

5.2.1 Configure the Ethernet Connection

This procedure describes how to configure the Ethernet on the network side, so that user services can be connected to the external network.

The ZXHN H3600 supports route-based and bridge-based WAN connections.

- Routing connection
- Bridge-based connection

Steps

1. On the main page of the ZXHN H3600, select Internet > WAN > Ethernet to the Ethernet Connection page, see Figure 5-5.

Figure 5-5 Ethernet Connection page

▼ Ethernet Connection

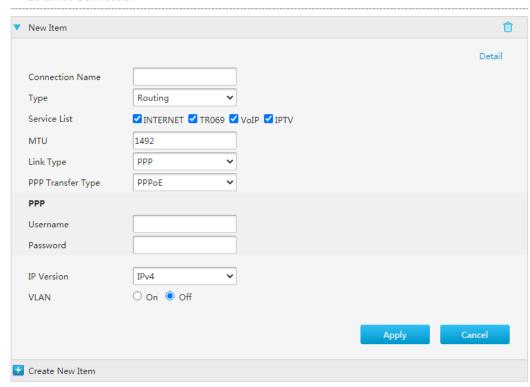


Table 5-1 lists the new item parameters.

Table 5-1 Parameter Descriptions for the Ethernet

Parameter	Description
Connection Name	Name of the connection.
Туре	The connection type includes Routing and Bridge Connection . In this case, Routing is selected.
Service List	Options: INTERNET, TR069, VoIP, IPTV. This parameter must be consistent with service configuration. For example, if INTERNET is selected, it indicates that the WAN connection supports the Internet access service only. If TR069 is selected, it indicates that the WAN connection supports remote management.
мти	Define the maximum transfer unit. In this case, default value is 1492.

Parameter	Description		
Link Type	There are two link types: PPP and IP.		
PPP Transfer Type	In this case, default value is PPPoE.		
PPP			
Username/Password	PPPoE user name and password. They are provided by the ISP.		
IP Version	The IP version includes: IPv4 and IPv6 IPv4/v6 In this case, IPv4 is selected.		
IPv4			
IP Type	By default, it is set to DHCP. Options: • DHCP: The DHCP server automatically allocates a dynamic IP address to the device. • Static: You need to specify a static IP address for the device.		
IP Address	IP Address of ZXHN H3600.		
Subnet Mask	Subnet mask of ZXHN H3600.		
Gateway	It is usually the IP address of the ZXHN H3600 by default.		
DNS1-DNS3	IP address of the DNS server for static connections. You can set up to three IP addresses for the server. These IP addresses are provided by the ISP.		
NAT	Enable or disable the NAT function.		
IPv6	IPv6		
IPv6 Info Acquire Mode	Specifies how to acquire IPv6 information for the WAN connection. It is valid only if the WAN connection supports IPv6. The options are: Manual :You need to set the global address, gateway, and DNS acquisition modes. Auto :The global address, gateway, and DNS acquisition modes are automatically configured.		
Request PD	By default, the On button is selected.		
Unnumbered Mode	By default, the On button is not selected. If it is selected, Specifies how to acquire the global IPv6 address.		
GUA Allowed From	Specifies how to acquire the global IPv6 address. It is valid only when the IPv6 Info Get Mode parameter is set to be Manual Mode. Options:		

Parameter	Description
	 DHCPv6: The device acquires a global address through DHCPv6. If no option is selected, it indicates that no address acquisition mode is configured. PD: You need to set a static IPv6 address. SLAAC: The device generates a global address in accordance with the RA packets from the upper-layer server.
GUA	Mode of obtaining global address.
Gateway	It is usually the IPv6 address of the ZXHN H3600 device by default.
PD	Prefix Delegation.
DNS1-DNS3	IPv6 address of the DNS server for static connections. You can set up to three IPv6 addresses for the server. These IPv6 addresses are provided by the ISP.
VLAN	Specifies whether to carry a VLAN tag in the packets sent over the WAN connection. By default, On button is not selected. If it is selected, a VLAN tag is carried in the packets sent over the WAN connection, and the VLAN ID must be set.
VLAN ID	Identifies a VLAN. Range: 0–4094. To ensure normal service operation, the VLAN ID must be the same as that set in upper-layer MDU configuration.



In the ZXHN H3600 provisioning, configure only one Internet-WAN connection and delete other WAN connections.

2. Click **Apply** button to apply the changes.

5.2.2 Configure the 3G

A Dongle device can be connected to ZXHN H3600 through a USB interface. If the Dongle has a 3G(SIM) card inserted, the ZXHN H3600 can access the Internet through the Dongle device.

This page provides the parameters of the 3G connection configuration function.

Configuration Process

Table 5-2 lists the 3G process of configuring the WAN connection.

Table 5-2 3G Configuration Process

Steps	Operations	Instructions
1	Insert 3G device.	Null.
2	Check the 3G device status.	The signal strength can verify whether the network card is plugged.
3	Create a 3G WAN connection.	Click Create New Item on the page, and create a new 3G connection.
4	Check the 3G connection status.	The IP address getting from carries can verify that the 3G WAN Connection based on IPv4 was completed successfully.



What to do when 3G device is not ready?

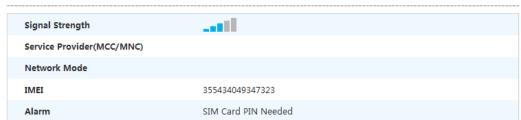
- 1. Check whether the dongle is plugged in.
- 2. If the device is already plugged in, please check whether the USB is contacted well.
- If the device is still unrecognized, maybe it has been damaged. Please replace the device.

Steps

- 1. Insert 3G device.
- 2. On the main page of the ZXHN H3600, select Internet > Status > 3G > Mobile Network to the Mobile Network page. The signal strength can verify the network card is plugged, as shown in Figure 5-6.

Figure 5-6 Mobile Network

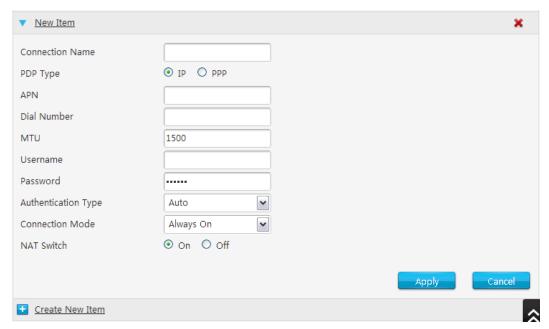
▼ Mobile Network



Refresh

3. On the main page of the ZXHN H3600, select **Internet > WAN > 3G** to the **3G Connection** page, as shown in Figure 5-7.

Figure 5-7 New 3G Connection



4. Set the parameters and click **Apply**. For a description of the parameters, refer to Table 5-3.

Table 5-3 New 3G Connection parameters

Parameter	Description
Connection Name	Name the 3G connection. For example "3G".
PDP Type	There are two PDP types: IP PPP
APN	Set the communication standard of the access network to be used. For example "3gnet".
Dial Number	Dial Number. Different communication standards have different dial numbers. For example "*99#".
МТИ	Define the maximum transfer unit.
Username/Password	The Username/Password of new 3G connection.
Authentication Type	There are three authentication types: • Auto • PAP • CHAP
Connection Mode	There are two connection modes: • Always On

Parameter	Description
	On Demand
Auto-disconnected without traffic	Setting this parameter when Connection Mode is On Demand .
NAT Switch	Select on/off NAT switch function.

5. On the main page of the ZXHN H3600, select Internet > Status > 3G to the 3G Working Mode page, as shown in Figure 5-8.

Figure 5-8 3G Working Mode

▼ 3G Working Mode



6. Set the parameters and click **Apply**. For a description of the parameters, refer to Table 5-4.

Table 5-4 3G Working Mode parameters

Parameter	Description
3G Mode	Enables or disables the 3G Working function.
Backup Interval	Sets the interval after which services are switched to the standby line when the active line is interrupted.
Recovery Primary Uplink Interval	Sets the interval after which services are switched back to the active line when the active line is recovered.

Result

On the main page of the ZXHN H3600, select **Internet > Status > 3G** to the **3G Connection Status** page, as shown in Figure 5-9.

Figure 5-9 3G Connection Status

▼ 3G Connection Status

Connection Name	3G
PDP Type	IP
APN	3gnet
Dial Number	*99#
NAT Switch	On
IP Address	10.13.241.4/255.255.255.255
DNS	58.240.57.33/221.6.4.66/0.0.0.0
Connection Status	Connected
Disconnect Reason	None
Online Time	0 h 2 min 55 s

Refresh

5.3 Configure the QoS

5.3.1 Configure the QoS Global Parameters

This page provides the function of QoS switch and other global parameters configuration. Packets that match no classification rules will be processed according to the default policy showed in this page.

Steps

On the main page of the ZXHN H3600, select Internet > QoS > QoS Global Configuration to the QoS Global Configuration page, see Figure 5-10.

Figure 5-10 QoS Global Configuration page

- 2. Set radiobox On to enable QoS function.
- 3. Click **Apply** button to apply the changes.

5.3.2 Configure the QoS Classification

This page provides the parameters of QoS classification configuration features.

Steps

- On the main page of the ZXHN H3600, select Internet > QoS > Classification to the Classification page.
- 2. Click to create new QoS classification, see Figure 5-11.

Figure 5-11 New QoS Classification Page

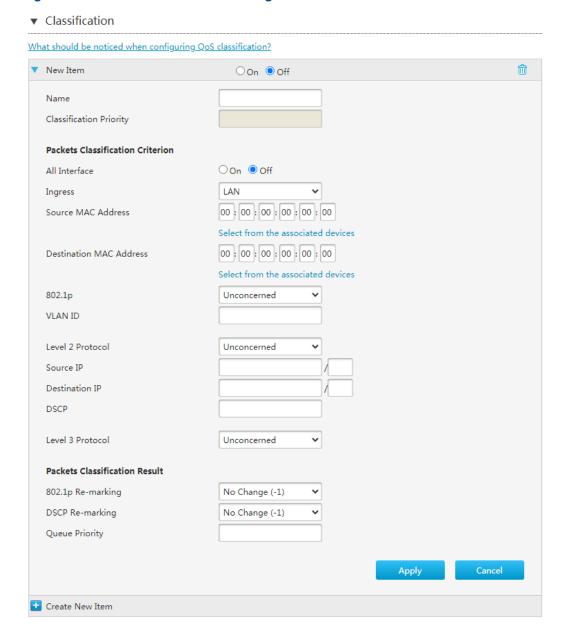


Table 5-5 lists the QoS classification Configuration parameters.

Table 5-5 Parameter Descriptions for the QoS Classification

Parameter	Description
On/Off	Set radiobox On to enable the function of classification.

Parameter	Description
Name	To create a QoS classification, enter the name of the classification.
Classification Priority	It can be modified by ISP.
Packets Classification Crite	rion
All Interface	Set radiobox On to enable all Interface.
Ingress	Specify the data traffic direction.
Source MAC Address	Source host MAC address.
Destination MAC Address	Destination host MAC address.
802.1p	Specify the 802.1p value to modify the service priority.
VLAN ID	Identifies a VLAN. Range: 0–4094. To ensure normal service operation, the VLAN ID must be the same as that set in upper-layer configuration.
Level 2 Protocol	The level 2 protocol includes: Unconcerned, IPv4, IPv6, ARP and PPPoE.
Source IP	Source host IP address.
Destination IP	Destination host IP address.
DSCP	DSCP value.
Level 3 Protocol	The Level 3 Protocol includes: Unconcerned, TCP, UDP and ICMP.
Source Port	Source port number of the matching packets.
Destination Port	Destination port number of the matching packets.
TCP ACK	Set radiobox On to enable the function of TCP ACK.
Packets Classification Result	
802.1p Re-marking	802.1p identifier value.
DSCP Re-marking	DSCP identifier.
Queue Priority	Range:1-8.

3. Click **Apply** button to apply the changes.

5.3.3 Configure the QoS Congestion Management

The procedure provides the parameters of QoS congestion management configuration features.

Steps

1. On the main page of the ZXHN H3600, select Internet > QoS > Congestion Management to open the Congestion Management page, see Figure 5-12.

Figure 5-12 Congestion Management

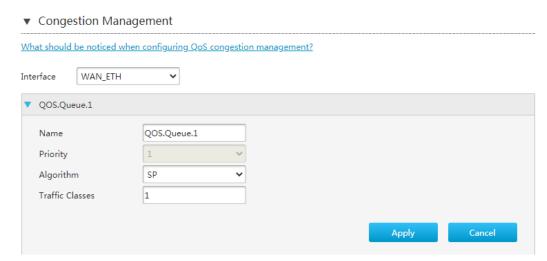


Table 5-6 lists the QoS congestion management parameters.

Table 5-6 QoS Congestion Management Parameters

Parameter	Description
Queue Switch	Select On to enable the function of queue. Select Off to disable the function of queue.
Name	To create a QoS congestion, enter the name of the congestion.
Priority	Queue priority. Range: 1 – 4. Each queue has a priority, queue priority is higher, the lower the priority value, and the SP queue priority value must be less than WRR queue.
Algorithm	 Options: SP: Under the same interface, if a queue's algorithm is SP, its priority must not be used by other queues. DWRR: If there are four queues, and four weights, which are 100% in total, can be configured for the queues, the packets for each queue are sent according to open the corresponding weight.
Weight	Weight value of the WRR/WFQ algorithm. If the weight values in the four rules are respectively 6, 3, 2, 1, the bandwithd for the value of 3 is 3/ (6+3+2+1)=25%.
Traffic Classes	Categorization mechanism.

Parameter	Description
	Traffic Classes is used to bind classification to a queue. Use "," to join
	numbers when binding several classifications, e.g. "1,2,10". Please note
	that different queues in an interface cannot bind the same classification.

2. Click **Apply** button to apply the changes.



- Each interface can be configured up to 8 queues. When the queues of interface are emptied, scheduling policies will be removed.
- Under the same interface, if a queue's algorithm is SP, its priority must not be used by other queues.
- There is a default queue in every interface. If not specified, the first queue will
 work as the default queue, otherwise, the last setting queue will be the default
 queue. Note that the default queue will automatically enabled and can not be disabled.
- "Traffic Classes" is used to bind classification to a queue. Use "," to join numbers when binding several classifications, e.g. "1,2,10". Please note that different queues in an interface cannot bind the same classification.

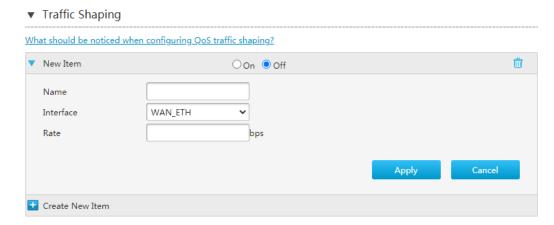
5.3.4 Configure the QoS Traffic Shaping

The procedure provides the parameters of QoS traffic shaping configuration features.

Steps

1. On the main page of the ZXHN H3600, select Internet > QoS > Traffic Shaping to open the Traffic Shaping page, see Figure 5-13.

Figure 5-13 Traffic Shaping



2. Set the parameters.

Table 5-7 lists the QoS traffic shaping parameters.

Table 5-7 QoS Traffic Shaping parameters

Parameter	Description
On/Off	Click On to enable the traffic shaping function. Click Off to disable the traffic shaping function.
Name	New QoS traffic shaping name.
Interface	Select an interface from the drop-down list.
Rate	Committed access rate. Range: 0,8192 – 1000000000. The shaping rate value of 0 indicates no speed limit.

3. Click **Apply** button to apply the changes.

5.4 Configure the Security

5.4.1 Configure the Firewall Level

The section describes how to configure firewall level.

Steps

Configure the Firewall

 On the main page of the ZXHN H3600, select Internet > Security > Firewall to the Firewall page, see Figure 5-14.

Figure 5-14 Firewall Page



2. Set the parameters. For a description of the parameters, refer to Table 5-8.

Table 5-8 Firewall Parameter Descriptions

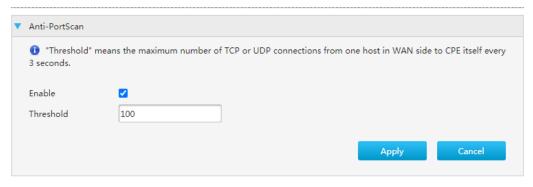
Parameter	Description
Firewall Level	 High: allows legal access from the WAN but forbids Internet devices from sending ping packets to the WAN interface of the ZXHN H3600. Middle(Recommended): allows legal access from the WAN and blocks dangerous data from the Internet. Low: allows legal access from the WAN and allows Internet devices to send ping packets to the WAN interface of the ZXHN H3600.

Configure the Anti-DoS Attack

 On the main page of the ZXHN H3600, select Internet > Security > Firewall to the Anti-DoS Attack page, see Figure 5-15.

Figure 5-15 Anti-DoS Attack Page

▼ Anti-DoS Attack



2. Set the parameters. For a description of the parameters, refer to Table 5-8.

Table 5-9 Anti-DoS Attack Parameter Descriptions

Parameter	Description
Enable	To enable the Anti-PortScan to be configured, select this check box.
Threshold	Threshold means the maximum number of TCP or UDP connections from one host in WAN side to CPE itself every 3 seconds.

3. Click Apply button to apply the changes.

5.4.2 Configure the Filter Criteria

The section describes how to configure filter criteria.

Steps

Configure the Filter Switch and Mode

- On the main page of the ZXHN H3600, select Internet > Security > Filter Criteria to the Filter Criteria page.
- 2. Click **Filter Switch and Mode Configuration** to the configuration page, see **Figure** 5-16.

Figure 5-16 Filter Switch and Mode Configuration Page

▼ Filter Switch and Mode Configuration



3. Configure filter switch and mode configuration parameters, see Table 5-10.

Table 5-10 Parameter Descriptions for the Filter Switch and Mode Configuration

Parameter	Description
URL Filter	Set radiobox On to enable the URL filter function.
Mode	There are two modes: Black List: Addresses in the URL Filter list are not allowed to access. White List: Only addresses in the URL Filter list can be accessed.

4. Click **Apply** button to apply the changes.

Configure the URL Filter

1. Click **URL Filter** to open **URL Filter** page, see Figure 5-17.

Figure 5-17 URL Filter Page

▼ URL Filter



2. Table 5-11 lists the URL filter parameters.

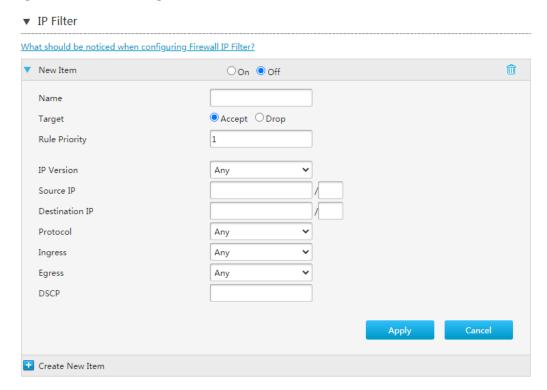
Table 5-11 Parameter Descriptions for the URL Filter

Parameter	Description
Name	The name of the URL filter.
URL	The URL address.

Configure the IP Filter

1. Click IP Filter to open the IP filter page, see Figure 5-18.

Figure 5-18 IP Filter Page



2. Table 5-12 lists the IPv4 filter parameters.

Table 5-12 Parameter Descriptions for the IPv4 Filter

Parameter	Description
On/Off	Set radiobox On to enable the function of IP filter.
Name	Name of the IP filter item. The name must be specified.
Target	Specify to discard or permit the data packages.
Rule Priority	Specify the value to modify the service priority.
IP Version	The IP version includes:Any, IPv4 , IPv6.

Parameter	Description
Source IP/Destination IP	Source/Destination destination IP address.
Protocol	Select the protocol that needs to filter packets. By default, it is Any.
Ingress	 Specify the data traffic direction. The Ingress option and egress option cannot be the same. If the ingress is LAN, the egress should be a WAN or 3G connection. The data traffic direction is upstream. If the ingress is a WAN or 3G connection, the egress should be the LAN. The data traffic direction is downstream.
Egress	 Specify the data traffic direction. The Ingress option and egress option cannot be the same. If the ingress is LAN, the egress should be a WAN or 3G connection. The data traffic direction is upstream. If the ingress is a WAN or 3G connection, the egress should be the LAN. The data traffic direction is downstream.
DSCP	A DSCP is specified for the TOS byte in the IP header of each packet to indicate the priority. Range: 0–63.

5.4.3 Configure the Local Service Control

The section describes how to configure local service control.

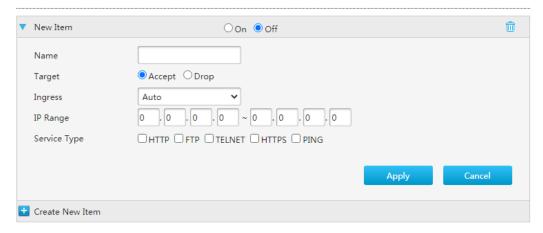
Steps

Configure the Service Control-IPv4

- 1. On the main page of the ZXHN H3600, select Internet > Security > Local Service Control to the Local Service Control page.
- 2. Click Service Control-IPv4 to open Service Control-IPv4 page, see Figure 5-19.

Figure 5-19 Service Control-IPv4 Page

▼ Service Control - IPv4



3. Configure the service control-IPv4 parameters.

Table 5-13 lists the local service control-IPv4 parameters.

Table 5-13 Parameter Descriptions for the Service Control-IPv4

Parameter	Description
On/Off	Click On to enable the function. Click Off to disable the function.
Name	Name of the Service Control item. The name must be specified.
Target	Specify to discard or permit the data packages.
Ingress	Specify the data stream inbound direction, and this parameter must be specified. If the Ingress is WAN_AII, all the WAN connection can access ZXHN H3600. If the Ingress is LAN, the LAN side can access ZXHN H3600.
IP Range	The IP address segment that needs to be filtered. When the IP segment is null, it refers to all the IP addresses.
Service Type	Specify the service that is permitted or denied to access.

4. Click **Apply** button to apply the changes.

Configure the Service Control-IPv6

1. Click Service Control-IPv6 to open Service Control-IPv6 page, see Figure 5-20.

Figure 5-20 Service Control-IPv6 Page

▼ Service Control - IPv6

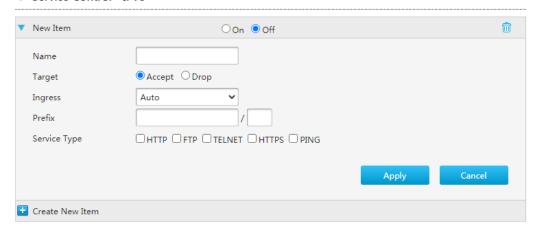


Table 5-14 lists the Service Control-IPv6 parameters.

Table 5-14 Parameter Descriptions for the Service Control-IPv6

Parameter	Description
On/Off	Click On to enable the function. Click Off to disable the function.
Name	Name of the Service Control item. The name must be specified.
Target	Specify to discard or permit the data packages.
Ingress	Specify the data stream inbound direction, and this parameter must be specified. If the Ingress is WAN_AII, all the WAN connection can access ZXHN H3600. If the Ingress is LAN, the LAN side can access ZXHN H3600.
Prefix	IPv6 address prefix.
Service Type	Type Specify the service that is permitted or denied to access.

2. Click **Apply** button to apply the changes.

Configure the Remote Service Port Control-IPv4

Click Remote Service Port Control - IPv4 to open Remote Service Port Control - IPv4 page, see Figure 5-21.Remote Service Port Control - IPv4 Page

Figure 5-21 Remote Service Port Control - IPv4 Page

▼ Remote Service Port Control - IPv4



Table 5-15 lists the remote service port control - IPv4 parameters.

Table 5-15 Parameter Descriptions for the Remote Service Port Control - IPv4

Parameter	Description
НТТР	The remote service port control of HTTP.
FTP	The remote service port control of FTP.
TELNET	The remote service port control of TELNET.
HTTPS	The remote service port control of HTTPS.

2. Click **Apply** button to apply the changes.

5.4.4 Configure the ALG

The section describes how to configure ALG. **ALG** provides the relevant parameters of security configuration function.

Steps

1. On the main page of the ZXHN H3600, select **Internet > Security > ALG** to the **ALG** page, the page see Figure 5-22.

Figure 5-22 ALG Configuration Page



- 2. Select the ALG services.
- 3. Click **Apply** button to apply the changes.



- Click All On to select all ALG services.
- Click All Off to cancel all ALG services.

5.4.5 Configure the DMZ

The section describes how to configure DMZ. **DMZ** provides the parameters of DMZ configuration features.

Steps

On the main page of the ZXHN H3600, select Internet > Security > DMZ to the DMZ page, the page see Figure 5-23.

Figure 5-23 DMZ Configuration Page



Table 5-16 lists the DMZ parameters.

Table 5-16 Parameter Descriptions for the DMZ

Parameter	Description
DMZ Switch	Enable the DMZ host function.
LAN Host	The IP address or the MAC address of the computer at the LAN side.

5.4.6 Configure the Port Forwarding

This procedure introduces how to configure Port Forwarding so that a computer from the external network can access the LAN-side server through the WAN connection. Port Forwarding provides the parameters of Port Forwarding configuration features. If you have local servers for different services and you want to make them publicly accessible, you need to specify the port forwarding policy. With NAT applied, it translates the internal IP addresses of these servers to a single IP address that is unique on the Internet.

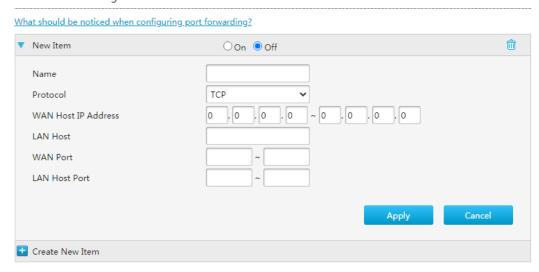
To the Internet users, all virtual servers on your LAN have the same IP Address. This IP Address is allocated by your ISP. This address should be static, rather than dynamic, to make it easier for Internet users to connect to your servers. However, you can use dynamic DNS feature to allow users to connect to your virtual servers by using a URL, instead of an IP address.

Steps

1. On the main page of the ZXHN H3600, select Internet > Security > Port Forwarding to the Port Forwarding page, the page see Figure 5-24.

Figure 5-24 Port Forwarding Configuration Page

▼ Port Forwarding



2. Configure the Port Forwarding parameters.

Table 5-17 lists the Port Forwarding settings parameters.

Table 5-17 Parameter Descriptions for the Port Forwarding

Parameter	Description
On/Off	Set radiobox On to enable the port forwarding function.
Name	Virtual host name, which cannot be null.
Protocol	Protocol name, including TCP, UDP, TCP AND UDP. The default protocol is TCP.
WAN Host IP Address	IP address segment of the WAN-side hosts.
LAN Host	IP address of the LAN-side host.
WAN Port	Port segment of the WAN-side hosts.
LAN Host Port	Port number range of the LAN-side host. Range: 1-65535.

3. Click **Apply** button to apply the changes.

5.5 Configure the Parental Controls

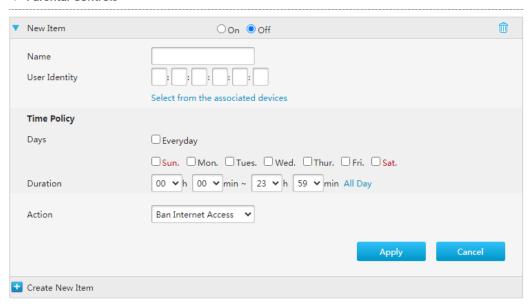
The section describes how to configure parental controls.

Steps

 On the main page of the ZXHN H3600, select Internet > Parental Controls to the Parental Controls page, see Figure 5-25.

Figure 5-25 Parental Controls

▼ Parental Controls



2. Configure the parental controls parameters.

Table 5-18 lists the parental controls parameters.

Table 5-18 Parental Controls Parameters

Parameter	Description
On/Off	Click On to enable the parental controls function.
Name	The name of parental control.
User Identity	Configure the user information according to the IP address or MAC address. If the All user option is selected, all the users that use the ZXHN H3600 device are included.
Days	Specify the days when the parent control settings are applied.
Duration	Specify the time when the parent control settings are applied.
Action	 The device supports: Ban Internet Access After this mode is selected, Internet access is not allowed. URL Black List After this mode is selected, websites set in URL are filtered out, and cannot be visited. URL White List After this mode is selected, only websites set in URL can be accessed.

3. Click **Apply** button to apply the changes.

5.6 Configure the DDNS

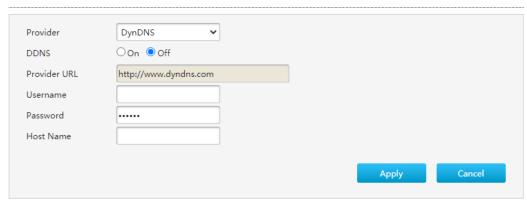
The section describes how to configure DDNS. **DDNS** provides the parameters of DDNS configuration function.

Steps

 On the main page of the ZXHN H3600, select Internet > DDNS to the DDNS page, see Figure 5-26.

Figure 5-26 DDNS Configuration Page





2. Configure the DDNS parameters.

Table 5-19 lists the DDNS parameters.

Table 5-19 Parameter Descriptions for the DDNS

Parameter	Description
Provider	Supported provider. Options: DynDNS, DtDNS, No-IP, easyDNS, freedns and TZO. If the DtDNS is selected, the WAN Connection should be configured.
DDNS	DDNS Switch. Click On to enable the DDNS function.
Provider URL	The URL of provider. If the DynDNS HTTP is used, the URL is http://www.dyndns.com. If the DtDNS HTTP is used, the URL is http://www.dtdns.org. If the No-IP HTTP is used, the URL is http://www.no-ip.com. If the easyDNS HTTP is used, the URL is http://www.easydns.com. If the freedns HTTP is used, the URL is http://freedns.afraid.org. If the TZO HTTP is used, the URL is http://www.tzo.com.
Username	DDNS server user name.
Password	DDNS server password.
Host name	Host name corresponding to the user.

5.7 Configure the SNTP

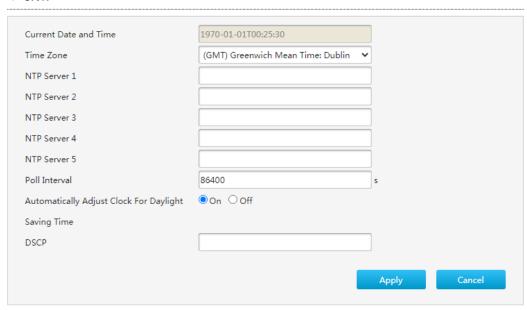
The section describes how to configure SNTP. **SNTP** provides the parameters of SNTP configuration features.

Steps

 On the main page of the ZXHN H3600, select Internet > SNTP to the SNTP page, see Figure 5-27.

Figure 5-27 SNTP Configuration Page

▼ SNTP



2. Configure the SNTP parameters.

Table 5-20 lists the SNTP parameters.

Table 5-20 Parameter Descriptions for the SNTP

Parameter	Description
Time Zone	Time zone.
NTP Server1-NTP Server5	IP address of the primary/secondary/third/fourth/fifth NTP server.
Poll Interval	Interval of time synchronization.Unit: second.
Automatically Adjust Clock For Daylight	Enable or disable the automatically adjust clock for daylight function.

Parameter	Description
	To ensure the QoS of communication, DSCP (Differentiat-
	ed Services Code Point) encodes the 8 flag bytes in the IP
DSCP	header of data packets to classify service types and distin-
DSCF	guish service priorities.The value range of DSCP is 0~63
	and each DSCP code value is mapped to a defined PHB (
	Per-Hop-Behavior) code.

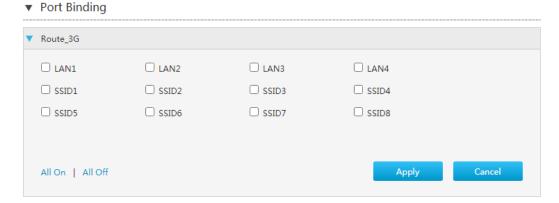
5.8 Configure the Port Binding

The section describes how to configure Port Binding. **Port Binding** provides the parameters of Port Binding configuration features.

Steps

 On the main page of the ZXHN H3600, select Internet > Port Binding to the Port Binding page, see Figure 5-28.

Figure 5-28 Port Binding Configuration Page



- 2. Select the LAN or SSID port that you want to bind.
- 3. Click **Apply** button to apply the changes.

5.9 Configure the Mulitcast

5.9.1 Configure the IGMP

The section describes how to configure IGMP. **IGMP** provides the parameters of IGMP configuration features.

Steps

 On the main page of the ZXHN H3600, select Internet > Multicast > IGMP to the IGMP page, see Figure 5-29.

Figure 5-29 IGMP Configuration Page



2. Enable the IGMP functions, see Table 5-21.

Table 5-21 Parameter Descriptions for the IGMP

Parameter	Description
IGMP Proxy	The system serves as a proxy server to forward IGMP packets from the MDU to other devices.

3. Click **Apply** button to apply the changes.

5.9.2 Configure the MLD

The section describes how to configure MLD. **MLD** provides the parameters of MLD configuration features.

Steps

 On the main page of the ZXHN H3600, select Internet > Multicast > MLD to the MLD page, see Figure 5-30.

Figure 5-30 MLD Configuration Page



2. Enable the MLD functions, see Table 5-22.

Table 5-22 Parameter Descriptions for the MLD

Parameter	Description
MLD Proxy	The system serves as a proxy server to forward MLD packets from the MDU to other devices.

3. Click **Apply** button to apply the changes.

Chapter 6

Configure the Local Network

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6.1 Check the Local Network Status

The section describes how to check the status of Local Network. The relevant information of Local Network status includes LAN Status, WLAN Status, WLAN Client Status, LAN Client Status and USB Storage Status. The relevant information of Local Network status is shown as below.

Steps

 On the main page of the ZXHN H3600, select Local Network > Status to the Local Network Status page, see Figure 6-1.

Figure 6-1 Local Network Status Page

- WLAN Status
- ► LAN Status
- WLAN Client Status
- ▶ LAN Client Status
- ▶ USB Storage Status
- 2. Click **Refresh** to refresh the information.

6.2 Configure the WLAN

6.2.1 Configure the Basic Parameters of the WLAN

The section describes how to configure WLAN basic settings.

Steps

Configure the WLAN On/Off

On the main page of the ZXHN H3600, select Local Network > WLAN > WLAN Basic to the WLAN Basic page, see Figure 6-2.

Figure 6-2 WLAN On/Off Configuration

▼ WLAN On/Off Configuration



2. Table 6-1 lists the WLAN on/off configuration parameters.

Table 6-1 WLAN On/Off Configuration parameters

Parameter	Description
WLAN (2.4GHz)	Click On to enable the 2.4GHz wireless function.

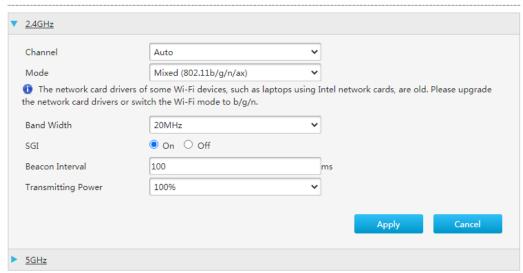
Parameter	Description
	Click Off to disable the 2.4GHz wireless function.
WLAN (5GHz)	Click On to enable the 5GHz wireless function. Click Off to disable the 5GHz wireless function.
Roaming Limit (2.4GHz)	The default value is recommended.
Roaming Limit (5GHz)	The default value is recommended.

Configure the WLAN Global Parameters

1. Click WLAN Global Configuration to the configuration page, see Figure 6-3.

Figure 6-3 WLAN Global Configuration Page

▼ WLAN Global Configuration



2. Table 6-2 lists the WLAN global configuration parameters.

Table 6-2 Parameter Descriptions for WLAN Global Configuration

Parameter	Description
Channel	Channel of the wireless network. A proper channel can be selected in accordance with the country code. Options: Auto, 1 - 13, default: Auto. Specifies the channel used for communication between the AP and the wireless site, depending on the local circumstance.
Mode	Options: IEEE 802.11b Only IEEE 802.11g Only IEEE 802.11n Only Mixed(802.11b/g) Mixed(802.11g/n)

Parameter	Description
	Mixed(802.11b/g/n)Mixed(802.11b/g/n/ax)
Band Width	Radio frequency bandwidth, including Auto,20Mhz and 40Mhz.
SGI	Click On to enable SGI function. Click Off to disable SGI function.
Beacon Interval	Interval for transmitting beacon frames, default: 100 ms. Beacon frames are used for communicating with other AP devices or network control devices to announce the WLAN presence.
Transmitting Power	Level of radio signal transmitting power. A larger value indicates wider coverage. Options:100%, 80%, 60%, 40%, 20%.



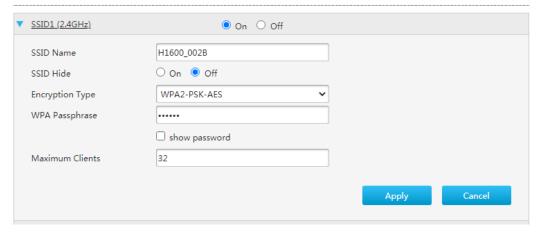
WLAN global configuration(5GHz) refers to WLAN global configuration(2.4GHz).

Configure the Private WLAN SSID

1. Click Private WLAN SSID Configuration to the configuration page, see Figure 6-4.

Figure 6-4 Private WLAN SSID Configuration Page

▼ WLAN SSID Configuration



2. Table 6-3 lists the WLAN SSID configuration parameters.

Table 6-3 Parameter Descriptions for the WLAN SSID Configuration

Parameter	Description
SSID Name	The name of SSID.

Parameter	Description
SSID Hide	Set radiobox On to hide the SSID information to prevent illegal users.
Encryption Type	Select encryption type.
WPA Passphrase	Password to connect to the wireless network. The value range is 8 - 63.
Maximum Clients	Maximum number of users that can access the SSID. The value range is 1 - 32.



Private WLAN SSID Configuration(5GHz) refers to Private WLAN SSID Configuration(2.4GHz).

6.2.2 Configure the Advanced Parameters of the WLAN

WLAN Advanced provides the parameters of WLAN Advanced configuration features.

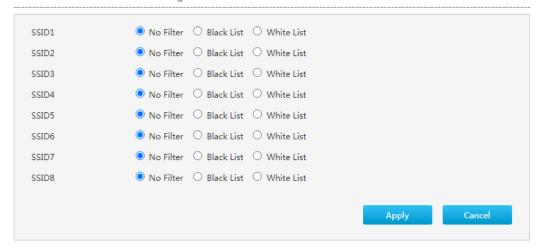
Steps

Configure the Access Control-Mode

- 1. On the main page of the ZXHN H3600, select **Local Network > WLAN > WLAN Advanced** to the **WLAN Advanced** page.
- 2. Click Access Control-Mode Configuration the configuration page, see Figure 6-5.

Figure 6-5 Access Control-Mode Configuration Page

▼ Access Control-Mode Configuration



3. Configure the access control-mode configuration parameters.

Table 6-4 lists the access control-mode configuration parameters.

Table 6-4 Access Control-Mode configuration parameters

Parameter	Description
No Filter	No filter is to be applied (the default).
Black List	Deny LAN users to access specific address.
White List	Allow LAN users to access specific address.

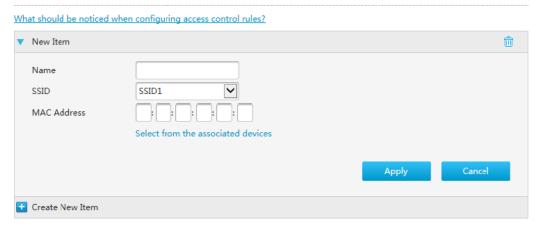
4. Click **Apply** button to apply the changes.

Configure the Access Control-Rule

1. Click **Access Control-Rule Configuration** to the configuration page, see Figure 6-6.

Figure 6-6 Access Control-Rule Settings

▼ Access Control-Rule Configuration



2. Configure the access control-rule configuration parameters. Table 6-5 lists the access control-rule configuration parameters.

Table 6-5 Access Control-Rule Configuration parameters

Parameter	Description
Name	The name of Access Control Item.
SSID	SSID name corresponding to the wireless network that the rule is applied to. The default value is SSID1.
MAC Address	The MAC address of the wireless device. We suggest to set the MAC addresses in access control list using a wireline connected device. Modifying the list using a wireless device may cause unexpected disconnection of the device used.

6.3 Configure the LAN

6.3.1 Configure the LAN(IPv4)

The section describes how to configure LAN(IPv4).

The relevant information of Internet status includes Allocated Address(DHCP), DHCP Server, DHCP Binding and Port Control.

Steps

Check the Allocated Address(DHCP)

- On the main page of the ZXHN H3600, select Local Network > LAN > IPv4 to the IPv4 page.
- 2. Click Allocated Address(DHCP) to the configuration, see Figure 6-7.

Figure 6-7 Allocated Address(DHCP) Page

▼ Allocated Address (DHCP)

Host Name	MAC Address	IP Address	Port	Remaining Lease
A23329746	dc:4a:3e:40:dc:cf	192.168.1.2	LAN1	22h 55min 24s

Refresh

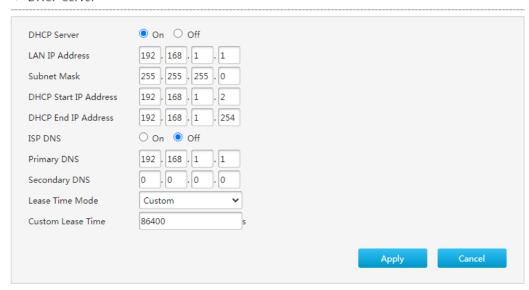
3. Click **Refresh** to refresh the informations.

Configure the DHCP Server

1. Click **DHCP Server** to the configuration, see Figure 6-8.

Figure 6-8 DHCP Server(IPv4) Page

▼ DHCP Server



2. Configure the DHCP server parameters.

Table 6-6 lists the DHCP server parameters.

Table 6-6 Parameter Descriptions for the DHCP Server

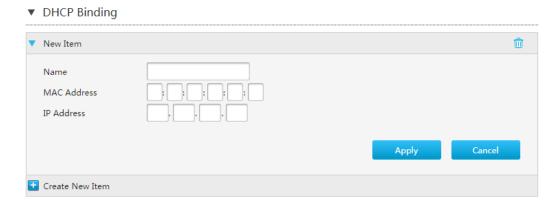
Parameter	Description
DHCP Server	Select On to let the device work as a DHCP server and assign IP addresses to open the client PCs or wireless devices.
LAN IP Address	The IPv4 address of LAN.
Subnet Mask	Subnet mask of the device.
DHCP Start IP Address	The start IP address of the DHCP address pool.
DHCP End IP Address	The end IP address of the DHCP address pool.
ISP DNS	Select the On check box to let the Assign IspDNS work.
Primary DNS	IP address of the DNS server, provided by ISP.
Secondary DNS	IP address of the DNS server2, provided by the ISP.
Lease Time Mode	The mode of Lease Time.
Custom Lease Time	The time during which the client PCs use the IP address assigned by the DHCP server. After the lease time expires, the private IP address will be available for assigning to other network devices.

3. Click **Apply** button to apply the changes.

Configure the DHCP binding

1. Click **DHCP Binding** to the configuration, see Figure 6-9.

Figure 6-9 DHCP Binding Page



2. Configure the DHCP Binding parameters.

Table 6-7 lists the DHCP binding parameters.

Table 6-7 Parameter Descriptions for the DHCP Binding

Parameter	Description
Name	The name of the DHCP Binding.
MAC Address	The MAC address of the DHCP Binding.
IP Address	IP address of the DHCP Binding.

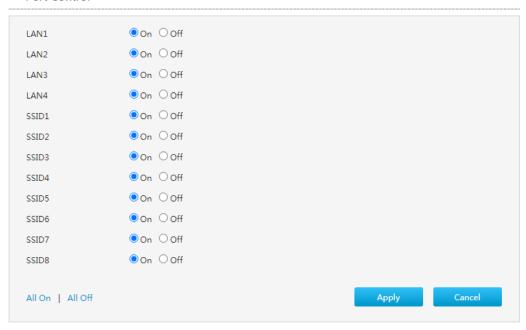
3. Click **Apply** button to apply the changes.

Configure the Port Control

1. Click **DHCP Binding** to the configuration, see Figure 6-10.

Figure 6-10 Port Control

▼ Port Control



- 2. Configure the port control parameters.
 - Click All On to select all ports.
 - Click All Off to cancel all ports.
- 3. Click **Apply** button to apply the changes.

6.3.2 Configure the LAN(IPv6)

The section describes how to configure LAN(IPv6).

The relevant information of Internet status includes Allocated Address(DHCPv6), LAN Address Management, Static Prefix, DHCPv6 Server, RA Service, Port Control.

Prerequisite

Before configuring the prefix delegation, make sure that the prefix delegation is enabled for the specified IPv6 WAN connection.

Steps

Check the Allocated Address(DHCPv6)

- On the main page of the ZXHN H3600, select Local Network > LAN > IPv6 to the IPv6 page.
- 2. Click Allocated Address (DHCPv6) to the configuration page, see Figure 6-11.

Figure 6-11 Allocated Address(DHCPv6) Page



3. Click **Refresh** to refresh the information.

Manage the LAN Address

1. Click LAN Address Management to the configuration page, see Figure 6-12.

Figure 6-12 LAN Address Management Page



2. Configure the LAN address parameters. Table 6-8 lists the LAN address parameters.

Table 6-8 Parameter Descriptions for the LAN Address

Parameter	Description
LAN IPv6 Address	The IPv6 address of LAN.

3. Click **Apply** button to apply the changes.

Configure the Static Prefix

1. Click **Static Prefix** to the configuration page, see Figure 6-13.

Figure 6-13 Static Prefix Page

▼ Static Prefix



2. Configure the static prefix parameters. Table 6-9 lists the static prefix parameters.

Table 6-9 Parameter Descriptions for the Static Prefix

Parameter	Description
Name	The name of the prefix.
Prefix	IPv6 address and prefix length. Only a GUA prefix is supported. Prefix length: 64.

Configure the DHCPv6 Server

1. Click **DHCPv6 Server** to the configuration page, see Figure 6-14.

Figure 6-14 DHCPv6 Server Page

2. Configure the DHCPv6 server parameters.

Table 6-10 lists the DHCPv6 server parameters.

Table 6-10 Parameter Descriptions for the DHCPv6 Server

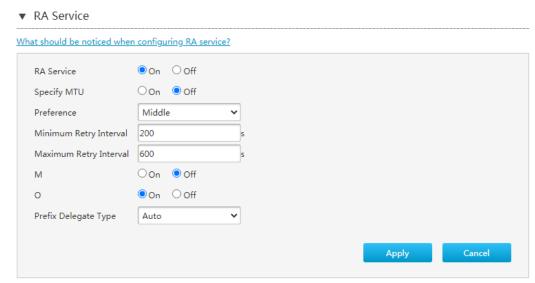
Parameter	Description
DHCPv6 Server	Select On to let the device work as a DHCP server and assign IP addresses to the client PCs or wireless devices.
DNS Delegate Type	 DNS Delegate Type: Auto: One DNS selected automatically from all the available DNS will be delegated. Manual: One or more DNSs selected manually from all the DNSs configured before will be delegated.
DNS Refresh Time	The time during which the client PCs use the IP addresses assigned by the DHCP server. After the lease time expires, the private IP address will be available for assigning to other network devices.
Prefix Delegate Type	Option: • Auto: One prefix selected automatically from all the available prefixes will be delegated.

Parameter	Description	
	Manual: One or more prefixes selected manually from all the	
	static prefixes configured before will be delegated.	
	Disabled: No prefix will be delegated.	

Configure the RA Service

1. Click **RA Service** to the configuration page, see Figure 6-15.





2. Configure the RA service parameters. Table 6-11 lists the RA service parameters.

Table 6-11 Parameter Descriptions for the RA Service

Parameter	Description
RA Service	Click On to enable the function. Click Off to disable the function.
Specify MTU	If On button is selected, enter the MTU value.
мти	Define the maximum transfer unit.
Preference	By default, the preference is Middle.
Minimum Retry Interval	The minimum time allowed between sending unsolicited multicast Router Advertisements from the interface. (The value must not be greater than 0.75 * (Maximum Retry Interval)).
Maximum Retry Interval	maximum time allowed between sending unsolicited multicast Router Advertisements from the interface.
М	Managed flag. Select this check box to enable the connected devices to obtain the IPv6 address through DHCP IPv6.

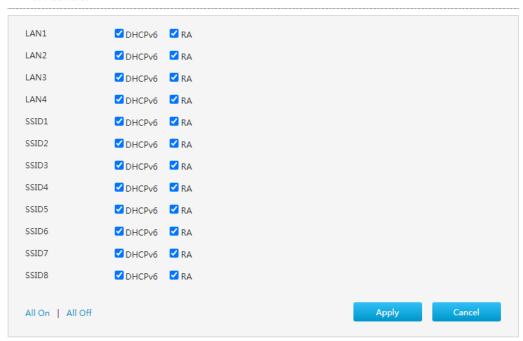
Parameter	Description
0	Other configure flag. Select this check box to enable the connected devices to obtain DNS address through DHCP IPv6.
Prefix Delegate Type	Option: Auto: All the available prefixes will be delegated. Manual: One or more prefixes selected manually from all the static prefixes configured before will be delegated.

Port Control

1. Click **Port Control** to the configuration page, see Figure 6-16.

Figure 6-16 Port Control Page

▼ Port Control



2. Select the LAN interface or SSID on which you want to disable or enable the DHCPv6 and RA function.



- Click **All On** to select all IPv6 Service-Port control types.
- Click All Off to cancel all IPv6 Service-Port control types.
- 3. Click **Apply** button to apply the changes.

6.4 Configure the Route

6.4.1 Configure the Routing(IPv4)

The section describes how to configure routing(IPv4), which provides the parameters of route(IPv4) configuration features.

The relevant information of Internet status includes **Routing Table**, **Static Routing** and **Policy Routing**.

Prerequisite

Before configuring routing(IPv4), make sure that the IPv4 WAN connection is created.

Steps

Check the Routing Table

- On the main page of the ZXHN H3600, select Local Network > Routing > IPv4 to the Routing(IPv4) page.
- 2. Click Routing Table to the configuration page, see Figure 6-17.

Figure 6-17 Routing Table Page

▼ Routing Table

Network Address	Subnet Mask	Gateway	Interface	
192.168.1.0	255.255.255.0	0.0.0.0	LAN	
192.168.168.0	255.255.255.128	0.0.0.0	LAN	
192.168.168.128	255.255.255.128	0.0.0.0	LAN	

Refresh

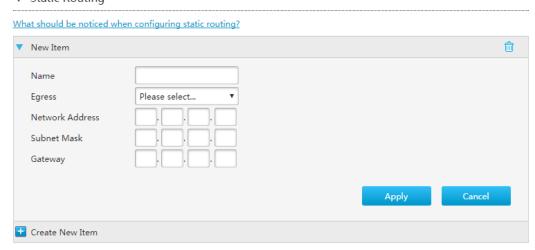
3. Click **Refresh** to refresh the information.

Configure the Static Routing

1. Click Static Routing to the configuration page, see Figure 6-18.

Figure 6-18 Static Routing Page

▼ Static Routing



2. Configure the static routing parameters. Table 6-12 lists the static routing parameters.

Table 6-12 Parameter Descriptions for the Static Routing

Parameter	Description
Name	The name of static routing entry.
Egress	WAN connection for static routing.
Network Address	IPv4 address of the destination network.
Subnet Mask	Subnet mask of the destination network.
Gateway	The next-hop IPv4 address to the destination network.

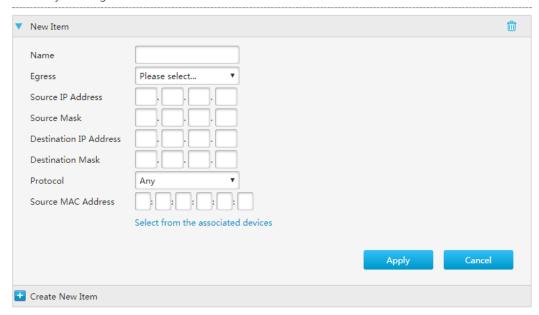
3. Click **Apply** button to apply the changes.

Configure the Policy Routing

1. Click Policy Routing to the configuration page, see Figure 6-19.

Figure 6-19 Policy Routing Page

▼ Policy Routing



2. Configure the policy routing parameters. Table 6-13 lists the policy routing parameters.

Table 6-13 Parameter Descriptions for the Policy Routing

Parameter	Description
Name	The name of Policy routing entry.
Egress	WAN connection for policy routing
Source IP Address	Source IPv4 address of the matching packets.
Source Mask	Source mask of the matching packets.
Destination IP Address	Destination IPv4 address of the matching packets.
Destination Mask	Destination mask of the matching packets.
Protocol	Matching IPv4 protocol. The ANY option means any IPv4 protocol.
Source Port	Source port number of the matching packets.
Destination Port	Destination port number of the matching packets.
Source MAC Address	MAC address of the source device that sends the matching packets.

3. Click **Apply** button to apply the changes.

6.4.2 Configure the Routing(IPv6)

The section describes how to configure Routing(IPv6).

The relevant information of Internet status includes **Routing Table**, **Static Routing** and **Policy Routing**.

Prerequisite

Before configuring routing(IPv6), make sure that the IPv6 WAN connection is created.

Steps

Check the Routing Table

- On the main page of the ZXHN H3600, select Local Network > Routing > IPv6 to the Routing(IPv6) page.
- 2. Click Routing Table to the configuration page, see Figure 6-20.

Figure 6-20 Routing Table Page

▼ Routing Table



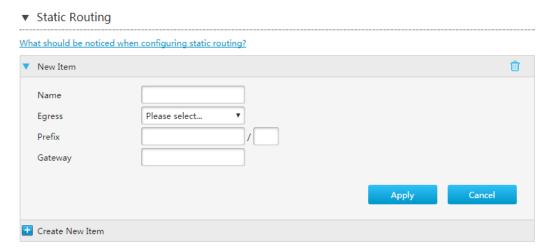
Refresh

3. Click **Refresh** to refresh the information.

Configure the Static Routing

1. Click **Static Routing** to the configuration page, see Figure 6-21.

Figure 6-21 Static Routing(IPv6) Page



2. Configure the static routing parameters. Table 6-14 lists the static routing parameters.

Table 6-14 Parameter Descriptions for the Static Routing

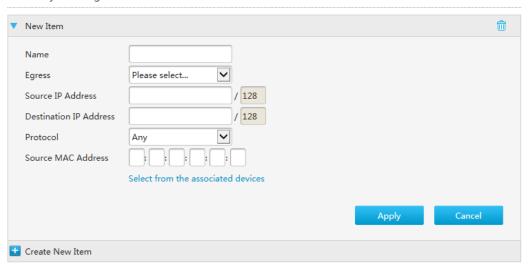
Parameter	Description
Name	The name of static routing entry.
Egress	WAN connection for static routing.
Prefix	IPv6 address and prefix length. The value range is 1-128.
Gateway	The next-hop IP address to the destination network.

Configure the Policy Routing

1. Click Policy Routing to the configuration page, see Figure 6-22.

Figure 6-22 Policy Routing(IPv6) Page

▼ Policy Routing



2. Configure the policy routing parameters. Table 6-15 lists the policy routing parameters.

Table 6-15 Parameter Descriptions for the Policy Routing

Parameter	Description
Name	The name of Policy routing entry.
Egress	WAN connection for policy routing
Source IP Address	Source IPv6 address of the matching packets.
Destination IP Address	Destination IPv6 address of the matching packets.
Protocol	Matching IPv6 protocol. The ANY option means any IPv6 protocol.

Parameter	Description
Source Port	Source port number of the matching packets.
Destination Port	Destination port number of the matching packets.
Source MAC Address	MAC address of the source device that sends the matching packets.

6.5 Configure the FTP

The section describes how to configure FTP. **FTP** provides the parameters of FTP configuration features.

Prerequisite

Before configuring FTP application, make sure a USB storage device is connected to open the ZXHN H3600 device.

Steps

 On the main page of the ZXHN H3600, select Local Network > FTP to open the FTP page, see Figure 6-23.

Figure 6-23 FTP



2. Table 6-16 lists the FTP parameters.

Table 6-16 FTP parameters

Parameter	Description
Server	Click On to enable the FTP server function. Click Off to disable the FTP server function.
Username/Password	It is valid only if the FTP security function is enabled.

3. Click **Apply** button to apply the changes.

6.6 Configure the UPnP

The procedure provides the parameters of UPnP configuration features.

Steps

 On the main page of the ZXHN H3600, select Local Network > UPnP to open the UPnP page, see Figure 6-24.

Figure 6-24 UPnP



Table 6-17 lists the UPnP parameters.

Table 6-17 UPnP parameters

Parameter	Description
UPnP	Click On to enable the UPnP function.
	Click Off to disable the UPnP function.

2. Click Apply button to apply the changes.

6.7 Configure the DMS/DLNA

The section describes how to configure DMS. **DMS** provides the parameters of DMS configuration features.

DMS is a multimedia server defined in DLNA protocol, which uses UPnP protocol to search and categorize the local media files or photos, and provide VOD services for the DMP.

If the DMS function is enabled on the ZXHN H3600 device, any client that supports UPnP function can use the specified DMP (for example, windows media player) to watch the media files or photos stored in the USB storage device.

The version of the windows media player used for DMS function must be 11 or later, or the OS must be vista or Win 7. To enable the DMP function in OS of earlier version, special tools, such as Intel(R) Tool for UPnP(TM) Technology or Twonky Media Manager must be installed.

Prerequisite

The USB device is connected to open the ZXHN H3600 device.

Steps

 On the main page of the ZXHN H3600, select Local Network > DMS/DLNA to open the DMS/DLNA page, see Figure 6-25.

Figure 6-25 DMS/DLNA

▼ DMS/DLNA



2. Enable the DMS/DLNA function, and specify the path storing the media files. For a description of the parameters, refer to Table 6-18.

Table 6-18 Parameter Descriptions for the DMS/DLNA

Parameter	Description
DMS	Click On to enable the DMS function. Click Off to disable the DMS function.
DMS Name	To create a DMS, enter the name of the DMS.
Library Rescan Method	Library rescan method that the device supports. Normally, it is set to Auto.
Media Source1– Media Source4	By default, the media source is /mnt, that is the root directory of the USB device. You can change the root directory to other directory of the USB storage device.

3. Click **Apply** button to apply the changes.

6.8 Configure the Samba Service

The procedure provides the parameters of samba configuration features.

Steps

 On the main page of the ZXHN H3600, select Local Network > Samba Service to open the Samba Service page, see Figure 6-26.

Figure 6-26 Samba Service

▼ Samba Service

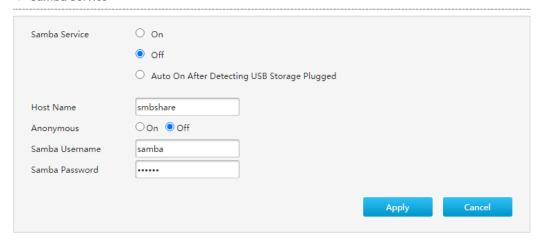


Table 6-19 lists the samba service parameters.

2. Table 6-19 Samba Service parameters

Parameter	Description
Samba Service	Click On to enable the samba service function manually. Click Off to disable the samba service function. Click Auto On After Detecting USB Storage Plugged : If detecting USB Storage Plugged, it will enable the samba service function automatically.
Host Name	The name of samba host.
Anonymous	Click On to enable the anonymous function. Click Off to disable the anonymous function.
Samba Username/Samba Password	It is valid only if Anonymous is disabled.

3. Click **Apply** button to apply the changes.

6.9 Configure the DNS

The section describes how to configure DNS. **DNS** provides the parameters of DNS configuration features.

The relevant information of Internet status includes **Domain name** and **Host Name**.

Steps

Configure the domain name

 On the main page of the ZXHN H3600, select Local Network > DNS to open the Domain name page, see Figure 6-27.

Figure 6-27 Domain name



- 2. Type the domain name in the text box.
- 3. Click **Apply** button to apply the changes.

Configure the host name

1. Click **Host name** to open the **Host Name** page, see Figure 6-28.

Figure 6-28 Host Name



- Type the host name in the Host Name text box and the IP address in the IP Address text box.
- 3. Click **Apply** button to apply the changes.

6.10 Configure the Device Role

The section describes how to configure the device role in the mesh network.

- Controller: set the device as the main control AP in the mesh network and connects the LAN interface of the optical cat.
- Agent: set the device as subordinate AP in the mesh network to connect the WAN interface of the main control AP.

Steps

 On the main page of the ZXHN H3600, select Local Network > NetSphere to the NetSphere page, see Figure 6-29.

Figure 6-29 NetSphere page

▼ Global Configuration



2. Set the device role in the mesh network. For a description of the parameters, refer to Table 6-20.

Table 6-20 Parameter Descriptions for the NetSphere

Parameter	Description
Enable	Click On button to enable the multi-AP networking function.
	Click Off button, the device is used as a common wireless router.

3. Click **Apply** button to apply the changes.

Chapter 7

Configure the VoIP

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7.1 Check the Status of VoIP

This procedure shows the relevant information of VoIP status.

Steps

On the main page of the ZXHN H3600 device, select VoIP > Status to open the Status page, see Figure 7-1.

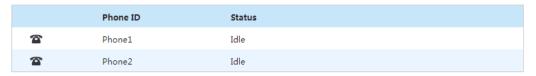
Figure 7-1 VoIP Status Page

▼ VoIP Line Status



Refresh

▼ VoIP Phone Status



Refresh

2. Click **Refresh** to refresh the information.

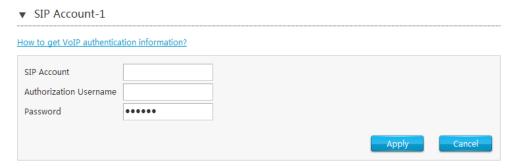
7.2 Configure the SIP Accounts

This procedure describes how to configure basic parameters of the VoIP service, including sip account, authorization username, password.

Steps

 On the main page of the ZXHN H3600 device, select VoIP > Basic to open the SIP Accounts page, see Figure 7-2.

Figure 7-2 SIP Accounts Page



2. Set the parameters. Table 7-1 describes the SIP account parameters .

Table 7-1 Description of the SIP Account Parameters

Parameter	Description
SIP Account	Registered name of a SIP subscriber. Normally, it is the phone number of the subscriber.
Authorization User- name	Username for authentication by the SS system, which must be the same as that configured in the SS system.
Password	Password for VoIP service authentication by the SS system, which must be the same as that configured in the SS system.

3. Click **Apply** button to apply the changes.

7.3 Configure the Advanced Parameters

This procedure describes how to configure advanced parameters of the VoIP service, including echo cancellation, jitter buffer, and DTMF.

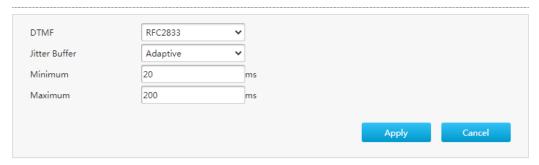
Steps

Configure the Advanced Parameters.

On the main page of the ZXHN H3600 device, select VoIP > Advanced. The Advanced page is displayed, see Figure 7-3.

Figure 7-3 Advanced Parameters Page

▼ Advanced Parameters



2. Set the parameters. For a description of the parameters, refer to Table 7-2.

Table 7-2 Parameter Descriptions for the VoIP Service

Parameter	Description
DTMF	DTMF mode. Options: RFC2833: DTMF digits are carried by RTP streams. DTMF in Voice: DTMF digits are not processed. SIP Info
Jitter Buffer	The variation in packet delay is called jitter. Jitter buffer refers to intentional delay of packets. Options: • Fixed: A fixed buffer time must be specified. • Adaptive: A jitter range must be specified.
Minimum	Minimum value of the jitter range, default: 20 ms.
Maximum	Maximum value of the jitter range, default: 200 ms.

- 3. Click **Apply** button to apply the changes.
- On the main page of the ZXHN H3600 device, select VoIP > Advanced > Echo
 Cancellation. The Echo Cancellation page is displayed, see Figure 7-3.

Figure 7-4 Echo Cancellation Page

▼ Echo Cancellation



2. Set the parameters. For a description of the parameters, refer to Table 7-2.

Table 7-3 Parameter Descriptions for the Echo Cancellation

Parameter	Description
Echo Cancellation	Whether to disable the echo cancellation feature.

7.4 Configure the SIP Protocol

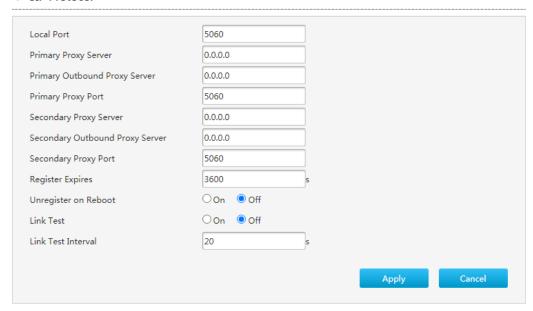
This procedure describes how to configure the SIP Protocol.

Steps

 On the main page of the ZXHN H3600 device, select VoIP > SIP Protocol to the SIP Protocol page, see Figure 7-5.

Figure 7-5 SIP Protocol Page

▼ SIP Protocol



2. Set the parameters. Table 7-4 describes the SIP protocol parameters.

Table 7-4 Description of the SIP Protocol Parameters

Parameter	Description
Local Port	Local port that the SIP protocol uses, default: 5060.
Primary Proxy Server	IP address of the active SIP proxy server that the ISP provides, which must be the same as that configured on the SIP server.
Primary Outbound Proxy Server	IP address of the active outbound proxy server that the ISP provides, which must be the same as that configured on the SIP server.

Parameter	Description
Primary Proxy Port	Port number that the ISP provides for communication between the active server and VoIP terminals, which must be the same as that configured on the SIP server, default: 5060.
Secondary Proxy Server	IP address of the standby SIP proxy server that the ISP provides, which must be the same as that configured on the SIP server.
Secondary Outbound Proxy Server	IP address of the standby outbound proxy server that the ISP provides, which must be the same as that configured on the SIP server.
Secondary Proxy Port	Port number that the ISP provides for communication between the standby server and VoIP terminals, which must be the same as that configured on the SIP server, default: 5060.
Register Expires	Registered lifecycle, unit: seconds, default: 3600.
Unregister On Reboot	Whether to deregister VoIP terminals after the server is restarted.
Link Test	Whether to enable link tests.
Link Test Interval	Interval of link tests, default: 20 seconds.

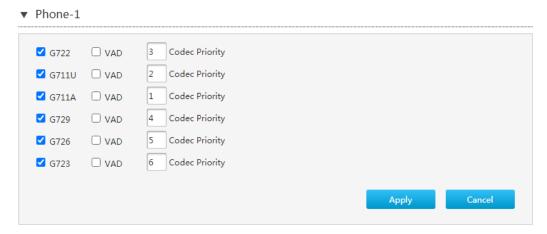
7.5 Configure the Media

This procedure describes how to configure the media codec type.

Steps

 On the main page of the ZXHN H3600 device, select VoIP > Media to the Media page, see Figure 7-6.

Figure 7-6 Media Page



2. Configure the media parameters. Table 7-5 describes the media parameters.

Table 7-5 Description of the Media Parameters

Parameter	Description
G722, G711U, G711A, G729, G726, G723	Select a codec, which must be the same as that configured in the SoftSwitch system.
VAD	Select a codec, which must be the same as that configured in the SoftSwitch system.
Codec Priority	You can modify priority through this parameter. A lower number indicates a higher priority.

7.6 Configure the Fax

The ZXHN H3600 supports the T30 and T38-based fax feature. By default, the T38 protocol is used.

Steps

 On the main page of the ZXHN H3600 device, select VoIP > Fax. The Fax page is displayed, see Figure 7-7.

Figure 7-7 Fax Page



2. Set the parameters. For a description of the parameters, refer to Table 7-6.

Table 7-6 Parameter Descriptions for the Fax

Parameter	Description
Enable T38 Protocol	Whether to enable the T38 protocol.
	If the Off button is selected, the T30 protocol is used.

3. Click **Apply** button to apply the changes

Chapter 8

Configure the Management and Diagnosis

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8.1 Configure the Account Management

This procedure introduces how to manage the user accounts and rights.

Steps

Guest Account Management

 On the main page of the ZXHN H3600, select Management&Diagnosis > Account Management to the Admin Account Management page, see Figure 8-1.

Figure 8-1 Admin Account Management Page

▼ Admin Account Management



2. Configure the administrator account management parameters.

Table 8-1 lists the administrator account management parameters.

Table 8-1 Parameter Descriptions for the Administrator Account Management

Parameter	Description
Username	The user name for the administrator privilege. The default user name of the administrator privilege is admin, which cannot be modified.
Old Password	The default passwords for the Administrator is admin.
New Password	Specify the new password.
Confirmed Password	Confirm the new password.

3. Click **Apply** button to apply the changes.

User Account Management

1. On the main page of the ZXHN H3600, select **Management > Account Management** to the **User Account Management** page, see Figure 8-2.

Figure 8-2 User Account Management Page

▼ User Account Management



2. Configure the administrator account management parameters.

Table 8-2 lists the user account management parameters.

Table 8-2 Parameter Descriptions for the User Account Management

Parameter	Description
Username	The user name for the administrator privilege. The default user name of the administrator privilege is <i>vulladmin</i> , which can be modified.
New Password	Specify the new password.
Confirmed Password	Confirm the new password.

8.2 Configure the Login Timeout

This procedure introduces how to configure the login timeout.

Steps

 On the main page of the ZXHN H3600, select Management&Diagnosis > Idle
 Timeout to the Idle Timeout page, see Figure 8-3.

Figure 8-3 Idle Timeout Configuration Page



- 2. Specify the time in the **Timeout** text box, rang: 1-30 min.lf no operation is performed on the Web page during this period, the system automatically exits the login status.
- 3. Click **Apply** button to apply the changes.

8.3 Configure the System Management

8.3.1 Configure the Device Management

This procedure introduces how to reboot the device or restore the factory default settings.

Steps

On the main page of the ZXHN H3600, select Management&Diagnosis > System
 Management > Device Management to the Device Management page, see Figure 8-4.

Figure 8-4 Device Management Page

▼ Reboot Management

Reboot: Please click the "Reboot" button to reboot the device. This process will take about 5 minutes.

Note: The reboot operation will interrupt all current interactions.

Reboot

▼ Factory Reset Management

Factory Reset: All the parameters will be restored to their default settings. The device will reboot automatically at the end of this process.

Note: After this operation is finished, all user configured settings will be lost and the device default settings will be restored.

Factory Reset

- 2. On this page, you can perform the following operations:
 - Click Reboot to reboot the ZXHN H3600 device.
 - Click **Factory Reset** to restore the factory default settings.

8.3.2 Upgrade Software

This procedure introduces how to upgrade Software.

Prerequisite

Make sure that the upgrade file is ready.

Steps

On the main page of the ZXHN H3600, select Management&Diagnosis > System
 Management > Software Upgrade to the Software Upgrade page, see Figure 8-5.

Figure 8-5 Software Upgrading Page

▼ Software Upgrade



2. Click **Browse** to select the upgrade version file.

3. Click Upgrade.



The system prompts the upgrade progress. During the upgrade process, do not cut off the power supply. Otherwise, the device may be damaged.

Generally, the software is upgraded by the ZTE CORPORATION engineers. If the user wants to upgrade the firmware, contact the local office of ZTE CORPORATION to obtain the latest firmware version.

8.3.3 Manage the User Configuration

This procedure introduces how to import or export the user configuration file.

User configuration refers to the customized configuration based on the factory defaults.

The user can configure the device settings based on his own requirements, and the configuration can be backed up.

Steps

Backup User Configuration

On the main page of the ZXHN H3600, select Management&Diagnosis > System
 Management > User Configuration Management to the Backup User Configuration page, see Figure 8-6.

Figure 8-6 Backup User Configuration Page

▼ Backup User Configuration



2. Click **Backup Configuration** to export the user configuration file.

Restore User Configuration

1. Click **Restore User Configuration** to the configuration page, see Figure 8-7.

Figure 8-7 Restore Configuration Management Page

▼ Restore User Configuration



2. Click **Browse** to select the user configuration file, and then click **Restore Configuration** to restore the device to the user configuration.

8.4 Configure the Mirror function

This procedure introduces how to perform the mirror configuration.

If the mirror configuration is performed, the packets at the WAN side will be copied to the specified LAN interface, and it can be used for the network analysis and troubleshooting.

Steps

 On the main page of the ZXHN H3600, select Management&Diagnosis > Mirror Configuration to the Mirror Configuration page, see Figure 8-8.

Figure 8-8 Mirror Configuration Page

▼ Mirror Configuration



2. Configure the mirror configuration parameters.

Table 8-3 lists the user mirror configuration parameters.

Table 8-3 Parameter Descriptions for the Mirror Configuration

Parameter	Description
Mirror	Click On to enable the mirror function. Click Off to disable the mirror function.
Source	Network-side WAN interface.
Destination	User-side LAN interface.

3. Click Apply button to apply the changes.

8.5 Configure the TR069 function

The section describes how to configure the TR-069. TR-069 provides the parameters of the TR-069 configuration features.

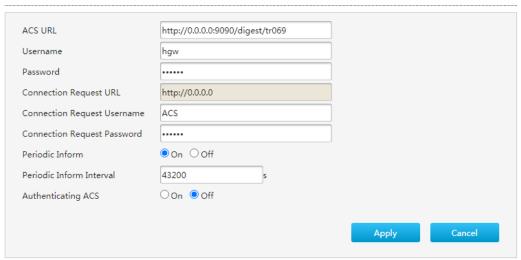
Steps

Configure the basic parameters

- On the main page of the ZXHN H3600, select Management&Diagnosis > TR-069 to the TR-069 page.
- 2. Click Basic Configuration to the TR069 basic configuration page, see Figure 8-9.

Figure 8-9 Basic Configuration Page

▼ Basic Configuration



3. Configure the TR069 basic configuration parameters.

Table 8-4 lists the TR069 Basic Configuration parameters.

Table 8-4 Parameter Descriptions for the TR069 Basic Configuration

Parameter	Description
ACS URL	The URL of the automatic configuration server that manages the device.
Username/Password	User name and password for the ZXHN H3600 to log in to the automatic configuration server.
Connection Request URL	Connection request URL, which is automatically generated by the system.
Connection Request Username/ Connection Request Password	User name and password for the TR-069 connection authentication that the automatic configuration server provides when it logs in to the ZXHN H3600 device.

Parameter	Description
Periodic Inform	Enable the periodic inform function.
Periodic Inform Interval	Periodic inform interval of the device (unit: second).
Authenticating ACS	Enable the TR-069 authenticating ACS.
ACS CA Certificate Chain	 Auto: Automatically select the first chain certificate authentication or the second chain certificate authentication Chain1: The first chain certificate authentication Chain2: The second chain certificate authentication

Configure the STUN

1. Click STUN Configuration to the STUN configuration page, see Figure 8-10.

Figure 8-10 STUN Configuration

▼ STUN Configuration

Enable On Off

Server Address

Apply Cancel

2. Configure the STUN configuration parameters. Table 8-5 lists the STUN configuration parameters.

Table 8-5 Parameter Descriptions for the STUN Configuration

Parameter	Description
Enable	After the STUN function is enabled, clients after NAT (or multiple NAT) can find their public network addresses, and determine the type of NAT and the Internet port bound to the local port. These information is used to create UDP communication between two hosts after the NAT router.
Server Address	The address of the server

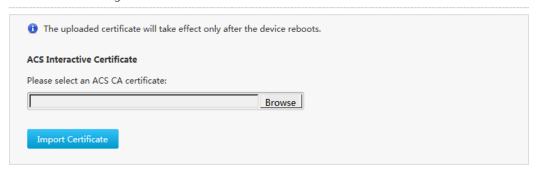
3. Click **Apply** button to apply the changes.

Configure the Certificate

1. Click Certificate Management to the certificate management page, see Figure 8-11.

Figure 8-11 Certificate Management

▼ Certificate Management



- 2. Select a ACS CA certificate chain.
- 3. Click **Browse** to select an ACS CA certificate, and click **Import Certificate**.

8.6 Manage the Log

The log management function enables the log printing function and configures the level of output logs.

Steps

Configure the Log Level

- On the main page of the ZXHN H3600, select Management&Diagnosis > Log Management to the Log Management page.
- 2. Click Log Level Management to the log level management page, see Figure 8-12.

Figure 8-12 Log Level Management Page

3. Configure the log management parameters.

Table 8-6 lists the Log Management parameters.

Table 8-6 Parameter Descriptions for the Log Level Management

Parameter	Description
Log Level	Options (ranked from low to high):
	Debug
	Informational
	Notice
	Warning

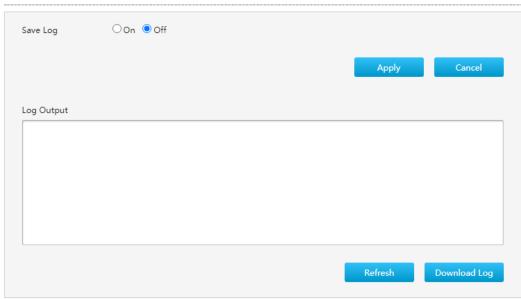
Parameter	Description	
	• Error	
	Critical	
	Alert	
	Emergency	
	The system stores only the logs of the selected level and above levels.	

Configure the System Log

 Click System Log Management to the system log management page, see Figure 8-13.

Figure 8-13 System Log Management Page

▼ System Log Management



2. Configure the system log management parameters.

Table 8-7 lists the system log management parameters.

Table 8-7 Parameter Descriptions for the System Log Management

Parameter	Description
Save Log	Click On to enable the system log function.

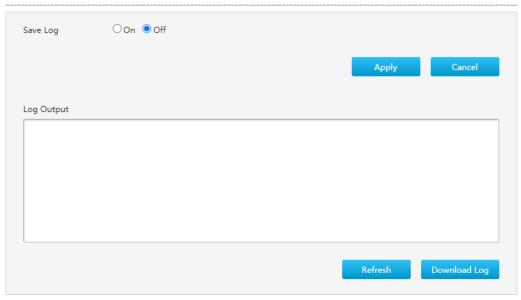
- 3. Click **Apply** button to apply the changes.
- 4. (Optional) Click **Refresh** button to get the latest information.
- 5. (Optional) Click Clear to clear the logs.
- 6. (Optional) Click **Download Log** to download the log file from the log server.

Configure the Security Log

1. Click **Security Log Management** to the security log management page, see Figure 8-14.

Figure 8-14 Security Log Management Page

▼ Security Log Management



2. Configure the security log management parameters.

Table 8-8 lists the security log management parameters.

Table 8-8 Parameter Descriptions for the security Log Management

Parameter	Description	
Save Log	Click On to enable the security log function.	

- 3. Click **Apply** button to apply the changes.
- 4. (Optional) Click **Refresh** button to get the latest information.
- 5. (Optional) Click **Download Log** to download the log file from the log server.

Configure the Remote Log

 Click Remote Log Management to the remote log management page, see Figure 8-15.

Figure 8-15 Remote Log Management Page

Remote Log Management

Remote Log On Off

Apply Cancel

2. Configure the remote log management parameters.

Table 8-9 lists the remote log management parameters.

Table 8-9 Parameter Descriptions for the Remote Log Management

Parameter	Description	
Remote Log	Click On to enable the remote log function.	

3. Click **Apply** button to apply the changes.

8.7 Diagnosis

Abstract

The procedure describes how to diagnosis. **Diagnosis** provides the parameters of the diagnosis configuration features.

The relevant **Diagnosis** includes **Ping Diagnosis**, **Trace Route Diagnosis**.

Steps

Configure the Ping Diagnosis

On the main page of the ZXHN H3600 device, select Management & Diagnosis > Diagnosis to open the Ping Diagnosis page, see Figure 8-16.

Figure 8-16 Ping Diagnosis

▼ Network Diagnosis

What should be noticed when diagnosing?

▼ PING Diagnosis

IP Address/Host Name
Egress Auto ▼

Diagnosis

Diagnosis Result

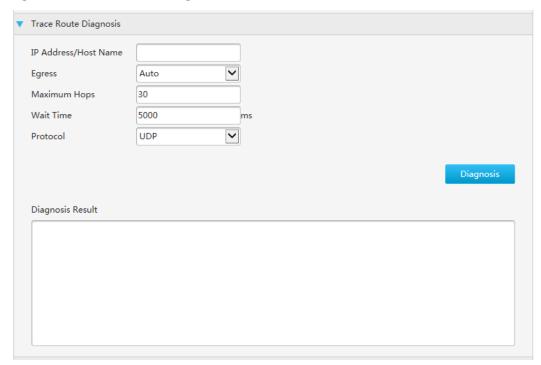
2. Type the host IP address or host name in the **IP Address/Host Name** text box, select the WAN/LAN connection from the **Egress** drop-down list.

Click **Diagnosis** to diagnose the connection, and the system will display the following diagnosis results.

Configure the Trace Route Diagnosis

On the main page of the ZXHN H3600 device, select Management & Diagnosis > Diagnosis to open the Trace Route Diagnosis page, see Figure 8-17.

Figure 8-17 Trace Route Diagnosis



- 2. Type the IP address or host name in the IP Address/Host Name text box, select one WAN connection, specify the Maximum Hops, Wait time, and Protocol.
- 3. After the configuration, click **Diagnosis**.

8.8 Check the ARP Table

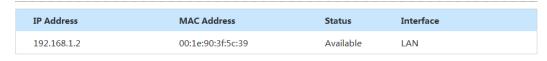
Check the ARP address of the connected terminal device.

Steps

 On the main page of the ZXHN H3600, select Management&Diagnosis > ARP Table to the ARP Table page, see Figure 8-18.

Figure 8-18 ARP Table Page

ARP Table



Refresh

2. Click **Refresh** button to refresh information.

8.9 Check the MAC Table

Check the MAC address of the connected terminal device.

Steps

 On the main page of the ZXHN H3600, select Management&Diagnosis > MAC Table to the MAC Table page, see Figure 8-19.

Figure 8-19 MAC Table Page

▼ MAC Table

Interface	VLAN ID	MAC Address	Active Time(s)	
SSID1	None	88:cb:87:31:42:8a	98.16	

Refresh

2. Click **Refresh** button to refresh information.

8.10 Configure the IPv6 Switch

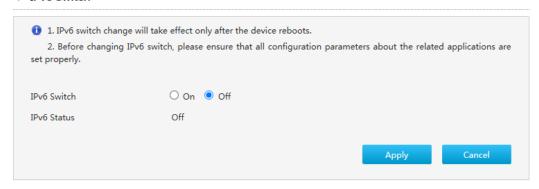
This procedure describes how to enable or disable IPv6 support for the ZXHN H3600.

Steps

On the main page of the ZXHN H3600, select Management&Diagnosis > IPv6
 Switch to the IPv6 Switch page, see Figure 8-20.

Figure 8-20 IPv6 Switch Page

▼ IPv6 Switch



2. To disable IPv6 support, set IPv6 Function to Off, and click Apply.



The configuration takes effective after the device is restarted.

Chapter 9

Troubleshooting

- The Power indicator on the front panel is off after the power button is pressed.
 - → Power switch does not turn on.
 - → The power adapter is not correctly connected to the device. Be sure to use the power adapter supplied with the device.
- The green LAN indicator on the front panel is off after the device is powered on.
 - → The corresponding LAN link is not established.
 - → The Ethernet cable is not correctly connected to the LAN interface.
 - → The network device connected to the LAN interface is not powered on.
- The WAN indicator on the front panel is off after the device is powered on.
 - → The WAN link is not established.
 - → The Ethernet cable is not correctly connected to the WAN interface.
 - → Please contact the service provider for help.
- Unable toconnectto thenetwork.
 - → Check that the Ethernet cable is correctly connected to the WAN interface and the Ethernet cable is correctly connected to the LAN interface.
 - → Check that the WAN indicator on the front panel is on and the Internet indicator on the front panel is solid green or flashing green.
- Restorethefactory defaultsettings.

After the power is on, use a needle to press the button for over 5 seconds to restore the default factory settings.