

300 Mbps Wireless Router

User Guide

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FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Compliance

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Conditions

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

EU Conformity Statement

CE This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the Directive 2014/30/EU, the Directive 2014/35/EU, the Directive 2011/65/EU.

Hereby, Hikvision declares that the radio equipment type Wireless Router is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: https://www.bikvision.com/ouropa/cuppert/devenlead/declaration.of conformity/

internet address: <u>https://www.nikvision.com/europe/support/download/declaration-of-conformity/</u>					
	Model	Received frequency	Transmitted frequency	Bandwidth	Transmit power
	DS-3WR3N	2400-2483.5 MHz	2400-2483.5 MHz	2.4 GHz: 20 MHz and 40 MHz	2.4 GHz:18.5 dBm



2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at

designated collection points. For more information see: <u>www.recyclethis.info</u>



2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation

for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the

battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info

Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (A)/NMB-3(A) standards requirements.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

(1) this device may not cause interference, and

(2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut

fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

This equipment should be installed and operated with a minimum distance 20cm between the radiator and your body.

Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.

Applicable Models

This guide applies to the model: DS-3WR3N.

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description		
I Note	Note Provides additional information to emphasize or supplement important points of the main text.		
A Caution	Indicates a potentially hazardous situation, which if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.		
Danger	Indicates a hazard with a high level of risk, which if not avoided, will result in death or serious injury.		

Safety Instructions

Before operating, read the operation instructions and precautions to be taken, and follow them to prevent accidents. The warning and danger items in other documents do not cover all the safety precautions that must be followed. They are only supplementary information, and the installation and maintenance personnel need to understand the basic safety precautions to be taken.

- Do not use the device in a place where wireless devices are not allowed.
- Please use the included power adapter.
- Mains plug is used as the disconnect device and shall remain readily operable.
- The power socket shall be installed near the device and easily accessible.
- Operating environment: Temperature: 0°C 40°C; Humidity: (10% 90%) RH, noncondensing; Storage environment: Temperature: -40°C - 70°C; Humidity: (5% - 90%) RH, noncondensing.
- Keep the device away from water, fire, high electric field, high magnetic field, and inflammable and explosive items.
- Unplug this device and disconnect all cables during lightning storms or when the device is unused for long periods.
- Do not use the power adapter if its plug or cord is damaged.
- If such phenomena as smoke, abnormal sound, or smell appear when you use the device, immediately stop using it and disconnect its power supply, unplug all connected cables, and contact the after-sales service personnel.

• Disassembling or modifying the device or its accessories without authorization voids the warranty, and might cause safety hazards.

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Chapter 1 Get to know your device

1.1 Overview

Hikvision wireless N300 home router is an eco-friendly wireless router dedicated to small and medium apartments. With 4 external 5 dBi antennas and built-in Qualcomm WiFi chip, it works perfectly with popular mobile phones and blanks your home with a reliable and stable internet connection. The WISP mode allows you to extend your existing WiFi network with one single step. In addition, the WiFi schedule function helps save power consumption by setting your router to turn on and off the WiFi network regularly.

1.2 Appearance

1.2.1 LED indicator



Figure 1-1 LED indicator

LED indicator	Status	Description	
SYS	Solid on	The system is working properly.	
515	Off	The system is faulty.	
	Solid on	The WiFi network is enabled.	
WLAN	Blinking	Data is being transmitted wirelessly.	
	Off	The WiFi network is disabled.	
	Solid on	The corresponding LAN port is connected properly, but no data is being transmitted over the LAN port.	
1, 2, 3	Blinking	The corresponding LAN port is connected properly, and data is being transmitted over the corresponding LAN port.	
	Off	The corresponding port is disconnected or improperly connected.	
WAN	Solid on	The corresponding WAN port is connected properly, and data is being transmitted over the corresponding WAN port.	
	Blinking	Data is being transmitted over the WAN port.	
	Off	The WAN port is disconnected or improperly connected.	

Table 1-1 LED indicator description

1.2.2 Jack, ports, and button



Figure 1-2 Jack, ports, and button

Table 1-2 Jack,	ports and button	description
-----------------	------------------	-------------

Jack/port/button	Description
PWR	Power jack
PVVK	Used to power on the router (with the included power adapter).
WAN	10/100 Mbps auto-negotiation WAN port.
VVAN	Used to connect to the external network.
	10/100 Mbps auto-negotiation LAN port.
LAN3, LAN2, LAN1	Used to connect to computers, and switches.
	Used for WPS negotiation or reset.
WPS/RST	 WPS: Press the WPS/RST button for 1 to 3 seconds, and enable the WPS function of another WPS-enabled device within 2 minutes to establish a WPS connection.
	 RST: When the router completes startup, hold down the WPS/RST button for about 8 seconds, and then release it when all the LED indicators blink once. The router is reset successfully.

1.3 Label

The bottom label shows the login IP address, SSID, MAC address, and serial number (SN) of the router. See the following figure.



Figure 1-3 Label

Login address: It is the domain name used to log in to the web UI of the router.

IP Address: It is the default address used to log in to the web UI of the router.

SSID: It specifies the default WiFi name of the router.

SN: It is required if you need technical assistance.

MAC: It specifies the MAC address of the router.

Chapter 2 Web UI

2.1 Log in to the web UI

Step 1 Connect your smartphone to the WiFi network of the router, or connect your computer to a LAN port of the router.



Step 2 Launch a web browser on the device connected to the router, and visit http://hikvisionwifi.local.



Figure 2-2 Visit the domain name of the router



The following page appears.

Figure 2-3 Web UI

iNote

If the above page does not appear, try the following solutions:

- Ensure that the router is powered on properly.
- If you are using a computer to access the page, check whether the computer obtains an IP address automatically. Refer to <u>A.1 Configuring the computer to obtain an IPv4 address</u> <u>automatically</u>.
- If you are using a smartphone to access the page, ensure that your cellular network is disabled.
- <u>Reset the router</u> and log in to the web UI of the router.

2.2 Log out of the web UI

If you log in to the web UI of the router and perform no operation within 5 minutes, the router logs you out automatically. You can also log out by clicking **Logout** in the upper right corner of the web UI.

2.3 Web UI layout

The web UI of the router consists of two parts, including the navigation bar and the configuration area. See the following figure.

HIKVISION		Download App English ~ Logout
sta	tus Route Settings Client Advanced	Administration
of Internet Settings		
Mireless Settings	Operating Mode	
IPv6 Configuration	Internet Connection Mode Router mode WISP mode AP mode	
Sleeping Mode	Under this mode, the router connects to the ISP in a wired manner, and provides WIFI signal to clients. Internet Connection	
	Connection Type PPPoE Static IP Address Dynamic IP Address	
	This type is applicable if a PPPoE user name and password are required for setting up an internet connection.	
	User Name tix	
	Password ···· 🔞	
	Connection Status Connected. You can access the internet.	
	Save	

Figure 2-4 Web UI layout

iNote

The functions and parameters shown in gray indicate that the functions are not supported or cannot be modified.

SN	Name	Description	
1,	Navigation bar	It is used to show the function menu of the router. Users can select functions in the navigation bar and the configuration appears in the configuration area.	
2	Configuration area	It is used to modify or view your configurations.	

Table 2-1 Navigation bar and configuration area description

2.4 Common element

The common elements used on the web UI are as follows.

Table 2-2 Common element description

Common element	Description
Save	It is used to save the current configurations and enable them to take effect.
Cancel	It is used to cancel the current configurations and restore the previous settings.

Chapter 3 Status

Log in to the web UI of the router and choose **Status** to enter the page. On this page, you can:

- View internet connection status
- <u>View online device information</u>
- View system information

3.1 View internet connection status

You can view the internet connection status on this page.

Procedures:

Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.

Step 2 Navigate to **Status** > **Connection Status**.

When the internet and the router are connected and Connected. You can access the internet. is shown as below, the router is connected to the internet successfully and you can access the internet via the router.



Figure 3-1 Internet connection status

When a red cross and "Disconnected" are shown between the internet and the router, and WAN port disconnected. Please connect an Ethernet cable with Internet connectivity to the port. is shown on the page, it indicates that the Ethernet cable is not connected properly. Please ensure that the Ethernet cable is connected properly.



Figure 3-2 Internet connection status

When a red cross and "Disconnected" are shown between the internet and the router, and Failed. Please confirm your user name and password and try again. is shown on the page, it indicates that the user name and password you entered were incorrect. Please navigate to the **Internet Settings** page to try again.



Figure 3-3 Internet connection status

iNote

Please consider the following tips when entering the username and password:

- Pay attention to case sensitivity, such as "Z" and "z".
- Pay attention to similar letters and numbers, such as "I" and "1".
- Ensure the completeness of account parameters, such as "0755000513@163.gd", rather than "0755000513"

If the problem persists, contact your ISP.

When a red cross and "Disconnected" are shown between the internet and the router, and Error: No response from the remote server. Please contact your ISP. is shown on the page, try the following solutions:

- Ensure that the Ethernet cable is connected properly.
- Ensure that you choose the proper connection type (Contact your ISP for any doubt about the connection type).
- Power off the router and wait for several minutes, then power it on and try again.

If the problem persists, consult your ISP.



Figure 3-4 Internet connection status

When a red cross and "Disconnected" are shown between the internet and the router, and Dial-up connection succeeded but the internet is inaccessible. Please contact your ISP. is shown on the page, contact your ISP for the problem.



Figure 3-5 Internet connection status

When a red cross and "Disconnected" are shown between the internet and the router, and The router has obtained a valid IP address but cannot access the Internet. Please try the solutions below one by one. is shown as below, follow the instructions on the page to solve the problem.



Figure 3-6 Internet connection status

3.2 View online device information

This part shows the information of online devices, such as the number and real-time upload/download speed.

To access the page, log in to the web UI of the router and navigate to **Status** > (Online devices).



Figure 3-7 Online device information

To control the bandwidth of online devices, click the **Download Speed** and **Upload Speed** area to enter the <u>Access Control</u> page.

Online Device (1)				
Device Name	Download Speed Upload Speed	d Download Limit Upload Limit	Internet Access	
MININT-GV610BB ∠ 192.168.0.200 6C:4B:90:41:E2:AD	↓ 0KB/s	No Limit v	✓ Local	
Blocked Device (Blacklist)				
Device Name	MAC Address	Unlimit		
	No device			

Figure 3-8 Online device information

3.3 View system information

This section shows the basic information of the router, including connection type, connection duration, WAN IP address and so on.

To access the page, log in to the web UI of the router and navigate to **Status** > **System Info**.

System Info	
Connection Type	Dynamic IP Address
Connection Duration	1m 27s
WAN MAC Address	
LAN IP Address	192.168.0.1
Subnet Mask	255.255.255.0
Default Gateway	192.168.84.1
Device Version	V1.0.6 build220329
WAN IP Address	192.168.84.100
Preferred DNS Server	192.168.80.1
Alternate DNS Server	61.139.2.69

Figure 3-9 System information

Table 3-1 S	system	information	parameter	description
	ystern	mormation	parameter	acouption

Parameter	Description
Connection Type	It shows the current IPv4 connection type of the router.
Connection Duration	It specifies the time that has elapsed since the router connects to the IPv4 internet successfully.
WAN MAC Address	It specifies the MAC address of the WAN port of the router.
LAN IP Address	It specifies the IP address of the LAN port for the router. LAN users can access the web UI of the router by visiting this IP address. Default: 192.168.0.1.

Parameter	Description	
Subnet Mask	It specifies the subnet mask of the WAN port.	
Default Gateway	It specifies the IPv4 default gateway of the router.	
Device Version	It specifies the current version number of the router's firmware.	
WAN IP Address	It specifies the IPv4 address of the WAN port.	
Preferred DNS Server	They show the preferred and alternative IPv4 DNS serv	
Alternate DNS Server	address of the WAN port.	

Chapter 4 Route settings

4.1 Internet settings

4.1.1 Overview

On this page, you can complete the internet settings to achieve shared internet access for multiple users.

To access the page, log in to the web UI of the router and navigate to **Route Settings** > **Internet Settings**.

Operating Mode
Internet Connection Mode Router mode WISP mode Universal relay mode AP mode
Under this mode, the router connects to the ISP in a wired manner, and provides WiFi signal to clients.
Internet Connection
Connection Type PPPoE Static IP Address Dynamic IP Address
This type is applicable if a PPPoE user name and password are required for setting up an internet connection.
User Name
Password
Connection Status Connected. You can access the internet.
Save

Figure 4-1 Internet settings

The router supports multiple working modes, including router mode, WISP mode, universal relay mode and AP mode. Choose the suitable mode according to your context of use.

Table 4-1	Working	mode of	the router
-----------	---------	---------	------------

Context of use	Suitable mode
Connect your router to a modem or Ethernet jack using an Ethernet cable.	Router mode
Bridge the existing WiFi network and extend the wireless coverage.	WISP mode or Universal relay mode
Connect the router to a smart home gateway to provide wireless coverage.	<u>AP mode</u>

4.1.2 Serve as a router

If you use the router for the first time or the router is restored to factory settings, follow the quick installation guide to configure the internet access. If you want to modify internet parameters or other settings, you can follow the instruction in this chapter.

By default, the router works in router mode. Under this mode, connect the WAN port of the router to the internet, connect the LAN ports to user devices and complete the internet settings, then you can access the internet on these devices.

iNote

Parameters are provided by your ISP. Contact your ISP for any doubts.

Set up a PPPoE connection

If the ISP provides you with a PPPoE user name and password, you can choose this connection type to access the internet. The application scenario is shown below.



Figure 4-2 Application scenario

Procedures:

- Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.
- Step 2 Navigate to Route Settings > Internet Settings.
- Step 3 Set Operating Mode to Router Mode.
- Step 4 Set Connection Type to PPPoE.
- Step 5 Enter the User Name and Password provided by your ISP.

Step 6 Click **Save** at the bottom of the page.

Operating Mode
Internet Connection Mode Router mode WISP mode Universal relay mode AP mode
Under this mode, the router connects to the ISP in a wired manner, and provides WiFi signal to clients.
Internet Connection
Connection Type PPPoE Static IP Address Dynamic IP Address
This type is applicable if a PPPoE user name and password are required for setting up an internet connection.
User Name
Password
Save

Figure 4-3 Set up a PPPoE connection

Wait a moment. When "Connected. You can assess the internet." is shown on the page, the router is connected to the internet.

Internet Connection	
Connection Type	PPPoE O Static IP Address O Dynamic IP Address
This type is applic	cable if a PPPoE user name and password are required for setting up an internet connection.
User Name	
Password	۲
Connection Status	Connected. You can access the internet.

Figure 4-4 Connection status

iNote

If you still cannot access the internet, try the following solutions:

- If "Error: No response from the remote server. Please contact your ISP." is shown on the page, you are recommended to set the Connection Type to Dynamic IP Address.
- If the problem persists, refer to <u>3.1 View internet connection status</u> to find a solution.

Table 4-2 PPPoE parameter description

Parameter	Description	
User Name	They specify the PPPoE user name and password provided by you	
Password	ISP.	
	It specifies the connection status of the WAN port.	
Connection Status	• When "Connected. You can access the internet now." is shown here, the router is connected to the internet successfully.	
	 When other information is shown here, the router fails to connect to the internet. Please take corresponding measures according to the information shown here. 	

Set up a static IP connection

When your ISP provides you with information including IP address, subnet mask, default gateway and DNS server, you can choose this connection type to access the internet.

Procedures:

Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.

Step 2 Navigate to Route Settings > Internet Settings.

Step 3 Set Connection Type to Static IP Address.

Step 4 Set the required parameters provided by your ISP.

Step 5 Click **Save** at the bottom of the page.

Internet Connection				
Connection Type	O PPPoE	Static I	P Address	O Dynamic IP Address
This type is applica	able if a static IP	address is	required for s	setting up an internet connection.
IP Address				
Subnet Mask]
Default Gateway				
Preferred DNS Server]
Alternate DNS Server]
		Save		

Figure 4-5 Set up a static IP connection

Wait a moment. When "Connected. You can access the internet." is shown on the page, you can access the internet.

Internet Connection
Connection Type O PPPoE
This type is applicable if a static IP address is required for setting up an internet connection
IP Address 192 · 168 · 20 · 155
Subnet Mask 255 · 255 · 255 · 0
Default Gateway 192 · 168 · 20 · 100
Preferred DNS Server 192 · 168 · 20 · 100
Alternate DNS Server
Connection Status Connected. You can access the internet.

Figure 4-6 Connection status

If you still cannot access the internet, refer to 3.1 View internet connection status to find a solution.

Parameter	Description			
IP Address	When the static IP address is chosen as the connection type, enter			
Subnet Mask	the fixed IP address information provided by your ISP.			
Default Gateway	□iNote			
Preferred DNS	If your ISP only provides one DNS server address, you can leave			
Alternate DNS	the Alternate DNS blank.			
	It specifies the connection status of the WAN port.			
Connection Status	• When "Connected. You can access the internet now." is shown here, the router is connected to the internet successfully.			
	 When other information is shown here, the router fails to connect to the internet. Please take corresponding measures according to the information shown here. 			

Set up a dynamic IP connection

Generally, accessing the internet through a dynamic IP address is applicable in the following situations:

- Your ISP does not provide PPPoE user name and password, or any information including IP address, subnet mask, default gateway and DNS server.
- You have a router with internet access and want to add another router.

The application scenario is shown below.



Figure 4-7 Application scenario

Procedures:

- Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.
- Step 2 Navigate to **Route Settings** > Internet Settings.

Step 3 Set Operating Mode to Router Mode.

Step 4 Set Connection Type to Dynamic IP Address.

Step 5 Click **Save** at the bottom of the page.

Operating Mode						
Internet Connection Mode Router mode WISP mode Universal relay mode AP mode						
Under this mode, the router connects to the ISP in a wired manner, and provides WiFi signal to clients.						
Internet Connection						
Connection Type O PPPoE O Static IP Address O Dynamic IP Address						
This type is applicable if no settings is required for setting up an internet connection.						
Save						

Figure 4-8 Set up a dynamic IP connection

Wait a moment. When "Connected. You can access the internet." is shown on the page, you can access the internet.

Internet Connection								
Connection Type O PPPoE O Static IP Address O Dynam	ic IP Address							
This type is applicable if no settings is required for setting up an internet connection.								
Connection Status Connected. You can access the internet.								
Save								

Figure 4-9 Connection status

If you still cannot access the internet, refer to <u>3.1 View internet connection status</u> to find a solution.

4.1.3 Serve as a WiFi extender

If you have a router that is connected to the internet and wants to extend the WiFi coverage, you can refer to this chapter.

Assume that the information about your existing WiFi network is as follows:

- WiFi name: My_home_WiFi
- WiFi password: Hikvision123456



Figure 4-10 Application scenario

Method 1: Set the router to WISP mode

Procedures:

Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.

iNote

If you use the router for the first time or have reset the router, proceed with the following steps. If you have already configured the router, skip **Step 2**.

Step 2 Set **Connection Type** to **Dynamic IP Address**, and click **Save**. You will be directed to the **Status** page.



If you are using a wireless device for configuration and are not directed to the **Status** page automatically, ensure that your wireless device is still connected to the WiFi network of the router.



Figure 4-11 Internet connection status

Step 3 Navigate to **Route Settings > Internet Settings > Operating Mode**.

Step 4 Set **Operating Mode** to **WISP**.

Step 5 Select the ISP hotspot, which is **My_home_WiFi** in this example.

Operating Mode								
	Internet Connection Mode 🔘 Router mode	WISP mode O Universal relay mode	○ AP mode					
Under this mode, the router boosts the WIFI signal of ISP.								
Please choose the WiFi signal to be boosted \mathcal{G}								
	WiFi Name	MAC Address	Channel	Security Mode	Strength			
۲	My_home_WiFi	D8:38:0D:EE:43:A0	48	WPA/WPA2-PSK	100%			

Figure 4-12 Select the WiFi signal to be boosted

Step 6 Enter the password of the WiFi network, which is **Hikvision123456** in this example.

Step 7 Click **OK**. The router will reboot to activate the settings.

Enter Password	\times				
Enter the password of "My_home_WiFi"					
<i></i>					
After you click OK, the router reboots to make the settings effective. When the reboot completes, visit hikvisionwifi.local to log in to the web UI.					
Cancel OK					

Figure 4-13 Enter password


Step 8 Log in to the web UI of the router again, and navigate to **Status > Connection Status** to ensure that Connected. You can access the internet. is shown on this page.

Figure 4-14 Connection status

i Note

If the connection between WiFi and My Router failed, try the following solutions:

- Ensure that you have entered the correct WiFi password of the WiFi, and mind case sensitivity.
- Ensure that **My Router** is within the wireless coverage of the **WiFi**.

Step 9 Relocate the new router by referring to the following suggestions and power it on again:

- Between the original router and the uncovered area, but within the coverage of the original router.
- Away from the microwave oven, electromagnetic oven or refrigerator.
- Above the ground with few obstacles.

Do not connect any device to the WAN port of the new router after setting the router to WISP mode.

To access the internet, connect your computer to a LAN port of the new router, or connect your smartphone to the WiFi network of the new router.

Navigate to **Route Settings** > **Wireless Settings** > **WiFi Name and Password** to check the WiFi name and password. If the network is not encrypted, you can also set a WiFi password on this page for security.

WiFi Name and Password		
Unify 2.4 GHz & 5 GHz	Enable O Disable	
After this function is enab	oled, the 2.4 GHz and 5 GHz networks use the same	e WiFi name; in this way, the router can automatically choose the best WiFi network for clients.
WiFi Network	Enable Disable	
WiFi Name	HIKVISION123	Hide WiFi network
Security Mode	WPA/WPA2-PSK Mixed ~	
WiFi Password	&	

Figure 4-15 WiFi name and password

iNote

If you cannot access the internet, try the following solutions:

- Ensure that the existing router is connected to the internet successfully.
- Ensure that your wireless devices are connected to the WiFi network of the new router.
- If the computer connected to the router for repeating cannot access the internet, ensure that the computer is configured to obtain an IP address and DNS sever automatically.

Method 2: Set the router to universal relay mode

Procedures:

Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.

iNote

If you use the router for the first time or have reset the router, proceed with the following steps. If you have already configured the router, skip **Step 2**.

Step 2 Set **Connection Type** to **Dynamic IP Address**, and click **Save**. You will be directed to the **Status** page.



If you are using a wireless device for configuration and are not directed to the **Status** page automatically, ensure that your wireless device is still connected to the WiFi network of the router.



Figure 4-16 Internet connection status

Step 3 Navigate to Route Settings > Internet Settings > Operating Mode.

Step 4 Set **Operating Mode** to **Universal relay mode**.

Step 5 Select the ISP hotspot, which is **My_home_WiFi** in this example.

Operatin	ıg Mode				
	Internet Connection Mode 🔘 Router mode	 WISP mode Universal rela 	y mode 🛛 🔿 AP mode		
	Under this mode, the router features strong co	ompatibility and can easily relay and boost	all WiFi signals.		
Please cl	hoose the WiFi signal to be boosted \mathcal{G}				
	WiFi Name	MAC Address	Channel	Security Mode	Strength
0	My_home_WiFi	D8:38:0D:EE:43:A0	48	WPA/WPA2-PSK	<u></u> 100%

Figure 4-17 Select the ISP hotspot to be boosted

Step 6 Enter the password of the selected WiFi network, which is **Hikvision123456** in this example.

Step 7 Click **OK**. The router will reboot to activate the settings.

Step 8 Log in to the web UI of the router again, and navigate to **Status > Connection Status** to ensure that Bridged in Universal Repeater mode is shown on this page.

iNote

The LAN IP address of the router will change. Please log in to the web UI of the router by visiting **http://hikvisionwifi.local**. If there is another network device with the same login domain name (hikvisionwifi.local) as the router, log in to the upstream router and find the IP address obtained by the new router in the client list. Then you can log in to the web UI of the router by visiting the IP address.



Figure 4-18 Connection status

iNote

If the connection between the **Upstream Router** and **My Router** failed, try the following solutions:

- Ensure that you have entered the correct WiFi password of the WiFi, and mind case sensitivity.
- Ensure that **My Router** is within the wireless coverage of the **Upstream Router**.

Step 9 Relocate the new router by referring to the following suggestions and power it on again:

- Between the original router and the uncovered area, but within the coverage of the original router.
- Away from the microwave oven, electromagnetic oven, and refrigerator.
- Above the ground with few obstacles.

After the new router is set to universal relay mode, Do NOT connect any device to the WAN port of the new router.

To access the internet, connect your computer to a LAN port of the new router, or connect your smartphone to the WiFi network of the new router.

Navigate to **Wireless Settings** > **WiFi Name and Password** to check the WiFi name and password. If the network is not encrypted, you can also set a WiFi password on this page for security.

WiFi Name and Password	
Unify 2.4 GHz & 5 GHz	Enable O Disable
After this function is enal	bled, the 2.4 GHz and 5 GHz networks use the same WiFi name; in this way, the router can automatically choose the best WiFi network for clients
WiFi Network	Enable O Disable
WiFi Name	HIKVISION123 Hide WiFi network
Security Mode	WPA/WPA2-PSK Mixed V
WiFi Password	······ @

Figure 4-19 WiFi name and password

iNote

If you cannot access the internet, try the following solutions:

- Ensure that the existing router is connected to the internet successfully.
- Ensure that your wireless devices are connected to the WiFi network of the new router.
- If the computer connected to the router for repeating cannot access the internet, ensure that the computer is configured to obtain an IP address and DNS sever automatically.

4.1.4 Serve as an AP

When you have a smart home gateway that only provides wired internet access, you can set the router to work in AP mode to provide wireless coverage.

iNote

When the router is set to AP mode:

- Every physical port can be used as a LAN port.
- The LAN IP address of the router will be changed. Please log in to the web UI of the router by visiting http://hikvisionwifi.local.
- Functions, such as bandwidth control and port mapping will be unavailable. Refer to the web UI for available functions.

Procedures:

Step 1 Power on the router. Connect a computer to a LAN port of the router, or connect your smartphone to the WiFi network of the router.



Figure 4-20 Application scenario

iNote

If you have finished the quick setup wizard before, launch a web browser and visit **http://hikvisionwifi.local** and skip **Step 2**.

Step 2 Log in to the web UI of the router.

- Launch a web browser on a device connected to the router and visit http://hikvisionwifi.local to log in to the web UI of the router. A computer is used for the illustration below.
- 2) Set **Connection Type** to **Dynamic IP Address**, and click **Save**. You will be directed to the **Status** page.

iNote

If you are using a wireless device for configuration and are not directed to the **Status** page automatically, ensure that your wireless device is still connected to the WiFi network of the router.



Figure 4-21 Connection status

Step 3 Set the router to **AP mode**.

- 1) Navigate to Route Settings > Internet Settings > Operating Mode.
- 2) Set **Operating Mode** to **AP**, and click **Save** at the bottom of the page.



Figure 4-22 Set the router to AP mode

3) Click **OK** in the popup window. The router will reboot to activate the settings.



Figure 4-23 Click OK

Step 4 Connect the upstream device, such as a gateway, to any port of the router.



Figure 4-24 Application scenario

Log in to the web UI of the router again, and navigate to **Status > Connection Status** to check if the AP mode is configured successfully as follows.



Figure 4-25 Internet connection status

iNote

If there is another network device with the same login domain name (hikvisionwifi.local) as the router, log in to the upstream router and find the IP address obtained by the new router in the client list. Then you can log in to the web UI of the router by visiting the IP address.

To access the internet, connect your computer to a physical port, or connect your smartphone to the WiFi network.

Navigate to **Route Settings** > **Wireless Settings** > **WiFi Name and Password** to check the WiFi name and password. If the network is not encrypted, you can also set a WiFi password on this page for security.

WiFi Name and Password		
Unify 2.4 GHz & 5 GHz	Enable Disable	
After this function is enab	oled, the 2.4 GHz and 5 GHz networks use the sam	e WIFI name; in this way, the router can automatically choose the best WIFI network for clients.
WiFi Network	Enable Disable	
WiFi Name	HIKVISION123	Hide WiFi network
Security Mode	WPA/WPA2-PSK Mixed ~	
WiFi Password	······ &	

Figure 4-26 WiFi name and password

iNote

If you cannot access the internet, try the following solutions:

- Ensure that the existing router is connected to the internet successfully.
- Ensure that your wireless devices are connected to the correct WiFi network of the new router.
- If the computer connected to the router cannot access the internet, ensure that the computer is configured to obtain an IP address and DNS sever automatically.

4.2 Wireless settings

4.2.1 WiFi on/off

You can enable/disable the wireless network of the router.

To access the configuration page, log in to the web UI of the router, and navigate to **Route Settings** > **Wireless Settings** > **WiFi On/Off**.

WiFi On/Off		
	WiFi On/Off Enable 	 Disable

Figure 4-27 WiFi on/off

4.2.2 WiFi name and password

Overview

On this page, you can configure basic WiFi parameters, such as the WiFi name and password.

To access the configuration page, log in to the web UI of the router, and navigate to **Route Settings** > **Wireless Settings** > **WiFi Name and Password**.

WiFi Name and Password		
WiFi Name	HIKVISION_XXXX	Hide WiFi network
Security Mode	WPA/WPA2-PSK Mixed ~	
WiFi Password	<i></i>	

Figure 4-28 WiFi name and password

Parameter	Description	
WiFi Name	It specifies the WiFi network name (SSID) of the WiFi network.	
Security Mode	 It specifies the encryption modes supported by the router, including None: It indicates that a WiFi network is not encrypted and any clients can access the network without a password. This option is not recommended as it leads to low network security. WPA-PSK: It indicates that WPA-PSK is adopted to authenticate users. WPA2-PSK: It indicates that WPA2-PSK is adopted to authenticate users. WPA/WPA2-PSK Mixed: It indicates that WPA2-PSK and WPA2-PSK are adopted to authenticate users. 	
WiFi Password	It specifies the password for connecting to the WiFi network. You are strongly recommended to set a WiFi password for security. i Note It is recommended to use the combination of numbers, uppercase letters, lowercase letters and special symbols in the password to enhance the security of the WiFi network.	
Hide WiFi network	With this function enabled, wireless clients cannot find the SSID, and you need to enter the SSID on the wireless clients to access the WiFi network. By default, this function is disabled.	

Table 1-1	WiFi name and	naccword	narameter	description
	with that the arru	passworu	parameter	uescription

Change the WiFi name and WiFi password

The router supports a 2.4 GHz WiFi network.

Assume that you want to change the WiFi name and password to John_Doe_2.4GHz and Hikvision+Wireless24. The network adopts WPA/WPA2-PSK Mixed as the encryption type.

Procedures:

Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.

Step 2 Navigate to Route Settings > Wireless Settings > WiFi Name and Password.

Step 3 Change the parameters of the WiFi network.

- 1) Change the WiFi Name of the WiFi network, which is **John_Doe_2.4GHz** in this example.
- 2) Select an Encryption Mode, which is **WPA/WPA2-PSK Mixed** in this example.
- 3) Change the WiFi Password of the WiFi network, which is **Hikvision+Wireless24** in this example.

Step 4 Click **Save** at the bottom of the page.

WiFi Name and Password		
WiFi Name	John_Doe_2.4GHz	Hide WiFi network
Security Mode	WPA/WPA2-PSK Mixed V	
occurry mode		
WiFi Password	<i></i>	

Figure 4-29 Change WiFi name and password

When completing the configurations, you can connect your wireless devices to the WiFi networks of the router to access the internet.

Hide the WiFi network

Procedures:

Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.

Step 2 Navigate to Route Settings > Wireless Settings > WiFi Name and Password.

Step 3 Tick **Hide WiFi network** of the target network.

Step 4 Click **Save** at the bottom of the page.

WiFi Name and Password		
WiFi Name	John_Doe_2.4GHz	Hide WiFi network
Security Mode	WPA/WPA2-PSK Mixed V	
WiFi Password	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	

Figure 4-30 Hide WiFi network

When the configurations are completed, the corresponding WiFi network is invisible to wireless devices.

Connect to a hidden WiFi network

When a WiFi network is hidden, you need to enter the WiFi name manually to connect to it.

Assume that the WiFi parameters are:

- WiFi name: Jone_Doe
- Encryption type: WPA/WPA2-PSK Mixed
- WiFi password: Hikvision+Wireless245

iNote

If you do not remember the wireless parameters of the WiFi network, log in to the web UI of the router and navigate to **Route Settings** > **Wireless Settings** > **WiFi Name and Password** to find them.

Procedures (Example: iPhone):

Step 1 Tap **Settings** on your phone, and find **WLAN**.

Step 2 Enable WLAN.

- Step 3 Scroll the WiFi list to the bottom, and tap Other....
- Step 4 Enter the WiFi name and password, which are **John_Doe** and **Hikvision+Wireless245** in this example.
- Step 5 Set security to **WPA2/WPA3** (If WPA2/WPA3 is not available, choose WPA2).

Step 6 Tap Join.

Settings WLAN		Enter network information
	ê 🗢 і	Cancel Other Network Join
	ê 🔶 🚺	· · · · · · · · · · · · · · · · · · ·
	ê 🤶 🚺	Name John_Doe
	₽ 중 ()	
	∻ ()	Security WDA2/MDA2
		Security WPA2/WPA3 >
	● ╤ (j) ● ╤ (j)	Password
Other	• • •	

Figure 4-31 Connect to a hidden WiFi network

When the configurations are completed, you can connect to the hidden WiFi network to access the internet.

4.2.3 Multi SSID and password

Overview

In this module, you can enable/disable the Multi SSID and password function and change the WiFi name and password of the guest network.

To access the configuration page, log in to the web UI of the router and navigate to **Route Settings** > **Wireless Settings** > **Multi SSID and Password**. This function is disabled by default.

Multi SSID and Password				
Multi SSID 💿 Enable 🕓 Disable				
WiFi Name HIKVISION_Extender				
WiFi Password]			

Figure 4-32 Multi SSID and Password

Parameter	Description	
Multi SSID	It is used to enable the Multi SSID and password function.	
WiFi Name	It specifies the WiFi name of the router's guest network. I Note You can change the SSIDs (WiFi name) if required. To distinguish the guest network from the main network, you are recommended to set the different WiFi network names.	
WiFi Password	It specifies the password for the router's guest network.	

Table 4-5 Multi SSID and	nacoword	narameter	description
Table 4-5 Multi SSID and	passworu	parameter	uescription

Set up the guest network

Scenario: A group of friends is going to visit your home.

Goal: Prevent the use of WiFi networks by guests from affecting the network speed of your computer for work purposes.

Solution: You can configure the guest network function and let your guests use the guest networks.

Assume that the parameters you are going to set for the guest WiFi network:

- WiFi name for WiFi network: John_Doe.
- WiFi password for WiFi network: Hikvision+245.

Procedures:

- Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.
- Step 2 Navigate to Route Settings > Wireless Settings > Multi SSID and Password.
- Step 3 Set Multi SSID and Password to Enable.
- Step 4 Change the WiFi Name, which is John_Doe in this example.
- Step 5 Set **WiFi Password**, which is **Hikvision+245** in this example.
- Step 6 Click **Save** at the bottom of the page.

Multi SSID and Password		
Multi SSID	• Enable O Disable	
WiFi Name	John_Doe	
WiFi Password	····· &	

Figure 4-33 Set up the multi SSID and password

After the configuration, guests can connect their wireless devices, such as smartphones, to **John_Doe** to access the internet.

4.2.4 WiFi schedule

Overview

In this module, you can enable/disable the WiFi schedule function.

To access the configuration page, log in to the web UI of the router and navigate to **Route Settings** > **Wireless Settings** > **WiFi Schedule**. This function is disabled by default.

WiFi Schedule	
	WiFi Schedule 💿 Enable 🔿 Disable
	Tum WiFi Off At 00 v 07 v 07 v 00 v
	Turn WiFi Off On 📄 Everyday 🔽 Monday 🔽 Tuesday 🔽 Wednesday 🔽 Thursday 🔽 Friday 📄 Saturday 📄 Sunday

Figure 4-34 WiFi schedule

Parameter	Description
WiFi Schedule	Used to enable/disable the WiFi schedule function of the router.
Turn WiFi Off At	It specifies the period to turn off WiFi. 00:00-00:00 indicates a whole day.
Turn WiFi Off On	It specifies the date to turn off WiFi.

Table 4-6 WiFi sched	lule parameter	description
	and parameter	acouption

Set up WiFi schedule

Procedures:

Step 1 Launch a web browser on a device connected to the router and visit http://hikvisionwifi.local to log in to the web UI of the router.

Step 2 Navigate to Route Settings > Wireless Settings > WiFi Schedule.

- Step 3 Set WiFi Schedule to Enable.
- Step 4 Specify a period to turn off the WiFi network, which is **03:00** ~ **08:00** in this example.
- Step 5 Choose the specified date to turn off the WiFi network, which is **Everyday** in this example.

Step 6 Click **Save** at the bottom of the page.

WiFi Schedule		
	WiFi Schedule Enable Disable	
-	Tum WiFi OffAt 03 ~ 08 ~ 00 ~	
Т	'um WiFi Off On 🔽 Everyday 🗹 Monday 🔽 Tuesday 🔽 Wednesday 🔽 Thursday 🔽 Friday 🔽 Saturday 🛃 Sunday	

Figure 4-35 Set up WiFi schedule

4.2.5 WPS

The WPS function enables wireless devices such as smartphones to connect to WiFi networks of the router quickly and easily.

To access the page, log in to the web UI of the router and navigate to **Route Settings > Wireless Settings > WPS**.

iNote

This function is only applicable to WPS-enabled wireless devices.

Connect to the WiFi network using the WPS button

Step 1 Press the WPS button on the router.



Figure 4-36 Press the WPS button

Step 2 Configure the WPS function on your wireless devices within 2 minutes. Configurations on various devices may differ (Example: HUAWEI P10).

- 1) Find **Settings** on the phone.
- 2) Select WLAN.
- 3) Tap :, and select WLAN settings.

\leftarrow Wireless & networks	Q	\leftarrow wlan	:
Airplane mode		WLAN	WLAN+
WLAN	· · · · · · · · · · · · · · · · · · ·		WLAN Direct
Mobile network	>		WLAN settings
Tethering & portable hotspot	>		Help
Dual SIM settings	>		
Data usage	>		
VPN	>		
Private DNS	Off >		

Figure 4-37 Configure the WPS function

4) Select WPS connection.

\leftarrow WLAN settings	
WLAN security check Check the security of connected WLAN networks, and avoid connecting to known networks that pose security risks	
Saved networks	
Install certificates	
MAC address	
IP address	
WPS CONNECTION	
WPS connection	
WPS PIN connection	>

Figure 4-38 Select WPS connection

Wait a moment until the WPS negotiation is completed, and the phone is connected to the WiFi network.

\leftarrow WLAN settings			
WLAN security check Check the security of connected WLAN networks, and avoid connecting to known networks that pose security risks			
Saved networks	>		
Install certificates	>		
MAC address	14:5f:94:bc:fc:83		
IP address Unavailable			
WPS connection			
Press the WLAN Protected Setup button on your router. It may be called "WPS" or contain this symbol:			
()			
CANCEL			

Figure 4-39 WPS negotiation completed

Connect to the WiFi network using the PBC button

Procedures:

Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.

Step 2 Navigate to Route Settings > Wireless Settings > WPS.

- Step 3 Enable the WPS.
- Step 4 Click **Save** at the bottom of the page.
- Step 5 Click PBC.

Step 6 Configure the WPS function on your wireless devices within 2 minutes. Configurations on various devices may differ (Example: HUAWEI P10).

- 1) Find WLAN settings on the phone.
- 2) Tap : , and choose WLAN settings.





Figure 4-40 Configure the WPS function

3) Select WPS connection.

\leftarrow WLAN settings	
WLAN security check Check the security of connected WLAN networks, and avoid connecting to known networks that pose security risks	
Saved networks	
Install certificates	
MAC address	
IP address	
WPS CONNECTION	
WPS connection	
WPS PIN connection	>

Figure 4-41 Select WPS connection

Wait a moment until the WPS negotiation is completed, and the phone is connected to the WiFi network.

← WLAN settings		
WLAN security check Check the security of connected WLA networks, and avoid connecting to kn- networks that pose security risks		
Saved networks	>	
Install certificates	>	
MAC address	14:5f:94:bc:fc:83	
IP address	Unavailable	
WPS connection		
Press the WLAN Protected Setup button on your router. It may be called "WPS" or contain this symbol:		
.		
CANCEL		

Figure 4-42 WPS negotiation completed

Wait until the smartphone or computer is connected to the WiFi network of the router successfully.

Connect to the WiFi network using the PIN code

Caution

WPS connection using pin code is generally applied on a computer with a wireless adapter. Please refer to the relevant adapter's user guide for detailed instructions.

Step 1 Find the PIN code.

Launch a web browser on the device connected to the router, and visit http://hikvisionwifi.local. Navigate to Route Settings > Wireless Settings > WPS to check the PIN code.

WPS	
WPS	Enable O Disable
PBC Mode	PBC Click this button or hold down the WPS/RST button
PIN Mode	PIN code: 33744827 Enter this PIN on the device to be connected.

Figure 4-43 Check PIN code

Step 2 Enter the PIN code on the wireless device for connection.

Wait until the smartphone or computer is connected to the WiFi network of the router successfully.

4.2.6 WiFi parameters

In this section, you can change network mode, wireless channel, and wireless bandwidth of 2.4 GHz WiFi network.

To access the configuration page, log in to the web UI of the router, and navigate to **Route Settings > Wireless Settings > WiFi Parameters**.

iNote

In order not to influence the wireless performance, it is recommended to maintain the default settings on this page without professional instructions.

WiFi Parameters			
Network Mode	11b/g/n	~	
WiFi Channel	Auto	~	Current channel: 3
Wireless Bandwidth	Auto	~	Current: 20 MHz
	Save		

Figure 4-44 WiFi parameters

Parameter	Description
	It specifies various protocols adopted for wireless transmission.
	2.4 GHz WiFi network supports 11b, 11g, 11b/g mixed and 11b/g/n mixed modes.
	• 11b/g/n: It indicates that all devices compliant with IEEE 802.11b or IEEE 802.11g protocol, or work at 2.4 GHz with IEEE 802.11n protocol can connect to the 2.4 GHz WiFi network of the router, therefore enjoying a maximum transmission rate of 300 Mbps.
Network Mode	 11b/g: It indicates that devices compliant with IEEE 802.11b or IEEE 802.11g protocol can connect to the 2.4 GHz WiFi network of the router, enjoying a maximum transmission rate of 54 Mbps.
	 11b: It indicates that devices compliant with IEEE 802.11b protocol can connect to the 2.4 GHz WiFi network of the router, enjoying a maximum transmission rate of 11 Mbps.
	 11g: It indicates that devices compliant with IEEE 802.11g protocol can connect to the 2.4 GHz WiFi network of the router, enjoying a maximum transmission rate of 54 Mbps.
	It specifies the operating channel of a WiFi network.
WiFi Channel	By default, the wireless channel is Auto , which indicates that the router selects a channel for the WiFi network automatically. You are recommended to choose a channel with less interference for better wireless transmission efficiency. You can use a third-party tool to scan the WiFi signals nearby to understand the channel usage situations.
	It specifies the bandwidth of the wireless channel of a WiFi network. Change the default settings only when necessary. By default, the wireless bandwidth is Auto .
Wireless Bandwidth	 40MHz: It indicates that the channel bandwidth of a router is 40 MHz.
	• 20MHz: It indicates that the channel bandwidth of a router is to 20 MHz.

Table 4-7 WiFi parameter description

Chapter 5 Client management

5.1 Access control

5.1.1 Overview

By configuring this function, you can limit the upload and download speed of devices connected to the router and allocate the bandwidth reasonably. On this page you can:

- Set the upload and download speed limit
- Add devices to the blacklist
- Remove devices from the blacklist

To access the configuration page, log in to the web UI of the router and navigate to **Client Management > Access Control**.

Online Device (1)			
Device Name	Download Speed Upload Speed	Download Limit Upload Limit	Internet Ac
MININT-GV610BB ∠ 192.168.0.100 6C:4B:90:41:E2:AD	↓ 0KB/s ↑ 0KB/s	No Limit V No Limit	 ✓ Local
Blocked Device (Blacklist)			
Device Name	MAC Address	Unlimit	
	No device		
	Save		

Figure 5-1 Access control

Parameter		Description	
	Device Name	It shows the information of the online device, including the device name and IP address. You can click 🖉 to customize the device name for easier management.	
	Download Speed	It specifies the current upload and download speeds of t	
	Upload Speed	device.	
Online	Download Limit	It allows you to specify the maximum upload and	
Online Device	Upload Limit	download speeds for the device.	
	Internet Access	 It specifies whether the device can access the internet. It indicates that the device can access the internet. It indicates that the device is unable to access the internet. Local: It indicates that the device is managing the web UI of the router. 	
	Device Name	It specifies the device name of a blocked device.	
Blocked	MAC Address	It specifies the MAC address of a blocked device.	
Device (Blacklist)	Unlimit	It is used to remove a blocked device from the blacklist. After being removed from the blacklist, the device can reconnect to the router for internet access.	

Table 5-1 Access control parameter description

5.1.2 Set the upload and download speed limit

Scenario: You want to allocate bandwidth equally and enable all connected devices to enjoy smooth 720p videos.

Solution: Configure the bandwidth control function to meet the requirement.

Procedures:

Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.

Step 2 Navigate to Client Management > Access Control.

Step 3 Target the devices to be controlled, set the **Download Limit** to **512 KB/s (HD Videos)**, and set the **Upload Limit** to **32KB/s**.

Step 4 Click **Save** at the bottom of the page.

Online D	evice (2)					
Device	Name		Download Speed	Upload Speed	Download Limit Upload Limit	Internet Access
?	MININT-GV6I0BB 192.168.0.200 6C:4B:90:41:E2:AD	2	↓ 0KB/s	↑ 0KB/s	512 KB/s (HD Videos V 32KB/s V	Local
?	User 192.168.0.199 32:D0:08:4B:64:48	2	↓0KB/s	↑ 0KB/s	128 KB/s (Web) v 32KB/s v	

Figure 5-2 Set the upload and download speed limit

After the configuration, the highest speed for the device is 4 Mbps (or 512 KB/s) and satisfies the requirement of 720p videos.

5.1.3 Add the device to the blacklist

Add devices to the blacklist to block internet access:

Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.

Step 2 Navigate to **Client Management > Access Control**.

Step 3 Click 🚺 corresponded to the device to be blocked to change the status to 🕖 .

Online Device (2)						
Device Name		Download Speed	Upload Speed	Download Limit	Upload Limit	Internet Access
MININT-GV6I0BB 192.168.0.200 6C:4B:90:41:E2:AD	2	↓ 0KB/s	↑ 0KB/s	No Limit v	No Limit	 ✓ Local
Unknown 192.168.0.199 32:D0:08:4B:64:48	2	↓ 0KB/s	↑0KB/s	No Limit ~	No Limit	~ ()

Figure 5-3 Add device to the blacklist

Step 4 Click **Save** at the bottom of the page.

The blocked device is shown on the blacklist.

Blocked Device (Blacklist)		
Device Name	MAC Address	Unlimit
	32:D0:08:4B:64:48	
	Save	

Figure 5-4 Blocked device

5.1.4 Remove the device from the blacklist

Procedures:

- Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.
- Step 2 Navigate to Client Management > Access Control > Blocked Device (Blacklist).

Step 3 Target the device and click 🕖 to 🌔 .

Step 4 Click **Save** at the bottom of the page.

Blocked Device (Blacklist)		
Device Name	MAC Address	Unlimit
	32:D0:08:4B:64:48	
	Save	

Figure 5-5 Blocked device

After the device is removed from the blacklist, it can access the internet through the router again.

5.2 Parental control

5.2.1 Overview

On the parental control page, you can view the information of online devices and configure their internet access options.

To access the configuration page, log in to the web UI of the router, and navigate to **Client Management** > **Parental Control Rules** page.

Online Device (1)				
Device Name	Online Duration	Manage		
MININT-GV610BB // 192.168.0.200	2h 22m 37s			
Parental Control Rules	Parental Control Rules The following rules take effect on all devices enabling parental control			
Allow access d	luring 19 ~ 00 ~ 21 ~ 00 ~			
Repe	at on 📄 Everyday 📄 Monday 📄 Tuesday 📄 Wednesday 📄 Thursday 🗹 Friday	y 🔽 Saturday 📃 Sunday		
Website Restric	tions Disable ~			
	Save			

Figure 5-6 Parental control

Parameter		Description
	Device Name	It specifies the name of the online device. You can click 🖉 to customize the device name for easier management.
Online	IP Address	It specifies the IP address of the online device.
Device	Online Duration	It specifies the time that has elapsed since the device connects to the router successfully.
	Manage	It specifies the status of a rule. You can enable/disable the rule by switching the button.
	Allow access during	It specifies the period when the internet connection is allowed.
Repeat on		It specifies the dates when the internet connection is allowed.
		It specifies the modes of website restrictions. • Disable: It specifies that all websites are accessible.
Parental Control	Website Restrictions	 Only Permit: It specifies that only the websites listed in Unblocked Websites are accessible.
Rules		 Only Forbid: It specifies that only the websites listed in Blocked Websites are inaccessible.
	Unblocked Websites	It specifies the websites that devices can or cannot access during the "Allow access during" period.
	Blocked Websites	i Note Key words are supported for access restriction. Full website addresses are recommended for precise limits.

Table 5-2 Parental control parameter description

5.2.2 An example of configuring parental control

Scenario: The final exam for your daughter is approaching and you want to configure her internet access through the router.

Goal: Your daughter cannot access websites, such as Facebook, Twitter, Youtube, and Instagram, from 8:00 to 22:00 on weekends using the computer in her room, and cannot access the internet from 22:00 to 8:00.

Solution: You can configure the parental controls function to reach the goal.

Procedures:

Step 1 Launch a web browser on a device connected to the router and visit http://hikvisionwifi.local to log in to the web UI of the router.

Step 2 Navigate to Client Management > Parental Control Rules.

Step 3 Set the button from 🔘 to 🌔 .

Online Device (1)			
Device Name		Online Duration	Manage
MININT-GV6I0BB 192.168.0.200	_	2h 46m 17s	

Figure 5-7 Configure parental control
- Step 4 Specify the period when the target websites cannot be accessed, which is 8:00 ~ 22:00 in this example.
- Step 5 Tick the days when the rule is applied, which are **Saturday** and **Sunday** in this example.
- Step 6 Set Website Restrictions to Only Forbid.
- Step 7 Set Blocked Websites, which are facebook.com, twitter.com, youtube.com and instagram.com.

Step 8 Click **Save** at the bottom of the page.

Parental Control Rules						
Т	The following rules take effect on all devices enabling parental control					
Allow access during	08 ~ : 00 ~ ~ 22 ~ : 00 ~					
Repeat on	🗌 Everyday 📄 Monday 📄 Tuesday 📄] Wednesday 📋 Thursday 📄 Friday 🗹 Saturday 🔽 Sunday				
Website Restrictions	Only Forbid	~				
Blocked Websites	Please enter	+				
1	facebook.com					
2	twitter.com					
3	youtube.com					
4	instagram.com					
	Save					

Figure 5-8 Set parental control rules

After the configuration is completed, your daughter can access any websites except for Facebook, Twitter, Youtube, and Instagram from 8:00 to 22:00 on weekends, and she cannot access the internet at all between 22:00 to 8:00.

Chapter 6 Advanced

6.1 MAC address filter

6.1.1 Overview

This function enables you to add devices to the whitelist or blacklist to enable or disable specified users to access the internet through the router.

To access the configuration page, log in to the web UI of the router, and navigate to **Advanced** > **MAC Address Filter**.

MAC Address Filter		
Filter Mode 💿 B	lacklist 🔿 Whitelist	
Blacklisted MAC Address	Remark (Optional)	Operation
		ŧ

Figure 6-1 MAC address filter

Parameter	Description
Filter Mode	 It specifies the MAC address filter mode. Blacklist: Wireless devices listed are unable to connect to the WiFi network of the router, and wired devices listed are unable to access the internet. Whitelist: Only wireless devices listed can connect to the WiFi network of the router, and wired devices listed can access the internet.
Blacklisted MAC Address	It specifies the MAC address of the device to which a rule
Whitelisted MAC Address	applies.
Remark (Optional)	It specifies the description of a rule.
Operation	 E : Click it to add a device to the blacklist/whitelist. Click it to delete a device from the blacklist/whitelist.
Whitelist all online devices	It is only available when you set the whitelist for the first time. By clicking it, you can add all currently connected devices to the whitelist.

Table 6-1 MAC address filter parameter description

6.1.2 Only allow specified device to access the internet

Scenario: The WiFi network in your home is misused by unknown users sometimes.

Goal: Only allow certain devices of family members to access the internet.

Solution: You can configure the MAC address filter function to reach the goal.

Assume the MAC address and connection status of your domestic devices are as follows.

Table 6-2 MAC address connection state	ıs
	72

Device	MAC address	Status
Your own phone	6C:4B:90:41:E2:AD	Connected
Wife's phone	94:C6:91:29:C2:12	Disconnected
Daughter's phone	98:9C:57:19:D0:1B	Disconnected

Procedures:

- Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.
- Step 2 Navigate to Advanced > MAC Address Filter.
- Step 3 Set the Filter Mode to Whitelist.
- Step 4 Enter the **Whitelisted MAC Address** of the device, which is **94:C6:91:29:C2:12** in this example.
- Step 5 (Optional) Enter the remark for the device, which is **Wife's phone** in this example.

Step 6 Click 🛨 .

MAC Address Filter		
Filter Mode 🔘 Blacklist	Whitelist	
Whitelisted MAC Address	Remark (Optional)	Operation
94:C6:91:29:C2:12	Wife's phone	ŧ

Figure 6-2 Add white MAC address

Step 7 Repeat Step 4 to Step 6 to add the Daughter's phone (98:9C:57:19:D0:1B) to the whitelist.

Step 8 Click **Save** at the bottom of the page.

MAC Address Filter		
Filter Mode 🔘 Blacklist	Whitelist	
Whitelisted MAC Address	Remark (Optional)	Operation
		Ŧ
6C:4B:90:41:E2:AD		Local
94:C6:91:29:C2:12	Wife's phone	
98:9C:57:19:D0:1B	Daughter's phone	

Figure 6-3 Whitelisted MAC address

When the configuration is completed, only the three devices added can access the internet through the router.

6.2 IP-MAC binding

6.2.1 Overview

Through the IP-MAC binding function, specified clients can always obtain the same IP address when connecting to the router, ensuring that the router's "Port Mapping", "DDNS", "DMZ host" and other functions can function normally. This function takes effect only when the DHCP server function of the router is enabled.

To access the configuration page, log in to the web UI of the router, and navigate to Advanced > IP-MAC Binding.

IP-MAC Binding		
IP Address	MAC Address	Operation
		ŧ

Figure 6-4 IP-MAC binding

Table 6-3 IP-MAC binding parameter description

Parameter	Description
IP Address	It specifies the IP address to be reserved for the client with the specified MAC address. It should belong to the DHCP address pool.
MAC Address	It specifies the MAC address of the client that needs a fixed IP address.
Onentien	🖽 : It is used to add an IP-MAC binding rule.
Operation	□ : It is used to delete an IP-MAC binding rule.

6.2.2 Assign fixed IP addresses to LAN clients

Scenario: You have set up an FTP server within your LAN.

Goal: Assign a fixed IP address to the host of the FTP server and prevent the failure of access to the FTP server owing to the change of IP address.

Solution: You can configure the IP-MAC binding function to reach the goal.

Assume that the information of the FTP server includes:

- The fixed IP address for the server: 192.168.0.136
- MAC address of the FTP server host: 00 00 00 00 00 01

Procedures:

- Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.
- Step 2 Navigate to Advanced > IP-MAC Binding.
- Step 3 Enter an IP address included in the DHCP address pool, which is **192.168.0.136** in this example.
- Step 4 Enter the MAC address of the client which needs a fixed IP address, which is **00:00:00:00:00:01** in this example.

Step 5 Click 🔳 .

Step 6 Click **Save** at the bottom of the page.

IP-MAC Binding		
IP Address	MAC Address	Operation
192.168.0.136	00 00 00 00 00 01	÷

Figure 6-5 IP-MAC binding

When the configuration is completed, the page is shown as below and the FTP server host always gets the same IP address when connecting to the router, which is 192.168.0.136 in this example.

IP-MAC Binding		
IP Address	MAC Address	Operation
		+
192.168.0.136	00 00 00 00 00 01	



6.3 Port mapping

6.3.1 Overview

By default, internet users cannot actively access the LAN of the router.

The port mapping function opens a port of the router, and binds the LAN server to the port using the server's IP address and intranet service port. All-access requests to the WAN port of the router will be directed to the server. Therefore, the server within the LAN can be accessed by internet users and the LAN can be free from attacks from the internet.

For example, the port mapping function enables internet users to access web servers or FTP servers within the LAN.

To access the configuration page, log in to the web UI of the router, and navigate to **Advanced** > **Port Mapping**.

Port Mapping				
Internal IP Address	Internal Port	External Port	Protocol	Operation
	21 (FTP) ~	21	Both ~	+

Figure 6-7 Port mapping

Parameter	Description	
Internal IP Address	It specifies the IP address of a server that resides on the LAN.	
It specifies the service port number of the internal server.Internal PortYou can either choose a port from the drop-down list or specify a port manually.		
External Port When the internal port is selected or specified, the external port be occupied automatically. You can also change it as required		
ProtocolIt specifies the protocol that specified service uses.ProtocolBoth indicate that both TCP and UDP are used. If you are unce about it, Both are recommended.		
Operation	 It is used to add a port mapping rule. It is used to delete a port mapping rule. 	

Table 6-4 Port mapping parameter description

6.3.2 Enable internet users to access LAN resources using an IP address

Scenario: You have set up an FTP server within your LAN.

Goal: Open the FTP server to internet users and enable family members who are not at home to access the resources of the FTP server from the internet.

Solution: You can configure the port mapping function to reach the goal.

Assume that the information of the FTP server includes:

- IP address: 192.168.0.125
- MAC address: 00 00 00 00 00 01
- Service port: 21
- The WAN IP address of the router: X.X.X.X.

i Note

- Please ensure that the router obtains an IP address from the public network. This function may not work on a host with an IP address of a private network or an intranet IP address assigned by ISPs that start with 100. Common IPv4 addresses are classified into class A, class B and class C. Private IP addresses of class A range from 10.0.00 to 10.255.255.255; Private IP addresses of class B range from 172.16.0.0 to 172.31.255.255; Private IP addresses of class C range from 192.168.0.0 to 192.168.255.255.
- ISPs may block unreported web services to be accessed with the default port number 80. Therefore, when the default LAN port number is 80, please change it to an uncommon port number (1024 to 65535) manually, such as 9999.
- The LAN port number and the WAN port number can be different.



Procedures:

Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.

Step 2 Add a port mapping.

- 1) Navigate to Advanced > Port Mapping.
- 2) Enter the Internal IP Address, which is 192.168.0.125 in this example.
- 3) Select an **Internal Port** in the drop-down box, which is **21** in this example.
- 4) Select a protocol, which is **Both** in this example.
- 5) Click 🖽 .
- 6) Click **Save** at the bottom of the page.

Port Mapping				
Internal IP Address	Internal Port	External Port	Protocol	Operation
192.168.0.125	21 (FTP)	~ 21	Both	~ +

Figure 6-9 Add a port mapping

The port mapping rule is added when the page is shown as below.

Port Mapping					
Internal IP Address	Internal Port	External Port	Protocol		Operation
	21 (FTP)	~ 21	Both	~	+
192.168.0.125	21	21	Both		-

Figure 6-10 Port mapping rule is added

Step 3 Assign a fixed IP address to the host where the server locates.

- 1) Navigate to **Advanced** > **IP-MAC Binding**.
- 2) Specifies an **IP Address** for the host of the server, which is **192.168.0.125** in this example.
- 3) Enter the **MAC Address** of the host of the server, which is **00:00:00:00:00:01** in this example.
- 4) Click 🖽 .
- 5) Click **Save** at the bottom of the page.

IP-MAC Binding		
IP Address	MAC Address	Operation
		+
192.168.0.125	00 00 00 00 00 01	Ξ

Figure 6-11 IP-MAC binding

When completing the configurations, users from the internet can access the FTP server by visiting "Intranet service application layer protocol name://WAN IP address of the router". If the external port number is not the same as the default intranet service port number, the visiting address should be: "Intranet service application layer protocol name://WAN IP address of the routers."

In this example, the address is "**ftp://X.X.X.X**". You can find the WAN IP address of the router in <u>View system information</u>.



Figure 6-12 Enter the ftp://X.X.X.X

Enter the user name and password to access the resources on the FTP server.

Log On	X z
? >	Either the server does not allow anonymous logins or the e-mail address was not accepted.
	FTP server: X.X.X.X
	User name:
	Password:
	After you log on, you can add this server to your Favorites and return to it easily.
Δ	FTP does not encrypt or encode passwords or data before sending them to the server. To protect the security of your passwords and data, use WebDAV instead.
	Log on <u>a</u> nonymously <u>S</u> ave password
	Log On Cancel

Figure 6-13 Enter the user name and password

If you want to access the server within a LAN using a domain name, refer to the solution <u>DDNS</u> + <u>Port mapping</u>.

iNote

After the configurations, if internet users still cannot access the FTP server, try the following methods:

- Ensure that the internal port number configured in the port mapping function is the same as the service port number set on the server.
- Close the firewall, antivirus software and security guards on the host of the FTP server and try again.

6.4 DDNS

6.4.1 Overview

DDNS normally interworks with port mapping, DMZ host and remote management, so that the internet users can be free from the influence of dynamic WAN IP addresses and access the internal server or the router's web UI with a fixed domain name.

To access the configuration page, log in to the web UI of the router, and navigate to **Advanced** > **DDNS**.

This function is disabled by default. When it is enabled, the page is shown as below.

DDNS		
DDNS	Enable Disable	
Service Provider	oray.com	Register Now
DDNS User Name	DDNS User Name	
DDNS Password	DDNS Password	2
Connection Status		

Figure 6-14 DDNS

Parameter	Description	
DDNS	It specifies whether to enable the DDNS function.	
Service Provider	It specifies a DDNS service provider, including oray.com, 88ip.cn and dyn.com.	
DDNS User Name	It specifies the user name and password registered on a DDNS	
DDNS Password	service provider's website for logging in to the DDNS service.	
DDNS Host Name	It specifies the domain name you applied on the website of your service provider.	
	It is only required when dyn.com is chosen as the service provider.	
Connection Status	It specifies the current connection status of the DDNS service.	

Table 6-5 DDNS parameter description

6.4.2 Enable internet users to access LAN resources using a domain name

Scenario: You have set up an FTP server within your LAN.

Goal: Open the FTP server to internet users and enable family members who are not at home to access the resources of the FTP server from the internet with a domain name.

Solution: You can configure the DDNS and port mapping functions to reach the goal.

Assume that the information of the FTP server includes:

- IP address: 192.168.0.125
- MAC address of the host: 00:00:00:00:00:01
- Service port: 21

The information of the registered DDNS service:

- Service provider: oray.com
- User name: JohnDoe
- Password: JohnDoe123456
- Domain name: XXXX.zicp.vip

i Note

Please ensure that the router obtains an IP address from the public network. This function may not work on a host with an IP address of a private network or an intranet IP address assigned by ISPs that start with 100. Common IPv4 addresses are classified into class A, class B and class C. Private IP addresses of class A range from 10.0.0.0 to 10.255.255.255; Private IP addresses of class B range from 172.16.0.0-172.31.255.255; Private IP addresses of class C range from 192.168.0.0-192.168.255.255.



Procedures:

Step 2 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.

Step 3 Configure the DDNS function.

- 1) Navigate to **Advanced** > **DDNS**.
- 2) Set **DDNS** to **Enable**.
- 3) Select a service provider, which is **oray.com** in this example.
- 4) Enter the user name and password, which are **JohnDoe** and **JohnDoe123456** in this example.
- 5) Click **Save** at the bottom of the page.

DDNS		
DDNS	Enable Disable	
Service Provider	oray.com	Register Now
DDNS User Name	JohnDoe	
DDNS Password	ĕ	2
Connection Status		

Figure 6-16 Configure DDNS

Wait a moment, when the Connection Status turns Connected, the configurations succeed.

Step 4 Configure the port mapping function (refer to Port mapping).

When completing the configurations, users from the internet can access the FTP server by visiting "Intranet service application layer protocol name://the domain name". If the external port number is not the same as the default intranet service port number, the visiting address should be: "Intranet service application layer protocol name://the domain name:external port number".

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File Computer V	/iew	~	?
← → · ↑ 💻 ftp;	//XXXX.zicp.vip	→ Search This PC 🔎	>
🖈 Quick access	V Folders (6)		
🔜 Desktop 🛷	Desktop	Documents	
Documents	Downloads	Music	
New folder snaps1	Pictures	Videos	
Win10 wired config	V Devices and drives (3)		
OneDrive	Local Disk (C:)	Local Disk (D:)	
🛄 This PC	316 GB free of 338 GB	63.5 GB free of 97.5 GB	
鹶 Network	Local Disk (E:)		
• 4 Homegroup			
9 items		8==	

In this example, the address is **ftp://XXXX.zicp.vip**.

Figure 6-17 Enter the ftp://XXXX.zip.vip

Enter the user name and password to access the resources on the FTP server.

Log On	As		\times
۲	Either the serve accepted.	er does not allow anonymous logins or the e-mail address was not	
	FTP server:	XXXX.zicp.vip	
	User name:	×	
	Password:		
	After you log or	n, you can add this server to your Favorites and return to it easily	
Δ	FTP does not er server. To prot	ncrypt or encode passwords or data before sending them to the tect the security of your passwords and data, use WebDAV instead	d.
	Log on anon	nymously Save password	
		Log On Cancel	

Figure 6-18 Enter the user name and password

iNote

After the configurations, if internet users still cannot access the FTP server, try the following methods:

- Ensure that the LAN port number configured in the port mapping function is the same as the service port number set on the server.
- Close the firewall, antivirus software and security guards on the host of the FTP server and try again.

6.5 DMZ host

6.5.1 Overview

A DMZ host on a LAN is free from restrictions when communicating with the internet. It is useful for getting a better and smoother experience in video conferences and online games. You can also set the host of a server within the LAN as a DMZ host when in need of accessing the server from the internet.

- A DMZ host is not protected by the firewall of the router. A hacker may leverage the DMZ host to attack your LAN. Therefore, enable the DMZ function only when necessary.
- Hackers may leverage the DMZ host to attack the local network. Do not use the DMZ host function randomly.
- Security software, antivirus software, and the built-in OS firewall of the computer may cause DMZ function failures. Disable them when using the DMZ function. If the DMZ function is not required, you are recommended to disable it and enable your firewall, security, and antivirus software.

To access the configuration page, log in to the web UI of the router, and navigate to **Advanced** > **DMZ Host**.

This function is disabled by default. When it is enabled, the page is shown as below.

DMZ Host	
DMZ Host	Enable
Host IP Address	Host IP Address

Figure 6-19 DMZ host

Table 6-6 DMZ parameter description

Parameter	Description	
DMZ Host	t is used to enable or disable the DMZ function.	
Host IP Address	It specifies the IP address to be set as the DMZ host.	

6.5.2 Enable internet users to access LAN resources using an IP address

Scenario: You have set up an FTP server within your LAN.

Goal: Open the FTP server to internet users and enable family members who are not at home to access the resources of the FTP server from the internet.

Solution: You can configure the DMZ host function to reach the goal.

Assume that the information of the FTP server includes:

- IP address: 192.168.0.125
- MAC address: 00:00:00:00:00:01
- Service port: 21
- The WAN IP address of the router: X.X.X.X.

iNote

Please ensure that the router obtains an IP address from the public network. This function may not work on a host with an IP address of a private network or an intranet IP address assigned by ISPs that start with 100. Common IPv4 addresses are classified into class A, class B and class C. Private IP addresses of class A range from 10.0.0.0 to 10.255.255.255; Private IP addresses of class B range from 172.16.0.0-172.31.255.255; Private IP addresses of class C range from 192.168.0.0-192.168.255.255.



- MAC: 00:00:00:00:00:01
- Port number: 21

Procedures:

Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.

Step 2 Set the server host as the DMZ host.

- 1) Navigate to **Advanced** > **DMZ Host**.
- 2) Set DMZ Host to Enable.
- 3) Enter the IP address of the host, which is **192.168.0.125** in this example.
- 4) Click **Save** at the bottom of the page.

DMZ Host	
DMZ Host (Enable
Host IP Address	192.168.0.125

Figure 6-21 Enter the IP address of the host

Step 3 Assign a fixed IP address to the host where the server locates.

- 1) Navigate to Advanced > IP-MAC Binding.
- 2) Enter the **IP Address** for the FTP server host, which is **192.168.0.125** in this example.
- 3) Enter the **MAC Address** of the host of the FTP server, which is **00:00:00:00:00:01** in this example.
- 4) Click 🖽 .

IP-MAC Binding		
IP Address	MAC Address	Operation
192.168.0.125	00 00 00 00 00 01	ŧ

Figure 6-22 IP-MAC binding

5) Click **Save** at the bottom of the page.

When the configurations are completed, users from the internet can access the DMZ host by visiting "Intranet service application layer protocol name://WAN IP address of the router". If the intranet service port number is not the default number, the visiting address should be: "Intranet service application layer protocol name://WAN IP address of the router:intranet service port number".

In this example, the address is "ftp://X.X.X.X". You can find the WAN IP address of the router in <u>View system information</u>.

iNote

When the default intranet service port number is 80, please change the service port number to an uncommon one (1024 to 65535), such as 9999.

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File Computer View		~	?
$\leftarrow \rightarrow \checkmark \uparrow$ ftp://X.X.	.X.X	→ Search This PC P	
🖈 Quick access 🛛 🗸 F	olders (6)		
📃 Desktop 🛛 🖈			
👆 Downloads 🛛 🖈	Desktop	Documents	
🔮 Documents 🛛 🖈		-	
📰 Pictures 🛛 🖈	Downloads	Music	
New folder			
snaps1	Pictures	Videos	
snapshots			
📙 Win10 wired config 🗸 🛛	Devices and drives (3)		
OneDrive	Local Disk (C:)	Local Disk (D:)	
💻 This PC	316 GB free of 338 GB	63.5 GB free of 97.5 GB	
Network	Local Disk (E:)		
	15.3 GB free of 29.2 GB		
•4 Homegroup			

Figure 6-23 Enter the ftp://X.X.X.X

Enter the user name and password to access the resources on the FTP server.

Log On	As		\times
۲	Either the serve accepted.	er does not allow anonymous logins or the e-mail address was not	
	FTP server:	X.X.X.X	
	<u>U</u> ser name:	~	
	Password:		
	After you log or	n, you can add this server to your Favorites and return to it easily.	
Δ		ncrypt or encode passwords or data before sending them to the sect the security of your passwords and data, use WebDAV instead	
	Log on anon	ymously Save password	
		Log On Cancel	

Figure 6-24 Enter the user name and password

If you want to access the server within a LAN using a domain name, refer to the solution <u>DMZ</u> + <u>DDNS</u>.



After the configuration is completed, if internet users still cannot access the FTP server, close the firewall, antivirus software and security guards on the host of the FTP server and try again.

6.6 PING WAN

The PING WAN function enables you to ping the WAN port IP address over the internet to check the connectivity between the router and the internet. It is enabled by default.

Choose **Advance**, and move to the **PING WAN** module to enter the configuration page. This function is disabled by default. When it is enabled, the page is shown as below.

PING WAN	
	PING WAN Enable Disable

Figure 6-25 PING WAN

6.7 UPnP

UPnP is short for Universal Plug and Play. This function enables the router open port automatically for UPnP-based programs. It is generally used for P2P programs, such as BitComet and AnyChat, and helps increase the download speed.

To access the configuration page, log in to the web UI of the router, and navigate to **Advanced** > **UPnP**.

This function is enabled by default.

UPnP		
	UPnP 💿 Enable	 Disable

Figure 6-26 UPnP

6.8 AP Isolation

When this function is enabled, wireless clients connected to the same SSID will not be able to communicate with each other, which can enhance wireless network security. This function is disabled by default. When it is enabled, the page is shown as below.

AP Isolation			
	AP Isolation	Enable	O Disable
			Save

Figure 6-27 AP isolation

Chapter 7 Administration

7.1 Login password

To ensure network security, a login password is recommended. We recommend you set a complex login password with more types of characters, such as uppercase letters, lowercase letters, numbers and special characters.

To access the login password configuration page, log in to the web UI and navigate to **Administration** > **Login Password**.

When you use the router for the first time, no password is required to log in to the web UI of the router and you can set a login password on this page.

Login Password		
	New Password	New Password
	Confirm Password	Confirm Password

Figure 7-1 Login password

If you have already set a login password, you can change the password on this page, but the old password is required.

Login Password		
Old Password	Old Password	
New Password	New Password	
Confirm Password	Confirm Password	

Figure 7-2 Login password

i Note

If you forget your login password and cannot log in to the web UI of the router, refer to <u>Reset the</u> <u>router</u> and log in to the web UI without a password.

7.2 WAN parameters

7.2.1 Change the MTU value

MTU (Maximum Transmission Unit) is the largest data packet transmitted by a network device. When the connection type is PPPoE, the default MTU value is 1480. When the connection type is the dynamic IP address or static IP address, the default MTU value is 1500. Do not change the value unless necessary. If you need to, please refer to the following instructions.

To access the configuration page, log in to the web UI of the router, and navigate to **Administration > WAN Parameters**.

WAN Parameters			
	MTU	1500 ~	Do not change if unnecessary.
Clone MA	AC Address	Restore Default MAC ~	Default MAC Address: d4:e8:53:d7:bb:9f
WAN Port Speed		Auto-negotiation ~	Current speed: 100 Mbps full duplex

Figure 7-3 Change the MTU value

Generally, the default value is recommended. Try to change the MTU value when:

- You cannot access some specific websites or encrypted websites (such as E-banking or Paypal websites).
- You cannot receive or send Emails or access an FTP or POP server.

You can try reducing the value of MTU gradually from 1500 until the problem is resolved (The recommended range is 1400 to 1500).

ΜΤυ	Application
1500	It is commonly used for non-ADSL and non-VPN dial-up connections.
1492, 1480	It is used for ADSL dial-up connections.
1472	It is the maximum value for the ping command. A packet with a larger size is fragmented.
1468	It is used for DHCP connections.
1436	It is used for VPN or PPTP connections.

7.2.2 Clone WAN MAC address

If you still cannot access the internet after completing <u>Internet settings</u>, it could be the result of the ISP's configuration to bind the internet account information with a fixed MAC address. In this case, you can clone and change the MAC address of the router to solve the problem.

To access the configuration page, log in to the web UI of the router, and navigate to **Administration** > **WAN Parameters**.

WAN Parameters		
MTU	1400 ~	Do not change if unnecessary.
Clone MAC Address	Restore Default MAC ~	Default MAC Address: d4:e8:53:d7:bb:9f
WAN Port Speed	Auto-negotiation ~	Current speed: 100 Mbps full duplex

Figure 7-4 Clone WAN MAC address

- **Restore Default MAC:** Restore the factory setting of the MAC address.
- Clone Local Host MAC: Set the MAC address of the router to the same as that of the device which is configuring the router.
- Manual: Manually set a MAC address.

i Note

Please ensure the cloned MAC address is that of the computer or the router which is already able to access the internet.

Procedures:

- Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.
- Step 2 Navigate to Administration > WAN Parameters.
- Step 3 Click the drop-down box of **Clone MAC Address**, and choose **Clone Local Host MAC** to copy the MAC address of the management device, or **Manual** to enter the desired MAC address.

Step 4 Click **Save** at the bottom of the page.

WAN Parameters		
Server Name	Default ~	Do not change if unnecessary.
Service Name	Manual 🗸	asd
Corriso Harris		asu
MTU	1480 ~	Do not change if unnecessary.
Clone MAC Address	Clone Local Host MAC	Local Host MAC Address: 6C:4B:90:41:E2:AD
olone millo Address		2000 1103 HB 107 100 100 100 100 100 100 100
WAN Port Speed	100 Mbps full duplex $\qquad \lor$	Current speed: 100 Mbps full duplex

Figure 7-5 Clone WAN MAC address

7.2.3 Change the WAN speed

To access the configuration page, log in to the web UI of the router, and navigate to **Administration** > **WAN Parameters**.

When the Ethernet cable is not damaged and connected to the WAN port properly, but **Ethernet** cable disconnected is still shown on the Internet Settings page, you can try to change the WAN Speed to 10 Mbps full-duplex or 10 Mbps half-duplex to solve the problem. Otherwise, keep the default settings.

WAN Parameters		
MTU	1400 ~	Do not change if unnecessary.
Clone MAC Address	Restore Default MAC V	Default MAC Address: d4:e8:53:d7:bb:9f
WAN Port Speed	Auto-negotiation ~	Current speed: 100 Mbps full duplex

Figure 7-6 Change the WAN speed

WAN Speed	Description			
Auto-negotiation	It indicates that the speed and duplex mode are determined through the negotiation with the peer port.			
100 Mbps full duplex	It indicates that the WAN port is working at the speed of 100 Mbps, and the port can receive and send data packets at the same time.			
100 Mbps half duplex	It indicates that the WAN port is working at the speed of 100 Mbps, but the port can only receive or send data packets alternately.			
10 Mbps full duplex	It indicates that the WAN port is working at the speed of 10 Mbps, and the port can receive and send data packets at the same time.			
10 Mbps half duplex	It indicates that the WAN port is working at the speed of 10 Mbps, but the port can only receive or send data packets alternately.			

Table 7-2 WAN speed parameter description

7.3 LAN parameters

On this page, you can:

- Change the LAN IP address and subnet mask of the router.
- Change the DHCP server parameters of the router.

The DHCP server can automatically assign an IP address, subnet mask, gateway and other information to clients within the LAN. If you disable this function, you need to manually configure the IP address information on the client to access the Internet. Do not disable the DHCP server function unless necessary.

- Configure the DNS information assigned to clients.

To access the configuration page, log in to the web UI of the router, and navigate to **Administration** > **LAN Parameters**.

LAN Parameters			
LAN IP Address	192.168.0.1		
Subnet Mask	255.255.255.0		
DHCP Server	Enable Once disabled, the router no longer assigns IP addresses to hosts		
Start IP	192.168.0. 100		
End IP	192.168.0. 200		
Preferred DNS Server	192.168.0.1		
Alternate DNS Server	Alternate DNS Server		

Figure 7-7 LAN parameters

Parameter	Description			
LAN IP Address	It specifies the LAN IP address of the router, which is also the management IP address for logging in to the web UI of the router.			
Subnet Mask	It specifies the subnet mask of the LAN port, used to identify the IP address range of the local area network.			
DHCP Server	When the DHCP server is enabled, the router automatically assigns an IP address to clients connected to the router			
Start IP	It specifies the range of IP addresses that can be assigned to			
End IP	devices connected to the router. The default range is 192.168.0.100 to 192.168.0.200.			
	It specifies the primary DNS address of the router used to assign to the clients. You can change it if necessary.			
Preferred DNS Server				
	Make sure that the primary DNS server is the IP address of the correct DNS server or DNS proxy. Otherwise, you may fail to access the internet.			
Alternate DNS ServerIt specifies the secondary DNS address of the router used assign to the clients. It is an optional field and is left blank default.				

7.4 Remote web management

7.4.1 Overview

Generally, the web UI of the router can only be accessed on devices that are connected to the router by a LAN port or wireless connection. When you encounter a network fault, you can ask for remote technical assistance, which improves efficiency and reduces costs and efforts.

To access the configuration page, log in to the web UI of the router, and navigate to **Administration > Remote Web Management**.

By default, this function is disabled. When this function is enabled, the page is shown as below.

Remote Web Management					
Remote Web Management	Enable	If this function is enabled, you can manage the router through the internet.			
Management IP Address	All	~			
Port	8888				

Figure 7-8 Remote web management

Parameter	Description				
RemoteWebIt is used to enable or disable the remote management functionManagementrouter.					
 It specifies the IP address of the host which can access the wrouter remotely. All: It indicates that hosts with any IP address from the intaccess the web UI of the router. It is not recommended for Specific: Only the host with the specified IP address can adweb UI of the router remotely. If the host is under a LAN, ethe IP address is the IP address of the gateway of the host address). 					
Port	 It specifies the port number of the router which is opened for remote management. Change it as required. Inote The port number from 1 to 1024 has been occupied by familiar services. It is strongly recommended to enter a port number from 1025 to 65535 to prevent conflict. Remote management can be achieved by visiting "http://the WAN IP address of the router:port number". If the DDNS host function is enabled, the web UI can also be accessed through "http://the wan port:port number". 				

Table 7-4 Remote web management parameter description

7.4.2 Internet users access the web UI

It specifies the port number of the router which is opened for remote management. Change it as required.

Scenario: You encounter a problem in configuring the router, and the router can access the internet.

Goal: Ask technical support to help you configure the router remotely.

Solution: You can configure the remote management function to reach the goal.

Assume that:

- The IP address of the device that remotely accesses the web UI: 210.76.200.101
- The WAN port IP address of the router: X.X.X.X



Figure 7-9 Application scenario

Procedures:

- Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.
- Step 2 Navigate to Administration > Remote Web Management.
- Step 3 Tick Enable of Remote Web Management function.
- Step 4 Set **Management IP Address** to **Specific**, and enter the IP address of the device that remotely accesses the web UI, which is **210.76.200.101** in this example.
- Step 5 Enter a port number used to access the router remotely.
- Step 6 Click **Save** at the bottom of the page.

Remote Web Management					
Remote Web Management	Enable	If this function is enabled, you can manag	ge th	ne router through the internet.	
Management IP Address	Specific	~		210.76.200.101	
Port	8888]		

Figure 7-10 Configure management IP address

When the configuration is completed, the technical support can access and manage the router by visiting "http://X.X.X.X.8888" on the computer.

7.5 Date & time

If the system time of the router is incorrect, time-based functions of the router cannot take effect correctly, including the WiFi schedule, parental controls and automatic maintenance functions.

The router supports the synchronization of time with the internet. when the router is connected to the internet, the router will calibrate the system time of the router. You can also set the time zone for your router.

To access the page, log in to the web Ui of the router and navigate to **Administration** > **Date & Time**.

Date & Time				
	Time Zone	(GMT+08:00)Beijing, Chongqing, Hong Kong, Urumqi $$		
	Current Time	2022-04-14 17:45:20	The current date and time have bee	n synchronized with those of the internet.

Figure 7-11 Date & time
7.6 Device management

7.6.1 Reboot the router

If any parameter fails to take effect or the router does not work properly, you can try rebooting the router.



Rebooting the router will disconnect all connections to the router. Reboot the router during leisure time.

To reboot the router, log in to the web UI of the router and navigate to **Administration** > **Device Management**. Click **Reboot** to reboot the router.

Device Management		
Reboot Router	Reboot	
Restore Factory Settings	Reset	
Backup/Restore	Backup	Restore
Export System Log	Export	
System Upgrade	Local Upgrade Current version: V1.0.5 build2203	329
Automatic Maintenance	Enable Once enabled, the r	router automatically reboots once if the data rate is lower than 3 kb/s during 2 to 5:30 a.m. every day.

Figure 7-12 Reboot the router

Wait for a moment until the ongoing process finishes. The router reboots successfully.

7.6.2 Reset the router

If you are uncertain about why the internet is inaccessible through the router or you forget the login password of the router, you can reset the router.

iNote

- Resetting the router is not recommended unless you cannot find a solution for the current problem anyway. You need to reconfigure the router after it is reset.
- Ensure that the power supply of the router is normal when the router is reset. Otherwise, the router could be damaged.
- The default login IP address is 192.168.0.1 after resetting, and no password is required.

Reset the router using the reset button

Hold down the reset button for about 8 seconds and release it when the LED indicator blinks fast. The router is reset.



Figure 7-13 Reset the router using the reset button

Reset the router on the web UI

Procedures:

- Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.
- Step 2 Navigate to **Administration > Device Management**.

Step 3 Click Reset.

Device Management		
Reboot Router	Reboot	
Restore Factory Settings	Reset	
Backup/Restore	Backup	Restore
Export System Log	Export	
System Upgrade	Local Upgrade	
	Current version: V1.0.5 build2203	329
Automatic Maintenance	Enable Once enabled, the	router automatically reboots once if the data rate is lower than 3 kb/s during 2 to 5:30 a.m. every day.

Figure 7-14 Reset the router on the web UI

Step 4 Click **OK** in the pop-up window.



Figure 7-15 Click OK

Wait for a moment until the ongoing process finishes. The router is reset.

7.6.3 Backup/restore configuration

In this module, you can back up the current configurations of the router to your computer. You are recommended to back up the configuration after the settings of the router are significantly changed, or the router works in a good condition.

After you restore the router to factory settings or upgrade it, you can use this function to restore the configurations that have been backed up.

Device Management		
Reboot Router	Reboot	
Restore Factory Settings	Reset	
1		
Backup/Restore	Backup	Restore
Export System Log	Export	
System Upgrade	Local Upgrade	
	Current version: V1.0.5 build220	329
Automatic Maintenance	Enable Once enabled, the	router automatically reboots once if the data rate is lower than 3 kb/s during 2 to 5:30 a.m. every day.

Figure 7-16 Backup/restore configuration

Back up the configurations of the router

Procedures:

Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.

Step 2 Navigate to Administration > Device Management.

Step 3 Click Backup.

Device Management		
Reboot Router	Reboot	
Restore Factory Settings	Reset	
Backup/Restore	Backup	Restore

Figure 7-17 Back up the configurations

After the file is downloaded, you can name it **RouterCfm.cfg**.

Restore previous configurations of the router

Procedures:

- Step 1 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.
- Step 2 Navigate to Administration > Device Management.

Step 3 Click **Restore**.

Step 4 Select the configuration file to be restored (extension: cfg), and click **Open**.

Open				×
\leftarrow \rightarrow \checkmark \uparrow \blacklozenge > This PC > Downloads		✓ Ö Search	Downloads	م
Organize 🔻 New folder 😓			•==	•
A Name	Date modified	Туре	Size	
Desktop 🖈 🗋 RouterCfm.cfg	1/7/2020 3:45 PM	CFG File	23 KB	
🖶 Downloads 👒				
🔮 Documents 🖈				
E Pictures 🖈				
New folder				
snaps1				
snapshots				
OneDrive				
This PC				
File name: RouterCfm.cfg		 ✓ All file 	s (*)	~
		C	pen C	ancel

Figure 7-18 Restore previous configurations of the router

Step 5 Click **OK** in the pop-up window.

?	Restore now?		
	Cancel	ОК	

Figure 7-19 Click OK

Wait for a moment until the ongoing process finishes, and the router restores previous settings.

7.6.4 Export system log

This function logs all key events that occur after the router is started. If you encounter a network fault, you can turn to system logs for fault rectification.

To access the configuration page, log in to the web UI of the router, and navigate to **Administration** > **Device Management**. Click **Export** to save the system logs to your local host.

Device Management			
Reboot Router	Reboot		
Restore Factory Settings	Reset		
Backup/Restore	Backup	Restore	
Export System Log	Export		
System Upgrade	Local Upgrade		
	Current version: V1.0.5 build2203	329	
Automatic Maintenance	Enable Once enabled, the r	router automatically reboots once if	the data rate is lower than 3 kb/s during 2 to 5:30 a.m. every o

Figure 7-20 Export system log

7.6.5 Upgrade firmware

This function enables the router to obtain the latest functions and more stable performance. The router supports local firmware upgrade.

Local upgrade

Danger

To prevent the router from being damaged:

- Ensure that the firmware applies to the router.
- It is recommended to upgrade the firmware by connecting a LAN port to a computer and performing the upgrade on the web UI.
- When you are upgrading the firmware, do not power off the router.

Procedures:

- Step 1 Go to <u>www.hikvision.com/en</u>. Download an applicable firmware of the router to your local computer and unzip it.
- Step 2 Launch a web browser on a device connected to the router and visit **http://hikvisionwifi.local** to log in to the web UI of the router.
- Step 3 Navigate to Administration > Device Management.
- Step 4 Click Local Upgrade.
- Step 5 Click the firmware file downloaded previously (extension: bin), and click **Open**.

Open									×
$\leftarrow \rightarrow \cdot \uparrow$	r → This P	C → Deskt	op > firmware		~	ē	Search firmwa	are	Q
Organize 🔻 🛛 🛚	lew folder								
📌 Quick access	^	Name	~		Date mo	dified	Туре		Size
E. Desktop	*	US_DS-	3WR3NV6.0re_V1.0	.5 build220329	2022/2/2	23 11:15	5 BIN File		1,704 KB
👆 Downloads	*								
Documents	*								
Pictures	*								
	· · · ·								>
	File nam	e: US_DS-	3WR3NV6.0re_V1.0).5 build220329	_crypt_m	ulti_C ~	All Files		~
							Open		Cancel

Figure 7-21 Local upgrade

Step 6 Click OK.

|--|

Figure 7-22 Click OK

Wait for a moment until the ongoing process finishes. Log in to the web UI of the router again. Navigate to **Administration > Device Management** and check whether the upgrade is successful based on the **Current Firmware Version**.



For better performance of the new firmware, you are recommended to reset the router to factory default settings and re-configure the router when the upgrading is completed.

7.6.6 Automatic maintenance

Automatic maintenance enables you to make the router restart regularly. It helps improve the stability and service life of the router.

To configure the automatic maintenance function, navigate to **Administration** > **Device Management**.

When this function is enabled, from 02:00 to 05:30 every day in the morning, if there is any user connected to the router and the traffic over the router's WAN port exceeds 3 KB/s within 30 minutes, the router will delay rebooting. If there is any user connected to the router and the traffic over the WAN port does not exceed 3 KB/s within 30 minutes, or there is no user connected to the router and the traffic over the router's WAN port is slower than 3 KB/s within 3 minutes, the router will reboot automatically.

Device Management		
Reboot Router	Reboot	
Restore Factory Settings	Reset	
Backup/Restore	Backup	Restore
Export System Log	Export	
System Upgrade	Local Upgrade	
	Current version: V1.0.5 build2203	329
Automatic Maintenance	Enable Once enabled, the r	router automatically reboots once if the data rate is lower than 3 kb/s during 2 to 5:30 a.m. e

Figure 7-23 Automatic maintenance

Appendix A

A.1 Configuring the computer to obtain an IPv4 address

automatically

Perform the Configuring procedures corresponding to <u>Windows 10</u>, <u>Windows 8</u> and <u>Windows 7</u> as required. A computer installed with a wired network adapter is used as an example to describe the procedures. The procedures for configuring computers installed with a WiFi network adapter are similar.

A.1.1 Windows 10

Step 1 Click 📰 in the bottom right corner of the desktop and choose **Network settings**.



Figure 7-24 Network settings

Step 2 Click Change adapter options.

← Settings		-		1
K NETWORK & INTERNET		Find a setting	م]
Data usage	Ethernet			1
VPN				
Dial-up				
Ethernet				
Proxy				
	Ethernet 2 Connected			
	Related settings			
	Change adapt			
	Change advanced sharing options Network and Sharing Center			
	HomeGroup			

Figure 7-25 Click Change adapter options

Step 3 Right-click on the connection which is being connected, and then click **Properties**.

Network Connections		- 🗆 X
$\leftarrow \rightarrow \lor \uparrow \mathbf{P} \ll Network$ and Internet	> Network Connections > V 🖑	Search Network Connections $~~ {\cal P}$
Organize Disable this network device	Diagnose this connection Rename this connection	»
Ethernet Network cable unplugged Intel(R) 82583V Gigabit Network C Ethernet 4 Network cable unplugged Intel(R) 82583V Gigabit Network C	Ethernet 2 Netwo Intel(R Ethern Netwo Intel(R Bridge Connections Create Shortcut Delete Rename Properties	Ethernet 3 Network cable unplugged Intel(R) 82583V Gigabit Network C Ethernet 6 Network cable unplugged Intel(R) 82583V Gigabit Network C
6 items 1 item selected		: E

Figure 7-26 Click properties

Step 4 Double-click Internet Protocol Version 4 (TCP/IPv4).

Ethernet Properties	x	
Networking		
Connect using:		
Intel(R) 82574L Gigabit Network Connection		
Configure		
This connection uses the following items:		
Bele and Printer Sharing for Microsoft Networks Microsoft Network Adapter Multiplexor Protocol Microsoft LLDP Protocol Driver		
✓ Link-Layer Topology Discovery Mapper I/O Driver		
Link-Layer Topology Discovery Responder		
✓ ✓ Internet Protocol Version 6 (TCP/IPv6) ✓ ✓ Internet Protocol Version 4 (TCP/IPv4) ✓		
< >		
Install Uninstall Properties		
Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.		
OK Cancel		

Figure 7-27 Click Internet Protocol Version 4(TCP/IPv4)

Step 5 Select Obtain an IP address automatically and Obtain DNS server address automatically, and click OK.

Internet Protocol Version 4 (TCP/IPv4) Properties	×
General Alternate Configuration	
You can get IP settings assigned automatically if your network suppor this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.	
Obtain an IP address automatically	
O Use the following IP address:	
IP address:	
Subnet mask:	
Default gateway:	
Obtain DNS server address automatically	
O Use the following DNS server addresses:	
Preferred DNS server:	
Alternate DNS server:	
Validate settings upon exit Advanced.	
OK Can	cel

Figure 7-28 Click OK

Step 6 Click Close in the Ethernet Properties window.

A.1.2 Windows 8

Step 1 Right-click 📰 in the bottom right corner of the desktop and choose **Open Network and Sharing Center**.



Figure 7-29 Choose Open Network and Sharing Center

Step 2 Click Ethernet and then Properties.

2	Network and Sharing Center	- 🗆 ×
🔄 🏵 🔹 🕇 🚆 « Network	and Internet 🔸 Network and Sharing Center 🔍 🖒	Search Control Panel 🔎
Control Panel Home	View your basis network information and set up Ethernet Status	connections
Change adapter settings	General	
Change advanced sharing settings	Connection IPv4 Connectivity: No Internet access IPv6 Connectivity: No Internet access Media State: Enabled Duration: 00:14:16 Speed: 1.0 Gbps	pe: <u>No Internet</u> access pns: <u>Ethernet</u> up a router or access point.
	Details Activity	ooting information.
	Bytes: 2,404 18,772	
See also		
HomeGroup	Close	
Internet Options		
Windows Firewall		

Figure 7-30 Click Ethernet and then Properties

Step 3 Double-click	Internet Protocol	Version 4	(TCP/IPv4).
---------------------	--------------------------	-----------	-------------

Q	Ethernet Properties	x
Networking		
Connect us	sing:	
🔮 Intel	(R) 82574L Gigabit Network Connection	
	Configure	
This conne	ction uses the following items:	
M → M M → V انا → V انا → In	le and Printer Sharing for Microsoft Networks icrosoft Network Adapter Multiplexor Protocol icrosoft LLDP Protocol Driver nk-Layer Topology Discovery Mapper I/O Driver nk-Layer Topology Discovery Responder temet Protocol Version 6 (TCP/IPv6) temet Protocol Version 4 (TCP/IPv4)	~
Insta	II Uninstall Properties	
Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.		

Figure 7-31 Double-click Internet Protocol Version 4(TCP/IPv4)

Step 4 Select Obtain an IP address automatically and Obtain DNS server address automatically, and click OK.

Internet Protocol Version	1 4 (TCP/IPv4) Properties
General Alternate Configuration	
You can get IP settings assigned auto this capability. Otherwise, you need t for the appropriate IP settings.	
Obtain an IP address automatica	lly
Use the following IP address:	
IP address:	
Subnet mask:	
Default gateway:	
Obtain DNS server address auto	matically
Use the following DNS server ad	dresses:
Preferred DNS server:	
Alternate DNS server:	
Validate settings upon exit	Advanced
	OK Cancel

Figure 7-32 Click OK

Step 5 Click **OK** in the Ethernet Properties window.

A.1.3 Windows 7

Step 1 Click 🔯 in the bottom right corner of the desktop and choose **Open Network** and **Sharing Center**.



Figure 7-33 Choose Open Network and Sharing Center

Step 2 Click Local Area Connection and then Properties.

Control Panel Home Change adapter setti Change advanced sh settings Local Area Connection Status General Connection IPv4 Connectivity: No Internet access Media State: Enabled Duration: 03:40:31 Speed: 1.0 Gbps Details Activity Sent Sent Received Bytes: 758,618 8,236,680 Set up co	DI Panel	naring Center 🗸 🍫 Search Control Pa) 💭 🗸 💱 « Network and Internet 🕨 Netwo
Sent — Received Bytes: 758,618 8,236,680	nnections See full map	No Internet access No Internet access Enabled 03:40:31 1:00 cm	Control Panel Home Change adapter setti Change advanced sh settings Connection IPv4 Connectivity: IPv6 Connectivity: Media State: Duration: Speed:
I-up, or VP	nection; or set up a	Received 8,236,680	
See also HomeGroup Internet Options	I network connection. Iters, or change sharing	Diagnose vork computers	See also HomeGroup

Figure 7-34 Click Local Area Connection and then Properties

Thread A thr	000 MT Network Con	nection
		Configure
This connection uses	the following items:	
Client for Mic		
QoS Packet		
	er Sharing for Microso ocol Version 6 (TCP/II	
	ocol Version 4 (TCP/II	
	opology Discovery Ma	Contraction of the second s
1000	analam, Diagouras, Pa	sponder
🗹 🔺 Link-Layer T	opology Discovery He	
	-	
Install	Uninstall	Properties
Install Description	-	Properties

Step 3 Double-click Internet Protocol Version 4 (TCP/IPv4).

Figure 7-35 Double-click Internet Protocol Version 4 (TCP/IPv4)

Step 4 Select Obtain an IP address automatically and Obtain DNS server address automatically, and click OK.

nternet Protocol Version 4 (TCP/IPv4)	Proper	ties			? ×
General Alternate Configuration					
You can get IP settings assigned auton this capability. Otherwise, you need to for the appropriate IP settings.					
Obtain an IP address automatical	у				
Use the following IP address:					
IP address:					
Subnet mask:					
Default gateway:					
Obtain DNS server address autom	atically	,			
Use the following DNS server add	resses:				
Preferred DNS server:					
Alternate DNS server:					
Validate settings upon exit				Adva	anced
	(ОК		Cancel

Figure 7-36 Click OK

Step 5 Click **OK** in the Local Area Connection Properties window.

A.2 Default parameters

Table 7-5 Parameter				
Parameter		Default		
Login	IP Address	192.168.0.1		
Login	Password	None		
LAN Parameter	IP Address	192.168.0.1		
LAN Parameter	Sunnet Mask	255.255.255.0		
	DHCP Server	Enabled		
DHCP Server	Start IP Address	192.168.0.100		
	End IP Address	192.168.0.200		
	Preferred DNS Server	192.168.0.1		
Operating Mode		Router mode		
	WiFi Name	See the label on the bottom of the router		
Wireless Settings	WiFi Password	None		
	WiFi Schedule	Disabled		

A.3 Acronyms and abbreviations

Table 7-6 Acronyms and abbreviations

Abbreviations	Full spelling
AES	Advanced Encryption Standard
АР	Access Point
DDNS	Dynamic Domain Name Server
DHCP	Dynamic Host Configuration Protocol
DHCPv6	Dynamic Host Configuration Protocol for IPv6
DMZ	Demilitarized Zone
DNS	Domain Name System
GMT	Greenwich Mean Time
IP	Internet Protocol
IPv4	Internet Protocol version 4
LAN	Local Area Network
MAC	Medium Access Control
MTU	Maximum Transmission Unit
NAT	Network Address Translation
ТСР	Transmission Control Protocol
UDP	User Datagram Protocol
UPnP	Universal Plug and Play
WAN	Wide Area Network
WISP	Wireless Internet Service Provider
WPA-PSK	WPA-Preshared Key

