Ruijie RG-ES200 Series Switches

Web-Based Configuration Guide

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Preface

Thank you for using our products.

Audience

This manual is intended for:

- Network engineers
- Technical support and servicing engineers
- Network administrators

Obtaining Technical Assistance

- Ruijie Networks Website: https://www.ruijienetworks.com/
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- Case Portal: https://caseportal.ruijienetworks.com
- Community: https://community.ruijienetworks.com
- Technical Support Email: service_rj@ruijienetworks.com
- Skype: service_rj@ruijienetworks.com

Related Documents

Documents	Description
Command Reference	Describes the related configuration commands, including command modes, parameter descriptions, usage guides, and related examples.
Hardware Installation and Reference Guide	Describes the functional and physical features and provides the device installation steps, hardware troubleshooting, module technical specifications, and specifications and usage guidelines for cables and connectors.

Conventions

This manual uses the following conventions:

Convention	Description
boldface font	Commands, command options, and keywords are in **boldface**.
italic font	Arguments for which you supply values are in *italics*.
[ ]	Elements in square brackets are optional.
{ x | y | z }	Alternative keywords are grouped in braces and separated by vertical bars.
[x | y | z]	Optional alternative keywords are grouped in brackets and separated by vertical bars.

1 Overview

eWeb is a Web-based management system that manages or configures devices. You can access eWeb via browsers such as Google Chrome.

Web-based management involves the Web server and Web client. The Web server is integrated in a device, and is used to receive and process requests from the client, and return processing results to the client. The Web client usually refers to a browser, such as Google Chrome, IE, or Firefox.

1.1 Conventions

In this document:

- Texts in bold are names of buttons (for example, **Save**) or other graphical user interface (GUI) elements (for example, **VLAN**).
- Devices of different models have slightly different functions. This document uses RG-ES218GC-P as an example for description.

Only RG-ES226GC-P, RG-ES218GC-P, RG-ES209GC-P, RG-ES209C-P, RG-ES205GC-P, and RG-ES205C-P support the PoE function and configuration.

Only RG-ES226GC-P, RG-ES218GC-P, RG-ES224GC, and RG-ES216GC support the multi-DHCP alarm function.

The device initially adopts an English OS by default. After it is accessed, the device language can be set to the language used by the current browser. A manually set device language has a higher priority than the language of the browser.

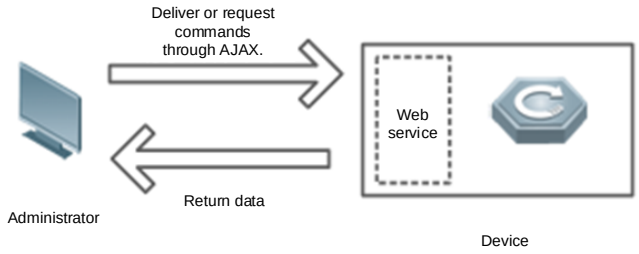
The cloud status and online upgrade are not supported in the English OS.

2 Configuration Guide

2.1 Preparations

Scenario

As shown in the figure below, administrators can access the device from a browser and configure the device through the eWeb management system.



Remarks	The eWeb management system combines various device commands and then delivers them to the device through AJAX requests. The device then returns data based on the commands. A Web service is available on the device to process basic HTTP protocol requests.

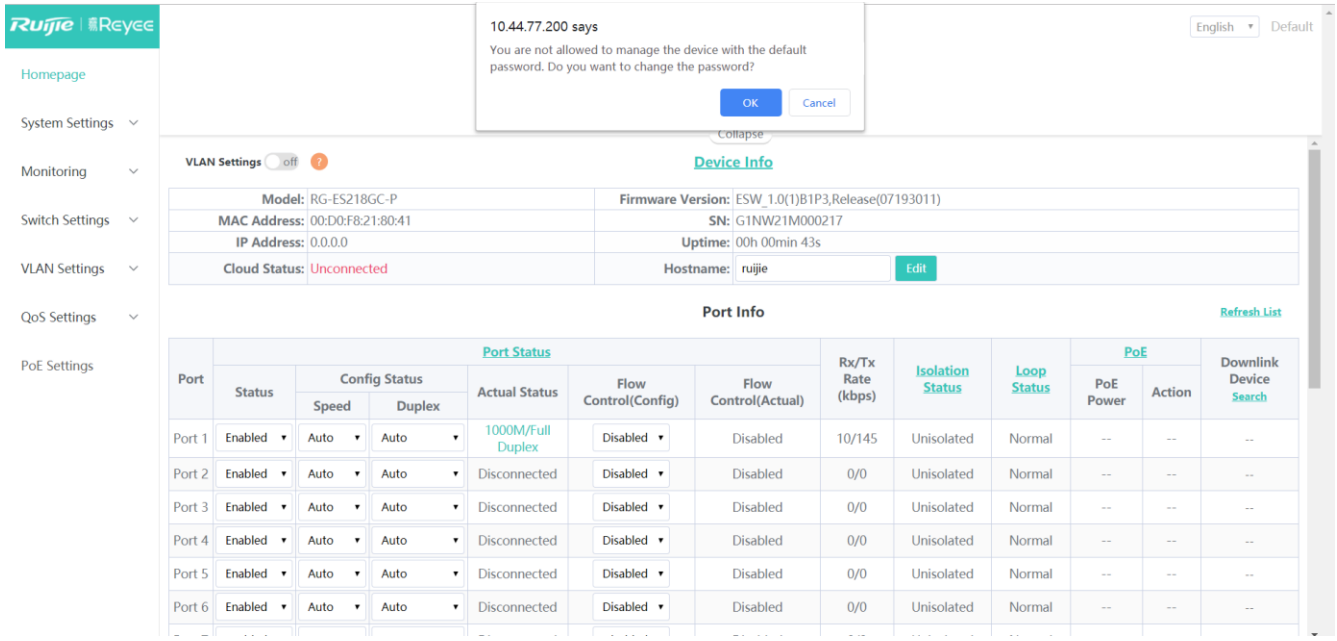
Deployment

Configuration Environment Requirements

Client requirements:

- An administrator can log into the eWeb management system from a Web browser to manage the device. The client refers to a PC or some other mobile endpoints such as laptops or tablets.
- Google Chrome, Firefox, IE9.0 and later versions, and some Chromium-based browsers (such as 360 Extreme Explorer) are supported. Exceptions such as garble or format error may occur if an unsupported browser is used.
- 1024 x 768 or a higher resolution is recommended. If other resolutions are used, the page fonts and formats may not be aligned, the GUI is less artistic, or other exceptions may occur.
- Ensure that the client IP address is set to be in the same network segment as the device management address. Then you can open the browser and enter the device management address to configure the device. When you use the reserved management address 10.44.77.200 of the device, ensure that the client is directly connected to the switch.

To log into the eWeb management system, open Google Chrome, enter **10.44.77.200** in the address bar, and press **Enter**, as shown in the figure below.

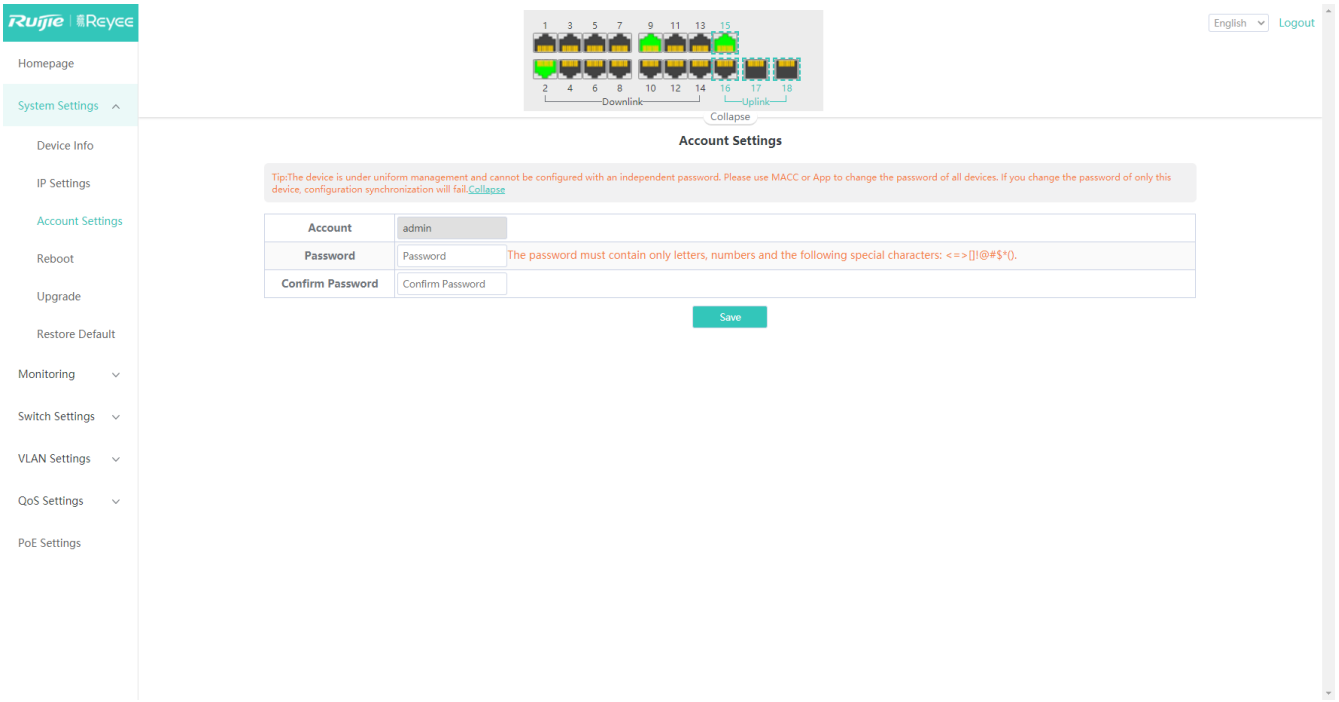


The device homepage appears by default. In addition, a dialog box is displayed, asking you whether to change the default password. (The factory settings of the device can be modified only after the password is changed as prompted.)

2.2 Default Password Configuration

Under factory default settings, the eWeb management system displays a prompt, asking you whether to change the password. (You can configure switch functions only after changing the password.)

Click **OK**. The Web management system automatically redirects to the **Account Settings** page (or you can choose **System Settings** > **Account Settings** to configure the login password).

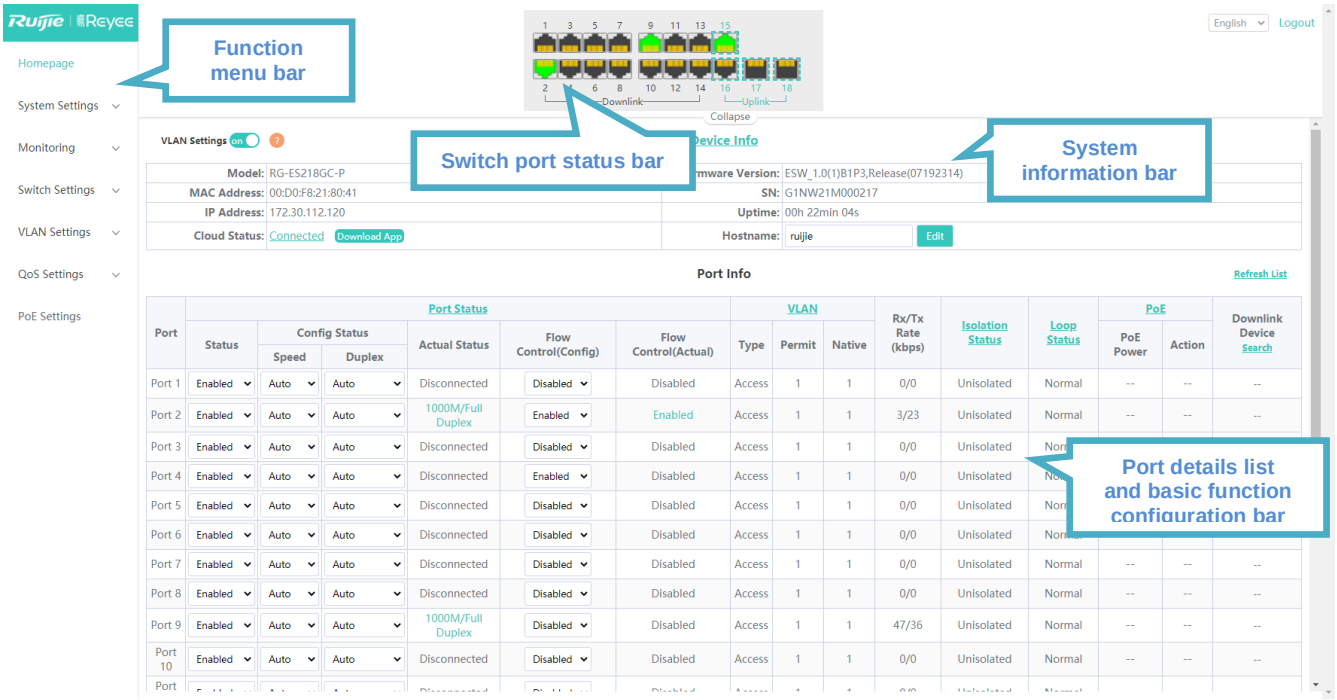


Enter a new password according to password rules and then click **Save**. In the displayed dialog box, click **OK**.

Keep in mind the configured device management password. After password change, the eWeb management system may need re-authentication and login.

2.3 Introduction to the Web GUI

The figure below shows the Web GUI of RG-ES226GC-P.



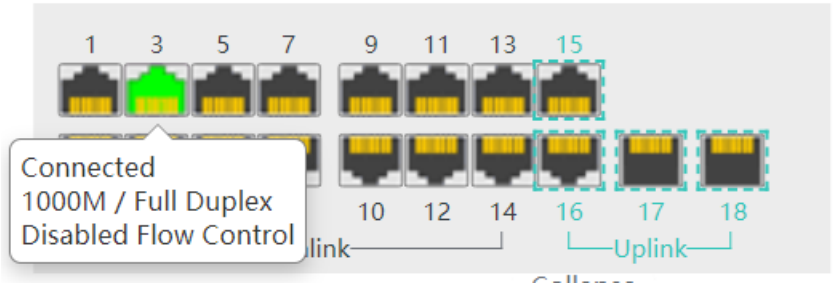
The Web GUI consists of the left and right portions.

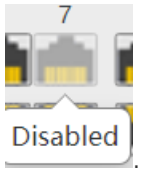
The left portion is the menu bar and provides links to all configuration functions of the device, such as **Monitoring** and **VLAN Settings**.

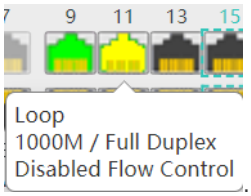
The right portion is the content area, which is divided into two parts. The upper part displays the port status bar and the **Logout** button while the lower part displays the content and configuration area.

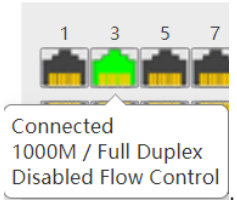
Port status bar:

Move the cursor over a port. Basic information about the port (including the port connection status, speed, duplex mode, and flow control status) is displayed. There are uplink and downlink ports. You can click **Collapse** to hide the port status bar so that a larger content area is displayed for viewing configuration details.



When a port is down, the port icon is grayed out 

. When a loop occurs on a port, the port icon is displayed in yellow 

. When a port works properly, the port icon is displayed in green 

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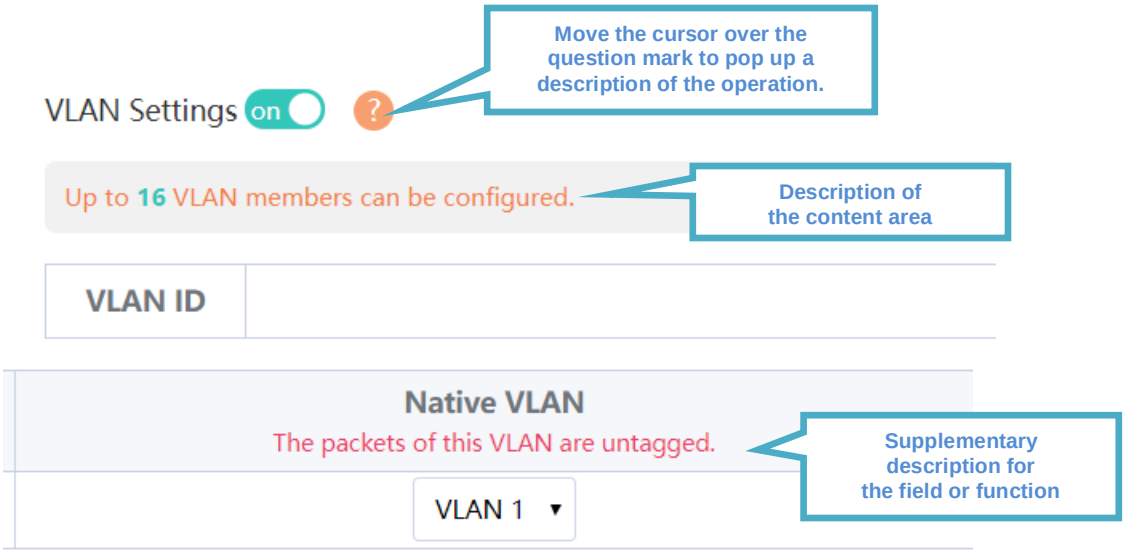
Description of the content area:

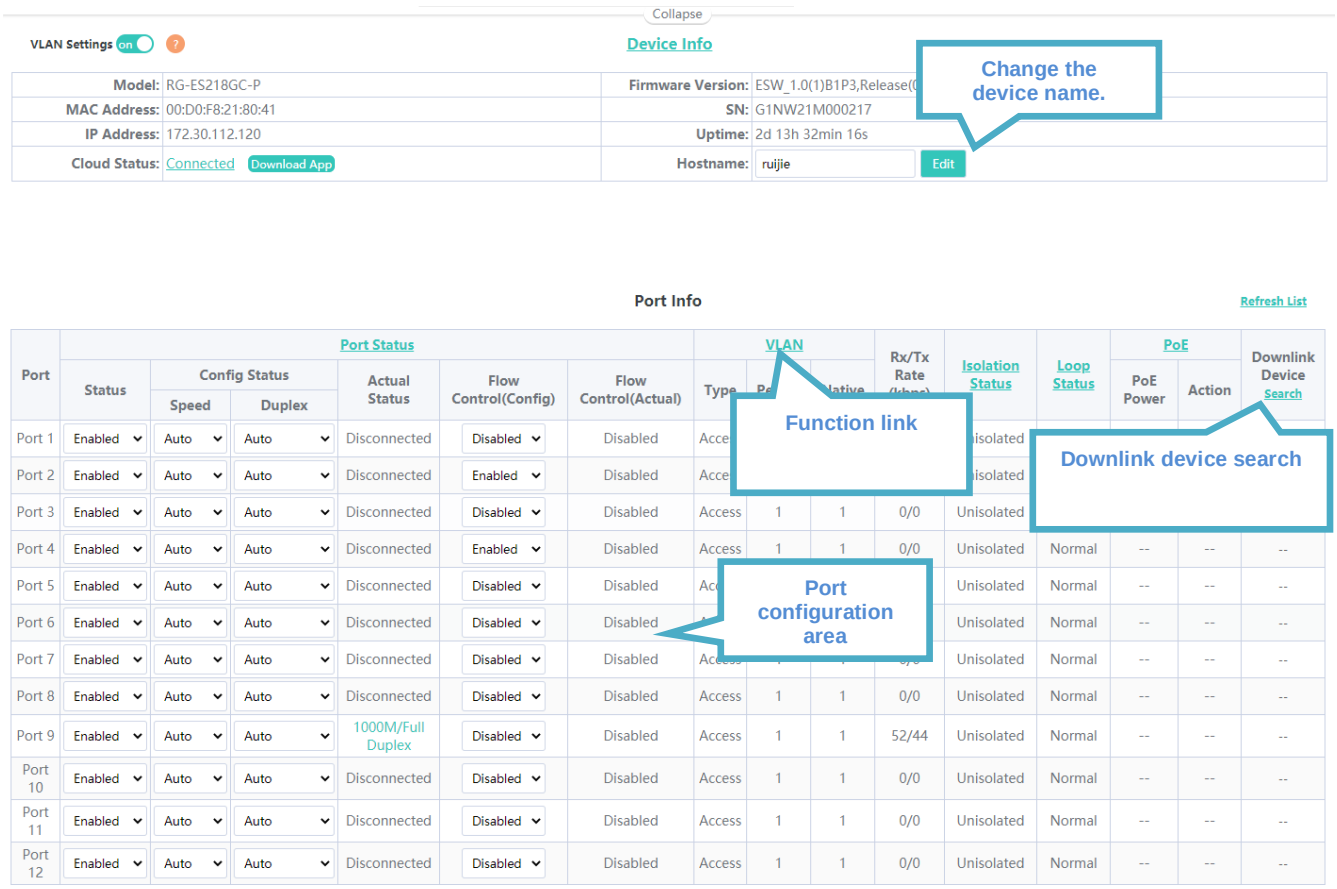
Texts in orange indicate a description of a function. Texts in red indicate notes of a function. A question mark (?) against an orange background indicates an operation prompt, and the prompt pops up when the cursor is moved over the question mark.



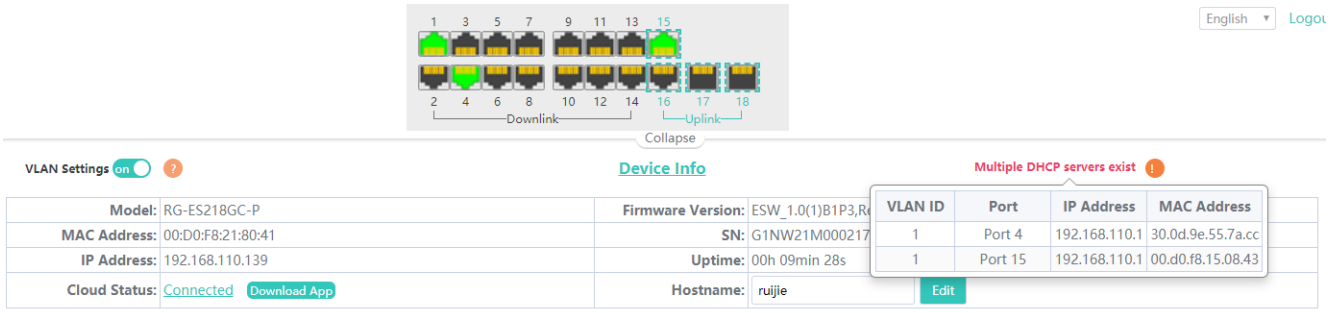
3 eWeb Configuration

3.1 Homepage

The homepage displays basic information about the device, interface status, and **VLAN Settings**.



The following figure shows a multi-DHCP alarm displayed on the homepage.



Move the cursor over the icon. Alarm information (VLAN, port, IP address, and MAC address) is displayed.

3.2 System Settings

3.2.1 Device Info

Details about the device are displayed.

System Settings

Device Name	ruijie
Model	RG-ES218GC-P
MAC Address	00:D0:F8:21:80:41
IP Address	192.168.110.140
Submask	255.255.255.0
Gateway	192.168.110.1
DNS	192.168.110.1
SN	G1NW21M000217
Firmware Version	ESW_1.0(1)B1P2,Release(07182814)
Firmware Date	Jun 28 2020
Hardware Version	1.00

3.2.2 IP Settings

Configure the management IP address and management VLAN for the device. **Auto Obtain IP** is set to **Enabled** by default. When **VLAN Settings** is set to **off**, the management VLAN is 1.

IP Settings

VLAN	1 (1-4094) Disable VLAN Settings,and the management packets will be untagged. If you want to tag packets, please enable VLAN Settings.
Auto Obtain IP	Enabled If you disable this feature, multi-DHCP alarming will fail.
IP Address	172.30.112.120
Submask	255.255.255.0
Gateway	172.30.112.1
Auto Obtain DNS	Enabled
DNS	172.30.44.20

Save

When **VLAN Settings** is set to **on**, the following figure is displayed.

IP Settings

VLAN	VLAN 1
Auto Obtain IP	Enabled If you disable this feature, multi-DHCP alarming will fail.
IP Address	172.30.112.120
Submask	255.255.255.0
Gateway	172.30.112.1
Auto Obtain DNS	Enabled
DNS	172.30.44.20

Save

When **VLAN Settings** is set to **on**, select the management VLAN from configured VLANs (you can choose **VLAN Settings > VLAN Members** to add a VLAN).

The device will be disconnected for a short time during IP address configuration. If **Auto Obtain IP** is set to **Enabled**, the device needs to obtain an IP address from the uplink device, or you can enter the management IP address (10.44.77.200) for Web management.

After **VLAN Settings** is set to **on**, change the management VLAN and check whether the port VLAN contains the management VLAN to avoid inaccessible IP address.

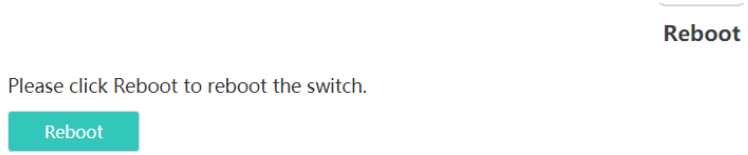
3.2.3 Account Settings

The settings are the same as those in 2.2 Default Password Configuration.

When switches are managed via an ad hoc network, no management password can be separately configured for the device and the global password needs to be configured on the master device.

3.2.4 Reboot

Click **Reboot** to reboot the switch.

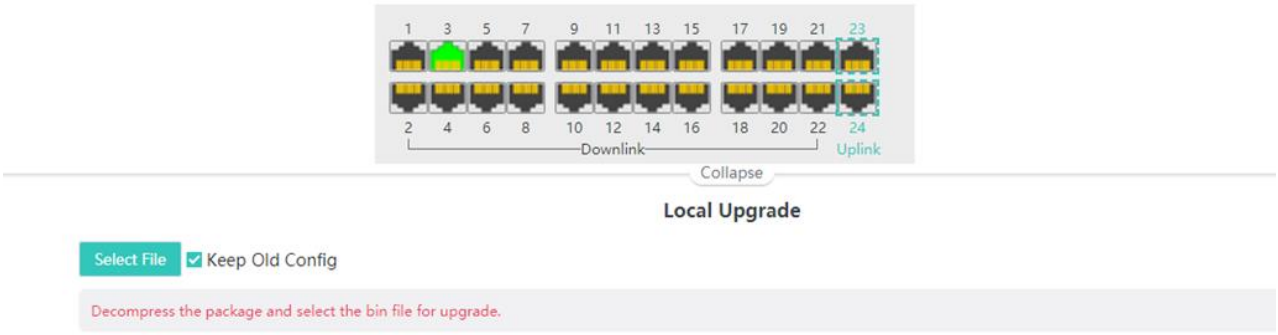


3.2.5 Upgrade

3.2.5.1 Local Upgrade

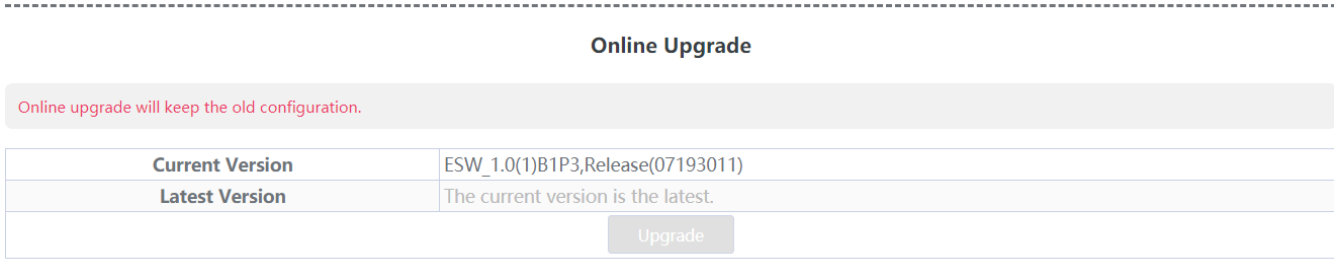
Click **Select File**. In the displayed dialog box, select a target upgrade package. (The software upgrade package is an xxx.bin file while the system upgrade package is an xxxx.tar.gz file. You need to manually decompress the package and select the xxx.bin file for upgrade.)

Keep Old Config is selected by default. If the target version is much later than the current version, it is recommended to uncheck **Keep Old Config**.



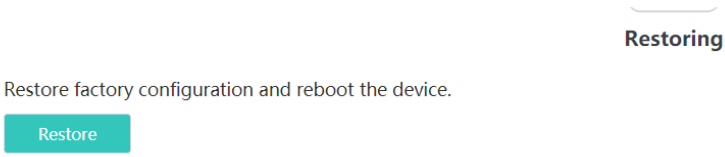
3.2.5.2 Online Upgrade

Online upgrade will keep your current configuration. If there is a new version available, the **Upgrade** button can be clicked. Click the **Upgrade** button and then confirm upgrade. The device will download the new version from the cloud and upgrade to the target version. The time it takes depends on network performance.



3.2.6 Restore Default

Click **Restore** to restore factory settings and reboot the device.



3.3 Monitoring

3.3.1 Switches

When switches are managed by a master device (some functions such as account management are unavailable), the master device of the ad hoc network is displayed. You can access the master device to configure the ad hoc network.

Collapse

Primary Device

The current device has been managed by the master device. Please click the IP address to manage the master device.

IP Address	SN	Model
192.168.110.1	EG34942570018	EG205G

The device can discover and display switches in the same management VLAN. The number of discovered switches in a management VLAN varies with the switch model:

The following models can discover up to 32 switches in the management VLAN: **RG-ES226GC-P**, **RG-ES218GC-P, RG-ES224GC, and RG-ES216GC**.

The following models can discover up to 16 switches in the management VLAN: **RG-ES205C-P**, **RG-ES205GC-P**, **RG-ES209C-P**, and **RG-ES209GC-P**.

Up to **32** switches of the same management VLAN can be discovered.

No.	IP Address	SN	Hostname	Model
1	172.30.112.120(Local)	G1NW21M000217	ruijie	RG-ES218GC-P
2	172.30.112.238	MACC123514726	ruijie	RG-ES226GC-P

The first entry shows information about the current device and other entries show information about the discovered devices. You can click an IP address to redirect to the eWeb management of a specific device (login is required).

3.3.2 Port Statistics

The **Port Statistics** page displays the statistics and status of device ports, such as port Rx/Tx rate and Rx/Tx packets.

Packet Statistics

Port	Status	Connection Status	Rx/Tx Rate(kbps)	Rx/Tx Packets(KB)	Rx/Tx Success	Rx/Tx Failure
Port 1	Enabled	Disconnected	0/0	0/0	0/0	0/0
Port 2	Enabled	Disconnected	0/0	29998/55440	116405/164546	0/0
Port 3	Enabled	Disconnected	0/0	0/0	0/0	0/0
Port 4	Enabled	Disconnected	0/0	0/0	0/0	0/0
Port 5	Enabled	Disconnected	0/0	0/0	0/0	0/0
Port 6	Enabled	Disconnected	0/0	0/0	0/0	0/0
Port 7	Enabled	Disconnected	0/0	0/0	0/0	0/0
Port 8	Enabled	Disconnected	0/0	0/0	0/0	0/0
Port 9	Enabled	Connected	8/23	1361114/2001977	4259448/7337545	0/0
Port 10	Enabled	Disconnected	0/0	0/0	0/0	0/0
Port 11	Enabled	Disconnected	0/0	0/0	0/0	0/0
Port 12	Enabled	Disconnected	0/0	0/0	0/0	0/0
Port 13	Enabled	Disconnected	0/0	0/0	0/0	0/0
Port 14	Enabled	Disconnected	0/0	0/0	0/0	0/0
Port 15	Enabled	Connected	29/31	2067594/1615316	7811786/4674787	0/0
Port 16	Enabled	Disconnected	0/0	0/0	0/0	0/0
Port 17	Enabled	Disconnected	0/0	0/0	0/0	0/0
Port 18	Enabled	Disconnected	0/0	0/0	0/0	0/0

Clear

3.3.3 Cable Diagnostics

You can learn the general cable status of ports through cable diagnostics, for example, whether a cable is short-circuited or disconnected.

Click **Start**. Test results will be displayed.

Cable Diagnostics

Port	Test Result	Details
Port 1	-	-
Port 2	-	-
Port 3	-	-
Port 4	-	-
Port 5	-	-
Port 6	-	-
Port 7	-	-
Port 8	-	-
Port 9	-	-
Port 10	-	-
Port 11	-	-
Port 12	-	-
Port 13	-	-
Port 14	-	-
Port 15	-	-
Port 16	-	-
Port 17	Unsupported	The port does not support cable diagnostics.
Port 18	Unsupported	The port does not support cable diagnostics.

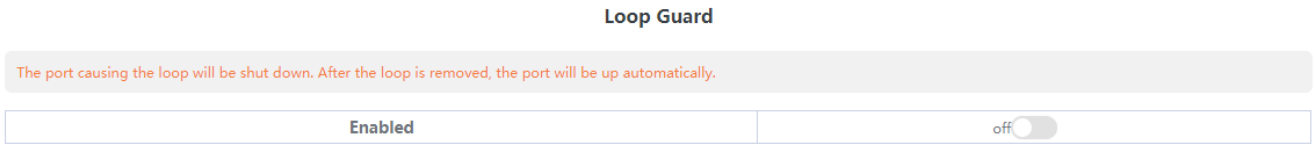
Start Start All

Cable Test

Port	Test Result	Details
Port 1	Normal	The cable works well.
Port 2	Disconnected	Please check cable connection or replace the cable.
Port 3	Disconnected	Please check cable connection or replace the cable.
Port 4	Disconnected	Please check cable connection or replace the cable.
Port 5	Disconnected	Please check cable connection or replace the cable.
Port 6	Disconnected	Please check cable connection or replace the cable.
Port 7	Disconnected	Please check cable connection or replace the cable.
Port 8	Disconnected	Please check cable connection or replace the cable.
Port 9	Disconnected	Please check cable connection or replace the cable.
Port 10	Normal	The cable works well.
Port 11	Normal	The cable works well.
Port 12	Disconnected	Please check cable connection or replace the cable.
Port 13	Disconnected	Please check cable connection or replace the cable.
Port 14	Disconnected	Please check cable connection or replace the cable.
Port 15	Normal	The cable works well.
Port 16	Disconnected	Please check cable connection or replace the cable.
Port 17	Unsupported	The port does not support cable test.
Port 18	Unsupported	The port does not support cable test.

Start Start All

3.3.4 Loop Guard



After loop guard is enabled (which is disabled by default), a port causing a loop on the current device will be automatically disabled. After the loop is removed, the port is restored automatically.

3.4 Switch Settings

3.4.1 Port Settings

On the **Port Settings** page, you can configure the port status, speed, duplex mode, and flow control attribute in batches. The page is divided into two parts:

Configuration part:

Select a port, configure attributes for the port, and then click **Save** to deliver the configuration to the port.

Display part:

Configured attributes and actual attributes of each port are displayed.

Port Settings

After the port is shut down, it is not allowed to send or receive packets(PoE is not affected). Shutting down all ports will make the switch unmanageable. Please be cautious.

Port	Status	Speed	Duplex	Flow Control
--Select--	Enabled	Auto	Auto	Disabled

Save

Port List

Port	Status	Speed/Duplex		Flow Control	
		Config Status	Actual Status	Config Status	Actual Status
Port 1	Enabled	Auto/Auto	Disconnected	Disabled	Disabled
Port 2	Enabled	Auto/Auto	Disconnected	Enabled	Disabled
Port 3	Enabled	Auto/Auto	Disconnected	Disabled	Disabled
Port 4	Enabled	Auto/Auto	Disconnected	Enabled	Disabled
Port 5	Enabled	Auto/Auto	Disconnected	Disabled	Disabled
Port 6	Enabled	Auto/Auto	Disconnected	Disabled	Disabled
Port 7	Enabled	Auto/Auto	Disconnected	Disabled	Disabled
Port 8	Enabled	Auto/Auto	Disconnected	Disabled	Disabled
Port 9	Enabled	Auto/Auto	1000M/Full Duplex	Disabled	Disabled
Port 10	Enabled	Auto/Auto	Disconnected	Disabled	Disabled
Port 11	Enabled	Auto/Auto	Disconnected	Disabled	Disabled
Port 12	Enabled	Auto/Auto	Disconnected	Disabled	Disabled
Port 13	Enabled	Auto/Auto	Disconnected	Disabled	Disabled

A disabled port cannot transmit or receive packets (the PoE function is not affected). Disabling all ports of a switch will make the switch unmanageable. Therefore, exercise caution when disabling ports.

3.4.2 Port Mirroring

Port mirroring forwards input/output packets of one or more source port to the destination port to monitor the network.

Port Mirroring

Packets received and transmitted on the source port will be mirrored to the mirror port.

Source Port Member	Direction	Mirror Port
--Select--	Input	Port 1

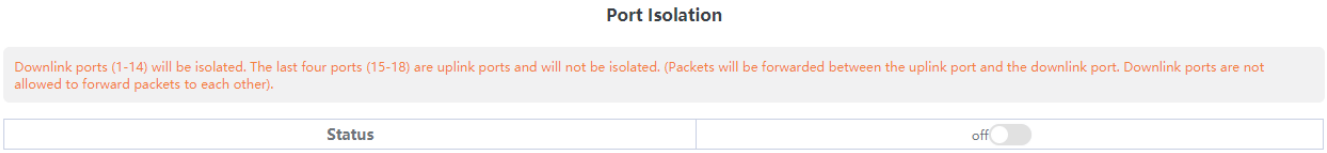
Save

Source Port Member	Direction	Mirror Port

Delete

Destination mirroring ports on RG-ES205C-P, RG-ES205GC-P, RG-ES209C-P, and RG-ES209GC-P can only capture packets. They cannot transmit data to the switch.

3.4.3 Port Isolation



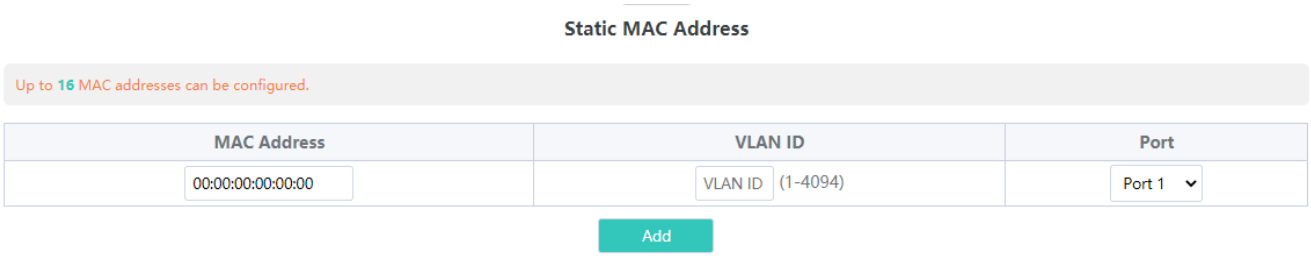
Port isolation implements layer-2 isolation of packets. After port isolation is enabled (which is disabled by default), data can be forwarded only between uplink ports and downlink ports, and downlink ports cannot forward packets to each other.

3.4.4 Static MAC

The **Static MAC Address** page is divided into two parts:

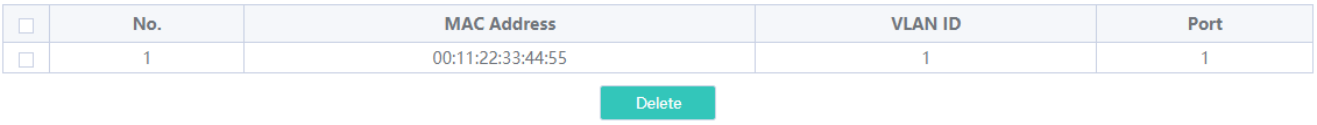
Adding a static MAC address:

Enter a valid MAC address and VLAN ID, select a port, and then click **Add** to add a static MAC address.



Displaying and deleting a static MAC address:

After a valid static MAC address is added, its information is displayed in the list below. Select a static MAC address and click **Delete** to delete the static MAC address.

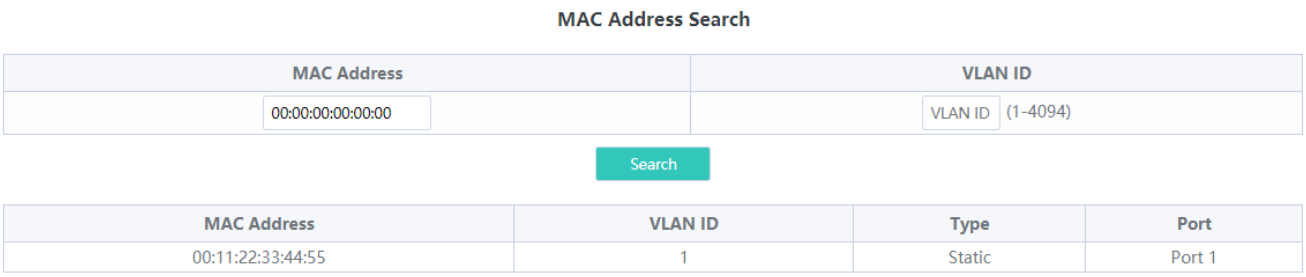


Up to 16 static MAC addresses can be added.

After **VLAN Settings** is set to **off**, no VLAN ID needs to be entered to add a static MAC address.

3.4.5 Search MAC

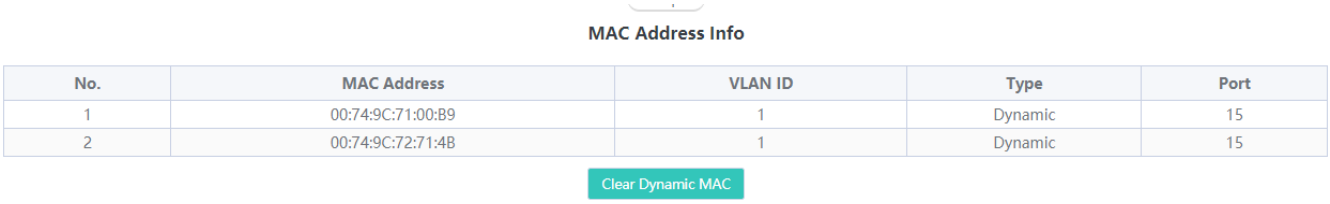
With the search MAC function, you can search for the MAC addresses learned by the device. MAC addresses can be fuzzily searched. You can enter a part of a complete MAC address (such as 00:74:9c:1e:4b:f4) for searching.



After **VLAN Settings** is set to **off**, the **VLAN ID** column will not be displayed.

3.4.6 MAC List

The **MAC Address Info** page lists MAC addresses learned by the device.

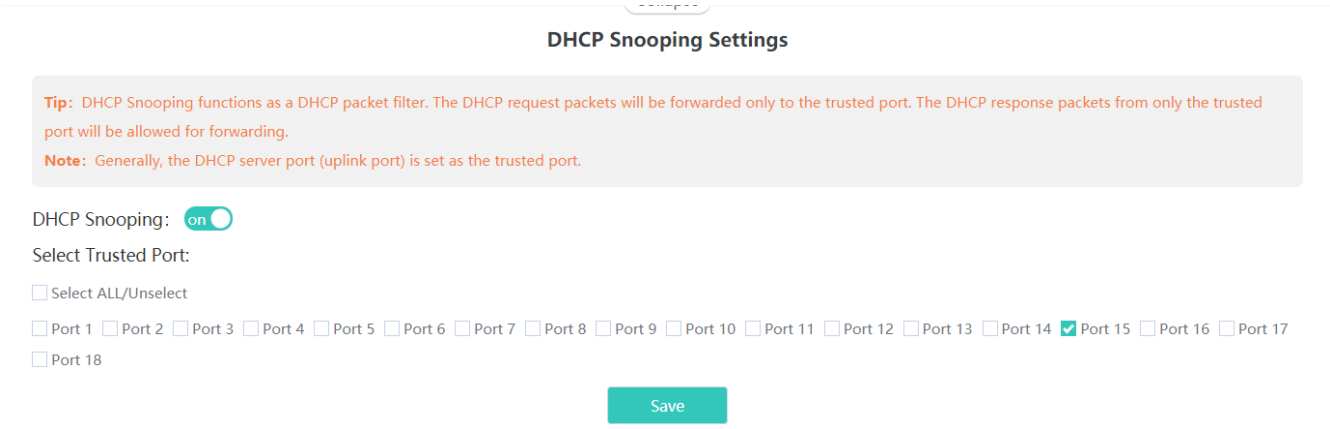


Click **Clear Dynamic MAC**. The device re-obtains the list of learned MAC addresses.

After **VLAN Settings** is set to **off**, the **VLAN ID** column will not be displayed.

3.4.7 DHCP Snooping

You can configure the DHCP snooping function for the device.



After **DHCP Snooping** is set to **on,** as shown in the figure above, the device sets the uplink port as a trusted port by default. You can select a port and click **Save** to set the port as a trusted port.

DHCP Snooping functions as a DHCP packet filter. The DHCP request packets will be forwarded only to the trusted port. The DHCP response packets from only the trusted port will be allowed for forwarding.

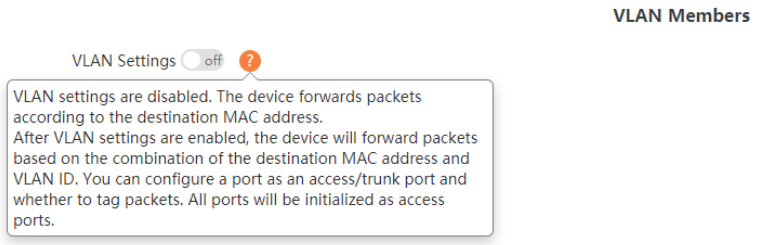
The port connected to the DHCP server (uplink port) is configured as the trusted port generally.

3.5 VLAN Settings

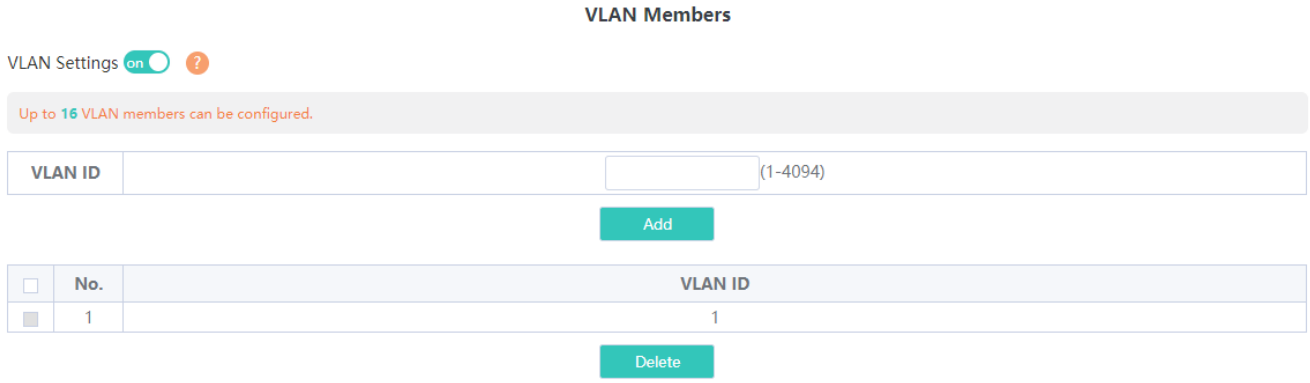
You can add or delete VLANs, and configure port VLANs (only when **VLAN Settings** is set to **on**).

3.5.1 VLAN Members

When **VLAN Settings** is set to **off**, the page is shown in the figure below:



When **VLAN Settings** is set to **on**, the page is shown in the figure below:



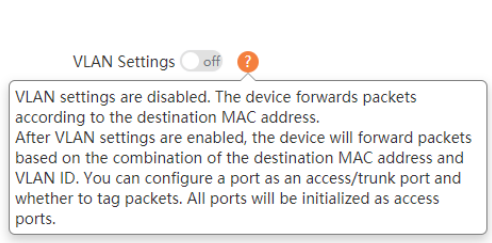
After **VLAN Settings** is set to **on**, enter a valid VLAN ID and click **Add** to configure a new VLAN. In the VLAN list, you can select VLANs and click **Delete** to delete them in batches.

Up to 16 VLANs can be configured.

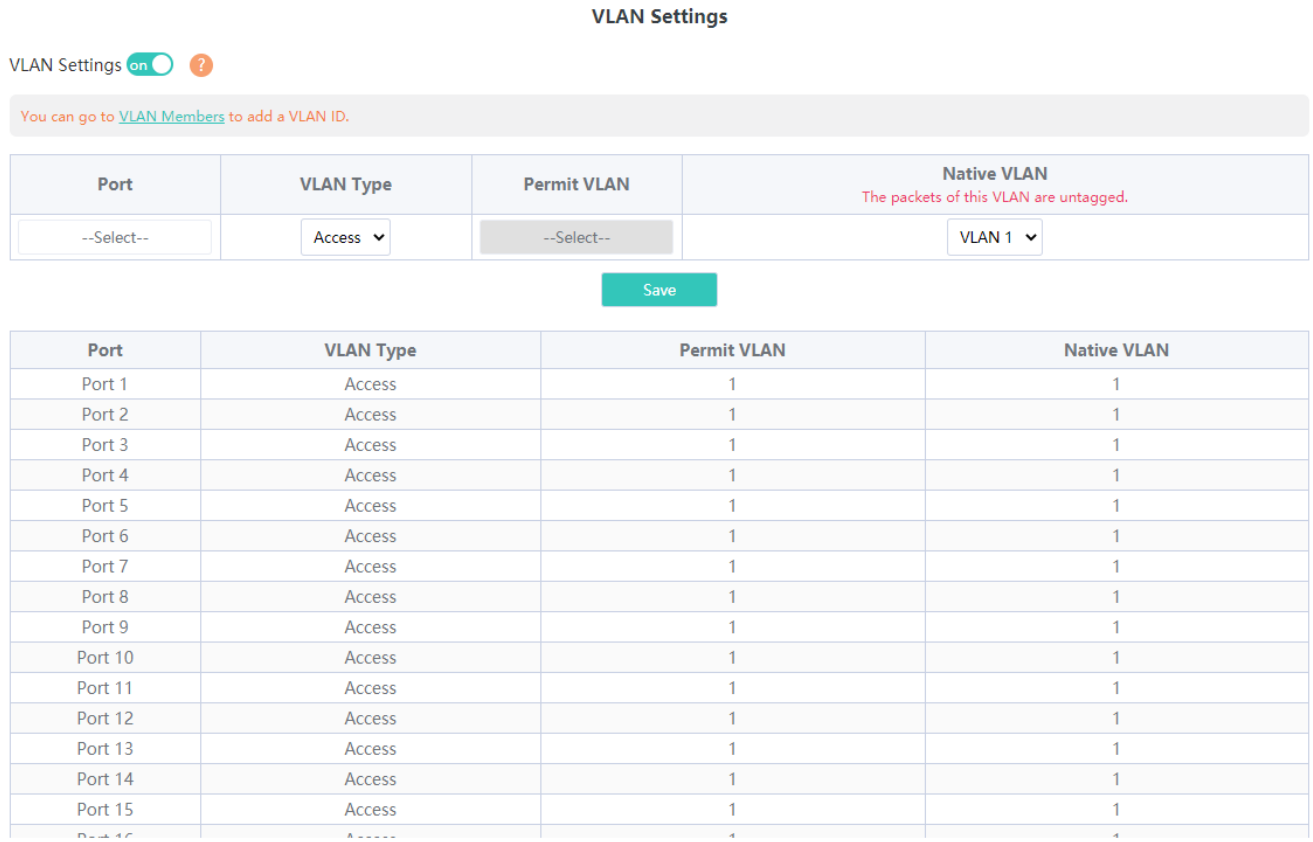
A VLAN ID bound to a port cannot be deleted.

3.5.2 VLAN Settings

When **VLAN Settings** is set to **off**, the page is shown in the figure below:



When **VLAN Settings** is set to **on**, the page is shown in the figure below:



The **VLAN Settings** page is divided into two parts:

The upper part enables port VLAN configuration. You can select a port, set the VLAN type (**Access** or **Trunk**; when **Trunk** is selected, **Permit VLAN** can be configured), **Permit VLAN**, and **Native VLAN**, and click **Save** to save the port VLAN configuration.

The lower part lists the port and VLAN settings.

Note: Packets from ports in the native VLAN are untagged.

3.6 QoS Settings

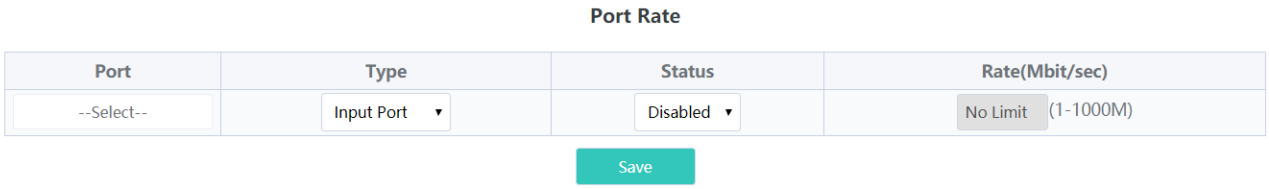
QoS settings include the port rate and storm control function.

3.6.1 Port Rate

You can configure the input and output rates for a port. The **Port Rate** page is divided into two parts:

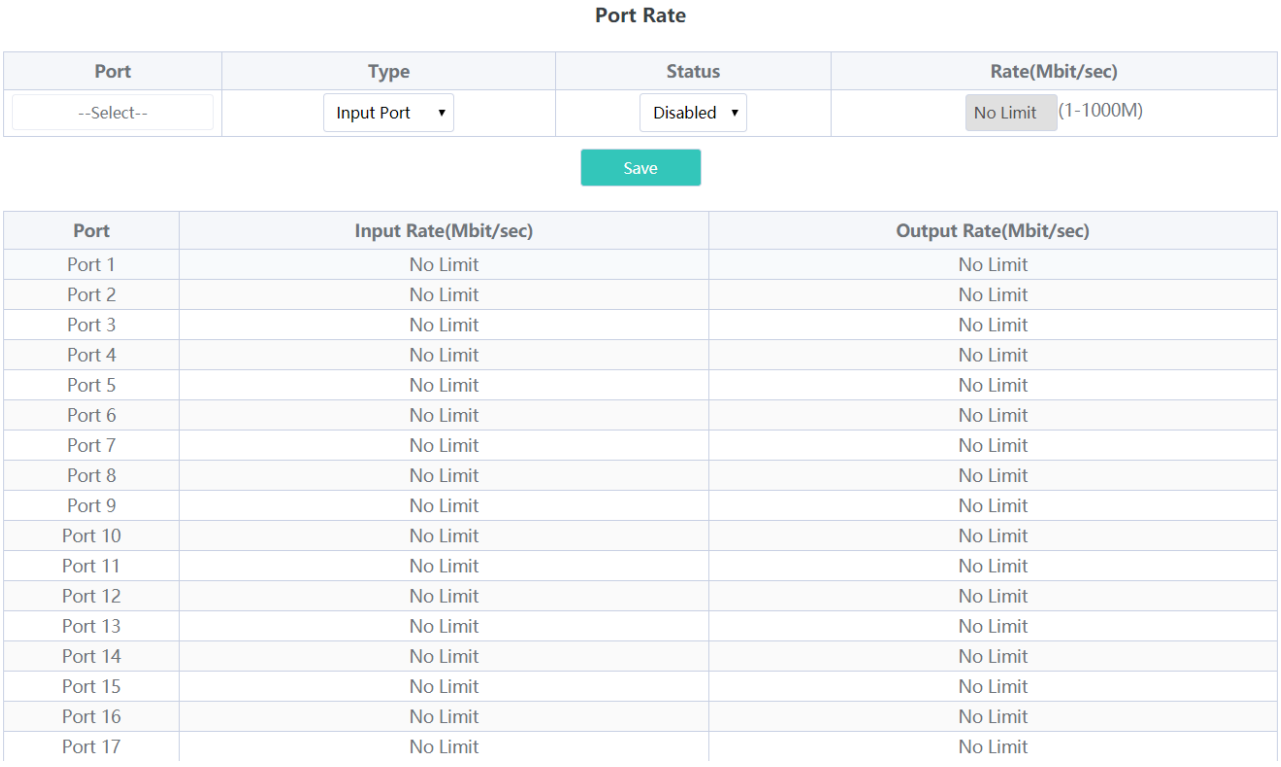
Configuration part:

Select one or more ports, set the port type and whether to enable rate limiting (if yes, enter the rate limit value of the port), and click **Save**.



Display part:

The input and output rates configured for device ports are displayed.



Port	Input Rate(Mbit/sec)	Output Rate(Mbit/sec)
Port 1	No Limit	No Limit
Port 2	No Limit	No Limit
Port 3	No Limit	No Limit
Port 4	No Limit	No Limit
Port 5	No Limit	No Limit
Port 6	No Limit	No Limit
Port 7	No Limit	No Limit
Port 8	No Limit	No Limit
Port 9	No Limit	No Limit
Port 10	No Limit	No Limit
Port 11	No Limit	No Limit
Port 12	No Limit	No Limit
Port 13	No Limit	No Limit
Port 14	No Limit	No Limit
Port 15	No Limit	No Limit
Port 16	No Limit	No Limit
Port 17	No Limit	No Limit

For RG-ES205C-P, the range of the port rate limit is from 1 Mbit/s to 100 Mbit/s.

For RG-ES209C-P, the maximum rate is 100 Mbit/s for ports 1–8, and the actual rate is 100 Mbit/s if a greater rate is configured. The range of the port rate limit is from 1 Mbit/s to 1000 Mbit/s for port 9.

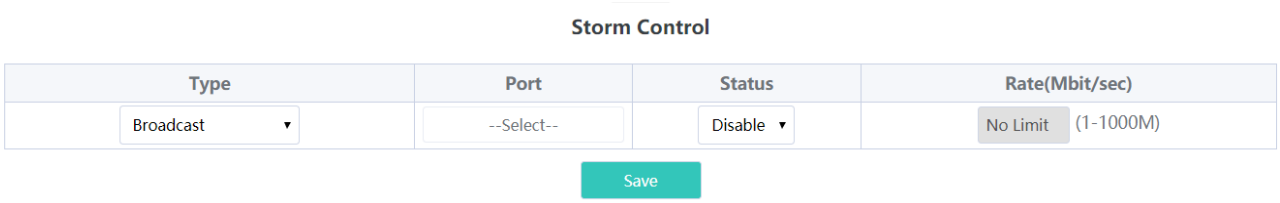
For RG-ES226GC-P, RG-ES218GC-P, RG-ES205GC-P, and RG-ES209GC-P, the range of the port rate limit is from 1 Mbit/s to 1000 Mbit/s.

3.6.2 Storm Control

The **Storm Control** page consists of the port storm control configuration and display.

Configuration part:

Specify the storm control type, select ports, enable storm control, and enter the storm control rate. Click **Save** to configure storm control.



Display part:

The storm control types and rates configured for device ports are displayed (when storm control is enabled, the storm control rates are displayed).

Type	Broadcast(Mbit/sec)	Unknown Unicast(Mbit/sec)	Unknown Broadcast(Mbit/sec)
Port 1	Disabled	Disabled	Disabled
Port 2	Disabled	Disabled	Disabled
Port 3	Disabled	Disabled	Disabled
Port 4	Disabled	Disabled	Disabled
Port 5	Disabled	Disabled	Disabled
Port 6	Disabled	Disabled	Disabled
Port 7	Disabled	Disabled	Disabled
Port 8	Disabled	Disabled	Disabled
Port 9	Disabled	Disabled	Disabled
Port 10	Disabled	Disabled	Disabled
Port 11	Disabled	Disabled	Disabled
Port 12	Disabled	Disabled	Disabled
Port 13	Disabled	Disabled	Disabled
Port 14	Disabled	Disabled	Disabled
Port 15	Disabled	Disabled	Disabled

For RG-ES205C-P, the range of the storm control rate is from 1 Mbit/s to 100 Mbit/s.

For RG-ES209C-P, the maximum rate is 100 Mbit/s for ports 1–8, and the actual rate is 100 Mbit/s if a greater rate is configured. The range of the storm control rate is 1 from Mbit/s to 1000 Mbit/s for port 9.

For RG-ES226GC-P, RG-ES218GC-P, RG-ES205GC-P, and RG-ES209GC-P, the range of the storm control rate is from 1 Mbit/s to 1000 Mbit/s.

3.7 PoE Settings

The PoE system status and PoE port status of the device are displayed.

System status:

The total power, used power, remaining power, and work status of the PoE function of the device are displayed.

PoE Info

Total Power	Used	Remaining	Work Status
240W	0W	240W	Normal

Port status:

The PoE voltage, current, power, and current power status of ports are displayed. You can control whether to enable PoE function on a port and restart PDs.

PoE Settings

PoE Status When off, PoE will not work on this port.	Port	Power(W)	Current(mA)	Voltage(V)	Power Status	Action
on	Port 1	0	0	0	Powered Off	--
on	Port 2	0	0	0	Powered Off	--
on	Port 3	0	0	0	Powered Off	--
on	Port 4	0	0	0	Powered Off	--
on	Port 5	0	0	0	Powered Off	--
on	Port 6	0	0	0	Powered Off	--
on	Port 7	0	0	0	Powered Off	--
on	Port 8	0	0	0	Powered Off	--
on	Port 9	0	0	0	Powered Off	--
on	Port 10	0	0	0	Powered Off	--
on	Port 11	0	0	0	Powered Off	--
on	Port 12	0	0	0	Powered Off	--
on	Port 13	0	0	0	Powered Off	--
on	Port 14	0	0	0	Powered Off	--
on	Port 15	0	0	0	Powered Off	--
on	Port 16	0	0	0	Powered Off	--
Port 17 Unsupported						

Fiber ports (last two ports) of RG-ES226GC-P and RG-ES218GC-P do not support the PoE function.

Disabling PoE on a port will stop powering downlink devices connected to the port.

4 FAQs

Q1: What can I do when I failed to log into the eWeb management system?

A: Perform the following steps:

(1) Check that a PC network cable is correctly connected to a device port and the port indicator blinks.

(2) Before accessing the setup GUI, you are advised to configure a static IP address for the PC. Set the IP address to 10.44.77.XXX (for example, 10.44.77.199; the IP address cannot be the same as the device IP address 10.44.77.200) and subnet mask to 255.255.255.0.

(3) Run the **ping** command to test the connectivity between the PC and the device.

Q2: What can I do when I forget the device username and password? How can I restore factory settings?

If you forget the login password, hold down the **Reset** button on the panel for 5 seconds after the device is powered on. Factory settings are restored after the device restarts.