



Virtualization Configuration

S5900-24S4T2Q Ethernet Switch



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Chapter 1 Configuring Virtualization

The Virtualization Configuration task in this chapter describes how to configure the virtualization capabilities of a switch.

Overview

Virtualization technology is a centralized management port extension technology. Users can connect virtualization-enabled switches to virtual devices using virtualized ports and cables.

Virtualization has the following advantages:

- 1.The port density can be extended by virtualization, because the number of ports of the virtualized device are obtained by adding the ports of all member devices in the virtual domain, and all ports can be regarded as the ports of one device.
- 2.Convenient user management operations. By virtualizing users, a group of switches can be managed as a logical object through an IP, reducing the occupation of IP addresses and facilitating management.
- 3.Expand the uplink bandwidth. Virtualization management is used to manage the virtualization function configuration and operational status. The user needs to enable the virtualization function of the virtualization enabled switch. After the virtualization configuration is complete, you need to restart the device for the virtualization function to take effect.

1.1 Virtualization Configuration Task List

- Configuring a virtualized port for virtualized device interconnection
- Configuring virtualization related parameters
- Enabling virtualization
- Saving the virtualization configuration and restart the device

1.2 Virtualization Configuration Task

1.2.1 Configuring Virtualization Ports for Interconnecting

Different numbered devices in the virtual domain are connected to each other through a virtualized port, and each device that enables virtualization must have at least one virtualized port.

Use the following command to configure the virtualization port:

command	purpose
bvss interface <i>num</i> type [TgigaEthernet QTGigaEthernet] port <i>port</i> group <i>group</i>	Configure the port <i>port</i> whose port type is <i>type</i> to be a virtualized port. The serial number is <i>num</i> and the port group number is <i>group</i> .

1.2.2 Configuring Virtualization Parameters

Virtualization uses virtual domains to manage virtualized devices that belong to the same group.

Devices in the same virtual domain are virtualized. Each member device in the virtual domain has different numbers. Each member device needs to be configured with its own priority. In order to use the master device, the device with the highest priority will become the master device of the virtualization domain. There are two modes of virtualization: normal mode and enhanced mode. The normal mode only supports 2 devices for virtualization. The enhanced mode supports up to 4

devices for virtualization. Currently, the system supports virtualization of normal mode and enhanced mode. There are two ways to set the MAC address of the virtualization system: the MAC address of the master device as the virtualized system MAC and the reserved MAC address as the MAC address of the virtualization system.

Use the following command to configure virtualization related parameters:

command	purpose
bvss mode [normal enhanced]	Configure virtualization mode.
bvss domain-id id	Configure the virtualization domain.
bvss member-id id	Configure the virtualization member number.
bvss priority priority	Configure the priority of the virtualized member device.
Bvss mac-address mode [use-active-member use-static-pool]	Configure the virtualization system mac address mode.

1.2.3 Enabling Virtualization

The device runs in standalone mode by default. The virtualization function is not enabled. After the virtualization related parameters are configured, the virtualization function needs to be enabled.

Use the following command to enable virtualization:

command	purpose
bvss enable	Enable virtualization.

1.2.4 Saving Virtualization Configuration

Once the virtualization parameters are fully configured and virtualization is enabled, you must save the virtualization configuration and reboot the device for the configured virtualization features to take effect.

Use the following command to save the virtualization configuration:

command	purpose
write bvss-config	Save the virtualization configuration.

1.2.5 Displaying virtualization configuration

On devices with virtualization enabled, you can use the following command to display virtualization related information.

Use the following command to display virtualization information:

command	purpose
show bvss current-config	Displays the current configuration of the virtualization.
show bvss running-config	Shows the current running configuration of virtualization.
show bvss management	Displays virtualization information.
show bvss statistics	Displays virtualization statistics.

The current running configuration refers to the virtualized configuration that the device is running. The virtualized current configuration is a configuration that the user may modify or add during the virtualization operation. These configurations do not take effect and need to be saved and restarted to take effect.