



Switch Configuration Example for Q-SYS™ Platform

Huawei S5700 Series

Important Note

This switch configuration example is intended to serve as a network setup guideline for systems using only Q-LAN audio streaming within your Q-SYS system and should be used alongside the [Q-SYS Q-LAN Networking Overview](#) tech note for deeper setup insight. Keep in mind that QSC is unable to provide live network configuration support for third-party switch configuration. To learn more about network switch qualification services and the plug-and-play Q-SYS NS Series preconfigured network switches, visit <http://www.qsc.com/switches>.

This document applies to these Huawei switches:
S5700

Introduction

As of release 5.3.x, Q-SYS Designer software now supports AES67-standard interoperability. The AES67 standard does not prescribe a method of discovery for devices so manufacturers are free to implement one or more discovery services for their devices. In this configuration document, the process uses Bonjour as the discovery method for AES67 devices.

Q-SYS Designer now also offers a selection of Differential Services Code Point (DSCP) setting presets to optimize Quality of Service (QoS) for different types of deployment. DSCP codes are a six-bit value placed in the IP header of data packet, and they instruct a network switch to handle various types of data with defined levels of priority that ensure proper QoS.

Configuration

The switch comes with a Cisco-type console cable that has a DB9 plug on one end (connects to the computer) and an RJ45 plug on the other (connects to the console port on the switch). Connect the switch to the computer using this cable.

Open the terminal emulation program on the computer. Set the serial communications to 9600, n 8 1.

Restore Factory Default Settings

The configuration procedures to make the switch usable with Q-SYS require starting with the switch's factory default settings. If the switch is new out of the box or otherwise had not been reconfigured yet, skip this procedure.

1. At the terminal prompt, type **reset saved-configuration** and press **Enter**. Press **Y** to confirm that you wish to erase the configuration file.

2. Type **reboot** and press **Enter**. You will be asked to save the configuration; press **N**. Then you will be asked to confirm the reboot request; press **Y**.

The switch will reboot with the factory default configuration.

Initial configuration

Start from the factory default configuration.

1. If the prompt asks you to configure a password, press **Y**. Type the password you want and press **Enter**.
2. Type **system-view** and press **Enter**. This will put the switch into configuration mode.
3. Type **interface vlanif 1** and press **Enter**. This is for configuring the default VLAN.
4. To set the management IP address and mask, type **ip address <address> <mask>** and press **Enter**.
5. Type **quit** and press **Enter**. This exits default VLAN configuration.
6. Type **telnet server enable** and press **Enter**. This enables telnet access to switch management.
7. Type **user-interface vty 0 4** and press **Enter** to configure the telnet sessions on virtual teletype (VTY) lines 0 through 4.
8. Type **authentication-mode password** and press **Enter** to enable password security.
9. To set the password, type **set authentication password <password>** and press **Enter**.
10. Type **user privilege level 3** and press **Enter**, which will allow all management operations through telnet.
11. Type **quit** and press **Enter**. This exits telnet configuration.
12. Type **user-interface vty 16 20** and press **Enter** to configure the telnet sessions on VTY lines 16 through 20.
13. Type **authentication-mode password** and press **Enter** to enable password security.
14. To set the password, type **set authentication password <password>** and press **Enter**.
15. Type **user privilege level 3** and press **Enter**, which will allow all management operations through telnet.
16. Type **quit** and press **Enter**. This exits telnet configuration.
17. Again, type **quit** and press **Enter**. This exits configuration mode

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QoS configuration

Configure QoS to ensure proper prioritization and handling of Q-LAN traffic.

1. Type **system-view** and press **Enter**. This will put the switch into configuration mode.
2. Type **qos schedule-profile pq** and press **Enter**. You will create a scheduling profile for strict priority.
3. Type **qos pq** and press **Enter**. This selects strict priority mode for the scheduling profile.
4. Type **quit** and press **Enter**. Exit the profile configuration context.
5. Type **interface range GigabitEthernet 0/0/1 to GigabitEthernet 0/0/48** and press **Enter**. This will enter configuration context for all ports.
6. Type **trust dscp** and press **Enter**. This will enable DSCP QoS on all ports.
7. Type **qos schedule-profile pq** and press **Enter** to apply strict priority queuing profile to all ports.
8. Type **quit** and press **Enter** to exit interface configuration context.
9. Type **quit** and press **Enter** to exit configuration mode.

Enable IGMP snooping (optional)

1. Type **system-view** and press **Enter**. This will put the switch into configuration mode.
2. Type **igmp-snooping enable** and press **Enter**. This will enable global IGMP snooping.
3. Type **quit** and press **Enter** to exit IGMP snooping configuration context.
4. Type **vlan 1** and press **Enter** to configure the default VLAN.
5. Type **igmp-snooping enable** and press **Enter**. This will enable IGMP snooping on the default VLAN.
6. Type **quit** and press **Enter** to exit VLAN configuration context.
7. Type **quit** and press **Enter** to exit configuration mode.

The switch is now configured for use with Q-LAN.