Switch Configuration Example **for Q-SYS™ Platform**

Pakedge S8 and S24 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 Pakedge switches:
> **S8Hav | S24av | S24f | S24P8av | S24P16av | S24Hav | S24Hf**

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 QoS setup for this switch must be completed using a command line interface (CLI) through the switch's serial console. A Cisco-style DE-9 to RJ-45 cable is included in the package, but any Cisco "roll-over" cable will work. The serial settings are 38400, N, 8, 1.

1. First, make sure the switch is defaulted to the factory settings. At the **Switch>** prompt, type **`en`** and press **Enter** to enter Privileged Exec mode.

2. Type **`delete start`** and press **Enter**, and at the prompt *Do you wish to continue? [Y/N]*: type **`y`** and press **Enter**.

3. Type **`reset`** and press **Enter**; this will reboot the switch with the default settings.

4. While the switch reboots, copy the following block of text commands below into a text editor. Edit the IP address and decimal subnet mask (for example, **/24** instead of **255.255.255.0**) that you would like to use for the switch.

```
enable
configure terminal
interface vlan1
ip address 192.168.1.205/24
exit
interface ge1 ge24
qos dscp-based
qos sched sp
qos dscp-map-qp 32 qosprofile qp1
qos dscp-map-qp 33 qosprofile qp1
qos dscp-map-qp 35 qosprofile qp1
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qos dscp-map-qp 44 qosprofile qp1
qos dscp-map-qp 45 qosprofile qp1
qos dscp-map-qp 46 qosprofile qp3
qos dscp-map-qp 47 qosprofile qp1
qos dscp-map-qp 48 qosprofile qp1
qos dscp-map-qp 49 qosprofile qp1
qos dscp-map-qp 50 qosprofile qp1
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qos dscp-map-qp 61 qosprofile qp1
qos dscp-map-qp 62 qosprofile qp1
qos dscp-map-qp 63 qosprofile qp1
end
copy running-config startup-config
```

5. Once he switch displays the **Switch>** prompt again, copy the entire block of edited text commands from the text editor and paste it into the terminal window (all at once, not individually).

6. Press **Enter** after the last line. The command on the last line saves the setting into flash memory.

7. You can now use the switch's web interface via the IP address you set above. Adjusting other settings is much easier through the web interface, as is downloading a backup of the configuration (select the **System Configuration** menu and click **Configuration File**). The reason for using the switch's CLI is that its web interface does not permit editing the DSCP mapping. However, other settings are much easier to set up in the web interface. Do not use the QoS section of the web interface, though, because it may interfere with the settings you configured in the CLI.