Switch Configuration Example **for Q-SYS™ Platform**
Extreme Summit X440 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 Extreme Networks switches:
> **Summit X440-8t** | **Summit X440-8p** | **Summit X440-24t** | **Summit X440-24p | Summit X440-48t | Summit X440-48p | Summit X440-24t-10G | Summit X440-24p-10G | Summit X440-48t-10G | Summit X440-48p-10G**

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

1. You must use the console serial connection to set up the switch. Use PuTTY, HyperTermial or other terminal emulation software. Use a null-modem cable and 9600, n, 8, 1 line settings with XON/XOFF flow control.

2. The switch will ask for login and password. The default login is **admin**. The default password is blank, so just press **Enter**.

3. If the switch had been previously configured for a different use, it can be restored to factory defaults. To do so, type `unconfigure switch all` and then press **Enter**. The switch will ask you for confirmation before it reboots.

4. After reboot and login, an unconfigured switch will ask several questions questions. The default answer for each question—No—is an acceptable configuration starting point.

5. Type **`disable igmp snooping`** and then press **Enter**.

6. Assigning an IP address for management is optional. To do so, type
   `configure vlan default ipaddress <ip address> <subnet mask>` and press **Enter**.

7. Enabling the web interface is also optional (and it requires assigning an IP in Step 6). To do so, type **`enable web http`** and then press **Enter**.

8. Connect to the switch through any of the front-panel Ethernet jacks and use a telnet connection to continue configuration.

9. Q-SYS requires DSCP, so in the switch enable DSCP examination of incoming frames; at the command line, type **`enable diffserv examination port all`** and press **Enter**. The switch may respond with a message warning that doing so will cause dot1p replacement of 802.1q tagged packets. You may disregard the warning and carry on.

10. By default, the switch enables 802.1p-based Quality of Service (QoS), which must be disabled. Type **`disable dot1p examination ports all`** and press **Enter**. The switch may respond again with a warning message, which you may disregard and carry on.

11. Assign highest priority QP8 to clock traffic by typing **`configure diffserv examination code-point 46 qosprofile qp8`** and then press **Enter**.

12. Assign QP5 to Q-SYS audio; type **`create qosprofile qp5`** and press **Enter**. Next, type **`configure diffserv examination code-point 34 qosprofile qp5`** and press **Enter**.

13. Type **`save`** and press **Enter**. Once these settings are saved, the switch will confirm that the old ones have been overwritten. The switch is now ready for use.

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