Switch Configuration Example **for Q-SYS™ Platform**
Moxa EDS-G509

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 Moxa switches:
> **EDS-G509**

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. Connect the serial port on the PC to the console port of the switch. (If you need information on the port pinouts, see this document: **http://www.moxa.com/doc/man/EDS-G509_HIG_3e.pdf#page=8**)

2. Open Telnet or a terminal emulator such as PuTTY and connect to the device using these settings: 115200 bps, no parity, 8 data bits, 1 stop bit.

```
MOXA EtherDevice Switch  EDS-G509
Console terminal type (1: ansi/vt100, 2: vt52) : 1
```

3. Press **Enter** to select the default choice.

```
Model :              EDS-G509
Name :               Managed Redundant Switch 00196
Location :           Switch Location

Firmware Version :   V2.6
Serial No :          00196
IP :
MAC Address :

 +-----------------------------+
 | Account  : [admin]          |
 | Password :                  |
 +-----------------------------+
```

4. Use the arrow keys to select **Password** and then press **Enter**.

5. In the main menu select **1.Basic Settings** and press **Enter**.

6. Select **Network** and press **Enter**.

7. Select **IPSetting** and press **Enter**.

```
IPv4
Auto IP Configuration       [Disable ]
Switch IP Address           [                    ]
Switch Subnet Mask          [255.255.0.0         ]
Default Gateway             [                    ]
1st DNS Server IP Address   [                    ]
2nd DNS Server IP Address   [                    ]

IPv6
Global Unicast Address Prefix [                  ]
Global Unicast Address        ::
Link-Local Address            fe80::290:e8ff:fe2a:8960
```

8. Select **Switch IP Address**. Enter a valid IPv4 static IP address that is accessible from your PC's network connection. If necessary, update the **Switch Subnet Mask** so it is correct for your network. You may leave all the other fields as they are.

9. When you are done, press **Esc** to return to the **Network Settings** menu.

10. Select **Activate** and press **Y**. This will save the settings and reboot the switch.

Complete the remaining settings using a web browser. You can close your terminal emulator program.

11. Enter the IP address of the switch in the address box of the web browser.
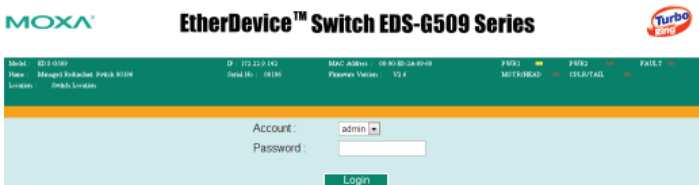
12. In the login window enter the password, if necessary (the default password in blank), and click **Login**.

13. From the menu tree on the left, select **Traffic Prioritization > QoS Classification**.

14. At **Queuing Mechanism**, select **Strict(High Priority First Always)**. *Do not leave it at Weight Fair(8:4:2:1).*

15. At each port, select **Inspect ToS** and clear **Inspect CoS**.

16. Click **Activate**.

17. Select **Traffic Prioritization > ToS/DiffServ Mapping**.

18. At the ToS value **0x84(34)**, set the level to **Medium**. At **0xB4(46)**, set the level to **High**.

19. At all other ToS entries, set the level to **Medium**. After you complete ll these, make sure the **0x84(34)** and **0xB4(46)** levels are still set to **Medium** and **High**, respectively.

20. Click **Activate**.

21. The switch is ready for use with Q-SYS. These administrative steps are optional but may be desirable.

    a. To set account passwords in the switch, select **Basic Settings > Password**.

    b. To enable IGMP Snooping (for efficient co-existence with multicast traffic), go to **Multicast Filtering > IGMP Snooping > IGMP Snooping Setting**. Select **IGMP Snooping Enable** and select each port that you want IGMP Snooping on. Click **Activate**.