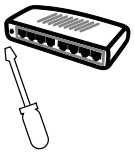

Ethernet Switch **Setup** for Q-SYS

H3C S5500

Initial Configuration

The initial configuration instructions assign an IP address and allow other management access. If this has already been done, you may skip to the next section.

Configuration requires a serial terminal connection between the computer and the switch's console port. Use a terminal emulation program such as PuTTY. The console port is an RJ45 connector labeled *CON* on the back of the switch. Use a Cisco-style DB9 to RJ45 cable and set the serial communications to 9600, n, 8, 1.

1. Type **`system view`** and press Enter to go into configuration mode.
2. Type **`interface vlan-interface 1`** and then press Enter to start configuring the default VLAN.
3. Type **`ip address`** ***`ip-address subnet-mask`*** (where *ip-address* is the IPv4 address you wish to set and *subnet-mask* is the subnet mask for the IP address) and press Enter to set the switch's IP address.
4. Default VLAN configuration is complete. Type **`quit`** and then press Enter.
5. Type **`telnet server enable`** and press Enter to enable switch management via telnet access.
6. Type **`user-interface vty 0`** and press Enter to configure the telnet session interface.
7. Type **`authentication-mode password`** and then press Enter to require a password for telnet access authentication. In the next step you will designate the password.
8. Type **`set authentication password simple`** ***`password`*** (where *password* is the password you wish to set) and press Enter to designate the password for access.
9. Type **`user privilege 3`** and press Enter to allow all management operations through telnet.
10. Telnet access configuration is complete. Type **`quit`** and press Enter.

Optional: Enable Web Interface

1. Type **`local-user password`** (where *password* is the password you set in the previous procedures) and press Enter.
2. Type **`service-type telnet`** and press Enter.
3. Type **`authorization-attribute level 2`** and press Enter.
4. Type **`password simple password`** (where *password* is the desired web interface password) and press Enter.

QoS Configuration

Step 4 below is only necessary if the switch has been configured previously and has "qos sp" enabled. If you are not sure whether the switch does or not, type **`show running-config`** and press Enter. The terminal window will display the switch's current running configuration.

1. Type **`port-group manual all`** and press Enter, to create a group for configuring all the ports.
2. Type **`group-member GigabitEthernet 1/0/1 to GigabitEthernet 1/0/28`** and press Enter, to add all the ports to the group.
3. Type **`qos trust dscp`** and press Enter. This instructs the switch to trust DSCP markings on incoming packets.
4. Only if "qos sp" is enabled:

   Type **`qos wrr`** and press Enter. This turns off universal strict priority queueing for all queues.
5. Type **`qos wrr 7 group sp`** and press Enter. This enables strict priority queueing on queue 7.
6. Type **`qos wrr 6 group sp`** and press Enter. This enables strict priority queueing on queue 6.
7. Type **`undo jumboframes enable`** and press Enter. This disables jumbo frames.
8. Type **`quit`** and press Enter to exit port configuration.

Map DSCP-marked packets to specific queues

1. Type **`qos map-table dscp-dot1p`** and press Enter. This enters map-table mode.
2. Type **`import 48 49 50 51 52 53 54 55 export 5`** and press Enter to lower the priority of DSCP values 48–55 to queue 5.
3. Type **`import 56 57 58 59 60 61 62 63 export 5`** and press Enter to lower the priority of DSCP values 56–63 to queue 5.
4. Type **`import 46 export 7`** and press Enter to raise the priority of DSCP 46 to queue 7.
5. Type **`import 34 export 6`** and press Enter to raise the priority of DSCP 34 to queue 6.
6. Type **`quit`** and press Enter to exit the dscp-dot1p map-table configuration.

Optional: Enable IGMP Snooping

1. Type **`igmp-snooping global enable`** and press Enter. This enables IGMP snooping.
2. Type **`quit`** and press Enter to exit IGMP snooping configuration.
3. Type **`vlan 1`** and press Enter to configure the default VLAN.
4. Type **`igmp-snooping enable`** and press Enter to enable IGMP snooping on the default VLAN.
5. Type **`quit`** and press Enter to exit VLAN configuration.

Save Configuration

1. Type **`quit`** and press Enter to exit configuration mode.
2. Type **`save`** and press Enter.