



Configuring the Cisco 4948 Switch for Livewire™

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Introduction:

This supplement document will assist you in setting up the Cisco Catalyst 4948 for Livewire operation. This is to be used as a guide for setup and Axia Support should be contacted to be sure this configuration is correct for your install.

Enhanced Software - Typical Global configuration:

Output queues are to be configured as high priority for strict expedited scheduling.

```
qos map dscp 46 to tx-queue 2
qos map dscp 48 to tx-queue 3
qos map cos 5 to dscp 46
```

Enable multicast routing

```
ip multicast-routing
```

Axia VLAN configuration

```
interface Vlan1
 ip address xxx.xxx.xxx.xxx 255.255.255.0
 ip pim dense-mode
end
```

Access port configuration (Axia devices and other "edge" switches)

```
interface GigabitEthernet1/xx
 switchport mode access
 switchport nonegotiate
 switchport block multicast
 switchport voice vlan dot1p
 qos trust cos
 tx-queue 1
   shape percent 25
 tx-queue 2
   shape percent 25
 tx-queue 3
   priority high
 tx-queue 4
   shape percent 10
 spanning-tree portfast
end
```



Interconnection configuration (Axia “core” switch to “core” switch)

```
interface GigabitEthernet1/xx
  switchport trunk encapsulation dot1q
  switchport mode trunk
  switchport nonegotiate
  switchport block multicast
  switchport voice vlan dot1p
  qos trust cos
  tx-queue 1
    shape percent 25
  tx-queue 2
    shape percent 25
  tx-queue 3
    priority high
  tx-queue 4
    shape percent 10
end
```

Etherchannel (L2 / PAgP) configuration (Multiple connections between “core” switches)

```
configure terminal
  interface range GigabitEthernet1/xx - xx
    channel-group 1 mode desirable
  end
endend
```

If you have further questions, please contact Axia Support at support@AxiaAudio.com, or call +1-216-241-7225.