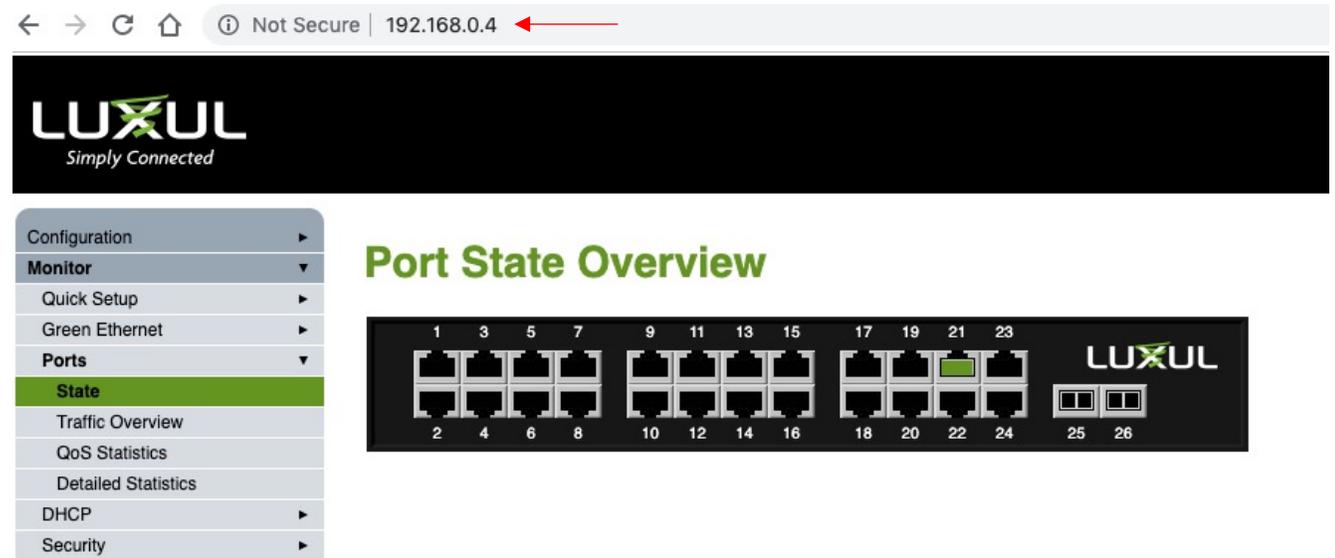




# Managed Switch Configuration for Dante

# Login to switch

- Login to switch via web browser.
- If your network is not currently on a 192.168.0.x subnet, you may need to temporarily set your computer to a static IP subnet of 192.168.0.x. It is also recommended to change the IP address of the switch to match the subnet of your network.
- Default IP address of the switches are:
  - AMS-2600 = 192.168.0.2
  - AMS/XMS-1208P = 192.168.0.3
  - All other AMS/XMS models = 192.168.0.4
  - SW-510/610 Series – DHCP by default
- Default username = admin
- Default password = admin\*
  - Firmware will require a password change upon initial setup



The screenshot shows a web browser window with the address bar displaying "Not Secure | 192.168.0.4". The page header features the LUXUL logo with the tagline "Simply Connected". A navigation menu on the left includes options like Configuration, Monitor, Quick Setup, Green Ethernet, Ports, State (highlighted), Traffic Overview, QoS Statistics, Detailed Statistics, DHCP, and Security. The main content area is titled "Port State Overview" and displays a grid of 26 port icons. Port 21 is highlighted in green, indicating it is active. The LUXUL logo is also present in the bottom right corner of the port overview area.



# DSCP Based QoS Configuration

# DSCP QoS Settings

- Navigate to Configuration > QoS > Port Classification.
- Select DSCP Based option for all ports. Clicking the top row with the \* globally selects all ports.

1 → Configuration

2 → QoS

3 → Port Classification

4 → DSCP Based

### QoS Ingress Port Classification for Switch 1

Port	CoS	DPL	DSCP Based
*	<>	<>	<input checked="" type="checkbox"/>
1	0	0	<input checked="" type="checkbox"/>
2	0	0	<input checked="" type="checkbox"/>
3	0	0	<input checked="" type="checkbox"/>
4	0	0	<input checked="" type="checkbox"/>
5	0	0	<input checked="" type="checkbox"/>
6	0	0	<input checked="" type="checkbox"/>
7	0	0	<input checked="" type="checkbox"/>
8	0	0	<input checked="" type="checkbox"/>
9	0	0	<input checked="" type="checkbox"/>
10	0	0	<input checked="" type="checkbox"/>
11	0	0	<input checked="" type="checkbox"/>
12	0	0	<input checked="" type="checkbox"/>
13	0	0	<input checked="" type="checkbox"/>
14	0	0	<input checked="" type="checkbox"/>
15	0	0	<input checked="" type="checkbox"/>
16	0	0	<input checked="" type="checkbox"/>
17	0	0	<input checked="" type="checkbox"/>
18	0	0	<input checked="" type="checkbox"/>
19	0	0	<input checked="" type="checkbox"/>
20	0	0	<input checked="" type="checkbox"/>
21	0	0	<input checked="" type="checkbox"/>
22	0	0	<input checked="" type="checkbox"/>
23	0	0	<input checked="" type="checkbox"/>

# Save DSCP Settings

- Scroll to bottom of screen and click Save

The screenshot shows the Luxul web interface for a Luxul AMS-4424P switch. The browser address bar shows '192.168.0.4'. The interface includes a navigation menu on the left, a main configuration area, and a status bar at the top right. The main configuration area displays a table of 26 ports, each with three input fields and a checkbox. The 'Save' button at the bottom is highlighted with a red arrow.

Port	Field 1	Field 2	Field 3	Checkbox
1	0	0	0	<input checked="" type="checkbox"/>
2	0	0	0	<input checked="" type="checkbox"/>
3	0	0	0	<input checked="" type="checkbox"/>
4	0	0	0	<input checked="" type="checkbox"/>
5	0	0	0	<input checked="" type="checkbox"/>
6	0	0	0	<input checked="" type="checkbox"/>
7	0	0	0	<input checked="" type="checkbox"/>
8	0	0	0	<input checked="" type="checkbox"/>
9	0	0	0	<input checked="" type="checkbox"/>
10	0	0	0	<input checked="" type="checkbox"/>
11	0	0	0	<input checked="" type="checkbox"/>
12	0	0	0	<input checked="" type="checkbox"/>
13	0	0	0	<input checked="" type="checkbox"/>
14	0	0	0	<input checked="" type="checkbox"/>
15	0	0	0	<input checked="" type="checkbox"/>
16	0	0	0	<input checked="" type="checkbox"/>
17	0	0	0	<input checked="" type="checkbox"/>
18	0	0	0	<input checked="" type="checkbox"/>
19	0	0	0	<input checked="" type="checkbox"/>
20	0	0	0	<input checked="" type="checkbox"/>
21	0	0	0	<input checked="" type="checkbox"/>
22	0	0	0	<input checked="" type="checkbox"/>
23	0	0	0	<input checked="" type="checkbox"/>
24	0	0	0	<input checked="" type="checkbox"/>
25	0	0	0	<input checked="" type="checkbox"/>
26	0	0	0	<input checked="" type="checkbox"/>

# DSCP Based QoS

- In the same QoS menu section, navigate to DSCP-Based QoS
- Select Trust for all DSCP classes. It is also acceptable to select Trust only on the classes that are required for Dante. Those classes are specified on the next page.

The screenshot shows the Luxul web interface for configuring DSCP-Based QoS Ingress Classification. The browser address bar shows the URL 192.168.0.4. The page title is "DSCP-Based QoS Ingress Classification". The left sidebar menu has "DSCP-Based QoS" selected, indicated by a red arrow labeled "1". The main content area displays a table with columns for DSCP, Trust, QoS Class, and DPL. The "Trust" column contains blue checkmarks for all DSCP values from 0 to 22. A red arrow labeled "2" points to the "Trust" checkbox for DSCP 0. The "QoS Class" column contains values such as 0 (BE), 8 (CS1), 10 (AF11), 12 (AF12), 14 (AF13), 16 (CS2), 18 (AF21), 20 (AF22), and 22 (AF23). The "DPL" column contains values like "<>" and 0.

DSCP	Trust	QoS Class	DPL
*	<input checked="" type="checkbox"/>	<>	<>
0 (BE)	<input checked="" type="checkbox"/>	0	0
1	<input checked="" type="checkbox"/>	0	0
2	<input checked="" type="checkbox"/>	0	0
3	<input checked="" type="checkbox"/>	0	0
4	<input checked="" type="checkbox"/>	0	0
5	<input checked="" type="checkbox"/>	0	0
6	<input checked="" type="checkbox"/>	0	0
7	<input checked="" type="checkbox"/>	0	0
8 (CS1)	<input checked="" type="checkbox"/>	0	0
9	<input checked="" type="checkbox"/>	0	0
10 (AF11)	<input checked="" type="checkbox"/>	0	0
11	<input checked="" type="checkbox"/>	0	0
12 (AF12)	<input checked="" type="checkbox"/>	0	0
13	<input checked="" type="checkbox"/>	0	0
14 (AF13)	<input checked="" type="checkbox"/>	0	0
15	<input checked="" type="checkbox"/>	0	0
16 (CS2)	<input checked="" type="checkbox"/>	0	0
17	<input checked="" type="checkbox"/>	0	0
18 (AF21)	<input checked="" type="checkbox"/>	0	0
19	<input checked="" type="checkbox"/>	0	0
20 (AF22)	<input checked="" type="checkbox"/>	0	0
21	<input checked="" type="checkbox"/>	0	0
22 (AF23)	<input checked="" type="checkbox"/>	0	0

# Select QoS Class

- Set Class 0 to priority 0
- Set Class 8 to priority 5
- Set Class 46 to priority 6
- Set Class 56 to priority 7
- Click Save at bottom of screen

Priority	Usage	DSCP Label	Hex	Decimal	Binary
High	Time critical PTP events	CS7	0x38	56	111000
Medium	Audio, PTP	EF	0x2E	46	101110
Low	(reserved)	CS1	0x08	8	001000
None	Other traffic	BestEffort	0x00	0	000000

Class info can be found at <https://www.audinate.com/faq/how-does-dante-use-dscp-diffserv-priority-values-when-configuring-qos>

# Set QoS Class

← → ↻ 🏠 ⓘ Not Secure | 192.168.0.4

**LUXUL**  
Simply Connected

- Configuration
  - Quick Setup
  - Green Ethernet
  - Ports
  - DHCP
  - Security
  - Aggregation
  - Loop Protection
  - IPMC Profile
  - MVR
  - IPMC
  - LLDP
  - MAC Table
  - Voice VLAN
  - QoS**
    - Port Classification
    - Port Policing
    - Queue Policing
    - Port Scheduler
    - Port Shaping
    - Port Tag Remarking
    - Port DSCP
    - DSCP-Based QoS**
    - DSCP Translation
    - DSCP Classification
    - Storm Policing
    - WRED
    - Mirroring
    - UPnP
    - GVRP
    - Stack
    - sFlow
    - UDLD
  - Monitor
  - Tools
  - Administration

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## DSCP-Based QoS Ingress Classification

DSCP	Trust	QoS Class	DPL
*	<input checked="" type="checkbox"/>	<>	<>
0 (BE)	<input checked="" type="checkbox"/>	0	← 1
1	<input checked="" type="checkbox"/>	0	0
2	<input checked="" type="checkbox"/>	0	0
3	<input checked="" type="checkbox"/>	0	0
4	<input checked="" type="checkbox"/>	0	0
5	<input checked="" type="checkbox"/>	0	0
6	<input checked="" type="checkbox"/>	0	0
7	<input checked="" type="checkbox"/>	0	0
8 (CS1)	<input checked="" type="checkbox"/>	5	← 2
9	<input checked="" type="checkbox"/>	0	0
10 (AF11)	<input checked="" type="checkbox"/>	0	0
11	<input checked="" type="checkbox"/>	0	0
12 (AF12)	<input checked="" type="checkbox"/>	0	0
13	<input checked="" type="checkbox"/>	0	0
14 (AF13)	<input checked="" type="checkbox"/>	0	0
15	<input checked="" type="checkbox"/>	0	0
16 (CS2)	<input checked="" type="checkbox"/>	0	0
17	<input checked="" type="checkbox"/>	0	0
18 (AF21)	<input checked="" type="checkbox"/>	0	0
19	<input checked="" type="checkbox"/>	0	0
20 (AF22)	<input checked="" type="checkbox"/>	0	0
21	<input checked="" type="checkbox"/>	0	0
22 (AF23)	<input checked="" type="checkbox"/>	0	0

← → ↻ 🏠 ⓘ Not Secure | 192.168.0.4

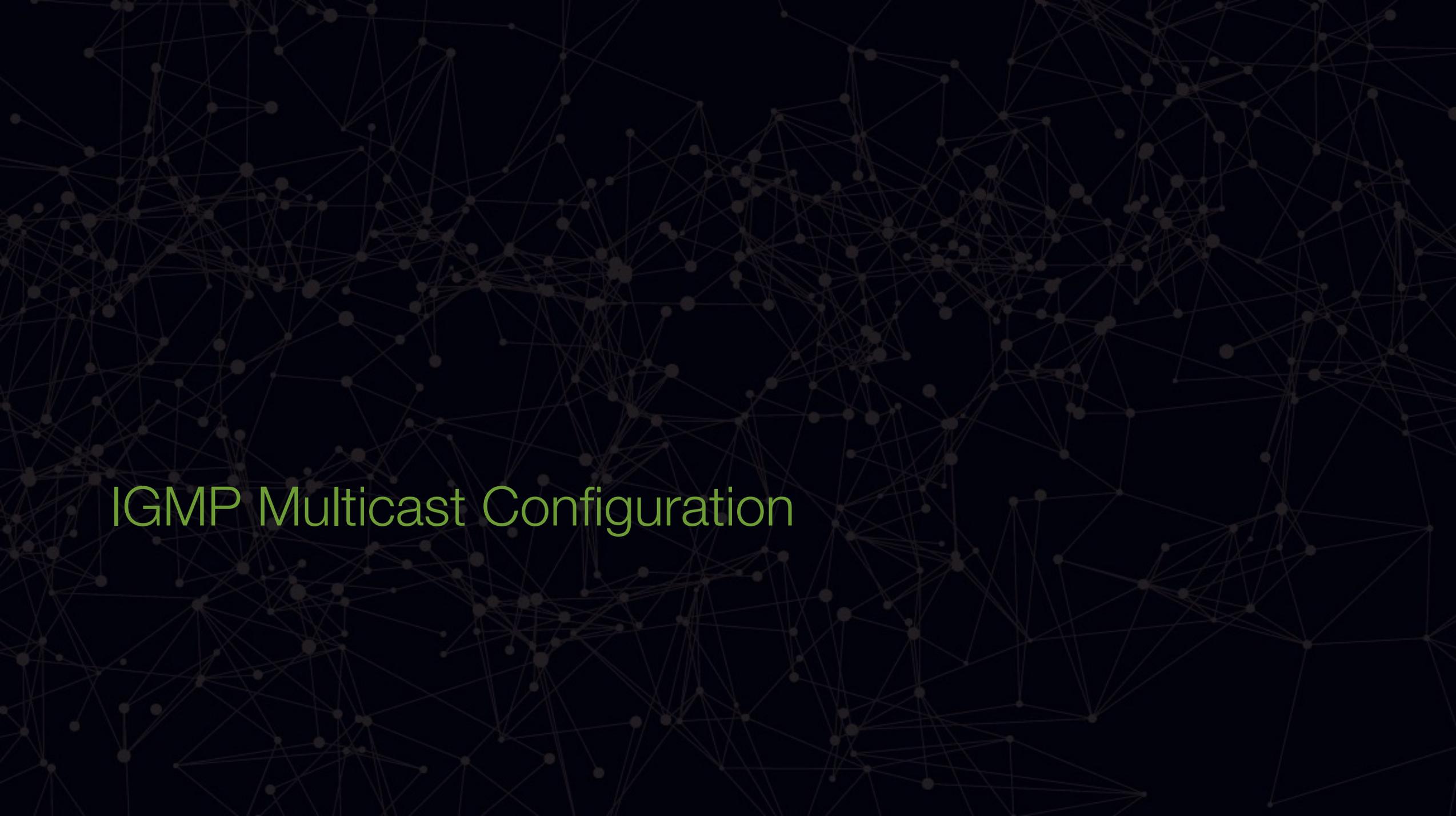
**LUXUL**  
Simply Connected

- Configuration
  - Quick Setup
  - Green Ethernet
  - Ports
  - DHCP
  - Security
  - Aggregation
  - Loop Protection
  - IPMC Profile
  - MVR
  - IPMC
  - LLDP
  - MAC Table
  - Voice VLAN
  - QoS**
    - Port Classification
    - Port Policing
    - Queue Policing
    - Port Scheduler
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    - Port DSCP
    - DSCP-Based QoS**
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    - Storm Policing
    - WRED
    - Mirroring
    - UPnP
    - GVRP
    - Stack
    - sFlow
    - UDLD
  - Monitor
  - Tools
  - Administration

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5 → Save Reset

38 (AF43)	<input checked="" type="checkbox"/>	0	0
39	<input checked="" type="checkbox"/>	0	0
40 (CS5)	<input checked="" type="checkbox"/>	0	0
41	<input checked="" type="checkbox"/>	0	0
42	<input checked="" type="checkbox"/>	0	0
43	<input checked="" type="checkbox"/>	0	0
44	<input checked="" type="checkbox"/>	0	0
45	<input checked="" type="checkbox"/>	0	0
46 (EF)	<input checked="" type="checkbox"/>	6	← 3
47	<input checked="" type="checkbox"/>	0	0
48 (CS6)	<input checked="" type="checkbox"/>	6	0
49	<input checked="" type="checkbox"/>	0	0
50	<input checked="" type="checkbox"/>	0	0
51	<input checked="" type="checkbox"/>	0	0
52	<input checked="" type="checkbox"/>	0	0
53	<input checked="" type="checkbox"/>	0	0
54	<input checked="" type="checkbox"/>	0	0
55	<input checked="" type="checkbox"/>	0	0
56 (CS7)	<input checked="" type="checkbox"/>	7	← 4
57	<input checked="" type="checkbox"/>	0	0
58	<input checked="" type="checkbox"/>	0	0
59	<input checked="" type="checkbox"/>	0	0
60	<input checked="" type="checkbox"/>	0	0
61	<input checked="" type="checkbox"/>	0	0
62	<input checked="" type="checkbox"/>	0	0
63	<input checked="" type="checkbox"/>	0	0



# IGMP Multicast Configuration

# IGMP Multicast Configuration

- Navigate to Configuration > IPMC > IGMP Snooping > Basic Configuration
- Check Snooping Enabled
- Check Unregistered IPMCv4 Flooding Enabled (it should be enabled already) 1 →
- Check Fast Leave on all ports 2 →
- Check Fast Leave on all ports
- Changing the setting on the top row with the \* globally selects all ports 3 →
- Click Save at bottom of screen



**Model: AMS-4424P**  
Firmware Version: v4.1.3

**Configuration** ▾

- Quick Setup ▸
- Green Ethernet ▸
- Ports ▸
- DHCP ▸
- Security ▸
- Aggregation ▸
- Loop Protection ▸
- IPMC Profile ▸
- MVR ▸
- IPMC** ▾
- IGMP Snooping ▾
- Basic Configuration
- VLAN Configuration
- Port Filtering Profile
- MLD Snooping ▸
- LLDP ▸
- MAC Table ▸
- Voice VLAN ▸
- QoS ▸
- Mirroring ▸
- UPnP ▸
- GVRP ▸
- Stack ▸
- sFlow ▸
- UDLD ▸
- Monitor ▸
- Tools ▸
- Administration ▸

## IGMP Snooping Configuration

Global Configuration		
Snooping Enabled	<input checked="" type="checkbox"/>	← 3
Unregistered IPMCv4 Flooding Enabled	<input checked="" type="checkbox"/>	← 4
IGMP SSM Range	232.0.0.0 / 8	
Leave Proxy Enabled	<input type="checkbox"/>	
Proxy Enabled	<input checked="" type="checkbox"/>	

## Port Related Configuration for Switch 1

Port	Router Port	Fast Leave	Throttling
*	<input type="checkbox"/>	<input checked="" type="checkbox"/>	← 5
1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited ▾
2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited ▾
3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited ▾
4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited ▾
5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited ▾
6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited ▾
7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited ▾
8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited ▾
9	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited ▾

# IGMP Multicast VLAN Configuration

- Navigate to Configuration > IPMC > IGMP Snooping > VLAN Configuration
- Click Add New IGMP VLAN if no VLAN table is created. Firmware 4.1.3 and higher will have already created the table for you
- Check Snooping Enabled
- Check Querier Election
- IP Address can be left at 0.0.0.0 or can be the IP address of the switch
- Set IP as IP address of the switch if using more than one switch in network
- Change Compatibility to Forced IGMPv2
- Set QI to 30 seconds
- Click Save

**LUXUL**  
Simply Connected

Model: AMS-4424P  
Firmware Version: v4.1.3

Refresh <<< >>>

### IGMP Snooping VLAN Configuration

Start from VLAN 1 with 20 entries per page.

Delete	VLAN ID	Snooping Enabled	Querier Election	Querier Address	Compatibility	PRI	RV	QI (sec)	QRI (0.1 sec)	LLQI (0.1 sec)	URI (sec)
<input type="checkbox"/>	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0.0.0	Forced IGMPv2	0	2	30	100	10	1

Add New IGMP VLAN

Save Reset

1 2 3 4 5 6 7

# Save Startup Config

- Navigate to Administration > Configuration > Save startup-config
- Click Save Configuration to make settings permanent in the switch

