

SIGNAMAX

C-300 Series Dante Solution Guide

Dante Solution Guide

SC30010

C-300 48 Port Gigabit Managed Switch

SC30020

C-300 24 Port Gigabit PoE+ Full Power Managed Switch

(Total Power Budget: 370W, can extend to 740W)

SC30030

C-300 24 Port Gigabit PoE+ Managed Switch

(PoE Power Budget: 200 W)

SC30040

C-300 24 Port Gigabit Managed Switch

SC30050

C-300 8 Port Gigabit PoE+ Managed Switch

(PoE Power Budget: 125 W)

SC30060

C-300 8 Port Gigabit Managed Switch

How to Use This Guide

This guide includes detailed instructions on how to optimize a C-300 Series switch for the Dante protocol based on the requirements and information provided by Audinate.

Who Should Read this Guide? This guide is for network administrators who are responsible for operating and maintaining network equipment. The guide assumes a basic working knowledge of LANs (Local Area Networks), the Internet Protocol (IP), the Internet Group Management Protocol (IGMP) and quality of Service (QOS).

Related Documentation This guide focuses on switch software configuration through the web browser.

For hardware installation please refer:

Quick Start Guide

For detailed configuration options and information about the switch's key features please refer:

Web Management Guide OR CLI Reference Guide

Revision History This section summarizes the changes in each revision of this guide.

Revision	Date	Description
v1.0.0	2020/03/19	Initial Release

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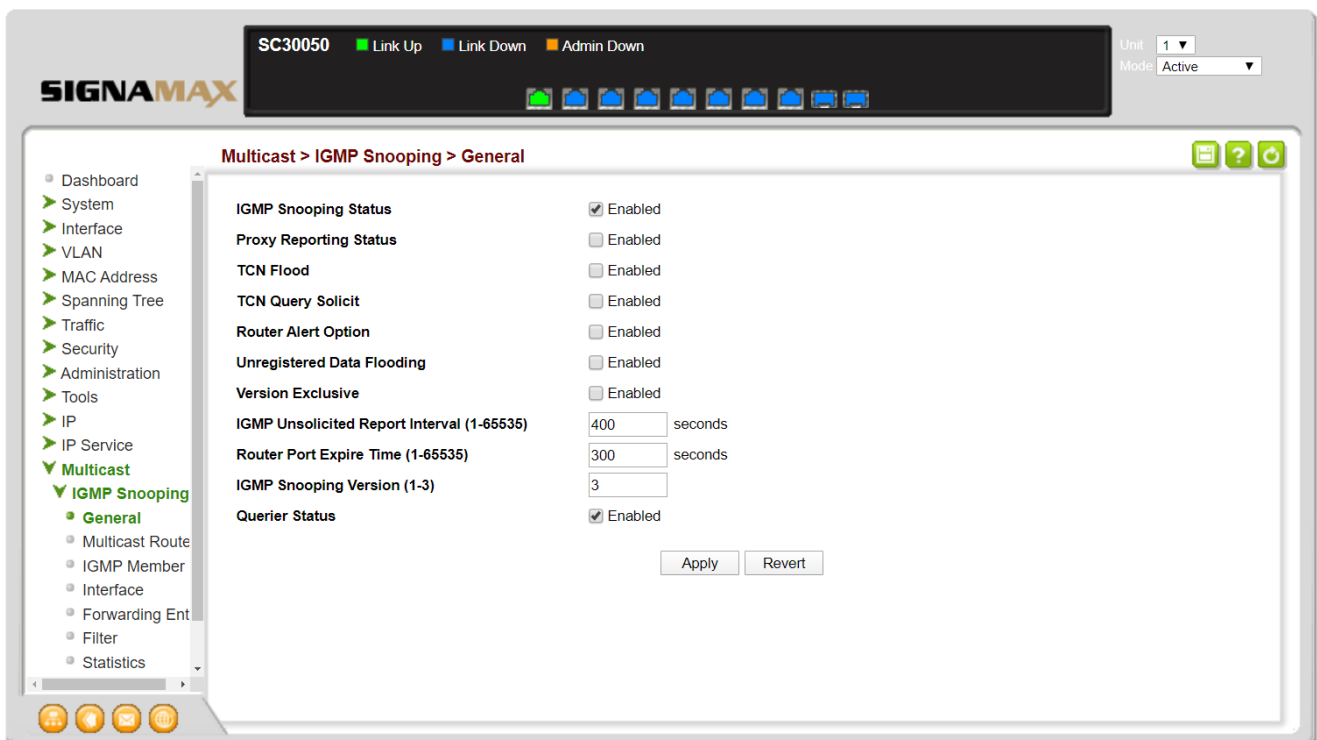
C-300 Series Dante Configuration via Web Interface

See the *Preparation for Web Interface* section of the Web Management Guide for how to connect and login to the C-300 Switch

Internet Group Management Protocol (IGMP)

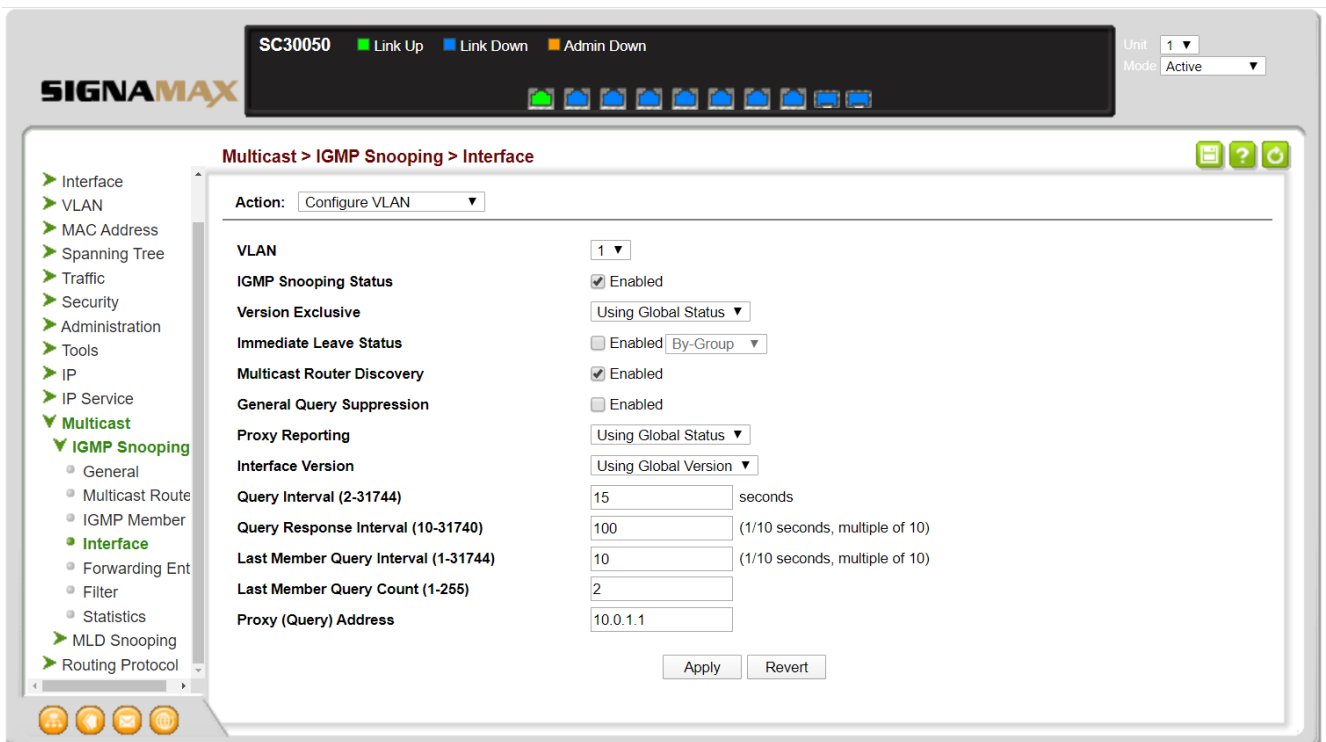
1. General IGMP Configuration

- Navigate to **Multicast->IGMP Snooping -> General**
- Enable **IGMP Snooping Status**
- IGMP Snooping Version (1-3): **3**
- Enable **Querier Status**
- Click **Apply**



2. Per VLAN IGMP Configuration

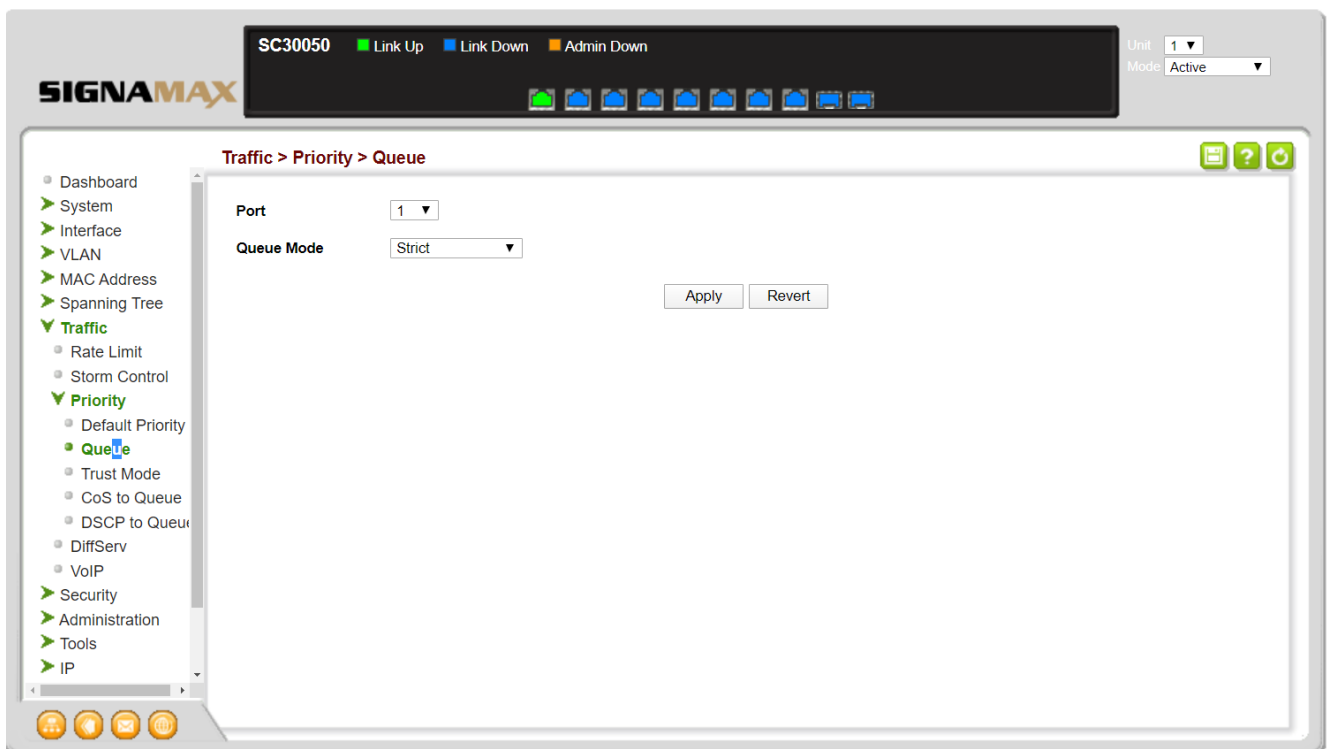
- Navigate to **Multicast->IGMP Snooping - > Interface**
- Choose Action: **Configure VLAN**
- Choose the VLAN that the Dante devices will use. By default this is **1**
- Enable **IGMP Snooping Status**
- Enable **Multicast Router Discovery**
- Query Interval: **15**
- Proxy (Query) Address: **10.0.1.1**
- Click **Apply**



Quality of Service (QoS)

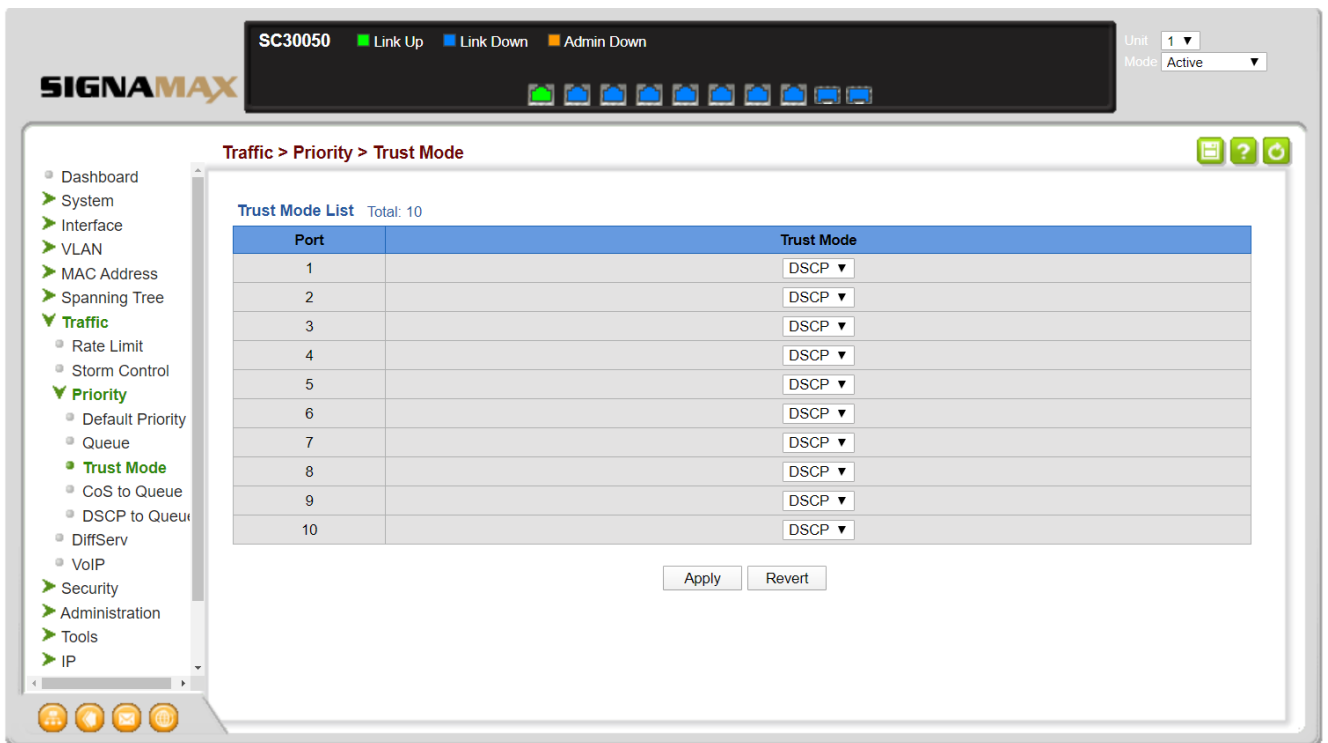
1. Configure Queue Mode

- Navigate to **Traffic-> Priority - > Queue**
- Choose Queue Mode: **Strict**
- Click **Apply**



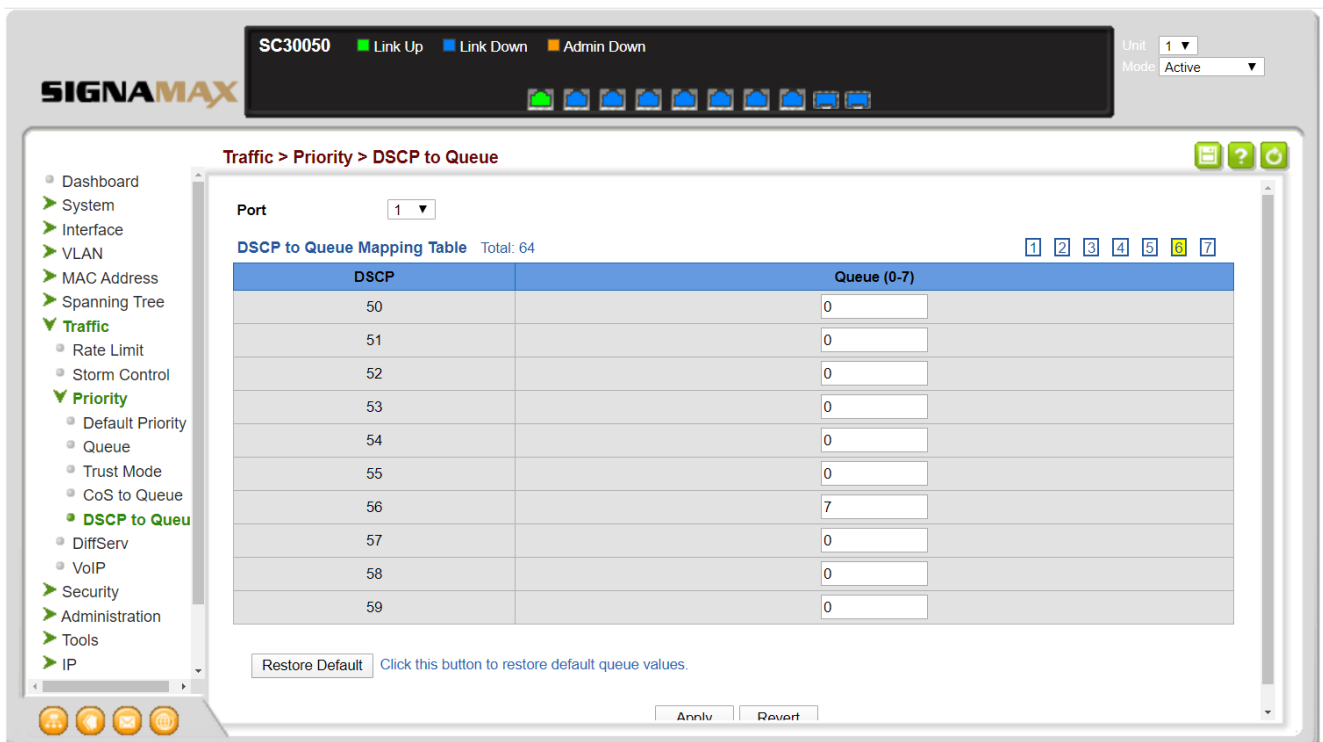
2. Configure Trust Mode

- Navigate to **Traffic-> Priority - > Trust Mode**
- Choose Trust Mode: **DSCP** on all the ports that will have Dante devices connected
- Click **Apply**



3. Configure DSCP to Queue Settings

- Navigate to **Traffic-> Priority - > DSCP to Queue**
- Enter Queue **2** for DSCP 8
- Enter Queue **6** for DSCP 46
- Leave Queue **7** for DSCP 56
- Enter Queue **0** for all other DSCP values
- Click **Apply**



Energy Efficient Ethernet (EEE)

1. Disable Energy Efficient Ethernet

- Navigate to **Interface->Green Ethernet**
- Disable **Power Saving Status** on all the ports that will have Dante devices connected.
- Click **Apply**

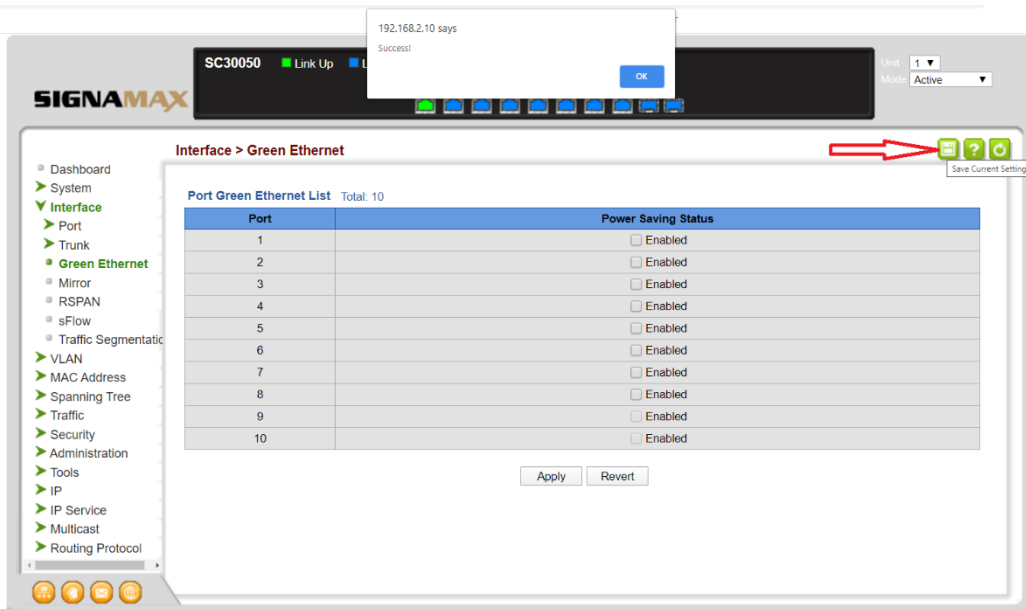
The screenshot shows the SIGNAMAX network management interface. At the top, the device ID is SC30050, with status indicators for Link Up (green), Link Down (blue), and Admin Down (orange). The left sidebar shows a navigation menu with 'Interface > Green Ethernet' selected. The main content area displays the 'Port Green Ethernet List' with a total of 10 ports. The table below shows the configuration for each port, with 'Power Saving Status' set to 'Enabled' for all ports. The 'Apply' button is visible at the bottom of the table.

Port	Power Saving Status
1	<input type="checkbox"/> Enabled
2	<input type="checkbox"/> Enabled
3	<input type="checkbox"/> Enabled
4	<input type="checkbox"/> Enabled
5	<input type="checkbox"/> Enabled
6	<input type="checkbox"/> Enabled
7	<input type="checkbox"/> Enabled
8	<input type="checkbox"/> Enabled
9	<input type="checkbox"/> Enabled
10	<input type="checkbox"/> Enabled

Startup Config

1. Saving the configuration file

- Click the **Save Current Settings** green button in the upper right of the screen



C-300 Series Dante Configuration via config file

An alternative to configuring the switch via the web interface described in the previous section is loading to the switch the configuration file provided in the link below

Loading the prepared configuration file

2. Download the prepared Dante configuration file

Download the prepared configuration file from here:

[C-300 Series Dante Configuration file](#)

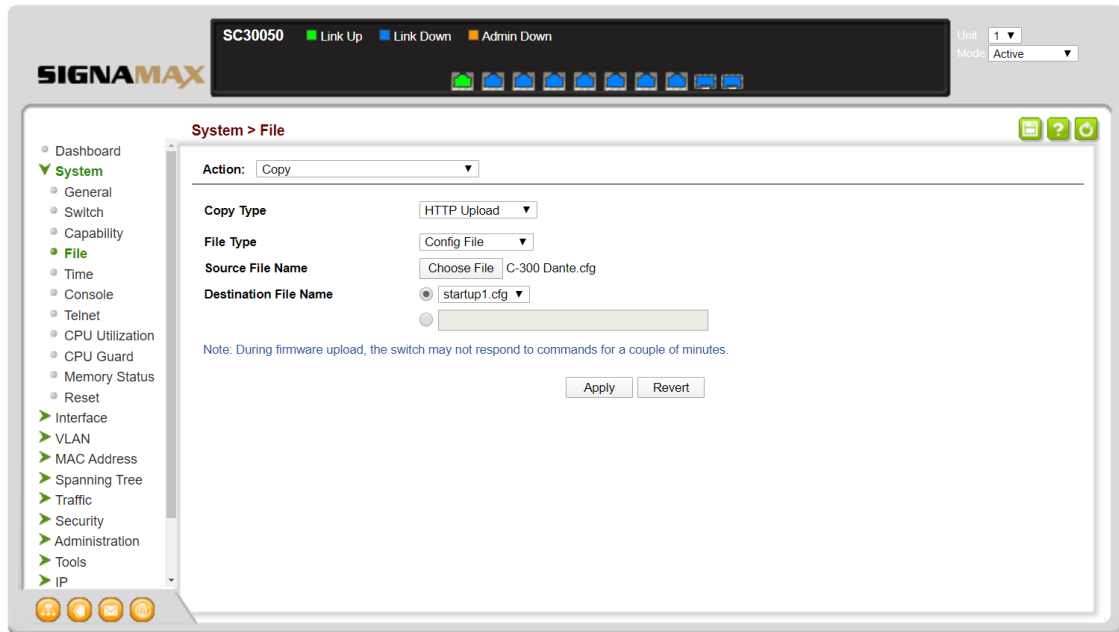
Open the zip file and save the .cfg file on your computer.

3. Login to the switch Web Interface

See the *Preparation for Web Interface* section of the *Web Management Guide* or the *Quick Start Guide* for how to connect and login to the C-300 Switch

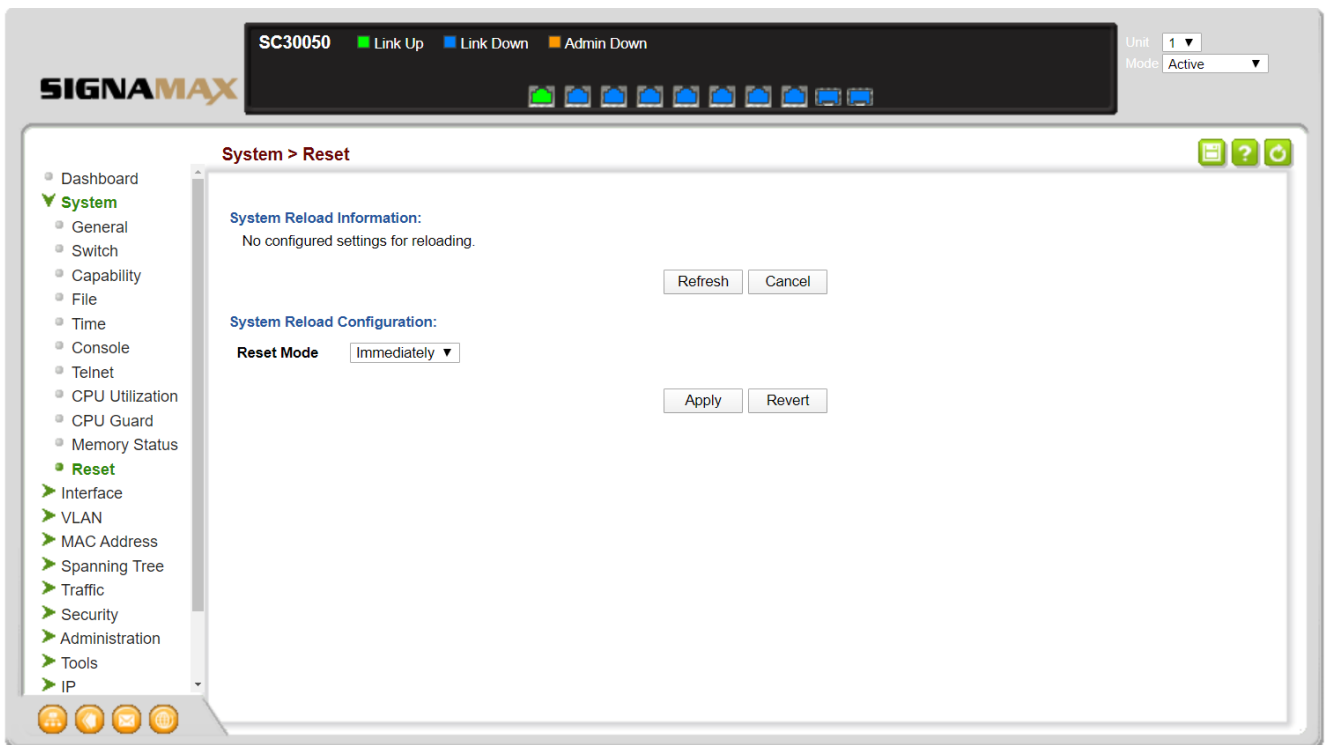
4. Copy the configuration file to the switch

- Navigate to **System->File**
- Select Action: **Copy**
 - Copy Type: **HTTP Upload**
 - File Type: **Config File**
 - Click **Choose File**, navigate to the configuration file you saved in step 1 above and select it
 - Click **Apply**



5. Reset the switch

- Navigate to **System->Reset**
- Click **Apply**



6. Complete the switch configuration

After the switch has completed the reboot process (approximately 90 seconds) you can re-login to the switch and make any localized configuration required (IP address, passwords etc.)