Cisco Ethernet Switch Quick Setup Guide

For MuxLab AV over IP Devices

Contents

1. Introduction

This document covers the basic setup requirements for a Cisco Ethernet Switch. The setup examples and screen shots shown are for the Cisco model SG300-10P, but these instructions are similar and applicable to other Cisco Ethernet Switch models.

2. MuxLab Ethernet Switch Setup Requirements

All MuxLab AV over IP Transmitters and Receivers require IGMP support to be enabled on the Ethernet Switch, and a select number of MuxLab units also require Jumbo Frames to be enabled.

Also note that all models below work on a 1G Ethernet Switch, except for the 500760, which requires a 10G Ethernet Switch.

The below table specifies the IGMP and Jumbo Frames requirement per MuxLab AV over IP Transmitter / Receiver model.

AV over IP Model	**Ethernet Switch BW Required**	**IGMP Required**	**Jumbo Frame Required**
500752	**1G**	**X**	
500753	**1G**	**X**	
500754	**1G**	**X**	
500755	**1G**	**X**	
500755-AMP	**1G**	**X**	
500756	**1G**	**X**	
500757	**1G**	**X**	
500758	**1G**	**X**	**X**
500759	**1G**	**X**	**X**
500760	**10G**	**X**	
500762	**1G**	**X**	
500770	**1G**	**X**	**X**
500771	**1G**	**X**	**X**

3. Ethernet Switch Setup

3.1. Enabling IGMP

Follow the steps below to enable the IGMP feature on the Ethernet Switch. For further details on navigating through the Ethernet Switch web server menus, please refer to the Ethernet Switch manual.

Step 1: Access the Ethernet Switch web server

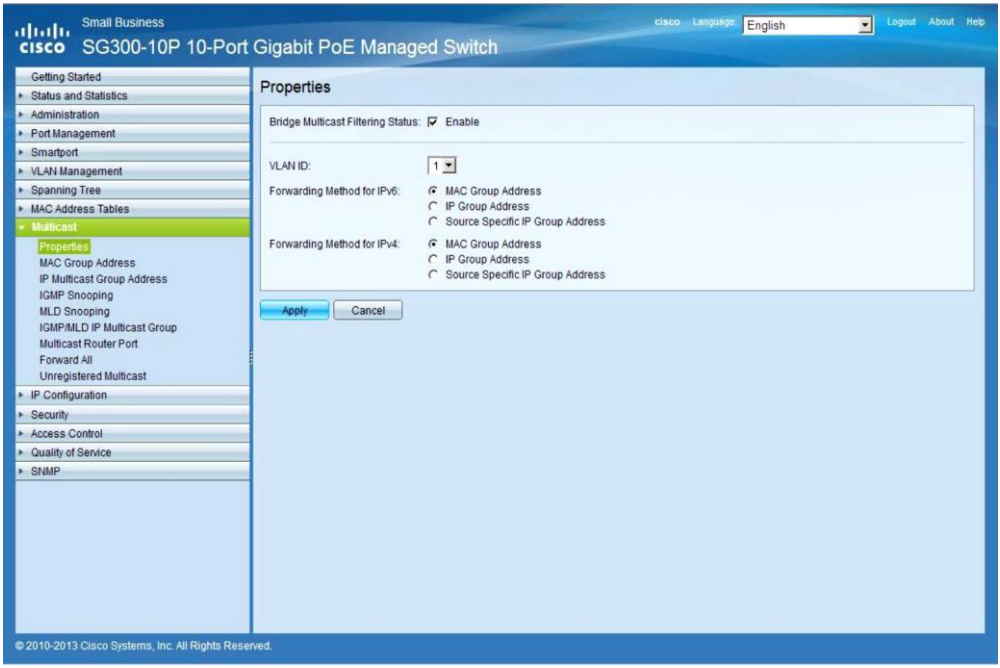
- Locate the Ethernet Switch default IP address
- Make sure your computer is on the same subnet as the Ethernet Switch

  (your network administration can assist you with this, if required)
- Enter the Ethernet Switch IP address into a browser

Step 2: IGMP Snooping Configuration

- Navigate to the menu:

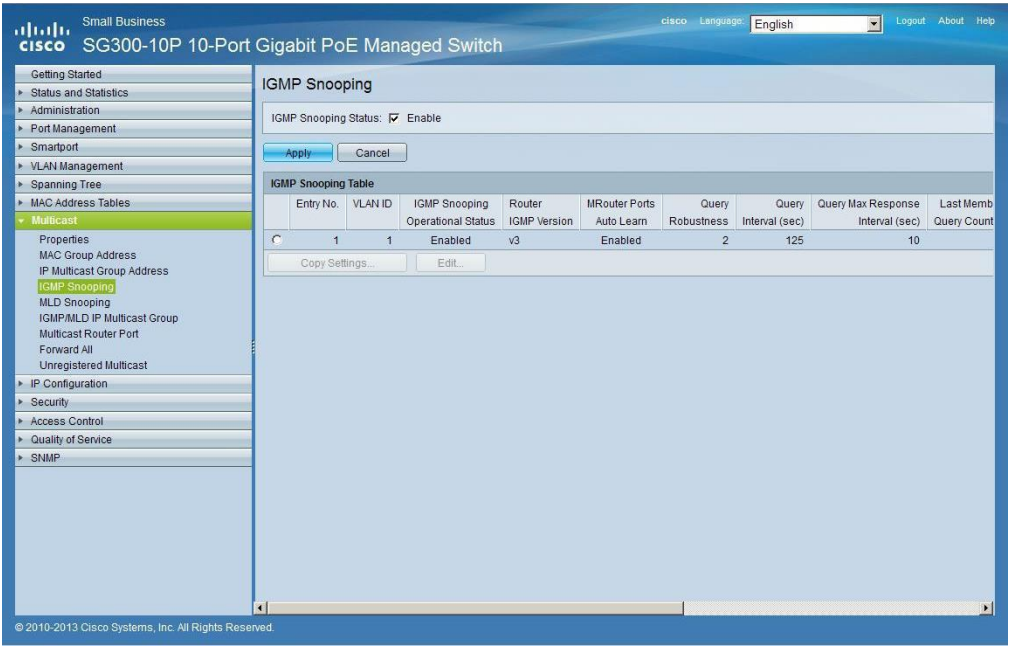
  *[*Multicast → Properties*]*
- Set the configuration as shown below, and then click *[Apply]*



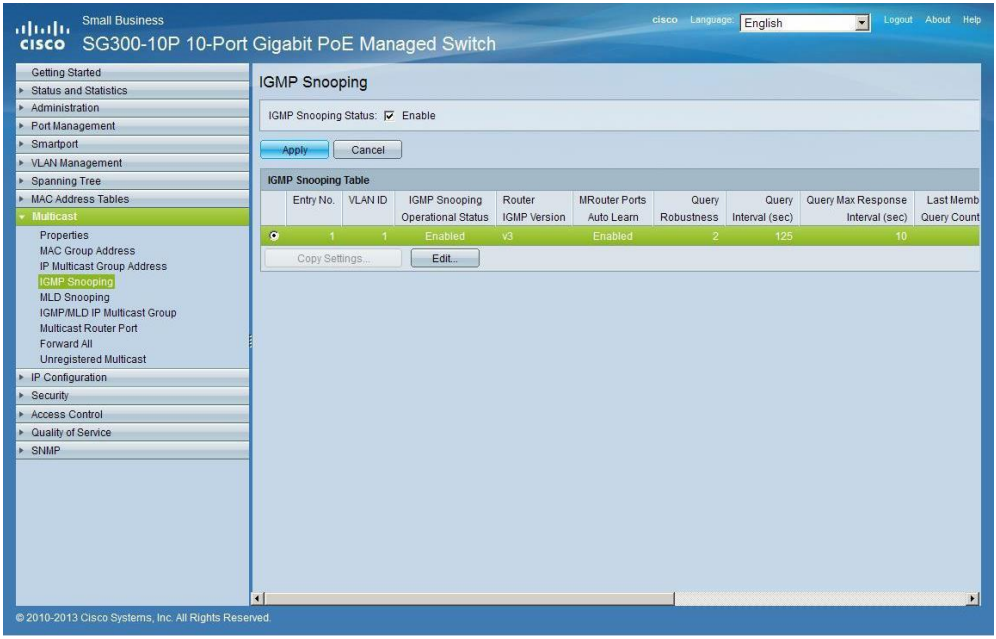
- Navigate to the menu:

  *[*Multicast → IGMP Snooping*]*

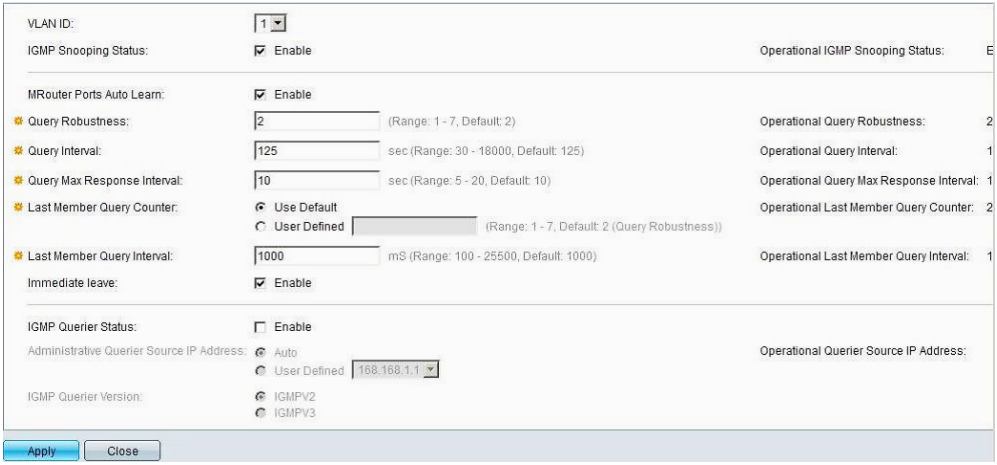
- (a) Enable the “IGMP Snooping Status” as shown below, and then click *[Apply]*



- (b) Select the radio button as shown below, and click *[Edit]*



- (c) Set the configuration as shown below, and then click *[Apply]*

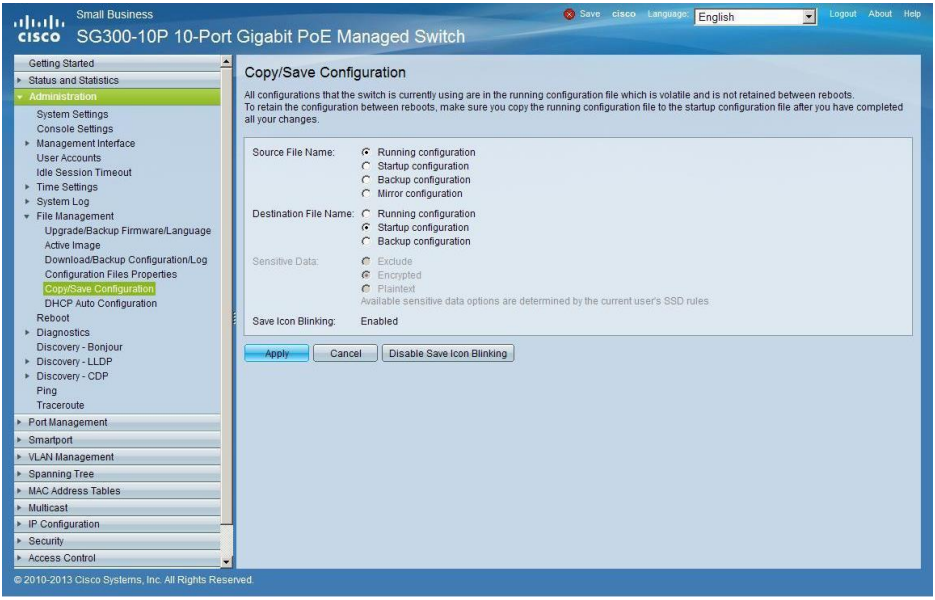


Step 3: Save the above configuration changes

- Navigate to the menu:

  *[*Administration → File Management → Copy/Save Configuration*]*

- Click on *[Apply]* as shown below



3.2. Enabling Jumbo Frames

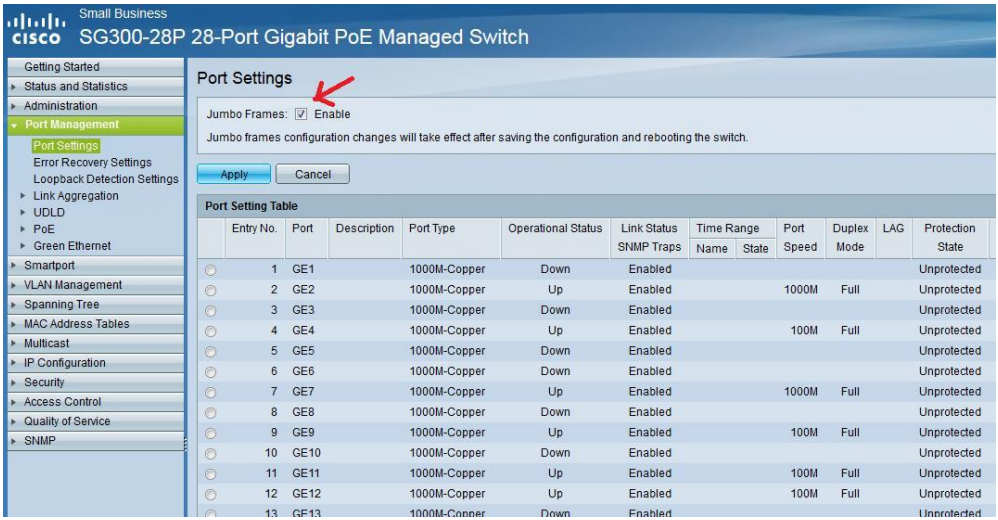
Follow the steps below to enable the Jumbo Frames feature on the Ethernet Switch. For further details on navigating through the Ethernet Switch web server menus, please refer to the Ethernet Switch manual.

Step 1: Enable Jumbo Frames

- Navigate to the menu:

  [Port Management > Port Settings]

- Check the “Jumbo Frame” checkbox as shown below, then click *[Save]*



Step # 2: Save the above configuration changes

- Navigate to the menu:

  [Administration > File Management > Copy/Save Configuration]

- Click on *[Apply]*

4. Preparing for System Installation

The Ethernet Switch is now properly configured to support MuxLab AV over IP devices with respect to IGMP and Jumbo Frames.

Note that MuxLab AV over IP Transmitters and Receivers are set by default with DHCP enabled, and the MuxLab 500811 ProDigital Network Controller has DHCP disabled by default and is set to a Static IP address of 192.168.168.50. It is recommended that you operate your system with the Transmitters and Receivers with DHCP enable and the 500811 Network Controller with DHCP disabled.

If however you intend to disable the DHCP on the Transmitters and Receivers, then please take note that the default Static IP address for the Transmitters is 192.168.168.55, and for the Receivers is 192.168.168.56.

Note that in order for the entire system to operate correctly, the Ethernet Switch, MuxLab Transmitters and Receivers, and the MuxLab ProDigital Network Controller must all be on the same subnet. Devices with DHCP enabled will adjust automatically to the correct subnet, while devices with DHCP disabled, may need to be set by the user to the correct subnet, if not already set correctly. Your network administrator can assist with this configuration if you are not familiar with how to accomplish this task.

If you are having issues which require further assistance, please contact the respective device manufacturer for the device in question. For MuxLab device related questions, please contact MuxLab Customer Technical Support at 877-689-5228 (toll-free in North America) or (+1) 514-905-0588 (International).

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