HDMI Over IP-PRO DSX
Basic Network Switch Configuration
For Cisco SG300/500 series

Revision: 1.2
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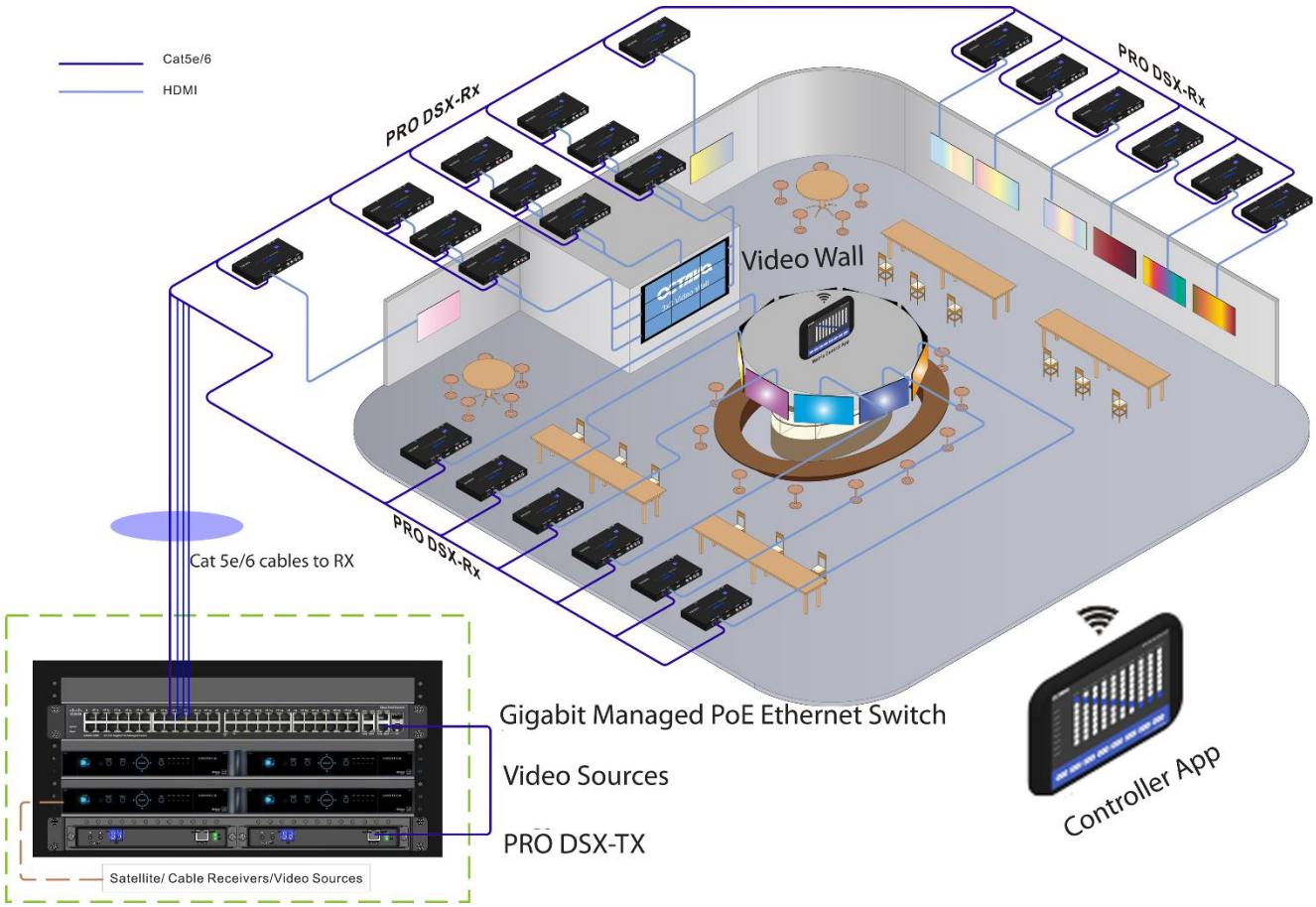
System Application Diagram



Customizable Matrix Control App (available for iOS, and Android Devices)

Introduction:

Scope: This guide provides a reference for configuring your network switch for use with the PRO DSX HDMI over IP Distribution System.

This configuration guide is based on the SG300 running firmware 1.4.1.3 or later. It is recommended that the firmware is up to date before continuing.

In this guide we will configure the network switch so some of the advanced features are enabled:
Jumbo frame : jumbo frames are Ethernet frames with more than 1500 bytes of payload.

Multicast Video: Multicast as compared to Unicast is a more efficient method of delivering video to multiple clients. Multicasting requires only 1 “channel/group” to be transmitted regardless of number of clients that will subscribe to the “channel/group”. Unicast would require 1 stream for each client , thus would increase the bandwidth requirement by N(number of clients).

IGMP (internet group management protocol): IGMP Querying/Snooping, optimizes network loading by ensuring that Multicast traffic is only forwarded to ports that are members of that Multicast group.

1. Connect a LAN cable directly from you PC to the “last” port of your SG-300-xx Ethernet switch.
   For example, if you have a SG-300-28. Connect to the G28 port.

2. Login into the Cisco SG-300 per the instructions shown here. You may refer to the Cisco user manual as well.

Accessing and Managing Your Switch

Use the Web-Based Interface

To access the switch by using the web-based interface, you must know the IP address the switch is using. The switch uses the factory default IP address of **192.168.1.254** by default.

When the switch is using the factory default IP address, the System LED flashes continuously. When the switch is using a DHCP server-assigned IP address or an administrator has configured a static IP address, the System LED is on solid (DHCP is enabled by default).

NOTE If you are managing the switch through a network connection and the switch IP address is changed, either by a DHCP server or manually, your access to the switch will be lost. You must enter the new IP address the switch is using into your browser to use the *web-based interface*. If you are managing the switch through a console port connection, the link is retained.

To configure the switch through an IP network:

STEP 1 Power on the computer and the switch.

STEP 2 Set the IP configuration on your computer.

a. If the switch is using the factory default IP address of **192.168.1.254**, you must chose an IP address for the computer in the range of 192.168.1.1—192.168.1.253 that is not already in use.

b. If the IP addresses is assigned by a DHCP server, make sure the DHCP server is running and can be reached from the switch and the computer. It might be necessary to disconnect and reconnect the devices for them to discover their new IP addresses from the DHCP server.

NOTE Details on how to change the IP address on your computer depend upon the type of architecture and operating system you are using. Use the computer Help and Support functionality to search for "IP Addressing."

STEP 3 Open a Web browser window. If you are prompted to install an Active-X plug-in when connecting to the device, follow the prompts to accept the plug-in.

STEP 4 Enter the switch IP address in the address bar and press **Enter**. For example, **http://192.168.1.254**.

The *Switch Login Page* displays.

STEP 5 Enter the default login information:

- Username is **cisco**
- Default password is **cisco** (passwords are case sensitive)

STEP 6 If this is the first time that you have logged on with the default username and password, the *Change Password Page* opens. The rules for constructing a new login and password are displayed on the page. Enter a new administrator password and click **Apply**.

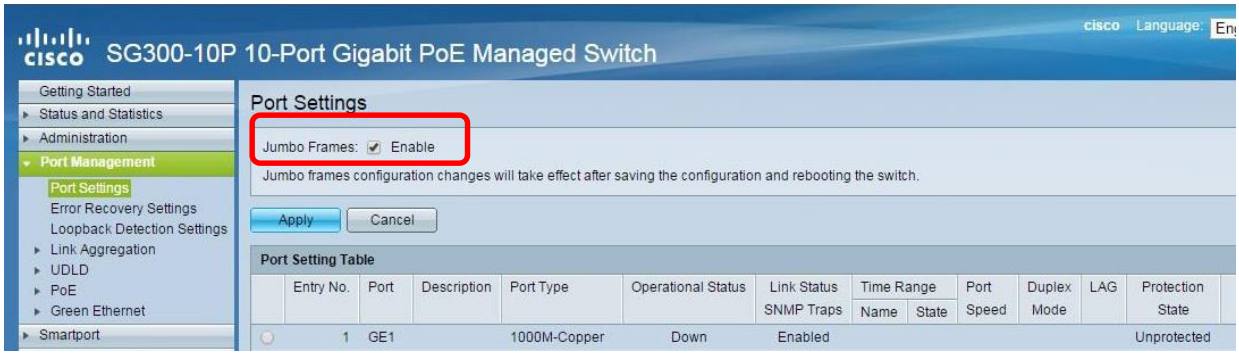
CAUTION Make sure that any configuration changes made are saved to the Startup configuration before exiting from the web-based interface by clicking on the **Save** icon. Exiting before you save your configuration will result in all current changes being lost the next time the switch is rebooted.

3. Check Firmware Version

Go to : Status and Statics > System Summary

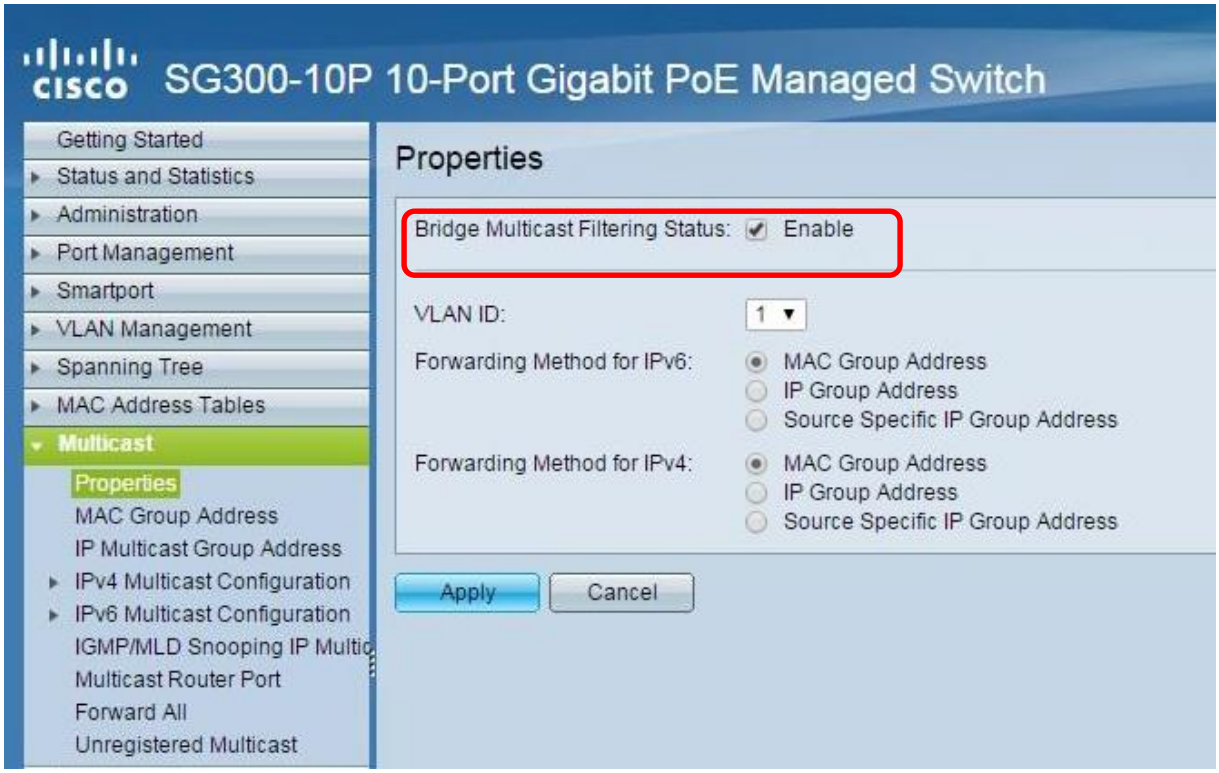
4. Enable JUMBO Frame

Go to : Port Management > Port Settings. Enable JUMBO Frames



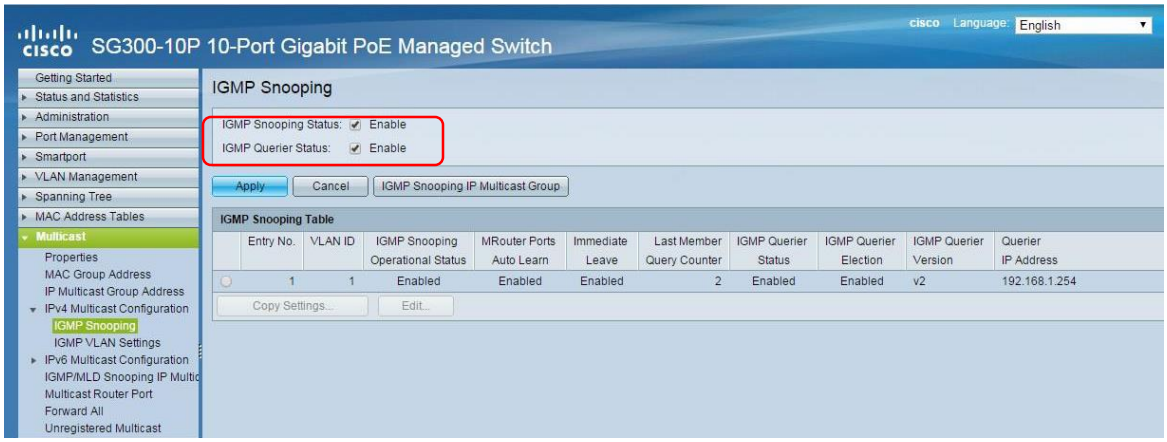
5. Enable Bridge Multicast Filter Status

Go to : Multicast> Properties. Enable Bridge Multicast Filter Status



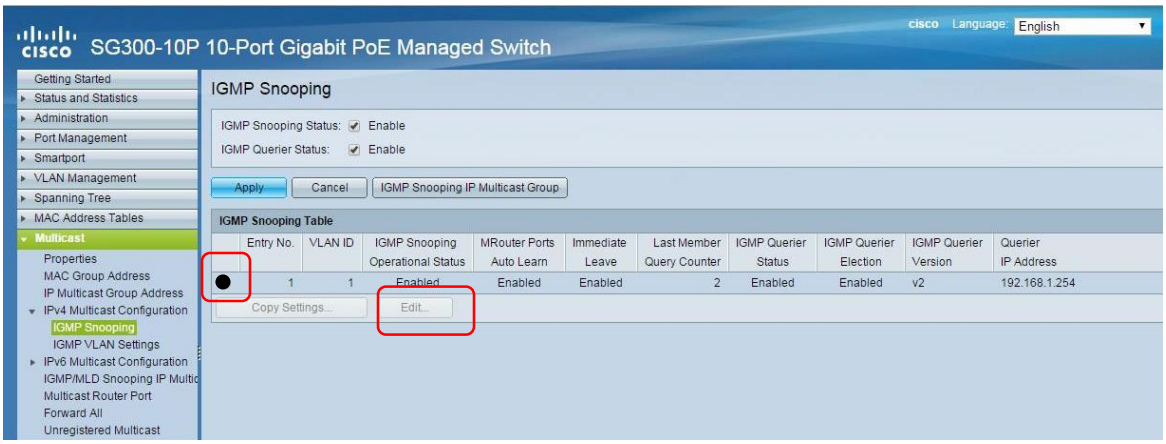
6. Enable IGMP Snooping, IGMP Querier Status

Go to : Multicast> IPv4 Multicast Configuration> IGMP Snooping. Enable IGMP Snooping, IGMP Querier Status

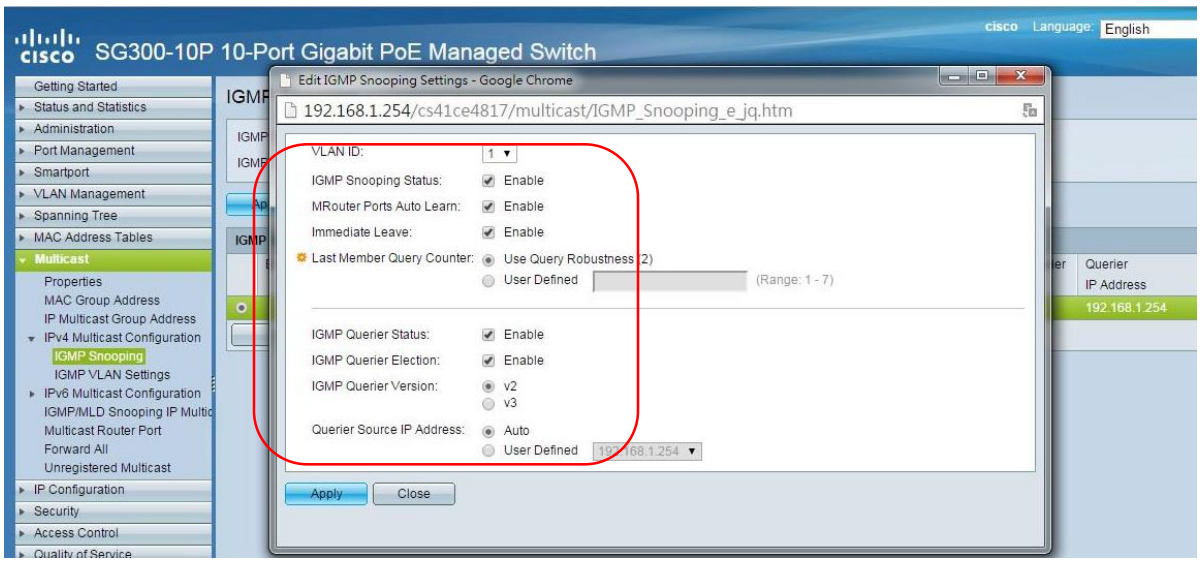


7. In **IGMP Snooping Table** SELECT the VLAN that the Octava PRO DSX will be connected to.

Then select **EDIT**



8. Configure the VLAN **IGMP SNOOPING** as shown below



9. Save , Apply


Save
Language:
SG300-10P 10-Port Gigabit PoE Managed Switch
Getting Started
Status and Statistics
Administration
System Settings
Console Settings
Management Interface
User Accounts
Idle Session Timeout
Time Settings
System Log
File Management
Upgrade/Backup Firmwa
Active Image
Download/Backup Confi
Configuration Files Prope
Copy/Save Configuration
DHCP Auto Configuratio
Reboot
Diagnostics
Copy/Save Configuration
All configurations that the switch is currently using are in the running configuration file which is volatile and is not retained between reboots.
To retain the configuration between reboots, make sure you copy the running configuration file to the startup configuration file after you have completed all your cha
Source File Name:
Running configuration
Startup configuration
Backup configuration
Mirror configuration
Destination File Name:
Running configuration
Startup configuration
Backup configuration
Sensitive Data:
Exclude
Encrypted
Plaintext
Available sensitive data options are determined by the current user's SSD rules
Save Icon Blinking:
Enabled
Apply
Cancel
Disable Save Icon Blinking

10. Reboot

reboot under **Administration>File Management > Reboot**