

VEO-XTI1C / VEO-XRI1C VEO-XTI2L / VEO-XRI2L

How to configure a Cisco SG300 Ethernet Switch for Ecler VEO over IP products



QUICK START GUIDE

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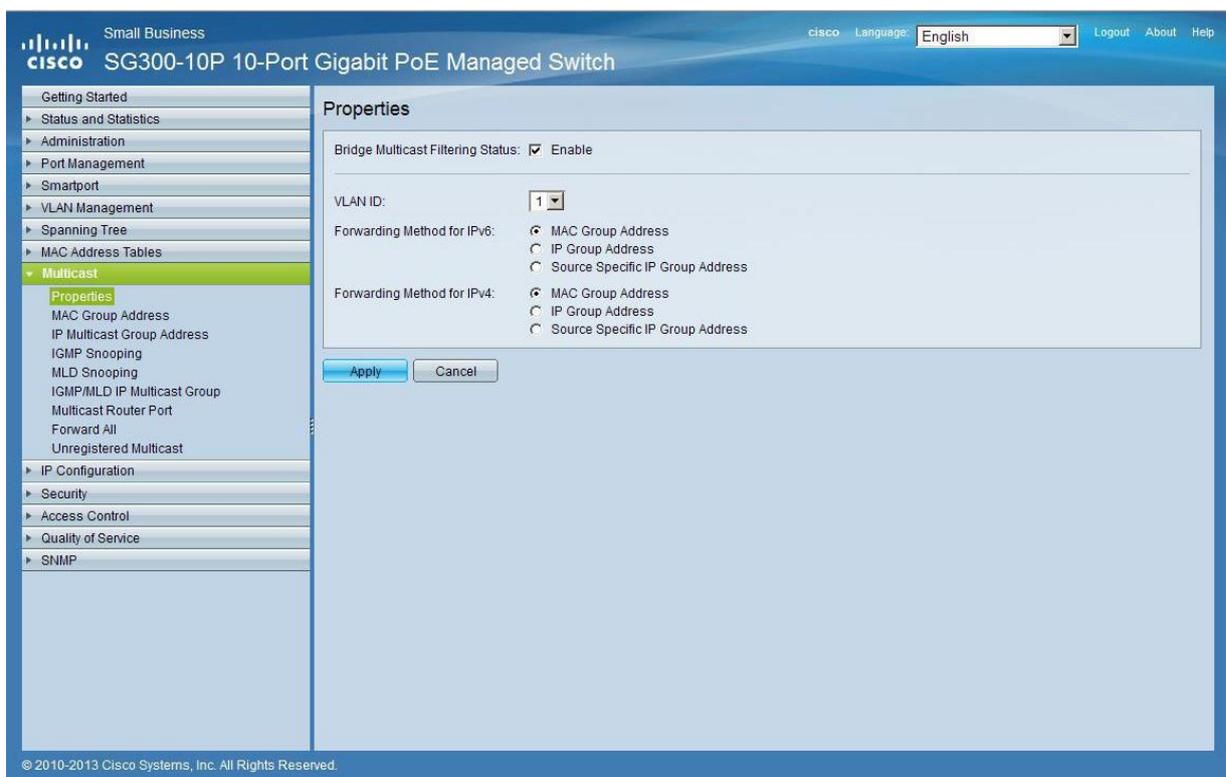
1. Establishing communication with the Cisco Ethernet Switch

1. Connect your computer to the Cisco Ethernet Switch using an Ethernet cable. The Cisco SG300 Ethernet Switch comes with a default Static IP address of **192.168.1.254**; you must configure your PC with a Static IP address in the same subnet.
2. Set a Static IP address on your computer network interface card, such as 192.168.1.66 along with the following mask 255.255.255.0.
3. Open your Internet browser and digit the default IP address of the switch: <http://192.168.1.254>. The **Default User ID** and **Password** for the unit is “Cisco”.

2. Enabling IGMP Protocol

The IGMP Protocol is mandatory for the correct operation of the VEO over IP products in multicast configurations. Without IGMP the audio/video can't work properly or may freeze.

1. Select **Multicast** → **Properties**. Enable the **Bridge Multicast Filtering Status** by activating the related selection box and clicking on **Apply**.



Small Business
cisco Language: English Logout About Help

SG300-10P 10-Port Gigabit PoE Managed Switch

Getting Started
Status and Statistics
Administration
Port Management
Smartport
VLAN Management
Spanning Tree
MAC Address Tables
Multicast
Properties
MAC Group Address
IP Multicast Group Address
IGMP Snooping
MLD Snooping
IGMP/MLD IP Multicast Group
Multicast Router Port
Forward All
Unregistered Multicast
IP Configuration
Security
Access Control
Quality of Service
SNMP

Properties

Bridge Multicast Filtering Status: Enable

VLAN ID: 1

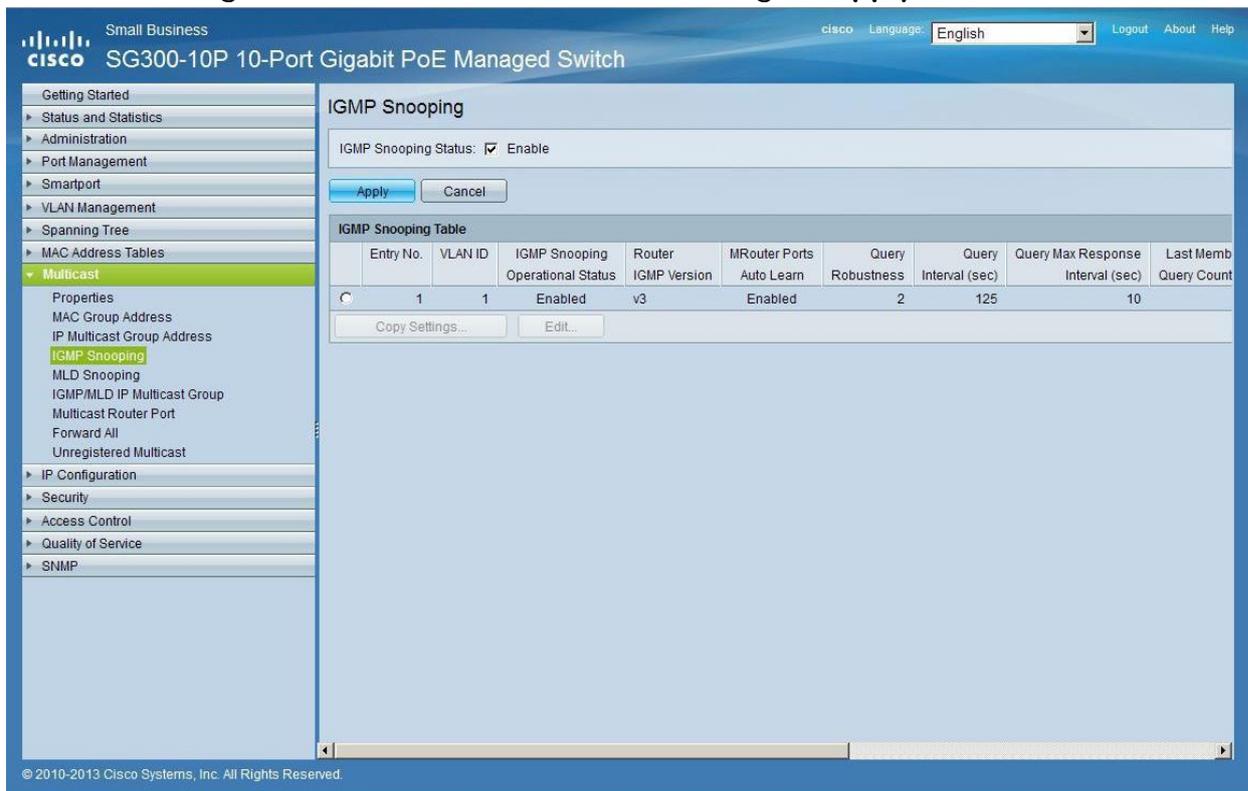
Forwarding Method for IPv6:
 MAC Group Address
 IP Group Address
 Source Specific IP Group Address

Forwarding Method for IPv4:
 MAC Group Address
 IP Group Address
 Source Specific IP Group Address

Apply Cancel

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2. Select **Multicast** → **IGMP Snooping**. Enable the **IGMP Snooping Status** by activating the related selection box and clicking on **Apply**.



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Language: English

IGMP Snooping Status: Enable

Apply Cancel

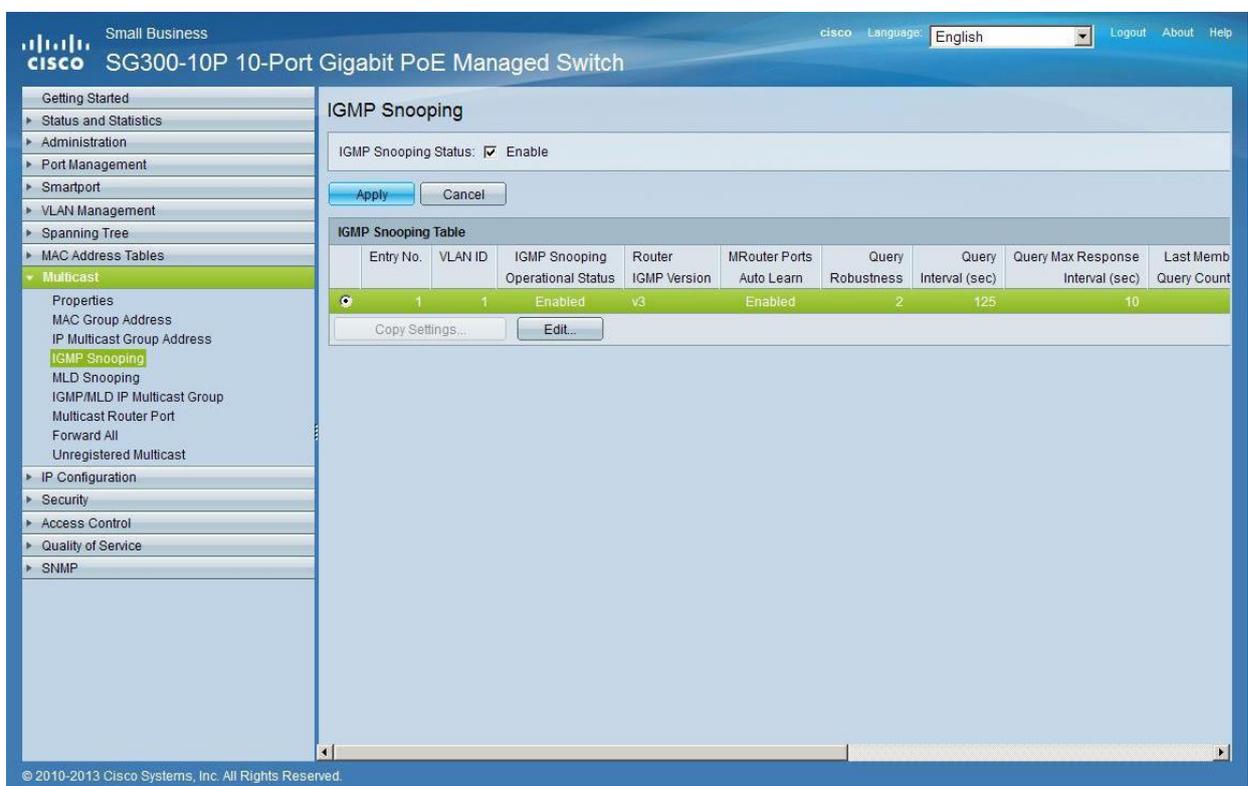
IGMP Snooping Table

Entry No.	VLAN ID	IGMP Snooping Operational Status	Router IGMP Version	MRouter Ports Auto Learn	Query Robustness	Query Interval (sec)	Query Max Response Interval (sec)	Last Memb Query Count
1	1	Enabled	v3	Enabled	2	125	10	

Copy Settings... Edit...

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3. In the **IGMP Snooping Table**, select the default **VLAN ID 1** and click on **Edit**.



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Language: English

IGMP Snooping Status: Enable

Apply Cancel

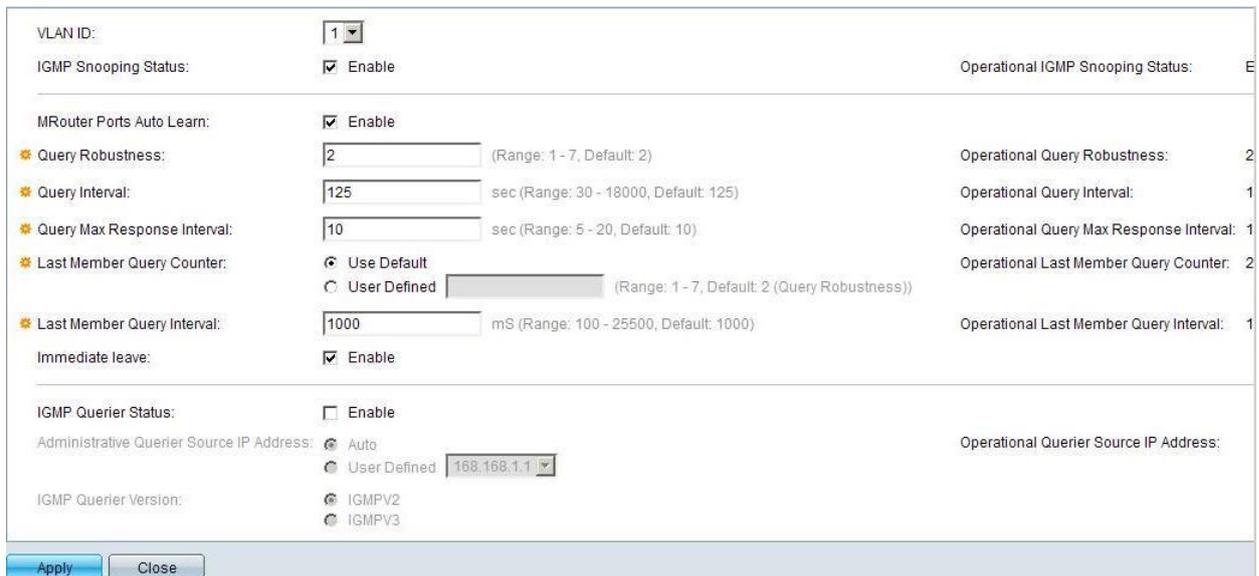
IGMP Snooping Table

Entry No.	VLAN ID	IGMP Snooping Operational Status	Router IGMP Version	MRouter Ports Auto Learn	Query Robustness	Query Interval (sec)	Query Max Response Interval (sec)	Last Memb Query Count
1	1	Enabled	v3	Enabled	2	125	10	

Copy Settings... Edit...

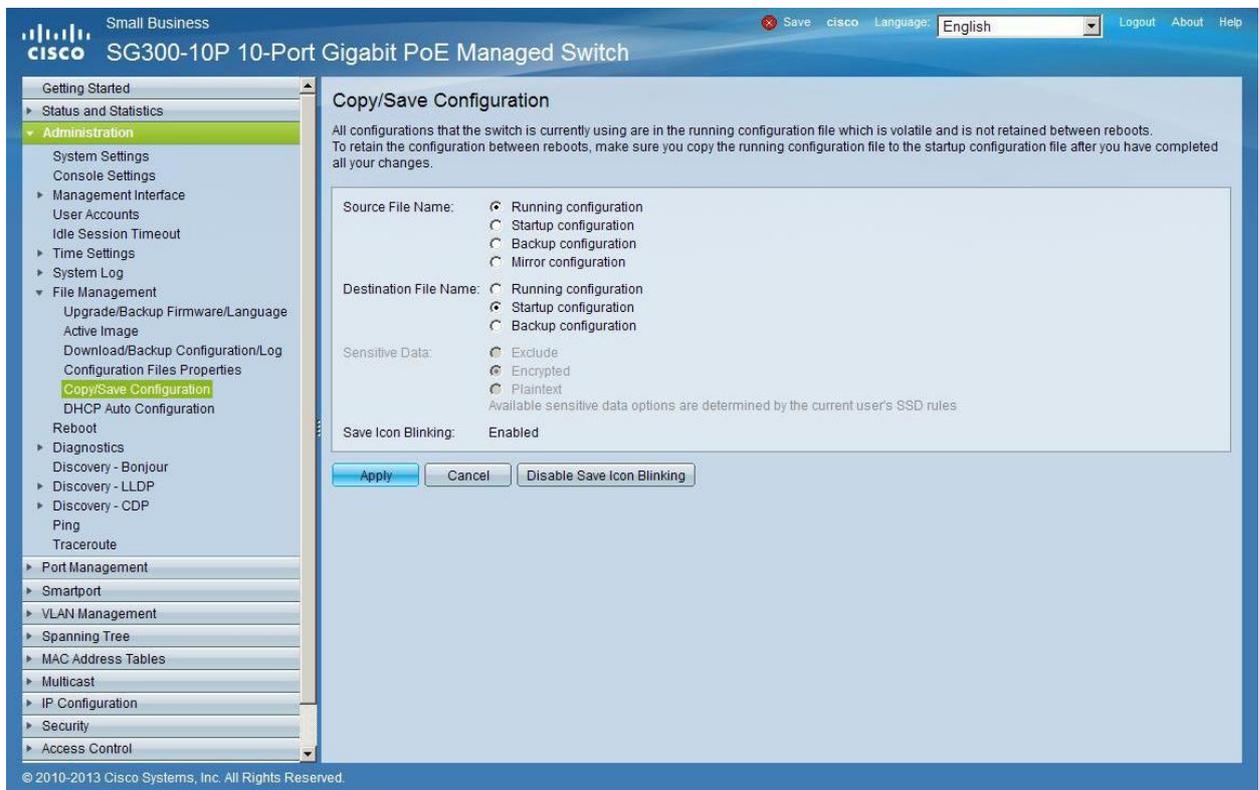
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- In the resulting window, activate the related selection box for **IGMP Snooping Status** and verify that the **Immediate Leave** selection box is enabled and then click on **Apply**.



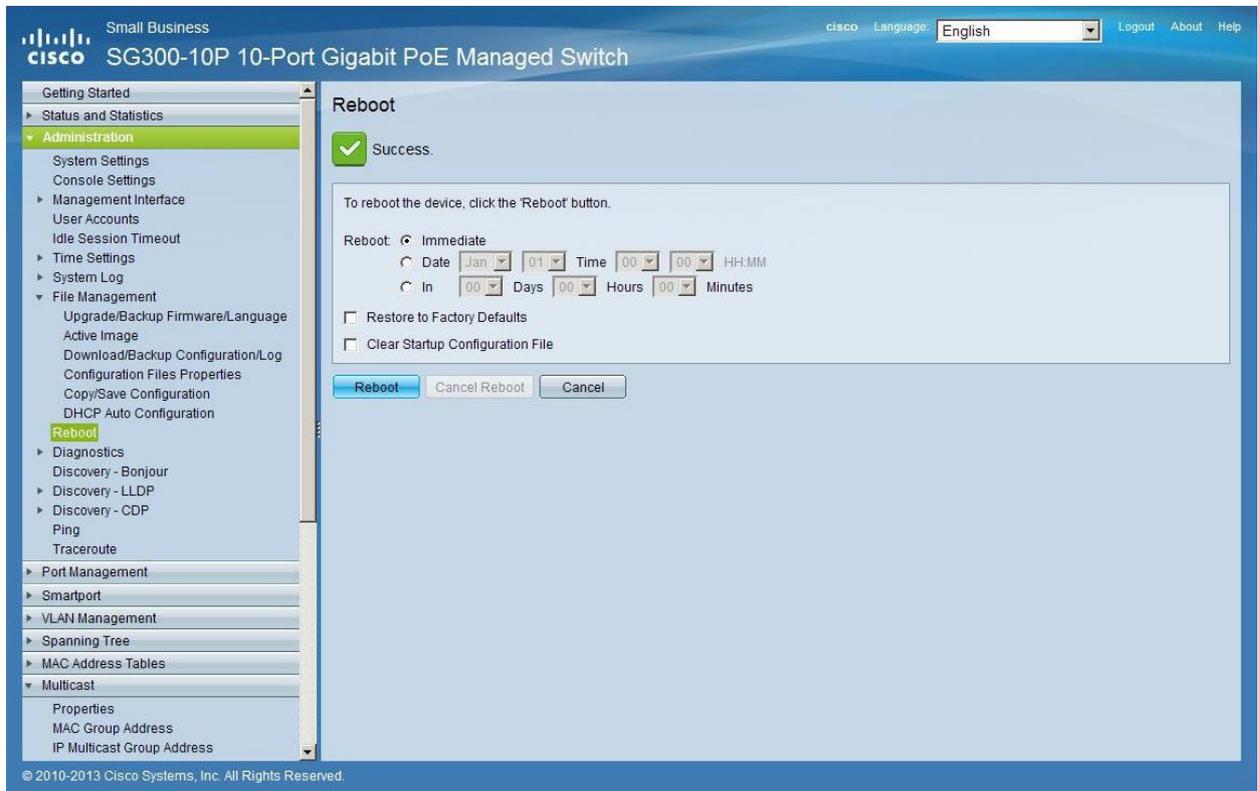
The screenshot shows a configuration window for IGMP Snooping. The 'VLAN ID' is set to 1. 'IGMP Snooping Status' is checked 'Enable'. 'MRouter Ports Auto Learn' is checked 'Enable'. 'Query Robustness' is set to 2. 'Query Interval' is 125 sec. 'Query Max Response Interval' is 10 sec. 'Last Member Query Counter' is set to 'Use Default'. 'Last Member Query Interval' is 1000 mS. 'Immediate leave' is checked 'Enable'. 'IGMP Querier Status' is unchecked. 'Administrative Querier Source IP Address' is set to 'User Defined' with the IP address 168.168.1.1. 'IGMP Querier Version' is set to 'IGMPV2'. There are 'Apply' and 'Close' buttons at the bottom.

- Select **Administration** → **File Management** → **Copy/Save Configuration**. Enable **Running Configuration** and **Startup Configuration** as shown below and save all changes by clicking **Apply**.



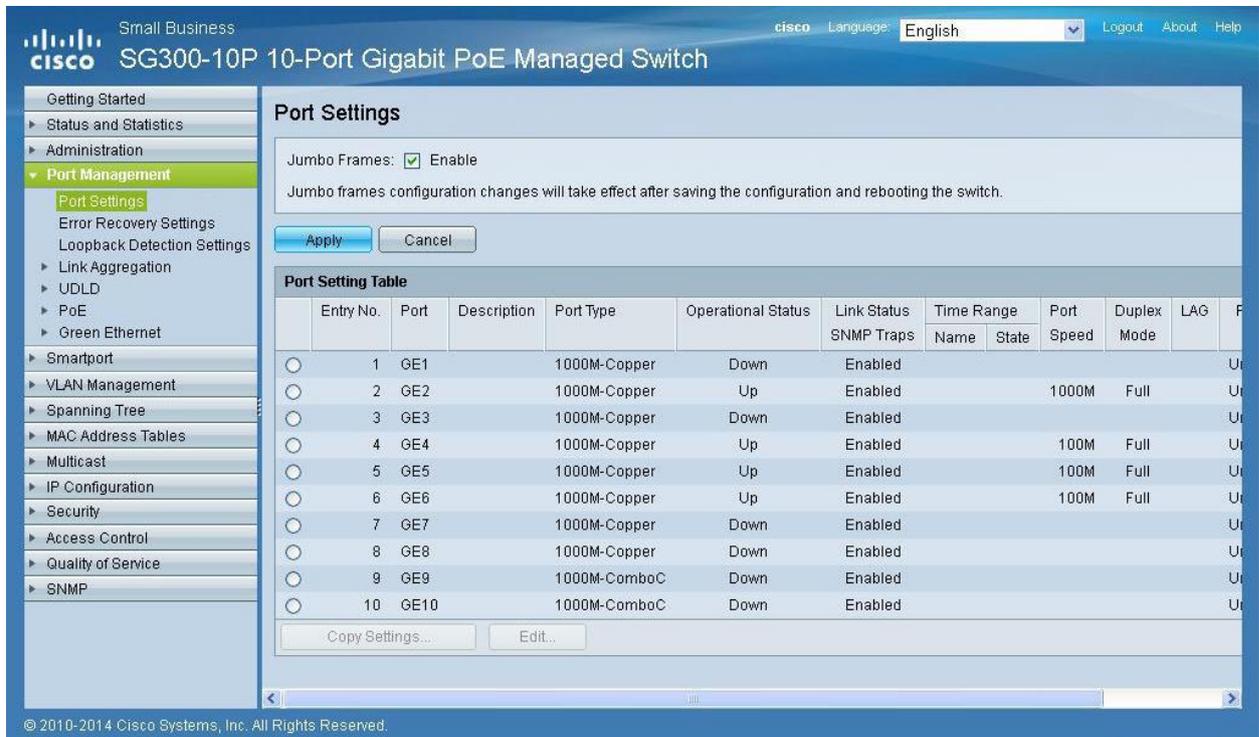
The screenshot shows the 'Copy/Save Configuration' window in the Cisco management interface. The left sidebar shows the navigation tree with 'Administration' expanded and 'Copy/Save Configuration' selected. The main area contains the following settings: 'Source File Name' with radio buttons for 'Running configuration' (selected), 'Startup configuration', 'Backup configuration', and 'Mirror configuration'; 'Destination File Name' with radio buttons for 'Running configuration', 'Startup configuration' (selected), and 'Backup configuration'; 'Sensitive Data' with radio buttons for 'Exclude' (selected), 'Encrypted', and 'Plaintext'; and 'Save Icon Blinking' set to 'Enabled'. There are 'Apply', 'Cancel', and 'Disable Save Icon Blinking' buttons at the bottom.

6. Select **Administration** → **File Management** → **Reboot**, and click on the **Reboot** button to reboot the Ethernet switch and make all the changes running.



3. Enabling Jumbo Frame

1. Select **Port Management** → **Port Settings**. Enable **Jumbo Frames** by activating the related selection box and click on **Apply**.



The screenshot shows the Cisco configuration interface for a Small Business SG300-10P 10-Port Gigabit PoE Managed Switch. The left sidebar shows the navigation menu with 'Port Management' selected and 'Port Settings' highlighted. The main content area is titled 'Port Settings' and shows 'Jumbo Frames: Enable'. Below this, there is a note: 'Jumbo frames configuration changes will take effect after saving the configuration and rebooting the switch.' There are 'Apply' and 'Cancel' buttons. A 'Port Setting Table' is displayed with the following data:

Entry No.	Port	Description	Port Type	Operational Status	Link Status	SNMP Traps	Time Range	Port Speed	Duplex Mode	LAG	F
<input type="radio"/>	1	GE1	1000M-Copper	Down	Enabled						U
<input type="radio"/>	2	GE2	1000M-Copper	Up	Enabled			1000M	Full		U
<input type="radio"/>	3	GE3	1000M-Copper	Down	Enabled						U
<input type="radio"/>	4	GE4	1000M-Copper	Up	Enabled			100M	Full		U
<input type="radio"/>	5	GE5	1000M-Copper	Up	Enabled			100M	Full		U
<input type="radio"/>	6	GE6	1000M-Copper	Up	Enabled			100M	Full		U
<input type="radio"/>	7	GE7	1000M-Copper	Down	Enabled						U
<input type="radio"/>	8	GE8	1000M-Copper	Down	Enabled						U
<input type="radio"/>	9	GE9	1000M-ComboC	Down	Enabled						U
<input type="radio"/>	10	GE10	1000M-ComboC	Down	Enabled						U

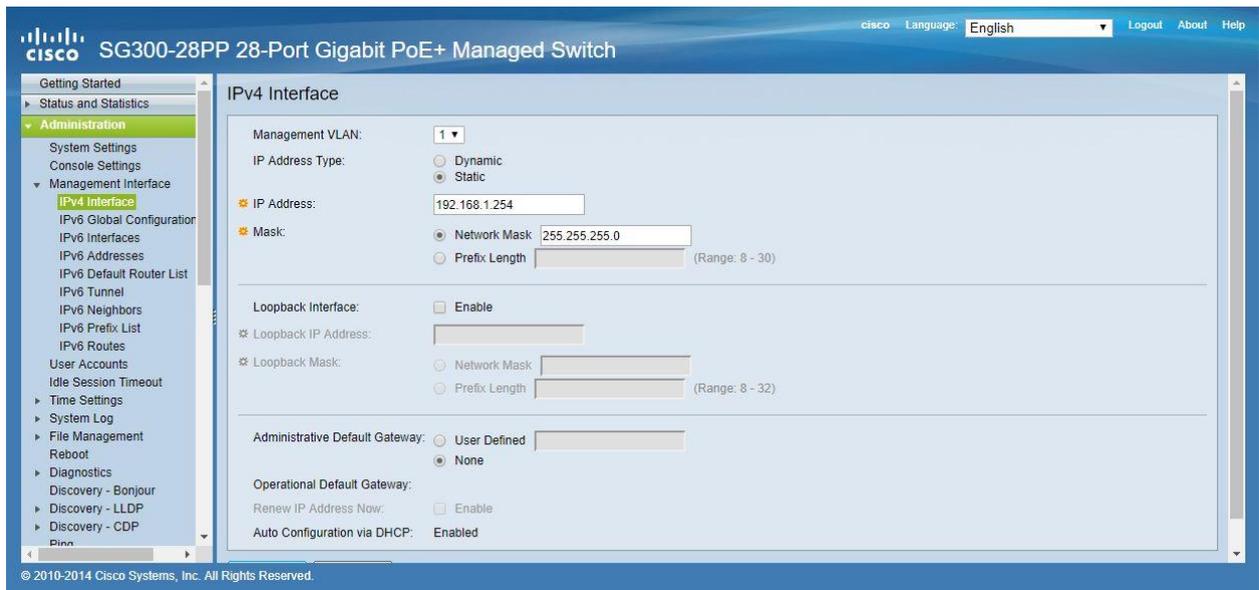
At the bottom of the table, there are 'Copy Settings...' and 'Edit...' buttons. The footer of the interface reads '© 2010-2014 Cisco Systems, Inc. All Rights Reserved.'

4. Configuring the DHCP Server

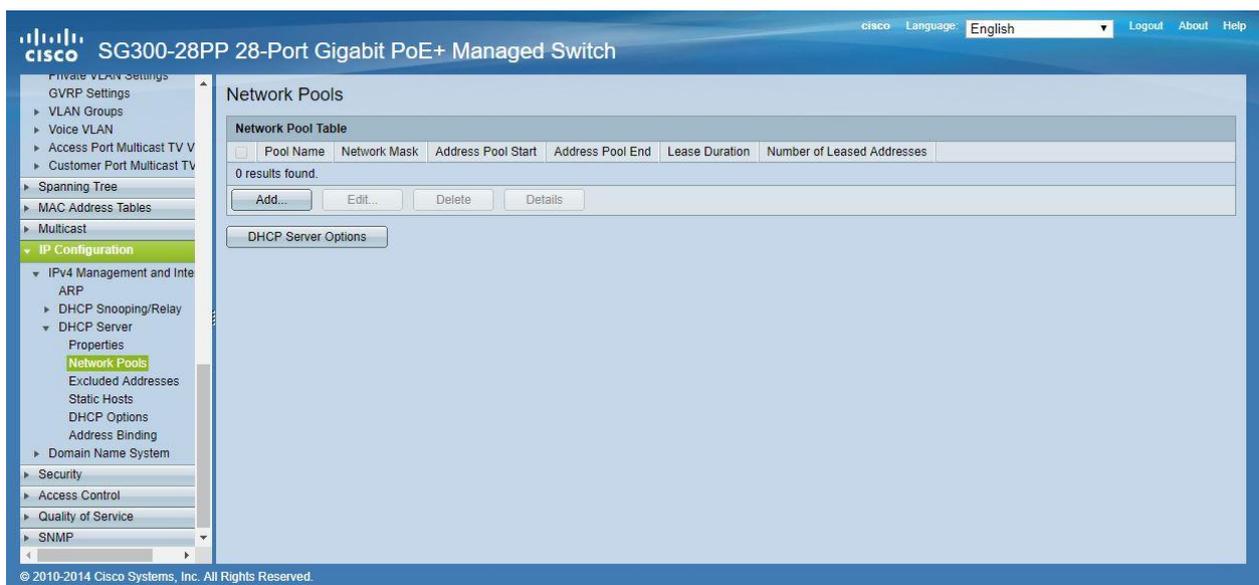
The DHCP Server will automatically configure the IP addresses of each device connected to the switch. All the devices need to be set as DHCP client in their own Network Configuration page. This allows avoiding any conflict between devices.

Note: Please check VEO user manual for IP configurations of each product, accordingly to your installation needs.

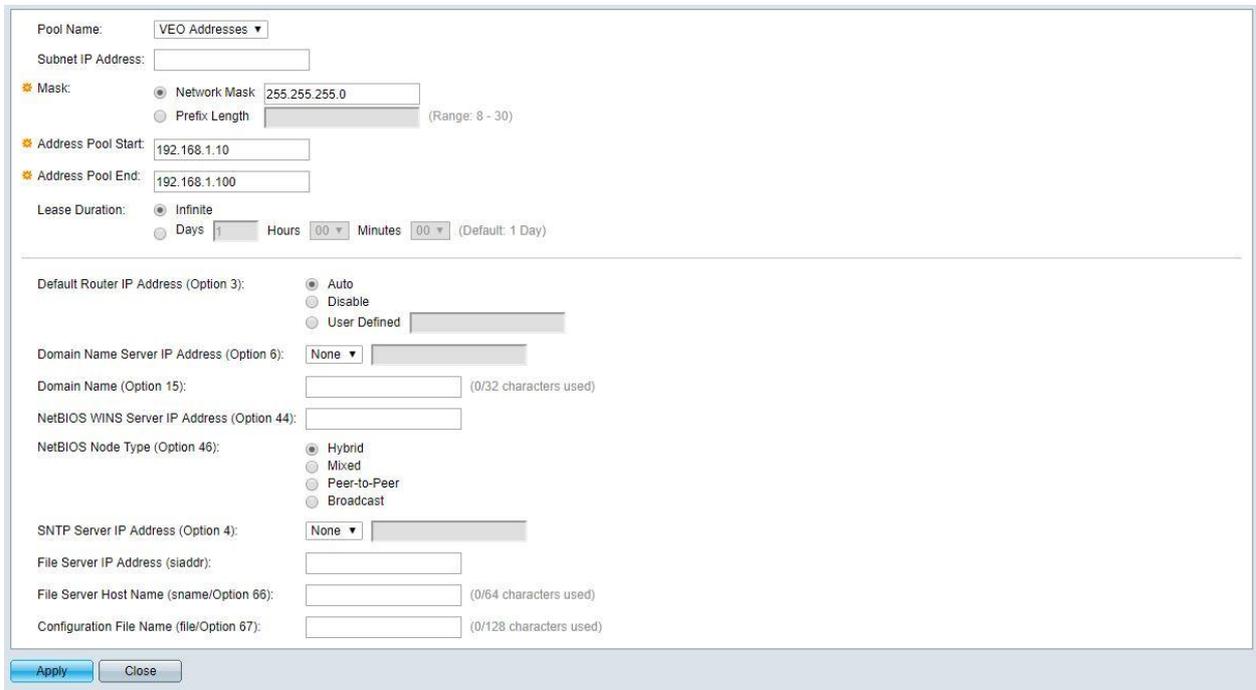
1. To change the **Ethernet Switch Static IP address** to the same subnet as the AV over IP Devices, select **Administration** → **Management Interface** → **IPv4 Interface**. Set **IP Address Type** to Static, and enter the IP Address (accordingly to your network requirements), and set the **Network Mask** to 255.255.255.0. In this case we e default IP address. **After applying these settings you need to change the IP address on your computer network interface card to the same subnet just set above.**



2. Select **IP Configuration** → **DHCP Server** → **Network Pools** and click on the **Add...** button



- Set the **Pool Name**, the **Network Mask** (255.255.255.0), the **Address Pool Start** (192.168.1.10), and the **Address Pool End** (192.168.1.100). Verify that you allocate enough IP addresses for all Transmitters and Receivers present on the network.



Pool Name:

Subnet IP Address:

Mask: Network Mask Prefix Length (Range: 8 - 30)

Address Pool Start:

Address Pool End:

Lease Duration: Infinite Days Hours Minutes (Default: 1 Day)

Default Router IP Address (Option 3): Auto Disable User Defined

Domain Name Server IP Address (Option 6):

Domain Name (Option 15): (0/32 characters used)

NetBIOS WINS Server IP Address (Option 44):

NetBIOS Node Type (Option 46): Hybrid Mixed Peer-to-Peer Broadcast

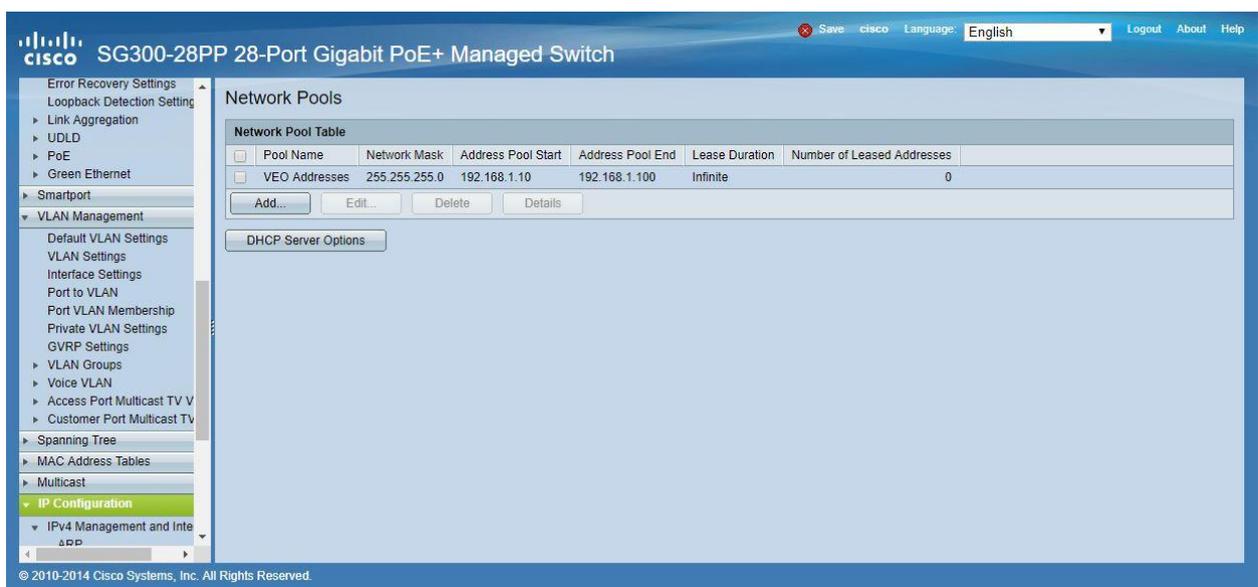
SNTP Server IP Address (Option 4):

File Server IP Address (saddr):

File Server Host Name (sname/Option 66): (0/64 characters used)

Configuration File Name (file/Option 67): (0/128 characters used)

Click on the **Apply** button.



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SG300-28PP 28-Port Gigabit PoE+ Managed Switch

Network Pools

Pool Name	Network Mask	Address Pool Start	Address Pool End	Lease Duration	Number of Leased Addresses
<input type="checkbox"/> VEO Addresses	255.255.255.0	192.168.1.10	192.168.1.100	Infinite	0

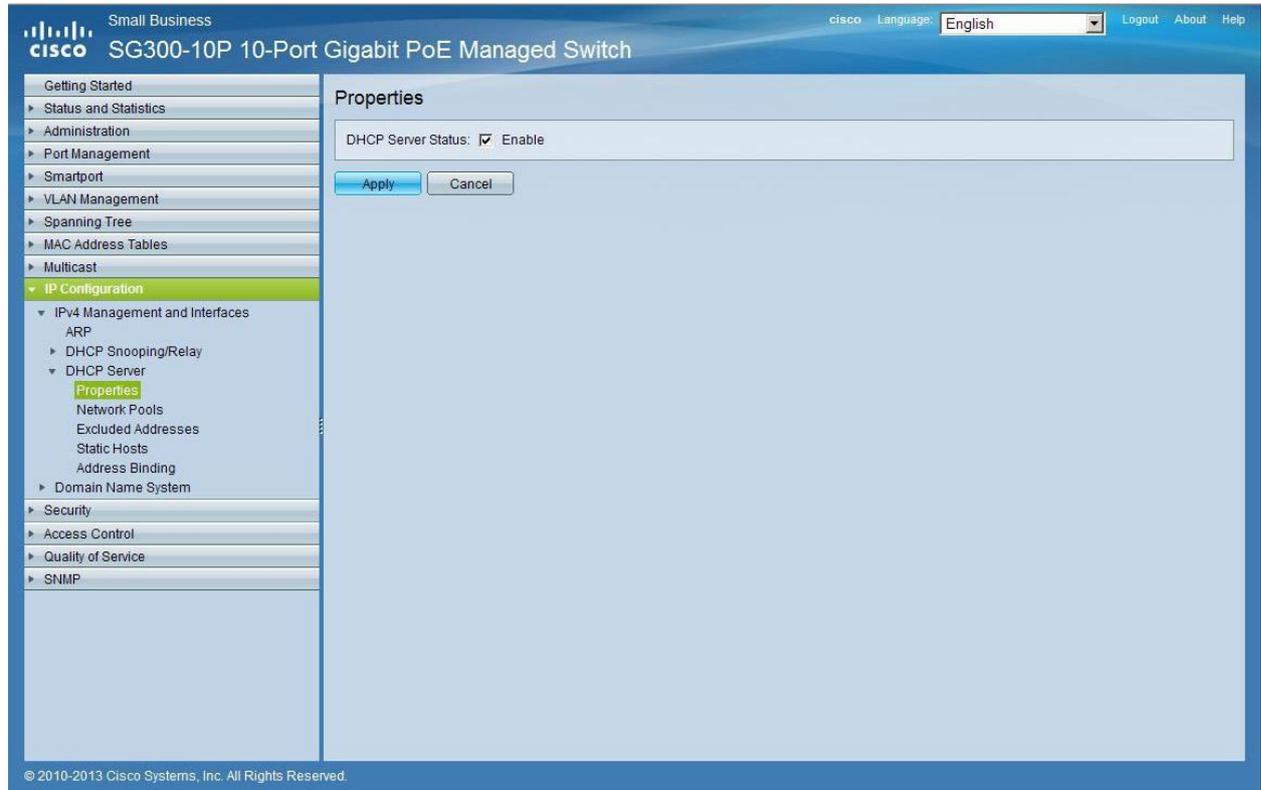
Add... Edit... Delete Details

DHCP Server Options

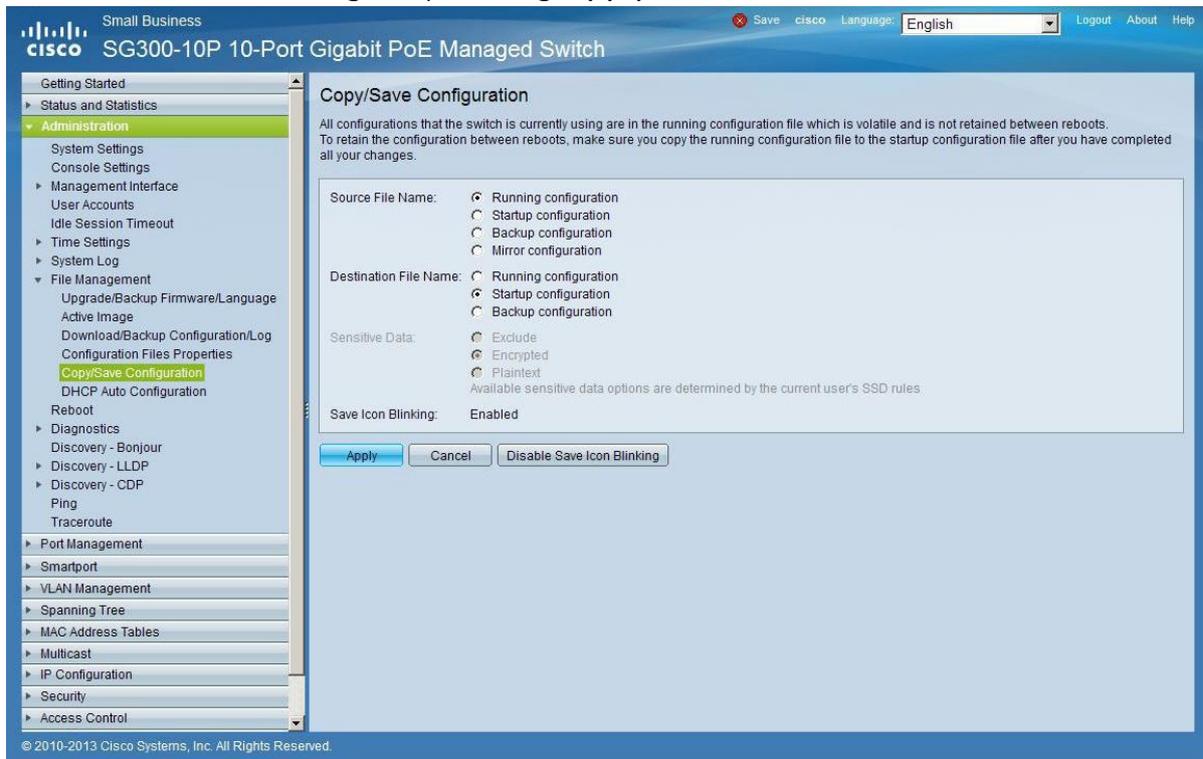
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4. Select **IP Configuration** → **IPv4 Management and Interfaces** → **DHCP Server** → **Properties**.

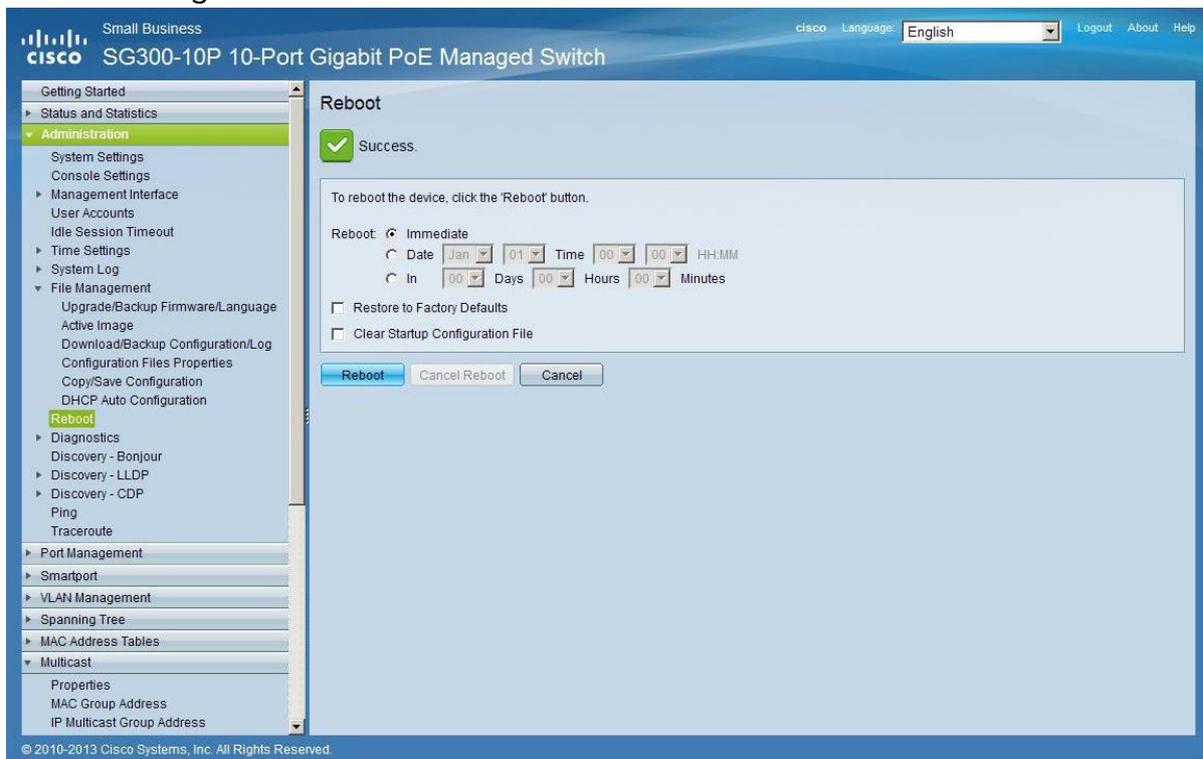
Enable the **DHCP Server Status** by activating the related selection box and clicking on **Apply**.



5. Select **Administration** → **File Management** → **Copy/Save Configuration**. Enable **Running Configuration** and **Startup Configuration** as shown below and save all changes by clicking **Apply**.



6. Select **Administration** → **File Management** → **Reboot**, and click on the **Reboot** button to reboot the Ethernet switch and make all the changes running.



All product characteristics are subject to variation due to production tolerances. **NEEC AUDIO BARCELONA S.L.** reserves the right to make changes or improvements in the design or manufacturing that may affect these product specifications.

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