Configuring PIM

How to configure PIM Sparse Mode on a ProAV switch.

NETGEAR® AV

Configuring PIM Sparse Mode Across Multiple Switches

Part 1

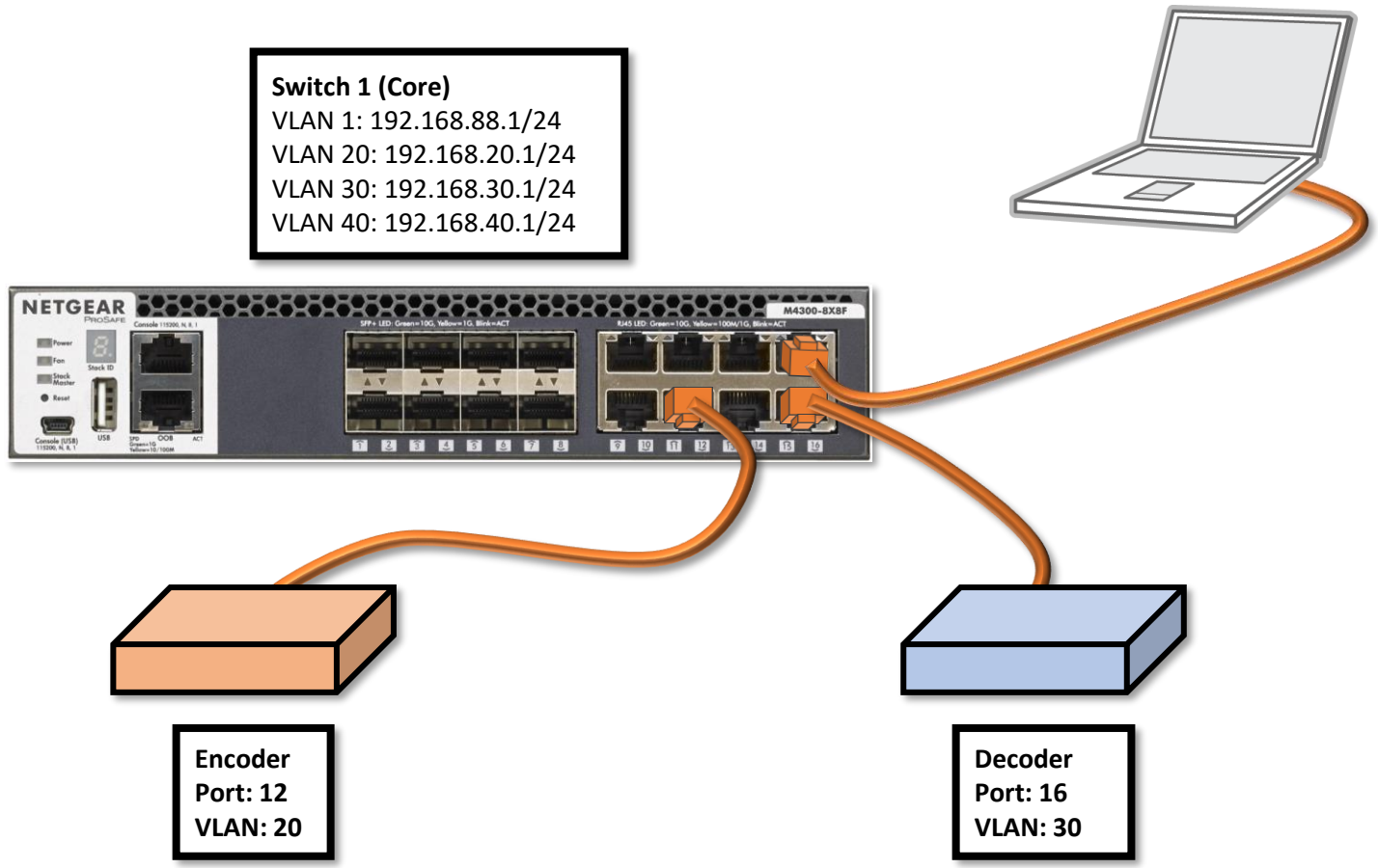
In this guide we will go over how to configure PIM Dense Mode or Sparse Mode on the core switch and then how to configure additional ProAV switches.

For this configuration we will be creating three VLANs on the switch using the AV UI and then going into the main UI to configure PIM SM.
After we have configured a single switch, we will go over the configuration for additional switches.

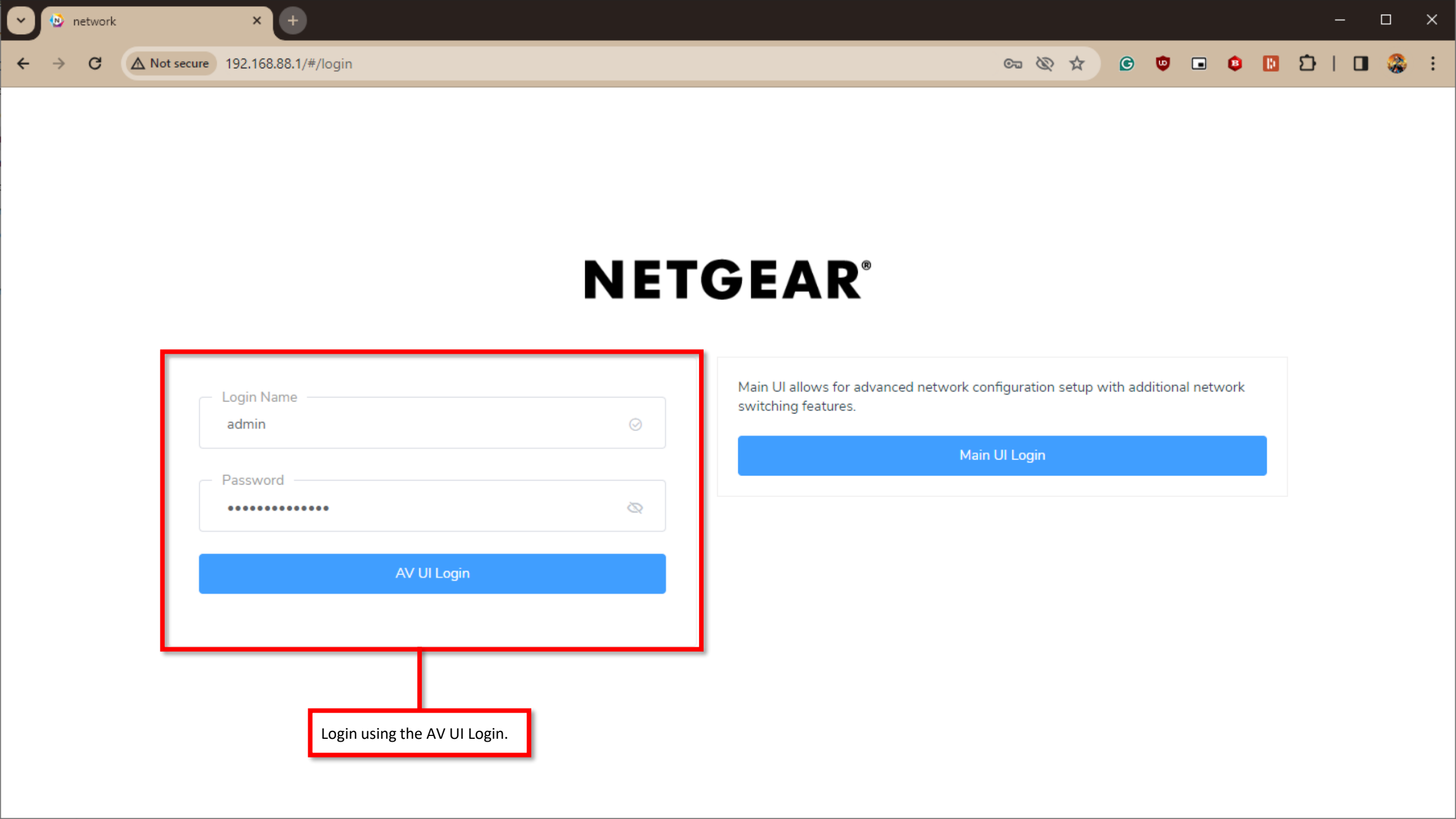
PIM stands for Protocol Independent Multicast. PIM is used to route multicast traffic in a network.

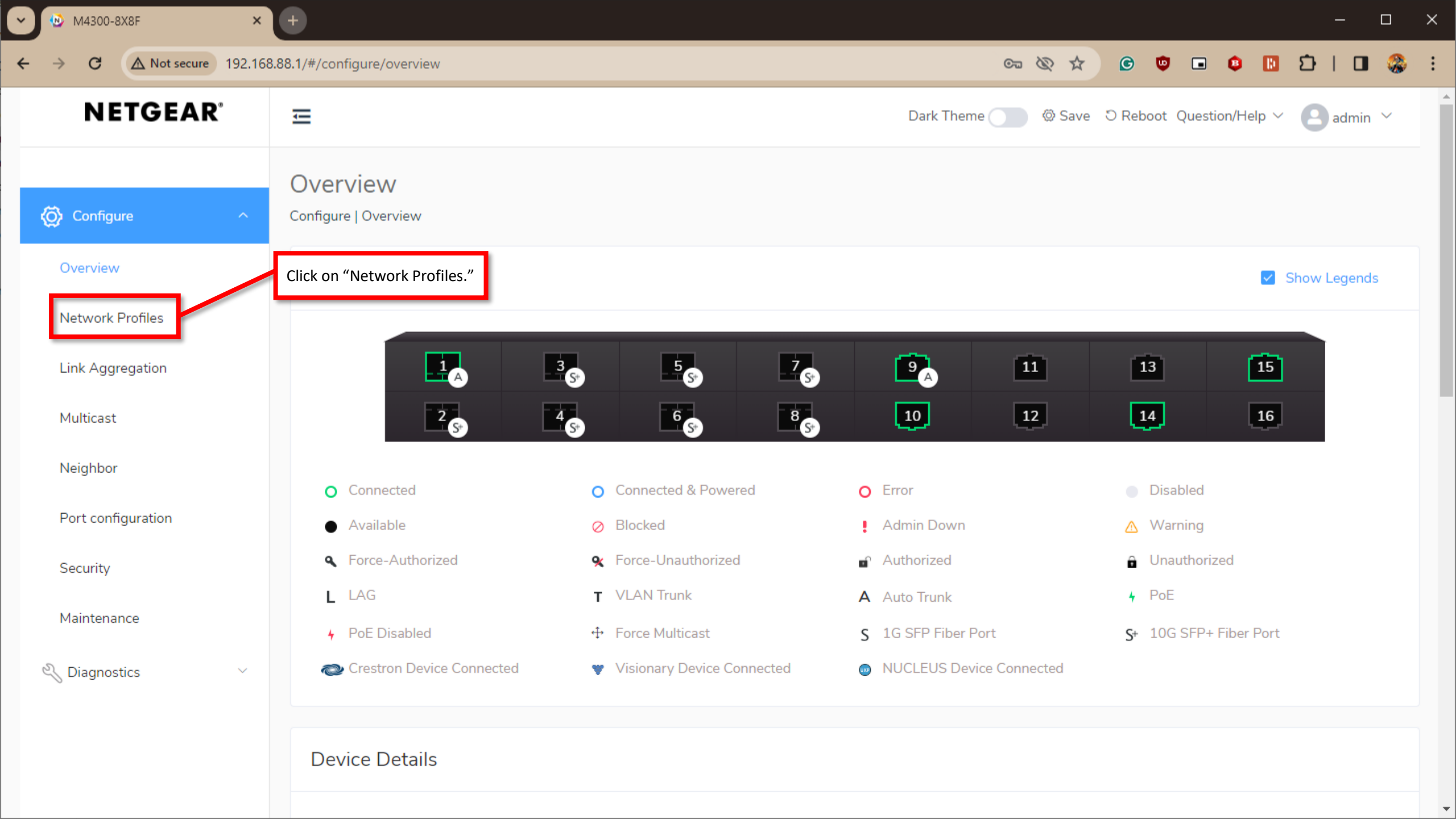
Part 1: Core switch configuration
Part 2: Leaf switch configuration

Devices:
M4300-8X8F (Core)
M4250-8G2XF-PoE+ (Leaf)



NOTE: An IP address followed by a "/24" means that the subnet mask of the network is 255.255.255.0.


network
Not secure
192.168.88.1/#/login
NETGEAR®
Login Name
admin
Password
AV UI Login
Main UI allows for advanced network configuration setup with additional network switching features.
Main UI Login
Login using the AV UI Login.


M4300-8X8F
Not secure
192.168.88.1/#/configure/overview
NETGEAR
Dark Theme
Save
Reboot
Question/Help
admin
Configure
Overview
Network Profiles
Link Aggregation
Multicast
Neighbor
Port configuration
Security
Maintenance
Diagnostics
Overview
Configure | Overview
Click on “Network Profiles.”
Show Legends
1 A
3 S+
5 S+
7 S+
9 A
11
13
15
2 S+
4 S+
6 S+
8 S+
10
12
14
16
Connected
Connected & Powered
Error
Disabled
Available
Blocked
Admin Down
Warning
Force-Authorized
Force-Unauthorized
Authorized
Unauthorized
L LAG
T VLAN Trunk
A Auto Trunk
PoE
PoE Disabled
Force Multicast
S 1G SFP Fiber Port
S+ 10G SFP+ Fiber Port
Crestron Device Connected
Visionary Device Connected
NUCLEUS Device Connected
Device Details

M4300-8X8F

Not secure 192.168.88.1/#/configure/virtualNetworks

NETGEAR

Dark Theme Save Reboot Question/Help admin

Configure

- Overview
- Network Profiles
- Link Aggregation
- Multicast
- Neighbor
- Port configuration
- Security
- Maintenance

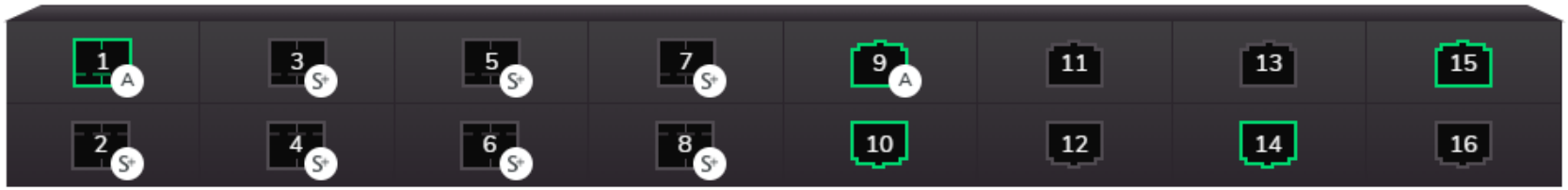
Diagnostics

Network Profiles

Configure | Network Profiles

M4300-8X8F

Show Legends



Auto-Trunk

PTP residency time stamping

Scroll down to the “Network Profiles.”

Connected	Connected & Powered	Error	
Available	Blocked	Admin Down	Warning
Force-Authorized	Force-Unauthorized	Authorized	Unauthorized
L LAG	T VLAN Trunk	A Auto Trunk	PoE
PoE Disabled	Force Multicast	S 1G SFP Fiber Port	S+ 10G SFP+ Fiber Port
Crestron Device Connected	Visionary Device Connected	NUCLEUS Device Connected	

To connect IP Audio SoundGrid devices and their controllers.

Crestron DigitalMedia AV Network
To connect Crestron DM NVX (video), Crestron DM NAX (audio), Creston 1 Beyond cameras (NDI), PCs, and other Crestron Control network devices.

Data
To connect PCs and other Control network devices. CobraNet is supported in a VLAN other than VLAN 1.

Lighting
To connect sACN, Art-Net, and MA-Net3 network devices, for controlling lighting equipment.

NUCLEUS Converged AV Network
To connect EvertzAV NUCLEUS Session Manager and UXP gateways on a single converged network.

Sonos
To connect the Sonos smart home sound system.

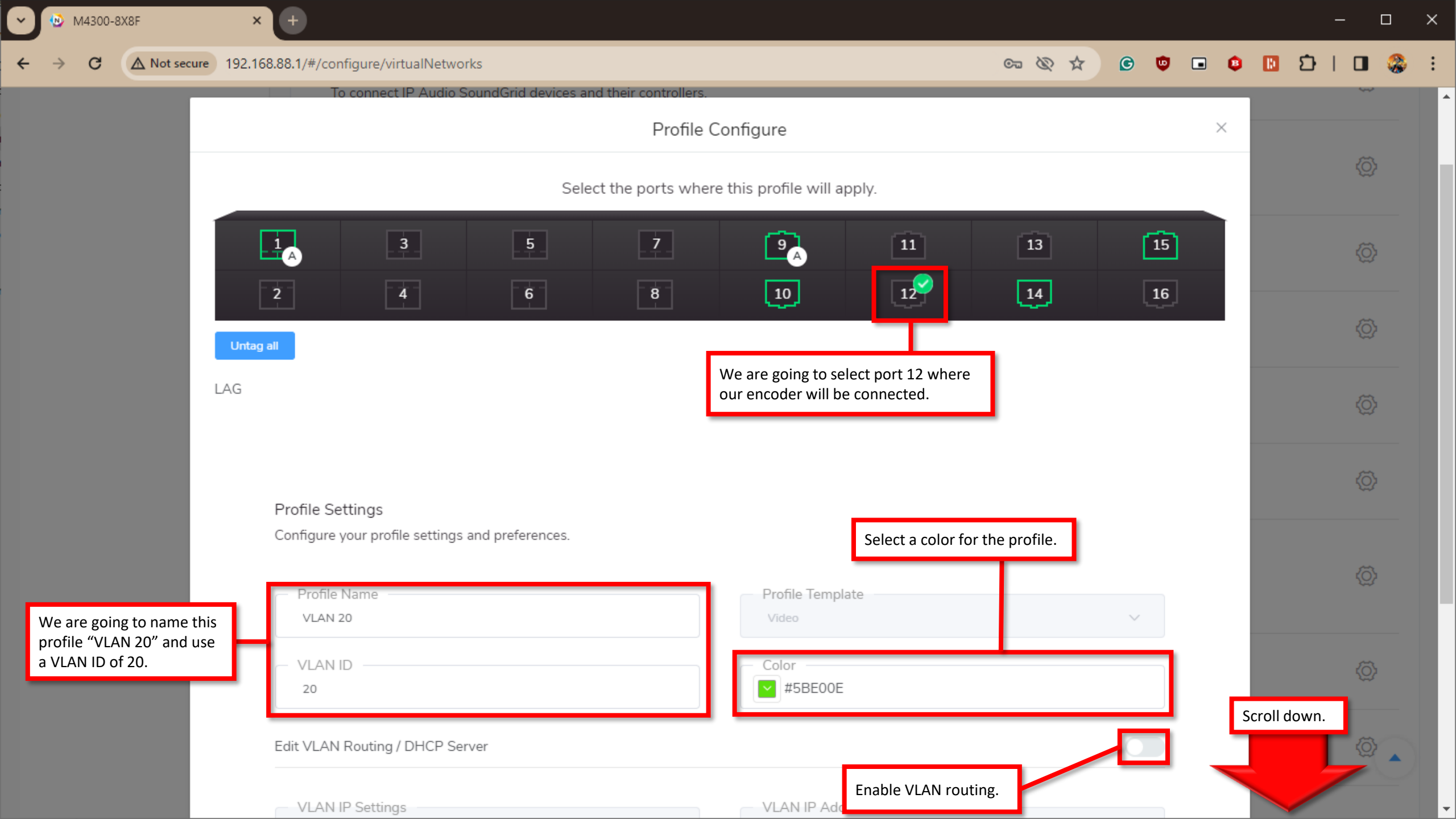
Video
To connect IP Video devices and their controller. Audio can be sent and received using another VLAN tag in another profile simultaneously. Supported devices include NVX, AMX, ZeeVee, Aurora, Kramer, Atlona, ATEN, LibAV, Visionary, Wyrestorm, Extron NAV, Dante AV, SDVoE & etc.

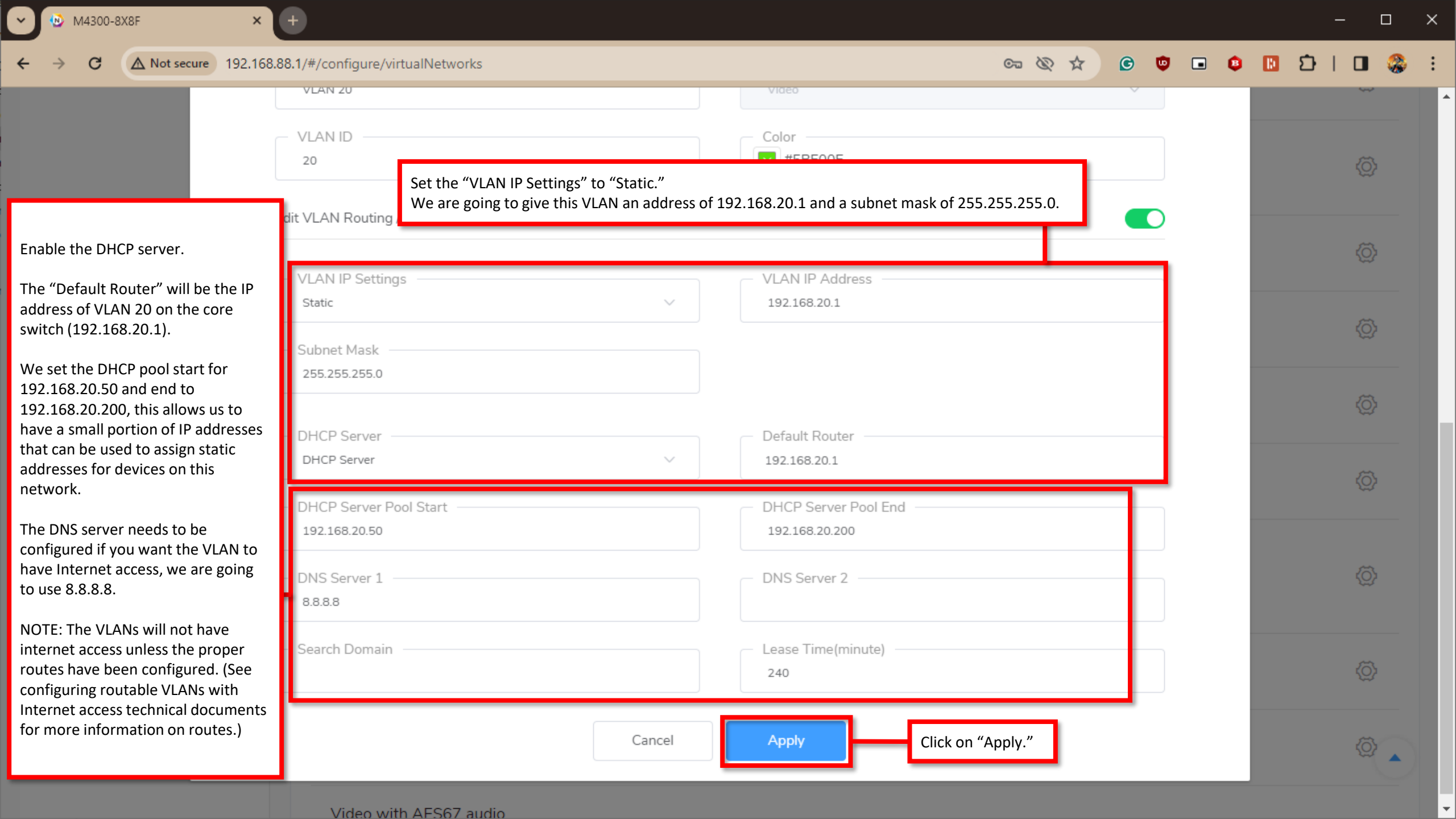
Video NDI4
To connect NDI Version 4 (mTCP) video devices and cameras.

We are going to create our VLANs using the “Video” profile template.

Video NDI5 with Dante, Q-Sys or AES67 audio
To connect NDI Version 5 (RUDP) video devices and cameras. Audio Dante, Q-SYS or AES67 is supported at the same time in the same VLAN.

Video with AES67 audio


M4300-8X8F
Not secure
192.168.88.1/#/configure/virtualNetworks
To connect IP Audio SoundGrid devices and their controllers.
Profile Configure
Select the ports where this profile will apply.
1 A
3
5
7
9 A
11
13
15
2
4
6
8
10
12
14
16
Untag all
LAG
We are going to select port 12 where our encoder will be connected.
Profile Settings
Configure your profile settings and preferences.
Select a color for the profile.
We are going to name this profile “VLAN 20” and use a VLAN ID of 20.
Profile Name
VLAN 20
VLAN ID
20
Profile Template
Video
Color
#5BE00E
Edit VLAN Routing / DHCP Server
Enable VLAN routing.
Scroll down.
VLAN IP Settings


M4300-8X8F
Not secure
192.168.88.1/#/configure/virtualNetworks
VLAN 20
Video
VLAN ID
20
Color
Set the “VLAN IP Settings” to “Static.”
We are going to give this VLAN an address of 192.168.20.1 and a subnet mask of 255.255.255.0.
dit VLAN Routing
VLAN IP Settings
Static
VLAN IP Address
192.168.20.1
Subnet Mask
255.255.255.0
DHCP Server
DHCP Server
Default Router
192.168.20.1
DHCP Server Pool Start
192.168.20.50
DHCP Server Pool End
192.168.20.200
DNS Server 1
8.8.8.8
DNS Server 2
Search Domain
Lease Time(minute)
240
Cancel
Apply
Click on “Apply.”
Enable the DHCP server.
The “Default Router” will be the IP address of VLAN 20 on the core switch (192.168.20.1).
We set the DHCP pool start for 192.168.20.50 and end to 192.168.20.200, this allows us to have a small portion of IP addresses that can be used to assign static addresses for devices on this network.
The DNS server needs to be configured if you want the VLAN to have Internet access, we are going to use 8.8.8.8.
NOTE: The VLANs will not have internet access unless the proper routes have been configured. (See configuring routable VLANs with Internet access technical documents for more information on routes.)
Video with AES67 audio

PoE Disabled | Force Multicast | 1G SFP Fiber Port | 10G SFP+ Fiber Port
Crestron Device Connected | Visionary Device Connected | NUCLEUS Device Connected

Configured Profiles

Edit the Default Profile VLAN 1 to change its profile template

Profile Name	Profile type	VLAN ID	IP Address	# of Assigned Ports
Default	Video	1	192.168.88.1	15
VLAN 20	Video	20	192.168.20.1	1

Total 2 | 10/page | 1 | Go to 1

Profile Templates

Scroll down to add the next VLAN.

Create AV Template

Audio AES67
To connect IP Audio AES67 devices and their controller

Audio Dante
To connect IP Audio Dante devices and their controller

Crestron DigitalMedia AV Network
To connect Crestron DM NVX (video), Crestron DM NAX (audio), Creston 1 Beyond cameras (NDI), PCs, and other Crestron Control network devices.

Data
To connect PCs and other Control network devices. CobraNet is supported in a VLAN other than VLAN 1.

Lighting
To connect sACN, Art-Net, and MA-Net3 network devices, for controlling lighting equipment.

NUCLEUS Converged AV Network
To connect EvertzAV NUCLEUS Session Manager and UXP gateways on a single converged network.

Sonos
To connect the Sonos smart home sound system.

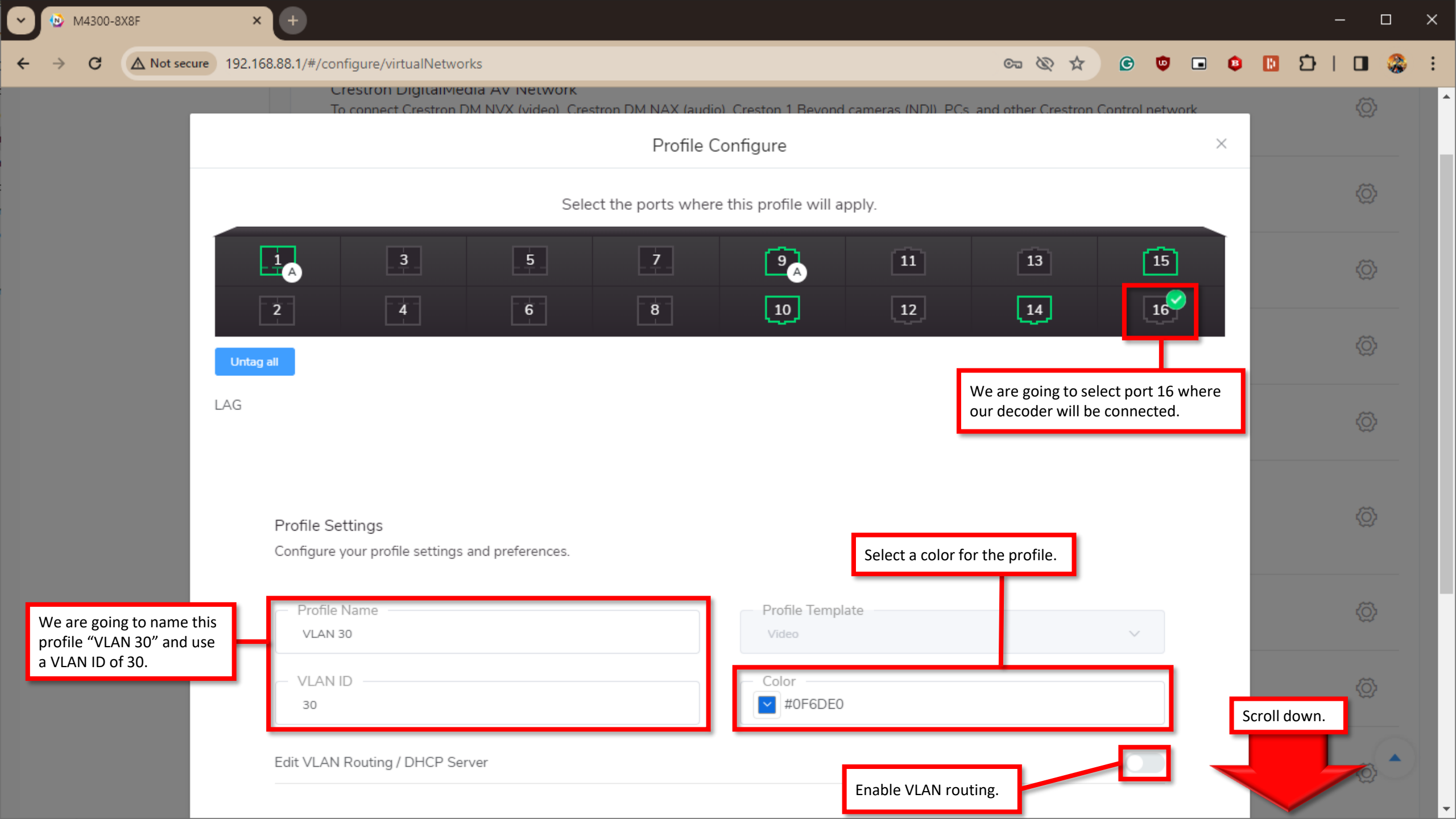
Video
To connect IP Video devices and their controller. Audio can be sent and received using another VLAN tag in another profile simultaneously. Supported devices include NVX, AMX, ZeeVee, Aurora, Kramer, Atlona, ATEN, LibAV, Visionary, Wyrestorm, Extron NAV, Dante AV, SDVoE & etc.

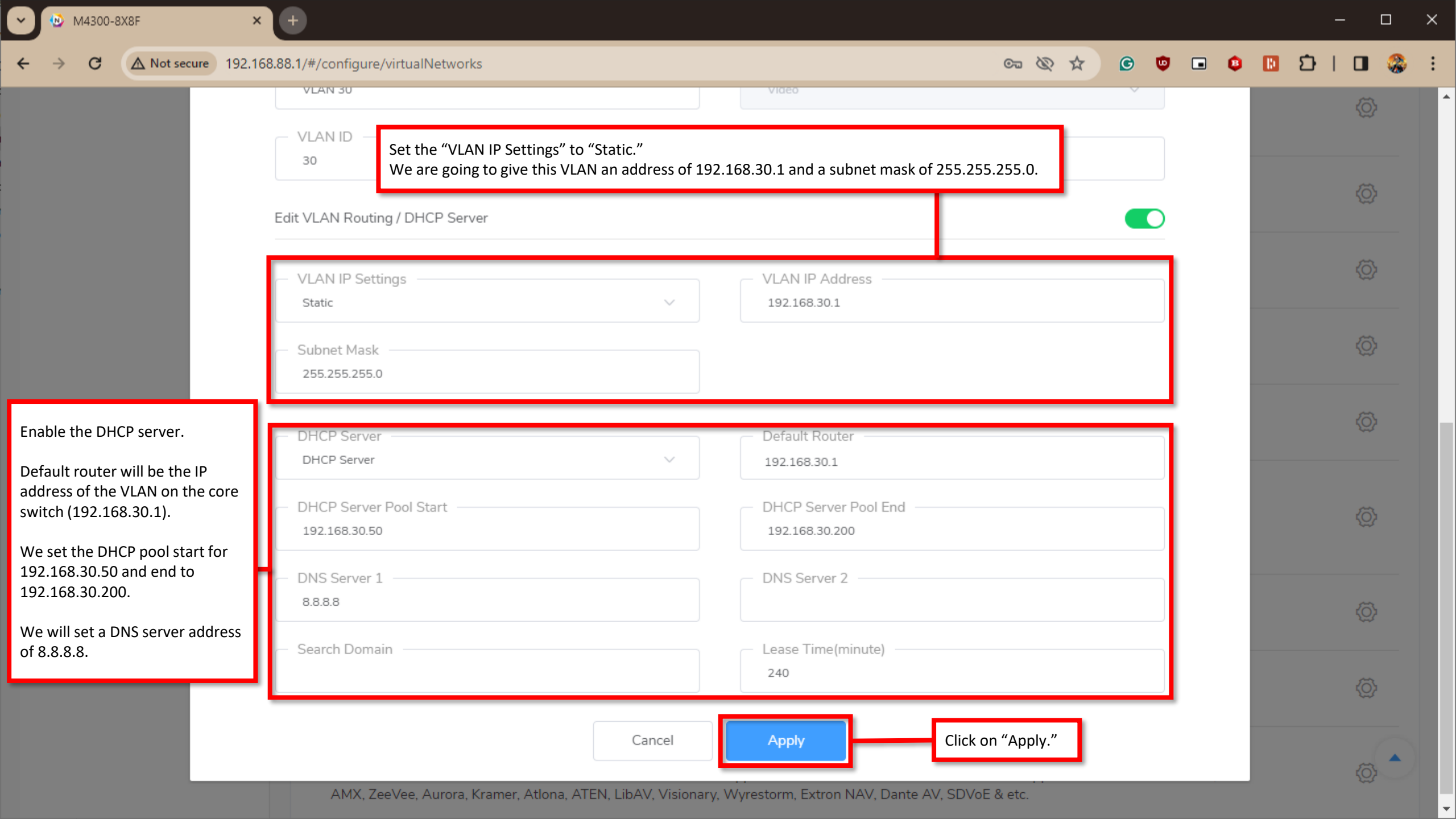
Video NDI4
To connect NDI Version 4 (mTCP) video devices and cameras.

Video NDI5 with Dante, Q-Sys or AES67 audio
To connect NDI Version 5 (RUDP) video devices and cameras. Audio Dante, Q-SYS or AES67 is supported at the same time in the same VLAN.

Video with AES67 audio
To connect IP Video devices and their controller. Audio AES67 supported at the same time in the same VLAN. Supported devices include NVX, AMX, ZeeVee, Aurora, Kramer, Atlona, ATEN, LibAV, Visionary, Wyrestorm, Extron NAV, Dante AV, SDVoE & etc.

We are going to create our VLANs using the “Video” profile template.


M4300-8X8F
Not secure
192.168.88.1/#/configure/virtualNetworks
Profile Configure
Select the ports where this profile will apply.
1
A
3
5
7
9
A
11
13
15
2
4
6
8
10
12
14
16
Untag all
LAG
We are going to select port 16 where our decoder will be connected.
Profile Settings
Configure your profile settings and preferences.
Select a color for the profile.
We are going to name this profile “VLAN 30” and use a VLAN ID of 30.
Profile Name
VLAN 30
Profile Template
Video
VLAN ID
30
Color
#0F6DE0
Scroll down.
Edit VLAN Routing / DHCP Server
Enable VLAN routing.


M4300-8X8F
Not secure
192.168.88.1/#/configure/virtualNetworks
VLAN 30
Video
VLAN ID
30
Set the “VLAN IP Settings” to “Static.”
We are going to give this VLAN an address of 192.168.30.1 and a subnet mask of 255.255.255.0.
Edit VLAN Routing / DHCP Server
VLAN IP Settings
Static
VLAN IP Address
192.168.30.1
Subnet Mask
255.255.255.0
Enable the DHCP server.
Default router will be the IP address of the VLAN on the core switch (192.168.30.1).
We set the DHCP pool start for 192.168.30.50 and end to 192.168.30.200.
We will set a DNS server address of 8.8.8.8.
DHCP Server
DHCP Server
Default Router
192.168.30.1
DHCP Server Pool Start
192.168.30.50
DHCP Server Pool End
192.168.30.200
DNS Server 1
8.8.8.8
DNS Server 2
Search Domain
Lease Time(minute)
240
Cancel
Apply
Click on “Apply.”
AMX, ZeeVee, Aurora, Kramer, Atlona, ATEN, LibAV, Visionary, Wyrestorm, Extron NAV, Dante AV, SDVoE & etc.

PoE Disabled | Force Multicast | 1G SFP Fiber Port | 10G SFP+ Fiber Port
Crestron Device Connected | Visionary Device Connected | NUCLEUS Device Connected

Configured Profiles

Edit the Default Profile VLAN 1 to change its profile template

Profile Name	Profile type	VLAN ID	IP Address	# of Assigned Ports
Default	Video	1	192.168.88.1	14
VLAN 20	Video	20	192.168.20.1	1
VLAN 30	Video	30	192.168.30.1	1

Total 3 | 10/page | 1 | Go to 1

Scroll down to add the next VLAN.

Profile Templates

Create AV Template

Audio AES67
To connect IP Audio AES67 devices and their controller

Audio Dante

Data
To connect PCs and other Control network devices. CobraNet is supported in a VLAN other than VLAN 1.

Lighting
To connect sACN, Art-Net, and MA-Net3 network devices, for controlling lighting equipment.

NUCLEUS Converged AV Network
To connect EvertzAV NUCLEUS Session Manager and UXP gateways on a single converged network.

Sonos
To connect the Sonos smart home sound system.

Video
To connect IP Video devices and their controller. Audio can be sent and received using another VLAN tag in another profile simultaneously. Supported devices include NVX, AMX, ZeeVee, Aurora, Kramer, Atlona, ATEN, LibAV, Visionary, Wyrestorm, Extron NAV, Dante AV, SDVoE & etc.

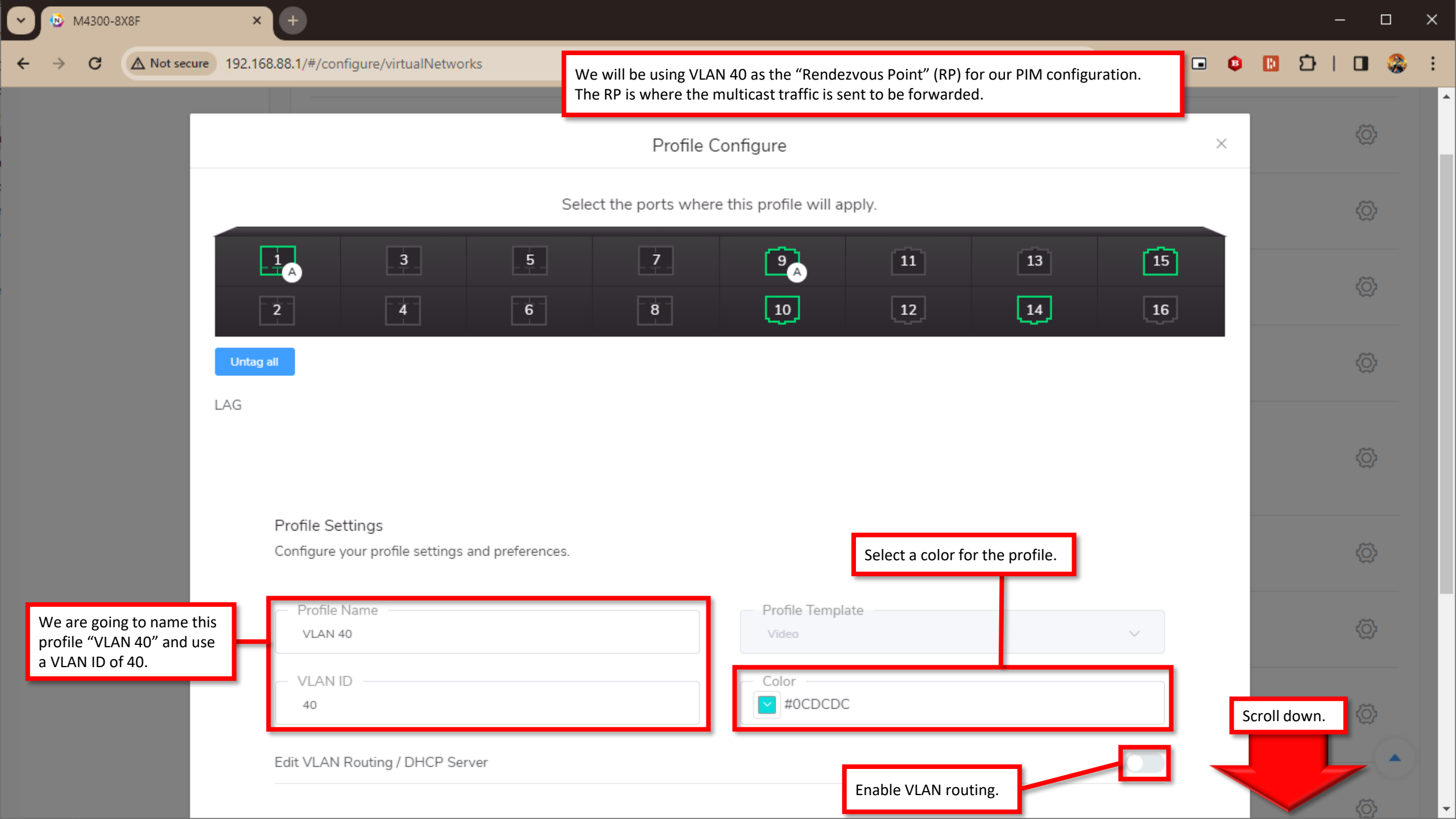
Video NDI4
To connect NDI Version 4 (mTCP) video devices and cameras.

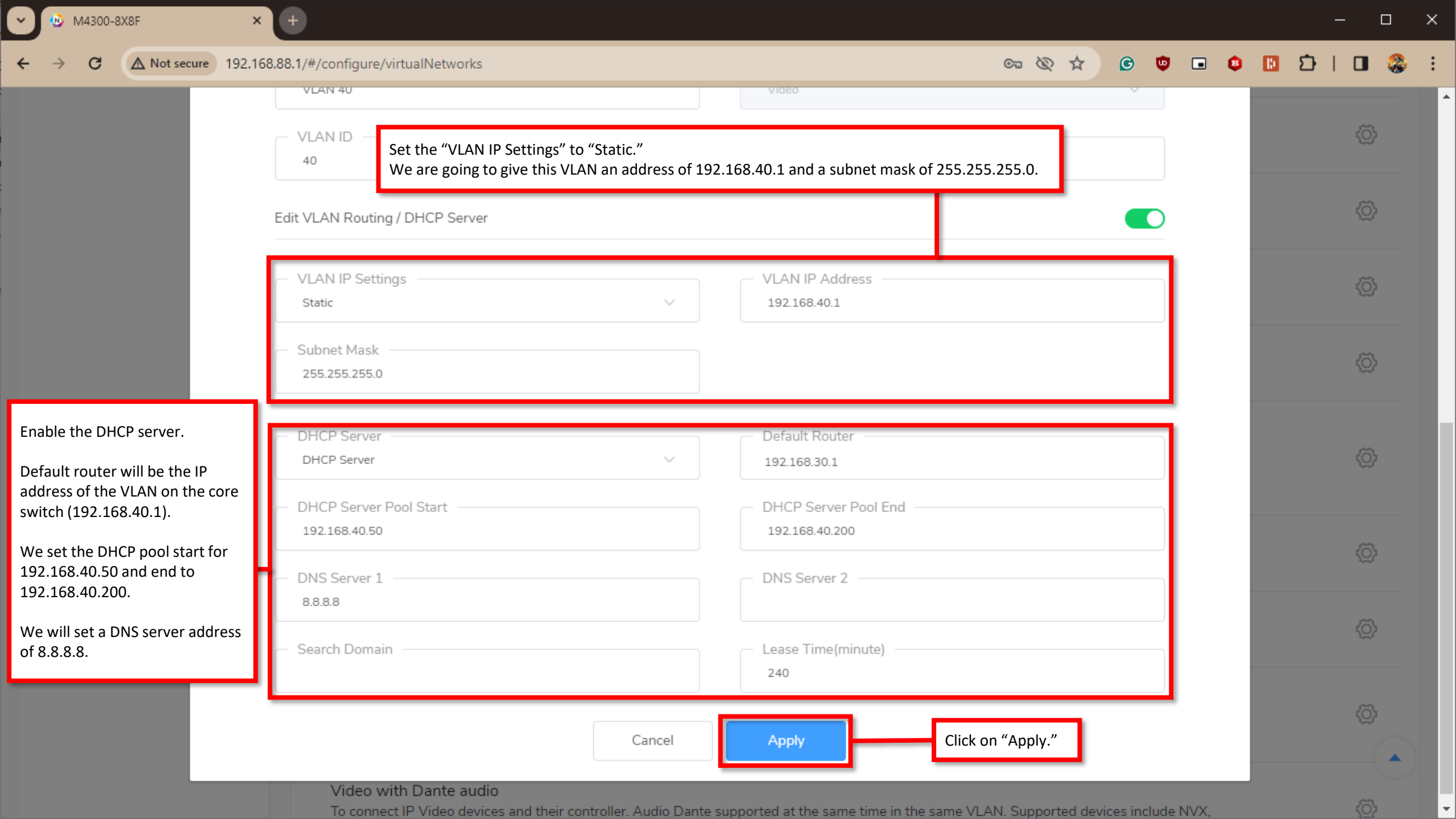
We are going to create our VLANs using the “Video” profile template.

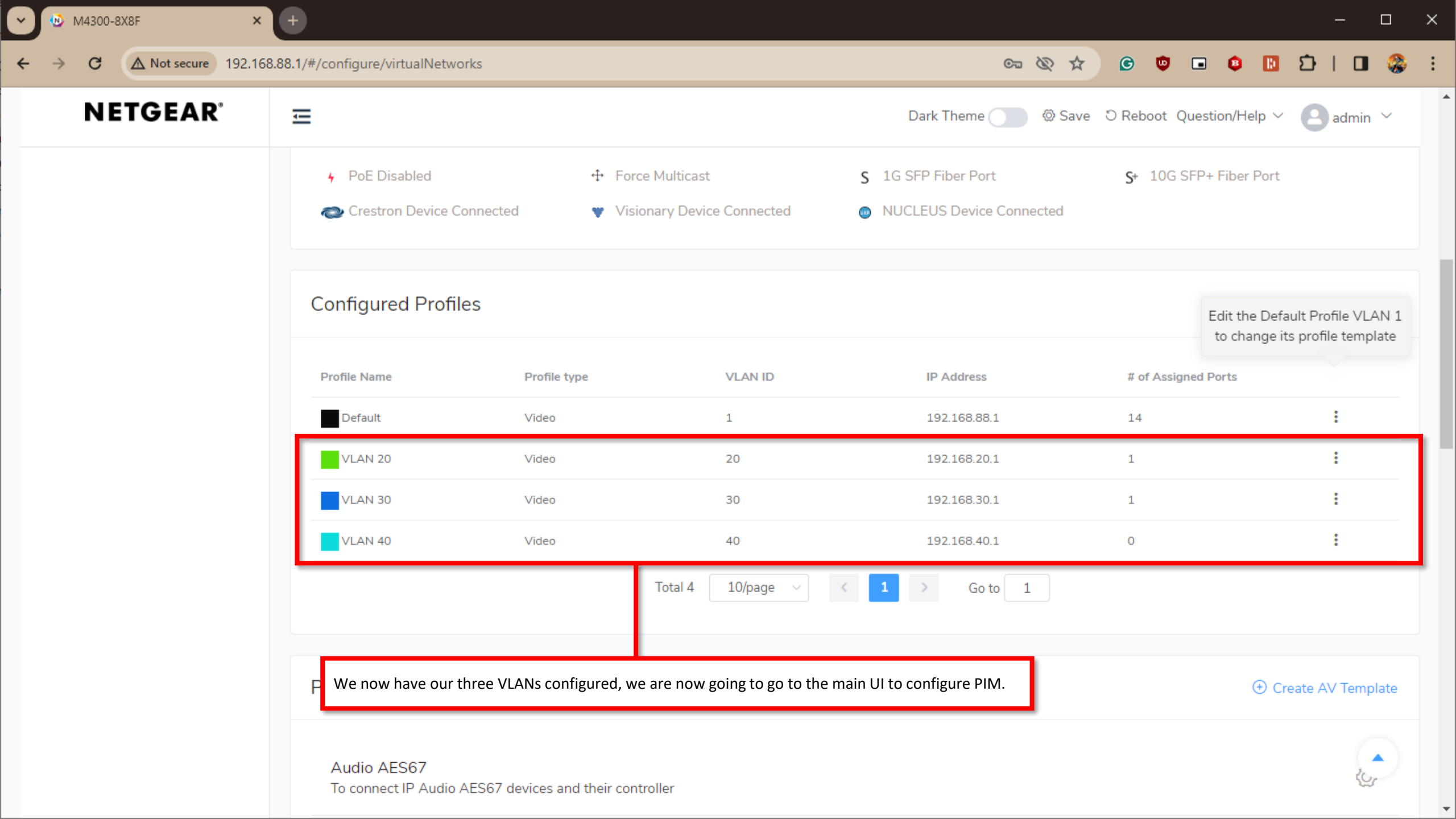
Video NDI5 with Dante, Q-Sys or AES67 audio
To connect NDI Version 5 (RUDP) video devices and cameras. Audio Dante, Q-SYS or AES67 is supported at the same time in the same VLAN.

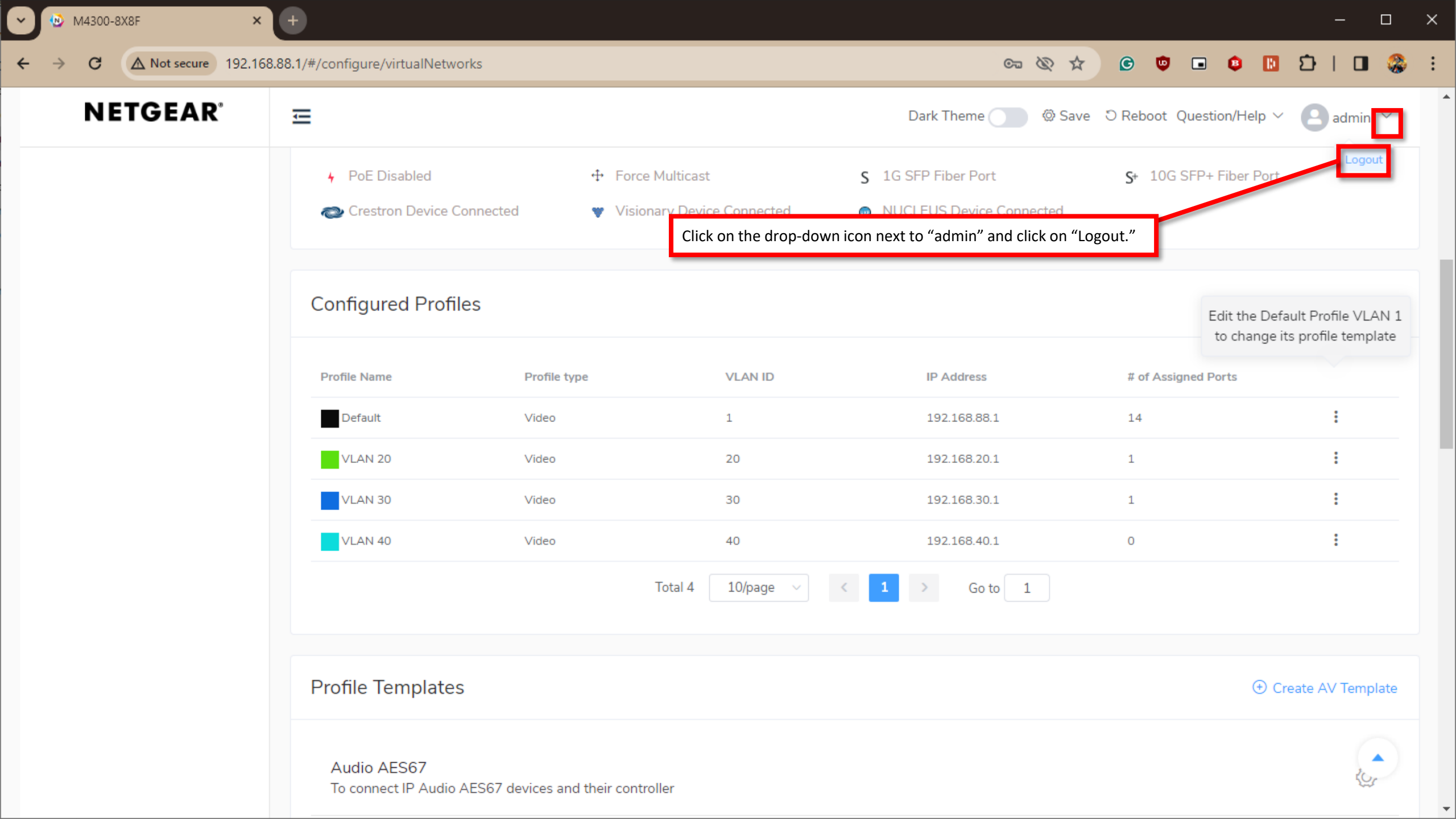
Video with AES67 audio
To connect IP Video devices and their controller. Audio AES67 supported at the same time in the same VLAN. Supported devices include NVX, AMX, ZeeVee, Aurora, Kramer, Atlona, ATEN, LibAV, Visionary, Wyrestorm, Extron NAV, Dante AV, SDVoE & etc.

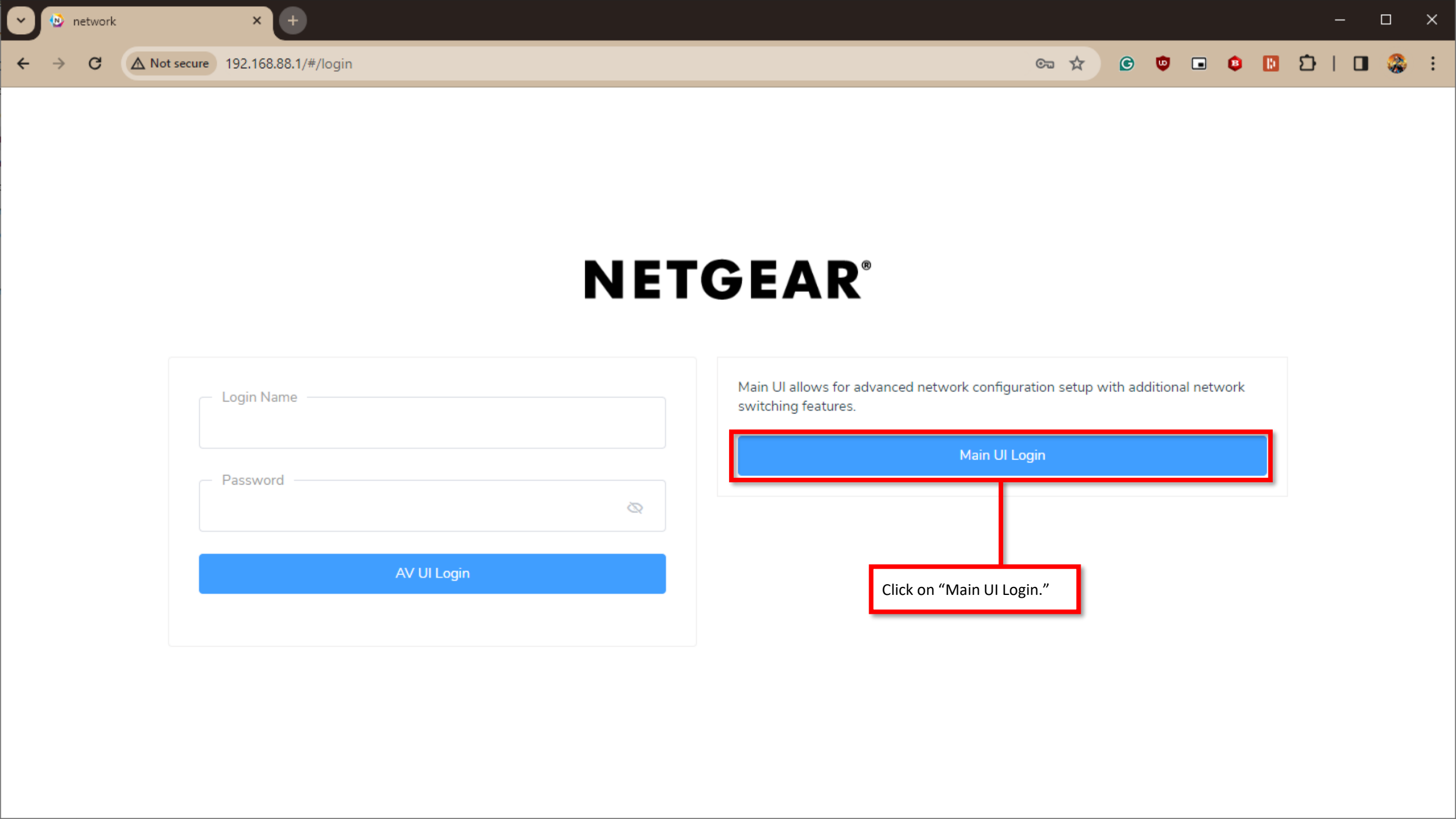
Video with Dante audio
To connect IP Video devices and their controller. Audio Dante supported at the same time in the same VLAN. Supported devices include NVX,

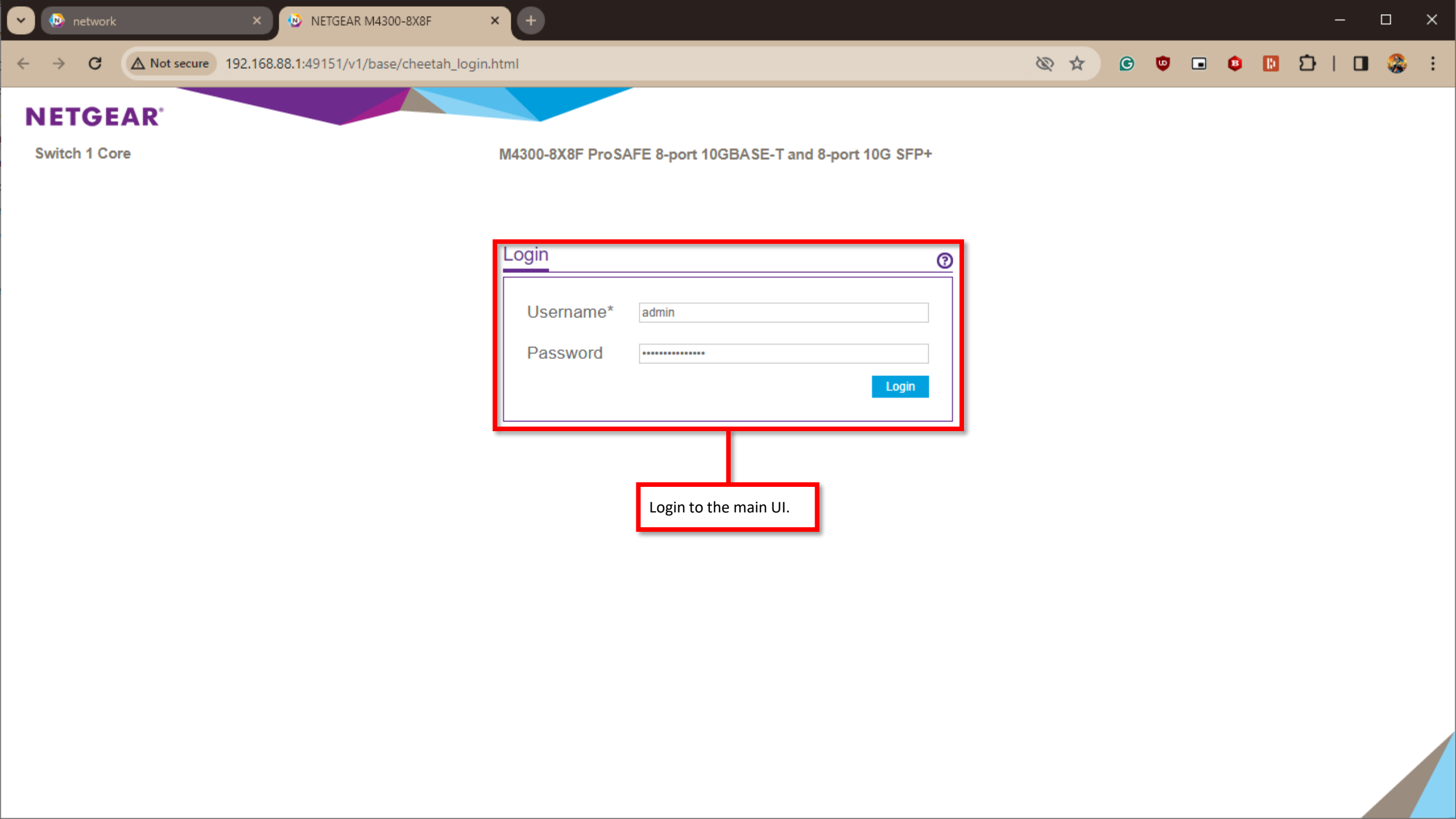

M4300-8X8F
Not secure
192.168.88.1/#/configure/virtualNetworks
We will be using VLAN 40 as the “Rendezvous Point” (RP) for our PIM configuration. The RP is where the multicast traffic is sent to be forwarded.
Profile Configure
Select the ports where this profile will apply.
1 A
3
5
7
9 A
11
13
15
2
4
6
8
10
12
14
16
Untag all
LAG
Profile Settings
Configure your profile settings and preferences.
Select a color for the profile.
We are going to name this profile “VLAN 40” and use a VLAN ID of 40.
Profile Name
VLAN 40
VLAN ID
40
Profile Template
Video
Color
#0CDCDC
Scroll down.
Edit VLAN Routing / DHCP Server
Enable VLAN routing.

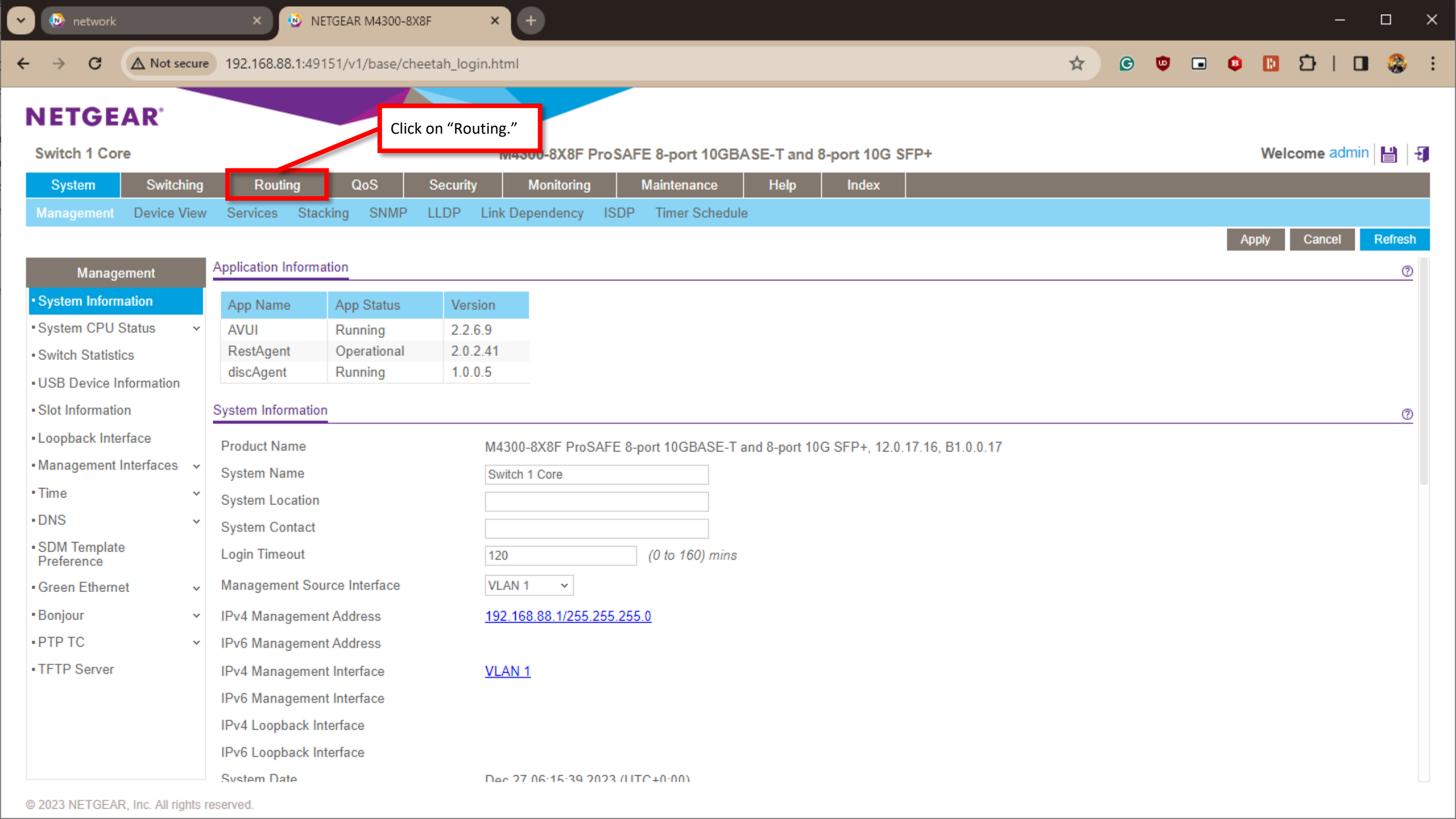

M4300-8X8F
Not secure
192.168.88.1/#/configure/virtualNetworks
VLAN 40
VLAN ID
40
Set the “VLAN IP Settings” to “Static.”
We are going to give this VLAN an address of 192.168.40.1 and a subnet mask of 255.255.255.0.
Edit VLAN Routing / DHCP Server
VLAN IP Settings
Static
VLAN IP Address
192.168.40.1
Subnet Mask
255.255.255.0
Enable the DHCP server.
Default router will be the IP address of the VLAN on the core switch (192.168.40.1).
We set the DHCP pool start for 192.168.40.50 and end to 192.168.40.200.
We will set a DNS server address of 8.8.8.8.
DHCP Server
DHCP Server
Default Router
192.168.30.1
DHCP Server Pool Start
192.168.40.50
DHCP Server Pool End
192.168.40.200
DNS Server 1
8.8.8.8
DNS Server 2
Search Domain
Lease Time(minute)
240
Cancel
Apply
Click on “Apply.”
Video with Dante audio
To connect IP Video devices and their controller. Audio Dante supported at the same time in the same VLAN. Supported devices include NVX.

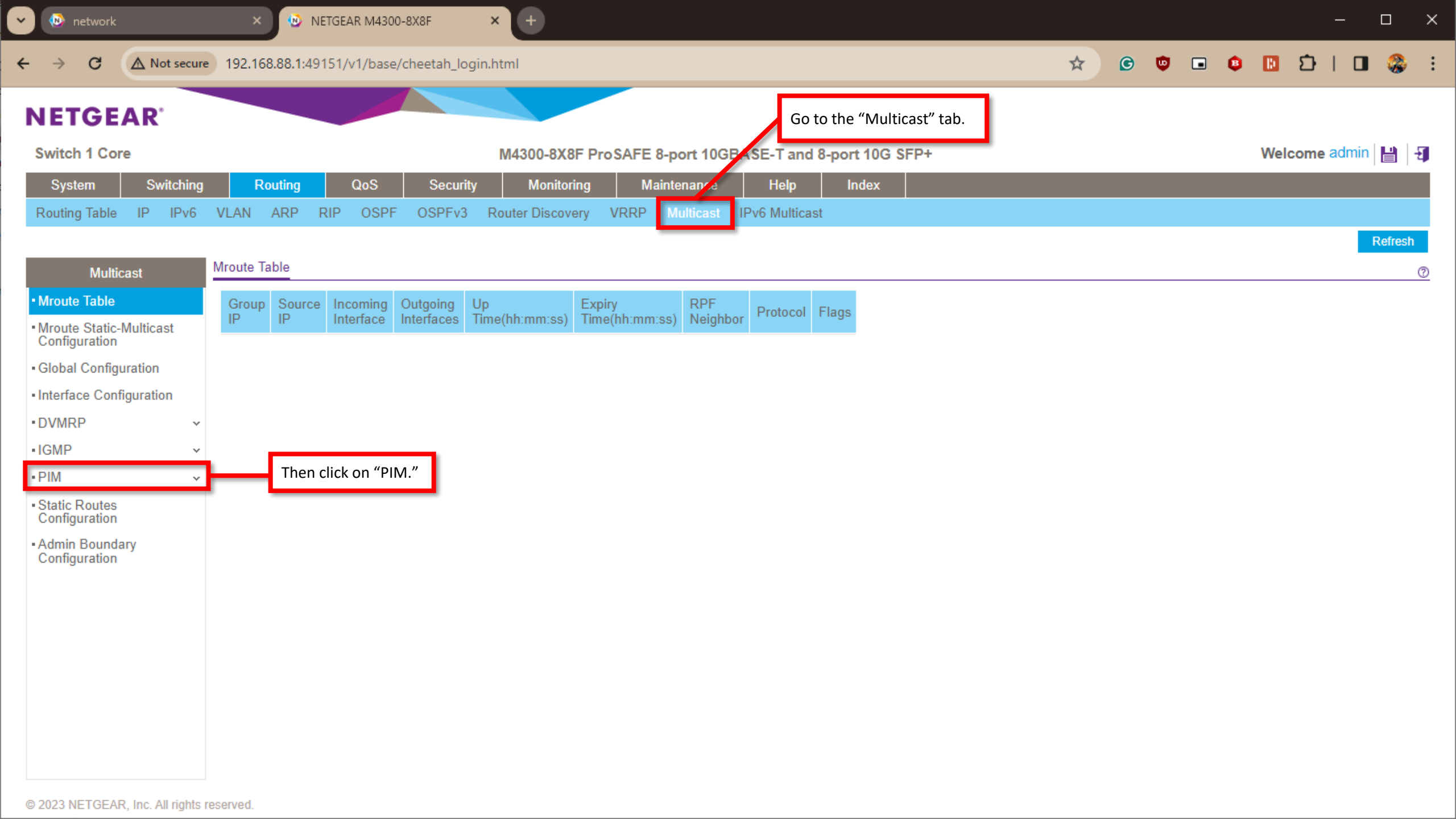

M4300-8X8F
Not secure
192.168.88.1/#/configure/virtualNetworks
NETGEAR
Dark Theme
Save
Reboot
Question/Help
admin
PoE Disabled
Force Multicast
1G SFP Fiber Port
10G SFP+ Fiber Port
Crestron Device Connected
Visionary Device Connected
NUCLEUS Device Connected
Configured Profiles
Edit the Default Profile VLAN 1 to change its profile template
Profile Name
Profile type
VLAN ID
IP Address
# of Assigned Ports
Default
Video
1
192.168.88.1
14
VLAN 20
Video
20
192.168.20.1
1
VLAN 30
Video
30
192.168.30.1
1
VLAN 40
Video
40
192.168.40.1
0
Total 4
10/page
1
Go to
1
We now have our three VLANs configured, we are now going to go to the main UI to configure PIM.
Create AV Template
Audio AES67
To connect IP Audio AES67 devices and their controller

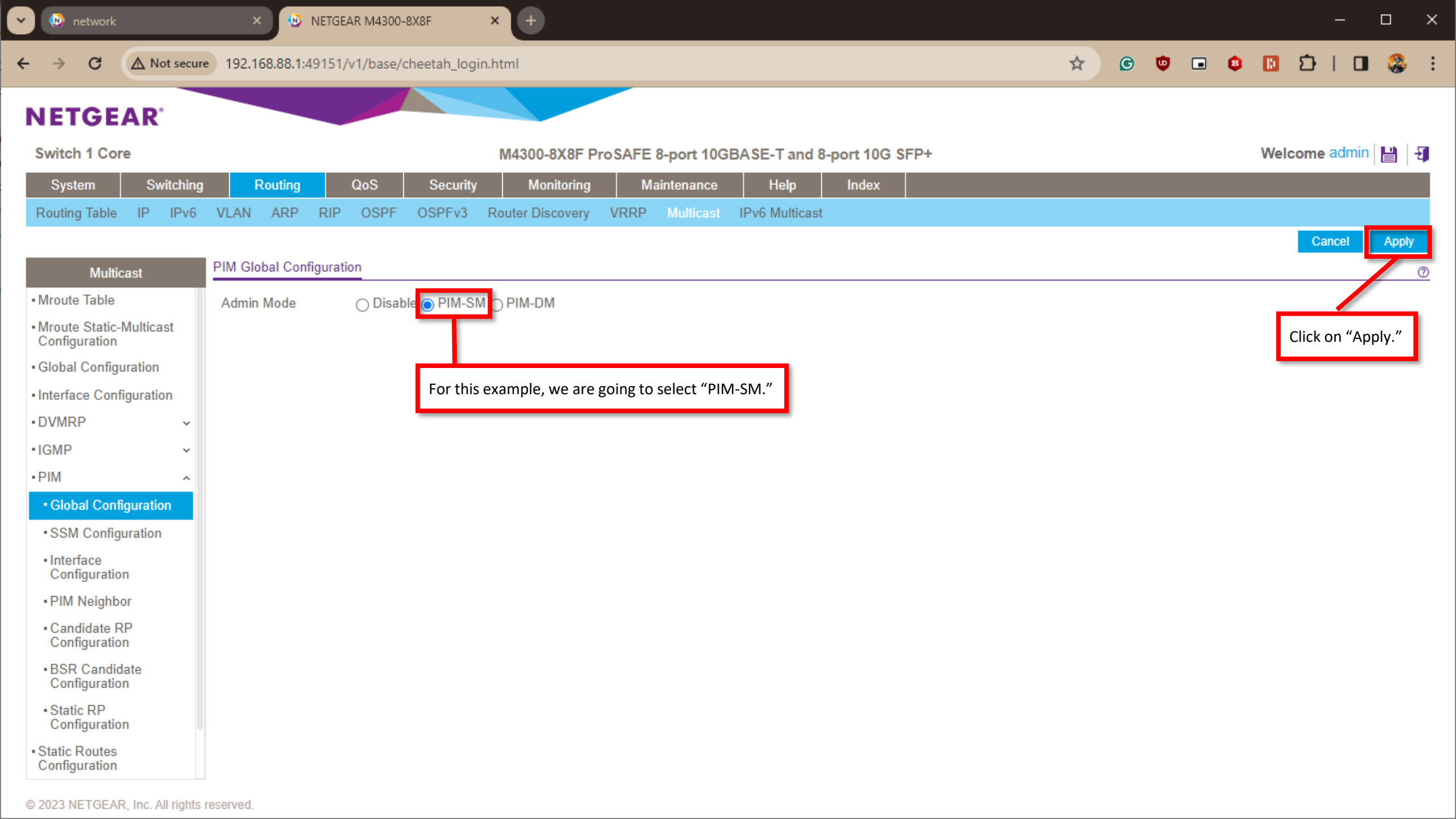

M4300-8X8F
Not secure
192.168.88.1/#/configure/virtualNetworks
NETGEAR
Dark Theme
Save
Reboot
Question/Help
admin
Logout
PoE Disabled
Force Multicast
1G SFP Fiber Port
10G SFP+ Fiber Port
Crestron Device Connected
Visionary Device Connected
NUCLEUS Device Connected
Click on the drop-down icon next to “admin” and click on “Logout.”
Configured Profiles
Edit the Default Profile VLAN 1 to change its profile template
Profile Name
Profile type
VLAN ID
IP Address
# of Assigned Ports
Default
Video
1
192.168.88.1
14
VLAN 20
Video
20
192.168.20.1
1
VLAN 30
Video
30
192.168.30.1
1
VLAN 40
Video
40
192.168.40.1
0
Total 4
10/page
1
Go to
1
Profile Templates
Create AV Template
Audio AES67
To connect IP Audio AES67 devices and their controller

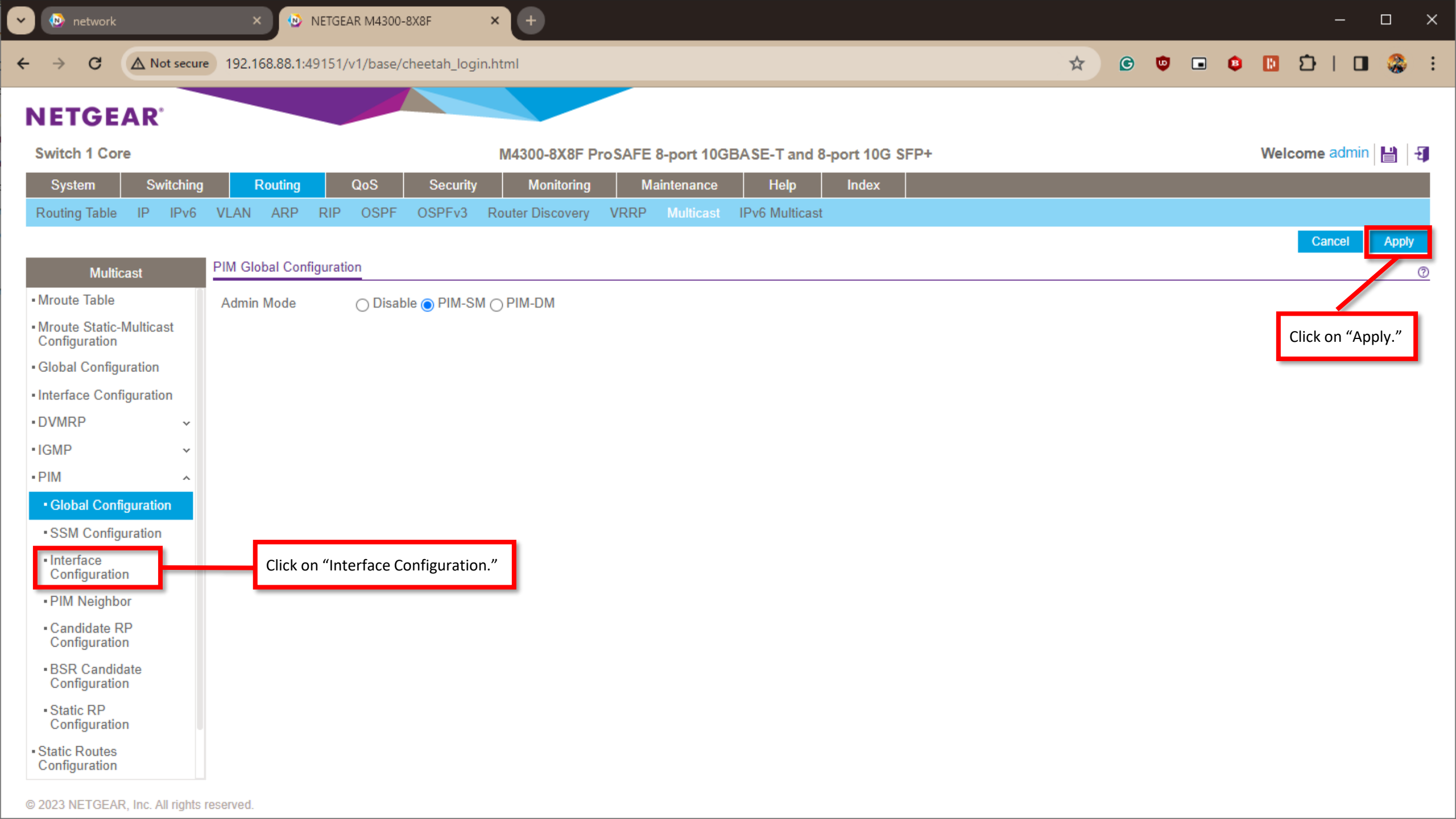

network
Not secure
192.168.88.1/#/login
NETGEAR®
Login Name
Password
AV UI Login
Main UI allows for advanced network configuration setup with additional network switching features.
Main UI Login
Click on “Main UI Login.”

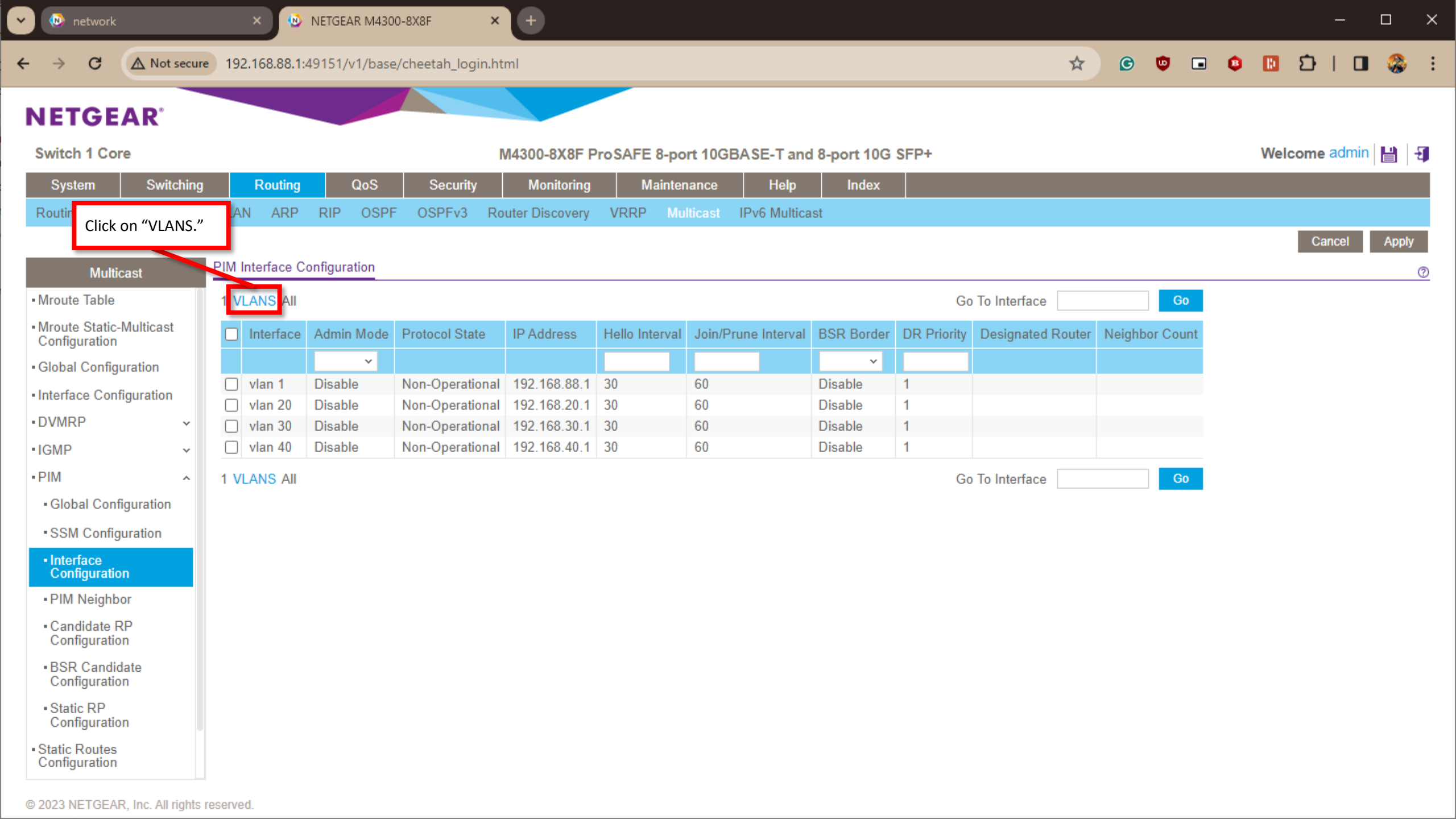

network
NETGEAR M4300-8X8F
Not secure
192.168.88.1:49151/v1/base/cheetah_login.html
NETGEAR
Switch 1 Core
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+
Login
Username*
admin
Password
Login
Login to the main UI.

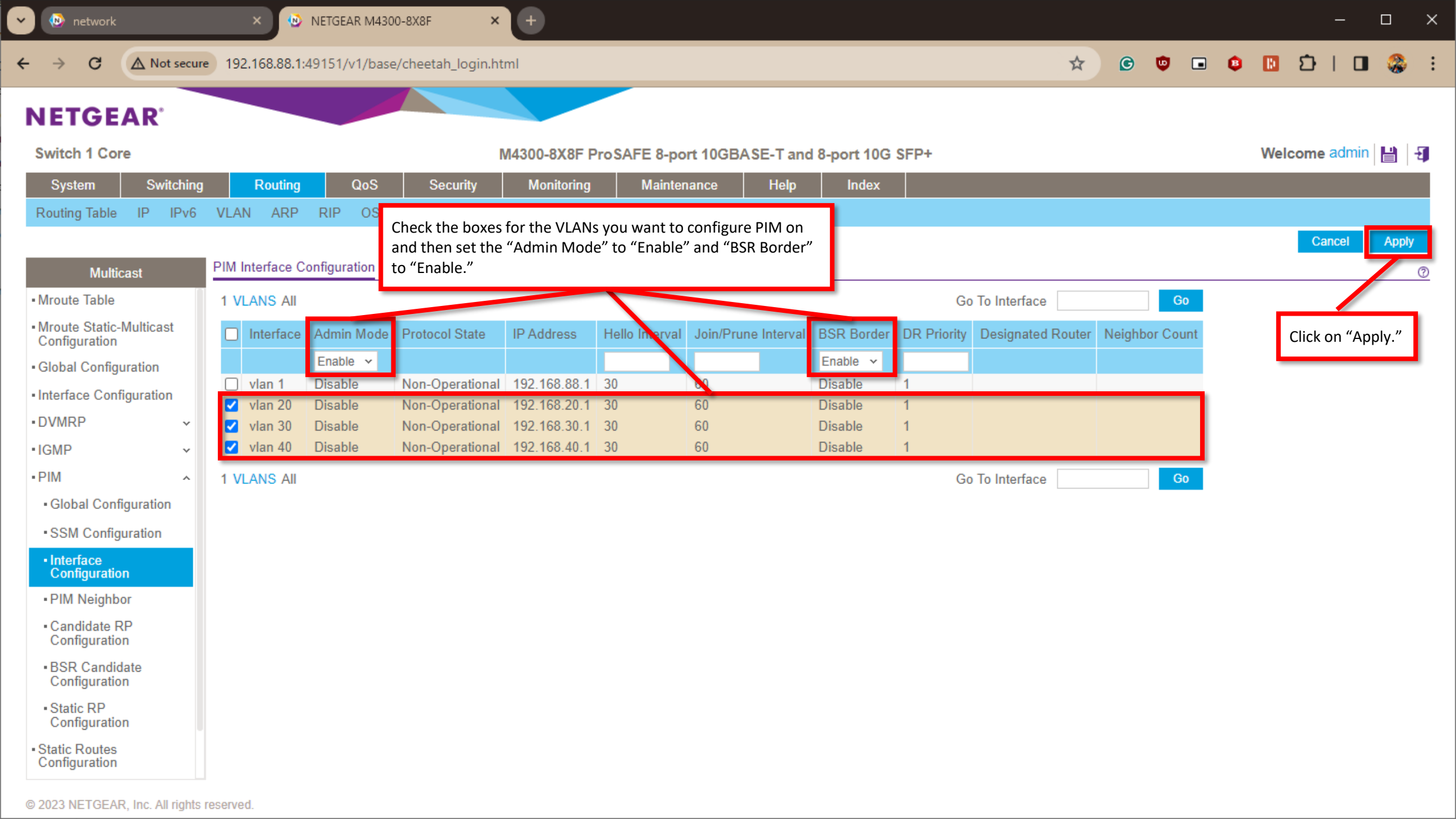

network
NETGEAR M4300-8X8F
Not secure
192.168.88.1:49151/v1/base/cheetah_login.html
Click on “Routing.”
NETGEAR
Switch 1 Core
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+
Welcome admin
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
Management
Device View
Services
Stacking
SNMP
LLDP
Link Dependency
ISDP
Timer Schedule
Apply
Cancel
Refresh
Management
System Information
System CPU Status
Switch Statistics
USB Device Information
Slot Information
Loopback Interface
Management Interfaces
Time
DNS
SDM Template Preference
Green Ethernet
Bonjour
PTP TC
TFTP Server
Application Information
App Name
App Status
Version
AVUI
Running
2.2.6.9
RestAgent
Operational
2.0.2.41
discAgent
Running
1.0.0.5
System Information
Product Name
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+, 12.0.17.16, B1.0.0.17
System Name
Switch 1 Core
System Location
System Contact
Login Timeout
120
(0 to 160) mins
Management Source Interface
VLAN 1
IPv4 Management Address
192.168.88.1/255.255.255.0
IPv6 Management Address
IPv4 Management Interface
VLAN 1
IPv6 Management Interface
IPv4 Loopback Interface
IPv6 Loopback Interface
System Date
Dec 27 06:15:39 2023 (UTC+0:00)
© 2023 NETGEAR, Inc. All rights reserved.

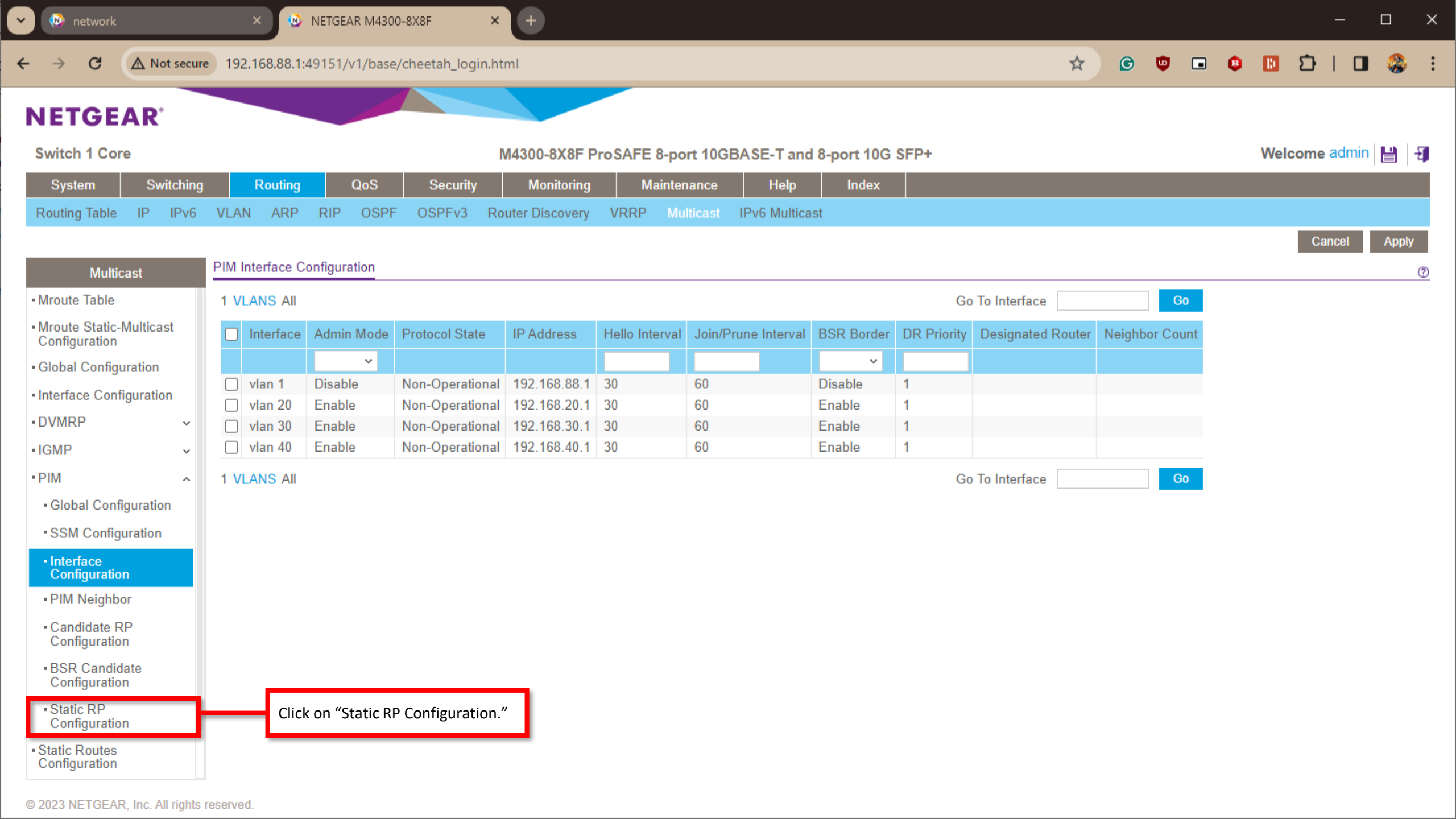

network
NETGEAR M4300-8X8F
Not secure
192.168.88.1:49151/v1/base/cheetah_login.html
NETGEAR
Switch 1 Core
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+
Welcome admin
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
Routing Table
IP
IPv6
VLAN
ARP
RIP
OSPF
OSPFv3
Router Discovery
VRRP
Multicast
IPv6 Multicast
Refresh
Multicast
Mroute Table
Mroute Static-Multicast Configuration
Global Configuration
Interface Configuration
DVMRP
IGMP
PIM
Static Routes Configuration
Admin Boundary Configuration
Mroute Table
Group IP
Source IP
Incoming Interface
Outgoing Interfaces
Up Time(hh:mm:ss)
Expiry Time(hh:mm:ss)
RPF Neighbor
Protocol
Flags
Go to the “Multicast” tab.
Then click on “PIM.”
© 2023 NETGEAR, Inc. All rights reserved.

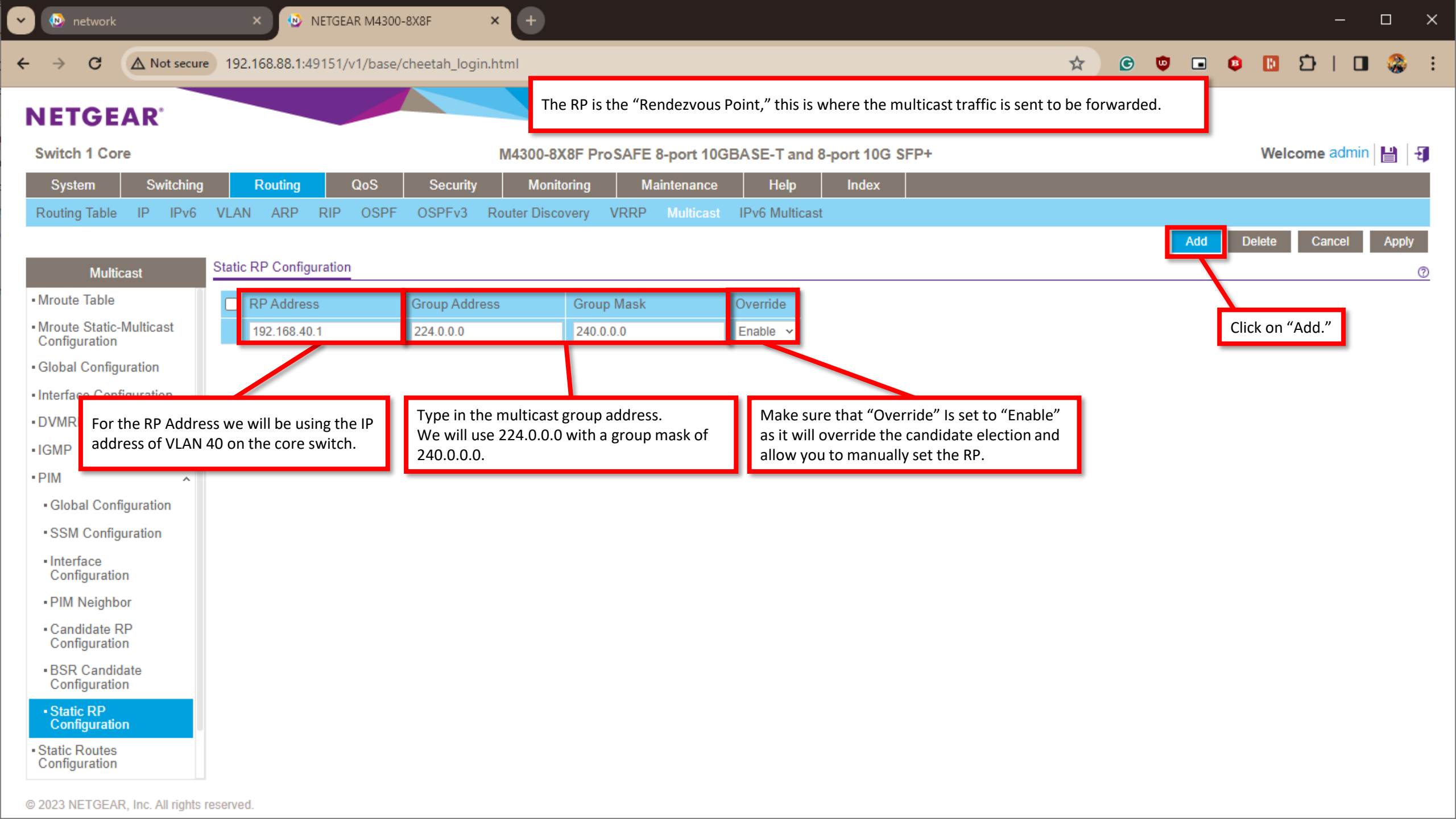

network
NETGEAR M4300-8X8F
Not secure
192.168.88.1:49151/v1/base/cheetah_login.html
NETGEAR
Switch 1 Core
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+
Welcome admin
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
Routing Table
IP
IPv6
VLAN
ARP
RIP
OSPF
OSPFv3
Router Discovery
VRRP
Multicast
IPv6 Multicast
Cancel
Apply
Multicast
Mroute Table
Mroute Static-Multicast Configuration
Global Configuration
Interface Configuration
DVMRP
IGMP
PIM
Global Configuration
SSM Configuration
Interface Configuration
PIM Neighbor
Candidate RP Configuration
BSR Candidate Configuration
Static RP Configuration
Static Routes Configuration
PIM Global Configuration
Admin Mode
Disable
PIM-SM
PIM-DM
For this example, we are going to select “PIM-SM.”
Click on “Apply.”
© 2023 NETGEAR, Inc. All rights reserved.

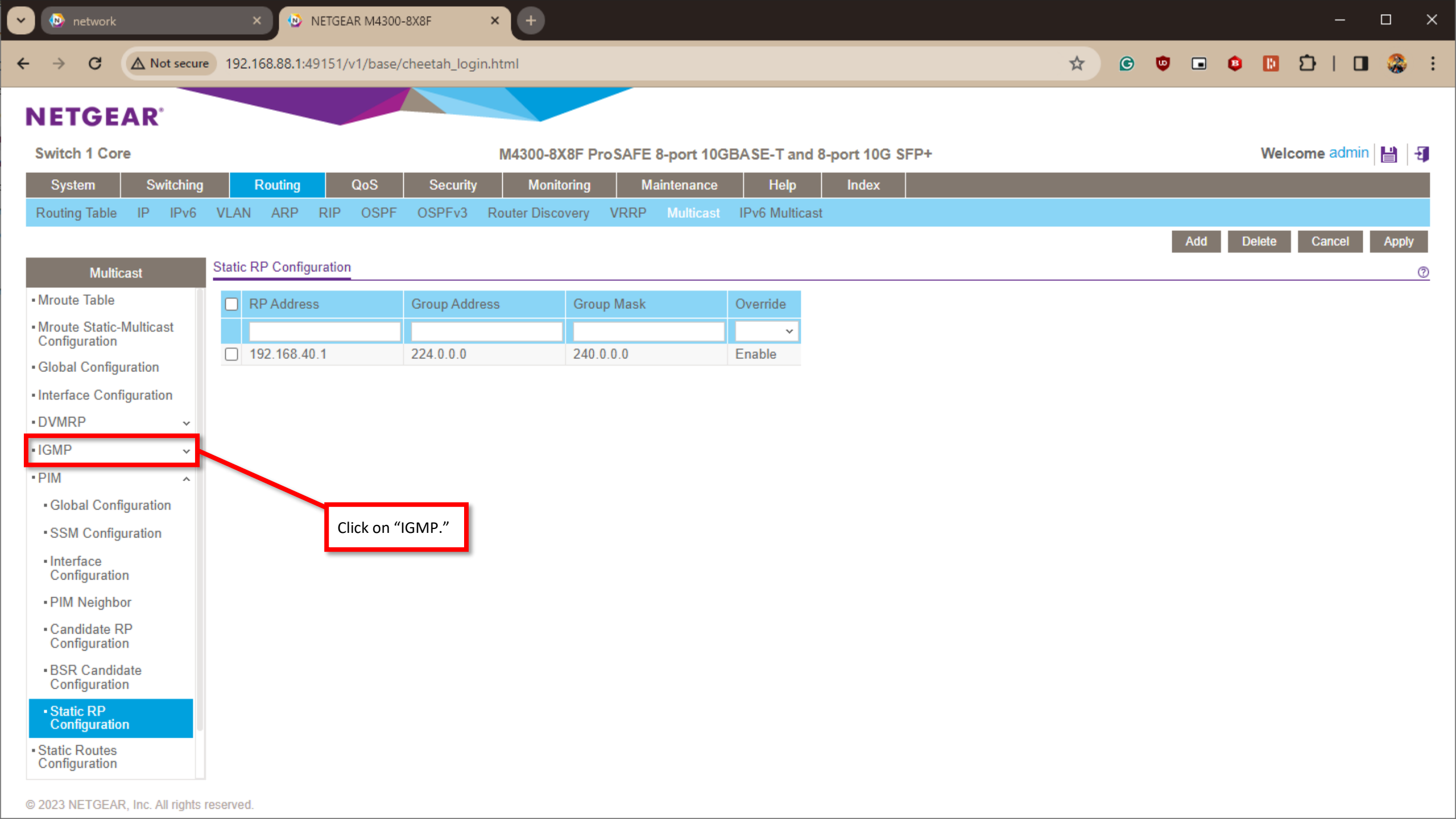

network
NETGEAR M4300-8X8F
Not secure
192.168.88.1:49151/v1/base/cheetah_login.html
NETGEAR
Switch 1 Core
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+
Welcome admin
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
Routing Table
IP
IPv6
VLAN
ARP
RIP
OSPF
OSPFv3
Router Discovery
VRRP
Multicast
IPv6 Multicast
Cancel
Apply
Multicast
Mroute Table
Mroute Static-Multicast Configuration
Global Configuration
Interface Configuration
DVMRP
IGMP
PIM
Global Configuration
SSM Configuration
Interface Configuration
PIM Neighbor
Candidate RP Configuration
BSR Candidate Configuration
Static RP Configuration
Static Routes Configuration
PIM Global Configuration
Admin Mode
Disable
PIM-SM
PIM-DM
Click on “Apply.”
Click on “Interface Configuration.”
© 2023 NETGEAR, Inc. All rights reserved.

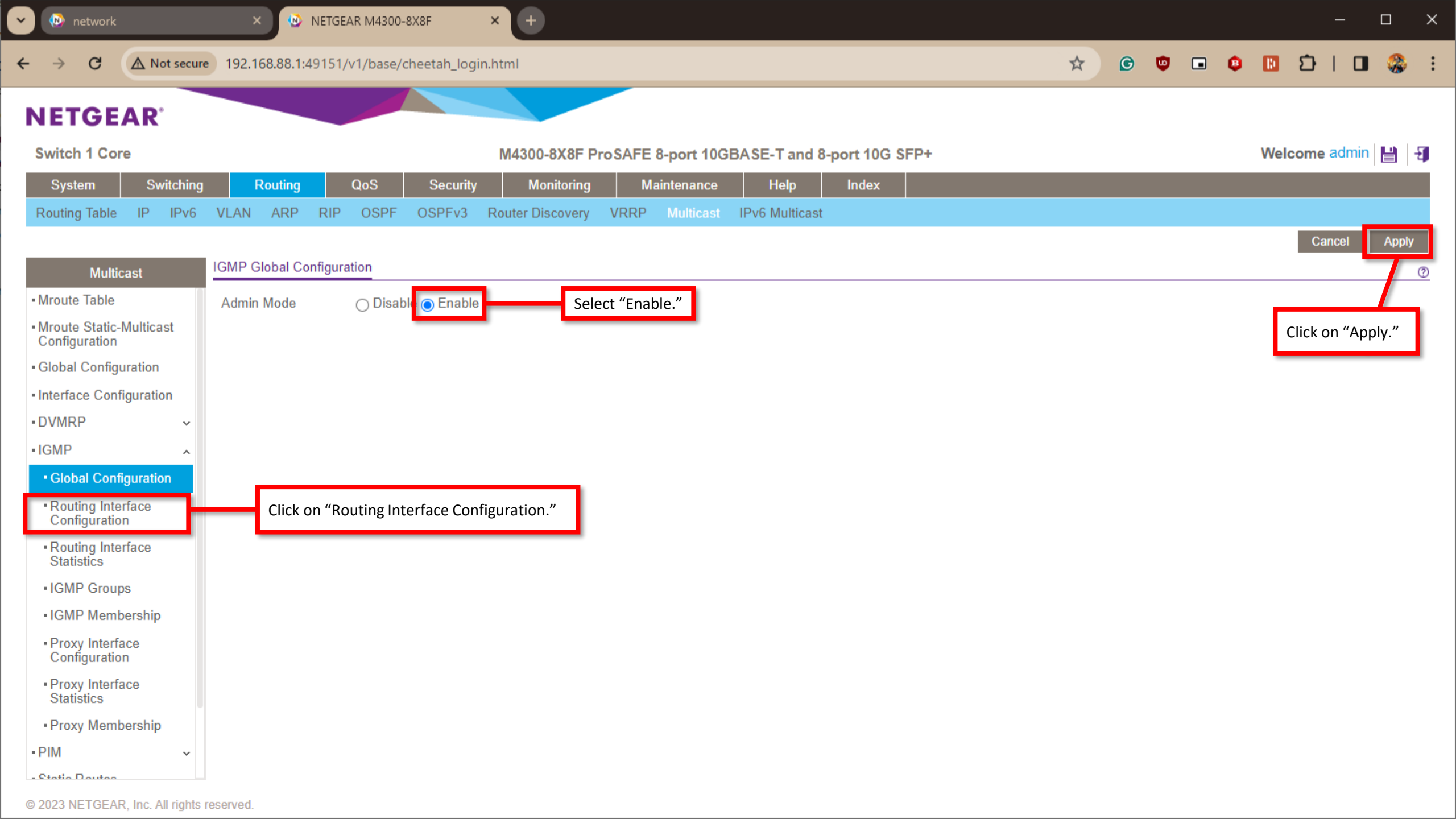

network
NETGEAR M4300-8X8F
Not secure
192.168.88.1:49151/v1/base/cheetah_login.html
NETGEAR
Switch 1 Core
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+
Welcome admin
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
Routin
LAN
ARP
RIP
OSPF
OSPFv3
Router Discovery
VRRP
Multicast
IPv6 Multicast
Click on “VLANS.”
Cancel
Apply
Multicast
Mroute Table
Mroute Static-Multicast Configuration
Global Configuration
Interface Configuration
DVMRP
IGMP
PIM
Global Configuration
SSM Configuration
Interface Configuration
PIM Neighbor
Candidate RP Configuration
BSR Candidate Configuration
Static RP Configuration
Static Routes Configuration
PIM Interface Configuration
1 VLANS All
Go To Interface
Go
Interface
Admin Mode
Protocol State
IP Address
Hello Interval
Join/Prune Interval
BSR Border
DR Priority
Designated Router
Neighbor Count
vlan 1 Disable Non-Operational 192.168.88.1 30 60 Disable 1
vlan 20 Disable Non-Operational 192.168.20.1 30 60 Disable 1
vlan 30 Disable Non-Operational 192.168.30.1 30 60 Disable 1
vlan 40 Disable Non-Operational 192.168.40.1 30 60 Disable 1
1 VLANS All
Go To Interface
Go
© 2023 NETGEAR, Inc. All rights reserved.

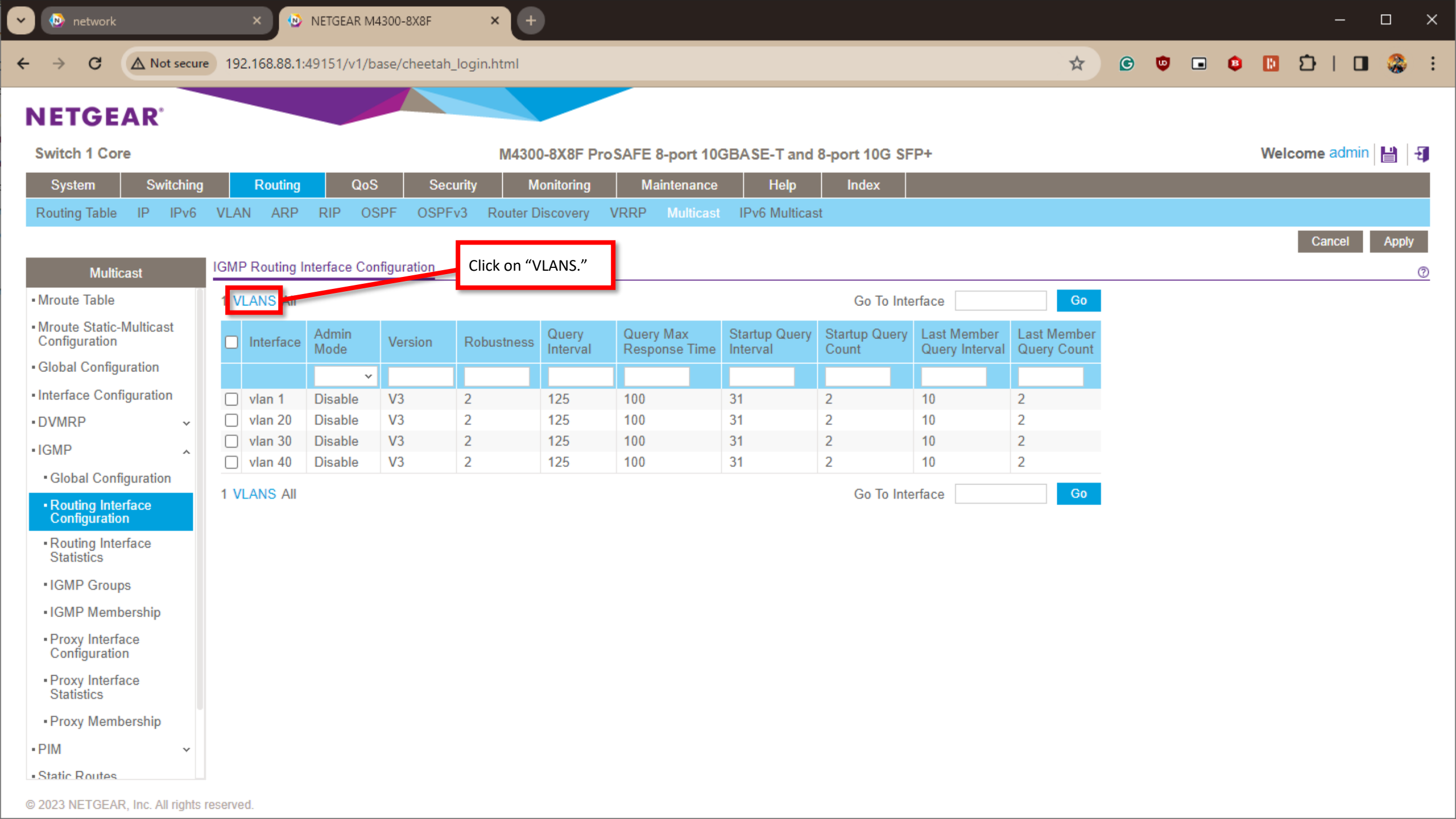

network
NETGEAR M4300-8X8F
Not secure
192.168.88.1:49151/v1/base/cheetah_login.html
NETGEAR
Switch 1 Core
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+
Welcome admin
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
Routing Table
IP
IPv6
VLAN
ARP
RIP
Check the boxes for the VLANs you want to configure PIM on and then set the “Admin Mode” to “Enable” and “BSR Border” to “Enable.”
Cancel
Apply
Click on “Apply.”
Multicast
Mroute Table
Mroute Static-Multicast Configuration
Global Configuration
Interface Configuration
DVMRP
IGMP
PIM
Global Configuration
SSM Configuration
Interface Configuration
PIM Neighbor
Candidate RP Configuration
BSR Candidate Configuration
Static RP Configuration
Static Routes Configuration
PIM Interface Configuration
1 VLANS All
Go To Interface
Go
Interface
Admin Mode
Protocol State
IP Address
Hello Interval
Join/Prune Interval
BSR Border
DR Priority
Designated Router
Neighbor Count
Enable
vlan 1 Disable Non-Operational 192.168.88.1 30 60 Disable 1
vlan 20 Disable Non-Operational 192.168.20.1 30 60 Disable 1
vlan 30 Disable Non-Operational 192.168.30.1 30 60 Disable 1
vlan 40 Disable Non-Operational 192.168.40.1 30 60 Disable 1
1 VLANS All
Go To Interface
Go
© 2023 NETGEAR, Inc. All rights reserved.

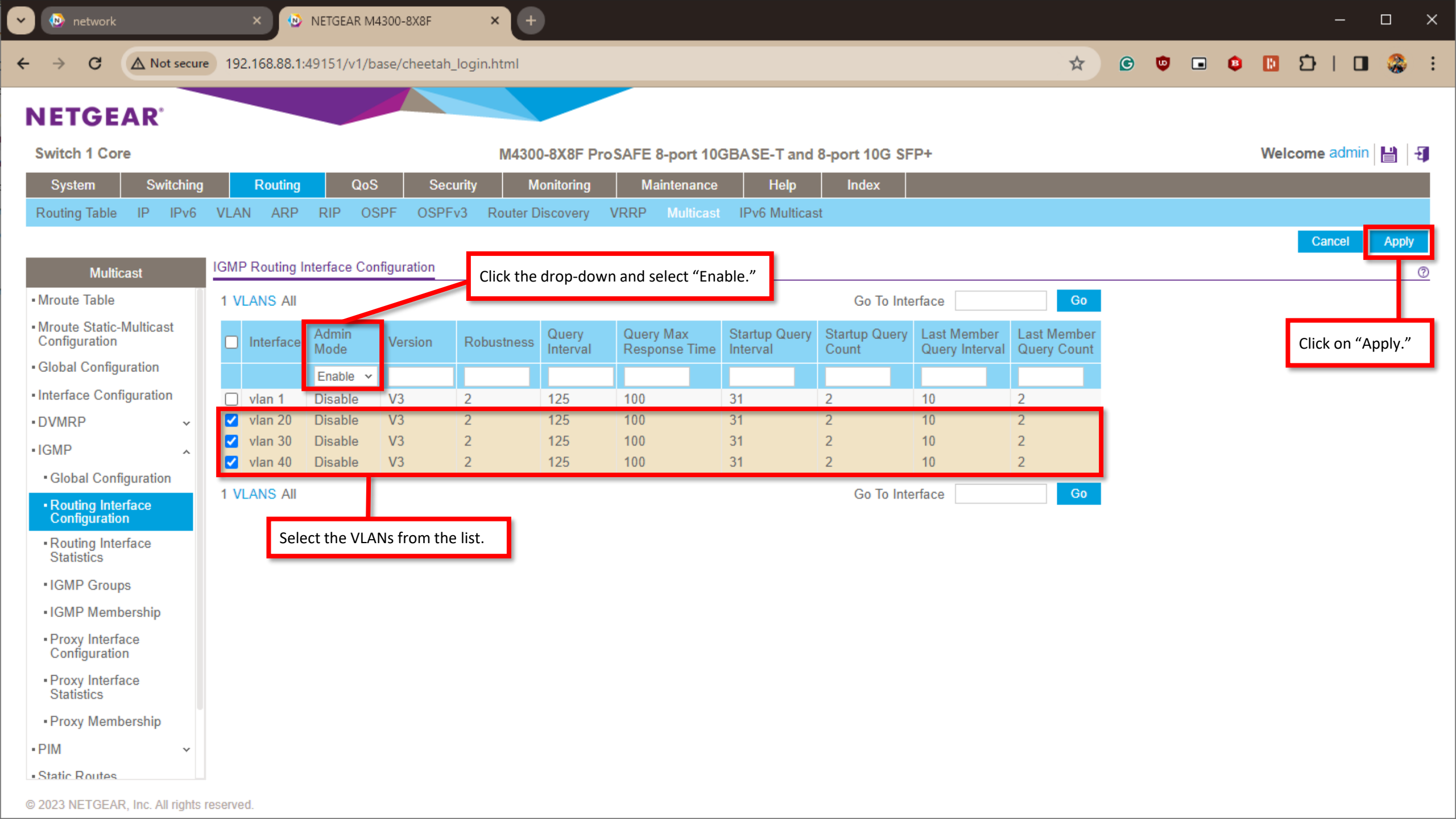

network
NETGEAR M4300-8X8F
Not secure
192.168.88.1:49151/v1/base/cheetah_login.html
NETGEAR
Switch 1 Core
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+
Welcome admin
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
Routing Table
IP
IPv6
VLAN
ARP
RIP
OSPF
OSPFv3
Router Discovery
VRRP
Multicast
IPv6 Multicast
Cancel
Apply
Multicast
Mroute Table
Mroute Static-Multicast Configuration
Global Configuration
Interface Configuration
DVMRP
IGMP
PIM
Global Configuration
SSM Configuration
Interface Configuration
PIM Neighbor
Candidate RP Configuration
BSR Candidate Configuration
Static RP Configuration
Static Routes Configuration
PIM Interface Configuration
1 VLANS All
Go To Interface
Go
Interface
Admin Mode
Protocol State
IP Address
Hello Interval
Join/Prune Interval
BSR Border
DR Priority
Designated Router
Neighbor Count
vlan 1 Disable Non-Operational 192.168.88.1 30 60 Disable 1
vlan 20 Enable Non-Operational 192.168.20.1 30 60 Enable 1
vlan 30 Enable Non-Operational 192.168.30.1 30 60 Enable 1
vlan 40 Enable Non-Operational 192.168.40.1 30 60 Enable 1
1 VLANS All
Go To Interface
Go
Click on “Static RP Configuration.”
© 2023 NETGEAR, Inc. All rights reserved.

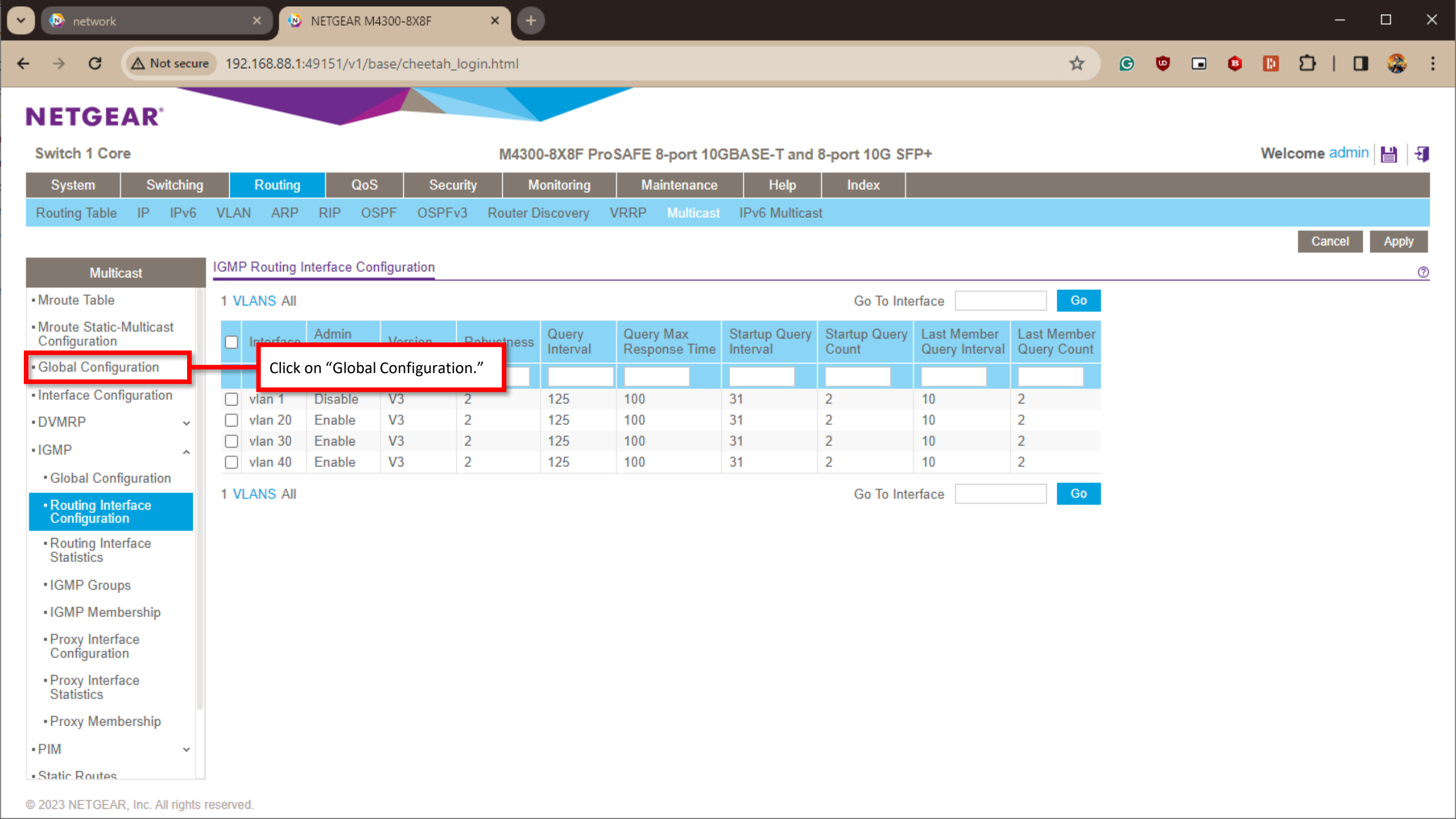

network
NETGEAR M4300-8X8F
Not secure
192.168.88.1:49151/v1/base/cheetah_login.html
NETGEAR
The RP is the “Rendezvous Point,” this is where the multicast traffic is sent to be forwarded.
Switch 1 Core
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+
Welcome admin
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
Routing Table
IP
IPv6
VLAN
ARP
RIP
OSPF
OSPFv3
Router Discovery
VRRP
Multicast
IPv6 Multicast
Add
Delete
Cancel
Apply
Multicast
Mroute Table
Mroute Static-Multicast Configuration
Global Configuration
Interface Configuration
DVMR
IGMP
PIM
Global Configuration
SSM Configuration
Interface Configuration
PIM Neighbor
Candidate RP Configuration
BSR Candidate Configuration
Static RP Configuration
Static Routes Configuration
Static RP Configuration
RP Address
Group Address
Group Mask
Override
192.168.40.1
224.0.0.0
240.0.0.0
Enable
Click on “Add.”
For the RP Address we will be using the IP address of VLAN 40 on the core switch.
Type in the multicast group address.
We will use 224.0.0.0 with a group mask of 240.0.0.0.
Make sure that “Override” Is set to “Enable” as it will override the candidate election and allow you to manually set the RP.
© 2023 NETGEAR, Inc. All rights reserved.

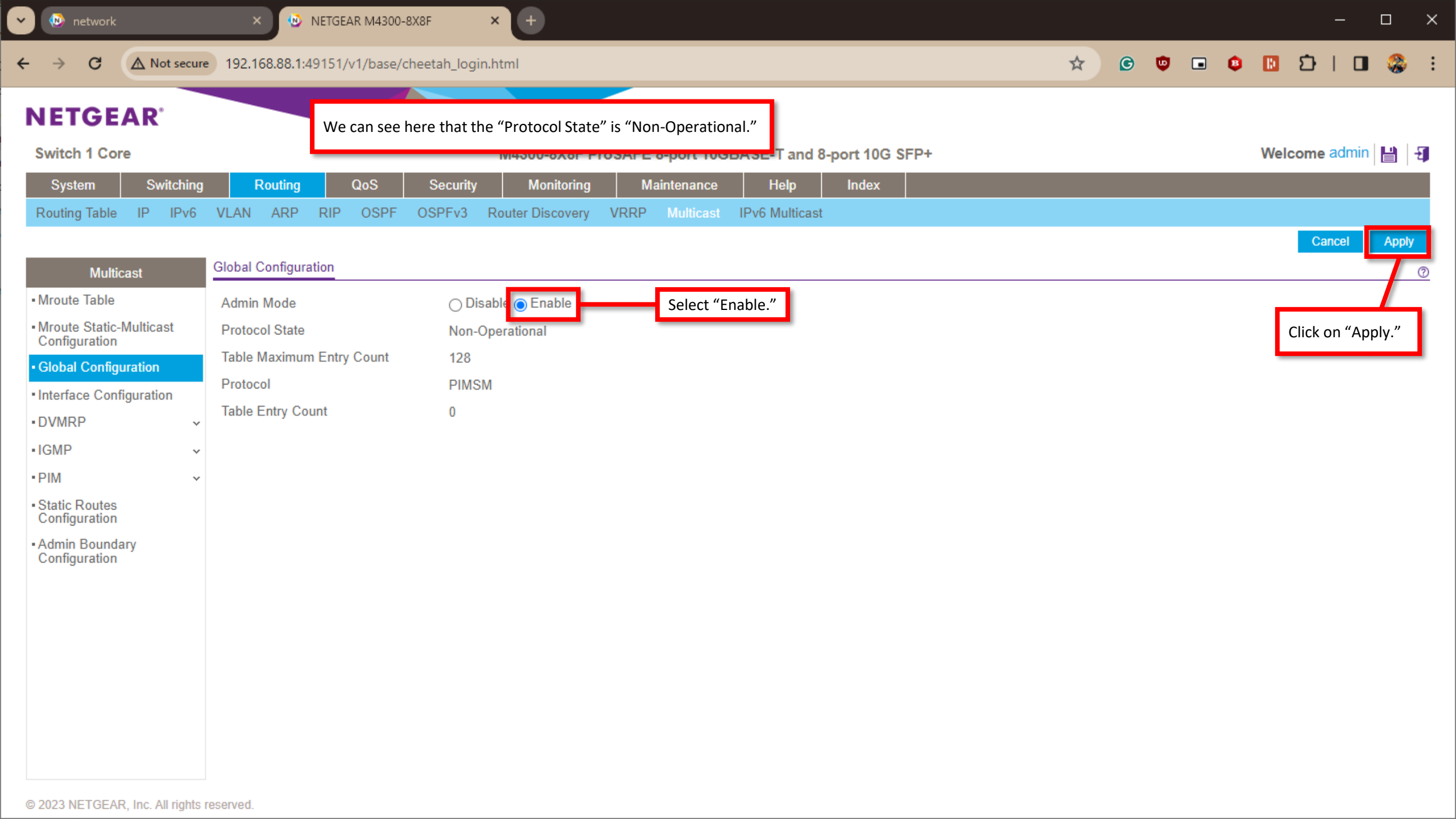

network
NETGEAR M4300-8X8F
Not secure
192.168.88.1:49151/v1/base/cheetah_login.html
NETGEAR
Switch 1 Core
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+
Welcome admin
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
Routing Table
IP
IPv6
VLAN
ARP
RIP
OSPF
OSPFv3
Router Discovery
VRRP
Multicast
IPv6 Multicast
Add
Delete
Cancel
Apply
Multicast
Mroute Table
Mroute Static-Multicast Configuration
Global Configuration
Interface Configuration
DVMRP
IGMP
PIM
Global Configuration
SSM Configuration
Interface Configuration
PIM Neighbor
Candidate RP Configuration
BSR Candidate Configuration
Static RP Configuration
Static Routes Configuration
Static RP Configuration
RP Address
Group Address
Group Mask
Override
192.168.40.1
224.0.0.0
240.0.0.0
Enable
Click on “IGMP.”
© 2023 NETGEAR, Inc. All rights reserved.

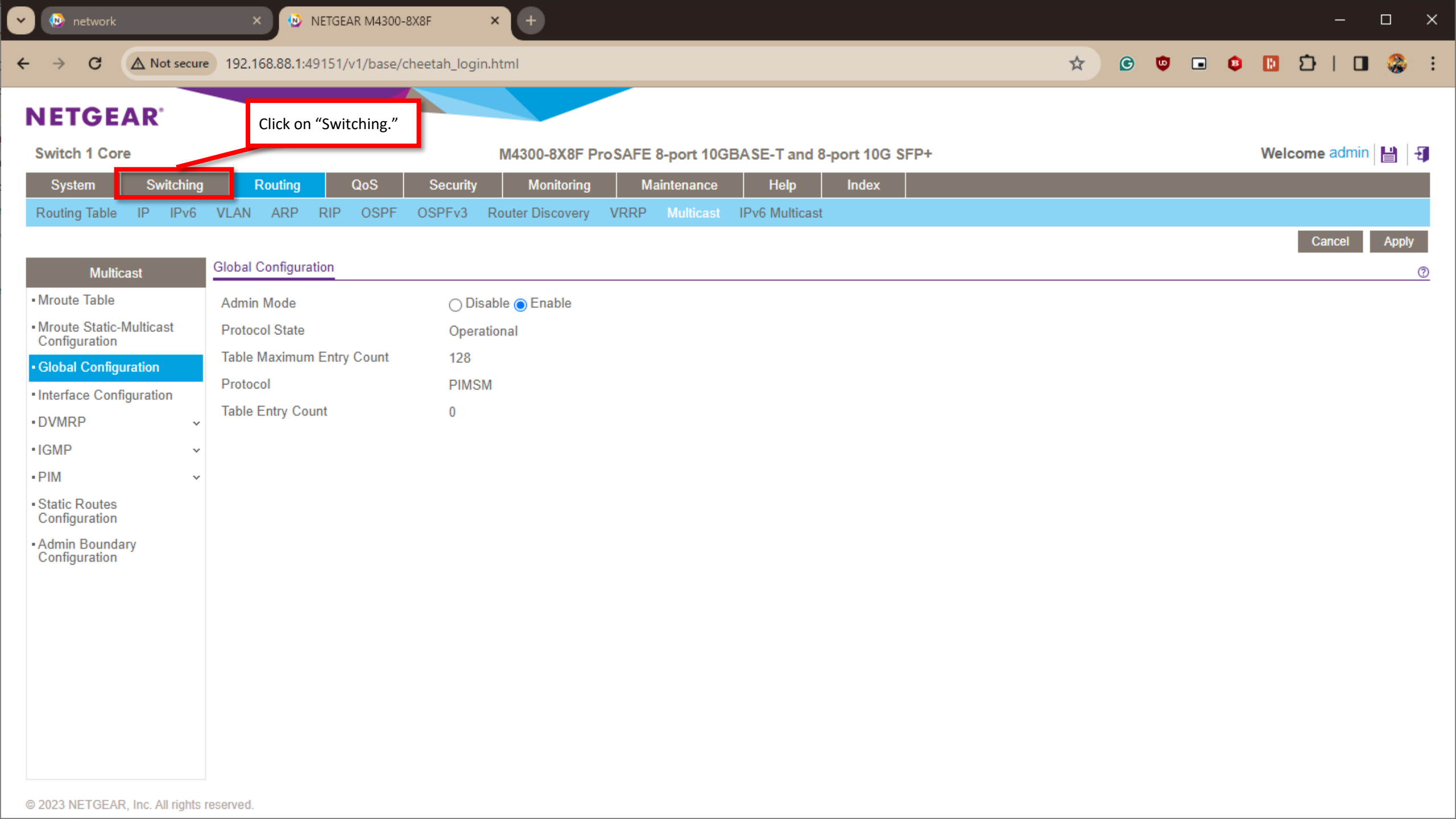

network
NETGEAR M4300-8X8F
Not secure
192.168.88.1:49151/v1/base/cheetah_login.html
NETGEAR
Switch 1 Core
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+
Welcome admin
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
Routing Table
IP
IPv6
VLAN
ARP
RIP
OSPF
OSPFv3
Router Discovery
VRRP
Multicast
IPv6 Multicast
Cancel
Apply
Multicast
Mroute Table
Mroute Static-Multicast Configuration
Global Configuration
Interface Configuration
DVMRP
IGMP
Global Configuration
Routing Interface Configuration
Routing Interface Statistics
IGMP Groups
IGMP Membership
Proxy Interface Configuration
Proxy Interface Statistics
Proxy Membership
PIM
IGMP Global Configuration
Admin Mode
Disable
Enable
Select “Enable.”
Click on “Apply.”
Click on “Routing Interface Configuration.”
© 2023 NETGEAR, Inc. All rights reserved.

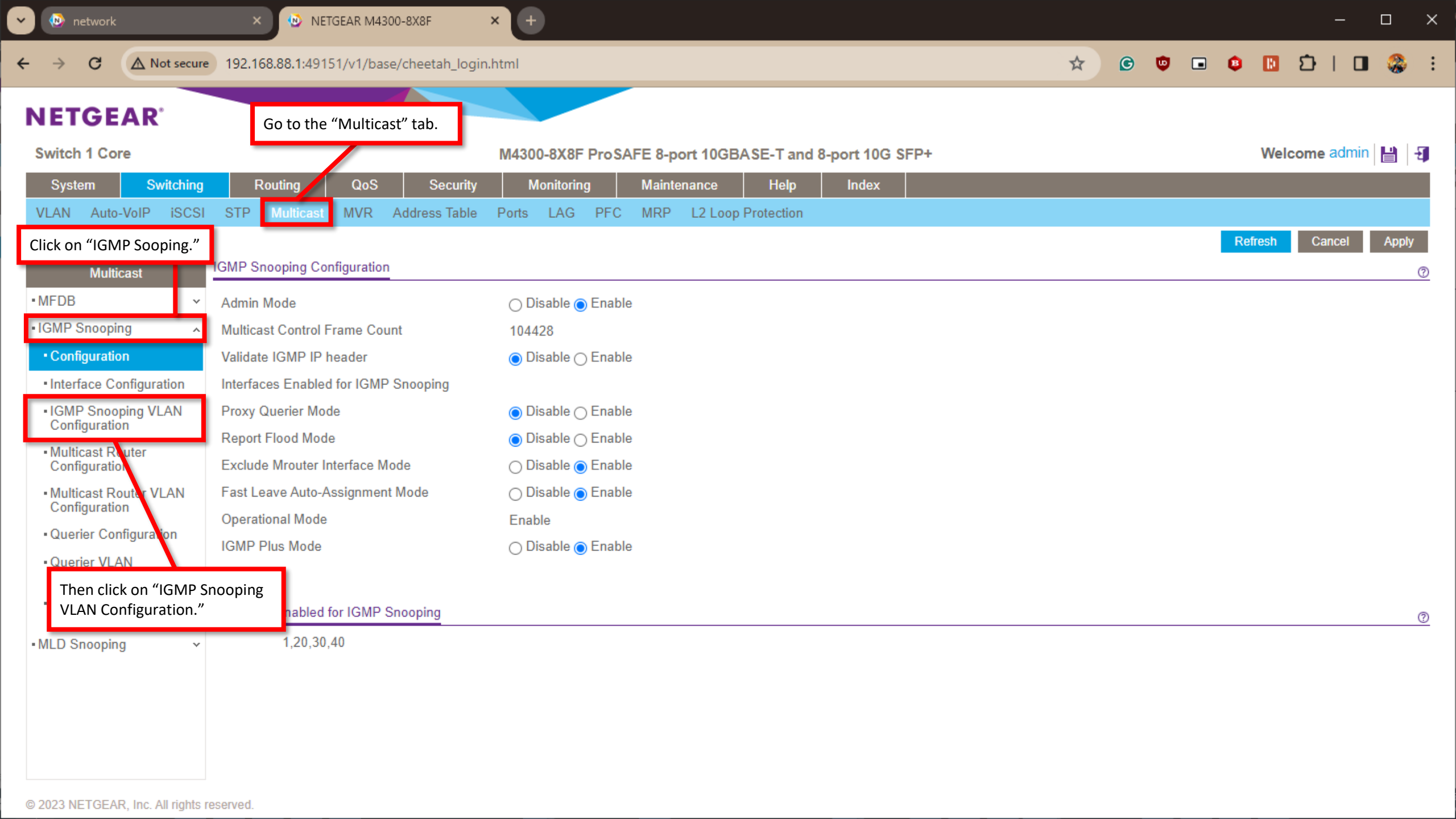

network
NETGEAR M4300-8X8F
Not secure
192.168.88.1:49151/v1/base/cheetah_login.html
NETGEAR
Switch 1 Core
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+
Welcome admin
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
Routing Table
IP
IPv6
VLAN
ARP
RIP
OSPF
OSPFv3
Router Discovery
VRRP
Multicast
IPv6 Multicast
Cancel
Apply
Multicast
Mroute Table
Mroute Static-Multicast Configuration
Global Configuration
Interface Configuration
DVMRP
IGMP
Global Configuration
Routing Interface Configuration
Routing Interface Statistics
IGMP Groups
IGMP Membership
Proxy Interface Configuration
Proxy Interface Statistics
Proxy Membership
PIM
Static Routes
IGMP Routing Interface Configuration
Click on “VLANS.”
1 VLANS All
Go To Interface
Go
Interface
Admin Mode
Version
Robustness
Query Interval
Query Max Response Time
Startup Query Interval
Startup Query Count
Last Member Query Interval
Last Member Query Count
vlan 1 Disable V3 2 125 100 31 2 10 2
vlan 20 Disable V3 2 125 100 31 2 10 2
vlan 30 Disable V3 2 125 100 31 2 10 2
vlan 40 Disable V3 2 125 100 31 2 10 2
1 VLANS All
Go To Interface
Go
© 2023 NETGEAR, Inc. All rights reserved.

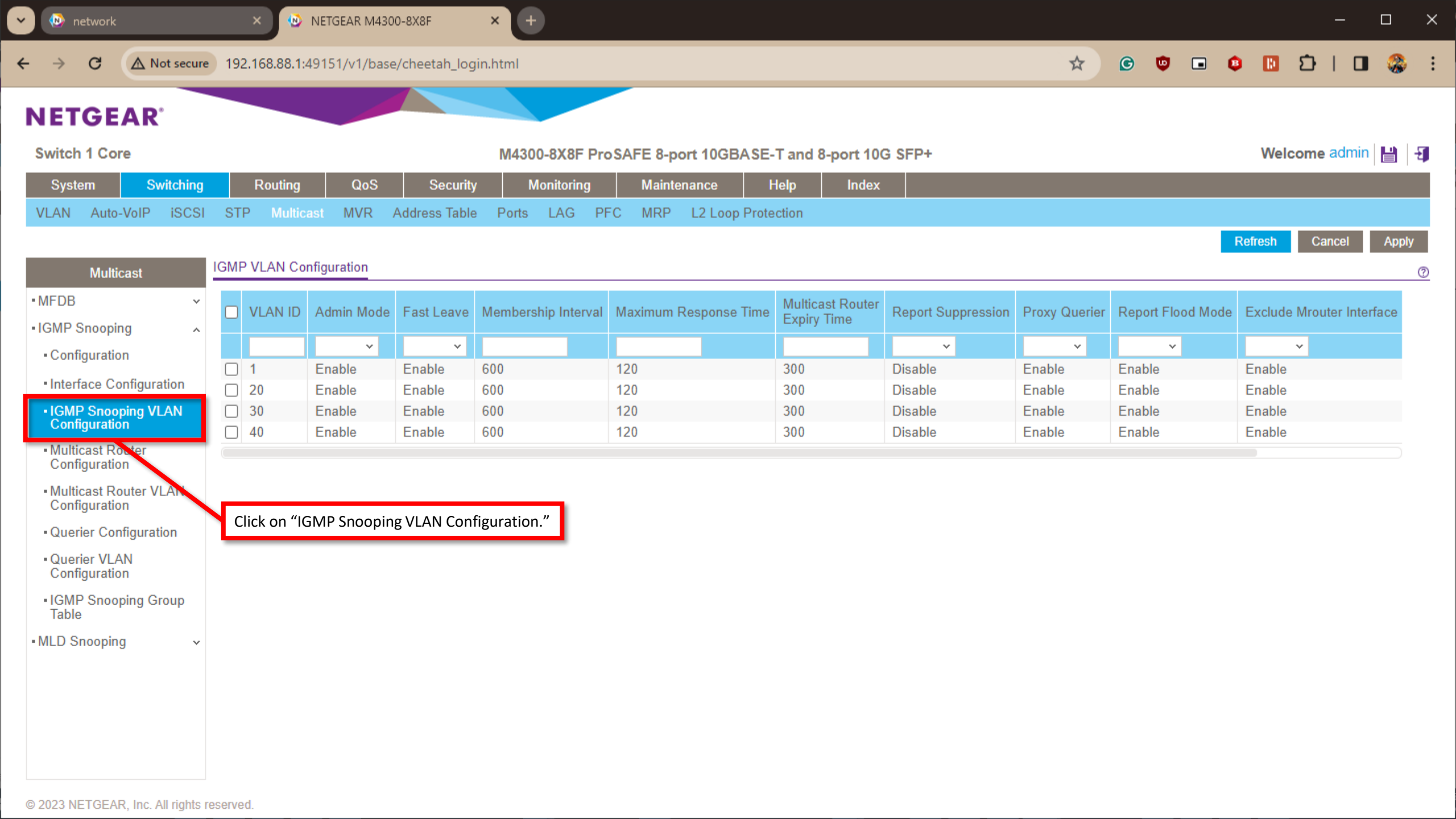

network
NETGEAR M4300-8X8F
Not secure
192.168.88.1:49151/v1/base/cheetah_login.html
NETGEAR
Switch 1 Core
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+
Welcome admin
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
Routing Table
IP
IPv6
VLAN
ARP
RIP
OSPF
OSPFv3
Router Discovery
VRRP
Multicast
IPv6 Multicast
Cancel
Apply
Multicast
Mroute Table
Mroute Static-Multicast Configuration
Global Configuration
Interface Configuration
DVMRP
IGMP
Global Configuration
Routing Interface Configuration
Routing Interface Statistics
IGMP Groups
IGMP Membership
Proxy Interface Configuration
Proxy Interface Statistics
Proxy Membership
PIM
Static Routes
IGMP Routing Interface Configuration
Click the drop-down and select “Enable.”
1 VLANS All
Go To Interface
Go
Interface
Admin Mode
Version
Robustness
Query Interval
Query Max Response Time
Startup Query Interval
Startup Query Count
Last Member Query Interval
Last Member Query Count
Enable
vlan 1 Disable V3 2 125 100 31 2 10 2
vlan 20 Disable V3 2 125 100 31 2 10 2
vlan 30 Disable V3 2 125 100 31 2 10 2
vlan 40 Disable V3 2 125 100 31 2 10 2
1 VLANS All
Go To Interface
Go
Select the VLANs from the list.
Click on “Apply.”
© 2023 NETGEAR, Inc. All rights reserved.

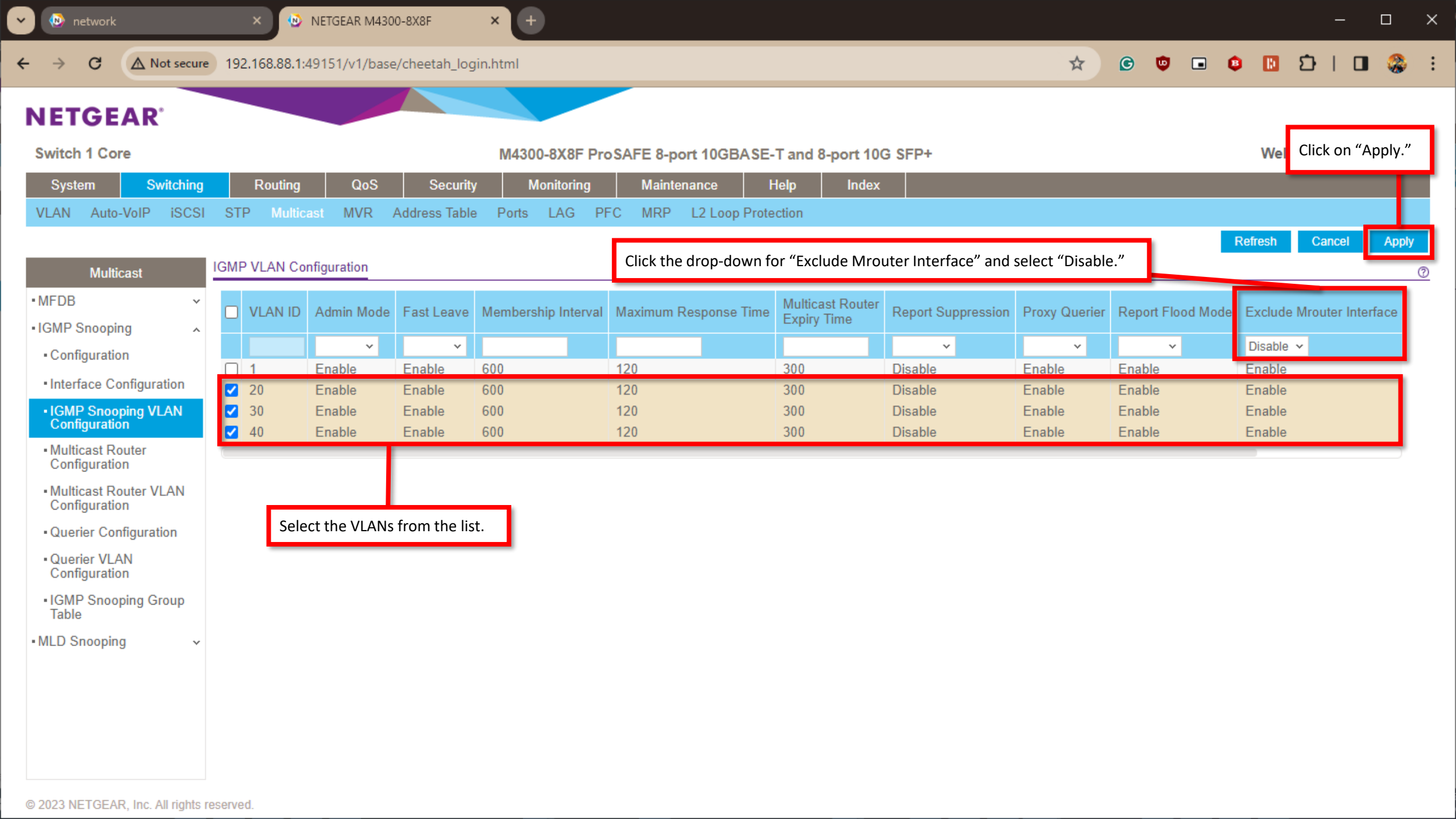

network
NETGEAR M4300-8X8F
Not secure
192.168.88.1:49151/v1/base/cheetah_login.html
NETGEAR
Switch 1 Core
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+
Welcome admin
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
Routing Table
IP
IPv6
VLAN
ARP
RIP
OSPF
OSPFv3
Router Discovery
VRRP
Multicast
IPv6 Multicast
Cancel
Apply
Multicast
Mroute Table
Mroute Static-Multicast Configuration
Global Configuration
Interface Configuration
DVMRP
IGMP
Global Configuration
Routing Interface Configuration
Routing Interface Statistics
IGMP Groups
IGMP Membership
Proxy Interface Configuration
Proxy Interface Statistics
Proxy Membership
PIM
Static Routes
IGMP Routing Interface Configuration
1 VLANS All
Go To Interface
Go
Interface
Admin
Version
Robustness
Query Interval
Query Max Response Time
Startup Query Interval
Startup Query Count
Last Member Query Interval
Last Member Query Count
vlan 1 Disable V3 2 125 100 31 2 10 2
vlan 20 Enable V3 2 125 100 31 2 10 2
vlan 30 Enable V3 2 125 100 31 2 10 2
vlan 40 Enable V3 2 125 100 31 2 10 2
1 VLANS All
Go To Interface
Go
Click on “Global Configuration.”
© 2023 NETGEAR, Inc. All rights reserved.


network
NETGEAR M4300-8X8F
Not secure
192.168.88.1:49151/v1/base/cheetah_login.html
NETGEAR
We can see here that the “Protocol State” is “Non-Operational.”
Switch 1 Core
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+
Welcome admin
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
Routing Table
IP
IPv6
VLAN
ARP
RIP
OSPF
OSPFv3
Router Discovery
VRRP
Multicast
IPv6 Multicast
Cancel
Apply
Multicast
Mroute Table
Mroute Static-Multicast Configuration
Global Configuration
Interface Configuration
DVMRP
IGMP
PIM
Static Routes Configuration
Admin Boundary Configuration
Global Configuration
Admin Mode
Disable
Enable
Select “Enable.”
Protocol State
Non-Operational
Table Maximum Entry Count
128
Protocol
PIMSM
Table Entry Count
0
Click on “Apply.”
© 2023 NETGEAR, Inc. All rights reserved.


network
NETGEAR M4300-8X8F
Not secure
192.168.88.1:49151/v1/base/cheetah_login.html
NETGEAR
Click on “Switching.”
Switch 1 Core
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+
Welcome admin
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
Routing Table
IP
IPv6
VLAN
ARP
RIP
OSPF
OSPFv3
Router Discovery
VRRP
Multicast
IPv6 Multicast
Cancel
Apply
Multicast
Mroute Table
Mroute Static-Multicast Configuration
Global Configuration
Interface Configuration
DVMRP
IGMP
PIM
Static Routes Configuration
Admin Boundary Configuration
Global Configuration
Admin Mode
Disable
Enable
Protocol State
Operational
Table Maximum Entry Count
128
Protocol
PIMSM
Table Entry Count
0
© 2023 NETGEAR, Inc. All rights reserved.


network
NETGEAR M4300-8X8F
Not secure
192.168.88.1:49151/v1/base/cheetah_login.html
NETGEAR
Go to the “Multicast” tab.
Switch 1 Core
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+
Welcome admin
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
VLAN
Auto-VoIP
iSCSI
STP
Multicast
MVR
Address Table
Ports
LAG
PFC
MRP
L2 Loop Protection
Click on “IGMP Sooping.”
Refresh
Cancel
Apply
Multicast
MFDB
IGMP Snooping
Configuration
Interface Configuration
IGMP Snooping VLAN Configuration
Multicast Router Configuration
Multicast Router VLAN Configuration
Querier Configuration
Querier VLAN
MLD Snooping
IGMP Snooping Configuration
Admin Mode
Disable
Enable
Multicast Control Frame Count
104428
Validate IGMP IP header
Disable
Enable
Interfaces Enabled for IGMP Snooping
Proxy Querier Mode
Disable
Enable
Report Flood Mode
Disable
Enable
Exclude Mrouter Interface Mode
Disable
Enable
Fast Leave Auto-Assignment Mode
Disable
Enable
Operational Mode
Enable
IGMP Plus Mode
Disable
Enable
Then click on “IGMP Snooping VLAN Configuration.”
nabled for IGMP Snooping
1,20,30,40
© 2023 NETGEAR, Inc. All rights reserved.


network
NETGEAR M4300-8X8F
Not secure
192.168.88.1:49151/v1/base/cheetah_login.html
NETGEAR
Switch 1 Core
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+
Welcome admin
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
VLAN
Auto-VoIP
iSCSI
STP
Multicast
MVR
Address Table
Ports
LAG
PFC
MRP
L2 Loop Protection
Refresh
Cancel
Apply
Multicast
MFDB
IGMP Snooping
Configuration
Interface Configuration
IGMP Snooping VLAN Configuration
Multicast Router Configuration
Multicast Router VLAN Configuration
Querier Configuration
Querier VLAN Configuration
IGMP Snooping Group Table
MLD Snooping
IGMP VLAN Configuration
VLAN ID
Admin Mode
Fast Leave
Membership Interval
Maximum Response Time
Multicast Router Expiry Time
Report Suppression
Proxy Querier
Report Flood Mode
Exclude Mrouter Interface
1 Enable Enable 600 120 300 Disable Enable Enable Enable
20 Enable Enable 600 120 300 Disable Enable Enable Enable
30 Enable Enable 600 120 300 Disable Enable Enable Enable
40 Enable Enable 600 120 300 Disable Enable Enable Enable
Click on “IGMP Snooping VLAN Configuration.”
© 2023 NETGEAR, Inc. All rights reserved.


network
NETGEAR M4300-8X8F
Not secure
192.168.88.1:49151/v1/base/cheetah_login.html
NETGEAR
Switch 1 Core
M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+
Wel
Click on “Apply.”
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
VLAN
Auto-VoIP
iSCSI
STP
Multicast
MVR
Address Table
Ports
LAG
PFC
MRP
L2 Loop Protection
Refresh
Cancel
Apply
Multicast
MFDB
IGMP Snooping
Configuration
Interface Configuration
IGMP Snooping VLAN Configuration
Multicast Router Configuration
Multicast Router VLAN Configuration
Querier Configuration
Querier VLAN Configuration
IGMP Snooping Group Table
MLD Snooping
IGMP VLAN Configuration
Click the drop-down for “Exclude Mrouter Interface” and select “Disable.”
VLAN ID
Admin Mode
Fast Leave
Membership Interval
Maximum Response Time
Multicast Router Expiry Time
Report Suppression
Proxy Querier
Report Flood Mode
Exclude Mrouter Interface
Disable
1 Enable Enable 600 120 300 Disable Enable Enable Enable
20 Enable Enable 600 120 300 Disable Enable Enable Enable
30 Enable Enable 600 120 300 Disable Enable Enable Enable
40 Enable Enable 600 120 300 Disable Enable Enable Enable
Select the VLANs from the list.
© 2023 NETGEAR, Inc. All rights reserved.

network | NETGEAR M4300-8X8F

Not secure 192.168.88.1:49151/v1/base/cheetah_login.html

NETGEAR

Switch 1 Core

M4300-8X8F ProSAFE 8-port 10GBASE-T and 8-port 10G SFP+

Welcome admin

System | Switching | Routing | QoS | Security | Monitoring | Maintenance | Help | Index

VLAN | Auto-VoIP | iSCSI | STP | Multicast | MVR | Address Table | Ports | LAG | PFC | MRP | L2 Loop Protection

Refresh | Cancel | Apply

Multicast

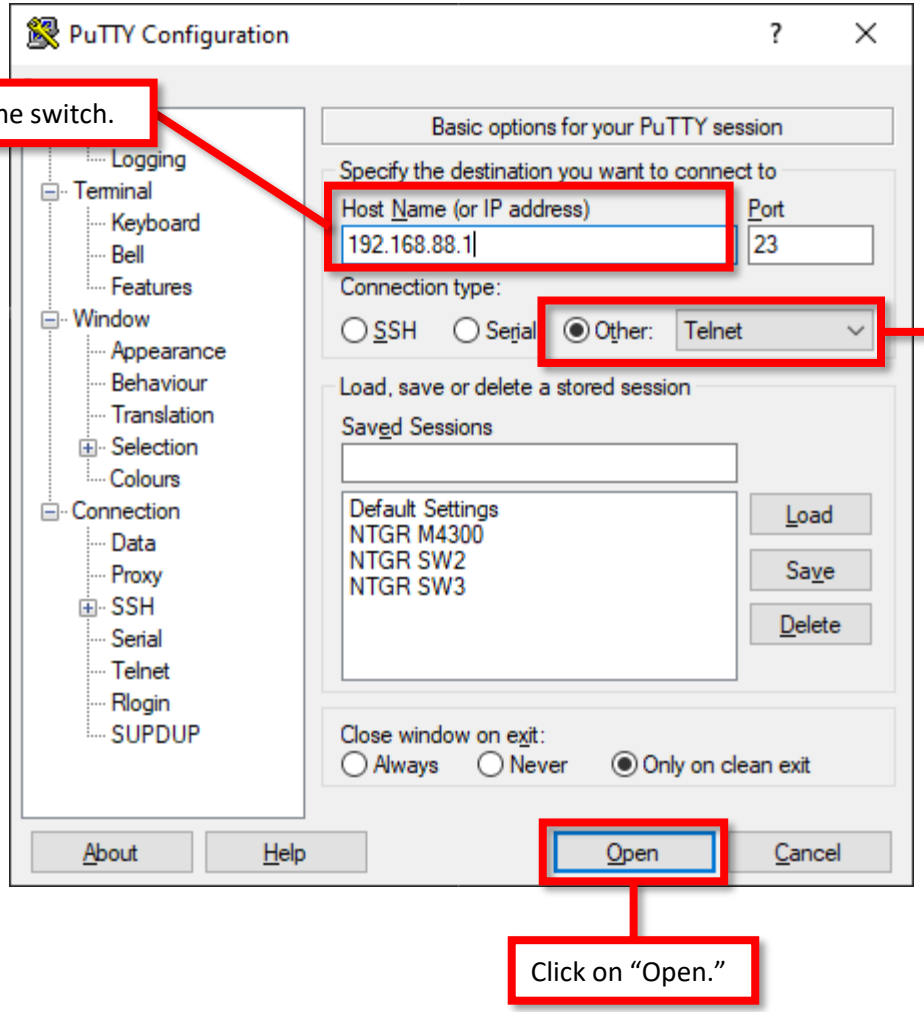
- MFDB
- IGMP Snooping
  - Configuration
  - Interface Configuration
  - IGMP Snooping VLAN Configuration
  - Multicast Router Configuration
  - Multicast Router VLAN Configuration
  - Querier Configuration
  - Querier VLAN Configuration
  - IGMP Snooping Group Table
- MLD Snooping

IGMP VLAN Configuration

VLAN ID	Admin Mode	Fast Leave	Membership Interval	Maximum Response Time	Multicast Router Expiry Time	Report Suppression	Proxy Querier	Report Flood Mode	Exclude Mrouter Interface
1	Enable	Enable	600	120	300	Disable	Enable	Enable	Enable
20	Enable	Enable	600	120	300	Disable	Enable	Enable	Disable
30	Enable	Enable	600	120	300	Disable	Enable	Enable	Disable
40	Enable	Enable	600	120	300	Disable	Enable	Enable	Disable

We now have most of the switch configured. We need to enable “No Autostate” on the VLAN that we are using as our RP, this can only be done via the CLI.

We are going to use “PuTTY” to connect to our switch via telnet.



Type in the IP address of the switch.

Select “Other” and make sure the drop-down is set to “Telnet.”
This will change the port to 23.

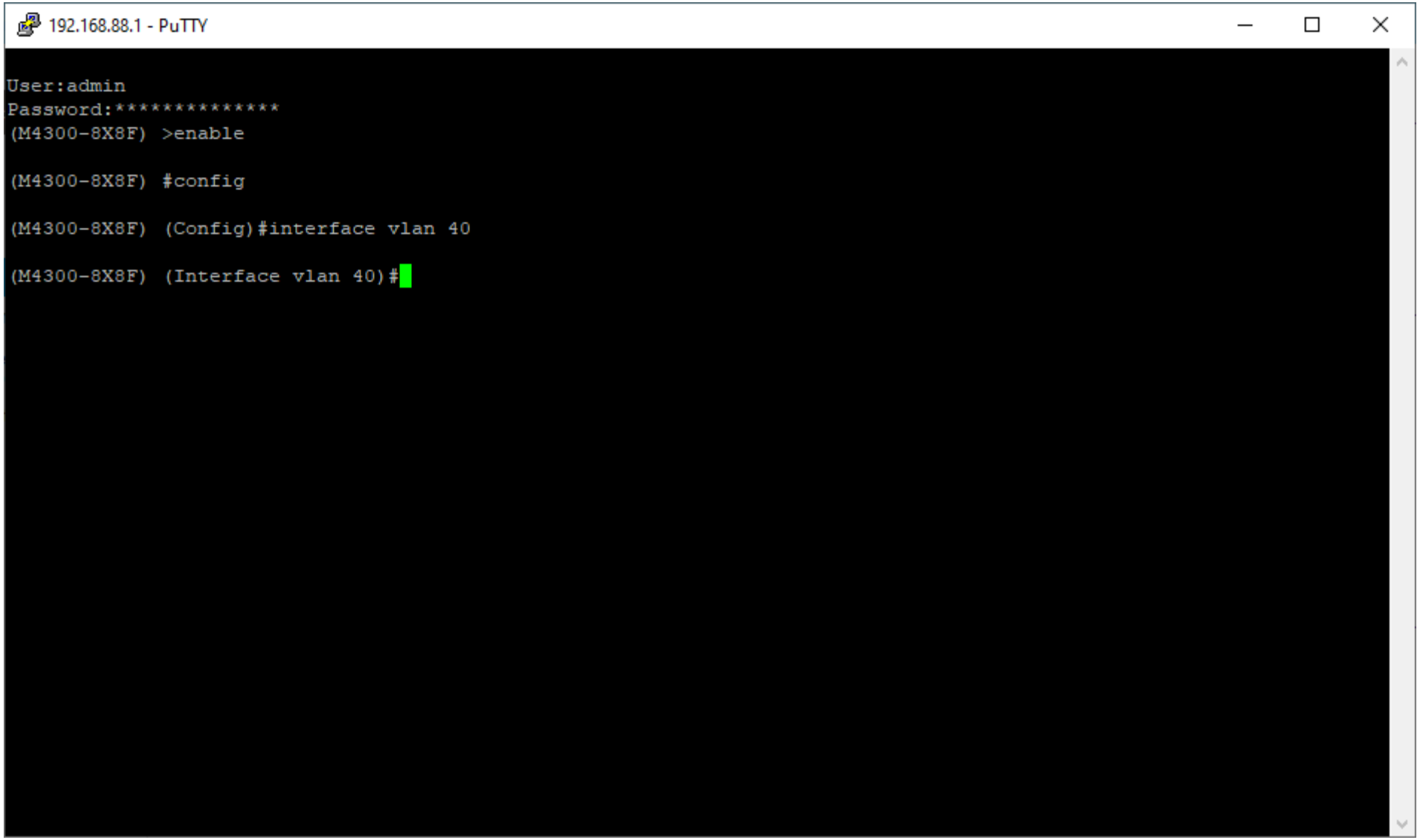
Click on “Open.”

Login with “admin” and the password for your switch.

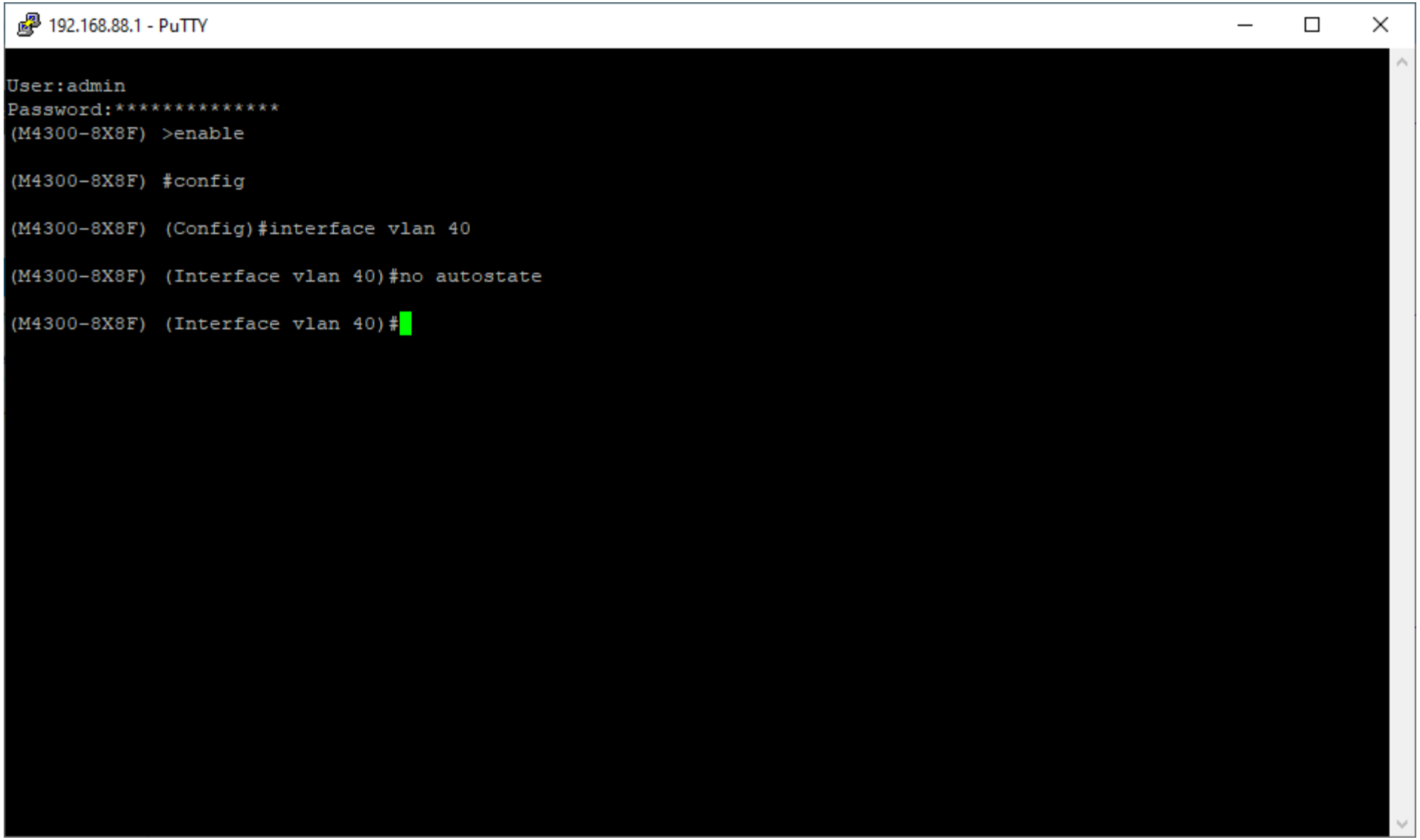
Type in “enable” and press enter.

Type in “config” and press enter.

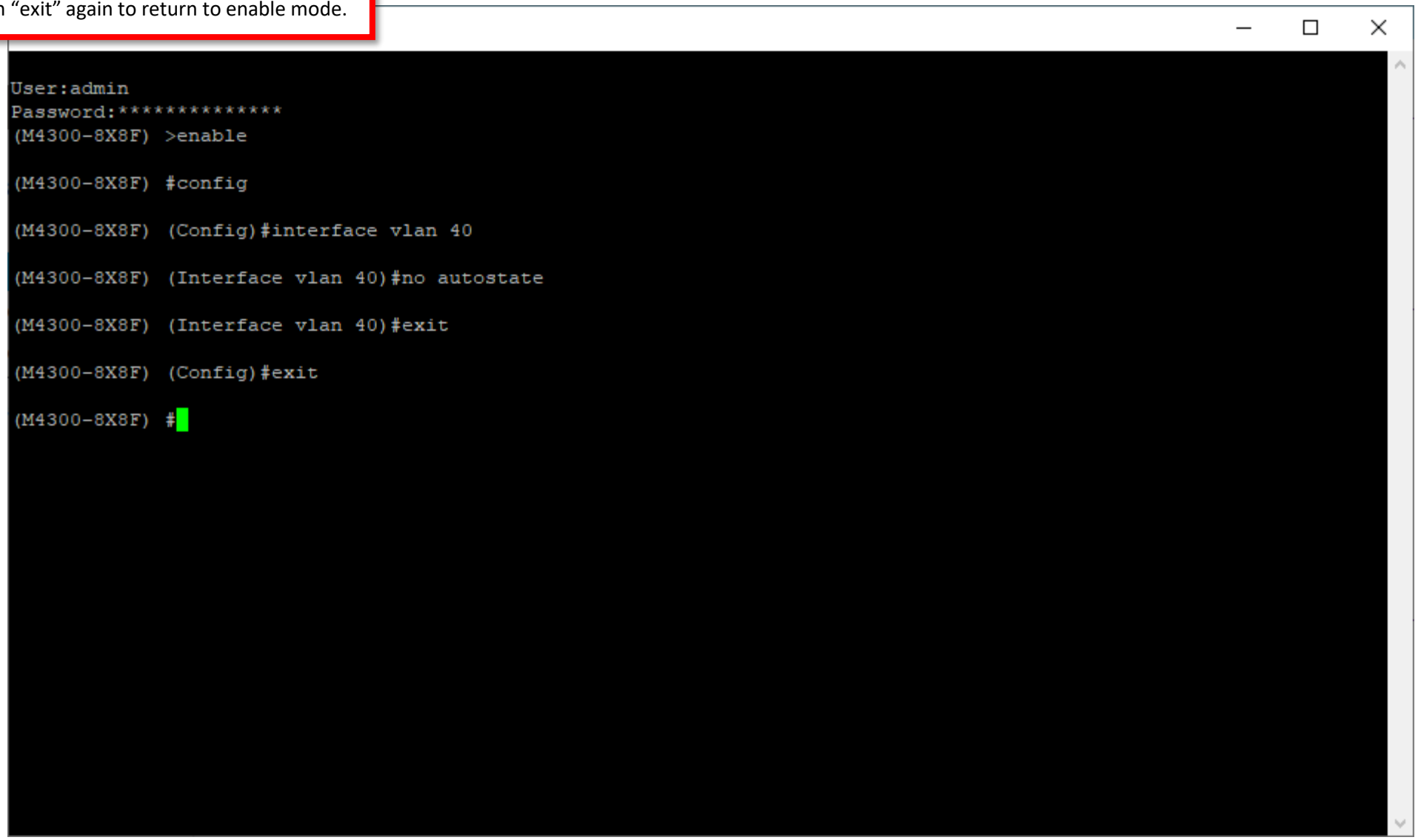
Type in “interface vlan 40” and press enter.



Type in “no autostate” and press enter.

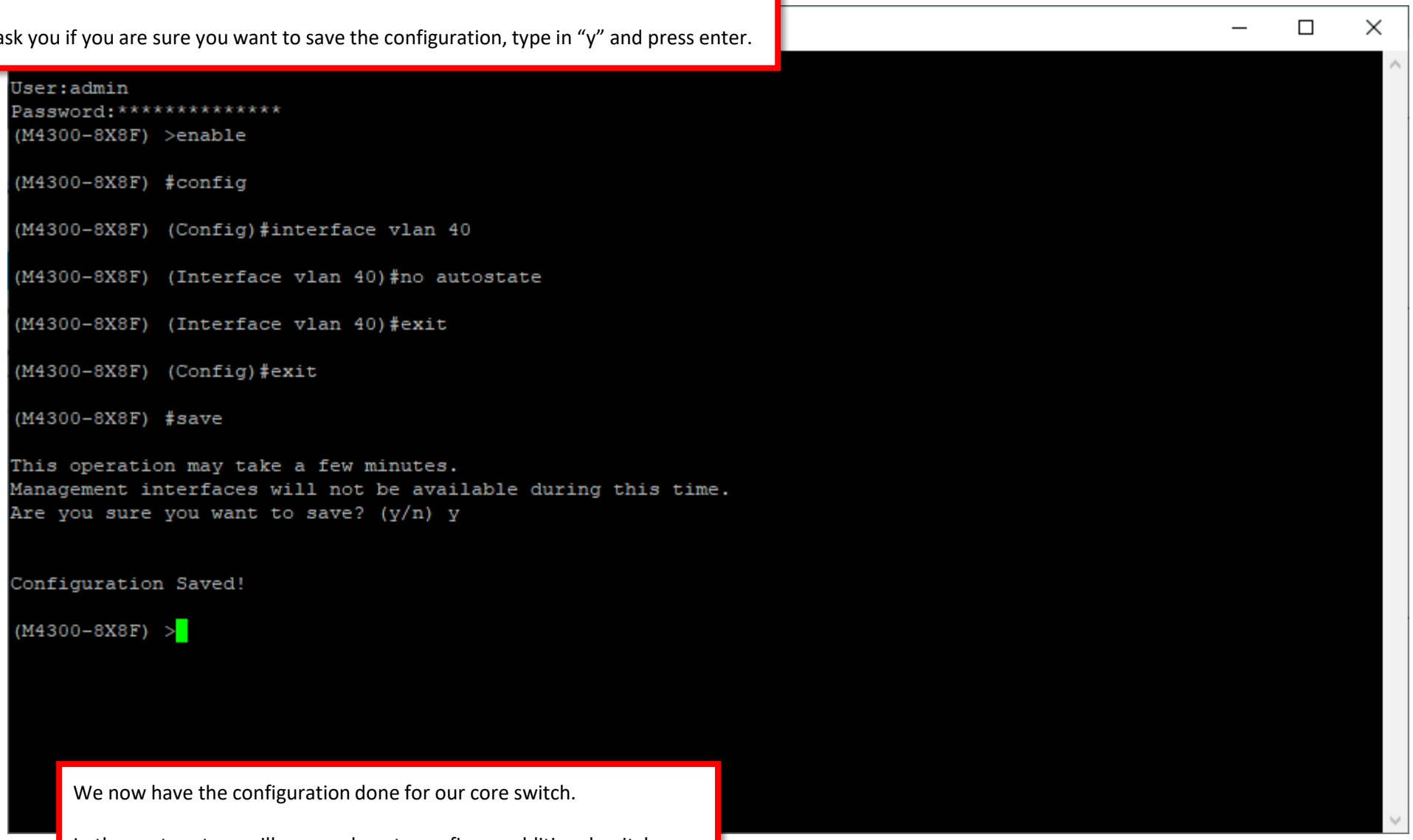


Type in “exit” and press enter.
This will bring you back to “Config” mode.
Type in “exit” again to return to enable mode.



From enable mode we can save our configuration.
Type in “save” and press enter.

It will ask you if you are sure you want to save the configuration, type in “y” and press enter.



We now have the configuration done for our core switch.

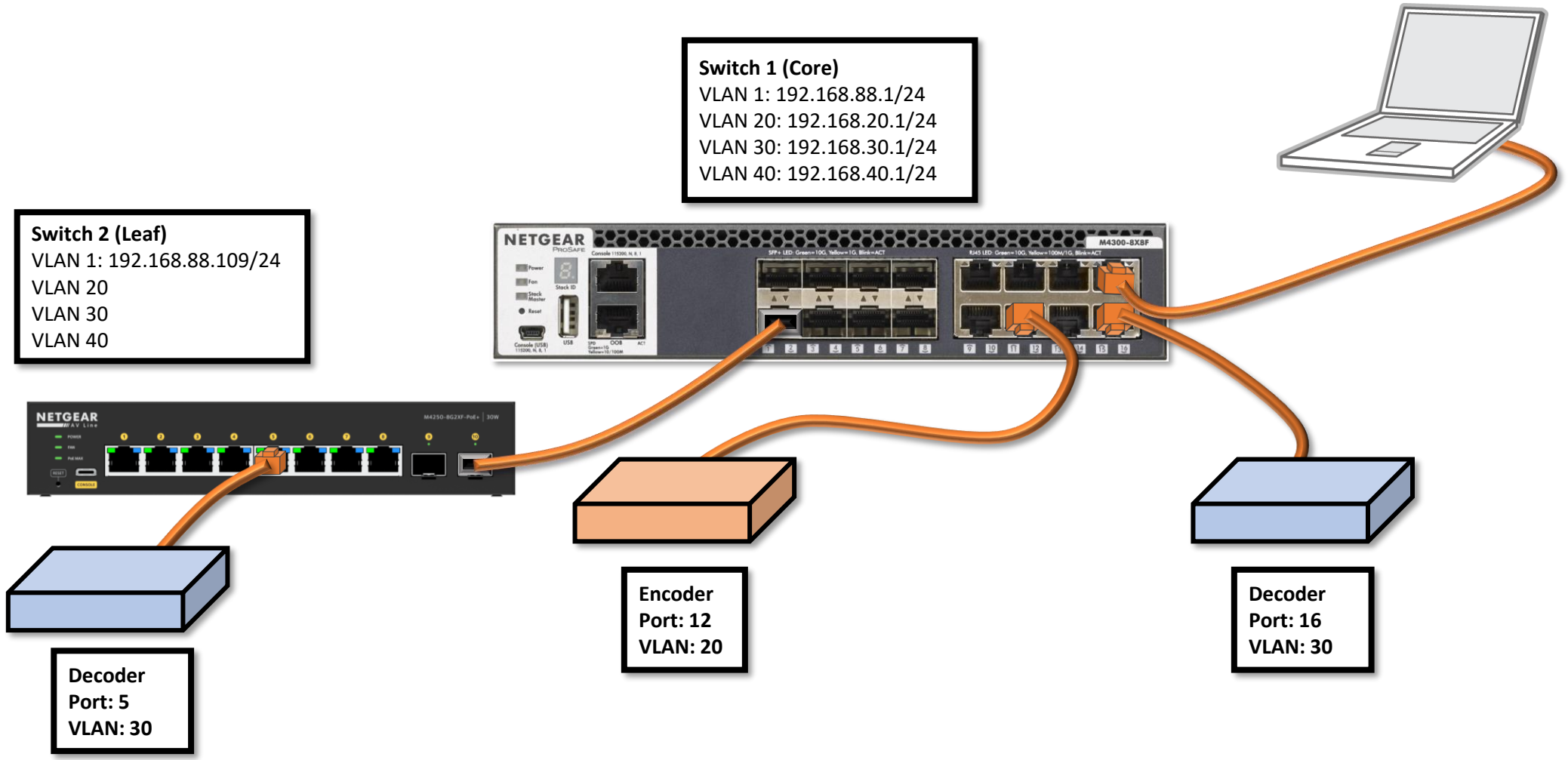
In the next part we will go over how to configure additional switches.

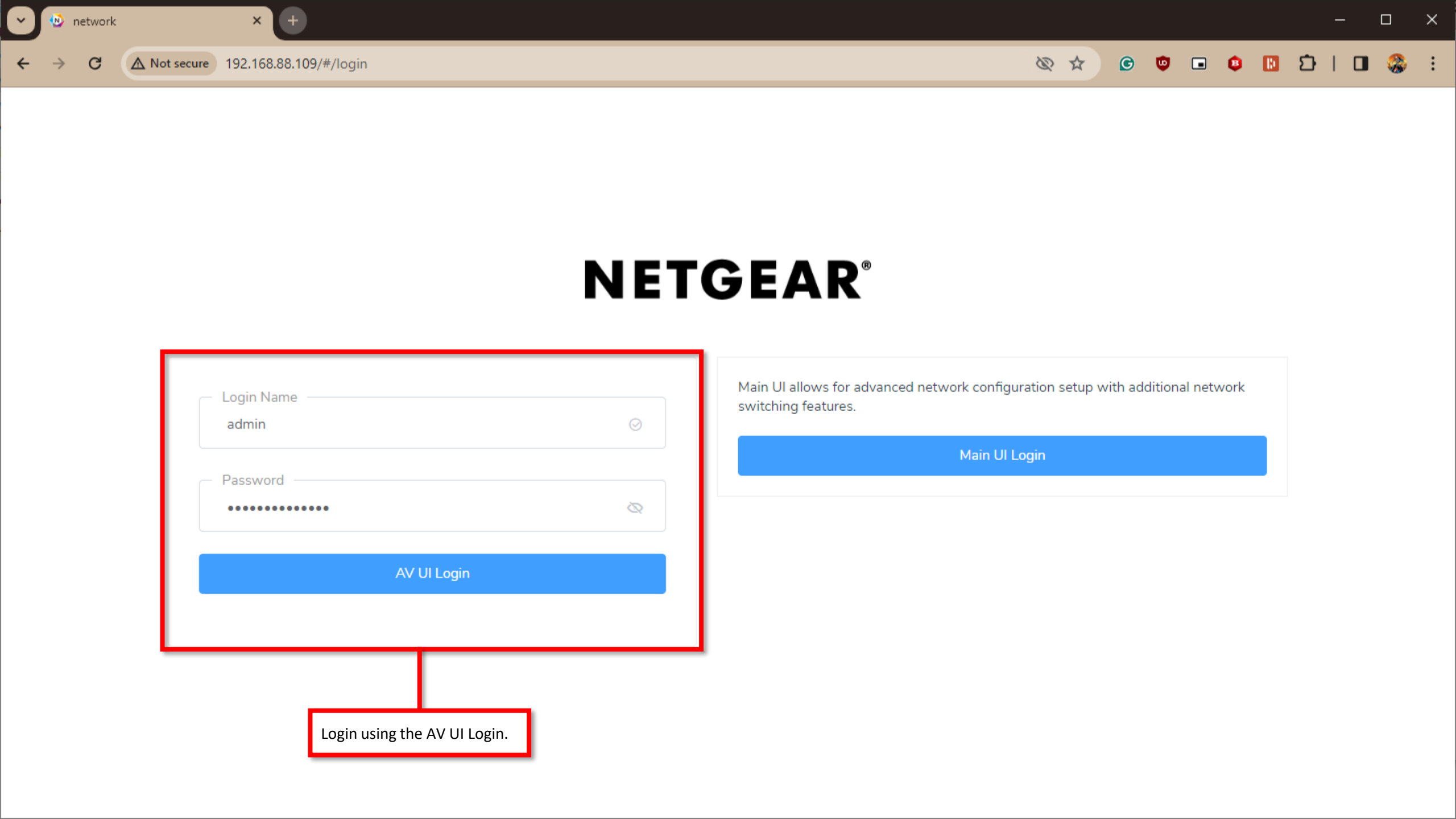
Configuring PIM Sparse Mode Across Multiple Switches

Part 2

We are now going to add a second switch and go over the configuration for additional switches.

The configuration for additional switches will be different from the configuration that we went over on the core switch.




network
Not secure
192.168.88.109/#/login
NETGEAR®
Login Name
admin
Password
AV UI Login
Main UI allows for advanced network configuration setup with additional network switching features.
Main UI Login
Login using the AV UI Login.

M4250-8G2XF-PoE+

Not secure 192.168.88.109/#/configure/overview

NETGEAR

Dark Theme Save Reboot Question/Help admin

Configure

- Overview
- Network Profiles
- Link Aggregation
- Multicast
- Neighbor
- Power over Ethernet
- Port configuration
- Security
- Maintenance

Diagnostics

Click on “Network Profiles.”

Overview

Configure | Overview

Show Legends

Connected	Connected & Powered	Error	Disabled
Available	Blocked	Admin Down	Warning
Force-Authorized	Force-Unauthorized	Authorized	Unauthorized
L LAG	T VLAN Trunk	A Auto Trunk	PoE
PoE Disabled	Force Multicast	S 1G SFP Fiber Port	S+ 10G SFP+ Fiber Port
Crestron Device Connected	Shure Device Connected	Visionary Device Connected	NUCLEUS Device Connected

Device Details

Product Name	Serial Number	Model	Date & Time	Country/Region
M4250	6YX32A5NA0109	M4250-8G2XF-PoE+	2023-12-27 10:22:01	N/A

M4250-8G2XF-PoE+

Not secure 192.168.88.109/#/configure/virtualNetworks

NETGEAR

Dark Theme Save Reboot Question/Help admin

Configure

- Overview
- Network Profiles
- Link Aggregation
- Multicast
- Neighbor
- Power over Ethernet
- Port configuration
- Security
- Maintenance

Diagnostics

Network Profiles

Configure | Network Profiles

M4250-8G2XF-PoE+

Show Legends

Auto-Trunk

PTP residency time stamping

Connected	Connected & Powered	Error	Disabled
Available	Blocked	Admin Down	
Force-Authorized	Force-Unauthorized	Authorized	
LAG	VLAN Trunk	Auto Trunk	PoE
PoE Disabled	Force Multicast	1G SFP Fiber Port	10G SFP+
Crestron Device Connected	Shure Device Connected	Visionary Device Connected	NUCLEUS

Scroll down to the “Network Profiles.”

M4250-8G2XF-PoE+

Not secure 192.168.88.109/#/configure/virtualNetworks

NUCLEUS Converged AV Network
To connect EvertzAV NUCLEUS Session Manager and UXP gateways on a single converged network.

Shure Converged Audio and Control Network
To connect Shure devices requiring audio and control traffic on a single VLAN. Compatible with Dante, AES67, QSYS, and Biamp Dante devices.

Shure Split Audio and Control Network
To connect Shure devices requiring separation of audio and control traffic into different VLANs. Compatible with Dante, AES67, QSYS, and Biamp Dante devices.

Sonos
To connect the Sonos smart home sound system.

Video
To connect IP Video devices and their controller. Audio can be sent and received using another VLAN tag in another profile simultaneously. Supported devices include NVX, AMX, ZeeVee, Aurora, Kramer, Atlona, ATEN, LibAV, Visionary, Wyrestorm, Extron NAV, Dante AV, SDVoE & etc.

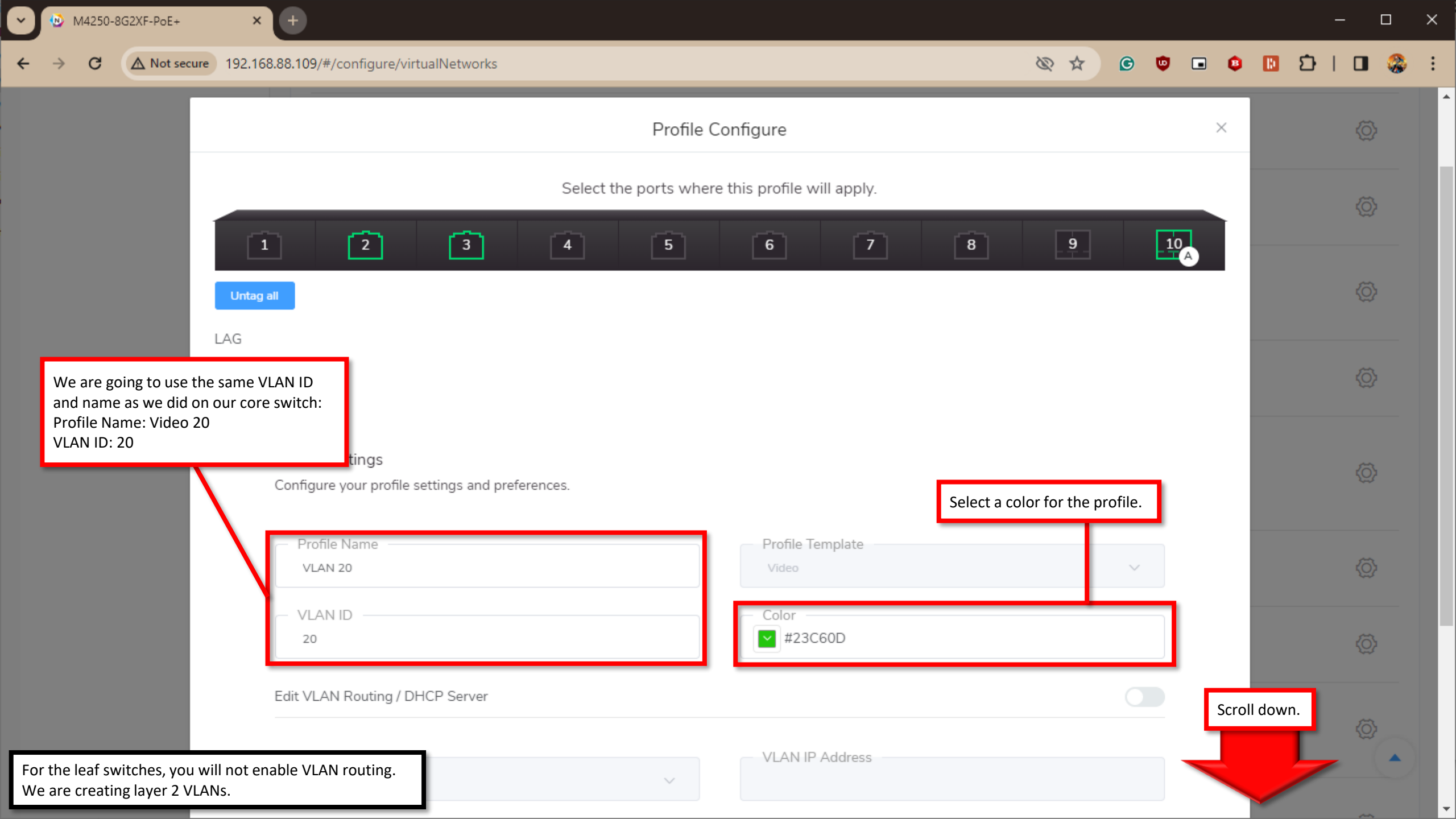
Video NDI4
To connect NDI Version 4 (mTCP) video devices and cameras.

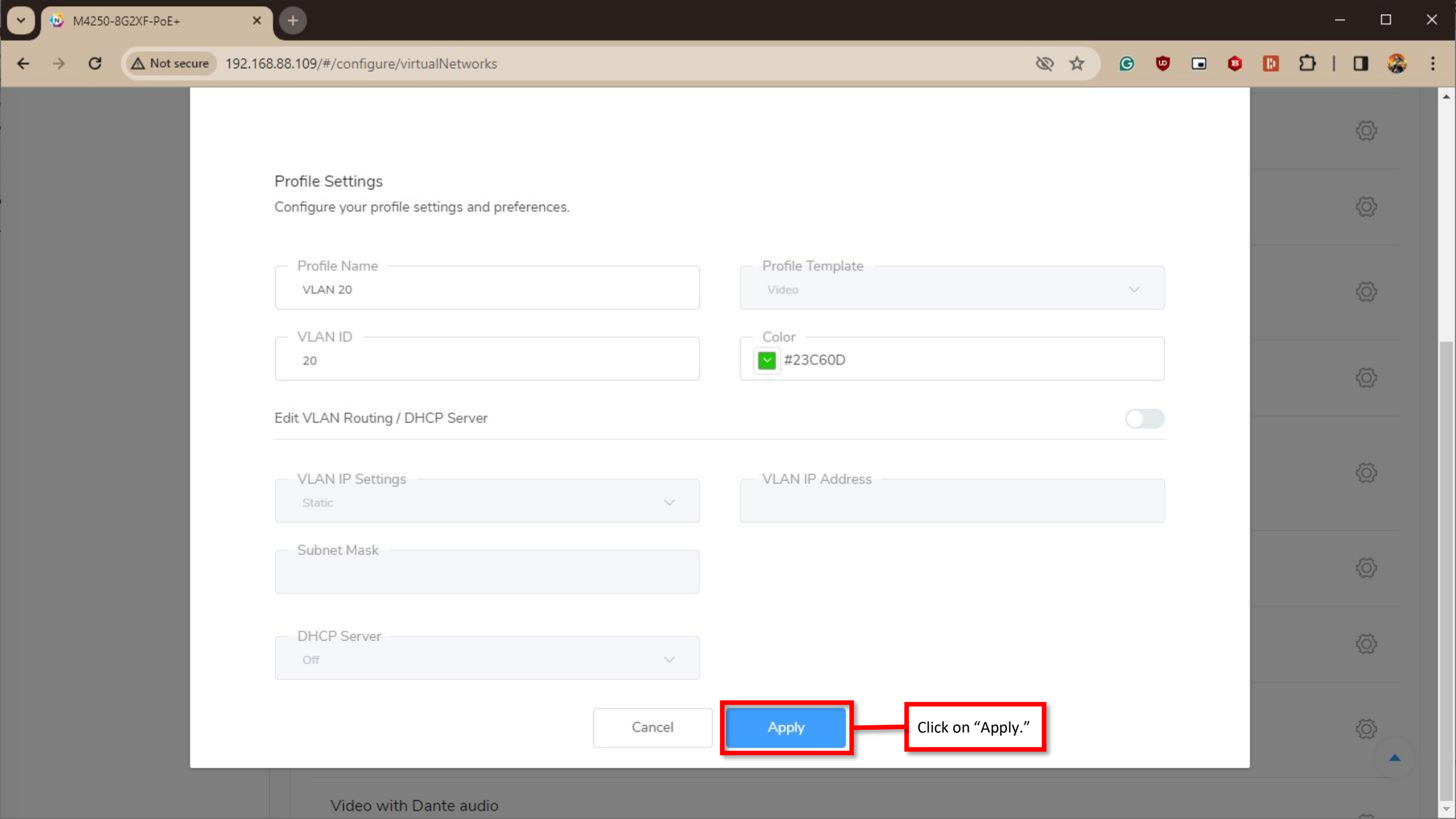
We are going to create our VLANs using the “Video” profile template.

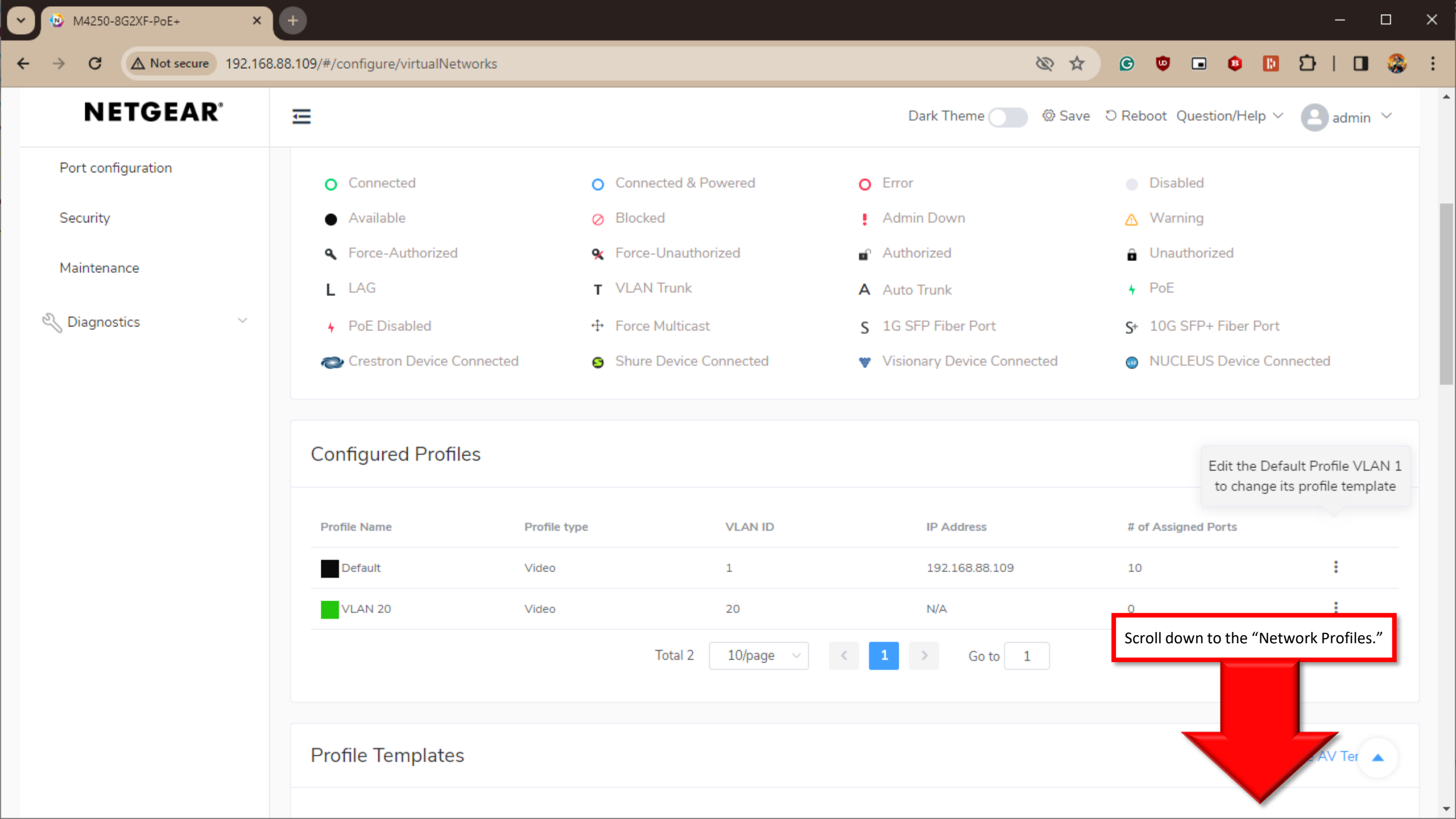
Video NDI5 with Dante, Q-Sys or AES67 audio
To connect NDI Version 5 (RUDP) video devices and cameras. Audio Dante, Q-SYS or AES67 is supported at the same time in the same VLAN.

Video with AES67 audio
To connect IP Video devices and their controller. Audio AES67 supported at the same time in the same VLAN. Supported devices include NVX, AMX, ZeeVee, Aurora, Kramer, Atlona, ATEN, LibAV, Visionary, Wyrestorm, Extron NAV, Dante AV, SDVoE & etc.

Video with Dante audio


M4250-8G2XF-PoE+
Not secure
192.168.88.109/#/configure/virtualNetworks
Profile Configure
Select the ports where this profile will apply.
1
2
3
4
5
6
7
8
9
10
A
Untag all
LAG
We are going to use the same VLAN ID and name as we did on our core switch:
Profile Name: Video 20
VLAN ID: 20
tings
Configure your profile settings and preferences.
Select a color for the profile.
Profile Name
VLAN 20
Profile Template
Video
VLAN ID
20
Color
#23C60D
Edit VLAN Routing / DHCP Server
Scroll down.
VLAN IP Address
For the leaf switches, you will not enable VLAN routing.
We are creating layer 2 VLANs.


M4250-8G2XF-PoE+
Not secure
192.168.88.109/#/configure/virtualNetworks
Profile Settings
Configure your profile settings and preferences.
Profile Name
VLAN 20
Profile Template
Video
VLAN ID
20
Color
#23C60D
Edit VLAN Routing / DHCP Server
VLAN IP Settings
Static
VLAN IP Address
Subnet Mask
DHCP Server
Off
Cancel
Apply
Click on “Apply.”
Video with Dante audio


M4250-8G2XF-PoE+
Not secure
192.168.88.109/#/configure/virtualNetworks
NETGEAR
Dark Theme
Save
Reboot
Question/Help
admin
Port configuration
Security
Maintenance
Diagnostics
Connected
Connected & Powered
Error
Disabled
Available
Blocked
Admin Down
Warning
Force-Authorized
Force-Unauthorized
Authorized
Unauthorized
LAG
VLAN Trunk
Auto Trunk
PoE
PoE Disabled
Force Multicast
1G SFP Fiber Port
10G SFP+ Fiber Port
Crestron Device Connected
Shure Device Connected
Visionary Device Connected
NUCLEUS Device Connected
Configured Profiles
Edit the Default Profile VLAN 1 to change its profile template
Profile Name
Profile type
VLAN ID
IP Address
# of Assigned Ports
Default
Video
1
192.168.88.109
10
VLAN 20
Video
20
N/A
0
Total 2
10/page
1
Go to
1
Scroll down to the “Network Profiles.”
Profile Templates

Data
To connect PCs and other Control network devices. CobraNet is supported in a VLAN other than VLAN 1.

Lighting
To connect sACN, Art-Net, and MA-Net3 network devices, for controlling lighting equipment.

NUCLEUS Converged AV Network
To connect EvertzAV NUCLEUS Session Manager and UXP gateways on a single converged network.

Shure Converged Audio and Control Network
To connect Shure devices requiring audio and control traffic on a single VLAN. Compatible with Dante, AES67, QSYS, and Biamp Dante devices.

Shure Split Audio and Control Network
To connect Shure devices requiring separation of audio and control traffic into different VLANs. Compatible with Dante, AES67, QSYS, and Biamp Dante devices.

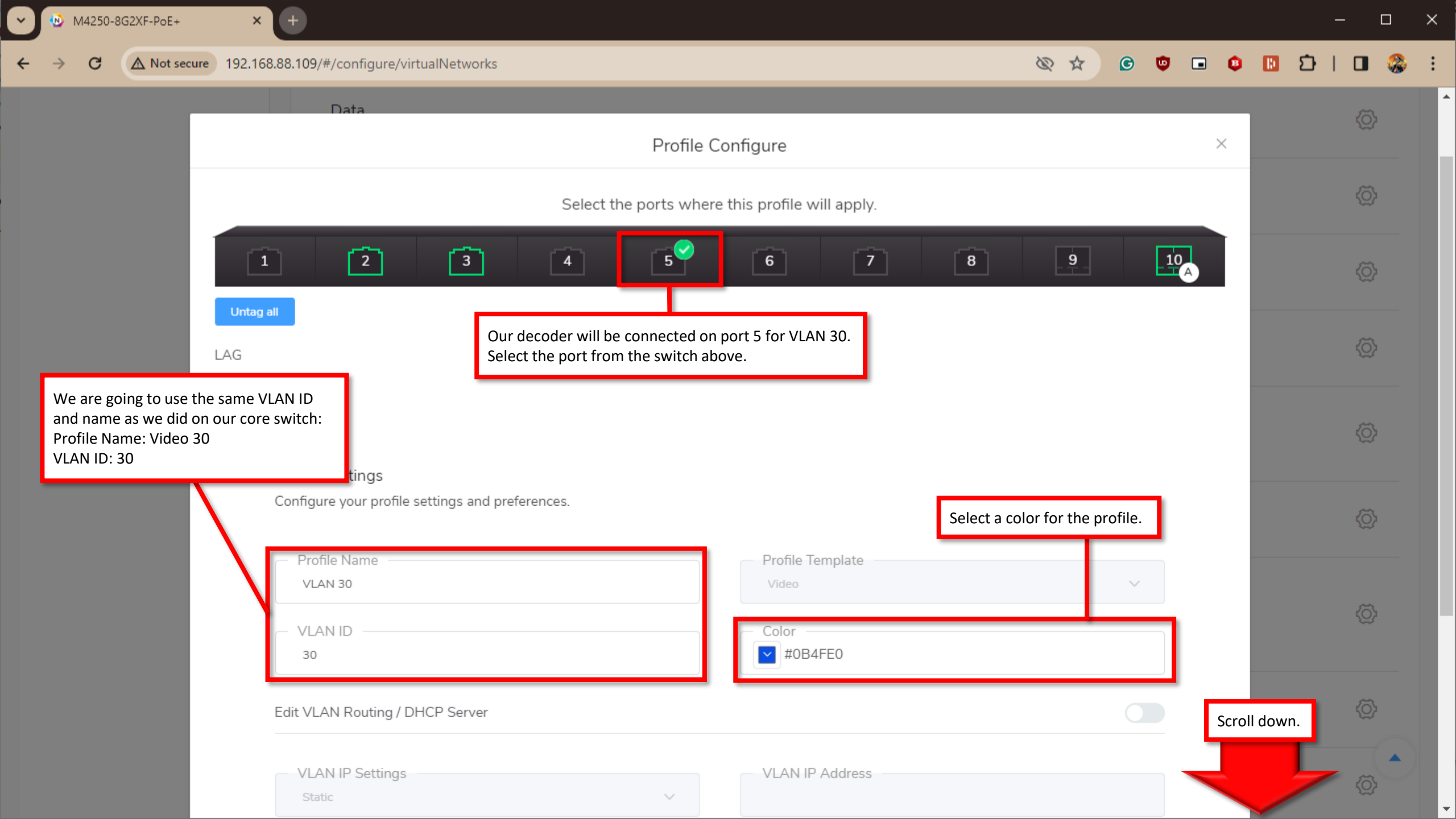
Sonos
To connect the Sonos smart home sound system.

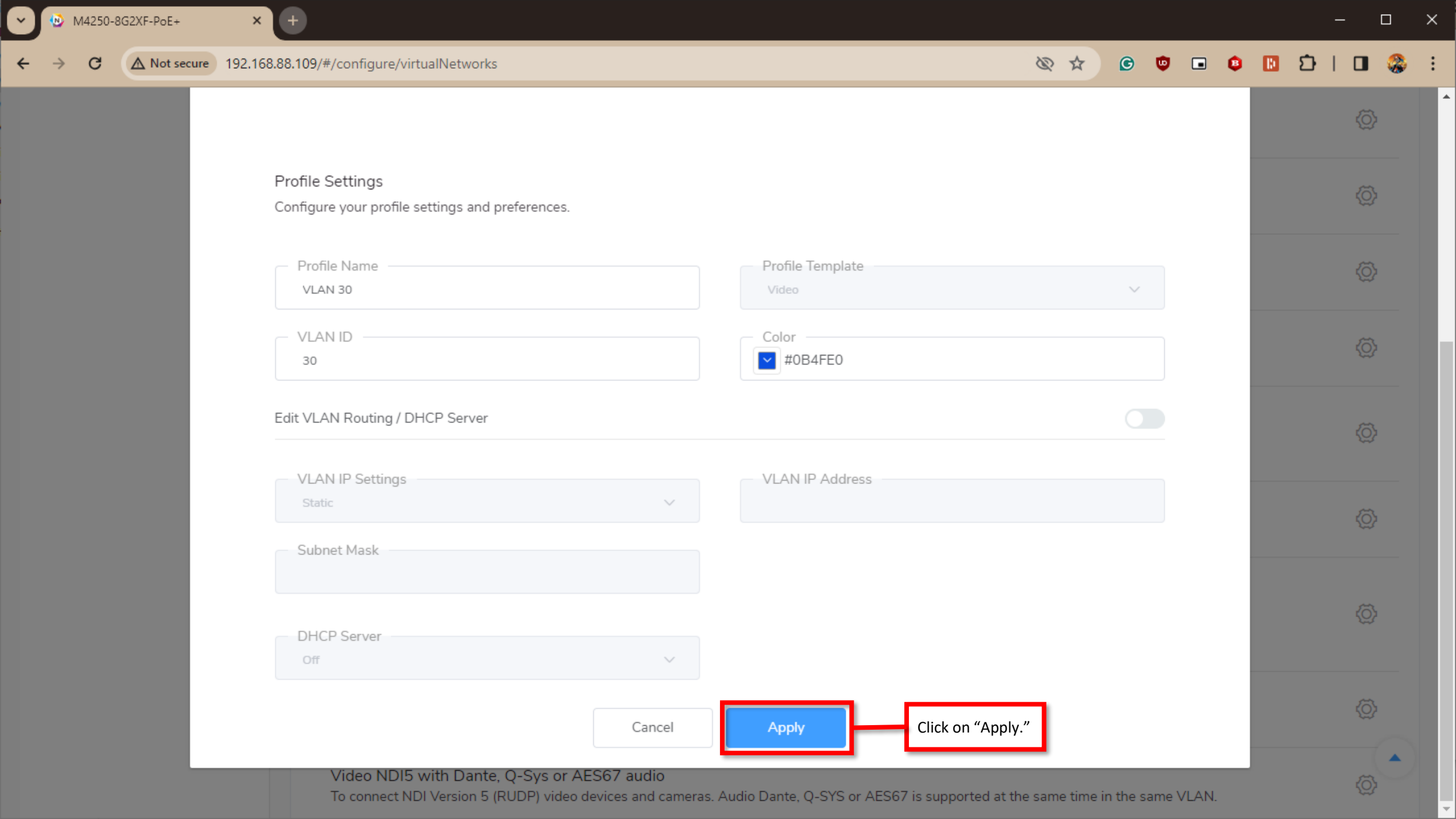
Video
To connect IP Video devices and their controller. Audio can be sent and received using another VLAN tag in another profile simultaneously. Supported devices include NVX, AMX, ZeeVee, Aurora, Kramer, Atlona, ATEN, LibAV, Visionary, Wyrestorm, Extron NAV, Dante AV, SDVoE & etc.

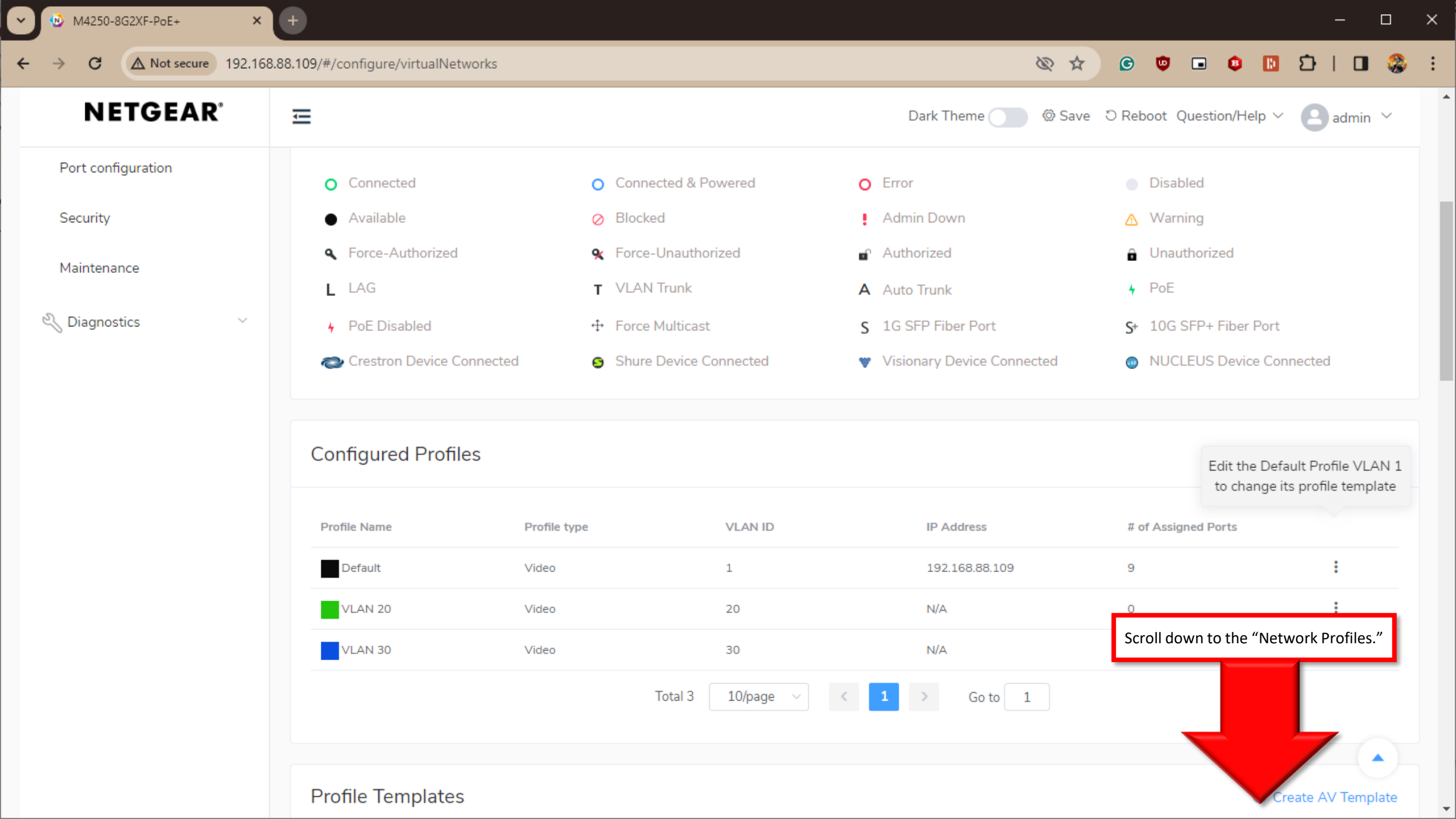
Video NDI4
To connect NDI Version 4 (mTCP) video devices and cameras.

Video NDI5 with Dante, Q-Sys or AES67 audio
To connect NDI Version 5 (RUDP) video devices and cameras. Audio Dante, Q-SYS or AES67 is supported at the same time in the same VLAN.

We are going to create our VLANs using the “Video” profile template.


M4250-8G2XF-PoE+
Not secure
192.168.88.109/#/configure/virtualNetworks
Data
Profile Configure
Select the ports where this profile will apply.
1
2
3
4
5
6
7
8
9
10
A
Untag all
LAG
Our decoder will be connected on port 5 for VLAN 30.
Select the port from the switch above.
We are going to use the same VLAN ID and name as we did on our core switch:
Profile Name: Video 30
VLAN ID: 30
tings
Configure your profile settings and preferences.
Profile Name
VLAN 30
VLAN ID
30
Profile Template
Video
Select a color for the profile.
Color
#0B4FE0
Edit VLAN Routing / DHCP Server
VLAN IP Settings
Static
VLAN IP Address
Scroll down.


M4250-8G2XF-PoE+
Not secure
192.168.88.109/#/configure/virtualNetworks
Profile Settings
Configure your profile settings and preferences.
Profile Name
VLAN 30
Profile Template
Video
VLAN ID
30
Color
#0B4FE0
Edit VLAN Routing / DHCP Server
VLAN IP Settings
Static
VLAN IP Address
Subnet Mask
DHCP Server
Off
Cancel
Apply
Click on “Apply.”
Video NDI5 with Dante, Q-Sys or AES67 audio
To connect NDI Version 5 (RUDP) video devices and cameras. Audio Dante, Q-SYS or AES67 is supported at the same time in the same VLAN.


M4250-8G2XF-PoE+
Not secure
192.168.88.109/#/configure/virtualNetworks
NETGEAR
Dark Theme
Save
Reboot
Question/Help
admin
Port configuration
Security
Maintenance
Diagnostics
Connected
Connected & Powered
Error
Disabled
Available
Blocked
Admin Down
Warning
Force-Authorized
Force-Unauthorized
Authorized
Unauthorized
LAG
VLAN Trunk
Auto Trunk
PoE
PoE Disabled
Force Multicast
1G SFP Fiber Port
10G SFP+ Fiber Port
Crestron Device Connected
Shure Device Connected
Visionary Device Connected
NUCLEUS Device Connected
Configured Profiles
Edit the Default Profile VLAN 1 to change its profile template
Profile Name
Profile type
VLAN ID
IP Address
# of Assigned Ports
Default
Video
1
192.168.88.109
9
VLAN 20
Video
20
N/A
0
VLAN 30
Video
30
N/A
Total 3
10/page
1
Go to
1
Scroll down to the “Network Profiles.”
Profile Templates
Create AV Template

Lighting
To connect sACN, Art-Net, and MA-Net3 network devices, for controlling lighting equipment.

NUCLEUS Converged AV Network
To connect EvertzAV NUCLEUS Session Manager and UXP gateways on a single converged network.

Shure Converged Audio and Control Network
To connect Shure devices requiring audio and control traffic on a single VLAN. Compatible with Dante, AES67, QSYS, and Biamp Dante devices.

Shure Split Audio and Control Network
To connect Shure devices requiring separation of audio and control traffic into different VLANs. Compatible with Dante, AES67, QSYS, and Biamp Dante devices.

Sonos
To connect the Sonos smart home sound system.

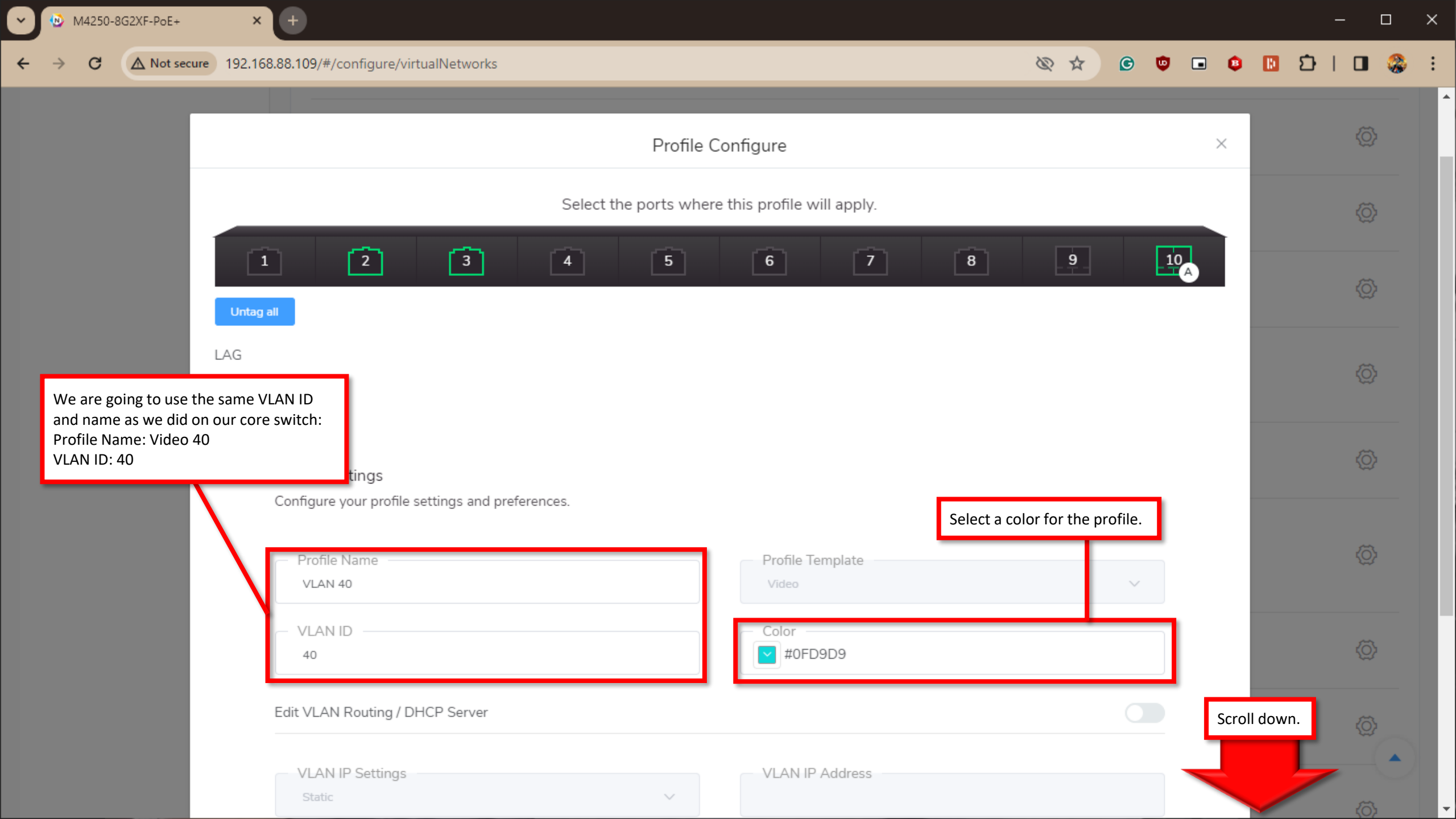
Video
To connect IP Video devices and their controller. Audio can be sent and received using another VLAN tag in another profile simultaneously. Supported devices include NVX, AMX, ZeeVee, Aurora, Kramer, Atlona, ATEN, LibAV, Visionary, Wyrestorm, Extron NAV, Dante AV, SDVoE & etc.

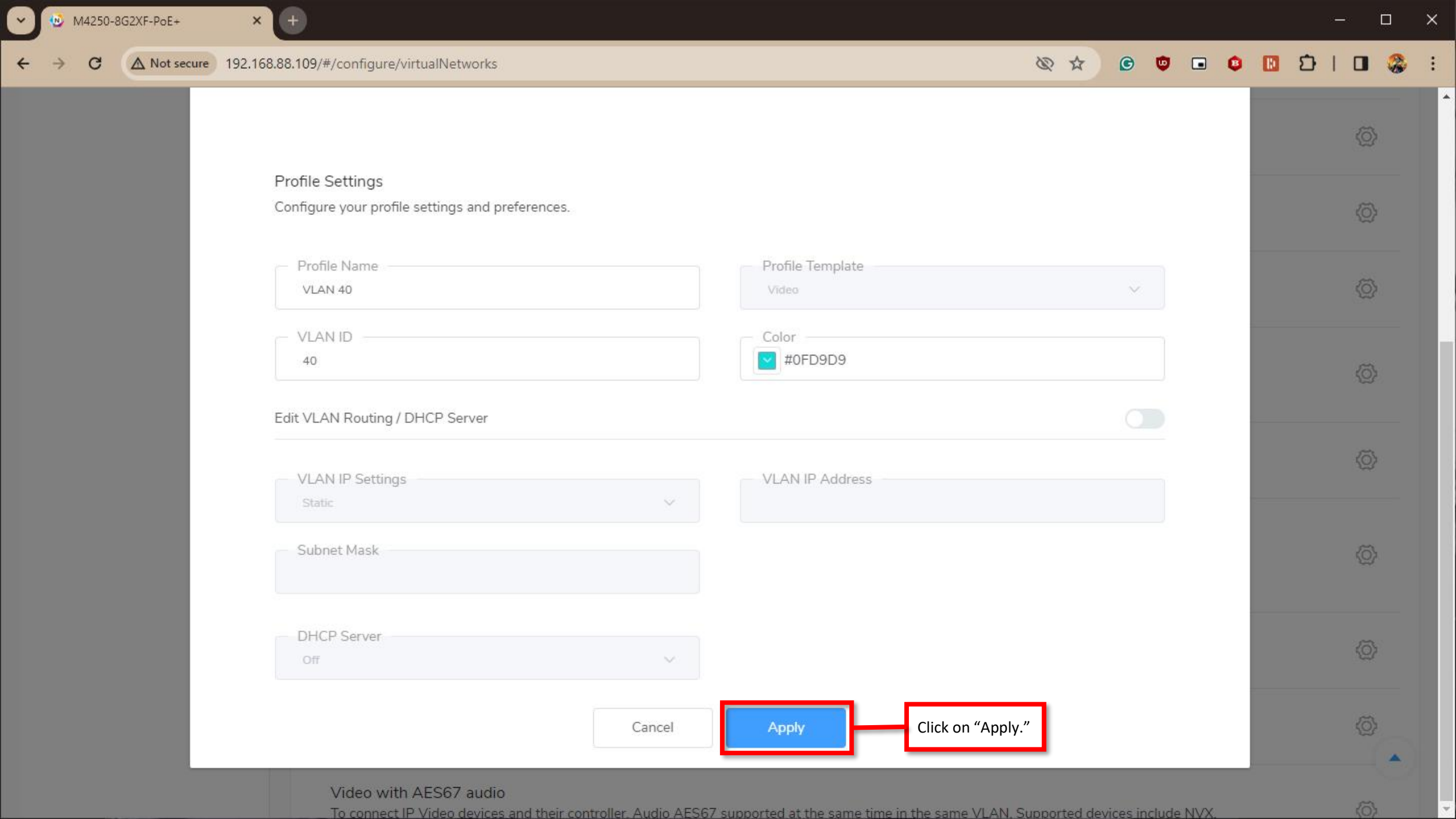
Video NDI4
To connect NDI Version 4 (mTCP) video devices and cameras.

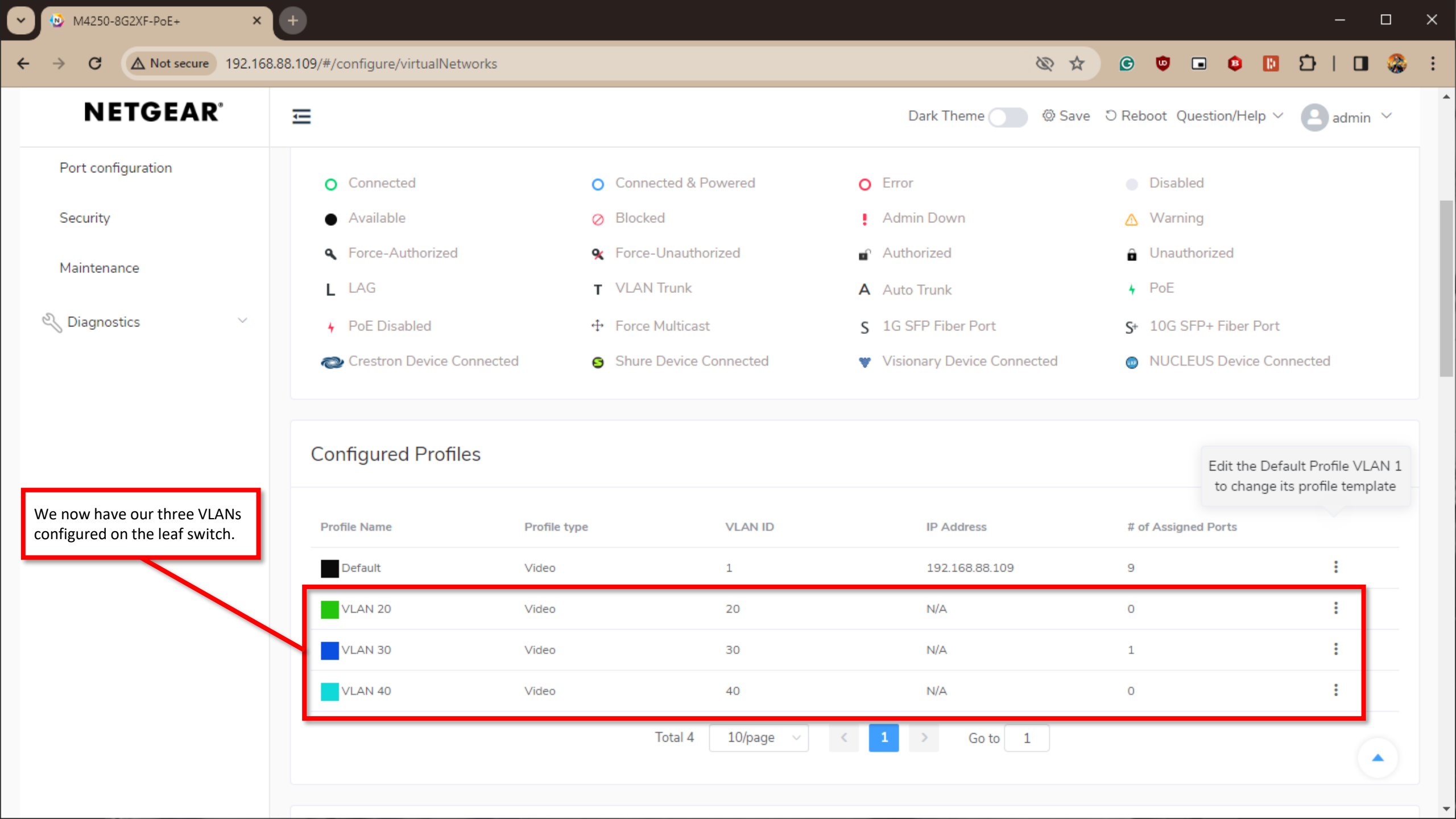
We are going to create our VLANs using the “Video” profile template.

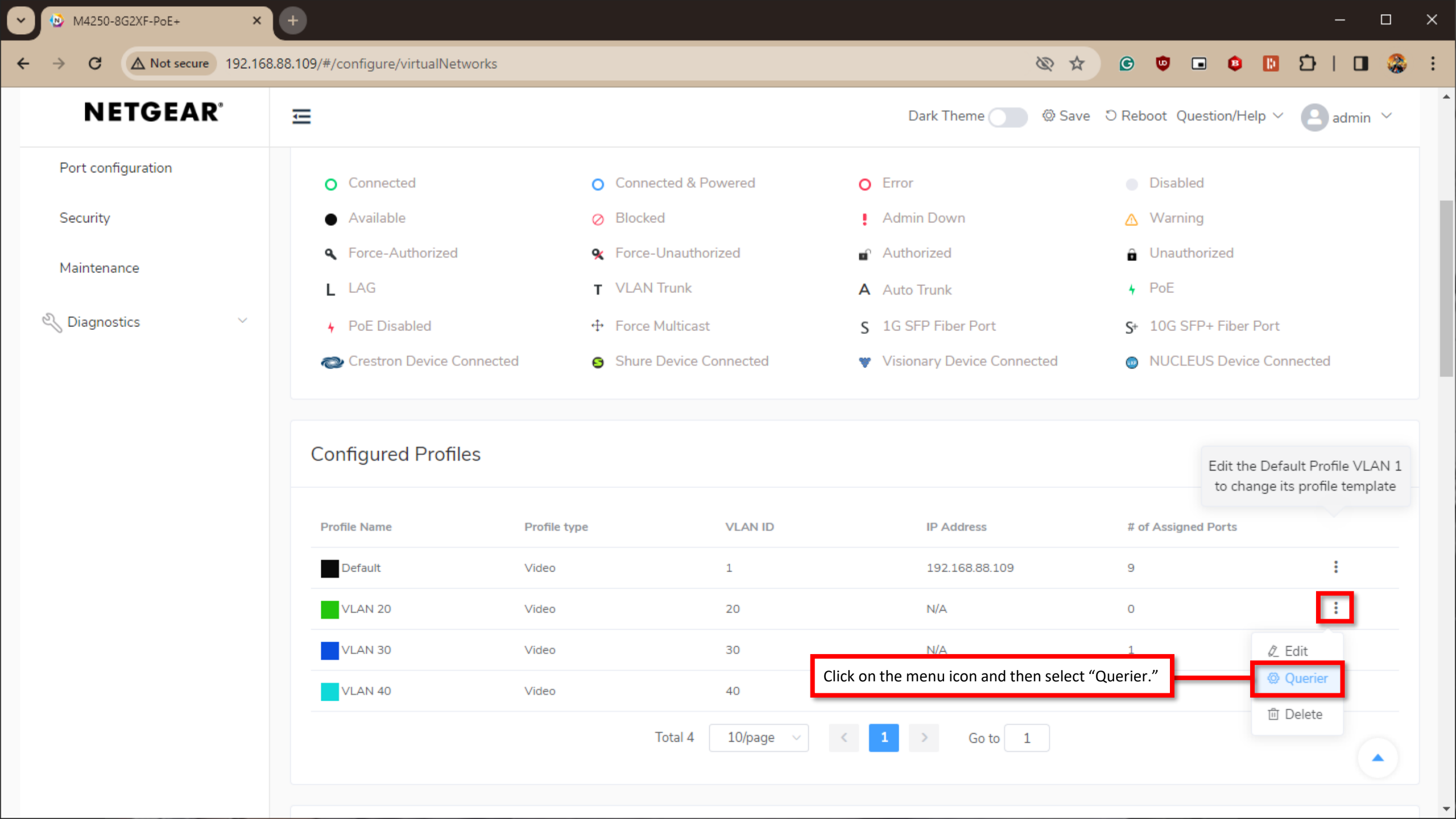
Video NDI5 with Dante, Q-Sys or AES67 audio
To connect NDI Version 5 (RUDP) video devices and cameras. Audio Dante, Q-SYS or AES67 is supported at the same time in the same VLAN.

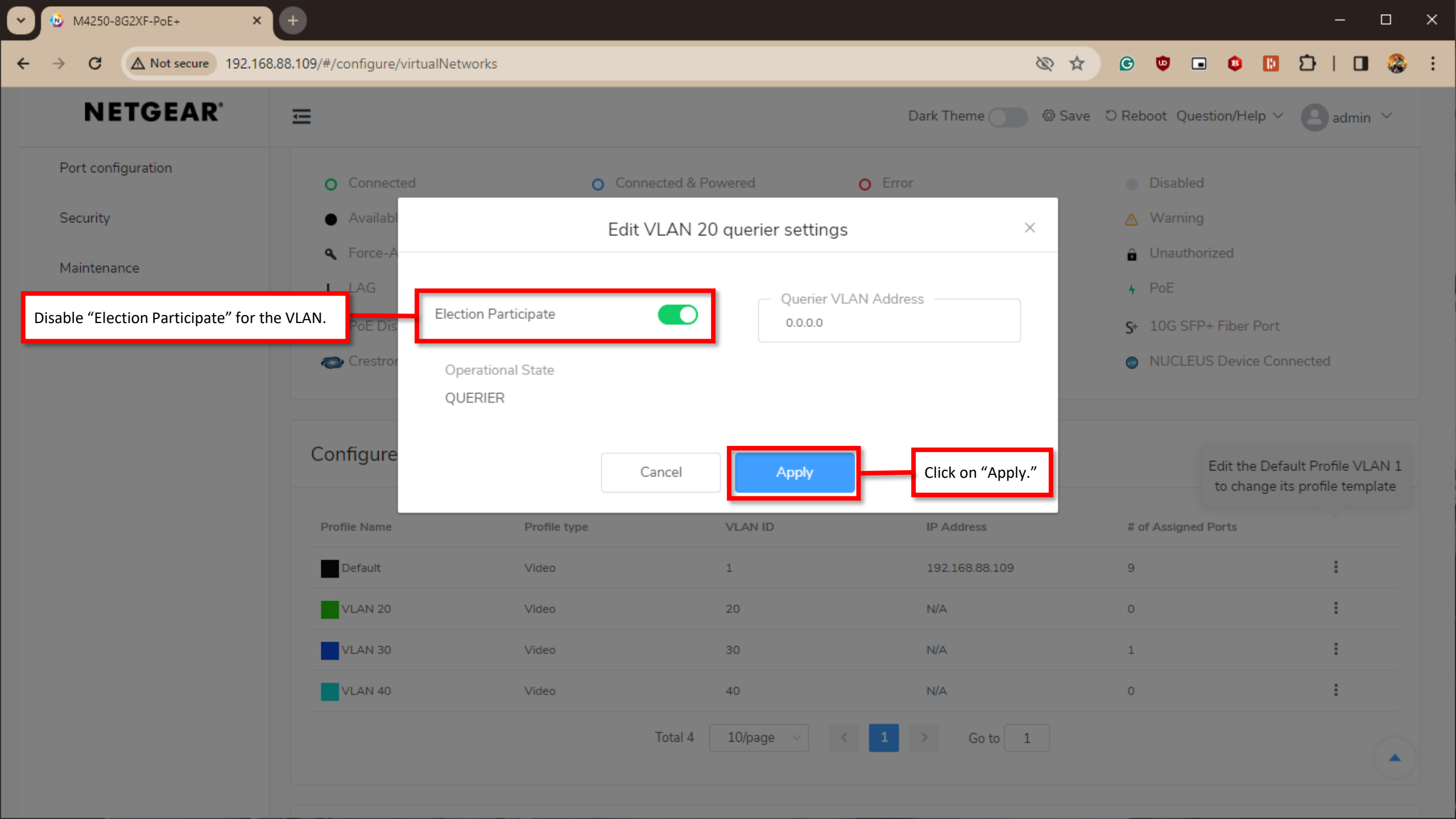
Video with AES67 audio
To connect IP Video devices and their controller. Audio AES67 supported at the same time in the same VLAN. Supported devices include NVX,

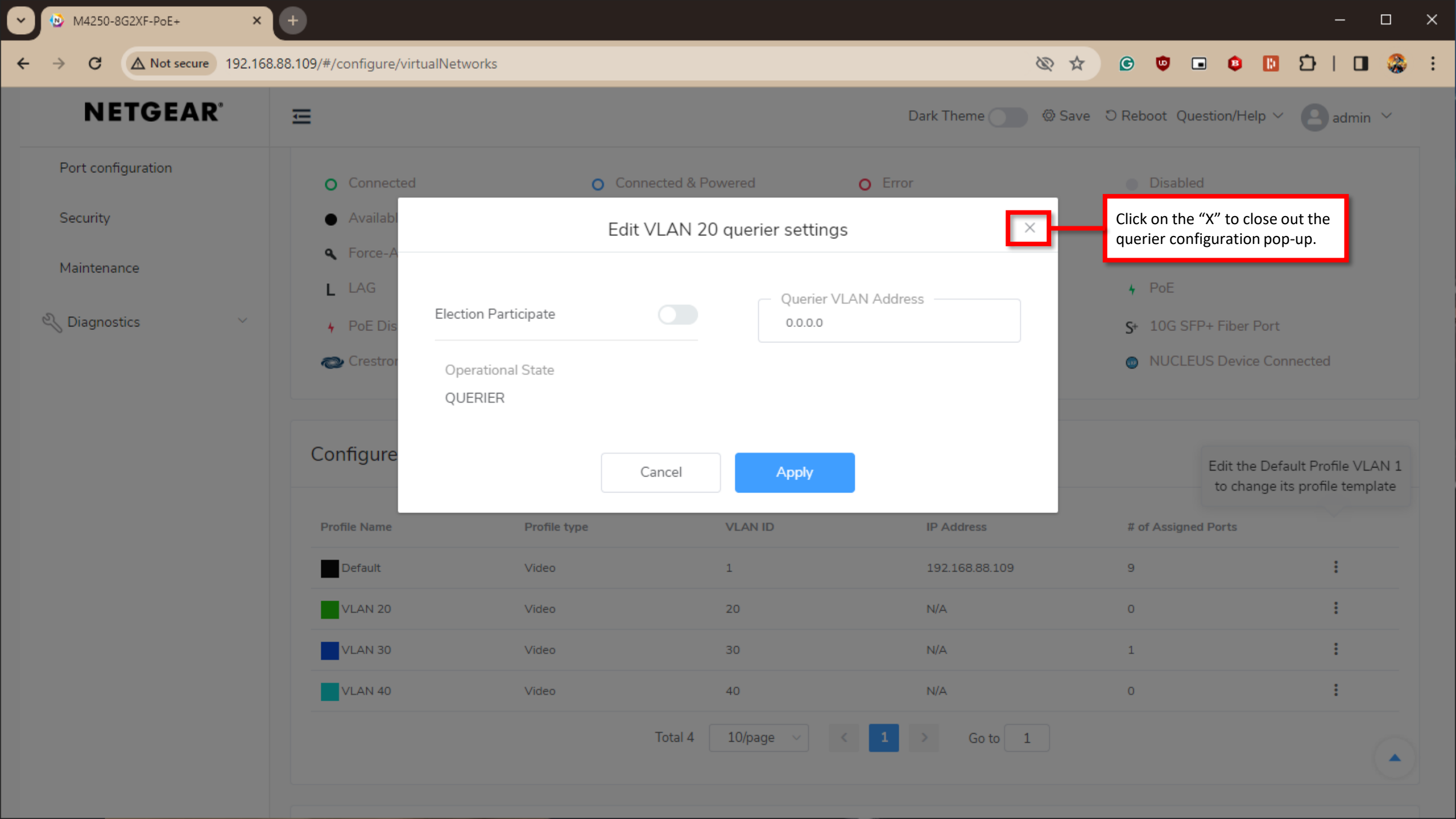

M4250-8G2XF-PoE+
Not secure
192.168.88.109/#/configure/virtualNetworks
Profile Configure
Select the ports where this profile will apply.
1
2
3
4
5
6
7
8
9
10
A
Untag all
LAG
We are going to use the same VLAN ID and name as we did on our core switch:
Profile Name: Video 40
VLAN ID: 40
tings
Configure your profile settings and preferences.
Profile Name
VLAN 40
VLAN ID
40
Profile Template
Video
Select a color for the profile.
Color
#0FD9D9
Edit VLAN Routing / DHCP Server
Scroll down.
VLAN IP Settings
Static
VLAN IP Address

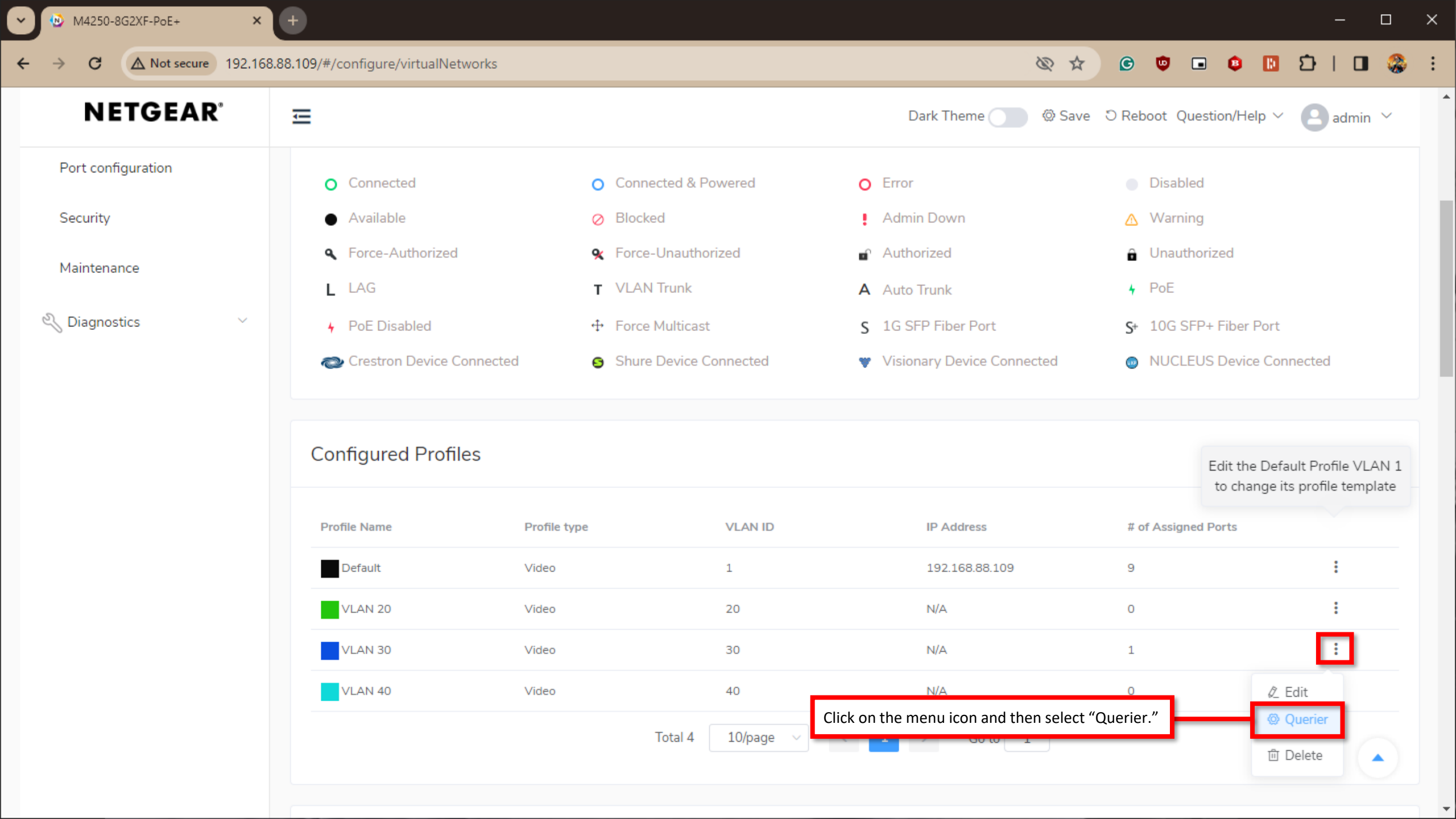

M4250-8G2XF-PoE+
Not secure
192.168.88.109/#/configure/virtualNetworks
Profile Settings
Configure your profile settings and preferences.
Profile Name
VLAN 40
Profile Template
Video
VLAN ID
40
Color
#0FD9D9
Edit VLAN Routing / DHCP Server
VLAN IP Settings
Static
VLAN IP Address
Subnet Mask
DHCP Server
Off
Cancel
Apply
Click on “Apply.”
Video with AES67 audio
To connect IP Video devices and their controller, Audio AES67 supported at the same time in the same VLAN. Supported devices include NVX,

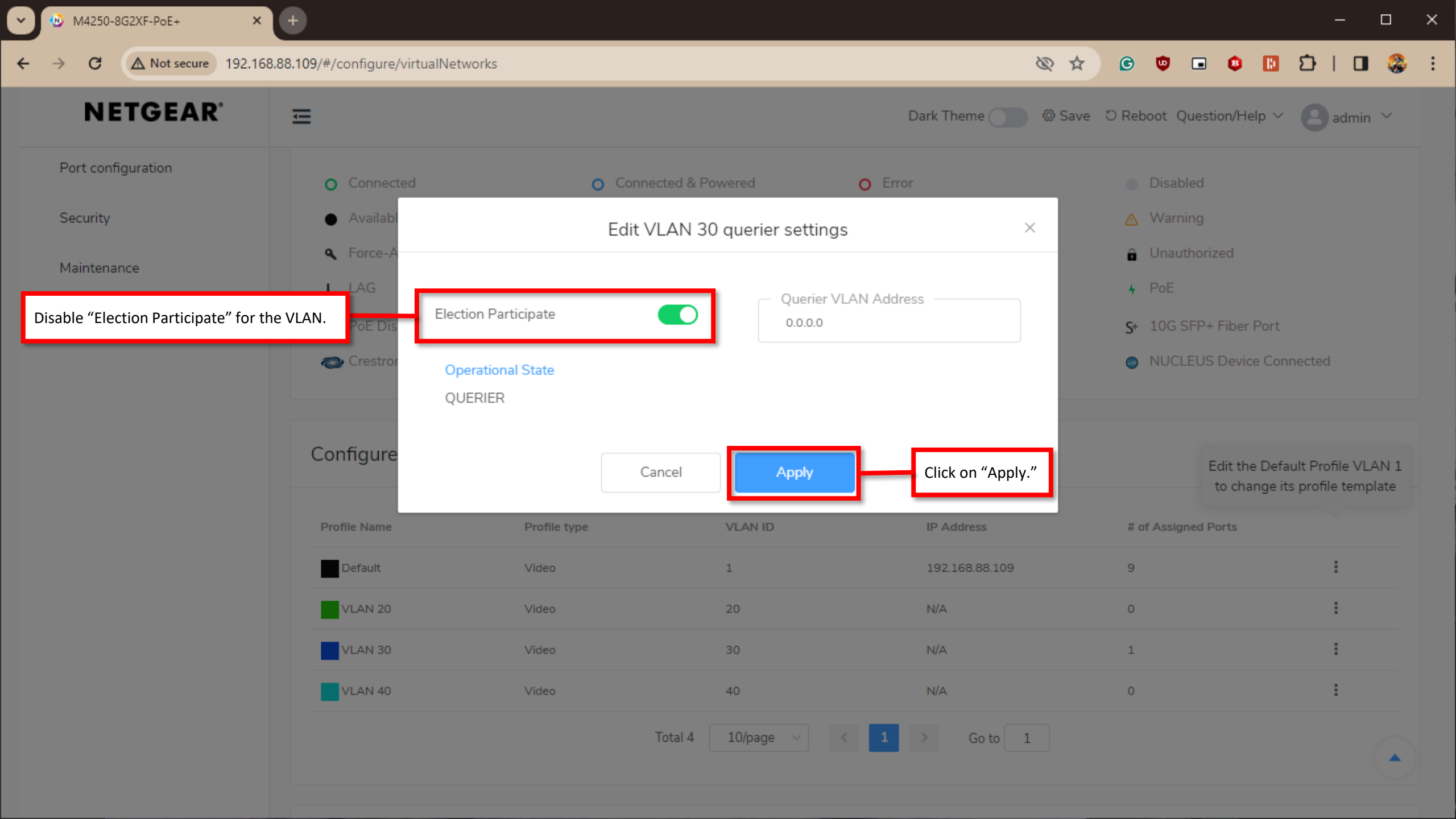

M4250-8G2XF-PoE+
Not secure
192.168.88.109/#/configure/virtualNetworks
NETGEAR
Dark Theme
Save
Reboot
Question/Help
admin
Port configuration
Security
Maintenance
Diagnostics
Connected
Connected & Powered
Error
Disabled
Available
Blocked
Admin Down
Warning
Force-Authorized
Force-Unauthorized
Authorized
Unauthorized
LAG
VLAN Trunk
Auto Trunk
PoE
PoE Disabled
Force Multicast
1G SFP Fiber Port
10G SFP+ Fiber Port
Crestron Device Connected
Shure Device Connected
Visionary Device Connected
NUCLEUS Device Connected
Configured Profiles
Edit the Default Profile VLAN 1 to change its profile template
We now have our three VLANs configured on the leaf switch.
Profile Name
Profile type
VLAN ID
IP Address
# of Assigned Ports
Default
Video
1
192.168.88.109
9
VLAN 20
Video
20
N/A
0
VLAN 30
Video
30
N/A
1
VLAN 40
Video
40
N/A
0
Total 4
10/page
1
Go to
1

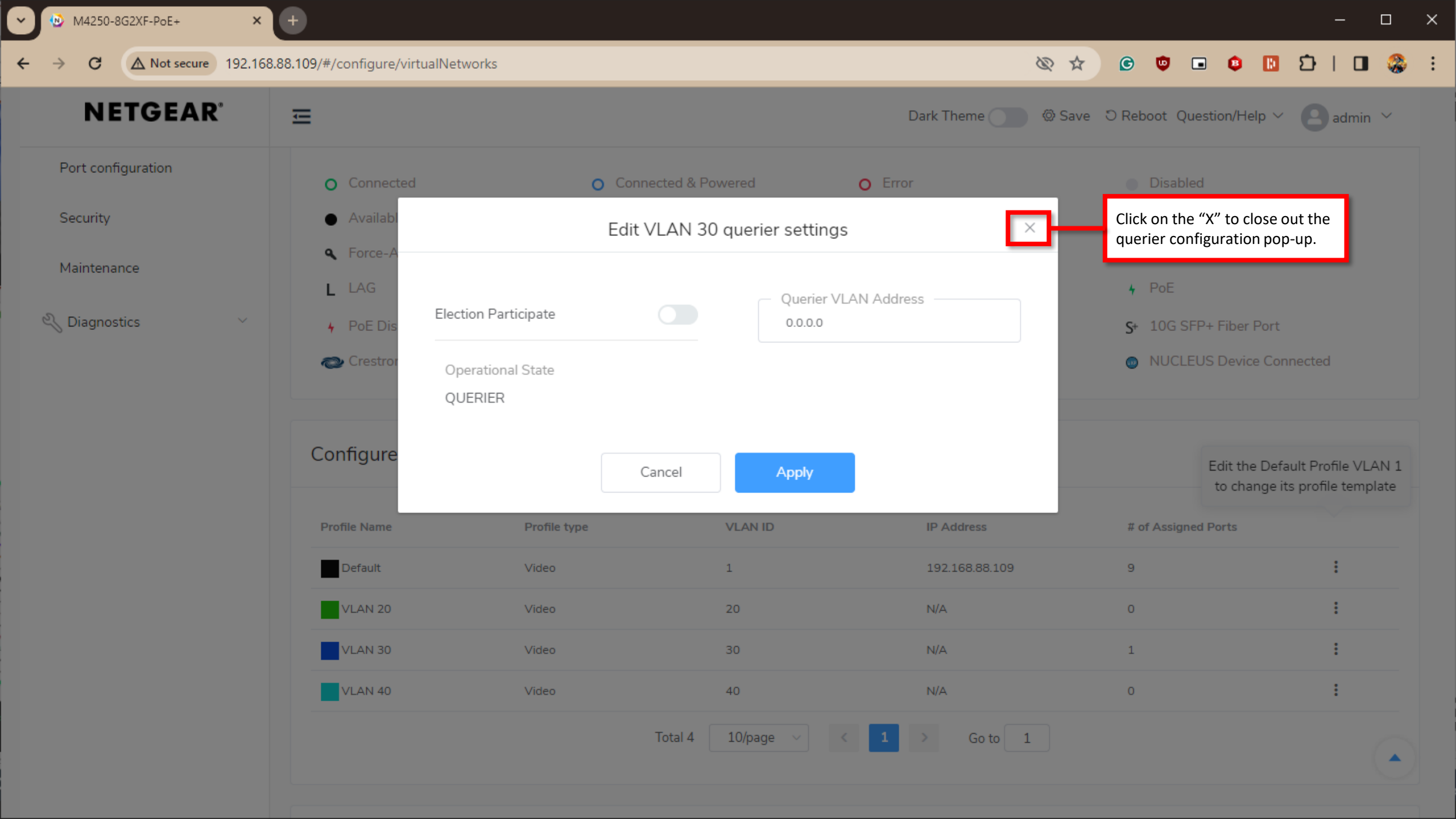

M4250-8G2XF-PoE+
Not secure
192.168.88.109/#/configure/virtualNetworks
NETGEAR
Dark Theme
Save
Reboot
Question/Help
admin
Port configuration
Security
Maintenance
Diagnostics
Connected
Connected & Powered
Error
Disabled
Available
Blocked
Admin Down
Warning
Force-Authorized
Force-Unauthorized
Authorized
Unauthorized
LAG
VLAN Trunk
Auto Trunk
PoE
PoE Disabled
Force Multicast
1G SFP Fiber Port
10G SFP+ Fiber Port
Crestron Device Connected
Shure Device Connected
Visionary Device Connected
NUCLEUS Device Connected
Configured Profiles
Edit the Default Profile VLAN 1 to change its profile template
Profile Name
Profile type
VLAN ID
IP Address
# of Assigned Ports
Default
Video
1
192.168.88.109
9
VLAN 20
Video
20
N/A
0
VLAN 30
Video
30
N/A
1
VLAN 40
Video
40
Edit
Querier
Delete
Click on the menu icon and then select “Querier.”
Total 4
10/page
1
Go to
1

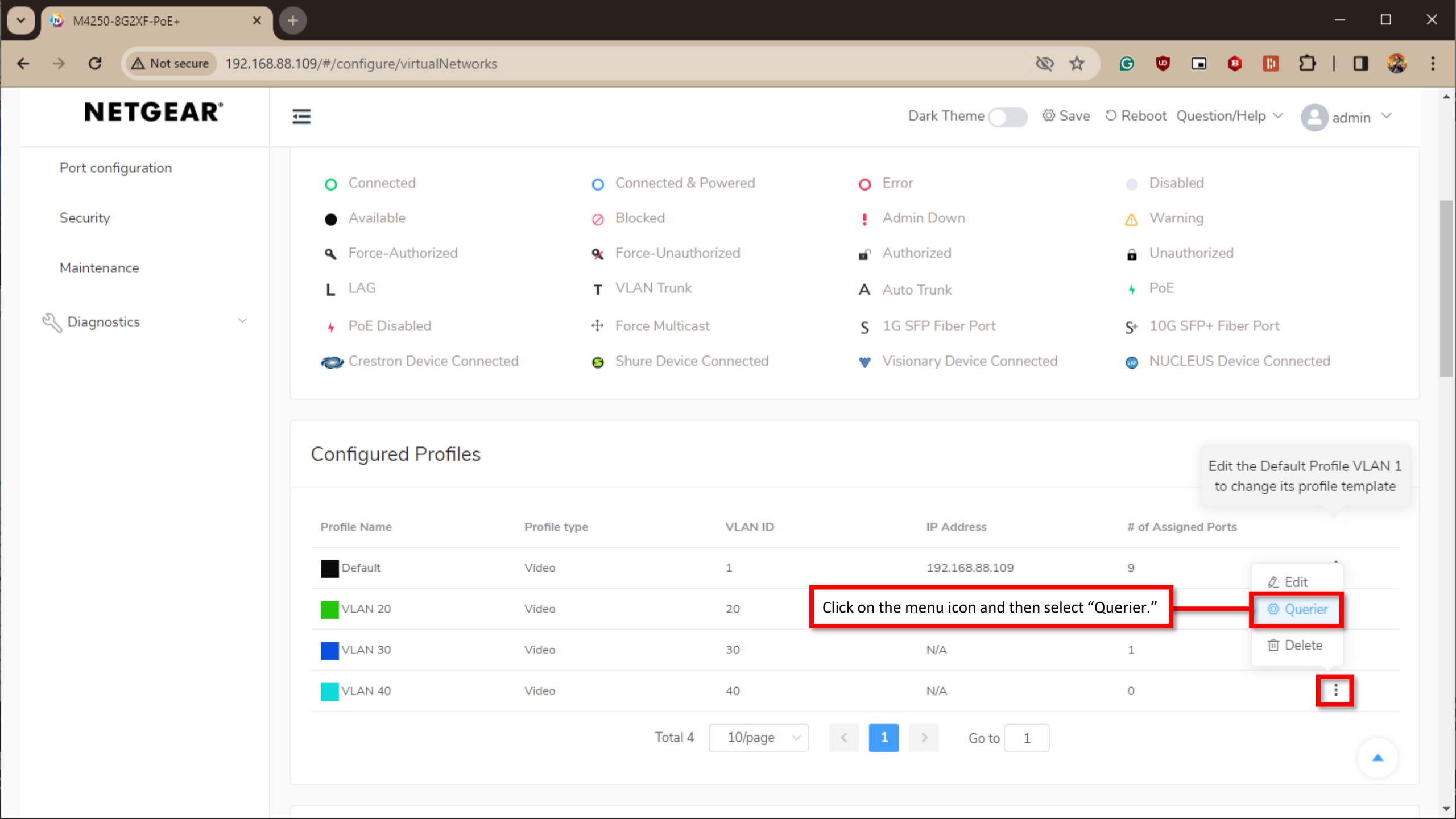

M4250-8G2XF-PoE+
Not secure
192.168.88.109/#/configure/virtualNetworks
NETGEAR
Dark Theme
Save
Reboot
Question/Help
admin
Port configuration
Security
Maintenance
Connected
Connected & Powered
Error
Disabled
Warning
Unauthorized
PoE
10G SFP+ Fiber Port
NUCLEUS Device Connected
Edit VLAN 20 querier settings
Election Participate
Querier VLAN Address
0.0.0.0
Operational State
QUERIER
Cancel
Apply
Disable “Election Participate” for the VLAN.
Click on “Apply.”
Configure
Edit the Default Profile VLAN 1 to change its profile template
Profile Name
Profile type
VLAN ID
IP Address
# of Assigned Ports
Default
Video
1
192.168.88.109
9
VLAN 20
Video
20
N/A
0
VLAN 30
Video
30
N/A
1
VLAN 40
Video
40
N/A
0
Total 4
10/page
1
Go to
1

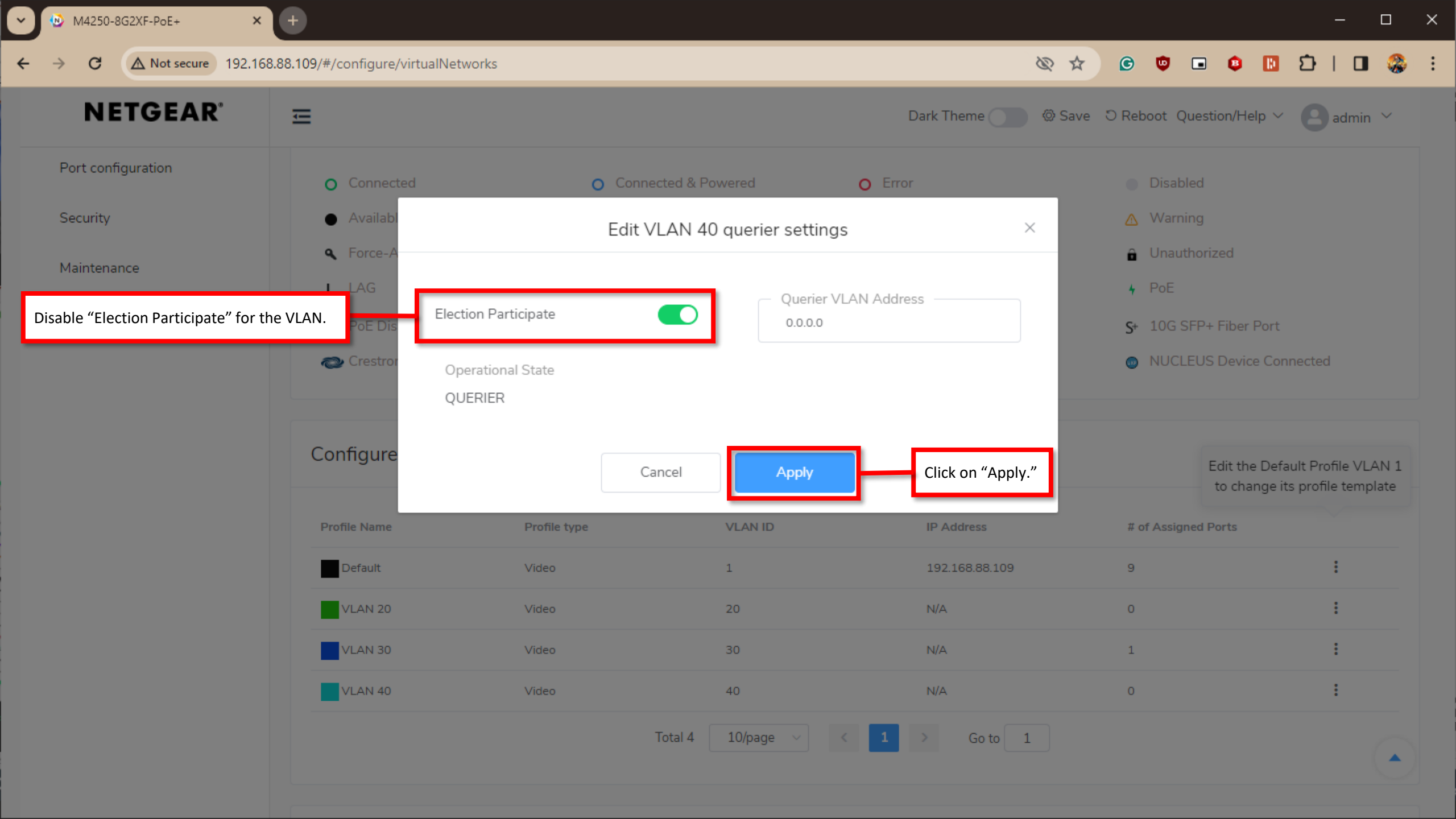

M4250-8G2XF-PoE+
Not secure
192.168.88.109/#/configure/virtualNetworks
NETGEAR
Dark Theme
Save
Reboot
Question/Help
admin
Port configuration
Security
Maintenance
Diagnostics
Connected
Connected & Powered
Error
Disabled
LAG
PoE
10G SFP+ Fiber Port
NUCLEUS Device Connected
Edit VLAN 20 querier settings
Election Participate
Querier VLAN Address
0.0.0.0
Operational State
QUERIER
Cancel
Apply
Click on the “X” to close out the querier configuration pop-up.
Configure
Edit the Default Profile VLAN 1 to change its profile template
Profile Name
Profile type
VLAN ID
IP Address
# of Assigned Ports
Default
Video
1
192.168.88.109
9
VLAN 20
Video
20
N/A
0
VLAN 30
Video
30
N/A
1
VLAN 40
Video
40
N/A
0
Total 4
10/page
1
Go to
1

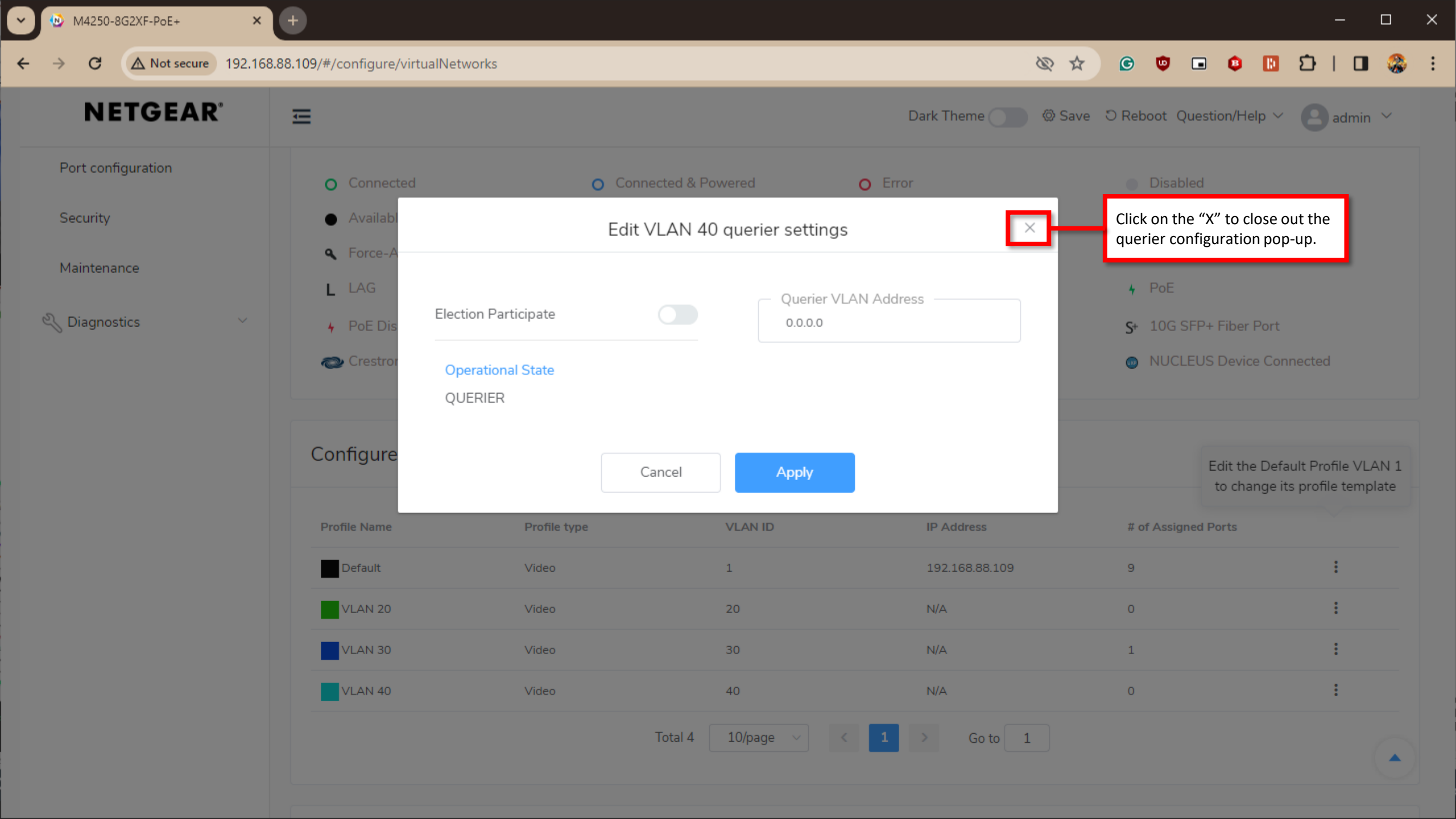

M4250-8G2XF-PoE+
Not secure
192.168.88.109/#/configure/virtualNetworks
NETGEAR
Dark Theme
Save
Reboot
Question/Help
admin
Port configuration
Security
Maintenance
Diagnostics
Connected
Connected & Powered
Error
Disabled
Available
Blocked
Admin Down
Warning
Force-Authorized
Force-Unauthorized
Authorized
Unauthorized
LAG
VLAN Trunk
Auto Trunk
PoE
PoE Disabled
Force Multicast
1G SFP Fiber Port
10G SFP+ Fiber Port
Crestron Device Connected
Shure Device Connected
Visionary Device Connected
NUCLEUS Device Connected
Configured Profiles
Edit the Default Profile VLAN 1 to change its profile template
Profile Name
Profile type
VLAN ID
IP Address
# of Assigned Ports
Default
Video
1
192.168.88.109
9
VLAN 20
Video
20
N/A
0
VLAN 30
Video
30
N/A
1
VLAN 40
Video
40
N/A
0
Edit
Querier
Delete
Total 4
10/page
Click on the menu icon and then select “Querier.”

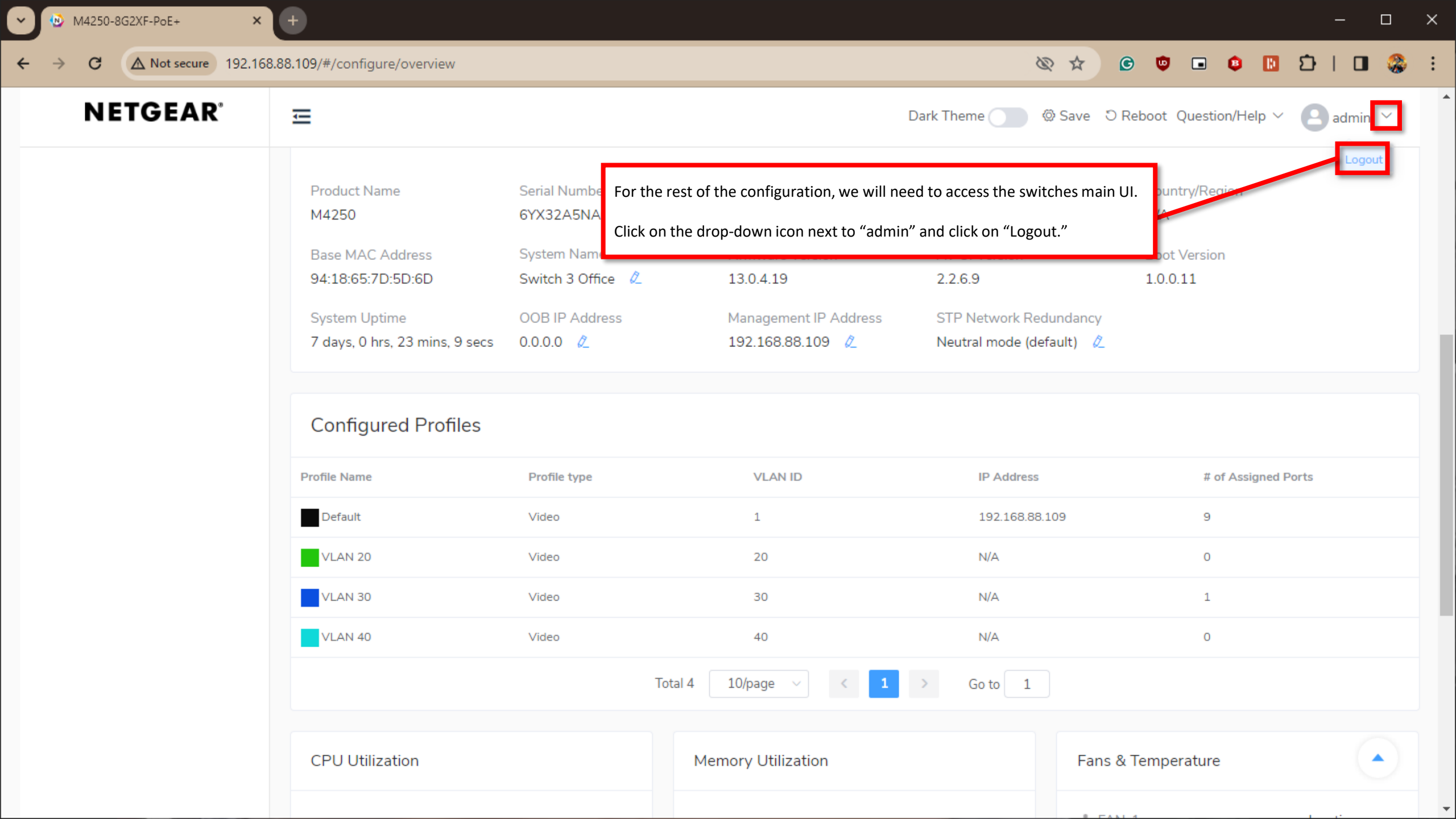

M4250-8G2XF-PoE+
Not secure
192.168.88.109/#/configure/virtualNetworks
NETGEAR
Dark Theme
Save
Reboot
Question/Help
admin
Port configuration
Security
Maintenance
Connected
Connected & Powered
Error
Disabled
Warning
Unauthorized
PoE
10G SFP+ Fiber Port
NUCLEUS Device Connected
Edit VLAN 30 querier settings
Election Participate
Querier VLAN Address
0.0.0.0
Operational State
QUERIER
Cancel
Apply
Disable “Election Participate” for the VLAN.
Click on “Apply.”
Configure
Edit the Default Profile VLAN 1 to change its profile template
Profile Name
Profile type
VLAN ID
IP Address
# of Assigned Ports
Default
Video
1
192.168.88.109
9
VLAN 20
Video
20
N/A
0
VLAN 30
Video
30
N/A
1
VLAN 40
Video
40
N/A
0
Total 4
10/page
1
Go to
1

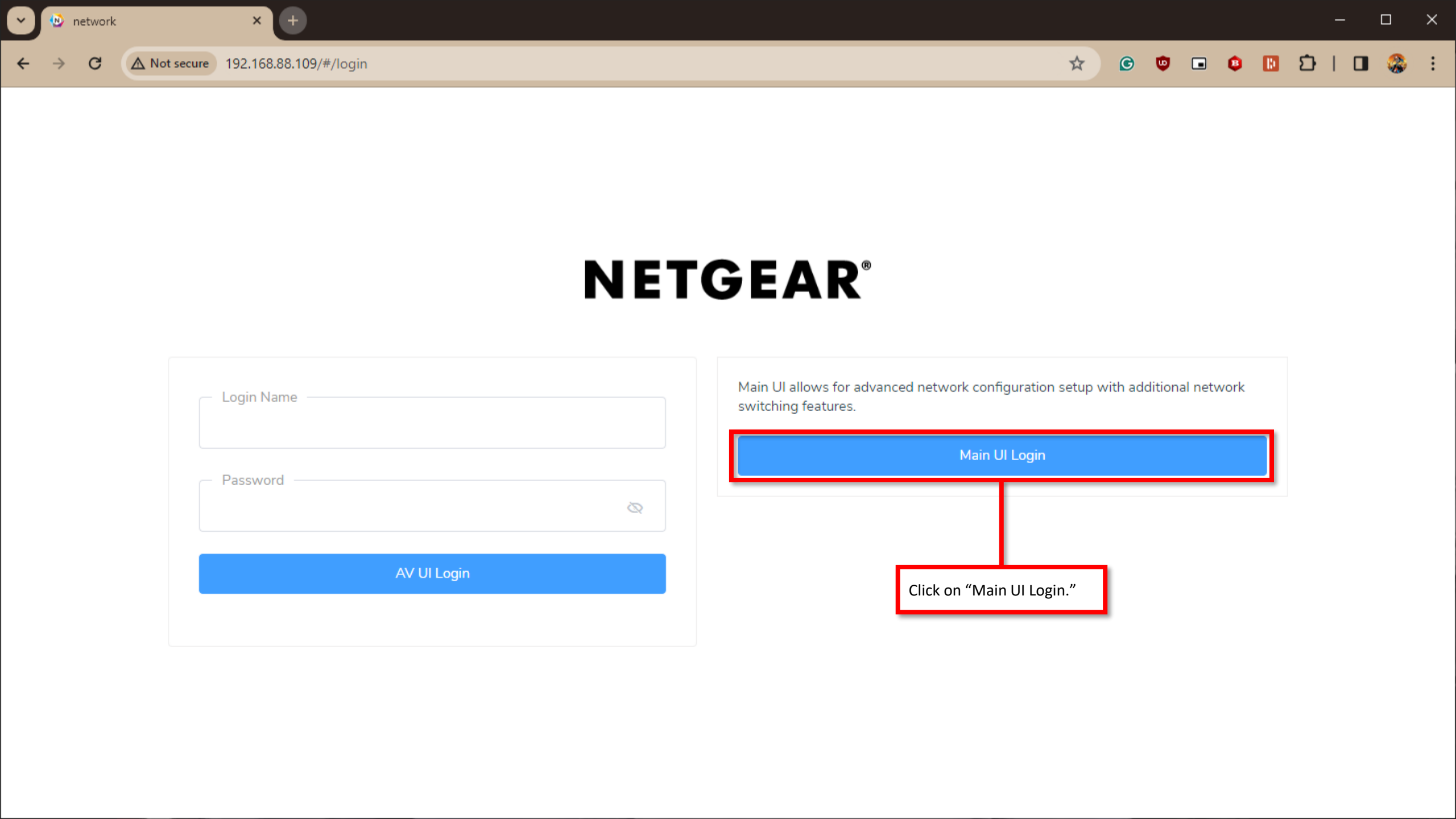

M4250-8G2XF-PoE+
Not secure
192.168.88.109/#/configure/virtualNetworks
NETGEAR
Dark Theme
Save
Reboot
Question/Help
admin
Port configuration
Security
Maintenance
Diagnostics
Connected
Connected & Powered
Error
Disabled
LAG
PoE
10G SFP+ Fiber Port
NUCLEUS Device Connected
Edit VLAN 30 querier settings
Election Participate
Querier VLAN Address
0.0.0.0
Operational State
QUERIER
Cancel
Apply
Click on the “X” to close out the querier configuration pop-up.
Configure
Edit the Default Profile VLAN 1 to change its profile template
Profile Name
Profile type
VLAN ID
IP Address
# of Assigned Ports
Default
Video
1
192.168.88.109
9
VLAN 20
Video
20
N/A
0
VLAN 30
Video
30
N/A
1
VLAN 40
Video
40
N/A
0
Total 4
10/page
1
Go to
1

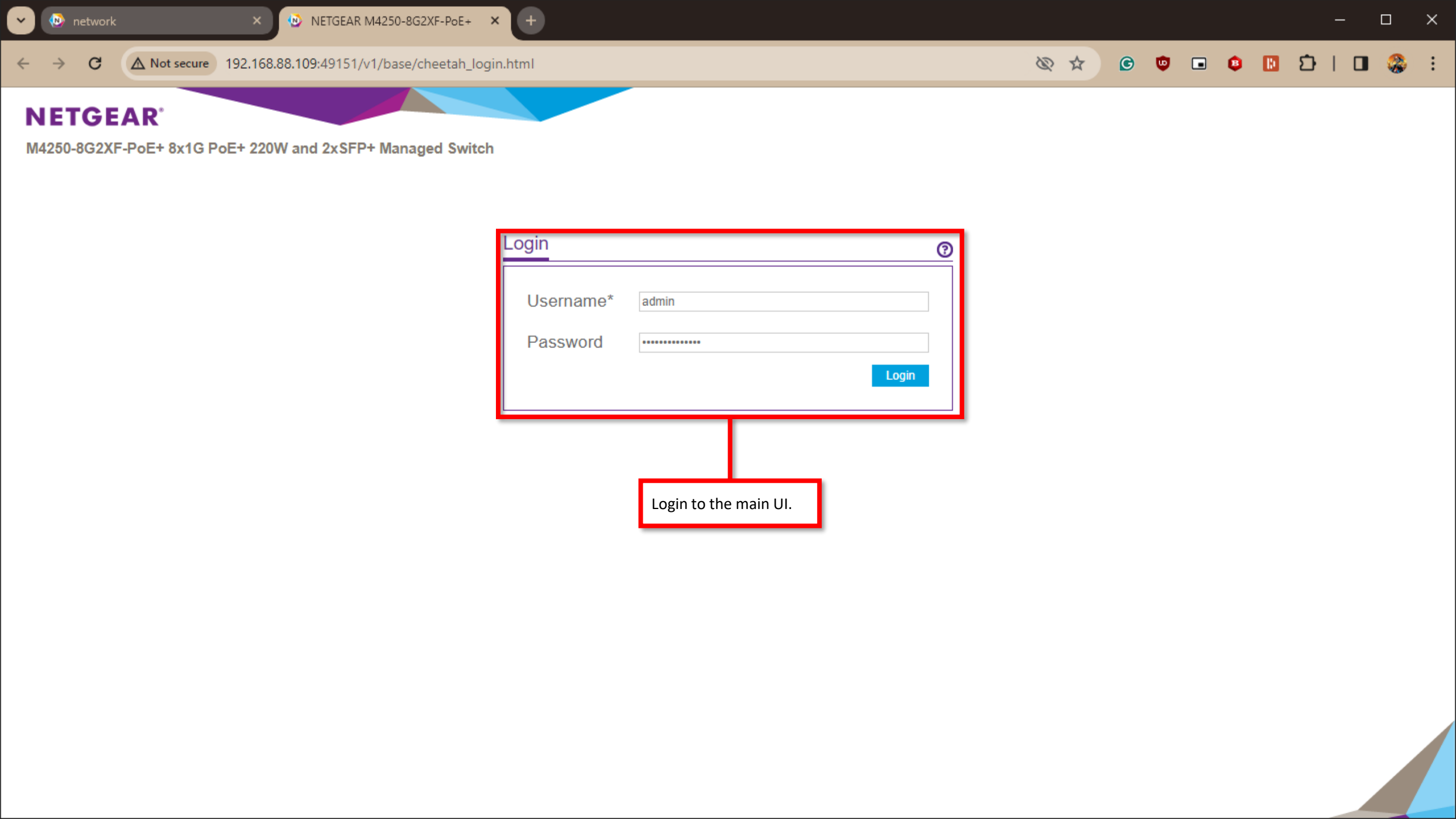

M4250-8G2XF-PoE+
Not secure
192.168.88.109/#/configure/virtualNetworks
NETGEAR
Dark Theme
Save
Reboot
Question/Help
admin
Port configuration
Security
Maintenance
Diagnostics
Connected
Connected & Powered
Error
Disabled
Available
Blocked
Admin Down
Warning
Force-Authorized
Force-Unauthorized
Authorized
Unauthorized
LAG
VLAN Trunk
Auto Trunk
PoE
PoE Disabled
Force Multicast
1G SFP Fiber Port
10G SFP+ Fiber Port
Crestron Device Connected
Shure Device Connected
Visionary Device Connected
NUCLEUS Device Connected
Configured Profiles
Edit the Default Profile VLAN 1 to change its profile template
Profile Name
Profile type
VLAN ID
IP Address
# of Assigned Ports
Default
Video
1
192.168.88.109
9
VLAN 20
Video
20
VLAN 30
Video
30
N/A
1
VLAN 40
Video
40
N/A
0
Edit
Querier
Delete
Click on the menu icon and then select “Querier.”
Total 4
10/page
1
Go to
1

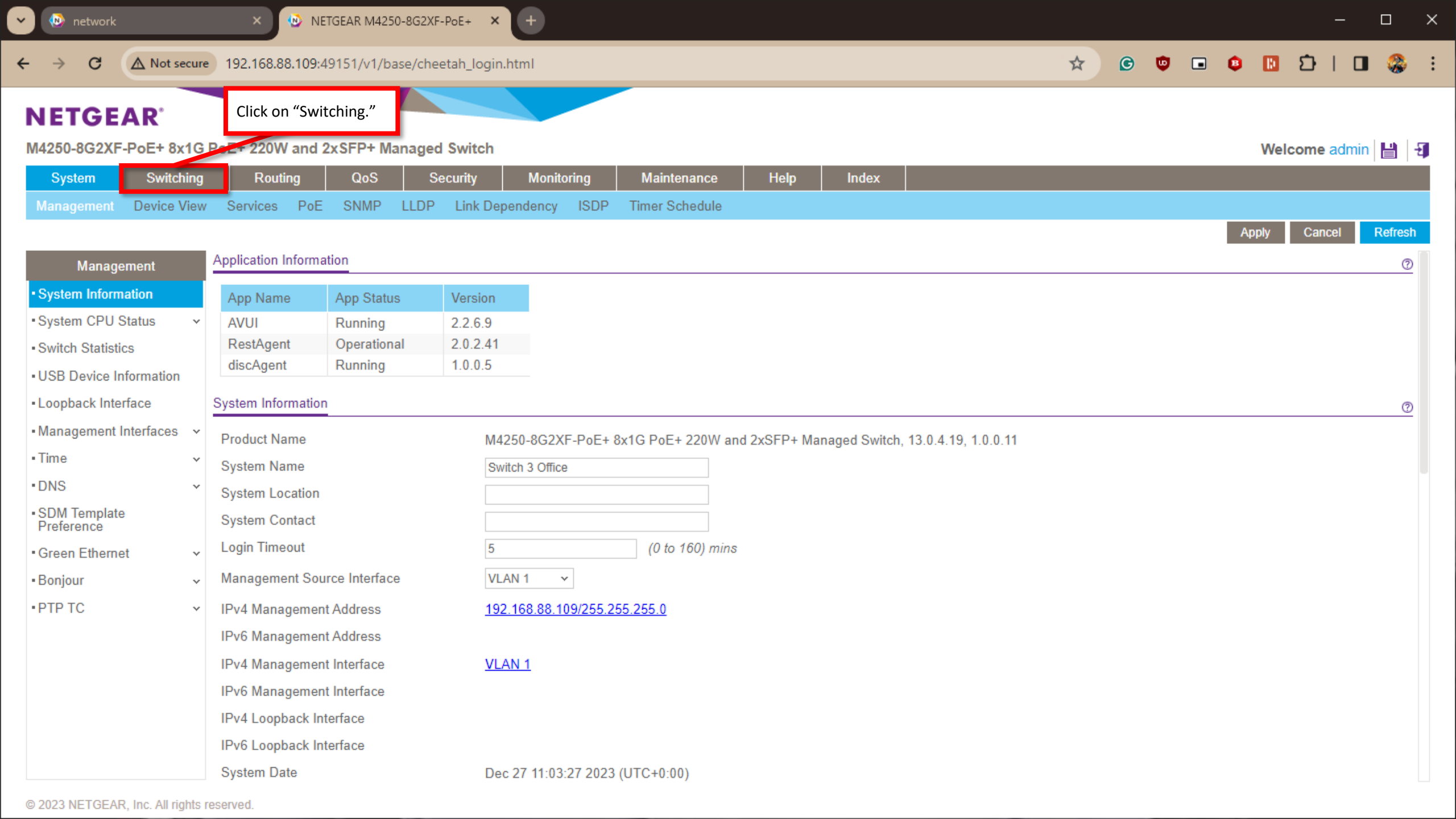

M4250-8G2XF-PoE+
Not secure
192.168.88.109/#/configure/virtualNetworks
NETGEAR
Dark Theme
Save
Reboot
Question/Help
admin
Port configuration
Security
Maintenance
Connected
Connected & Powered
Error
Disabled
Warning
Unauthorized
PoE
10G SFP+ Fiber Port
NUCLEUS Device Connected
Edit VLAN 40 querier settings
Election Participate
Querier VLAN Address
0.0.0.0
Operational State
QUERIER
Cancel
Apply
Disable “Election Participate” for the VLAN.
Click on “Apply.”
Configure
Edit the Default Profile VLAN 1 to change its profile template
Profile Name
Profile type
VLAN ID
IP Address
# of Assigned Ports
Default
Video
1
192.168.88.109
9
VLAN 20
Video
20
N/A
0
VLAN 30
Video
30
N/A
1
VLAN 40
Video
40
N/A
0
Total 4
10/page
Go to
1

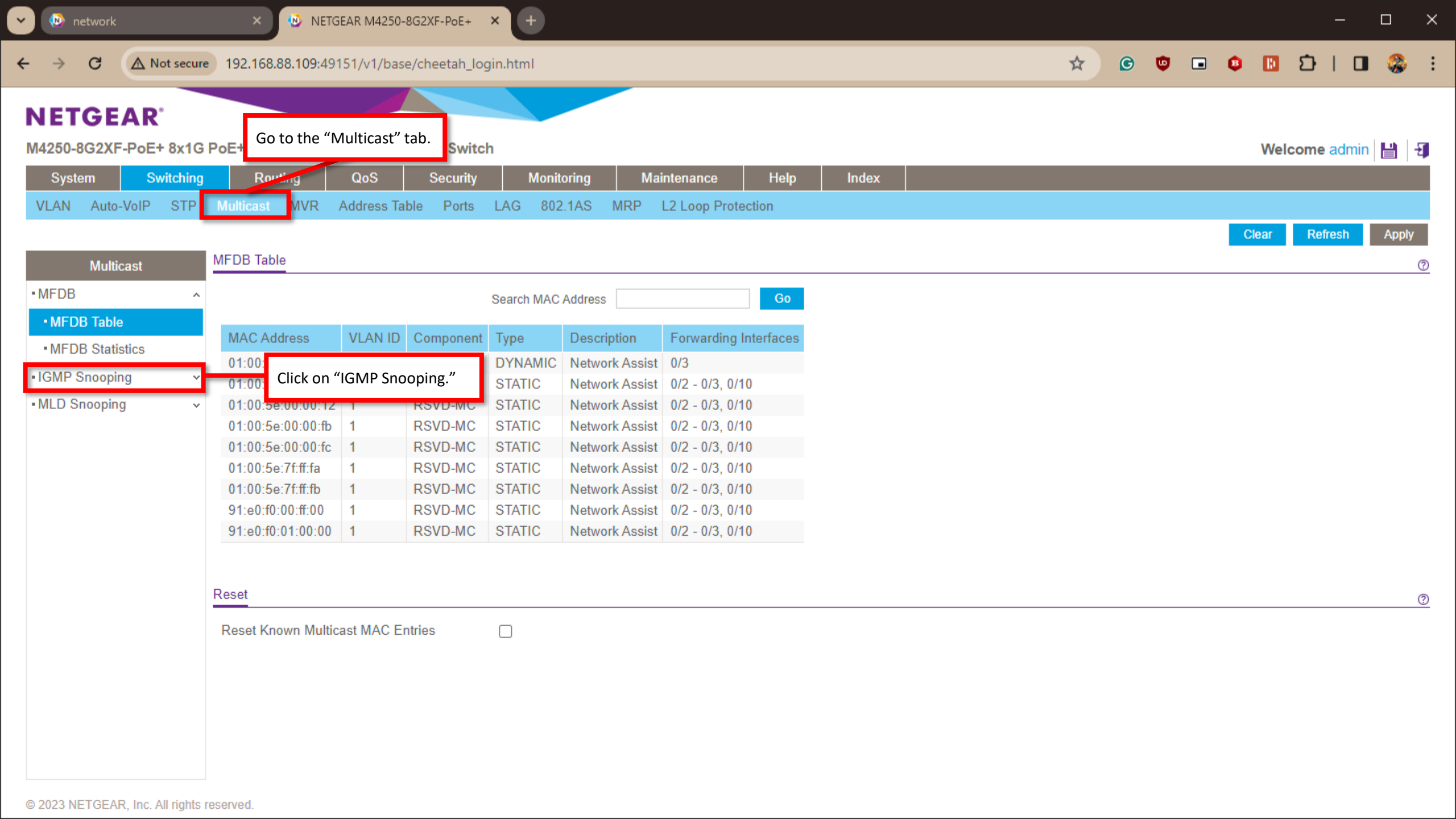

M4250-8G2XF-PoE+
Not secure
192.168.88.109/#/configure/virtualNetworks
NETGEAR
Dark Theme
Save
Reboot
Question/Help
admin
Port configuration
Security
Maintenance
Diagnostics
Connected
Connected & Powered
Error
Disabled
LAG
PoE
10G SFP+ Fiber Port
NUCLEUS Device Connected
Edit VLAN 40 querier settings
Election Participate
Querier VLAN Address
0.0.0.0
Operational State
QUERIER
Cancel
Apply
Click on the “X” to close out the querier configuration pop-up.
Configure
Edit the Default Profile VLAN 1 to change its profile template
Profile Name
Profile type
VLAN ID
IP Address
# of Assigned Ports
Default
Video
1
192.168.88.109
9
VLAN 20
Video
20
N/A
0
VLAN 30
Video
30
N/A
1
VLAN 40
Video
40
N/A
0
Total 4
10/page
1
Go to
1


M4250-8G2XF-PoE+
Not secure
192.168.88.109/#/configure/overview
NETGEAR
Dark Theme
Save
Reboot
Question/Help
admin
Logout
For the rest of the configuration, we will need to access the switches main UI.
Click on the drop-down icon next to “admin” and click on “Logout.”
Product Name
M4250
Serial Numbe
6YX32A5NA
Base MAC Address
94:18:65:7D:5D:6D
System Nam
Switch 3 Office
13.0.4.19
2.2.6.9
1.0.0.11
System Uptime
7 days, 0 hrs, 23 mins, 9 secs
OOB IP Address
0.0.0.0
Management IP Address
192.168.88.109
STP Network Redundancy
Neutral mode (default)
Configured Profiles
Profile Name
Profile type
VLAN ID
IP Address
# of Assigned Ports
Default
Video
1
192.168.88.109
9
VLAN 20
Video
20
N/A
0
VLAN 30
Video
30
N/A
1
VLAN 40
Video
40
N/A
0
Total 4
10/page
1
Go to
1
CPU Utilization
Memory Utilization
Fans & Temperature


network
Not secure
192.168.88.109/#/login
NETGEAR®
Login Name
Password
AV UI Login
Main UI allows for advanced network configuration setup with additional network switching features.
Main UI Login
Click on “Main UI Login.”


network
NETGEAR M4250-8G2XF-PoE+
Not secure
192.168.88.109:49151/v1/base/cheetah_login.html
NETGEAR
M4250-8G2XF-PoE+ 8x1G PoE+ 220W and 2xSFP+ Managed Switch
Login
Username*
admin
Password
Login
Login to the main UI.


network
NETGEAR M4250-8G2XF-PoE+
Not secure
192.168.88.109:49151/v1/base/cheetah_login.html
Click on “Switching.”
NETGEAR
M4250-8G2XF-PoE+ 8x1G PoE+ 220W and 2xSFP+ Managed Switch
Welcome admin
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
Management
Device View
Services
PoE
SNMP
LLDP
Link Dependency
ISDP
Timer Schedule
Apply
Cancel
Refresh
Management
System Information
System CPU Status
Switch Statistics
USB Device Information
Loopback Interface
Management Interfaces
Time
DNS
SDM Template Preference
Green Ethernet
Bonjour
PTP TC
Application Information
App Name
App Status
Version
AVUI
Running
2.2.6.9
RestAgent
Operational
2.0.2.41
discAgent
Running
1.0.0.5
System Information
Product Name
M4250-8G2XF-PoE+ 8x1G PoE+ 220W and 2xSFP+ Managed Switch, 13.0.4.19, 1.0.0.11
System Name
Switch 3 Office
System Location
System Contact
Login Timeout
5
(0 to 160) mins
Management Source Interface
VLAN 1
IPv4 Management Address
192.168.88.109/255.255.255.0
IPv6 Management Address
IPv4 Management Interface
VLAN 1
IPv6 Management Interface
IPv4 Loopback Interface
IPv6 Loopback Interface
System Date
Dec 27 11:03:27 2023 (UTC+0:00)
© 2023 NETGEAR, Inc. All rights reserved.


network
NETGEAR M4250-8G2XF-PoE+
Not secure
192.168.88.109:49151/v1/base/cheetah_login.html
NETGEAR
M4250-8G2XF-PoE+ 8x1G PoE+ Switch
Go to the “Multicast” tab.
Welcome admin
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
VLAN
Auto-VoIP
STP
Multicast
MVR
Address Table
Ports
LAG
802.1AS
MRP
L2 Loop Protection
Clear
Refresh
Apply
Multicast
MFDB
MFDB Table
MFDB Statistics
IGMP Snooping
MLD Snooping
Click on “IGMP Snooping.”
MFDB Table
Search MAC Address
Go
MAC Address
VLAN ID
Component
Type
Description
Forwarding Interfaces
01:00:
DYNAMIC
Network Assist
0/3
01:00:
STATIC
Network Assist
0/2 - 0/3, 0/10
01:00:5e:00:00:12
1
RSVD-MC
STATIC
Network Assist
0/2 - 0/3, 0/10
01:00:5e:00:00:fb
1
RSVD-MC
STATIC
Network Assist
0/2 - 0/3, 0/10
01:00:5e:00:00:fc
1
RSVD-MC
STATIC
Network Assist
0/2 - 0/3, 0/10
01:00:5e:7f:ff:fa
1
RSVD-MC
STATIC
Network Assist
0/2 - 0/3, 0/10
01:00:5e:7f:ff:fb
1
RSVD-MC
STATIC
Network Assist
0/2 - 0/3, 0/10
91:e0:f0:00:ff:00
1
RSVD-MC
STATIC
Network Assist
0/2 - 0/3, 0/10
91:e0:f0:01:00:00
1
RSVD-MC
STATIC
Network Assist
0/2 - 0/3, 0/10
Reset
Reset Known Multicast MAC Entries
© 2023 NETGEAR, Inc. All rights reserved.

network | NETGEAR M4250-8G2XF-PoE+

Not secure 192.168.88.109:49151/v1/base/cheetah_login.html

NETGEAR

M4250-8G2XF-PoE+ 8x1G PoE+ 220W and 2xSFP+ Managed Switch

Welcome admin

System | Switching | Routing | QoS | Security | Monitoring | Maintenance | Help | Index

VLAN | Auto-VoIP | STP | Multicast | MVR | Address Table | Ports | LAG | 802.1AS | MRP | L2 Loop Protection

Refresh | Cancel | Apply

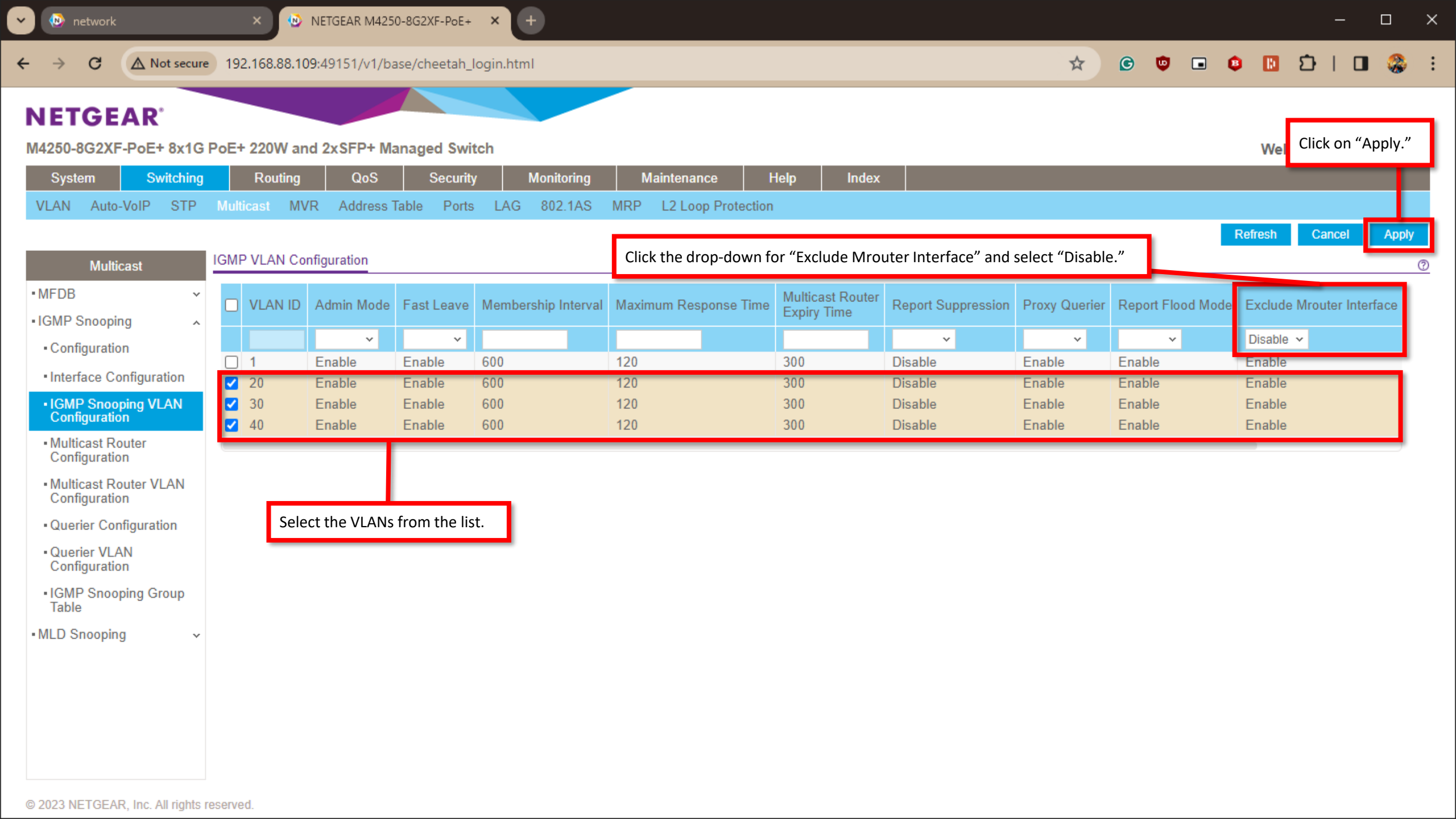
Multicast

- MFDB
- IGMP Snooping
  - Configuration
  - Interface Configuration
  - IGMP Snooping VLAN Configuration
  - Multicast Router Configuration
  - Multicast Router VLAN Configuration
  - Querier Configuration
  - Querier VLAN Configuration
  - IGMP Snooping Group Table
- MLD Snooping

IGMP VLAN Configuration

VLAN ID	Admin Mode	Fast Leave	Membership Interval	Maximum Response Time	Multicast Router Expiry Time	Report Suppression	Proxy Querier	Report Flood Mode	Exclude Mrouter Interface
1	Enable	Enable	600	120	300	Disable	Enable	Enable	Enable
20	Enable	Enable	600	120	300	Disable	Enable	Enable	Enable
30	Enable	Enable	600	120	300	Disable	Enable	Enable	Enable
40	Enable	Enable	600	120	300	Disable	Enable	Enable	Enable

Click on “IGMP Snooping VLAN Configuration.”


network
NETGEAR M4250-8G2XF-PoE+
Not secure
192.168.88.109:49151/v1/base/cheetah_login.html
NETGEAR
M4250-8G2XF-PoE+ 8x1G PoE+ 220W and 2xSFP+ Managed Switch
System
Switching
Routing
QoS
Security
Monitoring
Maintenance
Help
Index
VLAN
Auto-VoIP
STP
Multicast
MVR
Address Table
Ports
LAG
802.1AS
MRP
L2 Loop Protection
Refresh
Cancel
Apply
Click on “Apply.”
Multicast
MFDB
IGMP Snooping
Configuration
Interface Configuration
IGMP Snooping VLAN Configuration
Multicast Router Configuration
Multicast Router VLAN Configuration
Querier Configuration
Querier VLAN Configuration
IGMP Snooping Group Table
MLD Snooping
IGMP VLAN Configuration
Click the drop-down for “Exclude Mrouter Interface” and select “Disable.”
VLAN ID
Admin Mode
Fast Leave
Membership Interval
Maximum Response Time
Multicast Router Expiry Time
Report Suppression
Proxy Querier
Report Flood Mode
Exclude Mrouter Interface
Disable
1 Enable Enable 600 120 300 Disable Enable Enable Enable
20 Enable Enable 600 120 300 Disable Enable Enable Enable
30 Enable Enable 600 120 300 Disable Enable Enable Enable
40 Enable Enable 600 120 300 Disable Enable Enable Enable
Select the VLANs from the list.
© 2023 NETGEAR, Inc. All rights reserved.

network

NETGEAR M4250-8G2XF-PoE+

Not secure 192.168.88.109:49151/v1/base/cheetah_login.html

NETGEAR

M4250-8G2XF-PoE+ 8x1G PoE+ 220W and 2xSFP+ Managed Switch

Welcome admin

System | Switching | Routing | QoS | Security | Monitoring | Maintenance | Help | Index

VLAN | Auto-VoIP | STP | Multicast | MVR | Address Table | Ports | LAG | 802.1AS | MRP | L2 Loop Protection

Refresh | Cancel | Apply

Multicast

- MFDB
- IGMP Snooping
  - Configuration
  - Interface Configuration
  - IGMP Snooping VLAN Configuration
  - Multicast Router Configuration
  - Multicast Router VLAN Configuration
  - Querier Configuration
  - Querier VLAN Configuration
  - IGMP Snooping Group Table
- MLD Snooping

IGMP VLAN Configuration

VLAN ID	Admin Mode	Fast Leave	Membership Interval	Maximum Response Time	Multicast Router Expiry Time	Report Suppression	Proxy Querier	Report Flood Mode	Exclude Mrouter Interface
1	Enable	Enable	600	120	300	Disable	Enable	Enable	Enable
20	Enable	Enable	600	120	300	Disable	Enable	Enable	Disable
30	Enable	Enable	600	120	300	Disable	Enable	Enable	Disable
40	Enable	Enable	600	120	300	Disable	Enable	Enable	Disable

The leaf switch is now configured.
To add additional switches to the network you will follow the second part of this technical training.

End


NETGEAR AV
NETGEAR AV
Switching
Engineered
for AV over IP
NETGEAR
ProAV Catalog