NETGEAR® BUSINESS

M4350

M4300

M4500

M4250
AV Line

M4250

Experience an easy network configuration and management tool

The NETGEAR Engage™ Controller removes the complexity from network configuration and management in AV-over-IP installations using M4250, M4300, M4350, and M4500 switches. As a free, portable app for Windows, and MacOS, the controller automatically detects all the switches permitting effortless firmware upgrades, profile configurations, and much more. With the NETGEAR Engage Controller, deploy your AV network with ease.

NETGEAR Engage brings 3 major benefits

1. Automatically detect all switches in your network for easy firmware upgrades and centralized management. Multiple site switch management with central repository of AV network profiles and other settings.

2. Groundbreaking AV User Interface now available for all M4250, M4300, M4350, and M4500 switches to simplify configuration of multiple switches.

3. Powerful, easily portable, and free software application for Windows or Mac OS; no need to install. It can be downloaded on-site or brought in on a storage device.
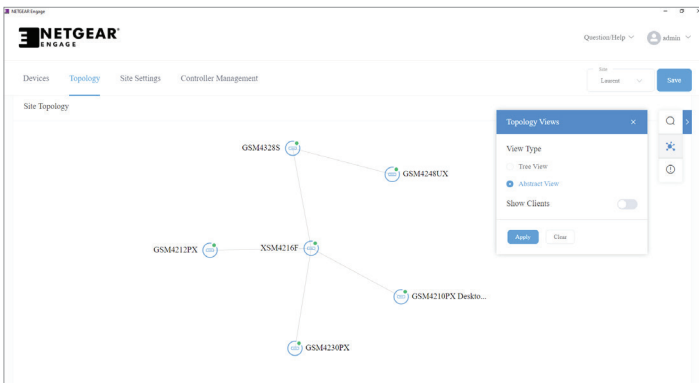
NETGEAR® AV

What are the main challenges?

Audio and Video over IP bring complexity to Pro AV installers when it comes to managing Ethernet switches. Now that Ethernet switches are the central, critical component of all AV over IP installations, an improperly setup network can ruin the entire AV experience.

1. Detecting Ethernet switches deployed across a network requires a lot of manual effort.

2. Updating firmware on multiple switches is time consuming.

3. Configuring Ethernet switches for Dante, AES67, AVB, Lighting, Video over IP, etc. is a difficult, error-prone task, especially for those who are not familiar with configuring a network switch.

4. Ensuring that multiple switches used in an installation are configured correctly to work in harmony is difficult and time consuming.

5. Network management software can be expensive and must reside on a particular computer which may not be available in the field for installation and troubleshooting.

Example

Topology

Without Clients
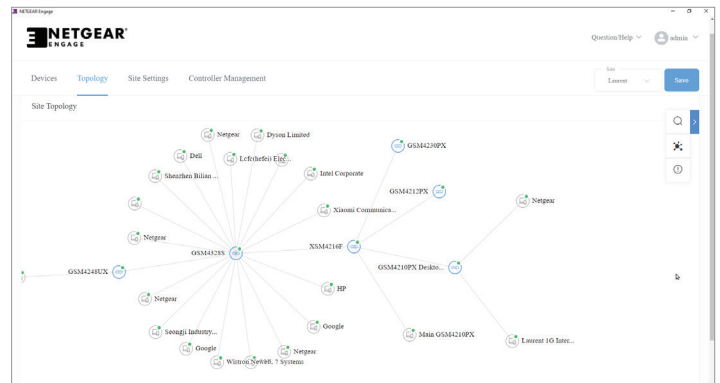
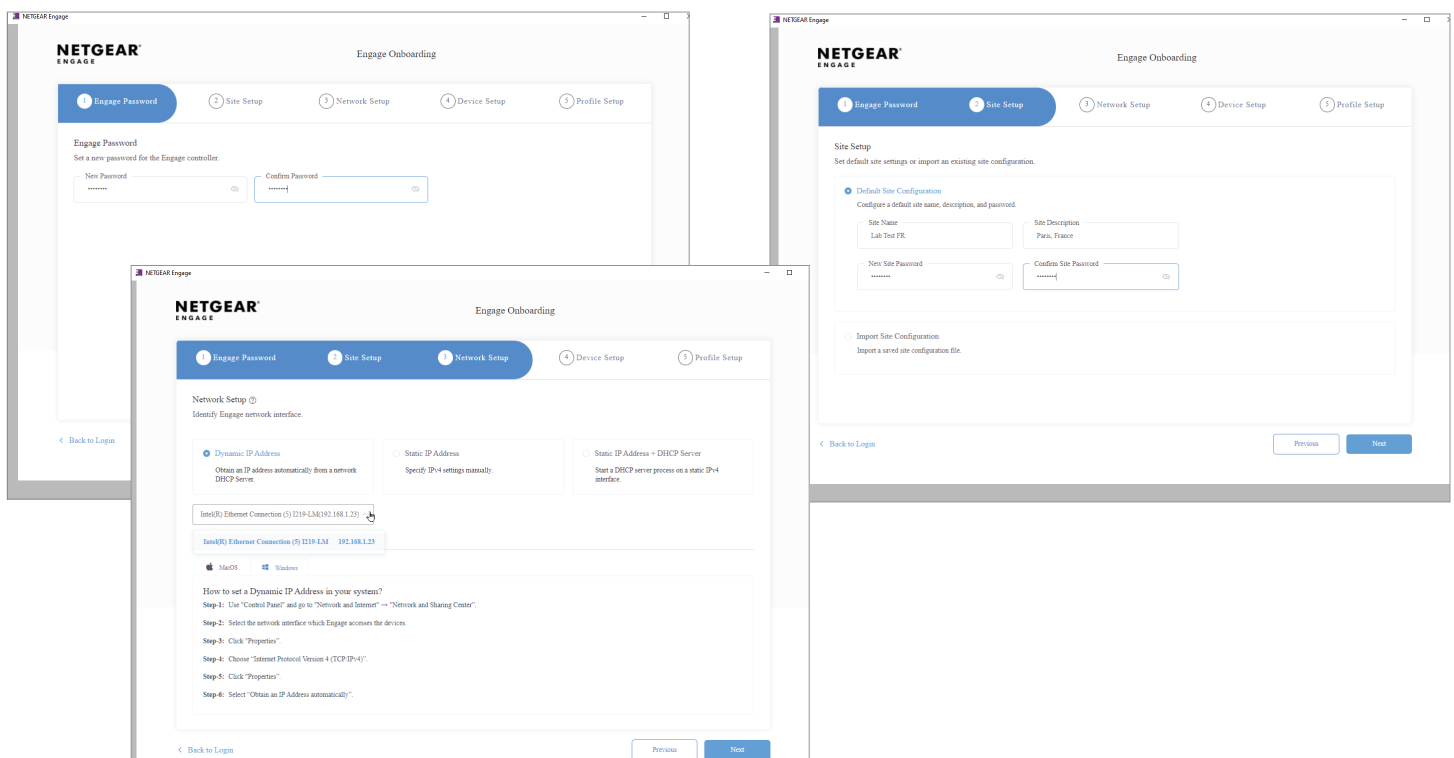With Clients

Site Settings

Before

After

How does the NETGEAR Engage Controller primarily solve those problems?

1. The Engage Controller automatically detects all M4250, M4300, M4350, and M4500 switches.

2. You can centrally trigger easy firmware upgrades across all switches if your PC is online.

3. The groundbreaking AV user interface with port-based profiles is now available for all switches on your network.

   – Centralize the easy-to-use AV profiles in your Engage Controller, and deploy to all the switches across your entire network.

4. Visualize and centrally manage your AV network for perfect configuration across switches.

   – The network topology lets you visualize M4250, M4300, M4350, and M4500 switches in play.

   – Leverage the unique NETGEAR IGMP Plus™, Auto-LAG, and Auto-Trunk features for automated inter-connect between your switches.

   – All your sites, credentials, and configuration are stored in a central place for your convenience.

5. The Engage Controller is a portable application, so it can reside on a USB thumb drive without the need to be installed on any particular computer to allow you to run it on any Windows, MacOS, or Linux computer anywhere.

Example

Initial Controller Onboarding

Technical Specifications

OS Support	• Microsoft Windows 10 and Microsoft Windows 11 • Apple macOS Monterey 12.x
Download	• NETGEAR Engage can be downloaded here: http://www.netgear.com/engage-download
Installation	• Portable application (no installation required) • Can be run even from a flash drive
Standard Client Requirement	• 2 Ghz CPU • 2GB RAM • 3GB HD (free space)
Language Support	• English
Internet	• Internet on the host computer isn't an absolute requirement • With internet, NETGEAR Engage detects new firmware for the switches • Switch firmware upgrades are then possible at the click of a button
Network Requirement	• NETGEAR Engage can automatically detect M4250 switches, M4300 switches and stacks, M4350 switches and stacks, and M4500 switches that are either factory-default, or already configured, within the same broadcast domain (VLAN). • In a Layer 3 network with routed VLANs, switches can be manually added, using manual IP settings for each
Switch Onboarding	• When factory-default, M4250/M4300/M4350 switches come with a DHCP Client address on their OOB port and their Management VLAN 1 interface • After 2 minutes, their OOB interface reverts to 192.168.0.239 255.255.255.0, and their Management VLAN 1 interface reverts to 169.254.100.100 255.255.0.0 • When multiple switches to onboard in this case without an existing DHCP server, the NETGEAR Engage can initially offer DHCP server service for your switches • For this, assign a static IP address to the NIC on the computer where NETGEAR Engage is used, and select "Static IP Address + DHCP Server" for your NIC during the Network Setup of your site • M4500 switches come with a DHCP Client interface on both OOB and VLAN 1 interfaces, hence a DHCP server is needed on the network or Engage for easier onboarding too
Switch Management	• NETGEAR Engage can detect, and manage switches either from their OOB interface, or their Management VLAN interface • NETGEAR Engage cannot connect to the switches via their other VLAN interfaces
Switch AV User Interface	• When onboarded in NETGEAR Engage, the switch AV User Interface is only available in NETGEAR Engage
Site Management	• Multiple sites can be created in NETGEAR Engage • Sites can be securely exported or imported using encrypted site files

Supported NETGEAR Devices

SUPPORTED NETGEAR DEVICES		
Model Name	Description	Model Number
NETGEAR M4250-9G1F-PoE+	Desktop Managed Switch 8x1G PoE+ 110W 1x1G and 1xSFP AV Line	GSM4210PD
NETGEAR M4250-8G2XF-PoE+	Desktop Managed Switch 8x1G PoE+ 220W and 2x10G SFP+ AV Line	GSM4210PX
NETGEAR M4250-10G2F-PoE+	Managed Switch 8x1G PoE+ 125W 2x1G and 2xSFP AV Line	GSM4212P
NETGEAR M4250-10G2XF-PoE+	Managed Switch 8x1G PoE+ 240W 2x1G and 2x10G SFP+ AV Line	GSM4212PX
NETGEAR M4250-10G2XF-PoE++	Managed Switch 8x1G Utra90 PoE++ 802.3bt 720W 2x1G and 2x10G SFP+ AV Line	GSM4212UX
NETGEAR M4250-12M2XF	Managed Switch 12x100M/1G/2.5GBASE-T and 2x10G SFP+ AV Line	MSM4214X
NETGEAR M4250-16XF	Managed Switch 16x10G SFP+ (1G/10G aggregation) AV Line	XSM4216F
NETGEAR M4250-26G4F-PoE+	Managed Switch 24x1G PoE+ 300W 2x1G and 4xSFP AV Line	GSM4230P
NETGEAR M4250-26G4F-PoE++	Managed Switch 24x1G Ultra90 PoE++ 802.3bt 1,440W 2x1G and 4xSFP AV Line	GSM4230UP
NETGEAR M4250-26G4XF-PoE+	Managed Switch 24x1G PoE+ 480W 2x1G and 4xSFP+	GSM4230PX
NETGEAR M4250-40G8F-PoE+	Managed Switch 40x1G PoE+ 480W and 8xSFP AV Line	GSM4248P
NETGEAR M4250-40G8XF-PoE+	Managed Switch 40x1G PoE+ 960W and 8xSFP+ AV Line	GSM4248PX
NETGEAR M4250-40G8XF-PoE++	Managed Switch 40x1G Ultra90 PoE++ 802.3bt 2,880W and 8xSFP+ AV Line	GSM4248UX
NETGEAR M4300-28G	Stackable Managed Switch with 24x1G and 4x10G including 2x10GBASE-T and 2xSFP+ Layer 3	GSM4328S
NETGEAR M4300-28G-PoE+	(550W PSU) Stackable Managed Switch with 24x1G PoE+ and 4x10G including 2x10GBASE-T and 2xSFP+ Layer 3	GSM4328PA
NETGEAR M4300-28G-PoE+	(1,000W PSU) Stackable Managed Switch with 24x1G PoE+ and 4x10G including 2x10GBASE-T and 2xSFP+ Layer 3	GSM4328PB
NETGEAR M4300-52G	Stackable Managed Switch with 48x1G and 4x10G including 2x10GBASE-T and 2xSFP+ Layer 3	GSM4352S
NETGEAR M4300-52G-PoE+	(550W PSU) Stackable Managed Switch with 48x1G PoE+ and 4x10G including 2x10GBASE-T and 2xSFP+ Layer 3	GSM4352PA
NETGEAR M4300-52G-PoE+	(1,000W PSU) Stackable Managed Switch with 48x1G PoE+ and 4x10G including 2x10GBASE-T and 2xSFP+ Layer 3	GSM4352PB
NETGEAR M4300-8X8F	Stackable Managed Switch with 16x10G including 8x10GBASE-T and 8xSFP+ Layer 3	XSM4316S
NETGEAR M4300-12X12F	Stackable Managed Switch with 24x10G including 12x10GBASE-T and 12xSFP+ Layer 3	XSM4324S
NETGEAR M4300-16X	(299W PSU) Stackable Managed Switch with 16x10G including 16x100M/1G/2.5G/5G/10GBASE-T PoE+ 199W Layer 3	XSM4316PA
NETGEAR M4300-16X	(600W PSU) Stackable Managed Switch with 16x10G including 16x100M/1G/2.5G/5G/10GBASE-T PoE+ 500W Layer 3	XSM4316PB
NETGEAR M4300-24X	Stackable Managed Switch with 24x10G including 24x10GBASE-T and 4 shared SFP+ Layer 3	XSM4324CS

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Model Name	Description	Model Number
NETGEAR M4300-24XF	Stackable Managed Switch with 24x10G including 24xSFP+ and 2 shared 10GBASE-T Layer 3	XSM4324FS
NETGEAR M4300-24X24F	Stackable Managed Switch with 48x10G including 24x10GBASE-T and 24xSFP+ Layer 3	XSM4348S
NETGEAR M4300-48X	Stackable Managed Switch with 48x10G including 48x10GBASE-T and 4 shared SFP+ Layer 3	XSM4348CS
NETGEAR M4300-48XF	Stackable Managed Switch with 48x10G including 48xSFP+ and 2 shared 10GBASE-T Layer 3	XSM4348FS
NETGEAR M4300-96X	Stackable Modular Managed Switch with up to 96x10GBASE-T, 96xSFP+, 24xQSFP+ or a combination Layer 3	XSM4396K0/K1
NETGEAR M4300-48XF	Stackable Managed Switch with 48x10G including 48xSFP+ and 2 shared 10GBASE-T Layer 3	XSM4348FS
NETGEAR M4350-24G4XF	Managed Switch with 24x1G PoE+ (648W base, up to 720W) and 4xSFP+ Layer 3	GSM4328
NETGEAR M4350-48G4XF	Managed Switch with 48x1G PoE+ (236W base, up to 1,440W) and 4xSFP+ Layer 3	GSM4352
NETGEAR M4350-44M4X4V	Managed Switch with 44x2.5G, 4x10G/Multi-Gig PoE++ (194W base, up to 3,314W) and 4xSFP28 25G Layer 3	MSM4352
NETGEAR M4350-8X8F	Managed Switch with 8x10G/Multi-Gig and 8xSFP+ Layer 3	XSM4316
NETGEAR M4350-12X12F	Managed Switch with 12x10G/Multi-Gig and 12xSFP+ Layer 3	XSM4324
NETGEAR M4350-24X4V	Managed Switch with 24x10G/Multi-Gig PoE+ (576W base, up to 720W) and 4xSFP28 25G Layer 3	XSM4328CV
NETGEAR M4350-24F4V	Managed Switch with 24xSFP+ and 4xSFP28 25G Layer 3	XSM4328FV
NETGEAR M4350-36X4V	Managed Switch with 36x10G/Multi-Gig PoE++ (280W base, up to 1,760W) and 4xSFP28 25G Layer 3	XSM4340CV
NETGEAR M4350-24X8F8V	Managed Switch with 24x10G/Multi-Gig PoE++ (290W base, up to 1,770W), 8xSFP+ and 8xSFP28 25G Layer 3	XSM4340V
NETGEAR M4350-32F8V	Managed Switch with 32xSFP+ and 8xSFP28 25G Layer 3	XSM4340FV
NETGEAR M4350-16V4C	Managed Switch with 16xSFP28 25G and 4xQSFP28 100G Layer 3	VSM4320C
NETGEAR M4350-40X4C	Managed Switch with 40x10G/Multi-Gig PoE++ (196W base, up to 1,676W) and 4xQSFP28 100G Layer 3	XSM4344C
NETGEAR M4500-32C	Managed Switch with Managed Switch with 32x40G/100G QSFP28 Layer 3	CSM4532
NETGEAR M4500-48XF8C	Managed Switch with Managed Switch with 48x10G/25G SFP28 and 8x40G/100G QSFP28 Layer 3	XSM4556

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Screenshots

NETGEAR, Inc. 350 E. Plumeria Drive, San Jose, CA 95134-1911 USA, 1-888-NETGEAR (638-4327), E-mail: info@NETGEAR.com, www.NETGEAR.com

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