



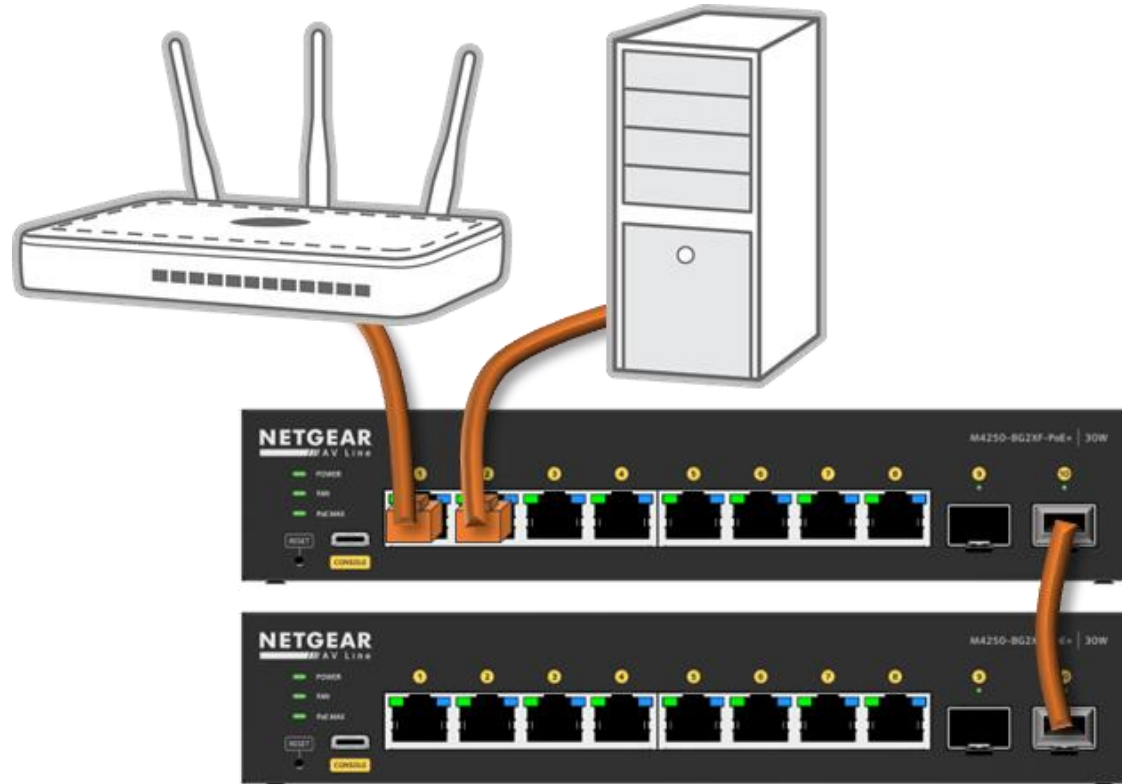
Configuring Multiple VLANs for Different Types of AV over IP

How to configure audio, video, and lighting all on separate VLANs.

Configuring Multiple VLANs for Different types of AV over IP

In this guide we will go over how to configure audio, video, and lighting on separate VLANs for each one.

We are first going to configure a VLAN for audio, then create one for video, and another one for lighting, each one will have their own ports configured across multiple switches.



Open the Engage controller and go to "Site Settings."

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Profile Template

VLAN ID

Default

Data

1

⋮

Total 1

10/page ▾

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Global Settings

These setting will be applied to all switches on this site.

Auto-Trunk



Auto-LAG



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Select the profile overview template to provide your AV profile template options

Profile Template

Select

Hybrid

Audio AES67

Audio Dante

Audio Q-SYS

Audio Video AVB

Data

Lighting

Click on the drop-down for "Profile Template" and select "Audio Q-SYS."

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Select the profile overview template to provide your AV profile template options

Profile Template

Audio Q-SYS ▾

Profile Description

To connect IP Audio Q-SYS devices and their controller

Use As Default VLAN Profile



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Click on "Next."

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Profile Settings

Configure your profile settings and preferences

Profile Name

Audio


Profile Template

Audio Q-SYS ▾

VLAN ID

10

Color

 #148FE7

We are going to name this VLAN **“Audio”** and give it an ID of **“10,”** then select the color for the profile.

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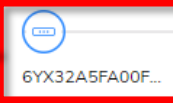
1 Profile Template

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3 Port Assignment

Profile Name: **Audio** | VLAN ID: **10** | Profile Template: **Audio Q-SYS**[Show Legends](#) [Refresh](#)

Click on the first switch to select the ports.



Total Number of Configured Switches: 0

Switch Name ▾

Model ▾

Configured Number of Ports ▾

Configured Ports



You have no configured switches for this network profile.

Please assign ports for this network profile by clicking on the Switch from the above section.

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- 3 Port Assignment

We are going to select ports 1 and 2.

Profile Name: **Audio** | VLAN ID: **10** | Profile Template: **Audio Q-SYS**

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After selecting the ports click on the next switch.

6YX32A5FA00F7

1 2 3 4 5 6 7 8 9 10 A

Total Number of Configured Switches: **1**

Switch Name	Model	Configured Number of Ports	Configured Ports		
6YX32A5FA00F7	M4250-8G2XF-PoE+	2	M4250-8G2XF-PoE+ 1 2		

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1 Profile Template **2** Profile Settings **3** Port Assignment

Profile Name: **Audio** | VLAN ID: **10** | Profile Template: **Audio Q-SYS**

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6YX32A5NA0109

1 **2** **3** ✓ **4** ✓ **5** **6** **7** **8** **9** **10**

Untag all

We are going to select ports 3 and 4.

Total Number of Configured Switches: **2**

Search for Switch

Switch Name ↓	Model ↓	Configured Number of Ports ↓	Configured Ports	
6YX32A5NA0109	M4250-8G2XF-PoE+	2	M4250-8G2XF-PoE+ 3 4	
6YX32A5FA00F7	M4250-8G2XF-PoE+	2	M4250-8G2XF-PoE+ 1 2	

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Apply

Click on "Apply."

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- 1 Profile Template
- 2 Profile Settings**
- 3 Port Assignment

Profile Name: **Audio** | VLAN ID: **10** | Profile Template: **Audio Q-SYS**

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6YX32A5NA0109

Create New Profile

Are you sure you want to apply network port assignments to all the switches on the site?

Click on "Confirm."

Total Number of Configured Switches: 2

Switch Name Model

6YX32A5NA0109 M4250-8G2XF-PoE+ 2

6YX32A5FA00F7 M4250-8G2XF-PoE+ 2

1 2

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Cancel

Apply

We now have our audio VLAN configured, we are now going to create the VLAN for video.

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Profile Name	Profile Template	VLAN ID	
 Default	Data	1	⋮
 Audio	Audio Q-SYS	10	⋮

Total 2 ▾ < 1 > Go to

Click on "Create New Profile."

Global Settings

These setting will be applied to all switches on this site.

Auto-Trunk



Auto-LAG



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Profile Template

Select the profile overview template to provide your AV profile template options

Profile Template

Select

U: Sonos

Video

Video NDI4

Video NDI5 with Dante, Q-Sys or AES67 audio

Video with AES67 audio

Video with Dante audio

Video with Q-SYS audio

Click on the drop-down for “**Profile Template**” and select “**Video.**”

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Profile Template

Select the profile overview template to provide your AV profile template options

Profile Template

Video ▾

Profile Description

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.

Use As Default VLAN Profile



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Click on "Next."

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Profile Settings

Configure your profile settings and preferences

Profile Name

Video

Profile Template

Video ▾

VLAN ID

20

Color



#850EE0

We are going to name this VLAN **"Video"** and give it an ID of **"20,"** then select the color for the profile.

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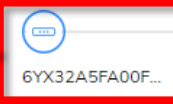
Create New Profile

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1 Profile Template

2 Profile Settings

3 Port Assignment

Profile Name: **Video** | VLAN ID: **20** | Profile Template: **Video**[Show Legends](#) [Refresh](#) Click on the first switch to select the ports.Total Number of Configured Switches: **0**

Switch Name ▾

Model ▾

Configured Number of Ports ▾

Configured Ports



You have no configured switches for this network profile.

Please assign ports for this network profile by clicking on the Switch from the above section.

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Create New Profile

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- 1 Profile Template
- 2 Profile Settings
- 3 Port Assignment**

We are going to select ports 3 and 4.

Profile Name: **Video** | VLAN ID: **20** | Profile Template: **Video**

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After selecting the ports click on the next switch.

6YX32A5FA00F7



[Untag all](#)

Total Number of Configured Switches: **1**

Switch Name	Model	Configured Number of Ports	Configured Ports		
6YX32A5FA00F7	M4250-8G2XF-PoE+	2	M4250-8G2XF-PoE+ <input type="text" value="3"/> <input type="text" value="4"/>		

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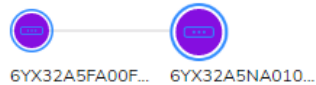
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- 3 Port Assignment**

Profile Name: **Video** | VLAN ID: **20** | Profile Template: **Video**

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6YX32A5NA0109



Untag all

Total Number of Configured Switches: **2**

Switch Name ↓	Model ↓	Configured Number of Ports ↓	Configured Ports	
6YX32A5NA0109	M4250-8G2XF-PoE+	2	M4250-8G2XF-PoE+ 5 6	
6YX32A5FA00F7	M4250-8G2XF-PoE+	2	M4250-8G2XF-PoE+ 3 4	

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Apply

Click on "Apply."

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Profile Name: **Video** | VLAN ID: **20** | Profile Template: **Video**

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6YX32A5NA0109

Create New Profile

Are you sure you want to apply network port assignments to all the switches on the site?

Cancel Confirm

Click on "Confirm."

Total Number of Configured Switches: 2

Switch Name ↓ Model ↓

6YX32A5NA0109 M4250-8G2XF-PoE+ 2

6YX32A5FA00F7 M4250-8G2XF-PoE+ 2

M4250-8G2XF-PoE+
3 4

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Cancel Apply

Now that we have our VLANs for audio and video configured, we are going to create the VLAN for the lighting.

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Profile Name	Profile Template	VLAN ID	
 Default	Data	1	⋮
 Audio	Audio Q-SYS	10	⋮
 Video	Video	20	⋮

Total 3 < 1 > Go to

Click on "Create New Profile."

Global Settings

These setting will be applied to all switches on this site.

Auto-Trunk



Auto-LAG



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Profile Template

Select the profile overview template to provide your AV profile template options

Profile Template

Select

U

Audio Q-SYS

Audio Video AVB

Data

Lighting

Shure Converged Audio and Control Network

Shure Split Audio and Control Network

Sonos

Click on the drop-down for “Profile Template” and select “Lighting.”

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1 Profile Template

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3 Port Assignment

Profile Template

Select the profile overview template to provide your AV profile template options

Profile Template

Lighting ▾

Profile Description

To connect sACN, Art-Net, and MANet lighting devices.

Use As Default VLAN Profile



Next

Click on "Next."

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3 Port Assignment

Profile Settings

Configure your profile settings and preferences

Profile Name

Lights

Profile Template

Lighting ▾

VLAN ID

30

Color

 #14F1A7

We are going to name this VLAN "**Lights**" and give it an ID of "**30**," then select the color for the profile.

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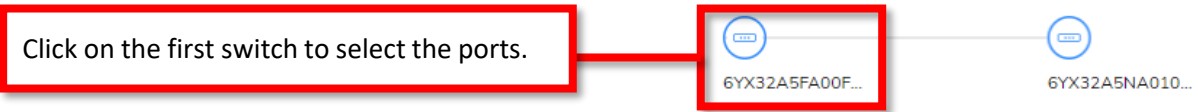
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- 1 Profile Template
- 2 Profile Settings
- 3 Port Assignment

Profile Name: **Lights** | VLAN ID: **30** | Profile Template: **Lighting**

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Total Number of Configured Switches: 0

Switch Name ↓	Model ↓	Configured Number of Ports ↓	Configured Ports
---------------	---------	------------------------------	------------------



You have no configured switches for this network profile.
Please assign ports for this network profile by clicking on the Switch from the above section.

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Profile Name: **Lights** | VLAN ID: **30** | Profile Template: **Lighting**

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We are going to select ports 5 and 6.

6YX32A5FA00F7

Untag all

After selecting the ports click on the next switch.

Total Number of Configured Switches: **1**

Switch Name	Model	Configured Number of Ports	Configured Ports		
6YX32A5FA00F7	M4250-8G2XF-PoE+	2	M4250-8G2XF-PoE+ 5 6		

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- 1 Profile Template
- 2 Profile Settings
- 3 **Port Assignment**

We are going to select ports 7 and 8.

Profile Name: **Lights** | VLAN ID: **30** | Profile Template: **Lighting**

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6YX32A5NA0109

Untag all

Total Number of Configured Switches: **2**

Switch Name ↓	Model ↓	Configured Number of Ports ↓	Configured Ports	
6YX32A5NA0109	M4250-8G2XF-PoE+	2	M4250-8G2XF-PoE+ <input type="text" value="7"/> <input type="text" value="8"/>	
6YX32A5FA00F7	M4250-8G2XF-PoE+	2	M4250-8G2XF-PoE+ <input type="text" value="5"/> <input type="text" value="6"/>	

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Cancel

Apply

Click on "Apply."

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Profile Name: **Lights** | VLAN ID: **30** | Profile Template: **Lighting**

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6YX32A5NA0109

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Are you sure you want to apply network port assignments to all the switches on the site?

Click on **"Confirm."**

Total Number of Configured Switches: 2

Switch Name Model

6YX32A5NA0109 M4250-8G2XF-PoE+ 2

6YX32A5FA00F7 M4250-8G2XF-PoE+ 2

5 6

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



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Profile Name	Profile Template	VLAN ID	
 Default	Data	1	⋮
 Audio	Audio Q-SYS	10	⋮
 Video	Video	20	⋮
 Lights	Lighting	30	⋮

Total 4 ▾ < 1 > Go to

Global Settings

These setting will be applied to all switches on this site.

Auto-Trunk



Auto-LAG



We now have our network configured with separate VLANs for audio, video, and lighting.

