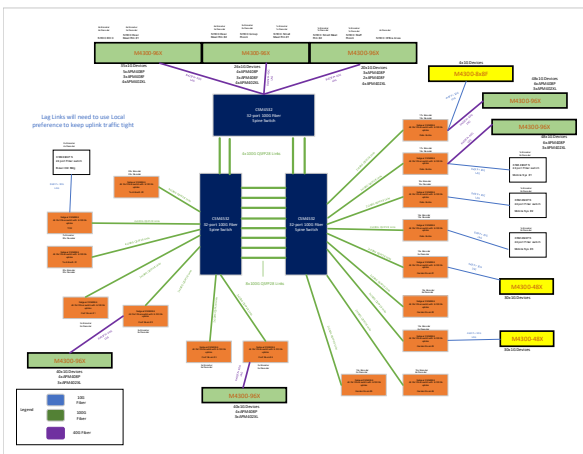


Top Ten Tips for AV over IP Network Design

From the team who designs AV over IP Networks

- 1 **Use Approved Switches.** Make sure to use switches that have been approved for use in Pro AV: M4250, M4300, and M4500 series switches.
- 2 **Get Training.** Many organizations offer free training such as:
 - NETGEAR: <https://netgear.academy>
 - SDVoE: <https://sdvoe.org/academy/>
 - Dante: <https://www.audinate.com/training>
- 3 **Find out the Requirements.** First task in any project is to find out the requirements. Is quality king? Is latency tolerated? Answers to these questions will help determine the type of encoders/decoders which determines the speed of the switch and uplink ports needed.
- 4 **Do the Math.** Make sure you have the proper uplinks for your system, or you will have problems. Guaranteed. Build in some headroom, too.
- 5 **Use VLANs.** At a bare minimum, create one VLAN for control and another for AV. Better practice is to create a separate VLAN for each type of AV signal.
- 6 **Remember Ports are Full Duplex.** Don't forget that a switch is running the ports on full duplex so you can send and receive data on same link without dividing the bandwidth.
- 7 **QoS is not Magic.** If you don't design your network correctly and you have a bottleneck, you will have sound and video disruption no matter what you try to do with QoS.
- 8 **Design in Scalability.** When designing AV over IP installations, remember that the network costs are far lower than the cost of traditional technology. And networks can easily scale as needs arise so design for future growth!
- 9 **Create a Dedicated AV Network.** We suggest designing a dedicated AV network for the highest performance and lowest latency. AV and IT aren't meant to "converge" with AV streams traversing IT networks, however you can connect the AV network back to the IT network for control.
- 10 **Use Quality Modules.** AV installations often require the best customer experience with great audio and great video. Reliable, proven transceivers are an essential part of every installation.



And the most important tip is to contact us first (for free) before the installation to verify your design plan - better to be safe than sorry.

Just email us: ProAVDesign@netgear.com



Zero-touch install



Rapid deployment



High reliability



Easy expandability



Dedicated engineering services team



Next business day replacement