

BACKGROUND

The AN-310 router has limited support for communications between the LAN 1-3 port grouping, and the LAN 4 port. As a result, we recommend you use LAN 4 as a non-overlapping network

This document provides guidance for the best practices for specific installation scenarios.

What Is Limited?

These limitations include:

- Multicast to support any auto-discovery protocols like SDDP (Control 4), AirPlay, Sonos, etc.
- QoS to support services like VoIP systems

Use Case: Router-on-a-Stick Topology

Our recommended procedure is to attach one dedicated switch to the router to handle traffic. Thus the connections run from the modem to the router, and then to the master switch. From there the cables run to other switches, WAPs, and host devices.

In this use case, use the LAN 4 port, which supports higher WAN-LAN throughput than the others:

- LAN 4: WAN-LAN 1Gbps unidirectional, 2Gbps bidirectional (1Gbps up, 1Gbps down, even simultaneously)
- LAN 1-3: WAN-LAN 1Gbps unidirectional, 1.2Gbps bidirectional (600Mbps up, 600Mbps down simultaneously)

Use Case: Router Using Multiple Ports

If you are using the router as a switch as well, then we recommend the following:

- Use LAN 1-3 for your networking needs. These three ports communicate well and your network will function as expected.
- Use LAN 4 only if you have a secondary non-overlapping network that you have set up using VLAN or subnet. Examples include a surveillance subnet or a separate network for the guest house.