Audinate Dante

Dante

Dante is a combination of software, hardware, and network protocols that delivers uncompressed, multi-channel, low-latency digital audio (and now video) over a standard Ethernet network. Dante is an acronym for **D**igital **A**udio **N**etwork **T**hrough **E**thernet.

https://en.wikipedia.org/wiki/Dante_(networking)

FAQ

What is the minimum requirement for switches in a Dante network?

While Gigabit switches are recommended, 100Mbps switches may be used in limited scenarios.

For low channel count (<32) applications, a 100Mbps switch may be used as long as it supports proper QoS, and QoS is active. **The use of 100Mbps switches without QoS is not recommended or supported.** For higher channel counts, Gigabit switches are essential. QoS is recommended for Gigabit switches on networks that share data with services other than Dante.

Network Configuration

IGMP Snooping

IGMP v2 / v3 on macOS

IGMP is specified in two commonly used versions: v2 and v3. This difference is most easily seen on current macOS computers that use IGMP v3 on built-in Ethernet ports; these may fail when connected to IGMP v2 switches. An easy workaround is to use an Ethernet adapter, all of which use IGMP v2. https://www.audinate.com/blog/post/well-intentioned-mishaps-with-igmp-snooping

Alternately (at the switch level) you can ‘Forward All’ multicast traffic to the Mac. In effect, that disables IGMP snooping for that port. However, assuming the Mac has a Gigabit port, you should be fine.

Link-Local

> For Link-Local networks, Dante expects primary interfaces to use the 169.254.x.x range, and secondary interfaces to use the 172.31.x.x range. {.is-info}

> The primary and secondary interfaces should not share a subnet or IP space. If a Dante device resets to factory default settings it may revert to "Daisy-Chain" mode – meaning it is now bridging your primary and secondary networks instead of offering redudancy - causing multiple interfaces to use the same IP address. {.is-warning}

- IP addresses for each network interface must be unique.
- Dante Primary and Secondary networks must never be physically linked.
- Dante Primary and Secondary addresses must be in different subnets.
- Dante Primary will use the 169.254.x.x subnet when set to auto-configure. This is standard IPv4 protocol and therefore the same behaviour as the Connectivity network.
- Dante Secondary will use the 172.31.x.x subnet when set to auto-configure. This is still a private address within IPv4, and is not reserved exclusively for auto-configuration, making its use for secondary auto-configuration unique to Dante.
- In addition to being configured in different subnets, Dante Primary, Dante Secondary and Connectivity should typically be treated as three physically separate networks, with their own network hardware.

Troubleshooting

Using Wireshark to Troubleshoot Dante Issues

Filters

Filter Multicast

`(eth.dst[0] & 1)`

Filter to Port

`udp.port == 4440`

Reverse Engineering

> Some details on this page are derrived from packet inspection or other reverse-engineering techniques and are not officially released from Audinate. {.is-warning}

Ports

8700 (UDP)

- Sample rate
- Level control
- Preferred Encoding
- Device Identification (Flash Port Light)

4440

- Get/set subscriptions
- Device latency
- Set/reset channel name
- Rename device

5353 (MDNS)

- Read device encoding
- Read device sample rate
- Read device latency
- Enumerate channel count
- Device discovery
- Device model
- MAC address
- Device manufacturer
- Device version

5353 (244.0.0.251 Multicast)

Revision #2
Created 2026-07-30 20:25:07 UTC by iantech
Updated 2026-07-30 20:25:36 UTC by iantech