

Kieran Walsh

Region Manager: Global Support Services

Deploying Dante

- Making Life as easy as possible:
  - What is “out of the box”?
  - How to build up a network
- Use of Dante controller
  - To test infrastructure
  - Troubleshooting

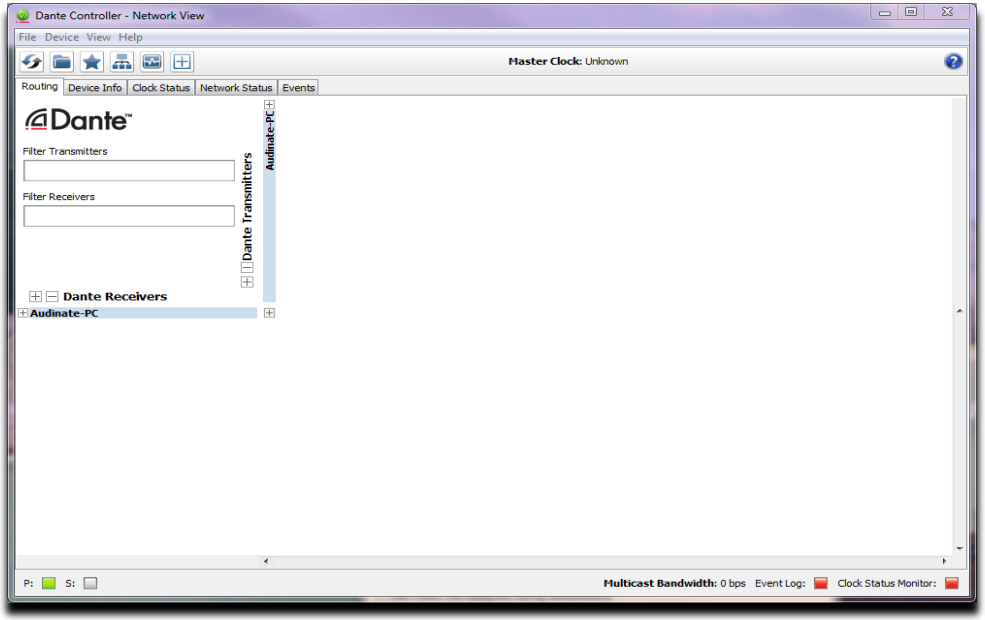
Dante – Out of the box

What do we consider “out of the box” settings are?

- Endpoints (Software and Dante-enabled hardware)
  - Just like an Operating System (Windows, OSX, Linux)
    - Network Interface is in automatic/dynamic mode
    - Just the “bare” OS system security package is installed
- Switches
  - Nothing configured
  - No VLANS, ACLs, LAGs etc
  - No “Active” STP topology
- Any Other “features” of the network
  - No “other” services are expected “out of the box”
  - Eg DHCP, RADIUS, TACACS+, VPN, 802.1x etc
  - The “art” of networking is balancing traffic
  - The “art” of Audio is making sound!

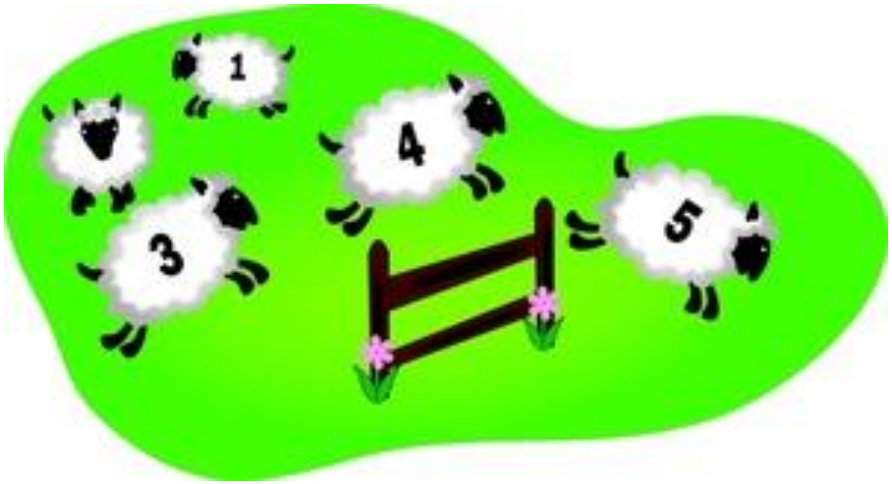
Start at the beginning

- Plug in a Machine running Dante software to a Switch



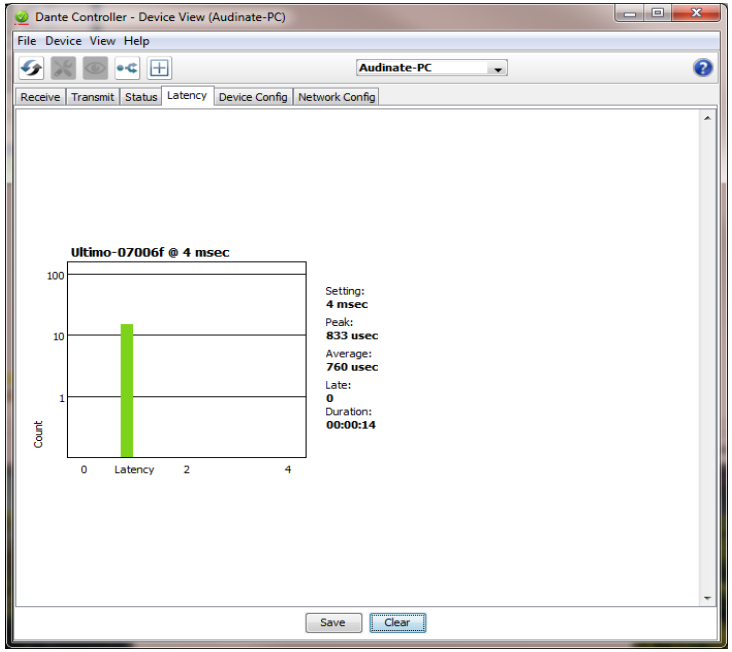
Why this is important?

- WITHOUT configuring IP address the machine just appears
- Dante Discovery resolves names
  - it does use IP addresses underneath
- Just like DNS in the World Wide Web!



Easy so far… too easy?

- How do we know that we are “safe”?
- Step 1 – check realtime packet latency



Checking Safety

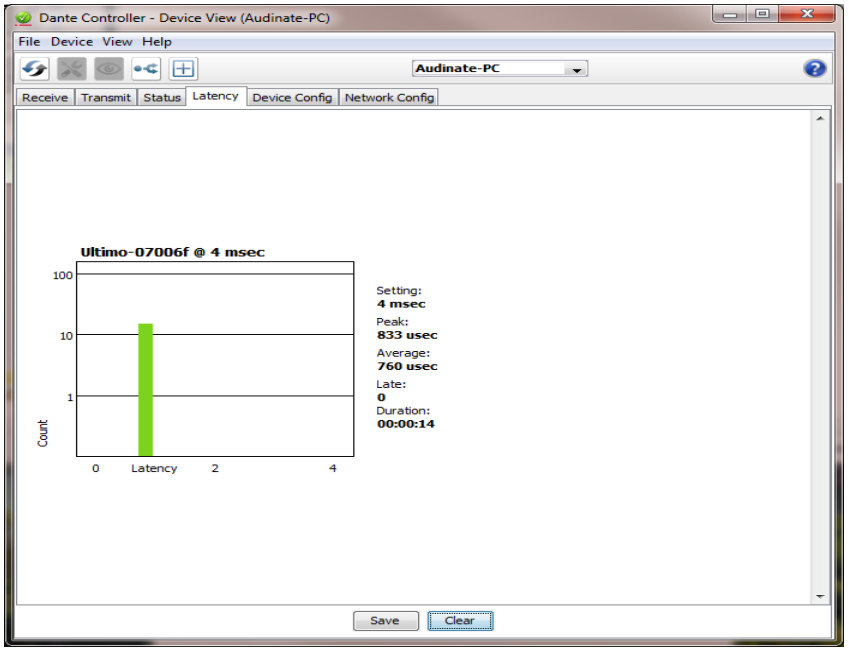
- Step 2 – Look at clock histogram
- Step 3 – Check Network View (bandwidth use)

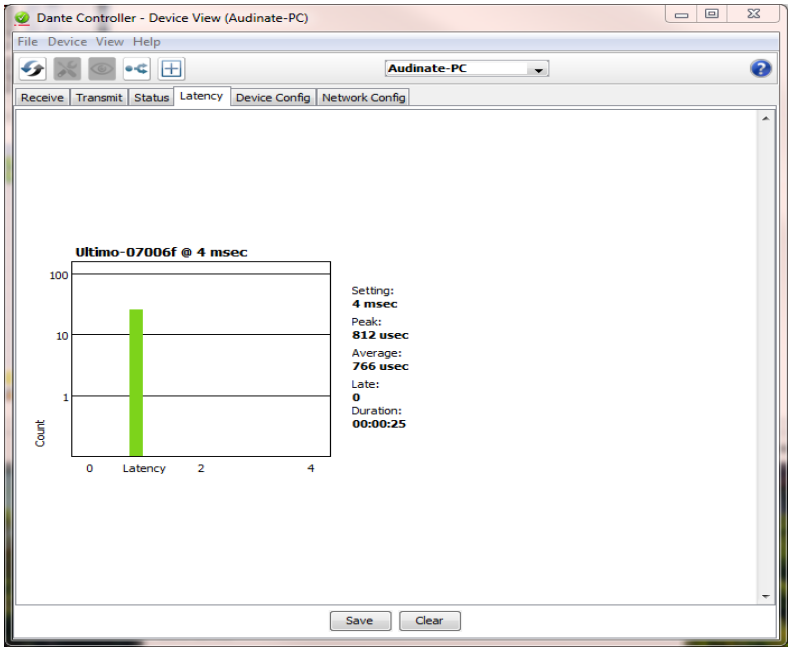
Switches?

- Dante works on most switches
- Dante controller has some quick tests that can help determine switch performance
- The main issue is multicast management
- This is easily tested using packet latency tool
  - 1. Create a multicast flow
  - 2. Use Packet latency monitor to compare performance with IGMP snooping switched off an on

Testing IGMP Snooping Performance

- Turning on IGMP snooping WILL increase latency!





Testing IGMP Snooping

- The previous example increased latency by about 6 microseconds
- This is not an issue on this switch, and will not affect audio performance
- Some switches will increase latency beyond a useable threshold