

Dante FAQ

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Revision Log

Date	Version	Notes
May 30, 2018	1.0	Initial Release



Table of Contents

1.0 Introduction 4

2.0 Dante Flows..... 5

3.0 Unicast and Multicast 6



1.0 Introduction

This document provides a single reference for answers to Dante questions that commonly come in to Extron support staff. Check back for updates as this document will be revised as needed.



2.0 Dante Flows

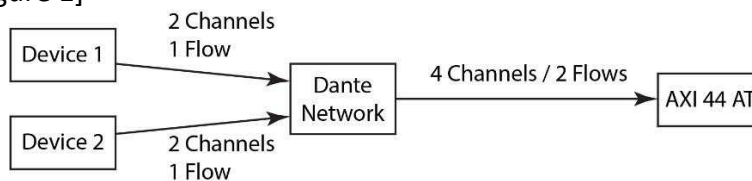
The channels of audio going into and out of a Dante device are organized into groups of one to four channels, called Flows. Dante devices have limits to the number of input Flows and output Flows, depending on the type of Dante technology (chipset) utilized in the device. A single Flow cannot have its channels divided or distributed among multiple devices. Therefore, it is advisable to plan for channel connectivity between devices while considering the number of Flows available per device and the layout of device to device connectivity.

The table below shows the number of Flows available in Extron Dante-enabled products.

Model	Transmit Flows	Receive Flows
DMP 128 Plus (AT Models)	32	32
DMP 128 (AT Models)	32	32
AXI 02 AT	2	2
AXI 22 AT	2	2
AXI 44 AT	2	2
AXP 50 C AT	32	32
AXP 64 C AT	32	32
NetPA 502 AT	0	2
NetPA 1001-70V AT	0	2

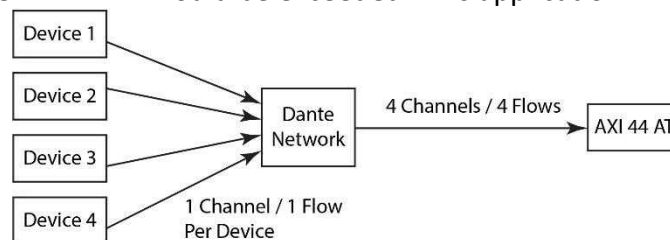
Flow Examples

Four channels are routed to an AXI 44 AT via Dante from two devices. The four channels are available at the analog outputs of the AXI 44 AT. This is possible because the AXI 44 AT has two Receive Flows. [Figure 1]



[Figure 1] This application will work

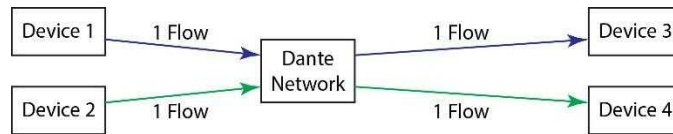
If those channels originate from more than two transmitting devices, the number of Receive Flows available on the AXI 44 AT would be exceeded. This application will not work. [Figure 2]



[Figure 2] This application will not work

3.0 Unicast and Multicast

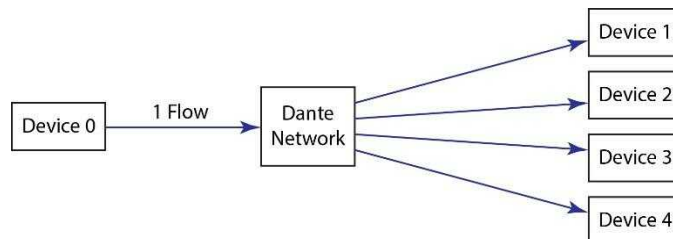
By default, Dante routing is done by unicast Flow, meaning that the routing of up to four channels between two devices uses up a single unicast Flow [Figure 3]. A unicast Flow cannot be routed to multiple Receivers. With unicast routing, extraneous network traffic is typically avoided.



[Figure 3 – Two Unicast Flows]

In cases where a single Dante Transmitter must be routed to many Dante Receivers, having a separate unicast Flow per Receiver not only uses up Flows but also increases network bandwidth use. In these cases, creating a single multicast Flow is recommended for routing to many Receivers without using up Flows [Figures 4 & 5]. Dante Controller will present a message when a Multicast Flow may be advantageous based on the routing defined.

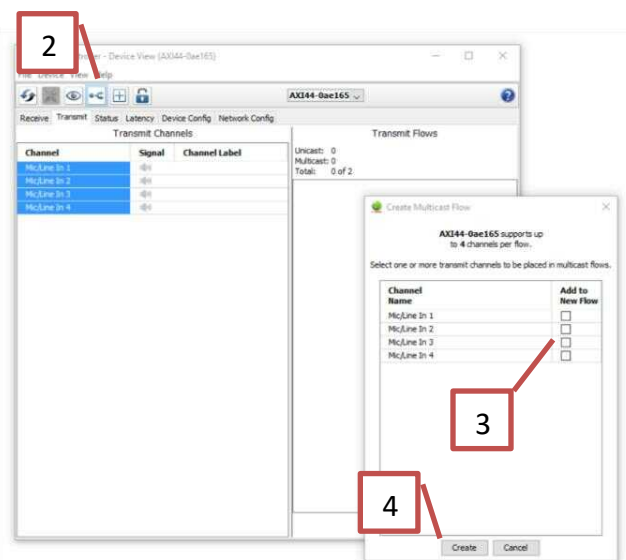
Multicast Flows are also useful when transmitting the same audio to more than two Receiver devices



[Figure 4 – Multicast Flow]

To create a multicast Flow:

1. Double-click the device in the Routing tab or CTRL-D
2. Click the *Create a new multicast flow* button
3. Check the box for each channel to be included
4. Click *Create*



[Figure 5] Multicast Flow window in Dante Controller