VIPEDIA-12-PRO / INTEGRA-PRO

Dante Configuration

Configuration Guide

ASL Document Ref.: U-0641-3466.docx
Issue: 01 complete, approved - Date: 25/03/22

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Document Change History

Issue	Amendment Summary	Date
1	First release	25/03/22

Contents

1 Introduction

1.1 Document Purpose

This Configuration Guide provides and overview of VIPEDIA-12-PRO / INTEGRA-PRO units and describes the specific steps required to configure Dante audio routing in VIPEDIA-12-PRO and/or INTEGRA-PRO based systems. It also provides instructions on how to update the firmware on Dante modules.

This guide does not provide:

- Instructions on how to configure, set up and commission ASL devices in the PAVA system.
- Details on non-Dante features on VIPEDIA-12-PRO / INTEGRA-PRO units.
- Details on external network switches used in the system.

Please see additional information in Sections “1.2 Prerequisites” (page 5) and “3 Configuration Overview” (page 11).

1.2 Prerequisites

This Configuration Guide assumes that:

- The user is familiar with the configuration of VIPEDIA-12 and/or INTEGRA systems (non-Dante), including the use of the PAVA System Configuration Tool (PAVA SCT), VIPA Config Tool (VCT) and the setup of VIPEDIA-12, INTEGRA and VIPEDIA-NET devices.
- The user is familiar with the use of the Dante Controller to configure Dante devices.
- The configuration PC has the required tools:
  - PAVA System Configuration Tool (PAVA SCT) and VIPA Config Tool (VCT): available from ASL or an appointed ASL distributor.
  - Dante Controller: available from Audinate.
- ASL devices in the PAVA system have the required firmware version.

1.3 Software/Firmware Versions and This Configuration Guide

The operation and features described here are correct for:

- VIPEDIA-12-PRO / INTEGRA-PRO / VIPEDIA-12 / INTEGRA V4.2.0.6P
- PAVA System Configuration Tool (PAVA SCT) V4.2.0.5P
- Dante Brooklyn II firmware version V4.1.1.4
- Dante Controller V4.4.2.2

If the VIPEDIA-12-PRO / INTEGRA-PRO, PAVA SCT or Dante module in your system has a later (or earlier) version of software, then it may mean that some aspects of the operation and configuration are subtly different from the operation described in this document, or that enhanced features have been added.

If any difficulties are encountered, contact ASL or an appointed ASL distributor, quoting the:

- Serial number of your VIPEDIA-12-PRO / INTEGRA-PRO unit

  See location and example of serial number label in “APPENDIX C – Serial Number Label” (page 100).
- VIPEDIA-12-PRO / INTEGRA-PRO software version

  The version number is available from the unit’s front panel menu option:

  Configuration > Router > Identity > S/Ware > Host CP

- Dante Brooklyn II firmware version
  See “APPENDIX B – Getting the firmware version on a Dante Brooklyn II module” (page 99).
- PAVA System Configuration Tool (PAVA SCT) version
  The version number is available in the title of the main window.
- Dante Controller version
  The version number is available in **Help > About** window.

1.4 Conventions Used in This Document

ADT:	refers to the Amplifier Dynamic Configuration Tool
FTT:	refers to the File Transfer Tool
PAVA SCT:	refers to the PAVA System Configuration Tool
PRO:	refers to VIPEDIA-12-PRO and INTEGRA-PRO units
RDT:	refers to the Router Dynamic Configuration Tool
VCT:	refers to the VIPA Config Tool
Vipedia	refers to VIPEDIA-12, INTEGRA, VIPEDIA-12-PRO and/or INTEGRA-PRO

2 VIPEDIA-12-PRO / INTEGRA-PRO Overview

2.1 Non-Dante Features

VIPEDIA-12-PRO / INTEGRA-PRO units provide the same functionalities as VIPEDIA-12 / INTEGRA units. However, note that PRO units cannot be used in DBB groups (i.e. VIPEDIA-24, VIPEDIA-36, VIPEDIA-48 and VIPEDIA-12-AB configurations) and do not support Active Standby (AS) redundancy.

For details of non-Dante features, please refer to:

- PAVA SCT User's Manual (Table 2:[1] on page 94): Configuration of VIPEDIA-12 / INTEGRA units, VIPEDIA-NET devices, amplifier mainframes and peripherals.
- INTEGRA User's Manual (Table 2:[3] on page 94): Configuration of INTEGRA units.

2.2 Dante Features

A VIPEDIA-12-PRO / INTEGRA-PRO unit is a VIPEDIA-12 / INTEGRA unit fitted with a VIPEDIA-NET Network Card with integrated Dante Brooklyn II module[1].

In a system with VIPEDIA-12-PRO / INTEGRA-PRO units, 32 sources can be routed between devices using Dante. Currently, only analogue audio input (including microphones) can be routed using Dante.

Emergency microphones routed using Dante can be used in EN 54-16 systems.

DVA messages are always routed to remote units using ASL's Portable Media Carrier (PMC) format.

ASL's PMC is also used for routing audio sources between VIPEDIA-12-PRO / INTEGRA-PRO and VIPEDIA-12 / INTEGRA units.

All VIPEDIA-12-PRO / INTEGRA-PRO units in the system should be equally configured to subscribe to all Dante sources. This ensures that audio is always routed over IP using the correct transport method (Dante or PMC).

2.3 Dante Outputs

All audio inputs and outputs of a VIPEDIA-12-PRO / INTEGRA-PRO unit are always available on the Dante network with no configuration required.

Any of the Dante outputs (transmitter channels) can easily be routed to Dante enabled devices (e.g. amplifiers) using the Dante Controller.

Table 1 (page 8) contains the allocation of Dante transmitter channels to VIPEDIA-12-PRO / INTEGRA-PRO audio inputs and outputs.

[1] The VIPEDIA-NET Network Card with integrated Dante Brooklyn II module is factory fit only.

Table 1 VIPEDIA-12-PRO / INTEGRA-PRO Dante transmitter channel allocation

Dante Transmitter Channel (Tx)	VIPEDIA-12-PRO / INTEGRA-PRO	Notes
1	Input 1	1) Input tapping point: AFTER channel processing (Trim > EQ > Gate > Compressor > Limiter > Fader > Chime Generator > Mute).
2	Input 2	
3	Input 3	
4	Input 4	
5	Input 5	
6	Input 6	
7	Input 7	
8	Input 8	
9	Input 9	
10	Input 10	
11	Input 11	
12	Input 12	
13	Output 1	2) Output tapping point: AFTER output processing (EQ > Delay > Fader > Mute > Limiter) but PRE addition of surveillance tones. 3) Tx Channels 17 to 24 (Outputs 5 to 12) should not be used as there may be overlap with other audio sources.
14	Output 2	
15	Output 3	
16	Output 4	
17	Output 5 (do not use)	
18	Output 6 (do not use)	
19	Output 7 (do not use)	
20	Output 8 (do not use)	
21	Output 9 (do not use)	
22	Output 10 (do not use)	
23	Output 11 (do not use)	
24	Output 12 (do not use)	
25	Reserved	4) Tx Channels 25 to 32 appear in the Dante Controller but are RESERVED.
26	Reserved	
27	Reserved	
28	Reserved	
29	Reserved	
30	Reserved	
31	Reserved	
32	Reserved	

2.4 Third-Party Dante Sources

Third-party Dante sources can be routed unprocessed or processed:

- Unprocessed:
  - No dynamic processing (EQ, gate, compressor and limiter) or gain adjustment is applied to the Dante source.
  - If required, processing must be applied at the output stage of the third-party transmitting device.
  - Can only be routed using Dante to outputs on VIPEDIA-12-PRO / INTEGRA-PRO units.
  - Configuration details in Section “4.5 Third-Party Dante Device to VIPEDIA-12-PRO / INTEGRA-PRO (Unprocessed)” (page 40).
- Processed:
  - An audio input is used for each third-party Dante source.
  - Input dynamic processing (EQ, gate, compressor and limiter) and gain adjustment can be applied to the processed Dante input using the Router Dynamic Configuration Tool (RDT).
  - Can be routed using PMC to remote units.
  - Can also be routed using Dante to outputs on VIPEDIA-12-PRO / INTEGRA-PRO units.
  - Can be used as VOX gate route trigger.
  - Configuration details in Section “4.6 Third-Party Dante Device to VIPEDIA-12-PRO / INTEGRA-PRO VIPEDIA-12 / INTEGRA (Processed)” (page 58).

Third-party Dante sources (unprocessed or processed) can be routed using contacts, microphone buttons, permanent routes, VOX routes, and as VIPA BGM; see Section “4.7 Configuration of Dante Audio in PAVA Routes” (page 80) for further details.

2.5 Dante and ASL PAVA Networks

ASL’s PAVA devices operate in 100 Mbit/s Ethernet, whereas Dante devices operate in 100 Mbit/s and Gigabit Ethernet.

This section provides an overview of the Dante and ASL PAVA network. If required, please refer to ASL for further information on requirements for Dante and ASL PAVA networks.

2.5.1 IP Address Ranges

Dante and VIPEDIA-12 / INTEGRA operate on separate IP networks:

- Dante devices operate using link-local addressing, with devices automatically assigned an address in the 169.254.0.0/16 range.
- VIPEDIA-12 / INTEGRA units and other ASL devices operate using statically assigned IP address (by default, in the 192.168.1.0/24 range).

It is, therefore, recommended to connect to the Dante device network through a dedicated network interface, which must be set to ‘obtain an IP address automatically’.

“APPENDIX A – PC Requirements for ASL Configuration Tools and Dante Controller” (page 95) provides details of the required settings.

2.5.2 Group Management Protocol (IGMP)

As standard, the Brooklyn II module on VIPEDIA-12-PRO / INTEGRA-PRO units are configured to transmit audio using multicast flows. Each unit will be configured with up to two multicast flows, each multicast flow with up to eight channels. Unlike unicast routing, multicast flows consume network bandwidth even if there are no receivers, but do not require additional bandwidth to add more receivers. To manage the multicast traffic on the network traffic, IGMP-enabled network switches may be required.

2.5.3 Loop Networks

VIPEDIA-12-PRO / INTEGRA-PRO only supports a single network connection. It cannot, therefore, support loop network topology which is normally required for Voice Alarm applications.

External switches that support Rapid Spanning Tree Protocol (RSTP) should be used where VIPEDIA-12-PRO / INTEGRA-PRO units are required to be connected in a loop network.

For networks using Hirschmann or ASL network switches, refer to:

- Hirschmann Network Switch RS20/30/40 Configuration Guide (Table 2:[5] on page 94)
- NETWORK-SWITCH-LP01 Configuration Guide (Table 2:[6] on page 94)

2.5.4 Isolated Dante Network

For flexibility and network performance, VIPEDIA-12-PRO / INTEGRA-PRO V4.1.x.x (or newer) allows Dante traffic to be routed in the same network as the ASL's PAVA traffic or in a separate 1G network. Refer to Section "4.2 Adding VIPEDIA-12-PRO / INTEGRA-PRO to the PAVA System Configuration" (page 15) for configuration details.

2.6 Limitations

- Maximum of 32 Dante channels per system.
- Dante sample rate must be 48 kHz.
- Dante outputs for outputs 5 to 12 (Tx Channels 17 to 24) should not be used by third-party Dante devices as there may be used for internal routing.
- VIPEDIA-12-PRO units cannot be used in DBB groups (i.e. VIPEDIA-24, VIPEDIA-36, VIPEDIA-48 and VIPEDIA-12-AB configurations).
- VIPEDIA-12-PRO units do not support Active Standby (AS) redundancy.
- External switches that support Rapid Spanning Tree Protocol (RSTP) should be used in loop network applications.
- IP microphones cannot be routed using Dante.
- DVA messages are always transmitted using PMC.
- Limited route validation in the PAVA SCT: allows unprocessed third-party Dante sources to be routed to non-Dante units.
- Not possible to import Dante Controller configuration files into the PAVA SCT.
- Third-party device configuration is not included in the Dante Controller configuration generated by the PAVA SCT.
- Generated Dante XML configurations might not match other tools.
- Configuration PC needs two network interfaces: one with fixed IP address (for the PAVA network) and the other with dynamic IP address (for the Dante network).

  A single network interface can be used for both networks, but it must be reconfigured for each network.

3 Configuration Overview

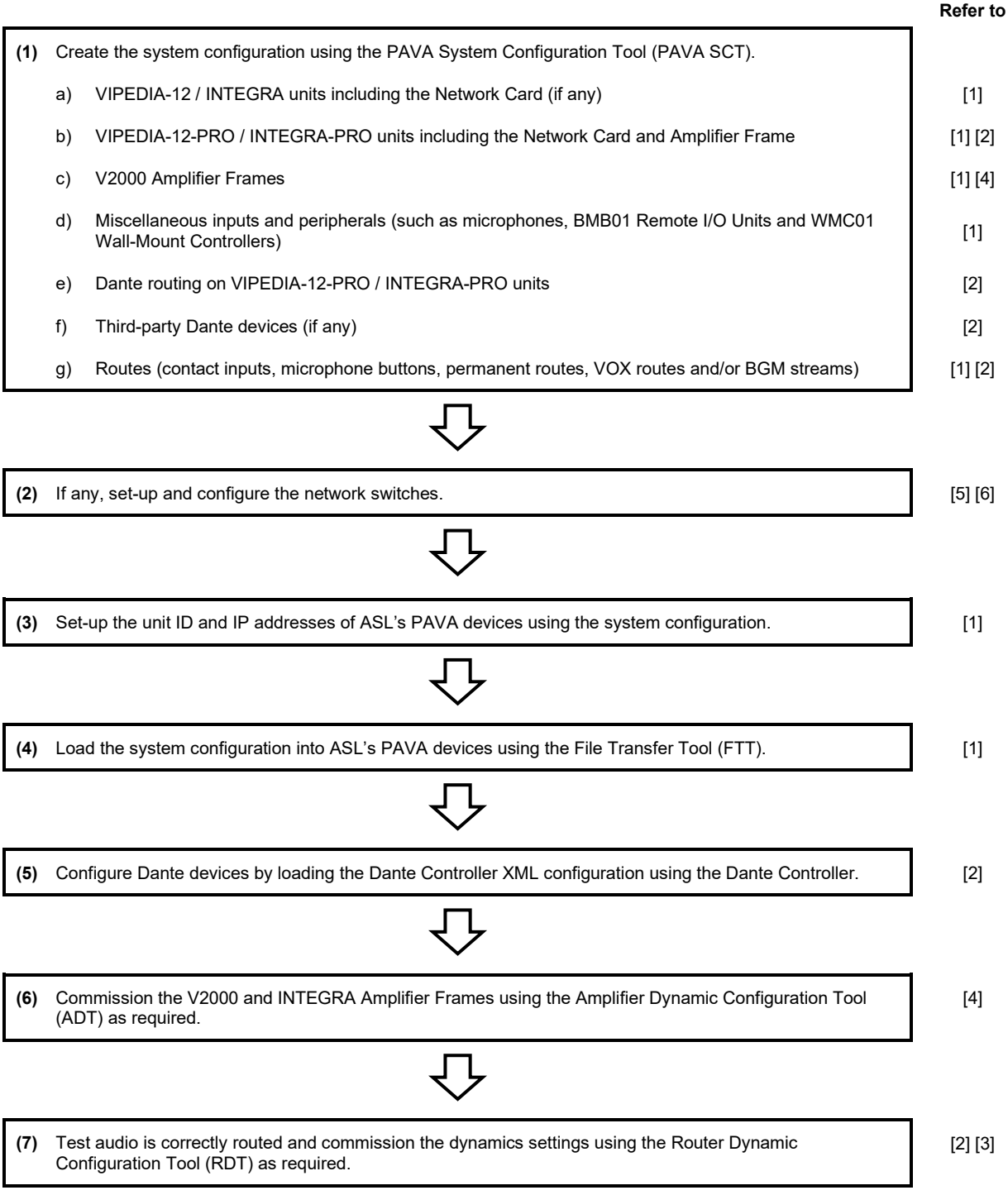
The basic configuration process is outlined in the diagram in Figure 1 (page 12).

Important:

It is assumed that:

- The user is already familiar with configuration and setup of non-Dante based VIPEDIA-12 / INTEGRA systems. If required, reference material is listed in the diagram in Figure 1 (page 12).
- The Dante Brooklyn II module is configured using the Dante configuration generated by the PAVA SCT. You can always manually configure the Dante devices using the Dante Controller as long as the Dante channel subscriptions on Dante Brooklyn II modules fitted to VIPEDIA-12-PRO / INTEGRA-PRO match the configuration shown on the **Dante** page of the PAVA SCT; see examples in Figure 3 (page 31), Figure 4 (page 44) and Figure 5 (page 62).
- The configuration PC has the required tools:
  - PAVA System Configuration Tool (PAVA SCT) and VIPA Config Tool (VCT): available from ASL or an appointed ASL distributor.
  - Dante Controller: available from Audinate.
- The configuration PC's network interface(s) used to connect to ASL's PAVA devices and/or Dante devices is(are) correctly configured; see "APPENDIX A – PC Requirements for ASL Configuration Tools and Dante Controller" (page 95) for further details.

Figure 1 VIPEDIA-12-PRO / INTEGRA-PRO and Dante Audio Routing Configuration process



Reference documentation/section:

[1] PAVA SCT User's Manual (Table 2:[1] on page 94) and/or INTEGRA User's Manual (Table 2:[3] on page 94) for configuration tasks not specific to VIPEDIA-12-PRO / INTEGRA-PRO and Dante

[2] Section "4 Configuration Tasks Specific to VIPEDIA-12-PRO / INTEGRA-PRO and Dante" (page 13)

[3] VIPEDIA-12 User's Manual (Table 2:[2] on page 94)

[4] V2000 User's Manual (Table 2:[4] on page 94): for configuration and commissioning V2000 and INTEGRA amplifier frames

[5] Hirschmann Network Switch RS20/30/40 Configuration Guide (Table 2:[5] on page 94)

[6] NETWORK-SWITCH-LP01 Configuration Guide (Table 2:[6] on page 94)

4 Configuration Tasks Specific to VIPEDIA-12-PRO / INTEGRA-PRO and Dante

4.1 Getting the MAC Address of a Dante Brooklyn II Module

Important:

a) Dante MAC addresses will always be of the format: **00:1D:C1**:xx:xx:xx

b) The Dante MAC address is not essential but will simplify the Dante Brooklyn II module configuration.

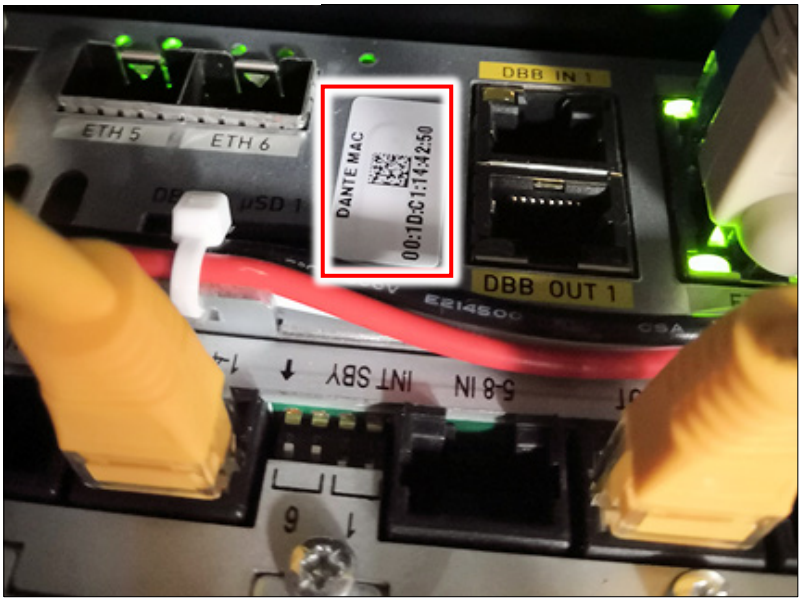
4.1.1 DANTE MAC Address Label on VIPEDIA-12-PRO

Rear panel (left side)

(A QR code scanner can be used to load the MAC address directly into the PAVA SCT.)

4.1.2 DANTE MAC Address Label on INTEGRA-PRO

Top of Router (left side)



(A QR code scanner can be used to load the MAC address directly into the PAVA SCT.)

4.1.3 MAC Address on the Dante Controller

Important:

Ensure that the configuration PC's network interface used to connect to the Dante devices is correctly configured to dynamic IP address; see "APPENDIX A – PC Requirements for ASL Configuration Tools and Dante Controller" (page 95) for further details.

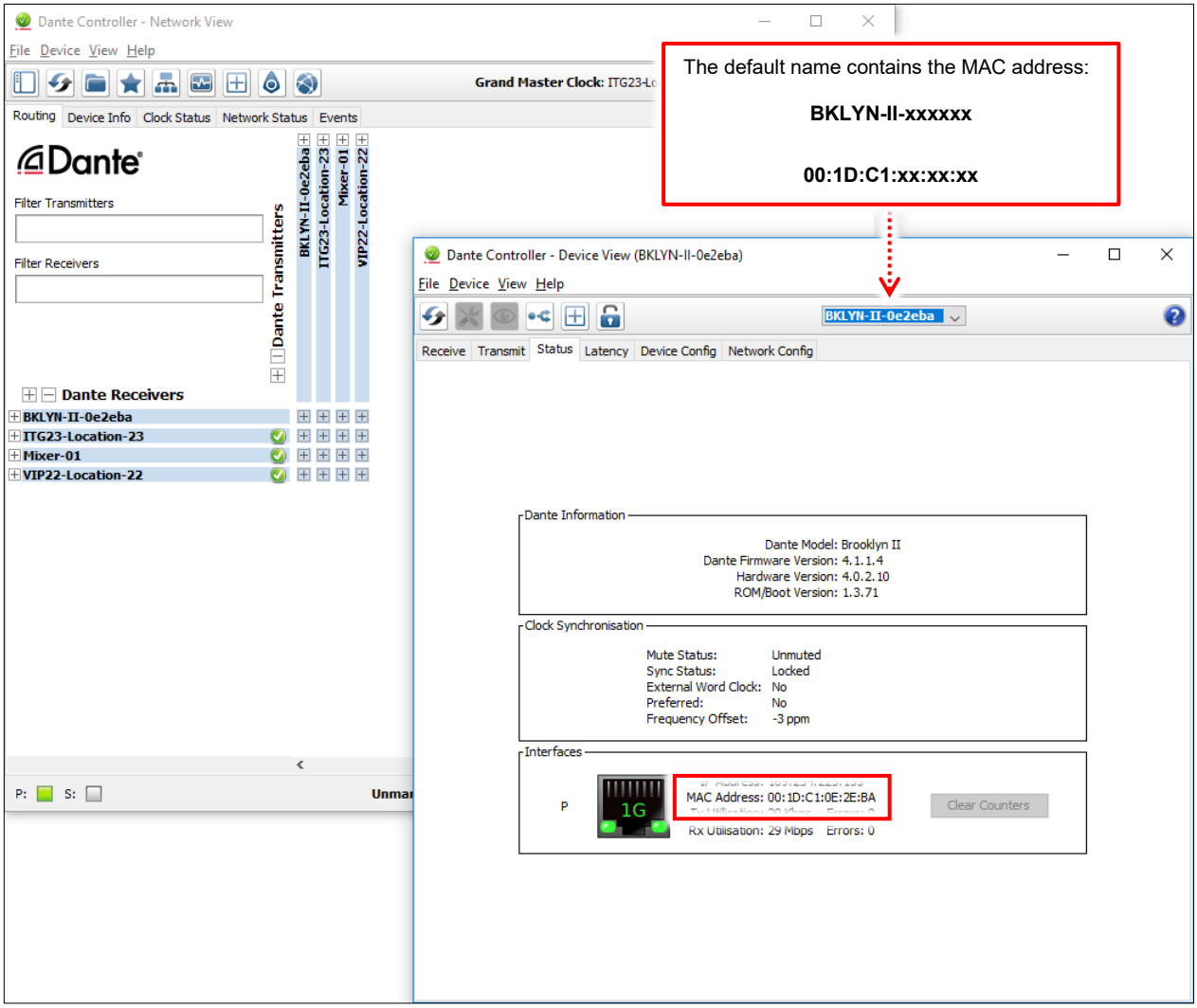
1. Launch the Dante Controller.
2. Select the **Routing** tab in **Dante Controller - Network View** main window.
3. Double-click the required device name in matrix to open the **Device View** window.
4. Select the **Status** tab.

   The firmware versions are shown in the **Dante Information** box.

   The MAC address is shown in the **Interfaces** box.

   Note:

   The default name contains the MAC address and is of the format **BKLYN-II-xxxxxx**, where xxxxxx are the last three blocks of the MAC address **00:1D:C1**:xx:xx:xx.



4.2 Adding VIPEDIA-12-PRO / INTEGRA-PRO to the PAVA System Configuration

Important:

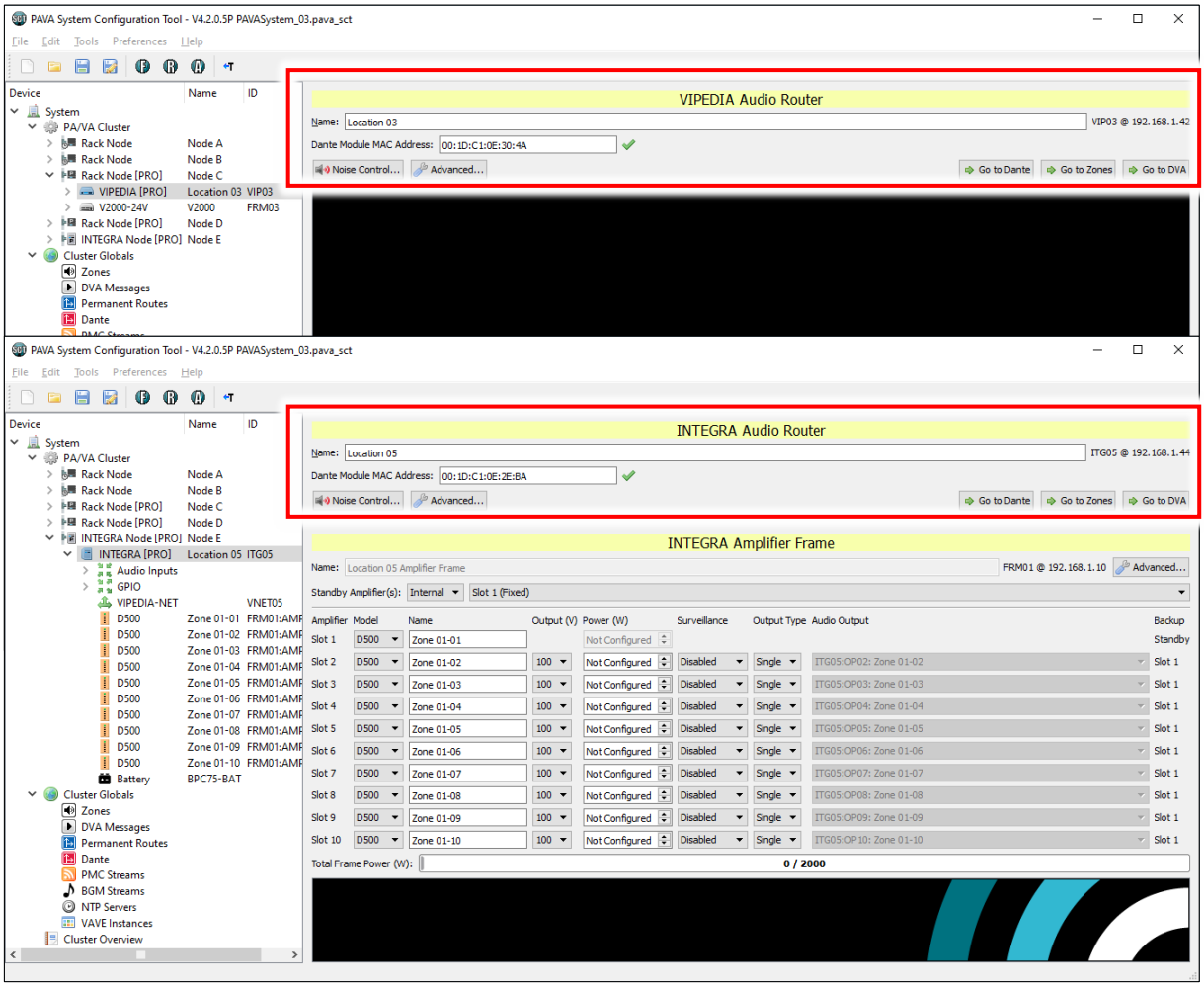
a) The following procedure describes the configuration of features applicable to VIPEDIA-12-PRO / INTEGRA-PRO units only.

b) For general configuration, refer to the PAVA SCT User's Manual (Table 2:[1] on page 94) and/or INTEGRA User's Manual (Table 2:[3] on page 94).

1. On the PAVA SCT device tree, right-click the **PA/VA Cluster** node.
2. Select **Add > Ins**, and then the required PRO node type: **VIPEDIA-12-PRO** or **INTEGRA-PRO**.
3. Expand the node and select the required **VIPEDIA-12-PRO** or **INTEGRA-PRO** unit.
4. Enter the unit's **Name**.

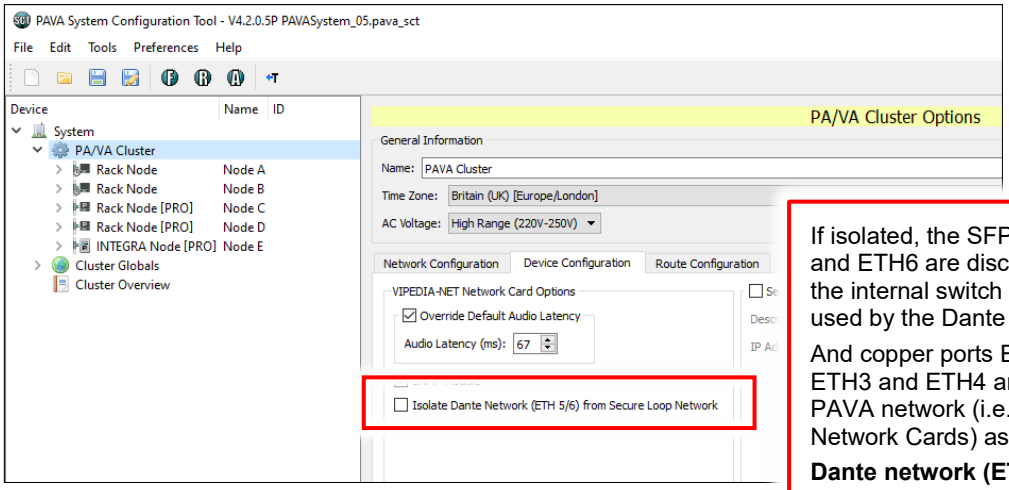
   The **Name** will also be assigned to the unit's Dante Brooklyn II module.
5. Enter the **Dante Module MAC Address**; see Section "4.1 Getting the MAC Address of a Dante Brooklyn II Module" (page 13).

   The Dante MAC address is not essential but will simplify the Dante Brooklyn II module configuration.



6. Select the **PA/VA Cluster** node to load the **PA/VA Cluster Options** configuration pane and select whether the Dante traffic is to be isolated from the ASL's PAVA traffic in a separate 1G network.

This feature is available on VIPEDIA-12-PRO / INTEGRA-PRO V4.1.x.x (or newer).



If isolated, the SFP ports ETH5 and ETH6 are disconnected from the internal switch and exclusively used by the Dante module.

And copper ports ETH1, ETH2, ETH3 and ETH4 are used by the PAVA network (i.e., Vipedias and Network Cards) as standard.

Dante network (ETH5 and ETH6) should not be isolated from the PAVA network where Dante is used for VA applications.

7. Configure the **VIPEDIA-12-PRO** / **INTEGRA-PRO** unit and peripherals (Amplifier Frames, microphones, GPIO contacts, etc.).

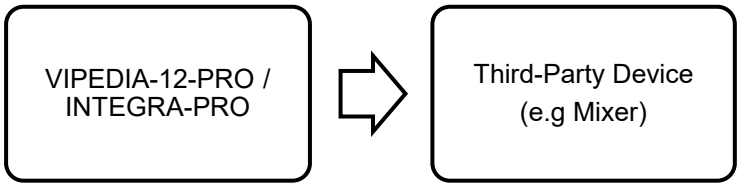
8. At this stage, although the configuration is valid, audio would still be routed between devices using ASL's PMC technology, not using Dante (where applicable).

Follow the configuration sections below for audio routing by Dante as required:

- "4.3 VIPEDIA-12-PRO / INTEGRA-PRO to Third-Party Dante Devices" (page 17)
- "4.4 VIPEDIA-12-PRO / INTEGRA-PRO to VIPEDIA-12-PRO / INTEGRA-PRO" (page 28)
- "4.5 Third-Party Dante Device to VIPEDIA-12-PRO / INTEGRA-PRO (Unprocessed)" (page 40)
- "4.6 Third-Party Dante Device to VIPEDIA-12-PRO / INTEGRA-PRO VIPEDIA-12 / INTEGRA (Processed)" (page 58)
- "4.7 Configuration of Dante Audio in PAVA Routes" (page 80)

4.3 VIPEDIA-12-PRO / INTEGRA-PRO to Third-Party Dante Devices

This section describes the configuration of third-party Dante devices to listen to inputs and outputs of VIPEDIA-12-PRO / INTEGRA-PRO units.



Important:

a) Table 1 (page 8) contains the allocation of Dante transmitter channels to VIPEDIA-12-PRO / INTEGRA-PRO audio inputs and outputs.

b) Dante transmit channels Tx17 to 24 on VIPEDIA-12-PRO / INTEGRA-PRO (outputs 5 to 12) should not be used by third-party Dante devices as there may be overlap with other audio sources.

4.3.1 PAVA SCT Configuration (PRO to Third-Party)

All audio inputs and outputs of a VIPEDIA-12-PRO / INTEGRA-PRO unit are always available on the Dante Network. No configuration is required in the PAVA SCT.

Any of the Dante outputs (transmitter channels) can easily be routed to Dante enabled devices (e.g. Dante amplifiers) using the Dante Controller as described below.

4.3.2 Dante Brooklyn II Module Configuration (PRO to Third-Party)

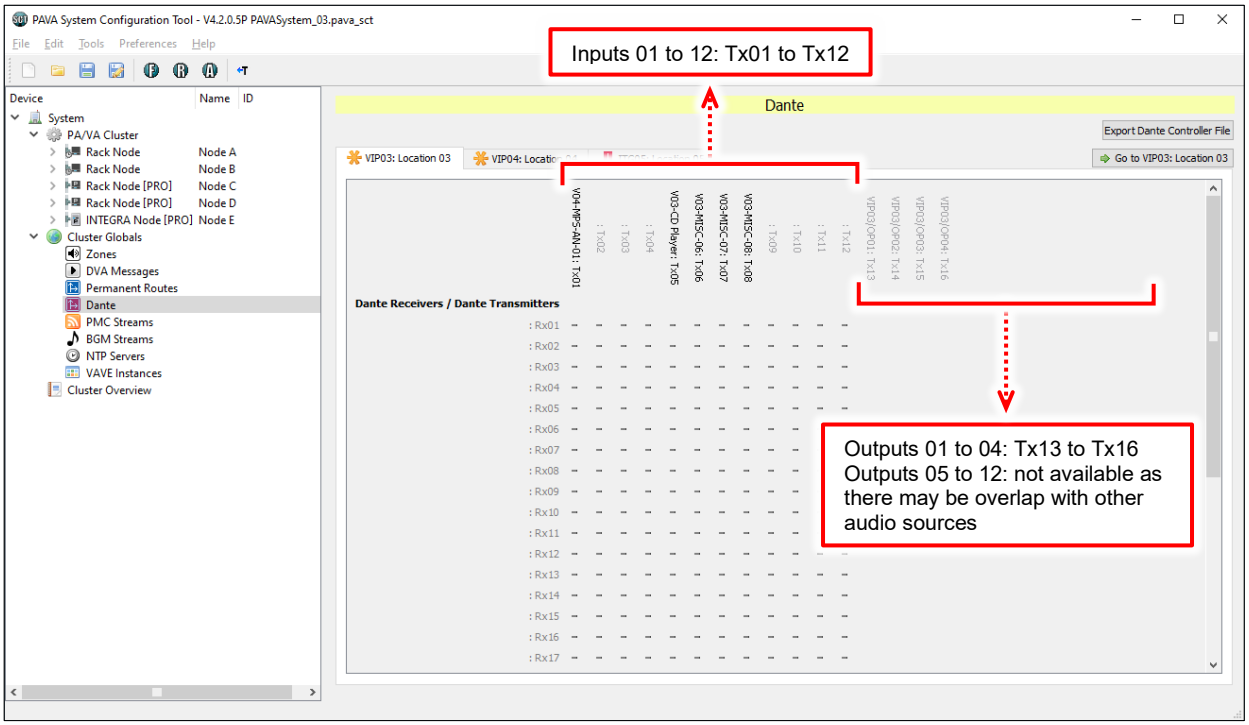
Important:

a) Although the Dante configuration file generated by the PAVA SCT does not contain the configuration of the third-party Dante devices, it is recommended that the configuration is loaded into all Brooklyn II modules fitted to VIPEDIA-12-PRO / INTEGRA-PRO units in the system. This will simplify the configuration of third-party devices. Also, any subscriptions between VIPEDIA-12-PRO / INTEGRA-PRO units will also be automatically configured in the same process.

b) The Dante page on the PAVA SCT shows the allocation of Dante transmitter channels to VIPEDIA-12-PRO / INTEGRA-PRO audio inputs and outputs; see example in Figure 2 (page 18).

1. On the PAVA SCT, select the **Dante** page and check Tx channel allocation for the required audio inputs and/or outputs.

Figure 2 Dante page: Tx channels for (audio inputs and outputs

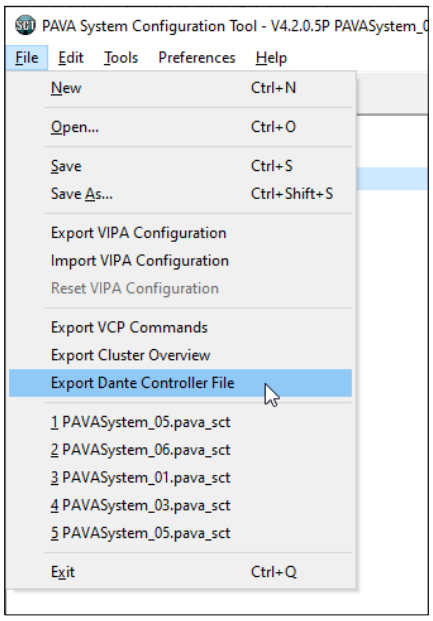


2. If all you want to do is use Dante to listen to ASL's Dante devices, then you can skip the configuration using the Dante Controller XML generated by the PAVA SCT, and go to step 10 (page 23).

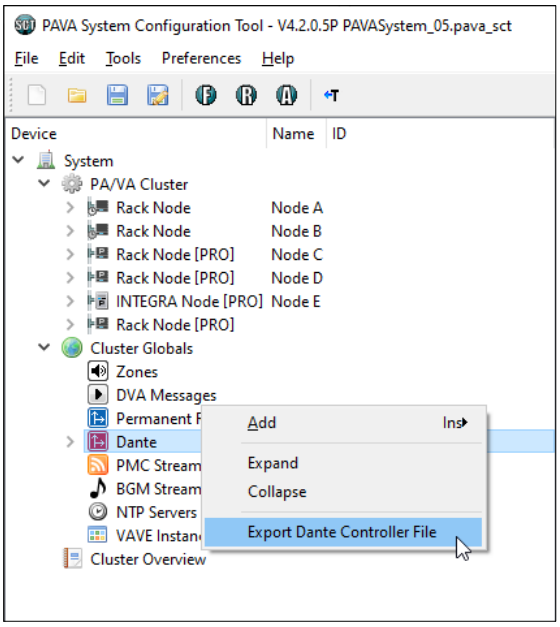
   Note that the Dante Controller XML configuration generated by the PAVA SCT can be installed to set the device and channel labels as seen on the PAVA SCT.

3. On the PAVA SCT, export the Dante Controller XML configuration using the menu option:

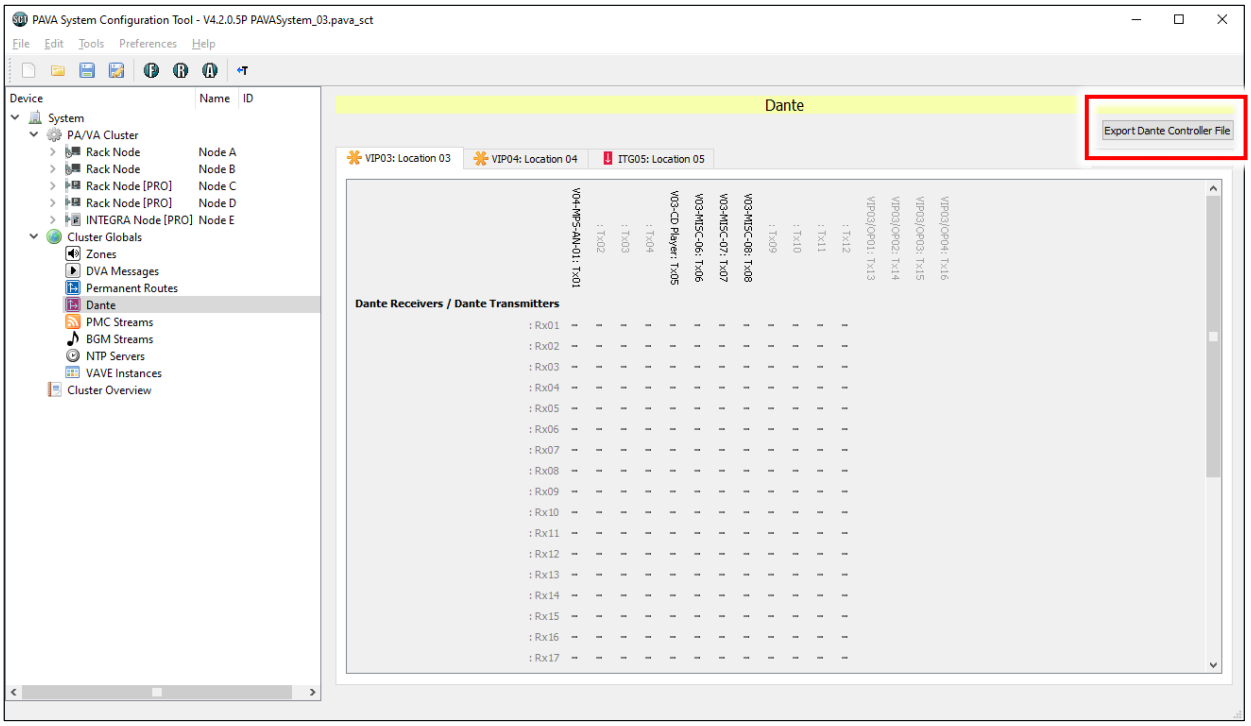
   File > Export Dante Controller File



Alternatively, right-click the **Dante** item in the device tree and select **Export Dante Controller File** option from the context menu.



Or click the **Export Dante Controller File** button on the **Dante** page.



4. Launch the Dante Controller.

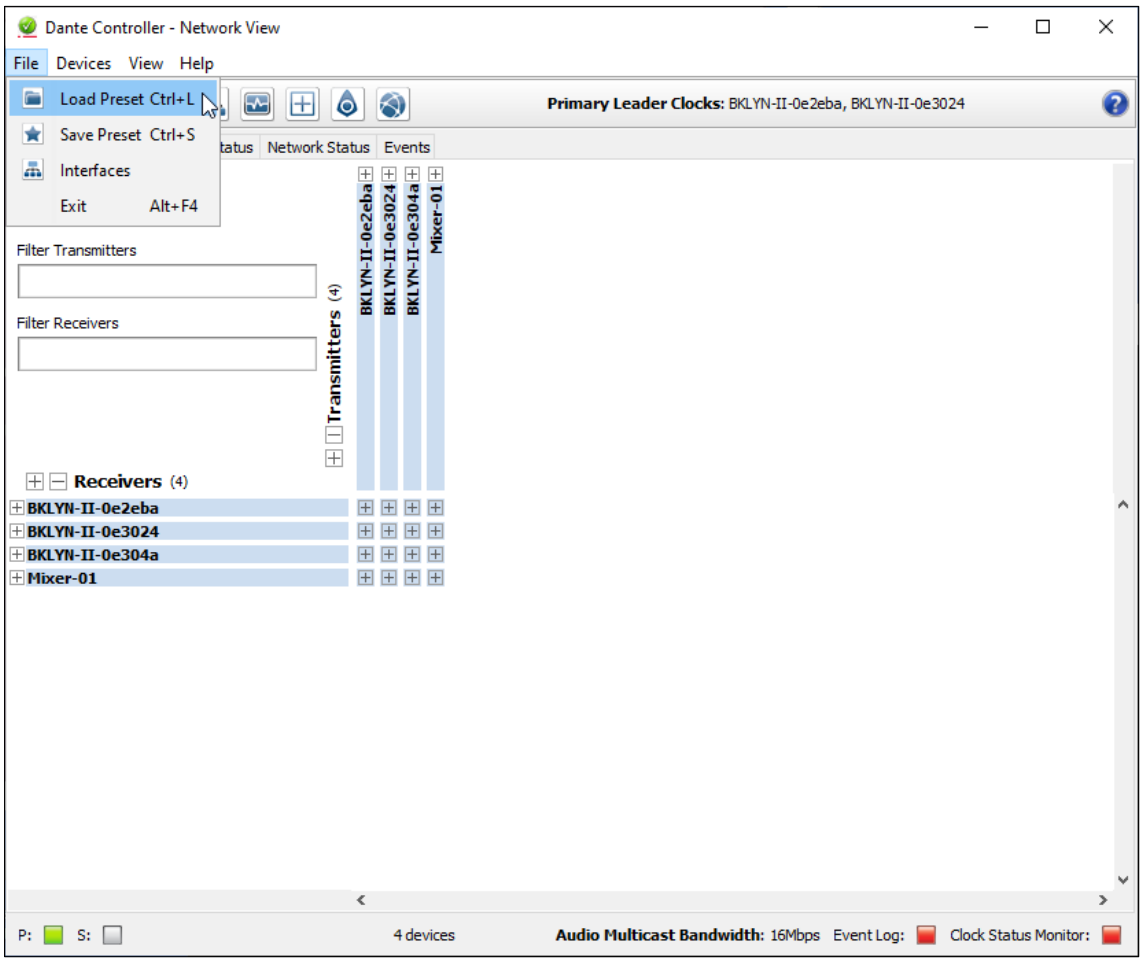
   Important:

   Ensure that the configuration PC's network interface used to connect to the Dante devices is correctly configured to dynamic IP address; see "APPENDIX A – PC Requirements for ASL Configuration Tools and Dante Controller" (page 95) for further details.

5. Select the **Routing** tab in **Dante Controller - Network View** main window and ensure that all required devices are present on the network.

6. Load the Dante XML configuration using the menu option:

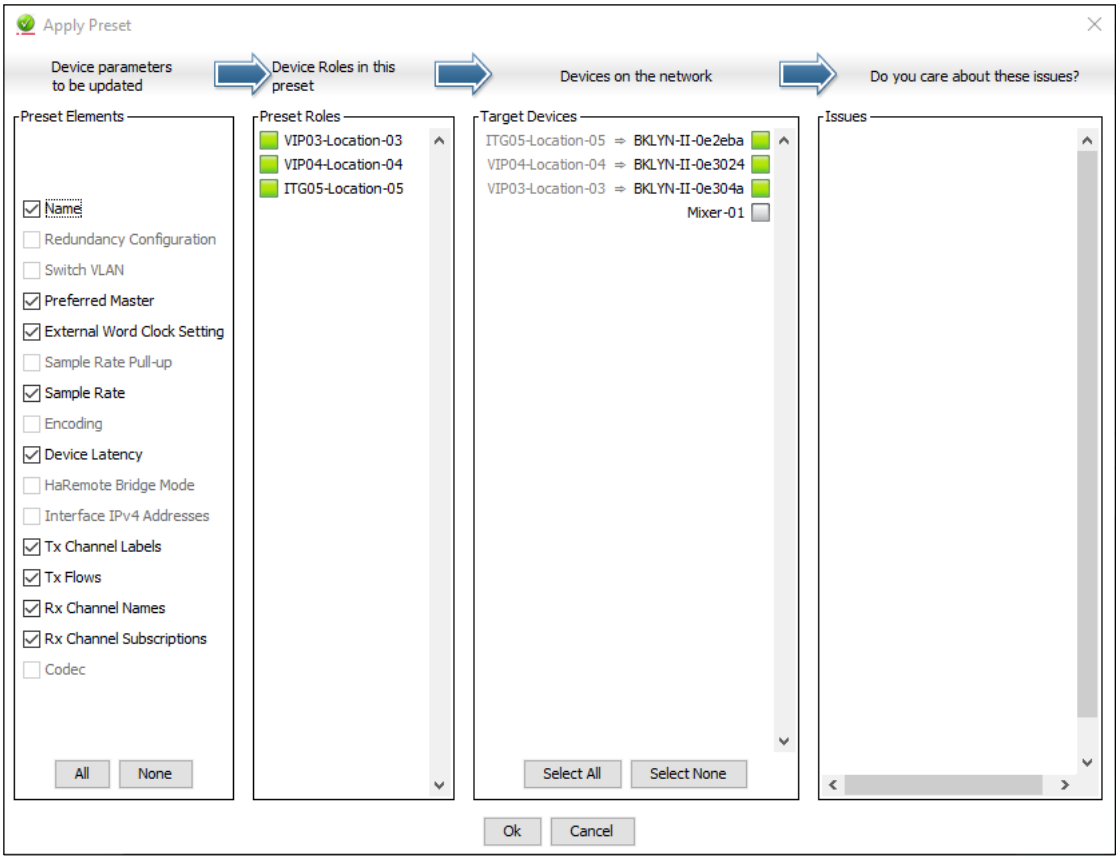
   File > Load Preset



7. The **Preset Elements** list shows the elements that can be imported from the configuration.

It is recommended to select all available elements.

a. If the MAC addresses are present in the configuration, it should automatically identify and apply the role to the correct device.



b. If the MAC addresses are not present in the configuration, assign the roles to the Dante devices on the network.

i. The **Preset Roles** list shows the devices in the configuration and the **Target Devices** list shows the devices found on the network.

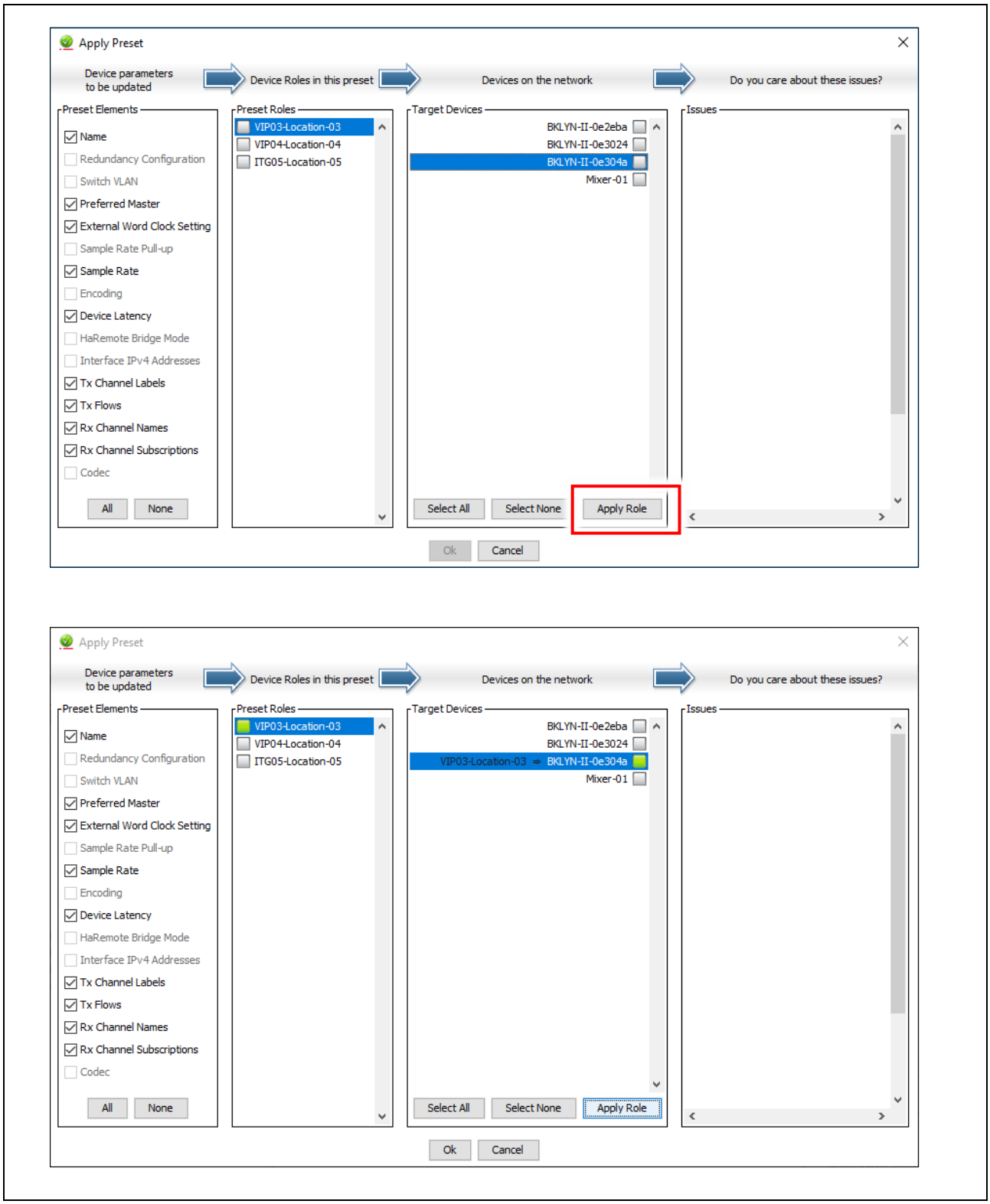
ii. Select a device in the **Preset Roles** list and its equivalent device the **Target Devices** list, and then click the **Apply Role** button.

Alternatively, select a device in the **Preset Roles** list, and drag and drop it on top of its equivalent device in the **Target Devices** list.

iii. Repeat the above steps for all devices in the **Preset Roles** list.

Important:

To simplify identifying the correct device on the network amongst various devices with default name, it is recommended that each Dante module is configured whilst it is the only device with default name on the network.

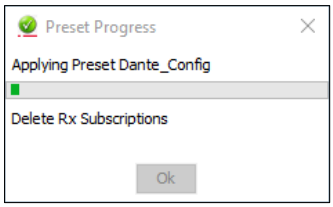

Apply Preset
Device parameters to be updated
Device Roles in this preset
Devices on the network
Do you care about these issues?
Preset Elements
Name
Redundancy Configuration
Switch VLAN
Preferred Master
External Word Clock Setting
Sample Rate Pull-up
Sample Rate
Encoding
Device Latency
HaRemote Bridge Mode
Interface IPv4 Addresses
Tx Channel Labels
Tx Flows
Rx Channel Names
Rx Channel Subscriptions
Codec
All
None
Preset Roles
VIP03-Location-03
VIP04-Location-04
ITG05-Location-05
Target Devices
BKLYN-II-0e2eba
BKLYN-II-0e3024
BKLYN-II-0e304a
Mixer-01
Issues
Select All
Select None
Apply Role
Ok
Cancel
Apply Preset
Device parameters to be updated
Device Roles in this preset
Devices on the network
Do you care about these issues?
Preset Elements
Name
Redundancy Configuration
Switch VLAN
Preferred Master
External Word Clock Setting
Sample Rate Pull-up
Sample Rate
Encoding
Device Latency
HaRemote Bridge Mode
Interface IPv4 Addresses
Tx Channel Labels
Tx Flows
Rx Channel Names
Rx Channel Subscriptions
Codec
All
None
Preset Roles
VIP03-Location-03
VIP04-Location-04
ITG05-Location-05
Target Devices
BKLYN-II-0e2eba
BKLYN-II-0e3024
VIP03-Location-03 ⇒ BKLYN-II-0e304a
Mixer-01
Issues
Select All
Select None
Apply Role
Ok
Cancel

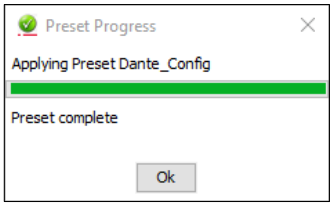
8. Click the **Ok** button to apply the configuration.

It may take a while depending on the number of devices.

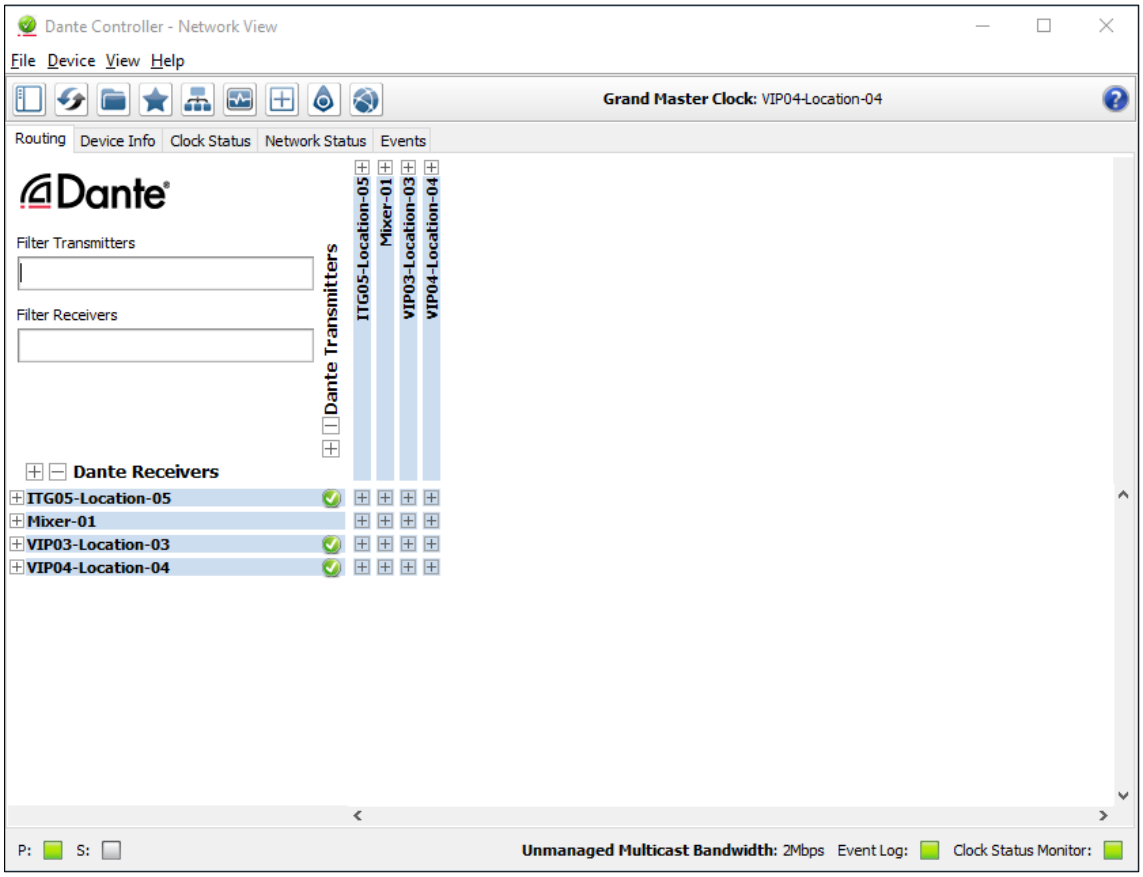
9. Once completed, click the **Ok** button.

Device and channel names will have been updated and routes between Dante Brooklyn II modules fitted VIPEDIA-12-PRO / INTEGRA-PRO units will be made (if any).

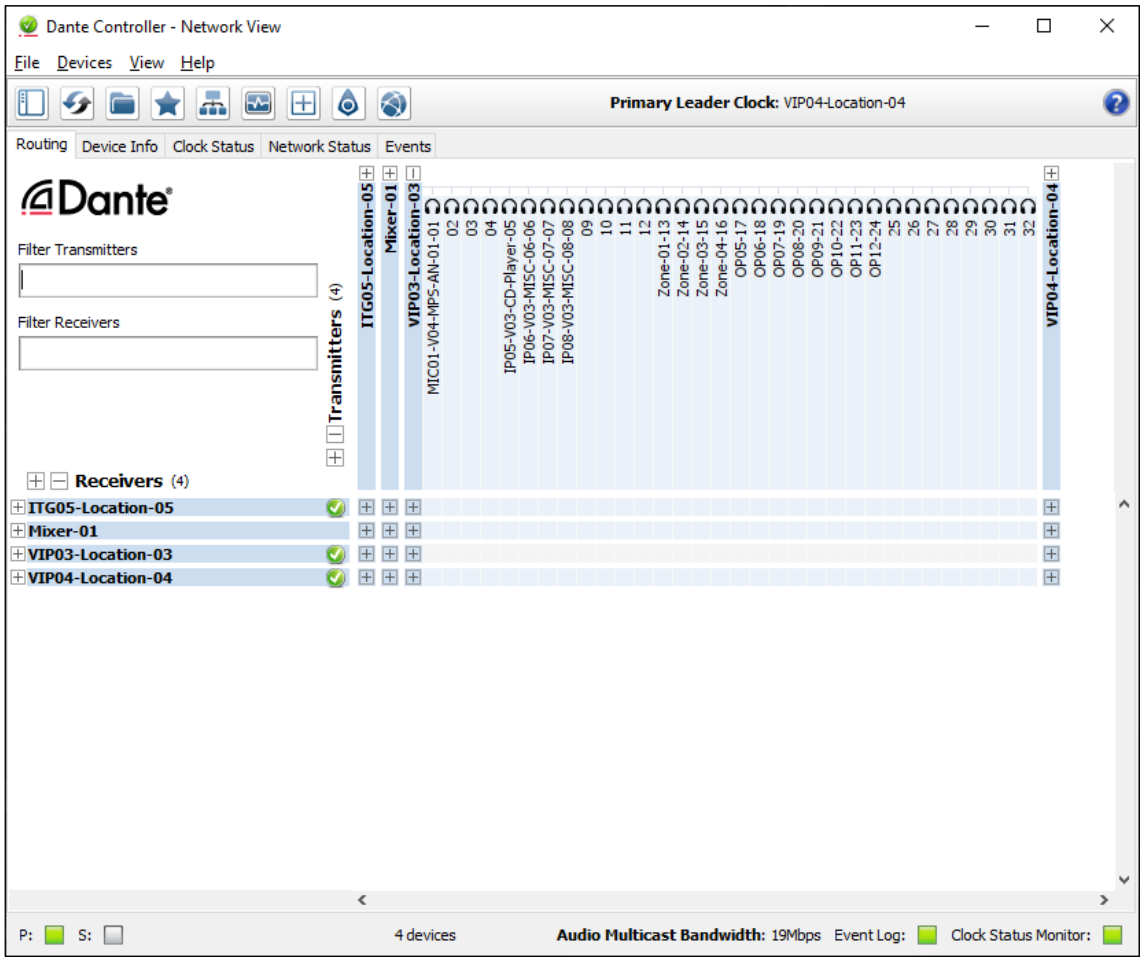




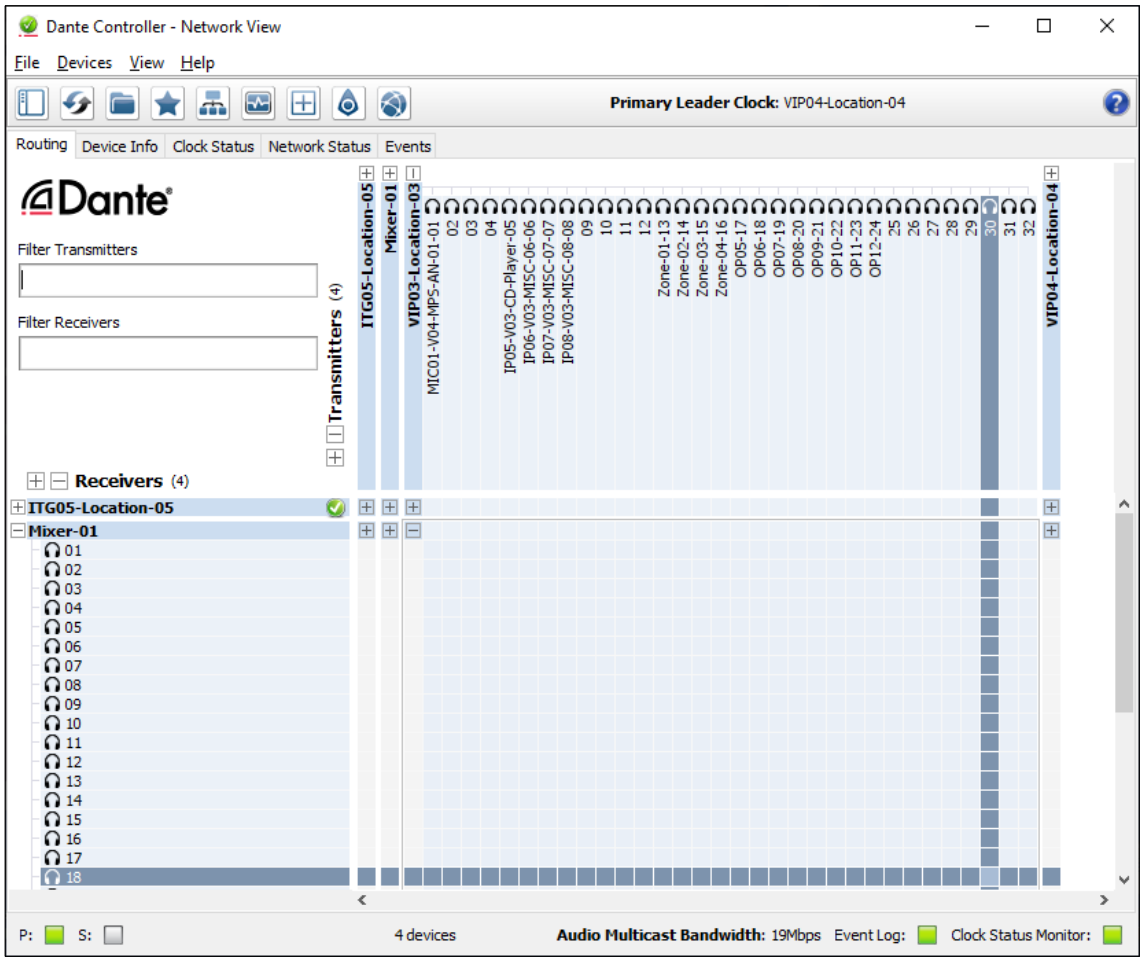
10. On the **Routing** tab, ensure that all required devices are present on the network.



11. Expand the required transmitter device (VIPEDIA-12-PRO / INTEGRA-PRO) along the top.



12. Expand the required receiver device (third-party) along the left side.



13. Position the mouse on the intersection of the correct receive (Rx) and transmit (Tx) channels.

In the example below, Rx10 of Mixer-01 is to be connected to Tx13 (output 1 of Vipedia VIP03).

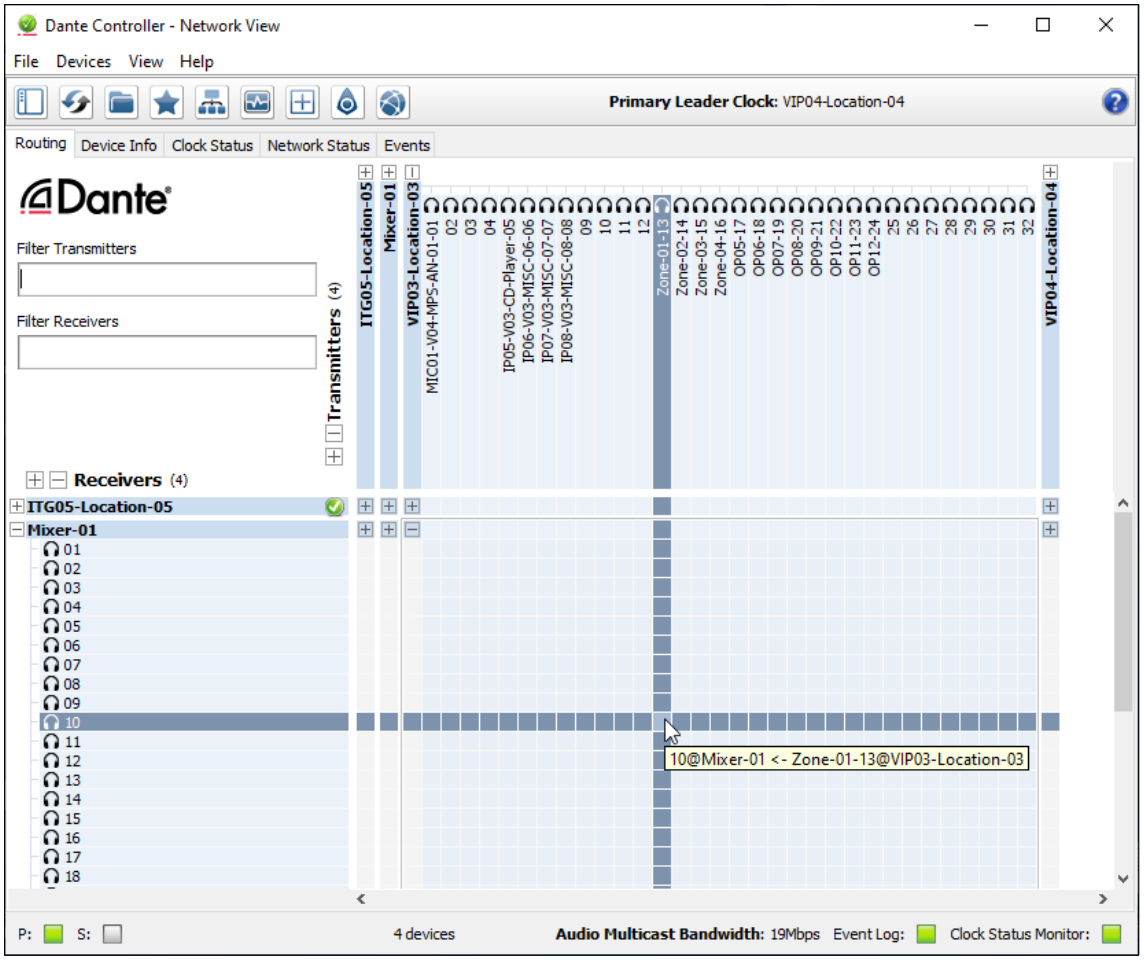
Note:

All audio inputs and outputs of a VIPEDIA-12-PRO / INTEGRA-PRO unit are always available on the Dante Network in pre-defined transmit channels:

- Input 1 on Tx01, input 2 on Tx02, …, and input 12 on Tx12
- Output 1 on Tx13, output 2 on Tx14, and output 12 on Tx24

  Tx17 to Tx24 (outputs 5 to 12) should not be used as there may be overlap with other audio sources.

See Table 1 (page 8) for further details on Dante transmit channel usage on VIPEDIA-12-PRO / INTEGRA-PRO units.



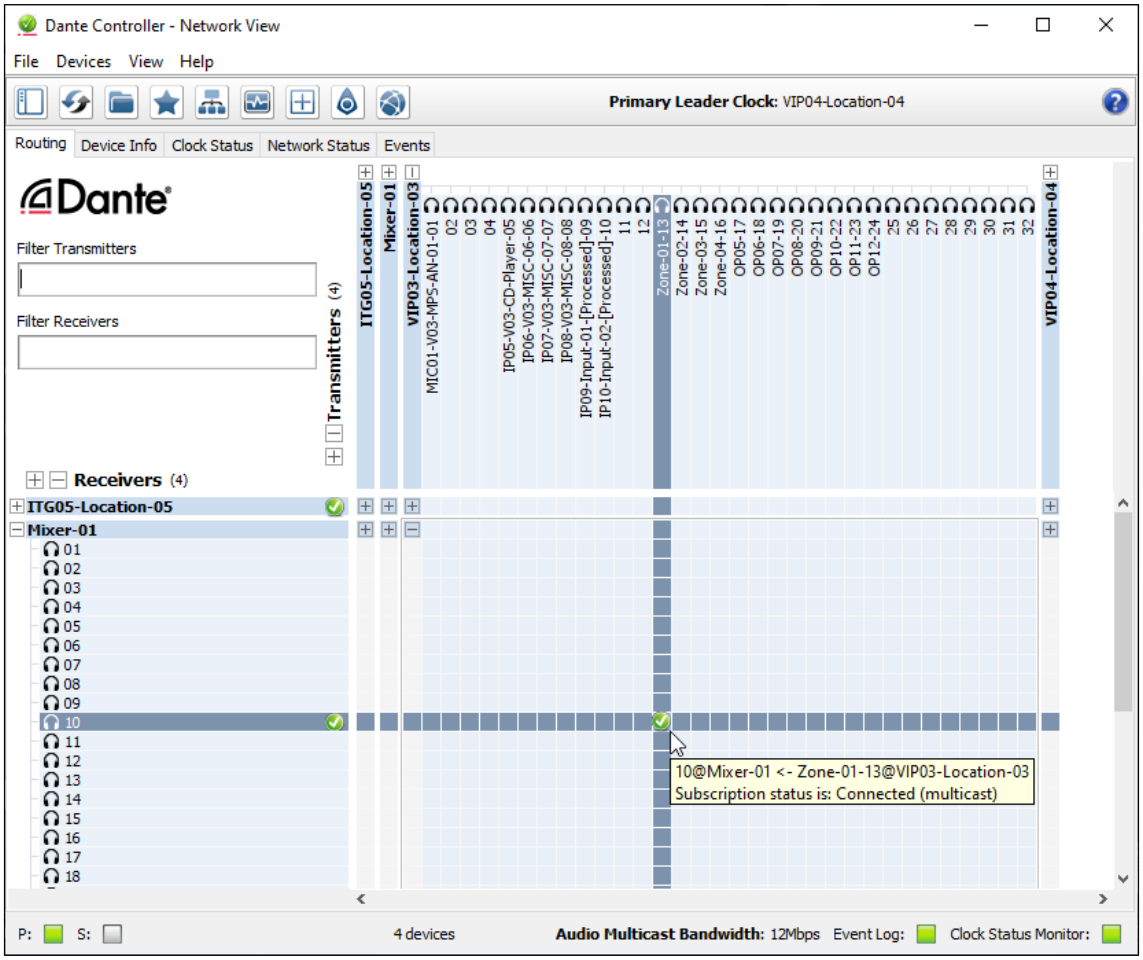
14. Click on the intersection to create a subscription between the receive and transmit channels.

15. A green tick will appear in the intersection. You may initially see a grey hourglass icon (usually very briefly) to indicate that the subscription is in progress.

In the example below, third-party device **Mixer-01:Rx10** is connected to Vipedia **VIP03:Tx13**.

Important:

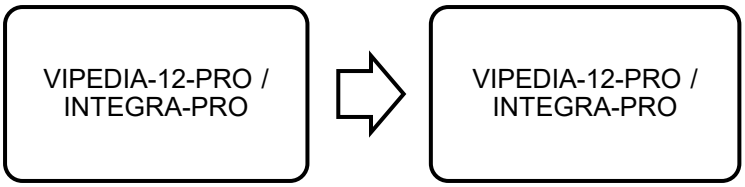
Subscriptions between third-party devices and Brooklyn II modules on VIPEDIA-12-PRO / INTEGRA-PRO units may be erased when the PAVA SCT configuration is updated and reapplied using the Dante Controller.



16. Repeat steps 11 to 14 for other third-party devices (if any).

4.4 VIPEDIA-12-PRO / INTEGRA-PRO to VIPEDIA-12-PRO / INTEGRA-PRO

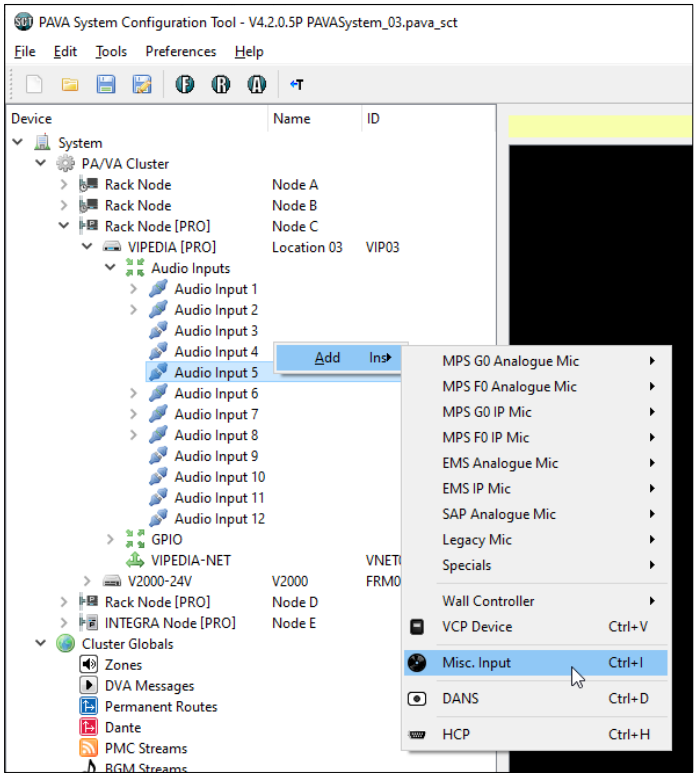
This section describes the configuration of audio inputs of VIPEDIA-12-PRO / INTEGRA-PRO units routed over Dante, where the input source can be miscellaneous audio (e.g. BGM) or microphone audio.



4.4.1 PAVA SCT Configuration (PRO to PRO)

1. On the PAVA SCT, select the required **VIPEDIA-12-PRO** or **INTEGRA-PRO** node.
2. Expand the node down to **Audio Inputs**.
3. Right-click the required **Audio Input**, and then select **Add > Ins >Misc. Input** to add a miscellaneous input or **Add > Ins > <*serial microphone*>**.

   The examples in this section show a Miscellaneous Input.



4. On the **Audio Input** configuration page, tick **Route over Dante for ASL PRO devices**.

The PAVA SCT automatically allocates a Dante receive channel (Rx) to the Dante transmit channel (Tx) associated with this audio input.

This tells all VIPEDIA-12-PRO and INTEGRA-PRO units in the system to listen to the this Dante transmit channel when this input is routed.

Notes:

a) Up to 32 Dante receive channels are available system wide.

b) The PAVA SCT automatically assigns the lowest available receive channel (Rx).

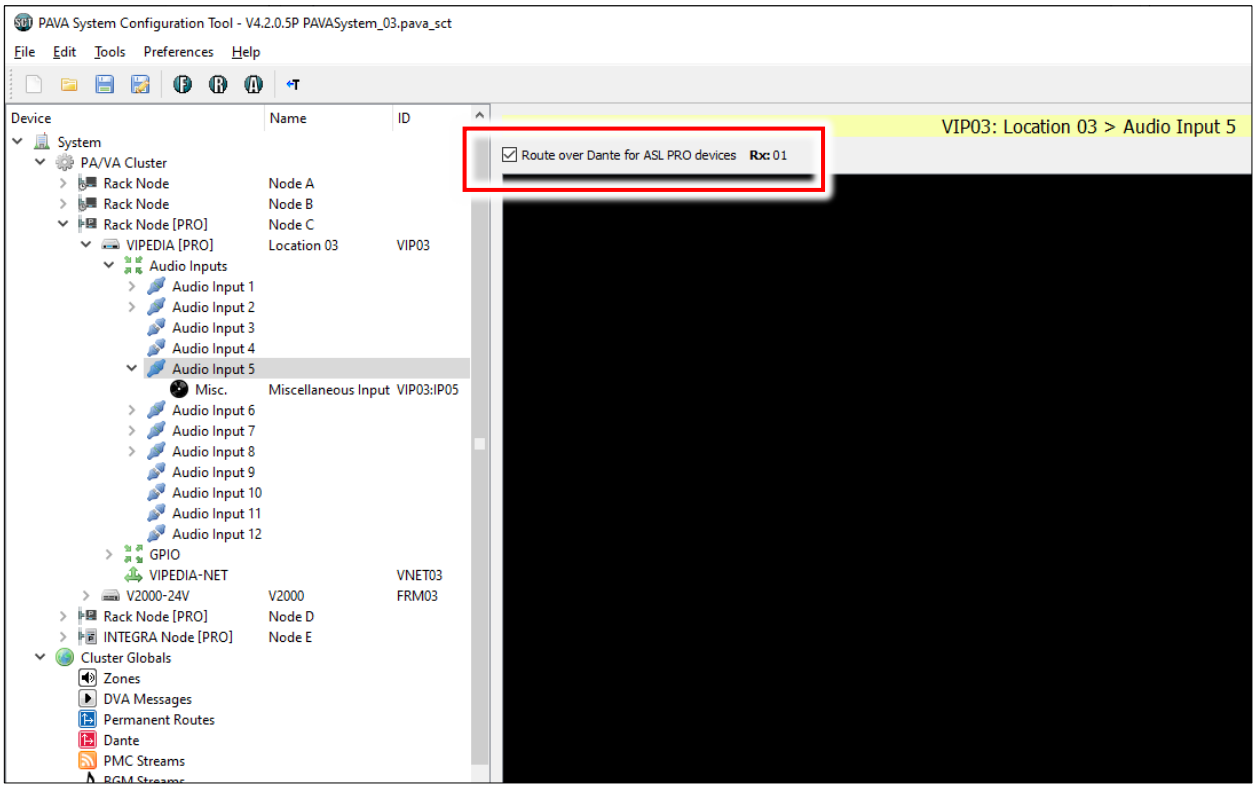
c) All audio inputs of a VIPEDIA-12-PRO / INTEGRA-PRO unit are always available on the Dante Network in pre-defined transmit channels: input 1 on Tx01, input 2 on Tx02, …, and input 12 on Tx12.

See Table 1 (page 8) for further details on transmit channel usage.

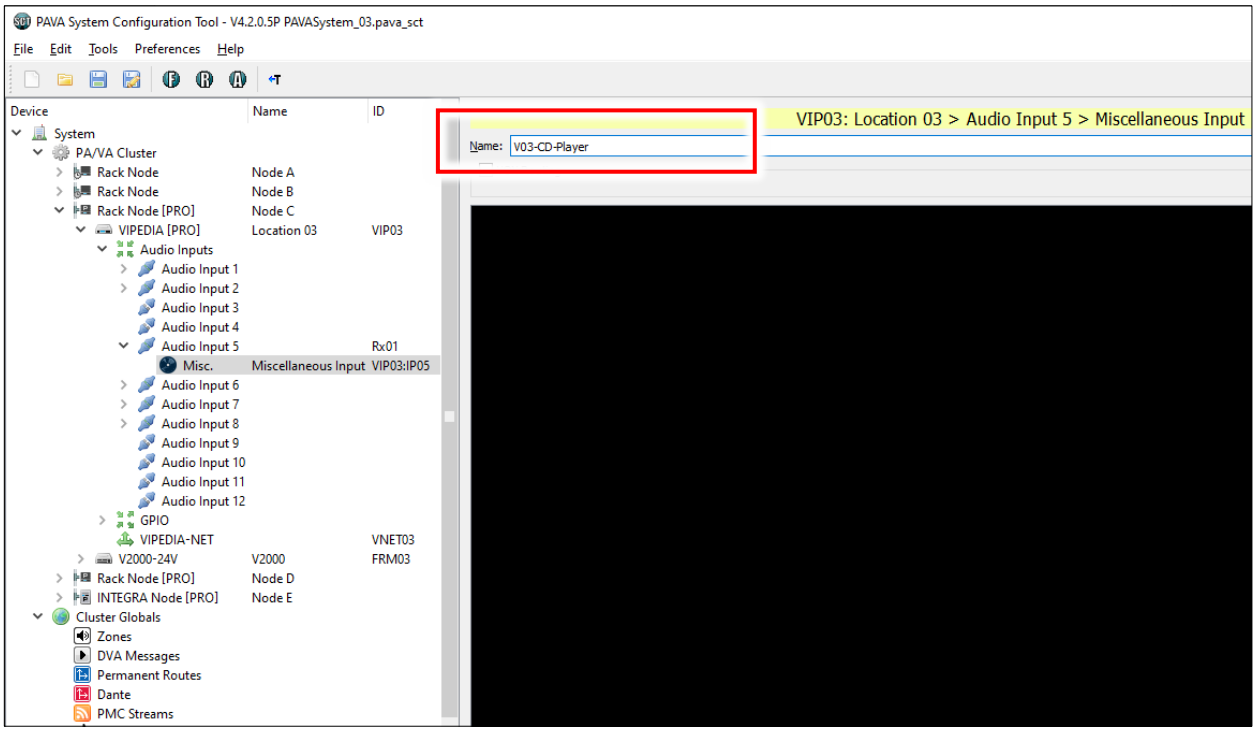
d) The **Dante** page shows the Dante channel allocation for each VIPEDIA-12-PRO / INTEGRA-PRO unit and third-party Dante device in the system; see an example in Figure 3 (page 31).

e) If **Route over Dante for ASL PRO devices** is not selected, the input will be routed using PMC as normal.

In the example below, input 5 of Vipedia VIP03 is configured to route over Dante using Rx01.



5. Select the input and enter a meaningful **Name**.

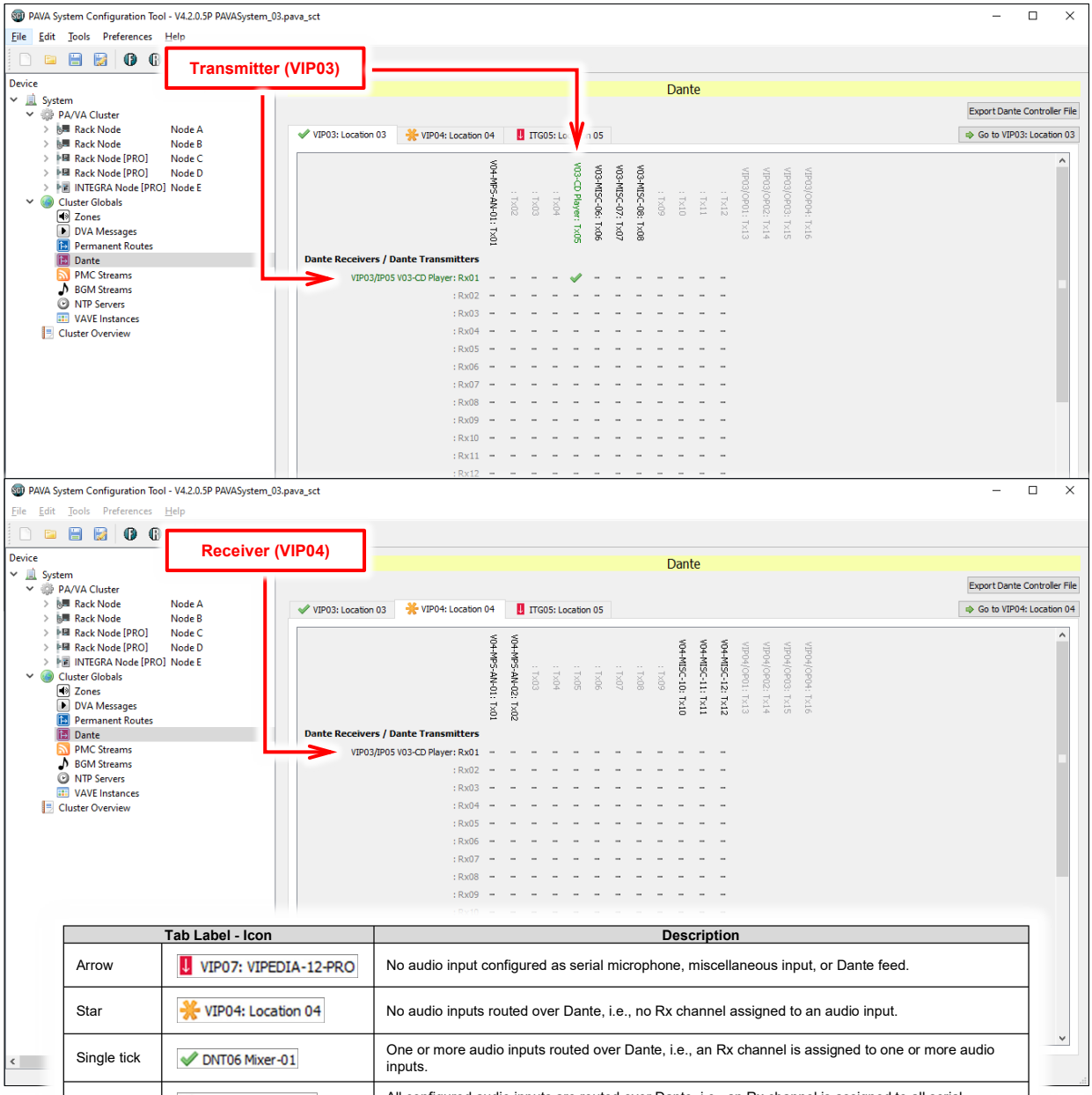


6. The **Dante** page shows the Dante channel allocation for each VIPEDIA-12-PRO / INTEGRA-PRO unit and third-party Dante device in the system.

The **Dante** page for the transmitter unit will show a tick in the intersection of the transmit channel (Tx) used by the audio input and the configured receive channel (Rx). For receiver units (remote units), it will show the receive channel (Rx) assigned to the audio input.

In the example below, the **Dante** page for Vipedia VIP03 (transmitter) shows a tick in the intersection of receive channel Rx01 and transmit channel Tx05 (which is always used by audio input 5). For receiver units, the **Dante** page shows receive channel Rx01 assigned to input 5 of Vipedia VIP03.

Figure 3 Dante page example (audio input over Dante)



Tab Label - Icon		Description
Arrow	VIP07: VIPEDIA-12-PRO	No audio input configured as serial microphone, miscellaneous input, or Dante feed.
Star	VIP04: Location 04	No audio inputs routed over Dante, i.e., no Rx channel assigned to an audio input.
Single tick	DNT06 Mixer-01	One or more audio inputs routed over Dante, i.e., an Rx channel is assigned to one or more audio inputs.
Double tick	VIP03: Location 03	All configured audio inputs are routed over Dante. i.e., an Rx channel is assigned to all serial microphones, miscellaneous inputs and/or Dante feeds.

Note:
Dante feed is a third-party Dante source that is processed using an audio input.

7. Repeat the above steps for all required audio inputs.
8. Configure routes as normal: contact inputs, microphone buttons, permanent routes, program/source selectors, wall-mount controllers, VOX routes (as source), and/or as BGM streams.

   If a Miscellaneous Input is routed over Dante, the input will be identified as **[DANTE]** in the **Source** list of routing configuration dialogs; see example below for contact input routing.

   Refer to the following sections for further details:

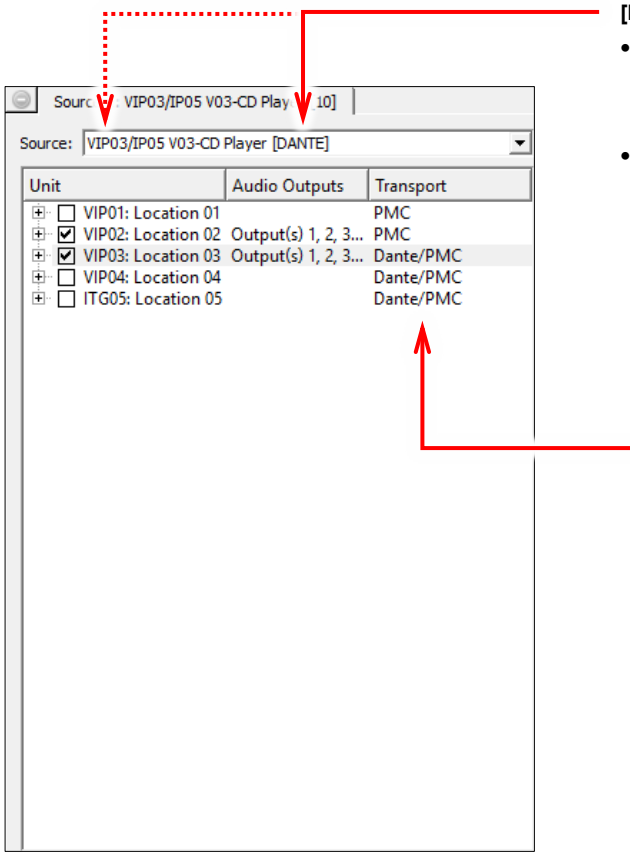
   - “4.7.1 Dante Audio as Source in Contact / Microphone Button / Permanent / Source Selector / Wall-Mount Controller / VOX Routes” (page 80)
   - “4.7.2 DANTE Audio as VIPA BGM Sources” (page 82)
   - “4.7.3 Processed Third-Party Dante Source as VOX Route Trigger” (page 83)

   Notes:

   a) The **Transport** column in routing configuration dialogs identifies the transport methods for voice over IP that the receiver can handle (PMC and/or Dante), not necessarily the transport method that will used when the route is made. The audio source type will determine the transport method that will be used when the route is made.

   b) Although routes are allowed in the configuration, unprocessed third-party Dante sources will not be routed over PMC to standard VIPEDIA-12 / INTEGRA units. Unprocessed third-party Dante sources can be routed to VIPEDIA-12-PRO / INTEGRA-PRO units only (over Dante).

   c) Although the system configuration is correct, Dante routes will not route audio until the Dante Brooklyn II modules are correctly configured using the Dante Controller; see Section “4.4.2 Dante Brooklyn II Module Configuration (PRO to PRO)” (page 33).

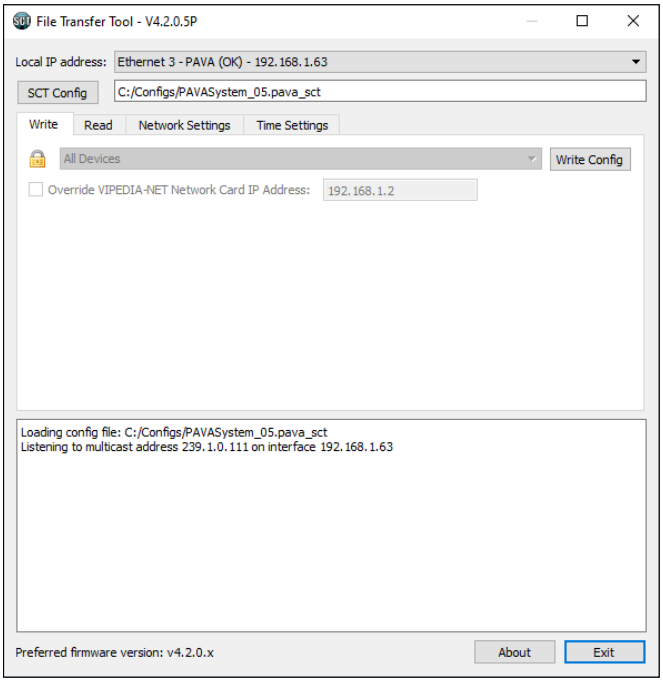


[DANTE] Sources:

- Sources from a PAVA Router (**VIPxx** or **ITGxx**) will be routed over Dante to VIPEDIA-12-PRO and INTEGRA-PRO units, and over PMC to standard VIPEDIA-12 / INTEGRA units.
- Sources from third-party devices (**DNTxx**) are unprocessed and will be routed over Dante to VIPEDIA-12-PRO and INTEGRA-PRO units. Although allowed in the configuration, they will not be routed to VIPEDIA-12 / INTEGRA units.

Transport methods for voice over IP that the receiver can handle, not necessarily the method used when the route is made.

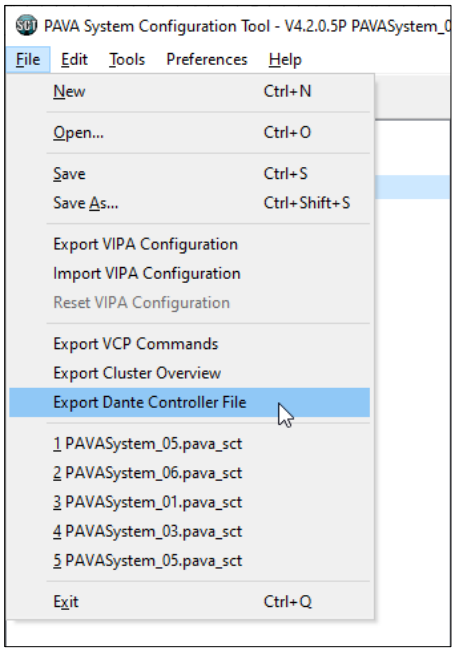
9. Load the configuration to the ASL's PAVA devices using the File Transfer Tool (FTT).



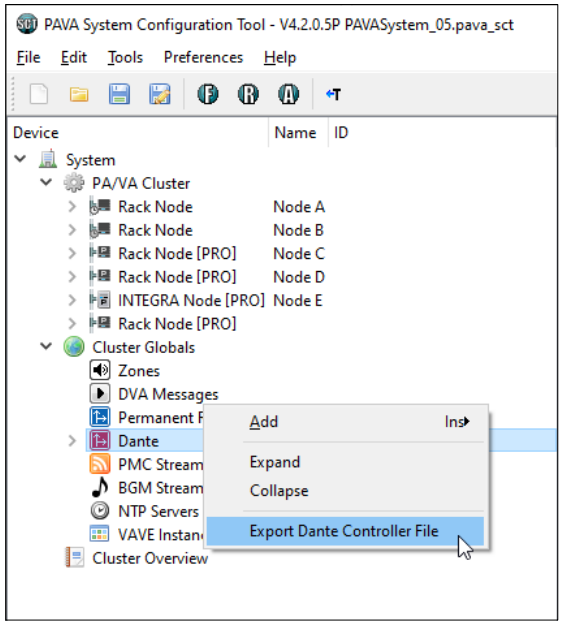
4.4.2 Dante Brooklyn II Module Configuration (PRO to PRO)

1. On the PAVA SCT, export the Dante Controller XML configuration using the menu option:

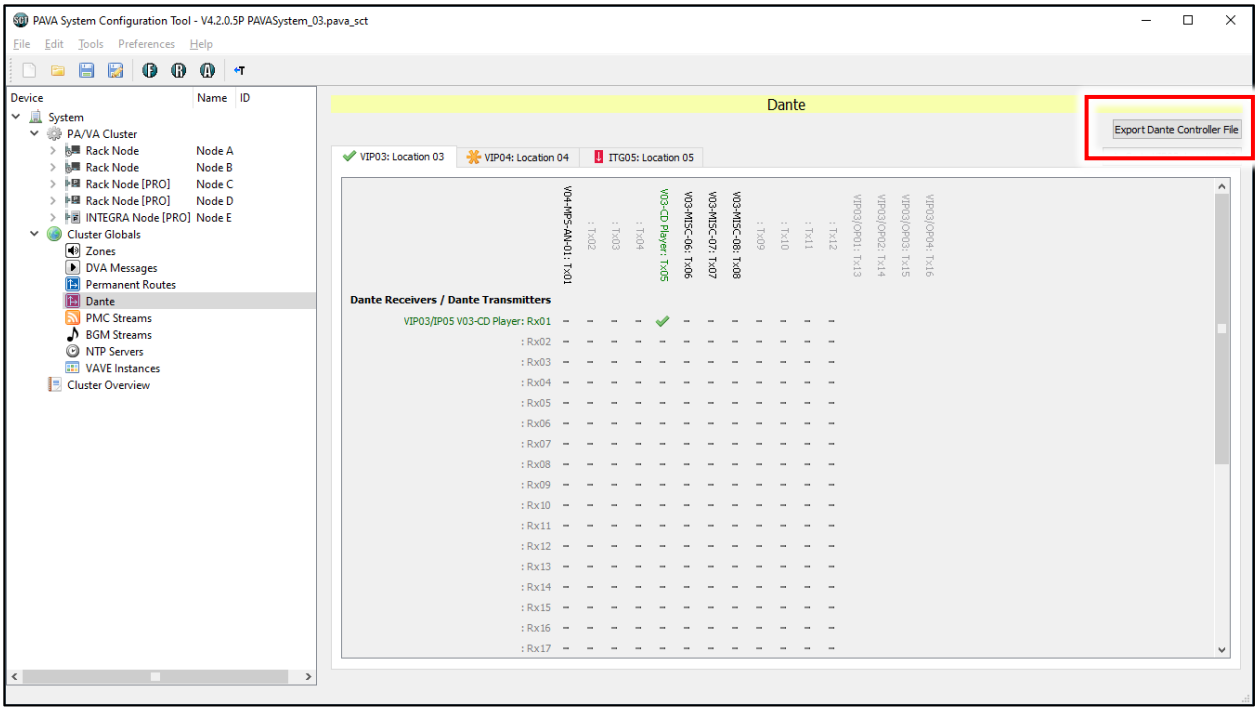
File > Export Dante Controller File



Alternatively, right-click the **Dante** item in the device tree and select **Export Dante Controller File** option from the context menu.



Or click the **Export Dante Controller File** button on the **Dante** page.



2. Launch the Dante Controller.

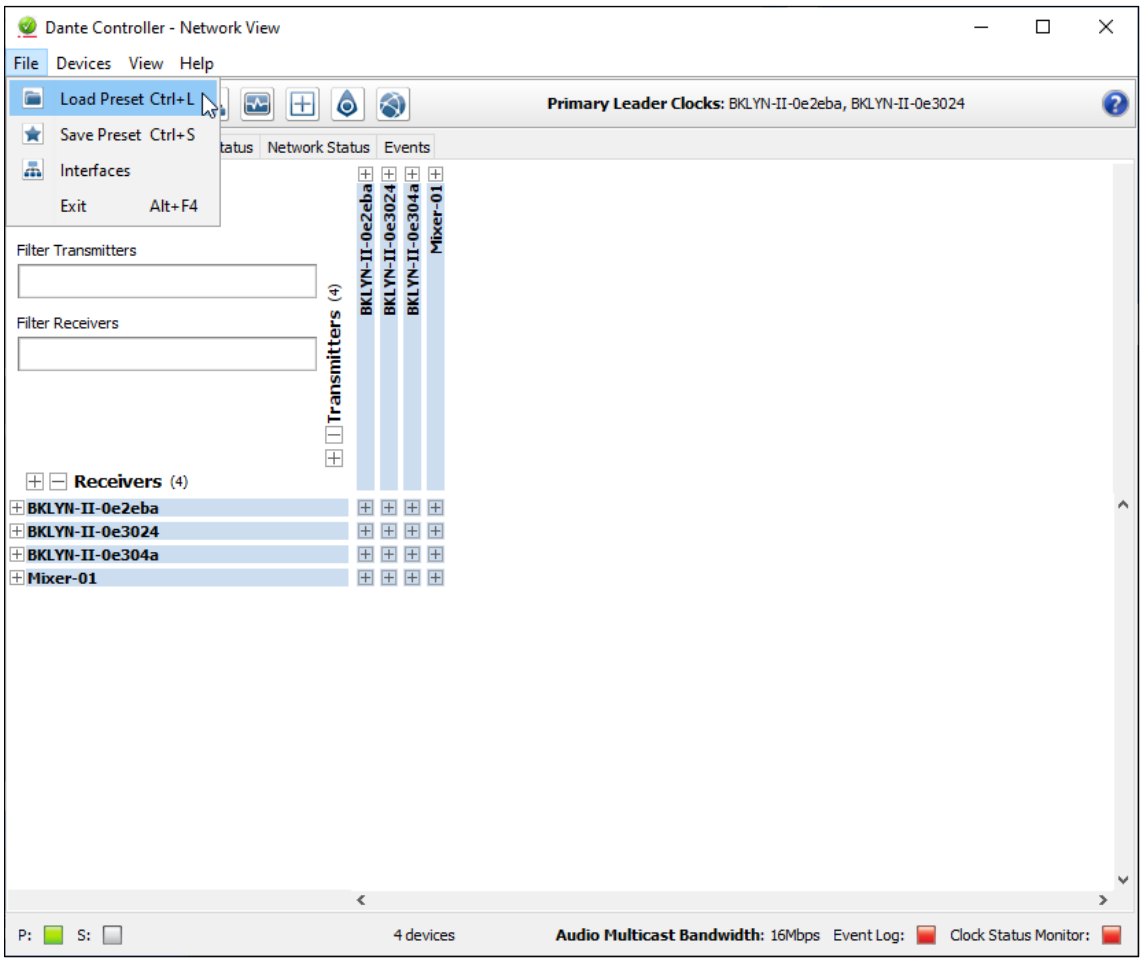
   Important:

   Ensure that the configuration PC's network interface used to connect to the Dante devices is correctly configured to dynamic IP address; see "APPENDIX A – PC Requirements for ASL Configuration Tools and Dante Controller" (page 95) for further details.

3. Select the **Routing** tab in **Dante Controller - Network View** main window and ensure that all required devices are present on the network.

4. Load the Dante XML configuration using the menu option:

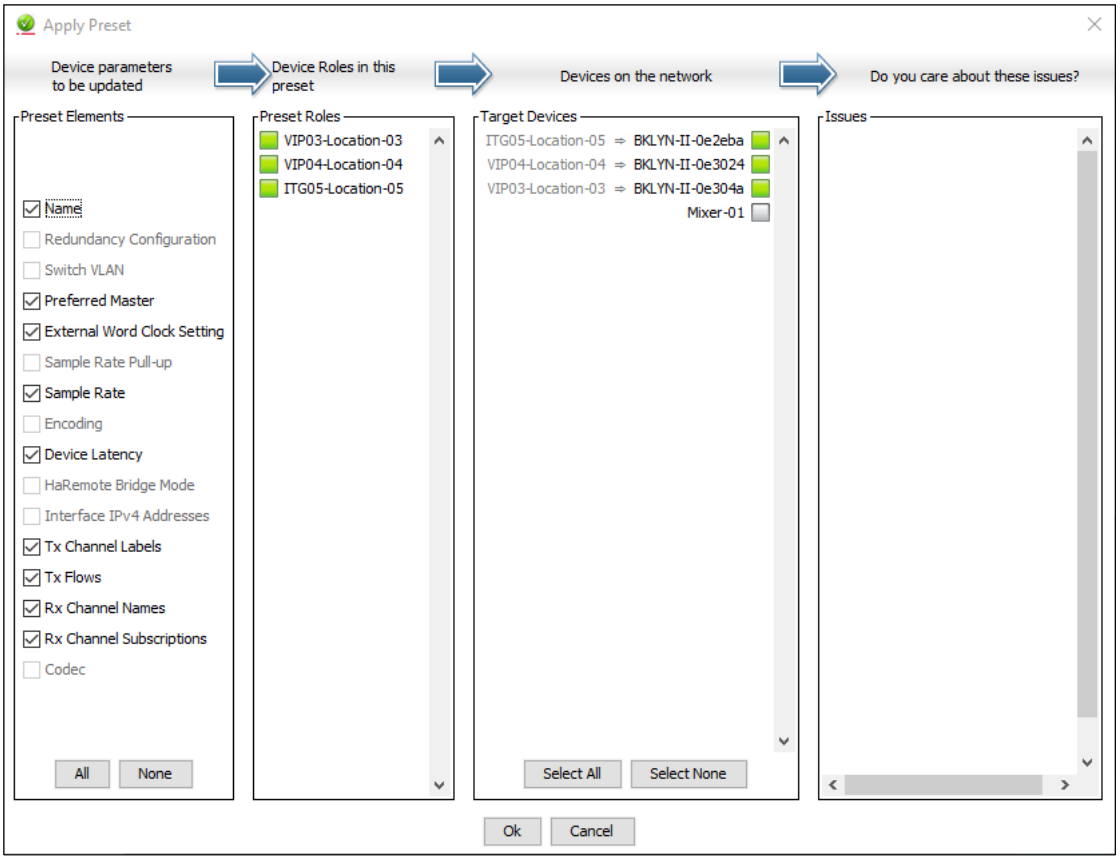
   File > Load Preset



5. The **Preset Elements** list shows the elements that can be imported from the configuration.

It is recommended to select all available elements.

a. If the MAC addresses are present in the configuration, it should automatically identify and apply the role to the correct device.



b. If the MAC addresses are not present in the configuration, assign the roles to the Dante devices on the network.

i. The **Preset Roles** list shows the devices in the configuration and the **Target Devices** list shows the devices found on the network.

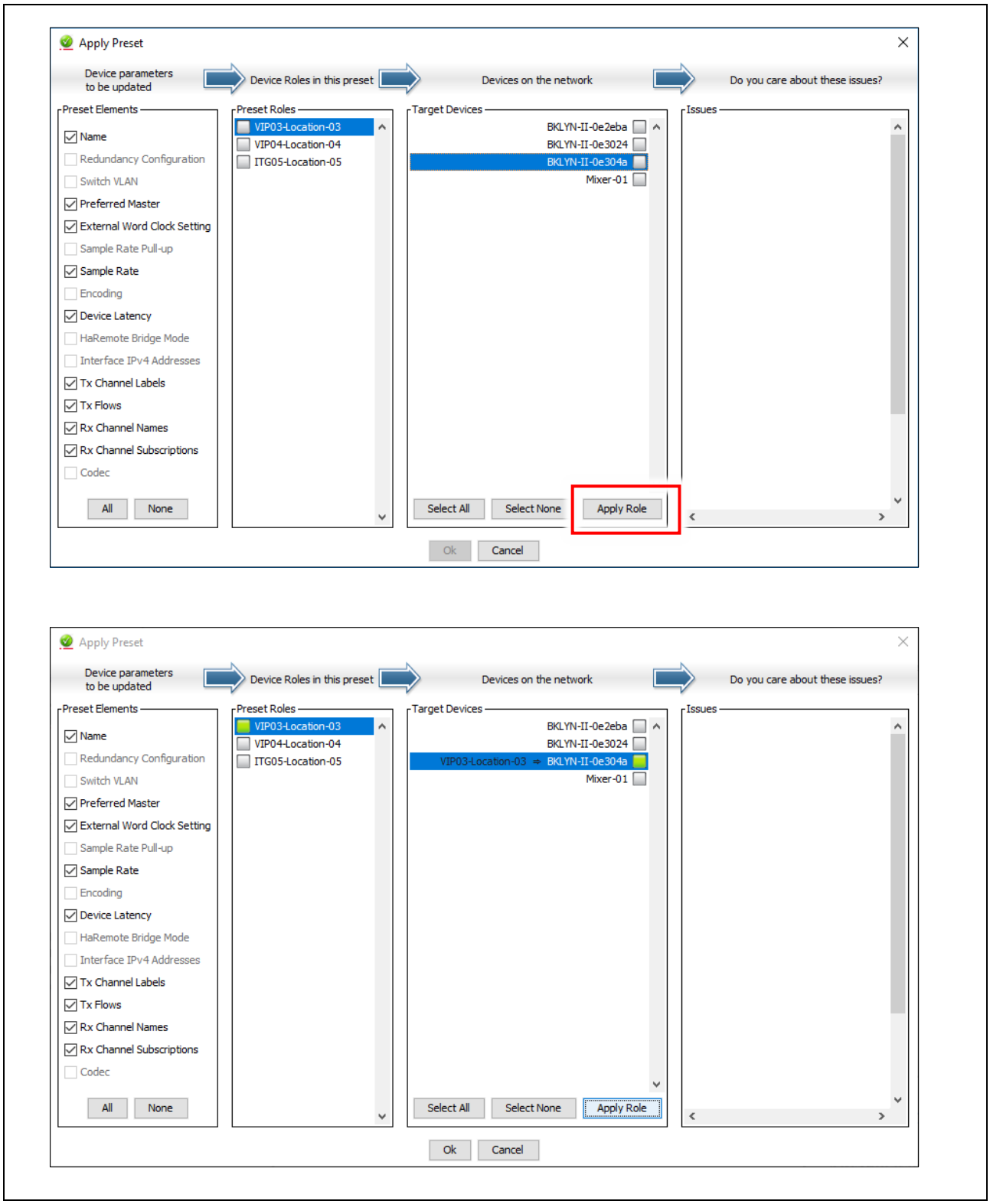
ii. Select a device in the **Preset Roles** list and its equivalent device the **Target Devices** list, and then click the **Apply Role** button.

Alternatively, select a device in the **Preset Roles** list, and drag and drop it on top of its equivalent device in the **Target Devices** list.

iii. Repeat the above steps for all devices in the **Preset Roles** list.

Important:

To simplify identifying the correct device on the network amongst various devices with default name, it is recommended that each Dante module is configured whilst it is the only device with default name on the network.

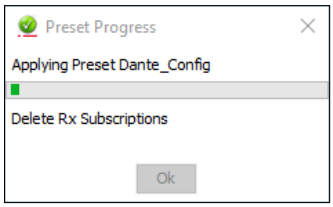

Apply Preset
Device parameters to be updated
Device Roles in this preset
Devices on the network
Do you care about these issues?
Preset Elements
Name
Redundancy Configuration
Switch VLAN
Preferred Master
External Word Clock Setting
Sample Rate Pull-up
Sample Rate
Encoding
Device Latency
HaRemote Bridge Mode
Interface IPv4 Addresses
Tx Channel Labels
Tx Flows
Rx Channel Names
Rx Channel Subscriptions
Codec
All
None
Preset Roles
VIP03-Location-03
VIP04-Location-04
ITG05-Location-05
Target Devices
BKLYN-II-0e2eba
BKLYN-II-0e3024
BKLYN-II-0e304a
Mixer-01
Issues
Select All
Select None
Apply Role
Ok
Cancel
Apply Preset
Device parameters to be updated
Device Roles in this preset
Devices on the network
Do you care about these issues?
Preset Elements
Name
Redundancy Configuration
Switch VLAN
Preferred Master
External Word Clock Setting
Sample Rate Pull-up
Sample Rate
Encoding
Device Latency
HaRemote Bridge Mode
Interface IPv4 Addresses
Tx Channel Labels
Tx Flows
Rx Channel Names
Rx Channel Subscriptions
Codec
All
None
Preset Roles
VIP03-Location-03
VIP04-Location-04
ITG05-Location-05
Target Devices
BKLYN-II-0e2eba
BKLYN-II-0e3024
VIP03-Location-03 ⇒ BKLYN-II-0e304a
Mixer-01
Issues
Select All
Select None
Apply Role
Ok
Cancel

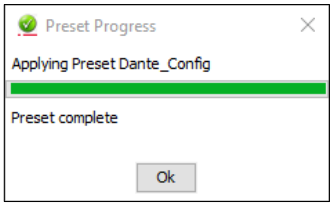
6. Click the **Ok** button to apply the configuration.

   It may take a while depending on the number of devices.

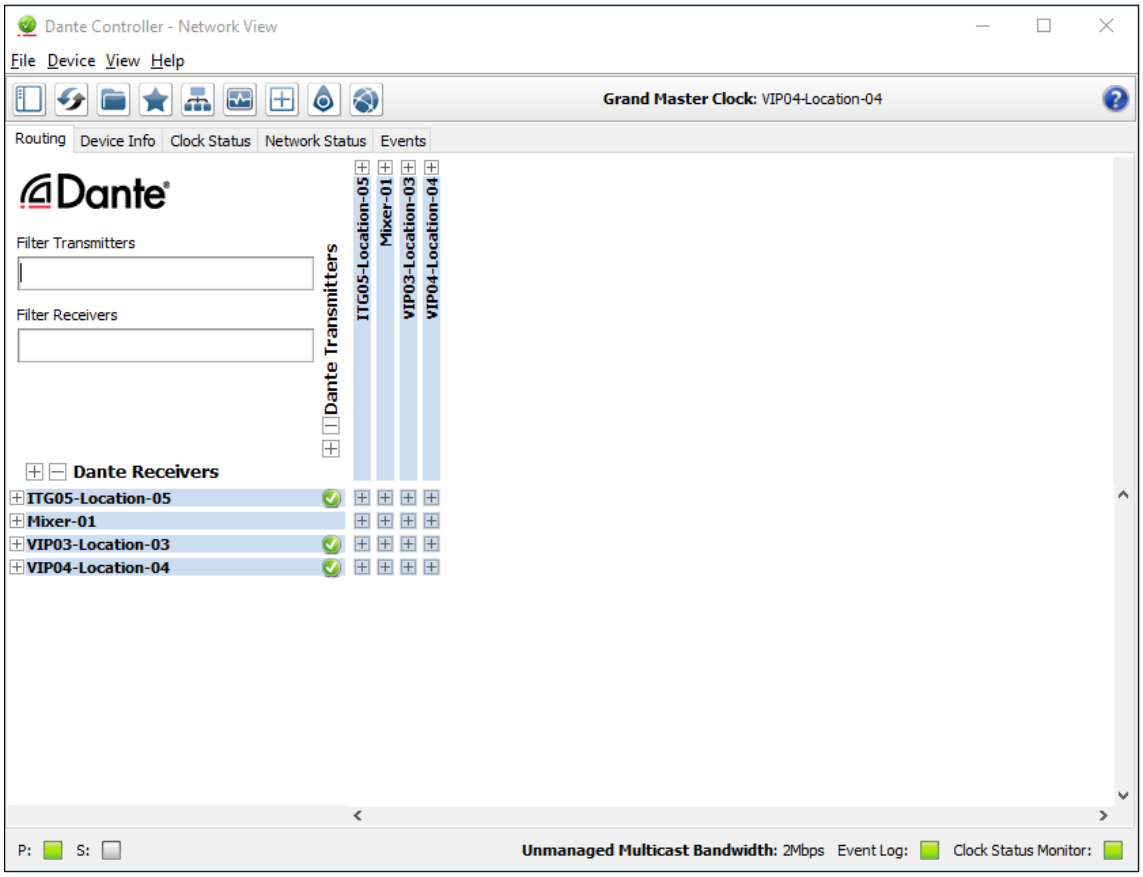
7. Once completed, click the **Ok** button.

   Device and channel names will have been updated and routes between Dante Brooklyn II modules fitted VIPEDIA-12-PRO / INTEGRA-PRO units will be made (if any).





8. On the **Routing** tab, ensure that all required devices are present on the network.



9. Routes can be confirmed by the green ticks inside the matrix.

a. Along the top, expand the transmitter device.

b. Along the left side, expand each receiver device fitted to VIPEDIA-12-PRO / INTEGRA-PRO units.

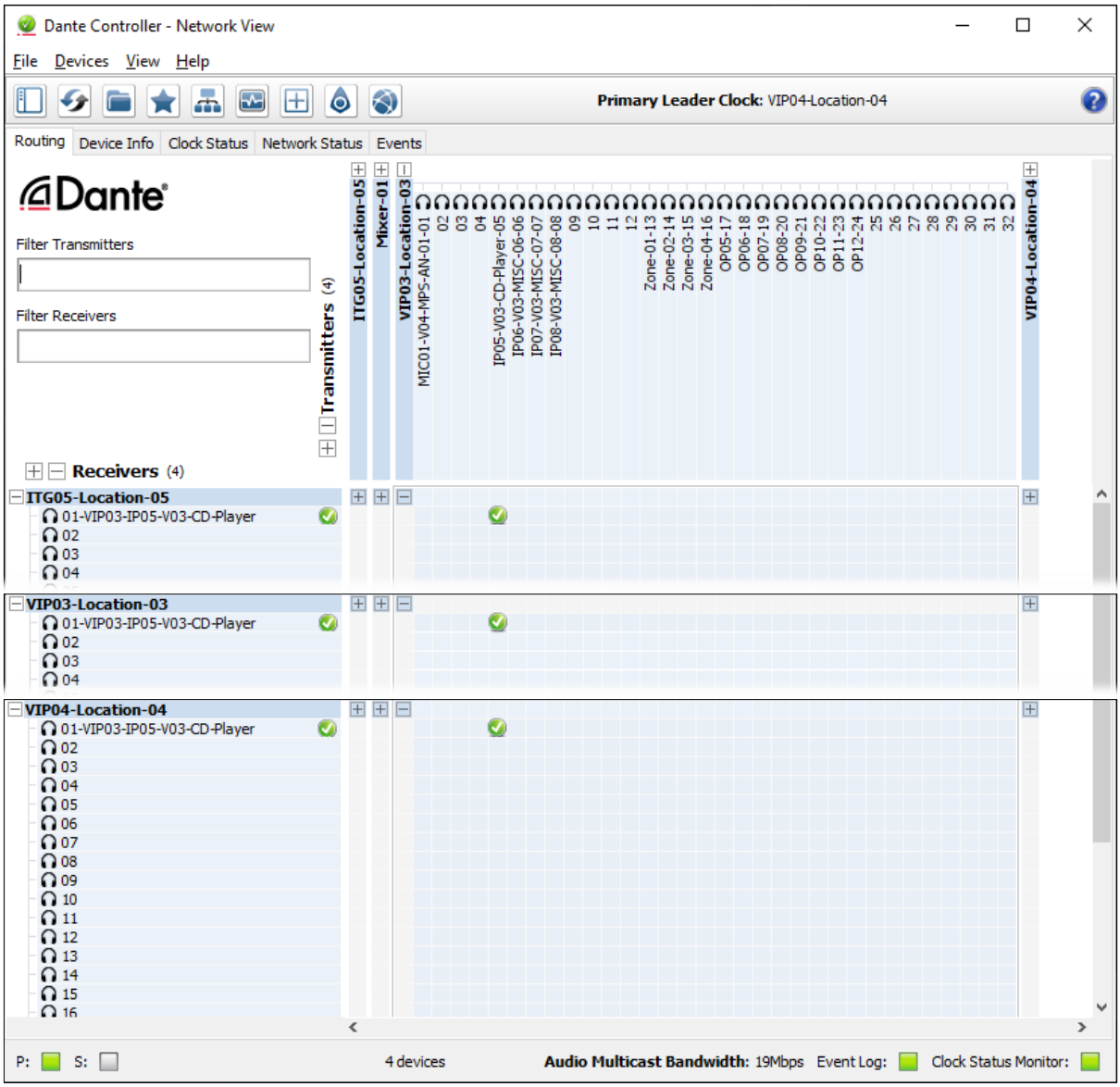
A green tick in the intersection of the configured Rx and Tx channels indicate that the subscription is OK and audio should be flowing.

In the example PAVA SCT configuration on page 29, Input 5 of Vipedia 03 is configured to route over Dante using Rx01. All Dante Brooklyn II modules fitted to VIPEDIA-12-PRO / INTEGRA-PRO units show a green tick in the intersection of **Rx01** and **Vipedia 03:Tx05**.

Notes:

a) The Rx channels of all Dante Brooklyn II modules fitted to VIPEDIA-12-PRO / INTEGRA-PRO units in the system configuration should subscribe to the same Tx channels across the system. This ensures that audio is always routed over IP using the correct transport method.

b) The Dante channel subscriptions on Dante Brooklyn II modules fitted to VIPEDIA-12-PRO / INTEGRA-PRO should match the configuration shown on the **Dante** page of the PAVA SCT; see example in Figure 3 (page 31).



4.5 Third-Party Dante Device to VIPEDIA-12-PRO / INTEGRA-PRO (Unprocessed)

This section describes the configuration of unprocessed third-party Dante sources that can be routed to VIPEDIA-12-PRO / INTEGRA-PRO units.

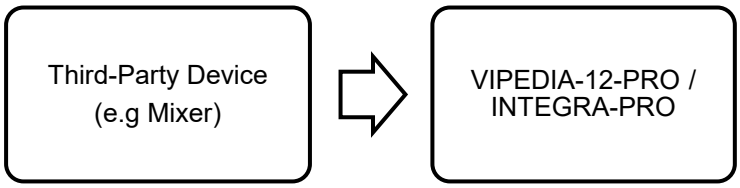
Important:

a) Unprocessed third-party Dante sources can only be routed using Dante to outputs on VIPEDIA-12-PRO / INTEGRA-PRO units.

b) If routing to standard VIPEDIA-12 / INTEGRA units is required, the third-party Dante source must be processed by a VIPEDIA-12-PRO / INTEGRA-PRO unit first as described in Section “4.6 Third-Party Dante Device to VIPEDIA-12-PRO / INTEGRA-PRO VIPEDIA-12 / INTEGRA (Processed)” (page 58).

c) No dynamic processing (EQ, gate, compressor and limiter) or gain adjustment is applied to the Dante source.

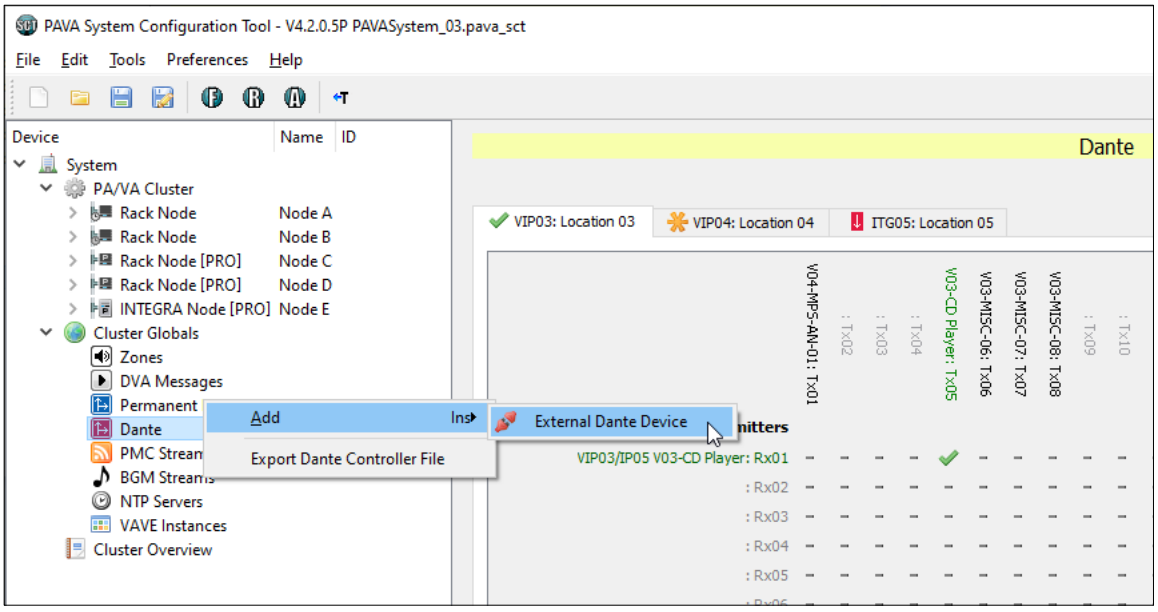
d) If required, processing must be applied at the output stage of the third-party transmitting device.



4.5.1 PAVA SCT Configuration (Third-Party to PRO - Unprocessed)

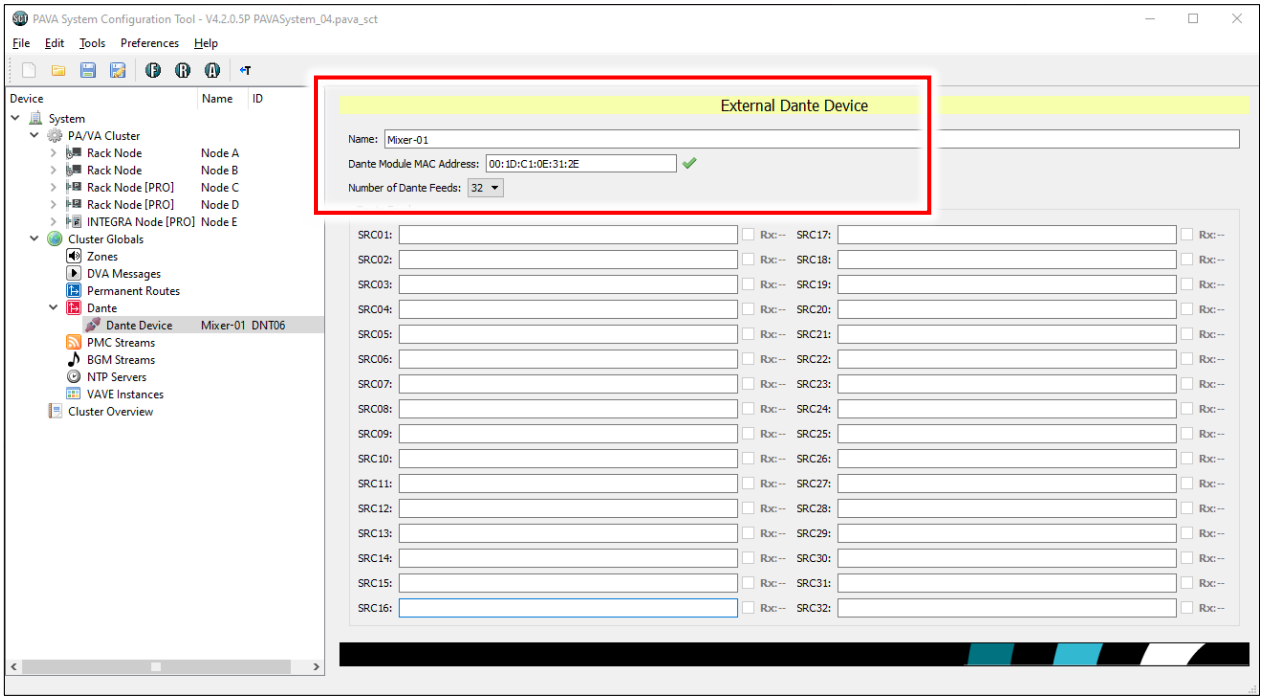
1. On the PAVA SCT device tree, right-click the **Dante** item.
2. Select **Add > Ins**, and then **External Dante Device**.

   The PAVA SCT automatically assigns the lowest available Unit ID (1 to 63 range).



3. Select the required **Dante Device** in the device tree to load the configuration page.
4. Enter the device's **Name**.
5. Enter the **Dante Module MAC Address**; see Section "4.1.3 MAC Address on the Dante Controller" (page 14)

   The Dante MAC address of a third-party device is not essential. It is not currently used but may be useful in the future.
6. Select the number of Dante transmit channels from the **Number of Dante Feeds** drop-down menu (8, 16, 32 or 64).

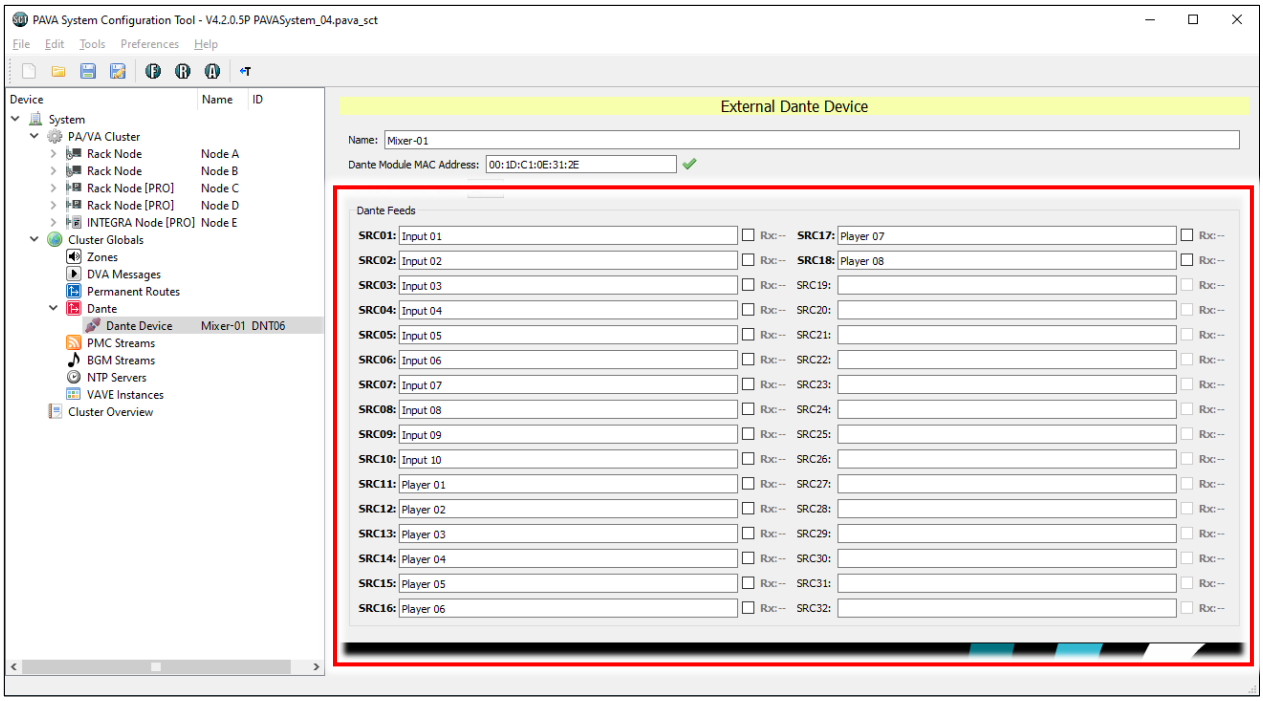


7. Enter a name for each Dante stream (**SRCxx**) available from the device, where **SRCxx** equates to **Transmit Channel xx** on the third-party device

Notes:

a) Using names that are assigned to the transmit channel on the Dante Controller helps the configuration.

b) The source name must be filled in for Rx channel and route configuration.



8. Select the Dante streams that will be routed to VIPEDIA-12-PRO / INTEGRA-PRO units by ticking the **Rx** check box of the required stream (**SRCxx**).

The PAVA SCT automatically allocates a Dante receive channel (**Rx**) to the third-party Dante stream (**SRCxx**).

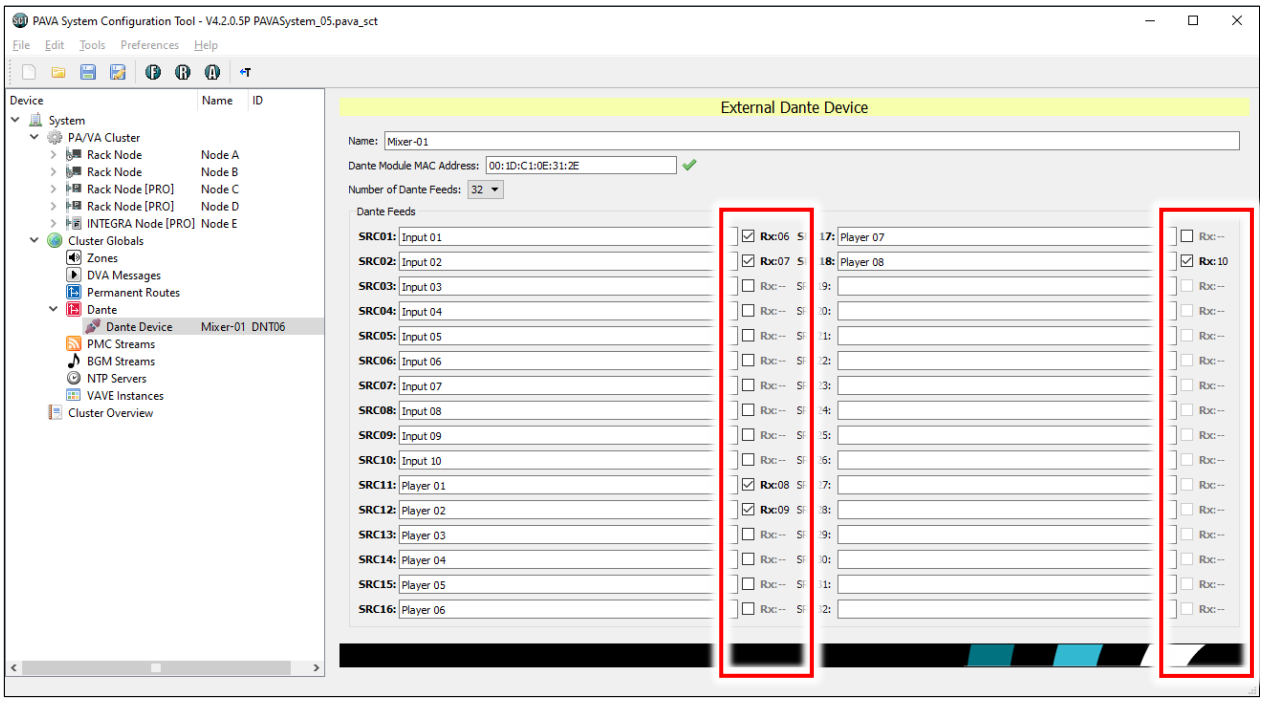
This tells all VIPEDIA-12-PRO and INTEGRA-PRO units in the system to listen to the this Dante stream when this source is routed.

Important:

a) Only select an **Rx** channel for Dante streams that are routed to VIPEDIA-12-PRO / INTEGRA-PRO outputs (and inputs, if processed).

b) Selecting an **Rx** channel for streams that are not routed within the PAVA system will reduce the number of Dante channels available for the PAVA system.

In the example below, 6 x Dante streams are selected on third-party device DNT06: SRC01<>Rx06, SRC02<>Rx07, SRC11<>Rx08, SRC12<>Rx09, and SRC18<>Rx10.

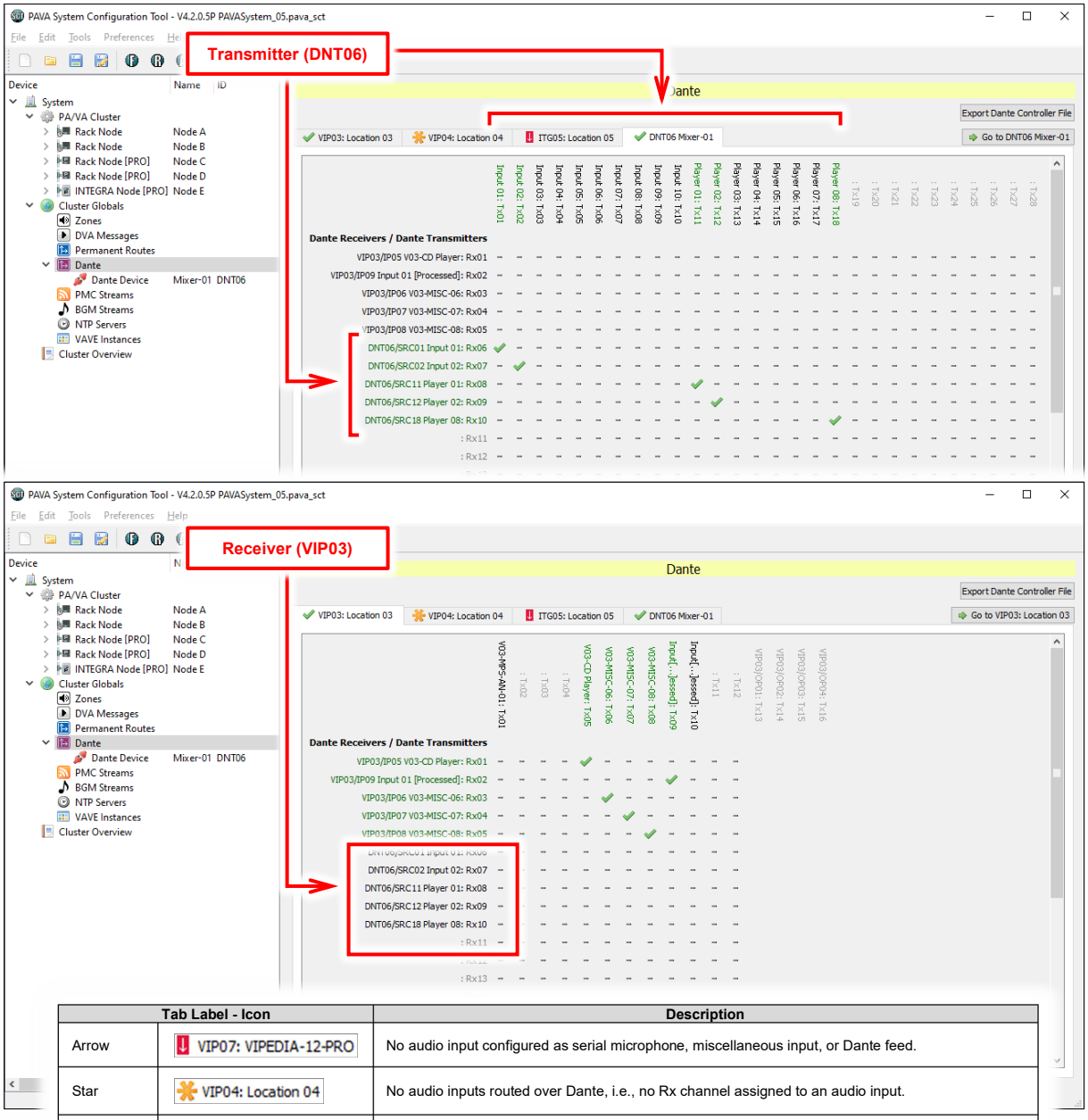


9. The **Dante** page shows the Dante channel allocation for each PRO and third-party Dante unit in the system.

The **Dante** page for the transmitter unit (the third-party device) will show a tick in the intersection of the transmit channel (Tx) and the configured receive channel (Rx). For receiver units (VIPEDIA-12-PRO and INTEGRA-PRO units), it will show receive channels (Rx) assigned to the third-party Dante streams.

In the example below, the **Dante** page for Vipedia VIP03 (and all other VIPEDIA-12-PRO and INTEGRA-PRO units) shows receive channel Rx06 assigned to SCR01; Rx07 to SCR02, Rx08 to SRC11, Rx09 to SCR12, and Rx10 to SCR18 of third-party device DNT06.

Figure 4 Dante page example (third-party Dante sources)



Tab Label - Icon		Description
Arrow	VIP07: VIPEDIA-12-PRO	No audio input configured as serial microphone, miscellaneous input, or Dante feed.
Star	VIP04: Location 04	No audio inputs routed over Dante, i.e., no Rx channel assigned to an audio input.
Single tick	DNT06 Mixer-01	One or more audio inputs routed over Dante, i.e., an Rx channel is assigned to one or more audio inputs.
Double tick	VIP03: Location 03	All configured audio inputs are routed over Dante. i.e., an Rx channel is assigned to all serial microphones, miscellaneous inputs and/or Dante feeds.
Note: Dante feed is a third-party Dante source that is processed using an audio input.		

10. Configure routes as normal: contact inputs, microphone buttons, permanent routes, program/source selectors, wall-mount controllers, VOX routes (as source) and/or BGM streams.

Dante sources will be identified as **[DANTE]** in the **Source** list of routing configuration dialogs, and the third-party device as **DNTxx**; see example below for contact input routing.

Refer to the following sections for further details:

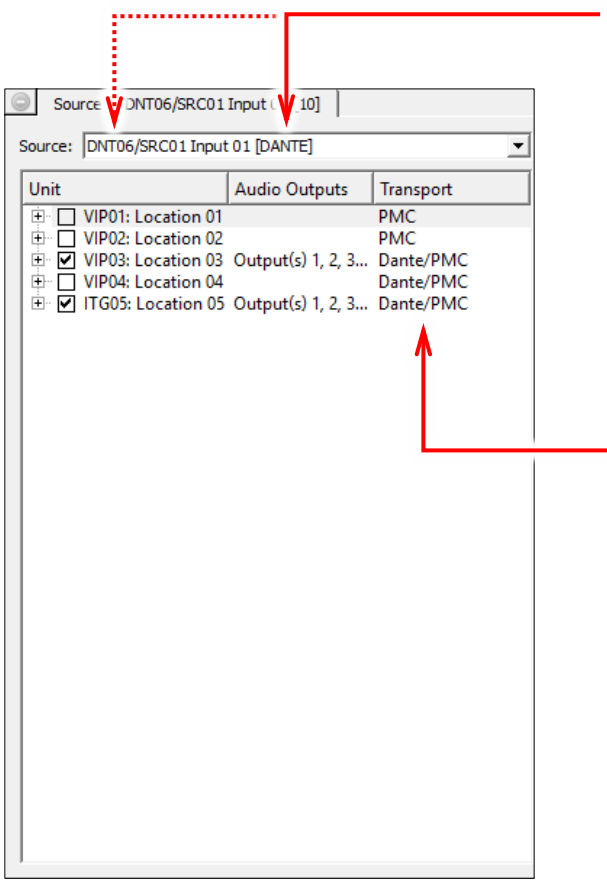
- “4.7.1 Dante Audio as Source in Contact / Microphone Button / Permanent / Source Selector / Wall-Mount Controller / VOX Routes” (page 80)
- “4.7.2 DANTE Audio as VIPA BGM Sources” (page 82)
- “4.7.3 Processed Third-Party Dante Source as VOX Route Trigger” (page 83)

Notes:

a) The **Transport** column in routing configuration dialogs identifies the transport methods for voice over IP that the receiver can handle (PMC and/or Dante), not necessarily the transport method that will used when the route is made. The audio source type will determine the transport method that will be used when the route is made.

b) Unprocessed third-party Dante sources can be routed to VIPEDIA-12-PRO / INTEGRA-PRO units only (over Dante). Although routes are allowed in the configuration, unprocessed third-party Dante sources will not be routed to standard units.

c) Although the system configuration is correct, Dante routes will not route audio until the Dante Brooklyn II modules are correctly configured using the Dante Controller; see Section “4.5.2 Dante Brooklyn II Module Configuration (Third-Party to PRO)” (page 47).

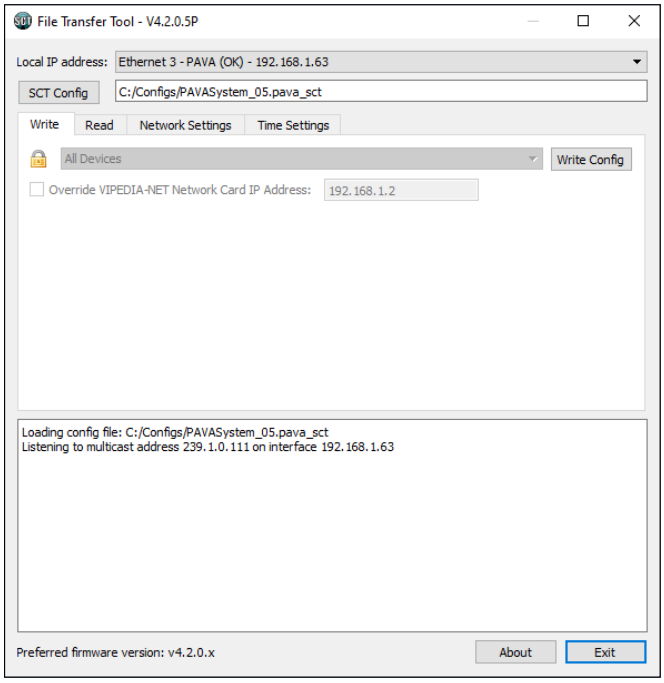


[DANTE] Sources:

- Sources from third-party devices (**DNTxx**) are unprocessed and will be routed over Dante to VIPEDIA-12-PRO and INTEGRA-PRO units. Although allowed in the configuration, they will not be routed to VIPEDIA-12 / INTEGRA units.
- Sources from a PAVA Router (**VIPxx** or **ITGxx**) will be routed over Dante to VIPEDIA-12-PRO and INTEGRA-PRO units, and over PMC to standard VIPEDIA-12 / INTEGRA units.

Transport methods for voice over IP that the receiver can handle, not necessarily the method used when the route is made.

11. Load the configuration to the ASL's PAVA devices using the File Transfer Tool (FTT).



4.5.2 Dante Brooklyn II Module Configuration (Third-Party to PRO)

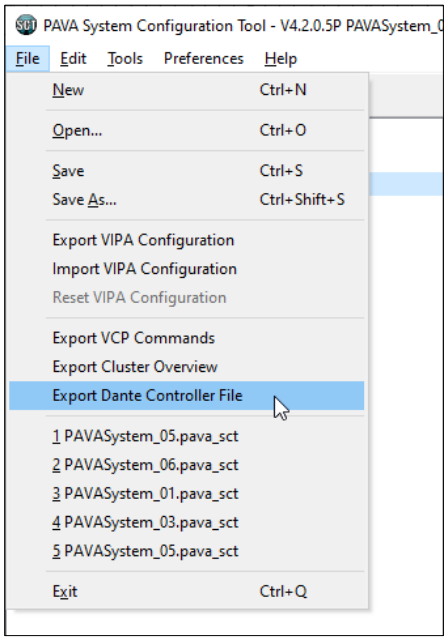
Important:

a) Subscriptions (routes) to third-party devices will not be fully configured when the Dante configuration generated by the PAVA SCT is loaded into the Brooklyn II module fitted to VIPEDIA-12-PRO / INTEGRA-PRO units. The configuration must be completed using the Dante Controller.

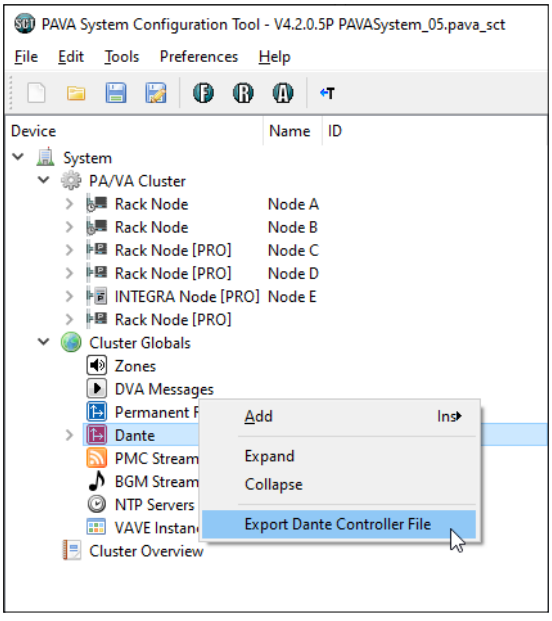
b) Any subscriptions between VIPEDIA-12-PRO / INTEGRA-PRO units will also be automatically configured in the same process.

1. On the PAVA SCT, export the Dante Controller XML configuration using the menu option:

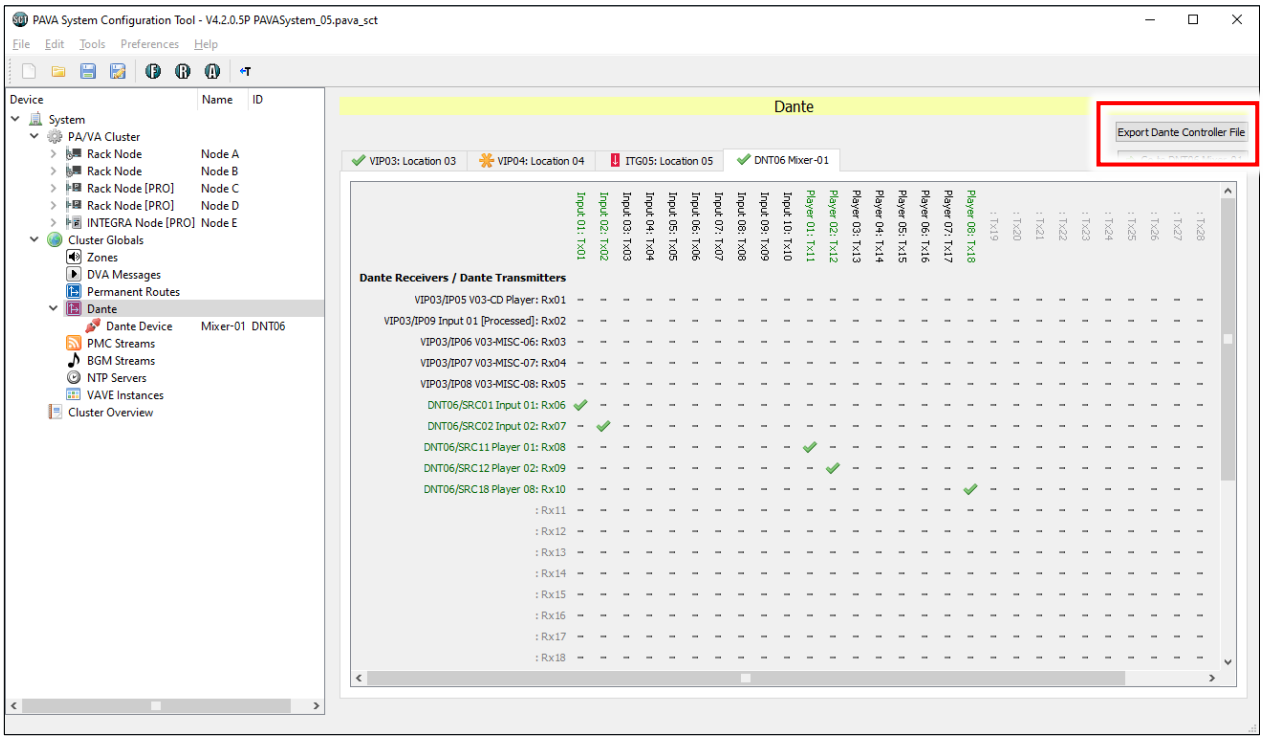
File > Export Dante Controller File



Alternatively, right-click the **Dante** item in the device tree and select **Export Dante Controller File** option from the context menu.



Or click the **Export Dante Controller File** button on the **Dante** page.



2. Launch the Dante Controller.

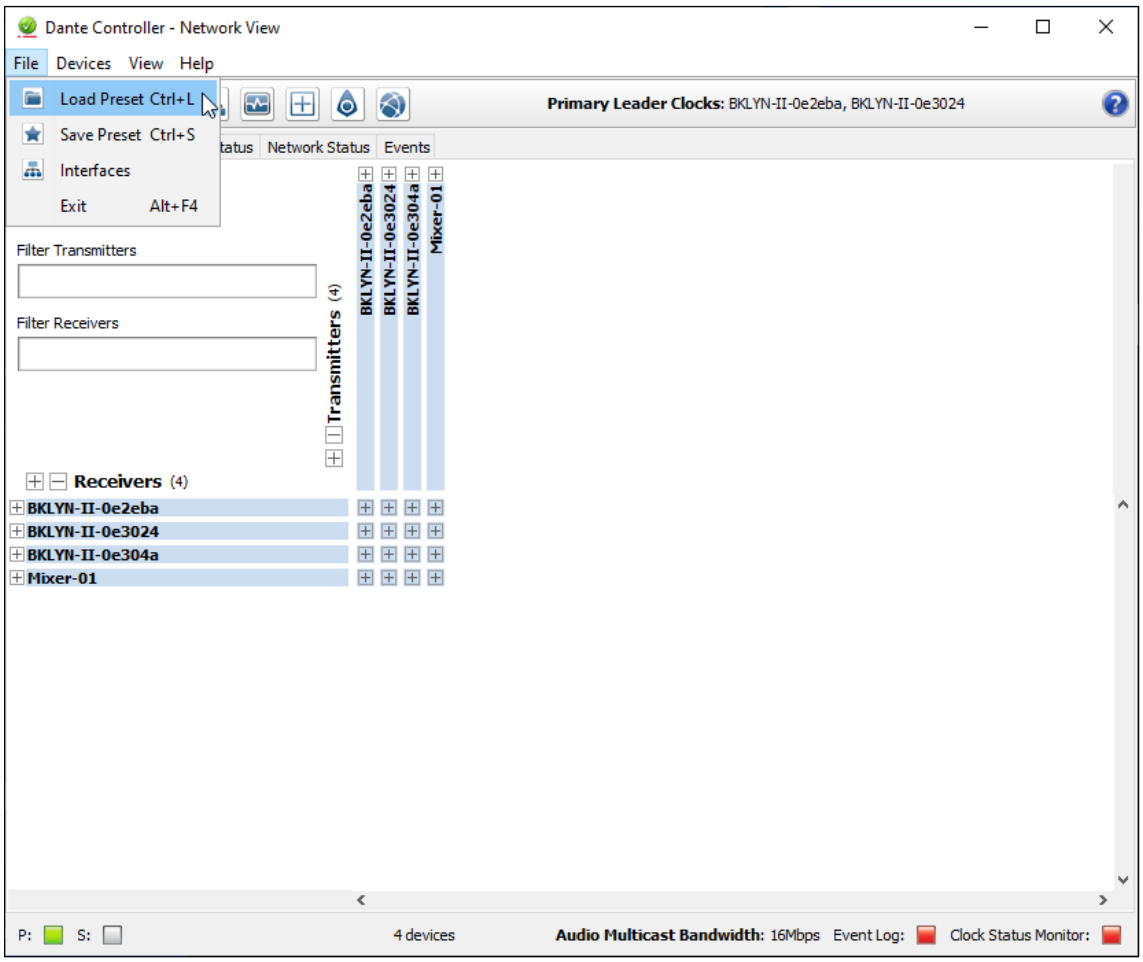
   Important:

   Ensure that the configuration PC's network interface used to connect to the Dante devices is correctly configured to dynamic IP address; see "APPENDIX A – PC Requirements for ASL Configuration Tools and Dante Controller" (page 95) for further details.

3. Select the **Routing** tab in **Dante Controller - Network View** main window, ensure that all required devices are present on the network.

4. Load the Dante XML configuration using the menu option:

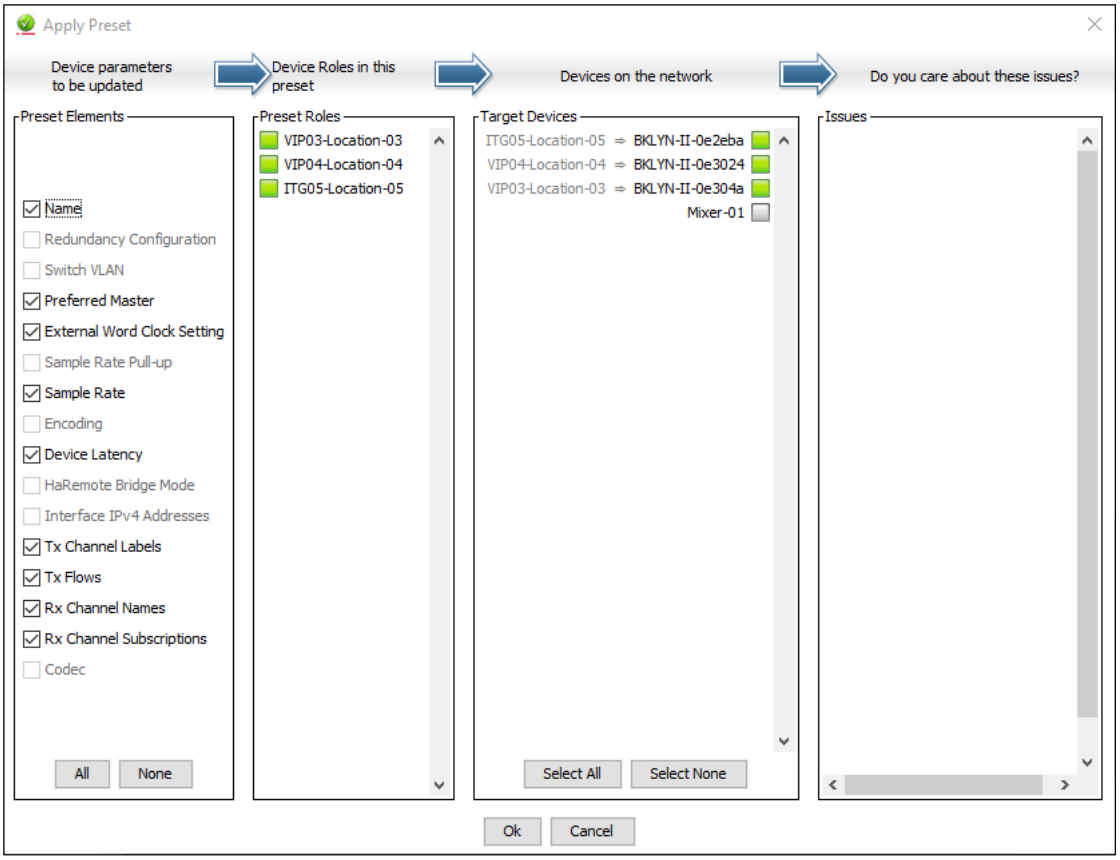
   File > Load Preset



5. The **Preset Elements** list shows the elements that can be imported from the configuration.

It is recommended to select all available elements.

a. If the MAC addresses are present in the configuration, it should automatically identify and apply the role to the correct device.



b. If the MAC addresses are not present in the configuration, assign the roles to the Dante devices on the network.

i. The **Preset Roles** list shows the devices in the configuration and the **Target Devices** list shows the devices found on the network.

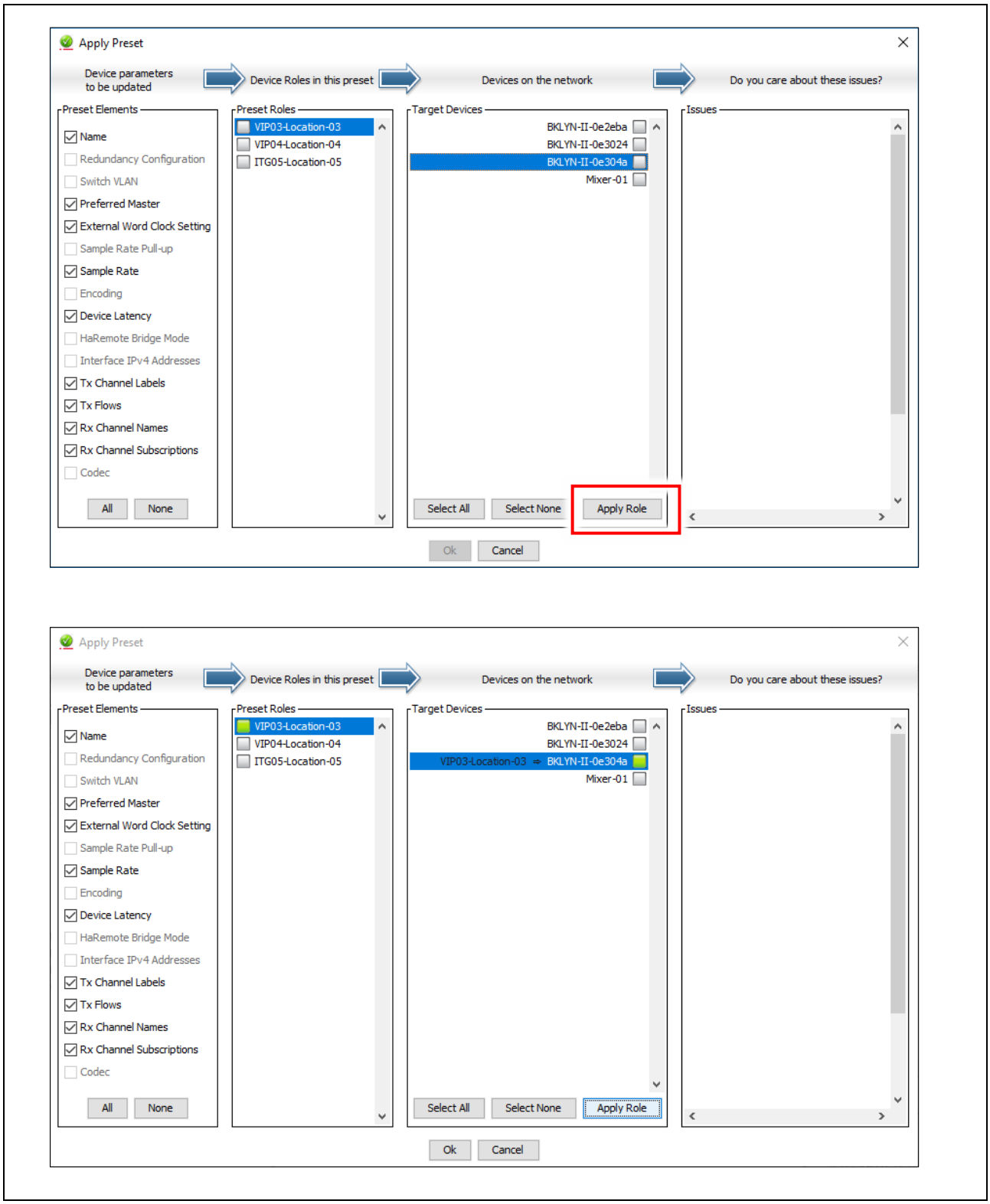
ii. Select a device in the **Preset Roles** list and its equivalent device the **Target Devices** list, and then click the **Apply Role** button.

Alternatively, select a device in the **Preset Roles** list, and drag and drop it on top of its equivalent device in the **Target Devices** list.

iii. Repeat the above steps for all devices in the **Preset Roles** list.

Important:

To simplify identifying the correct device on the network amongst various devices with default name, it is recommended that each Dante module is configured whilst it is the only device with default name on the network.

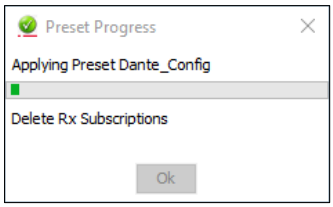

Apply Preset
Device parameters to be updated
Device Roles in this preset
Devices on the network
Do you care about these issues?
Preset Elements
Name
Redundancy Configuration
Switch VLAN
Preferred Master
External Word Clock Setting
Sample Rate Pull-up
Sample Rate
Encoding
Device Latency
HaRemote Bridge Mode
Interface IPv4 Addresses
Tx Channel Labels
Tx Flows
Rx Channel Names
Rx Channel Subscriptions
Codec
All
None
Preset Roles
VIP03-Location-03
VIP04-Location-04
ITG05-Location-05
Target Devices
BKLYN-II-0e2eba
BKLYN-II-0e3024
BKLYN-II-0e304a
Mixer-01
Issues
Select All
Select None
Apply Role
Ok
Cancel
Apply Preset
Device parameters to be updated
Device Roles in this preset
Devices on the network
Do you care about these issues?
Preset Elements
Name
Redundancy Configuration
Switch VLAN
Preferred Master
External Word Clock Setting
Sample Rate Pull-up
Sample Rate
Encoding
Device Latency
HaRemote Bridge Mode
Interface IPv4 Addresses
Tx Channel Labels
Tx Flows
Rx Channel Names
Rx Channel Subscriptions
Codec
All
None
Preset Roles
VIP03-Location-03
VIP04-Location-04
ITG05-Location-05
Target Devices
BKLYN-II-0e2eba
BKLYN-II-0e3024
VIP03-Location-03 ⇒ BKLYN-II-0e304a
Mixer-01
Issues
Select All
Select None
Apply Role
Ok
Cancel

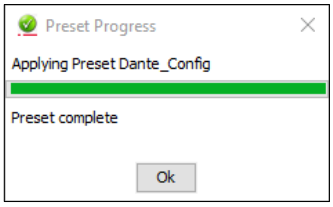
6. Click the **Ok** button to apply the configuration.

   It may take a while depending on the number of devices.

7. Once completed, click the **Ok** button.

   Device and channel names will have been updated and routes between Dante Brooklyn II modules fitted VIPEDIA-12-PRO / INTEGRA-PRO units will be made (if any).



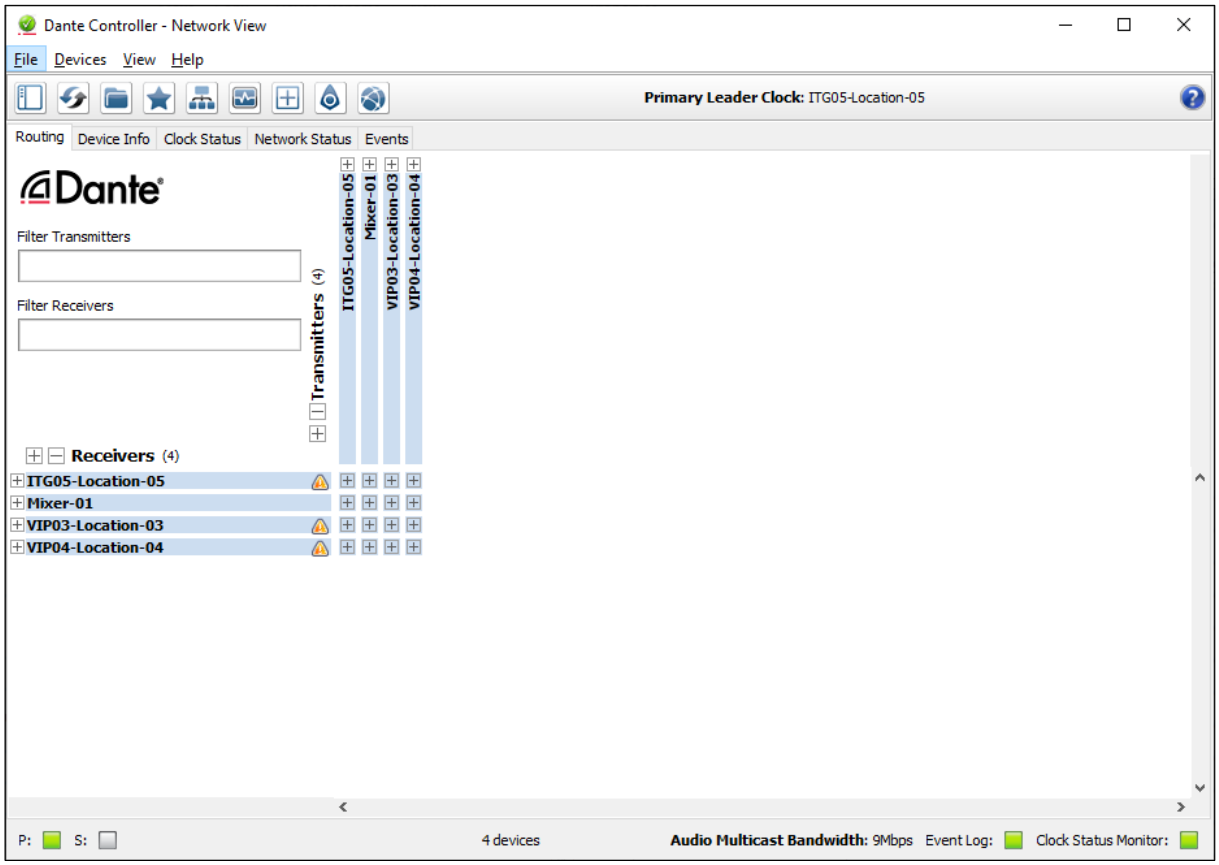


8. On the **Routing** tab, ensure that all required devices are present on the network.

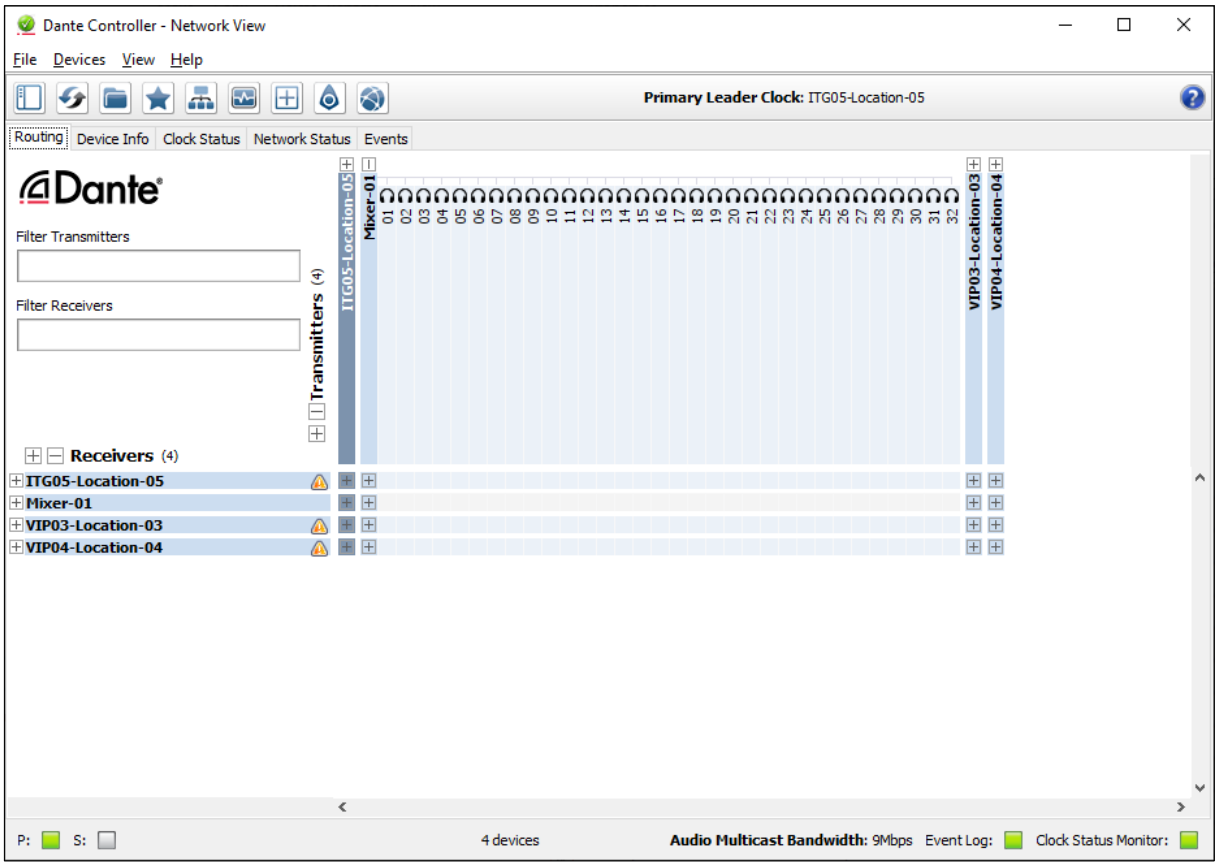
   Important:

   a) Subscriptions (routes) to third-party devices will be partly configured (unresolved), and the Brooklyn II modules fitted to VIPEDIA-12-PRO / INTEGRA-PRO units will show a warning icon ( ). The subscriptions must be completed (resolved) using the Dante Controller as described in the next steps.

   b) You will need to complete the subscription to third-party devices every time the Dante configuration generated by the PAVA SCT is loaded into the devices.



9. Expand the transmitter device (third-party) along the top.

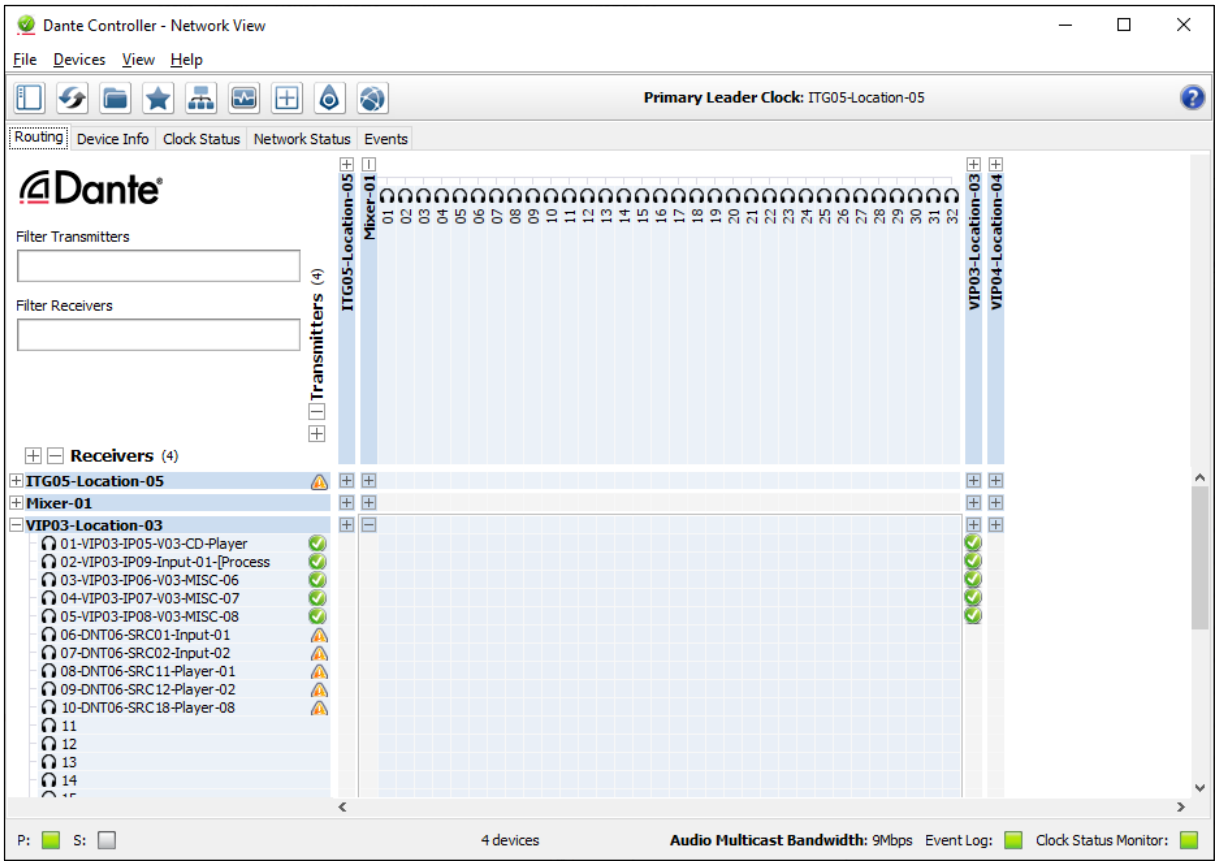


10. For each Dante Brooklyn II module fitted to VIPEDIA-12-PRO / INTEGRA-PRO units, connect the required receive channel to the correct transmit channel on the third-party device as described below.

Important:

You will need to repeat these steps every time the Dante configuration generated by the PAVA SCT is loaded into the devices.

a. Expand the required receiver device (VIPEDIA-12-PRO / INTEGRA-PRO) along the left side.



b. Position the mouse on the intersection of the correct receive (Rx) and transmit (Tx) channels.

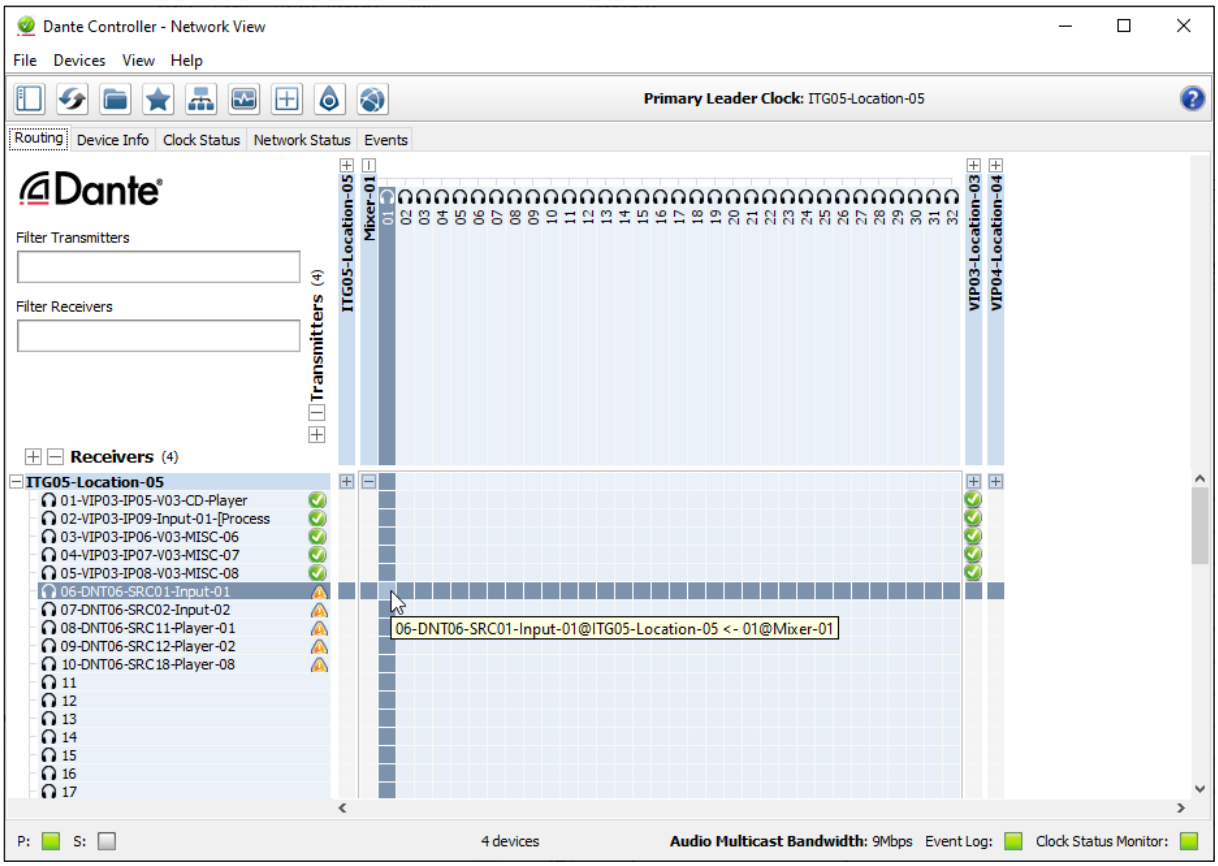
Use the receive channel name as guide to the required transmit channel.

The receive channel name when configured to a third-party device is of the format:

xx-DNTyy-SRCzz-<*Name in the PAVA SCT*>

- Name: can be used as guide when the name in the PAVA SCT is same as transmit channel name on the Dante Controller.
- zz: external device transmit channel number (use this as guide)
- yy: Unit ID of the third-party device in the PAVA SCT
- xx: receive channel number

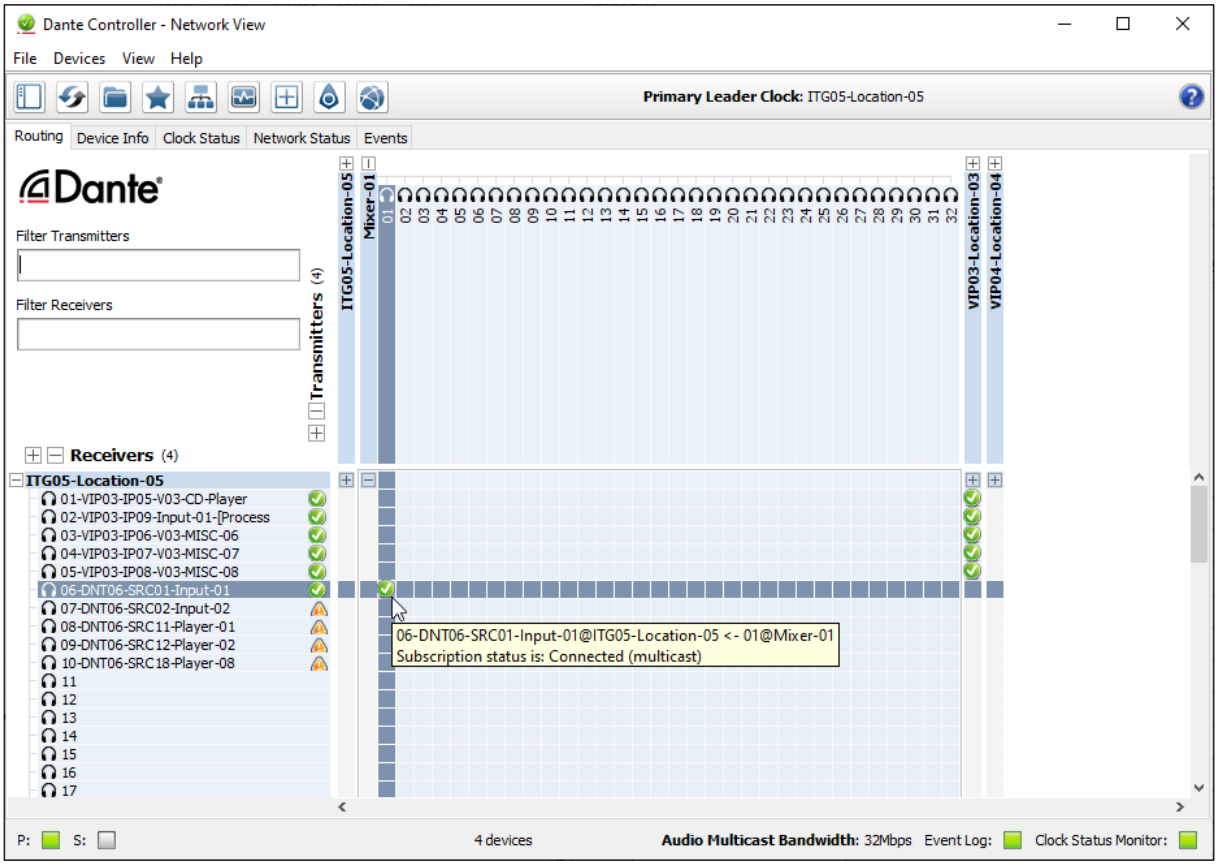
In the example below, **06-DNT06-SRC01-Input-01** indicates that **Rx06** on Integra ITG05 is to be connected to **Tx01** of the third-party device DNT06.



c. Click on the intersection to create a subscription between the transmit and receive channels

d. A green tick will appear in the intersection. You may initially see a grey hourglass icon (usually very briefly) to indicate that the subscription is in progress.

In the example below, Integra **ITG05:Rx06** is connected to third-party device **Mixer-01:Tx01**.

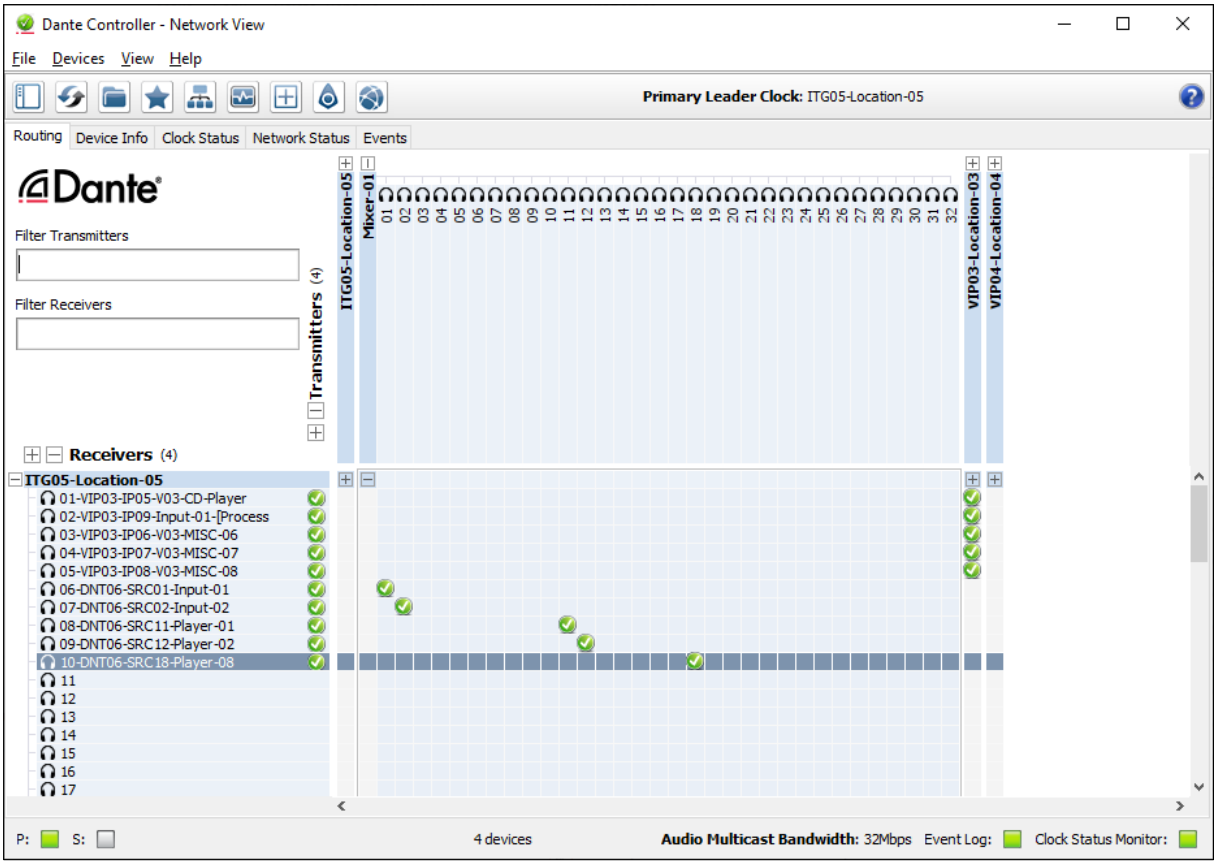


e. Repeat the above steps for all subscriptions for this third-party device (if any).

Notes:

a) The Rx channels of all Dante Brooklyn II modules fitted to VIPEDIA-12-PRO / INTEGRA-PRO units in the system configuration should subscribe to the same Tx channels across the system. This ensures that audio is always routed over IP using the correct transport method.

b) The Dante channel subscriptions on Dante Brooklyn II modules fitted to VIPEDIA-12-PRO / INTEGRA-PRO should match the configuration shown on the **Dante** page of the PAVA SCT; see example in Figure 4 (page 44).



11. Repeat steps 9 and 10 for all subscriptions to other third-party devices (if any).

4.6 Third-Party Dante Device to VIPEDIA-12-PRO / INTEGRA-PRO VIPEDIA-12 / INTEGRA (Processed)

This section describes the configuration of processed third-party Dante sources that can be routed to VIPEDIA-12-PRO / INTEGRA-PRO units and standard VIPEDIA-12 / INTEGRA units.

Important:

a) An audio input is used for each Dante source.

b) Input dynamic processing (EQ, gate, compressor and limiter) and gain adjustment can be applied to the processed Dante input using the Router Dynamic Configuration Tool (RDT).

c) Can be routed using PMC to remote outputs.

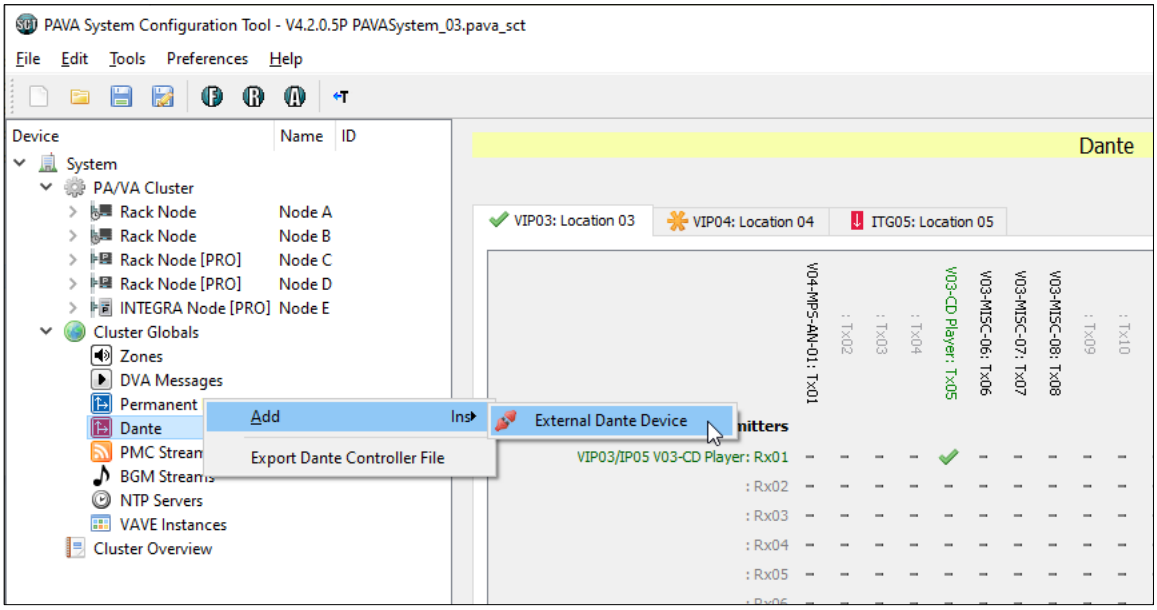
d) Can also be routed using Dante to outputs on VIPEDIA-12-PRO / INTEGRA-PRO units.

e) Can be used as VOX gate route trigger like miscellaneous inputs.

4.6.1 PAVA SCT Configuration (Third-Party to PRO - Processed)

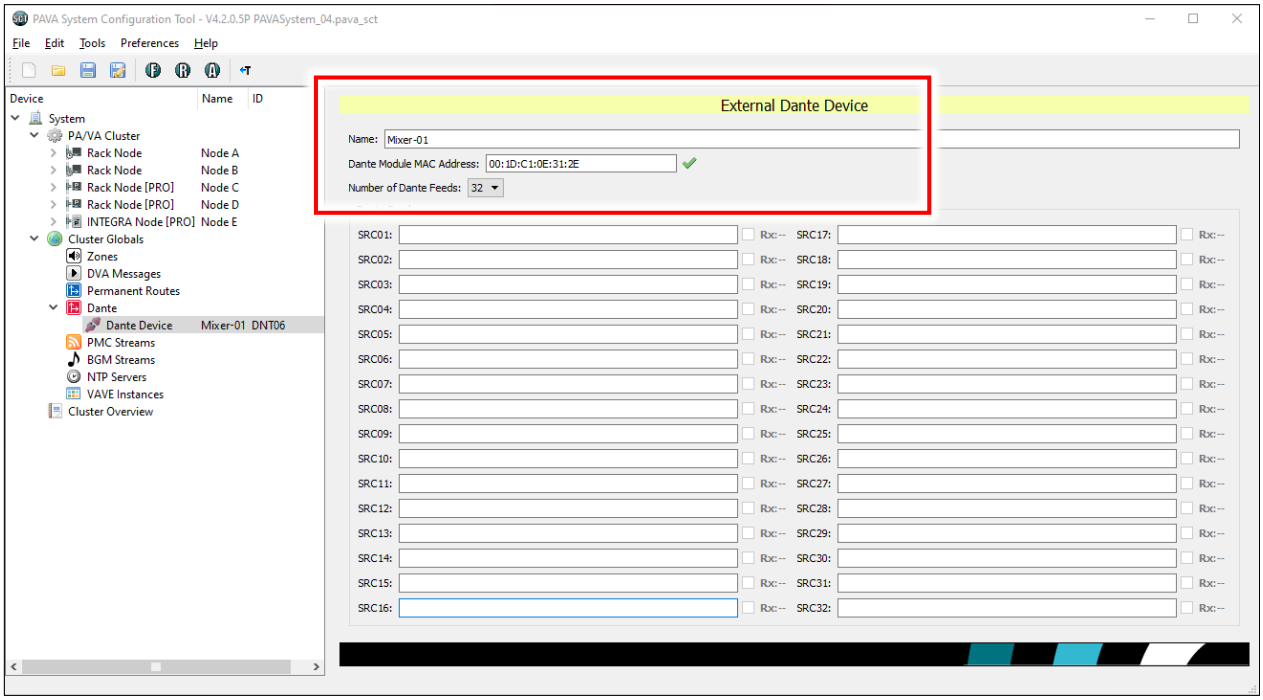
1. On the PAVA SCT device tree, right-click the **Dante** item.
2. Select **Add > Ins**, and then **External Dante Device**.

   The PAVA SCT automatically assigns the lowest available Unit ID (1 to 63 range).



3. Select the required **Dante Device** in the device tree to load the configuration page.
4. Enter the device's **Name**.
5. Enter the **Dante Module MAC Address**; see Section "4.1.3 MAC Address on the Dante Controller" (page 14)

   The Dante MAC address of a third-party device is not essential. It is not currently used but may be useful in the future.
6. Select the number of Dante transmit channels from the **Number of Dante Feeds** drop-down menu (8, 16, 32 or 64).

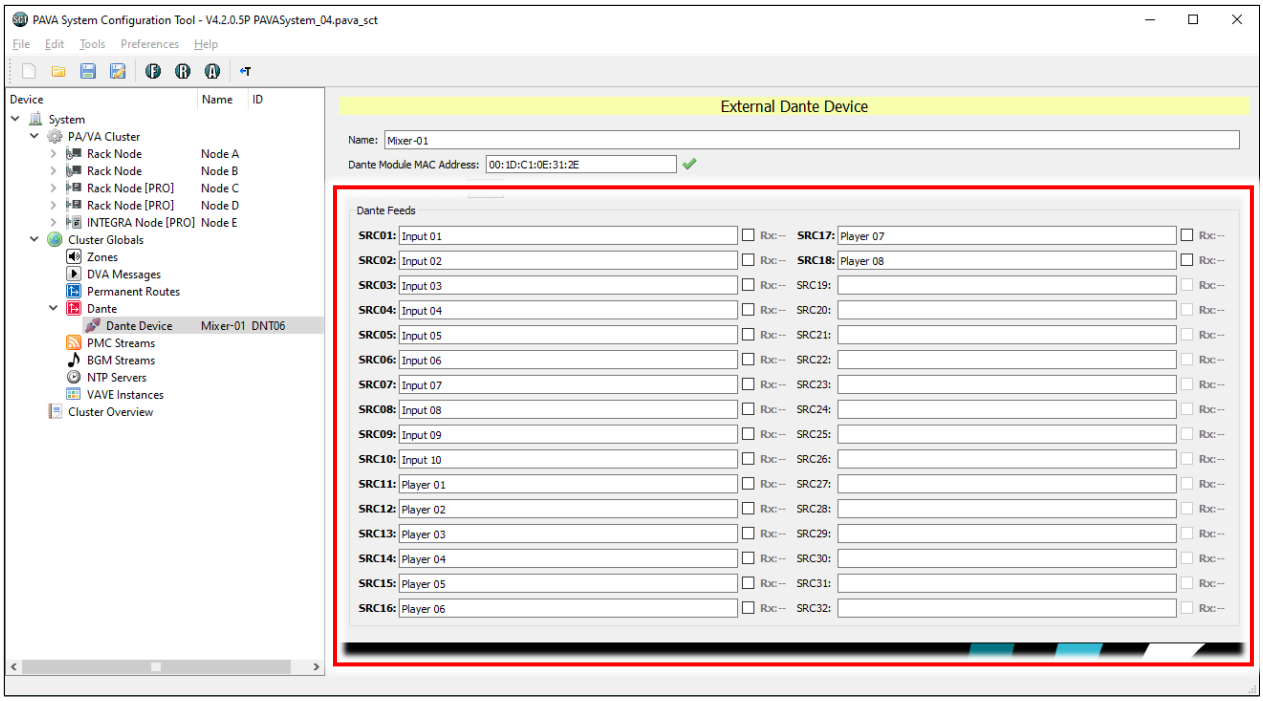


7. Enter a name for each Dante stream (**SRCxx**) available from the device, where **SRCxx** equates to **Transmit Channel xx** on the third-party device.

Notes:

a) Using names that are assigned to the transmit channel on the Dante Controller helps the configuration.

b) The source name must be filled in for Rx channel and route configuration.



8. Select the Dante streams that will be routed to VIPEDIA-12-PRO / INTEGRA-PRO units by ticking the **Rx** check box of the required stream (**SRCxx**).

The PAVA SCT automatically allocates a Dante receive channel (**Rx**) to the third-party Dante stream (**SRCxx**).

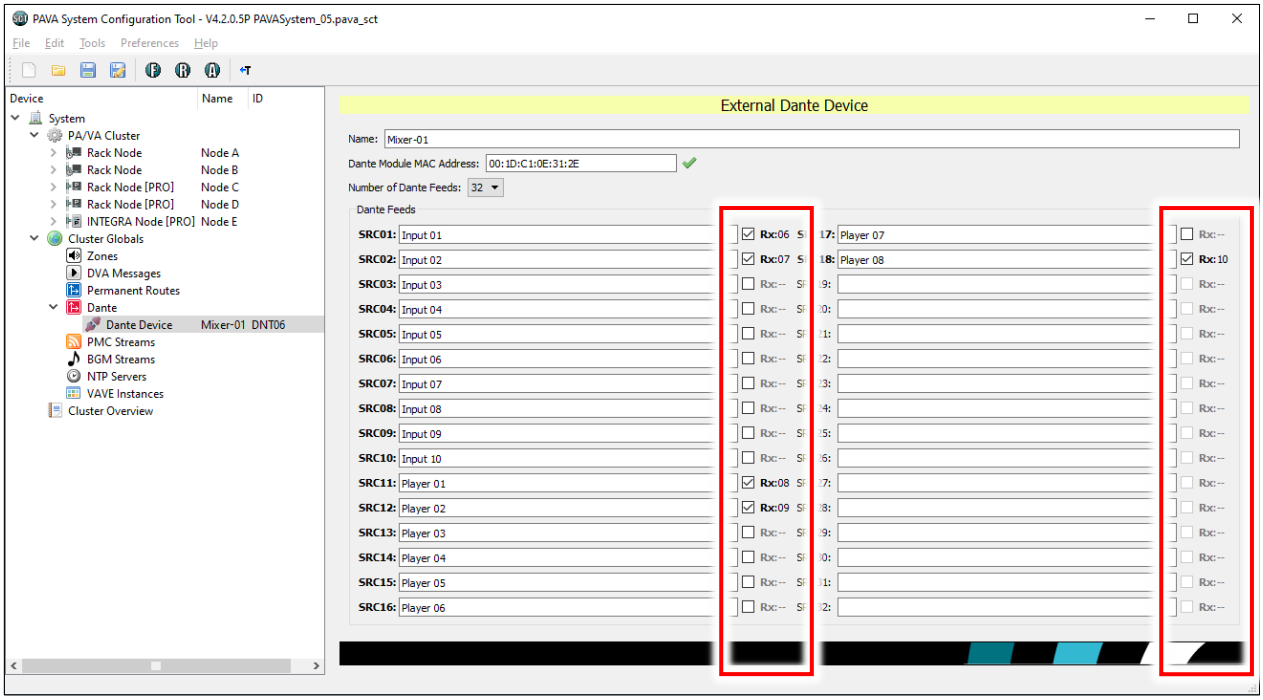
This tells all VIPEDIA-12-PRO and INTEGRA-PRO units in the system to listen to the this Dante stream when this source is routed.

Important:

a) Only select an **Rx** channel for Dante streams that are routed within the PAVA system.

b) Selecting an **Rx** channel for streams that are not routed within the PAVA system will reduce the number of Dante channels available for the PAVA system.

In the example below, 5 x Dante streams are selected on third-party device DNT06: SRC01<>Rx06, SRC02<>Rx07, SRC11<>Rx08, SRC12<>Rx09, and SRC18<>Rx10.

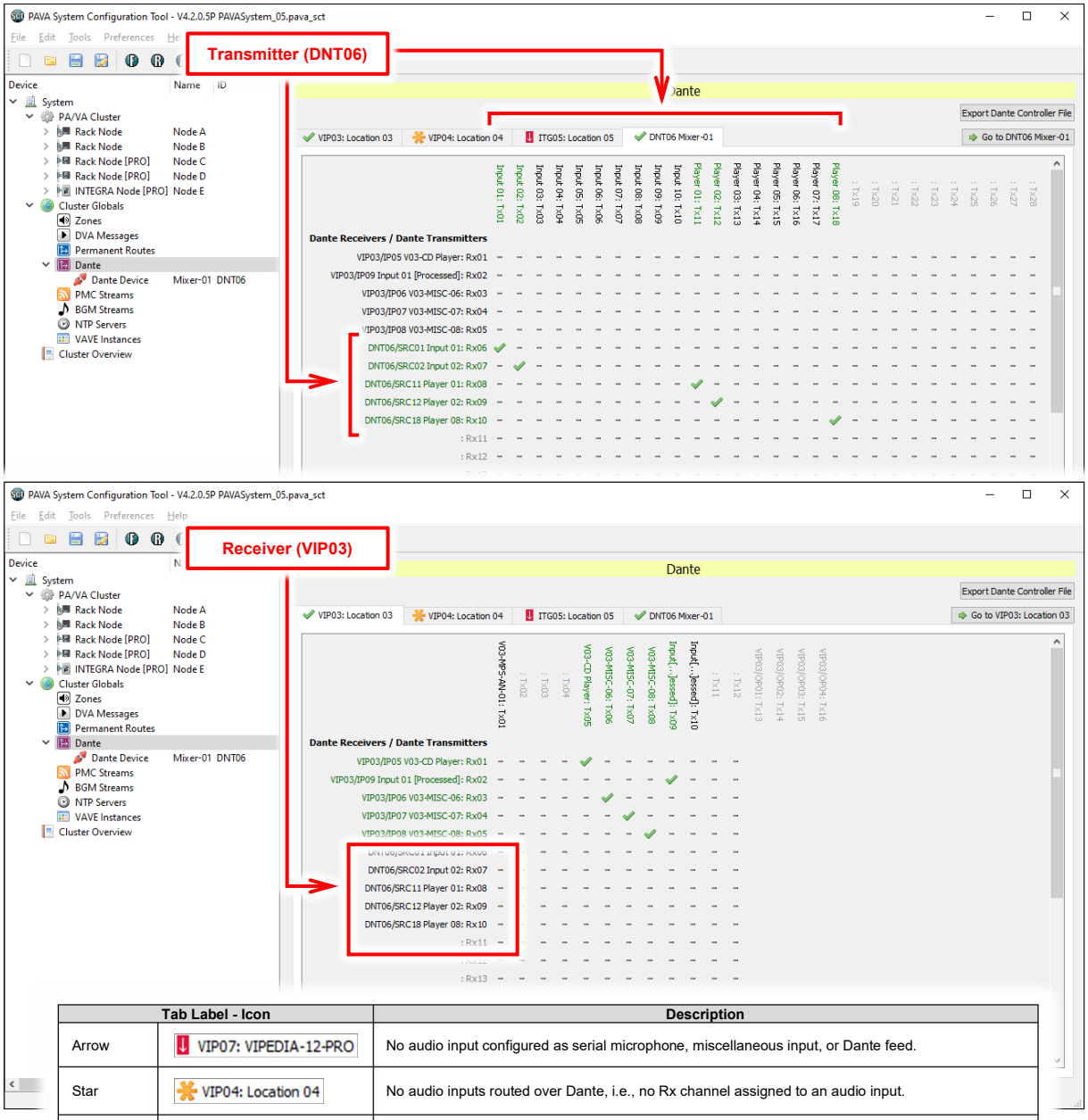


9. The **Dante** page shows the Dante channel allocation for each PRO and third-party Dante unit in the system.

The **Dante** page for the transmitter unit (the third-party device) will show a tick in the intersection of the transmit channel (Tx) and the configured receive channel (Rx). For receiver units (VIPEDIA-12-PRO and INTEGRA-PRO units), it will show receive channels (Rx) assigned to the third-party Dante streams.

In the example below, the **Dante** page for Vipedia VIP03 (and all other VIPEDIA-12-PRO and INTEGRA-PRO units) shows receive channel Rx06 assigned to SCR01; Rx07 to SCR02, Rx08 to SRC11, Rx09 to SCR12, and Rx10 to SCR18 of third-party device DNT06.

Figure 5 Dante page example (third-party Dante sources)



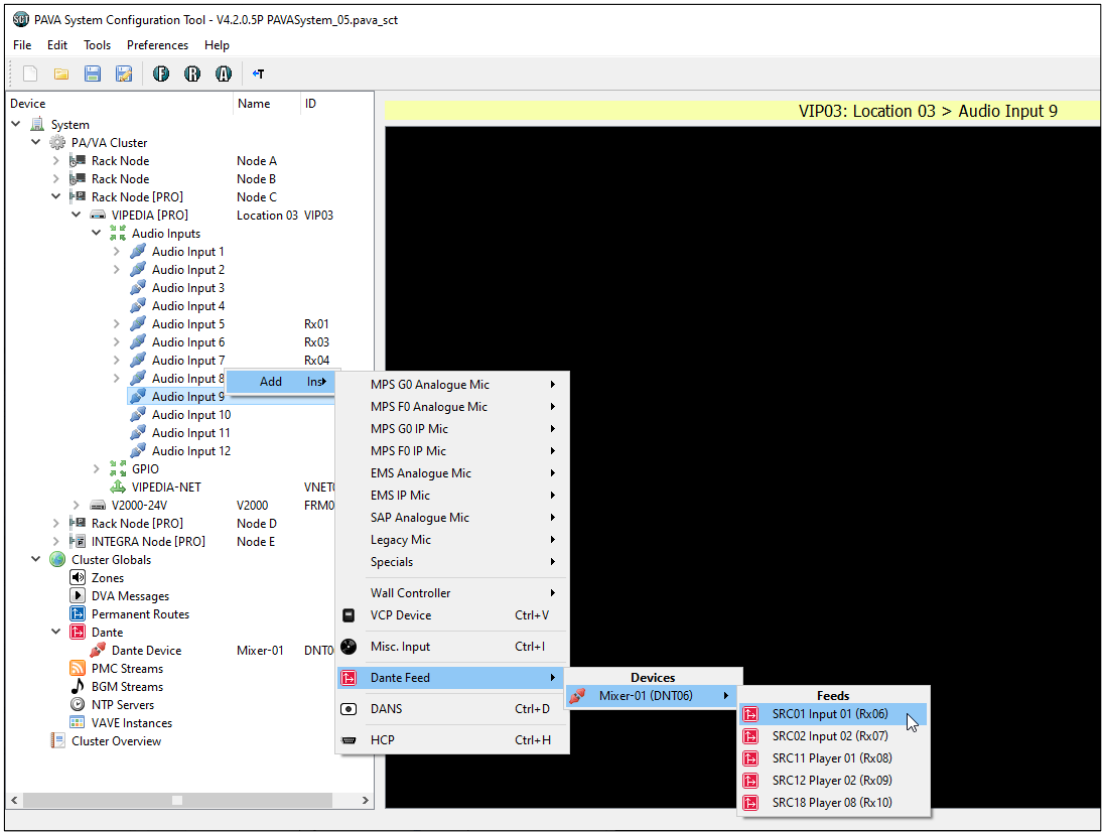
Tab Label - Icon		Description
Arrow	VIP07: VIPEDIA-12-PRO	No audio input configured as serial microphone, miscellaneous input, or Dante feed.
Star	VIP04: Location 04	No audio inputs routed over Dante, i.e., no Rx channel assigned to an audio input.
Single tick	DNT06 Mixer-01	One or more audio inputs routed over Dante, i.e., an Rx channel is assigned to one or more audio inputs.
Double tick	VIP03: Location 03	All configured audio inputs are routed over Dante. i.e., an Rx channel is assigned to all serial microphones, miscellaneous inputs and/or Dante feeds.
Note: Dante feed is a third-party Dante source that is processed using an audio input.		

10. Configure the audio input that will be used to process the third-party Dante source.

11. Right-click the required Audio Input.

12. Select **Dante Feed**, the third-party Dante device, and then the Dante source.

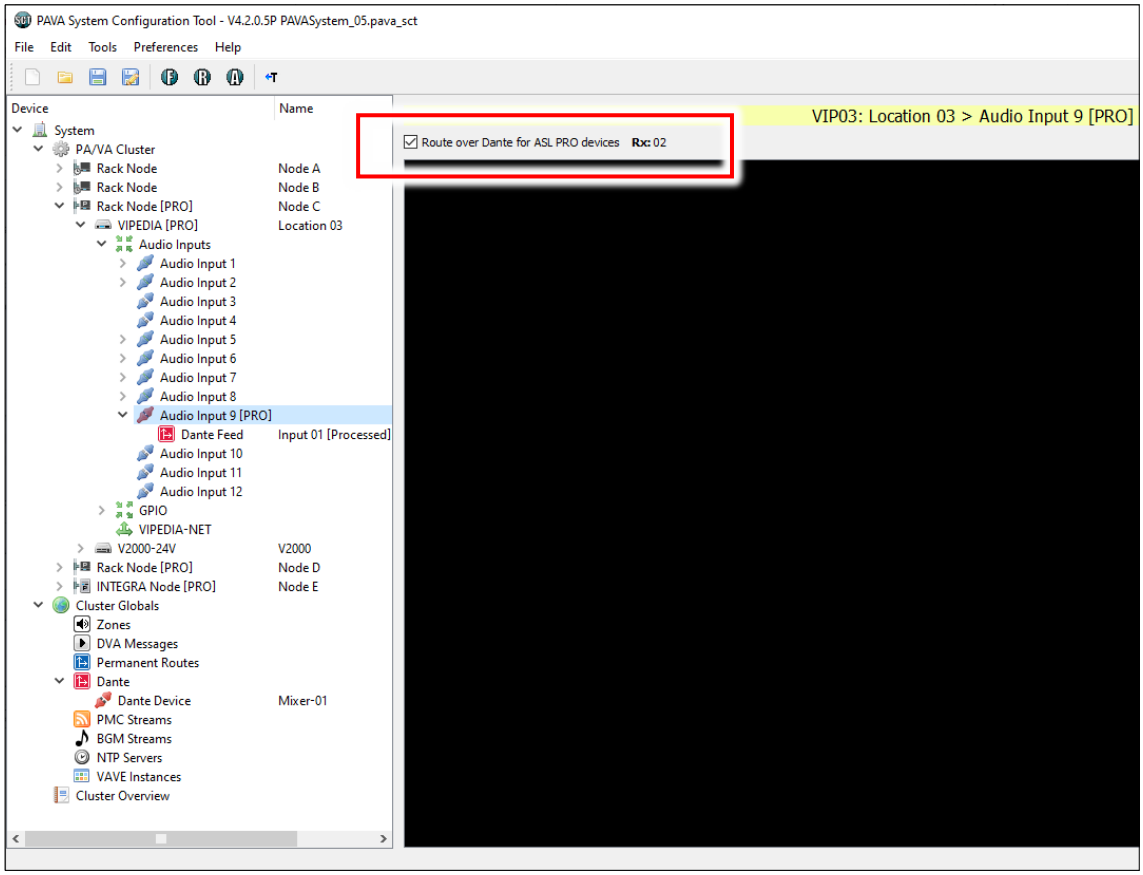
In this example, Audio Input 9 is configured as processed Dante input, where DNT06:SRC01 is selected as the **Dante Feed**.



13. The processed Dante input will automatically be set to route over Dante if a receive channel (Rx) is available in the system.

Important:

If the processed Dante source is only for local outputs, then untick **Route over Dante for ASL PRO devices** option to free up a Dante receive channel (Rx).



14. Configure routes as normal: contact inputs, microphone buttons, permanent routes, program/source selectors, wall-mount controllers, VOX routes (as source), VOX route trigger, and/or as BGM streams.

Processed Dante inputs will be identified as **[Processed]** in the **Source** list of routing configuration dialogs; see example below for contact input routing. If the processed Dante input is routed over Dante, it will also be identified as **[DANTE]**; see example below for contact input routing

Refer to the following sections for further details:

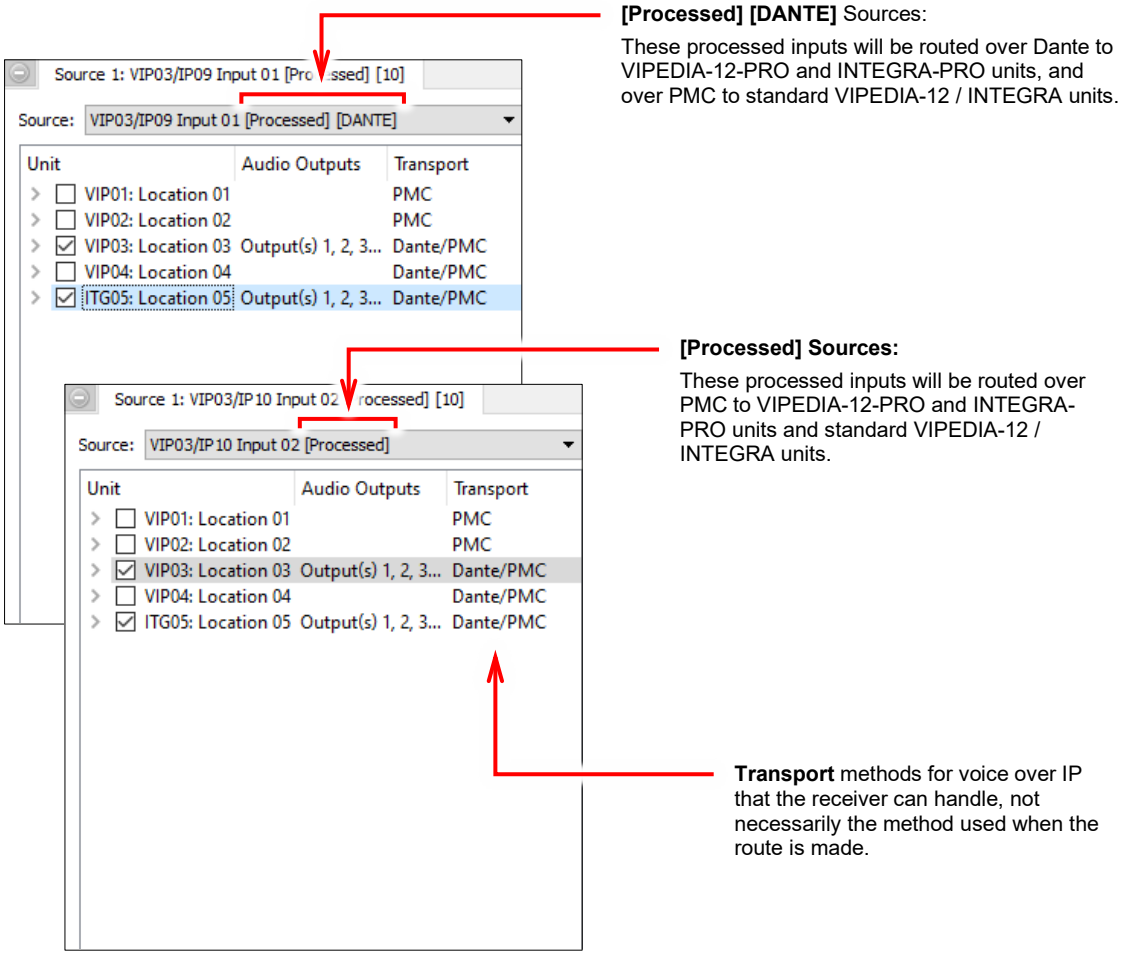
- “4.7.1 Dante Audio as Source in Contact / Microphone Button / Permanent / Source Selector / Wall-Mount Controller / VOX Routes” (page 80)
- “4.7.2 DANTE Audio as VIPA BGM Sources” (page 82)
- “4.7.3 Processed Third-Party Dante Source as VOX Route Trigger” (page 83)

Notes:

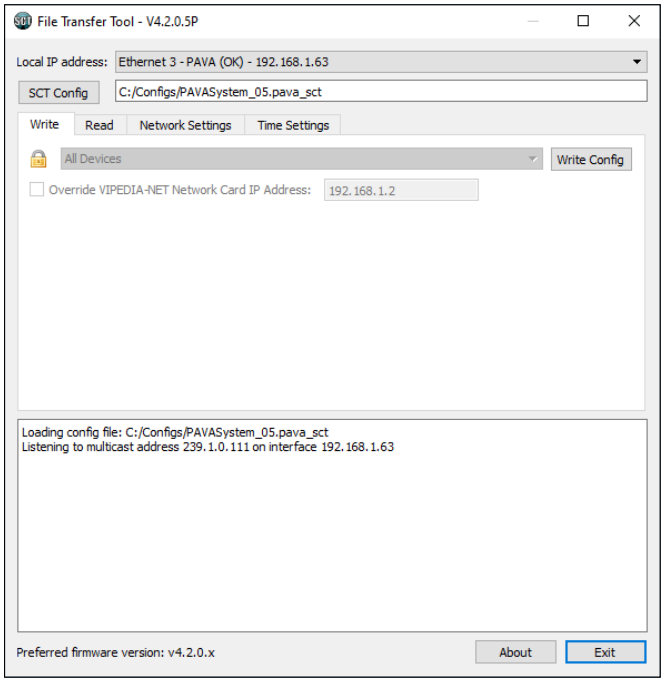
a) The **Transport** column in routing configuration dialogs identifies the transport methods for voice over IP that the receiver can handle (PMC and/or Dante), not necessarily the transport method that will used when the route is made. The audio source type will determine the transport method that will be used when the route is made.

b) Unprocessed third-party Dante sources can be routed to VIPEDIA-12-PRO / INTEGRA-PRO units only (over Dante). Although routes are allowed in the configuration, unprocessed third-party Dante sources will not be routed to standard units.

c) Although the system configuration is correct, Dante routes will not route audio until the Dante Brooklyn II modules are correctly configured using the Dante Controller; see Section “4.6.2 Dante Brooklyn II Module Configuration (Third-Party Processed to PRO) (page 67).



15. Load the configuration to the ASL's PAVA devices using the File Transfer Tool (FTT).



4.6.2 Dante Brooklyn II Module Configuration (Third-Party Processed to PRO)

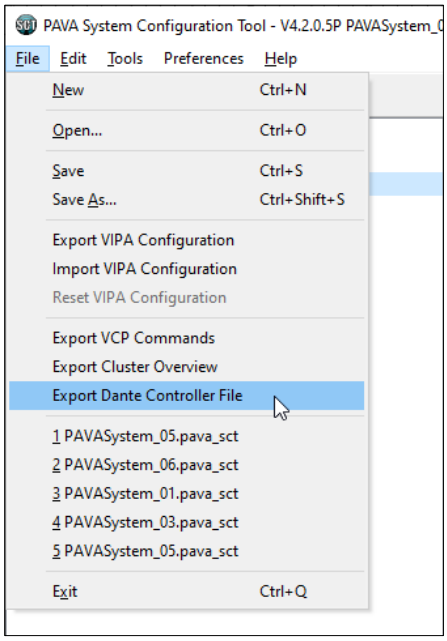
Important:

a) Subscriptions (routes) to third-party devices will not be fully configured when the Dante configuration generated by the PAVA SCT is loaded into the Brooklyn II module fitted to VIPEDIA-12-PRO / INTEGRA-PRO units. The configuration must be completed using the Dante Controller.

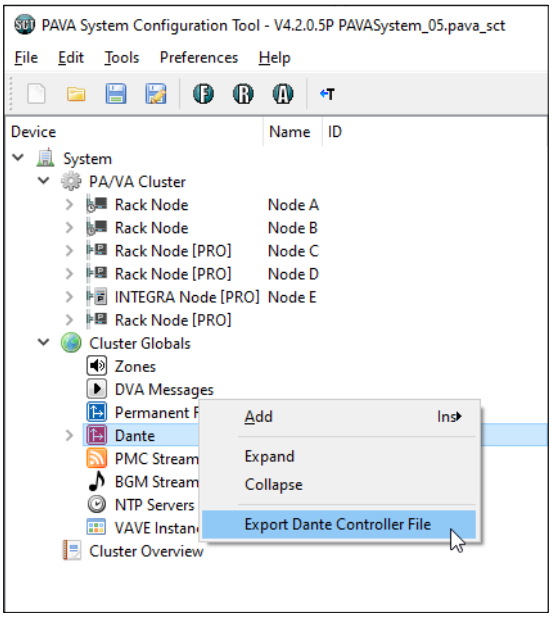
b) Any subscriptions between VIPEDIA-12-PRO / INTEGRA-PRO units will also be automatically configured in the same process.

1. On the PAVA SCT, export the Dante Controller XML configuration using the menu option:

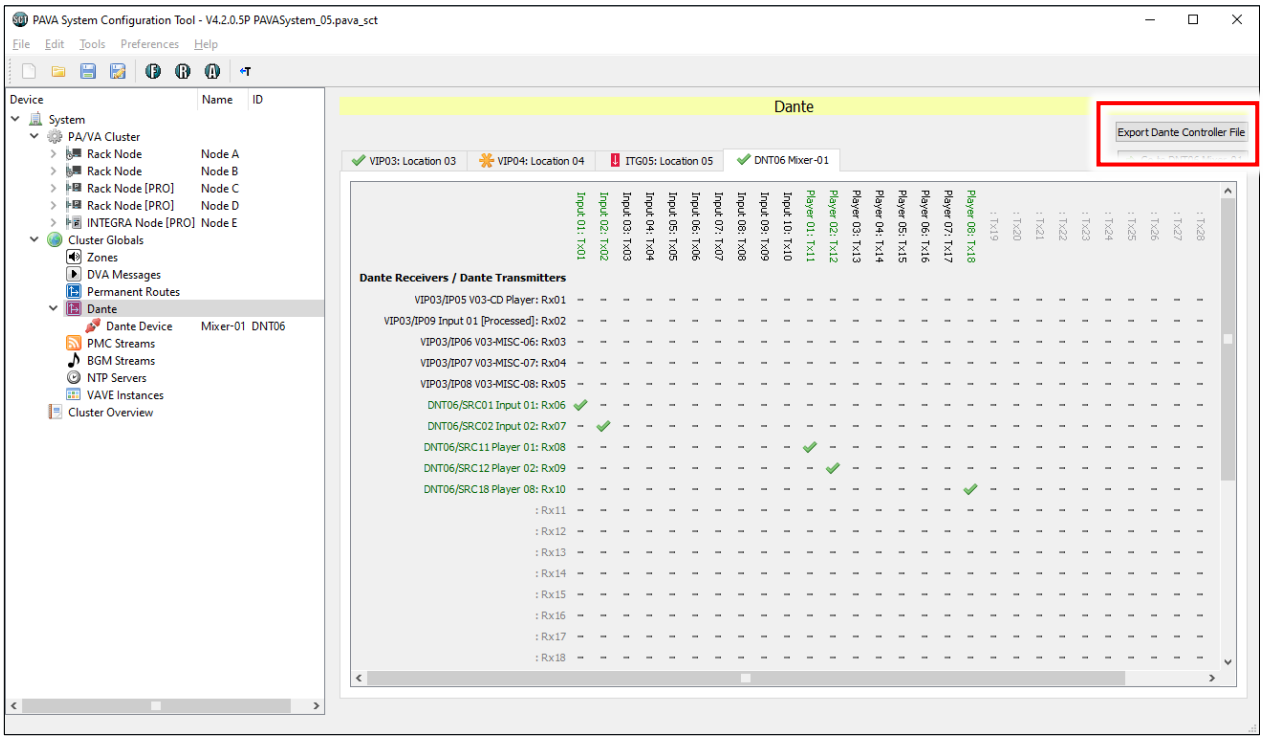
File > Export Dante Controller File



Alternatively, right-click the **Dante** item in the device tree and select **Export Dante Controller File** option from the context menu.



Or click the **Export Dante Controller File** button on the **Dante** page.



2. Launch the Dante Controller.

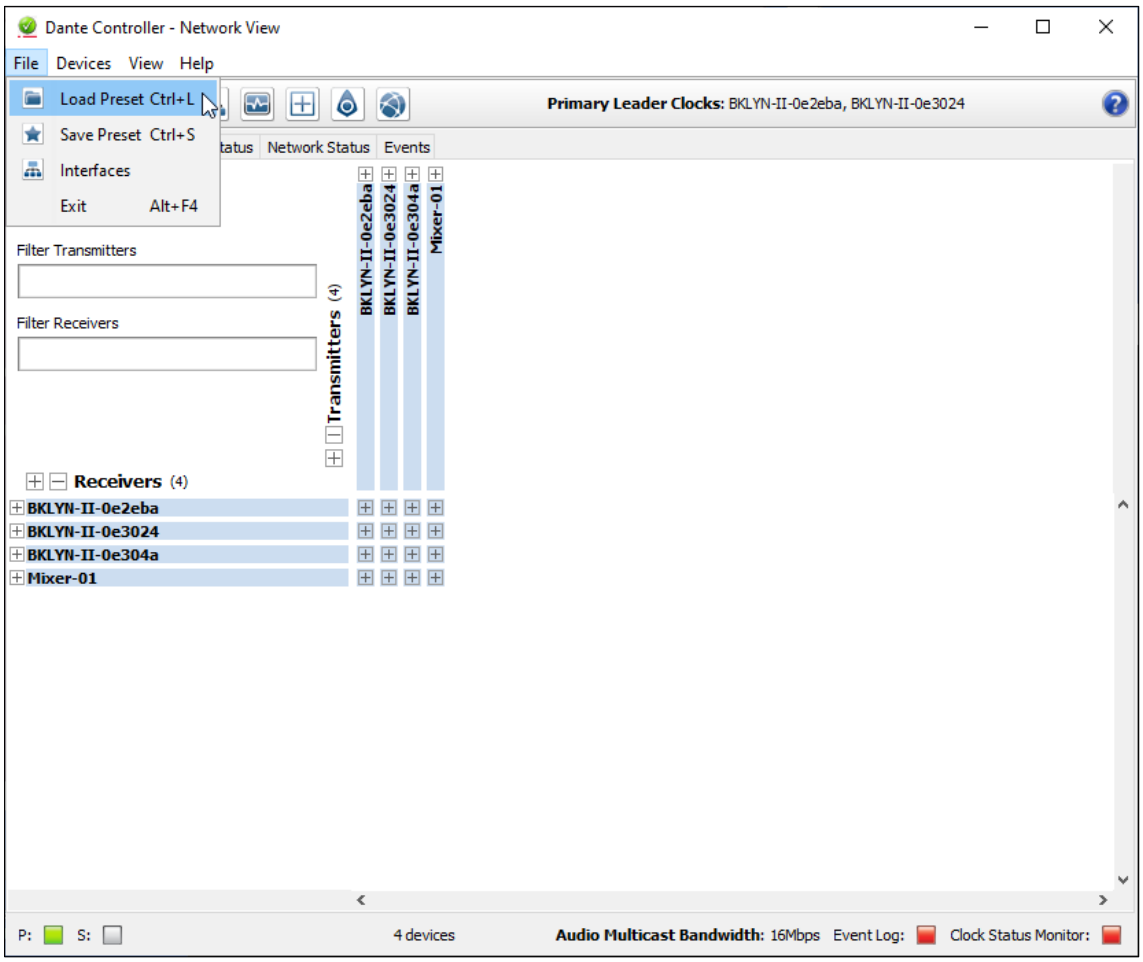
   Important:

   Ensure that the configuration PC's network interface used to connect to the Dante devices is correctly configured to dynamic IP address; see "APPENDIX A – PC Requirements for ASL Configuration Tools and Dante Controller" (page 95) for further details.

3. Select the **Routing** tab in **Dante Controller - Network View** main window, ensure that all required devices are present on the network.

4. Load the Dante XML configuration using the menu option:

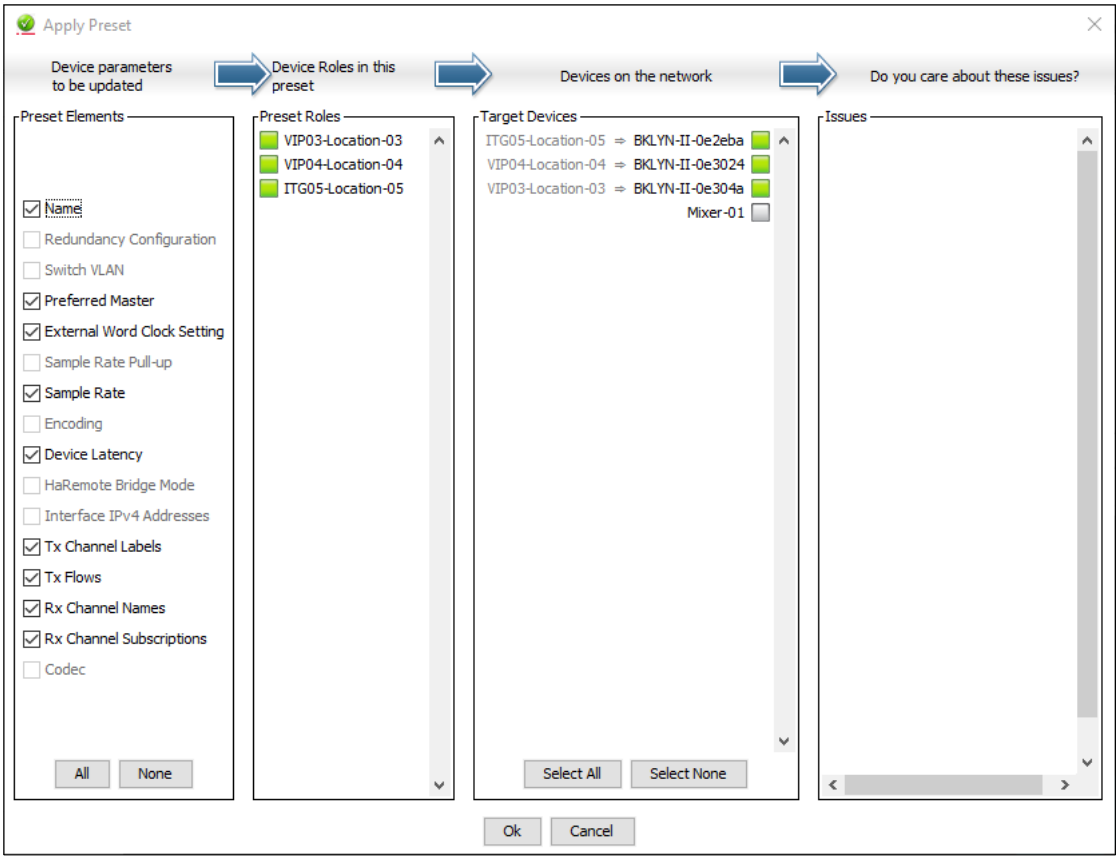
   File > Load Preset



5. The **Preset Elements** list shows the elements that can be imported from the configuration.

It is recommended to select all available elements.

a. If the MAC addresses are present in the configuration, it should automatically identify and apply the role to the correct device.



b. If the MAC addresses are not present in the configuration, assign the roles to the Dante devices on the network.

i. The **Preset Roles** list shows the devices in the configuration and the **Target Devices** list shows the devices found on the network.

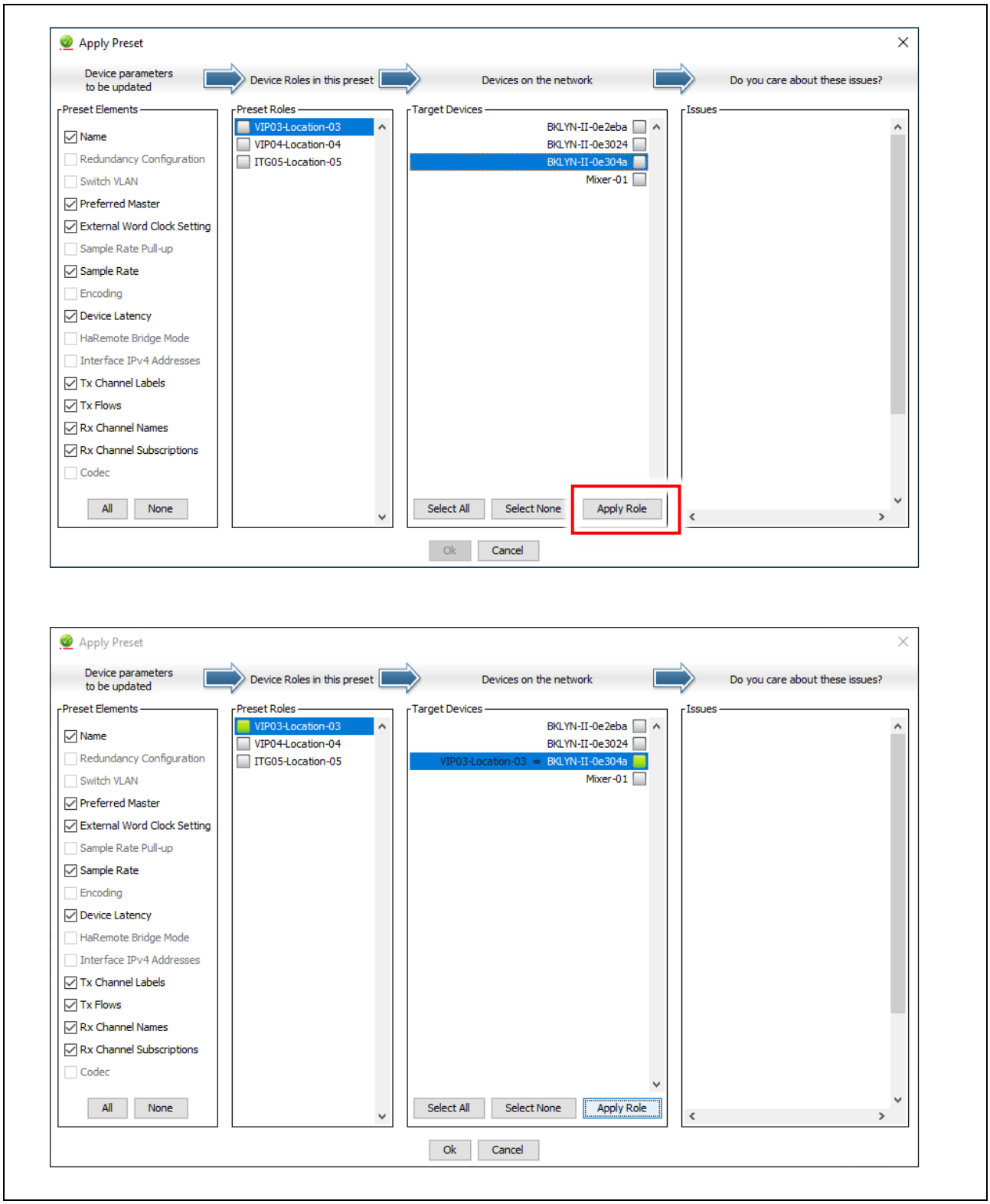
ii. Select a device in the **Preset Roles** list and its equivalent device the **Target Devices** list, and then click the **Apply Role** button.

Alternatively, select a device in the **Preset Roles** list, and drag and drop it on top of its equivalent device in the **Target Devices** list.

iii. Repeat the above steps for all devices in the **Preset Roles** list.

Important:

To simplify identifying the correct device on the network amongst various devices with default name, it is recommended that each Dante module is configured whilst it is the only device with default name on the network.

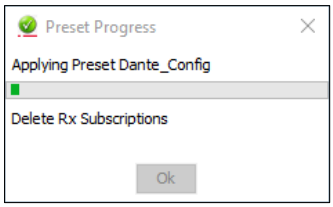

Apply Preset
Device parameters to be updated
Device Roles in this preset
Devices on the network
Do you care about these issues?
Preset Elements
Name
Redundancy Configuration
Switch VLAN
Preferred Master
External Word Clock Setting
Sample Rate Pull-up
Sample Rate
Encoding
Device Latency
HaRemote Bridge Mode
Interface IPv4 Addresses
Tx Channel Labels
Tx Flows
Rx Channel Names
Rx Channel Subscriptions
Codec
All
None
Preset Roles
VIP03-Location-03
VIP04-Location-04
ITG05-Location-05
Target Devices
BKLYN-II-0e2eba
BKLYN-II-0e3024
BKLYN-II-0e304a
Mixer-01
Issues
Select All
Select None
Apply Role
Ok
Cancel
Apply Preset
Device parameters to be updated
Device Roles in this preset
Devices on the network
Do you care about these issues?
Preset Elements
Name
Redundancy Configuration
Switch VLAN
Preferred Master
External Word Clock Setting
Sample Rate Pull-up
Sample Rate
Encoding
Device Latency
HaRemote Bridge Mode
Interface IPv4 Addresses
Tx Channel Labels
Tx Flows
Rx Channel Names
Rx Channel Subscriptions
Codec
All
None
Preset Roles
VIP03-Location-03
VIP04-Location-04
ITG05-Location-05
Target Devices
BKLYN-II-0e2eba
BKLYN-II-0e3024
VIP03-Location-03 ⇒ BKLYN-II-0e304a
Mixer-01
Issues
Select All
Select None
Apply Role
Ok
Cancel

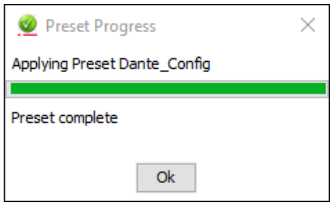
6. Click the **Ok** button to apply the configuration.

   It may take a while depending on the number of devices.

7. Once completed, click the **Ok** button.

   Device and channel names will have been updated and routes between Dante Brooklyn II modules fitted VIPEDIA-12-PRO / INTEGRA-PRO units will be made (if any).



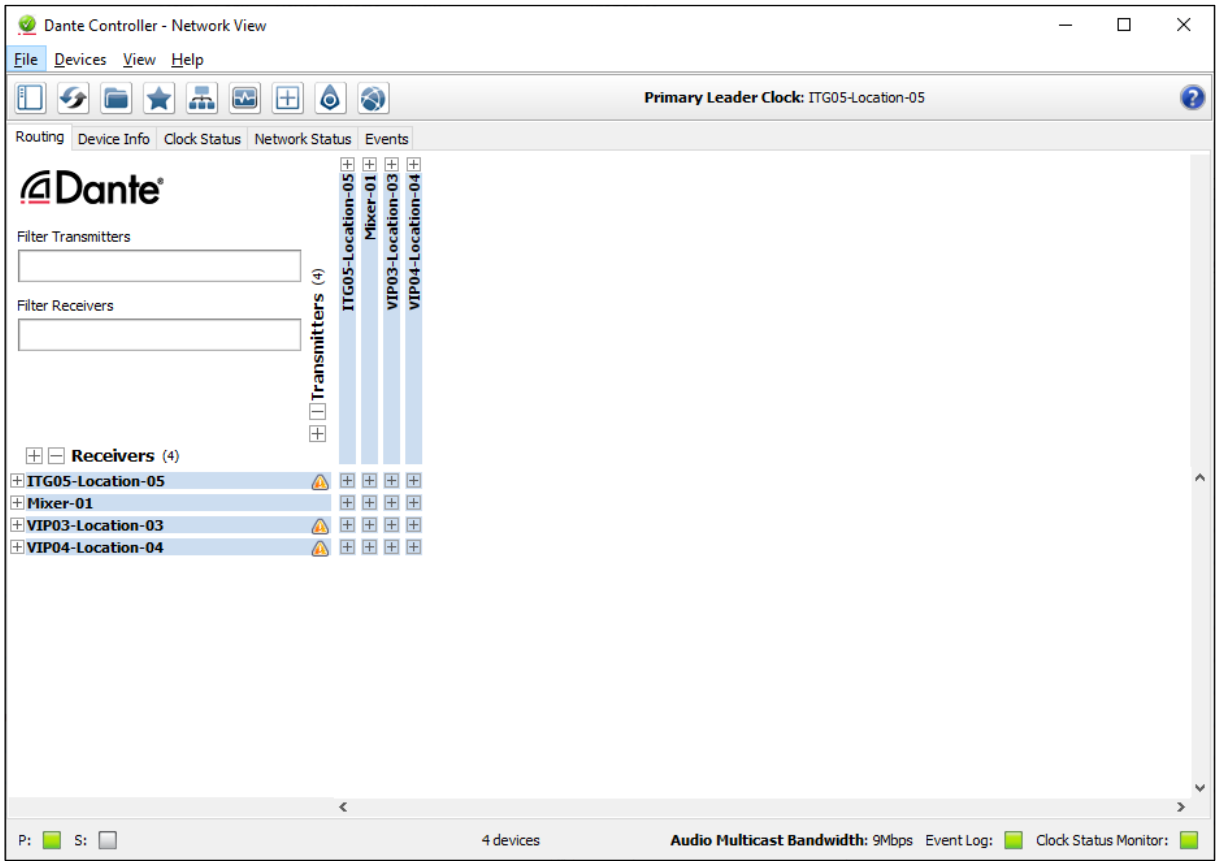


8. On the **Routing** tab, ensure that all required devices are present on the network.

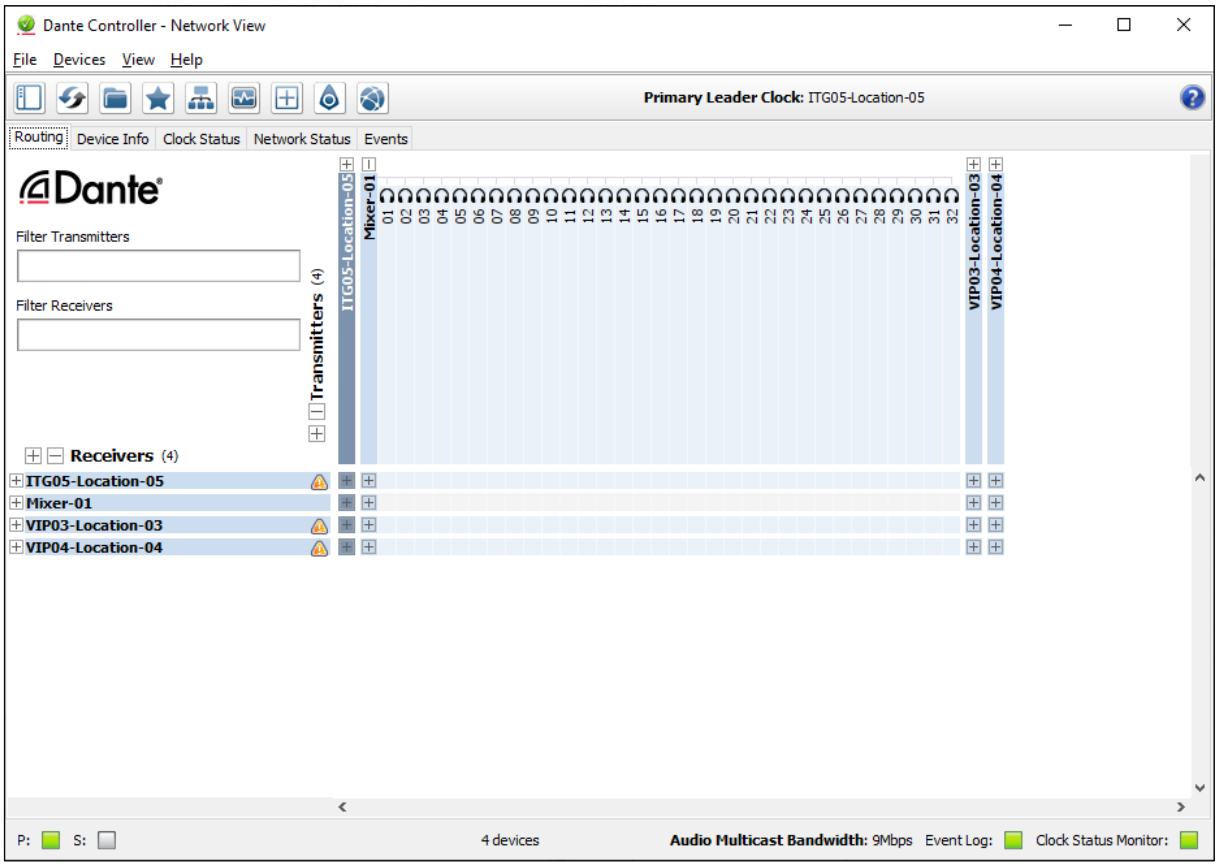
   Important:

   a) Subscriptions (routes) to third-party devices will be partly configured (unresolved), and the Brooklyn II modules fitted to VIPEDIA-12-PRO / INTEGRA-PRO units will show a warning icon ( ). The subscriptions must be completed (resolved) using the Dante Controller as described in the next steps.

   b) You will need to complete the subscription to third-party devices every time the Dante configuration generated by the PAVA SCT is loaded into the devices.



9. Expand the transmitter device (third-party) along the top.

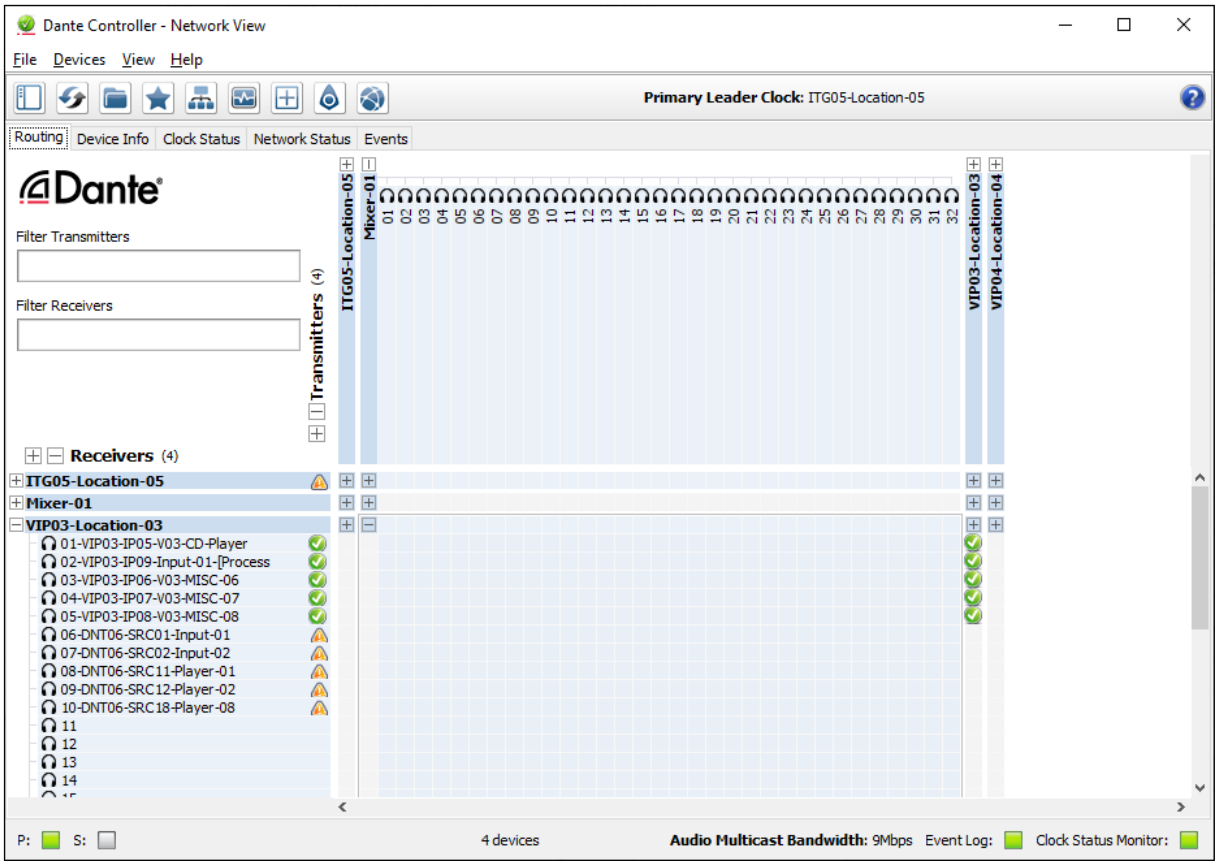


10. For each Dante Brooklyn II module fitted to VIPEDIA-12-PRO / INTEGRA-PRO units, connect the required receive channel to the correct transmit channel on the third-party device as described below.

Important:

You will need to repeat these steps every time the Dante configuration generated by the PAVA SCT is loaded into the devices.

a. Expand the required receiver device (VIPEDIA-12-PRO / INTEGRA-PRO) along the left side.



b. Position the mouse on the intersection of the correct receive (Rx) and transmit (Tx) channels.

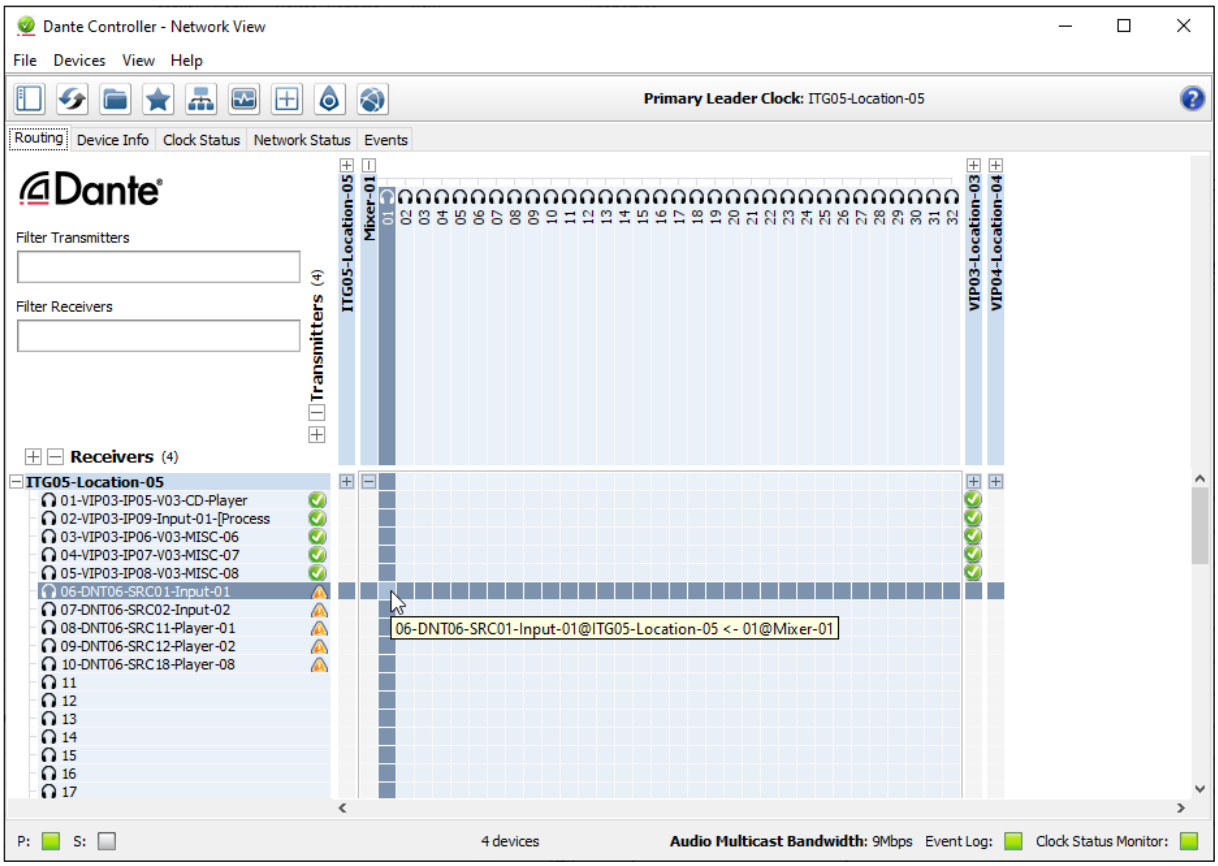
Use the receive channel name as guide to the required transmit channel.

The receive channel name when configured to a third-party device is of the format:

xx-DNTyy-SRCzz-<*Name in the PAVA SCT*>

- Name: can be used as guide when the name in the PAVA SCT is same as transmit channel name on the Dante Controller.
- zz: external device transmit channel number (use this as guide)
- yy: Unit ID of the third-party device in the PAVA SCT
- xx: receive channel number

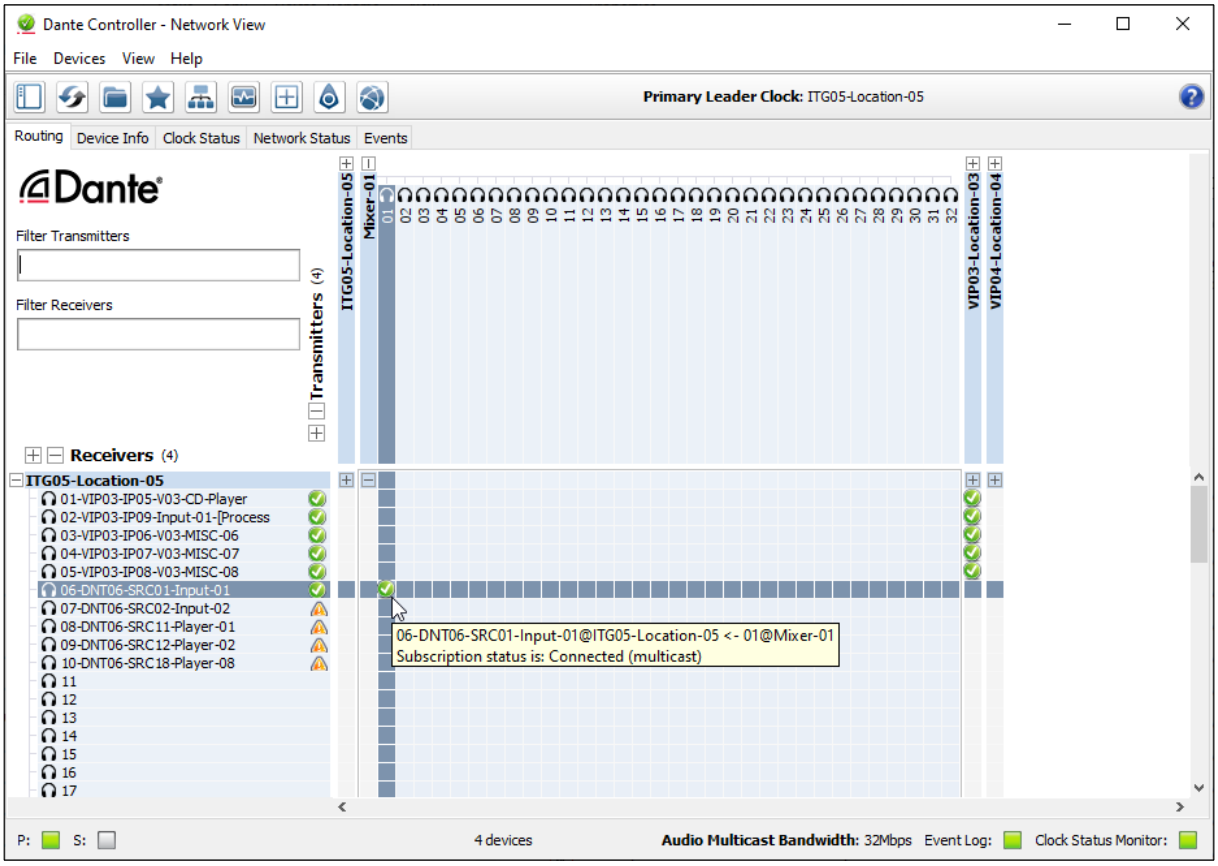
In the example below, **06-DNT06-SRC01-Input-01** indicates that **Rx06** on Integra ITG05 is to be connected to **Tx01** of the third-party device DNT06.



c. Click on the intersection to create a subscription between the transmit and receive channels

d. A green tick will appear in the intersection. You may initially see a grey hourglass icon (usually very briefly) to indicate that the subscription is in progress.

In the example below, Integra **ITG05:Rx06** is connected to third-party device **Mixer-01:Tx01**.

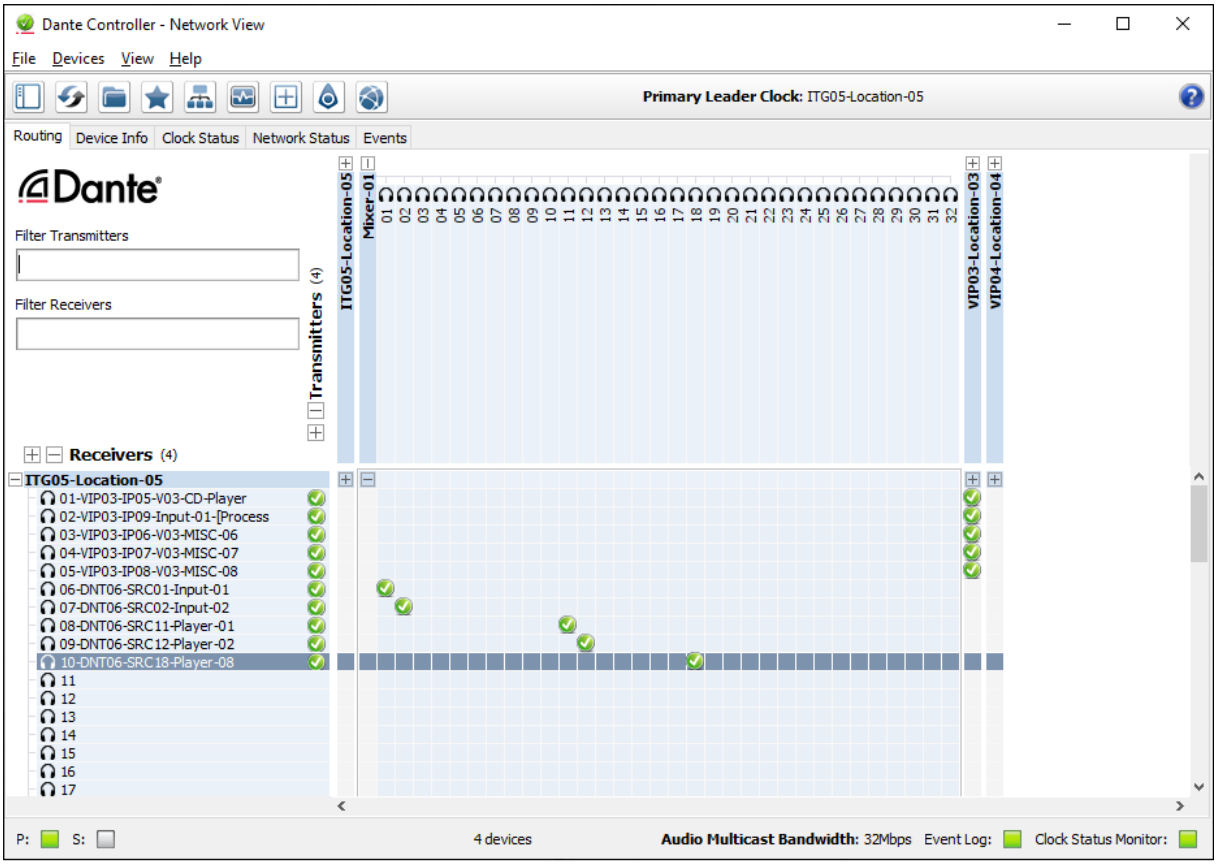


e. Repeat the above steps for all subscriptions for this third-party device (if any).

Notes:

a) The Rx channels of all Dante Brooklyn II modules fitted to VIPEDIA-12-PRO / INTEGRA-PRO units in the system configuration should subscribe to the same Tx channels across the system. This ensures that audio is always routed over IP using the correct transport method.

b) The Dante channel subscriptions on Dante Brooklyn II modules fitted to VIPEDIA-12-PRO / INTEGRA-PRO should match the configuration shown on the **Dante** page of the PAVA SCT; see example in Figure 4 (page 44).

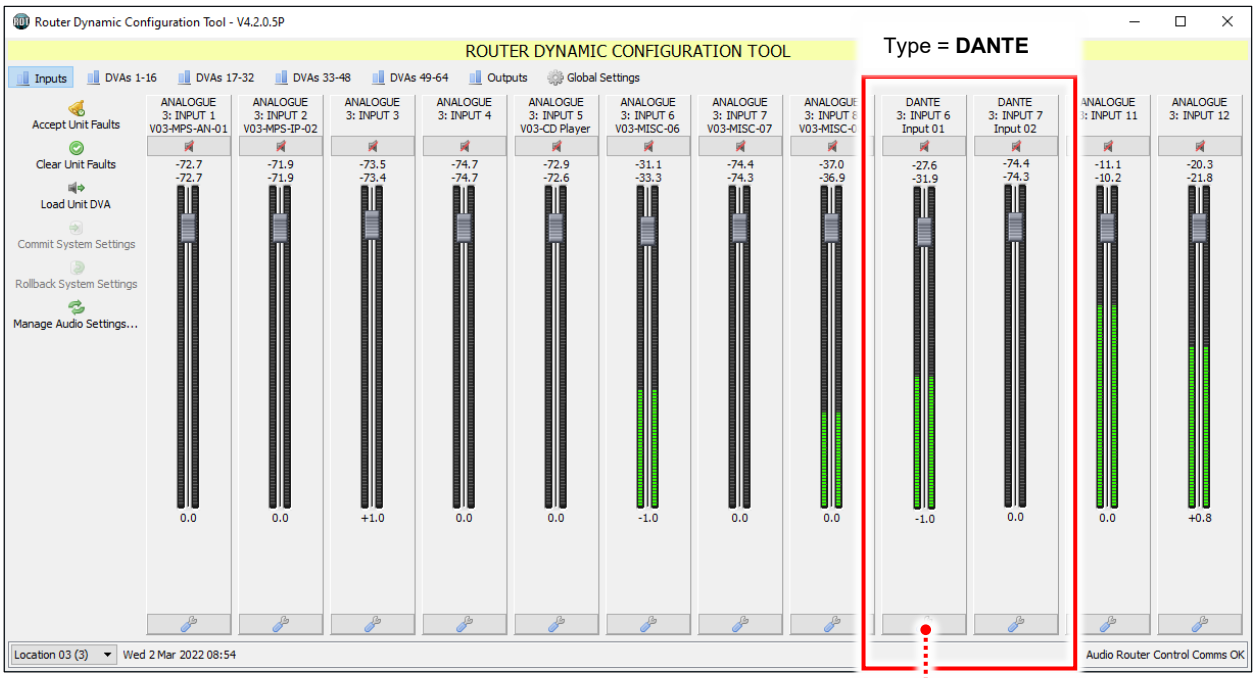


11. Repeat steps 9 and 10 for all subscriptions to other third-party devices (if any).

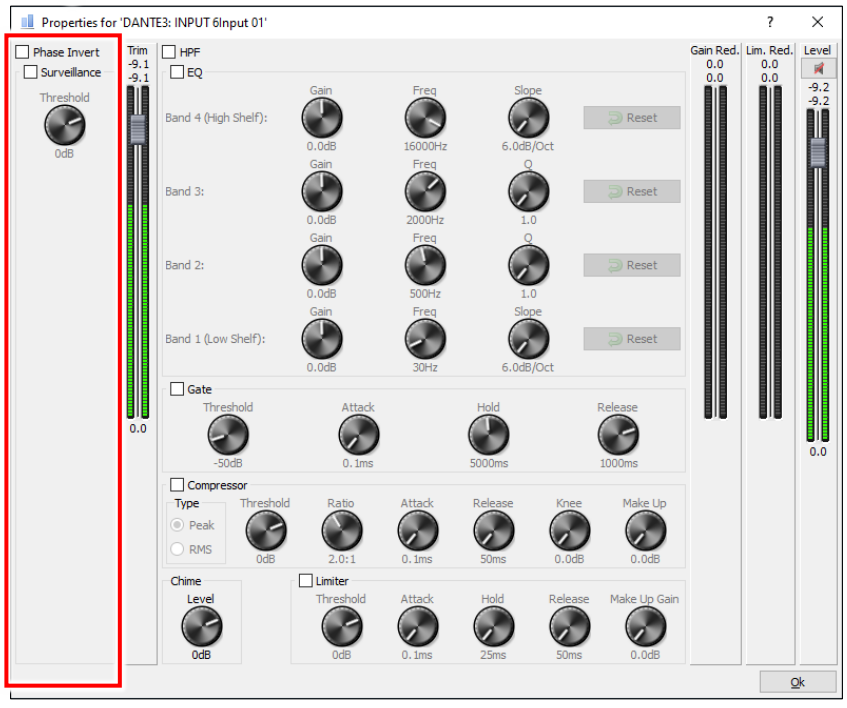
4.6.3 Processing Audio from Third-Party Dante Device

1. Launch the RDT from the PAVA SCT; refer to the VIPEDIA-12 User's Manual(Table 2:[2] on page 94).
2. Select the required VIPEDIA-12-PRO/INTEGRA-PRO from the drop-down menu located on the bottom-left corner of the main GUI.

   The RDT shows the input type at the top of each control bar: **ANALOGUE** for miscellaneous and microphone inputs, and **DANTE** for processed Dante inputs. The **Sensitivity** and **Phantom Power** are hidden in the **Properties** dialog for processed Dante inputs.



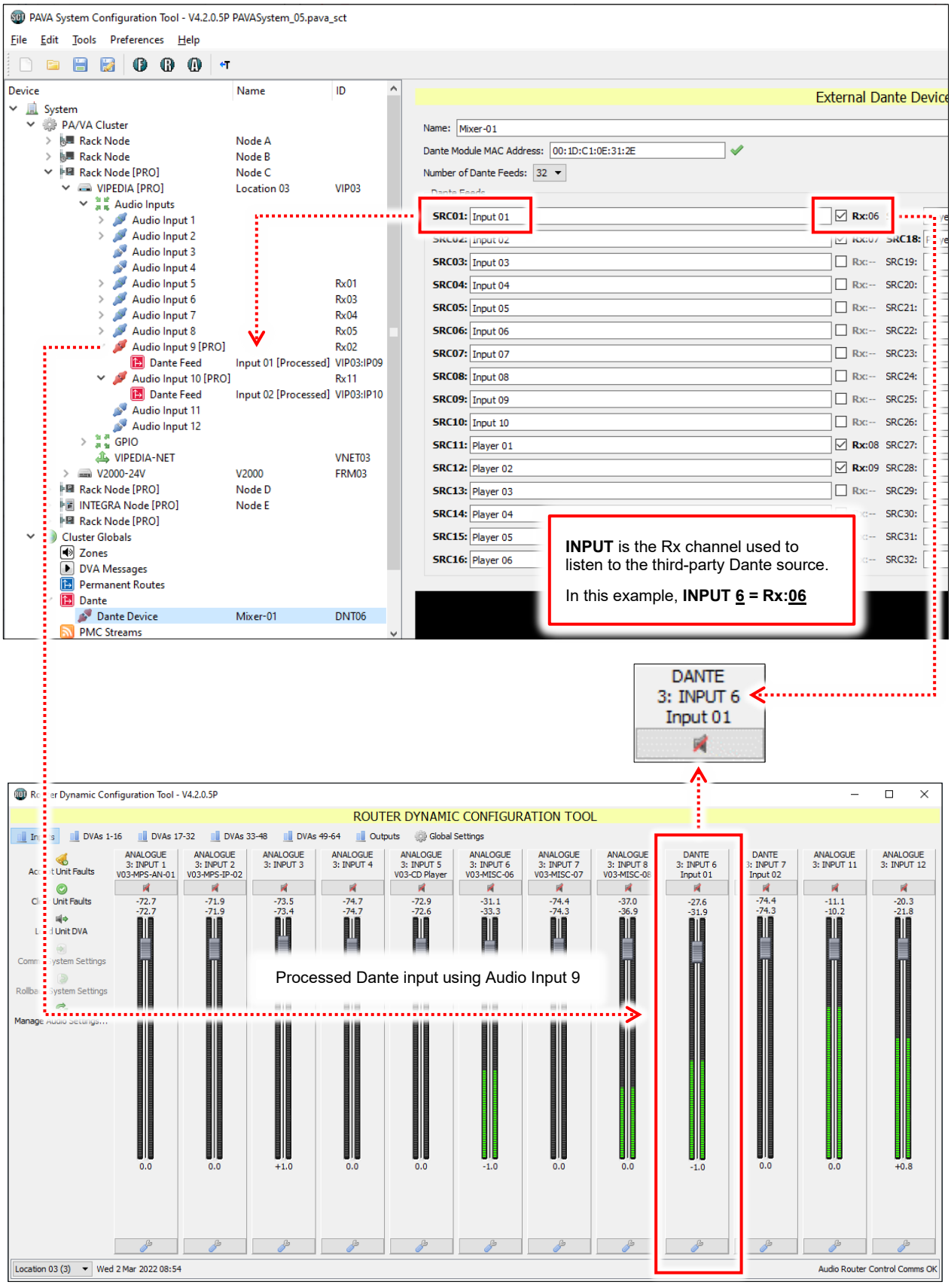
No **Sensitivity** and **Phantom Power** controls



Note:

The input number for processed inputs is not the audio input number used to process the third-party Dante source; see details in the next diagrams.

RDT - Input numbering for processed Dante inputs:



4.7 Configuration of Dante Audio in PAVA Routes

Dante audio sources (unprocessed and processed) can be routed by all standard routing mechanisms:

- “4.7.1 Dante Audio as Source in Contact / Microphone Button / Permanent / Source Selector / Wall-Mount Controller / VOX Routes” (page 80)

Dante audio sources can also be configured as VIPA BGM sources:

- “4.7.2 DANTE Audio as VIPA BGM Sources” (page 82)

Processed external Dante inputs can be configured as VOX route triggers:

- “4.7.3 Processed Third-Party Dante Source as VOX Route Trigger” (page 83)

4.7.1 Dante Audio as Source in Contact / Microphone Button / Permanent / Source Selector / Wall-Mount Controller / VOX Routes

1. On the PAVA SCT device tree, select the required contact input, microphone button, permanent route entry, program/source selector, wall-mount controller or VOX route trigger input.

   Please refer to the PAVA SCT User’s Manual (Table 2:[1] on page 94) for details on how to configure the required route trigger.

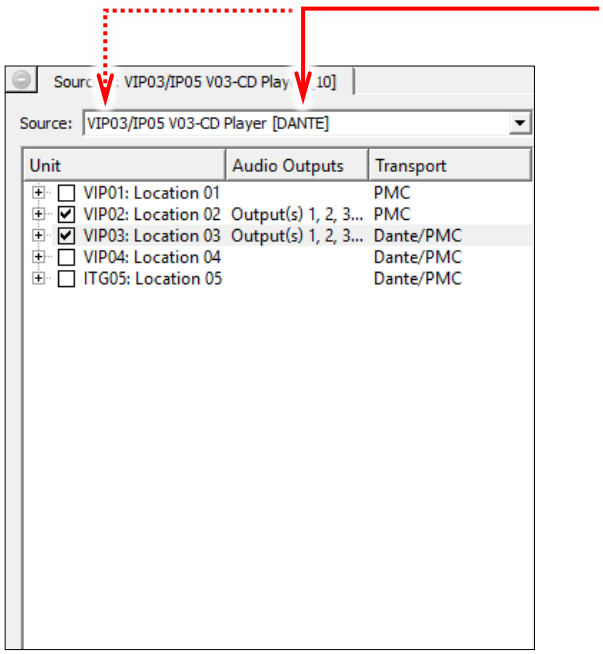
2. Select the required Dante source from the **Source** drop-down list; see examples below.

   Notes:

   a) The **Transport** column in routing configuration dialogs identifies the transport methods for voice over IP that the receiver can handle (PMC and/or Dante), not necessarily the transport method that will used when the route is made. The audio source type will determine the transport method that will be used when the route is made.

   b) Although routes are allowed in the configuration, unprocessed third-party Dante sources will not be routed over PMC to standard VIPEDIA-12 / INTEGRA units. Unprocessed third-party Dante sources can be routed to VIPEDIA-12-PRO / INTEGRA-PRO units only (over Dante).

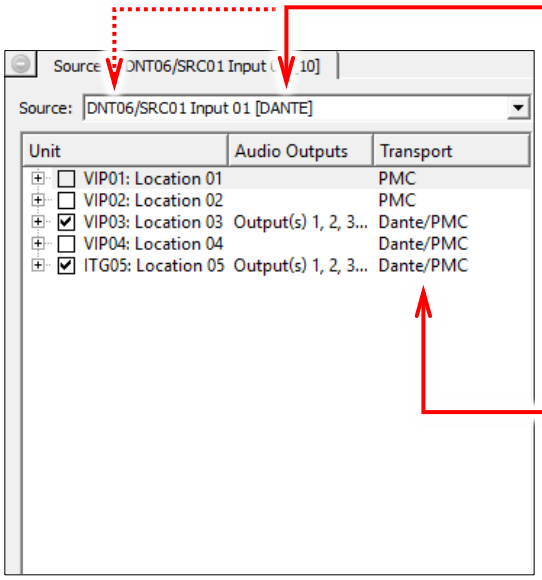
VIPEDIA-12-PRO / INTEGRA-PRO [DANTE] sources:



[DANTE] Sources:

Sources from a PAVA Router (**VIPxx** or **ITGxx**) will be routed over Dante to VIPEDIA-12-PRO and INTEGRA-PRO units, and over PMC to standard VIPEDIA-12 / INTEGRA units.

Unprocessed third-party [DANTE] sources:

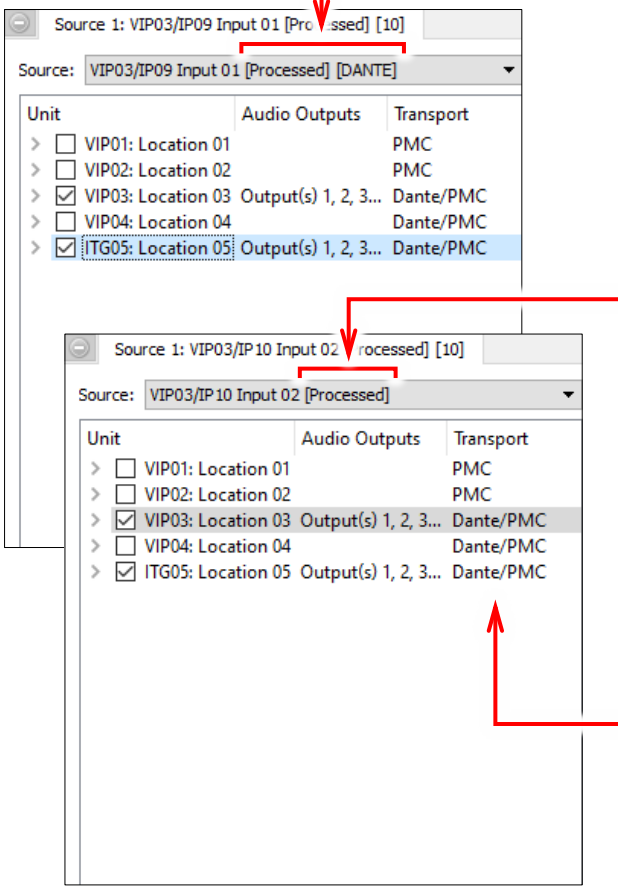


[DANTE] Sources:

Unprocessed sources from third-party devices (**DNTxx**) will be routed over Dante to VIPEDIA-12-PRO and INTEGRA-PRO units. Although allowed in the configuration, they will not be routed to VIPEDIA-12 / INTEGRA units.

Transport methods for voice over IP that the receiver can handle, not necessarily the method used when the route is made.

[Processed] third-party Dante sources:



[Processed] [DANTE] Sources:

These processed inputs will be routed over Dante to VIPEDIA-12-PRO and INTEGRA-PRO units, and over PMC to standard VIPEDIA-12 / INTEGRA units.

[Processed] Sources:

These processed inputs will be routed over PMC to VIPEDIA-12-PRO and INTEGRA-PRO units and standard VIPEDIA-12 / INTEGRA units.

Transport methods for voice over IP that the receiver can handle, not necessarily the method used when the route is made.

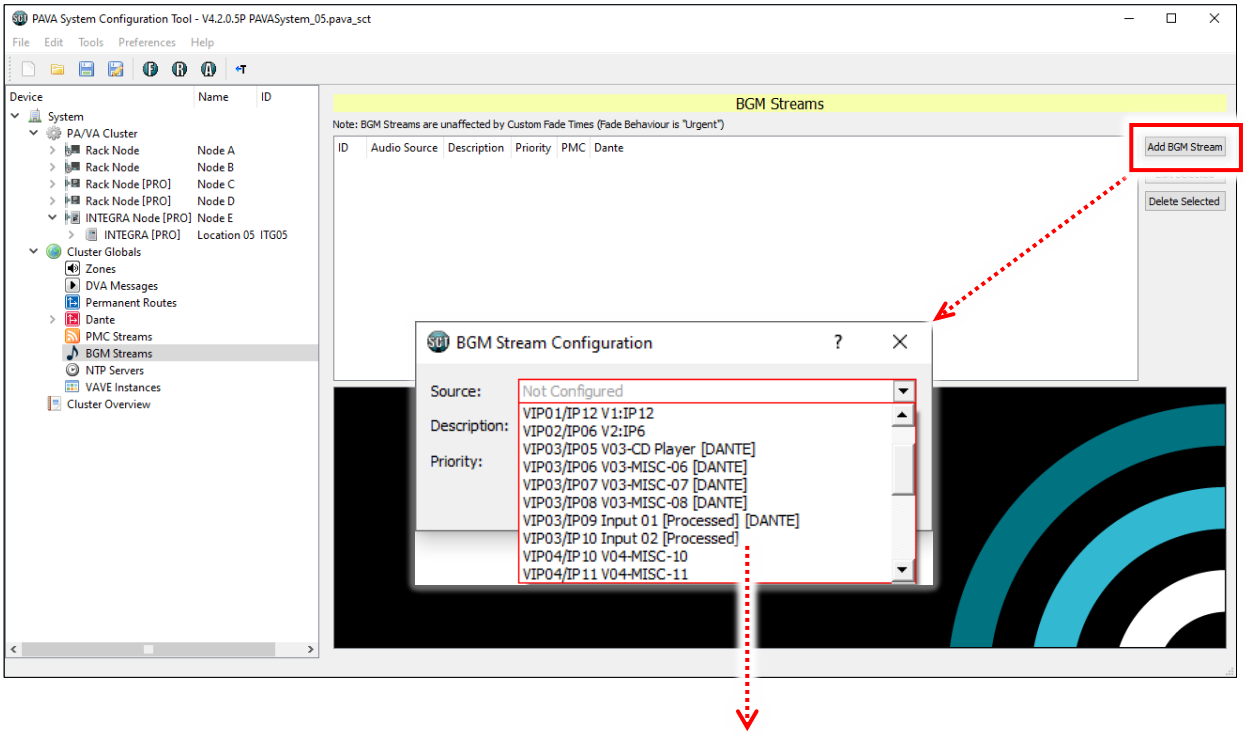
3. Configure the other routing options associated with the selected route trigger.

4.7.2 DANTE Audio as VIPA BGM Sources

VIPEDIA-12-PRO / INTEGRA-PRO and third-party Dante sources can be configured as BGM source routed by the Network Cards in the PAVA system; see routing details in Figure 6 (page 82).

1. On the PAVA SCT, open the **BGM Streams** page.
2. Click the **Add BGM Stream** button.
3. Select the required Dante source.

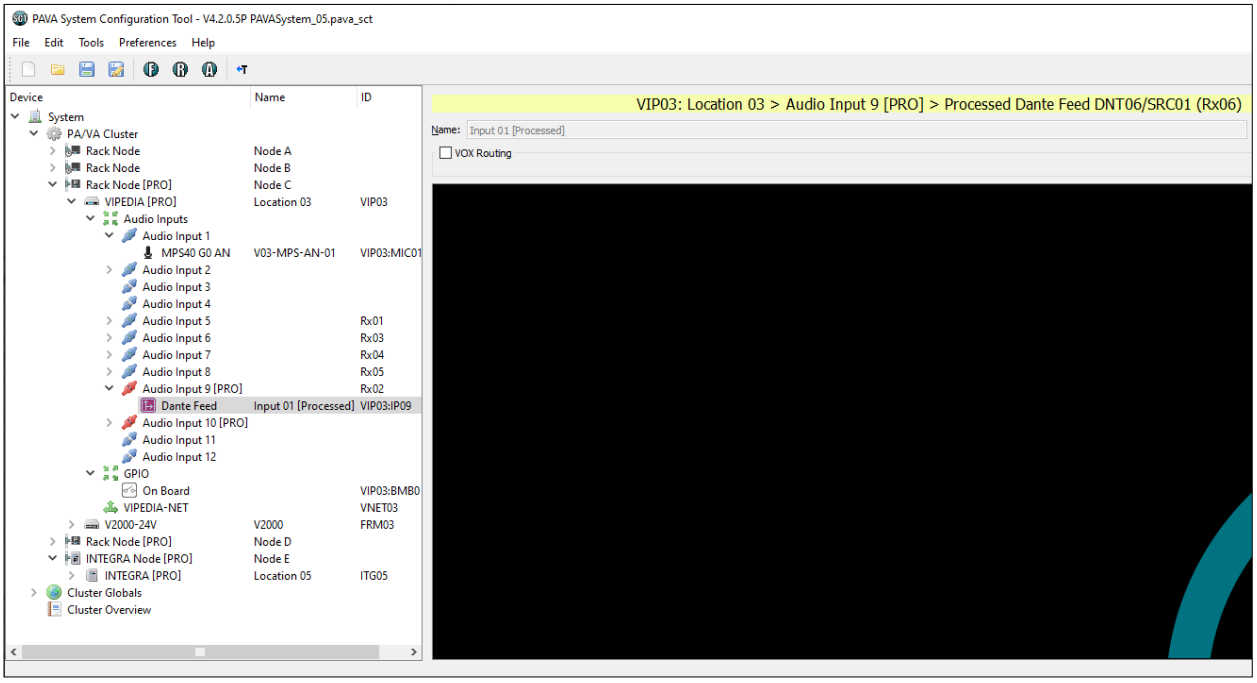
Figure 6 BGM Stream - Dante sources



- **[DANTE]** BGM sources from a PAVA Router (**VIPxx or ITGxx**) will be routed over Dante to VIPEDIA-12-PRO and INTEGRA-PRO units, and over PMC to standard VIPEDIA-12 / INTEGRA units.
- **Unprocessed [DANTE]** BGM sources from third-party devices **(DNTxx)** will be routed over Dante to VIPEDIA-12-PRO and INTEGRA-PRO units. They will not be routed to VIPEDIA-12 / INTEGRA units.
- **[Processed] [DANTE]** BGM sources will be routed over Dante to VIPEDIA-12-PRO and INTEGRA-PRO units, and over PMC to standard VIPEDIA-12 / INTEGRA units.
- **[Processed]** BGM sources will be routed over PMC to VIPEDIA-12-PRO and INTEGRA-PRO units and standard VIPEDIA-12 / INTEGRA units.

4.7.3 Processed Third-Party Dante Source as VOX Route Trigger

1. On the PAVA SCT device tree, select the required processed Dante input.

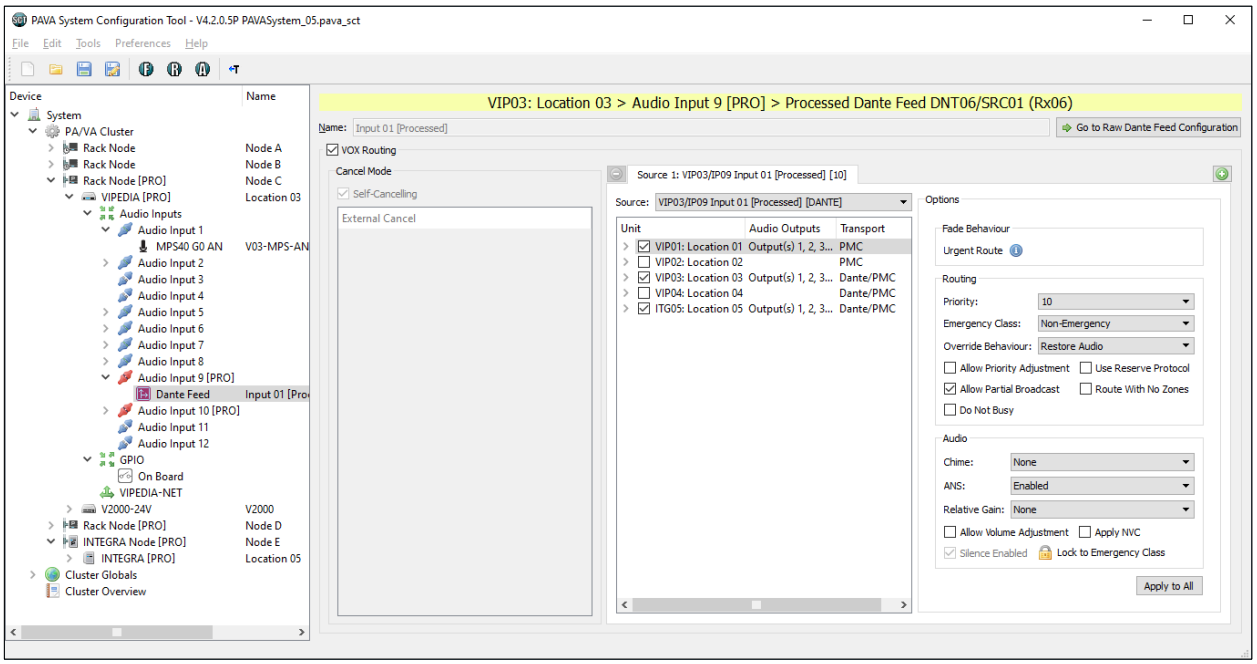


2. Enable the **VOX Routing** option.

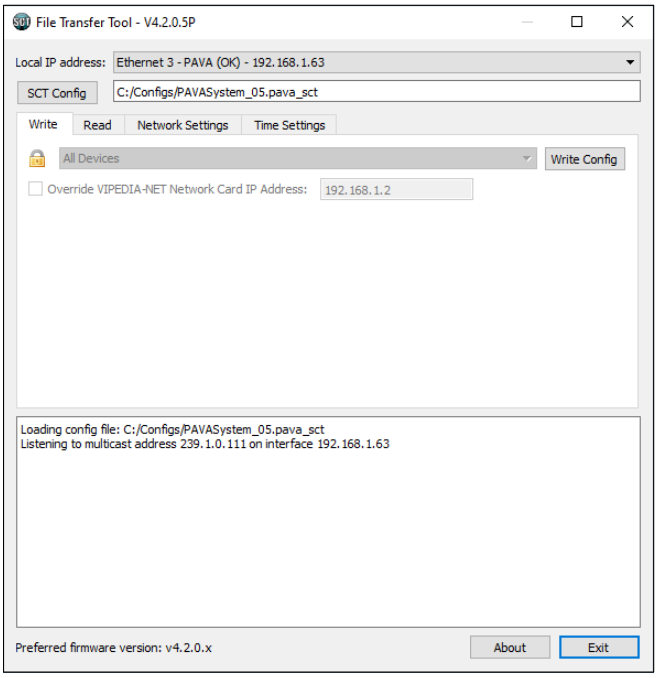
   The routing configuration dialog will be displayed.

3. Select the required source from the **Source** drop-down list and configure the route as normal.

   The example below shows the processed input as source.



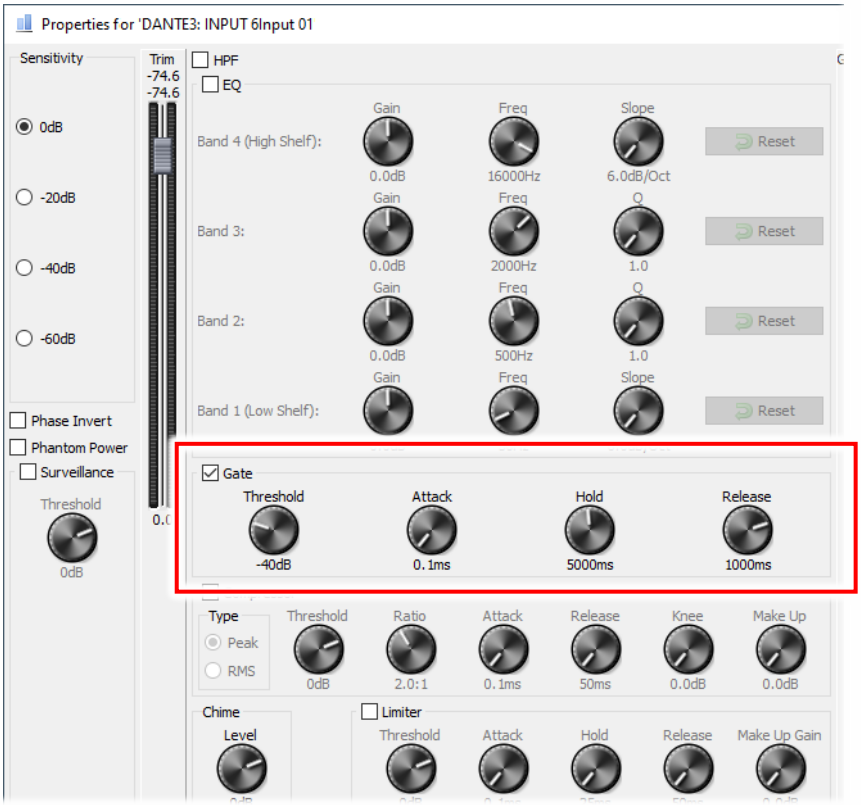
4. Load the configuration to the ASL's PAVA devices using the File Transfer Tool (FTT).



5. Launch the RDT to enable, and select the required VIPEDIA-12-PRO/INTEGRA-PRO from the drop-down menu located on the bottom-left corner of the main GUI.
6. Open the **Properties** dialog for the required processed Dante input that acts as VOX route trigger.
7. Enable the **Gate** in the input processing.
8. Set the **Threshold** to a suitable level to trigger the route.
9. Set **Attack** to **0.1 ms** (i.e. as fast as possible).
10. Set the **Hold Time** to suitably high level.

    The **Hold Time** defines the amount of time required below the **Threshold** before the route is cleared.

    Usually set between **5000 ms** to **10000 ms** to allow for breaks between songs in BGM, etc.
11. Set **Release** to **1000 ms** (or as required) so that the route fades out reasonably smoothly.



12. Commit the changes.

5 Dante Brooklyn II Module Firmware Update

VIPEDIA-12-PRO / INTEGRA-PRO units out of the box are supplied with Dante firmware version that is approved for EN 54-16 applications.

For EN 54-16 compliance:

a) Firmware update must be to a version of product firmware that is approved by ASL. If in doubt, please contact ASL.

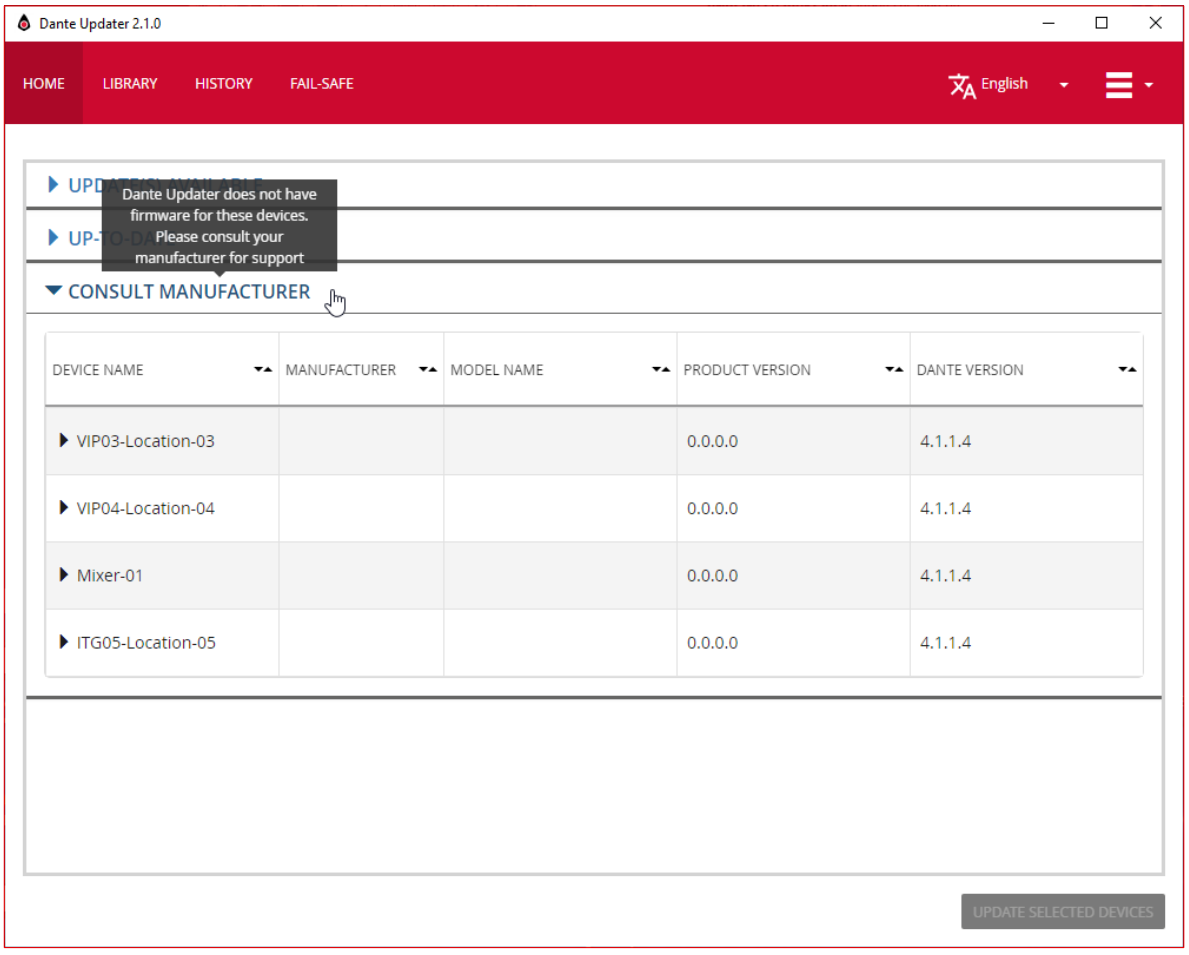
b) **Change to product firmware can only be done at access level 4 which must be restricted to persons trained and authorised by ASL to alter the firmware.**

Important:

a) You will need to install the Dante Firmware Update Manager on the configuration PC.

The Dante Firmware Update Manager is available on request from Audinate or ASL.

Note that it is not possible to update the Dante Firmware using the Dante Updater function on the Dante Controller. Dante modules on VIPEDIA-12-PRO / INTEGRA-PRO units will be listed under **CONSULT MANUFACTURER**.



b) The required Dante firmware image.

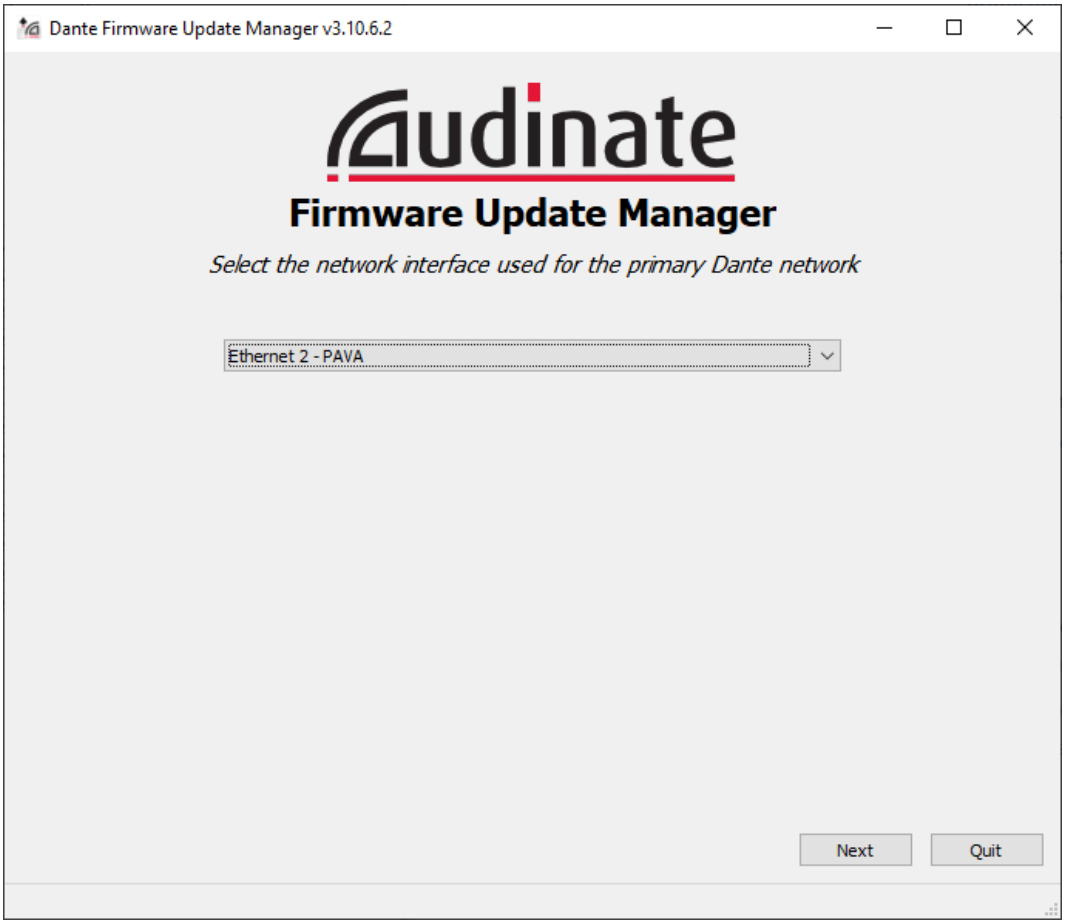
The Dante firmware image is available on request from Audinate or ASL.

c) If any difficulties are encountered, contact ASL.

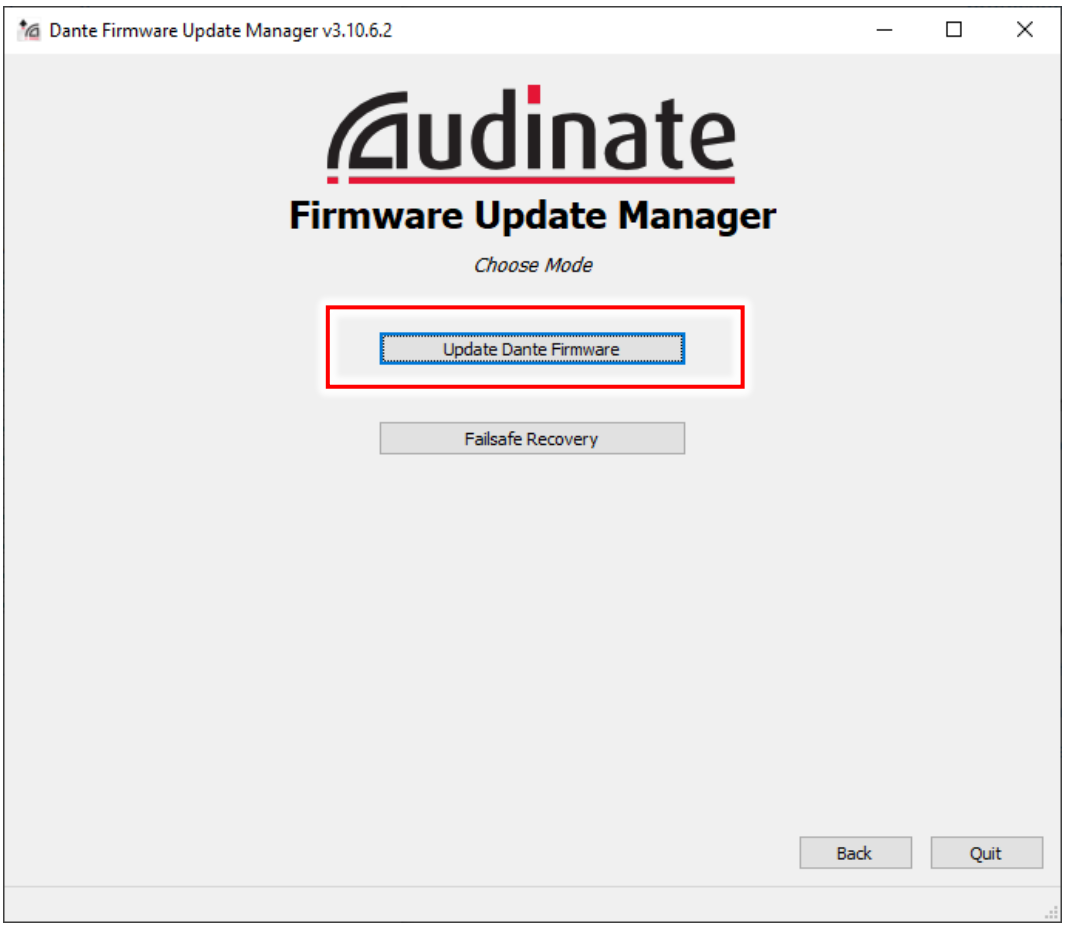
1. Launch the Dante Firmware Update Manager.
2. Select the correct network interface and click the **Next** button.

Important:

Ensure that the configuration PC's network interface used to connect to the Dante devices is correctly configured to dynamic IP address; see "APPENDIX A – PC Requirements for ASL Configuration Tools and Dante Controller" (page 95) for further details.



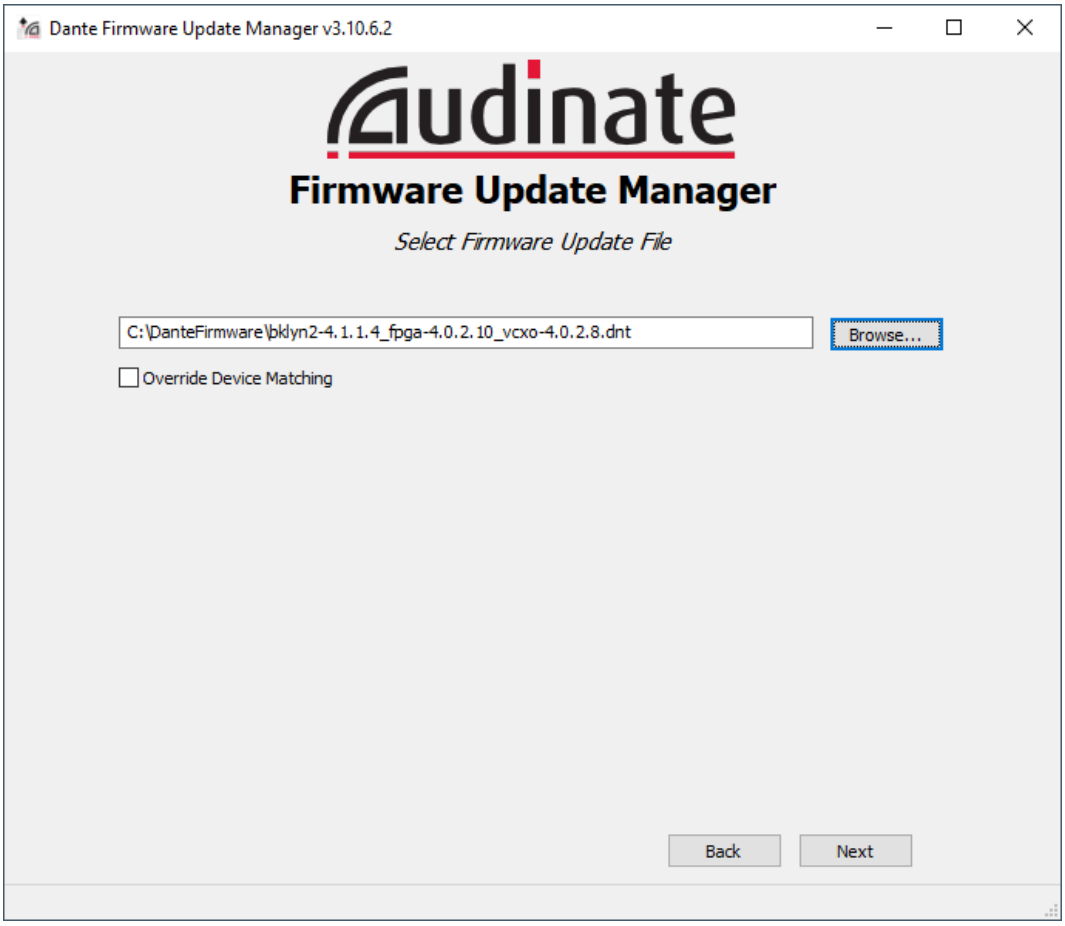
3. Click the **Update Dante Firmware** button.



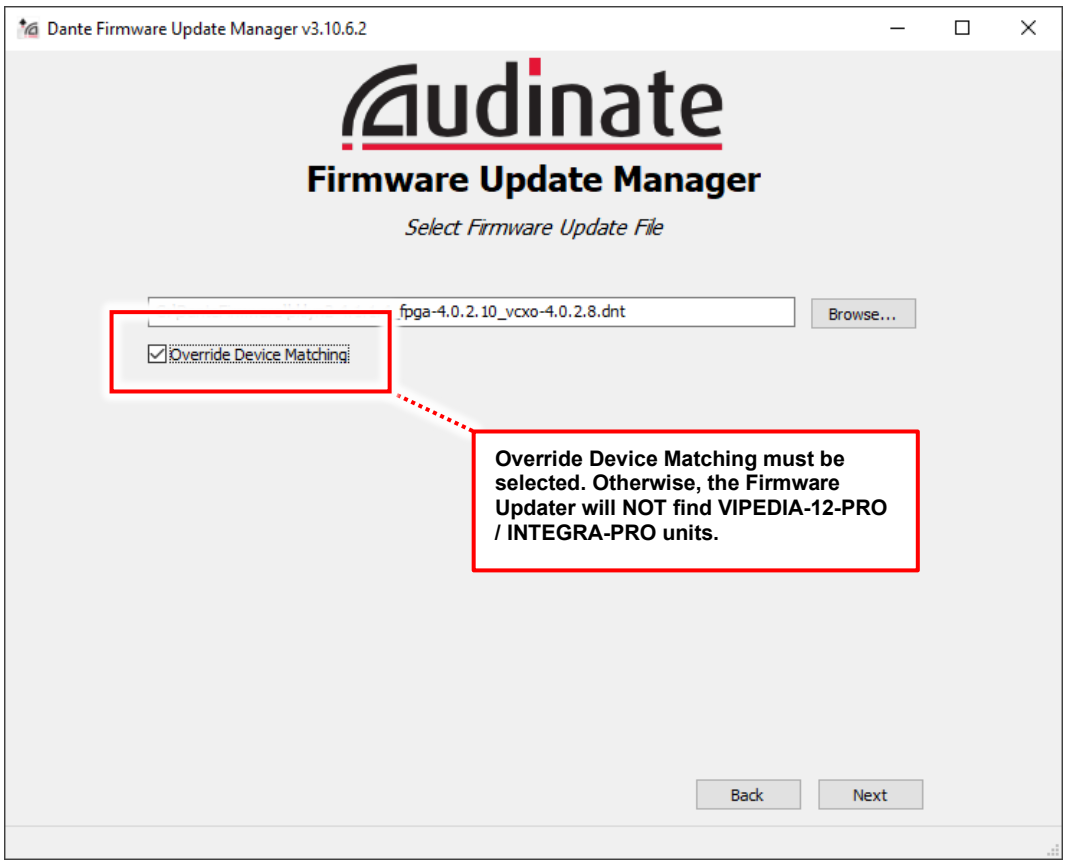
4. Browse to the required firmware image.

Important:

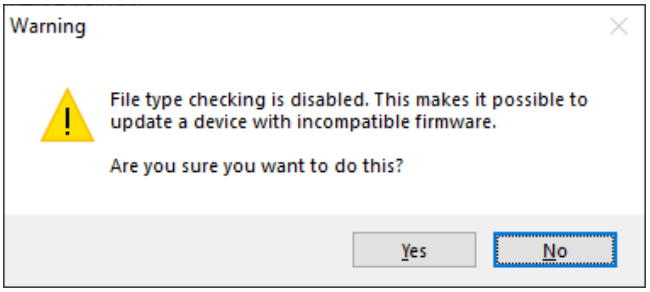
Firmware update must be to a version of product firmware that is approved by ASL. If in doubt, please contact ASL.



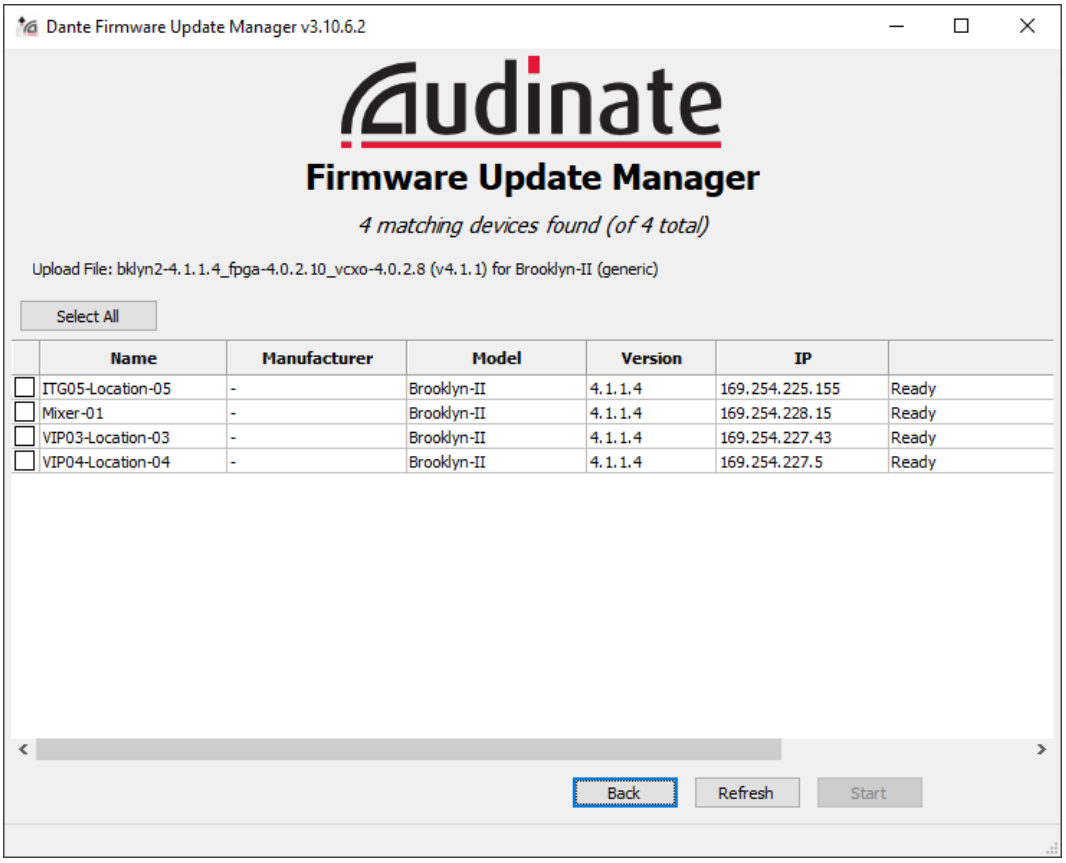
5. Tick the **Override Device Matching**.



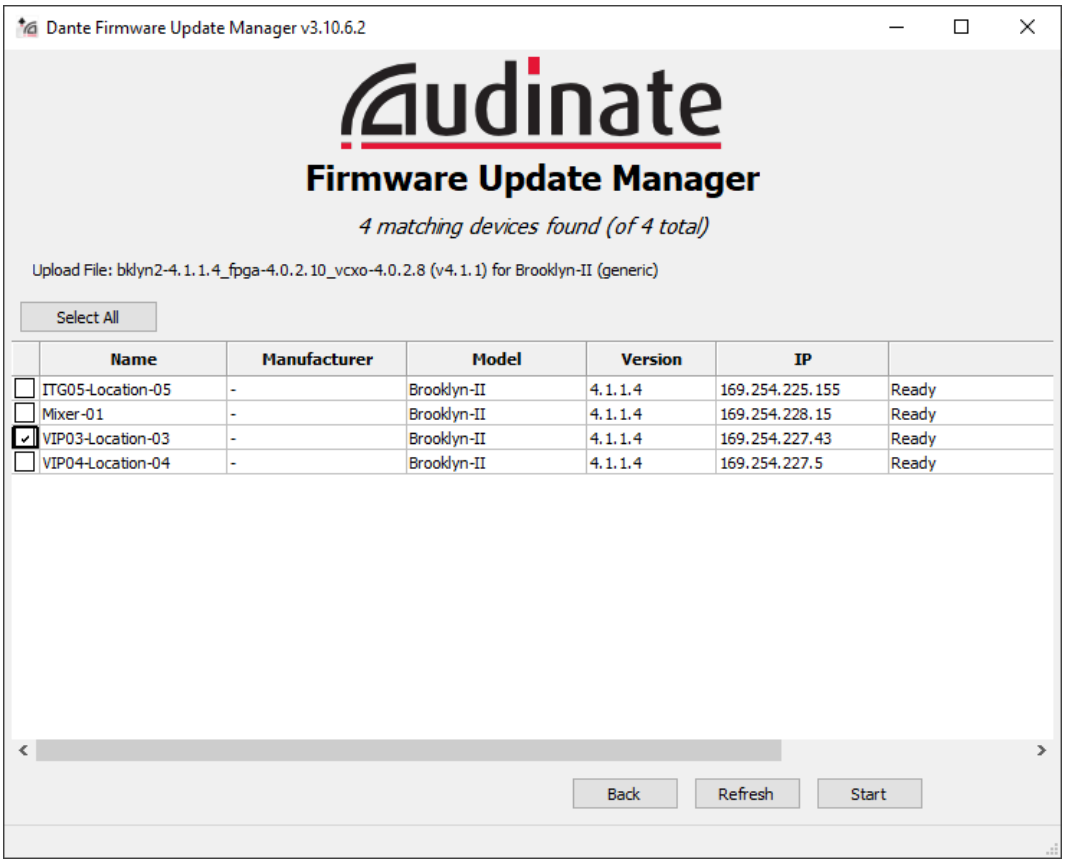
6. Click the **Yes** button in this warning dialog box.



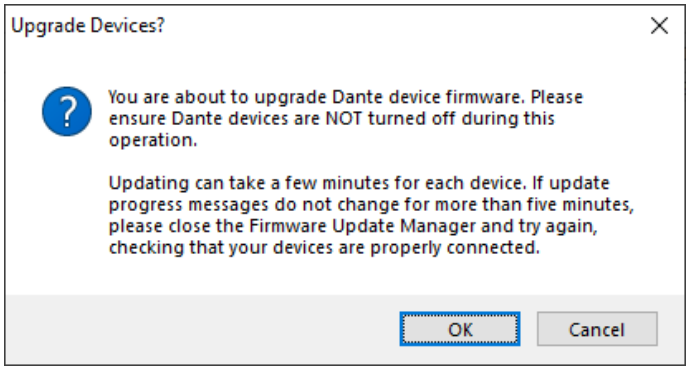
7. The Update Manager should display all Dante devices on the network.



8. Select the target device(s) or all devices (**Select All** option) and click the **Start** button.



9. Click the **OK** button in this warning dialog box.



10. The update will start.

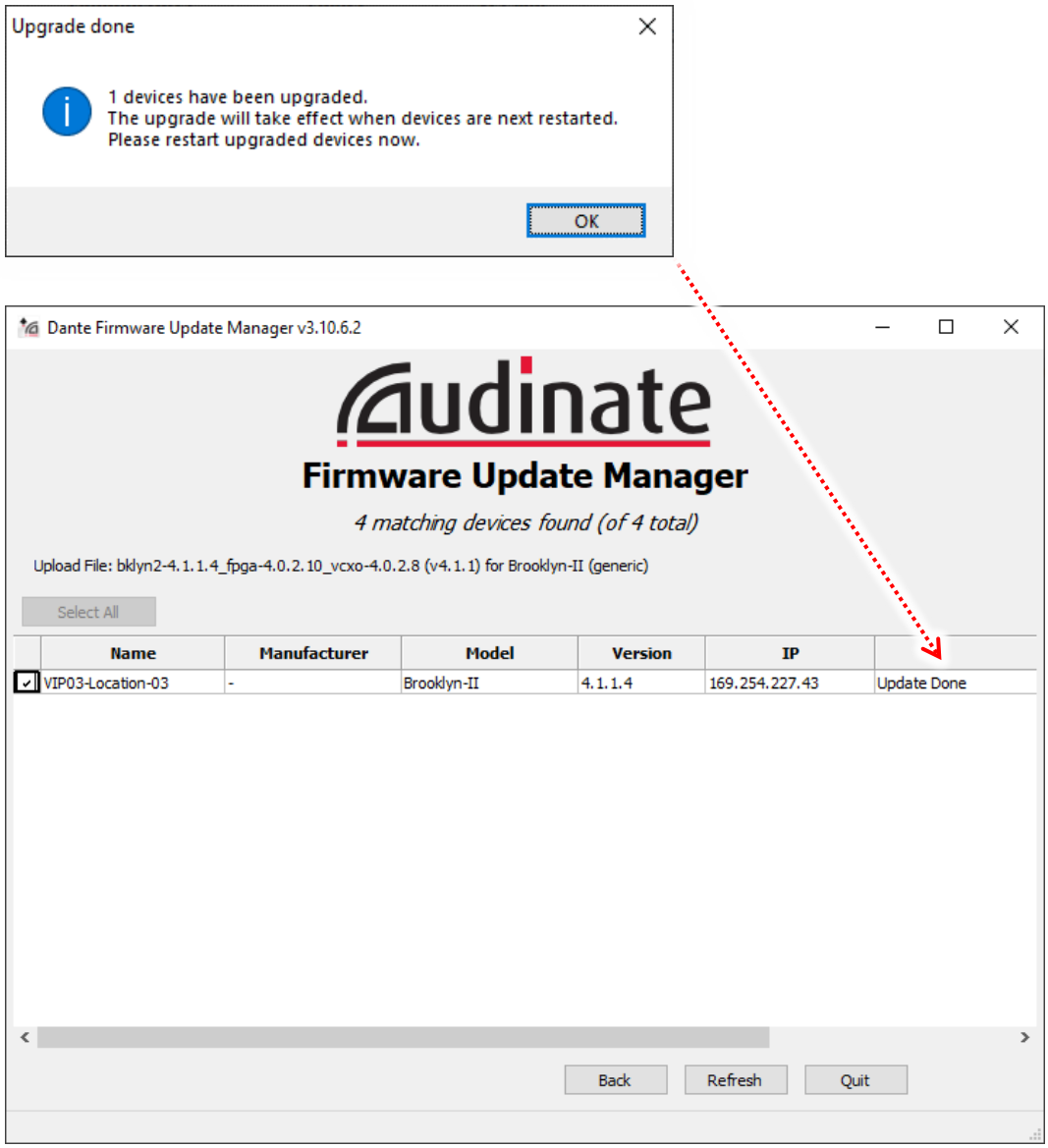
Wait for the update to complete.

DO NOT POWER DOWN THE UNIT DURING THE UPDATE.

11. When the update completes, an **Upgrade Done** message with the update results should be displayed.

Click the **OK** button.

The Update Manager will show the result of the upgrade operation.



12. Power cycle the unit.

6 Acronyms

ADT	Amplifier Dynamic Configuration Tool (ASL)
AS	Active Standby (ASL)
ASL	Application Solutions (Safety and Security) Limited
BGM	BackGround Music
BMB01	Remote I/O Unit (ASL)
CP	Computer Processor
DBB	Digital BackBone (ASL)
DVA	Digital Voice Announcer
EQ	Equaliser
GPIO	General Purpose Inputs/Outputs
GUI	Graphical User Interface
ID	Identification
IGMP	Internet Group Management Protocol
INTEGRA	Wall-mount Voice Alarm System (ASL)
INTEGRA-PRO	Wall-mount Voice Alarm System (Integrated Dante™) (ASL)
IP	Internet Protocol
MAC	Media Access Control
NA	Not Available/Not Applicable
NIC	Network Interface Card
PA	Public Address
PA/VA	Public Address and Voice Alarm
PAVA	Public Address and Voice Alarm
PAVA SCT	PAVA System Configuration Tool (ASL)
PC	Personal Computer
PMC	Portable Media Carrier (ASL's audio over IP format)
PRO	VIPEDIA-12-PRO and INTEGRA-PRO (ASL)
QR	Quick Response code
RDT	Router Dynamic Configuration Tool (ASL)
RSTP	Rapid Spanning Tree Protocol
VA	Voice Alarm
VCT	VIPA Config Tool (ASL)
VIPA	Voice over IP Audio (ASL)
VIPEDIA-12	Professional Sound Life-Safety Digital Audio System (ASL)
VIPEDIA-12-PRO	Professional Sound Life-Safety Digital Audio System (Integrated Dante™) (ASL)
VIPEDIA-NET	VIPEDIA-12 Network Card
XML	Extensible Markup Language

7 Reference Documentation

Table 2 Reference documents

Ref. No	Title	Filename Ref	Origin
[1]	PAVA SCT User's Manual (V3.x)	U-0701-1583	ASL
[2]	VIPEDIA-12 User's Manual (V3.x)	U-0641-3283	ASL
[3]	INTEGRA User's Manual (V3.x)	U-0732-0051	ASL
[4]	V2000 User's Manual (V3.x)	U-0623-1005	ASL
[5]	Hirschmann Network Switch Configuration Guide	U-0641-3488	ASL
[6]	NETWORK-SWITCH-LP01 Configuration Guide	U-0641-3675	ASL

All latest revisions of all user documentation are available from ASL's downloads page.

www.asl-control.co.uk/downloads

APPENDIX A – PC Requirements for ASL Configuration Tools and Dante Controller

The PC used for firmware and configuration update should meet the following requirements for correct operation of ASL configuration tools and Dante Controller.

1. The operating system on the configuration PC should be Windows 10.
2. The configuration PC must have an Ethernet connection to the target unit.

   Do not connect the configuration PC to a mirror port of network switch.

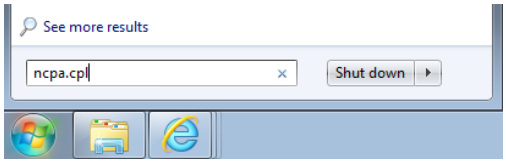
   Alternatively, the configuration PC can be directly connected to an Ethernet port on target unit.
3. Configure the settings of the PC's network interface that is used to connect to the system according to the target device (network):
   - ASL devices (e.g. VIPEDIA-12-PRO / INTEGRA-PRO): the network interface must have an static IP address in the same subnet as the target device.
   - Dante devices: the network interface must have a dynamic IP address

   A single network interface can be used for both networks, but it must be reconfigured for each network.

To change the configuration PC's IP address settings:

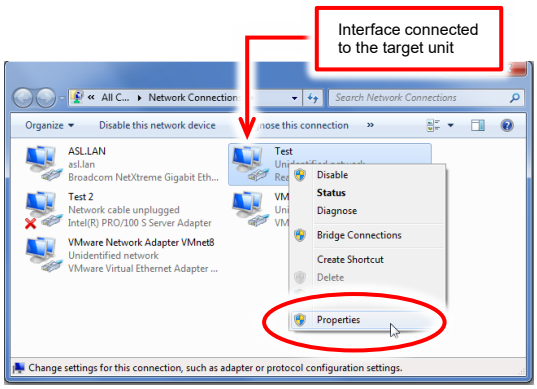
a. Click the **Start** button in the bottom-left corner of your screen.

b. Enter "ncpa.cpl" in the Search box and double-click the ncpa.cpl program.



c. The **Network Connections** window will be displayed.

d. In the **Network Connections** window, right-click the interface that is used to connect to the target unit, and then select **Properties** from the popup menu.

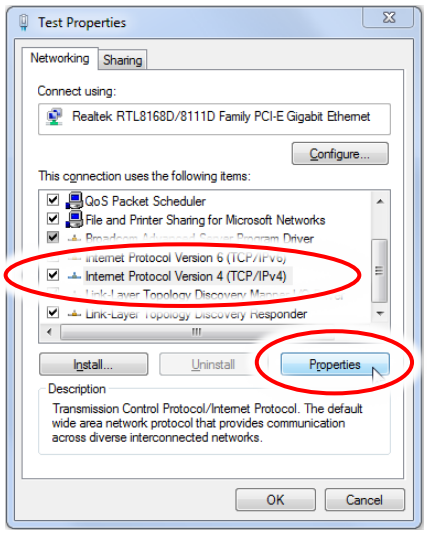


e. The **Properties** window for the interface card will be displayed.

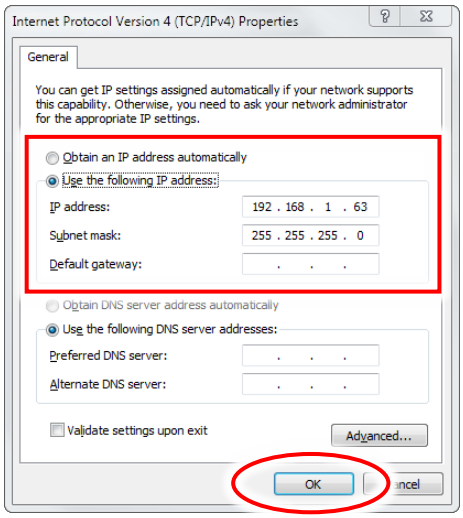
f. Select the **Networking** tab and then select **Internet Protocol Version 4 (TCP/IPv4)** in the connections list.

g. Click the **Properties** button.

h. The **Internet Protocol Version 4 (TCP/IPv4) Properties** window will be displayed.



For ASL devices:



a. Click the **Use the following IP Address** option and enter the configuration PC's **IP address**.
Ensure that the PC's IP address is in the same subnet as the target unit.

In the example on the right:

- Target units in a 192.168.1.0/24 network (factory default for ASL PA/VA equipment)
- Configuration PC on a free address in the same subnet (e.g. 192.168.1.63)

b. Enter the required **Subnet mask** or press the TAB key on the keyboard (Windows will set the default subnet mask).

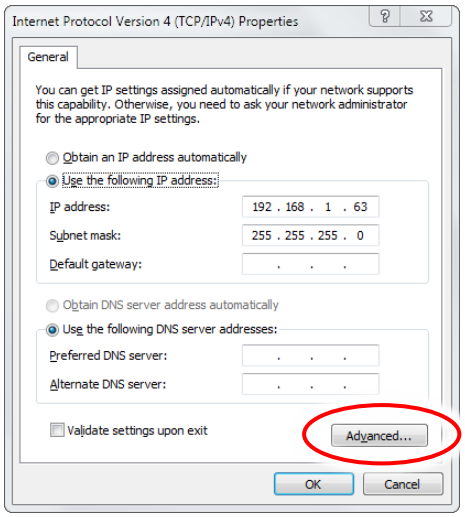
c. Click the **OK** button to apply the changes.

Multiple IP addresses can be assigned to a single network interface. This is normally used when the configuration PC is required to connect to units in different subnets, for example, when new "out of the box" units are configured with IP address outside the factory default subnet (192.168.1.0/24).

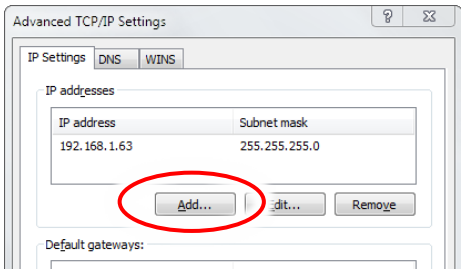
To assign multiple IP addresses to a network interface:

a. Re-load the **Internet Protocol Version 4 (TCP/IPv4) Properties** window.

b. Click the **Advanced** button.



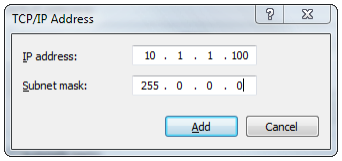
c. Click the **Add** button on the **Advanced TCP/IP Settings** window.



d. Enter the configuration PC's IP address in the new subnet.

In the example on the right:

- Target units in a 10.1.1.0/24 network
- Configuration PC on a free address in the same subnet (e.g. 10.1.1.100)



e. Enter the required **Subnet mask** or press the TAB key on the keyboard (Windows will set the default subnet mask).

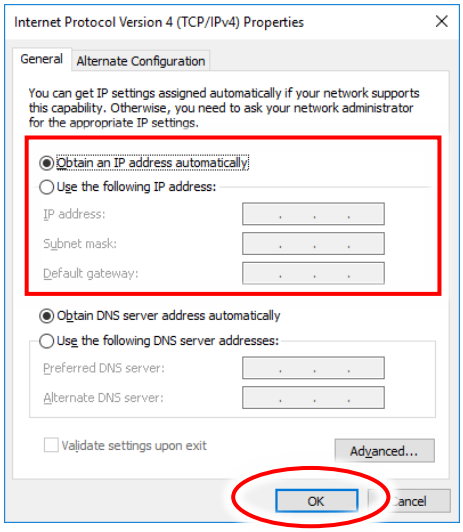
f. Click the **Add** button.

g. Repeat the procedure for all required subnets.

For Dante devices:

a. Select the **Obtain an IP Address automatically**.

b. Click the **OK** button to apply the changes.

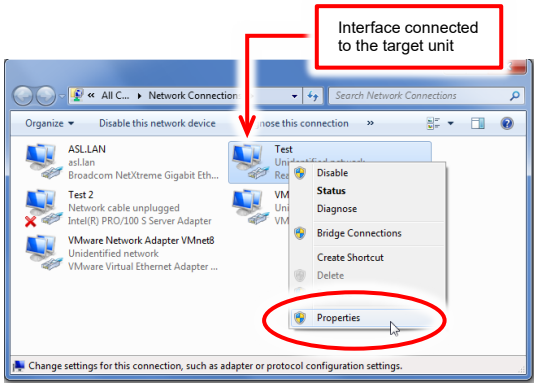


4. If the configuration PC has multiple network interfaces, ensure that the network interface used to connect to the target ASL unit has the highest priority by changing the metrics; see below.

Alternatively, the other network interfaces can be temporarily disabled.

To change the Interface Metrics:

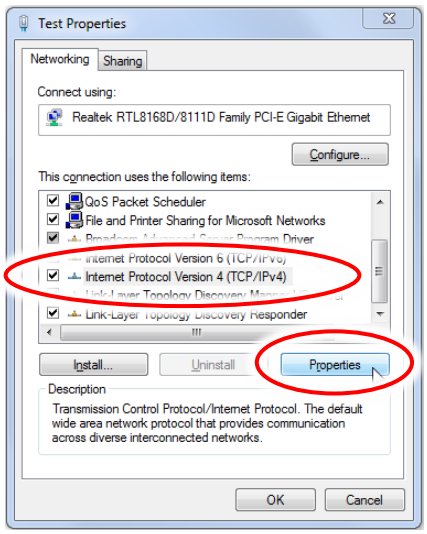
a. In the **Network Connections** window, right-click the interface that is used to connect to the target unit, and then select **Properties** from the popup menu.

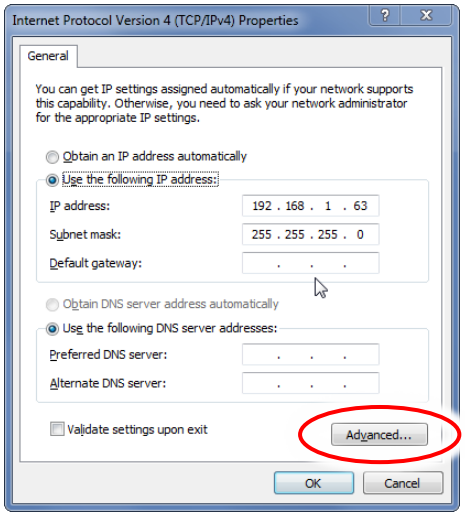


b. The **Properties** window for the interface card will be displayed.

c. Select the **Networking** tab and then select **Internet Protocol Version 4 (TCP/IPv4)** in the connections list.

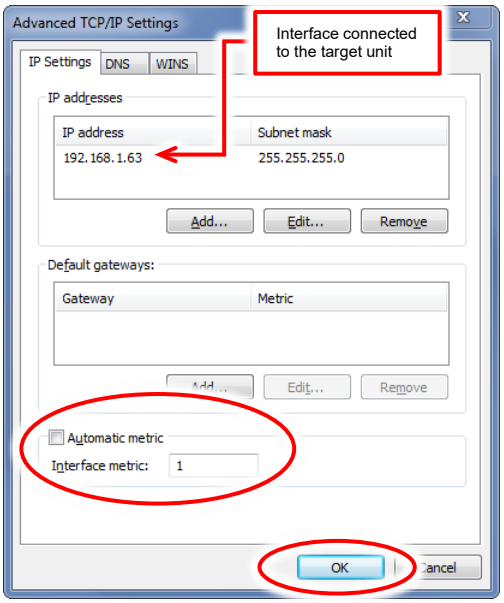
d. Click the **Properties** button.





e. The **Internet Protocol Version 4 (TCP/IPv4) Properties** window will be displayed.

f. Click the **Advanced** button.



g. The **Advanced TCP/IP Settings** window will be displayed; see example on the right.

h. Select the **IP Settings** tab.

i. If checked, uncheck the **Automatic metric** check box.

j. Set the **Interface metric** to "1".

k. Click the **OK** button to apply the changes.

l. Repeat the above procedure for all other network interfaces ensuring that they are set to a lower priority (value > 1), and not set to automatic.

5. Ensure that the target unit is up running and connected to the network, for example, using the "ping" command in a Command Prompt.

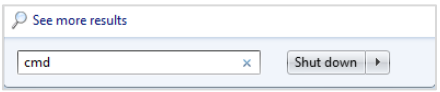
a. Click the **Start** button in the bottom-left corner of your screen.

b. Enter "cmd" in the Search box and double-click the cmd.exe program.

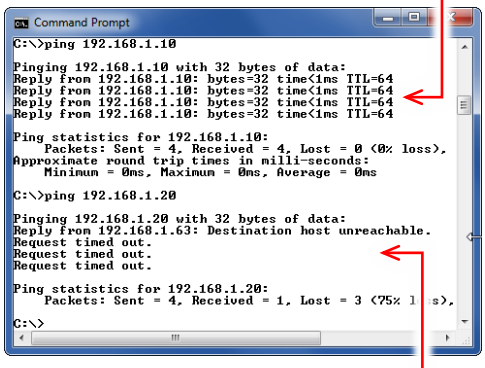
c. In the Command Prompt, enter the "ping" command followed by the IP address of the target unit.

For example:

```
ping 192.168.1.10
```



Target unit with IP address 192.168.1.10 is up running and connected to the network



Target unit with IP address 192.168.1.20 is not connected to the network

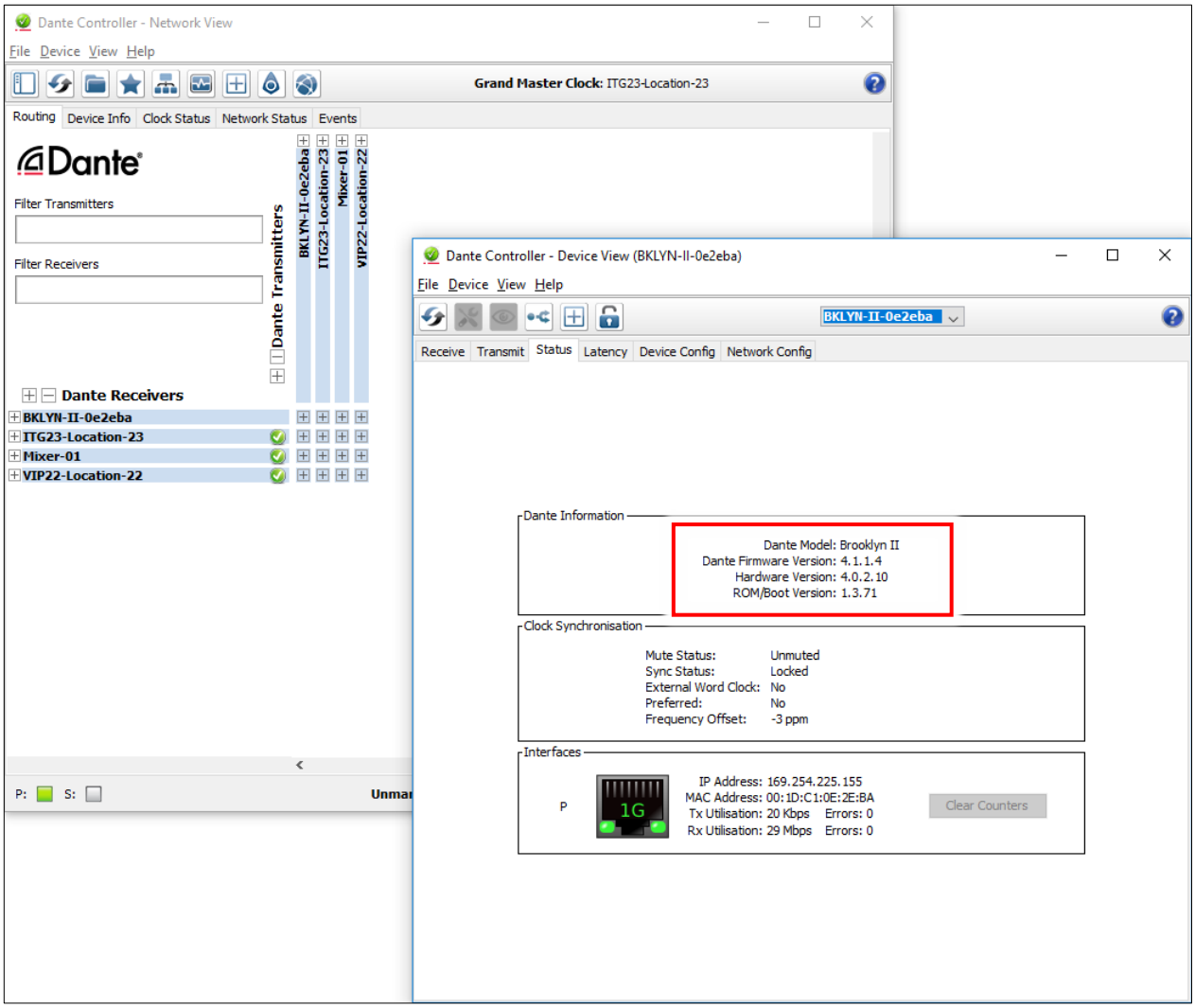
APPENDIX B – Getting the firmware version on a Dante Brooklyn II module

Important:

Ensure that the configuration PC's network interface used to connect to the Dante devices is correctly configured to dynamic IP address; see "APPENDIX A – PC Requirements for ASL Configuration Tools and Dante Controller" for further details.

1. Launch the Dante Controller.
2. Select the **Routing** tab in **Dante Controller - Network View** main window.
3. Double-click the required device name in matrix to open the **Device View** window.
4. Select the **Status** tab.

   The firmware versions are shown in the **Dante Information** box.



APPENDIX C – Serial Number Label

VIPEDIA-12 / VIPEDIA-12-PRO Serial Number and Build Standard

The serial number label of rack-mount units, such as the VIPEDIA-12 / VIPEDIA-12-PRO, is located on the rear or side of the unit; see example in Figure 7 (page 100).

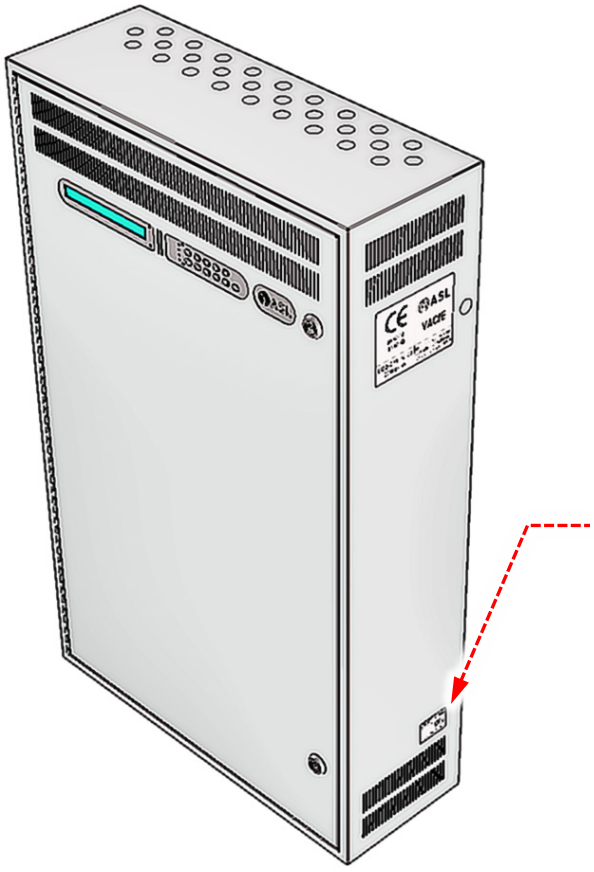
Figure 7 VIPEDIA-12 serial number label example

The last section of the barcode after the second forward slash (/) indicates the unit's Build Standard (BS) version.
Example: 1320/750640/02B → BS Version = 02

INTEGRA / INTEGRA-PRO Serial Number and Build Standard

The serial number of an INTEGRA / INTEGRA-PRO unit is located on side of the unit; see example in Figure 8 (page 100).

Figure 8 INTEGRA's serial number label example



Serial Number Label
Build Standard (BS) Version

(Actual label may differ from image shown.)

The last part of the serial number indicates the unit's Build Standard (BS) version.
Example: 1635-000010-03 → BS Version = 03