



Audinate<sup>®</sup>

Audinate Overview  
Audinate 简介

# Unsurpassed networking expertise 卓越的网络技术专家

- Global leader in AV networking, distributing top quality digital audio signals over computer networks  
全球AV网络技术的领导者，基于网络技术传输高质量的数字音频信号
- Dante has become the defacto standard with over 400 OEM licensees  
已有400多个品牌商选择Dante，Dante实际上已变成了行业的标准
- Broadest portfolio of a complete commercially supported networking solution  
具有最广泛的整体音频网络解决方案产品
- Intellectual property and patent portfolio  
自主研发，拥有相关多个知识产权和专利

Bringing the IT  
revolution to AV  
用IT技术来改革  
AV领域

Sydney Trains  
Sydney, Australia  
澳大利亚悉尼火车站





# Benefits of Dante Dante 技术的优势

- Rapid product development  
产品开发速度快
- Ease of use with plug and play and simplified connection management  
操作管理简单，即插即用
- Largest product ecosystem overring the highest level of interoperability  
支持产品数量最多的网络协议，保证了最高级别的互操作性
- Audinate offers a broad toolkit of commercially supported implementations  
Audinate提供各种工具（软件和硬件），支持各种项目实施需求



Melbourne Convention Centre  
Melbourne, Australia  
澳大利亚墨尔本会议中心



# Audinate Global Presence 全球布局

- Audinate Pty Ltd (Sydney Aus-澳大利亚悉尼)
- Audinate Inc. (Portland, OR-美国波特兰)
- Audinate Ltd. (UK-英国)
- Audinate Limited (Hong Kong-香港)
- Audinate Germany (Berlin-德国柏林)
- Audinate Japan (Tokyo-日本东京)
- Audinate China (Shanghai-中国上海)



# Dante is deployed across a wide range of market segments 广泛的市场领域



**Commercial installation**  
商业安装

- Conference rooms 会议室
- Convention centres 会议中心
- Universities 大学
- Houses of worship 教堂
- Hotels 酒店



**Broadcast**  
广电

- Broadcast Studios 演播室
- Sporting events 体育活动
- Recording Studios 录音棚



**Transport**  
交通

- Public transport facilities 公共交通
- Airports 机场



**Stadiums**  
体育馆

- Outdoor Stadiums 户外体育场
- Indoor Arenas 室内体育场
- Racetracks 赛马场



**Live sound**  
现场演出

- Concert Halls 音乐厅
- Theatres 剧场剧院
- Night Clubs 酒吧

## Examples of Dante installations 项目案例

- Milano Congress Centre 米兰国会中心
- Westfield Shopping Centre 西田购物中心
- Willow Creek Church 柳树溪教堂
- Bellagio Hotel and Casino 贝拉吉奥酒店和赌场



- NBC USA 美国NBC
- Microsoft Production Studios 微软演播室
- CBS Sports CBS体育
- BBC



- Sydney Trains 悉尼火车站



- ANZ Stadium ANZ体育馆
- American Airlines Arena 美国航空球场
- Randwick Racecourse 皇家兰德威克赛马场
- Daytona Motor Speedway 代托纳国际赛车道



- Foo Fighters 喷火战机乐队
- Maroon 5 魔力红乐队
- Moscow Bolshoi Theatre 莫斯科大剧场
- Ministry of Sound London 伦敦俱乐部





# Dante is the defacto audio networking standard 音频网络行业标准



# Growing network effect- Over 400 OEM licensees 增长的网络效应-超过400个品牌商

Number of Dante-enabled products drives economic network effect  
支持Dante的产品数量促使了对音视频行业的影响



Note: per financial half-year 注意：半年为节点

# Competitive landscape – Networked Audio Products

## 竞争分析-网络音频协议

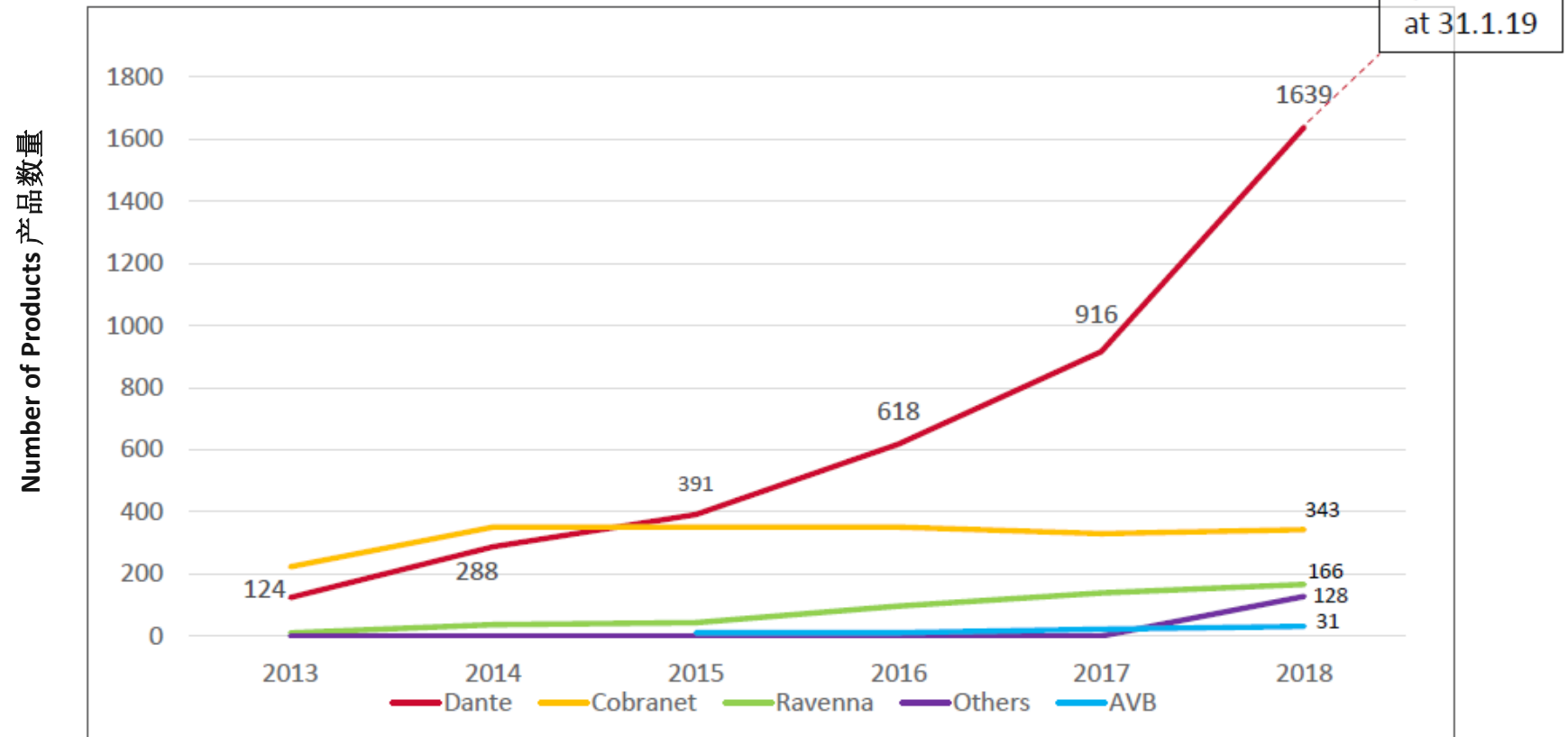
Audinate is the clear global market leader compared to competing audio networking solution providers.

相对于其它网络音频协议，Audinate很明显已是全球市场的领导者

Dante has nearly five times the adoption of its closest competitor

Dante几乎是最接近的竞争者的五倍

Total products per protocol<sup>(1)</sup> 总产品数量/协议



1) RH Consulting, Networked Audio Products 2018 and Audinate company data 以上数据来自RH顾问公司和Audinate



- What is Dante?
- 什么是Dante?



# WHAT IS DANTE? 什么是 Dante

---

**DANTE IS A HARDWARE AND SOFTWARE SOLUTION THAT TRANSPORTS PRECISELY TIMED DIGITAL AUDIO BETWEEN DEVICES USING STANDARD IP NETWORKING**

**DANTE 是一种结合了硬件和软件，使用标准 IP 网络技术在设备之间传输接近零延时数字音频的解决方案**

---



Easy to integrate  
集成容易

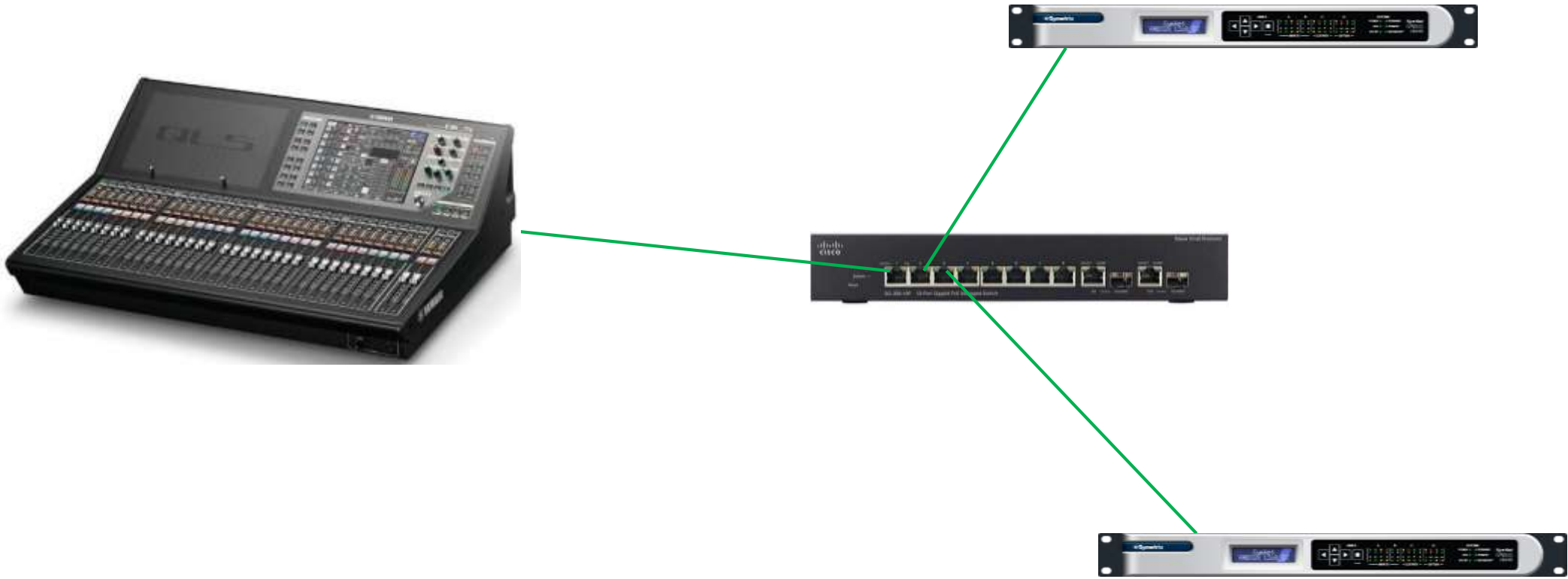
Easy to install  
安装容易

Easy to use  
使用容易

**Now Easy to Manage**  
管理容易

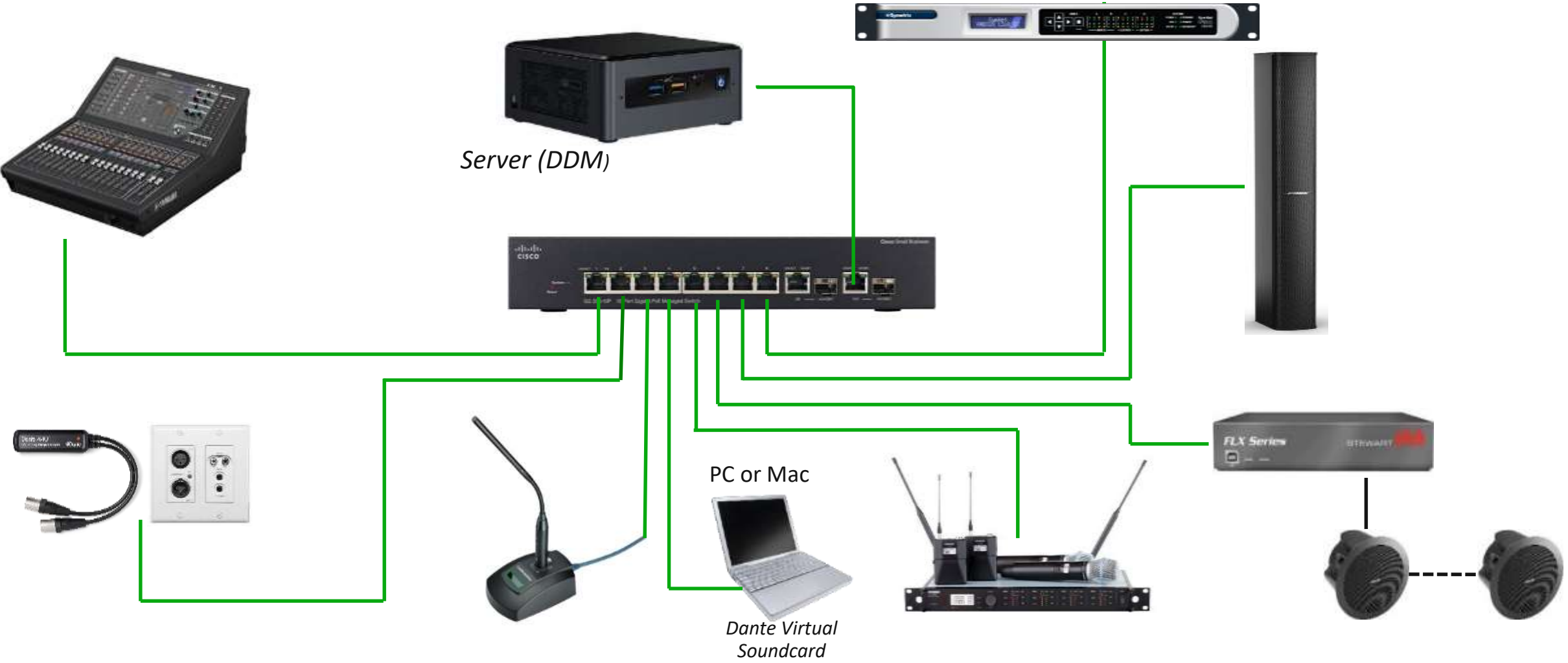


# Basic Dante Installation 基本的Dante系统

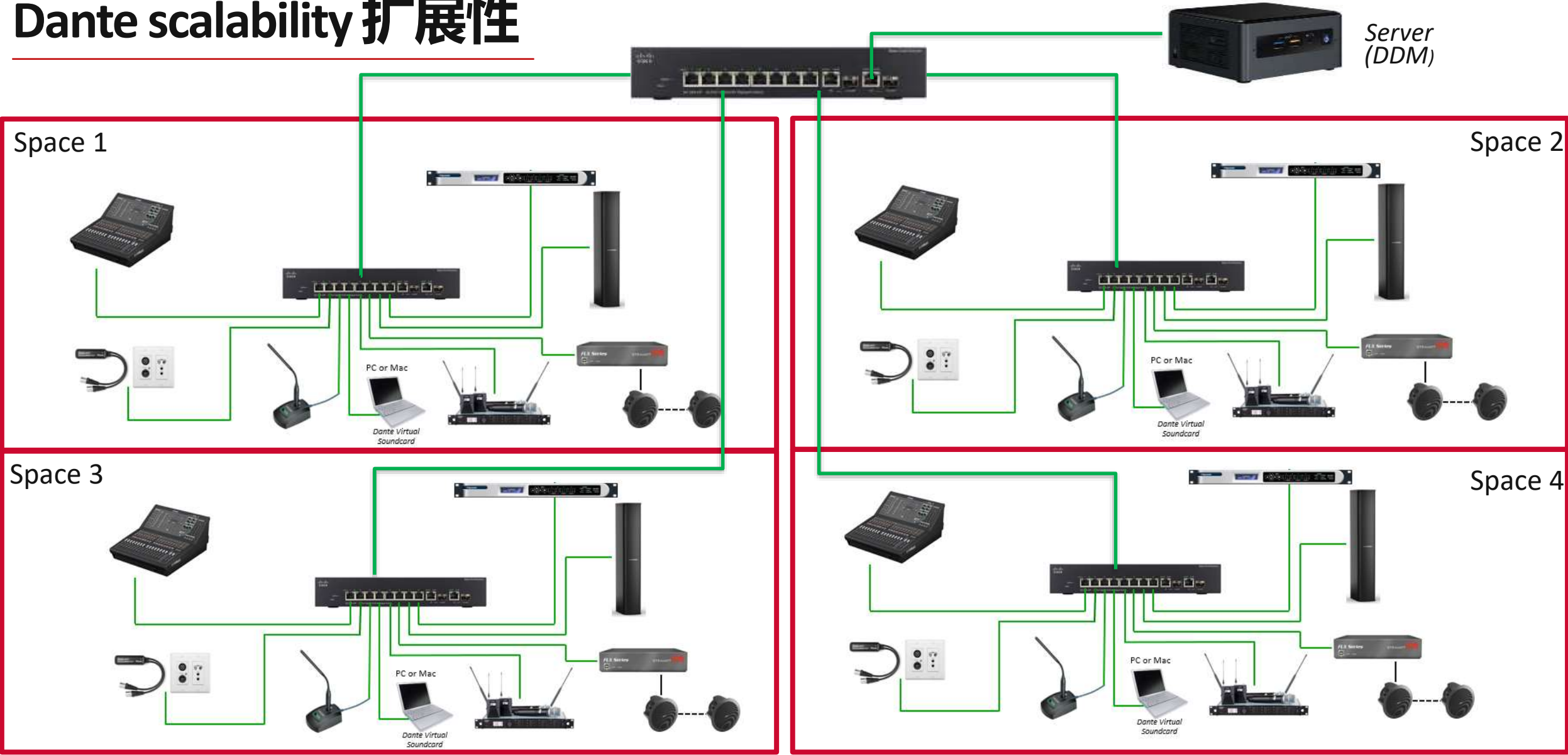




# Complete Design 完整的设计



# Dante scalability 扩展性



# WHY USE DANTE? 为什么使用Dante?

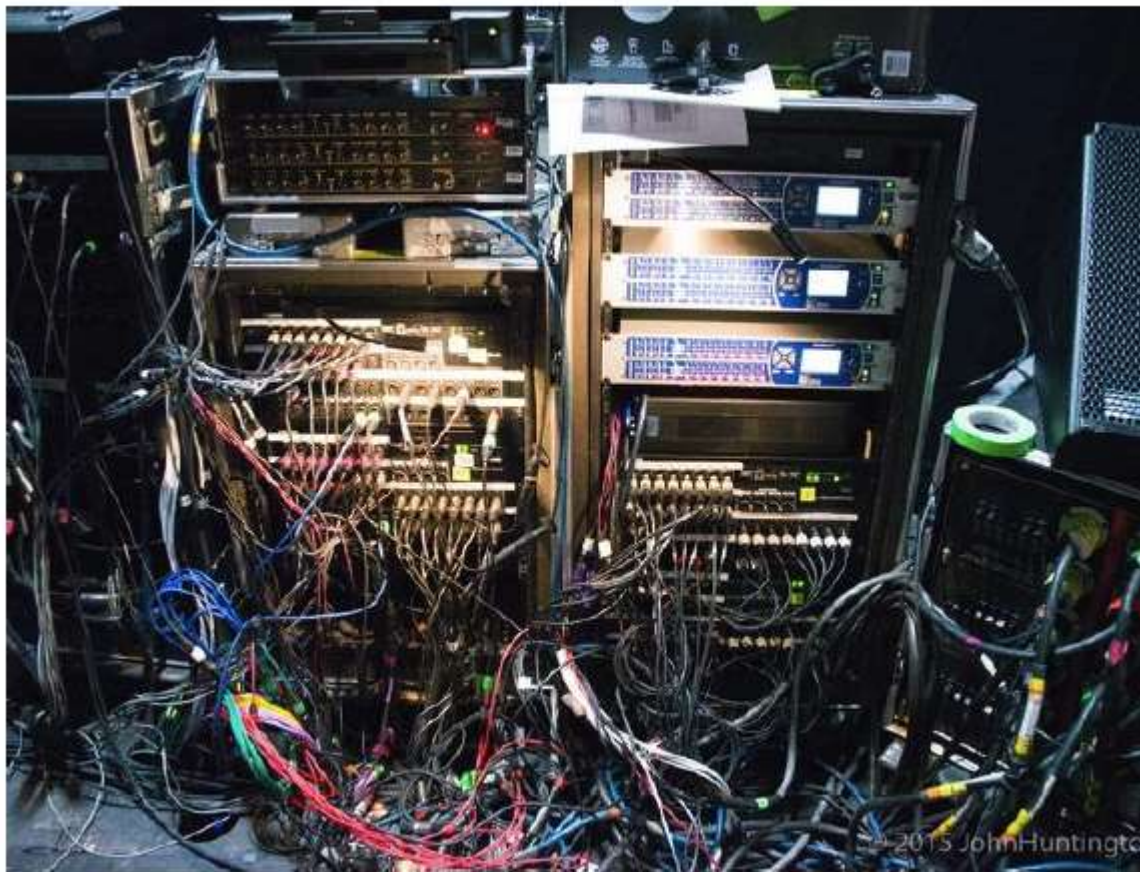
- Commercially support by network experts  
与行业网络专家合作
- Complete stack implementation  
完整的堆栈实现
- Technical support  
强大的技术团队
- Integration to Macs /PCs  
与Mac和PC电脑无缝集成
- Guaranteed interoperability Plug and Play  
即插即用
- Automatic device discovery  
设备自动发现
- Custom name-based labeling  
可自定义设备标签
- One-click routing  
一键路由

- Low, deterministic latency  
延时极低（微秒级）
- Precise time alignment of all audio  
精确的时间对准
- Virtually jitter-free  
几乎无抖动
- Redundancy  
可备份冗余
- Routing over layer 3 subnets  
可跨3层子网路由
- Automatic re-connection after power cycles  
断电自动连接
- Enterprise management  
企业级管理
- Network status/health  
网络状态运行实控（支持SNMP协议）



# One cable for media and control 单根网线即可传输内容和控制

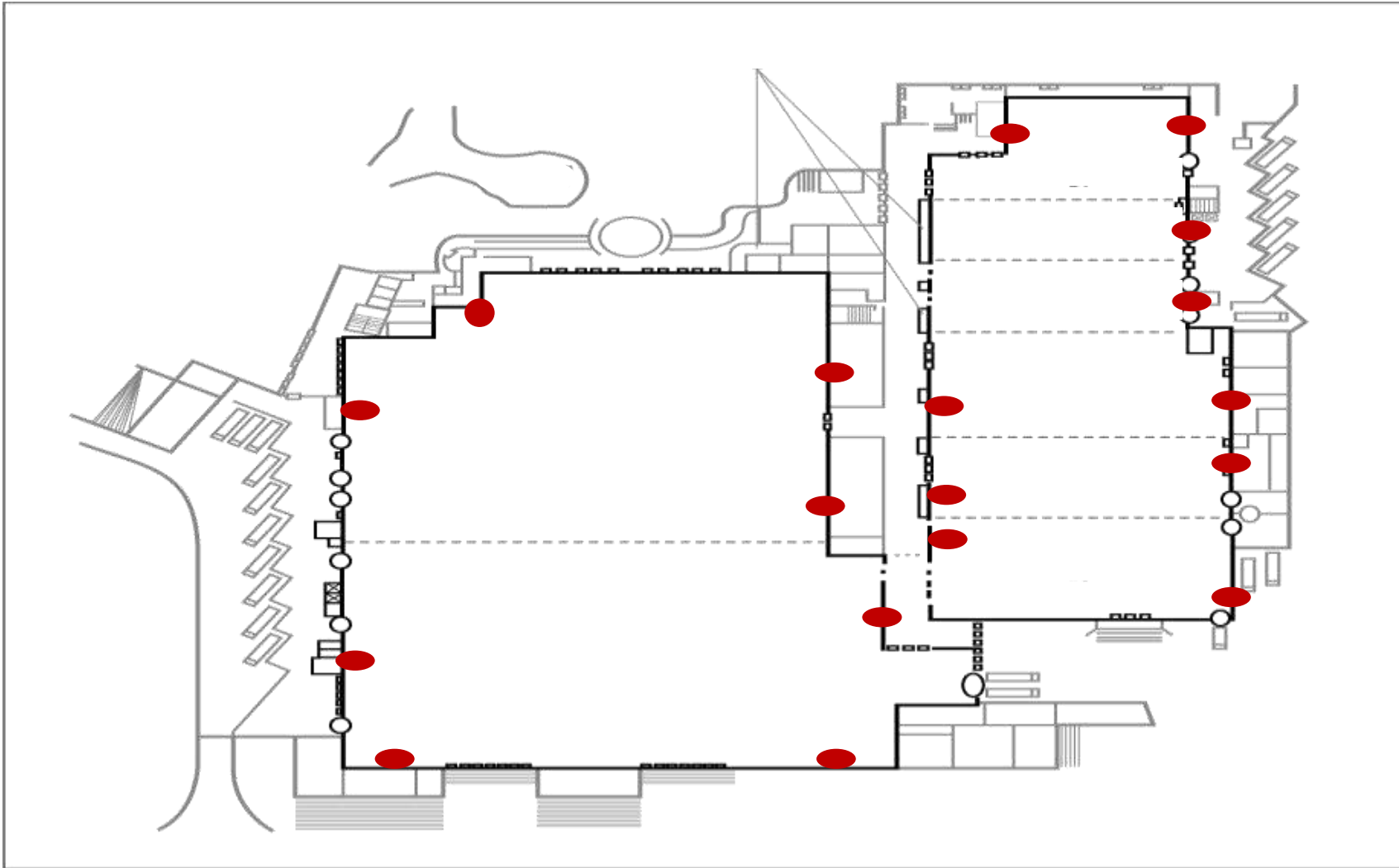
Before Dante



After Dante



# Wire and labor savings 节省了线材和人工成本



**18 drops of Cat5e  
cable  
18根Cat5e网线即可**



**Compared to 108  
drops of analog  
cable  
对比108条模拟音频线**





• Dante Implementations

• Dante 实施



# Audinate products 产品线

## Chips, Modules and Cards 芯片，模块和卡

Dante Ultimo (Chip)



Used in low channel applications (e.g. speakers and microphones up to 4x4 channels)  
用于通道数量少的应用（如音箱或者话筒，最多4×4）

Dante Brooklyn II (Module)



Used in medium to high channel applications (e.g. mixers and amplifiers up to 64x64 channels)  
用于中等到高等通道数量的应用（如调音台和功放，最多64×64）

Cards



Peripheral soundcards and network option cards specifically designed for individual OEMs  
周边声卡和网络选项卡，主要针对个别厂商

Dante Broadway (Chip)



Used in medium channel count applications (e.g. speakers and microphones from 4x4 up to 16x16 channels)  
用于中等通道数量应用（如音箱和话筒，4×4到16×16）

## Reference designs 特殊设计

IP Core Implementation

Enables OEMs to incorporate Dante software into their own chips (up to 512x512 channels)  
集成Dante软件平台于厂家自己的芯片（可以达到512×512通道）



## Adapter products 适配器

Dante AVIO

Enables connection of analogue equipment to a digital Dante network  
传统模拟设备和数字设备转换



# Audinate products 产品线

## Software 软件

### Dante Controller



Software to enable the configuration and setup of Dante enabled networks  
用于Dante系统的设置

### Dante Virtual Soundcard



Software-only sound card enabling PC and Mac audio applications to connect to Dante-enabled devices on the network.

Robust, high channel count application that makes a PC or Mac an audio component in an audio network  
用于连接电脑应用软件和支  
持Dante的设备终端。  
功能强大，支持高通道应用，使电  
脑成为Dante网络系统的一部分

### Dante Via



Software that turns audio applications and computer audio hardware into Dante channels, that can be connected to Dante-enabled devices on the network

Enables computer-only Dante networks to be created  
该软件可把电脑软件和电脑硬件转  
换成Dante信号，并可以和支持  
Dante的设备连接。  
支持只有电脑的Dante网络系统

### Dante Domain Manager

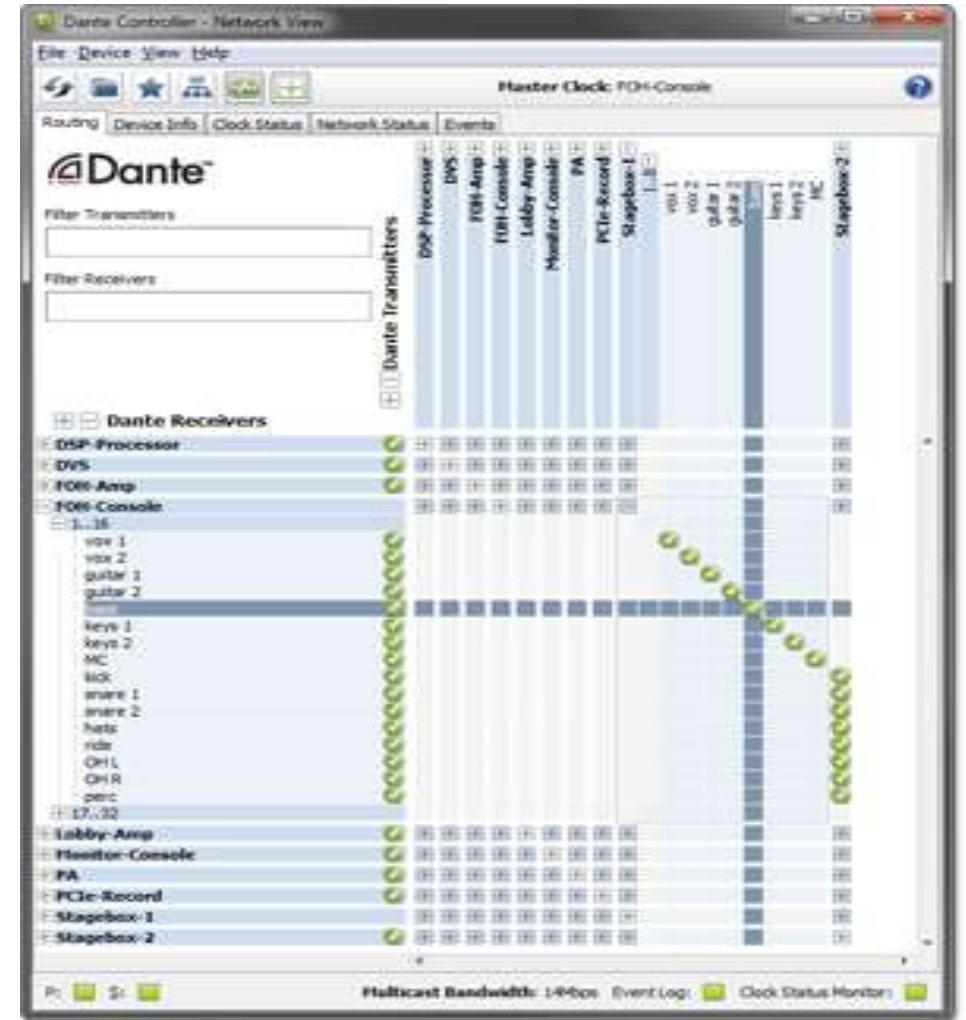


Provides network administrators with the ability to secure their audio networks from unwanted changes and modifications

Provides the ability to scale and segment audio networks regardless of the physical constraints of the network. For example, in a campus setting, different audio groupings can be managed and integrated by room, building and site  
提供网络管理平台，保证音频网络的安全，不被随意的更改和变更。  
不限于网络物理限制，可以任意的扩展和分割音频网络系统。例如针对一个校园项目，可以针对不同的房间，建筑或者场馆分为不同的音频组

# Dante Controller

- Simple plug and play signal routing application  
音频路由配置和应用非常简单，即插即用
- Configure 配置内容
  - Sample rate 采样率
  - Word clock I/O 字时钟I/O
  - Network latency 网络延时
  - Clock master preferences 主时钟选择
- Diagnostics 诊断
  - Link up/down, throughput, errors, clock master changes, etc  
链路连接，数据流量，错误提示，主时钟选择等
- Freely available  
免费使用





# Dante Virtual Soundcard

- Connects existing audio applications to a Dante network  
连接音频软件于Dante网络系统
  - DAW software  
音频工作站软件
  - Conferencing (e.g. Skype, Zoom)  
会议软件（例如：Skype, Zoom）
  - Recording and playback  
录音和播放软件
- Up to 64x64 channels  
最多支持64x64通道
- Uses built-in Ethernet  
使用内置以太网
- Appears as a soundcard  
以声卡的方式呈现
  - Core Audio (Mac)
  - ASIO + WDM (Win)



# Dante Via

- Networks, merges and routes all of your computer's audio streams and devices  
网络化，合并和路由所有电脑音频流信号和其周边设备
- Connect your USB and Firewire interfaces to a Dante audio network  
连接USB和火线接口于Dante音频网络系统
- Extend your computer's microphones and speakers with a Dante network  
扩展电脑内置话筒和音箱于Dante网络系统
- Create a Dante audio network using only computers  
只使用电脑即可组建Dante网络系统
- Bridge your audio-capable applications directly to Dante  
直接桥接电脑的音频软件于Dante系统
- Drag and drop UI  
操作界面简单（拖拽即可）



# Dante AVIO Adaptors – Network Everything 一切皆为网络



Dante for  
“brown field” installations  
用于“灰色领域”

Introduced 6 new  
Dante AVIO products  
6款不同类型产品

“Problem solver” for  
System Integrators  
解决集成商所面对的问题

Interoperability and  
Scalability  
互操作性和扩展性

Online retail &  
country distributors  
网上销售和分销商

Pull through  
Dante products  
健全产品线

- Rationale 原由
  - Add Dante to brown-field AV installations (mostly analogue)  
增加Dante于“灰色AV系统领域”（主要是模拟设备）
  - Add Dante to existing analogue, USB and AES3 audio product  
增加Dante于已存在的模拟、USB和AES3音频设备
  - Pull through Dante products and software  
健全Dante的产品线和软件



# INTRODUCING THE DANTE AVIO FAMILY OF ADAPTERS

## DANTE AVIO的产品线

Analog Input 模拟输入	Analog Output 模拟输出	AES3/EBU	USB
<p>“On ramp” to Dante networks from line level outputs, 1 or 2 channels 模拟输出转Dante网络 (1或2通道)</p>	<p>“Off ramp” from Dante networks to line level inputs, 1 or 2 channels Dante网络转模拟输入 (1或2通道)</p>	<p>Bidirectional, 2-channel AES3 connection to and from Dante networks AES3转Dante网络 (2x2通道)</p>	<p>Bidirectional, 2-channel USB class-compliant audio connection to Dante networks USB转Dante网络 (2x2通道)</p>





# DANTE AVIO ANALOG INPUT

## DANTE AVIO 模拟输入

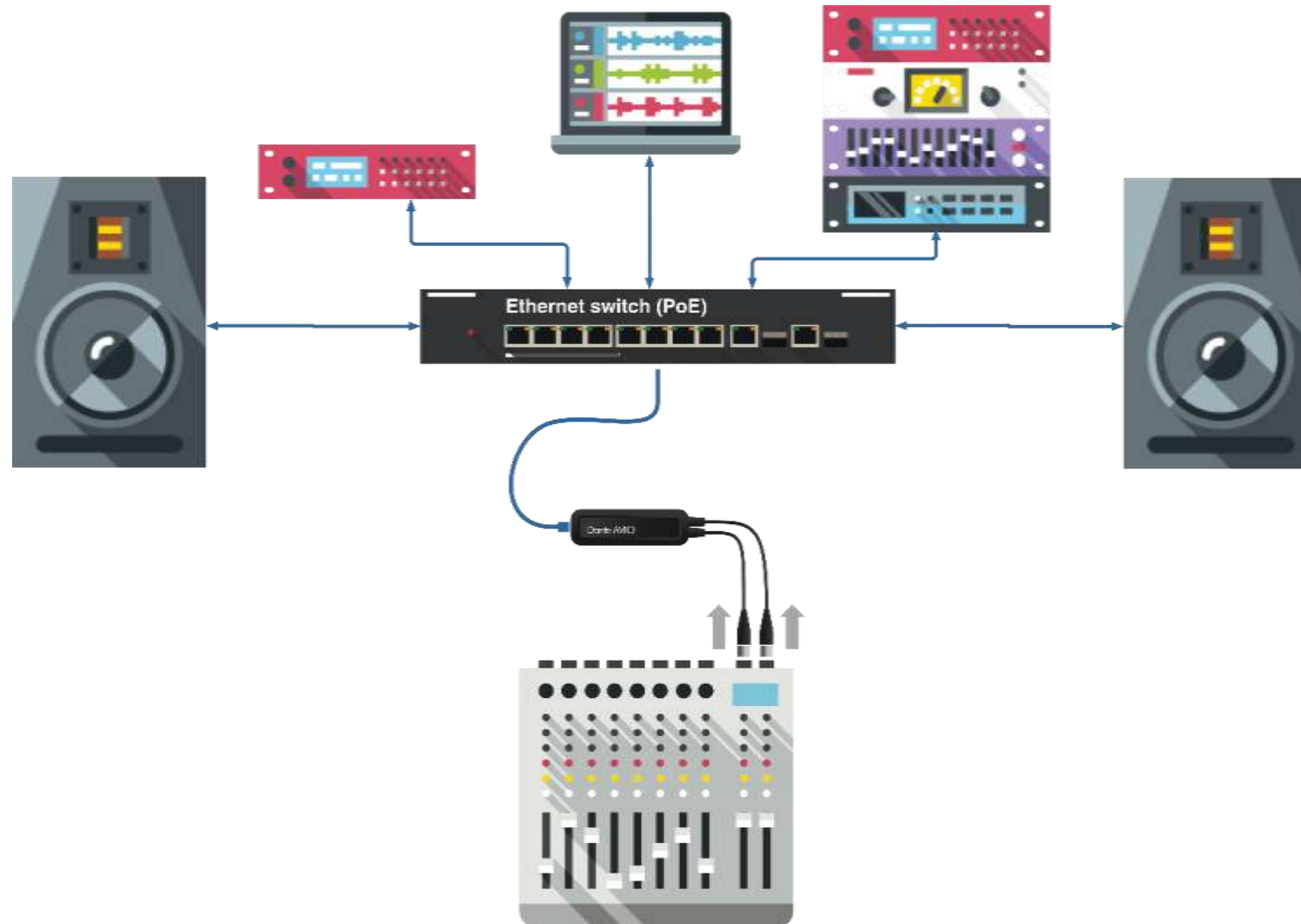


- “On ramp” from line-level analog to Dante network  
模拟线路输出转Dante网络
- For mixing consoles, wireless mic receivers, stage DIs and more.  
主要用于调音台，无线话筒接收器，舞台接口箱等
- Combine with Dante AVIO Analog Output for complete I/O of compressors, equalizers, etc.  
结合AVIO的输出适配器可以完全解决传统压缩器或均衡器不支持Dante的问题
- PoE powered  
PoE供电
- Balanced or unbalanced input  
支持平衡输入和非平衡输入
- 44.1, 48 & 96 kHz sample rates  
支持44.1、48 & 96kHz采样率
- 1- and 2-channel versions  
两个版本：一个通道或两个通道



# DANTE AVIO ANALOG INPUT

## DANTE AVIO 模拟输入



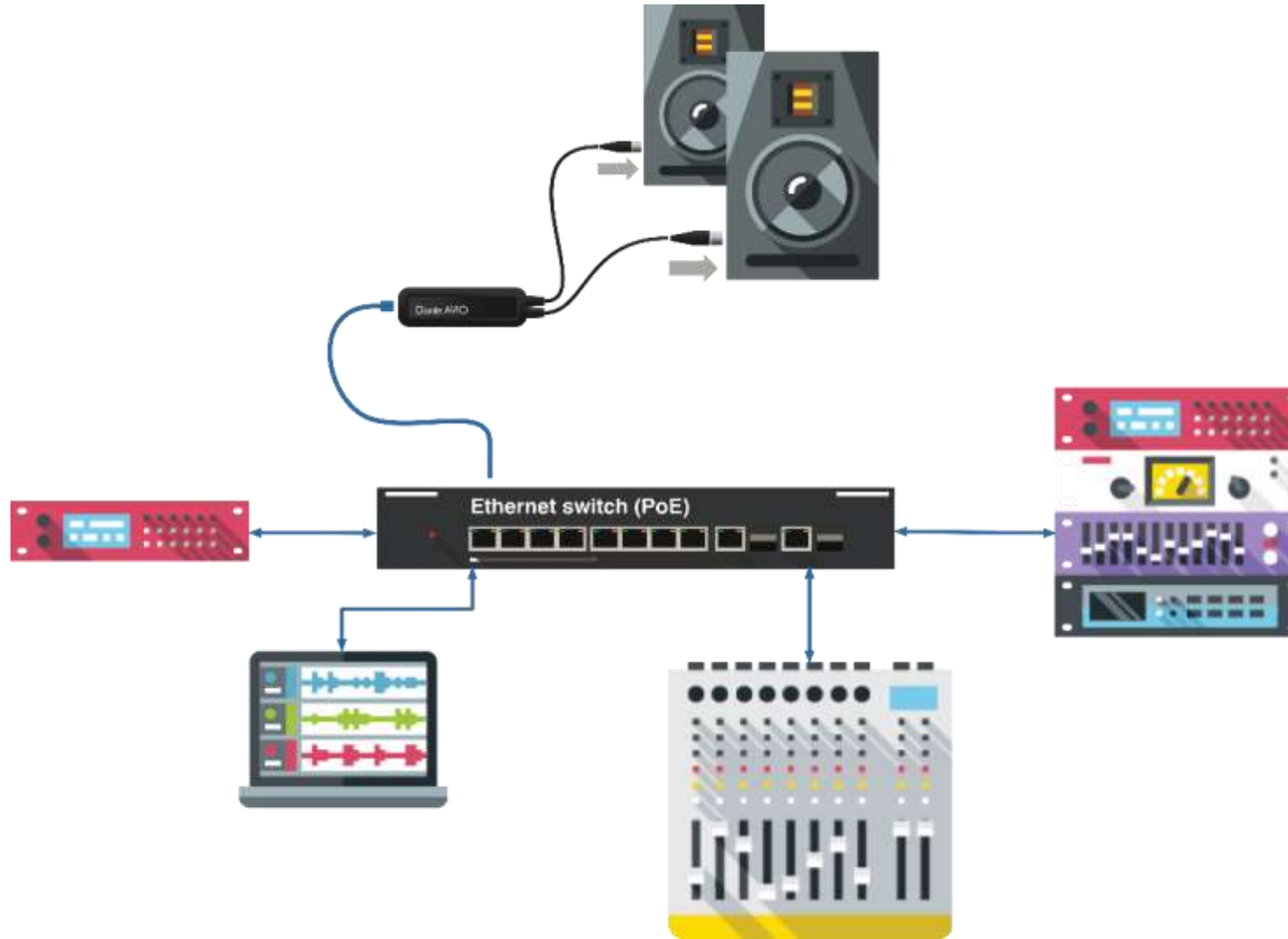
# DANTE AVIO ANALOG OUTPUT

## DANTE AVIO 模拟输出



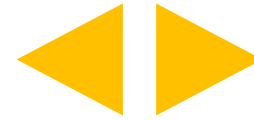
- “Off ramp” from Dante network line-level analog  
Dante网络转模拟线路输入
- Use with amplifiers, powered speakers, mixing consoles etc.  
主要用于模拟功放、有源音箱、调音台等
- Create easy drop-points for connecting overflow areas to a Dante network  
为整体Dante网络系统中的输出设备提供了简单的解决方案
- PoE powered  
PoE供电
- Balanced or unbalanced output  
支持平衡输出和非平衡输出
- 44.1, 48 & 96 kHz sample rates  
支持44.1、48 & 96kHz采样率
- 1- and 2-channel versions  
两个版本：一个通道或两个通道

# DANTE AVIO ANALOG OUTPUT DANTE AVIO 模拟输出





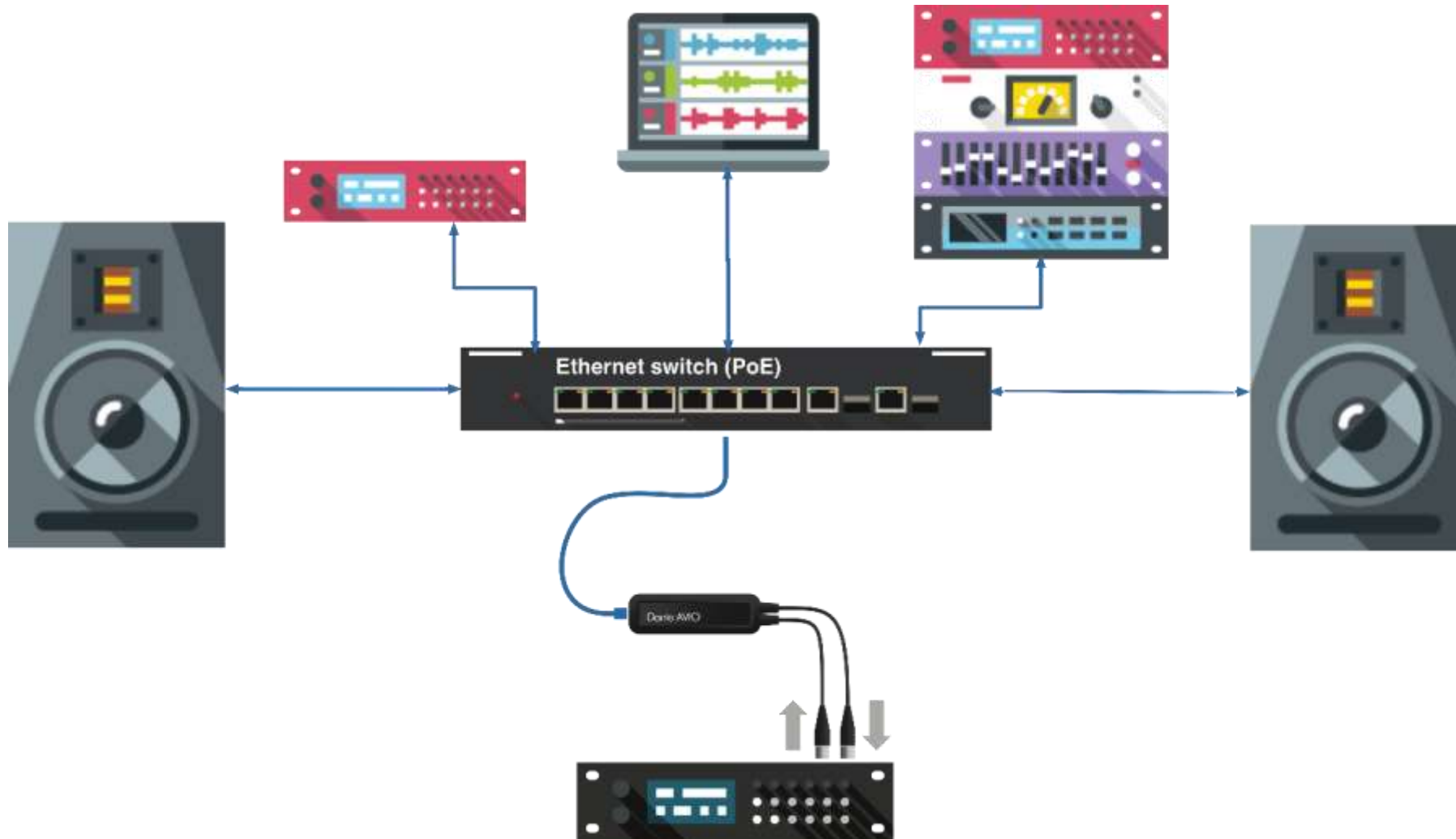
# DANTE AVIO AES3/EBU



- 2 channels of bidirectional AES3 audio to Dante internet  
2通道双向的AES3信号转为Dante网络
- Connect high quality AES3 products to a Dante network, like broadcast recorders, mixing consoles, DSPs, amplifiers, etc.  
主要用于连接高质量的AES3的产品, 例如广电的录制设备、调音台、处理器、功放等
- Keep signals 100% in digital domain  
保持信号100%处在数字领域
- PoE powered  
PoE供电
- 44.1, 48 & 96 kHz sample rates  
支持44.1、48 & 96kHz采样率



# DANTE AVIO AES3/EBU

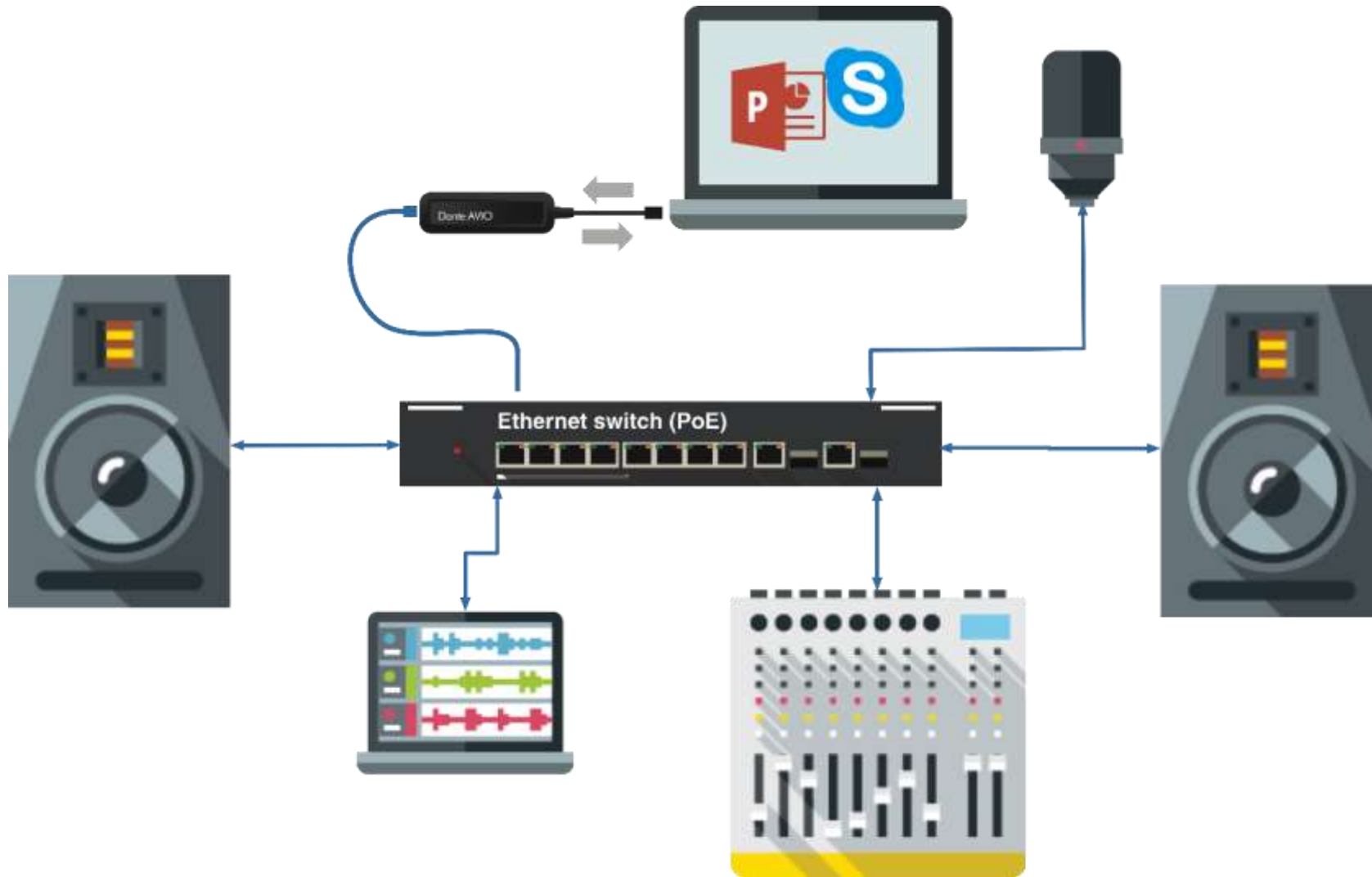


# DANTE AVIO USB



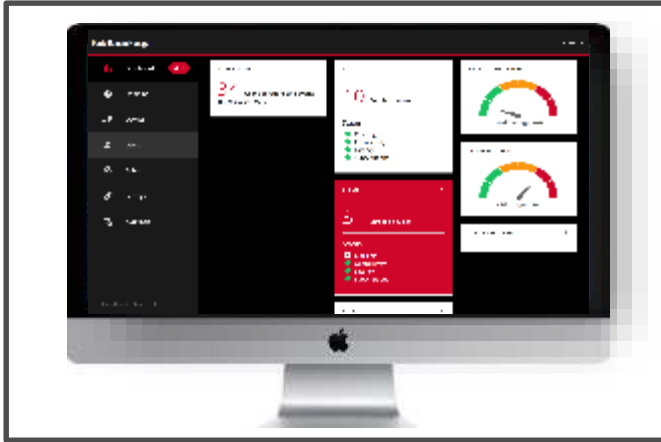
- 2 channels of bidirectional USB audio to Dante internet  
2通道双向的USB信号转为Dante网络
- Ideal for conference rooms and class room  
非常适合会议室和教室
- Connect any PC or Mac to a Dante network with no additional software  
连接任何的PC或者Mac到Dante网络, 且不需要安装任何软件
- Change computers without changing audio subscriptions  
更换电脑不需要重新设置音频的路由
- Works with any audio application  
兼容任何音频应用
- PoE or USB bus powered  
PoE或者USB供电
- 48 kHz sample rate  
只支持48kHz采样率

# DANTE AVIO USB





# Dante Domain Manager – System Management Software 系统管理平台



Secure Control  
安全控制

Scale beyond a LAN  
不限于本地网络

Logging & Auditing  
修改记录 & 报告

Domains Management  
域管理平台

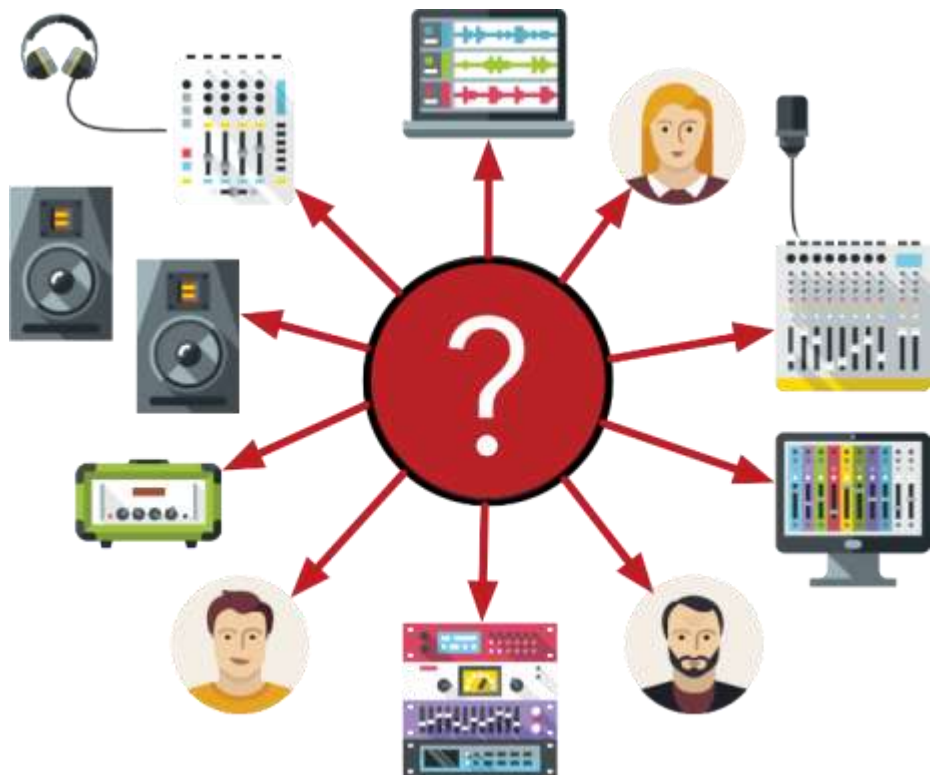
Sales Channel Established  
(System Integrators)  
销售渠道（集成商）

Sold to Installed Base  
安装工程

- Commercial product launch Feb 2018 at Integrated Systems Europe (ISE) tradeshow  
2018年2月份的荷兰ISE展正式发布
- Offered in Silver, Gold and Platinum Editions  
有三个版本：Silver，Gold和Platinum
- Install AV Awards: Signal Management Product of the Year  
获得当年信号管理产品奖：Install AV Awards
- Support up to 1,050 devices  
最多支持1,050设置



# AV networks bring IT-level concerns AV网络系统所带来的IT级的困扰



**How can I make sure that only authorized changes are made?**

**怎样可以保证只有被许可的修改发生?**

**How can I tell who has made changes to my system? What did they do?**

**怎样可以得知谁修改了系统，且修改了那些内容?**

**How can I centralise Dante AV system management in my site?**

**怎样可以统一集中管理Dante的AV系统?**

**How can I quickly tell if the system is working correctly?**

**怎样可以快速的得到系统是否正常运行?**

# What is Dante Domain Manager? Dante域管理平台是什么呢?

- ✓ Dante Domain Manager is software to manage, monitor and secure your entire Dante network

Dante域管理平台是一个可以管理、监控和保护整个Dante网络系统的软件管理平台

- ✓ Runs in server platforms, desktop and virtual environments

可运行在服务器、电脑或者虚拟系统

- ✓ Familiar and intuitive dashboard – authorized access wherever you need Dante device visibility

简单直观的操作界面-可随时随地监控Dante设备的运行状态

- ✓ Not in the audio path – audio continues even if the server has failed or is unreachable

不影响音频路由-管理平台出现故障，音频信号可继续工作



# ABOUT DANTE DOMAINS

## 什么是Dante域

✓ A Dante Domain is a logical group of devices and users with access controls

一个Dante域是由支持Dante的设备组成的一个逻辑组，并给与用户相应的管理权限

✓ A Dante Domain may be used to represent a location, building, zone, ...

一个Dante域可能代表一个场所、建筑、区域...

✓ Many Dante Domains can share one underlying network

不同的Dante域可以共享一个基础网络系统

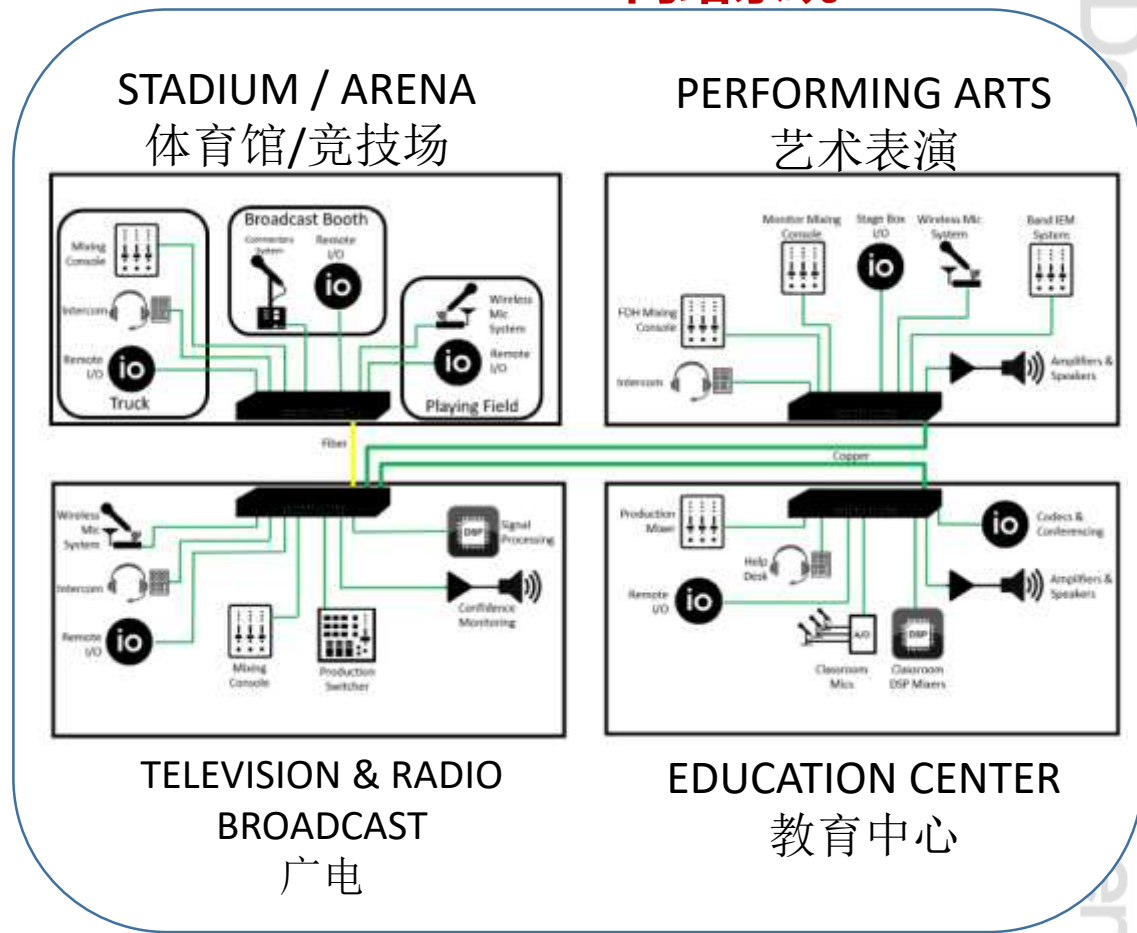
✓ A Dante Domain may span IP subnets

Dante域可以跨子网管理

✓ A Dante Domain can be isolated in terms of connectivity, audio and user access

对于系统的互联、音频路由和用户权限，Dante域之间可以相互独立

### Your network 网络系统



## AUTHENTICATION

### 用户授权

- For every device, every computer & user  
可以针对每一台设备，电脑和用户给予相应授权
- Optional integration with Active Directory  
可以集成活动目录集系统

## USER ROLES

### 用户角色

- Grant access only where needed, control changes  
只有管理内容需要更改的时候才需要最大的管理权限
- Four built-in privilege levels  
四个内置的权限级别

## DOMAIN MANAGEMENT

### 域管理

- Per-domain user privileges are supported  
支持单个域用户管理
- Domains can be isolated from each other  
域和域之间可以相互独立

## ROUTED CAMPUS NETWORKS

### 校园级路由网络

- Minimize or eliminate IT/network changes  
可最小化或者消除IT网络的变化
- No need to have Dante devices in a single subnet  
Dante设备不需要在一个单独的子网内

## LARGE SYSTEMS

### 支持大系统

- Divide large systems into logical Dante domains  
可把大系统分割成方便管理的多个逻辑Dante域
- Deploy Dante transparently across network subnets  
Dante系统可以跨子网管理

## HIGH AVAILABILITY

### 高可靠性

- Support for redundant DDM servers  
支持DDM服务器冗余备份

CHECK SYSTEM STATUS  
INSTANTLY  
可实时查看系统状态

- Centralized status logging & reporting  
集中统一的系统状态运行记录和报告
- User-configurable dashboard shows key information  
用户自定义的监控界面显示关键系统信息

AUDIT REPORTS  
审核报告

- Complete, time-stamped log of changes & events  
完整的以时间为标记的事件和修改记录
- Know who did what & when  
可明确修改对象，修改内容和修改时间

REMOTE ALERTS  
远程告警

- Integrate with SNMP network management tools  
可集成于支持SNMP的网络管理平台



# Easy to use 使用方便

## BROWSER-BASED MANAGEMENT GUI

基于浏览器的管理界面

- Use with all popular browsers and devices  
使用普通浏览器和设备即可操作

## INTUITIVE NAVIGATION

直观的操作

- Manage Dante domains, devices, users & roles in a single window  
在一个窗口管理Dante域、设备、用户和用户角色
- Clear and easy to understand  
非常容易理解

## SIMPLE DEVICE DISCOVERY & ENROLLMENT

设备发现和注册简单

- Simple and/or automated Dante device discovery  
支持Dante的设备可容易的被自动发现
- Simple, configurable, domain enrollment  
设备域管理和注册简单

# Dashboard for system status 系统状态的监控界面

The screenshot shows the Dante Domain Manager dashboard. At the top left, it says "Dante Domain Manager" and "admin" is logged in. A sidebar on the left contains navigation icons for Dashboard, Domains, Devices, Users, Roles, Settings, and Audit Log. The main content area is divided into several sections:

- DISABLED**: A grey box with a warning icon indicating "High Availability is disabled".
- External Services**: A section containing two grey boxes with warning icons: "SNMP Proxy Agent" (Receives SNMP queries and sends responses, Disabled) and "Email Service" (Sends notifications and reset password link, Disabled).
- MOST RECENT**: A white box showing "234 User operations and events in the last 24 hours".
- 2 INTERNAL SERVICES**: A white box with a right-pointing arrow.
- Domains**: A red box for the "STADIUM" domain showing "6 Enrolled devices". Below it, a "Status" section lists: Cloning (green dot), Connectivity (red X), Latency (green dot), and Subscriptions (red X).

At the bottom left of the dashboard, it says "Dante Domain Manager v0.1".

Dante Domain Manager™

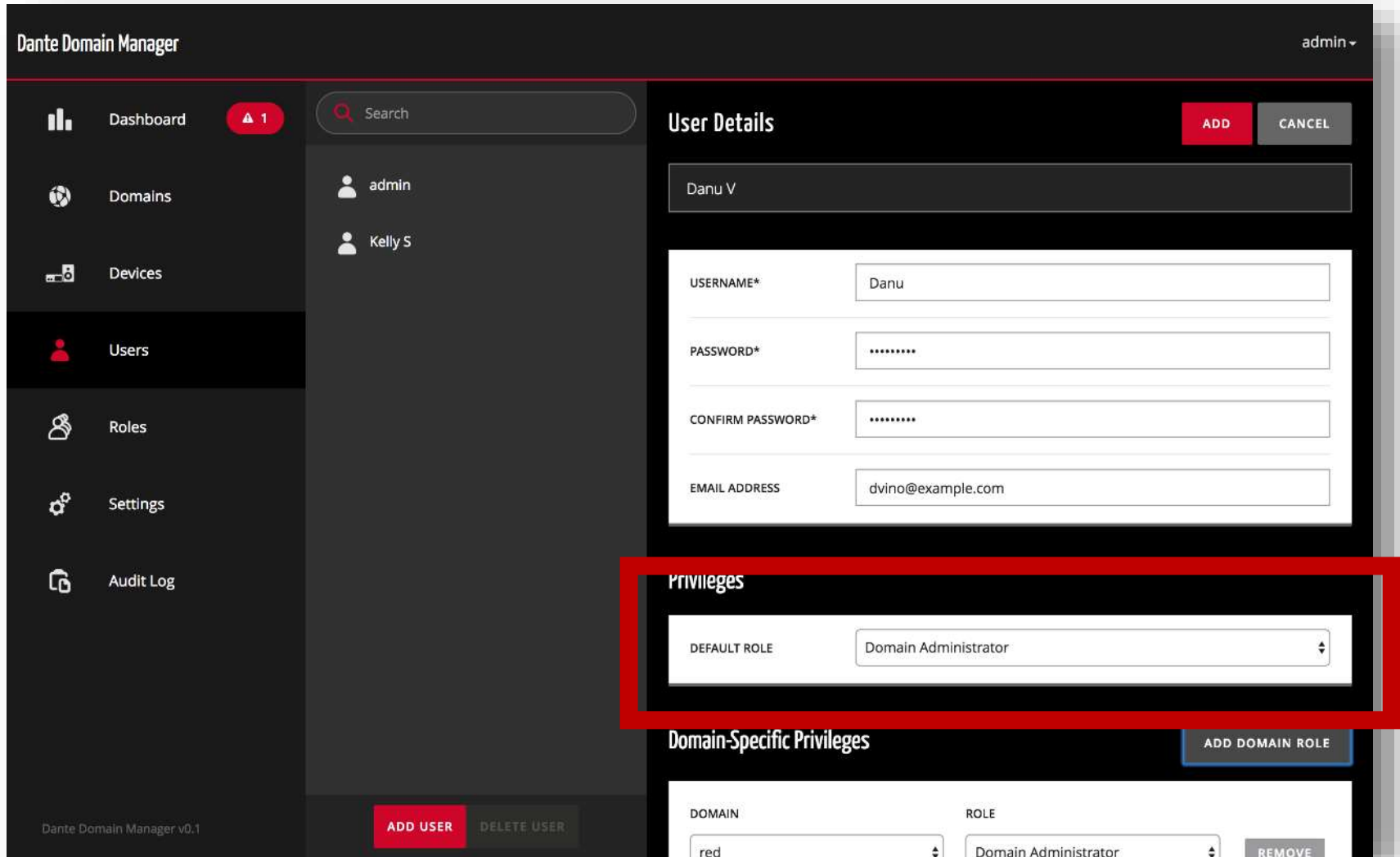
# Audit Log 审核日志

The screenshot shows the Dante Domain Manager interface with the Audit Log section active. The left sidebar contains navigation options: Dashboard, Domains, Devices, Users, Roles, Settings, and Audit Log. The main content area displays the Audit Log with a search bar, filters for 'Whole words only' and 'Match Case', and buttons for 'EXPORT TO CSV' and 'ADD FILTER'. A table shows log entries with columns for Timestamp, Domain, Details, Category, Source, Target, Severity, and Type. The first entry shows 'User admin logged in to the admin interface' at 9:28 AM. A red text box is overlaid on the table.

TIMESTAMP	DOMAIN	DETAILS	CATEGORY	SOURCE	TARGET	SEVERITY	TYPE
Fri Jun 9 2017 9:28 AM		User admin logged in to the admin interface	Authenticati on	admin		Info	User Action
Fri Jun 9 2017 9:18 AM		User admin logged out of the admin interface	Authenticati on	admin		Info	User Action
Fri Jun 9 2017 9:17 AM	beast	Bulk unsubscription summary - unsubscribed from channel 7 to channel 12	Device Routing	admin	AIC128-D-015807	Info	User Action
	beauty	Unenrolled device BKLYN-II-06345c from domain beauty	Device Admin	admin	BKLYN-II-06345c	Info	User Action
	Rahul's Domain	Bulk subscription summary - subscribed 16 Rx channels to AIC128-D-080090	Device Routing	Rahul	BKLYN-II-0e8ea8-WIN	Info	User Action
	Rahul's Domain	Bulk subscription summary - subscribed 16 Rx channels to AIC128-D-080090	Device Routing	Rahul	BKLYN-II-0e8ea8-WIN	Info	User Action

Who did what, and when  
修改对象, 修改内容和修改时间

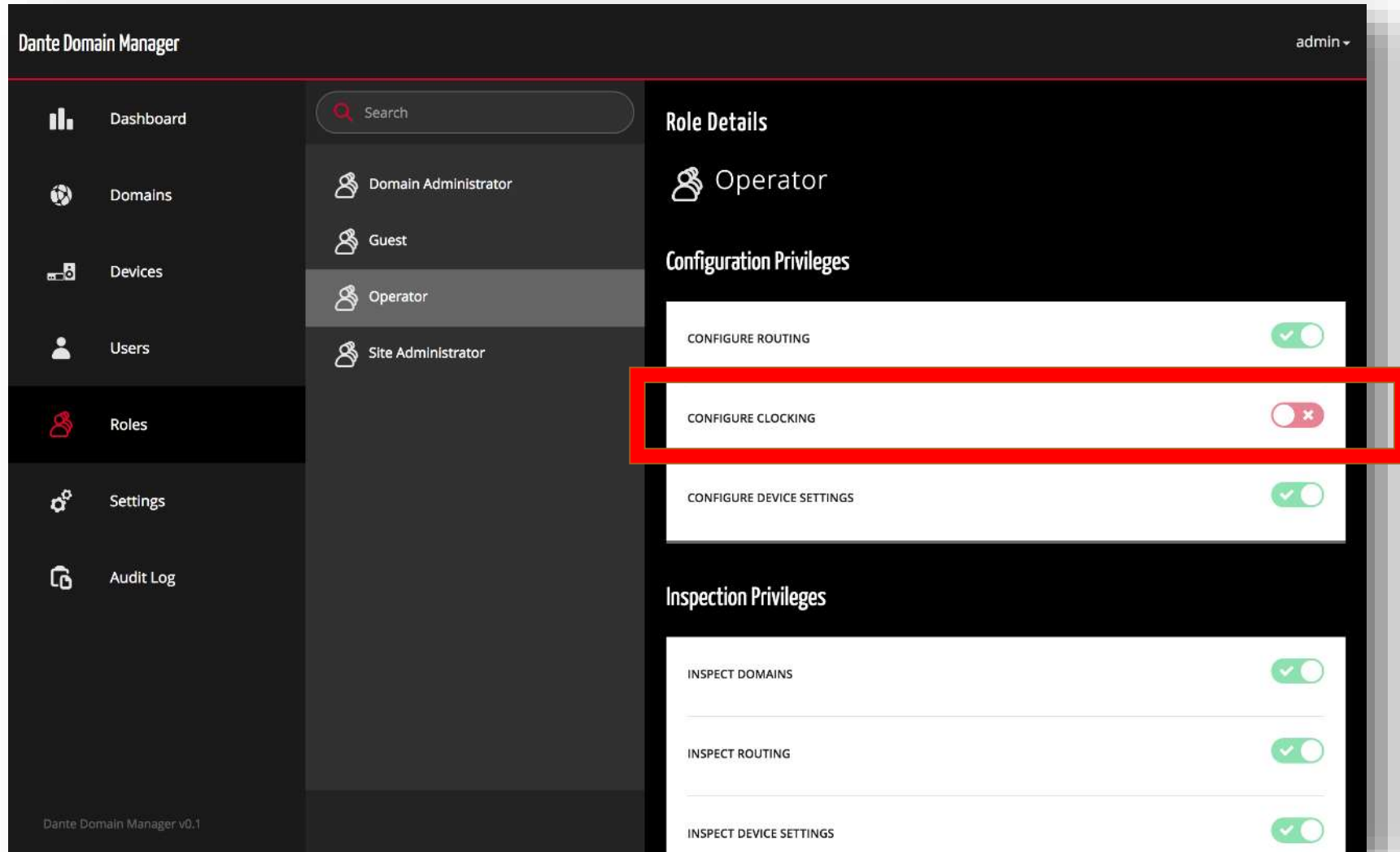
# Define users and privileges 用户授权和权限类别



The screenshot displays the Dante Domain Manager web interface. On the left is a navigation sidebar with options: Dashboard (with a notification badge '1'), Domains, Devices, Users (highlighted), Roles, Settings, and Audit Log. The main content area is titled 'User Details' and shows a form for adding a user named 'Danu V'. The form includes fields for USERNAME\* (Danu), PASSWORD\* (masked with dots), CONFIRM PASSWORD\* (masked with dots), and EMAIL ADDRESS (dvino@example.com). Below the form is a 'Privileges' section, which is highlighted with a red box. It contains a 'DEFAULT ROLE' dropdown menu currently set to 'Domain Administrator'. At the bottom, there is a 'Domain-Specific Privileges' section with a table for adding domain roles. The table has columns for 'DOMAIN' (set to 'red') and 'ROLE' (set to 'Domain Administrator'), with a 'REMOVE' button next to each entry. A blue 'ADD DOMAIN ROLE' button is located to the right of the table.



# Limit access to key functions 关键功能访问权限



The screenshot displays the Dante Domain Manager web interface. On the left is a navigation sidebar with options: Dashboard, Domains, Devices, Users, Roles, Settings, and Audit Log. The 'Roles' section is active, showing a list of roles: Domain Administrator, Guest, Operator (highlighted), and Site Administrator. The main content area shows 'Role Details' for the 'Operator' role. Under 'Configuration Privileges', three items are listed: 'CONFIGURE ROUTING' (enabled), 'CONFIGURE CLOCKING' (disabled, highlighted with a red box), and 'CONFIGURE DEVICE SETTINGS' (enabled). Under 'Inspection Privileges', three items are listed: 'INSPECT DOMAINS' (enabled), 'INSPECT ROUTING' (enabled), and 'INSPECT DEVICE SETTINGS' (enabled). The top right corner shows the user 'admin'.

# Domains and subnet crossing 域和子网跨越

The screenshot shows the Dante Domain Manager interface. On the left is a navigation sidebar with options: Dashboard, Domains, Devices, Users, Roles, Settings, and Audit Log. The 'Domains' section is active, showing a list of domains: Performing Arts Center, Stadium, and Law School. A red box labeled 'Dante Domains Dante域' points to this list. The main area displays 'Devices' for the selected domain, showing two subnets: 10.10.70.0/24 and 10.10.72.0/24. A red box labeled 'Devices in domain 域里的设备' points to the device list under the first subnet. Another red box labeled 'Subnets in domain 域里不同的子网' points to the two subnet headers. The device list includes Stage Manager's Mic, Stage Box, House DSP, FOH Console, RTL Intercom, and House Amplifier, all with 'ENROLLED' status and 'ONLINE' connectivity.

NAME	ENROLL STATE	CONNECTIVITY
Stage Manager's Mic	ENROLLED	ONLINE
Stage Box	ENROLLED	ONLINE
House DSP		ONLINE
FOH Console		ONLINE
RTL Intercom	ENROLLED	ONLINE
House Amplifier	ENROLLED	ONLINE

- Easy Troubleshooting Environments 系统故障排查容易
  - Multiple Conference Rooms Around a Facility  
一台设备可同时监控多个会议室
- Global View of All of My Rooms 可全球监控
  - Make sure that all of my conference rooms are up and running at the beginning of each day  
确保全球所有会议室每天都可正常运行
  - Centralized Management  
可统一集中管理
- Reporting on the Environment 根据环境需求提供数据报告
  - Can be exported to 3<sup>rd</sup> party reporting system like Crystal Reports  
可提供系统数据予第三方监控系统，例如： Crystal系统

# Problems Addressed by DDM

## DDM可解决的问题

---

*Examples*

列举例子



- **Privacy Concerns 隐私问题**

- Corporate Boardrooms 企业董事会议
- Publicly Held Companies 上市公司
- (HIPAA) U.S. Healthcare Compliance 美国医疗保健 (HIPAA)
- Professional Sports Coaches Meetings 专业体育培训会议

- **Accidental Changes to an Environment 环境的意外变化**

- House of Worship 教堂
- Volunteers 志愿者
- Guests 客户

- Fewer changes to network configuration  
可减少对网络的配置
- No changes to network configuration to move DANTE equipment from one audio zone (DANTE DOMAIN) to another  
Dante设备从一个区域（Dante域）改变到另外一个区域，不需要对网络配置做任何修改
- Use existing user directory for user privileges in DANTE  
Dante系统的用户权限可使用用户自己的目录系统
- Proactive alerts via email or SNMP  
可通过邮件或者SNMP协议发出主动警告
- Activity logs for all changes to DANTE configurations  
对Dante系统配置的任何修改提供活动修改日志
- High availability for DDM server  
DDM服务器冗余备份



# House of Worship 教堂

---

*Volunteers and Guests*  
志愿者和客户



# Becoming More Complex 系统越来越复杂



Dante Domain Manager™



# Still Run by Volunteers & Guests 系统依旧被志愿者或者客户管理



Lock the system down from unwanted changes  
对不允许被修改的内容进行管理

Provide different access rights to different people, including guests  
对于不同的用户提供不同的使用权限，包括客户





# Boardroom 董事会议室

---

*Private Meetings, Classified Briefings, etc..*

*私人会议，机密简报，等等*



# Privacy Concerns 隐私问题





# Television and Recording Studios 广电和录音棚

---

*Centralized Monitoring of All Studios*  
所有工作室集中统一管理





# Accidental Changes 突然的变化



Dante Domain Manager™

# Healthcare 医疗保健

---

*HIPAA Compliance, Expert Consultations, Change of Shift*

*HIPAA 合规, 专家咨询, 工作交接*

# HIPAA

- **Health Insurance Portability and Accountability Act of 1996 (“HIPAA”)**  
**健康保险携带和责任法案1996（简称“HIPAA”）**  
Department of Health and Human Services issued the Privacy Rule. The Privacy Rule standards address the use and disclosure of individuals’ health information.  
卫生及公共服务部门发布的隐私法规，该隐私法规解决了个人医疗信息的应用和披露问题
- **Who is regulated under HIPPA 规定的人员**
  - Health care providers include all “providers of services” (e.g., institutional providers such as hospitals) and “providers of medical or health services” (e.g., non-institutional providers such as physicians, dentists and other practitioners) as defined by Medicare, and any other person or organization that furnishes, bills, or is paid for health care.  
卫生医疗保健提供者，包括医疗保险规定的所有服务提供单位（例如：公共机构单位，医院），和只提供医疗或健康的服务单位（例如：非公共机构单位，如内科医生、牙医和其他执业医师），也包括任何提供卫生医疗相关的设备或者费用的个人和组织
- **What is regulated under HIPPA 规定的范围**
  - The Privacy Rule protects all “individually identifiable health information” held or transmitted by a covered entity or its business associate, in any form or media, whether electronic, paper, or oral.  
对于任何实体或者商业公司所拥有的或需要传阅的个人医疗信息，无论以何种形式和媒介，包括电子设备、文件或者语言，都受到HIPPA保护。

# Privacy Regulations 隐私法规



- Surgeons consulting with other physicians before a procedure  
在执行下一步操作前外科医生与内科医生的咨询会议

- Hospital executives deciding the future of the hospital  
医院的执行管理层探讨医院的未来



- Doctors and nurses discussing patients before changing shifts  
在工作交接前医生和护士交接病人病例





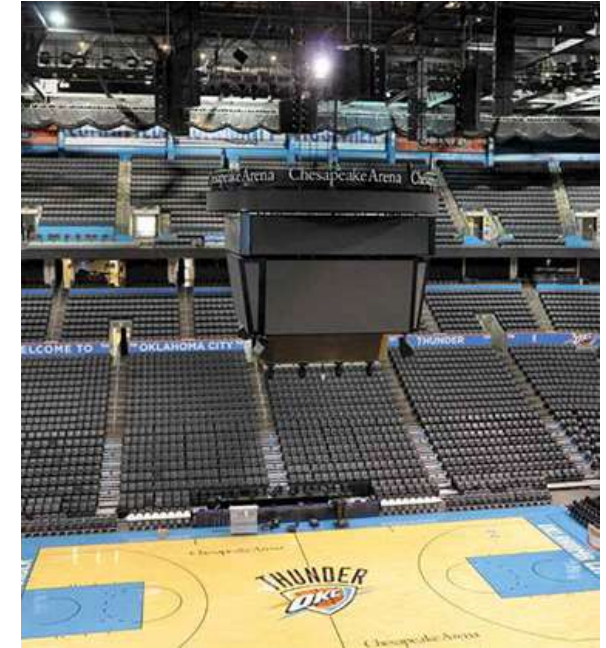
# Stadiums and Arenas 体育馆和竞技场

---

*Broadcast Trucks, Touring Acts, Coaches Meetings*  
转播车, 巡演, 培训会议



# Stadiums / Arenas 体育馆和竞技场



Dante Domain Manager™



# Game Day 比赛日



Dante Domain Manager provides you with the security that no one will mess up the routing for your venue. Giving you the ability to provide rights only to those people authenticated to be able to make changes. Guests will only see the devices in Dante Controller that you want them to see.

DDM可以管理和保护整个场馆的音频路由不被任意的修改。只允许被授权的管理者做修改，客户只能看到Dante设备状态，前提是提供权限给客户。



# Higher Education 高等教育机构

---

*Campus Wide Paging Solution and Professional AV System*  
校园广播系统和专业AV系统



# Dante @ AAB Endir Camparts 檢圖系統全部運系統狀態

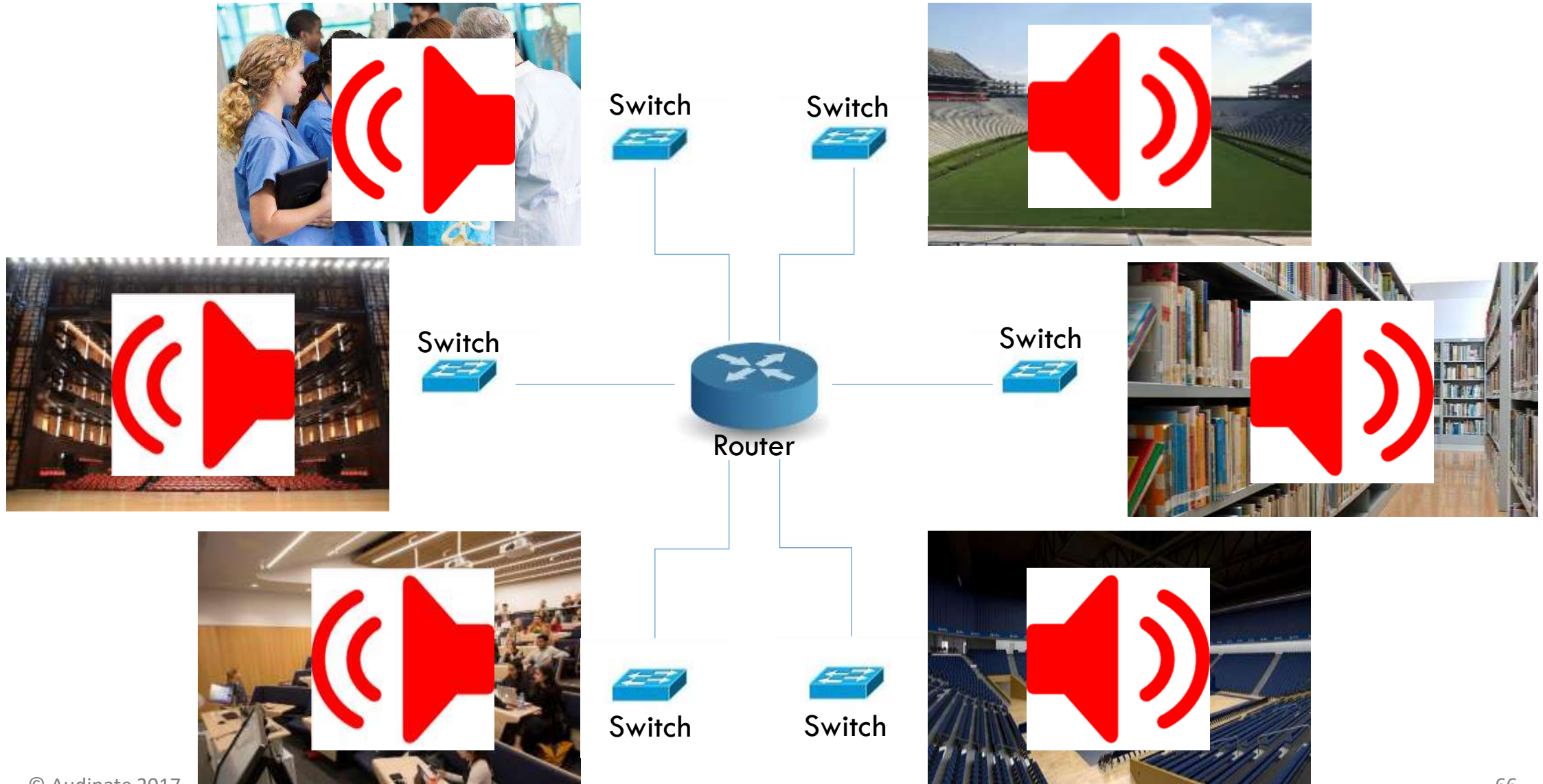


The screenshot shows the Dante Domain Manager interface. At the top left, it says "Dante Domain Manager" and "admin". The dashboard includes several sections: Alerts (with 3 alerts), High Availability (2 hosts configured), External Services (SNMP Proxy Agent, Email Service, Active Directory Service, all disabled), Activity (407 user operations in the last 24 hours), Host Server (2 internal services: Device Manager Service and Dante Discovery Service), and Domains (LAW SCHOOL, PERFORMING ARTS CENTER, STADIUM). The interface is dark-themed with red accents for alerts and activity.

Dante Domain Manager™



# Campus Wide Paging System and Professional AV System 校园广播系统和专业AV系统





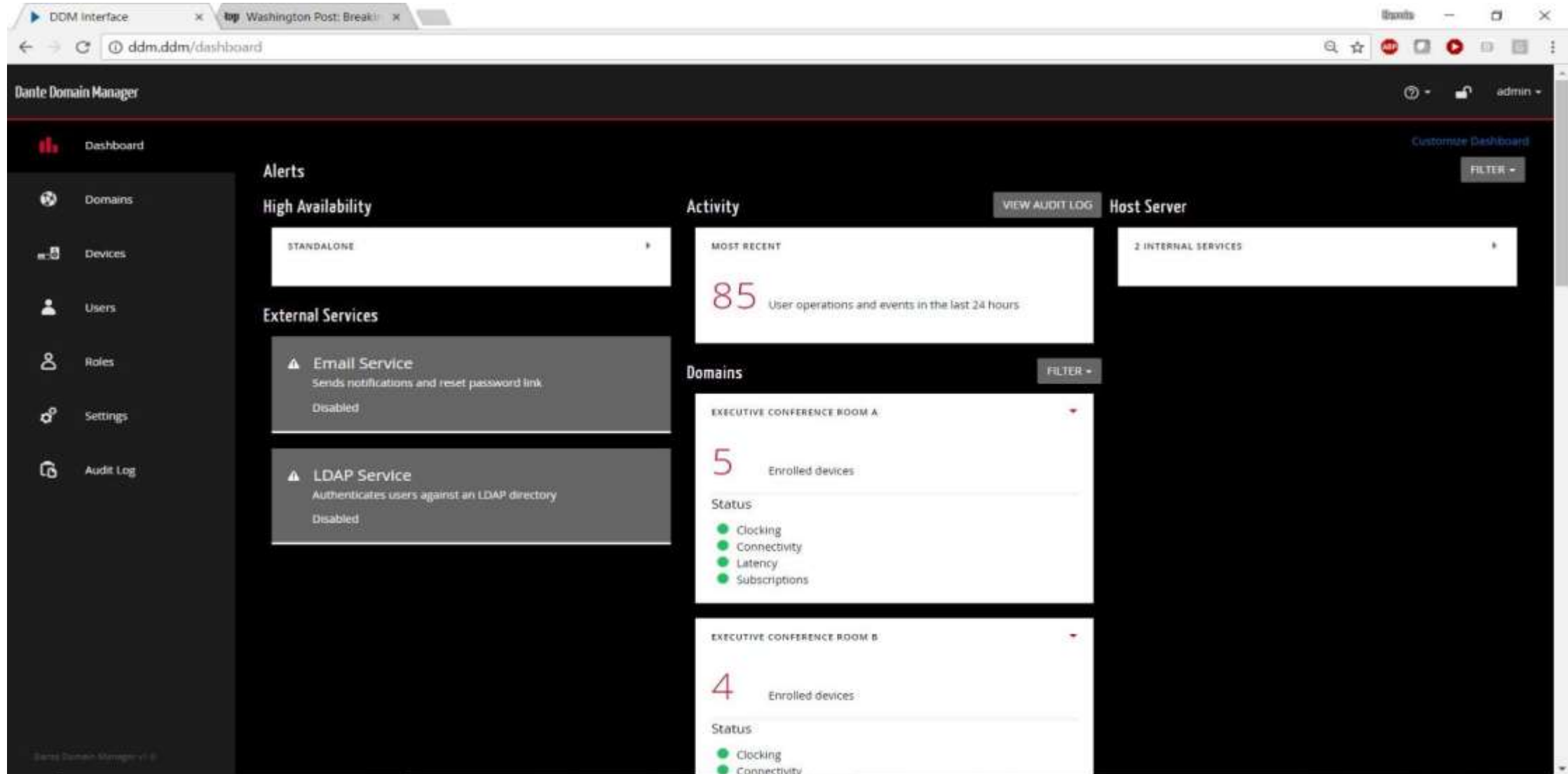
# Corporate / Government 企业和政府

---

*Management, Monitoring, Security, Scalability*  
管理、监控、保护、扩展



# Meeting Rooms 会议室



# What can I do with the DDM? DDM可以让我们做什么

## AV Managers AV管理员



✓ Easily trouble-shoot AV System problems, identify root causes and take corrective actions quickly

系统故障排查简单，可快速确认故障发生的本质并做出最正确的措施

## IT Administrators IT管理员



✓ Use my Directory service to manage access to AV systems

可使用用户自己的目录服务系统来管理AV系统的用户授权

✓ Prevent unauthorized changes to AV systems

可防止未被授权的修改

## System Integrators, AV Consultants 系统集成商和AV顾问



✓ Divide systems into manageable Dante domains

可对整体系统分割为多个可管理的Dante域

✓ Deploy Dante in campus routed IP networks

可运行在校园级的路由网络系统中

## AV System Owners AV系统业主



✓ Get notified of AV System issues so they can be actioned immediately

提供系统故障告警，并及时采取措施

# DDM Packages DDM版本

DDM EDITION DDM版本	SILVER 银版	GOLD 金版	PLATINUM 铂金版
<b>CAPACITY</b> 容量			
* No of Dante Domains Dante 域的数量	2	10	50
* No of Nodes (Dante Devices) Dante的设备终端	10	40	250
<b>FEATURES</b> 特色	<b>INCLUDED</b> 包括	<b>INCLUDED</b> 包括	<b>INCLUDED</b> 包括
* Create and manage domains 创建和管理Dante域	Yes	Yes	Yes
* Configure domains across subnets 可跨子网配置域	Yes	Yes	Yes
* Dashboards and alerts 监控面板和警告提醒	Yes	Yes	Yes
* Detailed audit log 详细的修改记录	Yes	Yes	Yes
* Automatic discovery of Dante devices Dante 设备自动发现	Yes	Yes	Yes
* Responsive browser interface (computer, phone, tablet) 浏览器界面响应 (电脑, 手机, 平板)	Yes	Yes	Yes
* User definition and role management 用户自定义和权限管理	Yes	Yes	Yes
* Virtual server support 支持虚拟服务器	Yes	Yes	Yes
* System backup and restore 系统备份和重置	Yes	Yes	Yes
* Secure, encrypted control traffic 数据流安全加密控制	Yes	Yes	Yes
* Route audio between Dante domains Dante域之间音频可相互路由	Yes	Yes	Yes
* Enhanced event and alert filtering 强大的事件和警告筛选功能	X	Yes	Yes
* LDAP and Active Directory integration 支持LDAP和活动目录集成功能	X	Yes	Yes
* High Availability redundancy 高可用性冗余	X	X	Yes
* SNMP alerts 支持SNMP警告	X	X	Yes

IDEAL FOR:  
适用于

**Silver**

**Smaller installations**  
小型系统

Conference room, reception area, house of worship or classroom  
会议室, 接待区, 教堂或者教室

**Gold**

**Mid-sized business environments**  
中型系统

Easy management of multiple rooms and public spaces, tighter IT integration 含有多个房间和公共空间, 且IT环境比较严格的应用

**Platinum**

**Large scale installations**  
大型系统

Critical usage, many users, rooms and devices spread over a wide area 对于要求非常严格, 并包括多个应用者, 多个房间和多个设备的大型系统

Dante Domain Manager™



# Dante Video: Bringing the “V to AV” 支持视频，真正的AV一体

## Benefits of the Dante Video Dante视频的优点

Common management for audio and video  
统一的音视频管理

Lower installation and cabling costs  
降低安装成本

Better synchronisation between audio and video  
音视频同步

Independent routing of Audio and Video signals  
音视频独立路由

Displaces expensive matrix switches  
替代传统的视频矩阵

Integration with Dante Domain Manager  
兼容DDM管理平台

- Distribution of video signals from HDMI across an IP network  
HDMI信号转换成IP网络进行传输和路由
- Audinate Video Prototype shown at Infocomm tradeshow June, 2018  
已在2018年美国Infocomm展展示了Dante视频协议标准样品
- Official launch of product on 5<sup>th</sup> Feb 2019  
2019年2月会在ISE展正式发布



# Use Cases 使用案例





# Industrial and Commercial Bank of China Beijing, China 中国工商银行北京总部

## ***Problem before Dante 没有使用Dante之前***

Difficult room acoustical characteristics

室内声学环境很差

Poor speech intelligibility for conferencing

会议时语言清晰度很差

## ***Solution with Dante 使用Dante之后***

More evenly distributed sound

声音分布均匀

High quality audio from every seat

每一个座位都保证了高质量音频



*“Make sure everyone’s voice is heard”*

# Columbus Zoo and Aquarium 哥伦布公园和水族馆

## **Problem before Dante 没使用Dante之前**

Reconfiguring audio would take 2 days 音频

系统重新配置可能需要2天的时间

System was difficult to maintain

系统维护比较困难

## **Solution with Dante 使用Dante之后**

Audio sources can be changed in minutes 音频

信号可以非常容易配置

Segment zones making it easy to maintain

系统维护非常容易



*"Domain Manager combats any unintended changes*

*by ensuring that only authorized users can make changes to the system."*



# Target Field- Minnesota Twins, Minneapolis, MN

**Problem before Dante 没使用Dante之前**

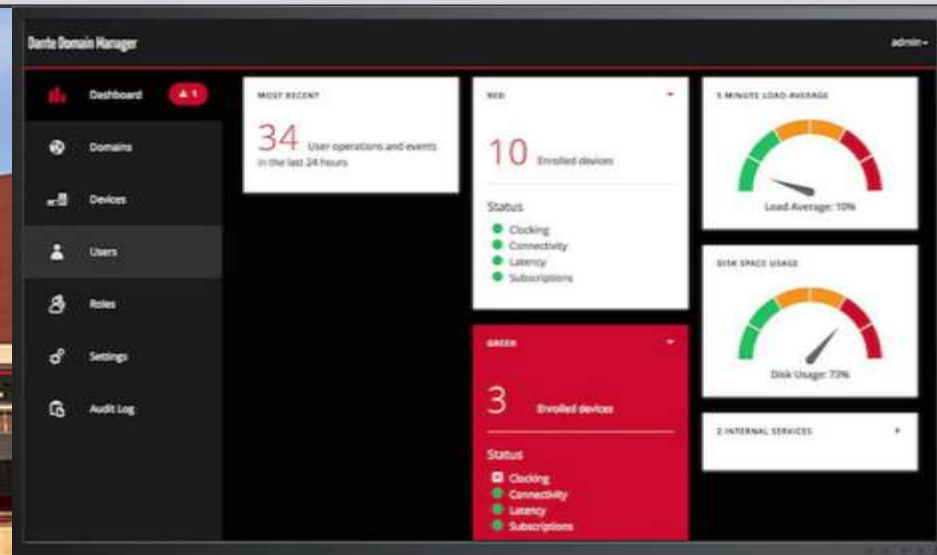
Every control room was a separate system 每一个控制室都是独立的系统

Installation of conduit & cabling too expensive 管线安装费用非常高

**Solution with Dante 使用Dante之后**

Any area can be connected into one system 全部的区域连接成一个系统

Connect audio from anywhere to anywhere 音频信号可以任意路由



*“Dante Domain Manager allows me to create complex systems while maintaining simplicity, and flexibility”*



现场音乐

# 美国航空中心 – 佛罗里达州迈阿密





商业安装

切萨皮克球馆- 美国俄克拉荷马州俄克拉荷马市







广播

维多利亚州国会大厦-澳大利亚墨尔本

教育

# 总督州立大学 - 伊利诺斯州大学园





礼拜堂

柳溪社区教会—伊利诺斯州南巴灵顿







电影

爱乐之城





后期制作

GOLDCREST 电影 – 英国伦敦





录音

SYNCHRON STAGE- 奥地利维也纳

# TRAINING 培训

- Dante Certifications (Online & In Person) Dante 认证培训 (线上或者面授)
  - Level 1, Level 2 and Level 3
- Online 线上课程
  - Getting started with Dante  
开始使用Dante系统
  - Dante Controller 101  
Dante控制软件101
  - Introduction to IP Networking for AV Systems  
介绍对于AV系统的IP网络知识
  - Principles of Digital audio  
数字音频系统的基本知识



**All classes are worth CTS credits**  
**全部课程都有CTS分数**



# SUMMARY 总结



Dante is a no-compromise solution  
Dante是一个非妥协的解决方案

- Complete, high performance digital media networking toolkit  
整体高性能的数字媒体网络解决方案
- True plug and play, with label-based routing  
真正的即插即用，且设备名称可自定义
- Widespread adoption and interoperability  
广泛的应用和互操作性强
- Supports existing switches  
支持已存在的网络系统
- The complete media networking solution  
整体的网络媒体解决方案

The Dante logo, featuring a stylized 'D' icon followed by the word 'Dante' in a bold sans-serif font, with a red underline beneath the text.

**Dante™**

Media networking perfected





DISTRIBUTORS IN CHINA  
已确定中国的分销商



锐丰科技  
RUIFENG Tech.



BEST CREWS



**NewBest** 上海新柏石智能科技股份有限公司





THANKS!  
感谢!