Audinate Overview
Audinate 簡介

Unsurpassed networking expertise 卓越的網路技術專家

- Global leader in AV networking, distributing top quality digital audio signals over computer networks
  全球AV網路技術的領導者，基於網路技術傳輸高品質的數位音訊信號
- Dante has become the defacto standard with over 400 OEM licensees
  已有400多個品牌商選擇Dante，Dante實際上已變成了行業的標準
- Broadest portfolio of a complete commercially supported networking solution
  具有最廣泛的整體音訊網路解決方案產品
- Intellectual property and patent portfolio
  自主研發，擁有相關多個智慧財產權和專利

Bringing the IT revolution to AV
用IT技術來改革AV領域

Sydney Trains
Sydney, Australia
澳大利亞悉尼火車站

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Benefits of Dante Dante 技術的優勢

- Rapid product development
  產品開發速度快
- Ease of use with plug and play and simplified connection management
  操作管理簡單，隨插即用
- Largest product ecosystem overring the highest level of interoperability
  支援產品數量最多的網路通訊協定，保證了最高級別的互通性
- Audinate offers a broad toolkit of commercially supported implementations
  Audinate提供各種工具（軟體和硬體），支援各種專案實施需求

Melbourne Convention Centre
Melbourne, Australia
澳大利亞墨爾本會議中心

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Audinate Global Presence 全球佈局

- Audinate Pty Ltd (Sydney Aus-澳大利亞悉尼)
- Audinate Inc. (Portland, OR-美國波特蘭)
- Audinate Ltd. (UK-英國)
- Audinate Limited (Hong Kong-香港)
- Audinate Germany （Berlin-德國柏林）
- Audinate Japan (Tokyo-日本東京)
- Audinate China (Shanghai-中國上海)

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Dante is deployed across a wide range of market segments廣泛的市場領域

Commercial installation 商業安裝

- Conference rooms 會議室
- Convention centres 會議中心
- Universities 大學
- Houses of worship 教堂
- Hotels 酒店

Broadcast 廣電

- Broadcast Studios 演播室
- Sporting events 體育活動
- Recording Studios 錄音棚

Transport 交通

- Public transport facilities 公共交通
- Airports 機場

Stadiums 體育館

- Outdoor Stadiums 戶外體育場
- Indoor Arenas 室內體育場
- Racetracks 賽馬場

Live sound 現場演出

- Concert Halls 音樂廳
- Theatres 劇場劇院
- Night Clubs 酒吧

Examples of Dante installations 項目案例

- Milano Congress Centre 米蘭國會中心
- Westfield Shopping Centre 西田購物中心
- Willow Creek Church 柳樹溪教堂
- Bellagio Hotel and Casino 貝拉吉奧酒店和賭場

- NBC USA 美國NBC
- Microsoft Production Studios 微軟演播室
- CBS Sports CBS體育
- BBC

- Sydney Trains 悉尼火車站

- ANZ Stadium ANZ體育館
- American Airlines Arena 美國航空球場
- Randwick Racecourse 皇家蘭德威克賽馬場
- Daytona Motor Speedway 代托納國際賽車道

- Foo Fighters 噴火戰機樂隊
- Maroon 5 魔力紅樂隊
- Moscow Bolshoi Theatre 莫斯科大劇場
- Ministry of Sound London 倫敦俱樂部

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Dante is the defacto audio networking standard 音訊網路行業標準

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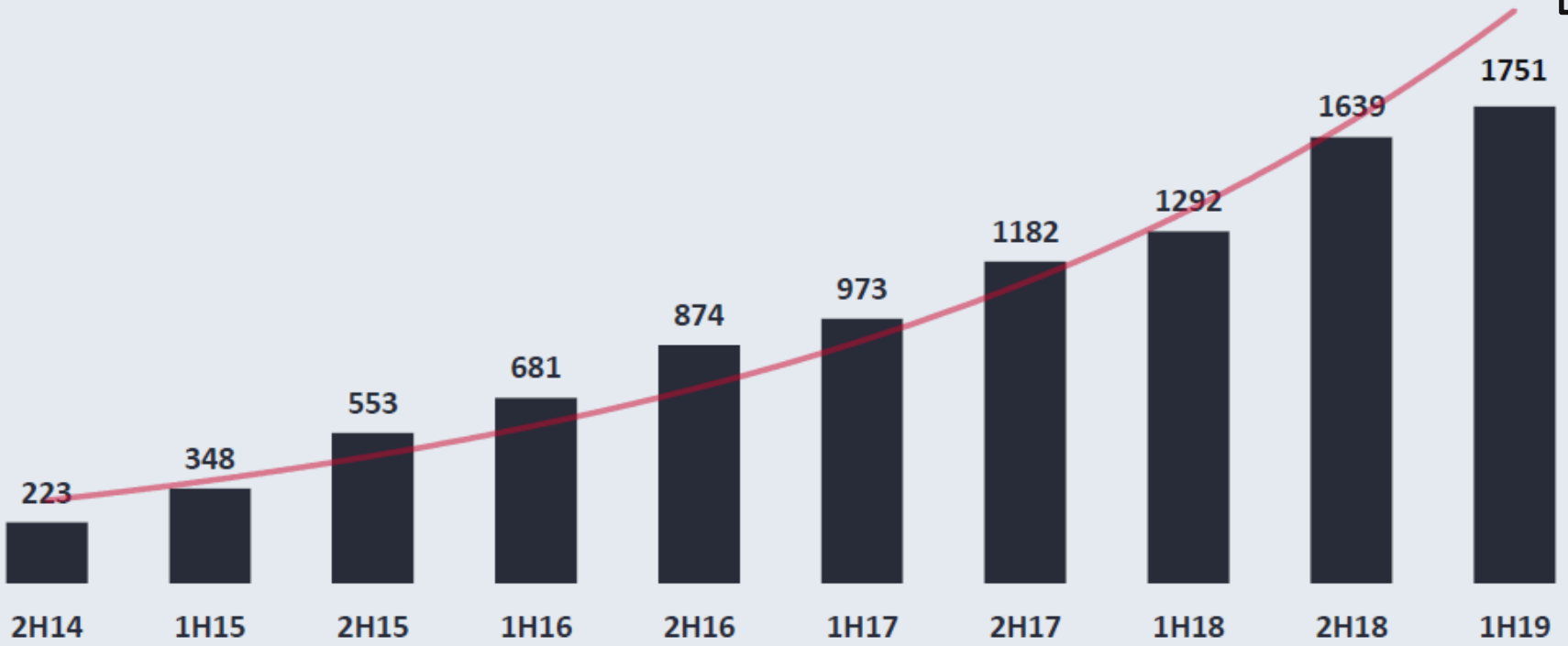
Audinate

Growing network effect- Over 400 OEM licensees
增長的網路效應-超過400個品牌商

Number of Dante-enabled products drives economic network effect
支持Dante的產品數量促使了對音視頻行業的影響

1,820 products at 31.01.2019



CAGR 58% in number of Dante-enabled products available in the market
支持Dante產品的複合年增長率為58%

Note: per financial half-year 注意：半年為節點

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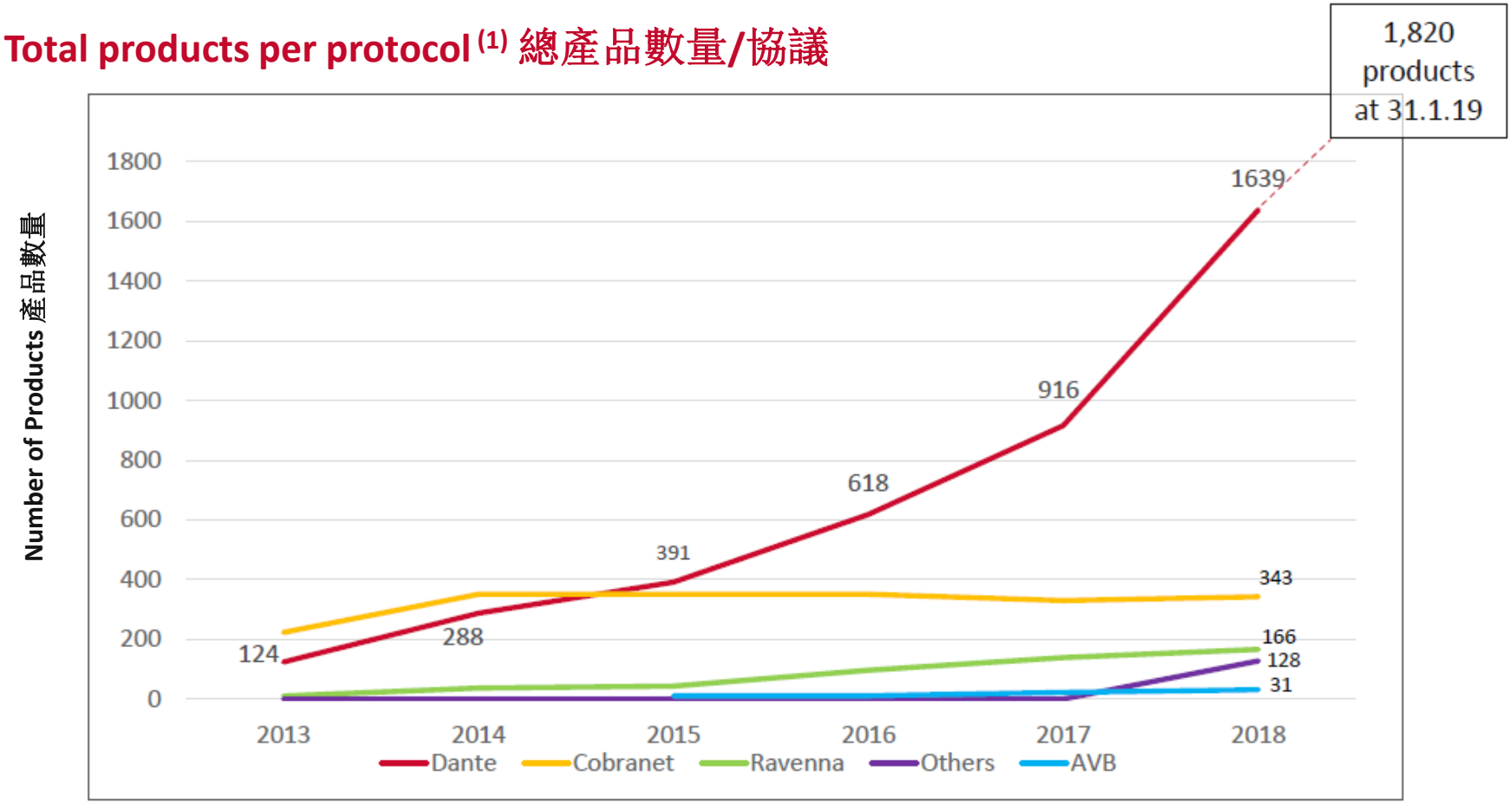
Competitive landscape – Networked Audio Products
競爭分析-網路音訊協定

Audinate is the clear global market leader compared to competing audio networking solution providers.
相對於其它網路音訊協定，Audinate很明顯已是全球市場的領導者

Dante has nearly five times the adoption of its closest competitor
Dante幾乎是最接近的競爭者的五倍

Total products per protocol (1) 總產品數量/協議



1) RH Consulting, Networked Audio Products 2018 and Audinate company data 以上資料來自RH顧問公司和Audinate

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WHAT IS DANTE? 什麼是 Dante

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

DANTE 是一種結合了硬體和軟體，使用標準 IP 網路技術在設備之間傳輸接近零延時數位音訊的解決方案

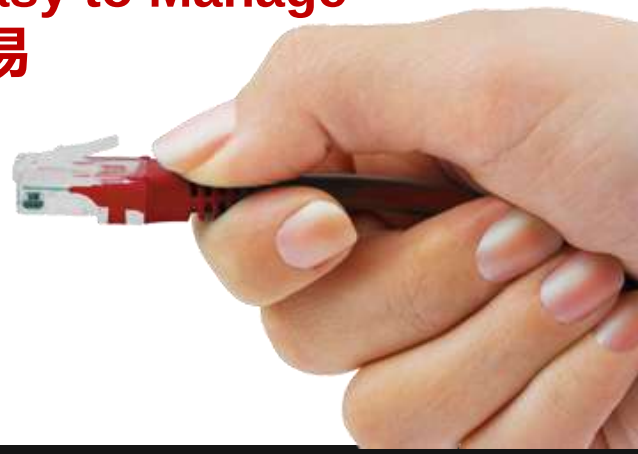
Dante™

Easy to integrate
集成容易

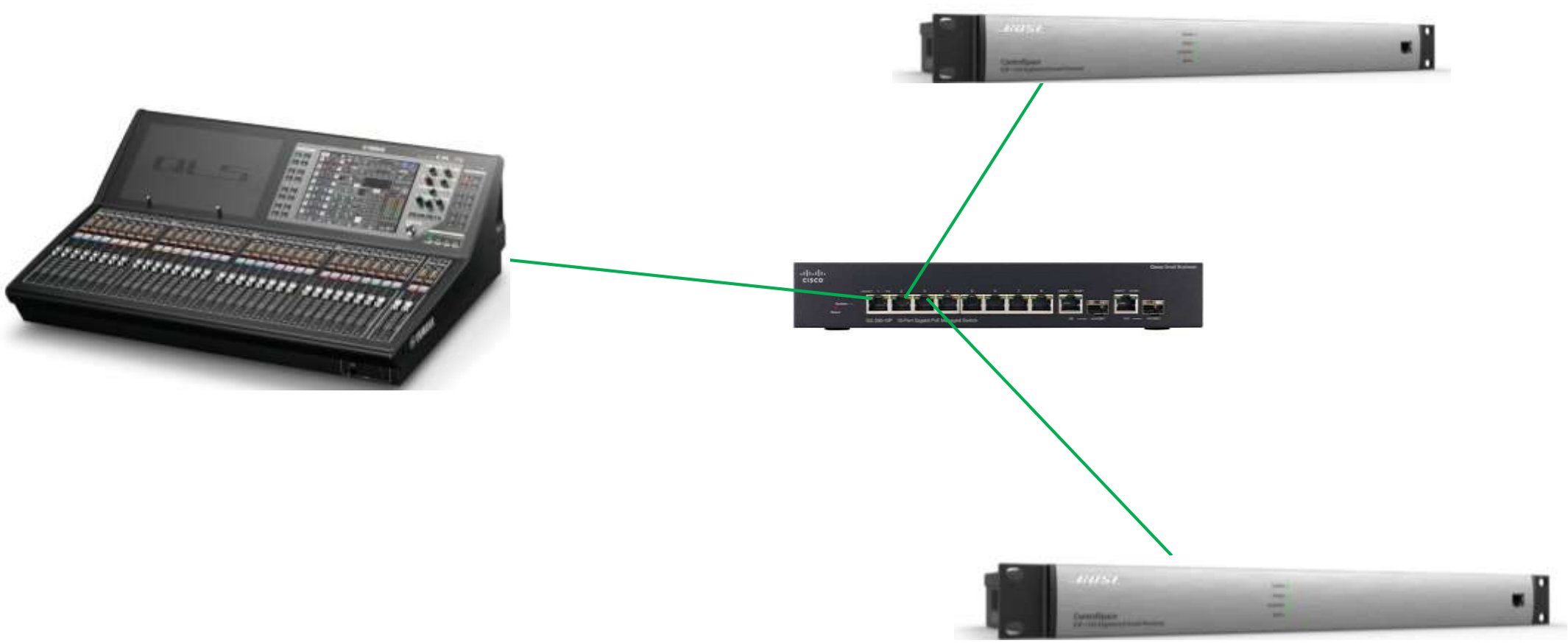
Easy to install
安裝容易

Easy to use
使用容易

Now Easy to Manage
管理容易



Basic Dante Installation 基本的Dante系統

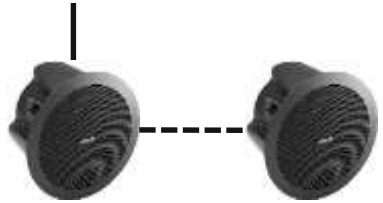


Complete Design 完整的設計

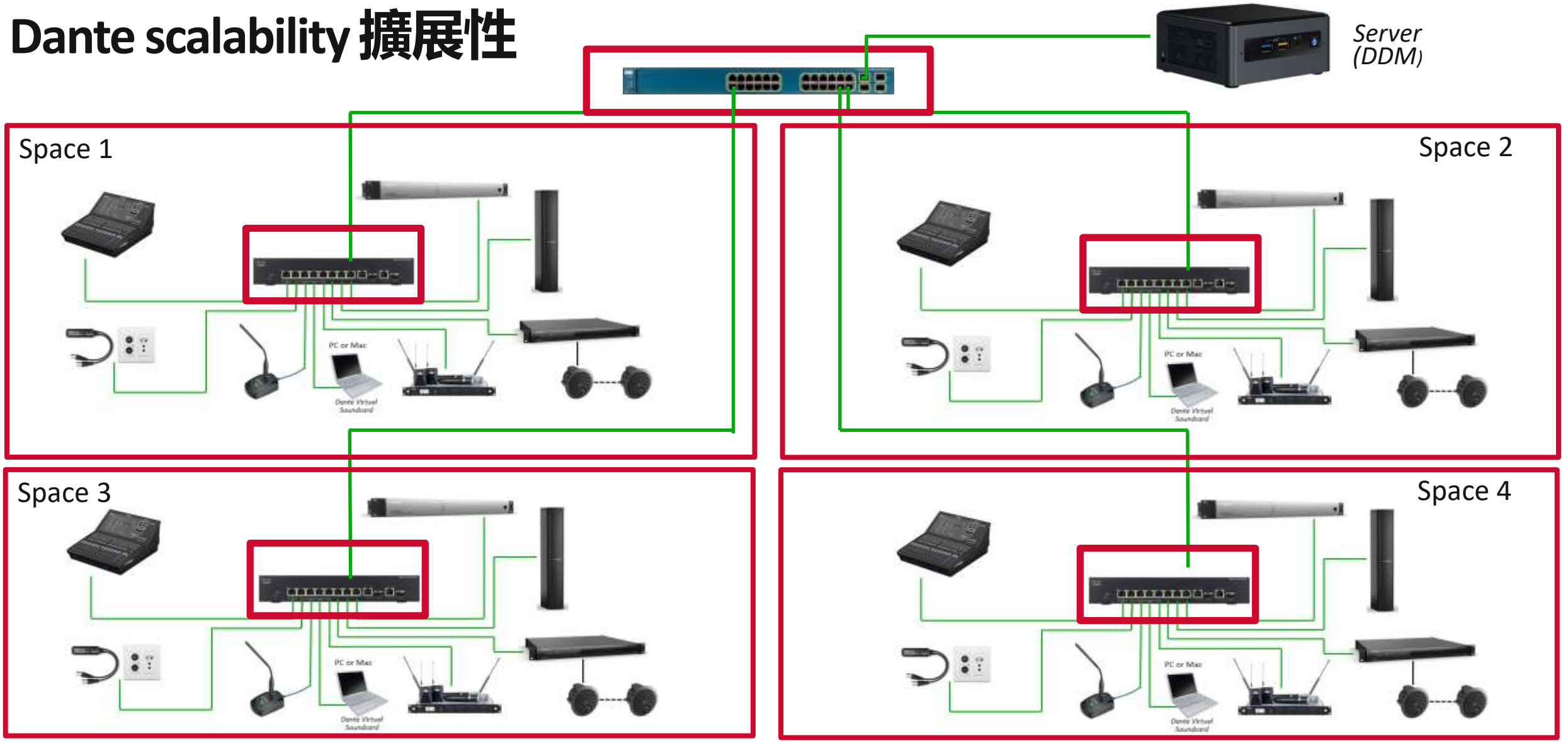
Server (DDM)

PC or Mac

Dante Virtual Soundcard



Dante scalability 擴展性



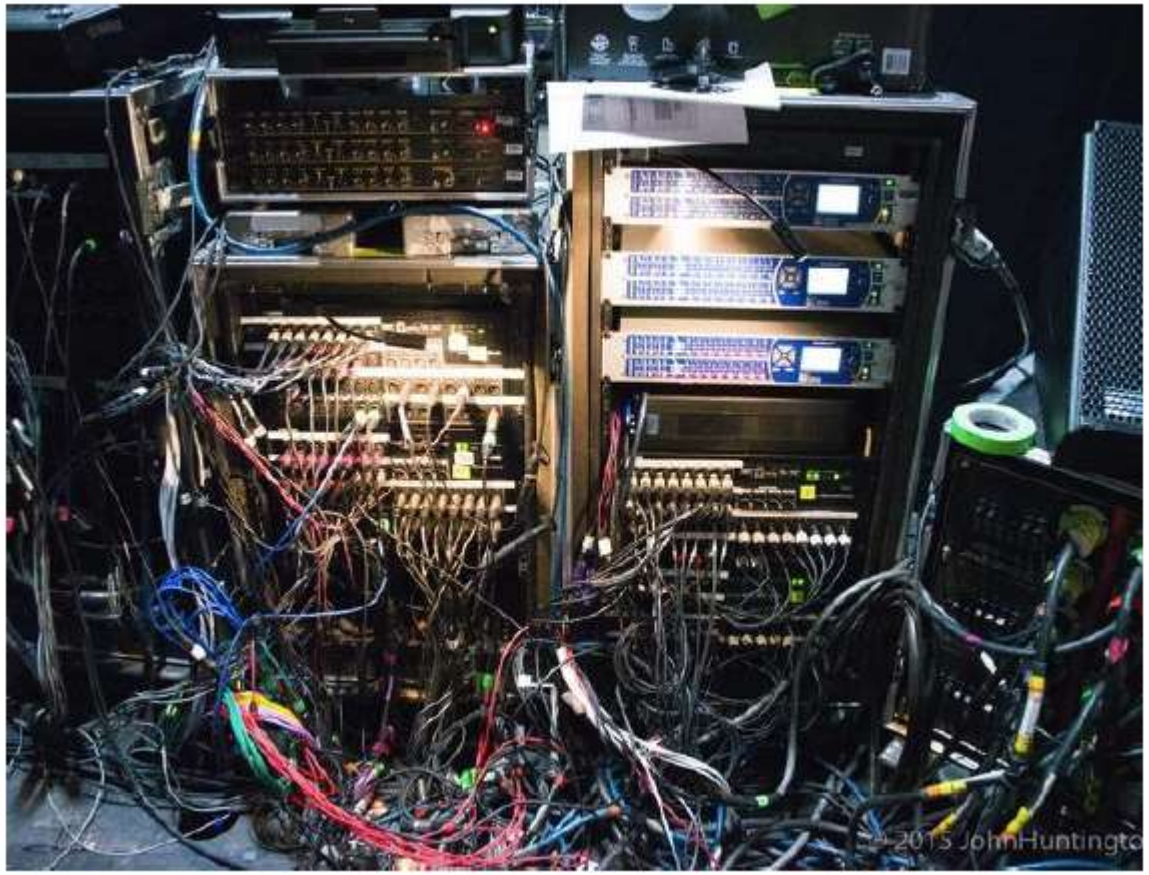
WHY USE DANTE? 為什麼使用Dante?

- Commercially support by network experts
  與行業網路專家合作
- Complete stack implementation
  完整的堆疊實現
- Technical support
  強大的技術團隊
- Integration to Macs /PCs
  與Mac和PC電腦無縫集成
- Guaranteed interoperability Plug and Play
  隨插即用
- Automatic device discovery
  設備自動發現
- Custom name-based labeling
  可自訂設備標籤
- One-click routing
  一鍵路由

- Low, deterministic latency
  延時極低（微秒級）
- Precise time alignment of all audio
  精確的時間對準
- Virtually jitter-free
  幾乎無抖動
- Redundancy
  可備份冗餘
- Routing over layer 3 subnets
  可跨3層子網路由
- Automatic re-connection after power cycles
  斷電自動連接
- Enterprise management
  企業級管理
- Network status/health
  網路狀態運行實控 （支持SNMP協議）

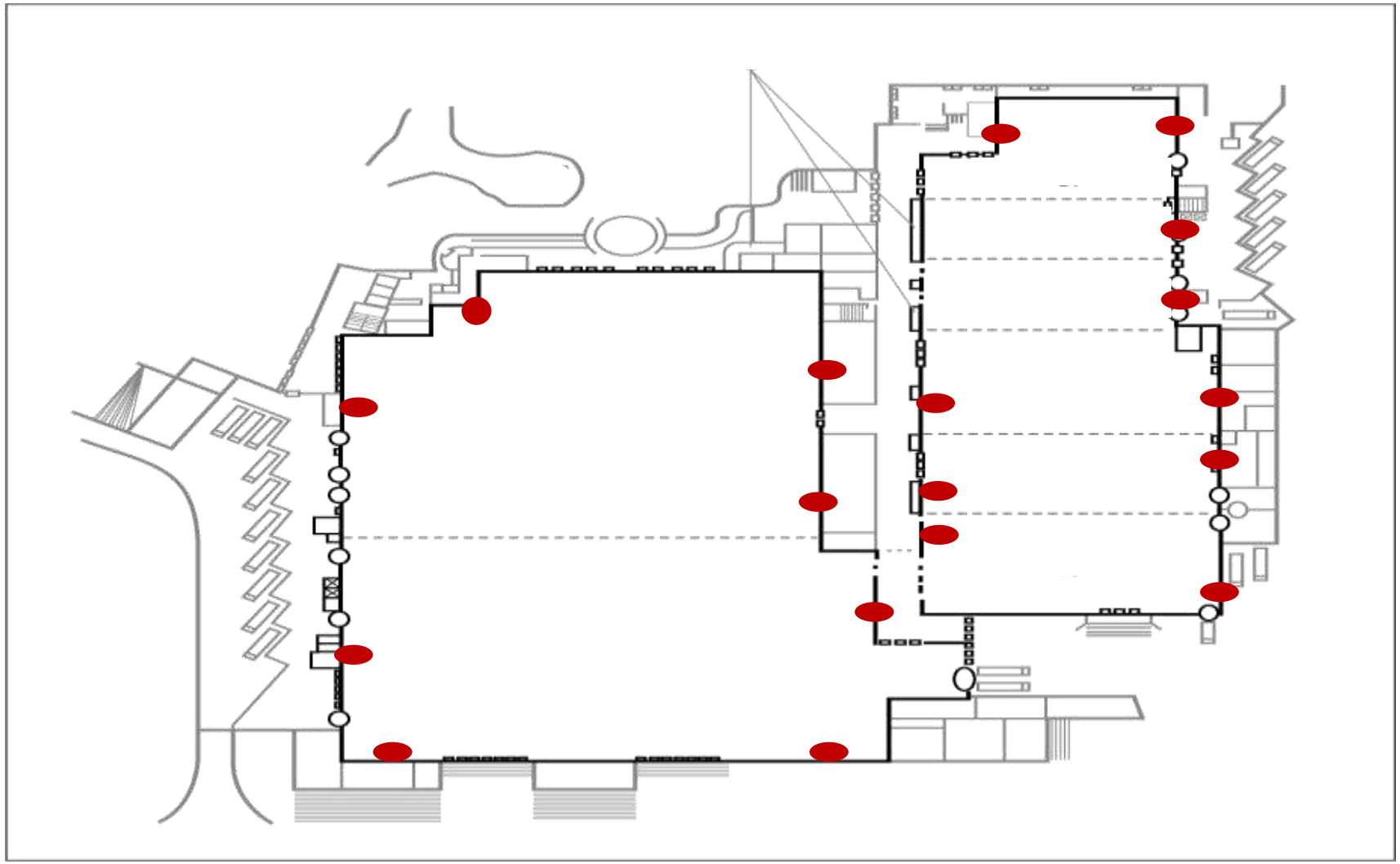
One cable for media and control 單根網線即可傳輸內容和控制

Before Dante



After Dante

Wire and labor savings 節省了線材和人工成本



18 drops of Cat5e cable
18根Cat5e網線即可

Compared to 108 drops of analog cable
對比108條模擬音訊線

- Dante Implementations
- Dante 實施

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Audinate products 產品線

Chips, Modules and Cards 晶片，模組和卡

Dante Ultimo (Chip)

Used in low channel applications
(e.g. speakers and microphones up to 4x4 channels)
用於通道數量少的應用（如音箱或者話筒，最多4×4）

Dante Brooklyn II (Module)

Used in medium to high channel applications (e.g. mixers and amplifiers up to 64x64 channels)
用於中等到高等通道數量的應用（如調音台和功放，最多64×64）

Cards

Peripheral soundcards and network option cards specifically designed for individual OEMs
周邊音效卡和網路選項卡，主要針對個別廠商

Dante Broadway (Chip)

Used in medium channel count applications (e.g. speakers and microphones from 4x4 up to 16x16 channels)
用於中等通道數量應用（如音箱和話筒，4×4到16×16）

Reference designs 特殊設計

IP Core Implementation

Enables OEMs to incorporate Dante software into their own chips (up to 512x512 channels)
集成Dante軟體平臺於廠家自己的晶片（可以達到512×512通道）

Adapter products 適配器

Dante AVIO

Enables connection of analogue equipment to a digital Dante network
傳統類比設備和數位設備轉換

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Audinate products 產品線

Software 軟體

Dante Controller

Software to enable the configuration and setup of Dante enabled networks
用於Dante系統的設置

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
用於連接電腦應用軟體和支援Dante的設備終端。
功能強大，支援高通道應用，使電腦成為Dante網路系統的一部分

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
該軟體可把電腦軟體和電腦硬體轉換成Dante信號，並可以和支援Dante的設備連接。
支持只有電腦的Dante網路系統

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
提供網路管理平臺，保證音訊網路的安全，不被隨意的更改和變更。
不限於網路物理限制，可以任意的擴展和分割音訊網路系統。例如針對一個校園項目，可以針對不同的房間，建築或者場館分為不同的音訊組

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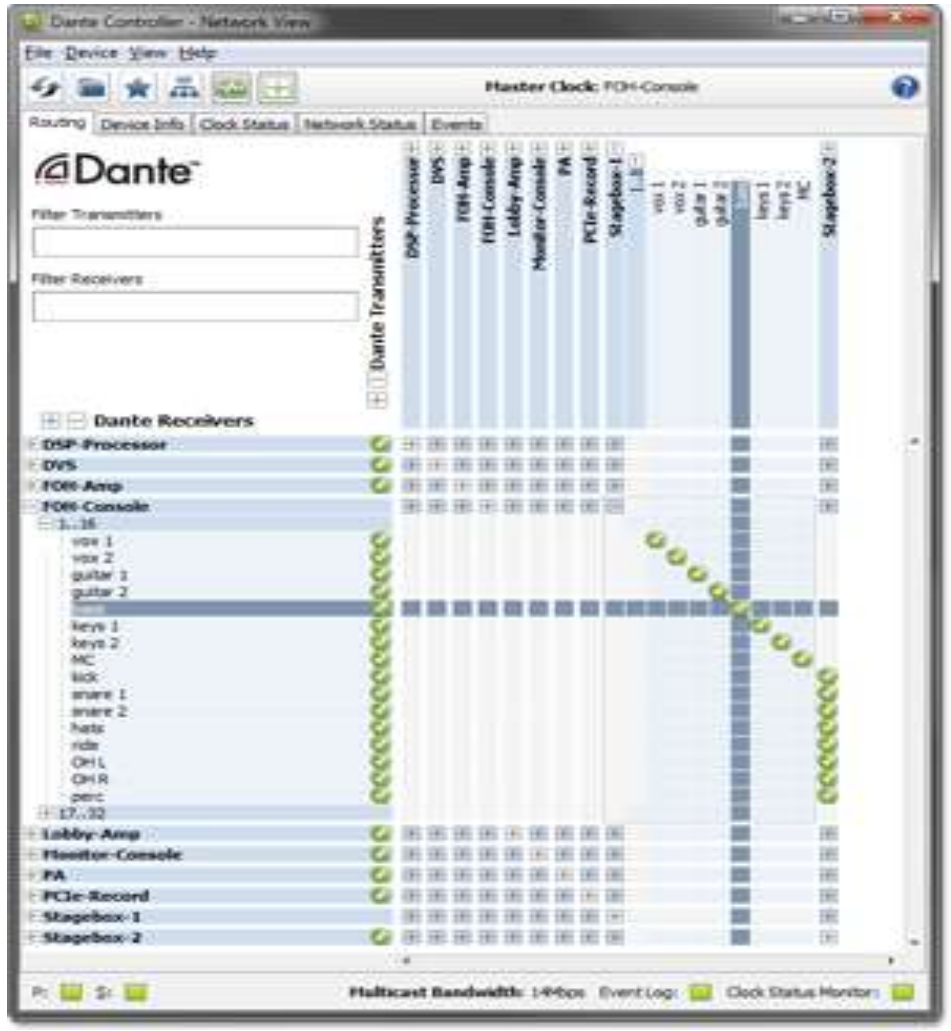
Dante Controller

- Simple plug and play signal routing application
  音訊路由配置和應用非常簡單，隨插即用
- Configure 配置內容
  - Sample rate 取樣速率
  - Word clock I/O 字時鐘I/O
  - Network latency 網路延時
  - Clock master preferences 主時鐘選擇
- Diagnostics 診斷
  - Link up/down, throughput, errors, clock master changes, etc
    鏈路連接，資料流程量，錯誤提示，主時鐘選擇等
- Freely available
  免費使用



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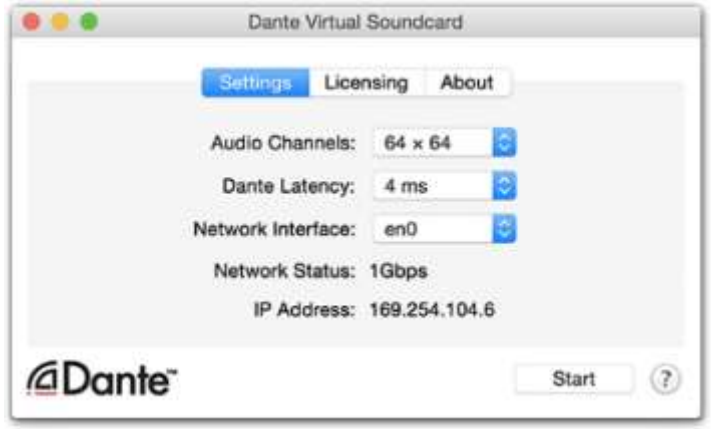
Dante Virtual Soundcard

- Connects existing audio applications to a Dante network
  連接音訊軟體於Dante網路系統
  - DAW software
    音訊工作站軟體
  - Conferencing (e.g. Skype, Zoom)
    會議軟體（例如： Skype, Zoom）
  - Recording and playback
    錄音和播放軟體
- Up to 64x64 channels
  最多支援64x64通道
- Uses built-in Ethernet
  使用內置乙太網
- Appears as a soundcard
  以音效卡的方式呈現
  - Core Audio (Mac)
  - ASIO + WDM (Win)



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Dante Via

- Networks, merges and routes all of your computer‘s audio streams and devices
  網路化，合併和路由所有電腦音訊流信號和其周邊設備
- Connect your USB and Firewire interfaces to a Dante audio network
  連接USB和火線介面於Dante音訊網路系統
- Extend your computer’s microphones and speakers with a Dante network
  擴展電腦內置話筒和音箱於Dante網路系統
- Create a Dante audio network using only computers
  只使用電腦即可組建Dante網路系統
- Bridge your audio-capable applications directly to Dante
  直接橋接電腦的音訊軟體於Dante系統
- Drag and drop UI
  操作介面簡單（拖拽即可）

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Dante AVIO Adaptors – Network Everything 一切皆為網路

Dante for “brown field” installations 用於“灰色領域”	Introduced 6 new Dante AVIO products 6款不同類型產品	“Problem solver” for System Integrators 解決集成商所面對的問題
Interoperability and Scalability 互通性和擴展性	Online retail & country distributors 網上銷售和分銷商	Pull through Dante products 健全產品線

- Rationale 原由
  - Add Dante to brown-field AV installations (mostly analogue)
    增加Dante於“灰色AV系統領域”（主要是類比設備）
  - Add Dante to existing analogue, USB and AES3 audio product
    增加Dante於已存在的模擬、USB和AES3音訊設備
  - Pull through Dante products and software
    健全Dante的產品線和軟體

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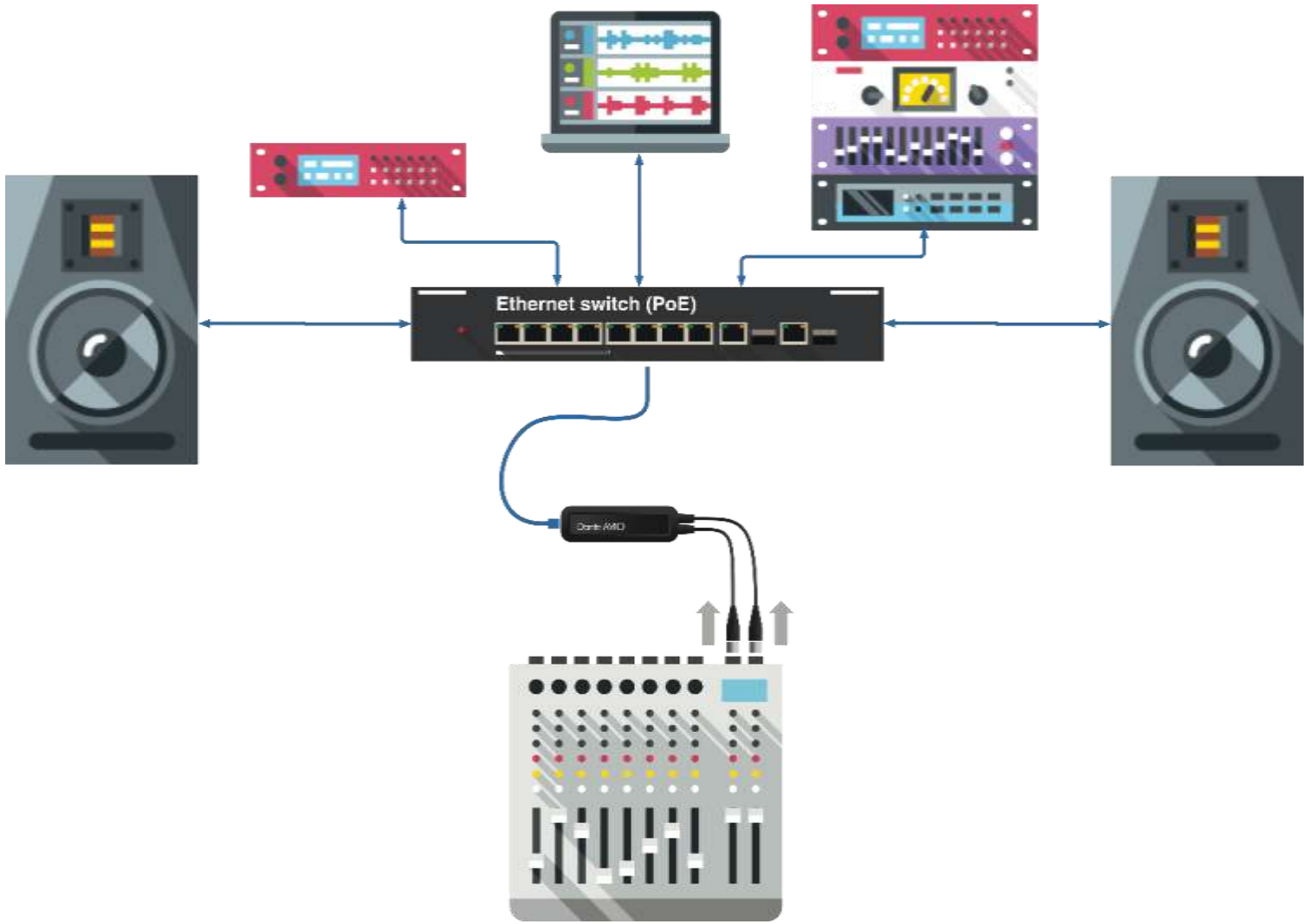
INTRODUCING THE DANTE AVIO FAMILY OF ADAPTERS
DANTE AVIO的產品線

Analog Input 模擬輸入	Analog Output 模擬輸出	AES3/EBU	USB
“On ramp” to Dante networks from line level outputs, 1 or 2 channels 模擬輸出轉Dante網路（1或2通道）	“Off ramp” from Dante networks to line level inputs, 1 or 2 channels Dante網路轉類比輸入（1或2通道）	Bidirectional, 2-channel AES3 connection to and from Dante networks AES3轉Dante網路（2×2通道）	Bidirectional, 2-channel USB class-compliant audio connection to Dante networks USB轉Dante網路（2×2通道）

DANTE AVIO ANALOG INPUT
DANTE AVIO 模擬輸入

- “On ramp” from line-level analog to Dante network
  類比線路路輸出轉Dante網路
- For mixing consoles, wireless mic receivers, stage DIs and more.
  主要用於調音台，無線話筒接收器，舞臺介面箱等
- Combine with Dante AVIO Analog Output for complete I/O of compressors, equalizers, etc.
  結合AVIO的輸出適配器可以完全解決傳統壓縮器或等化器不支持Dante的問題
- PoE powered
  PoE供電
- Balanced or unbalanced input
  支持平衡輸入和非平衡輸入
- 44.1, 48 & 96 kHz sample rates
  支持44.1、48 & 96kHz取樣速率
- 1- and 2-channel versions
  兩個版本：一個通道或兩個通道

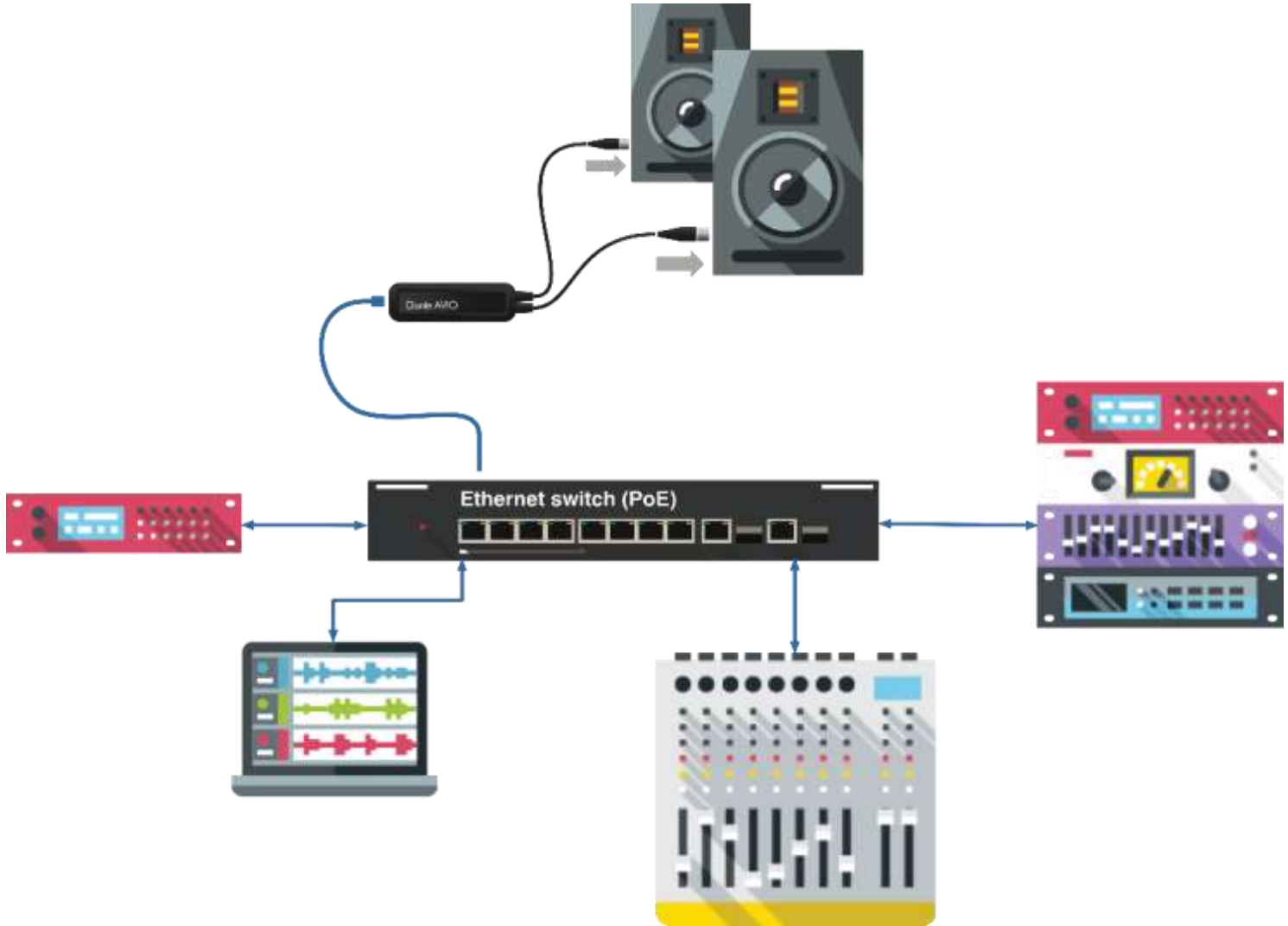
DANTE AVIO ANALOG INPUT
DANTE AVIO 模擬輸入



DANTE AVIO ANALOG OUTPUT
DANTE AVIO 模擬輸出

- “Off ramp” from Dante network line-level analog
  Dante網路轉類比線路路輸入
- Use with amplifiers, powered speakers, mixing consoles etc.
  主要用於模擬功放、有源音箱、調音台等
- Create easy drop-points for connecting overflow areas to a Dante network
  為整體Dante網路系統中的輸出設備提供了簡單的解決方案
- PoE powered
  PoE供電
- Balanced or unbalanced output
  支援平衡輸出和非平衡輸出
- 44.1, 48 & 96 kHz sample rates
  支持44.1、48 & 96kHz取樣速率
- 1- and 2-channel versions
  兩個版本：一個通道或兩個通道

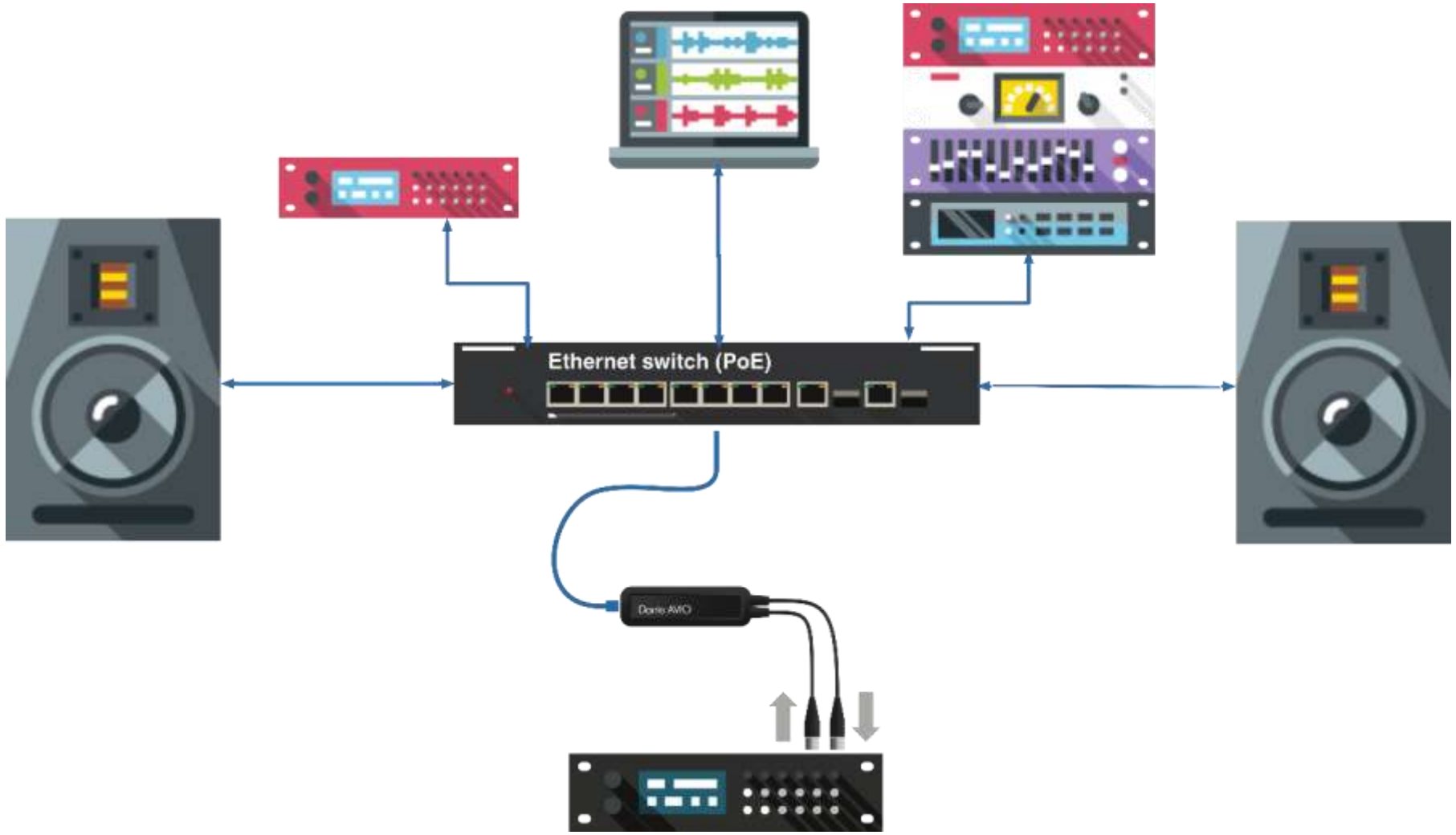
DANTE AVIO ANALOG OUTPUT
DANTE AVIO 模擬輸出



DANTE AVIO AES3/EBU

- 2 channels of bidirectional AES3 audio to Dante internet
  2通道雙向的AES3信號轉為Dante網路
- Connect high quality AES3 products to a Dante network，like broadcast recorders, mixing consoles, DSPs, amplifiers, etc.
  主要用於連接高品質的AES3的產品，例如廣電的錄製設備、調音台、處理器、功放等
- Keep signals 100% in digital domain
  保持信號100%處在數位領域
- PoE powered
  PoE供電
- 44.1, 48 & 96 kHz sample rates
  支持44.1、48 & 96kHz取樣速率

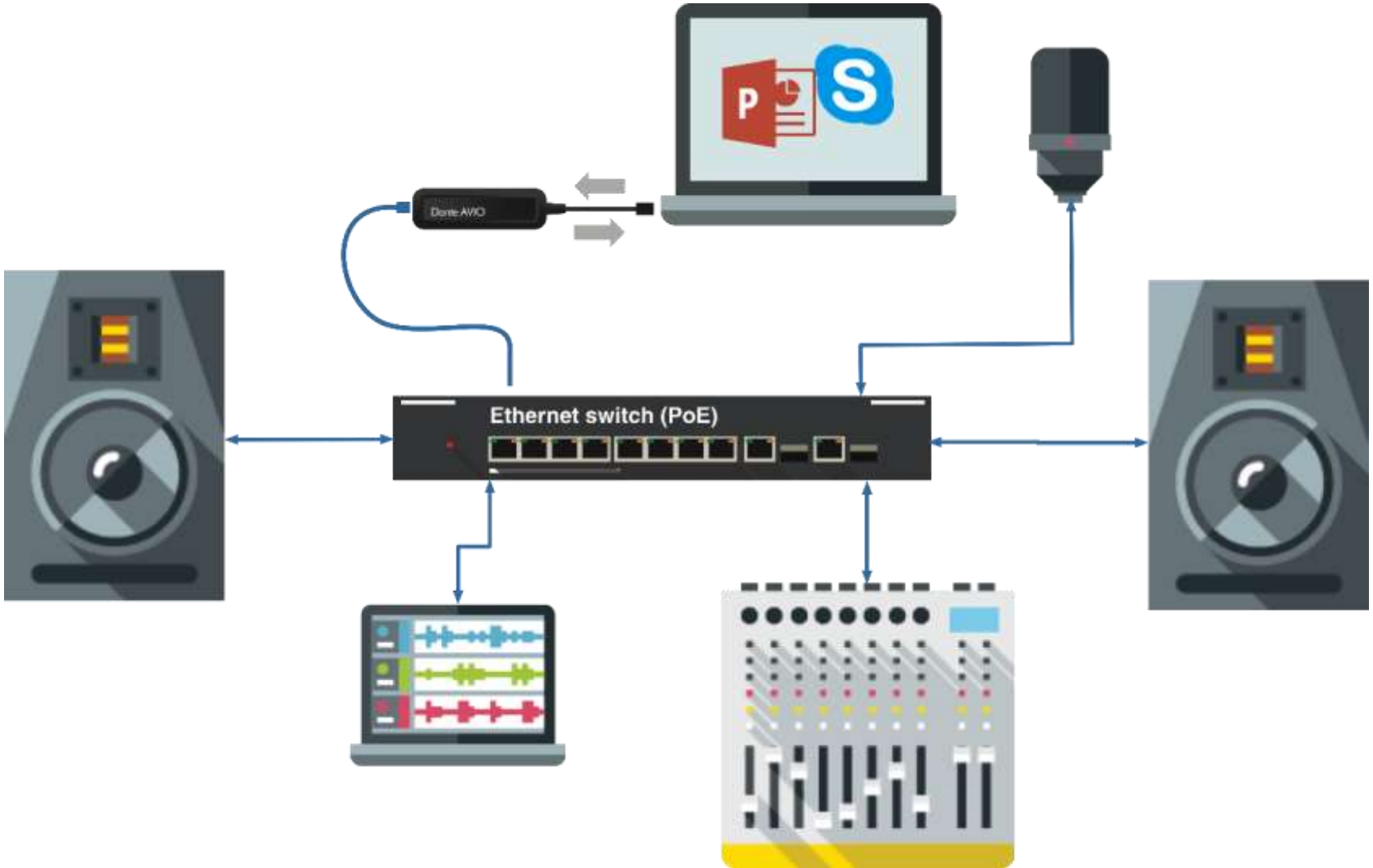
DANTE AVIO AES3/EBU



DANTE AVIO USB

- 2 channels of bidirectional USB audio to Dante internet
  2通道雙向的USB信號轉為Dante網路
- Ideal for conference rooms and class room
  非常適合會議室和教室
- Connect any PC or Mac to a Dante network with no additional software
  連接任何的PC或者Mac到Dante網路，且不需要安裝任何軟體
- Change computers without changing audio subscriptions
  更換電腦不需要重新設置音訊的路由
- Works with any audio application
  相容任何音訊應用
- PoE or USB bus powered
  PoE或者USB供電
- 48 kHz sample rate
  只支持48kHz取樣速率

DANTE AVIO USB



Dante Domain Manager – System Management Software 系統管理平臺

Secure Control 安全控制	Scale beyond a LAN 不限於本地網路	Logging & Auditing 修改記錄 & 報告
Domains Management 域管理平臺	Sales Channel Established (System Integrators) 銷售管道（集成商）	Sold to Installed Base 安裝工程

- Commercial product launch Feb 2018 at Integrated Systems Europe (ISE) tradeshow
  2018年2月份的荷蘭ISE展正式發佈
- Offered in Silver, Gold and Platinum Editions
  有三個版本：Silver，Gold和Platinum
- Install AV Awards: Signal Management Product of the Year
  獲得當年信號管理產品獎： Install AV Awards
- Support up to 1,050 devices
  最多支援1,050設置

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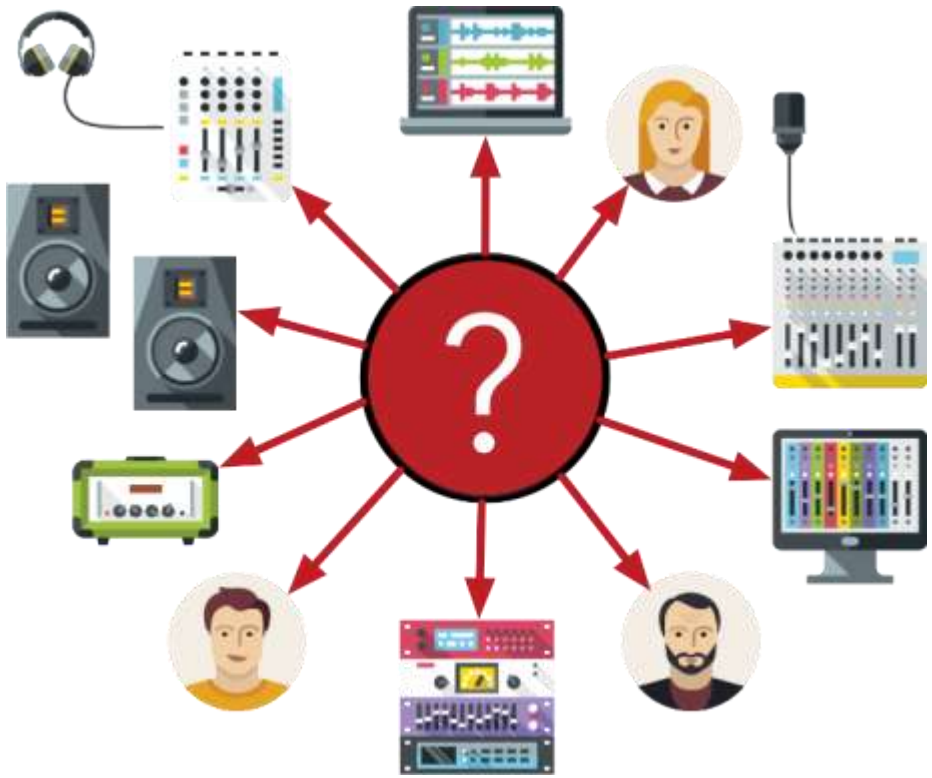
AV networks bring IT-level concerns
AV網路系統所帶來的IT級的困擾



How can I make sure that only authorized changes are made?
怎樣可以保證只有被許可的修改發生?

How can I tell who has made changes to my system? What did they do?
怎樣可以得知誰修改了系統，且修改了那些內容?

How can I centralise Dante AV system management in my site?
怎樣可以統一集中管理Dante的AV系統?

How can I quickly tell if the system is working correctly?
怎樣可以快速的得到系統是否正常運行?

Dante Domain Manager™

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What is Dante Domain Manager?
Dante域管理平臺是什麼呢?

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

Dante域管理平臺是一個可以管理、監控和保護整個Dante網路系統的軟體管理平臺

✓ Runs in server platforms, desktop and virtual environments

可運行在伺服器、電腦或者虛擬系統

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

簡單直觀的操作介面-可隨時隨地的監控Dante設備的運行狀態

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

不影響音訊路由-管理平臺出現故障，音訊信號可繼續工作

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ABOUT DANTE DOMAINS
什麼是Dante域

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

一個Dante域是由支持Dante的設備組成的一個邏輯組，並給與用戶相應的管理許可權

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

一個Dante域可能代表一個場所、建築、區域…

✓ Many Dante Domains can share one underlying network

不同的Dante域可以共用一個基礎網路系統

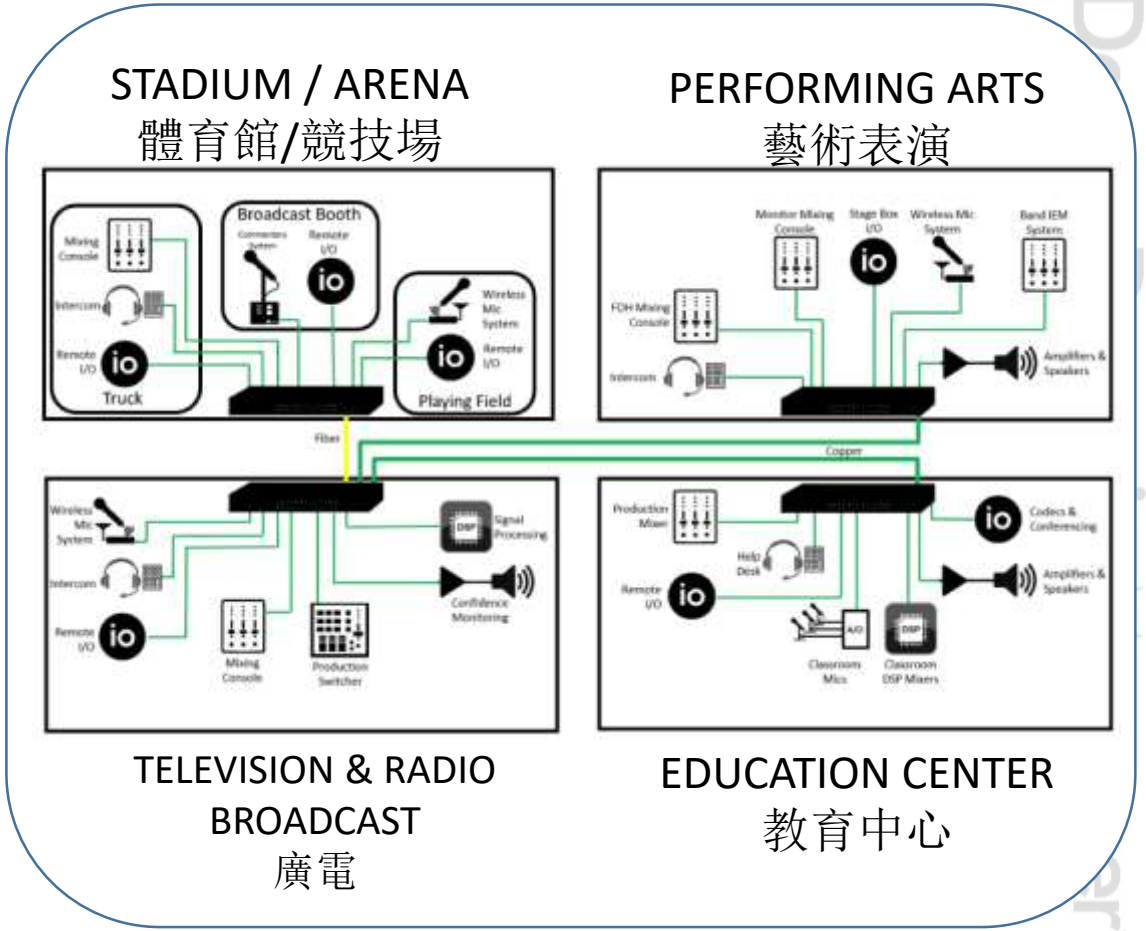
✓ A Dante Domain may span IP subnets

Dante域可以跨子網管理

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

對於系統的互聯、音訊路由和用戶許可權，Dante域之間可以相互獨立

Your network 網路系統



Security and Control 安全和管理

AUTHENTICATION
用戶授權

- For every device, every computer & user
  可以針對每一台設備，電腦和使用者給予相應授權
- Optional integration with Active Directory
  可以集成活動目錄集系統

USER ROLES
用戶角色

- Grant access only where needed, control changes
  只有管理內容需要更改的時候才需要最大的管理許可權
- Four built-in privilege levels
  四個內置的許可權級別

DOMAIN MANAGEMENT
域管理

- Per-domain user privileges are supported
  支援單個域用戶管理
- Domains can be isolated from each other
  域和域之間可以相互獨立

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Scalability and Flexibility 擴展性和靈活性

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ROUTED CAMPUS NETWORKS
校園級路由網路

- Minimize or eliminate IT/network changes
  可最小化或者消除IT網路的變化
- No need to have Dante devices in a single subnet
  Dante設備不需要在一個單獨的子網內

LARGE SYSTEMS
支援大系統

- Divide large systems into logical Dante domains
  可把大系統分割成方便管理的多個邏輯Dante域
- Deploy Dante transparently across network subnets
  Dante系統可以跨子網管理

HIGH AVAILABILITY
高可靠性

- Support for redundant DDM servers
  支持DDM伺服器冗餘備份

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Visibility and Accountability 視覺化和可追究性

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CHECK SYSTEM STATUS INSTANTLY
可即時查看系統狀態

- Centralized status logging & reporting
  集中統一的系統狀態運行記錄和報告
- User-configurable dashboard shows key information
  使用者自訂的監控介面顯示關鍵系統資訊

AUDIT REPORTS
審核報告

- Complete, time-stamped log of changes & events
  完整的以時間為標記的事件和修改記錄
- Know who did what & when
  可明確修改物件，修改內容和修改時間

REMOTE ALERTS
遠程告警

- Integrate with SNMP network management tools
  可集成於支援SNMP的網路管理平臺

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Easy to use 使用方便

BROWSER-BASED MANAGEMENT GUI

基於流覽器的管理介面

- Use with all popular browsers and devices
  使用普通流覽器和設備即可操作

INTUITIVE NAVIGATION

直觀的操作

- Manage Dante domains, devices, users & roles in a single window
  在一個視窗管理Dante域、設備、使用者和使用者角色
- Clear and easy to understand
  非常容易理解

SIMPLE DEVICE DISCOVERY & ENROLLMENT

設備發現和註冊簡單

- Simple and/or automated Dante device discovery
  支持Dante的設備可容易的被自動發現
- Simple, configurable, domain enrollment
  設備域管理和註冊簡單

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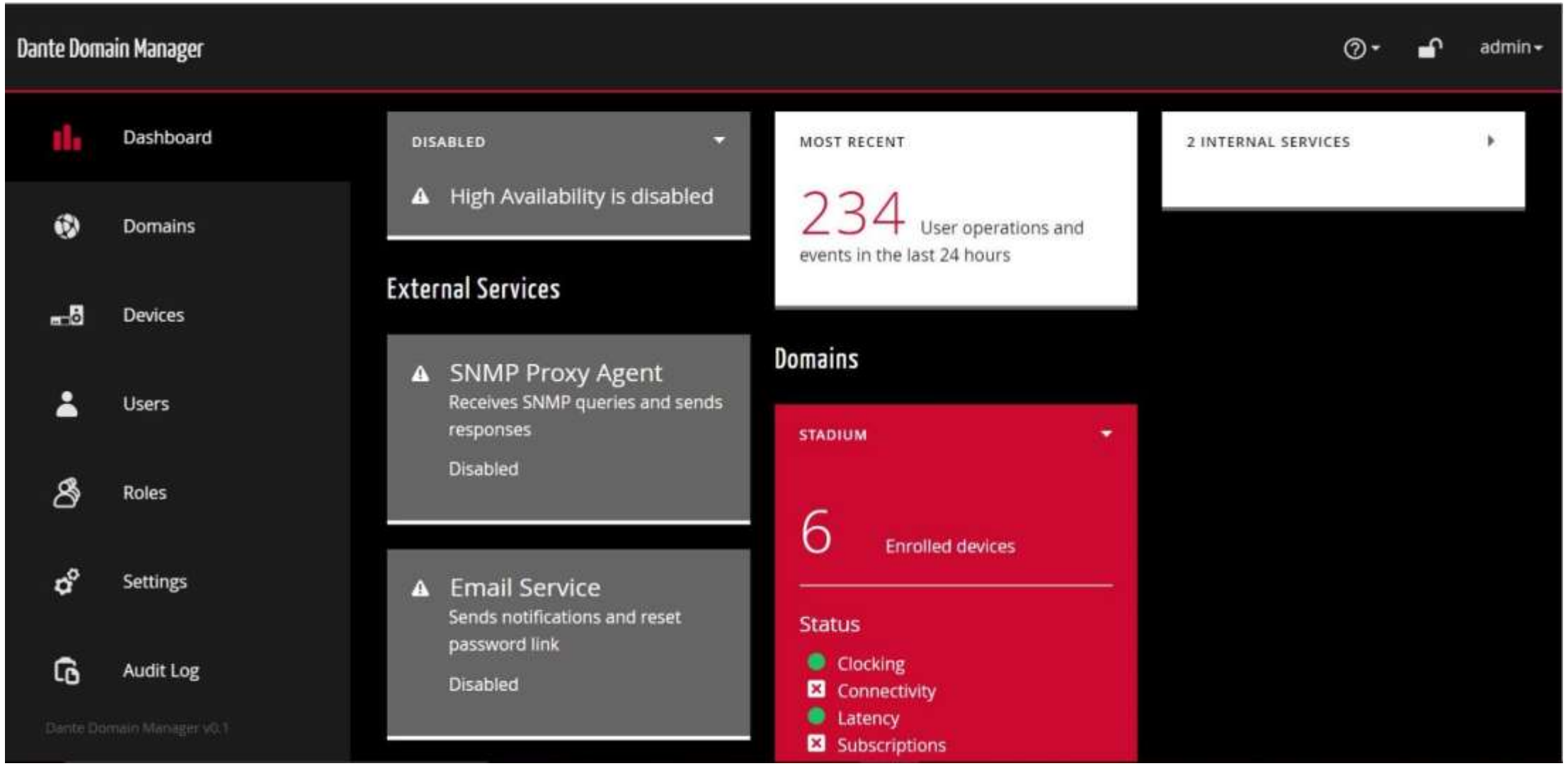
Dashboard for system status
系統狀態的監控介面



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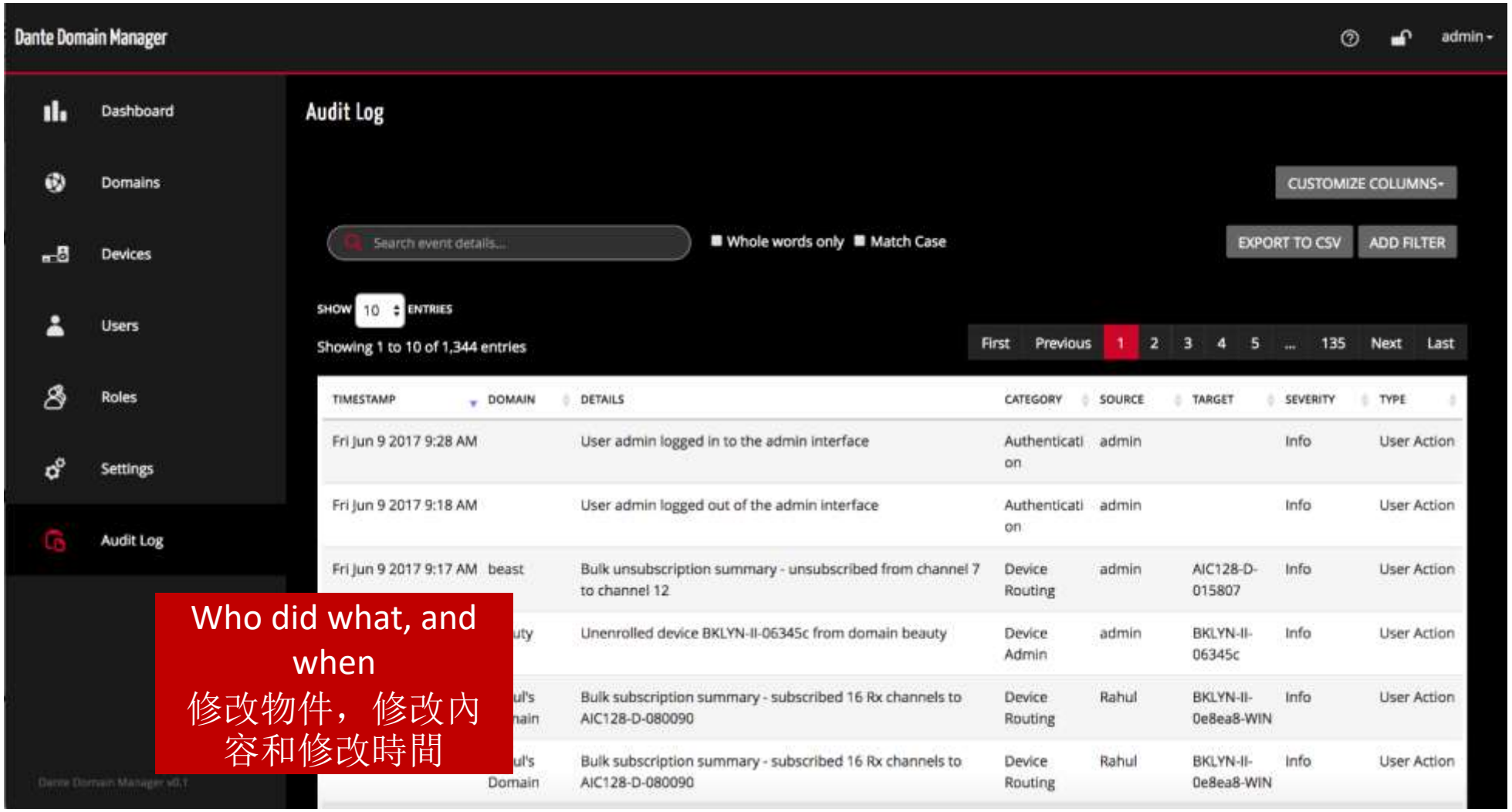
Audit Log 審核日誌



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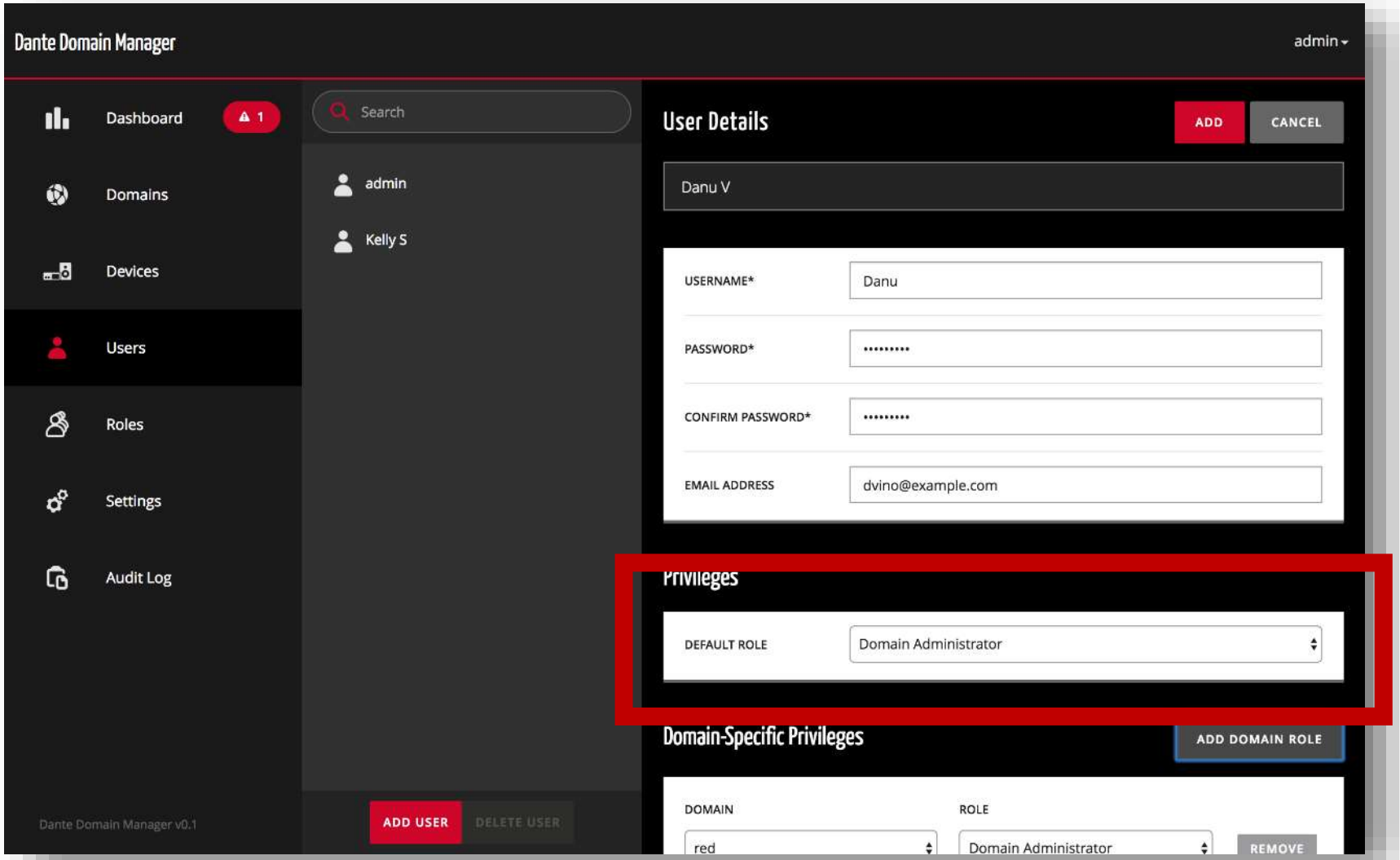
Define users and privileges
用戶授權和許可權類別



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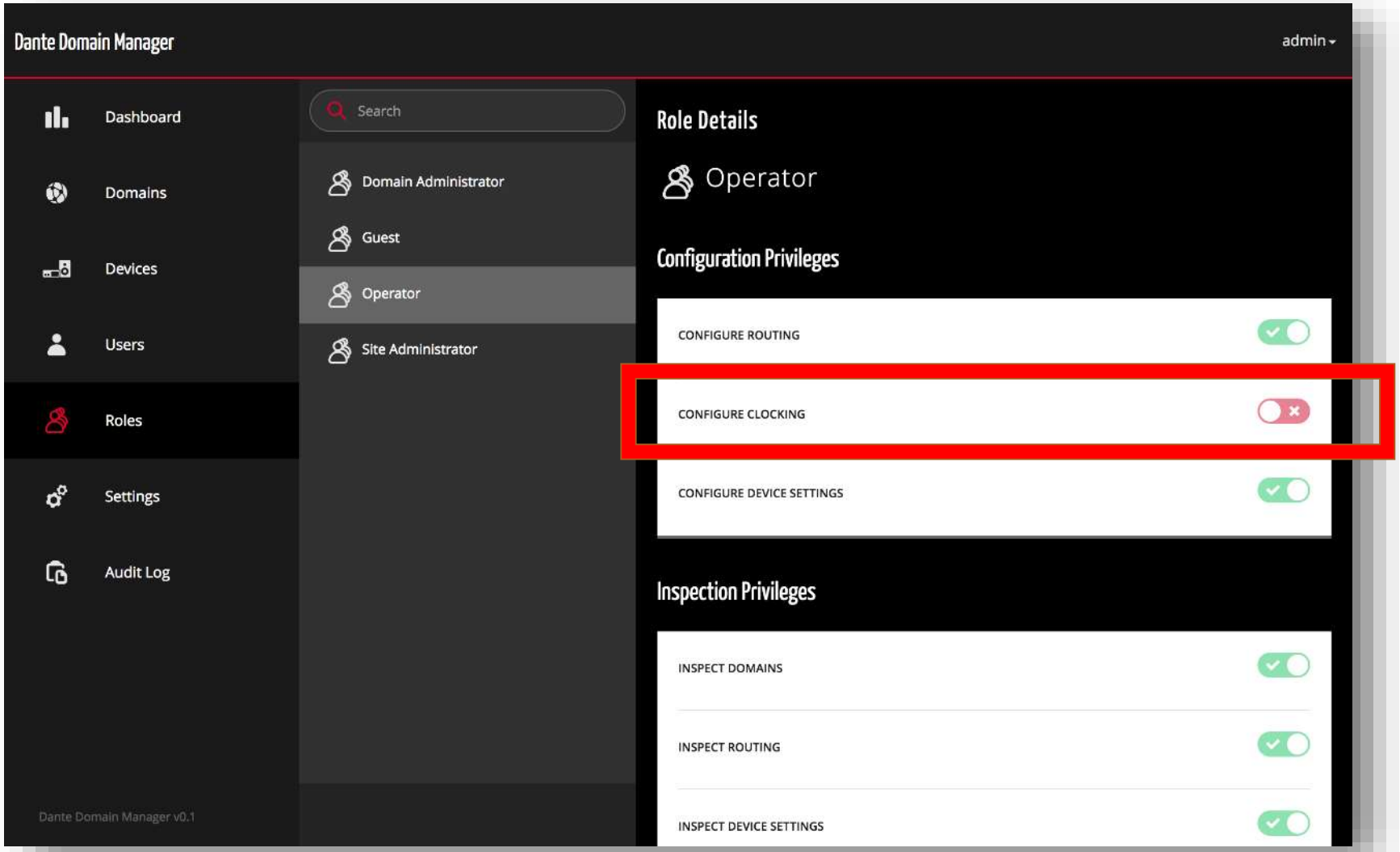
Limit access to key functions
關鍵功能存取權限



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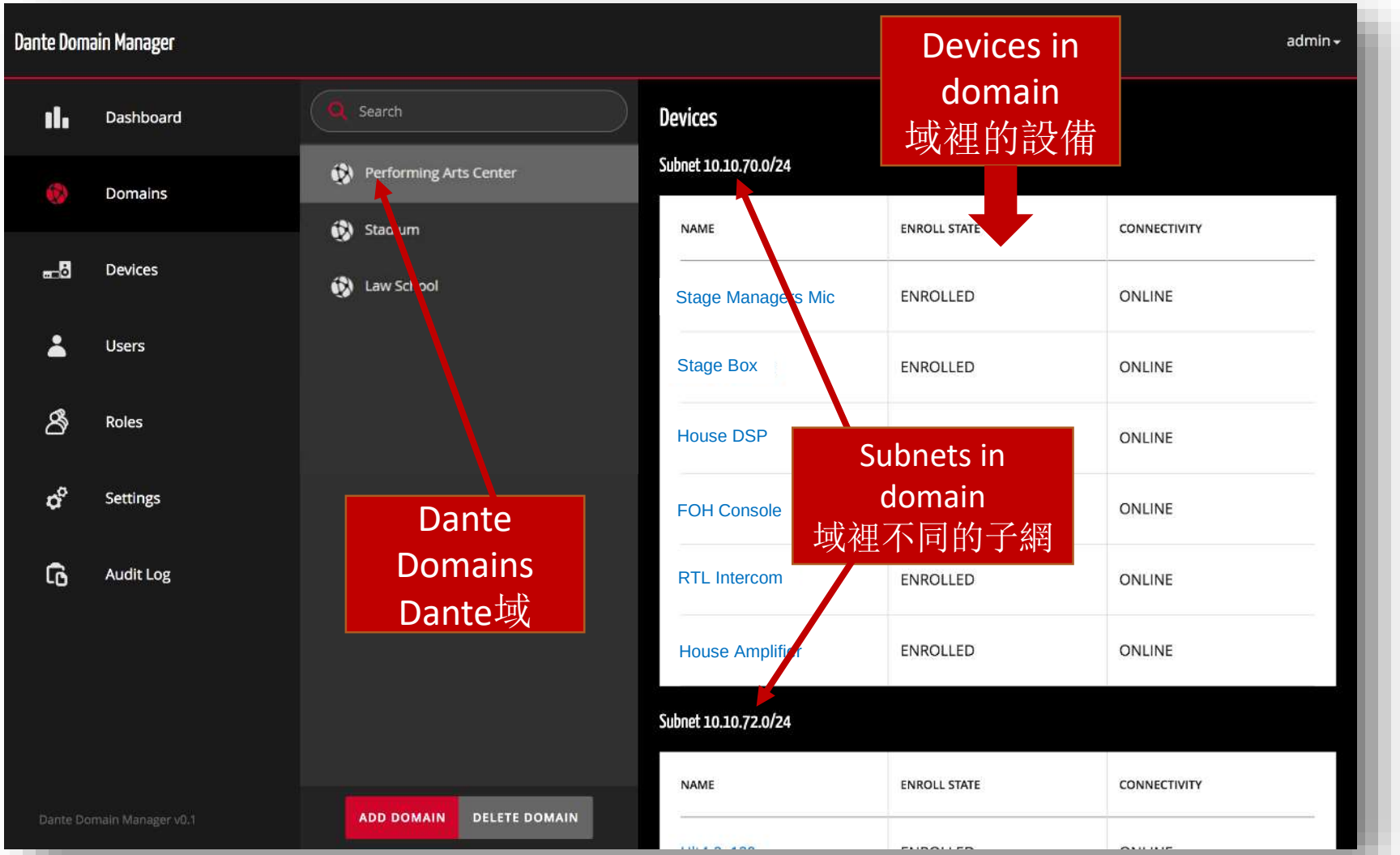
Domains and subnet crossing
域和子網跨越



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Additional Benefits of DDM
DDM的其它優點

- Easy Troubleshooting Environments 系統故障排查容易
  - Multiple Conference Rooms Around a Facility
    一台設備可同時監控多個會議室
- Global View of All of My Rooms 可全球監控
  - Make sure that all of my conference rooms are up and running at the beginning of each day
    確保全球所有會議室每天都可正常運行
  - Centralized Management
    可統一集中管理
- Reporting on the Environment 根據環境需求提供資料包告
  - Can be exported to 3rd party reporting system like Crystal Reports
    可提供系統資料予協力廠商監控系統，例如： Crystal系統

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Problems Addressed by DDM
DDM可解決的問題

Examples

列舉例子

Problems Addressed by DDM
DDM可解決的問題

- **Privacy Concerns 隱私問題**
  - Corporate Boardrooms 企業董事會議
  - Publicly Held Companies 上市公司
  - (HIPAA) U.S. Healthcare Compliance 美國醫療保健（HIPAA）
  - Professional Sports Coaches Meetings 專業體育培訓會議
- **Accidental Changes to an Environment環境的意外變化**
  - House of Worship 教堂
  - Volunteers 志願者
  - Guests 客戶

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Addressing IT concerns
解決IT困擾

- Fewer changes to network configuration
  可減少對網路的配置
- No changes to network configuration to move DANTE equipment from one audio zone (DANTE DOMAIN) to another
  Dante設備從一個區域（Dante域）改變到另外一個區域，不需要對網路配置做任何修改
- Use existing user directory for user privileges in DANTE
  Dante系統的使用者許可權可使用使用者自己的目錄系統
- Proactive alerts via email or SNMP
  可通過郵件或者SNMP協議發出主動警告
- Activity logs for all changes to DANTE configurations
  對Dante系統組態的任何修改提供活動修改日誌
- High availability for DDM server
  DDM伺服器冗餘備份

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House of Worship
教堂

Volunteers and Guests

志願者和客戶

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Becoming More Complex
系統越來越複雜

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Still Run by Volunteers & Guests
系統依舊被志願者或者客戶管理

Lock the system down from unwanted changes
對不允許被修改的內容進行管理

Provide different access rights to different people, including guests
對於不同的用戶提供不同的使用權限，包括客戶

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Boardroom
董事會議室

Private Meetings, Classified Briefings, etc..

私人會議，機密簡報，等等

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Privacy Concerns 隱私問題

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Television and Recording Studios
廣電和錄音棚

Centralized Monitoring of All Studios
所有工作室集中統一管理

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Accidental Changes 突然的變化

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Healthcare
醫療保健

HIPAA Compliance, Expert Consultations, Change of Shift

HIPAA 合規，專家諮詢，工作交接

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HIPAA

- **Health Insurance Portability and Accountability Act of 1996** (“HIPAA”)
  健康保險攜帶和責任法案1996（簡稱“HIPAA”）
  Department of Health and Human Services issued the Privacy Rule. The Privacy Rule standards address the use and disclosure of individuals’ health information.
  衛生及公共服務部門發佈的隱私法規，該隱私法規解決了個人醫療資訊的應用和披露問題
- **Who is regulated under HIPPA 規定的人員**
  - 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.
    衛生醫療保健提供者，包括醫療保險規定的所有服務提供單位（例如：公共機構單位，醫院），和只提供醫療或健康的服務單位（例如：非公共機構單位，如內科醫生、牙醫和其他執業醫師），也包括任何提供衛生醫療相關的設備或者費用的個人和組織
- **What is regulated under HIPPA 規定的範圍**
  - 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.
    對於任何實體或者商業公司所擁有的或需要傳閱的個人醫療資訊，無論以何種形式和媒介，包括電子設備、檔或者語言，都受到HIPPA保護。

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Privacy Regulations 隱私法規

- Surgeons consulting with other physicians before a procedure
  在執行下一步操作前外科醫生與內科醫生的諮詢會議

- Hospital executives deciding the future of the hospital
  醫院的執行管理層探討醫院的未來

- Doctors and nurses discussing patients before changing shifts
  在工作交接前醫生和護士交接病人病例

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Stadiums and Arenas
體育館和競技館

Broadcast Trucks, Touring Acts, Coaches Meetings

轉播車，巡演，培訓會議

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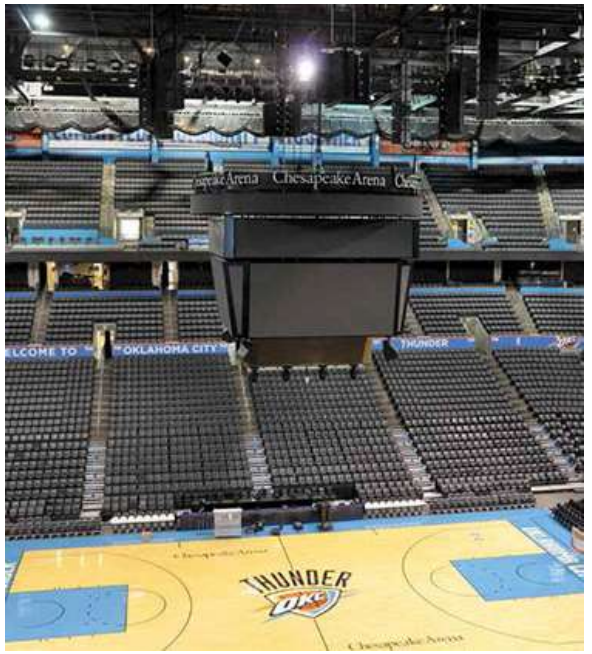
Stadiums / Arenas 體育館和競技館



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Game Day 比賽日

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可以管理和保護整個場館的音訊路由不被任意的修改。只允許被授權的管理者做修改，客戶只能看到Dante設備狀態，前提是提供許可權給客戶。

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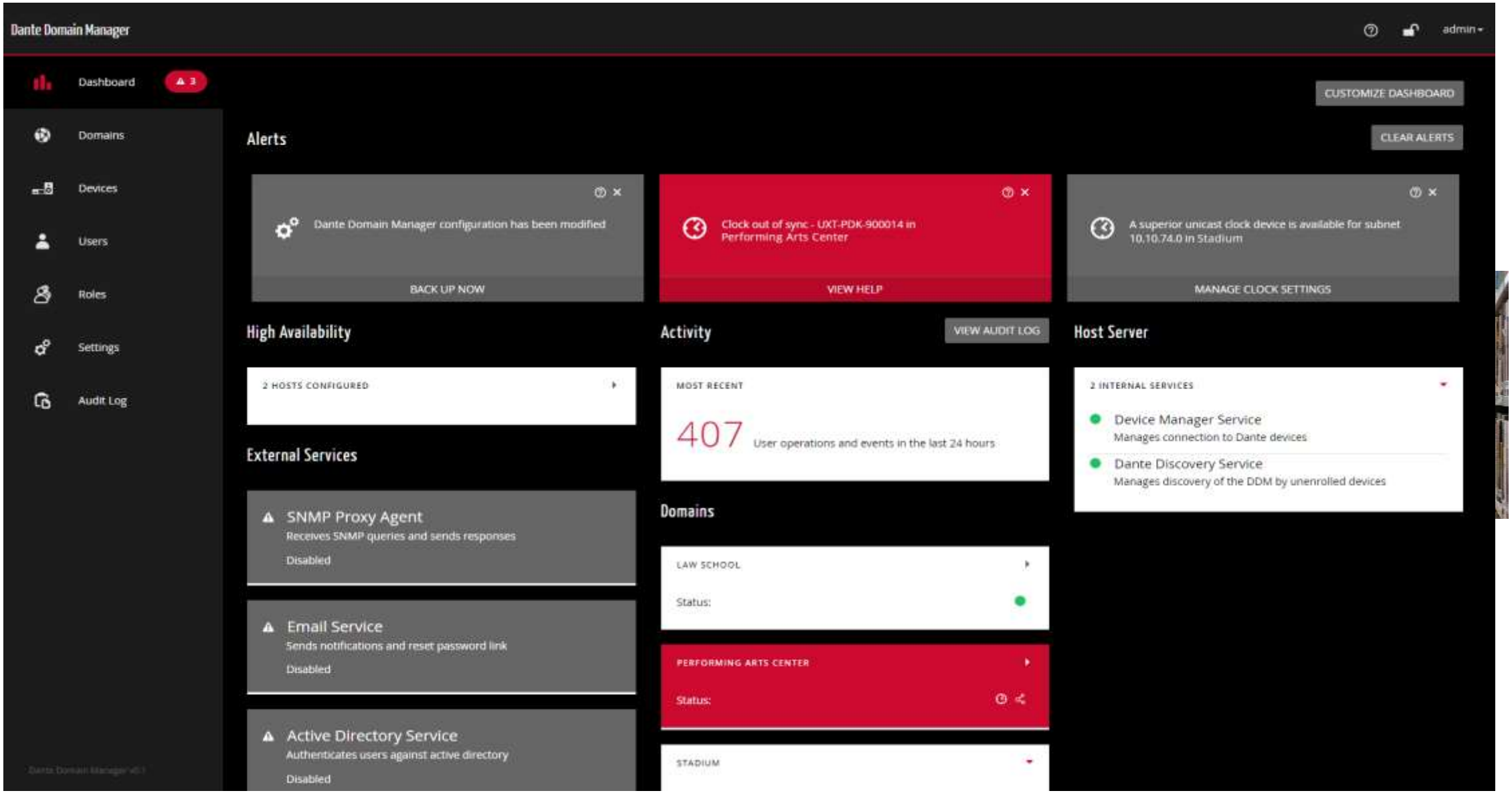
Higher Education
高等教育機構

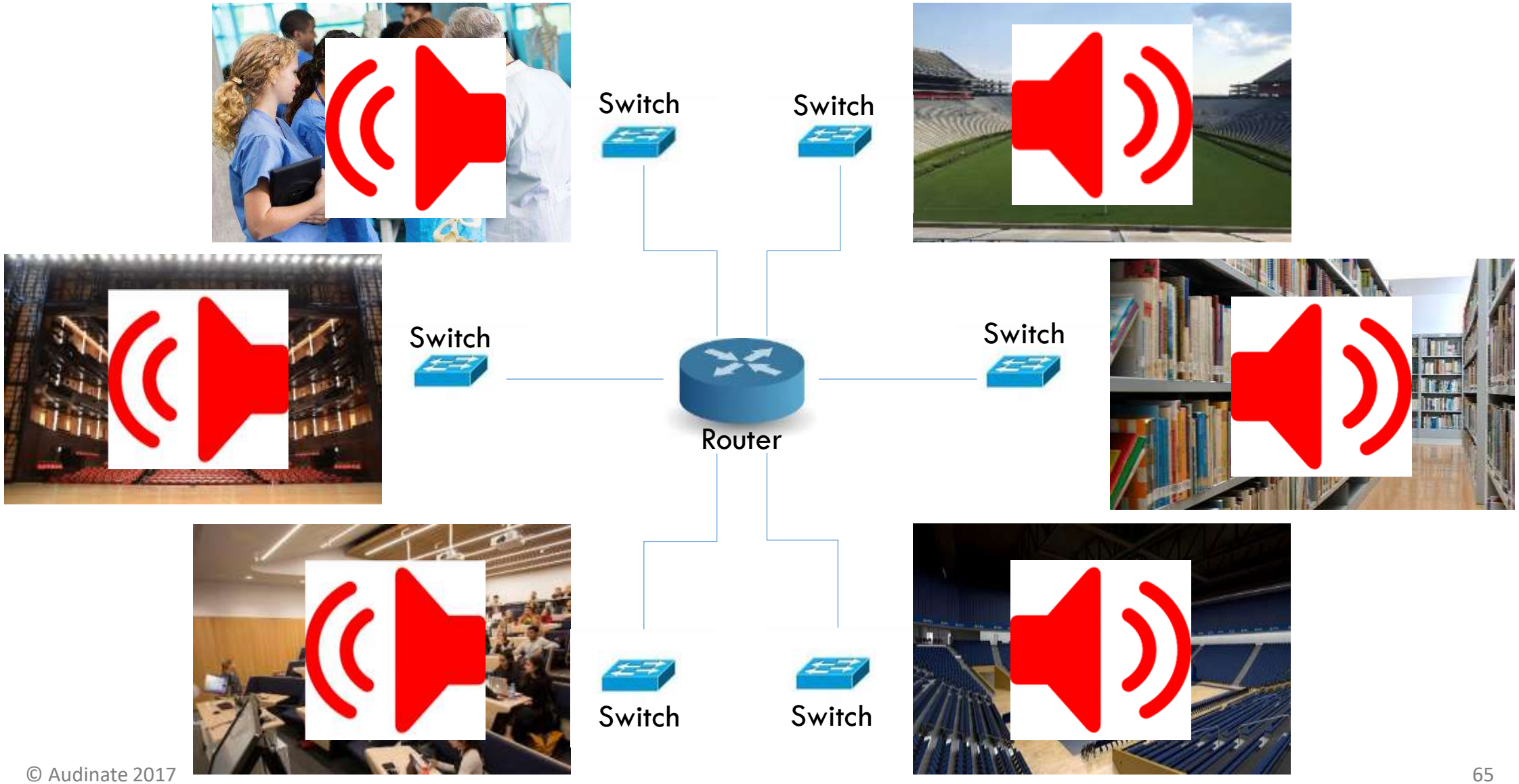
Campus Wide Paging Solution and Professional AV System
校園廣播系統和專業AV系統

Dante Domain Manager™

檢視和統合部署系統



Campus Wide Paging System and Professional AV System
校園廣播系統和專業AV系統



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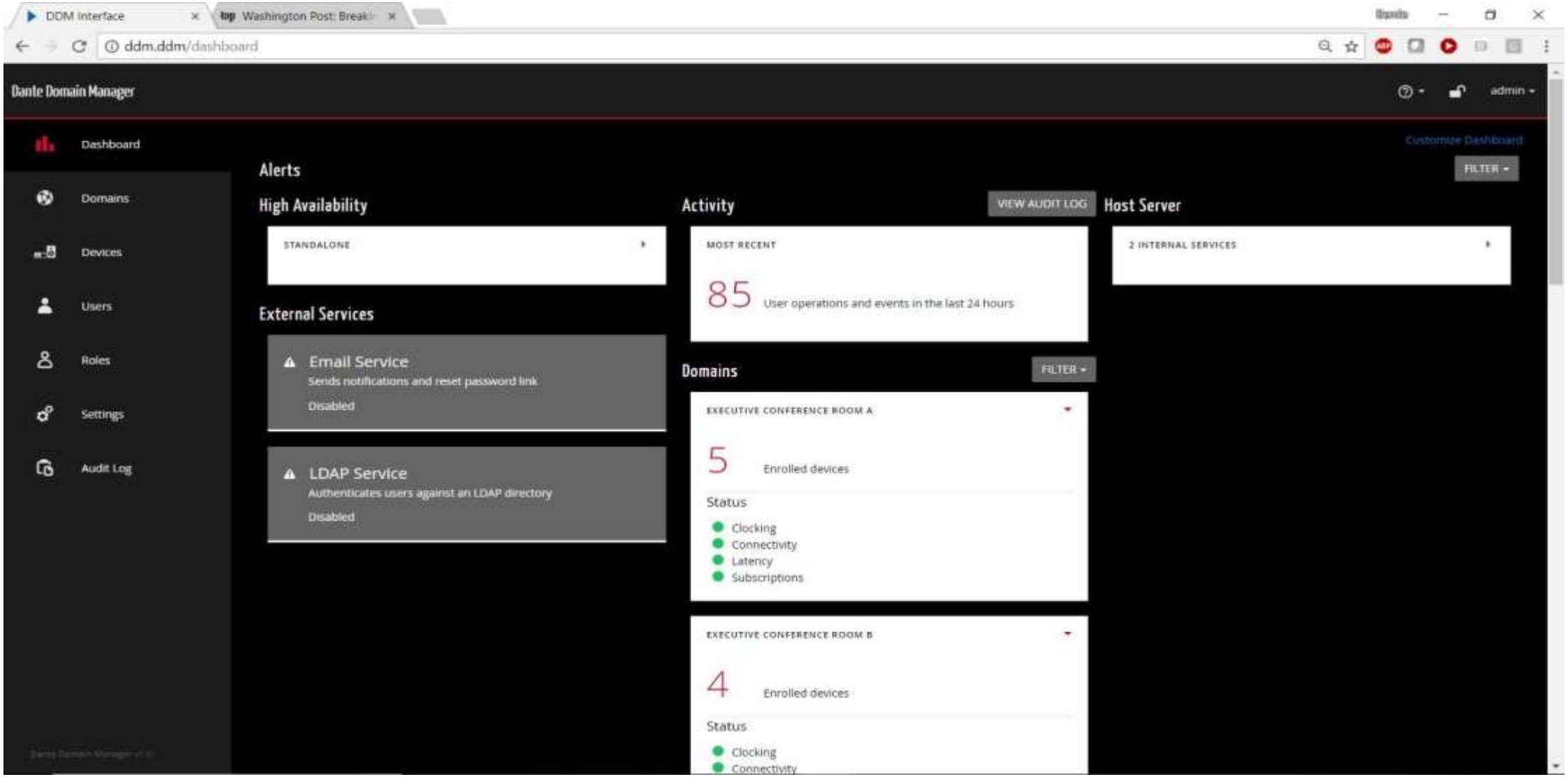
Corporate / Government
企業和政府

Management, Monitoring, Security, Scalability
管理、監控、保護、擴展

Dante™

Meeting Rooms 會議室



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What can I do with the DDM?
DDM可以讓我們做什麼

AV Managers
AV管理員

✓ Easily trouble-shoot AV System problems, identify root causes and take corrective actions quickly
系統故障排查簡單，可快速確認故障發生的本質並做出最正確的措施

IT Administrators
IT管理員

✓ Use my Directory service to manage access to AV systems
可使用使用者自己的目錄服務系統來管理AV系統的使用者授權
✓ Prevent unauthorized changes to AV systems
可防止未被授權的修改

System Integrators, AV Consultants
系統集成商和AV顧問

✓ Divide systems into manageable Dante domains
可對整體系統分割為多個可管理的Dante域
✓ Deploy Dante in campus routed IP networks
可運行在校園級的路由網路系統中

AV System Owners
AV系統業主

✓ Get notified of AV System issues so they can be actioned immediately
提供系統故障告警，並及時採取措施

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DDM Packages DDM版本

DDM EDITION DDM版本	SILVER 银版	GOLD 金版	PLATINUM 铂金版
CAPACITY 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
FEATURES 特色	INCLUDED 包括	INCLUDED 包括	INCLUDED 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:
適用於

Silver

Smaller installations
小型系統

Conference room, reception area, house of worship or classroom
會議室，接待區，教堂或者教室

Gold

Mid-sized business environments
中型系統

Easy management of multiple rooms and public spaces, tighter IT integration 含有多個房間和公共空間，且IT環境比較嚴格的應用

Platinum

Large scale installations
大型系統

Critical usage, many users, rooms and devices spread over a wide area 對於要求非常嚴格，並包括多個應用者，多個房間和多個設備的大型系統

Dante Domain Manager™

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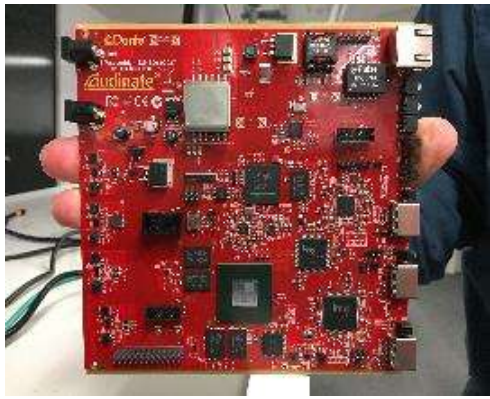
More than 250 devices? Discuss your requirements with us. 超過250台設備的應用，請直接聯繫我們

Dante Video: Bringing the “V to AV” 支援視頻，真正的AV一體

Benefits of the Dante Video Dante視頻的優點			
	Common management for audio and video 統一的音視頻管理	Lower installation and cabling costs 降低安裝成本	Better synchronisation between audio and video 音視頻同步
	Independent routing of Audio and Video signals 音視頻獨立路由	Displaces expensive matrix switches 替代傳統的視頻矩陣	Integration with Dante Domain Manager 相容DDM管理平臺

- Distribution of video signals from HDMI across an IP network
  HDMI信號轉換成IP網路進行傳輸和路由
- Audinate Video Prototype shown at Infocomm tradeshow June, 2018
  已在2018年美國Infocomm展展示了Dante視頻協定標準樣品
- Official launch of product on 5th Feb 2019
  2019年2月會在ISE展正式發佈



Confidential Under NDA

Use Cases
使用案例

Confidential Under NDA

Industrial and Commercial Bank of China Beijing, China中國工商銀行北京總部

Problem before Dante 沒有使用Dante之前

Difficult room acoustical characteristics
室內聲學環境很差
Poor speech intelligibility for conferencing
會議時語言清晰度很差

Solution with Dante 使用Dante之後

More evenly distributed sound
聲音分佈均勻
High quality audio from every seat
每一個座位都保證了高品質音訊

"Make sure everyone's voice is heard"

Columbus Zoo and Aquarium 哥倫布公園和水族館

Problem before Dante沒使用Dante之前

Reconfiguring audio would take 2 days 音訊系統重新配置可能需要2天的時間

System was difficult to maintain

系統維護比較困難

Solution with Dante 使用Dante之後

Audio sources can be changed in minutes 音訊信號可以非常容易配置

Segment zones making it easy to maintain

系統維護非常容易

"Domain Manager combats any unintended changes

Target Field- Minnesota Twins, Minneapolis, MN

Problem before Dante沒使用Dante之前

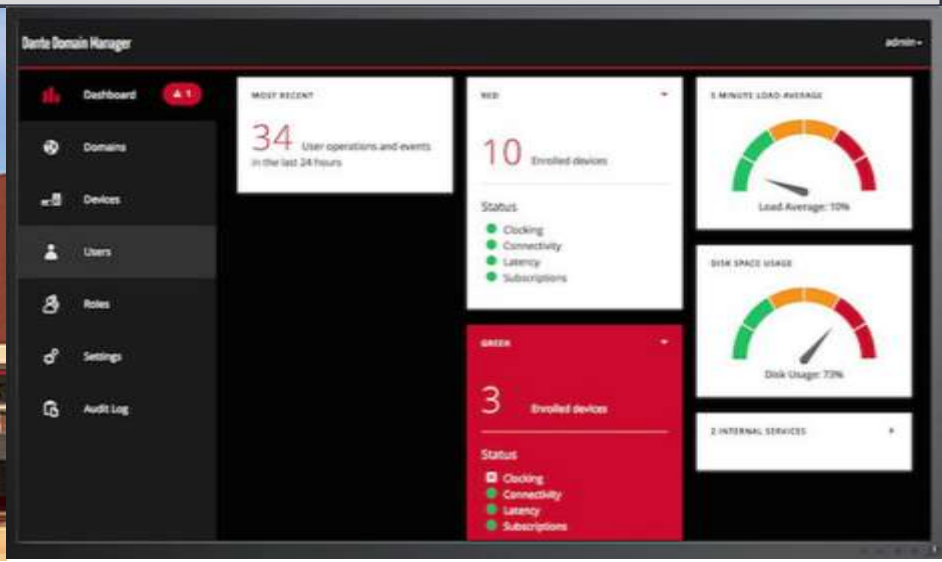
Every control room was a separate system 每一個控制室都是獨立的系統

Installation of conduit & cabling too expensive 管線安裝費用非常高

Solution with Dante使用Dante之後

Any area can be connected into one system 全部的區域連接成一個系統

Connect audio from anywhere to anywhere 音訊信號可以任意路由



"Dante Domain Manager allows me to create complex systems while maintaining simplicity, and flexibility"

現場音樂

美國航空中心 – 弗羅裡達州邁阿密

商業安裝

切薩皮克球館– 美國奧克拉荷馬州奧克拉荷馬市

廣播

維多利亞州國會大廈– 澳大利亞墨爾本

教育

總督州立大學 – 伊利諾斯州大學園

禮拜堂

柳溪社區教會– 伊利諾斯州南巴靈頓

RYAN GOSLING
EMMA STONE
LA LA LAND
FROM THE DIRECTOR OF WHIPLASH
IN SELECT CITIES DECEMBER 9

電影

愛樂之城

後期製作

GOLDCREST 電影 – 英國倫敦

錄音

SYNCHRON STAGE– 奧地利維也納

TRAINING 培訓

- Dante Certifications (Online & In Person) Dante 認證培訓（線上或者面授）
  - Level 1, Level 2 and Level 3
- Online 線上課程
  - Getting started with Dante
    開始使用Dante系統
  - Dante Controller 101
    Dante控制軟體101
  - Introduction to IP Networking for AV Systems
    介紹對於AV系統的IP網路知識
  - Principles of Digital audio
    數位音訊系統的基本知識

All classes are worth CTS credits
全部課程都有CTS分數

SUMMARY 總結

Dante is a no-compromise solution
Dante是一個非妥協的解決方案

- Complete, high performance digital media networking toolkit
  整體高性能的數位媒體網路解決方案
- True plug and play, with label-based routing
  真正的隨插即用，且設備名稱可自訂
- Widespread adoption and interoperability
  廣泛的應用和互通性強
- Supports existing switches
  支援已存在的網路系統
- The complete media networking solution
  整體的網路媒體解決方案

Media networking perfected

TRUSTED 信任

Microsoft Retail Stores

Milano Congress Center

Philadelphia NBA Stadium

NBC Studios

Singapore Sports Hub

Randwick Racetrack

Bolshoi Theatre

Sydney Trains

Tom Petty

Usher

Elton John

McCartney and Springsteen

QUESTIONS?
問題?

THANKS!
感謝!