The audio portion of today's program is available via your **PC speakers/headphones** or by dialing:
+1-719-457-6443, passcode: 679799

Session #1
Implementing IM, Presence, Voice and Video

**Migrating to
Unified Communications
with Microsoft Lync**

February 2012

Microsoft® Lync™

AudioCodes

Housekeeping….

The audio portion of today's program is available via your **PC speakers/headphones** or by dialing:
+1-719-457-6443, passcode: 679799

- To reduce interrupts and noise, all lines will remain on mute

- To pose a question/comment, please use the Q/A menu

- A link to the recording of today's presentation and the slide deck will be sent in a few days via email.

- Want early access to the slides?
  Follow @AudioCodes on Twitter or LinkedIn

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Great Drawings!
Nine opportunities to win!

8 x iPad 2

$2,000 Vacation Voucher!

- To enter the drawing, you must complete the survey to be presented at the end of today's session (on-demand viewers too!)
- Drawing for Vacation Voucher will occur after the last session and be based on all survey responses collected during the webinar series
- Up to eight chances per person to with the Vacation Voucher
- Drawing for iPad 2 will be from survey responses for the month & held at the end of each month
- One chance per person per month for the iPad drawing
- Winners will be notified via email
- Only US Legal Residents are eligible
- Complete drawing rules can be found at: http://www.audiocodes.com/uc-migration-series

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Today's Presenters

Alan D. Percy

Sr. Director, Marketing NA

Thomas Binder
Voice Architect
Voice Center of Excellence

Michael Nelson

Vice President, Co-Founder

Today's Agenda

Introductions and Housekeeping

Series Overview and Mission

Getting Started with Lync - Microsoft

A Customer Experience - IAS

Connecting the Dots - AudioCodes

What's Next?

Survey / Feedback

Q/A

AudioCodes

What is Microsoft Lync?

The biggest thing to hit the office since Microsoft Office.

➤ IM & Presence
➤ Video Conferencing
➤ Enterprise Voice
➤ Office Integration
➤ Mobile apps

Microsoft® Lync™

www.microsoft.com/lync

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Series Background

- Started with "UC with Microsoft Lync – Migration Strategies"
  - June 6, 2011
  - Market analysis, migration strategy and case study
  - All "crammed" into one hour
- Webinar Feedback:
  - Need more "How to" content
  - Want more details on each step
  - More Case Studies
  - Wanted more opportunities to ask questions
- If you missed it, you can view the recording at:

  www.audiocodes.com/events/recorded-webinars

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UC Migration with Microsoft Lync Sessions

Implementing IM/Presence/Voice & Video

Emergency Services and E911 with UC

Moving off the PBX / Moving SIP Phones to Lync

SIP Trunking – Turning on the Cost Savings

UC Mobility - Taking it on the Road

Branch Office Deployments and Survivability

Call Recording and Compliance with UC

Unified Messaging - Integrating the Desktop

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Agenda

- About me
- Terms
- Building a Lync environment
- Connecting to the PSTN
- Resources
- Q&A

Thomas Binder

- Thomas Binder
- Austria, Vienna
- Working on OCS/Lync since 2007
- MCS Voice CoE

Terms

- Front End Server
  - SIP registrar
- Pool
  - A cluster
- SIP Trunk
  - Connection to a SIP Trunking provider
- Conference
  - A conversation with more than two users
- PBX
  - Private Branch Exchange
- PSTN
  - Public Switched Telephony Network

Requirements

- Active Directory
    - Forest/Domain functional Level
        - Windows Server 2003 native mode
        - Windows Server 2008
        - Windows Server 2008 R2
    - Lync will require a Schema Update
- Certification Authority
    - Certificates for all servers
- DNS
    - A records and SRV records

Building a Lync environment

Front End Server
- SIP Registrar
- IM/Presence
- Can collocate
    - AV Conferencing Server
    - Mediation Server

Front End Server

Backend Database

Dedicated SQL backend
- Only required for EE
- Active/passive cluster

Enterprise vs. Standard Edition
- Same functionality
- Standard Edition
    - Single box solution
    - Includes also back end database
    - 5,000 users
- Enterprise Edition
    - High Availability
    - Requires dedicated SQL server and Hardware Load Balancer
    - Up to 80,000 users

Building a Lync environment

AV Conferencing Server

AV Conferencing Server
- Can be collocated with Front End
- Dedicated Server recommended for scalability
- For pools with 10,000+ users
- Each supports 20,000 users

Front End Server

Backend Database

Building a Lync environment

AV Conferencing Server

Monitoring Server

Front End Server

Backend Database

Monitoring Server
- Call Detail records
  - Who, when, how long
  - Usage information
- Quality metrics
  - Endpoint information
  - Network
- Out-of-the-box reports using SQL Server reporting services
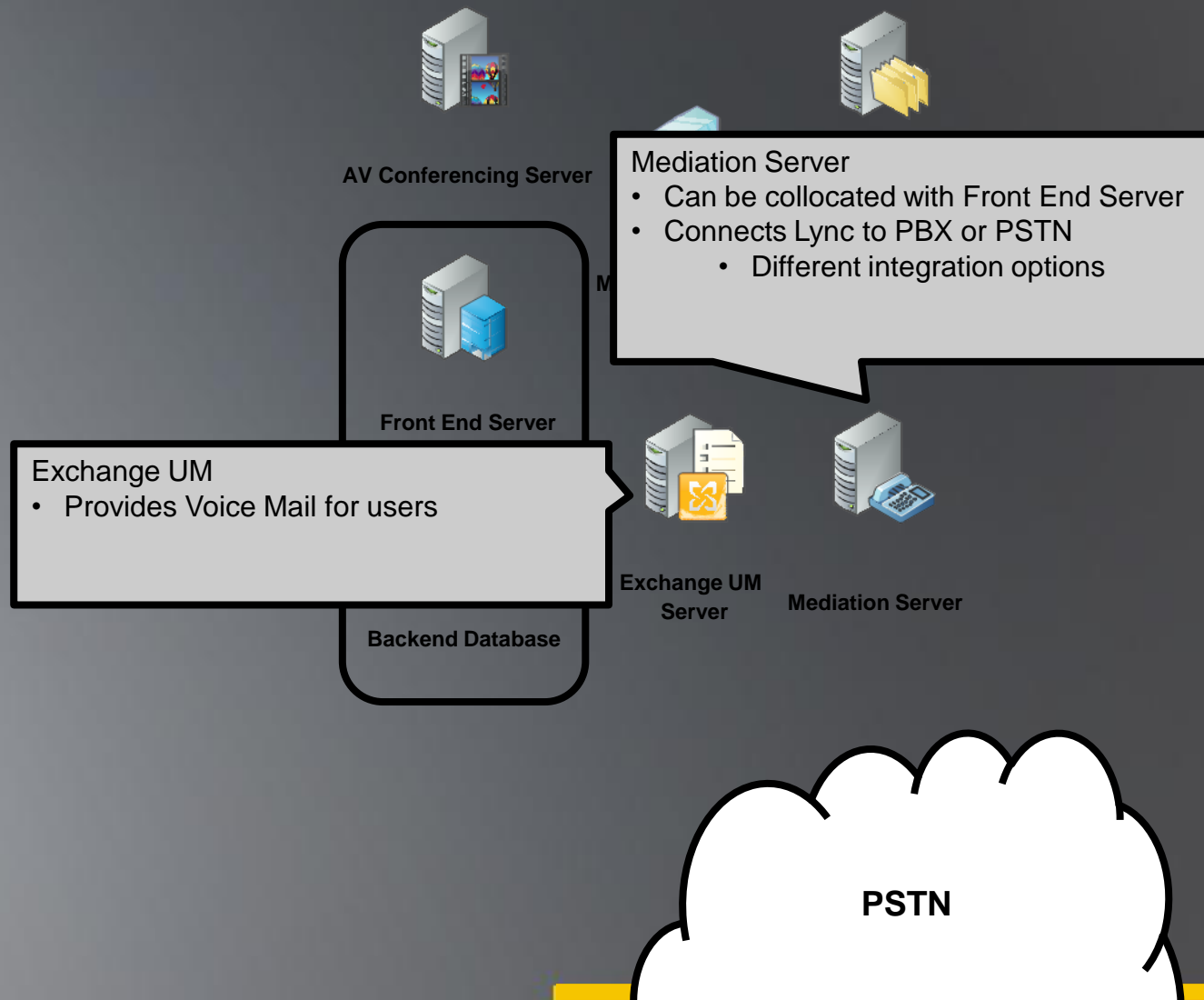- Can be collocated with Archiving Server
- Stores data in SQL Server

Building a Lync environment

AV Conferencing Server

Archiving Server

Front End Server

Backend Database
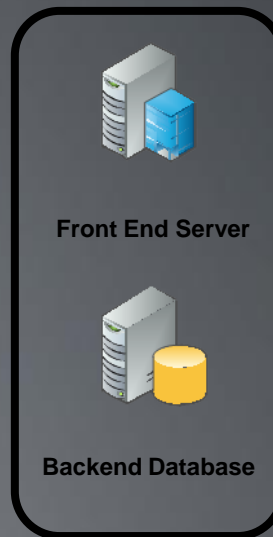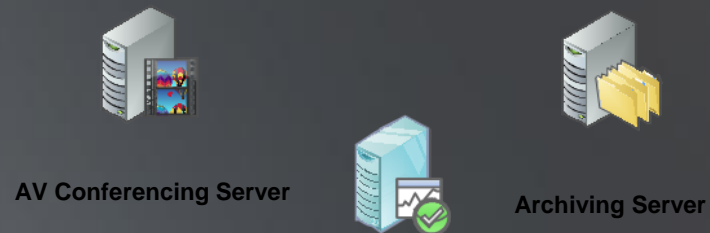
Archiving Server
- Archives Instant Message
  - Full content
- Privacy vs. compliance
- Can be collocated with Monitoring Server
- Stores data in SQL Server

Building a Lync environment

AV Conferencing Server

Mediation Server
- Can be collocated with Front End Server
- Connects Lync to PBX or PSTN
  - Different integration options

Front End Server

Exchange UM
- Provides Voice Mail for users

Exchange UM Server

Mediation Server

Backend Database

PSTN

Building a Lync environment

Reverse Proxy
- Used for https traffic
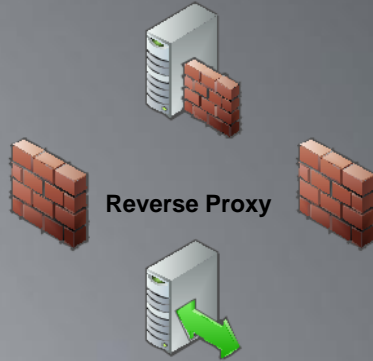- Can reuse existing Reverse Proxy
- Any Reverse Proxy can be used

Director
- Optional component
- Can redirect users
- Can function as next hop for all external traffic
  - Recommended if Edge Server is deployed

Internet

Reverse Proxy

Edge Server

Director Server

Front End Server

Backend Database

Monitoring Server

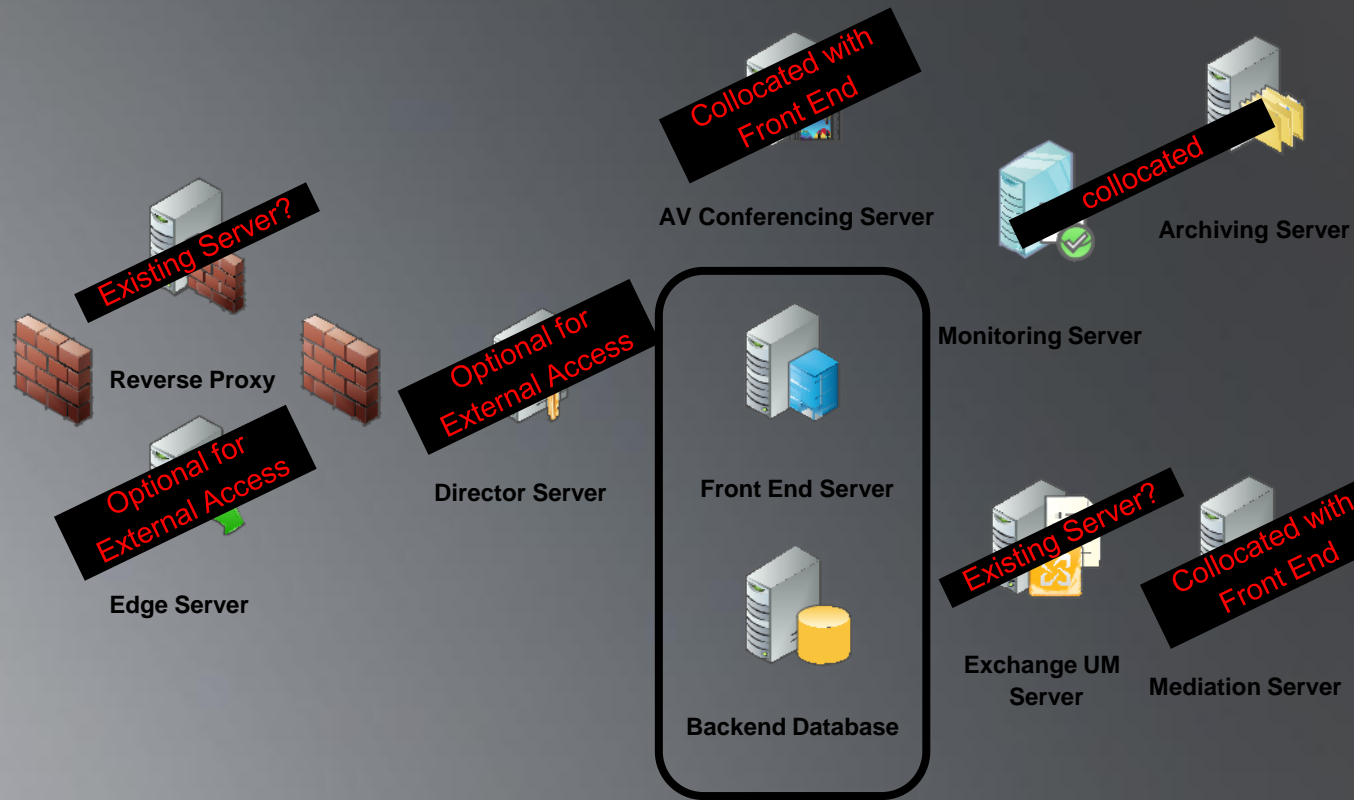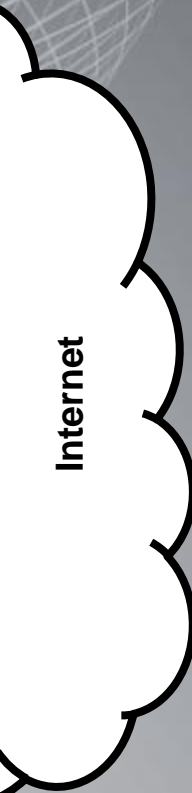**Archiving Server**

Exchange UM Server

Mediation Server

Edge Server
- Relays SIP, Conferencing and Media traffic
- Enables remote users, Federation and PIC
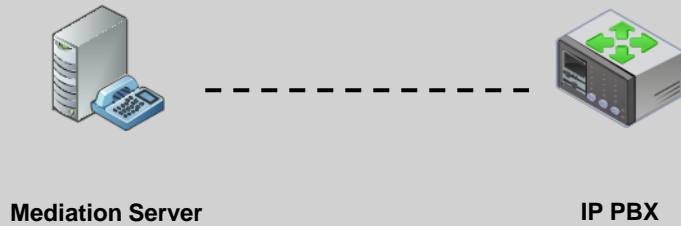- Can use DNS Load Balancing or Hardware Load Balancing

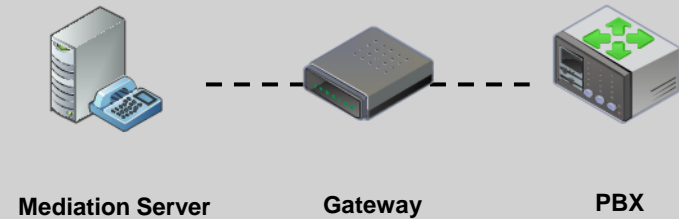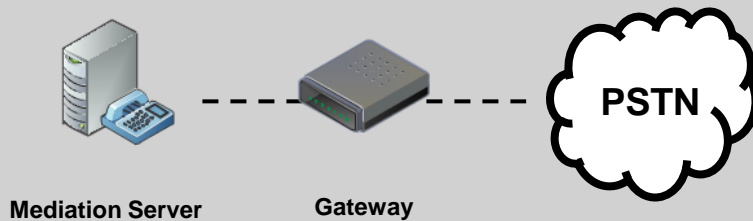**PSTN**

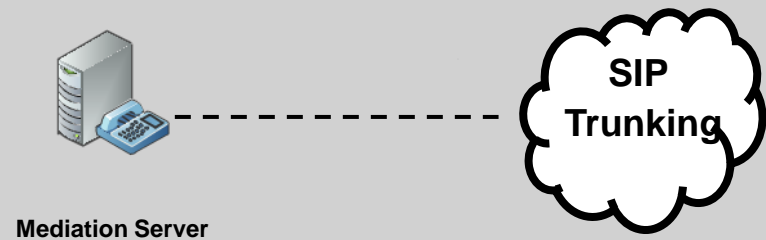# Building a Lync environment
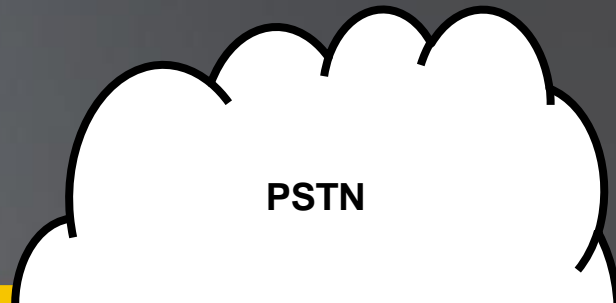
Enterprise Voice

Direct SIP to IP PBX

Mediation Server   **IP PBX**

Gateway to PBX

Mediation Server   **Gateway**   **PBX**

Gateway to PSTN

PSTN

Mediation Server   **Gateway**

SIP Trunking

SIP Trunking

Mediation Server

Lessons learned

- Know your deployment goal
- Network
- Open Interoperability Program
- Devices
- Phased approach
  - Internal
  - External
  - PSTN
- User Training

Resource

- Public documentation
  - http://www.microsoft.com/download/en/details.aspx?id=23888
- Open Interoperability Program
  - http://technet.microsoft.com/en-us/lync/gg131938.aspx
- Phones and Devices Qualified for Microsoft Lync
  - http://technet.microsoft.com/en-us/lync/gg278164.aspx
- NextHop: Microsoft Lync Server Documentation Hub
  - http://blogs.technet.com/b/nexthop/
- Lync.com
  - http://lync.com

Microsoft

Thank You

tbinder@microsoft.com

Integrated Access Solutions

- **UC Experts – Everything UC**

- **10+ years in Business**

- **Gray hair and scar tissue**

- **Legacy TDM through the evolution of VOIP to IP Telephony to Unified Communications**

- **Thousands and thousands of Digital AND IP endpoints deployed**

Integrated Access Solutions

- **Mid-Market to Enterprise Focus**

- **Over 100 Years of Experience**

- **Subject Matter Experts**

- **Legacy, Digital and IP PBX Platforms**

- **Advanced Communications Applications**

Orange County based with 450 employees world wide

- Situation
  - Dying PBX
  - Obsolete communications methods
  - Global foot print
  - Major corporate relocation
  - Changing business needs
  - Distributed work force
  - Outsourced conferencing and collaboration services costly

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TECHNOLOGY MANAGEMENT

Solution-Consulting

- **Deep needs analysis**
  - Workflow
  - Customer interaction
  - Employee efficacy

- **Infrastructure evaluation**
  - Data Network – WAN/LAN
  - Messaging
  - Enterprise applications

- **UC impact study**
  - Voice and Video capacity assessment
  - Enterprise application integration

- **Generate Design Options**
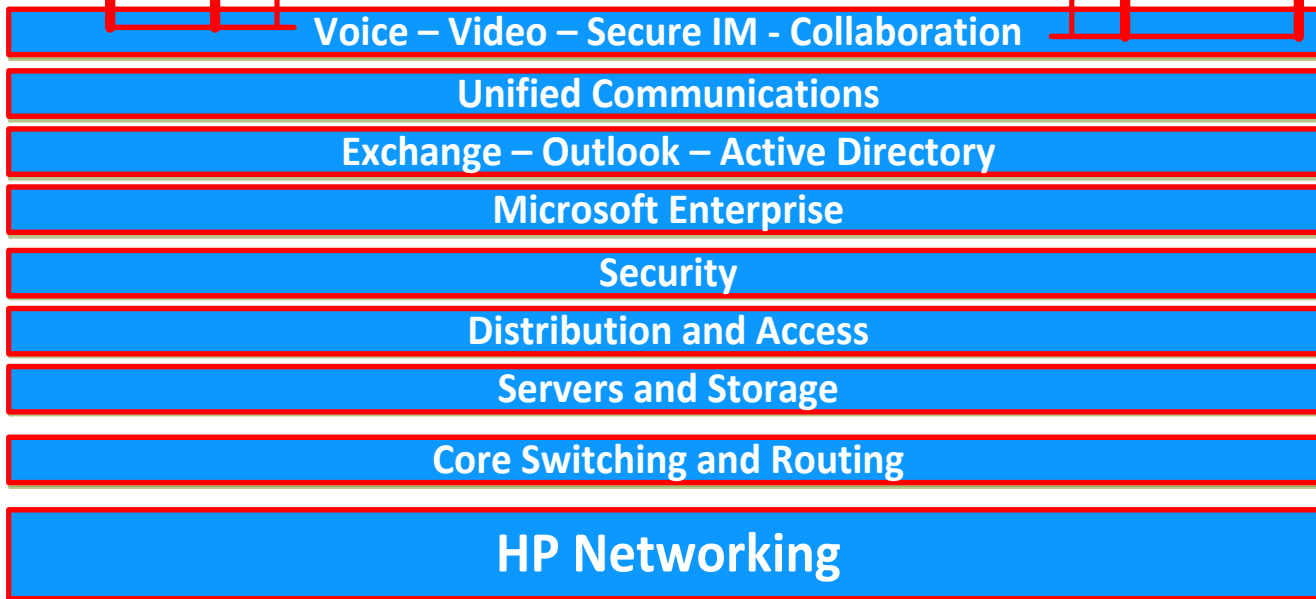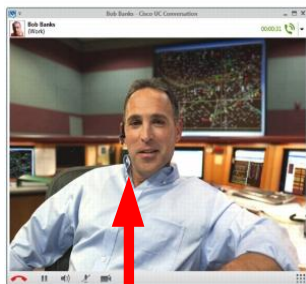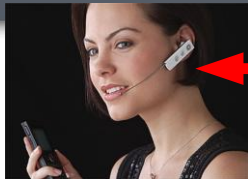
Solution – New Economy Approach

- Foundation
  - HP Networking
  - Microsoft EA
  - Audiocodes
  - Polycom
  - Intelepeer

- End User Experience
  - Teaming
  - Collaboration
  - Mobility
  - Adaptability

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Platform for a Global Solution

Voice – Video – Secure IM - Collaboration

Unified Communications

Exchange – Outlook – Active Directory

Microsoft Enterprise

Security

Distribution and Access

Servers and Storage

Core Switching and Routing

HP Networking

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TECHNOLOGY MANAGEMENT

Empowering a Global Team

Global Communications Network
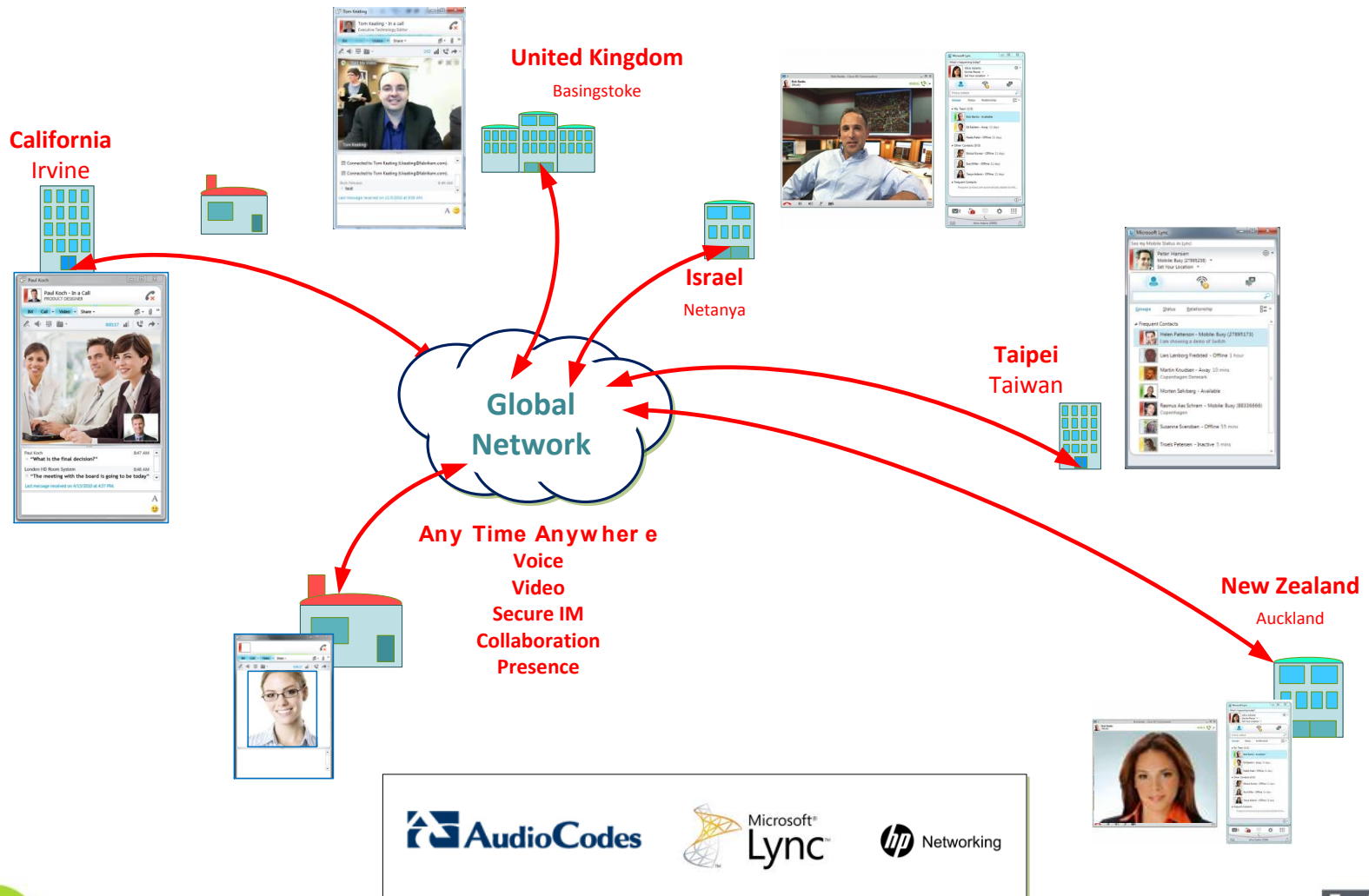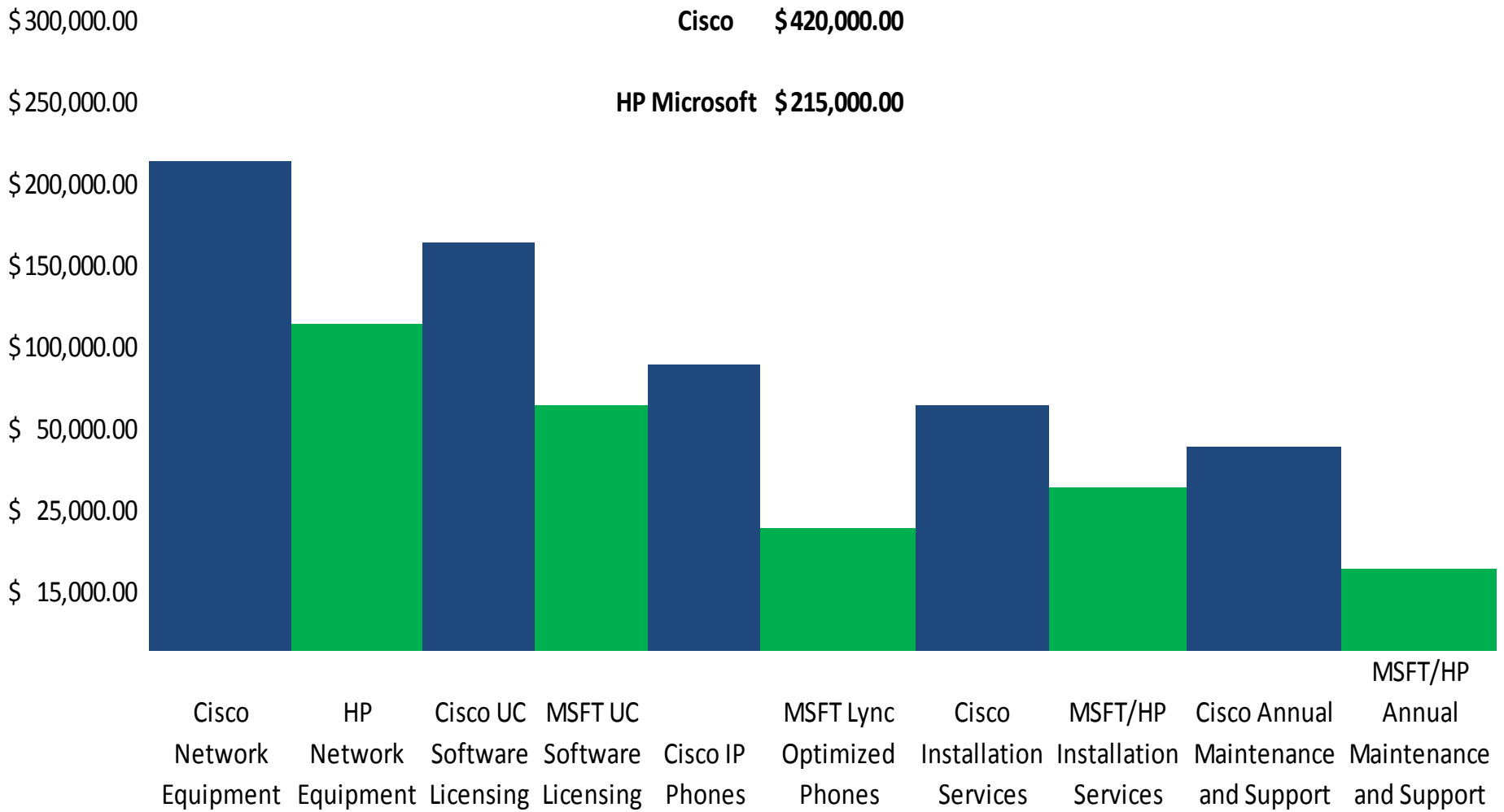
- California — Irvine
- United Kingdom — Basingstoke
- Israel — Netanya
- Taipei — Taiwan
- New Zealand — Auckland

Global Network

Any Time Anywhere
Voice
Video
Secure IM
Collaboration
Presence

AudioCodes Microsoft Lync hp Networking

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**Migrating to
Unified Communications
with Microsoft Lync**

February 2012

Microsoft®
Lync™

AudioCodes

What AudioCodes Does…

The Communications World:

Applications

Microsoft® Lync™

Mobile

UC

Cloud

Media Gateways | Residential Gateways | MSBG | SBC | IP Phones

← AudioCodes

All IP World

TDM ————————————→ All IP

2030
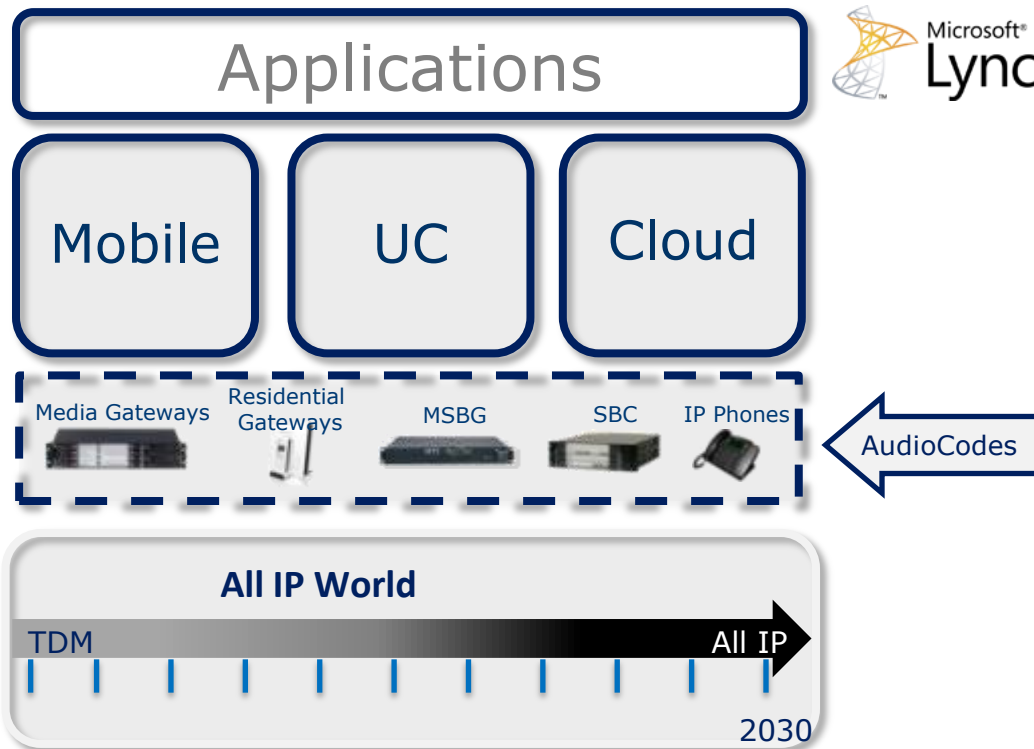
- Communications - world is shifting towards an all IP infrastructure

- Growth driven by desire for unified communications, cloud computing and mobility

- Incumbent vendors struggle to adapt to demands of newly emerging software applications
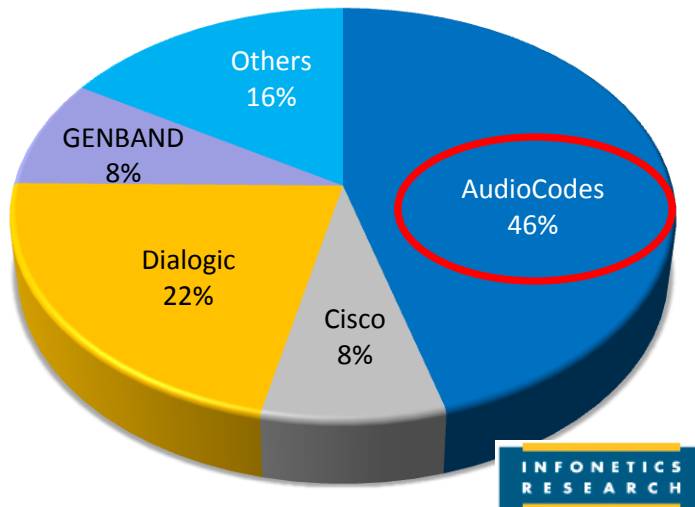
AudioCodes innovative, interoperable and diverse portfolio of solutions are uniquely positioned to enable this transition
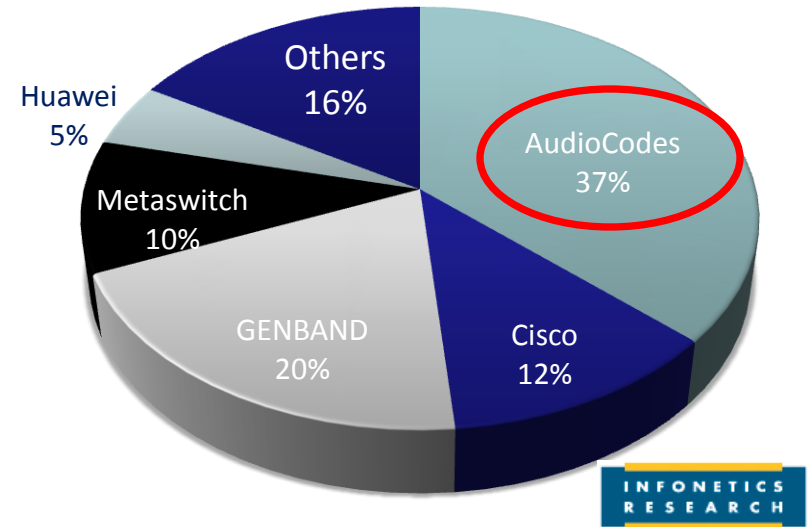
AudioCodes

Media Gateway Market Share

Low Density Market Share – Q4 2010

Others 16%
GENBAND 8%
Dialogic 22%
Cisco 8%
AudioCodes 46%

INFONETICS RESEARCH

Mid Density Market Share – Q4 2010

Huawei 5%
Others 16%
Metaswitch 10%
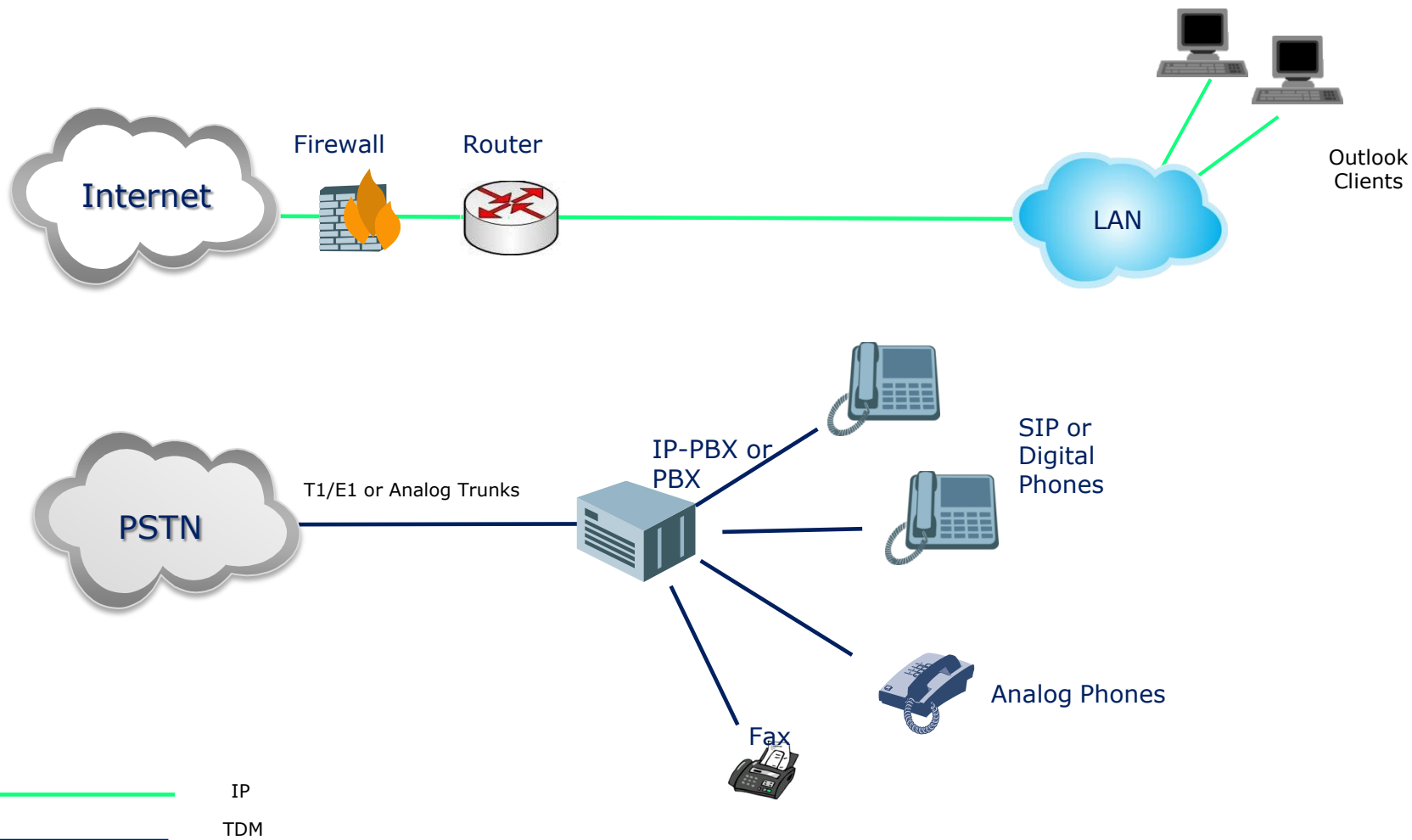GENBAND 20%
Cisco 12%
AudioCodes 37%

INFONETICS RESEARCH

- **Ranked #1 in VoIP chips (1997-2000)**

- **Ranked #1 in VoIP communications blades (1998-2006)**

- **Ranked #1 in VoIP Medium Density & Low Density media gateways (2008-2010)**
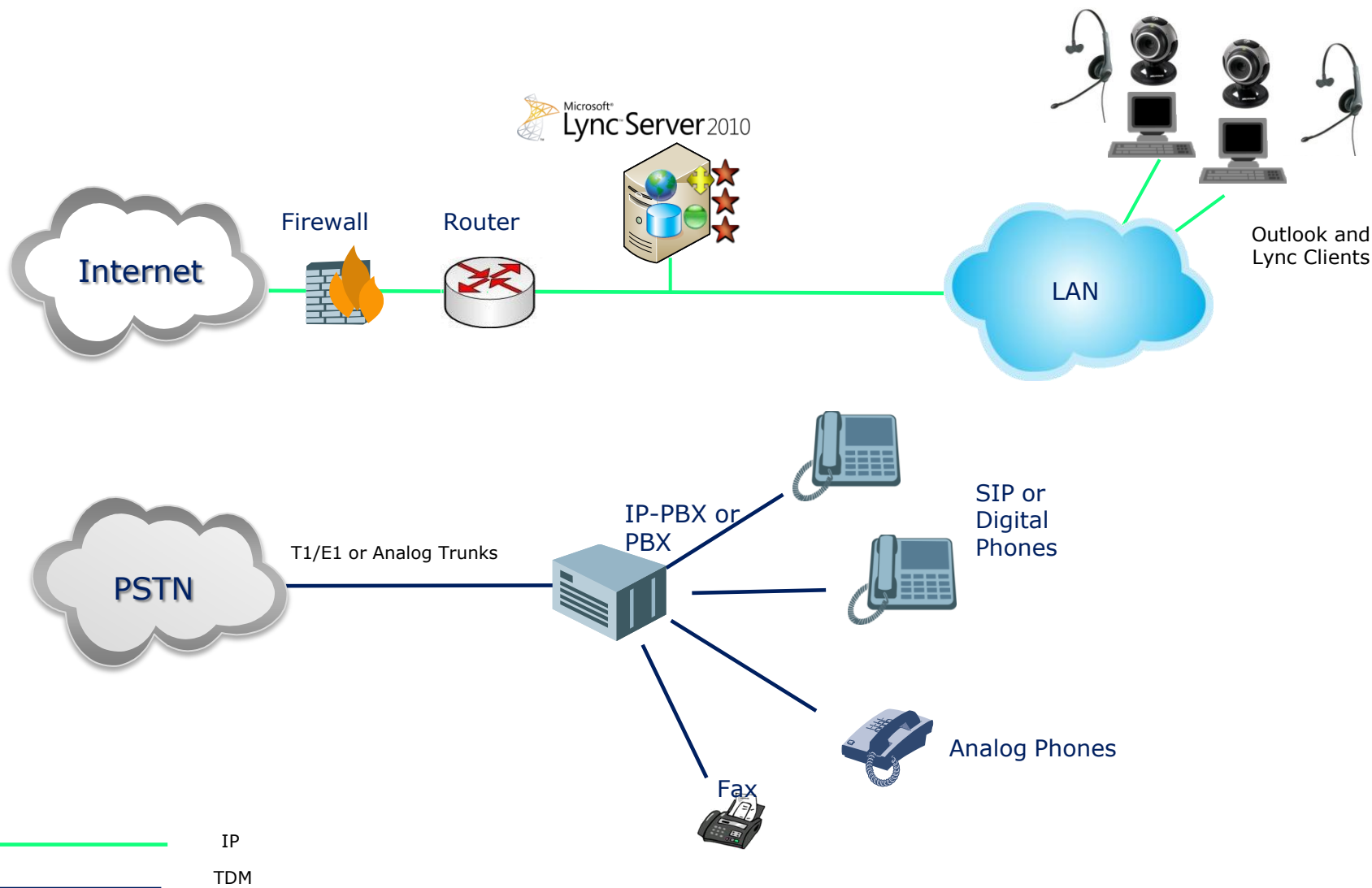
- **Focused on Enterprise Voice**

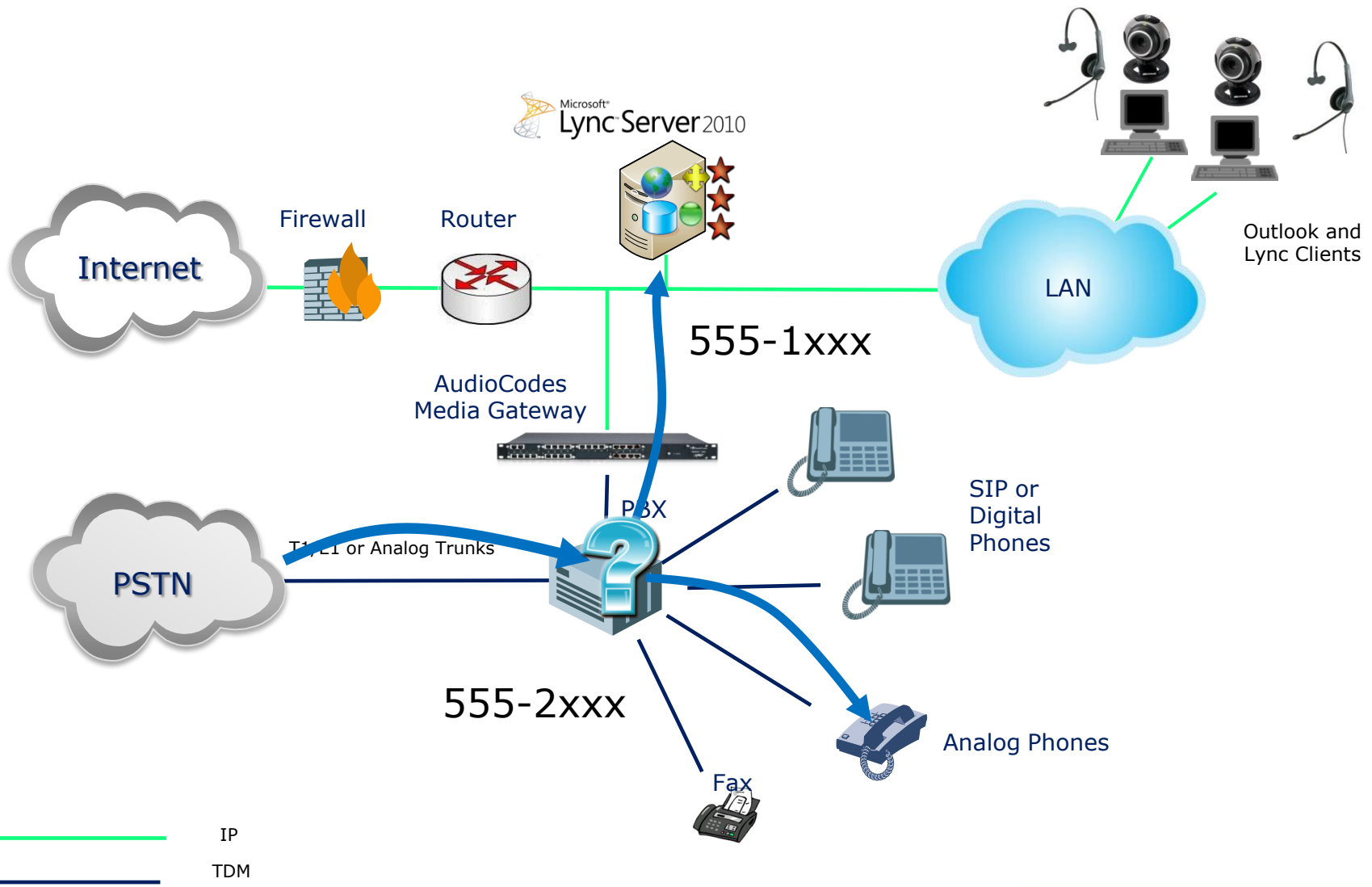*Source: Infonetics, 4Q10 SP VoIP Equipment & Subscribers*

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Starting Point: Businesses Today

Internet

Firewall

Router

LAN

Outlook Clients

PSTN

T1/E1 or Analog Trunks

IP-PBX or PBX

SIP or Digital Phones

Analog Phones

Fax

IP

TDM

Implementing Lync without Voice Integration

Microsoft®
Lync Server 2010

Firewall   Router

Internet

LAN

Outlook and
Lync Clients

IP-PBX or
PBX

SIP or
Digital
Phones

T1/E1 or Analog Trunks

PSTN

Analog Phones

Fax

IP

TDM

Behind the PBX

Internet

Firewall

Router

Microsoft® Lync Server 2010

LAN

Outlook and Lync Clients

555-1xxx

AudioCodes Media Gateway

PSTN

T1/E1 or Analog Trunks

PBX

555-2xxx

SIP or Digital Phones

Analog Phones

Fax

IP

TDM

AudioCodes

Drop and Insert

Internet

Firewall

Router

Microsoft® Lync Server 2010

Outlook and Lync Clients

LAN

555-1xxx

PSTN

Trunks

AudioCodes Media Gateway

555-2xxx

IP-PBX or PBX

SIP or Digital Phones

Analog Phones

Fax

———— IP

———— TDM

AudioCodes

SIP with IP-PBX

Integration Notes

Unified Communications Building Blocks from AudioCodes

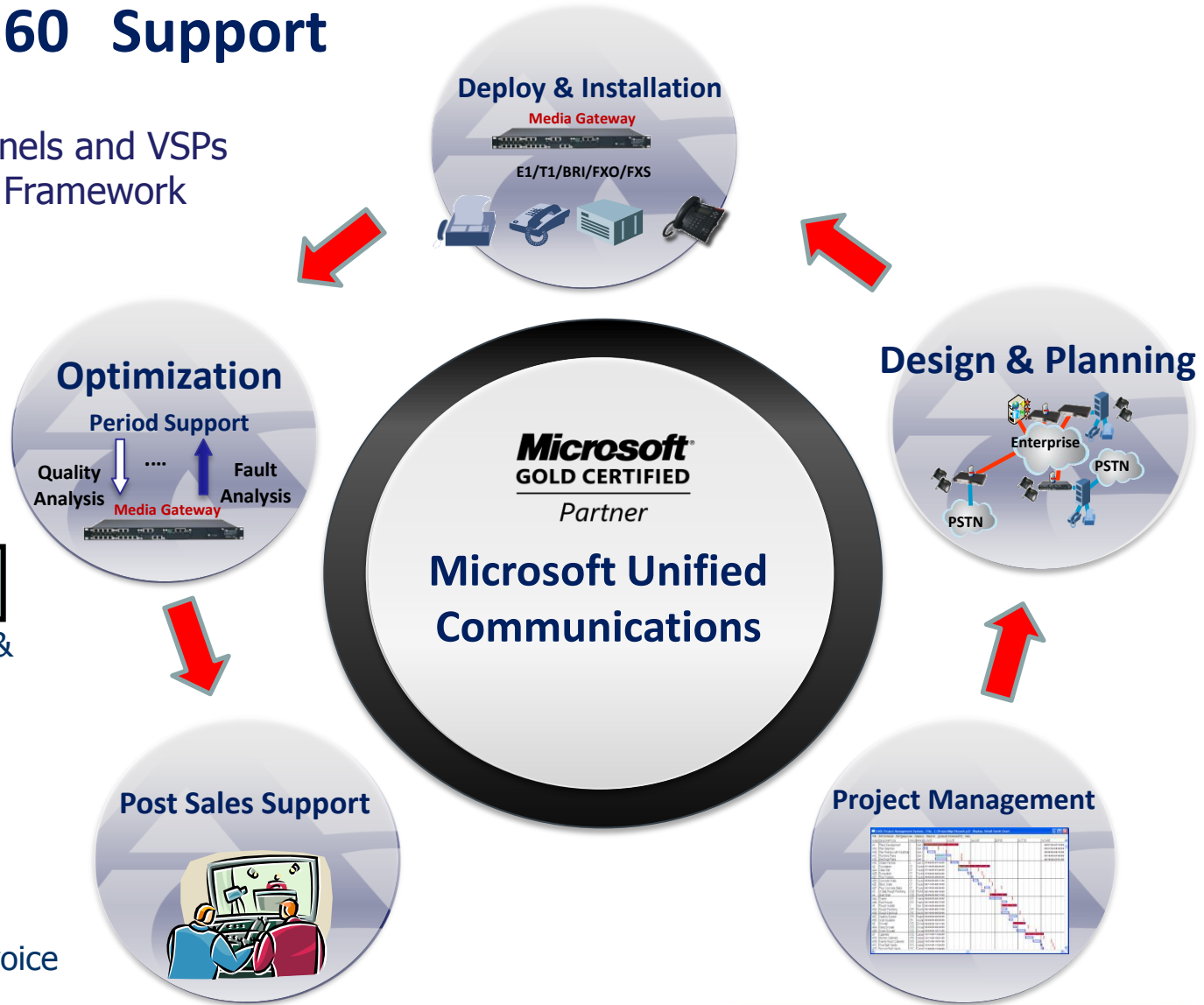| Features	MediaPack 1xx	Mediant 800	Mediant 1000	Mediant 2000	Mediant 3000	Mediant 8000
Office Communications Server 2007 R1/R2 (Gateway Type)	Basic	Basic	Basic Basic-Hybrid	Basic Basic-Hybrid	Basic	Basic
Lync Server 2010 (Gateway Type) Filed Upgradable - Firmware upgrade	Analog Device	Enhanced	Enhanced SBA SPS	Enhanced SBA SPS	Enhanced	Enhanced
Microsoft Exchange Server 2007 & 2010 (Gateway Type)	IP Gateway	IP Gateway	IP Gateway	IP Gateway	IP Gateway	IP Gateway
Max PSTN Channels	2/4/8/24	30	120	480	2,016	16,000
PSTN Interfaces	FXS/FXO Up to 24 FXS or 8 FXO ports	Up to: 1 E1/T1 4 BRI ports 12 FXS/FXO	Mix of: 1 - 4 E1/T1 1-20 BRI 4-24 FXS/FXO	1 -16 E1/T1 trunks	Up to 63/84 E1/T1 trunks	Up to 8xOC-3 (STM-1) ports, Up to 24xT3 (DS-3) ports Up to 252 E1/T1/J1 trunks
Modularity	Fixed configuration analog gateway	Fixed configuration gateway	Full Modularity	Fixed configuration digital gateway	Fixed configuration digital gateway	Full Modularity
SBC / IP to IP	N/A	Full E-SBC Up to 24 concurrent Sessions	Full E-SBC Up to 150 concurrent Sessions	IP to IP Up to 240 concurrent Sessions	Full E-SBC Up to 1000 concurrent Sessions	B2BUA Transcoding Application

AudioCodes 360 Support

➢ Targeted for MSFT Channels and VSPs
➢ Utilizes the PDI services Framework

Planning & Design

- Planning Assessment
- High Level Design
- Migration Planning
- Detailed Design
- Staging plan
- Implementation Plan

Implementation

- Media GW's Configuration & Deployment
- VOIP Deployment and Acceptance
- PSTN and PBX telephony integration
- Installation Services
- integration and migration between current & target voice infrastructures

Deploy & Installation
Media Gateway
E1/T1/BRI/FXO/FXS

Optimization
Period Support
Quality Analysis   ....   Fault Analysis
Media Gateway

Design & Planning
Enterprise
PSTN
PSTN

Microsoft
GOLD CERTIFIED
Partner

Microsoft Unified Communications

Post Sales Support

Project Management

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Our Next Session

Emergency Services and E911 with UC

Partners: March 13, 2012   End-Users: March 15, 2012

- Discussing the challenges and requirements
- Introduce ELIN
- Special handling for E-911 calls
- Cost-saving techniques
- Review a customer case study
- Presenters:

Pascal Menezes, Senior Program Manager, Microsoft

Chris Sheridan, Solutions Architect, Sentri and a vTSP for Microsoft

Year of the Lync Webinar

Wednesday February 22, 2012 11:00am EST (5:00pm CET) Duration: 1 hour

AudioCodes and Infonetics Research Webinar

Year of the Lync
Migration to Microsoft Lync Voice Solutions

Dani Kiryati
Marketing Manager
AudioCodes

Diane Myers
Directing Analyst
VoIP and IMS
Infonetics
Research

Register at: www.audiocodes.com/events/live-webinars

Survey Time!

8 x iPad 2

$2,000 Vacation Voucher!

We appreciate your feedback!

Please complete the short survey

http://www.surveymonkey.com/s/UCMIGRATION

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Q/A and To Learn More:

- Questions: Use the Q/A menu on Live Meeting

- More on Lync solutions at: www.audiocodes.com/Lync
  - Whitepapers
  - Recorded webinars
  - Videos
  - Datasheets/Brochures

- Social Media
  - Twitter – @AudioCodes
    or @AlanDPercy
  - LinkedIn
    – AudioCodes
    – AudioCodes / Lync Resource Center Group

See us at:

Enterprise
CONNECT

SILVER SPONSOR

Booth #1136

AudioCodes

Thanks!

Alan D. Percy
Alan.percy@audiocodes.com
Twitter: @AlanDPercy

More on Lync solutions at:
www.audiocodes.com/Lync

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