

28 April 2011

Thanks for joining!  
Today's program will  
begin promptly at 11 AM EST.

## Things to Consider When Migrating to SIP Trunking

Note: The audio portion of today's webinar  
Requires a Windows-based PC with audio capabilities  
and either speakers or a headset.



# Today's Speakers



**Dani Kiryati**

Marketing Manager  
AudioCodes



**Diane Myers**

Directing Analyst, VoIP & IMS  
Infonetics Research

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# Agenda

- SIP Trunking and E-SBC market trends
- SIP Trunking deployment considerations
- Roles and features of E-SBC
- Case studies

# Migrating to SIP Trunking

## Market Background and Trends

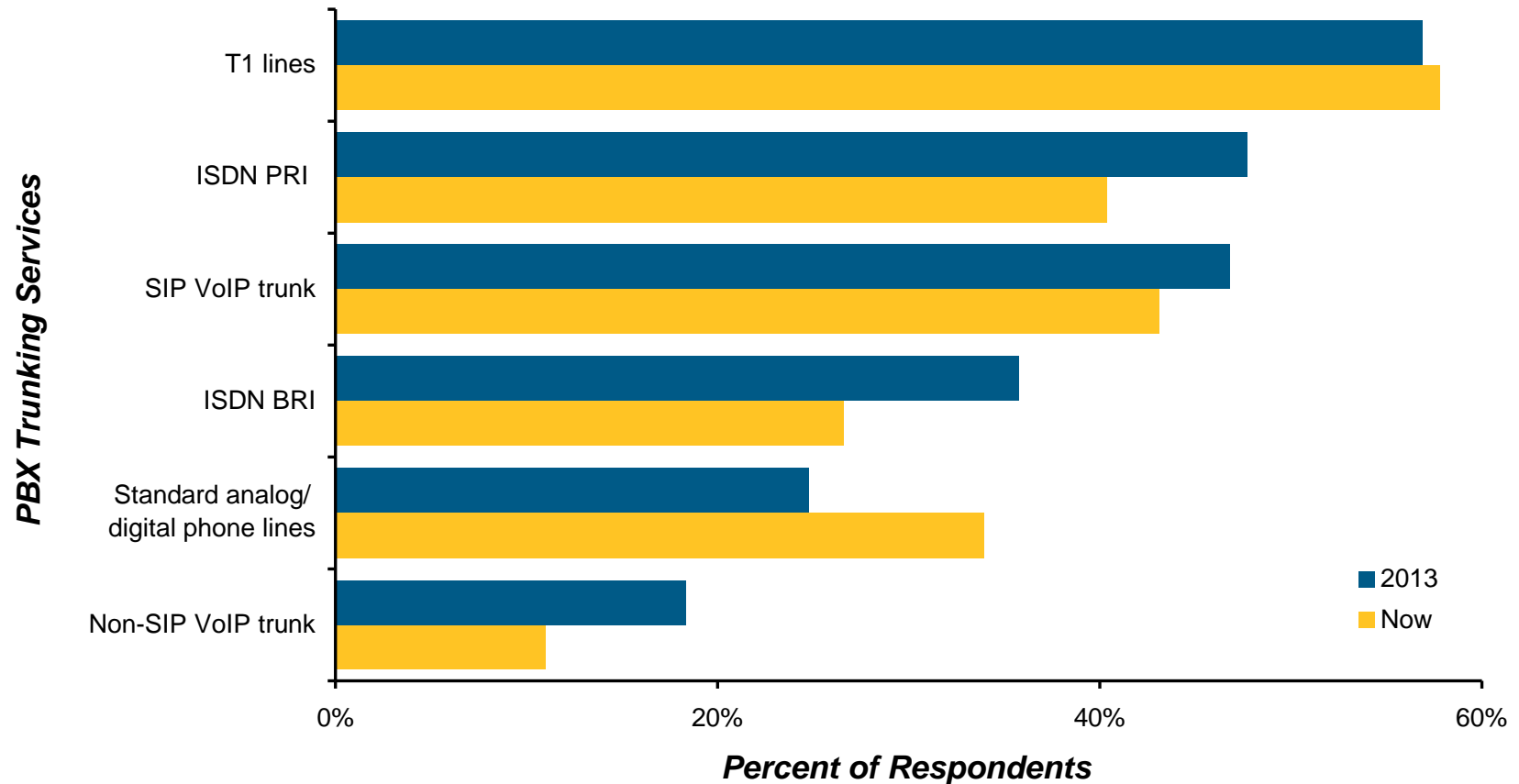


## Introduction by

**Diane Myers**

Directing Analyst, VoIP and IMS  
Infonetics Research

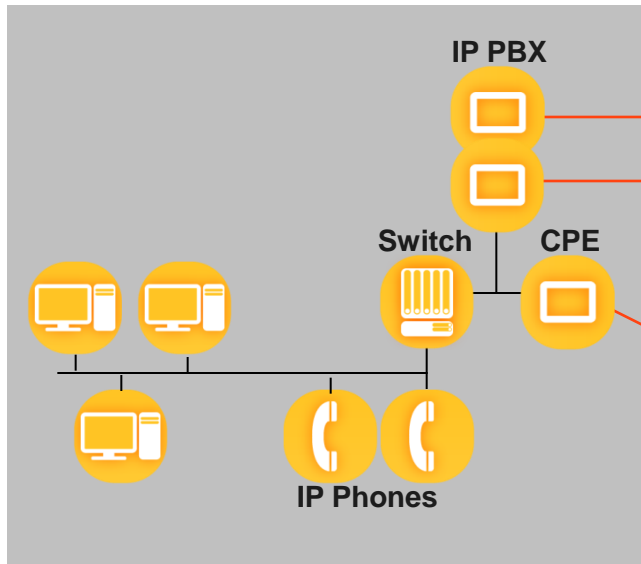
# How are businesses connecting voice today?



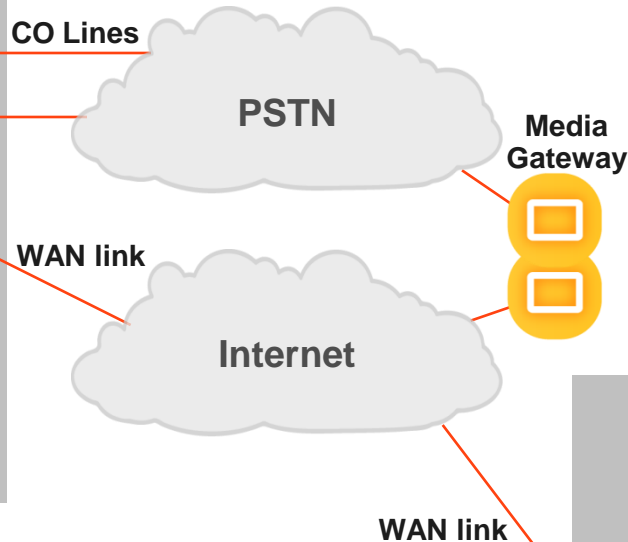
Source: Infonetics Research, *SIP Trunking Deployment Strategies: North American Enterprise Survey*, April 2011

# SIP trunking: next generation connectivity

Enterprise Network



Service Provider Network

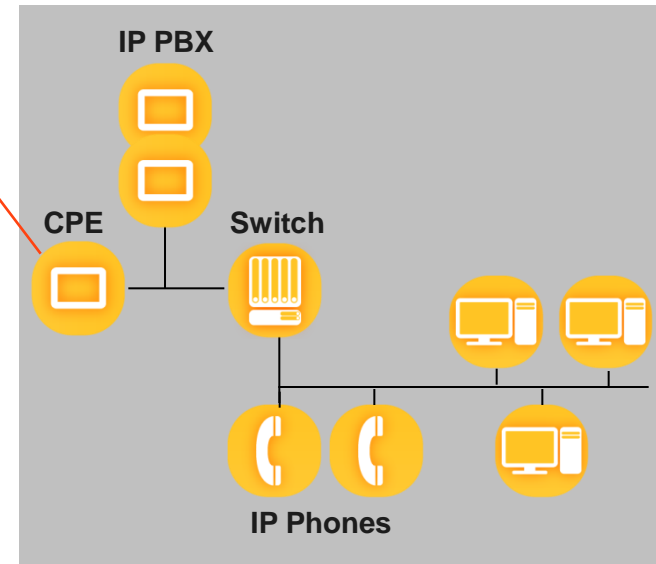


## NEW MODEL

- **SIP** supported by most service providers and equipment vendors
- SIP trunk: logical voice circuit
- Broadband connections, data networks

## OLD MODEL

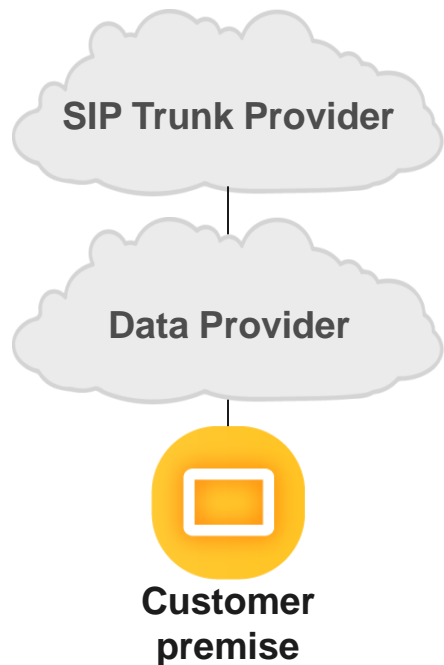
- Dedicated voice circuits/trunk lines (T1s, PRIs)
- High reliability, port-based



# How SIP trunks are delivered

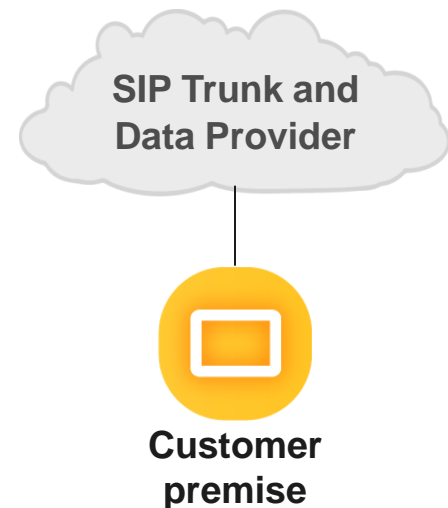
## Over-the-top

- Separate SIP trunk and data providers
- “Bring your own bandwidth”
- Shop around for the best offering
- SIP traffic is at the mercy of data provider



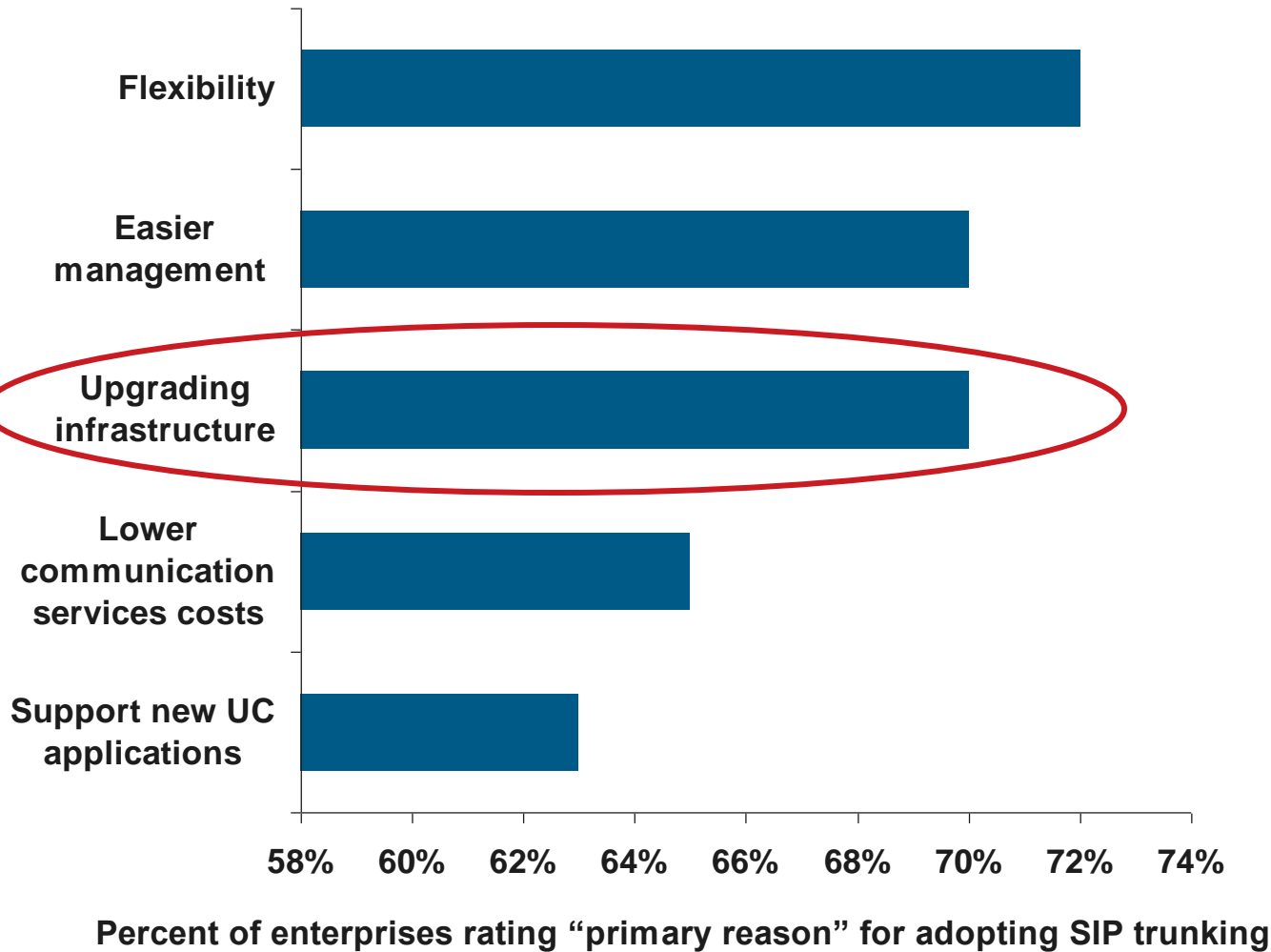
## Bundled offering

- Single provider for SIP trunk and physical network connectivity
- Option for end-to-end QoS for SIP traffic
- Clear demarcation of SIP trunk at CPE



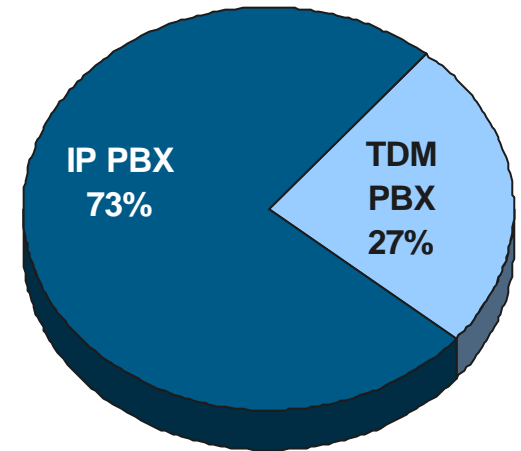


# Why SIP trunking now?



Source: Infonetics Research, *SIP Trunking Deployment Strategies: North American Enterprise Survey*, April 2011

2010 PBX System Shipments

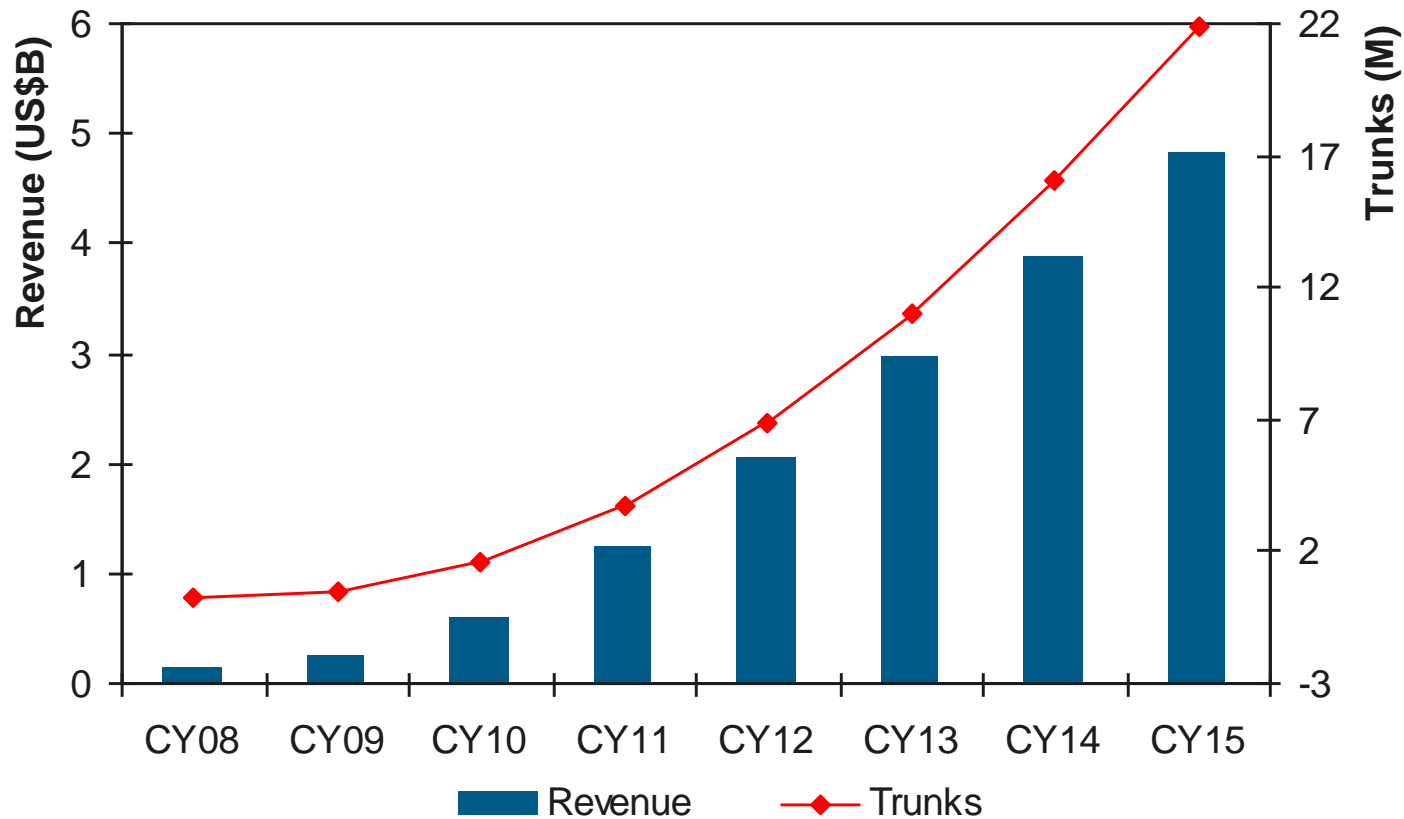


Source: Infonetics Research, *Unified Communication, VoIP, and TDM Equipment*, February 2011

# How SIP trunking achieves cost savings

- Centralization
  - Centralizing services at a few POPs gives economies of scale
- Consolidation
  - SIP trunks utilize the data network
  - Fewer physical ports needed
  - Centralized architectures require fewer devices
- Simplification
  - Capacity management: size the enterprise, not each site
- Right-sizing
  - With TDM trunking, circuits may be under-utilized most of the time
  - SIP trunking offers bursting, going over your allotted circuits during peak periods

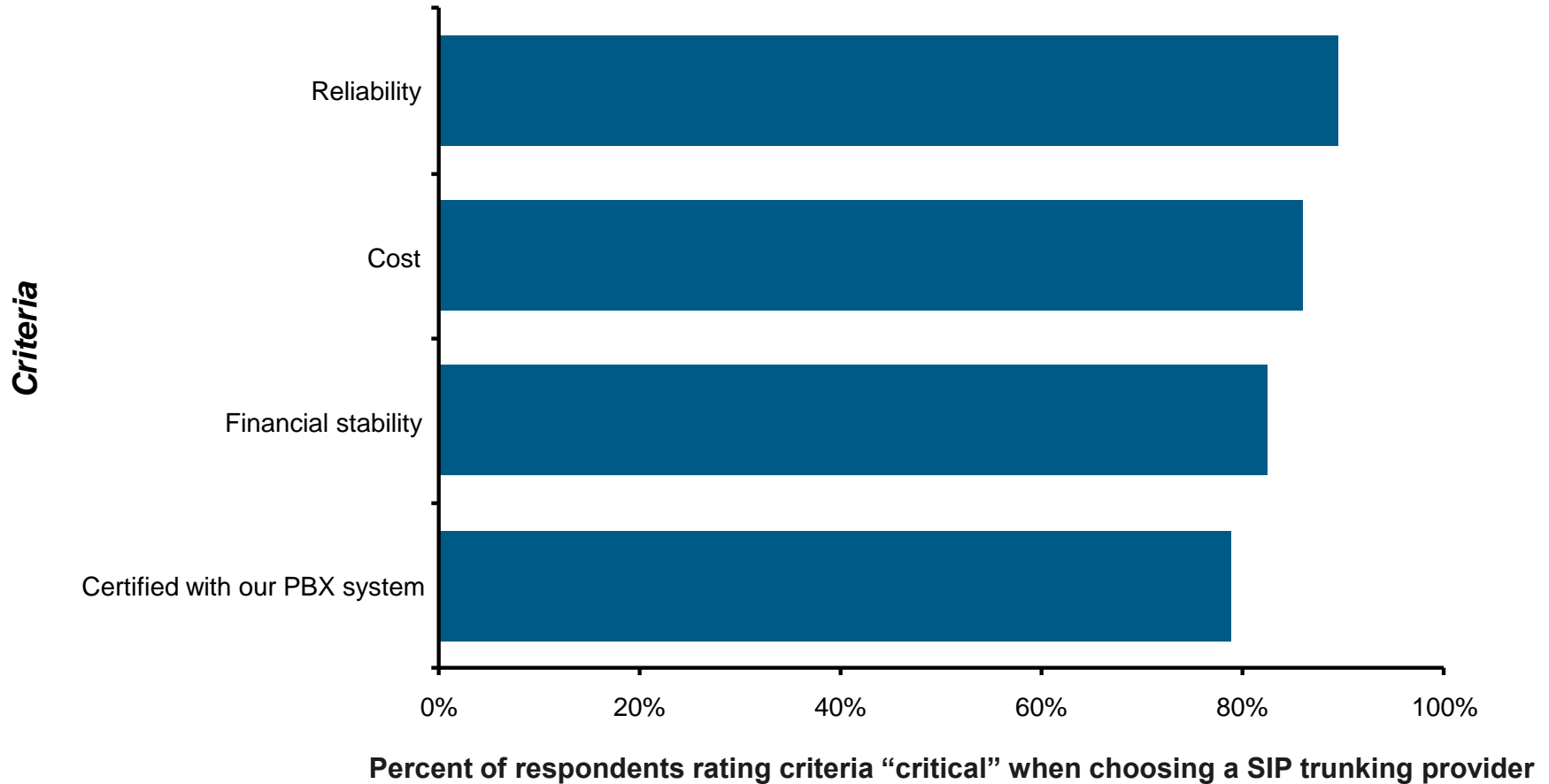
# SIP trunking expansion



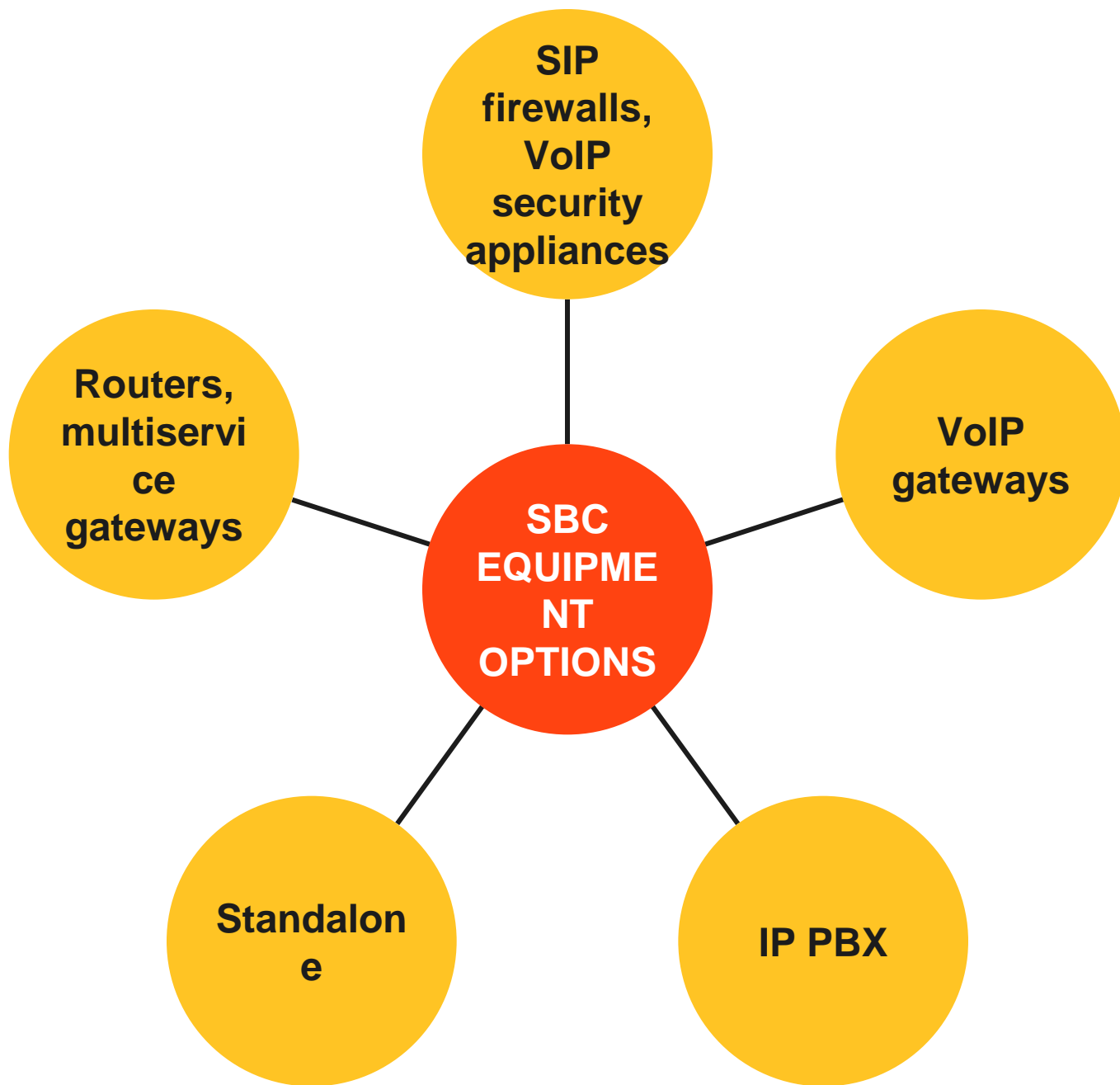
- North America strong but early stages on worldwide basis: 62% of trunks in service
  - Broad set of available providers

Source: Infonetics Research, *VoIP and UC Services and Subscribers*, March 2011

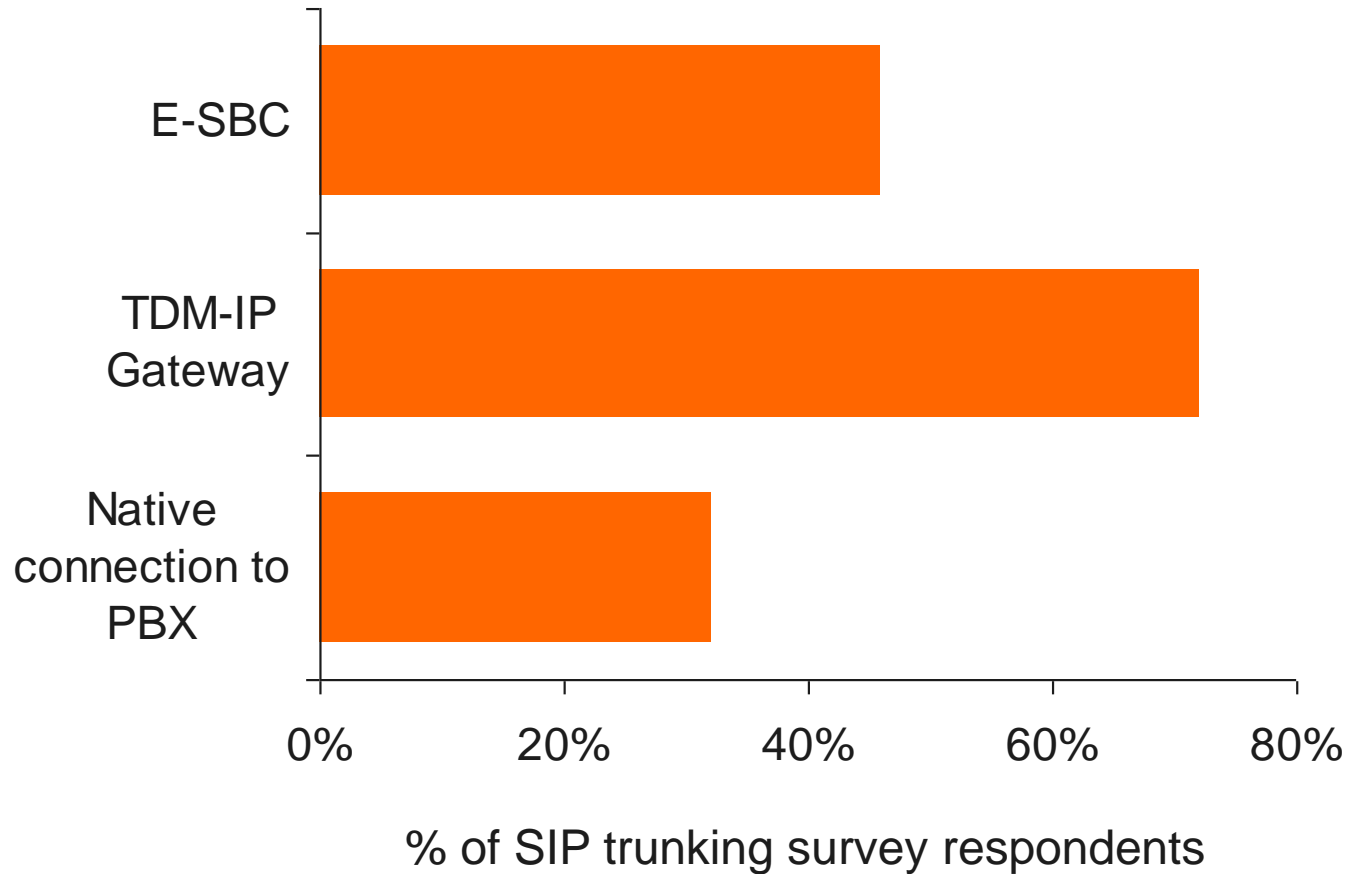
# Top criteria in choosing SIP trunking provider



Source: Infonetics Research, *SIP Trunking Deployment Strategies: North American Enterprise Survey*, April 2011

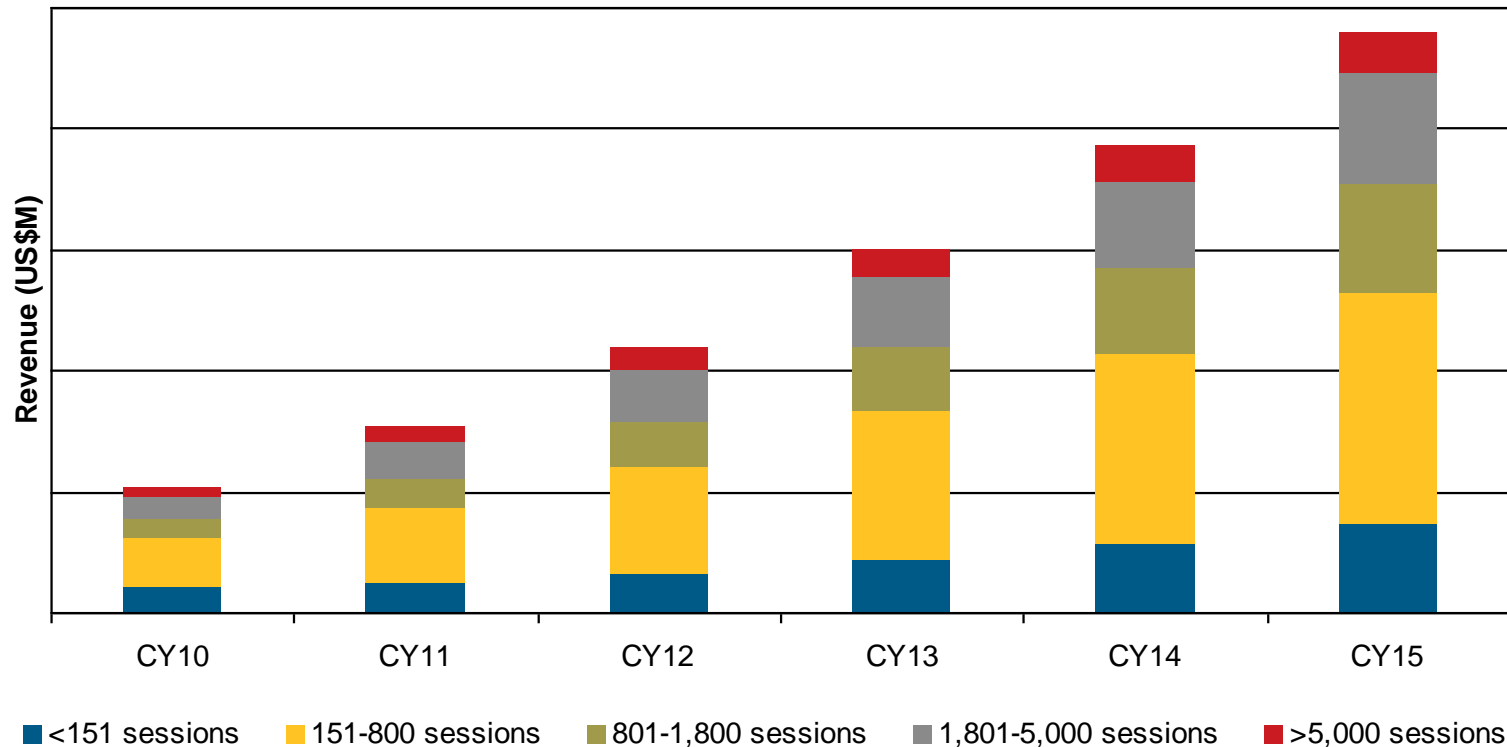


# Connecting to SIP trunks



Source: Infonetics Research, *SIP Trunking Deployment Strategies: North American Enterprise Survey*, April 2011

# SBCs address SIP trunking networking issues



- NAT (network address translation)
- Firewall traversal
- Interworking
- Transcoding

Source: Infonetics Research, *Enterprise SBCs*, April 2011



# THANK YOU

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# Things to Consider When Migrating to SIP Trunking

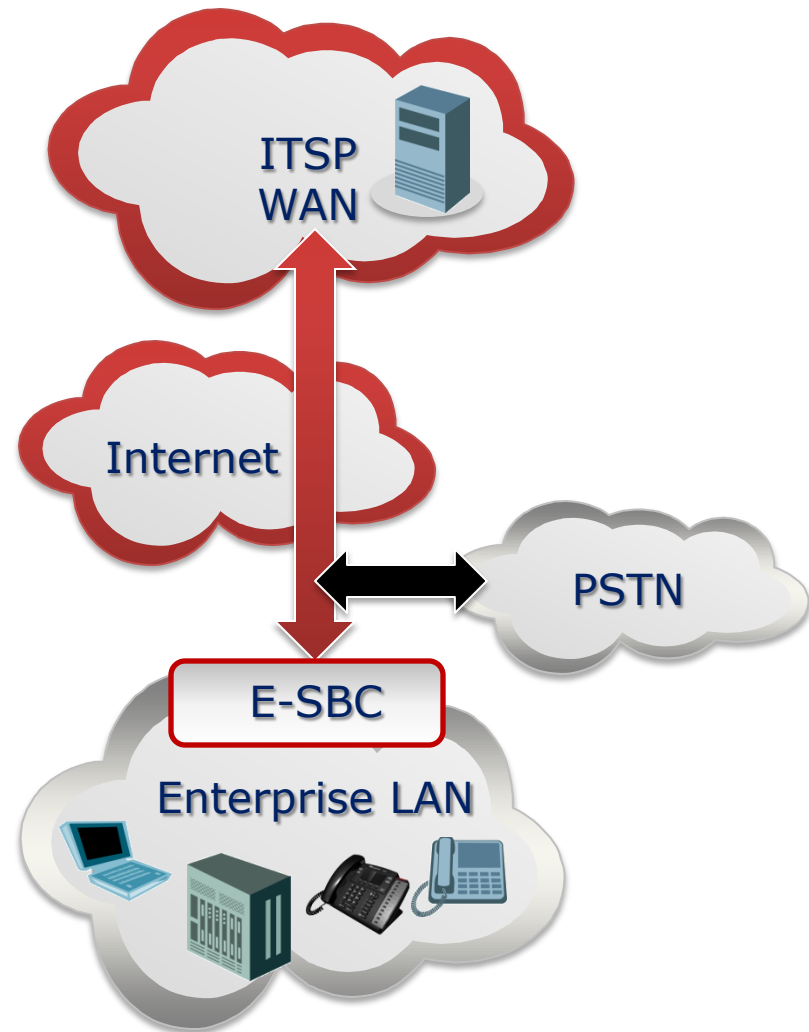
**Dani Kiryati**

Marketing Manager  
AudioCodes



## E-SBC – Critical Part of SIP Trunking

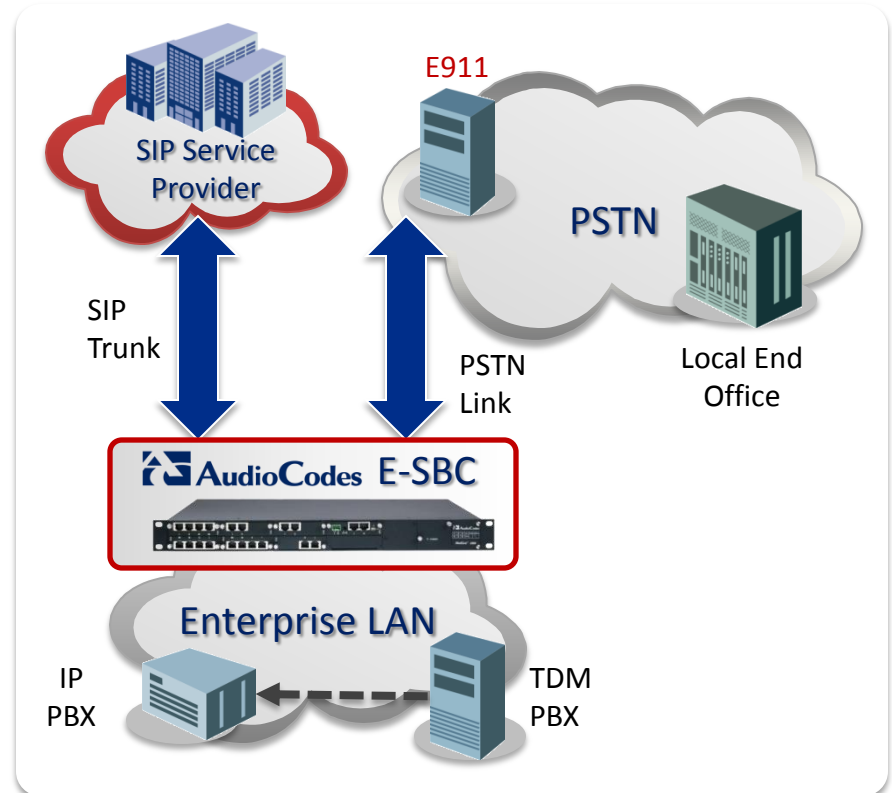
- Essential component of businesses migration to SIP Trunking services
  - Connecting TDM/IP PBX to SIP Trunks
  - IP-to-IP interoperability
  - Least cost routing to multiple service providers
- The E-SBC provides the enterprise
  - PSTN Connectivity
  - Interoperability
  - Survivability
  - Security
  - Quality assurance



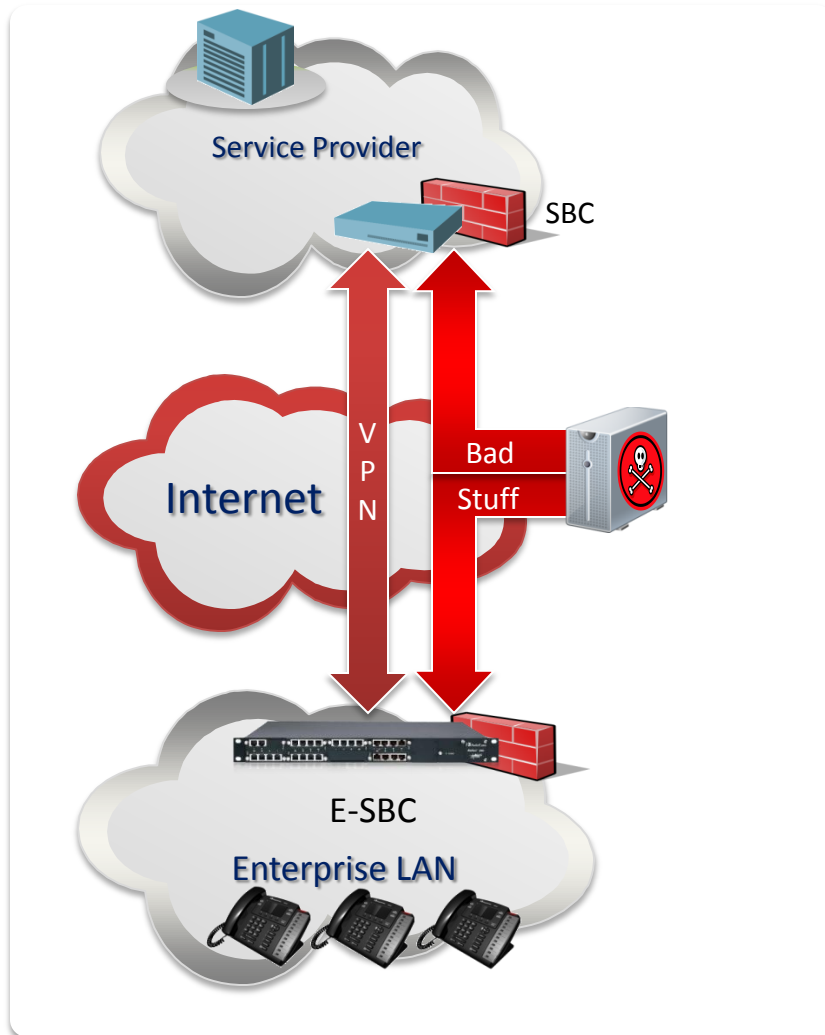
# PSTN Connectivity

## Can your Enterprise SBC deal with both SIP Trunks and PSTN connections?

- WAN isolation and PSTN fallback
- TDM to VoIP evolution
- Legacy PBXs
- Local End Office
- Emergency calling

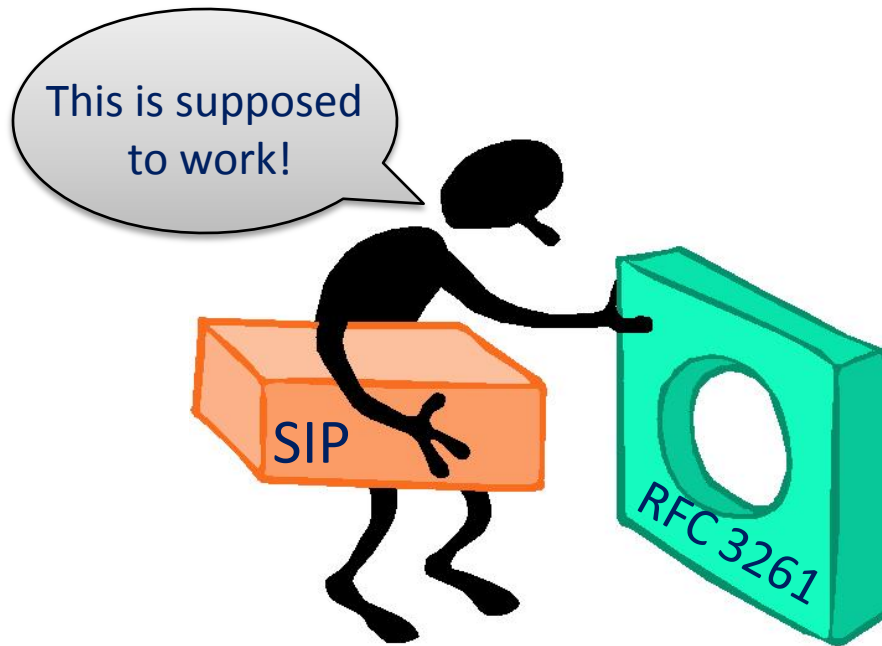


# Security



**Call Admission Control (CAC)**  
**Encryption & Authentication**  
**Topology hiding**  
**Traffic separation**  
**Protection against threats**

# Interoperability



**SIP interworking and normalization**  
**Signaling plane mediation**  
**Media plane mediation**  
**Transcoding**

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# Interoperability – Tested, Certified, Field Proven

**Successful migration to SIP Trunking is facilitated by E-SBC interoperability with leading players**

UC, IP-PBX  
& Contact  
Centers



SoftSwitch &  
Application  
Servers



SIP Trunking  
Service  
Providers



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## Scalability & Modularity – AudioCodes E-SBC Line

### Mediant 800 E-SBC



SMBs

Up to 24 sessions

Multi Service Business  
Gateway

### Mediant 1000 E-SBC



SMBs and SMEs

Up to 150 sessions

Multi Service Business  
Gateway

### Mediant 3000 E-SBC



Large Enterprises

Up to 1000 sessions

Hybrid SBC and PSTN

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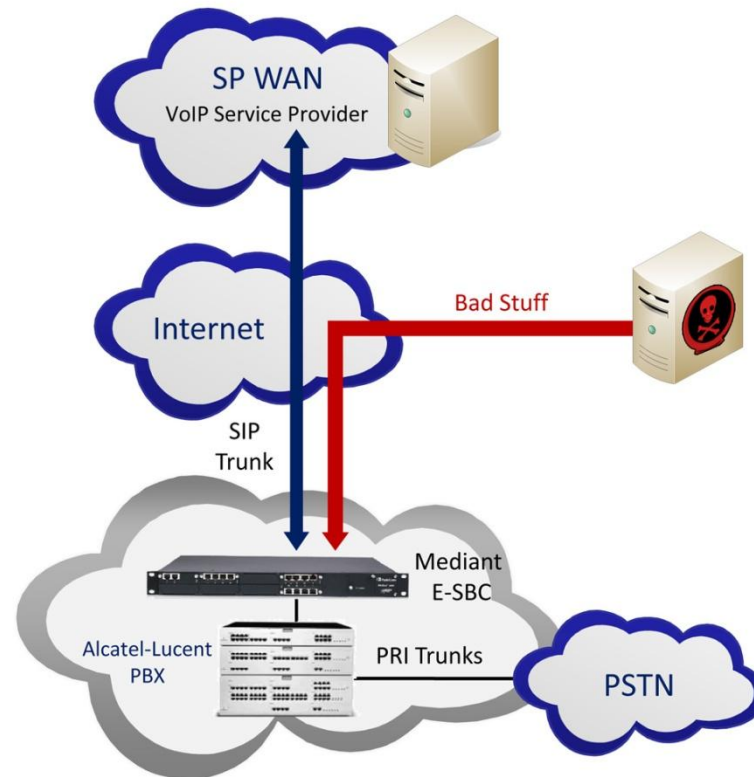
 **AudioCodes**



# Alcatel-Lucent

## Alcatel-Lucent and AudioCodes Collaborate on Session Border Controllers for Mid-Sized Enterprises

AudioCodes Mediant family of E-SBC is part of the Alcatel-Lucent Application Partner Program



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AudioCodes Mediant E-SBCs are supported for [SIP Trunking connectivity into Microsoft Lync Server 2010 and Office Communications Server 2007 R2](#)

## **AudioCodes Achieves Microsoft Qualification for SIP Trunking Interoperability with Verizon Business**

AudioCodes' Mediant 3000 and Mediant 1000 Enterprise Session Border Controllers are the first products in the market to be certified with Microsoft Lync Server 2010 and Microsoft Office Communications Server 2007 R2 for secured SIP Trunking connectivity into Verizon Business

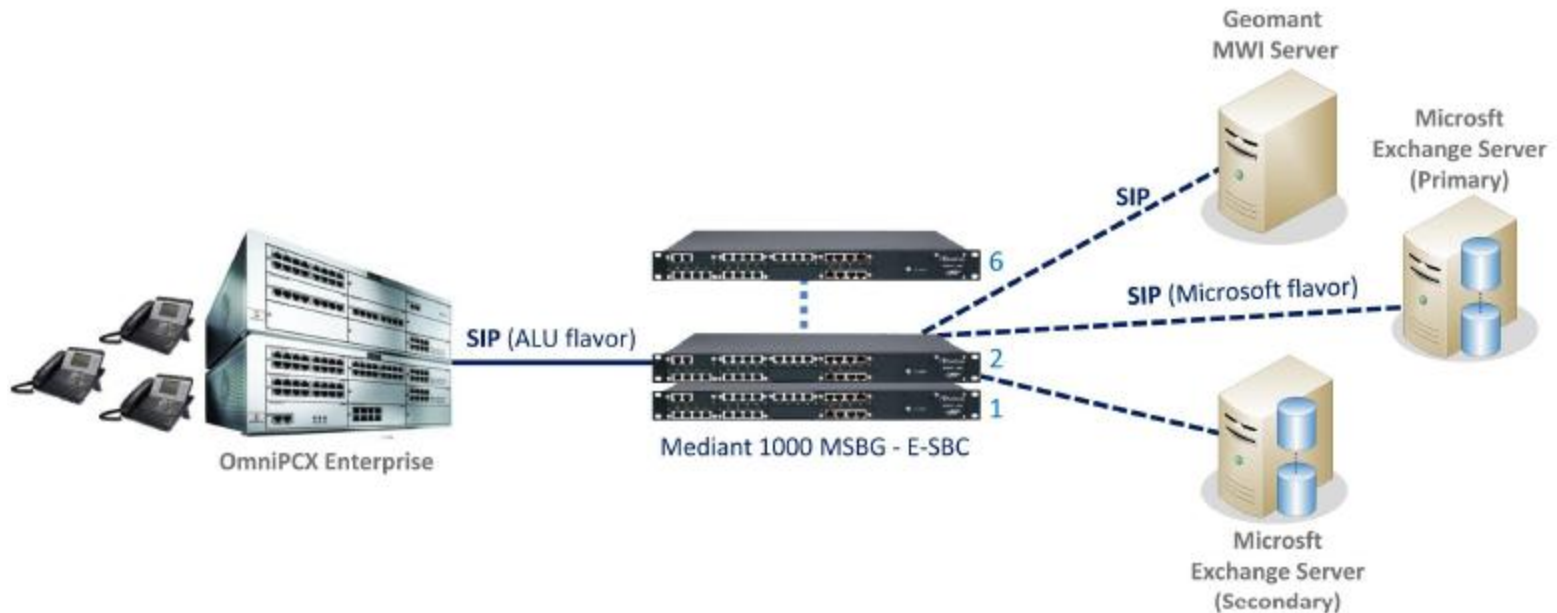
## **AudioCodes Announces General Availability of PSTN Connectivity and Survivability Solutions for Microsoft Lync**

Leveraging the new AudioCodes Enhanced Gateways and Survivable Branch Appliances, Enterprise customers are able to transparently and securely connect the Microsoft Corp. environment with their existing telephony infrastructure and preferred service providers.



# Case Study – Integrating OmniPCX and Microsoft Exchange




- Large financial institution in France
- Back-to-back user agent providing SIP mediation
- Handling 720 IP-to-IP sessions
- Message Waiting Indications (MWI)

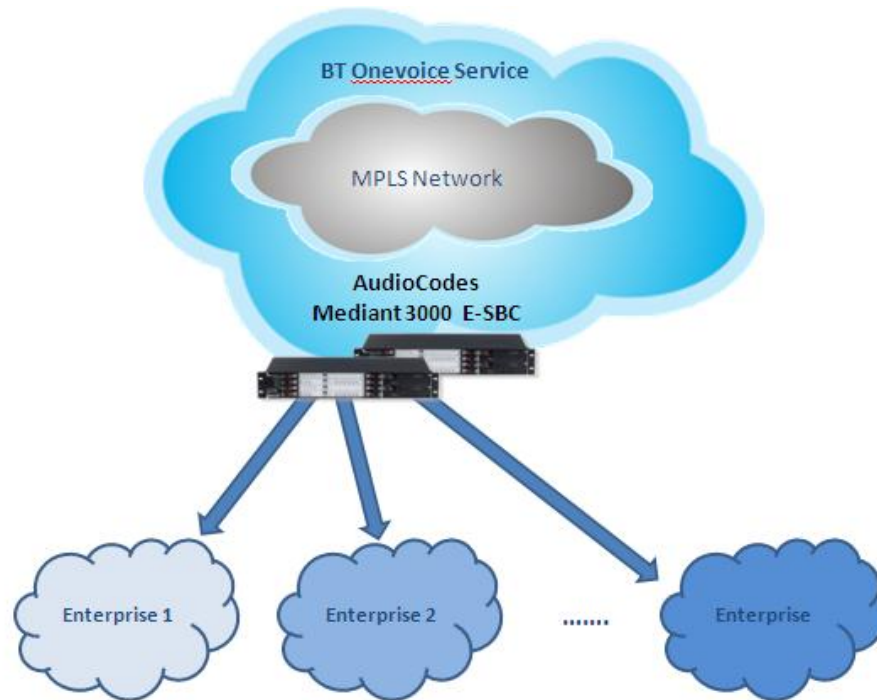


# Case Study - BT Global Services



## Solution for Onevoice SIP Trunking Service

-  BT Onevoice service is using AudioCodes' Mediant 3000 E-SBC
-  Providing SIP "normalization" capabilities
-  Supporting an extensive list of narrowband and wide-band codecs



### **Mark Summerson, General Manager, Unified Communications at BT Global Services**

"We have qualified AudioCodes as our preferred Gateway vendor as they allow us to offer a solid migration path for our business customers from their existing telephony systems to Microsoft Office Communications Server 2007 R2 and Lync Server 2010."

# Avaya



Mediant 1000 E-SBC

AND



Mediant 3000 E-SBC



certified for SIP Trunk connectivity with

Avaya Aura™ Communication Manager

Avaya Aura™ Session Manager

Avaya IP Office

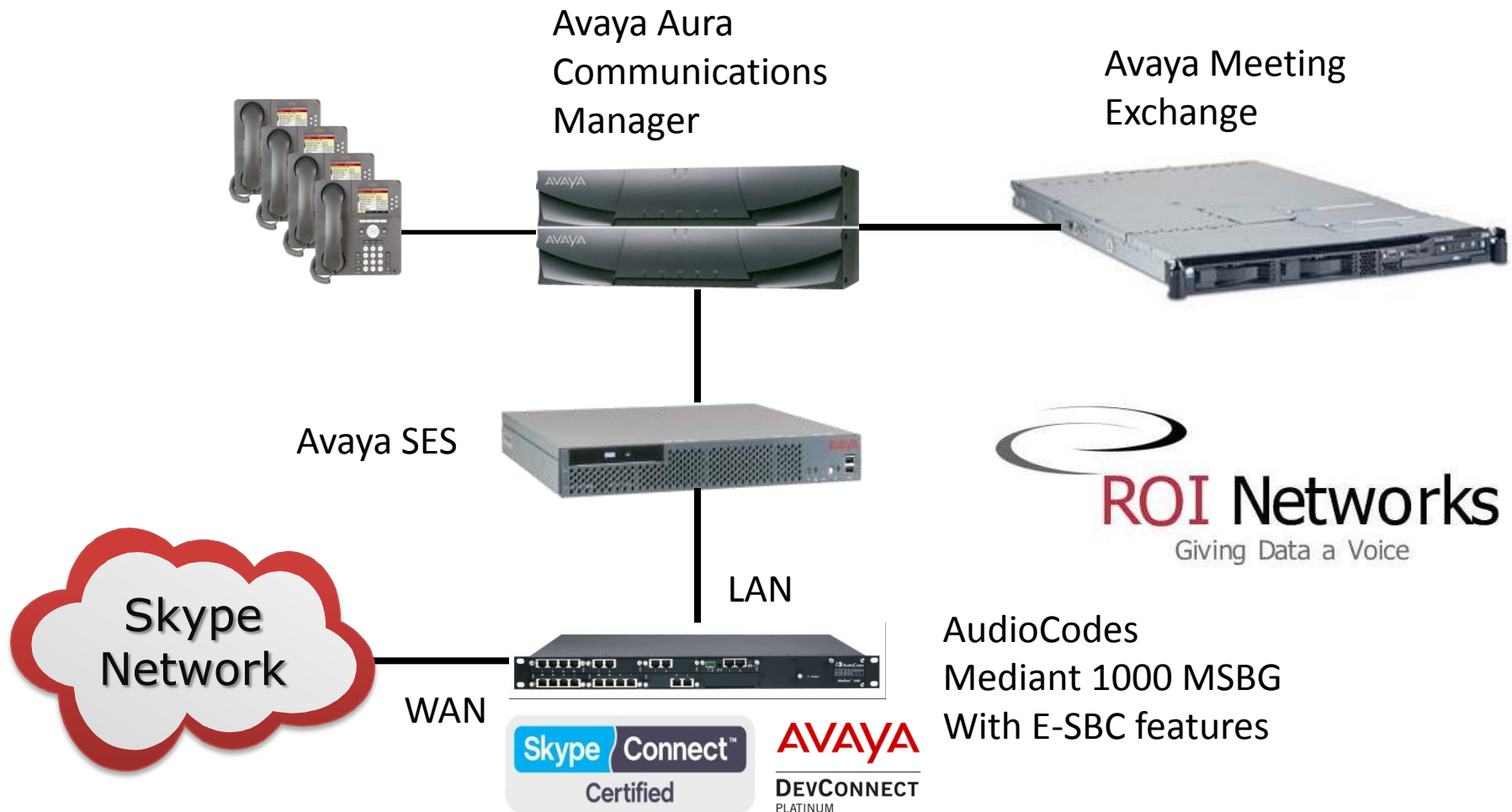


**First E-SBCs to pass the Avaya DevConnect certification without demerits**

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## Case Study – Skype, Avaya and ROI Networks

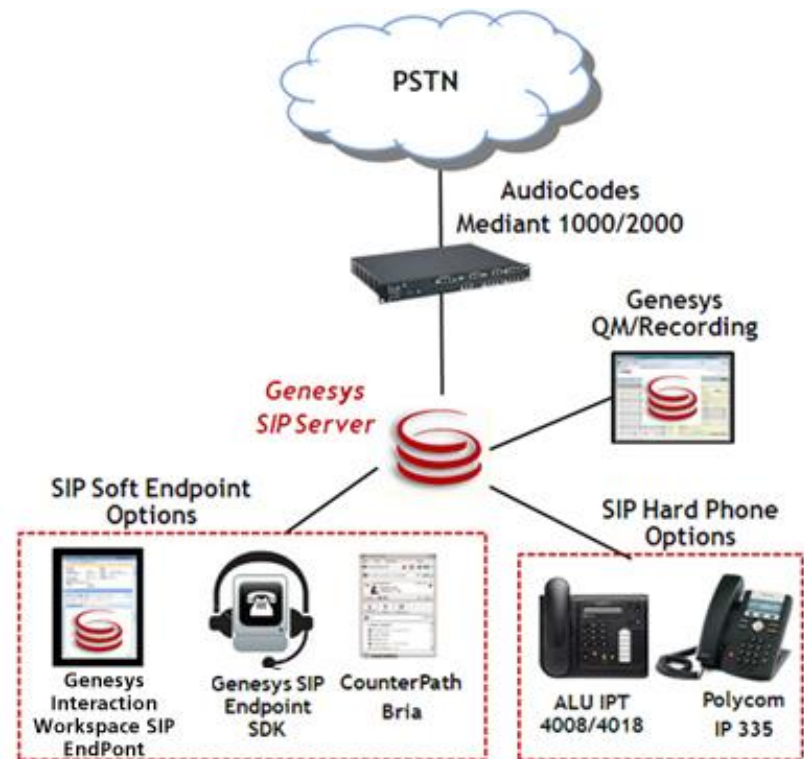


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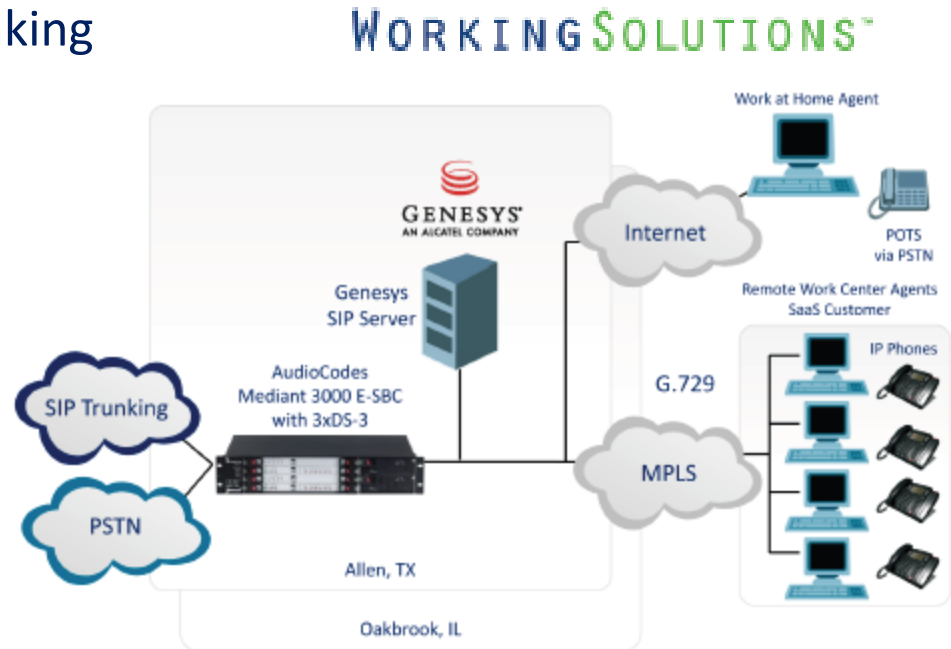
# Genesys

- Mediant Gateways are the only gateways participating in the **Genesys SIP Select** program
  - PSTN Trunking support for Genesys SIP Server
  - Upgradable to support SIP Trunking E-SBC applications



## Case Study – Working Solutions

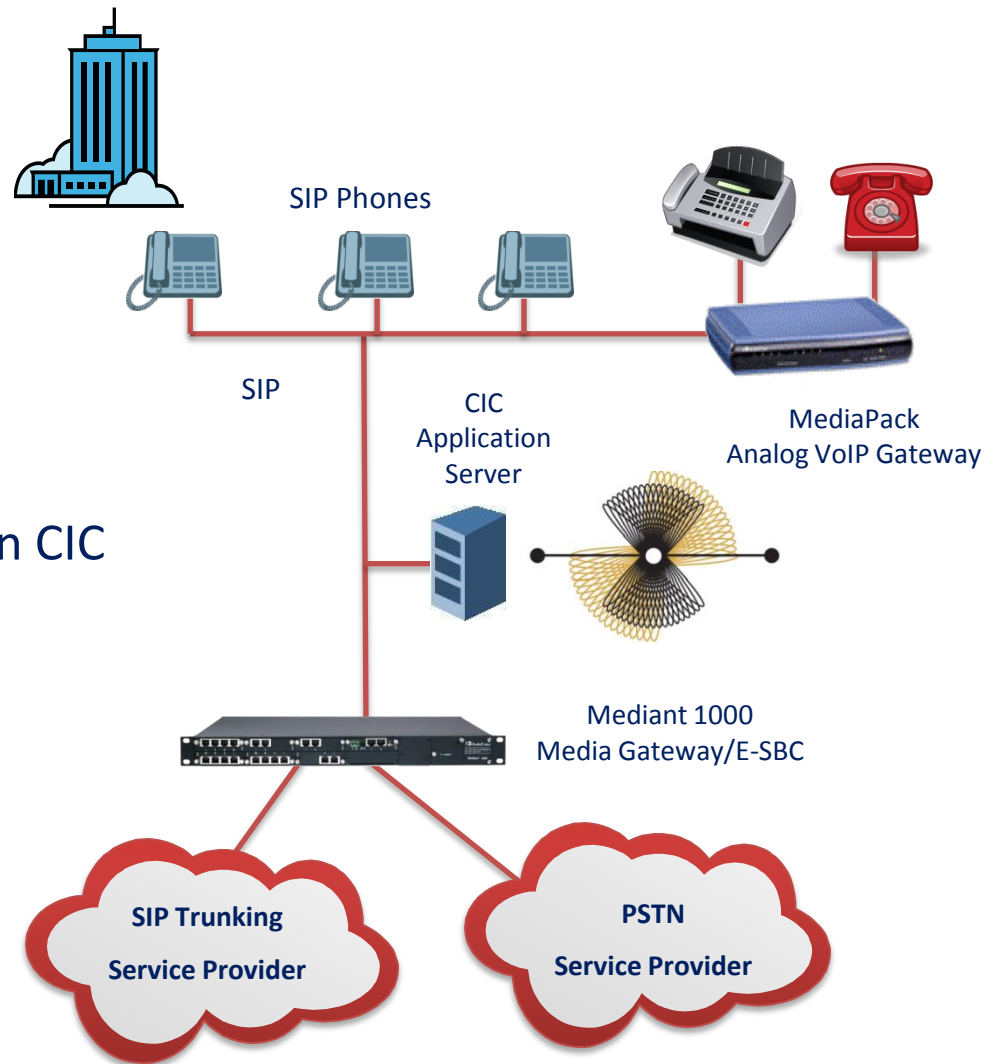
- Hosted Contact Center Service Provider
- Migration from TDM to SIP Trunking
- Work-from-Home agents only
- Transcoding
- Results:
  - Investment protection
  - Reduced costs
  - Improved flexibility





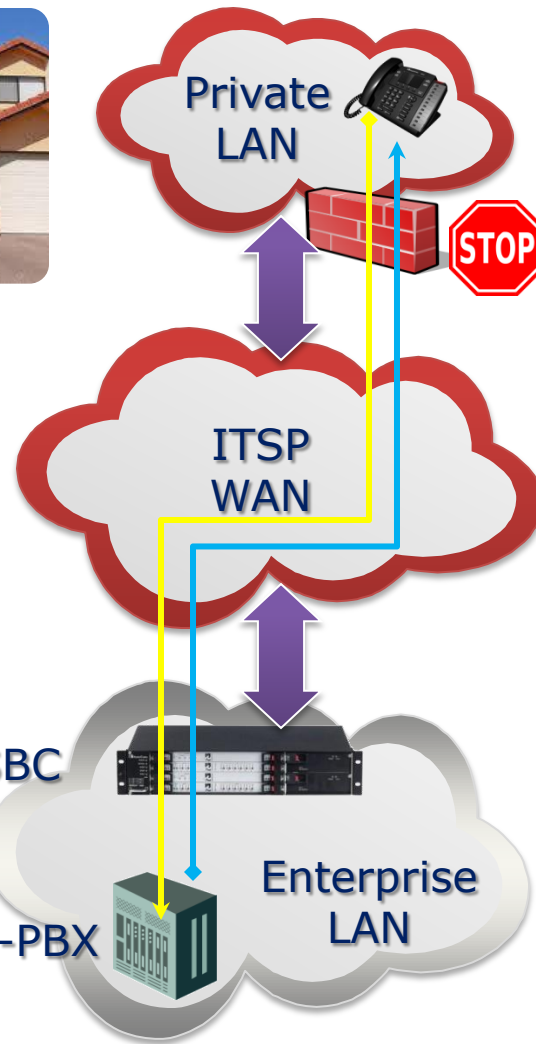
# Interactive Intelligence

- Connecting between Interactive Intelligence Customer Interaction Center (CIC) and the PSTN
- SIP Mediation with E-SBC between CIC and SIP Trunking providers
- Interface to legacy devices





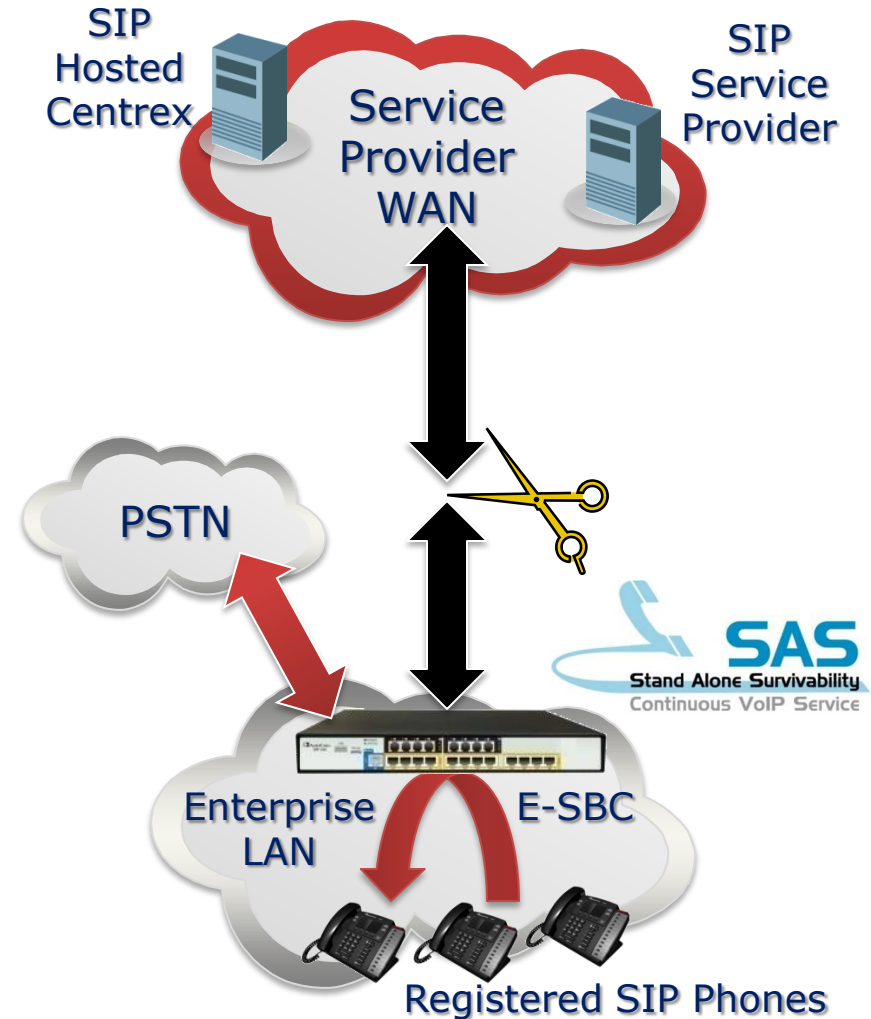
# Remote Workers



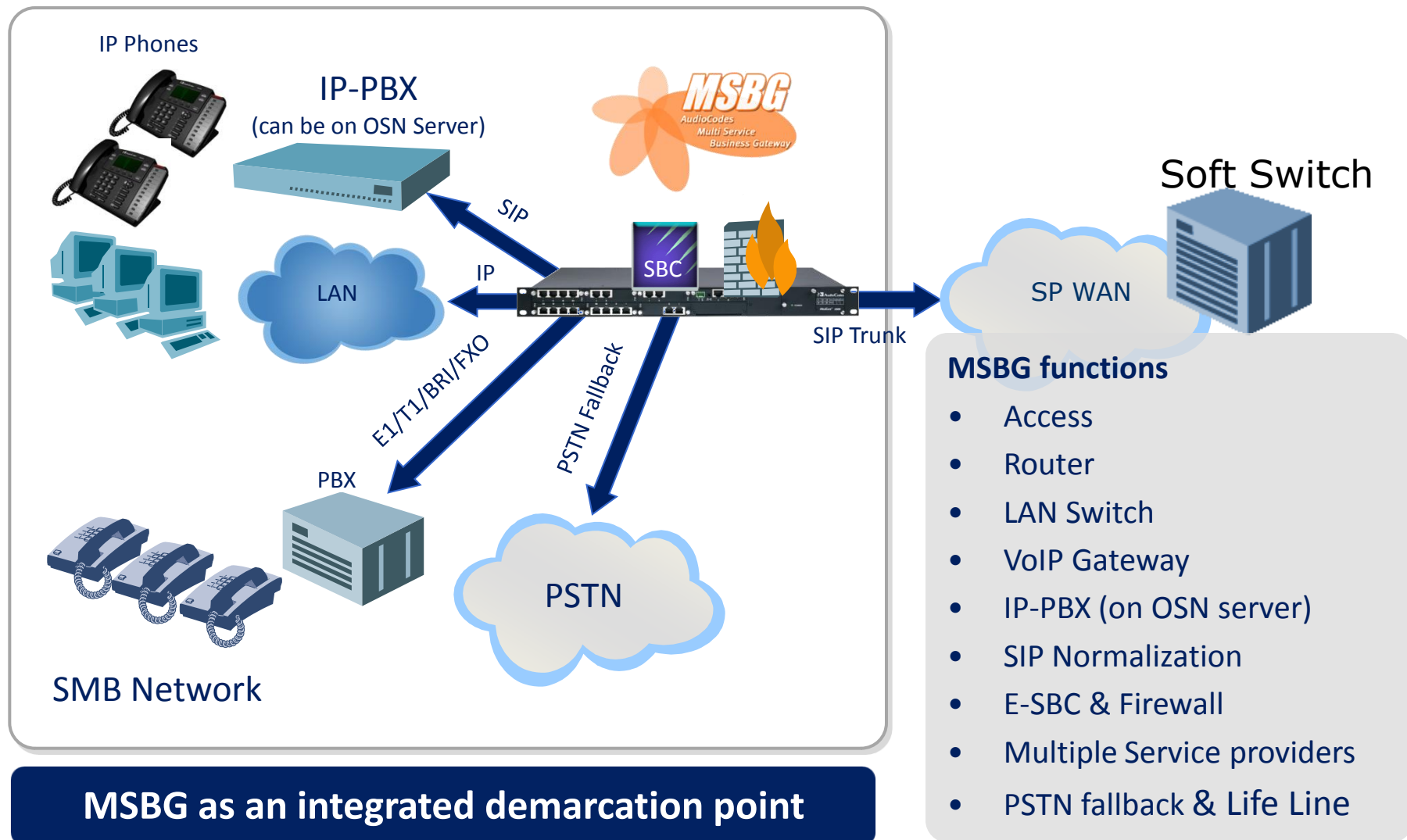
How do you handle users at home and in remote locations?

# Survivability

- Standalone Survivability (SAS) for branch service continuity
  - Basic features to registered SIP Phones in case of WAN failure
  - Automatically learned dial plan
  - Advanced telephony features during emergency mode



# More Than an E-SBC – Multi Service Business Gateway



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# Survey



We appreciate your feedback!

Please complete the short survey

<http://www.surveymonkey.com/s/2R9JY22>

# Q & A

## More Information

- More information on SIP Trunking:  
[www.audiocodes.com/sip-trunking](http://www.audiocodes.com/sip-trunking)
- Future live events and recordings of past events:  
[www.audiocodes.com/webinars](http://www.audiocodes.com/webinars)

*Thank you*

Contact: [dani.kiryati@audiocodes.com](mailto:dani.kiryati@audiocodes.com)  
[diane@infonetics.com](mailto:diane@infonetics.com)

