

SIPconnect Compliance Workshop

SIPconnect Overview and Value Proposition

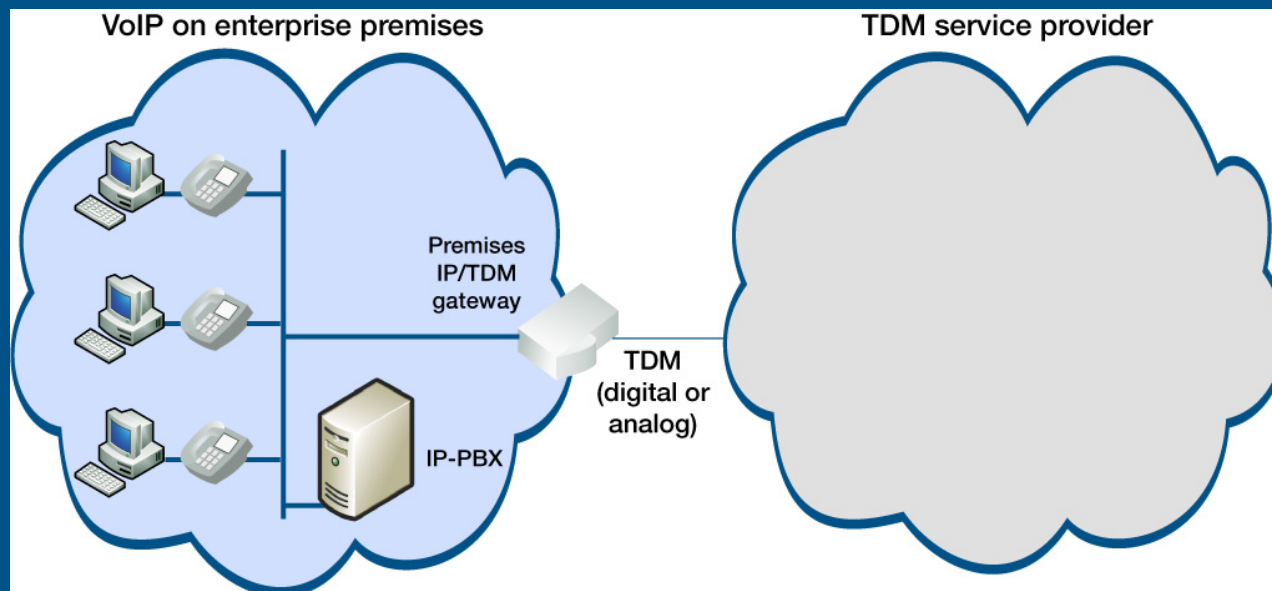
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Realizing The Promise of IP Communications

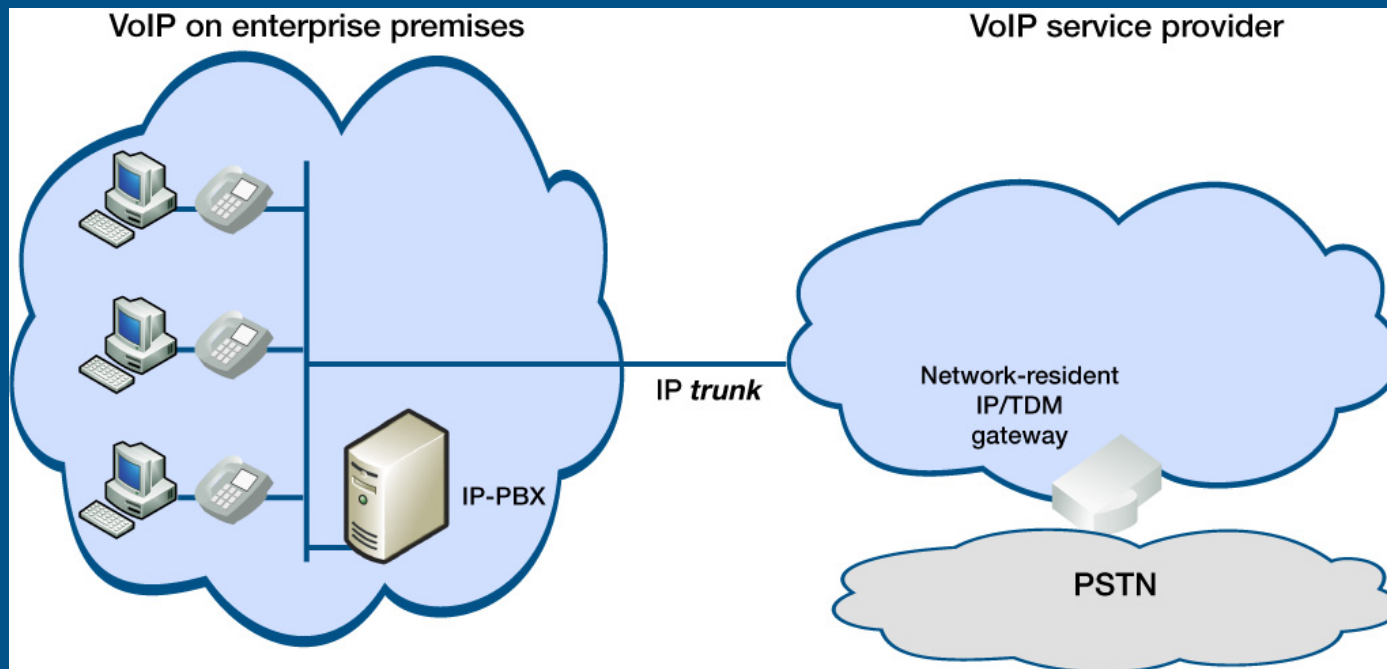
- ❖ **Problem:** IP-PBXs have successfully cut costs and delivered new features to customers, BUT...TDM Routing of VoIP Traffic is a Limited Approach to Achieving Next Generation Telephony
- ❖ **Opportunity:** Preserving and Extending Next-Generation IP Communications Capabilities Beyond the Enterprise
- ❖ **Solution:** Direct IP Peering, or Creating a Seamless, End-to-End Connection between SIP-enabled IP-PBXs and SIP-enabled VoIP Service Provider Networks

1st Generation IP PBXs are Dumbed Down



- ❖ Enterprises must use a gateway to connect IP PBXs to PSTN
 - Increases investment required to move to VoIP, reduces ROI
- ❖ Limits ability to leverage VoIP's advantages
 - Adapting to the PSTN means least common denominator functionality
 - Enterprises cannot fully leverage low-cost VoIP termination providers

The New Way



- ❖ Connecting IP PBXs directly to VoIP service providers provides significant advantages
 - More features, less cost
- ❖ But, how to do it?

SIP Is Key, but SIP Alone is Not Enough

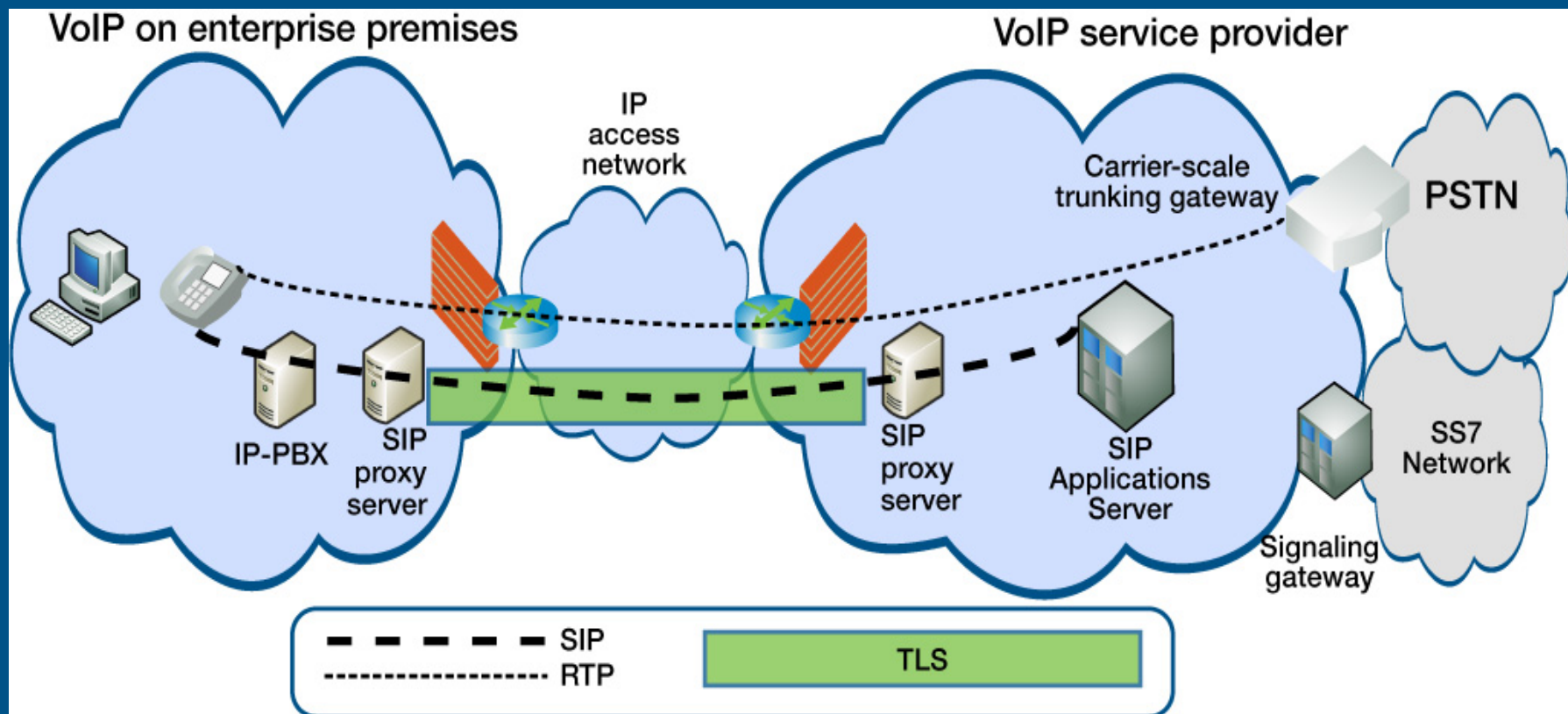
- ❖ SIP is the industry standard for VoIP, but...
 - There's a lot to SIP; but **what parts are relevant** for this?
 - e.g. How to handle addressing in the presence of multiple firewalls
 - When we have SIP options, **what choices do we make?**
 - e.g. Inter-domain authentication / registration policy
 - Some **solution elements lie "above" SIP**
 - e.g. OA&M around hierarchical logical identities
 - Users, customers, locations, DID blocks, ...
- ❖ What's needed?
 - An **industry accepted interconnection method** that uses SIP to build links between SIP-enabled PBXs and SIP-compliant service provider networks

What is SIPconnect?

- ❖ SIPconnect specifies a reference architecture
 - Minimum set of IETF and ITU-T standards that must be supported
 - Provides precise implementation rules and guidelines where existing standards allow for multiple implementation options.
 - Specifies a minimum set of capabilities that should be supported by service provider and enterprise networks

SIPconnect Reference Architecture

Common Functional Elements Required to Support SIPconnect



The SIPconnect Value Proposition

- ❖ Offers a Universal Approach to SIP Trunking
- ❖ Delivers Customer Cost Savings
 - eliminates gateways and extends VoIP's benefits (DID, conferencing, etc.)
- ❖ Enables Transparent Feature Transport
 - end-user info can be passed from IP-PBX to network enabling presence and other apps to travel from point-to-point
- ❖ Optimizes Quality of Service
 - transport layer issues are defined – i.e., QoS configuration, echo cancellation, method for DTMF relay, packetization rates, codec support and fax/modem traffic
- ❖ Provides Security
 - well-defined approaches to identity and authentication provide a secure model for direct IP peering

A Competitive Edge for IP PBX Manufacturers

- ❖ Why should IP PBX manufacturers care?
- ❖ Because direct IP peering is a huge value add for businesses and service providers alike – entities that purchase and interconnect with IP PBXs
 - Addresses QoS and security issues
 - Reduces equipment and transport costs
 - Increases features and functionality
 - Eliminates need to set up proprietary interfaces

Benefits for Service Providers

- ❖ Improved QoS and security via superior interconnection to the network
- ❖ Ability to offer higher quality services with advanced features tailored to IP PBX users
- ❖ Ability to forge strong relationships with IP PBX vendors
- ❖ Ability to establish new relationships with distribution channel: interconnects, system integrators and VARs.

Cost Savings and New Features for Business Customers

- ❖ Eliminates TDM gateways and increases efficiency of local access facilities
- ❖ Provides DID capabilities w/o requiring the recurring expense of analog lines or expensive digital circuits
- ❖ Improves voice quality by removing gateway latency and includes the attentive management of QoS, echo cancellation as well as fax and modem support
- ❖ Creates the right foundation for personalized applications and rich media services between customers and service providers as well as between customers and other IP-connected PBXs

Benefits for Distributors and Channel Partners

- ❖ Eliminates PSTN interconnection woes
 - No quality of service problems (i.e. latency and echo)
 - No need to perform custom configurations on a customer-by-customer basis
- ❖ Allows service providers to manage QoS
- ❖ Allows security-related functions to be “off-loaded” from customer premises to VoIP networks (incl. NAT traversal for seamless SIP connectivity) and other security concerns (i.e, denial of service attacks, etc.)