VoIP vs. POTS

Clayton Lockhart
VP AT&T Labs
VoIP Evolution: The Jump has Occurred!

- VoIP 2nd Gen Products & Services
- VoIP 1st Gen Products
- VoIP Science Experiments
- VoIP CPE
- TDM

Years:
- 1990
- 1995
- 1996
- 1997
- 1998
- 1999
- 2002
- 2003
- Services over IP
- IP Networks with QoS
- VoIP PBX
- IM
- Broadband
- XML
- SIP
- H.323
- WiFi
- VoIP Announcements
The Rise of IP Communication Services

Traffic Across AT&T IP Backbone

- Gaming
- VoIP
- Web
- Dial
- Broadband
- P2P
- Music/Video Stores

1998 1999 2000 2001 2002 2003

Gaming
VoIP
Web
Dial
Broadband
P2P
Music/Video Stores
Power of IP: Any Device to Any Device Over Any Access

IP Networks/Internet

- Telephone
- VoIP Router
- Cable Modem
- Cell phone
- Laptop
- Phone Line
- VoIP Gateway
- iPBX (Gateway)
- PBX Gateway
- IP Phone
- iPBX (Gateway)
- PBX
- DSL Modem
- Desktop
- ISP Gateway
- ISP Line
- WiFi Access Point
- PDA
- Cordless Phone
- Cable Modem
- IP Softphone

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IP Enables the Next Generation of Applications

COMMUNICATION LAYERS

Content Layer
(movies, books, papers, information, etc.)

Application Layer
(voice, video, web, chat, e-mail, etc.)

Logical Layer
(IP addressing, wireless handoffs, etc.)

Physical Layer
(electric, co-axial, copper, wireless, fiber)

Open standard data networks, such as IP, operate in layers that allow applications to be separated from the infrastructure:

- Enables multiple players to enter the market at different layers and compete, stimulating innovation.
- The type of the network (electric, co-axial, copper, wireless, fiber) no longer dictates the application or services.

Concept compliments of Kevin Werbach
Network Transformation End-State: Services Over IP

Business Services

Consumer Services

Application Aware Network

SoIP Common Infrastructure

MSE / IP / MPLS Core

Multi-Service Access

Supporting Multiple Endpoints, Access Technologies and Application Services

CallVantage®

Scalable Open Computing Platform

Reliable, SIP-based SoIP Network

World’s Biggest IP Network

Consumer Bundle

Integrated Messaging

E-Communications

Supporting Multiple Endpoints, Access Technologies and Application Services

Consumer or SMB Office

TA

Video

Data

HQ IP-PBX

Corporate Intranet

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VoIP-Enabled Contact Center

- Feature transparency across both PSTN and IP Networks
- Lower costs
- Productivity improvements
- Global call center connectivity

**Pre route features**
- TOD/DOW routing
- Network call prompter
- Alternate destination routing

**Post route features**
- Transfer Connect
- Next Available Agent
- Presence / Properties Routing
- ASR-based routing

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Dialer has access to Outlook address book & corporate directory

Creation & Control of voice or video conferences

User places & receives calls on any phone

Outgoing Calls – Multiple Call Appearances

Corporate Directory

Instant Messaging

Button on conference window starts user's webmeeting collaboration software and sends invitations to conference members by IM or Email

Video phone / soft phone

Collaboration (Webmeeting)

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IP is the Bridge to the Future; Network Centric Applications are the Future

Private Networks (WAN/VPN)
- Secure
- High Performance
- Predictable
- Reliable
- Non-Regulated

Corporate Intranet

Corporate Extranet

Public Voice Networks (PSTN)
- Scalable
- Ubiquitous
- Variable Performance
- Seamless
- Flexible
- Regulated

LAN

Supplier

Teleworker

Customer

Teleworker

ISP