SIP Trunking Workshop

SIPconnect - Lessons Learned
Marc Robins
President and Managing Director, SIP Forum
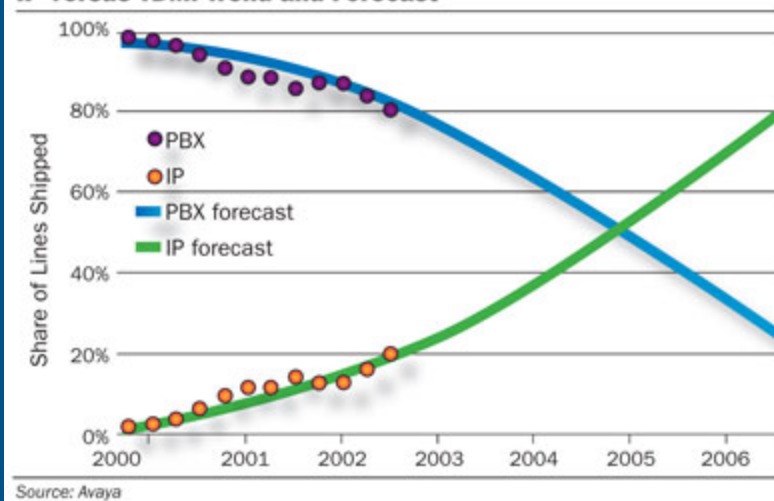
Economic Reality – an all IP world
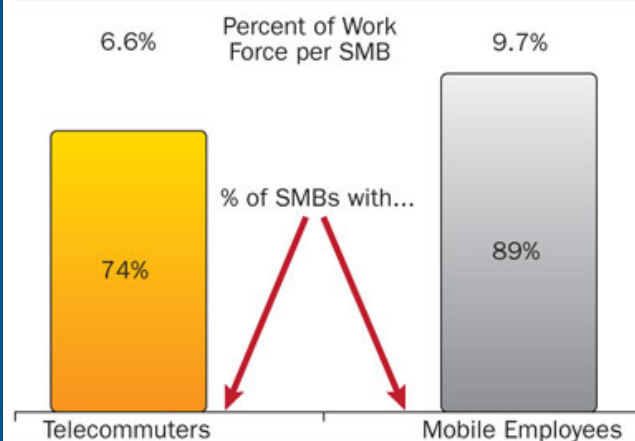
❖ Over 70% of all PBX's sold are now IP enabled, typically SIP based .

❖ By 2010 50% of the installed base of Enterprise PBX systems will be VoIP.

Telecommuters use VoIP to connect with the office.

IP versus TDM: Trend and Forecast

- PBX
- IP
- PBX forecast
- IP forecast

Source: Avaya

About 10% of SME Employees are Mobile; 6.6% Telecommute

6.6% | Percent of Work Force per SMB | 9.7%

% of SMBs with...

74% Telecommuters

89% Mobile Employees

Source: AMI-Partners

SIP connect

Economic Reality of Telecom

- ❖ Fixed Rate services are dominating telecommunications.
    - ➢ Triple Play from Cable Operators –
- ❖ All you can eat Fixed rate mobility services
    - ➢ Buckets of Mobile Minutes
    - ➢ $99.00 voice - text – web
- ❖ Variable Costs for Operators have become unacceptable.
    - ➢ SS7 dips, for instance

Sell your used Class 5 Switch on EBAY !!!

2005 to 2011 US Consumer VoIP Subscriber Forecast

- FTTH VoIP
- Broadband VoIP
- Cable VoIP
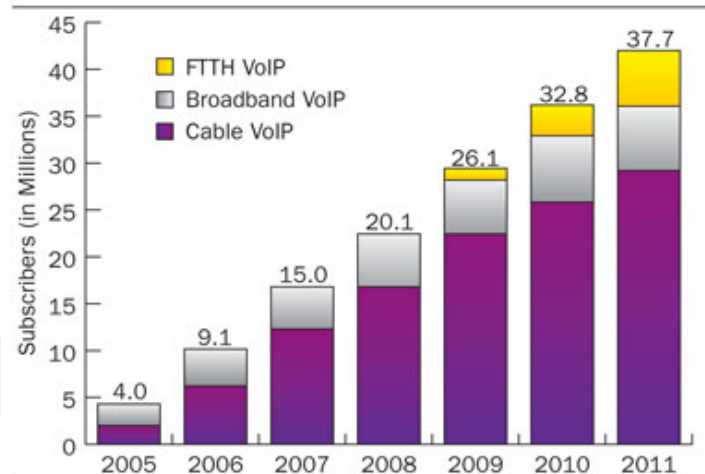
Source: Yankee Group, 2007

The Evolution of Enterprise VoIP

- ❖ **First : Replace the RJ-11**
  - ➢ Immediate gains in CAPEX as single wiring harness simplifies campus management.
  - ➢ Greenfield ROI – NO Brainer
- ❖ **Second : Replace the TIE Lines**
  - ➢ Integrate Enterprise wide Dial Plan Management into single IP Network. Immediate OPEX gains.
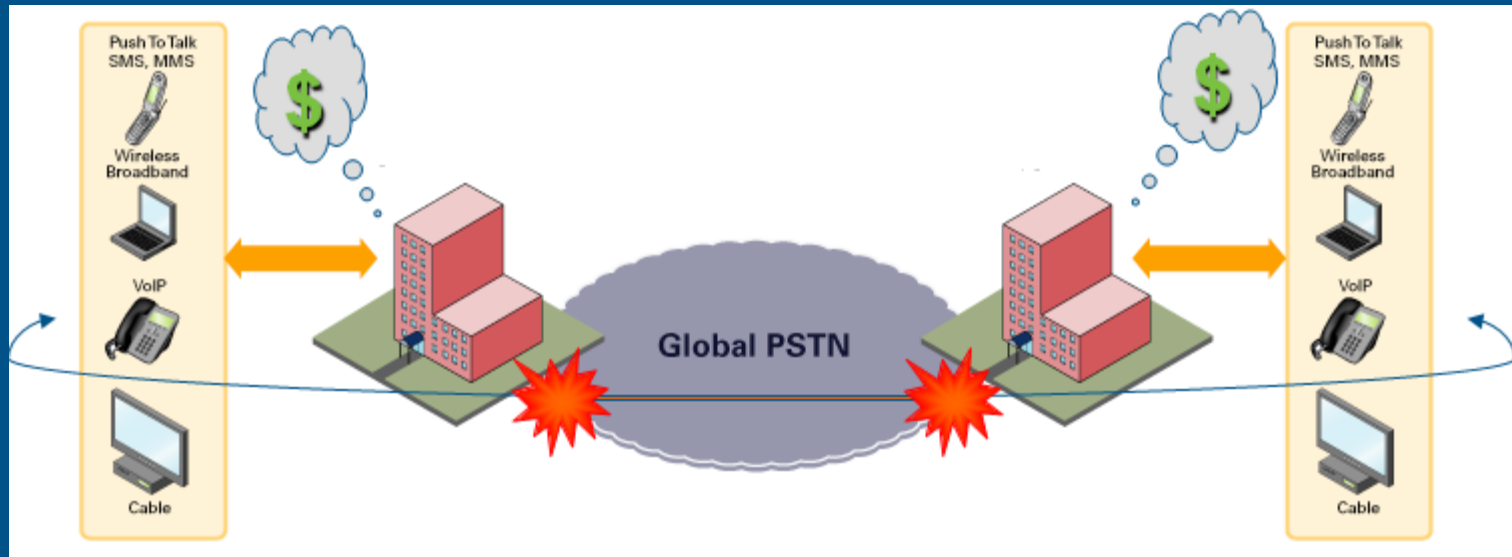- ❖ **Third : Replace the PRI (Today) SIPconnect**
  - ➢ All IP E2E
- ❖ **Fourth : Peer with Business Partners**
  - ➢ The 40-40-20 rule
- ❖ **Fifth : Seamless Campus/Mobility Integration**
  - ➢ Its not fixed Mobile Convergence its Substitution

SIP connect

SIP FORUM

The PSTN PRI's are the Bottle Neck to new Enterprise Communications services

- **The PSTN is used as the inter-VOIP "default" network**
  - Service is degraded as it must transverse multiple networks
- Every VOIP network is an Island (apologies to John Donne!)
- PSTN Primary Rate Interfaces are the last bottleneck.

The Lessons Learned

❖ **Where did this information come from?**

➢ Informal survey of SIPconnect service providers and vendors

❖ **Is this the end?**

➢ No.

➢ SIPconnect 1.1 further refines best practices

❖ **"A rising tide lifts all ships"**

SIP connect

SIP FORUM

SIPconnect in an Interoperability Program

❖ **The Goal: Make SIP Trunk testing and deployment _easier_ than a PRI**
  - ➤ Significant reduction time to market
  - ➤ Concept branding

❖ **N Paired - Service Provider and Vendor interoperability testing inefficient**
  - ➤ In-house – Requires personnel timeline management
  - ➤ Equipment/Software vendor – Dependent on multiple vendor timetables, and less control
  - ➤ 3rd party test houses – Dollar resources

SIP connect **SIP FORUM**

General Guidelines from Service Providers

❖ **Document the installation process**
  ➢ Incorporate guides from your vendors and partners
  ➢ Develop own documentation
  ➢ Simple site surveys

❖ **Promote a common standard**
  SIPconnect

SIP connect
SIP FORUM

❖ **Push vendor partners to become SIPconnect compliant**
  ➢ Reduced configuration permutations saves "months" of test time

SIP connect

SIP FORUM

From the IP PBX Vendors

- ❖ **SIPconnect compliant**
  - ➢ SIPconnect becomes a "brand"
  - ➢ Branding promotes consumer confidence
- ❖ **Promote the program with service providers**
  - ➢ Faster interop testing saves resources aka (money) for both parties
- ❖ **Implement the DIGEST authentication method**
  - ➢ TLS is required by SIPconnect
  - ➢ Watch for updates from SIPconnect 1.1

SIPconnect

SIP FORUM

Fax and Modem Deployments

- ❖ Fax and Modem traffic is not going away
  - ➢ Fax is actually going up.
- ❖ SP's need to explicitly test fax and modem deployments
- ❖ Consider deploying a separate DS0 interface
- ❖ SIP Forum has formed task groups to address issues

SIP connect

SIP FORUM

NAT & Firewall Issues for the Service Provider

- ❖ Document what you support (again…)
- ❖ Training
  - ➢ Customer facing organizations need to know what to expect
  - ➢ Train your channels
    - ➢ Proper configurations and deployment
    - ➢ Troubleshooting tips and best practices
- ❖ Potential issues in the deployment
  - ➢ Deploy a SIP-aware firewall
  - ➢ Provide configuration guidelines if the end user already has a firewall – One click configuration options.

SIP Connect

SIP FORUM

Now to the Economics

- ❖ **Cost Savings are real :**
  - ➢ Network gateway costs reduced/eliminated
  - ➢ "Reduced reliance on premises gateways can save 40-60%"
  - ➢ Be sure you can support the services
    - ➢ Internal Enterprise or Carrier support costs will kill margins

- ❖ **Additional Revenue Opportunities**
  - ➢ Provide DN/DID services to smaller companies
  - ➢ Centralized management
  - ➢ Deliver services to individual end users

- ❖ **Reduce Churn with services that complement the PBX**
  - ➢ Provide Stickiness
  - ➢ Integrate voice as an application, among others

SIP connect

SIP FORUM

Conclusions

- ❖ It works ..
- ❖ It delivers the ROI it promises
- ❖ SIPconnect 1.1 in progress
  - ➢ http://www.sipforum.org/sipconnect
- ❖ SIPconnect 1.1 builds on success
  - ➢ Still "Voice Centric"
  - ➢ Strengthen MUST vs SHOULD implement
  - ➢ Call Transfer expansion.
  - ➢ Implicit vs Explicit Register issues
  - ➢ UM issues for 2.0

Join the SIP Forum! -- Get Involved!

- ❖ Visit the SIP Forum Website: www.sipforum.org
  - ➢ Register for participant membership – it's FREE!
  - ➢ Join the discussion list
  - ➢ Learn about SIP Forum events and initiatives

- ❖ Attend a SIPit interoperability event: www.sipit.net

- ❖ Get Serious -- Participate in a Forum Task Group!

- ❖ Join the IP Communications Industry Thought Leadership!

SIP connect

SIP FORUM