



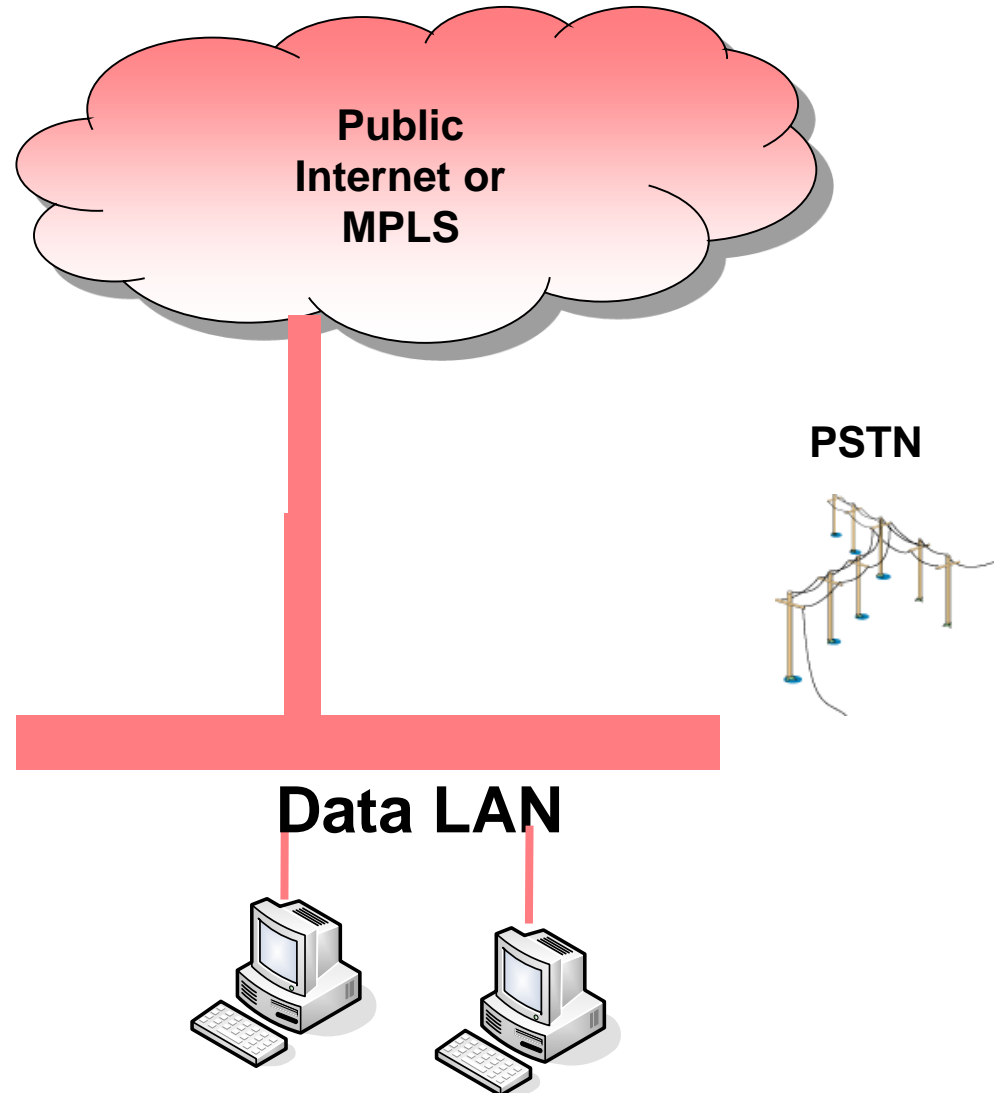
The SIP enabler

**We enable SIP communication for business**

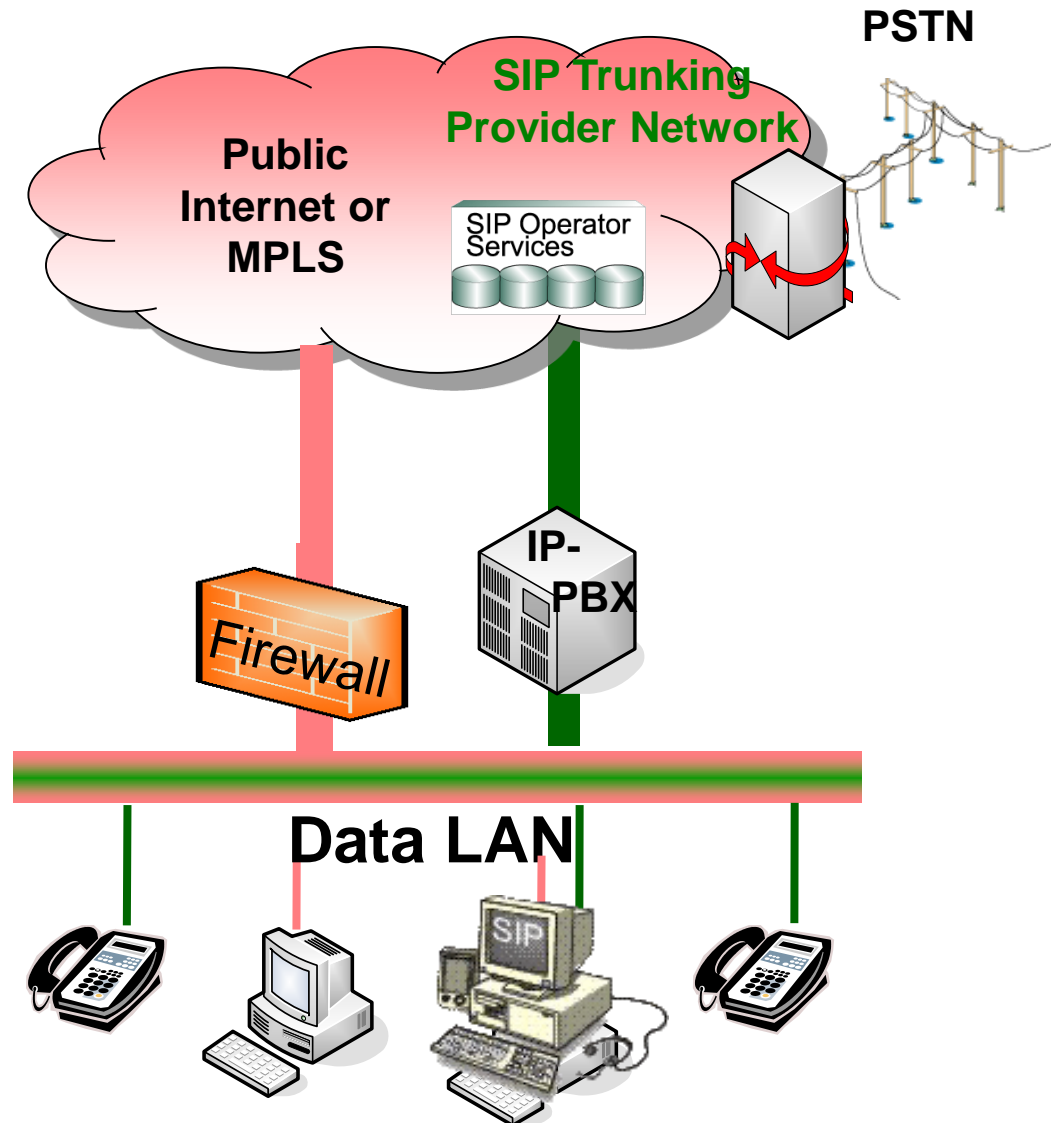
# “SIP Trunking is no longer a Nicety it’s a Necessity” - Jonah Fink

- SIP is an important and beneficial component of the evolution of business communication
  - Lower cost
  - Single network
  - Centralized call management with local numbers
  - Evolution to global connectivity
  - Revolutionary use of video and other media
  - Easier disaster recovery
- But, implementation is requires an Enterprise Session Border Controller

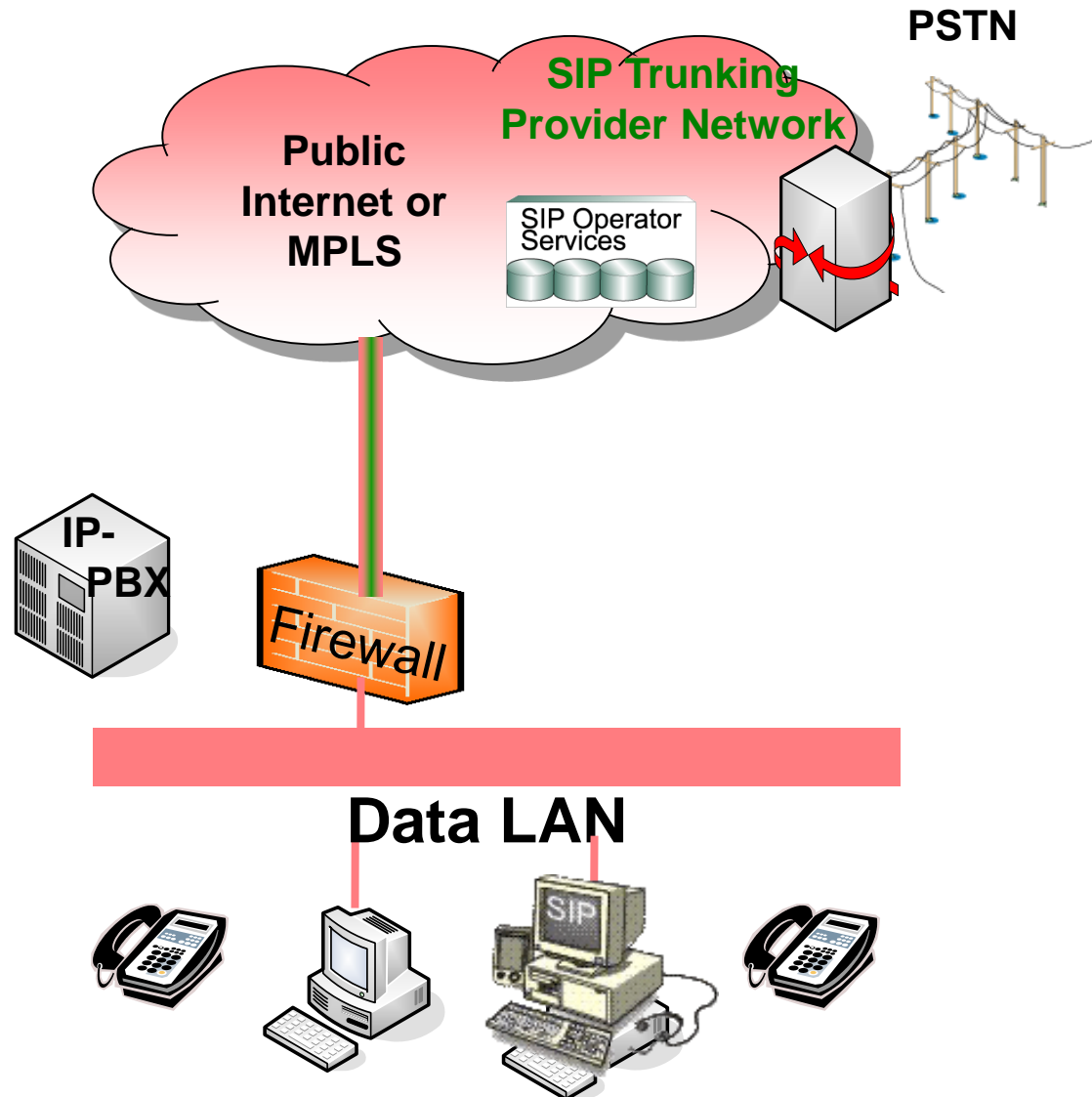
# Would you ever do this?



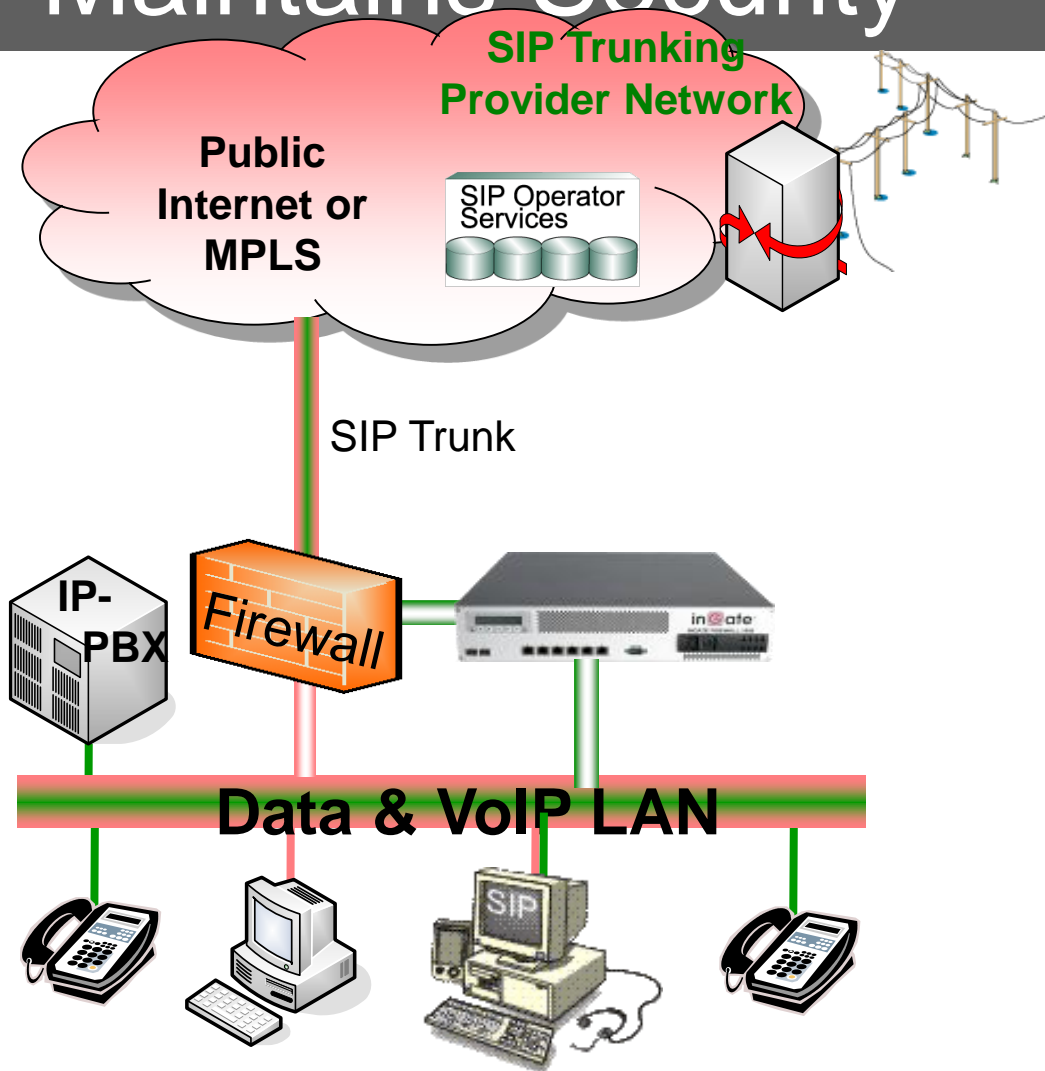
# PBX Exposed: Not Recommended



# NAT Breaks SIP: Not Possible



# ESBC Resolves NAT and Maintains Security



# What is an ESBC

- Device that:
  - Sits at the border between an enterprise and the Wide Area Network
  - Controls how Sessions are delivered between the enterprise and service provider
  - Analagous to a data firewall but for SIP and related media

# Why does the Enterprise need an SBC?

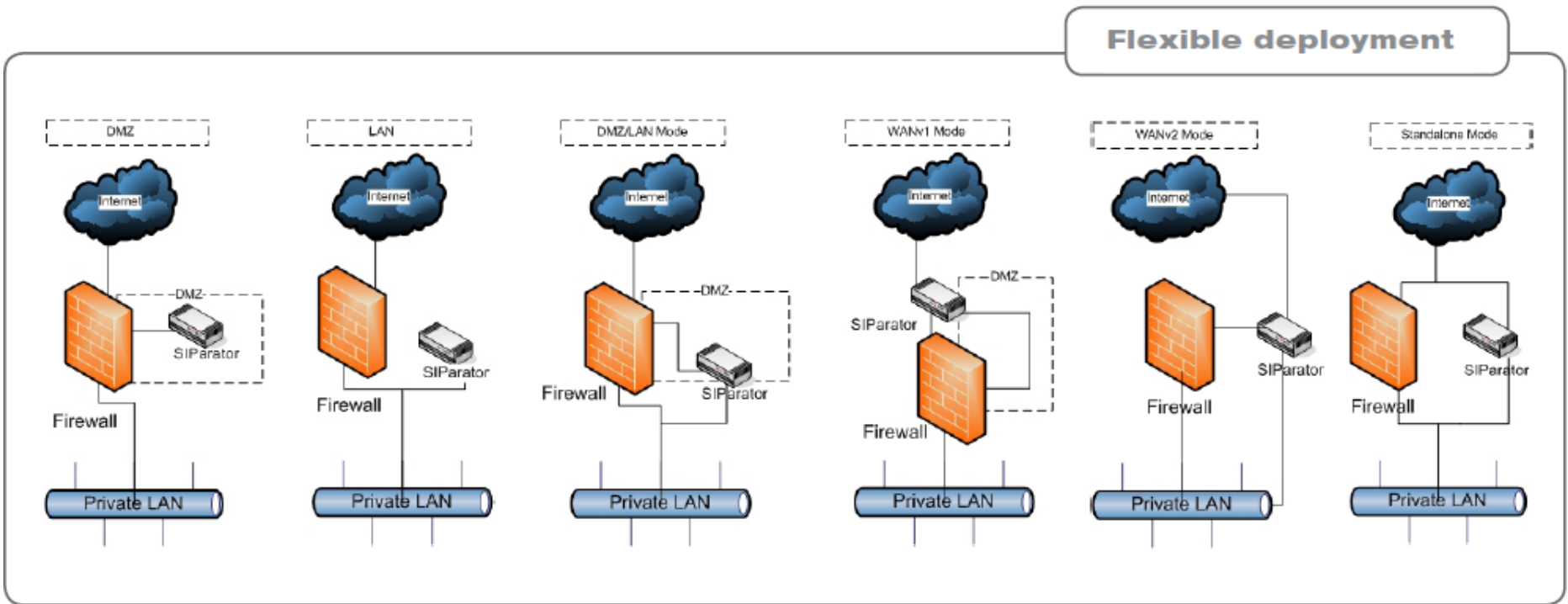
- Firewall traversal
  - Enables placement of the PBX behind the firewall
- Normalization SIP signaling
  - To insure interoperability with the service provider
- Far End NAT Traversal
  - Support for Remote Workers
- Disaster recovery
  - To address multiple PBXs or providers
- Quality of Service
  - To prioritize voice
- Demarcation Point
  - MOS scores
  - Logging and Wire Shark traces

- Deep SIP Packet Inspection
  - To keep the PBX secure
- Intrusion Detection / Prevention
  - To prevent Denial of Service Attacks
- Toll Fraud prevention
  - Authentication processes
- Encryption
  - To enable private communications

An E-SBC Simplifies, Secures and Strengthens any SIP Implementation



# Network Installation Options



Install to the Customer's Specification

# Ingate's Product Family

## The Ingate Product Range

**SIParator® 21**  
**Firewall® 1210**



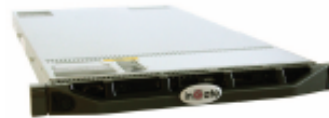
50 Calls\*  
200 Mbit/s  
30 000 Packets/s

**SIParator® 51/56/66**  
**Firewall® 1510/1560/1660**



150/400/1000 Calls\*  
500/700/900 Mbit/s  
40 000/80 000/160 000 Packets/s

**SIParator® 95/96/97**  
**Firewall® 2950/2960/2970**



1800/3000/8000 Calls\*  
4 500/ 4 500/ 5 000 Mbit/s  
300 000/500 000/900 000 Packets/s

**Software**  
**Firewall/SIParator®**  
**25 - 10 000 Calls\***



Can be installed on a  
virtual machine or  
natively x86 Linux Servers  
(industry-standard PC architecture)

(\*) Calls = Concurrent RTP Sessions = SIP Trunks

Cost-effective

Supporting 1-10,000 sessions

Firewall and NAT traversal

Support for Remote Workers

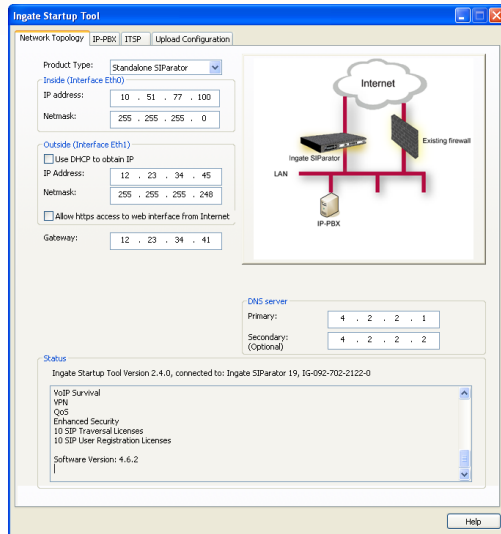
Security

Interoperability

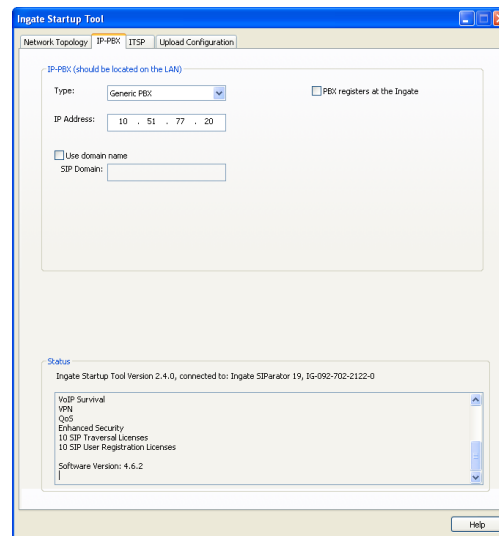
Diagnostics

SIP routing

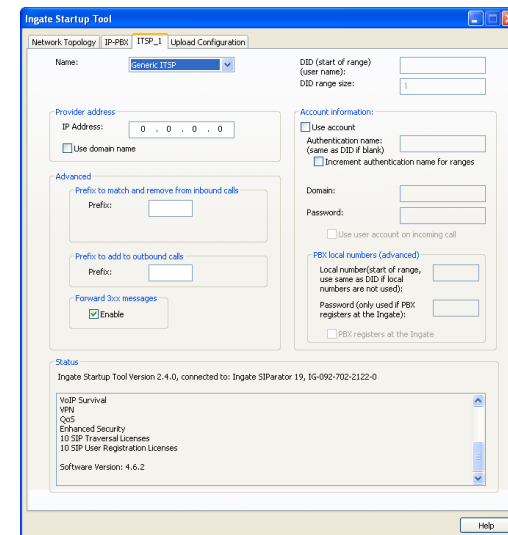
# Ingate SIP Trunking Startup Tool



Network Topology



Select PBX



Select ITSP

20 minutes: start to call completion

# Benefits of Ingate E-SBC

- **Functionality** – All capabilities needed to deliver SIP to the enterprise
- **Security** – Inspection, control, IDS / IPS, and more
- **Interoperability** – Tested with major PBXs and SIP Trunking operators
- **Flexibility** – six deployment options
- **Scalability** – seven models for small to large deployments
- **Simplicity** – Start-up wizard reduces installation time
- **Affordability** – Cost benefit vs. risk of network vulnerability
- **Reliability** – MTBF in excess of 8 years; failover option available
- **Experience** –
  - First E-SBC delivered in 2001
  - Partnered with Shoretel since 2006



**Please contact me at any time:**

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