

**Dialogic**<sup>®</sup>  
Making Innovation Thrive<sup>®</sup>



**Build on Dialogic**

**Dialogic**<sup>®</sup>  
**BorderNet**<sup>™</sup> 500

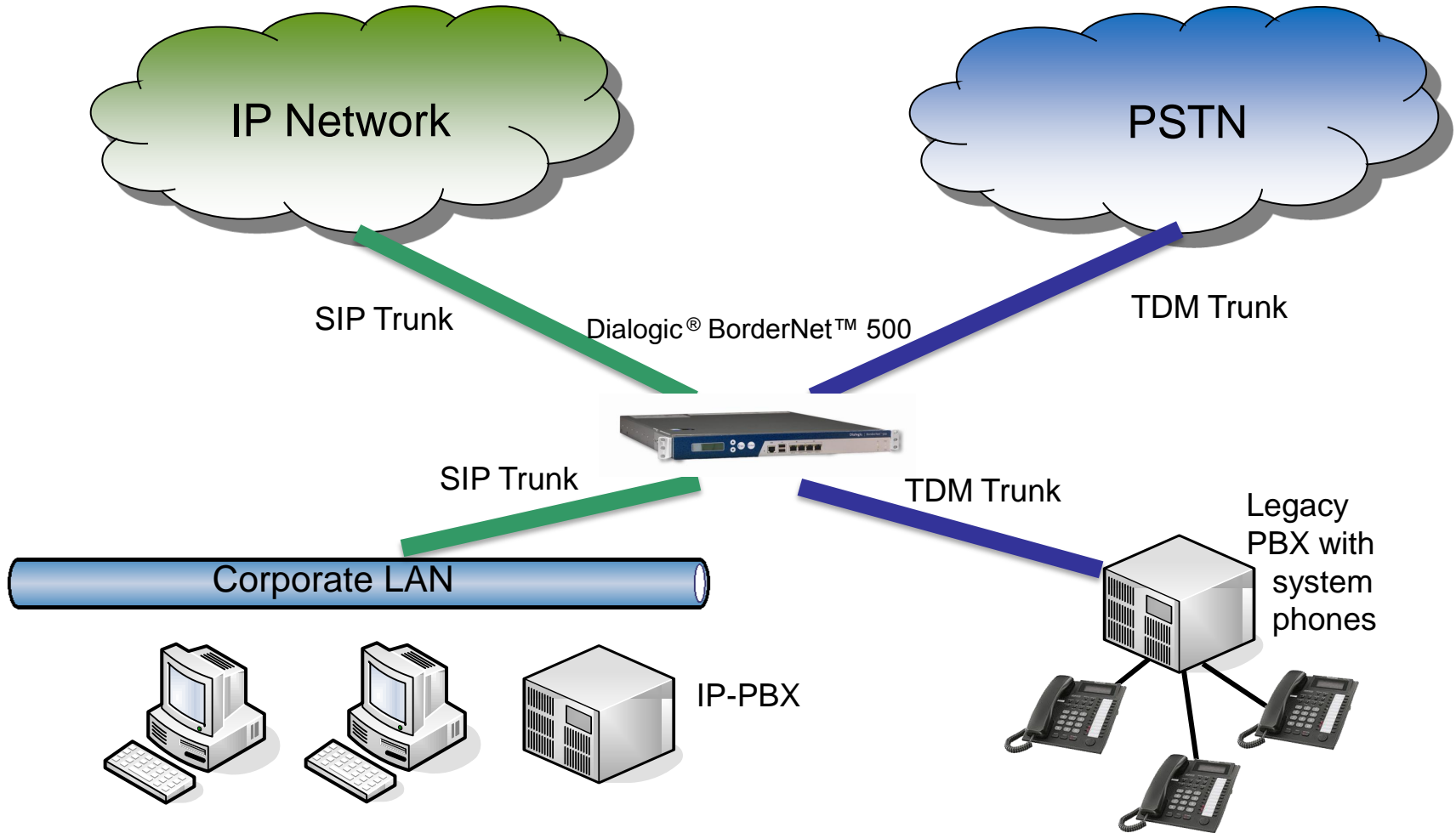
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# SIP Services: Network Edge Constraints

| Constraint                | Issue  |
|---------------------------|--|
| Firewalls / NAT Traversal | Many enterprise firewalls are not capable of handling SIP traffic  |
| SIP Interoperability      | Many SIP-based services and SIP-based customer premise equipment are not interoperable out of the box          |
| SIP Security              | SIP services have security vulnerabilities such as denial of service attacks, SPIT and toll fraud              |
| Legacy Integration        | Many existing PBX systems are not SIP capable, or require substantial upgrades to support SIP                  |
| Demarcation               | Many SIP services need a demarcation point or boundary between the service provider and the enterprise premise |

# Dialogic® BorderNet™ 500

## Any-to-Any Connectivity at the Enterprise Network Edge



# Dialogic® BorderNet™ 500 Integrated Product

- January 2010: Ingate + Dialogic Press Release
  - Providing “any-to-any” PBX connectivity for SIP trunking, Dialogic Corporation, ..... announced today that the company will incorporate the award-winning **SIP Trunking software module from Ingate® Systems** into a new enterprise border element designed to connect virtually any SIP trunk with virtually any PBX

## Enterprise Session Border Controller



- NAT traversal
- SIP security
- ITSP interoperability
- IP-PBX interoperability

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## T1/ E1 / BRI to SIP Media Gateway



- SIP interoperability
- SIP security
- PBX connectivity
- PSTN connectivity / failover

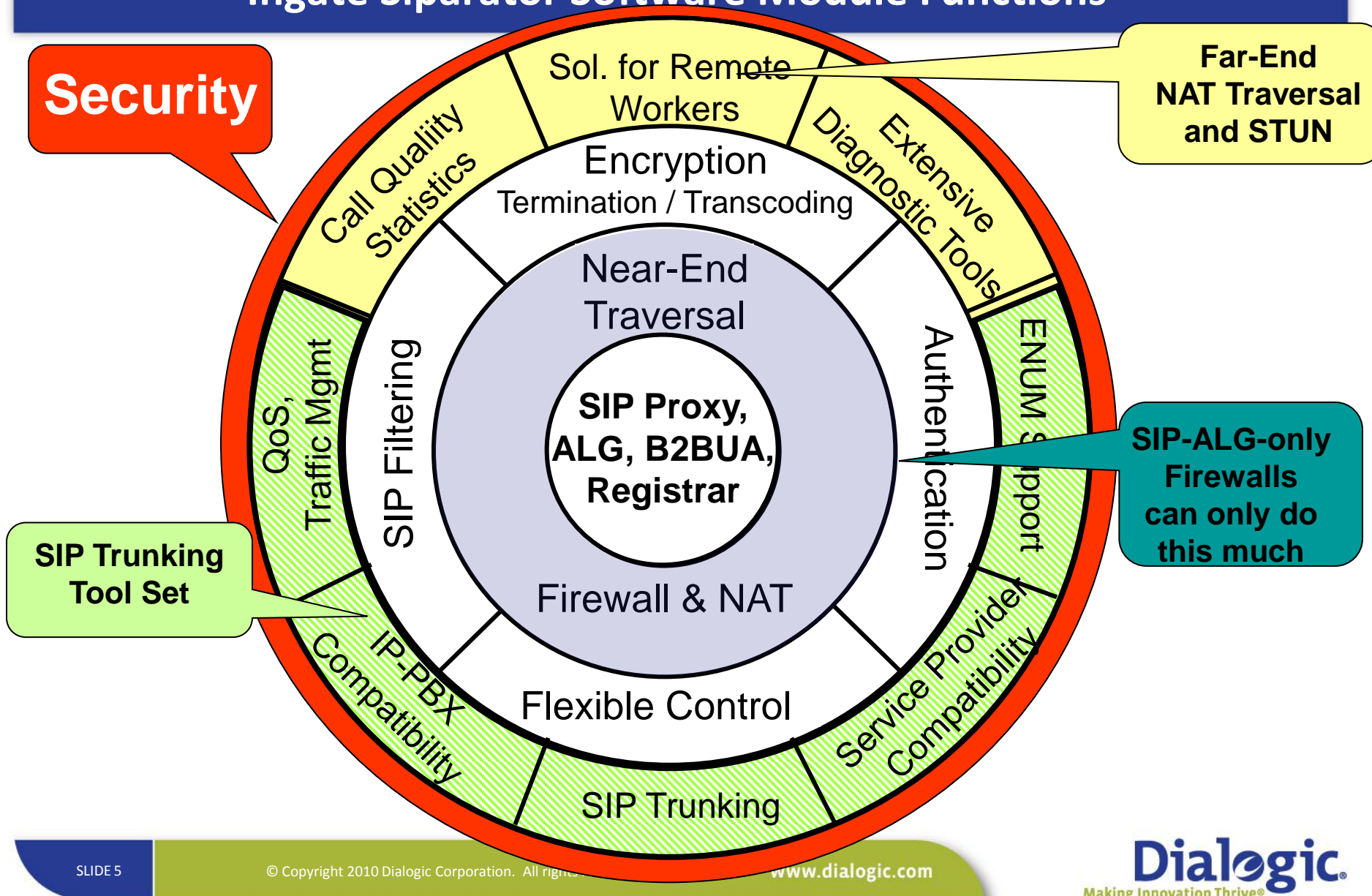
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## Dialogic® BorderNet™ 500



- Any to Any Connectivity  
for SIP Services

# Dialogic® BorderNet™ 500: Ingate Siparator Software Module Functions



# Dialogic® BorderNet™ 500

## Interoperability (building on Ingate interoperability)

### Service Providers

- 360 Networks
  - Airespring
  - AT&T
  - BandTel
  - Bandwidth.com
  - Broadvox
  - Cbeyond
  - Cellip
  - Cordia Corporation
  - Gamma
  - Global Crossing
  - IP-Only
  - Juma Networks
  - Level 3
  - Netlogic
  - Nexvortex
  - Nuvox
  - O1
  - Paetec
  - Primus
  - RNK Telecom
  - TDC
  - Tele2
  - Toplink
  - VoEX
  - VoIP Unlimited
  - Voxbone
- More in pipeline.....*

### Carrier Equipment

- Acme Packet
- Broadsoft
- NexPoint
- Sonus
- Sylanro

SIP Trunks

Secure SIP Trunks



Dialogic BorderNet™ 500

PSTN

'PSTN' Trunk Emulation

PSTN

- Basic Rate ISDN (BRI)
- Primary Rate ISDN (PRI) T1 / E1
- T1/E1 Robbed Bit / CAS

### IP-PBXs

- 3Com
- Aastra
- Digium / Asterisk
- Avaya
- Cisco Call Manager
- Ericsson MX-One
- Fonality
- Innovaphone
- Interactive Intelligence
- Iwatsu
- Microsoft
- Mitel
- NEC / Sphere
- Nortel
- Objectworld
- SER
- Shoretel
- Siemens
- SIP-Gear
- Swyx

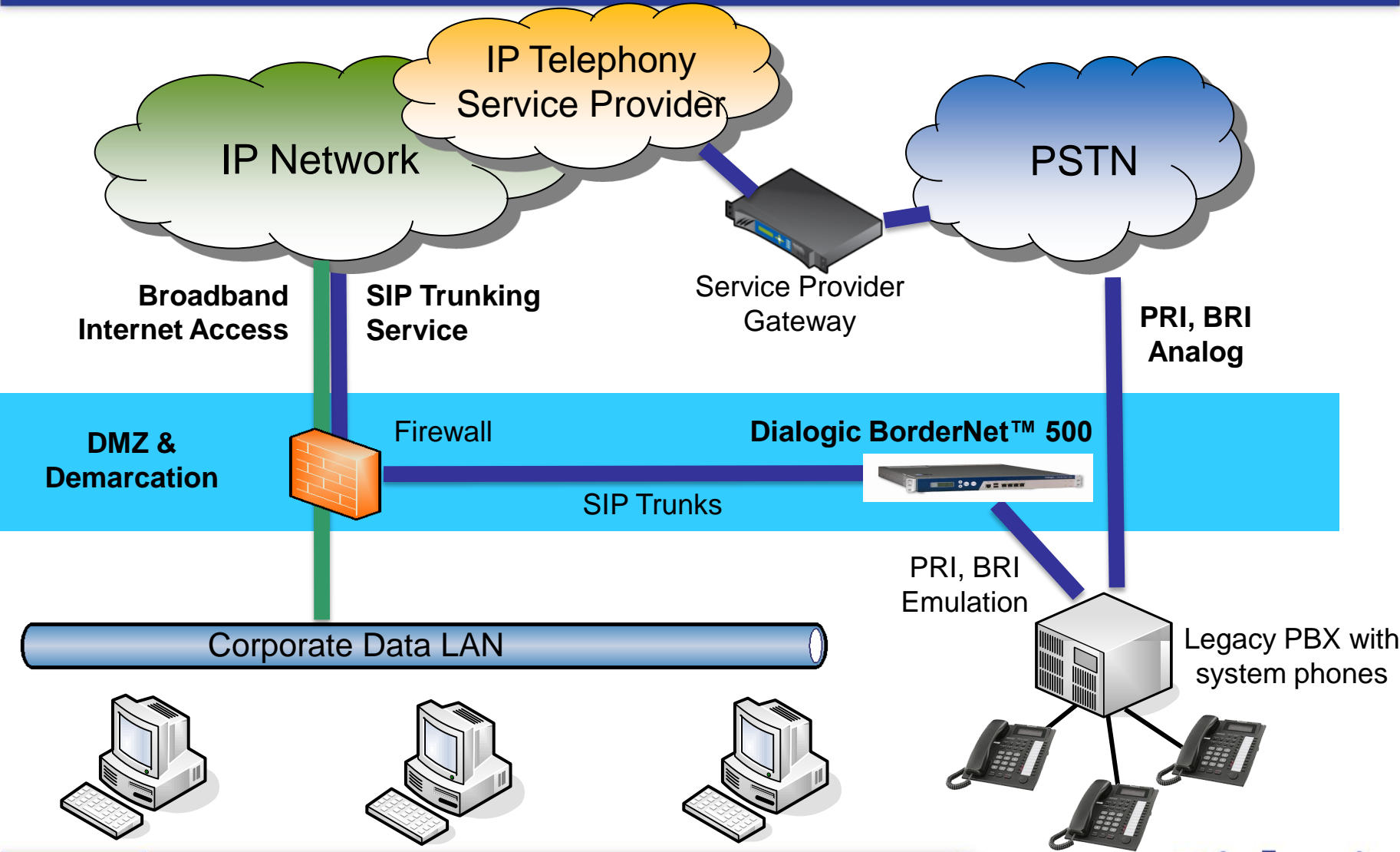
*More in pipeline.....*

### Legacy PBXs

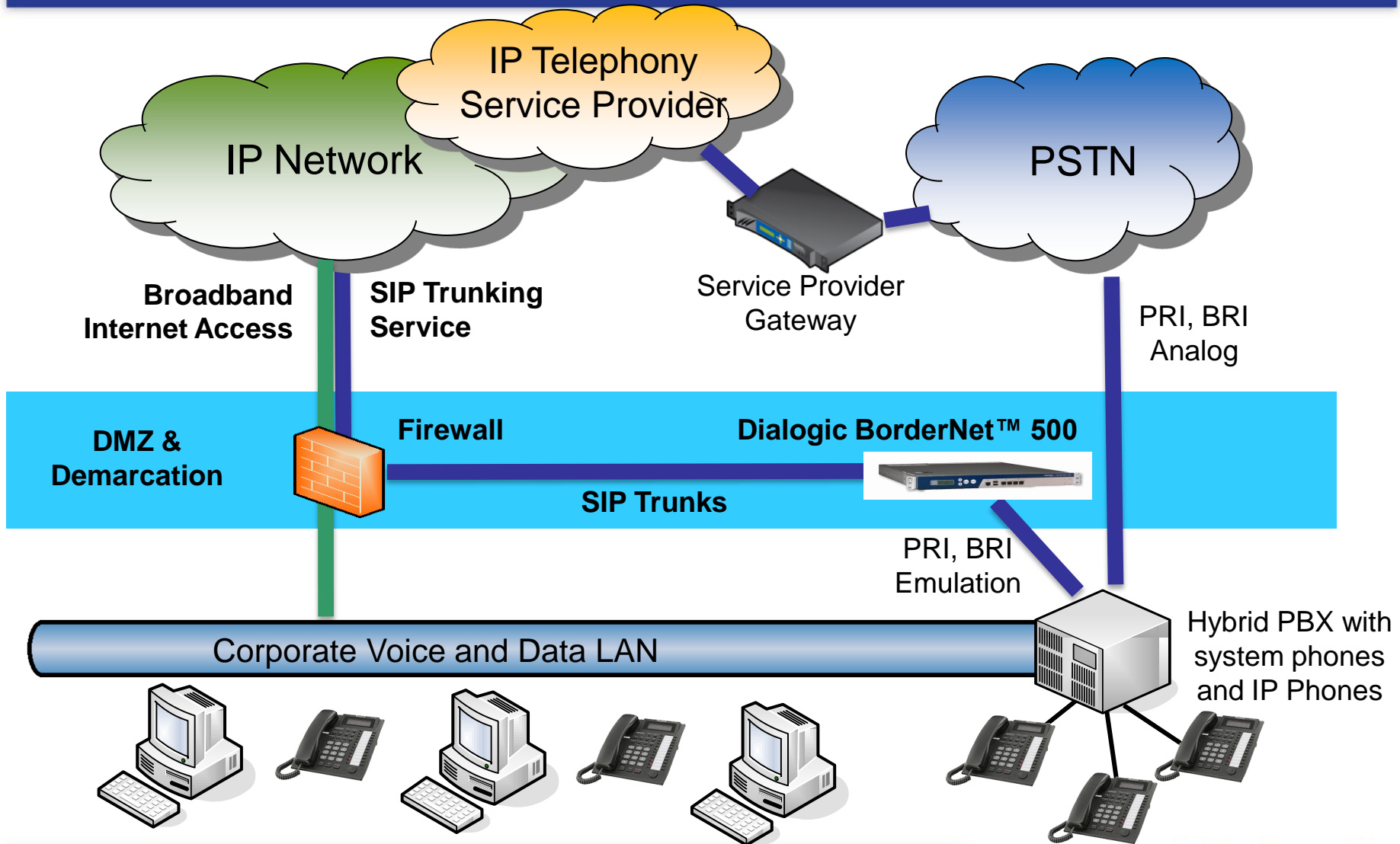
- Alcatel
- Avaya
- Ericsson
- Mitel
- Nortel
- Siemens
- Fujitsu
- Hitachi
- Intecom
- Matra
- Philips
- Rolm
- Tenovis
- Toshiba
- Iwatsu
- Intertel
- Panasonic
- DeTeWe
- Samsung

*If it supports a T1 or E1 trunk port today, chances are good we can emulate the PSTN for it...*

# Dialogic® BorderNet™ 500: Legacy TDM PBX Connectivity

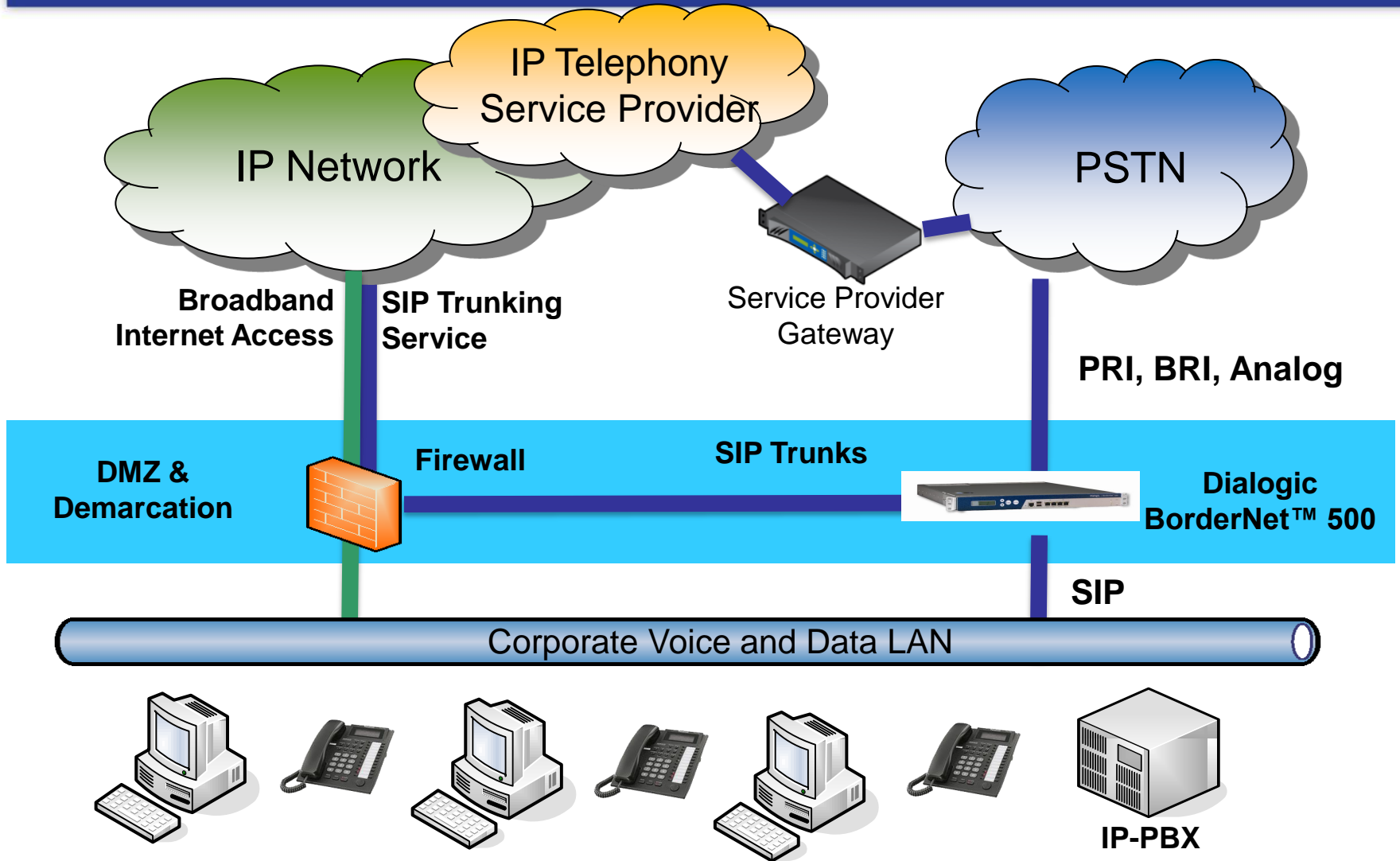


# Dialogic® BorderNet™ 500: Hybrid PBX Connectivity (non-SIP Trunk Ready)





# Dialogic® BorderNet™ 500 IP-PBX Connectivity



# Dialogic® BorderNet™ 500: Preliminary Specifications

## – Broad Product Line and Scalability

- 8 port, 16 channel - BRI to SIP
- 24/30 channel - T1/E1 to SIP
- 48/60 channels - Dual T1/E1 to SIP
- 96/120 channels - Quad T1/E1 to SIP

## – Complete Support for SIP Trunking Services

- SIP Proxy, SIP Registrar
- SIP Interoperability
- SIP Connection set up (SIP + RTP)

## – Complete PBX, PSTN, IP and Fax Protocol Support

- Analog FXO, PRI, BRI, ISDN, CAS, Q.SIG protocols
- SIP (RFC32XX), Microsoft SIP (TCP Transport), Microsoft Secure SIP: TLS
- T.30 (PSTN) Fax to T.38 (FoIP)
  - Exclusive V.34 Fax / FoIP speed



## – Value Added Software Options

- Remote SIP Connectivity (Far-end NAT-passing incl STUN-server)
- QoS (bandwidth limitation and prioritization)
- Enhanced Security (IDS/IPS for SIP, SRTP and TLS)
- VoIP Survival (VoIP redundancy if Internet connection fails)
- SIP Registrar (SIParator software is used as the primary SIP registrar)

## – Flexible, Cost Effective Support for Analog Devices

- Support for ATAs & FXS Gateways from Grandstream & Cisco
  - Easy to deploy - 1, 2, 4, 8, 24 port solutions
  - Low cost per port
- Interface for any number of Analog Devices
  - Conference Phones, Fax Machines, POTs, elevator phones, loading docks, checkout registers, paging systems, etc.

**The right mix of features and densities for success with SIP Services**



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