

# Remote Office IT Challenges

## Data, Voice, and Video Convergence

## ■ Convergence of VoIP, Data and Video:

- Reduces cost
- Simplifies management
- Provides enhanced features
- Delivers greater mobility for the distributed business
- Provides same quality as PSTN calls
- Converged Voice, Data, Video – unified infrastructure for feature-rich applications
- Convergence made easy and even more cost-effective with MPLS

**Voice/Video Over IP are here to stay...BUT...**

## ■ The WAN limits the success of Convergence

- Low speed links for remote sites – 128kbps, 512kbps, T1's/E1's
- Low visibility for existing application bandwidth consumption

## ■ Performance challenges

- Unacceptable voice quality
- Greedy and bursty competing applications
- MPLS access points are still congested...QoS is not enough

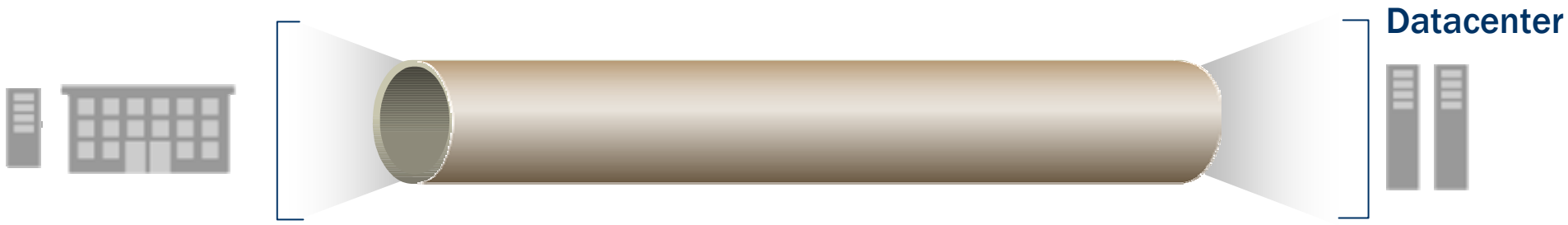
## ■ More data is thrown over the WAN

- Server consolidation
- Web services
- Disaster recovery

## ■ Voice is not the only business critical application

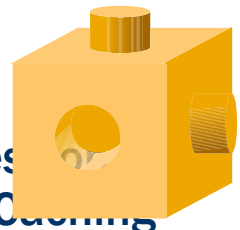
- Other data applications can't be degraded to improve voice quality

# Complex problem – integrated solution



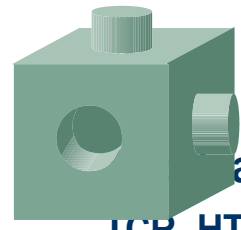
**Problem: Insufficient Capacity**

WAN Compression  
Caching



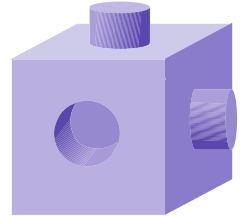
**Problem: Application chattiness**

Application/protocol Acceleration:  
TCP, HTTP, FTP, DNS, MAPI, Citrix, VoIP



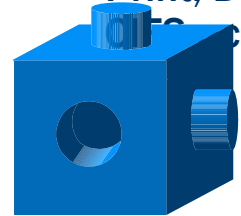
Monitoring &  
Layer 7 QoS

**Problem: Application Contention**



Wide Area File Services (WAFS)  
Print, DNS, DHCP services; Offline mode;  
TCP acceleration

**Problem: Server consolidation challenges**



## Profile

- Global leader in chemical distribution with \$4.6Billion in sales

## Business need

- Decided to implement VoIP to remote locations to reduce IT costs

## Problem

- Voice quality was unacceptable; users complaining
- Slow MPLS WAN links could not support VoIP

## Solution

- Expand compression increased effective WAN capacity
- Layer7 QoS used to prioritize VoIP and guarantee quality

## Results

- Up to 1000% acceleration for data applications
- Good voice quality; happy users
- 30% savings over comparable MPLS Telco offering



**“For us, the Layer 7 QoS feature was critical in ensuring that our employees would experience the same “call quality” as they were accustomed to from traditional telephone systems.”**

*- Jacob Nielsen, Network Administrator at Brenntag Nordic*

## Expand Networks Enables Your IT Initiatives

1. **Server Consolidation/Storage**
2. **Deploying Web Applications**
3. **Server-Based Computing**
4. **Voice & Data Convergence**
5. **Optimizing MPLS WAN**
6. **Business Continuity**
7. **Satellite and Mobile Communications**

- **Founded in 1998**
  - Headquartered in New Jersey, USA
  - R&D in Tel Aviv
- **1,200 + customers**
- **Over 22,000 installations**
- **90 countries**
- **300+ partners**
- **Worldwide 24x7 support**



*Expand Networks helps organizations simplify their IT infrastructure while delivering superior application performance to distributed business environments.*

*This results in improved user productivity and cost-effective IT*

# Over 1,200 Customers Across 5 Continents

## FINANCE



## RETAIL



## GOVERNMENT



## HEALTHCARE



## MANUFACTURING

