

# VoIP and IP Telephony

## A Carrier's Perspective

# NETWORKSHOP 36

**GLOBAL CAPABILITY.  
PERSONAL ACCOUNTABILITY.**

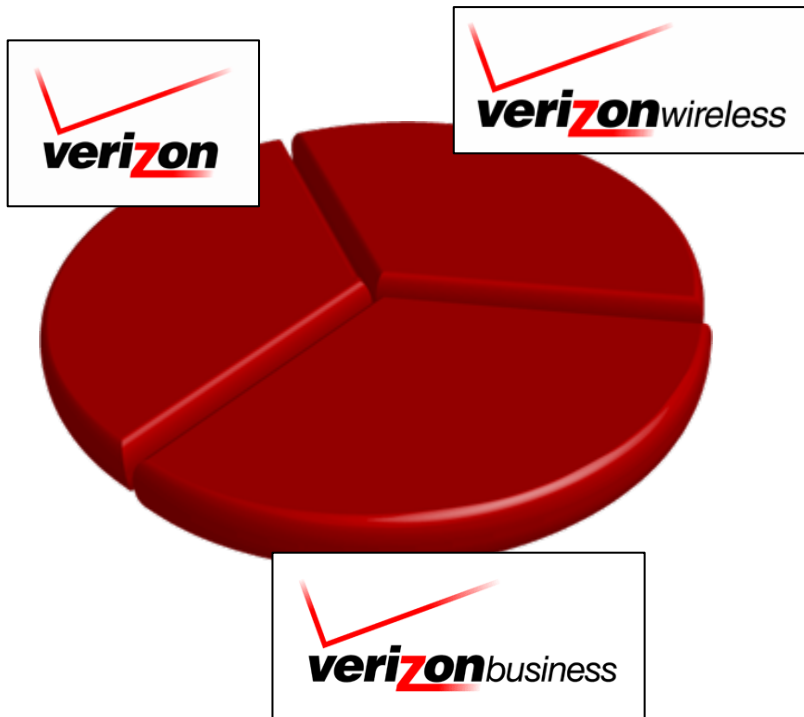
**Richard McCammond**  
Senior Consultant – Convergence  
April 8, 2008



# Agenda

- **Verizon Business – Brief Introduction**
- **Everything to IP**
- **A Carrier's Network Fabric**
- **How do Enterprises use the new IP Fabric?**
- **Drive towards Collaboration**

# Verizon Communications Inc.



## Revenue

- 2007 Revenue: \$93.5 billion (+6% compared to 2006)
- World's second biggest telecommunications provider\*
- 39th on Fortune Global 500

## Profit

- One of the world's most profitable telecommunications providers\*
- 36th on Fortune Global 500

\* Source: Fortune Global 500, CNN Money, 2007

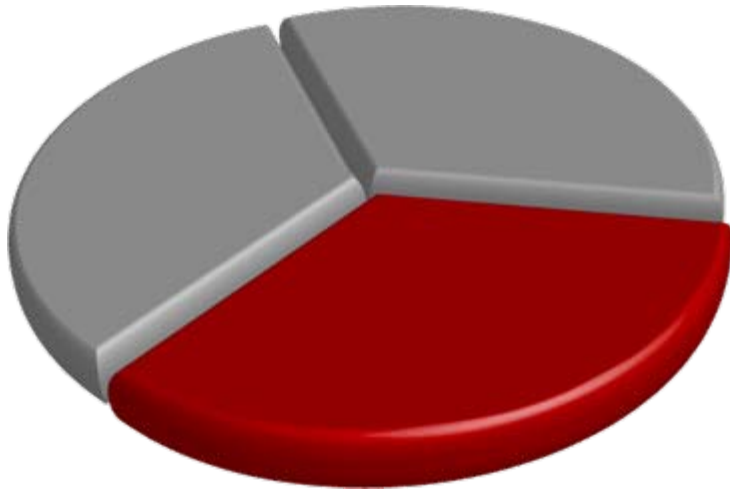


# Fortune Global 500 – 2007

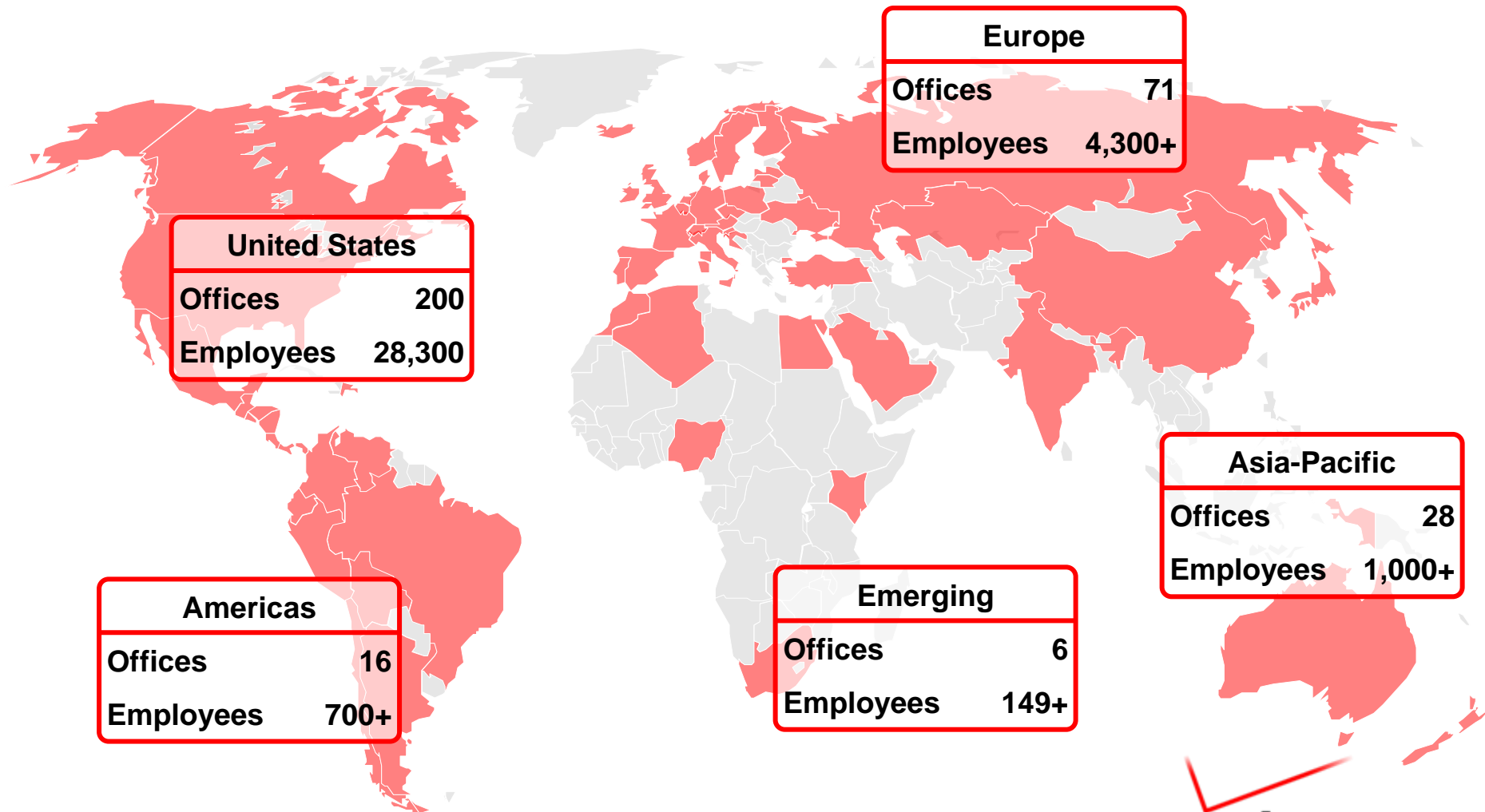
1. Wal-Mart Stores	74. Proctor & Gamble	149. Tyco International	222. KLM – Air France Gr.
6. Toyota Motor	82. France Telecom	159. NEC	232. Cisco Systems
13. ING Group	86. AT&T	164. BT	243. American Express
28. Siemens	95. Vodafone	180. China Mobile Comm.	259. Bridgestone
39. Verizon Communications	102. Dell	184. PepsiCo	266. News Corp.
41. HP	115. Pfizer	191. Walt Disney	279. Danske Bank Group
53. E.ON	120. Unilever	203. FedEx	
60. Deutsche Telekom	127. United Technologies	219. Honeywell Internat.	
69. Sony	139. Microsoft		

# Verizon Business

- Customers include 97% of the Fortune 500
- Over 30,000 employees
- Operations in 75 countries
- Customers in 2,700 cities in 152 countries
- Most expansive IP network worldwide (based upon points of presence)
- Most connected backbone according to TeleGeography



# Verizon Business – Offices and People



Asia-Pacific	
Offices	28
Employees	1,000+

Emerging	
Offices	6
Employees	149+

United States	
Offices	200
Employees	28,300

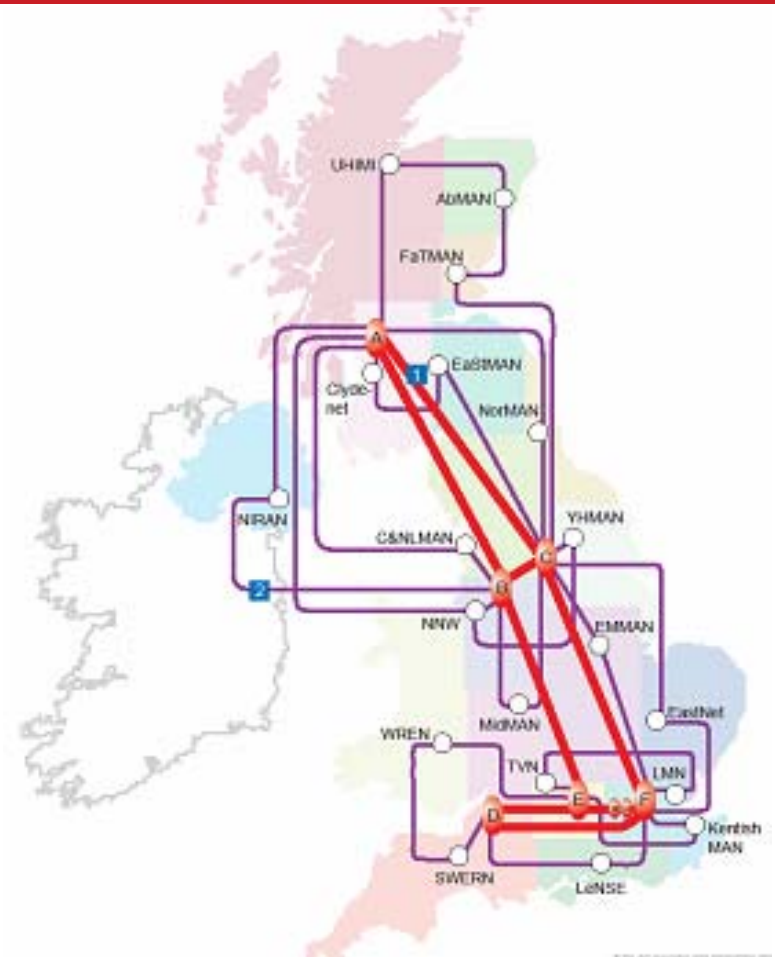
Americas	
Offices	16
Employees	700+

Europe	
Offices	71
Employees	4,300+



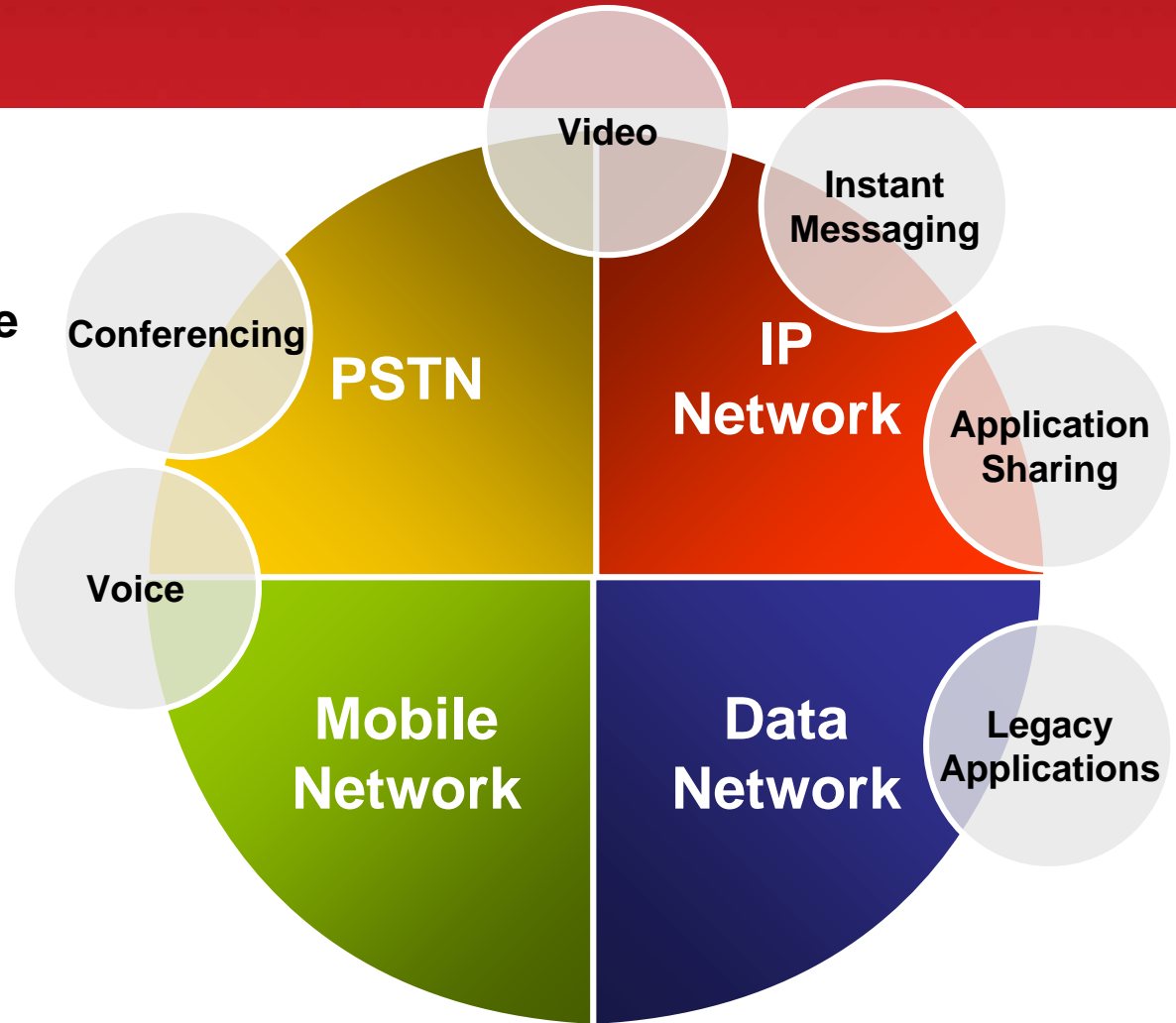
# Verizon Business and the Joint Academic Network (JANET)

- **1999 to 2005 – SuperJANET 4**
  - WorldComm built SJ4 with 2.5Gbit/s overlaying its UK backbone. Capacity eventually increased to 10Gbit/s
- **2006 to Present – SuperJANET 5**
  - Verizon Business builds SJ5 with dedicated fibre and improved diversity. Multiple 10Gbits/s links upgradeable to 40Gbit/s



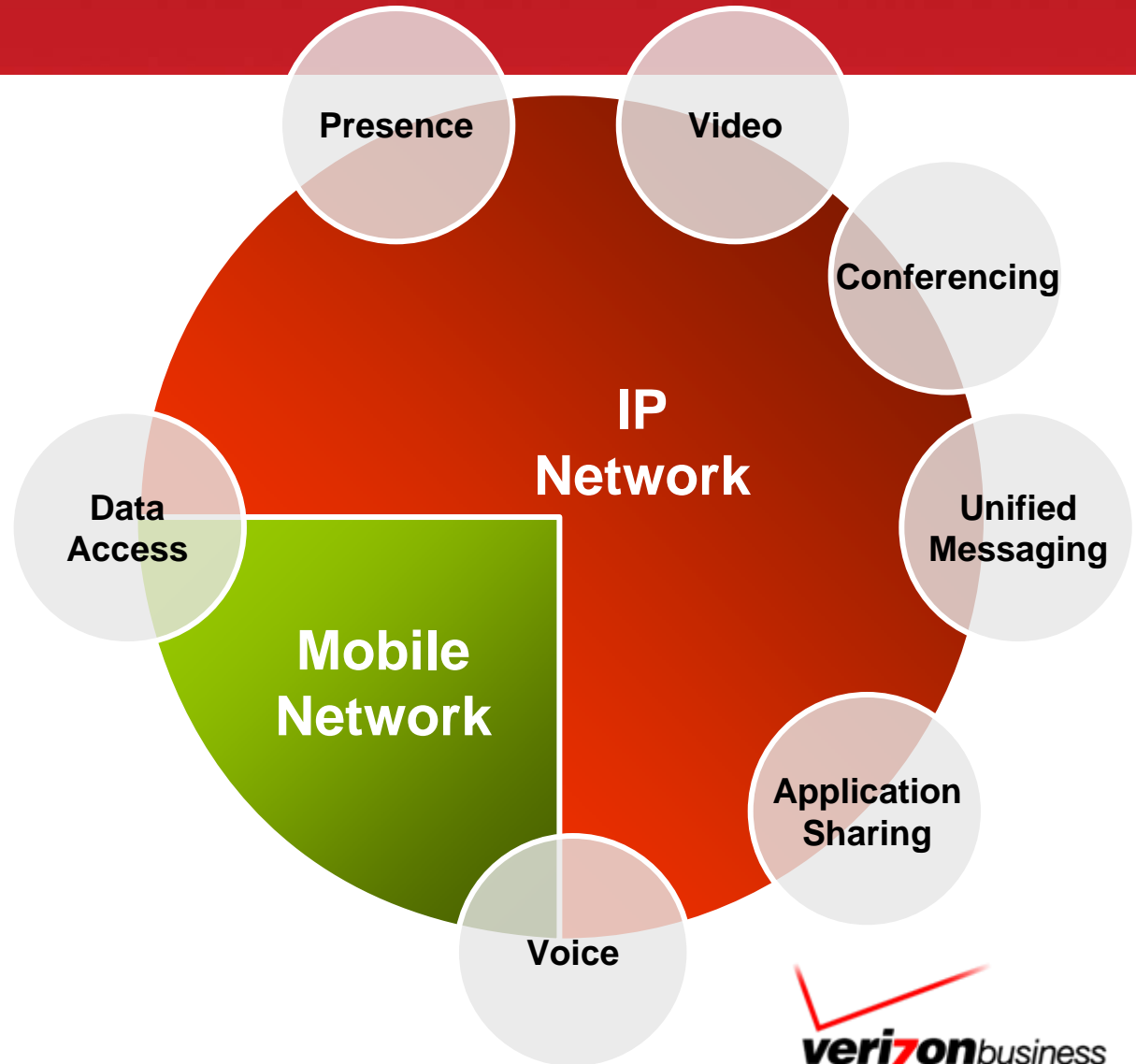
# Converged Communications and the Network – Past

Different networks aren't just **expensive** and **inefficient**, they perpetuate the separation of applications

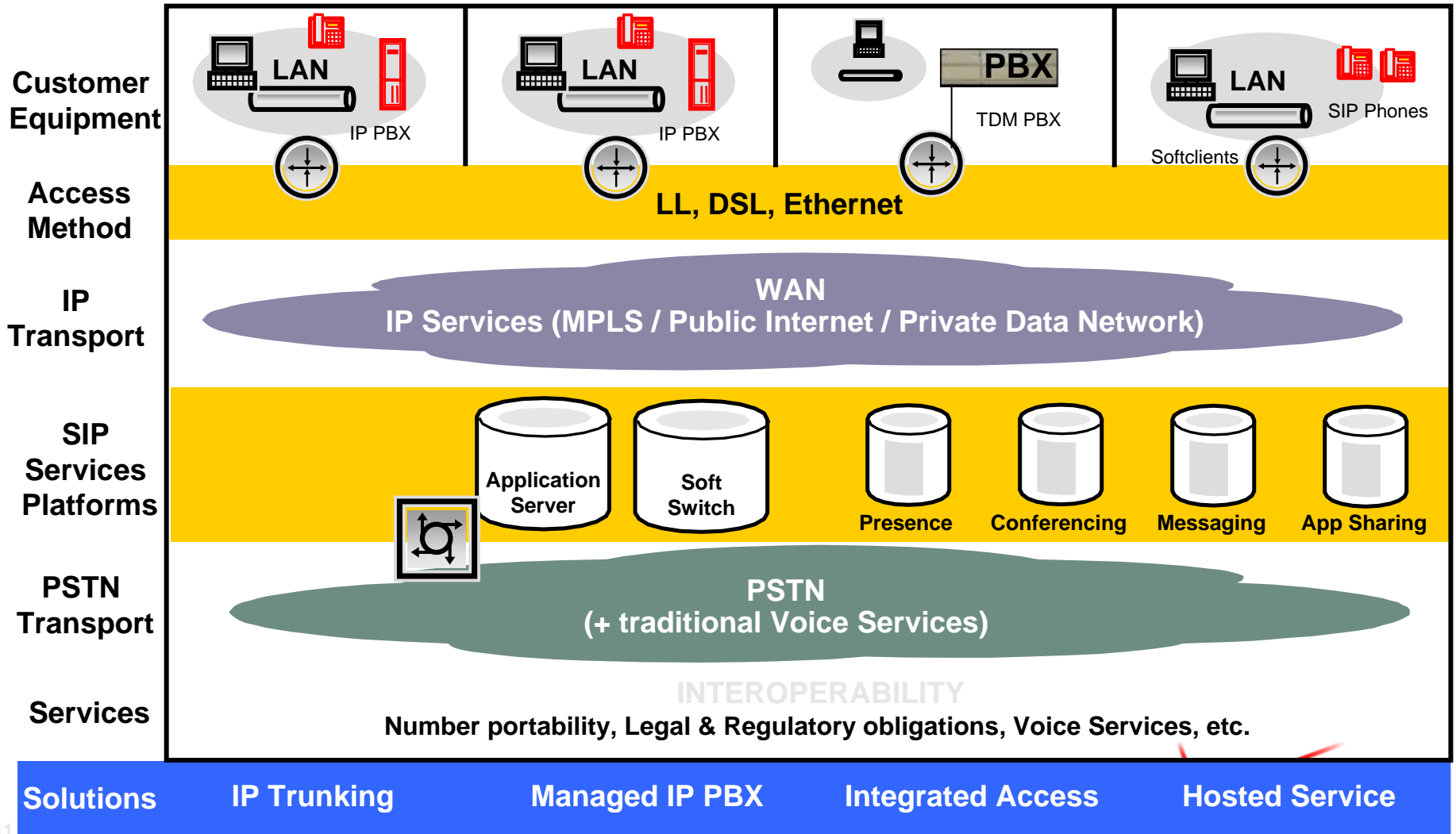


# Converged Communications and the Network – Now

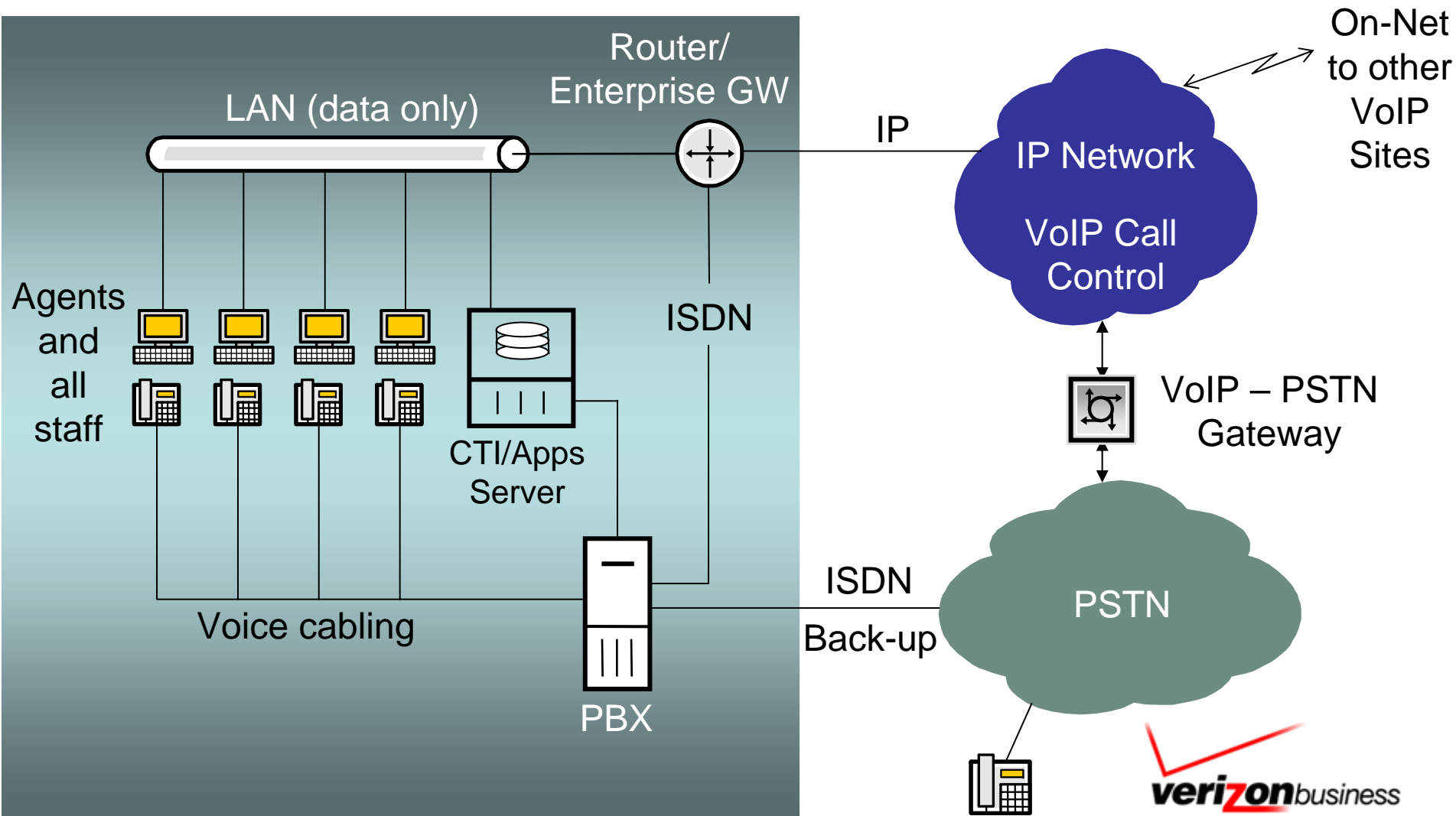
Applications that run on the **same network** can share **presence** information and data  
New **unified** services become possible



# Carrier Global Network Fabric

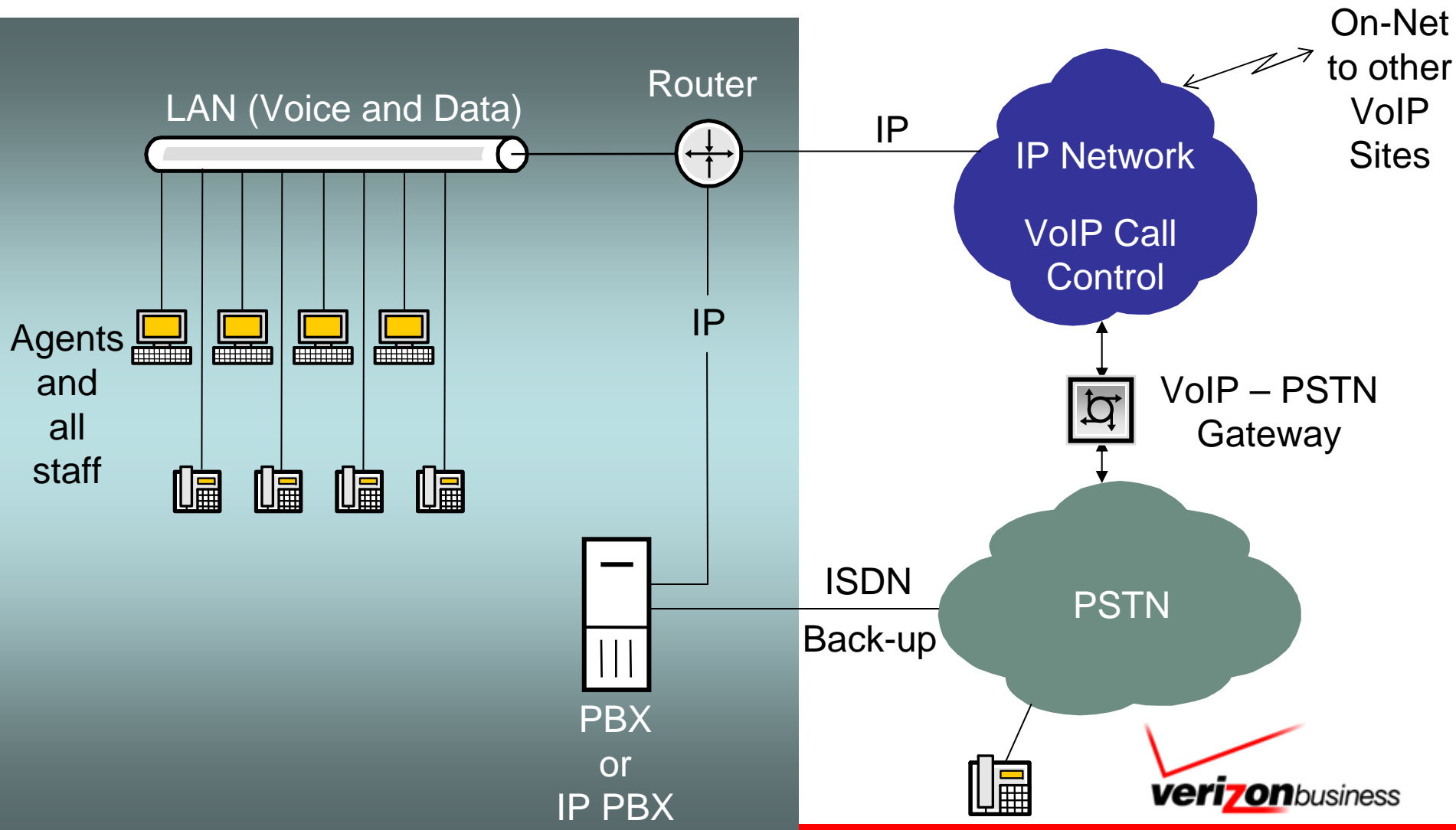


# Traditional PBX with IP (SIP) Trunks Integrated Access

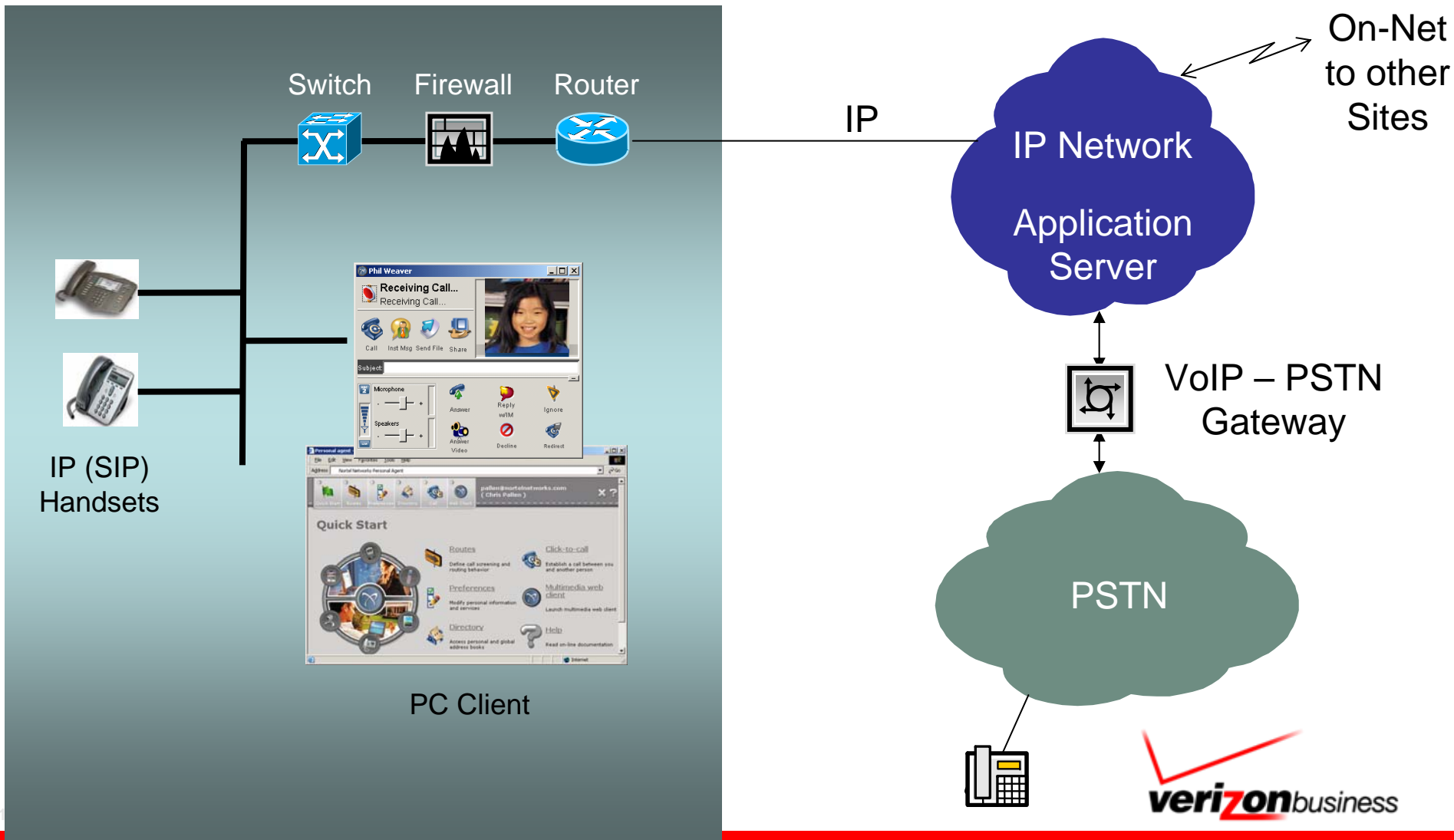


# IP PBX with IP (SIP) Trunks

## IP Trunking



# Hosted Collaboration Tools



# Unified Communications – More than VoIP

## Organisations are communicating and collaborating globally:

- They need the ability to develop and enhance technology in a web-enabled world
- There is growing pressure to control travel and entertainment costs
- There are multimedia and multiple devices



***Collaboration and convergence have become a fundamental part of the way we work***

# Collaboration Tools

## Separate Applications in the Past

### Conferencing



SIP  
H.323



Conferencing  
Media Server

### Telephony VoIP

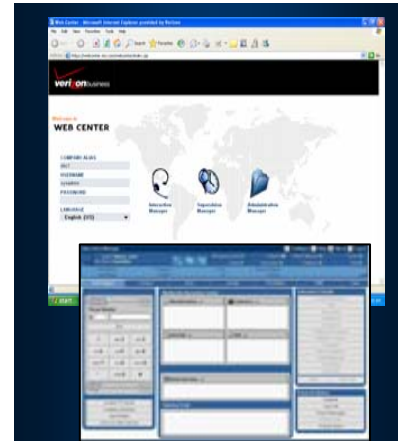


SIP



VoIP  
Media Server

### Presence

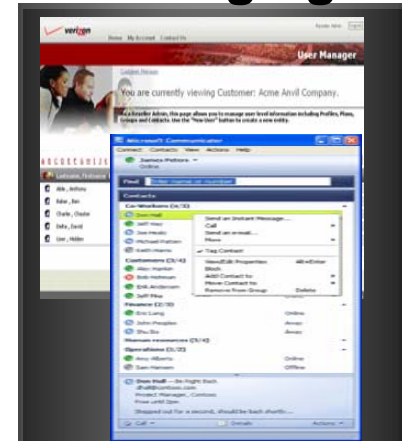


SIP



Presence  
Server

### Messaging



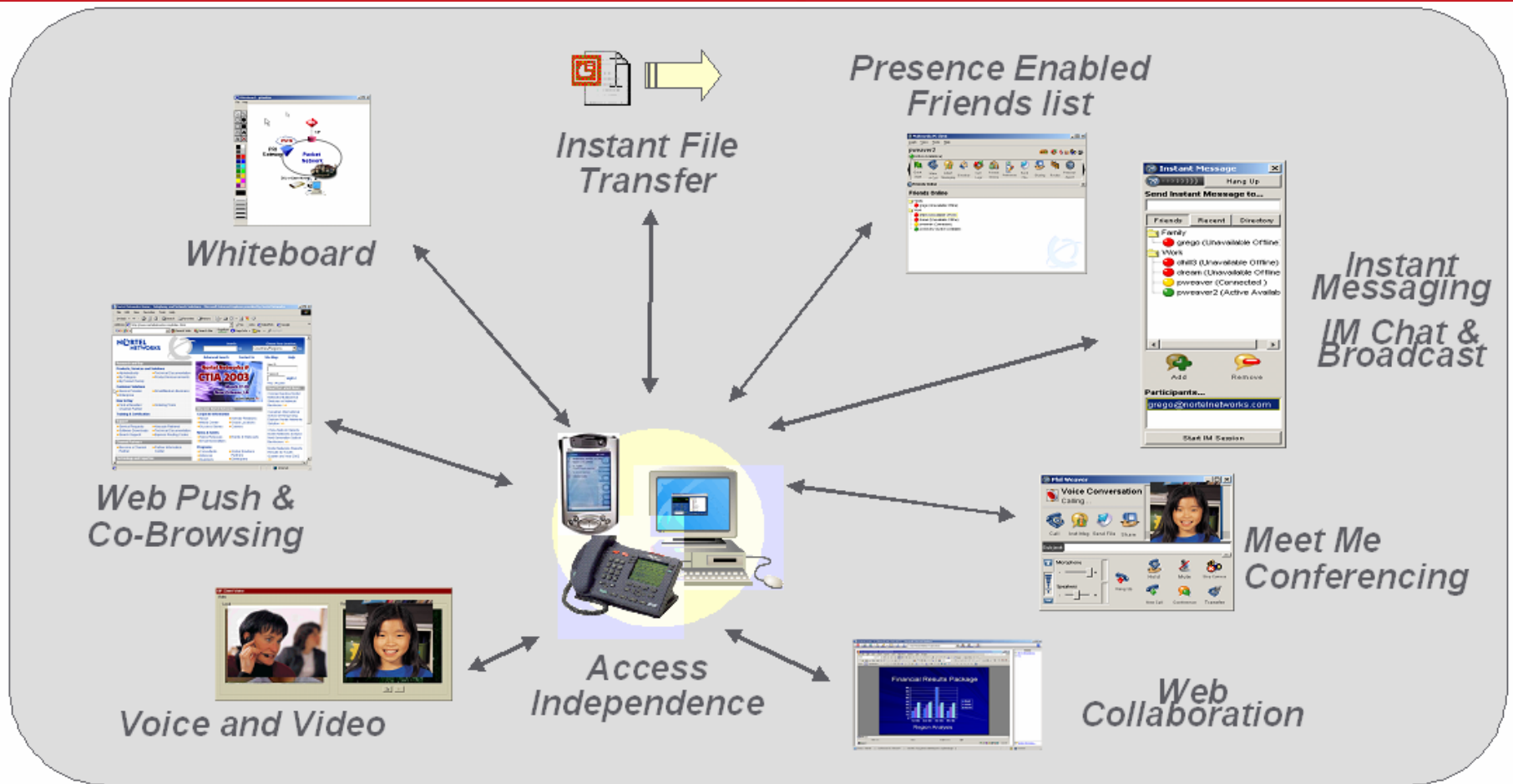
SIP



Hosted IM  
Media Server

# Collaboration Toolset

## Unified Communications



# Questions?

