IBM System i™

i = UC²
System i for Unified Communications & Collaboration

John Taylor, Typex Group plc
john_taylor@typex.com
0191 226 3766

i want easier collaboration.
i want control.
i want an i.

© 2007 IBM Corporation

Enriched Communications through Application Integration and Multimedia

1. IP Changes Communications
2. Open Standards Route to Multimedia: SIP
3. IP Communications Applications
4. IP Communications benefits

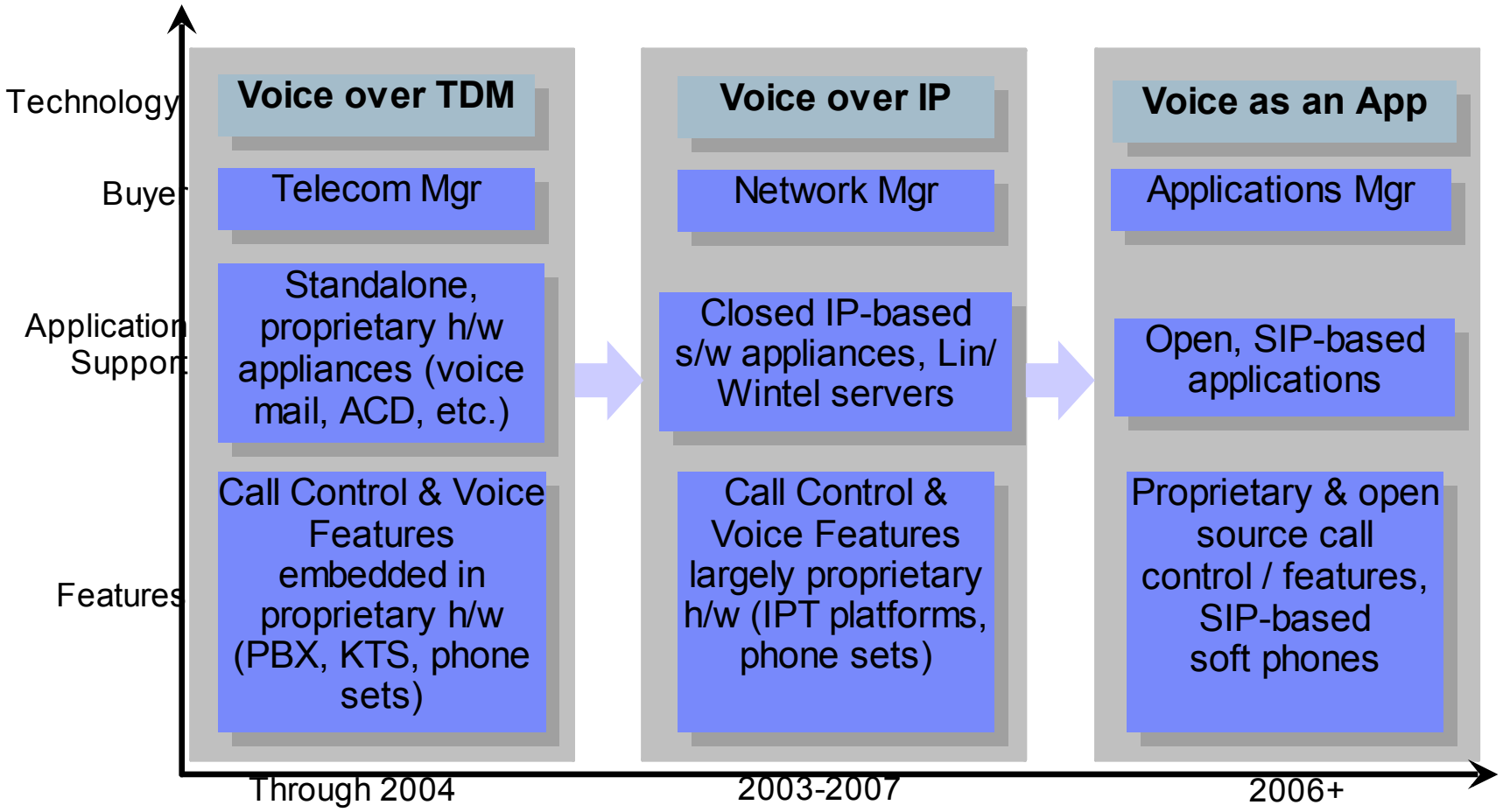
© 2007 IBM Corporation

Enriched Communications through Application Integration and Multimedia

1. **IP Changes Communications**
2. Open Standards Route to Multimedia: SIP
3. IP Communications Applications
4. IP Communications benefits

© 2007 IBM Corporation

Market Shift Has Begun - Voice As An Application



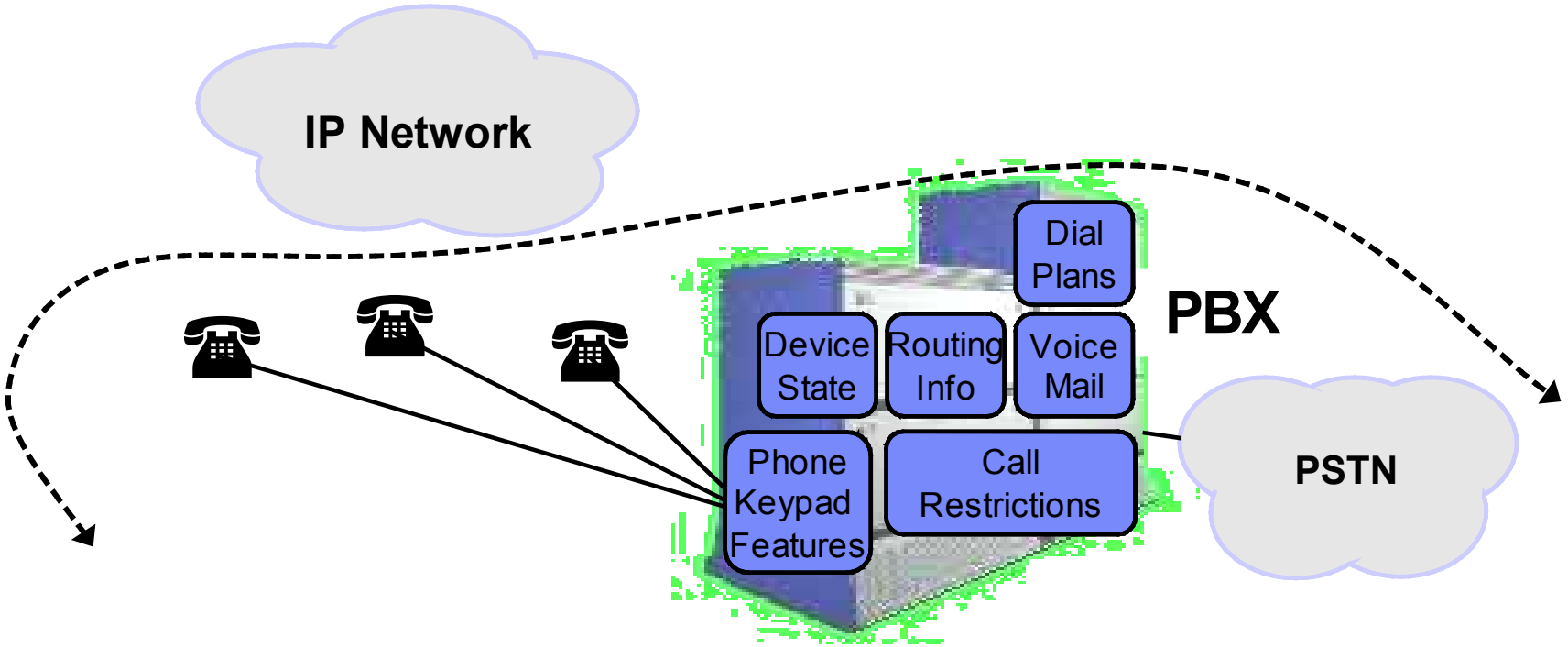
Sources: Yankee Group, IntelliCom Analytics

© 2007 IBM Corporation

IP Telephony – moving to an application model

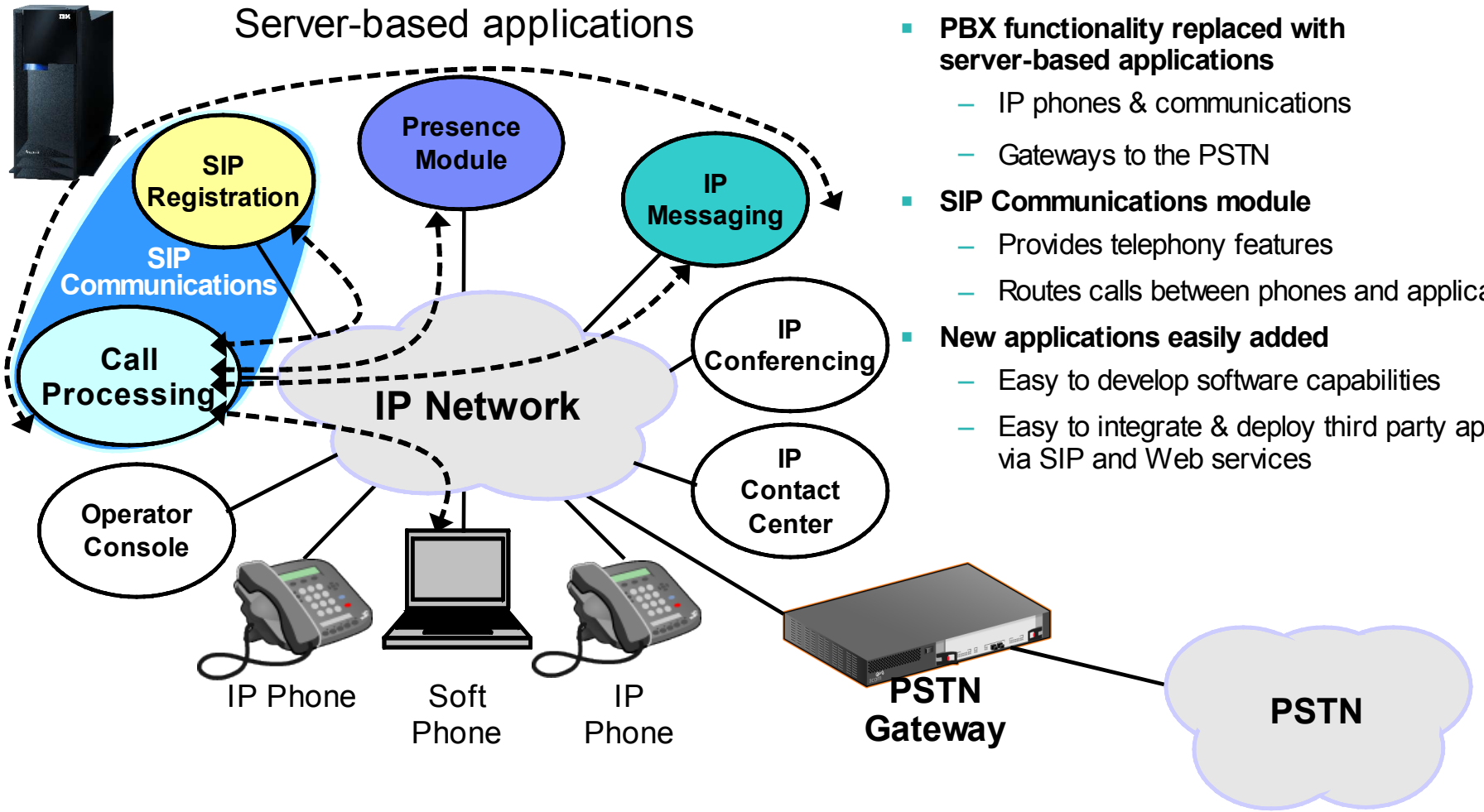
Traditional telephony

Often totally independent from the IP network



© 2007 IBM Corporation

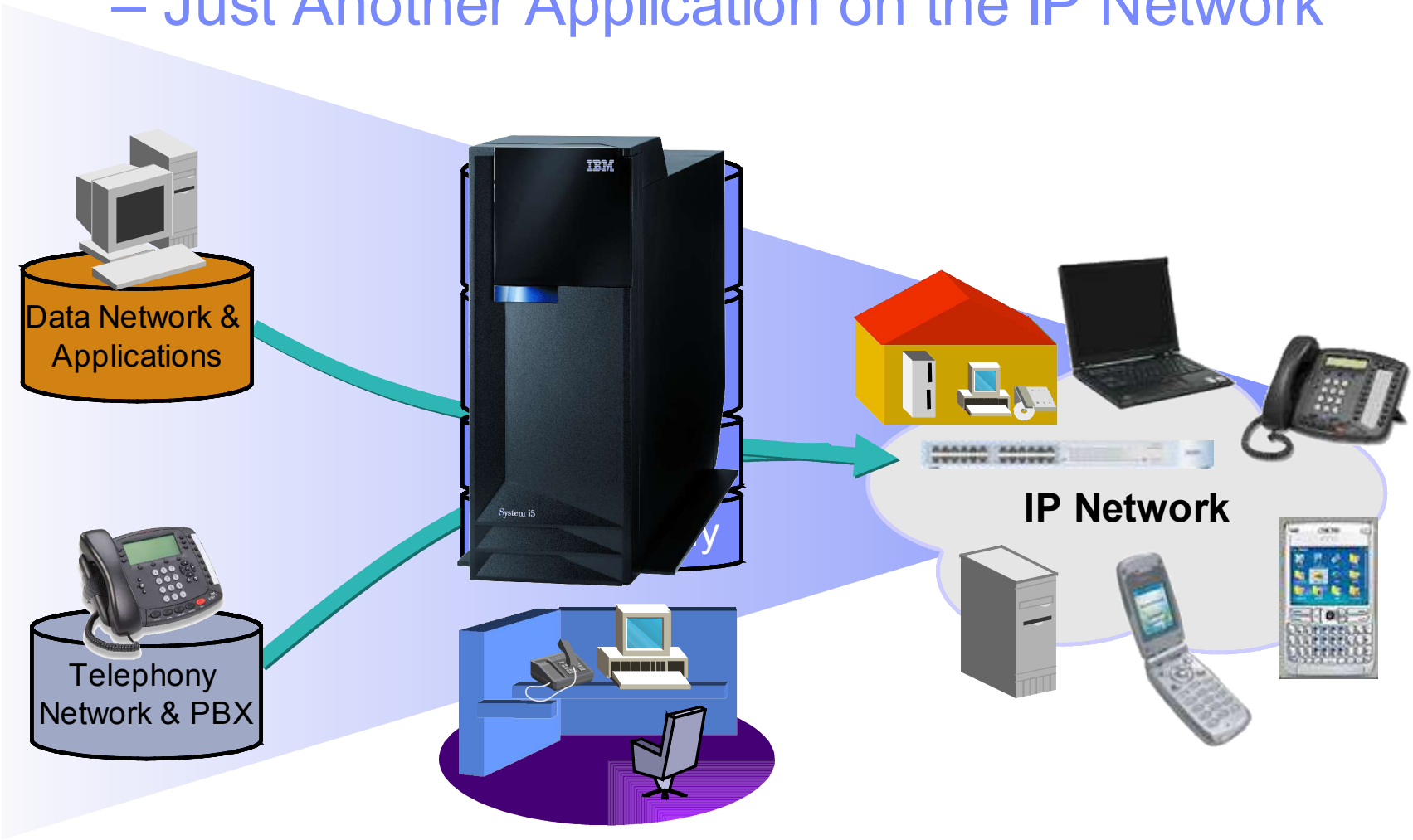
IP Telephony – moving to an application model



- **PBX functionality replaced with server-based applications**
  - IP phones & communications
  - Gateways to the PSTN
- **SIP Communications module**
  - Provides telephony features
  - Routes calls between phones and applications
- **New applications easily added**
  - Easy to develop software capabilities
  - Easy to integrate & deploy third party applications via SIP and Web services

© 2007 IBM Corporation

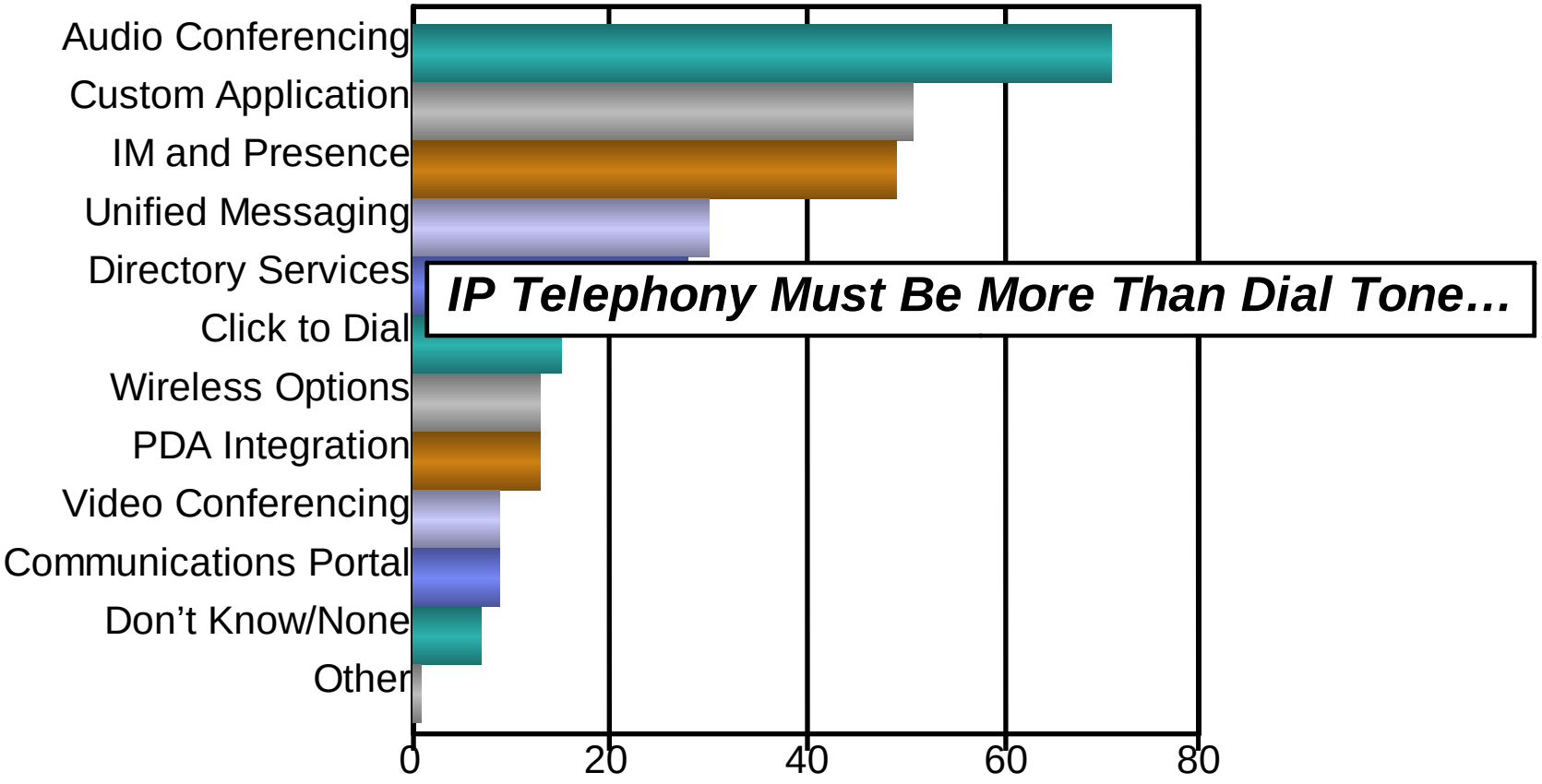
Telephony:
– Just Another Application on the IP Network



© 2007 IBM Corporation

What Convergence Applications Are Driving IP Telephony Adoption?

"Which of the following enhanced services or features are being used with the IP PBX?"



Source: IDC IP Telephony Survey

© 2007 IBM Corporation

What users are looking for from Unified Communications….

Integration of communications control across devices

Common Contact Lists

- Easy to maintain contacts across multiple devices

Media choice

- Simple to respond to communications with alternate media
  - E.g. Click-to-call to respond to email

Presence

- Is someone available now?

Multimedia

- Communicate using multiple media
  - Voice
  - Video
  - IM
  - Desktop share

Unified inbox

- All messages in on place
  - Email
  - Voicemail
  - Fax

© 2007 IBM Corporation

Beyond Unified Communications

- **Integration of telephony, collaboration tools and business applications to drive revenue, improve business processes and increase customer satisfaction**

IP Telephony

Collaboration

Business Applications

© 2007 IBM Corporation

Enriched Communications through Application Integration and Multimedia

1. IP Changes Communications
2. **Open Standards Route to Multimedia: SIP**
3. IP Communications Applications
4. IP Communications benefits

© 2007 IBM Corporation

Open Standards Route to Multimedia: SIP

A standard for initiating interactive sessions:

Session Initiation Protocol

- Enables multi-vendor deployment of IP Telephony
- Supports communications using multiple media such as video and instant messaging – not just voice
- Can be easily integrated with Web technologies
- Calling based on email-like addressing
- Extremely flexible

© 2007 IBM Corporation

Enriched Communications

Multimedia SIP Clients

- Support multimodal sessions
  - Instant Messaging
  - Audio
  - Video
  - Desktop sharing
- Enables workers to communicate more effectively
  - Media appropriate to communication
  - Increases contact and understanding

© 2007 IBM Corporation

A single SIP infrastructure can support many different services!

SIP webcam

VoiSmart®
IP Telephony & VoIP Solutions

SIP Surveillance

NetCODEC

SIP Paging

© 2007 IBM Corporation

Enriched Communications through Application Integration and Multimedia

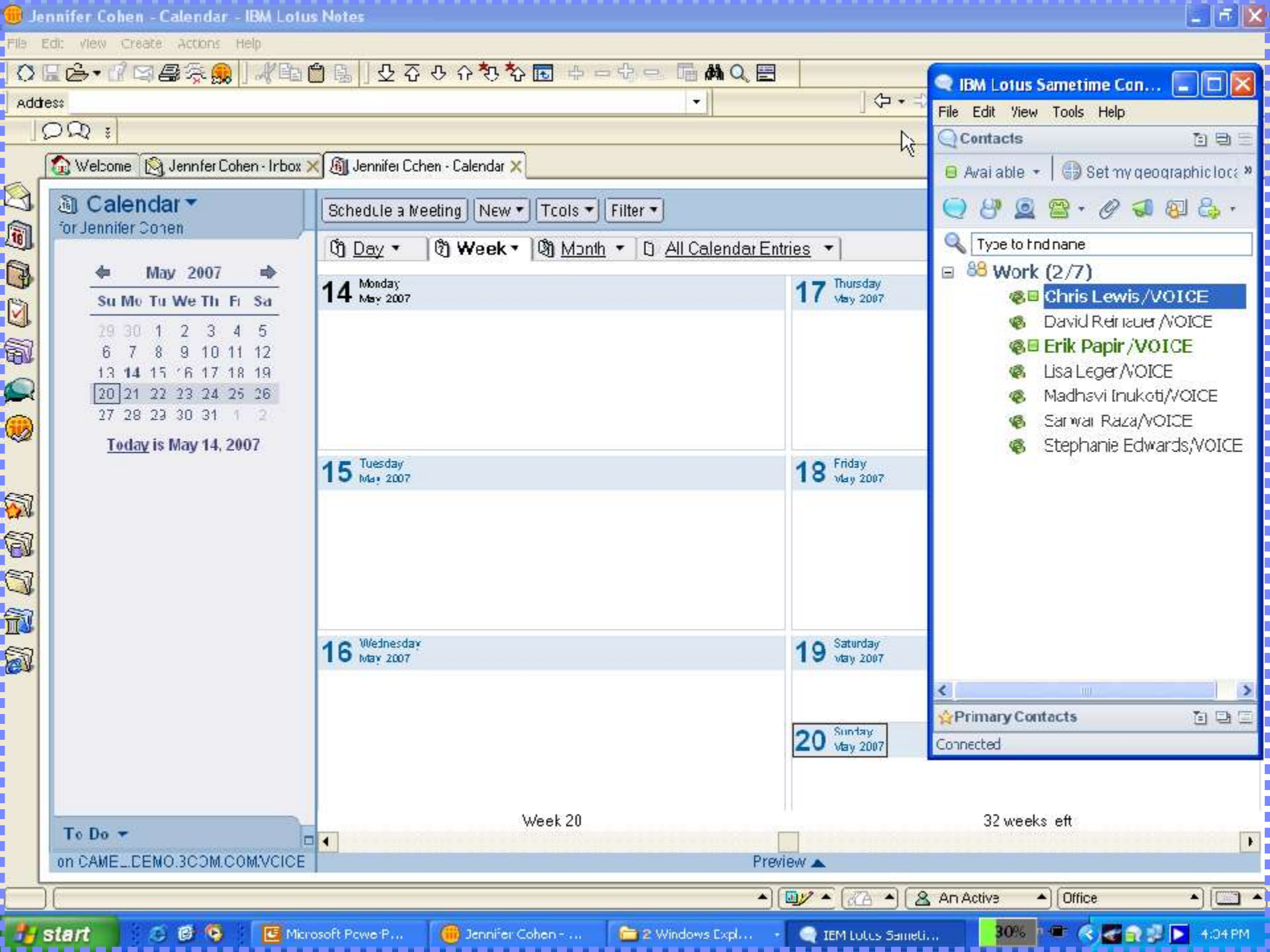
1. IP Changes Communications
2. Open Standards Route to Multimedia: SIP
3. **IP Communications Applications**
4. IP Communications benefits

© 2007 IBM Corporation

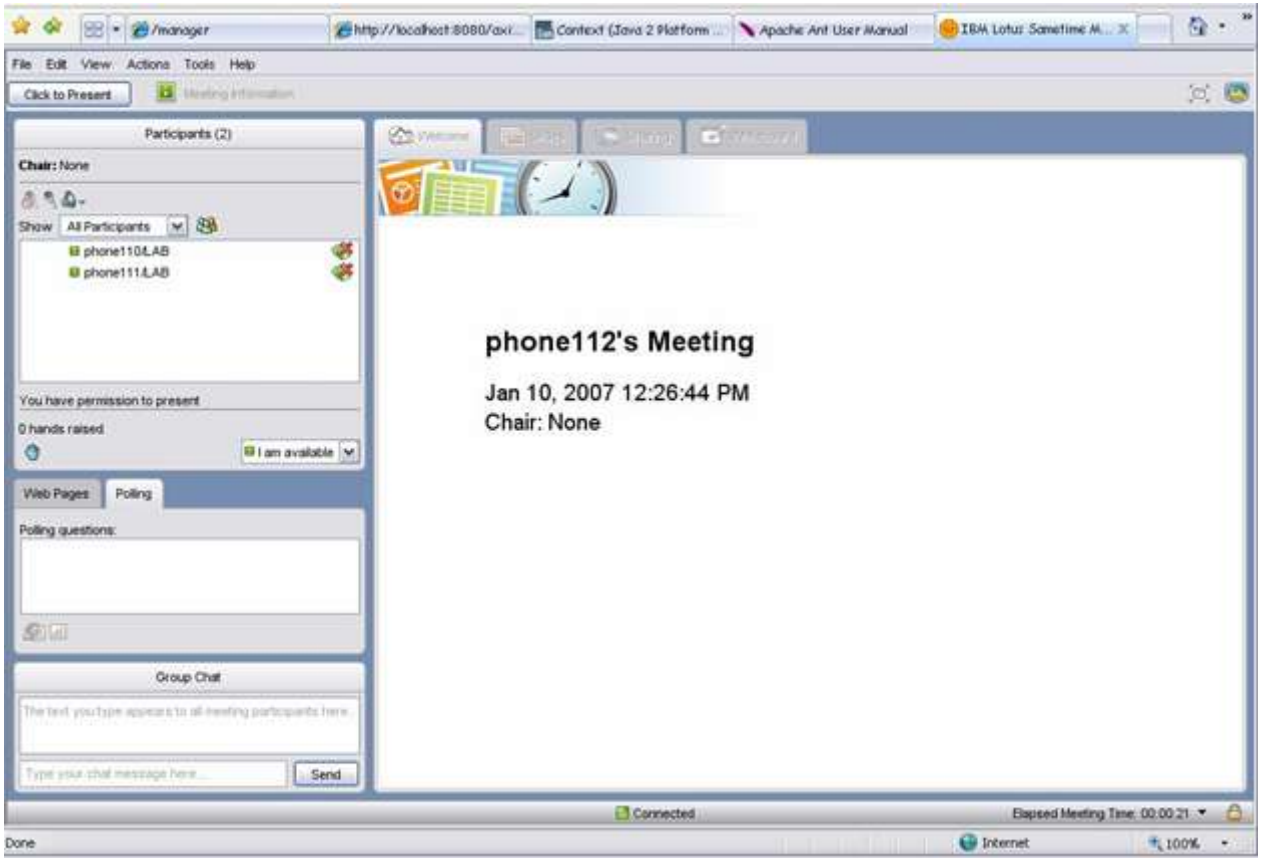
Lotus Integration Functions in IBM/3Com Suite 7.2.5

- **Domino Integration**
  - LDAP for Telephone Directory
  - Voicemail in Email
  - Fax in Email
- **Notes Integration**
  - Click to Dial
- **Sametime Integration**
  - Telephony Presence
  - Click to Dial
  - Click to Conference

© 2007 IBM Corporation

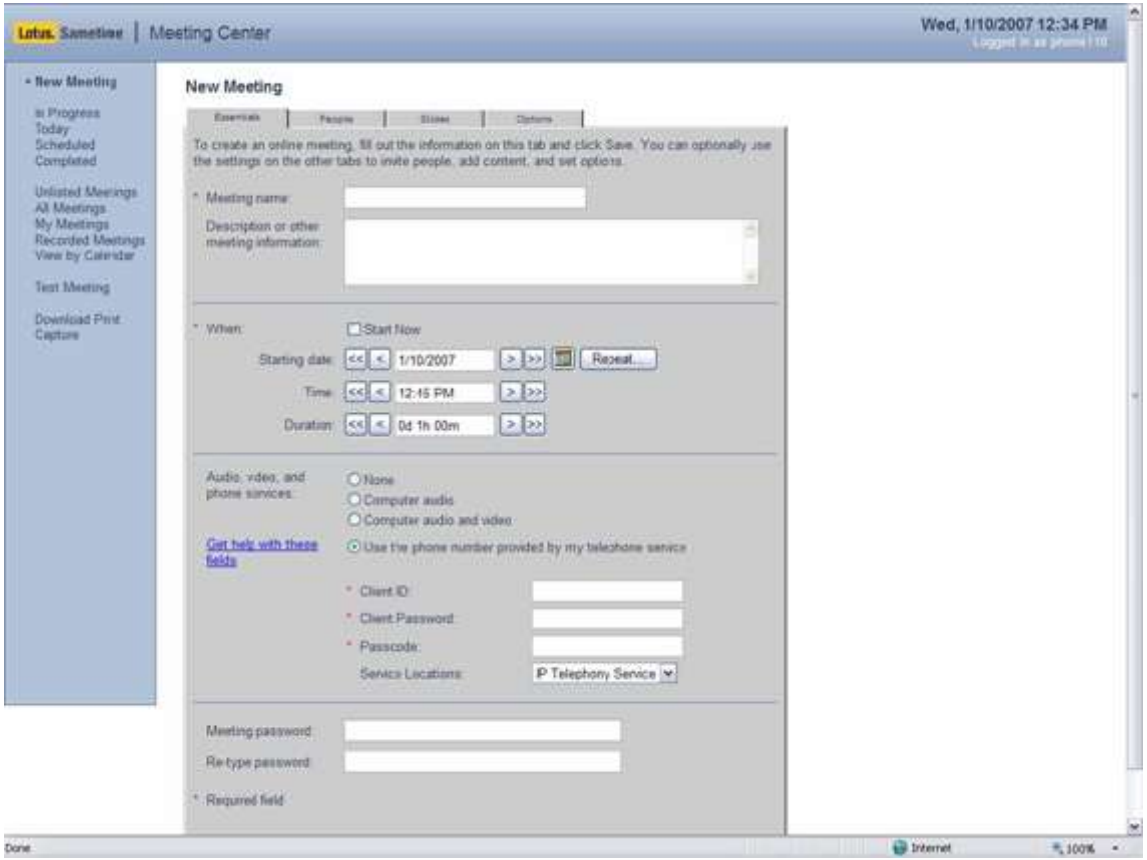

Jennifer Cohen - Calendar - IBM Lotus Notes
File Edit View Create Actions Help
Address
Welcome
Jennifer Cohen - Inbox
Jennifer Cohen - Calendar
Calendar
for Jennifer Cohen
May 2007
Su Mo Tu We Th Fr Sa
29 30 1 2 3 4 5
6 7 8 9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28 29 30 31 1 2
Today is May 14, 2007
To Do
on CAME_DEMO.3COM.COM/VOICE
Schedule a Meeting
New
Tools
Filter
Day
Week
Month
All Calendar Entries
14 Monday May 2007
15 Tuesday May 2007
16 Wednesday May 2007
17 Thursday May 2007
18 Friday May 2007
19 Saturday May 2007
20 Sunday May 2007
Week 20
32 weeks left
Preview
IBM Lotus Sametime Con...
File Edit View Tools Help
Contacts
Available
Set my geographic loca
Type to find name
Work (2/7)
Chris Lewis/VOICE
David Reinauer/VOICE
Erik Papir/VOICE
Lisa Leger/VOICE
Madhavi Inukoti/VOICE
Sarwar Raza/VOICE
Stephanie Edwards/VOICE
Primary Contacts
Connected
An Active
Office
start
Microsoft Powe P...
Jennifer Cohen - ...
2 Windows Expl...
IBM Lotus Sameti...
30%
4:04 PM

Instant Web conference – with telephone integration and moderator controls, chat and desktop sharing capabilities.



© 2007 IBM Corporation

Or schedule a web conference in advance, publishing dial in info etc. into form below – participants can just click on 'join call' to have their phones dial into published bridge.



© 2007 IBM Corporation

Applications: IP Call Center

- **Inbound Call Center Application**
  - Planned General Availability : Q2 2007
- **Typical Inbound Call Center applications**
  - Internal sales teams
  - Help desks
  - Support centers
  - Customer service centers
  - Telemarketing response lines
  - Incident response centers
  - Order entry teams
  - Any requirement to route calls to a team of agents with
    - Application integration
    - Supervisor and monitoring functions

Telephony API SDK –

3Com Telephony Software Development Kit

- **Allow ISVs to integrate with telephony applications**
- **Call control and phone configuration capabilities with service oriented web services API (HTTPS, XML, SOAP)**
- **Sample applications in various languages and developer documentation**

- **Call Control Functions:**
  - Make a Call
  - Put a Call on Hold
  - Disconnect a Call
  - Transfer a Call
  - Add party to a conference call

- **Phone configuration functions:**
  - Set/Clear Do Not Disturb
  - Set/Clear Forward to Voicemail
  - Call Forward Busy/Ring No Answer/Universal
  - Hunt group login/logout
  - Mute phone

© 2007 IBM Corporation

3COM ON WEB PORTAL

www.open.3com.com

Explore 3Com|ON

Member Levels

Program Benefits

Join Now / Join Open Network

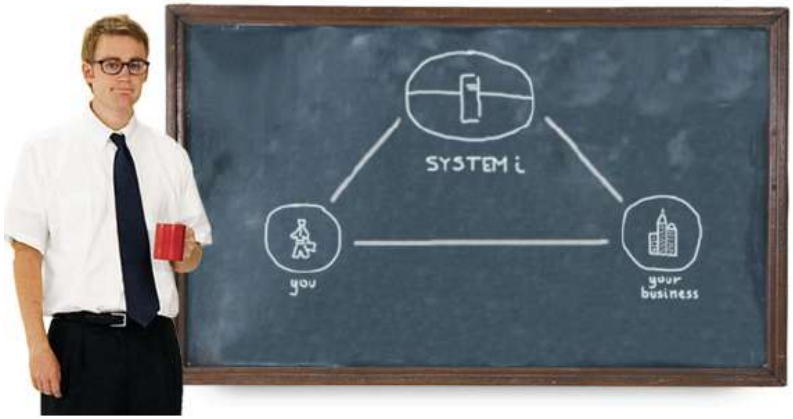
© 2007 IBM Corporation

Enriched Communications through Application Integration and Multimedia

1. IP Changes Communications
2. Open Standards Route to Multimedia: SIP
3. IP Communications Applications
4. **IP Communications benefits**

© 2007 IBM Corporation

IP Telephony delivers on cost and productivity



Moving from Traditional to IP Telephony can deliver significant benefits

- Reduced costs associated with long distance, voice mail, and conferencing
- Simplified administration
- Reduced construction and maintenance
- Increased employee productivity
- Improved customer service

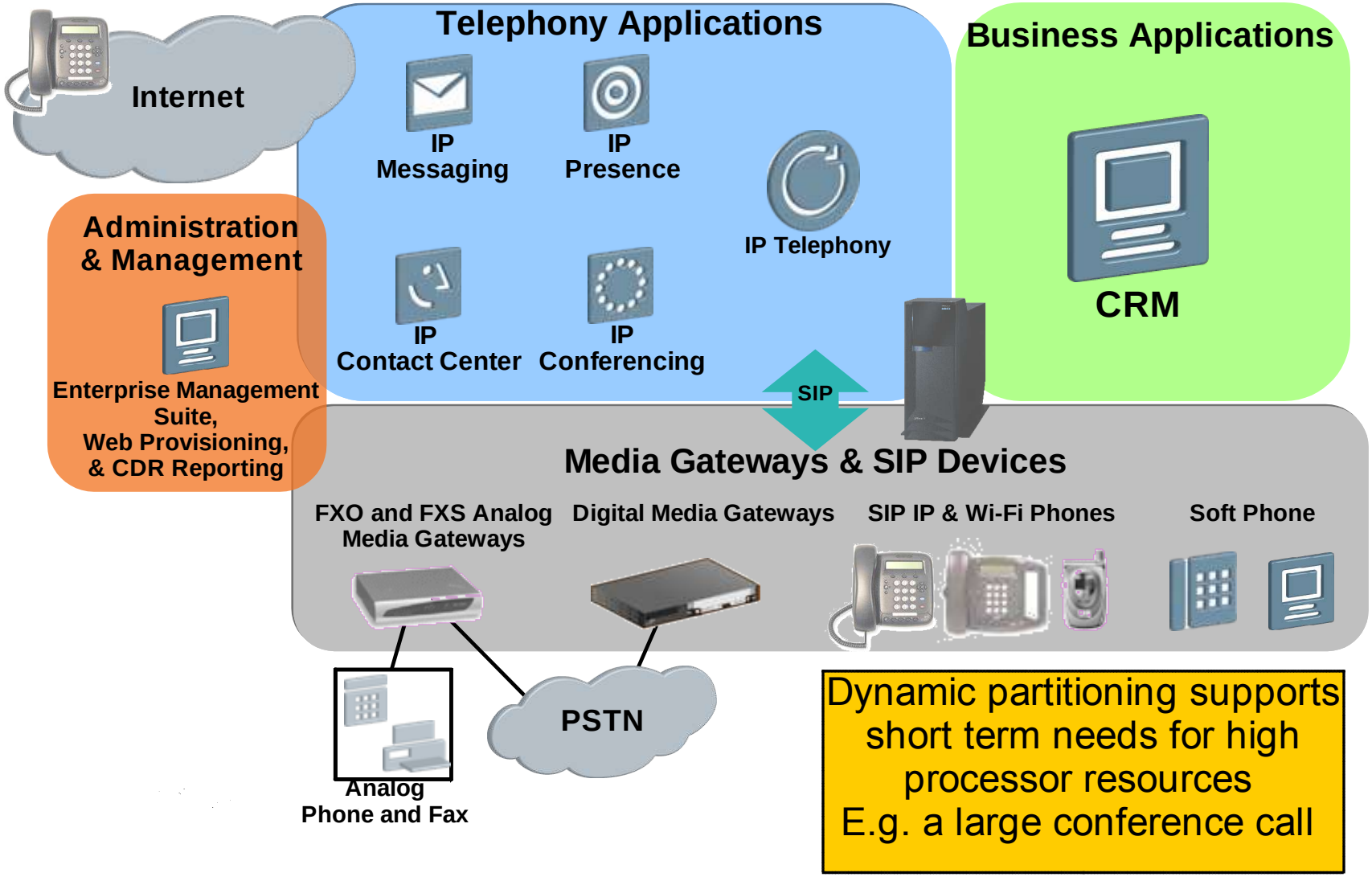
© 2007 IBM Corporation

System i IP Telephony is Powered by 3Com

- Shared values make a great fit:
  - Support for Open Standards
  - Focused on the mid-market
  - Promise simplicity and integration
- System i brings core values
  - Scalability – A complete IP Telephony suite on a single system
  - Reliability – Legendary uptime, expert support and #1 in customer satisfaction
  - Integration – With collaboration and business processing apps already on your system

© 2007 IBM Corporation

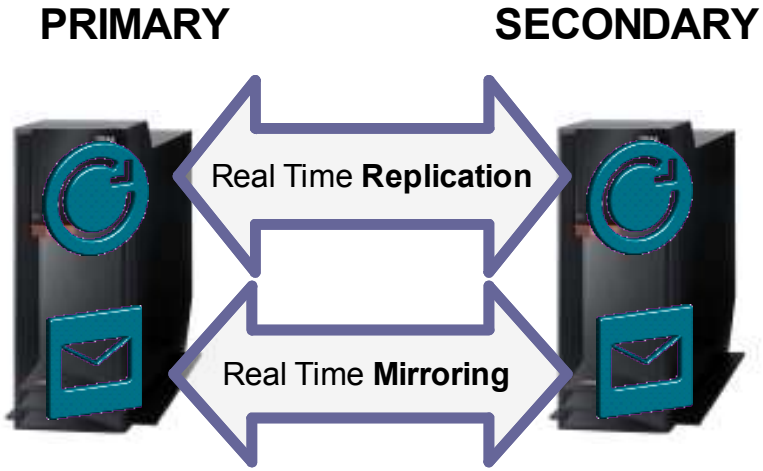
System i IP Telephony Suite



© 2007 IBM Corporation

High Availability through Application Redundancy

- **Application approach to resilience**
  - Database replication ensures multiple application instances remain synchronized
    - Hot standby redundant applications that can take over services instantly
    - Critical data replicated or mirrored between servers
    - Gateways provide survivable telephony to enable calling even if contact to server lost
  - Application capacity scales with processing resources, memory and hard discs
    - Can grow with the business
    - No forklift upgrades or server replacement
    - Traditional PBX vendors often requires phones to be replaced for larger platforms
  - You should always have dial tone….



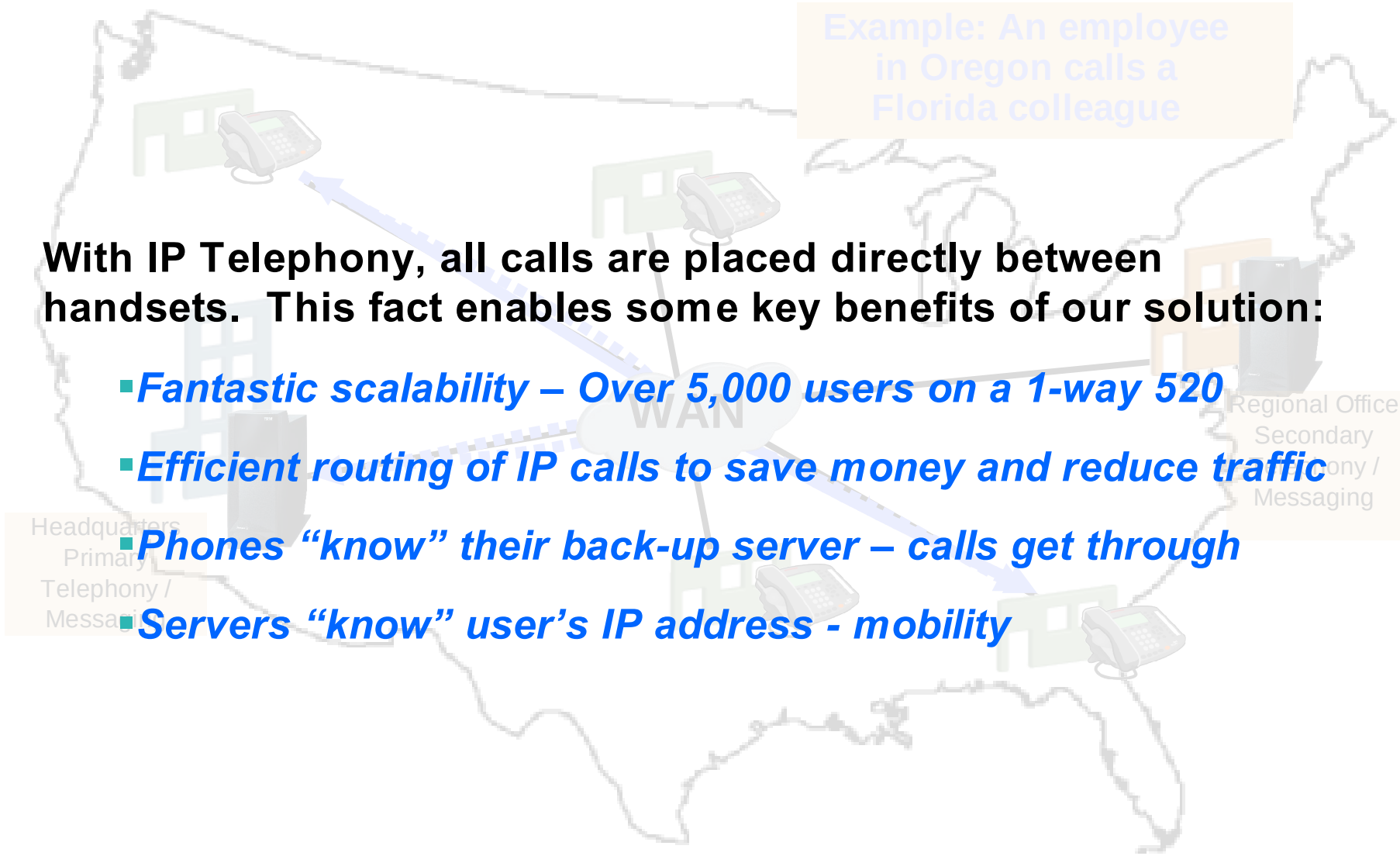
Miercom RATED BEST

"In testing fail-over of the VCX, we were frankly astonished that we could keep disconnecting back-up controllers, and phone service continued without skipping a beat."*

*Source: Miercom is a privately held network consultancy, specializing in networking and communications-related product testing and analysis.

© 2007 IBM Corporation

How Does System i IP Telephony Work?

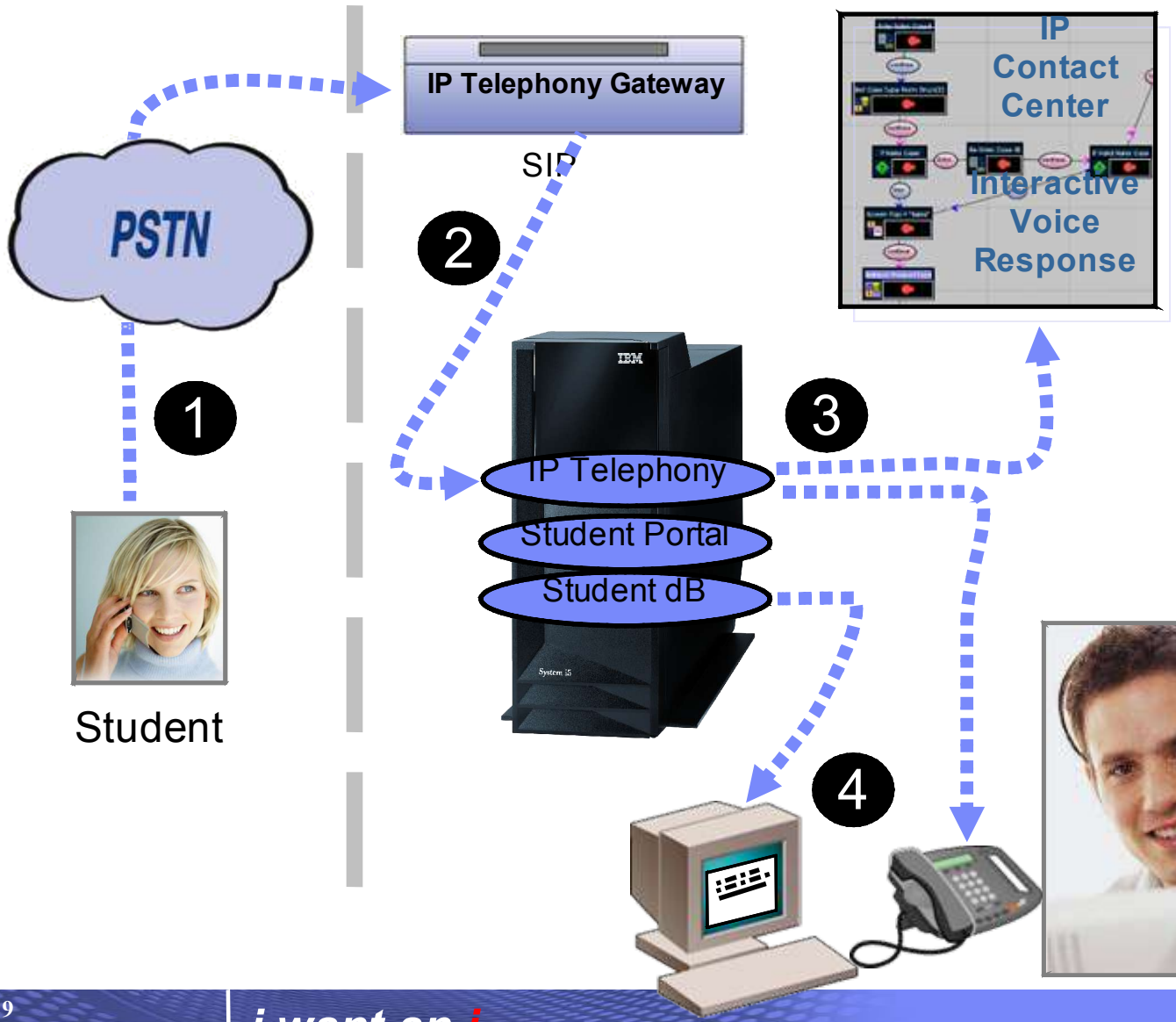


With IP Telephony, all calls are placed directly between handsets. This fact enables some key benefits of our solution:

- ***Fantastic scalability – Over 5,000 users on a 1-way 520***
- ***Efficient routing of IP calls to save money and reduce traffic***
- ***Phones "know" their back-up server – calls get through***
- ***Servers "know" user's IP address - mobility***

© 2007 IBM Corporation

Convergence Example – Student Portal



1. Student Calls from Public network
2. System i routes call to operator
3. IVR asks for student info/ID
4. Student advisor answers call with student info on computer screen

Advisor can conference in other persons from computer screen if needed

© 2007 IBM Corporation

System i IP Telephony

Benefits of System i IP Telephony

- Consolidate Phone and Data Networks
- Make calls on low-cost data networks
- Dynamic resource allocation
- Unified Messaging and advanced features
- Support mobile and remote workers
- Integration with business applications
- Integration with collaboration applications

© 2007 IBM Corporation

Questions?

john_taylor@typex.com, 0191 226 3766

Alan Mathew, IBM

© 2007 IBM Corporation

Trademarks and Disclaimers

© IBM Corporation 1994-2006. All rights reserved.

References in this document to IBM products or services do not imply that IBM intends to make them available in every country.

The following terms are trademarks of International Business Machines Corporation in the United States, other countries, or both:

AS/400	eServer	i5/OS	System i5
AS/400e	@server	iSeries	WebSphere
Blue Gene	IBM	OS/400	
e-business on demand	IBM (logo)	System i	

Rational is a trademark of International Business Machines Corporation and Rational Software Corporation in the United States, other countries, or both.
Intel, Intel Logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered
trademarks of Intel Corporation or its subsidiaries in the United States and other countries.
Linux is a trademark of Linus Torvalds in the United States, other countries, or both.
Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.
UNIX is a registered trademark of The Open Group in the United States and other countries.
Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.
Other company, product or service names may be trademarks or service marks of others.

Information is provided "AS IS" without warranty of any kind.

All customer examples described are presented as illustrations of how those customers have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics may vary by customer.

Information concerning non-IBM products was obtained from a supplier of these products, published announcement material, or other publicly available sources and does not constitute an endorsement of such products by IBM. Sources for non-IBM list prices and performance numbers are taken from publicly available information, including vendor announcements and vendor worldwide homepages. IBM has not tested these products and cannot confirm the accuracy of performance, capability, or any other claims related to non-IBM products. Questions on the capability of non-IBM products should be addressed to the supplier of those products.

All statements regarding IBM future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only. Contact your local IBM office or IBM authorized reseller for the full text of the specific Statement of Direction.

Some information addresses anticipated future capabilities. Such information is not intended as a definitive statement of a commitment to specific levels of performance, function or delivery schedules with respect to any future products. Such commitments are only made in IBM product announcements. The information is presented here to communicate IBM's current investment and development activities as a good faith effort to help with our customers' future planning.

Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput or performance that any user will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput or performance improvements equivalent to the ratios stated here.

The 3Com IP Telephony ROI Analysis Tool™ (“Tool”) was developed by Alinean and 3Com. IBM is not responsible for the contents of the Tool, the accuracy of the data contained in the Tool, how results are generated, or any reports created by the Tool. Any ROI projections cited are estimates and were created using the Tool, which includes certain assumptions relative to the value of IP Telephony. Any reliance by you on the Tool and any results from the Tool is at your sole risk and will not create

© 2007 IBM Corporation