# Common Session Luxembourg
15 february 2007

Co presentation IBM and 3Com

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

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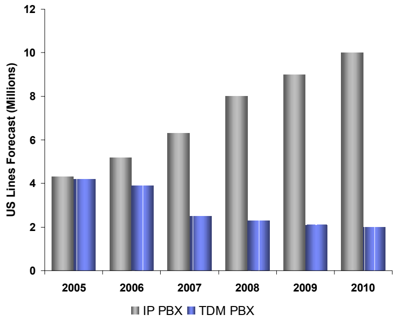
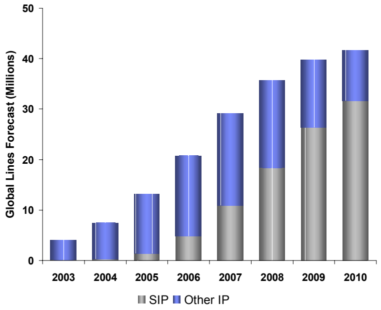
## Transition to IP Telephony is well underway

IP Telephony outsells Traditional PBX systems today



Source: Business Communications Review Magazine Jan 1, 2006

While the market transitions to open standards



Source: Canalys forecasts, Converged Telephony Analysis, Aug 2005

# Why IP Telephony ?

- It is based on the **end-to-end** principle
- IP services are performed at **the edge** (Smart devices)
- Network is unaware of the number of applications, this makes it **scalable**
- The need for **cost** effective growth
- Lower the operational expenditure by **converging** the data and voice networks into one single network (cost reduction)

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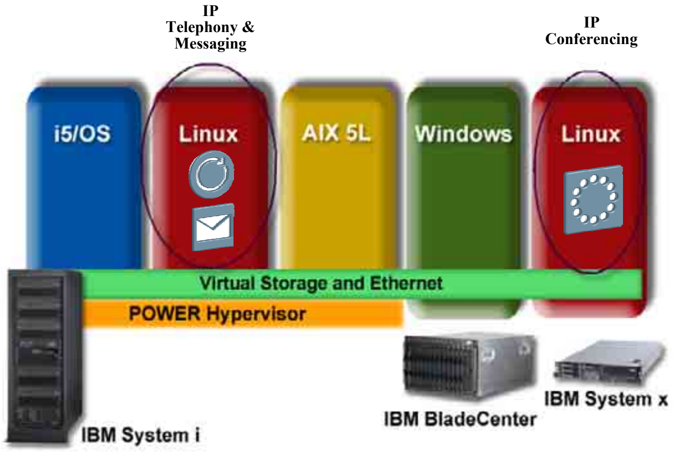
# Why on System i ?

- **Scalability**
  - Resource Allocation (LPAR)
  - Capacity on Demand (n-ways)
- **Integration**
  - Platform Integration (i5/OS, Aix, Linux, Windows)
  - Telephony / Application Integration (SIP protocol – VLan)
- **System Management**
  - HA ( function included in package)
  - Simplified Backup ( Virtualization)
- **Simplicity**
  - no Server Farm

## Where does IP Telephony run on System i?

- System i & i5/OS virtual by design
- Extends horizontally to other environments
- IP Telephony resides in own hardened Red Hat Linux Kernel
- Multiple Guest partitions for separate IP Telephony functions


IP Telephony & Messaging
IP Conferencing
i5/OS
Linux
AIX 5L
Windows
Linux
Virtual Storage and Ethernet
POWER Hypervisor
IBM System i
IBM BladeCenter
IBM System x

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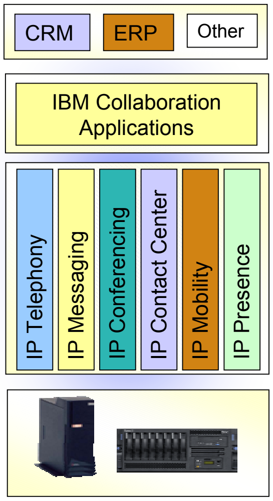
## Reliability is the Single Most Critical Aspect

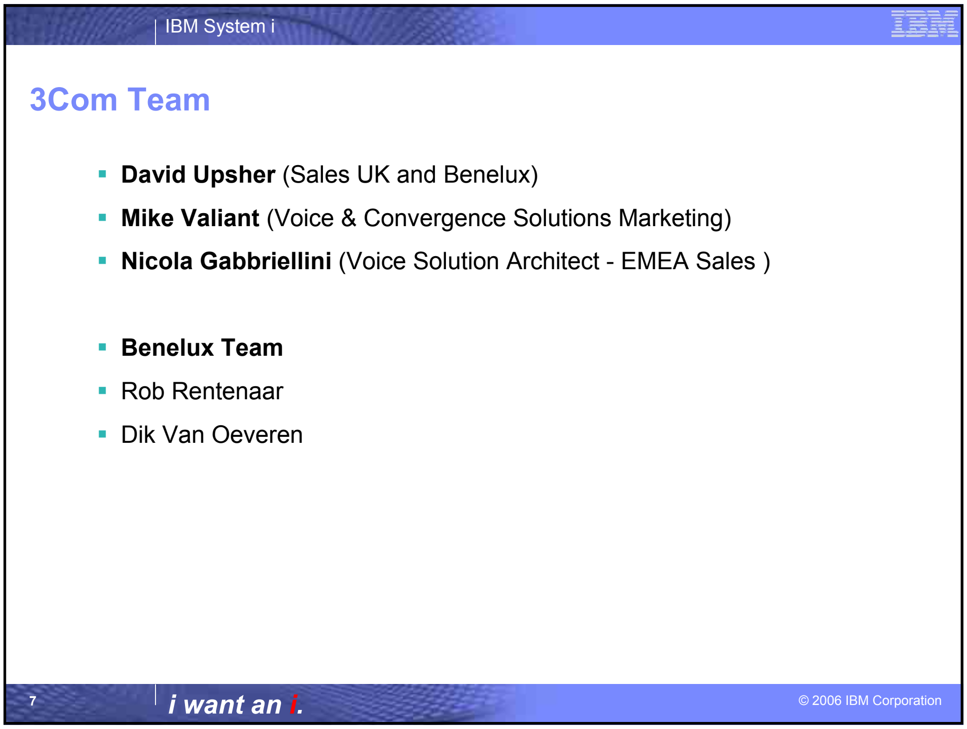
- **3Com SIP-Based Telephony & Application Modules on single platform with**
  - IBM Collaboration Applications
  - IBM Software Partner (ISV) Solutions
- **Telephony on IBM System i**
  - Single, Secure, Reliable Platform for IP Telephony & other Business Applications
  - Reduces Total Cost of Ownership
  - Enhances Business Process Integration & Application Integration
  - Provides Operational Efficiency & Productivity
  - Strengthens Customer Interaction



CRM
ERP
Other

IBM Collaboration Applications

IP Telephony
IP Messaging
IP Conferencing
IP Contact Center
IP Mobility
IP Presence



IBM System i

## 3Com Team

- **David Upsher** (Sales UK and Benelux)
- **Mike Valiant** (Voice & Convergence Solutions Marketing)
- **Nicola Gabbriellini** (Voice Solution Architect - EMEA Sales )

- **Benelux Team**
- Rob Rentenaar
- Dik Van Oeveren

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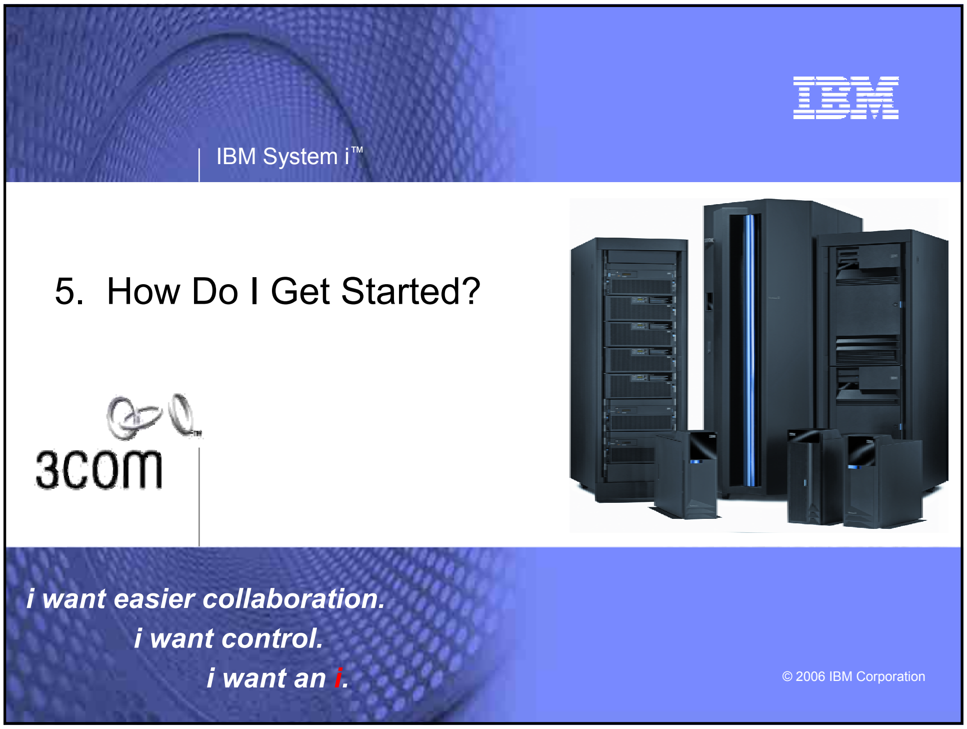
*i want an i.*



IBM System i™

## 5. How Do I Get Started?

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

## Three customer scenarios for IP Telephony

- **Preloaded Telephony Editions**
  - **Pre-sized and competitively priced for IP Telephony**
  - 100, 250, 500, 1000 Handsets
- **Upgrade of Standard and Enterprise Editions**
  - IP Telephony could justify that long-overdue upgrade
  - Multi-workload system for IP Telephony, Collaboration, and Business Apps
- **Installed Standard and Enterprise Editions with existing capacity**
  - Activate those extra processors to run IP Telephony application
  - Multi-workload system with available capacity for IP Telephony Applications

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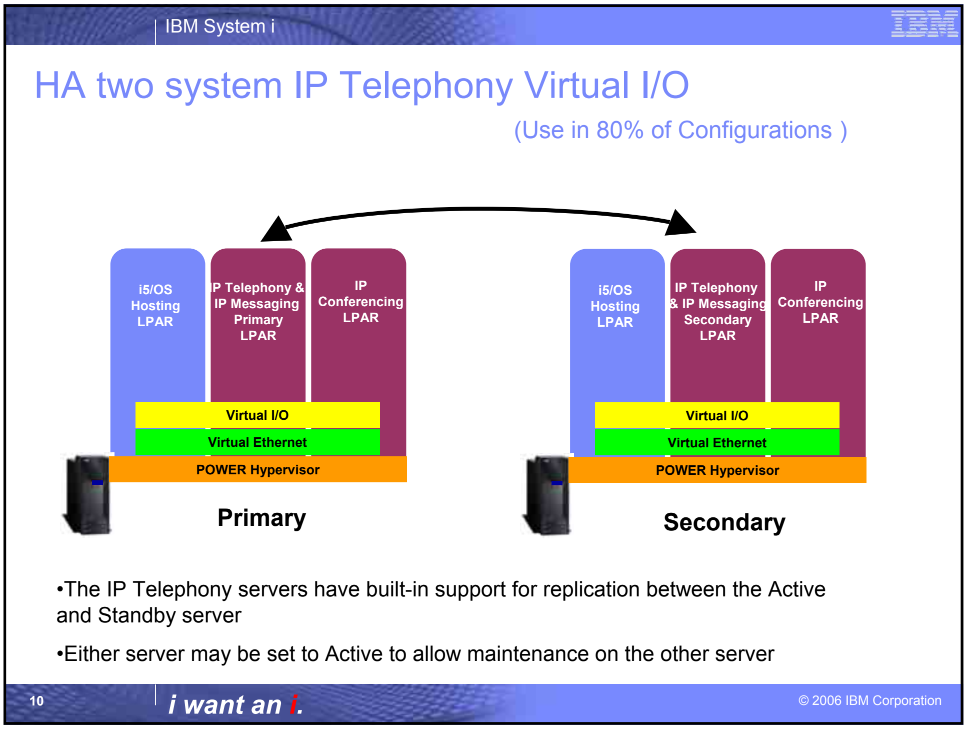


## HA two system IP Telephony Virtual I/O

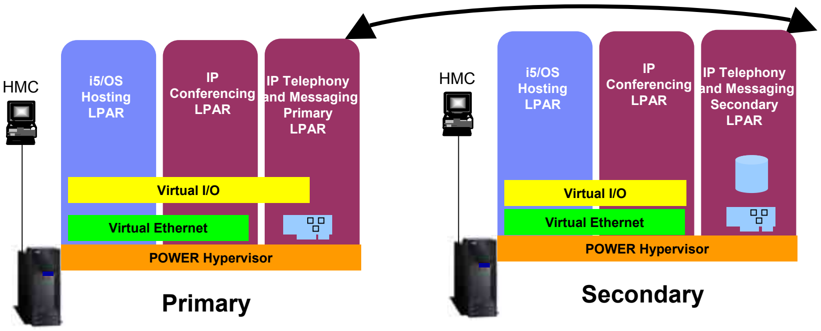
(Use in 80% of Configurations )

i5/OS Hosting LPAR
IP Telephony & IP Messaging Primary LPAR
IP Conferencing LPAR
Virtual I/O
Virtual Ethernet
POWER Hypervisor
Primary
i5/OS Hosting LPAR
IP Telephony & IP Messaging Secondary LPAR
IP Conferencing LPAR
Virtual I/O
Virtual Ethernet
POWER Hypervisor
Secondary

•The IP Telephony servers have built-in support for replication between the Active and Standby server

•Either server may be set to Active to allow maintenance on the other server

# HA two system IP Telephony hybrid


HMC
i5/OS Hosting LPAR
IP Conferencing LPAR
IP Telephony and Messaging Primary LPAR
Virtual I/O
Virtual Ethernet
POWER Hypervisor
Primary
HMC
i5/OS Hosting LPAR
IP Conferencing LPAR
IP Telephony and Messaging Secondary LPAR
Virtual I/O
Virtual Ethernet
POWER Hypervisor
Secondary

- •IP Telephony servers can take advantage of virtual and direct I/O resources at the same time, these are configuration are hybrid.
- •One IP Telephony partition could take advantage of virtual I/O resources while having a dedicated Ethernet.

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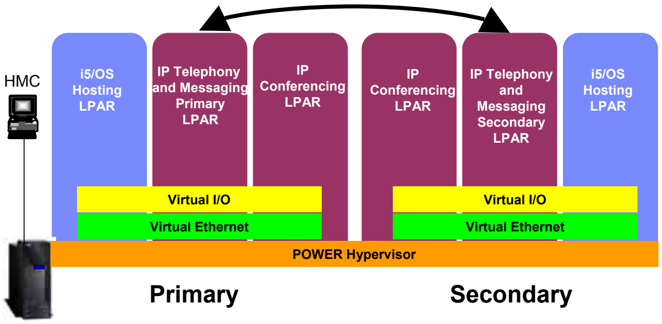
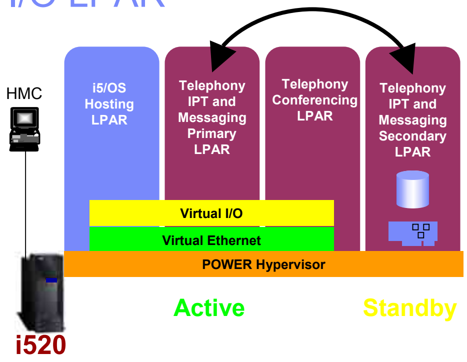
# HA Telephony using a Single System with two sets of LPAR


HMC
i5/OS Hosting LPAR
IP Telephony and Messaging Primary LPAR
IP Conferencing LPAR
IP Conferencing LPAR
IP Telephony and Messaging Secondary LPAR
i5/OS Hosting LPAR
Virtual I/O
Virtual Ethernet
Virtual I/O
Virtual Ethernet
POWER Hypervisor
Primary
Secondary

- •The IP Telephony servers have built-in support for replication between the Active and Standby server
- • Roles may be swapped to allow maintenance on either hosting LPAR or Telephony LPAR
- • An HMC is required to build the 2 i5/OS LPARS

# IP Telephony using a direct I/O LPAR

- The 3COM Telephony servers have built-in support for replication between the Active and Standby server
- Roles may be swapped to allow maintenance on either the hosting LPAR or the Telephony LPAR
- The secondary server is running in a Direct I/O LPAR. Either in the same system or an existing system in the account
- An HMC is required to build the LPARS
- The direct I/O LPAR can remain active when the hosting LPAR is down for a full system backup or maintenance
- An outage may still occur for firmware maintenance is required (generally once per year)


HMC
i5/OS Hosting LPAR
Telephony IPT and Messaging Primary LPAR
Telephony Conferencing LPAR
Telephony IPT and Messaging Secondary LPAR
Virtual I/O
Virtual Ethernet
POWER Hypervisor
Active
Standby
i520

Typical Hardware Additions needed to a Telephony Express Edition or Existing Customer system. A card and disk enclosure may be needed for existing systems.

| | |
|---|---|
| •6594 4-disk slot Exp Cage | $ 250 |
| •1894 73 GB Disk Unit AIX/Linux Ptns. Only (10K rpm) | $ 599 |
| •0647 AIX/Linux PCI-X Disk/Tape Controller (IOPless) | $ 587 |
| •5706 PCI-X 1 Gbps Ethernet - TX IOA (twisted pair) Dual Port | $ 999 |
| • **Total** | **$ 2435** |
| •7310-C05 HMC Desktop Hardw.Mgmt.Console | $1830 |
| •Plus Monitor /Keyboard/Mouse | |

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# System i IP Telephony Express Packages

<table>
<tr><th colspan="2">Eight new 520 Telephony Express packages<br>Planned* October 24 Announce, GA November 3</th></tr>
<tr><td><b>Telephony Express HA<i>nnn</i></b><br><b>Pair of systems (primary & secondary)</b></td><td><b>Telephony Express <i>nnn</i></b><br><b>Single primary system (assumes an existing machine for secondary)</b></td></tr>
<tr><td><b>4 packages for 9406-520:</b><br><i>100</i> users 1-way primary & 1-way secondary<br><i>250</i> users 1-way primary & 1-way secondary<br><i>500</i> users 1-way primary & 1-way secondary<br><i>1000</i> users 1/2-way primary & 1/2-way secondary</td><td><b>4 packages for 9406-520:</b><br><i>100</i> users 1-way primary<br><i>250</i> users 1-way primary<br><i>500</i> users 1-way primary<br><i>1000</i> users 1/2-way primary</td></tr>
<tr><td><b>Includes base (no-charge) hardware & software (for each machine)</b><br>– 1-2 GB memory<br>– 1-2 70GB disk drive<br>– 1 DVD-ROM drive<br>– IBM software as in Standard Edition<br>– Specified 3COM IP Telephony software</td><td><b>Includes base (no-charge) hardware & software</b><br>– 1-2 GB memory<br>– 1-2 70GB disk drive<br>– 1 DVD-ROM drive<br>– IBM software as in Standard Edition<br>– Specified 3COM IP Telephony software (subset)</td></tr>
</table>

* Until the announce is formally announced via IBM announcement letter, this planning information is subject to change and does not provide an implicit or implied promise IBM will deliver the material described in this presentation. Announcements will also vary by country.

# System i IP Telephony Express HA offering

**System i IP Telephony is comprised of:**

- System i primary server
- System i back-up server
- 3Com IP Telephony software and licenses
- 3Com IP Telephony handsets (phones) and gateway(s)
- Services
  - Network Assesment
  - Voice Readiness Assesment
  - Implementation Services
- 3Com Software Maintenance
- 3Com Hardware maintenance

IBM
System i5

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# CTP : Cost, Time, Productivity benefits

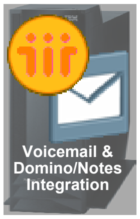
## *Common Network*
- Reduced Infrastructure, Admin, Maintenance, Management, Upgrades
- Reduction in Voice Trunks
- Reduced Cabling
- Increased Network Resilience
- Near-Zero-Cost Moves/Adds/Changes
- IP-Phone can behave as PC substitute

## *Reduced Communication Costs*
- Reduced PSTN costs via IP Toll Bypass
- Reduced PSTN costs for Home/Remote Workers
- Reduced PSTN costs via Web-Based Audio/Video Conferencing
- Reduced voice mail access costs via Unified Messaging
- Reduced PSTN costs via Personal Assistant
- Reduced Mobile Roaming Costs via Extension Portability and Softphone

## *Improved Employee Productivity*
- End-Users via Converged Applications:
  - IP Contact Centre
  - Voice Recording
  - Unified Messaging
  - Personal Assistant
  - Micro-Web-Brower of IP Phone
  - CTI Apps: Screen Dial, Screen Pop, etc.
  - Web-Based Audio/Video Conferencing
- IT Operations Staff/Network Management
- Facilities Management Staff

## *Non-Quantifiable Benefits*
- Increased Customer Satisfaction
- Increased Employee Retention
- Increased Mobility (Extension Portability)
- Increased Mobility (Wireless Extensions)
- Increased Geographic Flexibility
- Improved Competitive Positioning
- Faster Application Deployment
- Increased Resilience

3com


Voicemail &
Domino/Notes
Integration

Thank you