



IBM Systems and Technology Group University 2005

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Selling pSeries in the SMB Marketplace

Course #: P20

Robert Pace, Marion LeBleu
Global SMB Go-To-Market, pSeries



Agenda

- **New! Offerings for SMB**
- **New! Enablement programs to increase sales in SMB**
- **New! Tools and resources**



Learning Objectives

- **At the conclusion of this session, you should be able to:**
- **Describe what's new and different about pSeries that makes it relevant for SMB.**
- **Utilize the sales enablers presented here to build significant volume and revenue with pSeries in 2005.**
- **Know where to find pSeries tools for IBMers**
- **Know how to use IBM tools for BPs**



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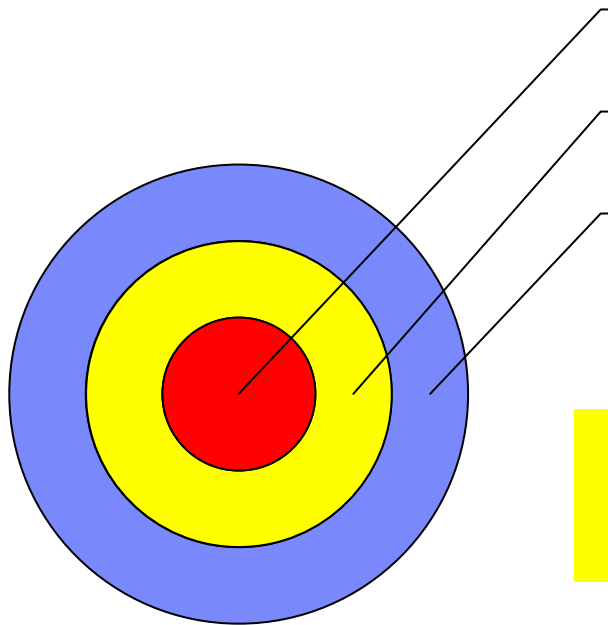
2005 is the year for pSeries & OpenPower's in SMB!

Market Opportunities
New Marketing Strategies



WW SMB Opportunity is HUGE in 2005!

- **SMB represents 56% of the \$20B total Unix marketplace opportunity!**
 - **80% of SMB Unix opportunity lies in 11 markets worldwide.**
 - **pSeries is well positioned to take share in 2005.**
- **The p5 Express family, our OpenPower Linux-tuned servers and solutions - formidable competitors in today's marketplace!**



New high volume entry offerings priced right!

New solutions to help meet your business priorities!

New tools for successful sales growth!

The time is NOW to take share from our competitors!

You can hit your pSeries & OpenPower targets in 2005!



A unique window of opportunity arises when our strengths align with our competitors' weaknesses

Install Base:

- Satisfied with current solution or looking at competitors or migrating to Windows
- Primary inhibitors are burden of migration and no sense of urgency to change

•SUN:

- Vulnerable in the low end / SMB
- Primary inhibitors are the lack of an IBM 1) comparable ecosystem to SUN and 2) history of limited value offerings that were relevant to the SMB / entry space

HP:

- Vulnerable in the midrange enterprise compared to p570, OD, and VE capabilities
- Primary inhibitor is the HP install base neither understands nor considers IBM's UNIX offerings



The greatest SMB
TAKE SHARE
opportunity is SUN

Solutions are driving spending in the mid-market
*Solutions are \$95B, 63% of the total mid-market opportunity**

Express Solutions Value to Business Partners



Speed

Accelerates Business Partner Time to Value using pre-defined reference solutions



Support

Fast expert support available from IBM

Return on Investment

Improved ROI with solutions that enable up-selling and cross-selling of products and services



Simplicity

Ability to go to market with a solutions orientation



*Source: GMV 2H04 and SMV 2H04 with overlap removed

pSeries High Volume Entry servers & solutions

Broader portfolio for building improved OI!



1/25 OpenPower 710

2/8 p510E

More products than ever before!

- Decreased Cost of Acquisition
- Leadership performance with competitive pricing
- Flexibility through automation & virtual on-demand capabilities
- Reliability features for every size server need
- Low Cost of Ownership
- New Financing Options / IGF Financial Programs

AIX L



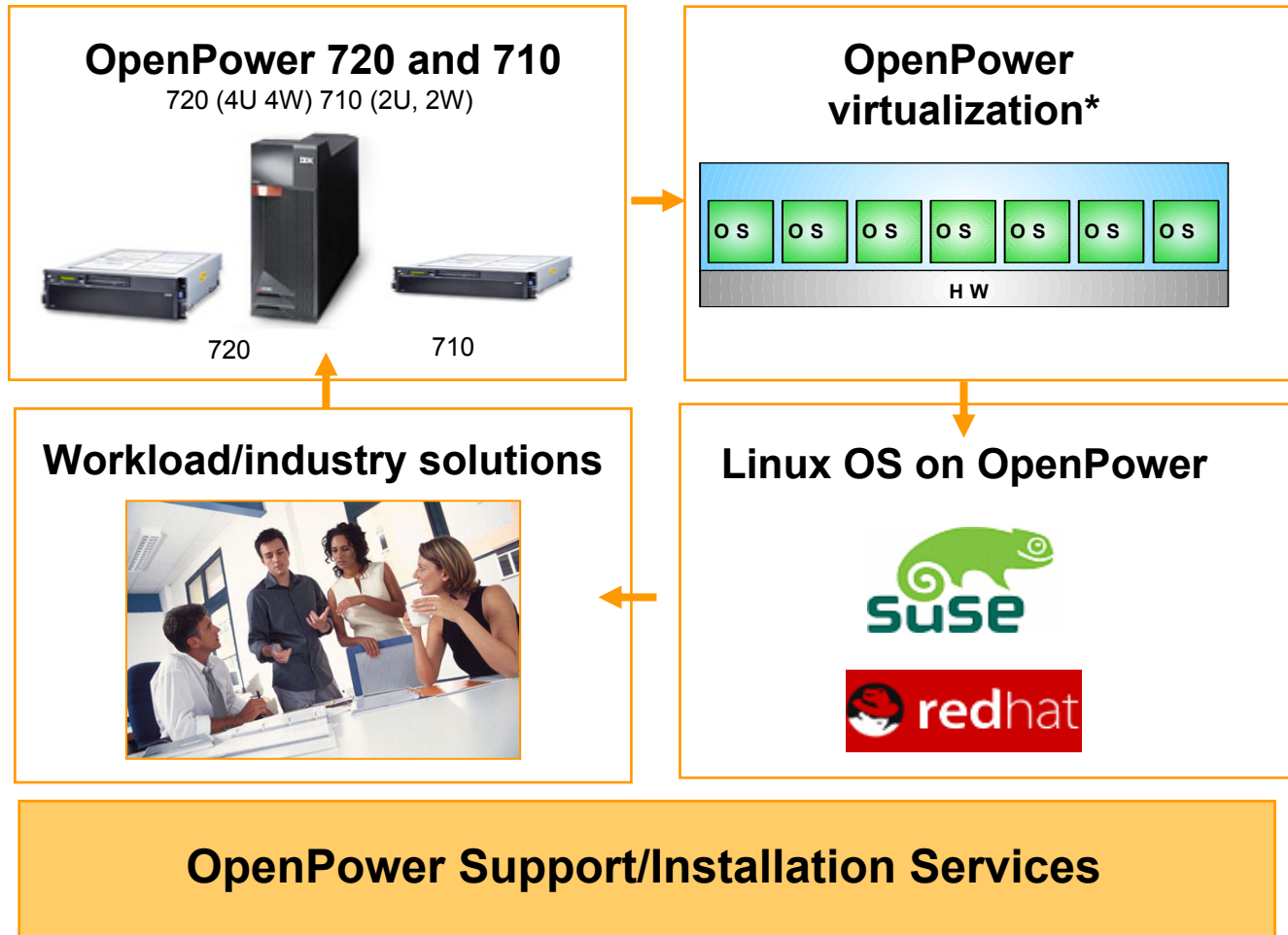
★ Express Solutions



★ p510E ★ p520E ★ p550E ★ p570E ★ OpenPower 720 ★ JS20 ★ OpenPower 710



An integrated set of OpenPower offerings delivers the passion of Linux enriched by the power of IBM



Igniting Aggressive Growth in SMB

Requires responding to SMB customer needs and requirements today and in the future – while continuing our strong momentum changing perceptions

Increased Focus on Solutions Portfolio

Express Solutions
SMB ISV's
SOSWOS Focus
Express Servers

Communications - Awareness
-PowerStorm, PowerUp activities

Channel Enablement & Partner Development

Targeted Portfolio - New p5 Express Servers & Solutions

3Q04

4Q04

1H05

2H05

2006



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Programs to Increase Momentum

Initiatives for 2005

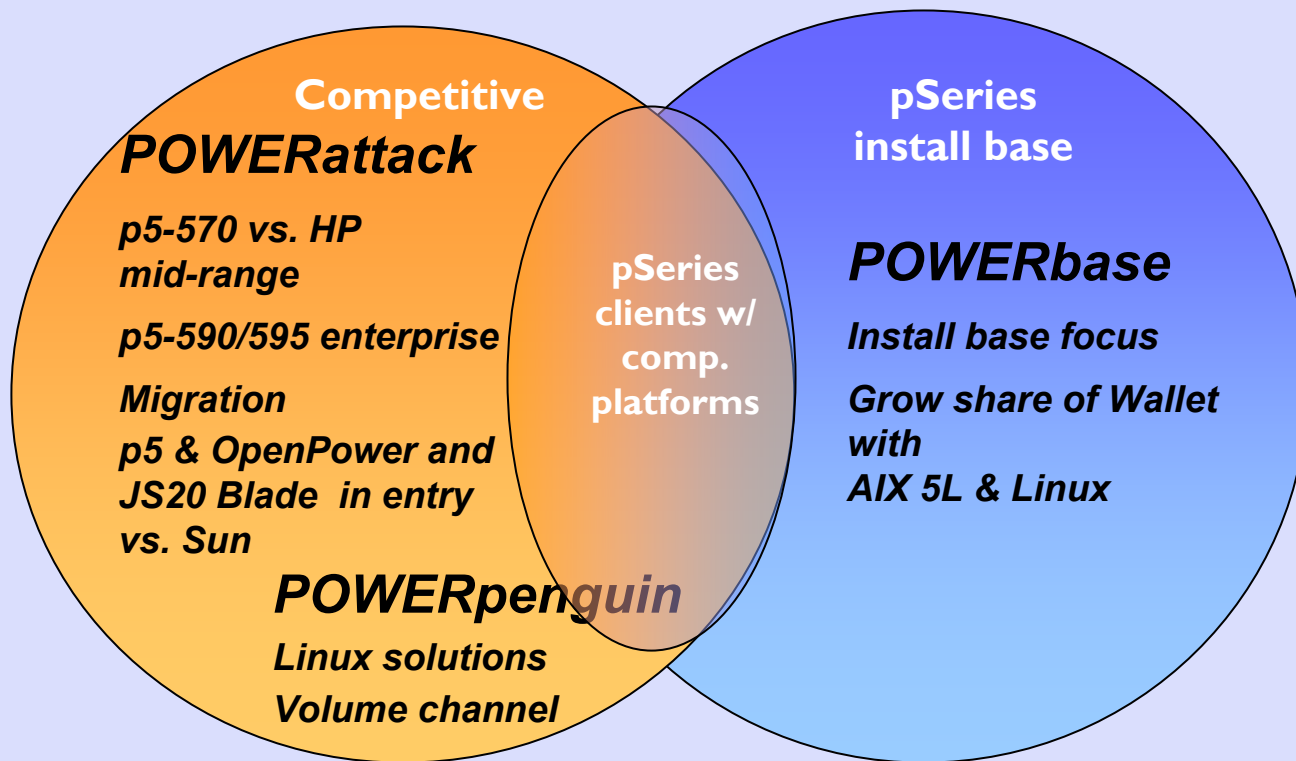


pSeries Go To Market in 2005

POWERstorm

Awareness & consideration

Product offerings- launch/transitions





PUT IT IN THE SERVER ROOM. FEEL IT IN THE BOARDROOM.

Meet the IBM eServer™ p5 system – the game-changing UHDC® server that can bring instant agility to your business. With advanced IBM Virtualization Engine™ technology options, the eServer p5 system is the only UNIX server with breakthrough Micro-Partitioning™ capabilities. It can automatically balance resources among virtual partitions in milliseconds! On demand, it configures and adapts on the fly. Add apps. Add users. Add capabilities. At any time. And gain business agility just like that. You need to learn more. Move about all the benefits of eServer p5 systems at ibm.com/eserver/boardroom

a reason why IBM eServer p5 systems with Power Architecture™ technology rule in UNIX computing.

Flexible, fifth-generation POWER® processors.	Capacity on Demand*.	Runs IBM AIX® 6.1™ and Linux®.	Advanced system utilization.	Virtual servers as small as 1/10 of a processor.
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FEEL THE POWER OF LINUX.

Introducing the IBM eServer™ OpenPower™ system. With this server, you can have it all. Power Architecture™ technology and the Linux® operating system. Outstanding reliability features and 64-bit computing. This is what you've been waiting for. A server specifically enhanced for Linux. It's a purist's dream. Its instant embrace into the Linux movement. And it's an affordable way to adopt Power Architecture technology on demand. Join the movement at ibm.com/eserver/pumpup



The IBM eServer p5 system delivers agility, company-wide.

Retention Newsletter

If you are having difficulty reading this e-mail, please view it online at:

<http://www.ibm.com/isource/cgi-bin/goto?on=PSEN>



December 2004 / January 2005, Issue One

As new technologies enable the fast to get faster, enterprise computing is becoming a whole new ballgame. Find out how IBM can lead you into the future and don't forget to visit the [IBM® eServer® p5 and pSeries®](#) web site on IBM.com.

Did you get this newsletter from a colleague? If so, be sure to visit [subscribe](#) to receive future issues of PowerUp from IBM.

Ready to
contact us?

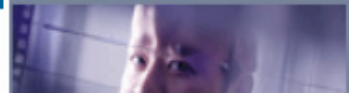
Talk to a pSeries
specialist at
1-800-IBM-CALL

Profiting from p5



Moving forward: The case for upgrading to POWER5(tm)

Special offers



- **Published every six weeks - 8 issues in 2005**
- **“Case Study” like articles; commissioned from eServer UNIX magazine – 8 for retention and 8 for competitive**
- **Interactive flash elements and -website-animated promotions**
- **http://www-1.ibm.com/servers/eserver/pseries/newsletter/pseries_subscribe.html**

pSeries Installed Base - Portal Home and 2nd Level Page

United States [Search]

Home | Products & services | Support & downloads | My account

Select a country Servers > UNIX servers > Migration >

IBM eServer pSeries and IBM RS/6000 migration

UNIX servers

- Operating system
- Migration
- Security
- High availability
- Solutions
- Storage
- Services
- Support
- Developers
- Education
- Library
- Literature
- Press

Shopping help

- Warranty info
- View cart
- Open saved carts
- Estimate shipping
- Order status
- Returns policy
- Shopping guarantee

Related links:

- Small & Medium Business
- Business partners

MOVE ON. MOVE UP.
TO POWER4+ SERVERS & AIX 5L 5.2

Get low-rate financing from IBM Financial Services
More on these and other offers

pSeries newsletter

Keep informed about server hardware/software advances as well as application certifications
+ Sign up now

Migration

- Why migrate?
- Special offers on pSeries servers

Other migrations

- Considering migrating from other platforms?
 - Solaris
 - Series/1 applications

Other server option

Considering Windows, Intel or Linux? Explore:

- Blade servers
- xSeries
- Linux servers

pSeries upgrade questions?

If you've got questions about making the leap to pSeries servers, we're ready to help.
Call 1-800-426-7777 (Priority code 104AP047)

Meet the experts

Webcast: Satya Sharma, IBM Chief UNIX Architect, describes how to take advantage of the flexible resource model enabled by AIX 5L V5.3 and new POWER5 systems—October 12, 2004
+ Register

AIX 5L on Demand

With the AIX 5L v5.2 operating system, IBM eServer pSeries systems are well suited for the mission-critical requirements of enterprise computing environments. AIX 5L v5.2 offers pSeries customers a wide range of availability, scalability, connectivity and security features. Download this white paper and learn for yourself how AIX 5L can help leverage your investment in your IBM eServer pSeries system.

[Download now](#)

Migration path by server model

Upgrading to POWER4+ processor-based IBM eServer pSeries® servers with AIX® 5L™ Version 5.2 can help ensure availability of your critical applications, reduce your total cost of ownership, and offer other benefits.

United States [Search]

Home | Products & services | Support & downloads | My account

Select a country Servers > UNIX servers > Migration >

Migration path for IBM RS/6000 Enterprise Server S70 or Advanced Model S7A

UNIX servers

- Operating system
- Migration
- Security
- High availability
- Solutions
- Storage
- Services
- Support
- Developers
- Education
- Library
- Literature
- Press

Shopping help

- Warranty info
- View cart
- Open saved carts
- Estimate shipping
- Order status
- Returns policy
- Shopping guarantee

Related links:

- Small & Medium Business
- Business partners

MOVE ON.
TO MORE ADVANCED HARDWARE

Contact us

Speak directly with a migration specialist
1-800-426-7777
Priority code 104AP047

Suggested migration: IBM eServer pSeries® 650 or IBM eServer pSeries 670

What are the benefits of migrating?

With a breadth of Internet and Web applications, the pSeries 650 or pSeries 670 address issues that are most important to business success. Consider the fact that you can:

- Web enable 32-bit applications on a 64-bit server with a breadth of functionality in the AIX® 5L™ operating system
- Run the Linux operating system
- Exploit memory-intensive applications with up to 8 times more memory than the RS/6000 S70 or S7A
- Enhance the reliability and availability of 24x7 mission-critical applications with (functions model dependent):
 - Hot-plug PCI slots
 - Dynamic Processor Deallocation
 - Dynamic deallocation of cache and PCI bus slots
 - Chipkill™ memory protection
 - Redundant, hot-plug power supplies and cooling fans
- Deliver end-to-end growth by scaling to 128GB of memory and to 16-way, 1.45GHz server as needs increase

Newsletter

IBM eServer pSeries newsletter

Keep informed about server hardware/software advances as well as application certifications
+ Sign up now

New! Enablers for successful selling

- **SystemSeller program**
- **PartnerWorld program**
- **Business Partner Innovation Center program**
- **Small and Medium Business Advantage**
- **KYI for pSeries partners and sales reps**
- **Territory Economic Replacement tool**
- **Expanded migration services**

SystemSeller

SystemSeller is an IBM program designed to *accelerate sales* of our server and storage products targeted at the mid-market by providing *competitively priced* offerings that are *relevant* to small and medium business owners, *jointly marketed* by IBM and our partners.

Program Attribute	Benefit To You
Everyday Low Price	No special bid, faster sales
Great earnings opportunity	More predictable margins for your business
Readily available stock	Faster delivery to you and your customer
“Sweetspot” of customer’s needs	Working with you, we will bring to market the offerings that your customers want.
IBM Demand Generation Engine	End user campaigns that drive of the SystemSeller offerings and demand to you
SystemSeller Toolkit	Provides you with the tools you need to develop your own marketing campaigns and accelerate your sales.

PARTNERWORLD 2005

- In the dynamic marketplace of e-business on demand customers are looking to the IBM eServer pSeries advantages in performance, reliability, functionality and affordability.
- In terms of functionality, customers must adjust to unpredictable demands effectively, and **Business Partners must be able to deliver** solutions that address these requirements.
- PartnerWorld is a program specifically designed for all of IBM partners. Based on certification levels and interest by brand, Partners can earn co marketing dollars , gain access to valuable leads, demand generation material and access the internal website for partners.

PARTNERWORLD website:
www.ibm.com/partnerworld/smb

Partner Teaming – the way to Win!



- **Small and Medium Business Advantage program is a focused 7 step program for partners designed to help them sell into the SMB marketplace.**
 - Improve BP profitability from SMB by focusing on BP retention of SMB Growth Incentives
 - Doubling our sales enablement efforts in support of SMB solution selling
 - Enhance SMB specific market messages to provide clear direction for our BPs
 - Delivering a fully integrated program to our Business Partner community

New! SMBA Industry Sales Kits – to Premier at PartnerWorld 2005

pSeries Partner ecosystem

- **Business Partner Innovation Center (BPIC)– PartnerWorld program for selected partners**
- **Know Your IBM (KYI) – Expanded modules for p**
- **Better Funded Incentives**
 - SMB Growth Incentive – the more partners sell; the more they earn! Program changes to be announced in AG for Q2. EMEA and AP programs remain unchanged.
 - ISV Advantage Program – helping support marketing and sales with ISV's

IBM BPIC is a select community within PartnerWorld focused on and skilled to deliver advanced solutions to our customers.



• IBM Business Partner Innovation Centers will be:

- Differentiated within IBM's partner community as our key partners for on demand solutions and ISG Power Technologies
- Receive Increased Visibility: BPIC Branding
- Receive targeted marketing and technical support: TSSC/BPIC Lease and Hotline, Simplified VAP Processing for Tivoli + VE Solutions (benefits are customized by geography)



Know Your IBM Program

Know Your IBM (KYI) is a permission based interactive marketing program designed to

- **Increase sales and profits**
 - **Enhance partner satisfaction**
 - **Build IBM and IBM Brand Loyalty**
-
- **KYI delivers customizable IBM 'quick learn' modules, participant profile management, real time performance measurement and sales reporting capabilities coupled with meaningful rewards and incentives**
 - **Learn Rewards acquired by completion of modules and Sequences**
 - **Sell Rewards acquired by reporting sales in areas of competed Sequences**

Home | Products & services | Support & downloads | My account

Know your IBM >

KYI eServer and TotalStorage - USA



Learn More:

www.ibm.com/partnerworld/knowyouribm

- **IBM eServer and TotalStorage Campaigns in a variety of countries today**
- **4Q2004 First iSeries module launched in EMEA**
- **Cross Brand IBM Systems Group campaigns in 2005!**



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Tools and Resources

Utilize these sales tool for building successful plans in your territories!





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Economic Replacement Tool

Territory based opportunity tool



Economic Replacement Sales Tool

- **See the demonstration at the Solutions Center!**
- **Easily identifies opportunities within your territory.**
- **Designed to help better target those clients that are candidates for replacement systems.**
- **Benefits**
 - Improved sales tool to better plan sales calls.
 - Leads can be worked with Partners to increase sales
 - Will be consistently updated to keep data fresh!

Custom Generator – you select replacement system

Savings through replacing an AS/400 with a new eServer i5 solution!*

	Installed Model			eServer i5 Replacement			
	Model	Processor	ICC	Model	Edition		
	720	2063	1500	520	Enterprise 7453		
CPW	810			2400			
Interactive/OLTP CPW	35			2400			
	Monthly costs			Monthly costs			Monthly Savings
Average monthly Maintenance Charges (CEC only - 36 month period)	\$ 541			\$ 199			\$ 342
Typical monthly power consumption costs	\$ 106			\$ 42			\$ 63

The customer's currently installed system info comes from Example Generator input

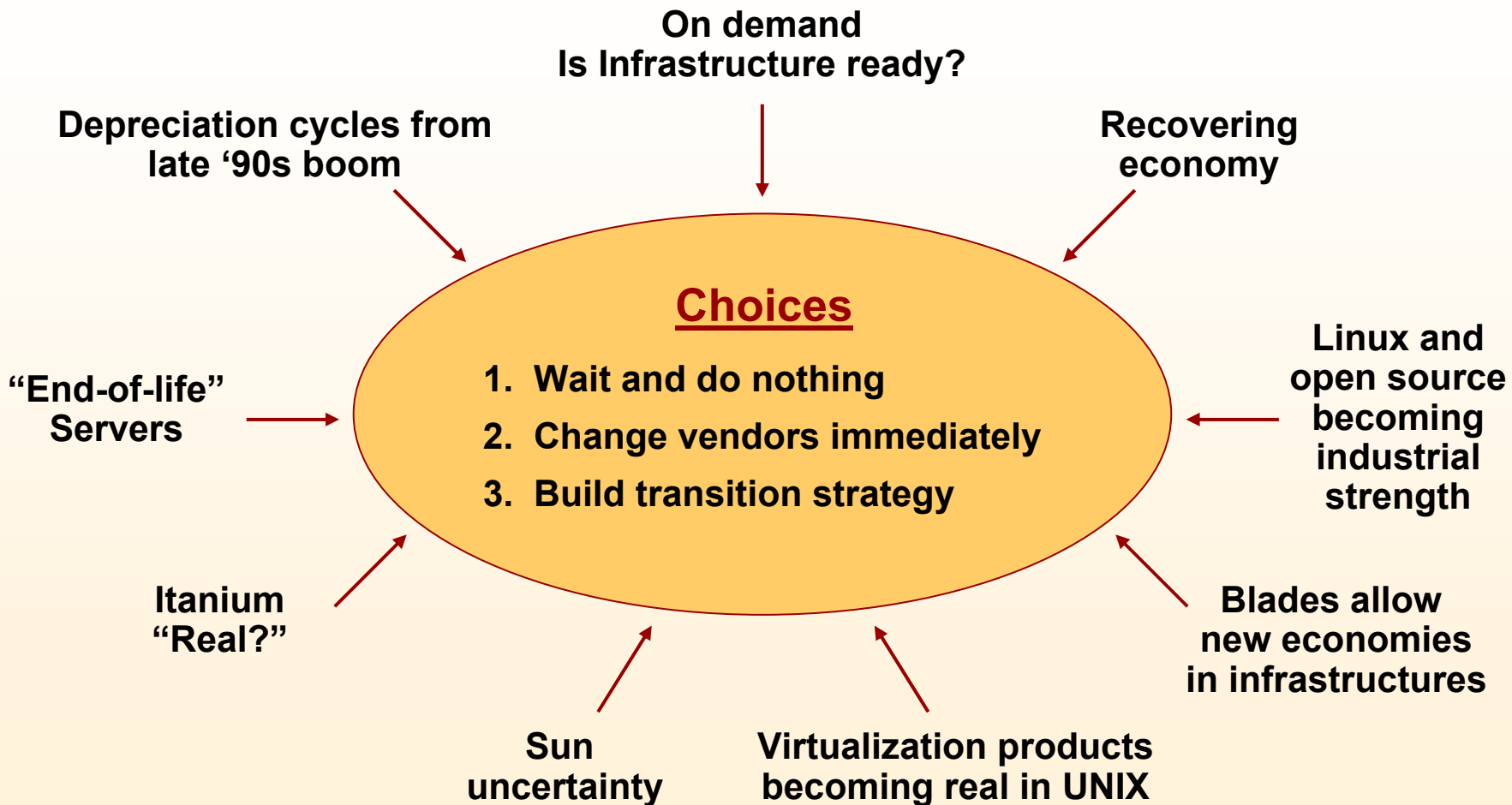
You select a potential replacement @system



Migration Approach



Customer Views of Marketplace conditions drive Migration consideration



2005 Migration Factory

- Expanding program given 2004 success and 2005 Growth Objectives
500 requests evaluated, 250 worked, 50 migrations executed in 2004
Over 150M in revenue in 2004.
- New Enhancements
OpenPower and LoP included in program
“Proof of Concept” option in addition to assessments and migrations
Alternate service provider (non-AMS) subject to approval
- “Greater” IBM following pSeries lead
Migration workshops, webinars, web, collateral part of corporate marketing campaigns
Migration services positioned as offering

Migration Factory Summary

	Pre-Sales Assessment	Proof-of-Concept	Post-Sales Migration
Approval Requirements	AMS / WW Brand	AMS / WW Brand / Geo Sales	AMS / WW Brand / Geo Sales / Geo Pricing
Scope of Work	Ranges from Telephone to On-site Support; Typically No Coding	Work on Existing IBM Equipment at Customer or Benchmark Center	Application Moved to pSeries or OpenPower
Financial Impact	Funded by WW SG&A Budget; No Impact to Geo	Funded by Geo SG&A Budget	Funded by Geo Gross Profit Budget; Booked as Cost of Sale Transaction
Customer Contract	No	No	Yes
Short-Term Revenue Impact	N/A	N/a	FMV of Migration Services Deferred Until Completion
Reporting/Tracking	AMS Database	Sales Enters into WW Comp DB	Sales Enters into WW Comp DB
Customer Reference	Optional	Required	Required

Migration Factory wins

SMB WINS noted in yellow

Account	Competition	Details
City of Phoenix	HP	Database migration
D&E Communications	HP	HP Alpha Tru64 / Oracle migration
DKSH	HP	SAP Oracle migration
Dow Jones	Sun	Custom application migration - <i>mega financial institution success for IBM</i>
Dollar Thrifty Rent-A-Car	HP	Tru64 Oracle migration
Gruner & Jahr	Sun	Peoplesoft migration
Hastings	Sun	Peoplesoft migration
Holcim	Sun	SAP migration
IVAX	HP	<i>Strategic</i> SMB Oracle migration
Portland General Electric	Sun	Oracle migration
Telkom South Africa	HP	SAP migration
WFS Financial	Sun	Custom application migration from DG Avilion/HP



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Call to Action



How to win in SMB in 2005

- 1. Understand the competitive differentiators, & value propositions of our products.**
- 2. Spread the word about the increased partner incentives, and marketing dollars available by focusing their time on pSeries and OpenPower products.**
- 3. Leverage our new Territory Economic Replacement Tool to identify opportunities.**
- 4. Utilize the SMB playbooks in your regions to tell your customers about plays, programs and additional resources.**



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Lets continue the **SMB** momentum
YOU have built.

Thank you for your outstanding sales performance!

Please be sure to attend the other
recommended SMB and pSeries sessions





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Backup

Upcoming Q1 announcements
OpenPower 710 & p5-510 & p5-510E



pSeries Specific Resources

- **Series Intranet Site:**

- http://w3-1.ibm.com/sales/systems/portal/_s.155/253

- **IBM eServer pSeries Sales Kit**

- Available on Systemsales and BP websites:

- http://w3-1.ibm.com/sales/systems/portal/_s.155/254?navID=f220s240&geoID=All&prodID=pSeries&docID=psshtoolsrk

- **IBM OpenPower Sales Kit**

- **For IBMers:** w3.ibm.com/linux/openpower

- **For BPs:** http://www-1.ibm.com/partnerworld/sales/systems/myportal/_s.155/250?navID=f220s260&geoID=All&prodID=IBM%20eServer%20And%20TotalStorage%20Products&docID=opsk091404.skit&docType=SalesKit&skCat=DocumentType

- **IBM pSeries SMB sales kit**

- http://w3-1.ibm.com/sales/systems/portal/_s.155/254?navID=f400&geoID=AM&prodID=pSeries&docID=smbplay.skit&docType=SalesKit&skCat=DocumentType



Additional websites of interest

- **Customer reference website**
 - **Search by Geography, Country or Industry**
w3.ncs.ibm.com/crmd.nsf/home?readform
- **pSeries SMB Internal Deep Dive Education Modules-includes pSeries Selling Guides by Industry** – These education modules are in PartnerWorld University (PWU), within SMB College. The link for PWU follows:
<http://www.ibmweblectureservices.ihost.com/pwu>
- **SMB Express Microsite**
 - [http://www-1.ibm.com/businesscenter/smb/us/en/expressbridge?&ca=smb expressbridge011105&tactic=&me=W&met=inli&re=SMBHome Hero](http://www-1.ibm.com/businesscenter/smb/us/en/expressbridge?&ca=smb%20expressbridge011105&tactic=&me=W&met=inli&re=SMBHomeHero)

The SMBA website: one more tool for Partners

The screenshot displays the IBM PartnerWorld website interface. At the top, there is a navigation bar with links for Home, Products & services, Support & downloads, and My account. A search bar is located on the right. Below the navigation bar, the main heading reads 'IBM Small and Medium Business Advantage'. A sidebar on the left offers options to 'Select a country' and lists resources like 'Selling resources', 'Marketing resources', and 'Products and'. The main content area includes a 'Select a country/region' dropdown menu set to 'Global'. Below this, there are several promotional tiles: 'IBM Express Portfolio of offerings' (designed and priced for the mid-market), 'SMB financing announcement' (highlighting improved response times and simplified processes), and a 'DEMAND BUSINESS e-newsletter' sign-up button. A large banner at the bottom features the text 'Business Partner Directions' and '2nd Quarter 2004—Issue 2' with an 'Enter' button. The footer of the banner shows 'ibm.com/partnerworld'.

- Continue to develop the SMBA portal as the SMB view of IBM
- Clearly position SMBA with RSI Advantage, ISV Advantage, and PartnerWorld Industry Networks and PW,
- Continue strong outreach programs in each geography to drive BP utilization, particularly for new sales enablement industry & solutions content
- Deploy Customer Value Monitor at SMBA portal to establish baseline for customer satisfaction of web site and content

OpenPower 710

- **OpenPower 710 announces on 1/25**
- **Attend OpenPower and Linux on Power courses here at STGU.**

OpenPower 710 – Positioning and key messages

Positioning

- Highly available 2U, 2-way POWER5 server for application serving in data center environments
- Rack-dense computing power with extreme availability and scalability for constrained data centers and ASPs

Key Messages

- Rack-dense computing power with improved performance and high availability
- Feature-rich application serving platform for constrained data centers and ASPs
- Robust RAS from POWER5 technology

Competitive Advantage

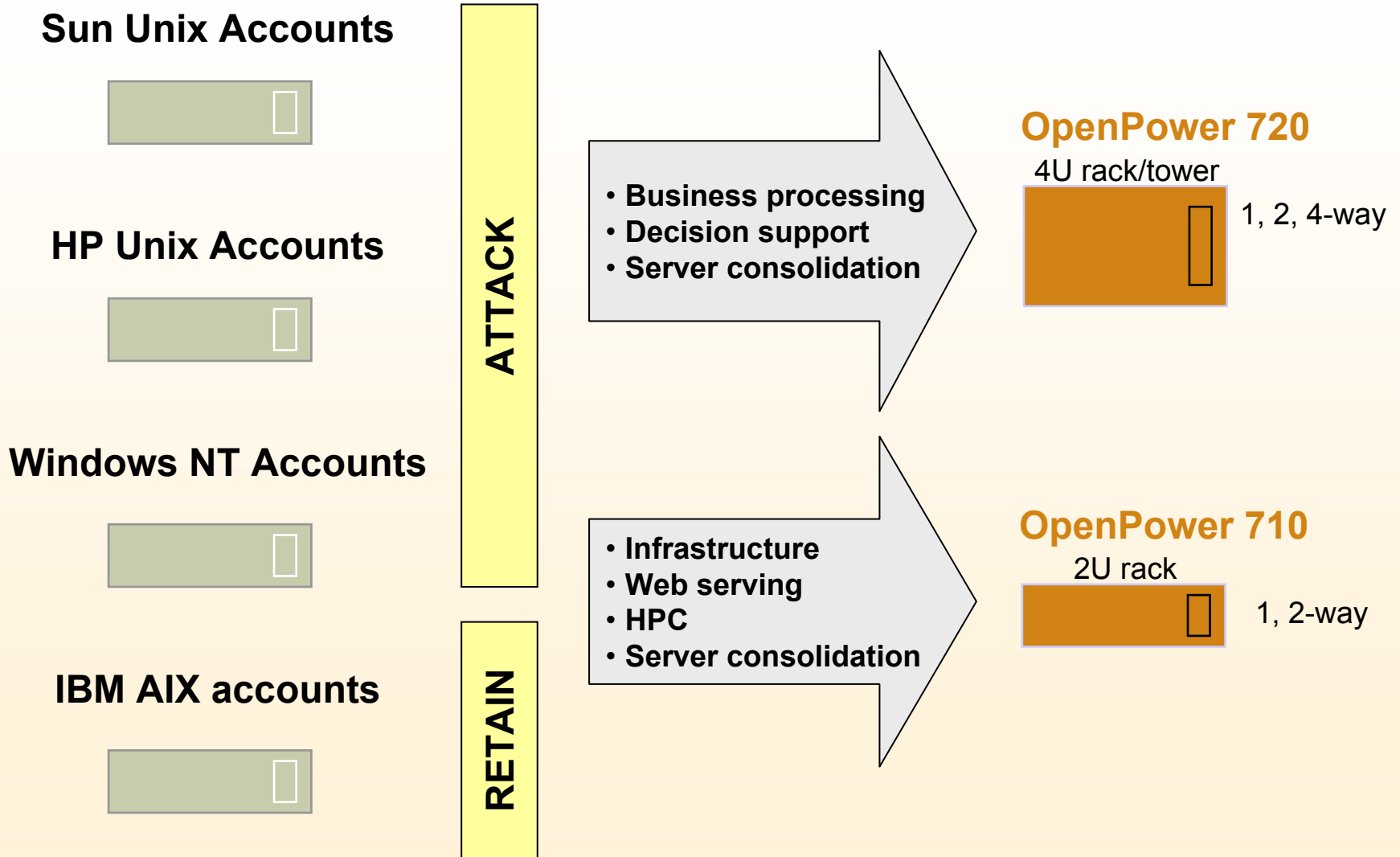
- Robust RAS capability
- Advanced virtualization technology
- Decade experience in 64 bit technology



OP 710 Customer Profile

Primary Market	Key User Requirement	User Characteristics	Solution Environment	Applications/ Usage
Medium to Large Enterprise - Constrained Data Center Environments <ul style="list-style-type: none"> - Financial Services - Retail - Government - Manufacturing - Telecom 	<ul style="list-style-type: none"> • Growth Flexibility • Rack optimized designs • Ease of use • Latest technology • Cable Management • Cost sensitive 	<ul style="list-style-type: none"> • Flexibility to grow rack environment or system with business needs • Price/Performance Computing • Highly Segmented Networks with Multiple Locations 	<ul style="list-style-type: none"> • Internet/Intranet Front End • Network Infrastructure • Workgroup applications • Performance clustering 	<ul style="list-style-type: none"> • Dynamic Web Serving • Encryption and security • Caching • Email apps • IIS / Websphere • RAS solutions • Computational Node
Internet Service Providers	<ul style="list-style-type: none"> • Rack optimized designs • Time to Revenue • Ease of Service / Installation • Cable Management 	<ul style="list-style-type: none"> • Seeking cost effectiveness • Need Quick installation for rapid growth • MGT nodes/ Linux Clustering 	<ul style="list-style-type: none"> • Network Infrastructure • Web Content Serving • Application Hosting services 	<ul style="list-style-type: none"> • Caching • Load Balancing • Gateways • Firewall • Content Serving • Groupware Access • Streaming Media

OpenPower 710 – competitive play



New IBM @server OpenPower 710 is ideal for infrastructure, web serving and HPC applications



OpenPower 710



Specifications:

- 2U 1-way up to 2-way, rack-mount
- 1.65 GHz processor frequency
- Up to 32GB memory
- 4 bays for Ultra320 SCSI drives
- 3 PCI-X slots, USB: 2, HMC: 2
- DVD ROM in base
- Redundant cooling and optional redundant power
- 3 year parts and labor NBD warranty and support
- Software support
 - SLES 9 from Novell SUSE LINUX
 - RHEL AS 4 from Red Hat
- IGS Service Offerings
- Advanced OpenPower Virtualization option
- Entry 1W \$3,449 list, 2W \$3,999¹

¹ Entry - 1 GB memory, 1x73 GB 10K Drive

Leaders for Linux OS criteria

- Criteria:
 - **Be an Advanced or Premier member of PartnerWorld**
 - Demonstrate Technical Skill by having one person SUSE LINUX, LPI or Red Hat certified
 - Or if an ISV, have a commercially available application on Linux
 - Detail one customer win using Linux and IBM products
- Benefits:
 - A fully funded custom telemarketing campaign with a high quality agency around five well defined opportunity areas
 - Increased incentives for Value Networks (teaming with ISV Advantage ISVs)
 - Priority status to Participate in Linux Campaigns and Events (subject to availability)
 - Linkage with Linux Impact team and SMB Sales Teams
 - Free Evaluation Software
 - **And just ANNOUNCED - NEW benefits from Novell SUSE LINUX and Red Hat**

<http://ibm.com/partnerworld/linux>

Overview: Virtual Loaner Program* - Linux on Power

Worldwide SMB ISVs and Sales

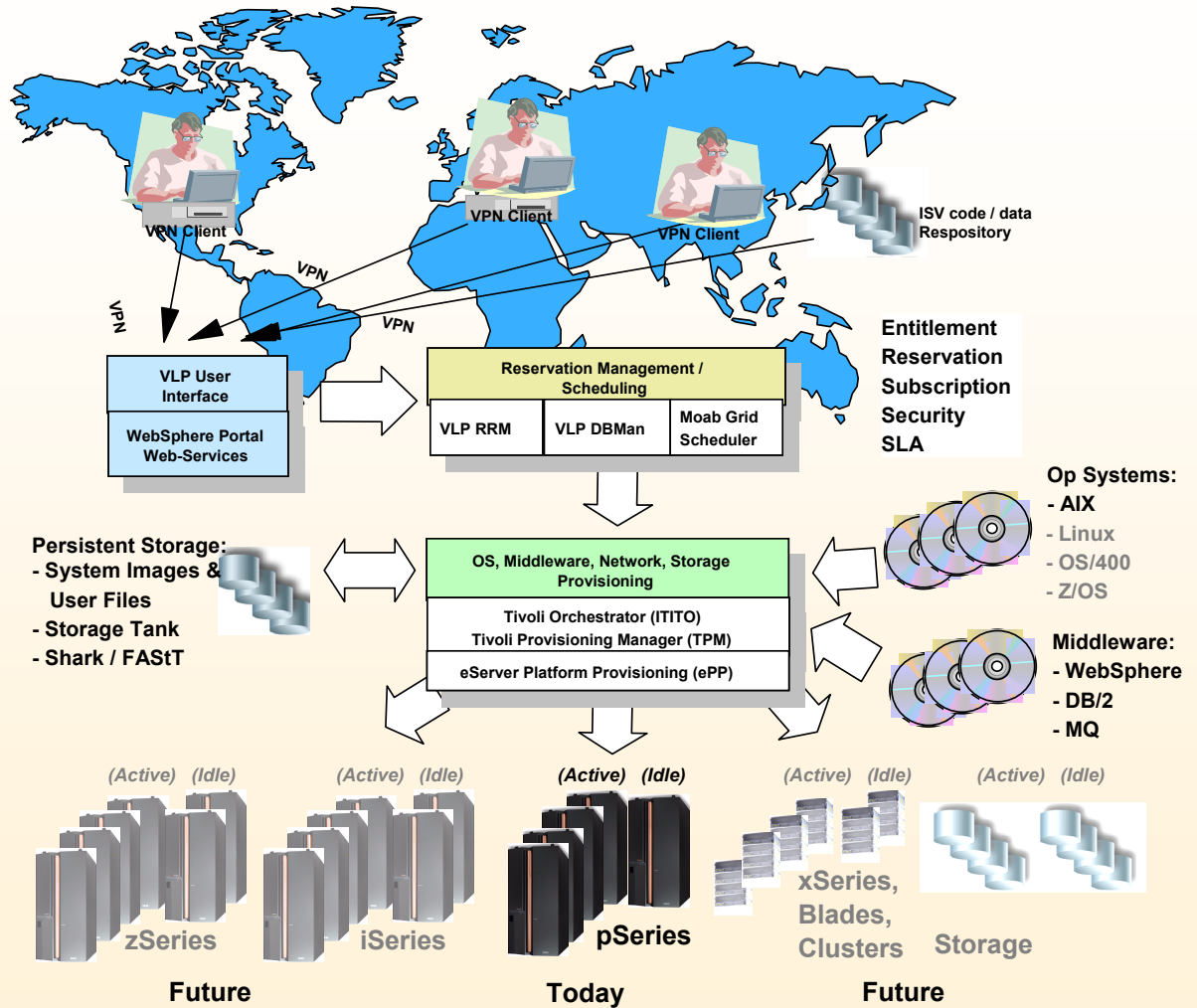
- Remote Access
- Worldwide 24X7 Availability
- Application Porting, Testing, and Support

e-business on demand™ Operating Environment

- Self-Service Web Interface
- Grid Scheduling and Automated Provisioning
- Save / Restore Supports Long-Term Usage

Centralized Equipment Pool

- Virtual Servers / Logical Partitioning
- Broad Range of Equipment
- Multiple Centers



*Availability of technologies subject to change.

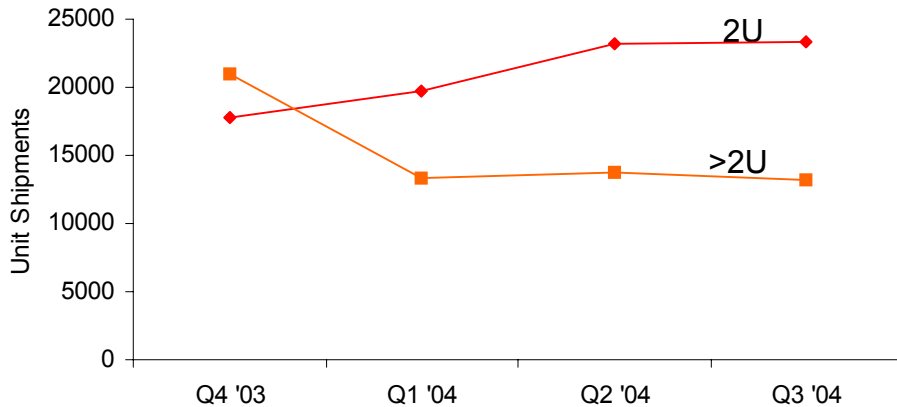
p5-510 and p5-510 Express

- **These products announce on 2/8/05.**
- **Please attend the training call on Feb. 1, 2005 to get all the latest information.**
- Look for times and call in numbers in your SystemSeller Newsletter or on the website under Education, pSeries.

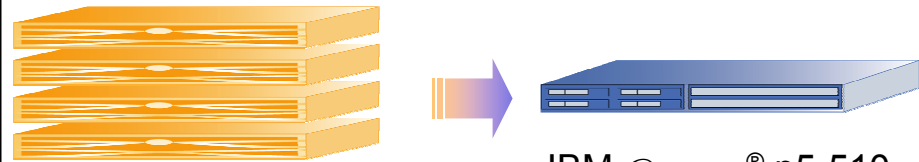
The p5-510 crushes the Sun v240!*

Fewer systems to manage, fewer headaches, lower TCA!

2w Unix Shipments by U-rating (IBM, Sun, HP)



p5-510 delivers 4 times the OLTP workload performance of the Sun V240!



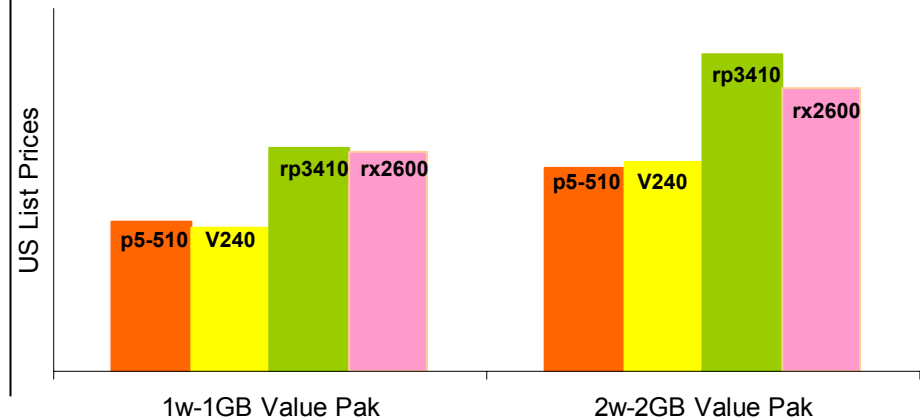
Sun v240's
1.28GHz

IBM eServer® p5-510
1.65GHz

p5-510 2U 2-way Rack server

- First 2U server, since the B50
- 3 year warranty
- 4 Value Pak configurations (2 x 1.5GHz 510Express & 2 x 1.65GHz 510)
- Optional Advanced POWER Virtualization

p5-510E Price Comparison*



* - Sun V240 and HP rp3410, rx2600 have 1 year warranty

*Comparison based on Ideas International OLTP workload performance estimates as of December 1, 2004 for the 2-way configurations of the Sun V240 1.28GHz [2068] and the p5-520 1.65GHz [8682]. The p5-510 has the same processor and memory configurations as the p5-520. © IDEAS International Ltd.

IBM @server p5 510 Express server

What is p5-510 Express:

- Lowest priced POWER5 server
- 1.5GHz - 1, 2 way, 2U
- DLPAR
- Optional Virtualization
- Target Audience: 100+employee size companies
- p5-510 Express delivers -
 - ✓ Outstanding Value
 - ✓ Easy to deploy and manage
 - ✓ Security and Reliability features
 - ✓ High performance and configurability
 - ✓ Deployment flexibility (AIX/Linux)
 - ✓ (Optional) Advanced virtualization technologies for higher asset utilization



Enhancements over p615:

- Performance
 - ▶ POWER5™ vs POWER4™, POWER4+™
 - ✓ Unmatched performance leadership
 - ✓ SMT
 - ✓ >150% better P/P (over p615)¹
- Enhanced RAS
 - ▶ **3 year warranty**
 - ▶ Concurrent firmware updates (2Q05)
- Smaller 2U form-factor
- Dual Gigabit Ethernet
- External SCSI (standard)
- Advanced POWER™ Virtualization
 - ▶ Virtualization of Resources
 - ▶ Fine Grained Micro-partitioning™
 - ✓ Increase flexibility & asset utilization

Why p5-510 Express:

- Increase IBM presence in the SMB and distributed applications segment
- Grow IBM presence in existing accounts
- The p5-510 Express will retain existing pSeries® and RS/6000 customers
 - ✓ Replacement of previous offerings including B50, 150, 170, p610, p615
- Gain presence in the Linux entry server market.

1. Based on US List Price and IBM relative performance estimates of similarly configured 1,2way p615 1.2GHz and p5-510 1.5GHz servers

IBM p5-510 Express server – Business Value

■ More value for your money

- ▶ Competitively priced systems
- ▶ Improved asset and resource utilization
- ▶ High levels of reliability and availability



■ Flexibility and fast business execution

- ▶ Flexibility to run the vast library of AIX 5L and Linux applications
- ▶ Outstanding POWER5 performance provides more responsive systems for enhanced client interaction and increased employee productivity
- ▶ Modular, dense rack systems give the ability to build/modify computing resources as needs change

■ Low risk

- ▶ 3 year warranty backed by IBM service or your local IBM trained reseller
- ▶ High-availability configurations enable continuous data availability for critical business data
- ▶ Enhanced security for access control and intrusion detection with AIX 5L
- ▶ Safeguard your data with the security of IBM @server and Unix

Positioning p5-510 Express and p5-510 - Overview

IBM	Competitors	Target Sectors	IBM Differentiators	Ideal Workloads
p5-510E (1.5GHz)	Sun v20z, Sun V240, HP rp3410, HP rx2600	<ul style="list-style-type: none"> ▪ SMB <ul style="list-style-type: none"> – Retail – Financial – Distribution – Distributed Branches – Industrial – Media & Entertainment 	<ul style="list-style-type: none"> ✓ Competitive Price¹ ✓ Cost of Ownership ✓ Easy to Deploy and Manage ✓ RAS & Security ✓ Performance 	<ul style="list-style-type: none"> ✓ ERP, CRM, ✓ email, workgroup server, ✓ File and print, ✓ Web serving, ✓ e-commerce and ✓ Application development ✓ Small Branch server, ✓ Small DB Server.
p5-510 (1.65GHz)	Sun v20z, Sun V240, HP rp3410, HP rx2600	<ul style="list-style-type: none"> ▪ Financial Services ▪ Large Retailers ▪ Public Sector ▪ HPC ▪ Industrial ▪ Media and Entertainment ▪ Service Providers ▪ Software Publishers/ISV 	<ul style="list-style-type: none"> ✓ Price ✓ Performance ✓ Virtualization ✓ Flexibility ✓ RAS & Security 	<ul style="list-style-type: none"> ✓ OLTP, ✓ Applications server, ✓ Database server, ✓ Datamining, DataMart, ✓ eMail, File and Print, ✓ Networking, ✓ Security servers, ✓ Sys. Mgmt server, ✓ Proxy and caching servers, ✓ HPC, Analytics, ✓ Grid computing, ✓ Streaming Media

1. Improved performance of the p5 servers may result in Clients requiring smaller HW configurations, which potentially lower HW costs

Notes to Presenter

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Revised January 9, 2003

Notes to Presenter (Cont.)

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Revised May 6, 2004

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Any performance data contained in this document was determined in a controlled environment. Actual results may vary significantly and are dependent on many factors including system hardware configuration and software design and configuration. Some measurements quoted in this document may have been made on development-level systems. There is no guarantee these measurements will be the same on generally-available systems. Some measurements quoted in this document may have been estimated through extrapolation. Users of this document should verify the applicable data for their specific environment.

Revised February 6, 2004

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Revised August 2, 2004

Notes on Benchmarks and Values

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TPC	http://www.tpc.org	Linpack	http://www.netlib.no/netlib/benchmark/performance.ps
Pro/E	http://www.proe.com	SPEC	http://www.spec.org
GPC	http://www.spec.org/gpc	NotesBench Mail	http://www.notesbench.org
VolanoMark	http://www.volano.com	STREAM	http://www.cs.virginia.edu/stream/

Unless otherwise indicated for a system, the performance benchmarks were conducted using AIX V4.3 or AIX 5L. IBM C Set++ for AIX and IBM XL FORTRAN for AIX with optimization were the compilers used in the benchmark tests. The preprocessors used in some benchmark tests include KAP 3.2 for FORTRAN and KAP/C 1.4.2 from Kuck & Associates and VAST-2 v4.01X8 from Pacific-Sierra Research. The preprocessors were purchased separately from these vendors. Other software packages like IBM ESSL for AIX and MASS for AIX were also used in some benchmarks.

The following SPEC and Linpack benchmarks reflect microprocessor, memory architecture, and compiler performance of the tested system (XX is either 95 or 2000):

- SPECintXX - SPEC component-level benchmark that measures integer performance. Result is the geometric mean of eight tests comprising the CINTXX benchmark suite. All of these are written in the C language. SPECint_baseXX is the result of the same tests as CINTXX with a maximum of four compiler flags that must be used in all eight tests.
- SPECint_rateXX - Geometric average of the eight SPEC rates from the SPEC integer tests (CINTXX). SPECint_base_rateXX is the result of the same tests as CINTXX with a maximum of four compiler flags that must be used in all eight tests.
- SPECfpXX - SPEC component-level benchmark that measures floating-point performance. Result is the geometric mean of ten tests, all written in FORTRAN, included in the CFPXX benchmark suite. SPECfp_baseXX is the result of the same tests as CFPXX with a maximum of four compiler flags that must be used in all ten tests.
- SPECfp_rateXX - Geometric average of the ten SPEC rates from SPEC floating-point tests (CFPXX). SPECfp_base_rateXX is the result of the same tests as CFPXX with a maximum of four compiler flags that must be used in all ten tests.
- SPECweb96 - Maximum number of Hypertext Transfer Protocol (HTTP) operations per second achieved on the SPECweb96 benchmark without significant degradation of response time. The Web server software is ZEUS v.1.1 from Zeus Technology Ltd.
- SPECweb99 - Number of conforming, simultaneous connections the Web server can support using a predefined workload. The SPECweb99 test harness emulates clients sending the HTTP requests in the workload over slow Internet connections to the Web server. The Web server software is Zeus from Zeus Technology Ltd.
- SPECweb99_SSL - Number of conforming, simultaneous SSL encryption/decryption connections the Web server can support using a predefined workload. The Web server software is Zeus from Zeus Technology Ltd.
- SPEC OMP2001 - Measures performance based on OpenMP applications.
- SPECsfs97_R1 - Measures speed and request-handling capabilities of NFS (network file server) computers.

Revised May 28, 2003

Notes on Benchmarks and Values (Cont.)

-SPECjAppServer200X (where X is 1 or 2) - Measures the performance of Java Enterprise Application Servers using a subset of J2EE APIs in a complete end-to-end Web application.

The Linpack benchmark measures floating-point performance of a system.

-Linpack DP (Double Precision) - $n=100$ is the array size. The results are measured in megaflops (MFLOPS).

-Linpack SP (Single Precision) - $n=100$ is the array size. The results are measured in MFLOPS.

-Linpack TPP (Toward Peak Performance) - $n=1,000$ is the array size. The results are measured in MFLOPS.

-Linpack HPC (Highly Parallel Computing) - solves the largest system of linear equations possible. The results are measured in GFLOPS.

STREAM is a simple synthetic benchmark program that measures sustainable memory bandwidth (in MB/s) and the corresponding computation rate for simple vector kernels. Both standard and tuned results may be reported. <http://www.cc.virginia.edu/stream/>

VolanoMark is a 100% pure Java server benchmark that creates long-lasting network client connections in groups of 20 and measures how long it takes for the clients to take turns broadcasting their messages to the group. The benchmark reports a score as the average number of messages transferred by the server per second.

-The following Transaction Processing Performance Council (TPC) benchmarks reflect the performance of the microprocessor, memory subsystem, disk subsystem, and some portions of the network:

-tpmC - TPC Benchmark C throughput measured as the average number of transactions processed per minute during a valid TPC-C configuration run of at least twenty minutes.

-\$/tpmC - TPC Benchmark C price/performance ratio reflects the estimated five year total cost of ownership for system hardware, software, and maintenance and is determined by dividing such estimated total cost by the tpmC for the system.

-QppH is the power metric of TPC-H and is based on a geometric mean of the 17 TPC-H queries, the insert test, and the delete test. It measures the ability of the system to give a single user the best possible response time by harnessing all available resources. QppH is scaled based on database size from 30GB to 10TB.

-QthH is the throughput metric of TPC-H and is a classical throughput measurement characterizing the ability of the system to support a multiuser workload in a balanced way. A number of query users is chosen, each of which must execute the full set of 17 queries in a different order. In the background, there is an update stream running a series of insert/delete operations. QthH is scaled based on the database size from 30GB to 10TB.

-\$/QphH is the price/performance metric for the TPC-H benchmark where QphH is the geometric mean of QppH and QthH. The price is the five-year cost of ownership for the tested configuration and includes maintenance and software support.

Revised February 6, 2004

Notes on Benchmarks and Values (Cont.)

The following graphics benchmarks reflect the performance of the microprocessor, memory subsystem, and graphics adapter:

- SPECxpc results - Xmark93 is the weighted geometric mean of 447 tests executed in the x11perf suite and is an indicator of 2D graphics performance in an X environment. Larger values indicate better performance.
- SPECplb results (graPHIGS) - PLBwire93 and PLBsurf93 are geometric means of literal and optimized Picture Level Benchmark (PLB) tests for 3D wireframe and 3D surface tests, respectively. Larger values indicate better performance.
- SPECopc results - Viewperf 7 (3dsmax-01, DRV-08, DX-07, Light-05, ProE-01, UGS-01) and Viewperf 6.1.2 (AWadv-04, DRV-07, DX-06, Light-04, medMCAD-01, ProCDRS-03) are weighted geometric means of individual viewset metrics. Larger values indicate better performance.

The following graphics benchmarks reflect the performance of the microprocessor, memory subsystem, graphics adapter and disk subsystem.

- SPECapc Pro/Engineer 2000i2 results - PROE2000I2_2000370 was developed by the SPECapc committee to measure UNIX and Windows workstations in a comparable real-world environment. Larger numbers indicate better performance.

The NotesBench Mail workload simulates users reading and sending mail. A simulated user will execute a prescribed set of functions 4 times per hour and will generate mail traffic about every 90 minutes. Performance metrics are:

- NotesMark - transactions/minute (TPM).
- NotesBench users - number of client (user) sessions being simulated by the NotesBench workload.
- \$/NotesMark - ratio of total system cost divided by the NotesMark (TPM) achieved on the Mail workload.
- \$/User - ratio of total system cost divided by the number of client sessions successfully simulated for the NotesBench Mail workload measured. Total system cost is the price of the server under test to the client, including hardware, operating system, and Domino Server licenses.

Application Benchmarks

- SAP - Benchmark overview information: <http://www.sap-ag.de/solutions/technology/bench.htm>; Benchmark White Paper September, 2000; <http://www.sap-ag.de/solutions/technology/pdf/50020428.pdf>.
- PeopleSoft - To get information on PeopleSoft benchmarks, contact PeopleSoft directly or the PeopleSoft/IBM International Competency Center in San Mateo, CA.
- Oracle Applications - Benchmark overview information: http://www.oracle.com/apps_benchmark/
- Baan - The Baan benchmark demonstrates the scalability of Baan ERP solutions. The test results provide the number of Baan Reference Users (BRUs) that can be supported on a specific system. BRU is a single on-line user or a batch unit workload. These metrics are consistent with those used internally by both IBM and Baan to size systems. To get more information on Baan benchmarks, go to <http://www.ssaglobal.com>.
- J.D. Edwards Applications - Product overview information at <http://www.jdedwards.com>.

Revised December 9, 2003