IBM

eserver

iSeries. mySeries.

i5OS

i5/OS™ V5R3 and IBM eServer i5

Ian Jarman
iSeries Product Manager, IBM Rochester

IBM@server

zSeries®

- Most reliable, mission-critical data transaction servers

iSeries® + POWER5 = eServer i5

- Most flexible, integrated data transaction servers

pSeries® + POWER5 = eServer p5

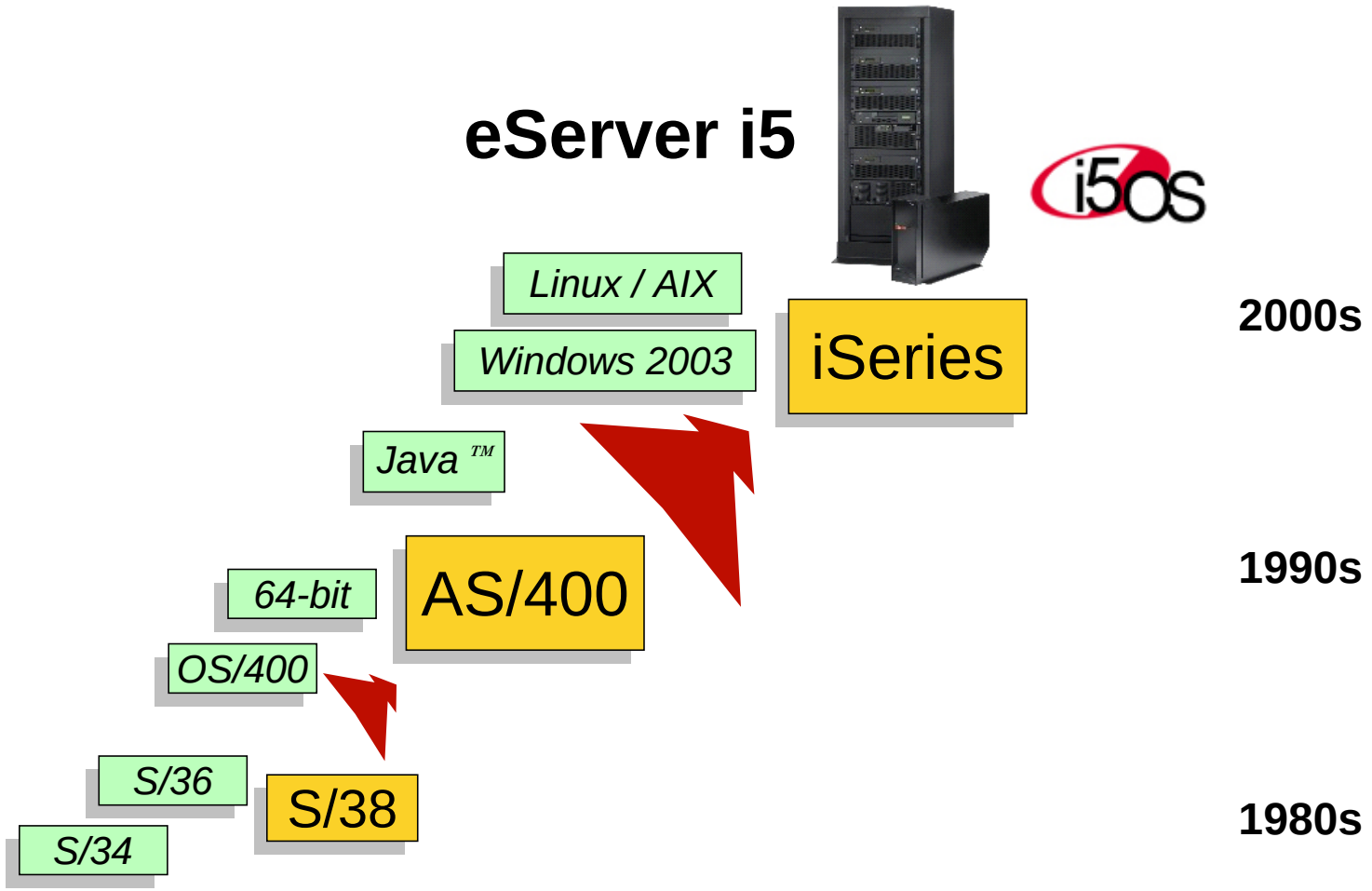
- Most powerful, technologically advanced UNIX® servers

xSeries®

- Most scalable Intel® processor-based servers with mainframe-inspired reliability technologies

© 2004 IBM Corporation

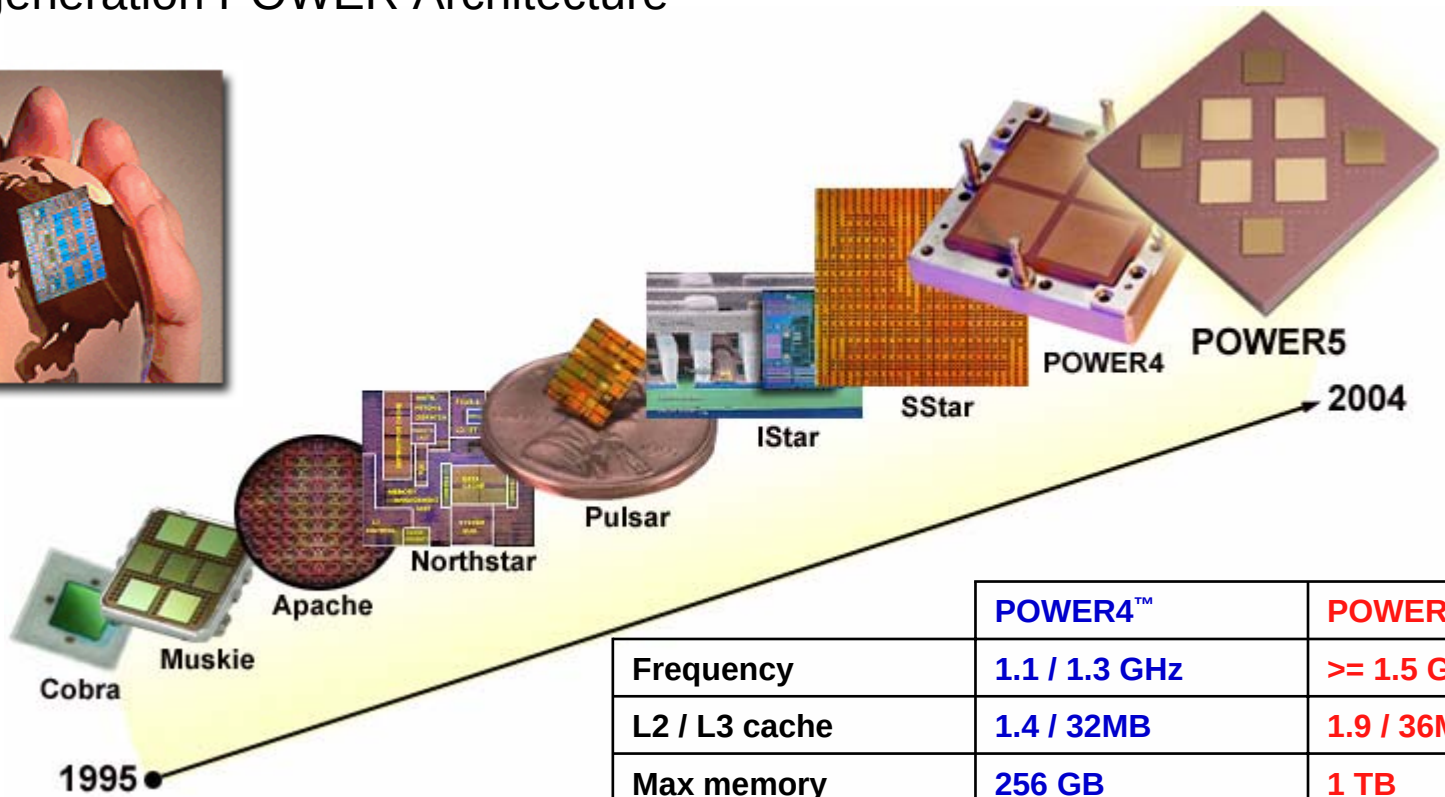
Innovation with Investment Protection



© 2004 IBM Corporation

IBM Innovation: Invest Without Disruption

- 9th generation 64-bit processor
- 5th generation POWER Architecture

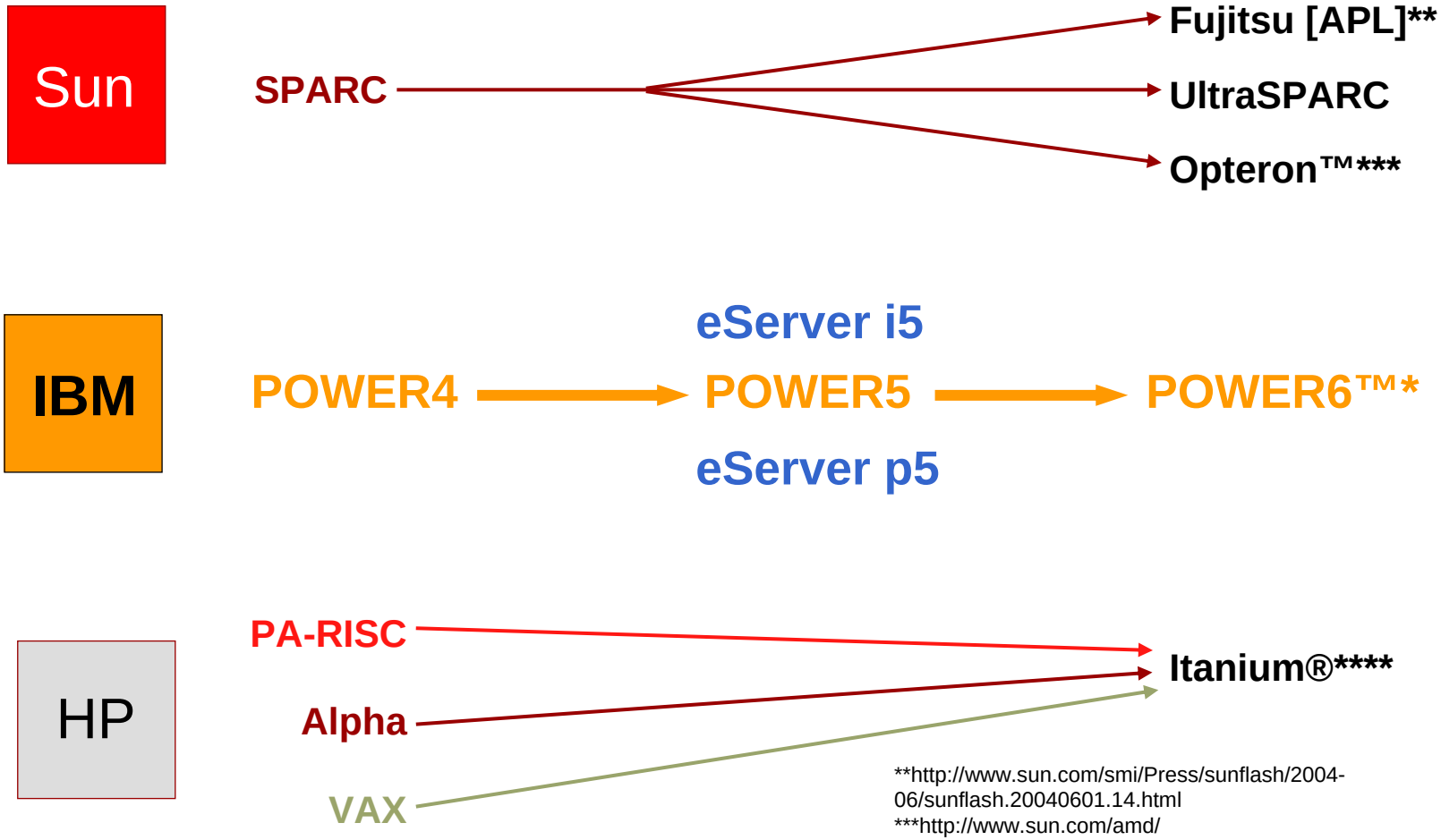


	POWER4™	POWER5
Frequency	1.1 / 1.3 GHz	>= 1.5 GHz
L2 / L3 cache	1.4 / 32MB	1.9 / 36MB
Max memory	256 GB	1 TB

© 2004 IBM Corporation

iSeries. mySeries.

IBM Innovation: Invest Without Disruption



**http://www.sun.com/smi/Press/sunflash/2004-06/sunflash.20040601.14.html
***http://www.sun.com/amd/
****http://h71033.www7.hp.com/page/ItaniumAnnment.html

© 2004 IBM Corporation

*All statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.

Positioning eServer i5 & eServer p5

IBM eServer i5 **Simplicity in an on demand world**	Feature fully integrated solutions including IBM middleware with maximum flexibility in operating system choice
IBM eServer p5 **Make no compromises. Accept no limitations.**	Feature innovative and affordable POWER systems to serve the multiple workloads of the UNIX and Linux marketplace

© 2004 IBM Corporation

Integrated Middleware Differentiates eServer i5

- IBM middleware integration delivers low operations and support costs
- Robust stability, a consistent middleware base, & IBM partnership and support attracts ISVs
- Exceptional application investment protection with binary compatibility since 1970s, 64-bit since 1995
- WebSphere - Express for iSeries now integrated and shipped with i5/OS

i5OS

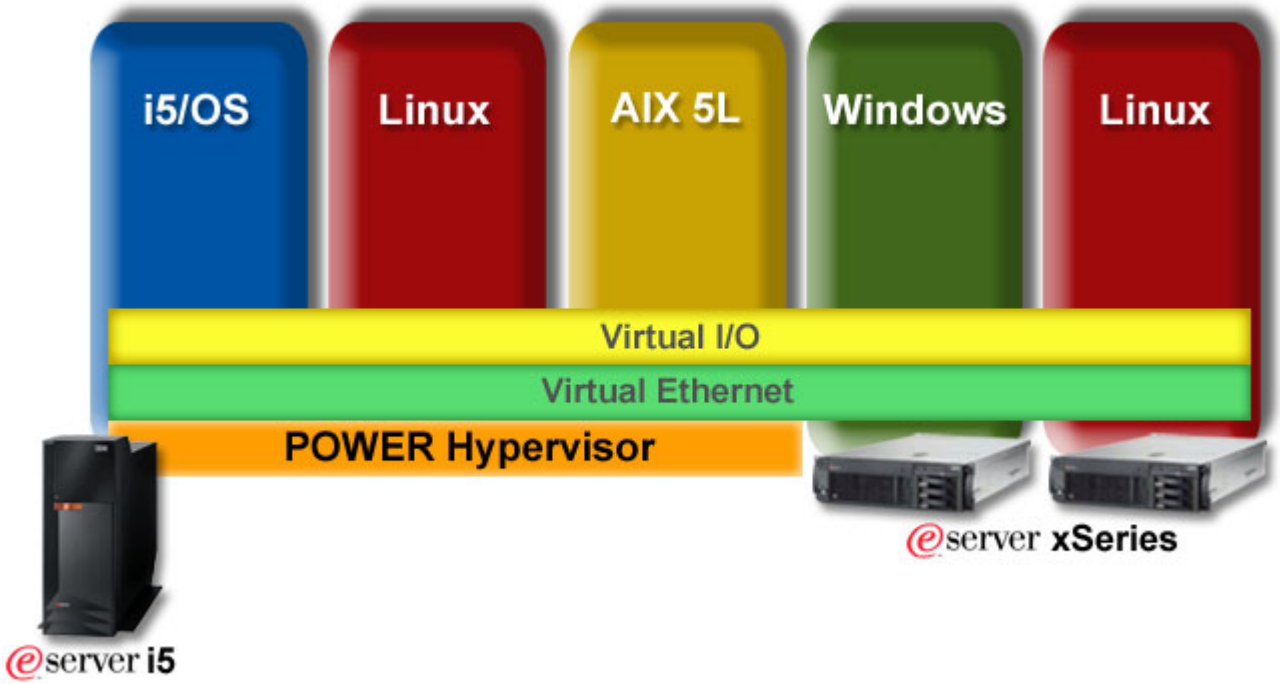
WebSphere software

DB2 Data Management Software

© 2004 IBM Corporation

iSeries. mySeries.

Simplify Your Infrastructure

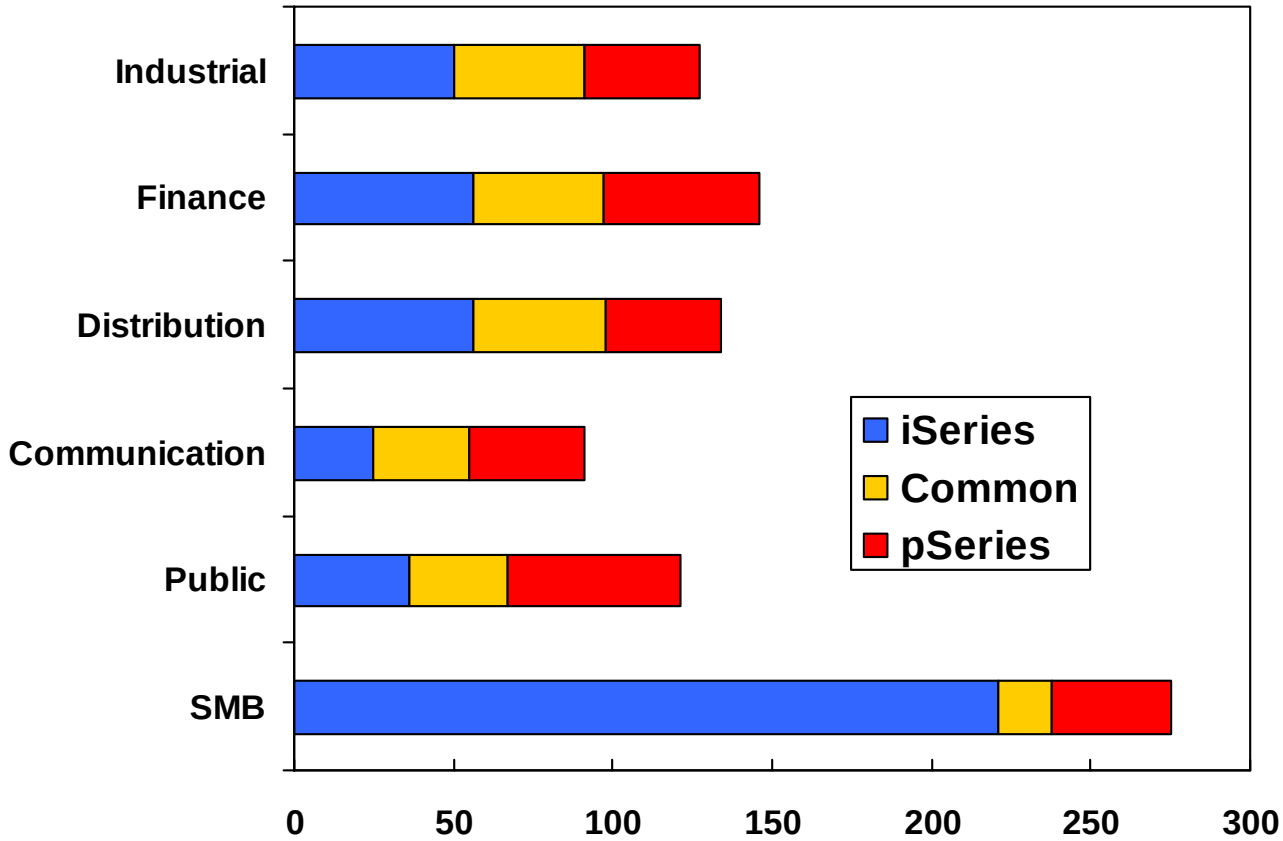


"As well as consolidating physical servers, the iSeries provides an easy way to integrate multiple environments. iSeries is the ultimate server for integration, and it has delivered immediate and significant advantages."

Jan van de Straat, Director of R&D, Gemeente Harlem

© 2004 IBM Corporation

ISV SMB Solutions Differentiate eServer i5



© 2004 IBM Corporation

iSeries servers

i890

i870

i825

i810

iSeries 800

Medium to Large Enterprises

Small to Medium Enterprises

eServer i5 servers

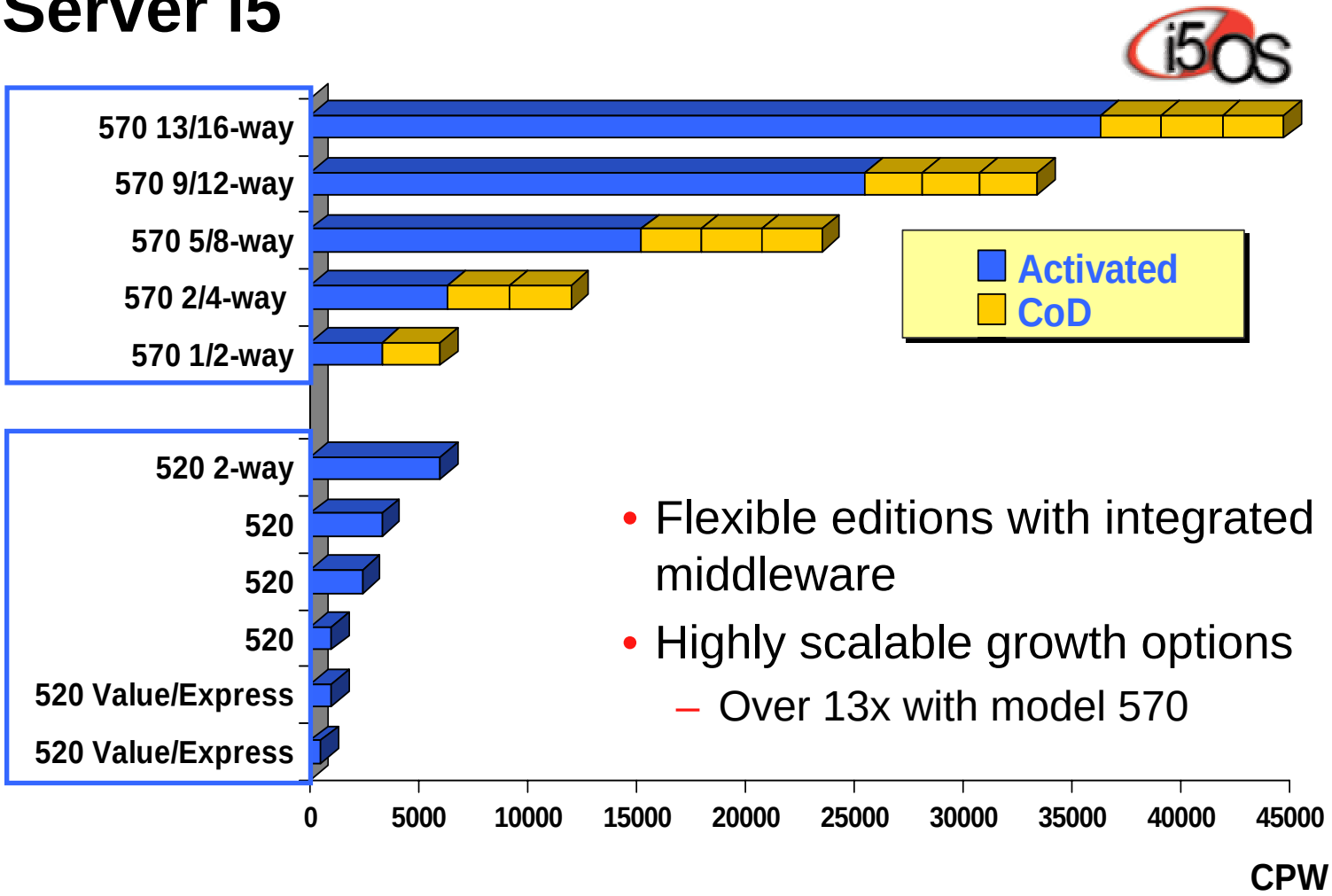
570

Up to 16-way
GA 8/31

520

© 2004 IBM Corporation

IBM eServer i5



- Flexible editions with integrated middleware
- Highly scalable growth options
  - Over 13x with model 570

© 2004 IBM Corporation

iSeries. mySeries.

New Economic Model Realigns Price & Value

- Common price for common hardware
  - Same price as eServer p5 for memory, disk, processor activations etc
- Capture value of i5/OS and IBM middleware with Editions
  - Aggressive price/performance improvements on Editions
- Aggressive new entry prices target new customer growth
  - Rich configurations of 520 Express Edition starting at $11,500
- New, flexible on demand pricing to run mixed workloads in an on demand operating environment

WebSphere software

DB2 Data Management Software

i5/OS

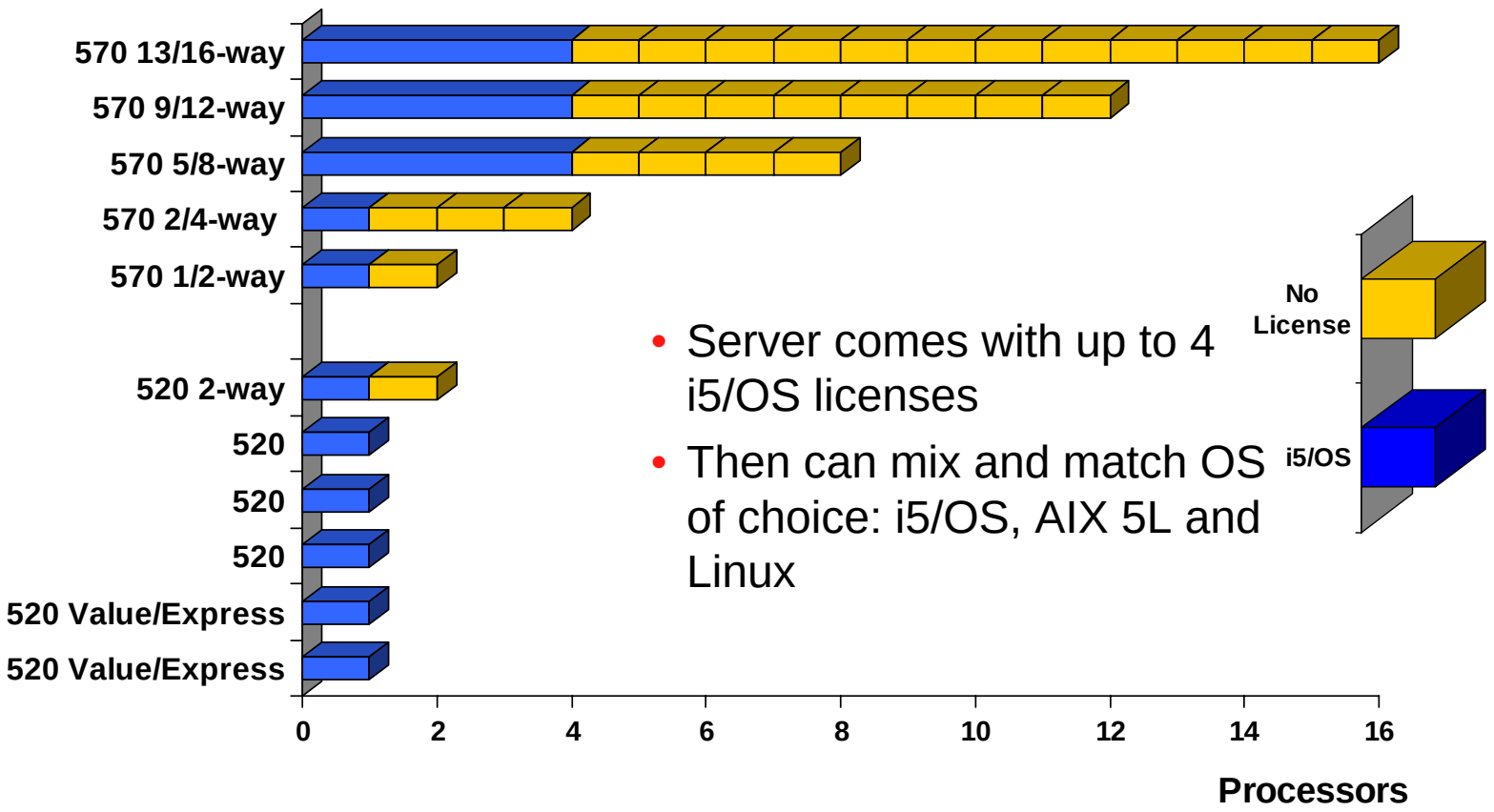
© 2004 IBM Corporation

Introducing Flexible On Demand Pricing

- eServer i5 is the industry's most flexible server, running multiple operating systems including i5/OS, AIX 5L, Linux and Windows® System Server
- New, flexible on demand pricing establishes a new economic model for running mixed workloads in an on demand operating environment
- Introduces new value and flexibility for clients running i5/OS with mixed application workloads
- Clients can choose the applications they need for their business
- Clients can buy what they need and pay as they grow

© 2004 IBM Corporation

IBM eServer i5 – Standard Edition & i5/OS



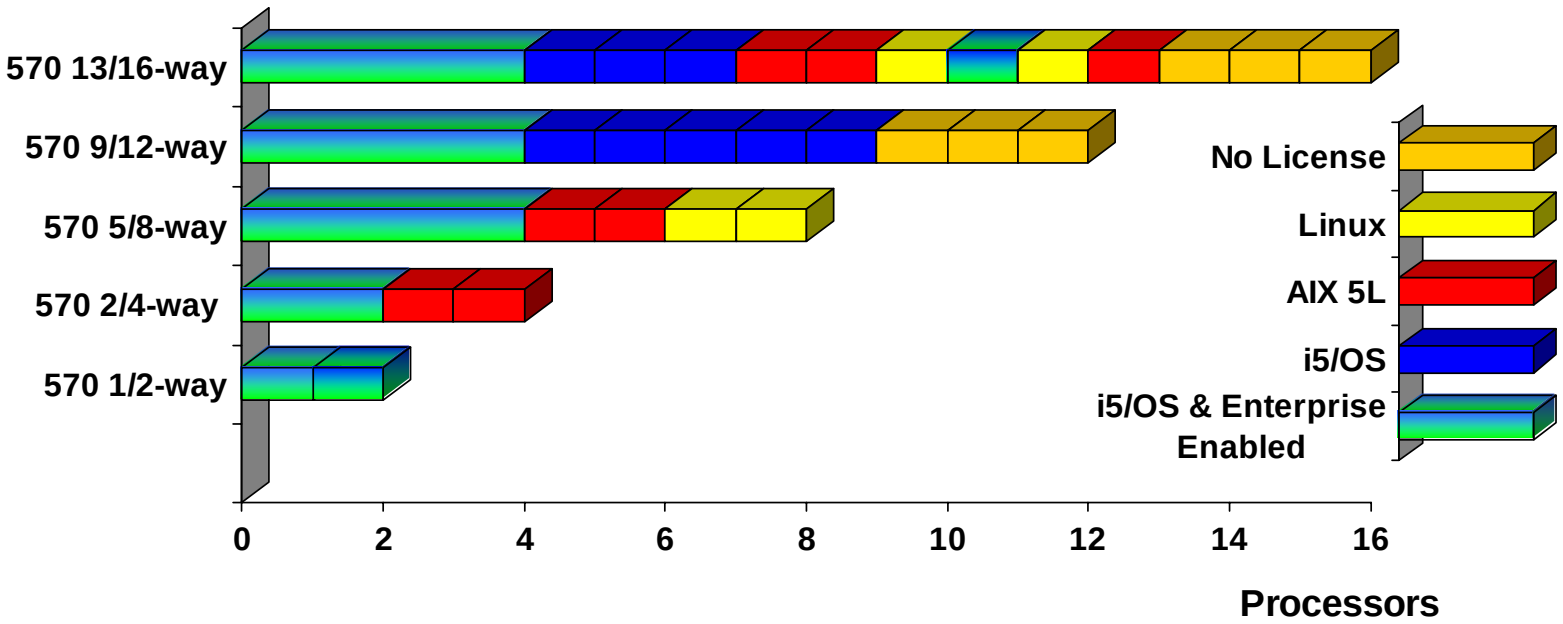
- Server comes with up to 4 i5/OS licenses
- Then can mix and match OS of choice: i5/OS, AIX 5L and Linux

© 2004 IBM Corporation

iSeries. mySeries.

570 Enterprise Edition Examples

Flexible on demand pricing options

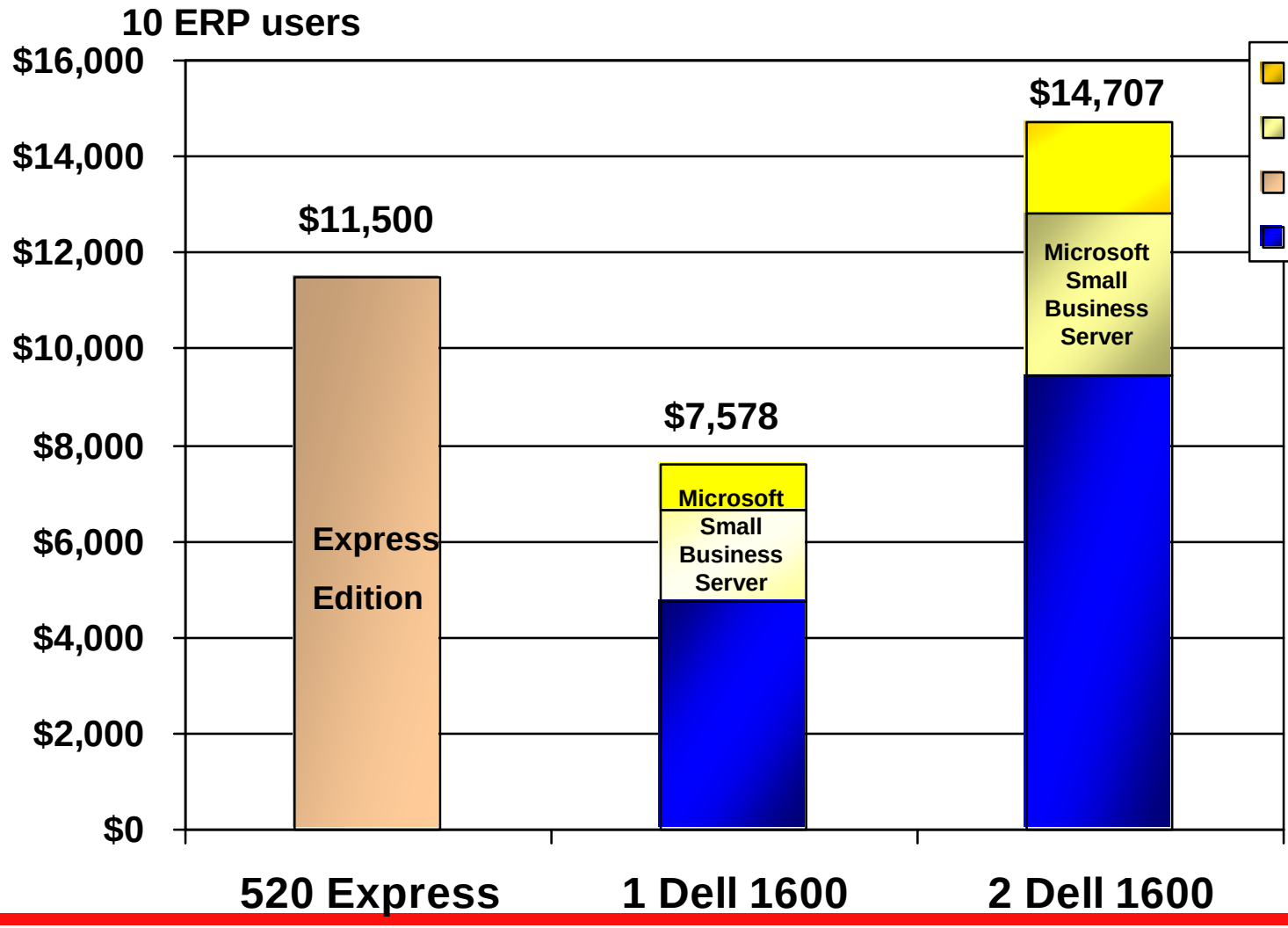


- Mix workloads in an on demand operating environment
- Mix and match i5/OS application workloads

© 2004 IBM Corporation

iSeries. mySeries.

Cost: 520 Express vs Dell - Total Solution Compare



Always include full stack with database in price comparisons

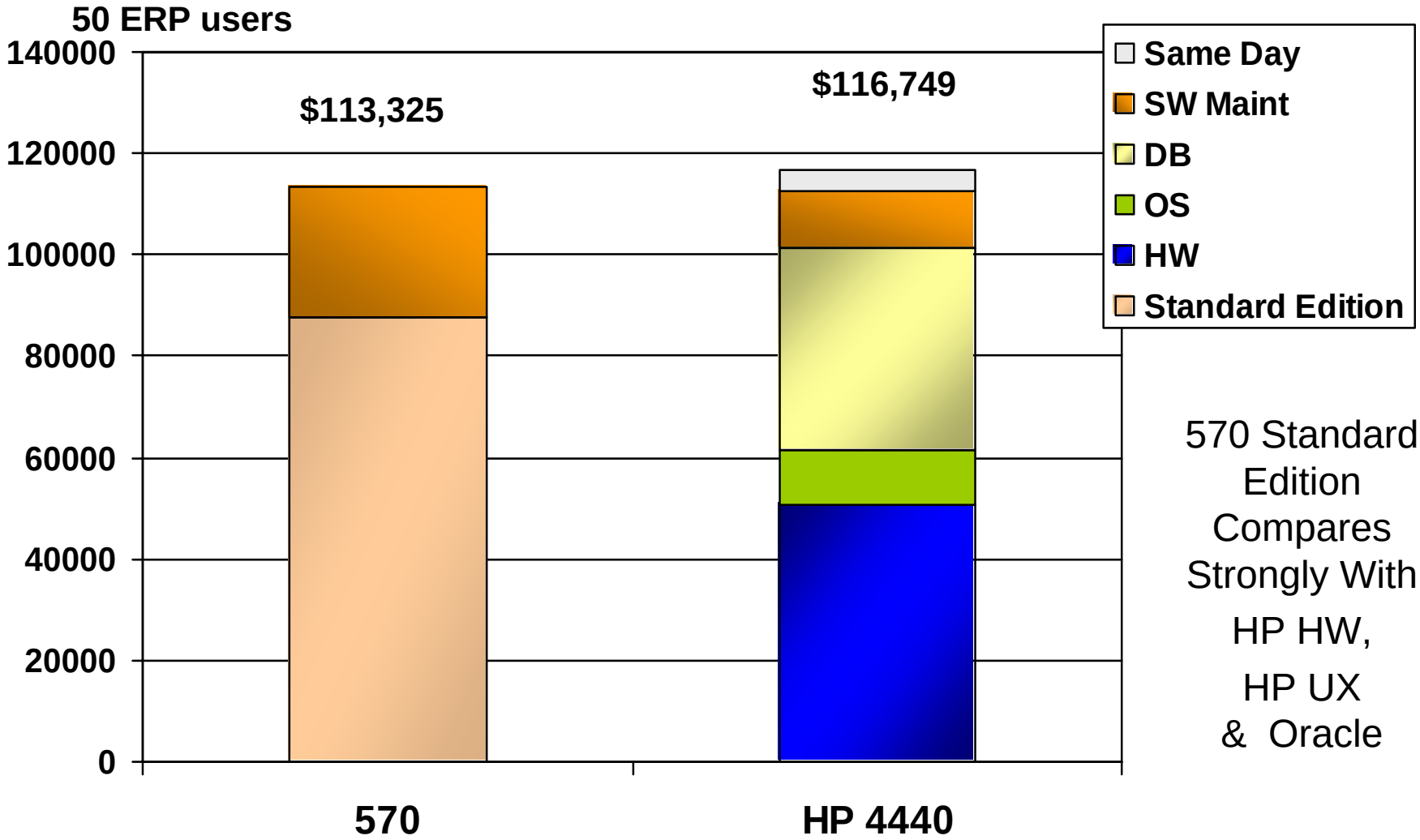
Note:
eServer i5 Runs Multiple Workloads on Single Server

© 2004 IBM Corporation

iSeries. mySeries.

Source of Dell Prices: http://www1.us.dell.com/content/products/compare.aspx/rack_optimized?c=us&cs=555&l=en&s=biz 4/29/2004

Cost: 570 1-way vs HP - Total Solution Compare



570 Standard Edition Compares Strongly With HP HW, HP UX & Oracle

Source of HP Prices: HP WEBSITE 4/26/2004 http://h30099.www3.hp.com/configurator/index.asp

© 2004 IBM Corporation

Analysts Positively Review IBM Strategy for Common Technology for POWER5 Servers

- "If any IBM server has benefited from the convergence of IBM's server divisions, it's the iSeries."
- "IBM solved the issue of maintaining hardware investment in the iSeries by moving the product over to the same hardware technology as used in its pSeries Unix servers."
- "The investment in the OS/400 operating system continues as strongly as ever."
- "In terms of IBM's commitment, the iSeries continues as a "safe" platform for clients to invest in for the 5-year time-span covered by Gartner's typical forecast period (i.e., to 2008)."

Source: Ian Brown, Gartner Group *IBM eServer iSeries Midrange Servers* DPRO-95458

© 2004 IBM Corporation

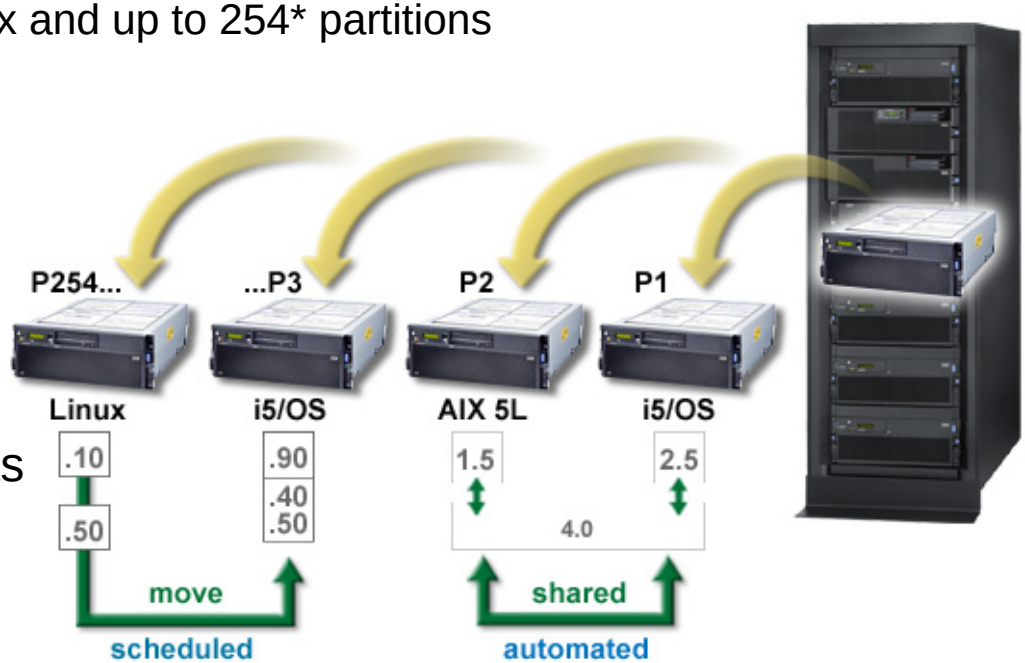
i5/OS – The next generation of OS/400

- i5/OS V5R3 is an integrated operating system that builds on and extends the capabilities of OS/400 V5R2
- i5/OS V5R3 runs on IBM @server i5 servers, IBM @server iSeries servers and IBM AS/400® models 170, 720, 730, and 740
- Upgrades to i5/OS V5R3 are available from OS/400 V5R2 and V5R1

© 2004 IBM Corporation

i5/OS V5R3 Dynamic Logical Partitioning

- Features new POWER Hypervisor™ for i5/server
  - Supports i5/OS, AIX 5L and Linux and up to 254* partitions
- Increase server utilization rates across multiple workloads
  - Automatic processor balancing with uncapped partitions
- Improve fault tolerance and lower partition management costs
  - Primary partition replaced by Hardware Management Console (HMC)



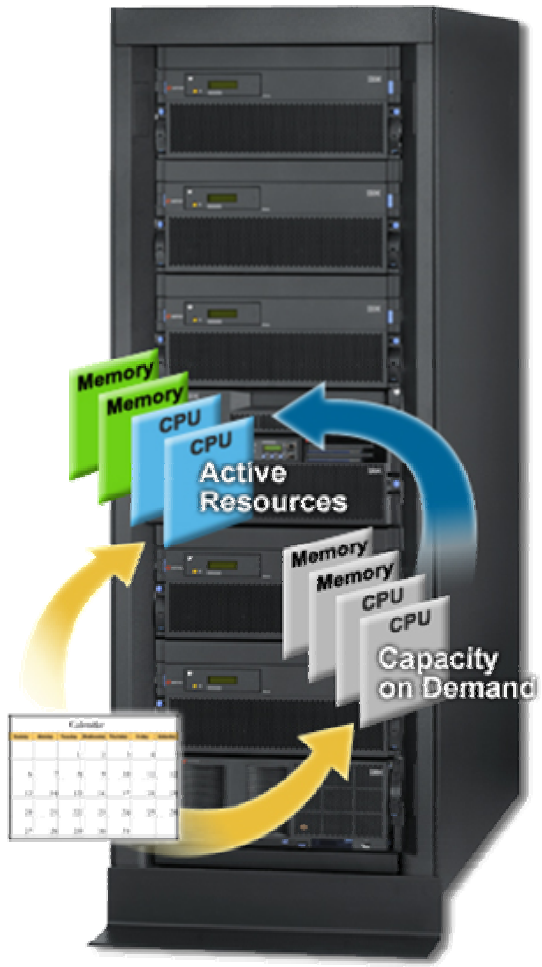
- *An IBM Virtualization Engine systems technology*

* Product Preview Up to 40 with 570 4-way. This presentation contains information about IBM's plans and directions. Such plans are subject to change without notice.

© 2004 IBM Corporation

iSeries. mySeries.

Optimize IT Resources to Changing Business Needs



- Capacity Upgrade on Demand
- On/Off Capacity on Demand
- New Memory Capacity on Demand
- New Reserve Capacity on Demand
  - Automatically enable reserve capacity if processor utilization reaches 100%

"On/Off Capacity on Demand is like having a line of credit. The iSeries provides us with the flexibility to pay for only what we use, and saves us the cost of installing additional server capacity that likely would be underutilized"

Marshall Andrew, VP Information Technology
Station Casinos

© 2004 IBM Corporation

iSeries. mySeries.

Choose the Applications to Grow Your Business

"The IBM eServer i5 enables PeopleSoft customers to run our applications across multiple operating environments without adding complexity. Now customers can deploy AIX-based PeopleSoft Enterprise Advanced Supply Chain Planning to run co-resident, allowing customers to build on their existing skill base and infrastructure."

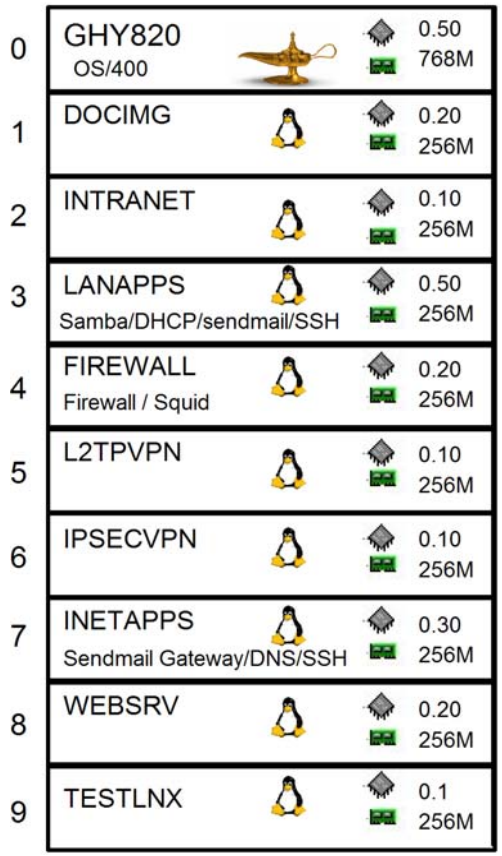
Les Wyatt, General Manager
PeopleSoft EnterpriseOne

- AIX 5L on eServer i5 GA 8/31/2004
  - AIX 5L 5.2 supported
  - AIX 5L 5.3 supports micro-partitioning, Virtual Storage and Virtual Ethernet
    - Single storage & backup management

© 2004 IBM Corporation

iSeries. mySeries.

Deploy Open Infrastructure Applications Without Starting Another Server Farm



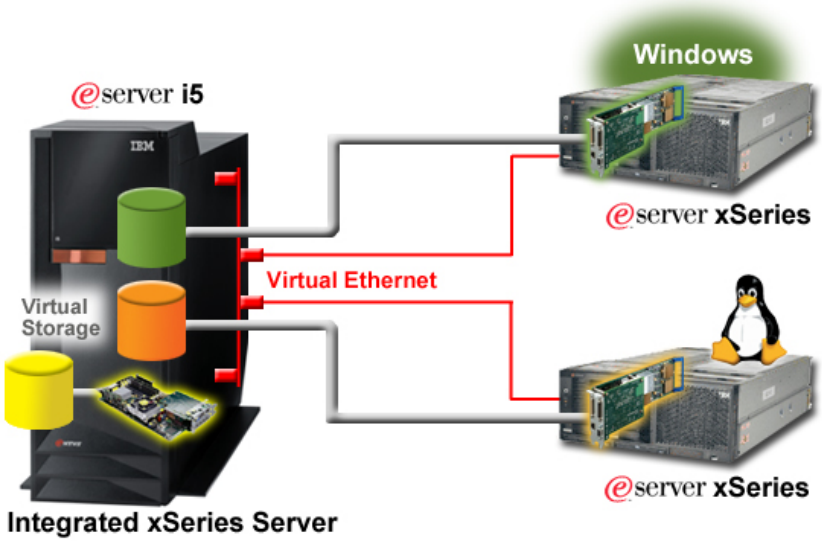
"We selected Linux on the iSeries because it was such a compelling alternative to the cost and complexity of managing nine separate Intel-based servers."

Nigel Fortlage,
Vice President of IT, GHY

- Linux on POWER
  - Up to 254 Linux partitions
  - Automatic processor balancing
- Red Hat Enterprise Linux 3
  - Update 3 GA on 9/30
- SUSE LINUX Enterprise Server 9
  - GA 8/31

© 2004 IBM Corporation

Lower The Cost of Intel Server Management



- Consolidate Intel® processor-based servers
  - Windows Server 2003 or Linux*
- Reduce cost by integrating storage, backup and security management

"The superior manageability of this system helps us reduce costs and realize impressive return on investment. Everything—from daily management of the servers to new software installation—has been easy with the iSeries and xSeries environment."

Jim Horio

IT Director, Asian Art Museum

* Product Preview. Planned availability 3Q 2004 This presentation contains information about IBM's plans and directions. Such plans are subject to change without notice.

© 2004 IBM Corporation

WebSphere Application Server

- WebSphere Application Server – Express now available with every @server and upgrade to i5/OS V5R3
- Tightly integrated with i5/OS V5R3
  - Includes new IBM Survey application, in addition to IBM Telephone Directory
- Over 200 iSeries ISV's currently enabled for WAS V5
  - Plan for WAS V6 in 2H2004*

WebSphere software

* This presentation contains information about IBM's plans and directions. Such plans are subject to change without notice.

© 2004 IBM Corporation

iSeries. mySeries.

WebSphere Development Studio for iSeries

- Integrated tools unlock greater productivity by bringing order and collaboration to development teams
- Shipped 130,000 copies of WebSphere Development Studio
- IBM WebFacing Tool enhanced to dynamically convert UIM-based 5250 system screens
- Improve productivity with enhancements to Control Language (CL), RPG, Java, COBOL, OS/400 PASE* with i5/OS

© 2004 IBM Corporation

IBM

e server

iSeries. mySeries.

i5OS

Trademarks and Disclaimers

© IBM Corporation 1994-2004. 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 or registered trademarks of International Business Machines Corporation in the United States, other countries, or both:

AIX	DB2 Universal	eServer	Lotus	Power Architecture	RS/6000	z/OS
AIX/L	DB2 OLAP Server	Enterprise Storage Server	MQSeries	Power Everywhere	S/390	zSeries
AIX 5L	DataPropagator	Hipersockets	Notes	POWER Hypervisor	ThinkPad	400
AIX 5L (logo)	Domino	IBM	OS/400	POWER6	Tivoli	i5/OS
AS/400	e business(logo)	IBM Virtualization Engine	POWER	pSeries	TotalStorage	
AS/400e	e(logo)business	IBM(logo)	POWER4	Quickplace	WebSphere	
DB2	e(logo)server	iSeries	POWER5	Rational	xSeries	

Lotus, Freelance Graphics, and Word Pro are registered trademarks of Lotus Development Corporation and/or IBM Corporation.
Domino is a trademark of Lotus Development Corporation and/or IBM Corporation.

C-bus is a trademark of Corollary, Inc. in the United States, other countries, or both.
Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. 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.
ActionMedia, LANDesk, MMX, Pentium and ProShare are trademarks of Intel 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.
SET and the SET Logo are trademarks owned by SET Secure Electronic Transaction LLC.
Other company, product and 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 in this presentation 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 in this presentation 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.

Photographs shown are of engineering prototypes. Changes may be incorporated in production models.