



Business Critical Servers Portfolio Overview

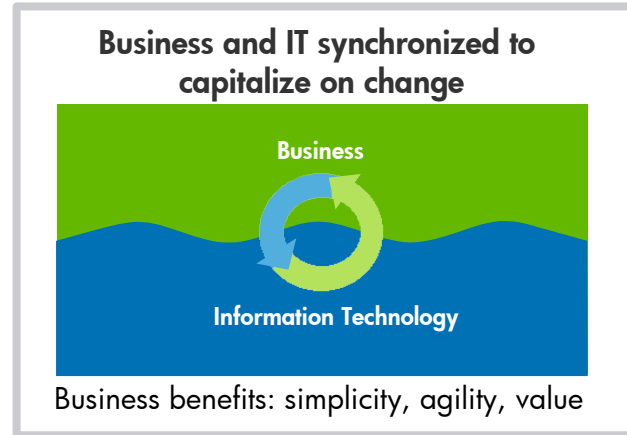
Cupertino, CA
February 7th, 2006

Gabriella Guazzo
BCS Product Marketing
Latin America

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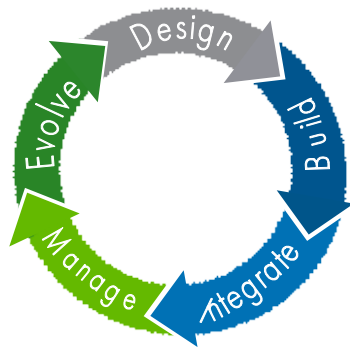


Powering the Adaptive Enterprise: HP Storage and Servers



Our Approach

Understanding customer needs



Flexibility in engagement

Our Portfolio



The right combination

HP delivers the best solution to customers' specific business/IT problems

HP server and storage portfolio

The world's broadest, most robust enterprise offering



Access *(low-end)*

ProLiant DL/ML
100 & 300 series



ProLiant BL
e-Class



Integrity
rx4640



Integrity
rx2620



rx1620

Application *(mid-range)*



ProLiant DL/ML
500 series



ProLiant BL
p-Class



Integrity
rx8620



Integrity
rx7620

Database *(High-End)*



ProLiant
DL 700
series



Integrity
Superdome

Multi-OS



HP-*ux*11i

Microsoft
Windows Server 2003



Intel® Itanium® Processor Family Roadmap

2004

2005

2006

2007

Future

Leading Performance

4S+	Itanium® 2 Processor (Madison 9M) 1.6 GHz, 9M	Montecito Dual Core, 24MB Multi-threading	Montvale Dual Core, Multi-threading	Tukwila Multi-core	Poulson
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Leading \$/FLOPS

2S	Itanium® 2 Processor (Fanwood) 1.6 GHz, 3M, DP	Millington DP, Montecito-based	DP Montvale DP, Montvale-based	Dimona DP, Tukwila-based	Future DP, Poulson-based
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Lower Power

2S	LV Itanium® 2 Processor (LV Fanwood) 1.3 GHz, 3M, DP	LV Millington DP, Low Voltage, Montecito-based	LV Montvale DP, Low Voltage, Montvale-based	LV Dimona DP, Low Voltage, Tukwila-based	Future DP, Low Voltage, Poulson-based
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New Technologies

- Multi-core
- Multi-threading
- Dynamic performance boost (Foxton)
- Dynamic power management (DBS)
- Cache reliability (Pellston)
- Virtualization (Vanderpool)
- Multi-core enhancements
- Enhanced RAS
- Enhanced virtualization
- Enhanced I/O & memory
- Common system architecture w/ Intel® Xeon™

All products, dates, comparisons, and information are preliminary and subject to change without notice.

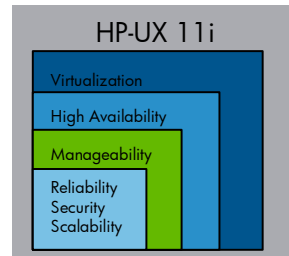


HP Integrity servers: Meeting diverse business needs



- **Strengthening**

HP-ux11i



- **Deepening** value-added capabilities for **Linux**



simply change



redhat.

- **Driving 64-bit Windows** growth with Microsoft

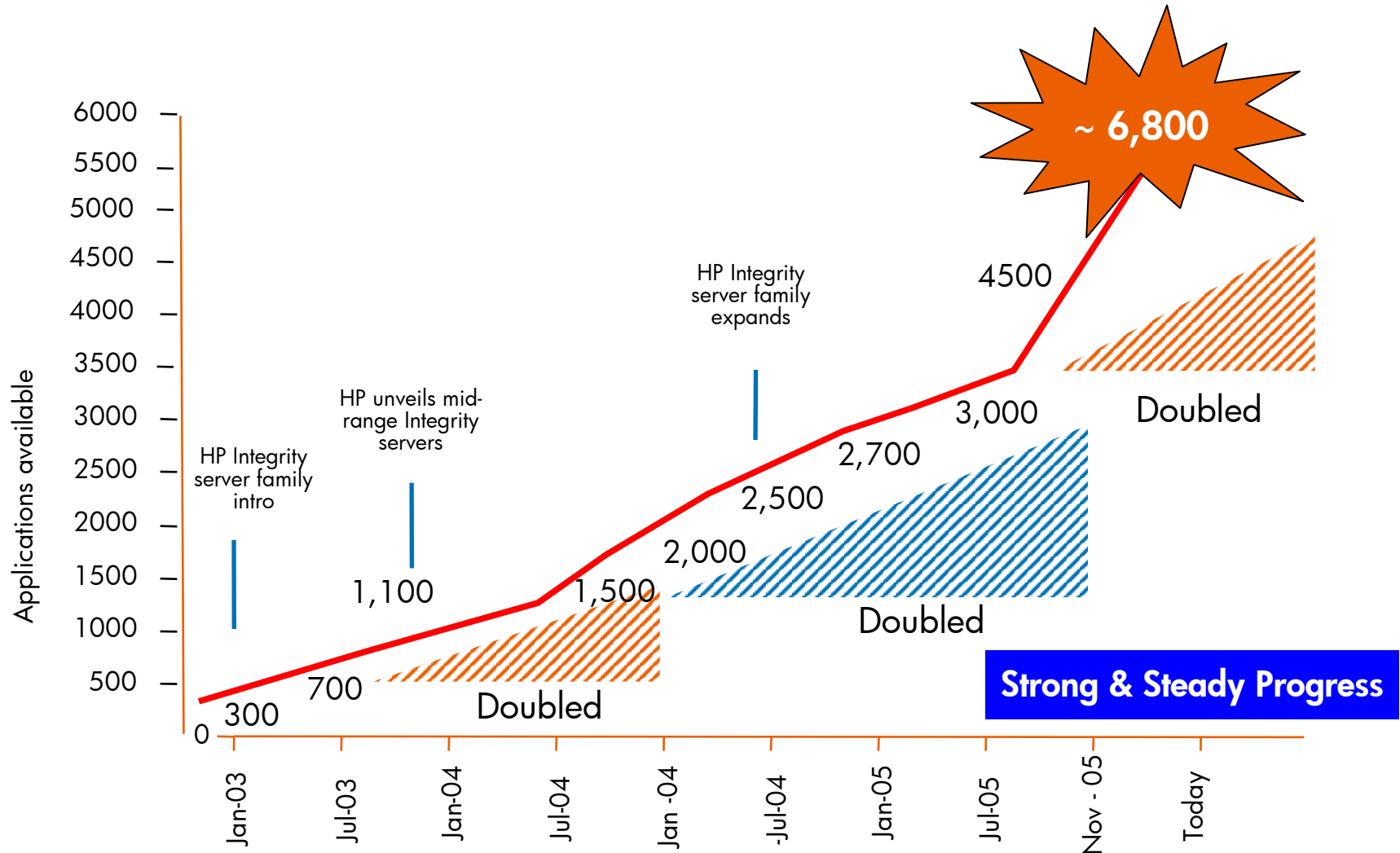


- **Continuing** the roll-out of **OpenVMS**



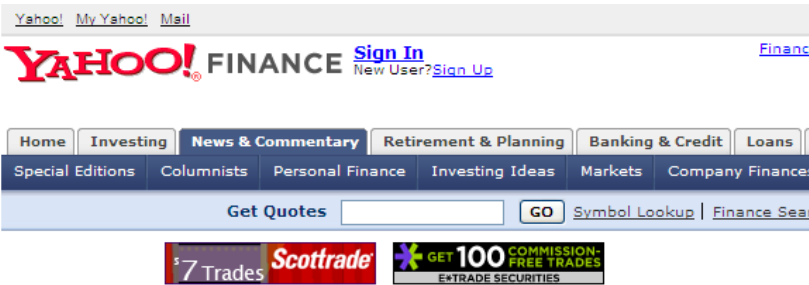
Investment protection with increased flexibility

HP Integrity server momentum continues: more customers, more ISVs

<https://h20299.www2.hp.com/Customertool>

Oracle Pricing and Licensing Policy



<http://biz.yahoo.com/prnews/051219/sfm063.html?.v>

"...The new policies improve parity among hardware vendors and help ensure that customers receive the most advantageous pricing for their Oracle technology software, regardless of the hardware on which it is deployed..."

Press Release

Source: Oracle Corporation

Oracle(R) Rolls Out New Multi-Core Pricing and Licensing Policy

Monday December 19, 4:05 pm ET

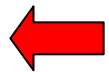
Helps Customers Take Advantage of Advancements in Multi-Core Chip Technology

REDWOOD SHORES, Calif., Dec. 19 /PRNewswire-FirstCall/ -- As part of its continued commitment to provide customers with simple, flexible and transparent licensing models, Oracle (Nasdaq: [ORCL](#) - [News](#)) today announced an update to its multi-core processor pricing and licensing policy. The new policies improve parity among hardware vendors and help ensure that customers receive the most advantageous pricing for their Oracle technology software, regardless of the hardware on which it is deployed.

(Logo: <http://www.newscom.com/cgi-bin/prnh/20020718/ORCLLOGO>)

After working closely with its customers over the past several months, Oracle chose to update its pricing policies to help customers take advantage of the recent advancements in multi-core processor chips from leading vendors such as AMD, IBM, Intel and Sun Microsystems. While Oracle will continue to recognize each core as a separate processor, the processor definition has been amended as it relates to counting multi-core chips to determine the total number of processor licenses required. Now, the required processor licensing is dependent upon the specific multi-core chip on which the Oracle software is deployed.

Oracle Processor Licensing	Processor Factor
UltraSparc T1 (indicated)	0.25
AMD/Intel (including Notebook)	0.50
All other Multi-core Servers (Power/PAISC/Sparc)	0.75
Single Core Server	1.00



Oracle Processor Licensing:	Processor Factor
UltraSparc T1	0.25
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HP server and storage portfolio

The world's broadest, most robust enterprise offering



Access (low-end)

- ProLiant DL/ML 100 & 300 series
- ProLiant BL e-Class
- Integrity rx4640
- Integrity rx2620
- Integrity rx1620

Application (mid-range)

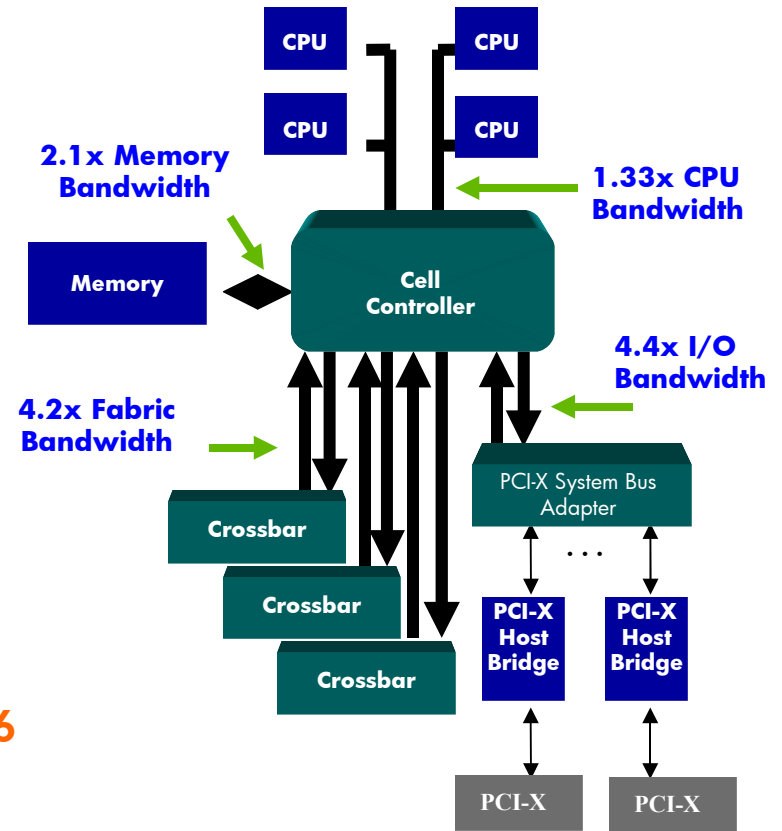
- ProLiant DL/ML 500 series
- ProLiant BL p-Class
- Integrity rx8620
- Integrity rx7620

Database (High-End)

- ProLiant DL 700 series
- Integrity Superdome

Under NDA until March 20th, 2006

New sx2000 chipset



Multi-OS



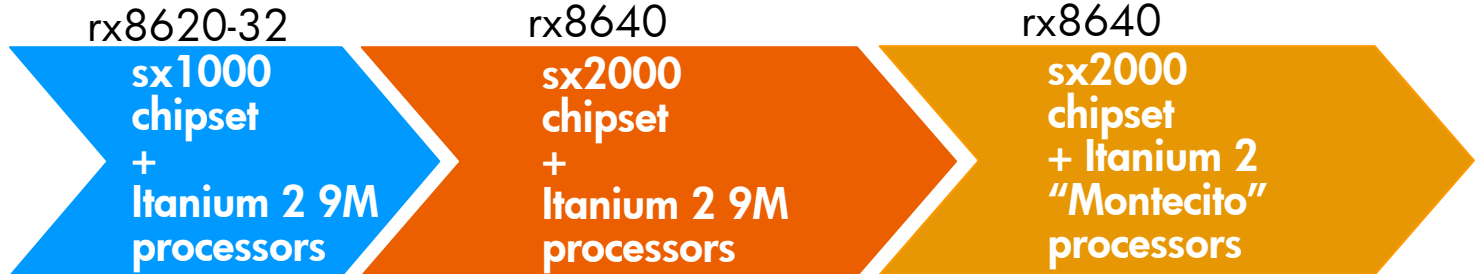
Investment protection with the sx2000 chipset



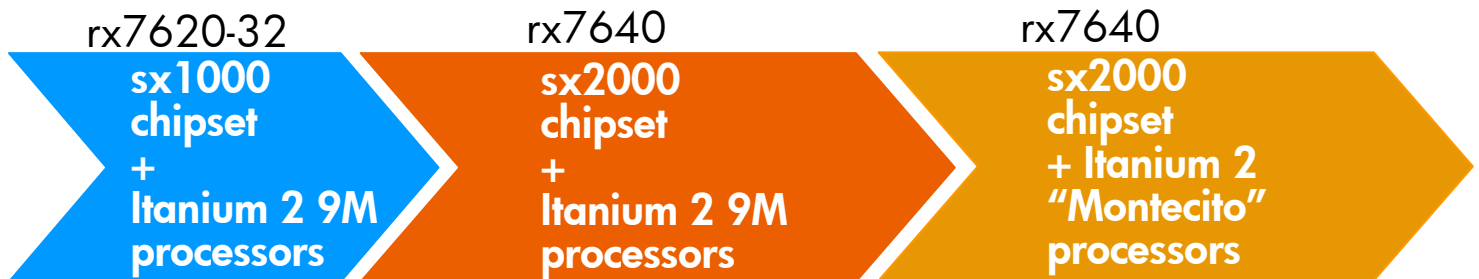
Integrity Superdome



rx8620



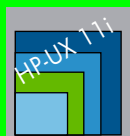
rx7620



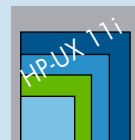
HP extends the HP Integrity family with the blade servers



- HP Integrity Investment Protection, Reliability, Security, and Flexibility
- Enterprise & Industry Standard Operating Environments
- Common HP Integrity and HP Proliant manageability for BL60p
- Mission Critical Technologies across Integrity rack mount servers
 - HP-UX, Windows, & Linux fail-over support
 - HP Virtual Server Environment
 - Clustering Support



BL60p
2-way



rx1620 & rx1600
1U, 2-way



rx2620
2U, 2-way



rx4640
4U, 4-way



rx7620
9U, 8-way



rx8620
17U, 16-way



Superdome
64-way*

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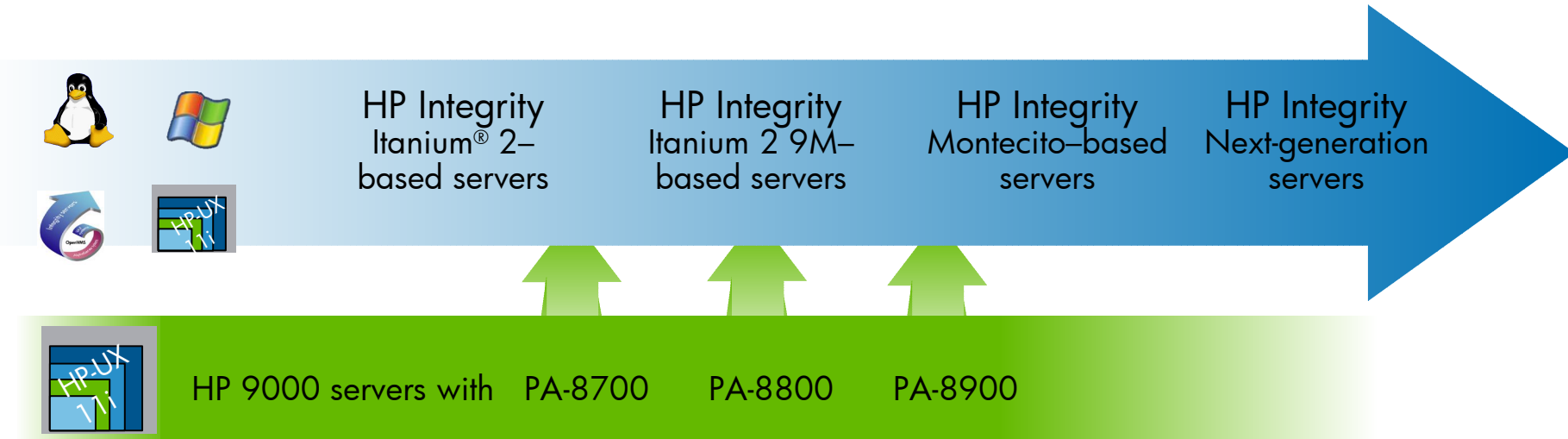
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Application <i>(mid-range)</i>	<p>ProLiant DL/ML 500 series</p>	<p>ProLiant BL p-Class</p>	<p>Integrity rx8620</p>	<p>Integrity rx7620</p>	<p>rp8420-32</p>	<p>rp7420-16</p>

Database <i>(high-end)</i>	<p>ProLiant DL 700 series</p>	<p>Integrity Superdome</p>	<p>HP 9000 Superdome</p>

Multi-OS				
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Evolution: HP 9000 server new PA-8900 processors



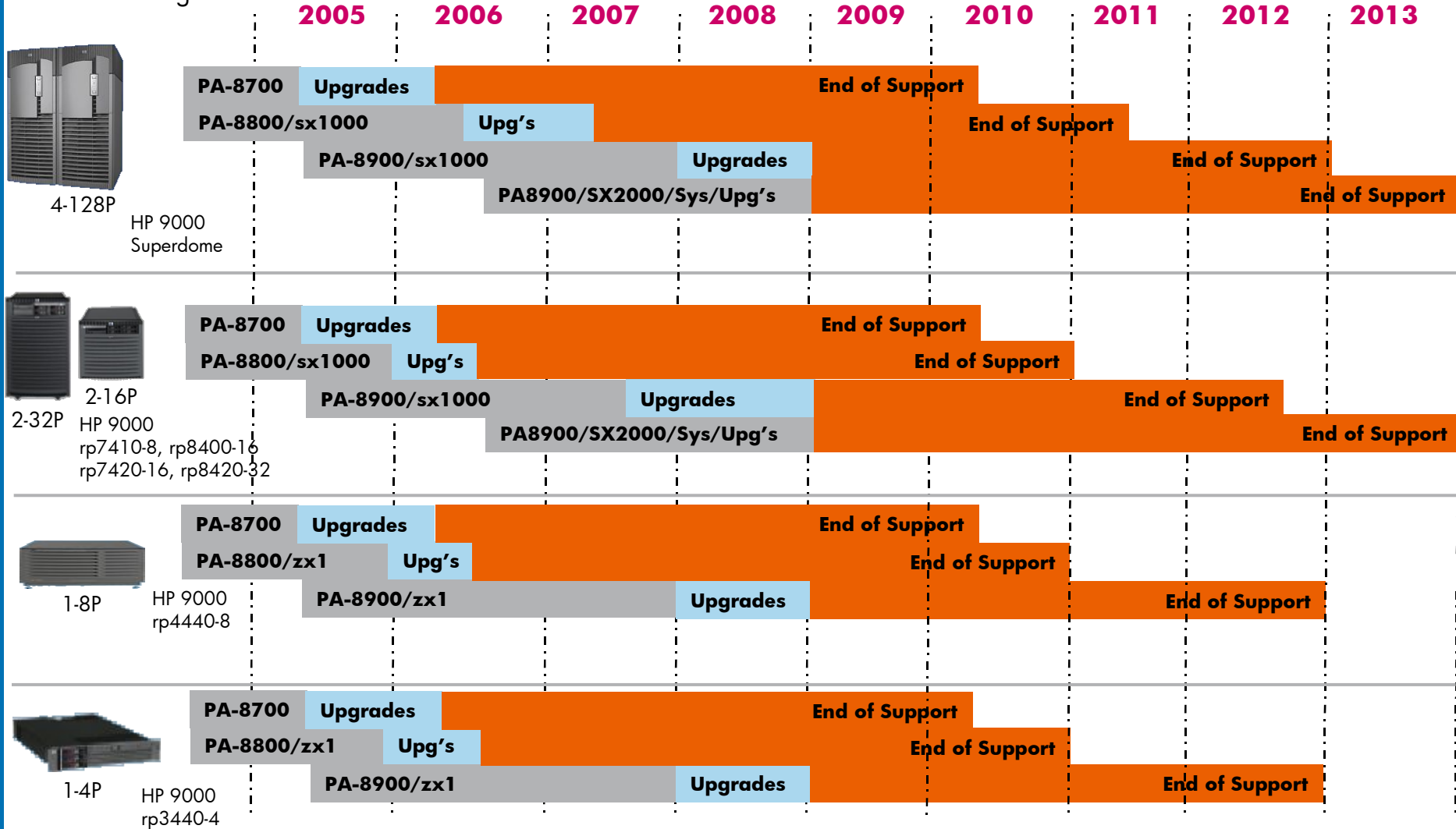
PA-8900 processors complete the PA-RISC roadmap with enhanced performance and scalability for HP 9000 servers

Investment protection for customers as they move to standards

HP 9000 Proposed PA-RISC EOL Server Roadmap



Current offering



Easing the transition to Integrity Superdomes: Mixing and matching processors

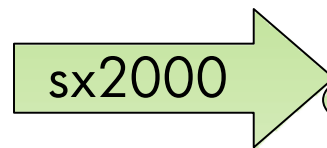
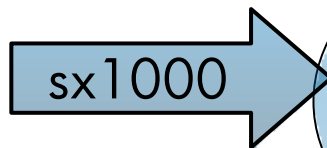


"I want to test out Integrity servers in my environment before I migrate over."

Integrity Superdome



Cell Board



Processor

- Itanium 2 6M CPU
- Itanium 2 9M CPU
- mx2 dual processor module
- PA-8800
- PA-8900

Mad/9M & "Montecito"

Addressing the customer need (1 full cell board swap)

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Access <i>(low-end)</i>	<p>ProLiant DL/ML 100 & 300 series</p>	<p>ProLiant BL e-Class</p>	<p>Integrity rx4640</p>	<p>Integrity rx2620</p>	<p>Integrity rx1620</p>	<p>rp4440-8</p>	<p>rp3440-4</p>	<p>rp3410-2</p>	<p>AlphaServer DS series</p>
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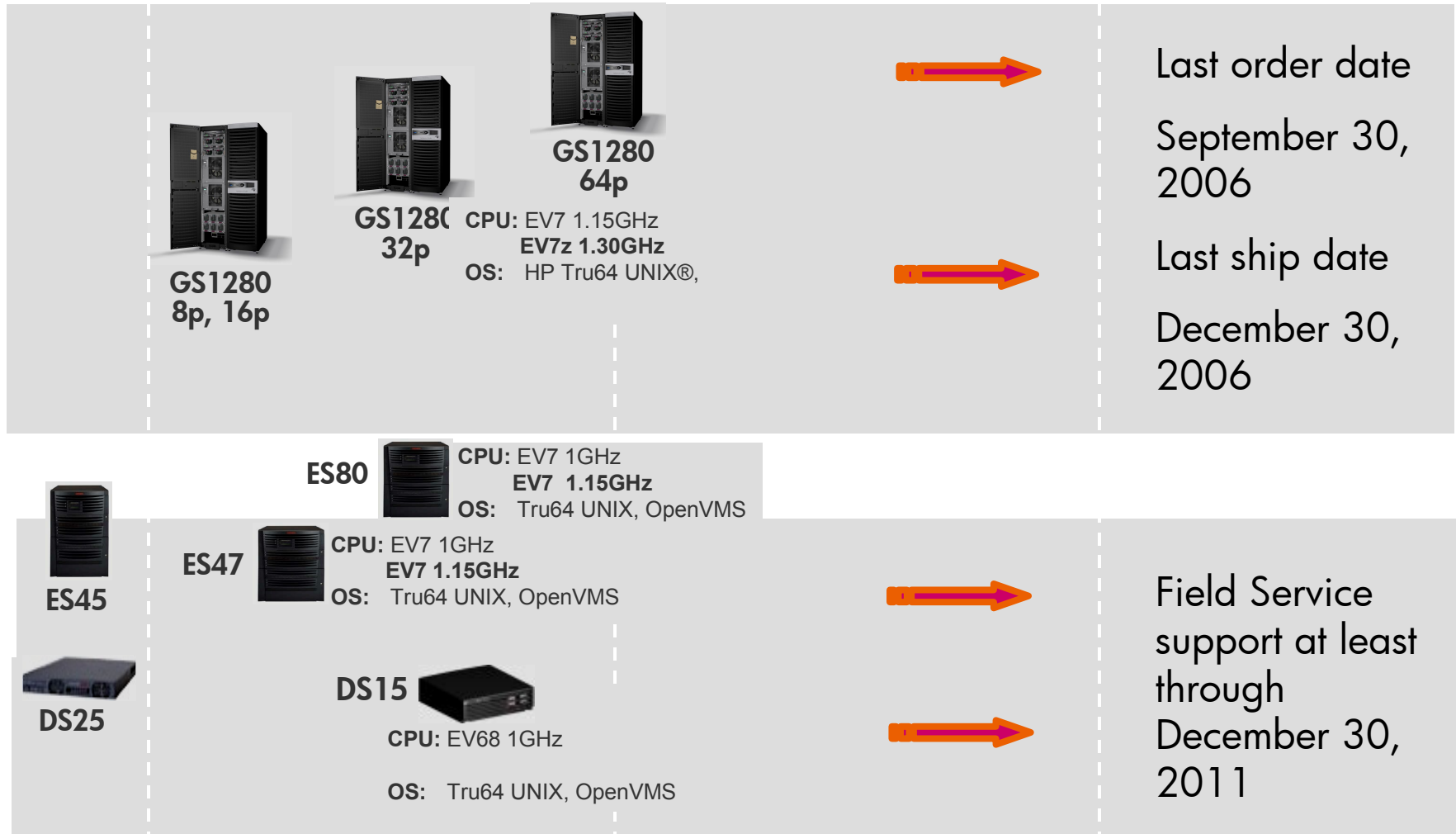
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Database <i>(high-end)</i>	<p>ProLiant DL 700 series</p>	<p>Integrity Superdome</p>	<p>HP 9000 Superdome</p>	<p>AlphaServer GS series</p>	<p>AlphaServer SC series</p>
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Multi-OS					Tru64
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HP AlphaServer evolution...

sales at least until 2006, with support at least until 2011



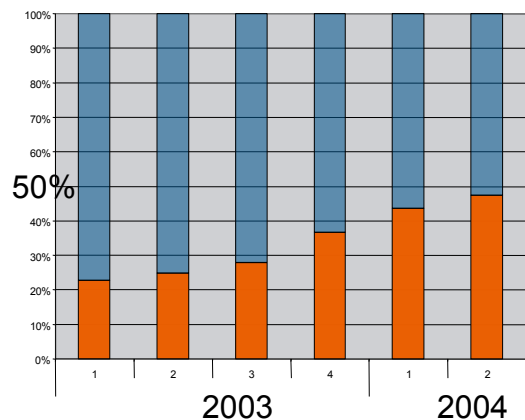
Subject to change without notice

Customer evolution programs: Ensuring a smooth path forward



• Results

- 98% customer retention within the Top 600 named AlphaServer accounts
- Tru64 UNIX customers shifting to HP 9000 and Integrity



Leadership programs

- e3000
- Alpha RetainTrust
- HP 9000

- Continually refreshed transition tools and services
- Complementary planning and deployment tools (Transition Planning Modules, Best Practices white papers, ISV Roadmap Advisory Tool, porting guides, interoperability tools)
- Software Transition Kits to HP-UX 11i from
 - Tru64 UNIX
 - HP-UX PA-RISC based servers
 - Sun Solaris
- Web-based and classroom training
- “For fee” design and implementation services based on best practices



evolve at your pace

HP has programs and solutions to support



Business value

- Compelling business reason
- No transition for the sake of technology
- Minimize transition costs
- Why HP?

Risk mitigation

- Application availability
- No unplanned downtime
- Minimize impact to existing staff
- New environment superset of old
- Deliver roadmaps



Business Systems Evolution Programs

The screenshot shows the HP Business Systems Evolution Programs page. It features the HP logo and the text 'Business Systems Evolution' and 'Business systems evolution'. The page is organized into several sections: 'Business systems evolution' with links for 'Site information', 'What's new', 'Newsletters', and 'Send us your comments'; 'Evolution programs' listing 'HP 9000 programs', 'HP AlphaServer systems', 'HP e3000 servers', and 'HP NonStop servers'; 'Learn more about' with links for 'Linux' and 'Microsoft'; 'Maximizing your IT potential' with a paragraph about HP's vision and a link to 'adaptive enterprise'; 'What's new' with links for 'HP NonStop Is a Credible Replacement to IBM's TPF', 'Announcing new AlphaServer systems and releases of OpenVMS and Tru64 UNIX', and 'IDC's Cost of Change Framework - white paper (PDF)'; 'HP 9000 offerings' with a paragraph about upgrading to HP-UX 11i; and 'HP Alpha RetainTrust program' with a paragraph about easing the transition to HP Integrity servers.

Visit . . . <http://www.hp.com/go/evolution>

You continue to view us as your trusted IT advisor throughout the multi-year transition period

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Multi-OS						
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HP Integrity NonStop servers



- Intel® Itanium® 2 processor 1.5 GHz with 4 MB cache
- 4–16 GB memory per processor
- Fibre Channel disk storage
- Gigabit Ethernet connectivity
- Modular packaging in 19" cabinets
- Investment protection with support for connecting to S-series disk and I/O
- Five nines of availability (99.999%)



Delivering significantly higher performance
over previous HP NonStop offerings

1 HP Integrity
NonStop

=

2 HP S88000 processors
2.7 HP S78000 processors
2.6 HP S86000 processors
3.0 HP S76000 processors
4.4 HP S74000 processors

HP server and storage portfolio

The world's broadest, most robust enterprise offering



Access *(low-end)*

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StorageWorks

- Storage client
- Storage controller
- Storage optimizer
- Storage fabric
- Storage web manager

OVSAM

ILM Portfolio

XP Family

UDO Jukeboxes

EVA Family

ESL and E series

MSA family

NAS family

MSL series

Tape drives

Autoloaders

Multi-OS

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SAN Infrastructure / Software / Media / Options

HP's standards-based server strategy



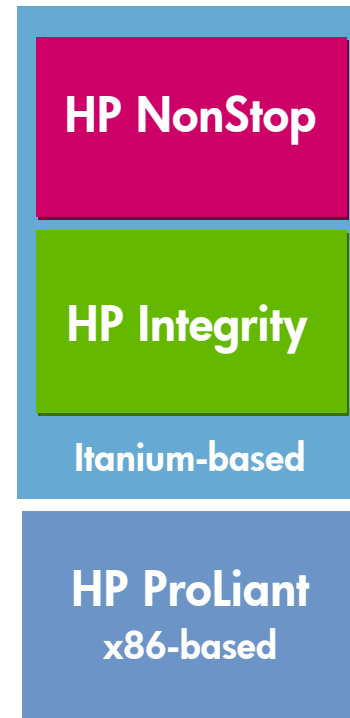
Past



Moving to 3 product lines based on 2 industry-standard architectures

Today

standards-based



Focused innovation

- Management
- Virtualization
- HA
- Storage
- Clustering

Customers benefit from increased HP investment in value-add innovation

HP server value proposition

Each family offers leading value in its class

ProLiant

HP ProLiant offers the best choice for building a scale-out foundation for the adaptive enterprise

Best platform for mainstream 32-bit and emerging 64-bit x86 versatility

1-4p/1-8c
Windows, Linux

Integrity

Trust HP Integrity servers for your most demanding workloads

Best platform for RISC replacement, and 64-bit Windows and Linux

1-64p/1-128c
HP-UX, Windows,
Linux, OpenVMS

Integrity NonStop

When user service levels are paramount trust Integrity NonStop for your most critical business applications

Best platform for 24/7 computing with fail-safe data integrity and linear scalability

2-4080p
NonStop OS

Consistent Manageability, Services and Storage capabilities across the portfolio

IT imperatives drive requirements for HP Integrity systems

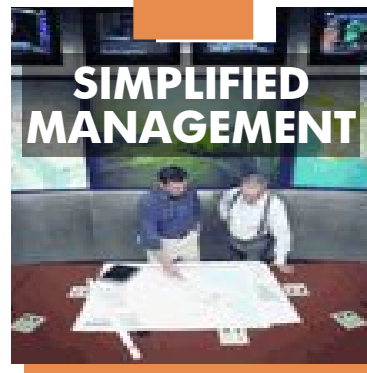


**Bring our high
value projects up
and online quicker**



Better return on IT with HP Integrity systems

**Consolidate
and simplify
to free up
resources**



**Meet the high
service level
expectations of
our customers**



i n v e n t