



HP-UX 11i v3: Software developers' choice for the future

HP-UX 11i v3 benefits, developers' advice and resources



Technology for better business outcomes

Agenda

- HP-UX 11i v3 value
- Planning considerations
- Opportunities for HP promotion for commercial software suppliers
- Resources

HP-UX 11i v3 -
the performance engine
for your applications,
with ultimate flexibility
for development and
deployment



Why HP-UX 11i v3 ?

- 30% average performance boost
- More than 100M ZB storage
- Mission critical virtualization

Meet growth demands

Mitigate risks

- Dynamic nPars can reduce unplanned downtime to ~0
- Maintenance downtime reduced up to 55%
- Improved security facilitates compliance

- >10% time savings for typical storage management tasks
- Best practices and toolkits for faster time to solution
- Unified infrastructure management

Reduce operational costs

Future ready

- Foundation for enhancements
- Investment protection
- Faster adoption of blades innovation
..... and more

Launch, execute & manage solutions – Faster, Cheaper, Better



HP system flexibility yields savings

HP-UX 11i: best multi-OS integration

The ultimate - HP Integrity Server Blade

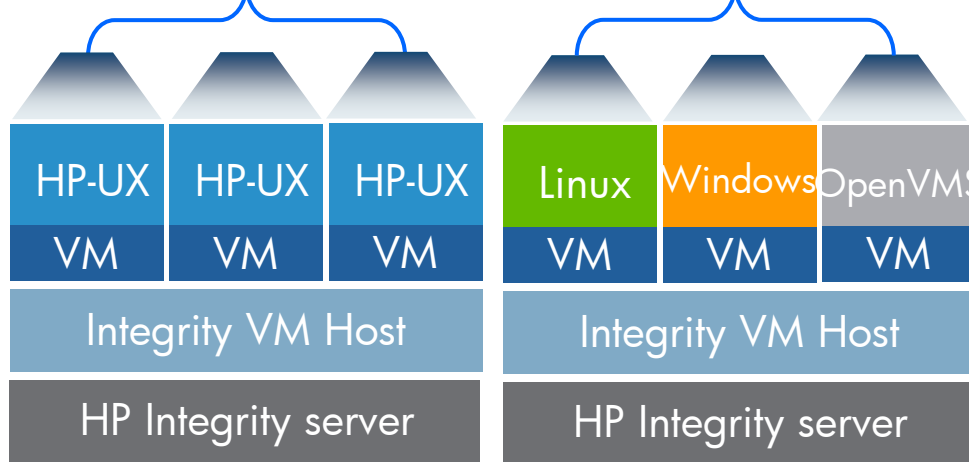
All this in one enclosure – for low-cost development, consolidation benefits and faster time-to-solution

Itanium-based HP Integrity blade servers run alongside HP ProLiant Intel Xeon & AMD Opteron blade servers & StorageWorks blades



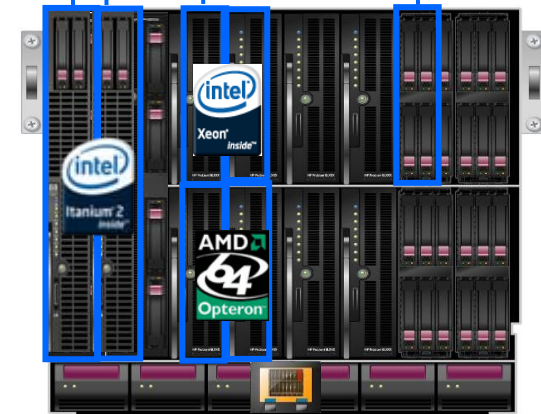
Integrity Server Blade BL860c

Virtualization - Integrity Virtual Machines



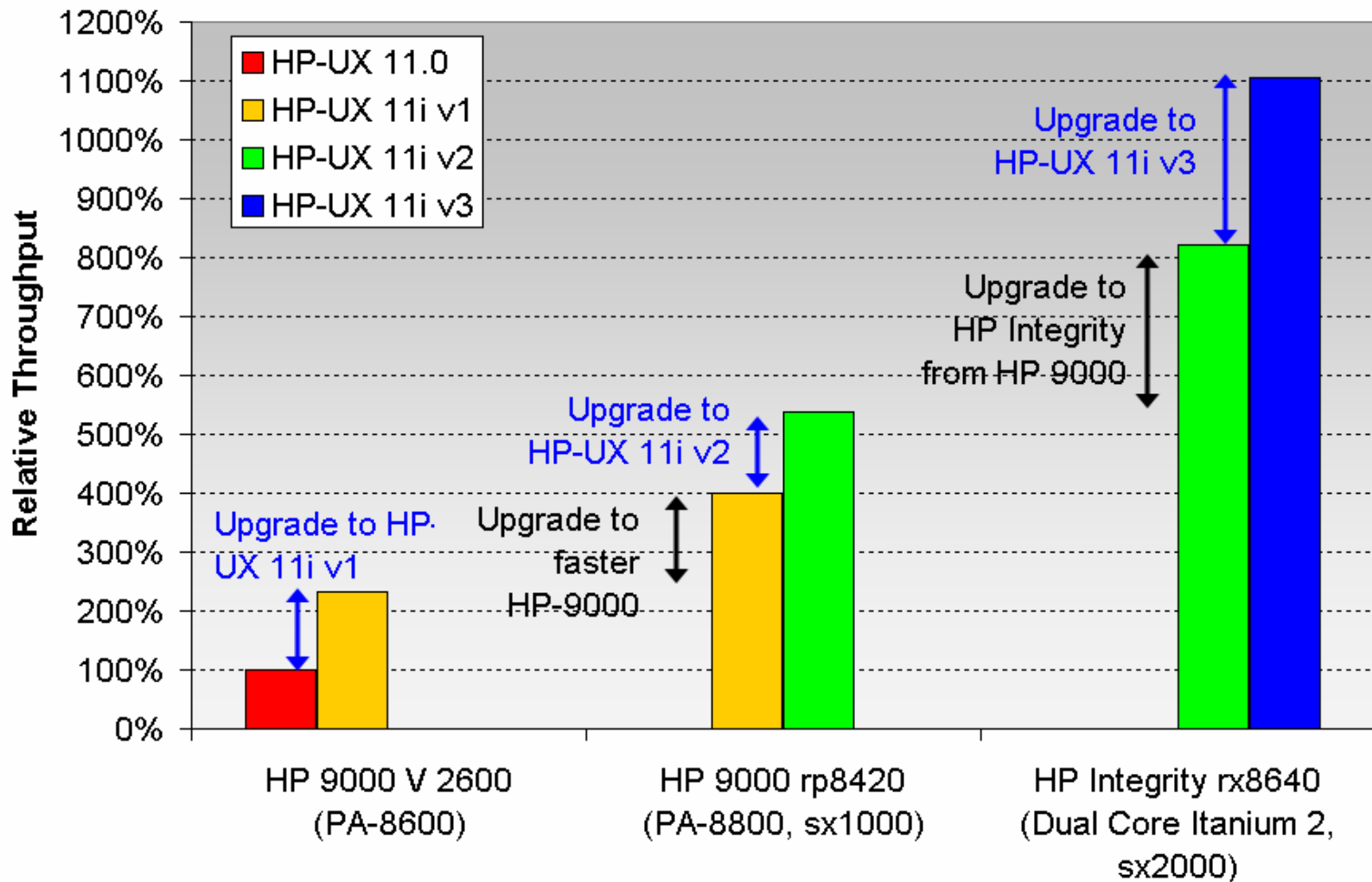
x86 HP ProLiant server blades

HP StorageWorks blades



HP BladeSystem c-Class

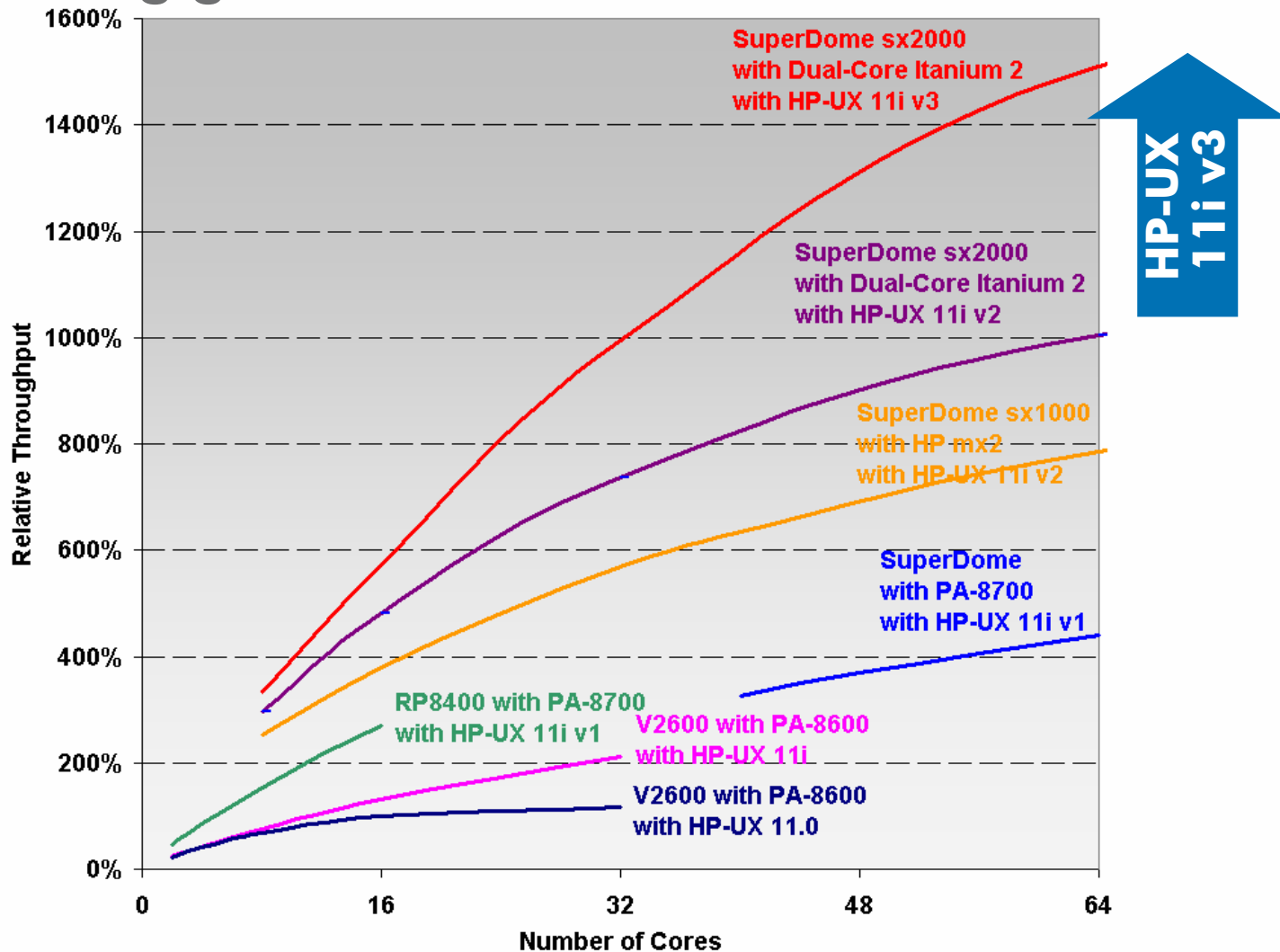
Continuous software performance improvement with HP-UX 11i v3



32 Core System

HP-UX 11i kernel scalability

Another big gain with HP-UX 11i v3



Note: Superdome sx2000 with Dual-Core Itanium 2 scales to 128 cores

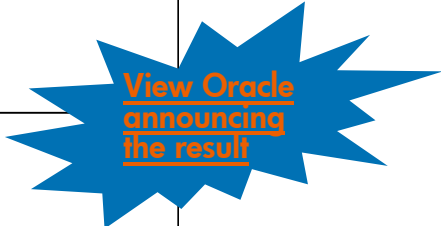
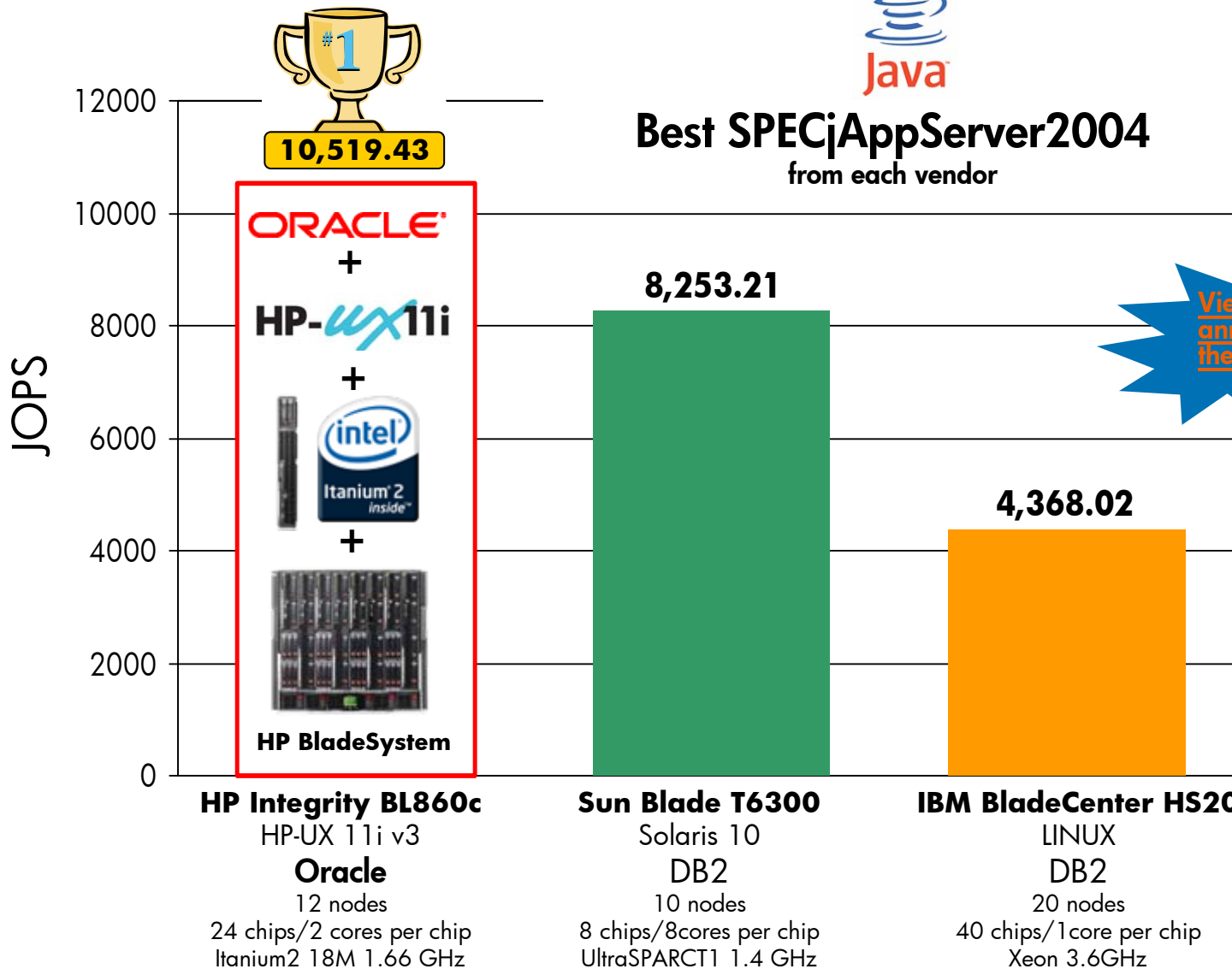
Example (11/08/07) with HP Integrity BL860c & Oracle® Fusion Middleware



World-record Java performance



Best SPECjAppServer2004 from each vendor



Planning news:
prepare to win bigger



HP protects your investment in applications developed for HP-UX 11i

- Software compatibility - applications that run on Integrity with HP-UX 11i v2 *just work* on v3
 - If your deployment target is mixed HP-UX 11i v2 and v3, build applications on v2, for deployment on both v2 and v3 (forward binary compatibility)
 - If deploying on v3 only, build and optimize on v3 for maximum performance
 - Some features in HP-UX 11i v3 are not available in v2 (Long usernames, e.g.)
 - ARIES ships with each Integrity server, and can run most HP 9000 HP-UX executables in emulation without modification, compilation or available source code
- Hardware compatibility - your investment in Integrity servers with HP-UX 11i pays off into the future.
 - Applications running on HP-UX 11i on HP Integrity servers today will run on any future HP Integrity servers running HP-UX 11i, irrespective of the processor generation, going out into the future (binary compatibility)
 - Without application modification, your application benefits from HP's ongoing system enhancements

HP-ux11i v3

Planning for ongoing success and optimal support for our mutual customers

Significant milestones in HP technology related to your HP-UX 11i applications and their support:

- HP Integrity systems based on Intel Itanium *Montvale* processors, shipping now, are the last new Integrity servers supported by HP-UX 11i v2. Subsequent servers will run HP-UX 11i v3 and future versions.
- The last planned HP-UX 11i v2 update release shipped in December 2007. All new OS functionality will ship only on HP-UX 11i v3.
- HP plans December 31, 2009 as the last sales date for HP-UX 11i v1 and HP-UX 11i v2.
- HP plans December 31, 2008 as the last sales date for new systems in the HP 9000 family of systems. Upgrades will be available through December 2009.
- Support For HP-UX 11i v1 and 2 and for HP 9000 systems will continue at least until December 2013.

HP-ux11i v3

HP-UX 11i software roadmap

Optimizing business outcomes with mission-critical virtualization

2003

2007

2010 and beyond

Accelerating deployment, reducing costs, and improving service levels

HP-UX 11i v2

Enterprise UNIX
for HP Integrity
& HP 9000
Servers

Sales through 2009

HP-UX 11i v3

Adaptive Infrastructure:
The next level of virtualization
and automation

Flexibility with mission-critical virtualization
Capacity for most demanding workloads
Affordable data-center class availability & security
Centralized expert control
Embracing multi-OS environments, blades

Recommended version for new deployments

HP-UX 11i v4

Zero-downtime
virtualization

Manageability
Security
Availability

In development

HP-UX 11i v5

Next wave of
enterprise
computing

In planning

Continuously releasing functionality to shipping releases

Investment protection through binary compatibility and 10+ years of support life
Major releases about every 3 years

HP-ux11i



HP-UX 11i v3 today and tomorrow

Continuously releasing functionality

Binary compatibility and quality are key

Updates about every 6 months, enhancements on-going

Future updates

Advanced security integration and automation
Live application migration
Faster cluster failover
Tighter Multi-OS & HP BladeSystem infrastructure integration

H1'2008 – Update 2 – driving versatility

Expanded OE integration
Enhanced regulatory compliance & data encryption
Simplified blade management
Advancements in multi-OS manageability
Comprehensive capacity planning
Cluster wide file/volume management over extended distances

H2'2007 – Update 1 – enhancing vitality

- HP software ecosystem available
- Dynamic nPartitions
- Online addition, replacement, deletion of I/O drivers
- Optimized for Integrity Server Blades
- Compiler optimizes multi-core utilization

H1'2007 - Initial release

OS performance improvement ~30%
Next generation mass storage stack

- Automatic device discovery & configuration, dynamic handling of SAN changes
- Self-configuring multi-pathing for automatic load balancing and failover

Planned & unplanned downtime reduced
In-depth security protection easier to deploy
Memory migration included in virtualization
Accelerated deployment with reference architectures

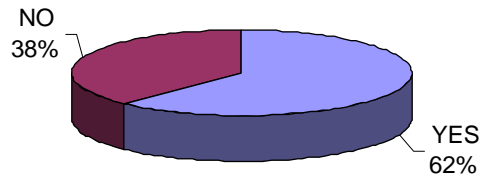
HP-ux11i v3

Time

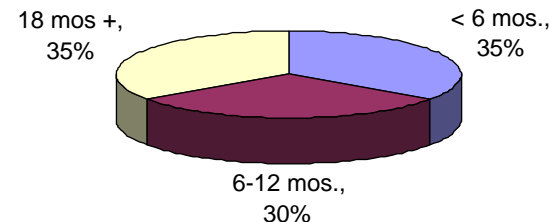
HP-UX 11i customers plan to upgrade to v3, many in 2008

For those currently utilizing HP -UX 62% plan to migrate to HP -UX v3 and for 65%, the migration will be implemented in the next year

PLANS TO MIGRATE TO HP-UX v3 ON HP INTEGRITY SERVERS (Restricted to Respondents Currently Using HP-UX)



FOR THOSE PLANNING TO MIGRATE TO HP-UX v3, EXPECTED TIME FRAME FOR IMPLEMENTATION



Inform HP of your HP-UX 11i v3 readiness for maximum HP promotion

For ISVs: When you update your application availability status information in the HP ISV Application Status Database (www.hp.com/go/ISVapplicationstatus) HP will market your v3-ready solutions:

- Promotion in the gallery of HP-UX 11i v3-ready solutions for sales and channel partners www.hp.com/go/v3readyisvs
- HP will feature HP-UX 11i v3 related quotes on hp.com for incremental visibility. Please see www.hp.com/go/v3isvquotes
- DSPP members whose solutions are HP-UX 11i v3-ready are entitled to use the HP-UX 11i v3 graphic in their company's literature and Web sites.

Get your graphic now! www.hp.com/go/hpuxv3graphic

Resources

- To submit v3-related quotes or nominate customer success stories, send email to hpuxquestions@hp.com
- DSPP website – www.hp.com/go/dspp
- HP-UX 11i websites
 - Main site www.hp.com/go/hpux11i
 - HP software downloads www.hp.com/go/softwaredepot
 - HP-UX information library (documentation, etc.)
www.hp.com/go/hpux11ilibrary
 - HP-UX 11i Knowledge-on-Demand technical Webcasts
www.hp.com/go/kod
- ISV Integrity application availability
 - How to get listed www.hp.com/go/ISVapplicationstatus
 - Where customers can view available applications
www.hp.com/go/isvappstatus

HP-UX 11i Knowledge-on-Demand topics

as of 1/15/08

Free, 1-hour technical Webcasts for developers & system admins

Pipeline: deployment series – solution-specific optimization, why v3 & v3 performance 'keynotes', ARIES, v3 tunables, troubleshooting v3 performance - plus languages: Chinese (simplified & traditional), French, Italian, Japanese, Korean & Spanish

Developers' series

Foundation track

- » How to upgrade to HP-UX 11i v3
- » HP-UX open source resources **Italian transcript**
- » Unified file cache **Italian transcript**
- » HP Caliper Integrity performance tool - New features for understanding performance **Spanish transcript**
- » The Mercury library – Increasing application performance **French transcript**
- » Software Transition Kits (STKs) for HP-UX 11i v3
- » ARIES emulation: run HP 9000-built HP-UX 11i applications on HP Integrity servers **Coming soon!**

Java developers track

- » Java memory management - Internals and performance **French transcript**
- » HPjmeter – measure Java application performance on HP-UX 11i **Spanish transcript**
- » Solving Java performance problems **French transcript**

C/C++ developers track

- » pthreads enhancements in HP-UX 11i v3 **French & Italian transcripts**
- » Using compilers to get optimal performance
- » HP Code Advisor: A powerful new C/C++ analysis tool for HP-UX **Spanish transcript**
- » Hyper-Threading on HP-UX 11i v3 **French transcript**
- » Kernel tracing on HP-UX 11i

Deployment series

HP-UX 11i v3 operating system optimization

- » How to upgrade to HP-UX 11i v3
- » Dynamic nPartitions
- » GlancePlus
- » NUMA tuning: Getting the most out of your cellular server
- » HP-UX 11i v3 tunables **Coming soon!**
- » I/O optimization **Coming soon!**
- » Performance trouble-shooting on v3 **Coming soon!**

Optimize Java applications at runtime

- » Java memory management - Internals and performance **French transcript**
- » HPjmeter – measure Java application performance on HP-UX 11i **Spanish transcript**
- » Solving Java performance problems **French transcript**

Optimizing high availability configurations

- » Manage your Serviceguard environment
- » Using what's new in Serviceguard

Optimizing virtualized configurations

- » Capacity advisor **Coming soon!**
- » Workload monitoring and management **Coming soon!**

* Topics and language availability are subject to change without notice.

www.hp.com/go/kod



In summary - HP recommends HP-UX 11i v3 on HP Integrity servers

For your applications' optimal performance and your customers' highest business return --

- HP-UX 11i v3
 - now in its 2nd release, with the 3rd - Update 2 - shipping in March 2008
 - delivers the highest quality of any HP-UX release ever
- Applications run on average 30% faster on v3 than on v2 (your mileage may vary), due to operating system optimization in version 3. Significant performance gains can also be accrued by
 - using the latest versions of compilers
 - running on the fastest Integrity servers
- Your end users/customers benefit not only from productivity gains through greater application performance, but also
 - through HP's continued investment in v3 functionality,
 - with its established lead in integrated virtualization, security and high availability

HP-ux11i v3



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