



## hp-ux 11i data sheet

Connection is the key to evolving successfully in our changing business world. Your enterprise needs an operating environment that supports today's proliferation of applications on a choice of platforms and integrates them seamlessly. HP-UX 11i is a highly available, manageable and secure operating system that provides the power and flexibility to run your mission-critical enterprise infrastructure.

### **power on demand to run your enterprise**

Designed from the ground up to be the best commercial Unix operating environment for the enterprise, HP-UX 11i has been the leading enterprise Unix OS for the last 15 years, and it continues to push the software technology envelope. Key examples of HP's technological innovation with HP-UX 11i include:

- Hard and soft partitioning integrated with automatic, goal-based workload management.
- Instant capacity on demand (iCOD), with dynamically allocatable and deallocatable processors.
- Native intrusion detection (built-in security from HP).

- Dynamic code translation technology providing binary compatibility across PA-RISC and Itanium architectures.
- Veritas File System for HP-UX (HP Online JFS).
- Veritas Volume manager for HP-UX.

### **industry-leading applications**

HP-UX has the support of over 16,000 ISV applications and the leading application and middleware suppliers such as Oracle, SAP, I2, PeopleSoft, and SAS. This means you'll find an industry-leading application solution whatever your need.

### **middleware and application development tools**

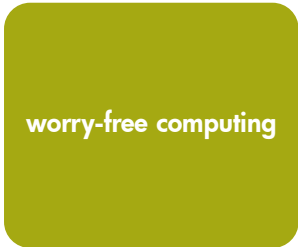
HP-UX is supported by the leading middleware and application development tool providers such as BEA and Rational. Add to that Integrated Development Environments from leading IDE vendors like TogetherSoft, Borland, and Sitraka, and you can count on optimal application performance. HP-UX 11i offers a complete developer ecosystem with Java, Linux/Open Source and a native development environment for faster time-to-deployment.

### **the foundation of your always-on internet infrastructure**

HP-UX 11i offers business-critical necessities at the highest level: the world's best combination of performance, performance scalability, availability, manageability and security.

- Performance Scalability: the efficient support of large numbers of processors provides near linear performance scalability as processors are added.
- Single-system Availability capabilities include online system tuning, online data backup, online component replacement, and automatic detection and deallocation of at-risk components.
- Multi-system Availability capabilities include automatic and bi-directional failover of business critical data and applications over extended distances.





- Manageability tools provide role-based capability sets and the ability to manage hundreds of servers from a single browser-based console.
- Security fortifications include a host firewall and an intrusion-detection facility that can monitor multiple servers simultaneously.

**the operating environment for worry-free computing**

HP-UX 11i comes as part of four world-class operating environments, all fully integrated and tested by HP. These operating environments, ordered and supported as a single product, feature fast and easy installation and administration.

- The HP-UX 11i Operating Environment provides the basic capabilities needed by most customers.
- The HP-UX 11i Enterprise Operating Environment adds additional system management and high availability capabilities.
- The HP-UX Mission Critical Operating Environment provides the highest levels of manageability and high availability.
- The HP-UX Technical Computing Operating Environment is tailored to the needs of technical applications

**hardware platforms: PA-RISC and Intel Itanium architecture**

HP-UX 11i supports two industry-leading architectures—PA-RISC and the Intel Itanium architecture. PA-RISC is a Unix

**hp-ux 11i operating environments: components**

**HP-UX 11i Mission Critical Operating Environment**

**HP-UX 11i Enterprise Operating Environment**

**HP-UX 11i Operating Environment (Base/Internet)**

- network drivers
- hp apache web server
- ignite/ux
- Java RTE, JDK and JPI
- cifs client
- cifs server
- service control manager
- system inventory manager
- hp-ux kernel configuration
- software distributor/ux
- Netscape LDAP server
- pam kerberos
- ems framework
- Netscape communicator
- base Veritas File System for hp-ux
- base Veritas Volume Manager for hp-ux

- online JFS 3.3
- mirror disk/UX
- process resource manager (PRM)
- glance plus
- openview performance agent
- Event monitoring services (EMS) HA monitors

- mc/serviceguard
- hp-ux workload manager
- serviceguard nfs toolkit
- Enterprise Cluster Management (ECM) toolkit

**HP-UX 11i Technical Computing Operating Environment**

- system inventory manager
- network drivers
- ems framework
- software distributor/ux
- base Veritas Volume Manager for hp-ux
- ignite/ux
- Java RTE, JDK and JPI
- Netscape directory server
- perl
- mpi
- mlib
- hp apache web server
- cifs client
- cifs server
- Java 3D
- pam kerberos
- technical system configurator
- Netscape communicator



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workhorse that handles heavy mission-critical processing loads. The Intel Itanium architecture was jointly developed by HP and Intel that promises new levels of performance and value. It features explicit parallel execution to derive the best possible performance from the steadily increasing number of components in today's microprocessors.

### architectural compatibility

HP-UX 11i provides unparalleled compatibility across the PA-RISC and Itanium-based server platforms with complete data and source code compatibility. HP-UX 11i even has the built-in capability to execute PA-RISC binaries on the Itanium architecture via Aries dynamic code translation.

### superior Linux compatibility

HP-UX 11i provides Linux API (Application Programming Interface) compatibility making it easy to develop an application

using the popular, low-cost Linux platform and then deploy it into a mission-critical environment using HP-UX 11i. And with HP-UX 11i on Itanium-based server platforms, Linux compatibility will be extended to include binary compatibility.

### summary

HP-UX 11i is designed to meet, exceed and anticipate the needs of today's internet-based enterprises as the linchpin of an always-on infrastructure. It has the robustness, performance scalability, high availability, manageability, and bulletproof security required by business-critical computing. HP-UX 11i is also the only operating system with a clear bridge to the next generation Itanium architecture including data, source, and even binary compatibility across the architectures.

## features and benefits

### performance

- Support for high performance PA-RISC processors
- Support for Itanium Processor Family
- MxN threads for optimal Java performance+

### scalability

- 1-64 way symmetric multi-processing scalability (up to 128-way in 2003)
- up to 256 gigabytes of memory (increasing to 1 terabyte by end of 2003)
- 2 terabyte maximum file system and file size (increasing to 4 terabytes in 2003)
- autoport aggregation for higher networking bandwidths (optional product)\*
- dynamic memory page sizing
- instant capacity on demand (iCOD, optional product)\*

### reliability and availability

- integrated operating environments
- dynamic processor resilience
- dynamic memory resilience
- memory sparing technology
- online file system administration (Online Journalized File System, add-on product)
- fast file system recovery (Journalized File System)
- disk mirroring (MirrorDisk/UX optional product)
- system administrator notification of system exception conditions
- dynamically tuneable kernel parameters
- autoport aggregation for transparent link redundancy (optional product)\*
- MC/ServiceGuard for automatic application failover (optional product)
- dynamic failover to iCOD CPUs\*
- disaster recovery (extended campus cluster, metropolitan cluster, continental clusters — all optional products)\*



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### **security**

- hardened kernel
- trusted users, passwords, disks, file systems, and permissions
- Public Key Infrastructure (PKI) support\*
- buffer overflow protection (transparent to applications)
- IPSec (Internet Protocol Security)
- Host Intrusion Detection System
- IPFilter host firewall
- internet daemon services
- built-in encryption/decryption accelerators
- Netscape directory server
- LDAP UX integration\*
- AAA (Authentication, Authorization, and Accounting) Server
- C2 compliance
- security patch monitoring (Security Patch Check)\*
- pluggable authentication module
- kerberos security server\*
- virtual vault\* (optional product)

### **manageability**

- centralized GUI interface (Servicecontrol Manager)
- networkable multi-system configuration tracking (System Inventory Manager)
- online GUI-based dynamic kernel configuration (HP-UX Kernel Configuration)
- management of 100's of remote nodes (Centralized Web Console, optional product)
- automatic system administrator notification of exception conditions (Event Monitoring Service)
- role-based system administrator capabilities
- allocation of system resources (Process Resource Manager, add-on product)
- automatic, goal-based allocation of system resources (HP-UX Workload Manager, add-on product)\*
- automatic OS updates over a network (Ignite-UX)
- automatic application software updates over a network (Software Distributor-UX)
- hardware-based partitions\*
- software-based partitions\* (HP-UX Virtual Partitions, optional product)

### **connectivity and interoperability**

- industry-standard TCP/IP
- TCP Wrappers for network activity monitoring
- SLP (Service Location Protocol)
- ARPA Services
- WU-FTP (Washington University File Transfer Protocol)
- IPv4, IPv6
- Mobile IPv4\*
- Dynamic Host Configuration Protocol versions 4 and 6 (DHCP)
- Berkeley Internet Name Domain (BIND) 9.2
- Dynamic Name Service (DNS)
- Sendmail 8.11.1
- Common Internet File System (CIFS)
- Network File System (NFS)





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### **web application infrastructure**

- HP Apache-based web server integrated with additional HP features including built-in Secure Socket Layer (SSL) and tuned for high performance
- BEA WebLogic Platform 7.0 including the #1 J2EE BEA WebLogic Server

### **Linux compatibility**

- GNU Tool Chain
- Over 50 Open Source Tools
- Application Programming Interface (API) compatibility
- Application Binary Interface (ABI) compatibility+ (available first half, 2003)
- scanner to identify problems and recommended changes
- extensive documentation on Best Practices on Porting to HP-UX 11i accessible online at [www.hp.com/go/LPK](http://www.hp.com/go/LPK)

### **application development tools**

- COBOL
- Java
- C
- C++
- Fortran

### **cross-architectural compatibility**

- Source code compatibility (including 32-bit PA-RISC applications)
- Data compatibility
- Aries dynamic code translation technology+

+ Itanium only

\* PA-RISC only

For more information about HP-UX 11i, please visit [www.hp.com/go/hp-ux](http://www.hp.com/go/hp-ux) or call your local sales representative.

### **for more information**

For downloads and information on HP-UX software visit [www.software.hp.com](http://www.software.hp.com)

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