

HP ProLiant servers

Build an adaptive infrastructure that
can grow in step with your business



With powerful, flexible solutions and innovations in manageability, virtualisation, power and cooling, HP ProLiant servers help you build the right adaptive infrastructure for your IT.

With the right infrastructure, your information technology should be able to meet any business demand – no matter how urgent or demanding the request may be. A powerful, flexible infrastructure enables your business to run smoothly and securely, helps you drive efficiency and increase productivity, and serves your current IT requirements while easily absorbing new emerging technologies.

Flexibility, innovation and experience

The widely trusted HP ProLiant servers demonstrate HP's ongoing commitment to provide a complete server infrastructure that supports your business objectives and your business growth. The extensive selection of management tools, storage and networking products, services and support for HP ProLiant servers delivers a robust portfolio that – along with HP's close collaboration with world-class independent software vendors (ISVs) and systems integrators (SIs) – enables you to build solutions to meet your unique and changing infrastructure requirements.

HP's approach to innovation for ProLiant servers helps you simplify operations and get the most from your IT resources. You can rely on the flexibility and innovation of HP ProLiant servers and infrastructure – and the expertise of HP and those with whom we collaborate – to build the right foundation and give you an exceptional ownership experience.

The HP ProLiant advantage

There is no disputing the clear customer preference for HP ProLiant servers, with more than 11 million HP ProLiant servers shipped worldwide since their introduction. Customers have chosen ProLiant systems more often than any other server. In fact, HP has delivered approximately 3.5 million more x86 servers than the nearest competitor.

Renowned throughout the industry for delivering breakthrough value within and beyond the system, HP ProLiant servers comprise the industry's most comprehensive x86 offering, with 1-, 2- and 4-processor servers; a comprehensive suite of server blades; and your choice of Intel® Xeon™ or AMD Opteron™ processors. ProLiant servers are an outstanding platform for mainstream 32-bit and emerging 64-bit x86 versatility, and they capably support a heterogeneous environment – including Microsoft® Windows®, Novell SUSE Linux® and Red Hat Linux, and NetWare operating systems – in a way that fits your specific needs.

HP ProLiant servers have led the industry with the first rack-based servers, the first density-optimised servers, and, more recently, modular server blades. HP has pioneered technologies such as remote management, small form factor drives, RAID memory, Physical to ProLiant migration software and universal storage – just to name a few.

Managing complexity

You can count on HP's expertise – whether through self-help information and tools or HP Services – to help you select, size and implement your best solution, lowering your overall cost of IT.

HP ProLiant servers also help you centralise management across your organisation, with tools such as HP Systems Insight Manager (SIM) software that manage servers, storage, and client systems.



When you choose HP, you select a single, accountable and reliable source with a world-class track record of keeping IT simple and supportable for the long term.

Driving efficiency

HP ProLiant server infrastructure helps make the most of your investment, thanks to a broad portfolio and flexible configurations that enable you to select only what you need. Innovations such as HP BladeSystem, remote and automated management, and universal storage architecture help you achieve efficiency over the life of your server infrastructure. Moreover, HP's innovative, industry-leading virtualisation technologies and services enable you to pool and share resources to improve utilisation dramatically while simplifying resource management.

“Today, with the help of the HP BladeSystem, VMware and HP Virtualization Management Software, we are actually delivering more servers for less money to our internal customers. If we had to do that a few years ago, I’m not sure how we would have managed it.”

Dean Buker, Manager
Network & Systems, Polaris



Managing risk

With consistent and highly reliable design, industry-standard components that ease integration, an array of availability features and options, innovations in data protection, and the backing of world-class services plus extensive partnerships and alliances, an HP ProLiant server infrastructure is the right answer in a risk-prone world.

The HP ProLiant server family – the right technology at the right price for the right job

HP ProLiant servers offer the right technology for your computing needs, including a choice of AMD Opteron or Intel Xeon processors, depending on the types of applications you plan to run. You can also select from three form factors:

- **The HP ProLiant DL line:** density-optimised for remote or space-constrained rack-mounted environments such as work groups and high-performance computing.
- **The HP ProLiant ML line:** increased expansion for rack and tower environments ideal for virtualisation, email and database applications.
- **The HP ProLiant BL line:** time-smart, energy-thrifty, change-ready and cost-savvy infrastructure delivering well-balanced system architecture for the next generation data centre.

Your solution flexibility is enhanced with the ability to choose the levels of performance, availability, expandability and manageability to meet your specific needs.

HP was the first vendor to make the power-saving features of the AMD Opteron processor available across a complete portfolio of x86-based servers.

Universal storage architecture protects your data, enhances availability and lowers your TCO

HP develops and tests its storage devices above industry standards for higher performance and reliability. This translates to peace of mind, knowing that your data is there – whenever you want to retrieve it. Universal storage enables seamless data migration across your server and storage framework, simplifies storage redeployment, and keeps your service costs low.

HP’s newest enhancements feature the introduction of serial storage devices. These include small form factor drives that deliver the advantages of Serial Attached SCSI (SAS) and Serial Advanced Technology Attachment (SATA) storage drives across the HP ProLiant product line. Small form factor (SFF) drives require significantly less power and produce less heat, and the small form factor lets you pack more units into the same space. HP delivers SFF SAS drives across our latest generation of servers, giving customers a single-step transition to increase the benefit of SAS.



Simplified management supports greater efficiency and more effective use of resources

An IT environment is only as effective as your ability to manage it. HP places priority on developing and delivering innovative, industry-leading management tools that extend to the server infrastructure and beyond for flexible, scalable, efficient – and remote – management of your entire environment.

With HP Systems Insight Manager (SIM), you can reduce the cost and complexity of IT maintenance. HP SIM delivers fault monitoring, inventory reporting, and configuration management across the HP server portfolio – all from a single management console.

SIM integrates with HP ProLiant Essentials, a suite of tools that adds powerful life cycle features. SIM also integrates seamlessly with HP OpenView software, which provides a comprehensive view of your business processes, services, and IT resources. And the Integrated Lights-Out 2 (iLO2) management processor offers complete control of HP ProLiant and HP BladeSystem servers from any web browser. This drives down your cost of managing the platforms by reducing visits to remote sites and “lights-out” data centres while decreasing the need for multiple remote management solutions.

Multifunction networking: coordinate and consolidate your connectivity

Constrained resources and tightened budgets are forcing organisations of all sizes to simplify their infrastructures, improve manageability, increase network performance and reduce the costs of computing. HP offers the industry’s first Multifunction Networking Adapters to support TCP/IP Offload Engine, Internet Small Computer Serial Interface (iSCSI), and Remote Direct Memory Access (RDMA) – providing a unified fabric for networking, storage and high-performance clustering over a single connection point.

HP’s Multifunction Networking Adapters are ideal for virtualisation, grid, I/O and server consolidation, and other applications where deployment of a single fabric environment is desired.

Total HP ProLiant server management

HP ProLiant Essentials software solutions include:

Systems Insight Manager	One-click access to comprehensive ProLiant server health, configuration, performance, remote management and server inventory data.
SmartStart	For reliable, streamlined, and consistent configuration and deployment of HP ProLiant servers.
Performance Management Pack (PMP)	A hardware performance bottleneck analysis tool that identifies the server subsystem – such as memory, CPU, and so on – that requires additional capacity for your applications. Information on HP ProLiant server performance and HP StorageWorks Modular Smart Array storage systems is delivered straight to the administrator's desktop.
Intelligent Networking Pack (INP)	For virus monitoring and protection using HP virus-throttling technology – along with advanced teaming features for ProLiant customers requiring advanced redundancy and enhanced load balancing for their Ethernet networks. With network-aware intelligence provided by this solution, ProLiant servers can adapt to and change the network path to achieve significant improvements in reliability and performance.
Integrated Lights-Out 2 (iLO2)	An embedded, easy-to-use remote management tool that allows network IT administrators to perform virtually any administration or maintenance task – remotely and securely as if in front of the server – with local access to the keyboard, mouse, monitor, power button or USB media. The iLO2 solution is also operating system independent, offering full remote control whether the server is operating normally, stalled, or powered off.
Insight Control	An integrated suite of software that simplifies the provisioning and management of HP BladeSystem infrastructures to increase data centre efficiency and consistency, achieve faster time to production, and realise tangible savings in time and costs.
Rapid Deployment Pack (RDP)	For unattended server deployment. From a central management console, you can deploy and redeploy hundreds of ProLiant servers simply by pointing and clicking.
Vulnerability and Patch Management Pack (VPM)	An all-in-one vulnerability scanning and patch management solution. This toolset simplifies and consolidates the proactive identification and resolution of issues that can affect server availability and performance – all from the single console of HP SIM.
Virtual Machine Manager (VMM)	Provides heterogeneous virtual machine management and control. This solution helps administrators take advantage of VM technology from Microsoft and VMware to help boost server utilisation and balance workloads across hardware infrastructure.
Server Migration Pack (SMP)	A companion product to VMM, automates the migration of physical servers into virtual machines, enabling a typical migration process to be completed within minutes.
Server Migration Pack – Physical to ProLiant Edition	Automated, accurate and affordable way to migrate existing physical servers and their content to the latest server technologies.
Workload Management Pack (WMP)	For resource partitioning on a single operating system instance. This solution provides for processor and memory for priority applications.

HP rack and power infrastructure solutions – simple, real, adaptive

HP rack and power infrastructure solutions deliver efficient, easy-to-use capabilities to manage, monitor, deploy and provision your infrastructure. HP's common and universal infrastructure solutions simplify the configuration, purchase and deployment of IT. These solutions help you achieve a low cost of ownership through scalability and simple integration, and improve efficiency and monitoring of your power and cooling infrastructure. Plus they are based on universal components, which means all HP branded equipment is compatible within the same rack. HP also offers innovative cooling solutions that can support three times the standard cooling power in a single rack. This saves valuable data centre real estate, so that businesses can consolidate half-empty racks and take back those wide-open spaces in the data centre.

HP Services

HP Services has end-to-end, industry-leading expertise in delivering solutions that help you improve your business agility. From initial assessment and design to technical integration and ongoing support, HP Services can be your single point of contact and accountability.

Our services portfolio includes:

- **Data Centre Services** – thorough review and analysis of your physical data centre environment including servers, storage, and networks
- **Education & Training Services** – industry-leading training and education programmes for your IT professionals
- **HP Factory Express** – comprehensive portfolio of customised, factory-configured solutions and on-site deployment services
- **Business Continuity Consulting** – design, build, integration, and management services to minimise unplanned IT downtime based on industry best practices
- **Mission Critical Services** – a comprehensive portfolio of integrated hardware and software support services for maintaining an available, reliable, and scalable IT environment

HP Mission Critical Partnership

HP Critical Service

HP Proactive 24 Service

Across the globe, enterprise customers rely on HP Services to design, build, integrate and manage the IT systems that run their businesses. HP Services capabilities cover consulting and integration, outsourcing, and support services. With more than 69,000 services professionals operating in more than 170 countries, acknowledged technology leadership, and a heritage of innovation in services, HP Services can point to an extensive track record of helping customers align IT for business performance improvement.

For more information, visit www.hp.com/go/services

World class solutions built on collaboration

To build solutions that meet your far-reaching and diverse needs – wherever you are in the world – HP combines the power and flexibility of HP ProLiant servers and technologies by working closely with world-class technology providers to leverage best-in-class software, industry expertise, and integration capabilities. By collaborating with well-known and respected industry leaders, HP delivers highly flexible solutions that provide an excellent return on your IT investment and the level of accountability you demand.

HP Financial Services: the smartest way to invest in IT

Leasing with HP Financial Services provides you with the capital to leverage technology change, making it easier to:

- Free up capital through leasing programmes to help you transition faster to new technology solutions
- Acquire new platforms more cost-effectively through flexible terms that benefit your business
- Manage IT solutions over time with upgrade and add-on plans that fit your business' needs
- Dispose of equipment at the end of its lifecycle in accordance with environmental laws

Why HP ProLiant servers?

HP ProLiant servers comprise the world's most comprehensive x86-based server portfolio, along with complementary hardware and software to help you build out a solid and reliable infrastructure. When you choose ProLiant, you get the benefits of HP expertise to help you select, size, and implement your best solution. HP's world-class partnerships and alliances complement the ProLiant server portfolio and provide comprehensive, end-to-end solutions.

HP ProLiant servers and infrastructure are trusted by more businesses than any other, with industry leadership across major enterprise applications. You can be confident that your ProLiant infrastructure has been designed to scale to meet your changing needs, guard your investment, provide outstanding value – and make your life easier.

To learn more

For more information on how HP ProLiant servers and infrastructure can help you lay the foundation of an Adaptive Enterprise, contact your HP representative or visit www.hp.com/go/proliant



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