

Is your infrastructure ready to adapt?

HP BladeSystem prepares your infrastructure for change—both today and tomorrow.

HP knows what keeps CIOs up at night. You have to streamline costs and operations. You need to change from being a cost center to being a competitive advantage. You need to begin to automate, increase worker productivity, and scale to meet service demands. And you must do this all while better aligning your overall business process. In short, you know you need an agile infrastructure, but what might be news to you is that the HP BladeSystem is the ideal infrastructure foundation for an Adaptive Enterprise.



Blades increase efficiency and slash costs.

Compared to traditional rack-mounted or proprietary platforms, HP BladeSystem solutions dramatically lower cost, increase utilization, and promote efficiency. Designed for advanced, automated management, our blade solutions combine standards-based technologies that reduce complexity with innovations to streamline productivity.

When integrated into existing environments, HP BladeSystem solutions drive the adoption of new technologies and the simplification of processes across the data center. They allow you to create competitive advantage and do more with less, so you can spend time on tasks that drive revenue instead of those that only keep the lights on. In the end, they reduce costs and provide profitable service delivery to your business.

Blades allow you to scale without compromise

HP BladeSystem solutions act as the universal service delivery infrastructure facilitating your business technology—able to support any workload at any time. They provide complete, centralized control combined with decentralized flexibility to simplify the physical configuration and the logical management of resources. They help automate processes to improve and streamline daily tasks required to scale or repurpose, freeing time and money for the innovation needed to differentiate your business. The HP BladeSystem helps you virtualize your infrastructure, so you can transform physical resources and create unconstrained environments for workloads of any size.

Feel free to deploy blades anywhere—from consolidating multi-tiered architectures or migrating proprietary symmetric multiprocessing (SMP) platforms to standards-based economics. HP BladeSystem is flexible enough to create a secure and reliable foundation that will harness combined performance-to-scale resources to deliver any IT service—from data center to desktop—profitably.

You need to break down barriers and scale to the demands of tomorrow's data center. All while preparing for tomorrow. HP BladeSystem also protects your current investment and provides consistency with existing infrastructures by using the same tools based on standards to manage and control more than just your blade infrastructure.

Blades help you prepare for business change

HP BladeSystem is a fast track on the journey to building an Adaptive Enterprise. Its advanced, integrated management and the unique design of HP BladeSystem creates a foundation that improves the linkage between IT and business by eliminating islands of technology, people, and processes.

By bringing all components together—from compute, storage, network, and power—the HP BladeSystem can be managed as one pool of resources to deliver a variety of IT services to the business. All aspects are modular, so enterprises of all sizes can drive agility to new services and applications where the costs and demands for change are the highest—when they are ready. HP BladeSystem helps shorten time to solution, free resources for innovation, and overcome the challenges of change.

What makes HP BladeSystem different?

Our vision for blades is pervasive—a service-oriented infrastructure capable of supporting workloads of all sizes. Groups of shared resources can be logically pooled without touching the physical components so that IT services and service levels can be allocated to any business need quickly and efficiently. To make this a reality, HP invests in more than a great server, we are designing a better infrastructure—one enhanced for better service delivery.

The key elements underlying the HP BladeSystem infrastructure consist of their unique system enclosure, their advanced networking capabilities, their power subsystem and distribution configuration, network storage, and the integrated management framework. With these advancements, HP customers can choose from the broadest range of server blades, interconnect, management tools, and storage components to build a modular solution. One that's flexible enough to support any workload, and agile enough to adapt to any new business demand—and HP BladeSystem allows you to do it more efficiently than any rack-mounted or other blade offerings available today.



Why HP BladeSystem as the ideal infrastructure?

We thought about blades from the top down. We looked at best-practice business processes and how they carry through the infrastructure. HP has unique tools and services that can help track data from your business, and information from the infrastructure, and then pull it all together to provide better insight into business process flow—into how the performance and processes of the infrastructure impacts your business and bottom line.

We designed the HP BladeSystem infrastructure with these insights in mind—and with the goal of improving that connection. As a result, HP BladeSystem contains the intelligence and interconnectivity, the scalability, and the efficiency your business requires—all based on industry-standard architecture, modularity, integration, and simplification.

HP BladeSystem enclosures

Distinct from other choices, the HP BladeSystem enclosure knows the physical location of each server or switch plugged into that enclosure—it even knows how and when you might want to configure a server or switch if it's ever inserted into an empty slot. This is a powerful feature that makes the system self-aware and enables unique features based on sense of server location and the infrastructure's "personality." So if server one fails, HP BladeSystem can automatically shift workload to an underutilized server. Or if capacity reaches a predefined threshold, the HP BladeSystem will bring on a new server in a predesignated area. Likewise, if a new server is inserted, the system can configure and install predefined software.

HP enclosures also facilitate interconnection between other enclosures, extending scalability and interaction between other servers and networks. Additionally, our enclosures support multiple server and network modules, so you can protect your investment, and grow and adapt your infrastructure to meet future server and network designs.

HP BladeSystem power distribution

Power and cooling concerns are top of mind for all large data centers, regardless of whether they rely on traditional rack-mounted or blade server designs. As power and cooling demands grow with new technologies, this must be addressed and planned for today. The unique power distribution system inherent in the HP BladeSystem provides N + N redundancy and eliminates the need for power supplies in each system component.

To provide power redundancy, power is distributed from the modular power enclosure to the HP BladeSystem server enclosures. In addition, a power management module determines if adequate power is available for new components during the power-up sequence. This power solution is superior to other choices based on its ability to expand to future power demands.

Not limited to one bank of servers, the power subsystem in the HP BladeSystem provides more headroom without a complete overhaul of the power subsystem and distribution scheme as the environment grows. This, in turn, reduces overall cost, heat, and power usage while planning for the future needs.

HP BladeSystem networking infrastructure

HP BladeSystem solutions provide advanced network interconnect options that allow the creation of virtual LANs (VLANs) that separate available network bandwidth into multiple independent and secure channels. Without visibility to the actual path, devices can be assigned network resources dynamically and transparently. These virtual network channels enable efficient, available, and secure communications across the HP BladeSystem. To extend their efficient, integrated design, network and switch options share the same enclosures as the server blade. HP offers one of the broadest selections of network and switch options in the industry to support advanced network, clustering, and SAN connectivity.

Shared storage

The HP BladeSystem virtualizes all elements (servers, network, storage, and power) of the infrastructure, allowing physical resources to be pooled and shared across multiple applications and IT services. The ideal future state with an HP BladeSystem infrastructure is where no single application or server image resides on a specific server, and all the infrastructure data resides on shared storage. Networked storage allows the pooling and sharing of storage resources and enables on-the-fly allocation of resources to individual servers or applications. Changes made to virtual pools of servers and networks can also be performed on the shared storage applications, in a similar way with a common interface.

HP BladeSystem management

The beauty of an all-blade infrastructure solution is the ability to manage the entire infrastructure as one universal system. Only HP provides this ability, through innovative management capabilities built in to the HP BladeSystem. And, because HP management tools are based on industry-standard architectures, you can use the same tools enhanced for HP BladeSystem to manage the rest of your existing infrastructure.

Implementation and support services for HP BladeSystem environments

HP Services professionals draw on extensive industry-specific experience designing, delivering, and managing HP BladeSystem solutions tailored to the unique needs of businesses of all sizes. HP can help significantly improve business agility and align business and IT strategies to market new services, build customer loyalty, boost revenues, increase profitability, and contain operational costs. With more than 65,000 trained HP service professionals and 70,000 product and service partner experts worldwide, HP can provide local resources globally.

IT environment has never been more critical to business. What value is the business information in if it is not readily available, accurate, current, and secure? HP is the recognized leader in quality service and support, with a clear understanding of business and IT needs for 24x7 availability, bulletproof security, and high levels of performance and reliability. HP offers a single point of accountability for all service and support needs.

HP provides financial flexibility

HP Financial Services offers a complete array of leasing and financial lifecycle management services around the world. To find out more, contact your HP Financial Services representative at 888.215.8868 or visit us at www.hp.com/hpfinancialservices.

Changing the way you think about your infrastructure

HP BladeSystem solutions allow you think about managing a pool of resources, as opposed to just one machine. And their intelligence makes that management process easier and less costly. They let you move from manual processes to automated ones. They help you transform constrained physical components into limitless virtualized pools of resources. And they allow you to manage with consistency across your entire HP platform.

If you're looking to change the way your infrastructure supports your business, the HP BladeSystem is a move in a more adaptive direction. For more information, visit www.hp.com/go/bladesystem.

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