



## thin client server computing for hp ProLiant BL server blades

### enterprise power, space efficiency

Thin client server computing is a powerful, cost-effective means to achieve global delivery of applications and information, but it places a heavy responsibility on the servers in your data center. That means performance, availability, and scalability are a must. And with resources getting tighter every day, space efficiency and simplified administration are also essential.

HP has the answer: a space-efficient, easily managed thin client server computing solution designed for enterprise demands. Working in partnership with Citrix and Microsoft®, HP delivers a complete solution, including servers, thin clients, software, and services, which leverages ultra-dense ProLiant BL e-Class and high-performance ProLiant BL p-Class server blades from the new HP.

Developed for adaptive computing, and optimized for rapid deployment and automated provisioning, the ProLiant BL e-Class and p-Class blades provide dynamic scaling, and are remotely manageable from anywhere in the world. Deployed in a multi-tier architecture, these flexible servers are designed to handle rapidly changing and unpredictable requirements.

It's the ideal platform for thin client server computing, enabling you to streamline application delivery to a heterogeneous user community, while minimizing cost and complexity.

### benefits

- **adaptability** – The HP Adaptive Infrastructure vision and innovative ProLiant blade technologies provide a flexible foundation for rapid deployment and automated provisioning
- **high performance and availability** – Advanced Intel® processors and redundant components, along with load balancing, maximize performance and availability
- **scalability** – Server blades can be deployed and redeployed in just minutes, reducing operating system installation and server provisioning time by up to 300%

- **cable reduction** – Innovative design cuts cabling at least 80%.\* The interconnect switch is used to consolidate server blade network cables to a manageable quantity. In addition to network cabling reduction, the ProLiant BL server blades are designed for headless management so there are no keyboard, video, or mouse cables to connect.
- **lights-out management** – Integrated technology allows remote deployment, configuration, monitoring, and management for more effective control of distributed remote sites and data centers
- **innovative tools** – ProLiant Essentials Software from the new HP enables dynamic resource scaling, virtual presence and control, rapid deployment, and automated provisioning
- **best practices** – Documented best practices provide for faster solution deployment, higher quality, and rapid return on investment
- **world-class hp services** – Global support and single point of accountability are your assurance of long-term success

\* Compared to traditional 1U servers using an interconnect switch

### centralized deployment of enterprise applications

With a thin client server computing solution from HP, you gain the flexibility to easily and efficiently support changing application requirements anywhere in your enterprise. Using Microsoft Windows® 2000 with Terminal Services, we provide the foundation for centralized deployment of enterprise-wide applications to Windows-based devices. Building on Terminal Services, Citrix MetaFrame enables enterprise-class thin client server computing by adding unparalleled manageability and scale for terminal server farms, applications, and users. In addition, it extends support for heterogeneous environments by integrating and publishing interactive applications to any standard web browser. As a result, centralized applications can be served to all types of devices, including Windows, UNIX®, Linux, Java™, and Macintosh.

### versatile, cost-effective computing

ProLiant BL e-Class and p-Class server blades play a central role in enabling rapid deployment and flexible, cost-effective management of your thin client server computing solution. ProLiant BL e-Class edge-server blades offer industry-leading, power-efficient performance and scalability, while the ProLiant BL p-Class blades offer enterprise performance and availability.



The key to making this environment truly adaptable, while also conserving valuable resources, is the HP Dynamic Internet Solutions Architecture (DISA). DISA enables the scaling up and out of terminal services, web, application, and data resource tiers, leveraging the industry-defining technology of ProLiant servers to create an infrastructure optimized for flexibility, performance, availability, and economy.

**adaptability**

ProLiant BL e-Class and p-Class blades maximize your ability to handle dynamically changing business requirements. You can add computing resources by simply snapping in a new blade. And because they support dynamic resource scaling, you can deploy and redeploy hundreds of blades by simply dragging and dropping predefined scripts and images. Graphical tools provided with ProLiant Essentials Rapid Deployment Pack Software make it fast and easy.

**performance and availability**

ProLiant BL p-Class blades also bring a new level of performance and availability to enterprise computing in a blade form factor. With key component redundancy, intelligent management, and "rip-and-replace" serviceability, these feature-packed servers deliver the uptime you need to meet the intense demands of terminal services.

**economy**

For all their power and versatility, ProLiant BL p-Class blades are designed with economy in mind. A flexible forward-compatible infrastructure accommodates future blades with increasing performance, and offers plenty of power headroom so you don't have to repurchase power infrastructure for the next generation of blades. Automated, dynamic provisioning greatly reduces the burden on IT staff—along with the associated costs.

**lights-out management**

In addition, major management savings come from the HP Integrated Lights-Out management capabilities. For example, using these capabilities you can install, configure, monitor, update, and troubleshoot remote ProLiant BL p-Class blades from anywhere, anytime—all via a standard web browser. And your entire ProLiant server infrastructure is easily managed with HP Insight Manager, which includes a visualization tool that provides up-to-the-minute status of all the blades in a rack, with full graphical location detail. In addition, HP provides Rapport Administrative Software to manage HP thin clients, distribute software upgrades, and create reports.

**Compaq EVO thin client T20**

HP provides the Compaq EVO Thin Client T20, a thin client device providing you with a choice of operating systems, local browser, and expandable flash/DRAM memory. Local protocol support includes both Microsoft RDP and Citrix ICA, enabling you to run either Microsoft Terminal Server or Citrix MetaFrame.

**more information**

For more information on how HP thin client server computing solutions powered by ProLiant BL server blades can help you increase the flexibility and reduce the cost of managing enterprise applications, please contact your HP representative or reseller, or visit [hp.com/solutions/thinclient](http://hp.com/solutions/thinclient).

Technical information in this document is subject to change without notice. Microsoft and Windows are trademarks of Microsoft Corporation in the U.S. and/or other countries. UNIX is a registered trademark of The Open Group in the U.S. and other countries. Java is a trademark of Sun Microsystems, Inc. in the United States and other countries. Intel and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. ©2002 Hewlett-Packard Company. 176M-0902A-WVWEN

**hp dynamic internet solutions architecture (DISA)**

