Westlake Reed Leskosky
HP Blade Workstations support nationwide teamwork for architectural firm

“For years we’ve relied on traditional HP Workstations because they deliver performance, reliability and value. Now HP Blade Workstations will help us with the increasing challenge of enabling distributed work groups, while also making our technology more manageable.”
James Wolf, Technology Manager, Westlake Reed Leskosky

Objective:
Facilitate use of large CAD files in architecture/design offices across the country

Approach:
Westlake Reed Leskosky has incorporated its outlying offices with HP Blade Workstations, which employees will access using HP Blade Workstation Clients and HP Remote Graphics Software.

IT improvements:
• Simplified, less costly IT support
• Improved data security

Business benefits:
• Elimination of the need to move large CAD files from one office to another
• Improved access and more flexibility for remote users
• More favorable environment for distributed work groups

HP customer case study: HP Blade Workstations facilitate CAD work, simplify technology management

Industry: Architecture and engineering

As the power of computer-aided design (CAD) software has grown over the years, so have the file sizes it produces. It may be only a minor inconvenience to share files across an internal network that serves a small firm in a single location. But how do you enable design professionals to collaborate on huge CAD files when they’re separated by hundreds—sometimes even thousands—of miles?

Cleveland-based Westlake Reed Leskosky has found a solution: HP Blade Workstations. “For years we’ve relied on traditional HP workstations because they deliver performance, reliability and value,” notes James Wolf, Technology Manager for the firm. “Now HP Blade Workstations will help us with the increasing challenge of enabling distributed work groups, while also making our technology more manageable.”
Growth presents challenges

Westlake Reed Leskosky provides comprehensive fully integrated design and management services including architecture, engineering, interior architecture and design, lighting and theatre technology, sustainable design, master planning and programming. The company long ago standardized on leading products for its CAD work: Autodesk software running on HP workstations. Over the years, the combination has served the growing architectural engineering firm well. But unlike many other firms, WRL faces an additional challenge: distance. While its headquarters are located in Cleveland, the company also operates offices nearly coast-to-coast: from Washington, D.C., to Phoenix.

“Sometimes it’s a major challenge to bring someone with expertise in a particular field from Phoenix into a project based in Washington or Cleveland,” notes Wolf. The staff member either has to temporarily move cross-country, or the firm is constantly moving huge CAD files instead. It’s a cumbersome process to move large CAD files, and it erects barriers against collaboration.

The challenge has grown even larger in recent years with the emergence of building information modeling (BIM) applications, like Autodesk Revit. BIM is the most powerful building documentation tool yet, Wolf notes. It bridges communication within the architecture, engineering and construction functions. With BIM, architects and engineers efficiently generate and exchange information, create digital representations of all stages of the building process, and simulate real-world performance. But with all that capability comes complexity: BIM files are often huge.

Wolf believes HP Blade Workstations will enable his firm to more effectively manage those files, while solving several problems all at once: eliminating the need to move large files, facilitating distributed workgroups over large distances, and making it easier to manage the company’s core technology.

Remote access without compromises

How will it work? First, the powerful workstation components—processor, graphics support, memory, etc.—reside on a Blade Workstation in the server room at the firm’s Cleveland headquarters. But users in Phoenix, or Washington, or anywhere else, can access the power of the workstation remotely from an HP dc73 Blade Workstation Client. The result: The core business technology is centralized for improved management, while employees are freed to work while still having the power of a workstation at their fingertips.

A key to the HP Blade Workstation Solution is HP Remote Graphics Software. RGS is what allows users to remotely access the workstation desktop and share 2D, 3D video and media-rich applications over distance in real time. It employs digital compression and a rapid image processing algorithm to deliver a “just like local” experience.

“RGS is excellent in accelerating our open GL applications including AutoDesk AutoCAD, AutoCAD 3ds Max, Autodesk Revit and even graphics applications like Adobe Photoshop,” says Wolf. “Other solutions for remote access just don’t perform with high-powered software, in part because they’re sharing a processor. You really need the dedicated processors for your applications that the blade workstations have.”

“I’m real big on actually seeing the performance, so before we invest in dozens of workstations, we’ll often bring hardware into our office and run benchmarks to make sure it delivers what we need. The bottom line is, so far we’ve been happy with our HP technology, and happy with the people who stand behind it.”

James Wolf, Technology Manager, Westlake Reed Leskosky
He says the new HP ProLiant xw460C Blade Workstations are configured to match the performance of the company’s existing HP xw4400 workstations, with which WRL has already benchmarked RGS software’s performance. The Blade Workstations are configured with Intel® Xeon® Dual-Core 2.33 GHz processors, 4 GB of RAM, and NVIDIA FX 560M graphics processors, running genuine Windows® XP Professional 32-bit.

**Users get better access, more flexibility**

So how will Blade Workstations impact specific users? Staff in the company’s outlying offices will probably be the most frequent users. They will use Blade Workstation Clients, along with a 24-inch diagonal HP LP 2465 LCD monitor and RGS software, to run the full suite of Autodesk software throughout the day. But they aren’t the only likely users. In addition, project managers who are equipped primarily with notebook PCs will also have access to the powerful CAD, BIM, and Modeling applications.

“Project Managers using HP Blade Workstations will actually have better access to CAD files than they’ve had before,” says Wolf. “They will use a notebook and a second monitor to run an RGS session with a Blade Workstation. That means they can run a building information modeling application like Revit, or some other analytical applications, that the processor and video on their notebook wouldn’t otherwise be able to run.”

WRL’s new configuration with Blade Workstations will actually facilitate a long-term company goal: flexible, project-oriented distributed work groups involving employees from different offices in different locations. With Remote Graphics Software, the desktop session from an HP Blade Workstation can be sent to multiple users, allowing them to view and interact with the same application. Engineers in Phoenix and Washington can collaborate in real time on even the most sophisticated 3D CAD model. And they can do so without requiring a workstation nearby.

“That has a couple of important benefits for us,” says Wolf. “First, we’ll be able to even out our workload between offices. Not all our markets are growing at the same speed, and we might have more demand in Phoenix during one year, and Washington the next. Instead of having to fly people to Phoenix for two months to keep a major project on schedule, they can continue to work from our home office, go home at night and have dinner with their family. Another key initiative in our firm is to allow selected staff to have a flexible telecommuting schedule when appropriate. In the long term, our equipment creates win-win opportunities for both our clients and staff that keep our projects on schedule and our staff happy, which will help with employee retention.”

In addition, remote collaboration will make better use of employees with highly specialized skills—like an acoustician (expert in acoustics) who works out of the company’s Cleveland office, but whose skills are needed throughout the company.

**HP Blade Workstations streamline technology management**

HP Blade Workstations offer another important advantage to WRL: simplified and improved management. Until now, with Workstations deployed from Phoenix to Washington, the firm needed to position technology experts across the country for technology rollouts, software upgrades and troubleshooting. Blade Workstations will reduce the need for local expertise.
“In Washington, where we don’t keep any IT staff, we’ll be able to outfit the office with HP dc73 Blade Workstation Clients that connect to Blade Workstations. Our dedicated IT staff in Cleveland will be able to monitor and manage those workstations more effectively than if they had to be managing hardware out in the field,” Wolf explains.

It will be easier and less expensive for WRL’s internal support staff to manage the blades in the data center than to manage Workstations physically located in distance cities—especially with HP remote management tools.

Blade Workstations also increase data security. Even if a Blade Workstation Client or PC is stolen from the office, the business-critical CAD files are stored back in the company’s data center, on an HP Storage Area Network.

Confidence in technology
Wolf says working with HP and its local partner, BPI Information Systems in Cleveland, gives him confidence that WRL is getting the right technology for its needs. “It’s good to know I’ve got a dedicated account person locally who can get me the answers I need, and we have access to HP’s expertise.” When it came to the blade technology, Wolf notes, BPI helped arrange conference calls with HP product experts and ultimately bring in Blade Workstation specialists to Cleveland for an on-site meeting and assessment.

“I’m real big on actually seeing the performance, so before we invest in dozens of workstations, we’ll often bring hardware into our office and run benchmarks to make sure it delivers what we need,” he continues. “The bottom line is, so far we’ve been happy with our HP technology, and happy with the people who stand behind it.”

Contact the
HP Reference2Win Program, 866-REF-3734
for more information.

To learn more, visit www.hp.com
www.bpiis.com

© 2008 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

1 64-bit computing on Intel architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers and applications enabled for Intel® 64 architecture. Processors will not operate (including 32-bit operation) without an Intel 64 architecture-enabled BIOS. Performance will vary depending on your hardware and software configurations. See www.intel.com/info/em64t for more information.

Dual/Quad/Triple Core is a new technology designed to improve performance of multithreaded software products and hardware-aware multitasking operating systems and may require appropriate operating system software for full benefit. Not all customers or software applications will necessarily benefit from use of this technology.

Intel®, Pentium® and Xeon® are trademarks of Intel Corporation in the U.S. and other countries.

Microsoft and Windows are U.S. registered trademarks of Microsoft Corporation. Windows Vista is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.


This customer’s results depended upon its unique business environment, the way it used HP products and services and other factors. These results may not be typical; your results may vary.