

## SARCOM leads by example

HP partner and solutions provider reduces total cost of ownership by 30% while dramatically boosting availability at its data center with HP BladeSystem.



### SARCOM

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– Thomas F. Miller, Director of Enterprise Systems and Storage, SARCOM

#### Objective:

Drive cost out of the datacenter and streamline server management and administration.

#### Approach:

Deployed HP BladeSystem to consolidate and virtualize a total of 80 virtualized servers on just eight HP server blades in less than two months.

#### IT improvements:

- 99% reduction in planned downtime, from 6 hours per quarter to near zero
- 88% faster HP BladeSystem deployment due to HP Factory Express, from 8 hours down to 1
- 80% reduction in server footprint
- 88% decrease in overall server deployment time (4 hours reduced to 30 minutes)
- 50% reduction in administration hours
- 30% reduction in power and cooling costs
- 30-40% reduction in Total Cost of Ownership (TCO) due to virtualization

#### Business benefits:

- Reduced cost of operations through productivity gains
- Better employee collaboration due to Web-enabled applications
- Successful deployment offers true proof-of-concept to their customers

#### Making data centers more efficient

Many solution providers don’t have time to upgrade their own data centers. As the saying goes, “The shoemaker’s children have no shoes.”

An exception is SARCOM, an HP partner based in Lewis Center, Ohio that recently found the time and means to upgrade its own data center—and is realizing substantial benefits.

SARCOM has 800+ employees in 22 offices serving businesses throughout the United States. Although SARCOM’s mission is to help customers drive cost out of their computing infrastructures, the company realized it could do the same for its own Columbus, Ohio data center by deploying the HP BladeSystem and VMware.

“We wanted to reduce the number of physical servers we had, especially the older servers and non-HP servers,” says Thomas F. Miller, director of enterprise systems and storage at SARCOM. After two phases of virtualization and consolidation, SARCOM has been able to reduce power and cooling costs by 30%, decrease its overall server footprint by 80%, reduce server deployment time by 75%, and diminish IT administration hours by 50%.

Why did SARCOM go with HP for its solution? “We believe HP has absolutely the best technology out there,” Miller says. “They have a passion for it and of course their product performance speaks for itself. That’s why we sell it to our customers and that’s why we chose to use it for our in-house solution.”

### Physical to virtual and beyond

Scaling back the number of SARCOM's physical servers was the beginning of the process. "We really needed to get those numbers down," says Miller. The first phase involved virtualizing and replacing 60 standalone servers in the datacenter, every one of which had locally attached storage. The results were dramatic: By fall 2005, the company was able to virtualize those 60 physical servers on just seven HP ProLiant DL380 servers.

The second phase of the process began in early 2007. SARCOM migrated its virtualized servers from a rack-mounted environment to an HP BladeSystem comprised of eight HP ProLiant BL25p G2 server blades. It also installed a HP StorageWorks Enterprise Virtual Array (EVA) 5000 to replace all direct-attached storage.

Now the eight HP server blades house 80 virtual servers. Avoiding the presence of 72 physical servers has decreased the overall server footprint at SARCOM by 80%.

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*"Our customers are really blown away when I tell them how we went from nearly 80 servers down to just 8."*  
– Thomas F. Miller, Director of Enterprise System and Storage, SARCOM

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Adding a single standalone server in the past would have consumed at least four hours of IT department resource time at SARCOM. Now, with the virtualized servers running on the HP BladeSystem, the IT team can rapidly add new server blades and deploy VMware, rolling out a single blade in just 30 minutes, an 88% reduction.

### Clear IT value

The results of deploying the HP solution have been wide-reaching. The robust, consolidated hardware provides much higher availability than SARCOM had prior to the deployment. It also cut the company's planned and unplanned downtime dramatically. Historically, their quarterly planned downtime was about six hours—although it could extend as long as 12-15 hours, significantly reducing productivity. As a result of the HP BladeSystem and VMware deployment, both planned and unplanned network downtime has now become nearly non-existent. The higher availability also means that it's easier to move loads from one server blade to another, remove a server blade for service when necessary, or add additional memory when needed.

Decreasing the number of physical servers has brought SARCOM significant savings in energy usage. It no longer has to provide support for power redundancies, Ethernet adapters, and SAN infrastructure for the 72 additional servers it would have in a standalone server environment.

Providing redundant power supply to 72 servers would mean an additional 144 active power cords requiring outlets and circuits. Says Miller, "One of the most compelling things for us now is that we don't have to have 144 500-watt power supplies just sitting there running at only 30% utilization."

If each server had four Ethernet adapters, there would be 288 switch ports requiring power 24/7. The server reduction and energy savings realized from the HP deployment has enabled SARCOM to do things that would have been impossible with a traditional server configuration, such as having all servers attached to the SAN.

SARCOM realized faster time to value for its new HP BladeSystem by choosing HP Factory Express customization and configuration services. "The HP BladeSystem came pre-mounted, pre-configured and pre-tested in its enclosure," Miller remembers. "Instead of arriving in about 30 boxes, it was fully assembled, shrink-wrapped on a pallet, ready to plug in. We had it up in one hour instead of eight and didn't have the boxes to recycle."

The server virtualization and consolidation project has enabled SARCOM to cost-effectively add more servers than it could think of accommodating before. SARCOM has been able to Web-enable many internal and customer-facing services, leveraging Microsoft SharePoint Services.

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## At a glance

SARCOM is an Ohio-based HP partner and solutions provider. SARCOM has 800+ employees in 22 offices serving businesses throughout the United States. SARCOM's mission is to help customers reach business goals while driving cost out of their computing infrastructures. Practicing what it preaches, SARCOM is using the HP BladeSystem to consolidate and virtualize its data center, achieving significant savings.

Another capability SARCOM has deployed is a new LANDesk desktop management system hosting six HP BL460c and two BL480c server blades in an HP c7000 BladeSystem enclosure. The LANDesk system enables remote image deployment, management, inventory and patching of desktops for the company's 800+ employees in 22 offices—substantially streamlining IT administration.

"One feature we especially like about HP BladeSystem c-Class is power management with the Dynamic Power Saver mode," Miller says. "It saves us power by running the required power supplies at a higher rate of utilization and putting unneeded power supplies in a standby mode. Most power supplies will operate inefficiently when lightly loaded and more efficiently when heavily loaded."

### A solution with competitive advantage

Another bonus the company received as a result of deploying the HP solution can be classified as "strictly business." When its customers hear about the dramatic IT gains and real-world business value SARCOM received with the HP solution, they want to hear more.

Being able to cite the concrete cost and resource savings they have received with the HP solution really gets a customer's attention. Says Miller, "When I am talking to a company about their needs around virtualization and storage solutions, it's great to be able to use our own success with HP as an example. Our customers are really blown away when I tell them how we went from nearly 80 servers down to just eight."

SARCOM believes that being able to include HP server and storage technology as part of its service offering provides them with a significant competitive advantage. "As a partner, HP's commitment to our success has been fantastic," says Miller. "Their support of our business objectives and growth strategies has truly played a huge role in our ability to win new business and bring leading-edge solutions to the marketplace."

## Solution at a glance

### Hardware

- HP ProLiant BL460c and BL480c Server Blades
- HP BladeSystem c7000 enclosure
- HP ProLiant BL25p G2 Server Blades
- HP BladeSystem p-Class enclosure

### Software

- HP Integrated Lights-Out 2 (iLO2) Standard
- Microsoft Windows Server 2003
- VMware ESX Server
- Progress Software enterprise resource planning (ERP) system
- SARtrac proprietary, Web-enabled support tracking
- HP StorageWorks Enterprise Virtual Array (EVA) 5000

### HP Services

- HP Factory Express
- HP Service and support

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4AA1-7319ENW, February 2008

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