



# Datacenter Solution Spotlight

## Server and Storage Virtualization

Customer: Secondary and Adult Education Center

Location: Central Ohio

### Business Need

The IT department of this career education center maintained a sprawling, inefficiently utilized server environment. They needed a solution that would produce greater efficiencies in server utilization, management and maintenance, and streamlined use of limited server room space. An additional, more long-term goal was virtualizing the desktops of both staff and student end users.

With the guidance of MCPc consultation, they decided the best approach was to implement storage and server virtualization through VMware. This would allow them to yield the desired efficiencies as well as establish the necessary foundation for desktop virtualization.

However, its small IT staff supported approximately 1,000 secondary and adult students, and 300 employees. Therefore, its first priority was addressing day-to-day desktop, application and network support issues. This left little time and resources for strategic datacenter projects. As a result, the organization required a partner with VMware expertise and engineering talent that could help tie all these layers together, while preventing the disruption of daily support tasks.

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### Solution

After initial discussions with the IT staff to understand the specific needs of the environment, MCPc designed a two-month project plan to execute on the server consolidation goals and put the necessary infrastructure in place for subsequent desktop virtualization.

Using the VMware Capacity Planner tool, MCPc engineers ran an analysis on 22 servers in the environment and found that they could be consolidated to four servers running on VMware vSphere technology. Proper licensing for vSphere was secured through OARnet with the help of MCPc. The engineers then worked with the IT staff to migrate existing operating systems and applications into the VMware virtual machine environment, upgrade the memory and firmware of four existing PowerEdge 1950 servers, migrate two Dell MD1000 storage shelves into the new MD3000i storage array, and install, update and configure vSphere on six other existing PowerEdge 1950 servers. Once the VMware physical-to-virtual conversion was successfully demonstrated, physical server instances were



### Highlights

This customer wanted to virtualize its server environment to gain efficiencies in space usage and server management, and to lay the foundation for a later goal of desktop virtualization. To do this, MCPc engineers worked with the educational institution's IT staff to design, install and configure a new server and storage environment, and add VMware vSphere.

### Benefits

- MCPc's resources enabled the small IT staff to execute the server virtualization project without neglecting day-to-day technical support duties.
- 22 servers were consolidated to four.
- With a virtualized datacenter, the long-term goal of desktop virtualization is now possible.

migrated to the virtual machine with shared storage.

After the virtual server layer was successfully built, the IT staff was ready to launch the desktop virtualization project, which would also be executed with the help of MCPc.

## Results

Now that a patchwork of 22 servers has been consolidated into a unified fleet of four servers running on vSphere, datacenter management, maintenance and upgrades have all been simplified. Previously, multiple storage platforms were underutilized and created multiple instances of stranded storage; the new VMware solution centralized storage and enabled sharing across all servers in the environment.

Plus, with a solid storage configuration, the environment as a whole has become more stable, requiring less emergency support. These efficiencies and stability provided critical gains for an organization that usually has only one or two technology staffers to address the needs of more than 1,300 end users.

If your organization is looking to implement server, storage, desktop or application virtualization in its IT environment, contact MCPc today to discuss a tailored, holistic solution designed and delivered by vendor-certified architects.



## About VMware

VMware, a global leader in cloud infrastructure, delivers customer-proven virtualization solutions that significantly reduce IT complexity. VMware accelerates an organization's transition to cloud computing while preserving existing IT investments and enabling more efficient, agile service delivery without compromising control.

