Microsoft

Windows Server 2008

Customer Solution Case Study

Plastic Manufacturer Uses Virtualization to Mold New Hardware Management

Customer: Master Molded Products
Web Site: www.mastermolded.com
Customer Size: 150
Country or Region: United States
Industry: Manufacturing
Partner: Quality Systems Solutions
Partner Web Site:
www.qualitysystemsolutions.com

Customer Profile
Master Molded Products, a 150-employee manufacturing company based in Elgin, Illinois, designs, engineers, and manufacturers custom value-added plastic products.

Software and Services
- Microsoft Office SharePoint Portal Server 2003
- Microsoft Windows 2000 Professional
- Microsoft Windows 2000 Server
- Windows Server 2003 Enterprise Edition
- Windows Server 2008 Enterprise
- Windows Vista
- Windows XP Professional

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manufacturer, found that it was consistently overspending its hardware budget while also under-utilizing the hardware it owned. The company needed a solution to enforce better hardware utilization while increasing server power on existing machines. A simple deployment of Windows Server® 2008 in a VM environment provided a test-bed for a much needed application of SharePoint Server.

The existing hardware includes Dell, Compaq, HP, and IBM, and the network uses switched Ethernet with a mixture of Gigabit and 10/100 segments. Remote access is provided through the SBS virtual private network (VPN) and Remote Web Workplace (RWW).

"We are always concerned with system stability and performance," says MMP LAN Administrator Roy Dodd. According to Dodd, MMP's IT crew faced its most challenging exercise when managing virtual machines on the company's Windows Server 2003 Virtual Server. And, when managing end-user requests and problems that arose when using a Windows® SharePoint® Server portal. Although the SBS domain functioned satisfactorily, the company had historically overspent on its hardware and underutilized its capacity.

"We are trying to optimize utilization of existing hardware and ensure that new hardware is not 'over-spec'd' for our needs," says Dodd. "We are also looking to consolidate multiple physical servers into virtual machines on fewer hardware devices."

Solution

Dodd estimates only about 45 of MMP's employees access its Windows services in-house, which run on a mix of AMD- and Intel-based Dell and Hewlett-Packard (HP) computers. To begin its path toward server consolidation and calibrating its hardware use, Dodd hired Microsoft Certified Partner Quality Systems Solutions, Inc. to consult about creating a solution that would provide a new platform for MMP's Windows® SharePoint® Services 3.0 portal.

"Performance and availability of skills were probably the two most significant drivers," says Dodd, of the decision to go with Quality Systems Solutions' recommendation of deploying Windows Server 2008.

The built-in server virtualization technology of Windows Server 2008 was also a key determining factor. Even though the new operating system would initially only host a general purpose file server and

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Windows SharePoint Services portal for up-to-the-minute access of manufacturing data and information, the value of being able to continue to upgrade the company's existing physical hosts with Windows Server 2008 and gain server power without incurring new hardware costs was a huge plus from Dodd's perspective.

"We chose to stand up a new virtual machine as part of this solution, so there was no migration involved," says Dodd. "Virtualization, when available, should bear a positive impact on our business by improving performance and system stability."

Windows Server 2008 and the Windows SharePoint Services 3.0 solution were deployed on a new Dell PE 2950 computer, The creation of the Windows Server 2008 virtual machine and implementation of the core Windows SharePoint Services required about one day's work, according to Dodd. The final solution included the Windows Server 2008 Initial Configuration Tasks tool, Server Manager console, Add Roles Wizard, and Add Features Wizard.

Benefits

MP's optimized deployment of Windows Server 2008 enabled the IT department to change its pattern of over-spending and under-utilizing hardware by providing more stability in a virtual machine environment while reducing its operating footprint.

Specific benefits of the deployment include:

Improved user productivity. Windows Server 2008 provided a sturdy host for a new Windows SharePoint Services 3.0 application so that data contained in Word and Excel files could be more centrally managed and manipulated in a portal environment without the need of Exchange-based collaboration. Reduced server management requirements. Potentially incorrect configurations are now detected before changes are made, which prevents mistakes. Application deployment time was reduced by 2 months and time for server management by one hour a week.

Increased scalability. Windows Server 2008 improved the use of existing hardware in a virtual machine environment. "We expect that we will be able to consolidate server workload onto existing hardware, effectively postponing the need to purchase new servers."

Improved customer service. MMP is able to more easily and effectively find essential data in a timely manner, even historical data from processes that may have occurred months or years ago, through the SharePoint portal.

Dodd says MMP looks forward to experimenting with Windows Server 2008 Hyper-V™ virtualization technology as a way of improving an evolving server virtualization and hardware consolidation philosophy growing in the IT department. "We expect to realize better hardware utilization down the road," he says. "We also expect that though reliability and stability are not currently a problem, they will only get better as we incorporate more Windows Server 2008 machines into the environment."

Windows Server 2008

Windows Server 2008, with built-in Web and virtualization technologies, enables you to increase the reliability and flexibility of your server infrastructure. New virtualization tools, Web resources, and security enhancements help you save time, reduce costs, and provide a platform for a dynamic and optimized datacenter. Powerful new tools like IIS 7.0, Server Manager, and Windows® PowerShell, allow you to have more control over your servers and streamline Web, configuration, and management tasks. Advanced security and reliability enhancements like Network Access Protection and the Read-Only Domain Controller option for Active Directory Domain Services harden the operating system and help protect your server environment to ensure you have a solid foundation on which to build your business.

For more information, go to:
www.microsoft.com/windowsserver2008

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