

At Your Service

Here are software tools to help you administer and manage your servers.

To deliver optimal service, your e-mail servers, database servers, Web servers and other server-based applications need the proper software.

For IT, having servers increasingly means also investing in administrative and management software tools (along with security software). Servers, like desktop and notebook computers, need management — even when they're working perfectly. This is especially true if there are problems, ranging from increased service demands to security updates that need to be applied.

There are software tools to help ensure that servers provide optimal service for your employees, customers and prospects; that allow IT to respond to new business requirements quickly and easily; and that help maintain control of the TCO (total cost of ownership) on these assets. The more servers a company has, the more important these tools are to leverage IT staff time effectively.

Here's a look at some of the leading software tools available to administer and manage your servers.

M for Managing Microsoft

In addition to server operating systems and popular Microsoft server applications such as Exchange, SQL Server 2005, and IIS (Internet Information Services), Microsoft offers a number of tools for monitoring, administering and managing these systems, as well as other Windows-based servers and parts of the network infrastructure.

These tools include Microsoft Systems Management Server (SMS) 2003, which provides deployment and inventory management; Microsoft Operations Manager (MOM) 2005, which helps IT to monitor and manage the health and availability of the infrastructure and applications; and System Center Essentials, Microsoft's new unified management solution, specifically designed for mid-sized business.

"SMS is Microsoft's fleet management application," according to Tom

Henderson, managing director of ExtremeLabs.com, an Indianapolis-based technology consultancy. "It also works with other Microsoft initiatives for rolling out new machines with pre-installed customized applications. SMS has a lot of server management features, including support for IIS. SMS can also deal with Vista."

MOM, says Henderson, "is good for monitoring and some control of Microsoft infrastructure." It's useful for tech support and network support, such as keeping track of drive space, building structures to support applications and application maintenance, and keeping track of a wide variety of details. MOM is also useful for help desk tasks such as Exchange and print-queue issues. And MOM lets IT create customized management screens that relate more directly to your organization than does a generic application.

V for Virtualization

Server virtualization — creating "virtual machines" for each server application running on shared hardware — is helping IT in companies of all sizes and types.

"Today's main IT pain points are around optimizing the use of assets, backup and recovery," says Ben Matheson, director of SMB products and solutions at VMware. "Virtualization helps in each of these areas. Using virtualization for server consolidation and containment reduces hardware, power, space and cooling costs. The ROI (return on investment) on virtualization products is measured in six to nine months. Virtualization also lowers the complexity of an IT center's operations, which saves a lot of staff time."

Creating virtual servers, using tools such as VMware's ESX Server, is only the first step, Matheson notes. "IT also needs to be able to manage them, for example, saving snapshots of the current VM [virtualized machine] state and controlling resource and capacity allocations."

VMware offers a growing number of tools and features for managing virtual servers, storage and networks in its Infrastructure 3 suite, which is available



in three editions (including the Starter Edition) tailored to the size and needs of the company.

“VMotion lets you migrate VMs dynamically between hosts with zero downtime or disruption, so you can do hardware service and other tasks without interrupting service,” says VMware’s Matheson. “VMware DRS (Distributed Resource Scheduler) dynamically allocates resources and load-balances your virtual machines. So, for example, if you have six ESX servers and one is running ‘hot,’ DRS will move the virtual machine to a less-loaded system.”

Other tools in VMware’s suite, according to Matheson, include the VMware

VirtualCenter, which provides centralized management, automation and optimization for IT infrastructure; VMware Consolidated Backup, which “lets you back up virtual machines more easily without using as much of the machine overhead;” and VMware High Availability (HA), which, if one ESX system goes down, can restart the virtual machines on other ESX servers.

“With HA, downtime is measured in minutes, before you restart on a new host, versus hours or days for a tape rebuild,” Matheson says.

PC for Patch and Configuration Management

Managing the operating system and application software on servers includes »

configuration changes, along with deploying patches and security updates and maintaining inventory.

One company offering solutions for these tasks is Altiris. "We offer products for day-to-day configuration and operational activities," says Christine Ewing, market segment manager.

While a company of any size needs all these functions, IT staff — especially in mid-sized companies — needs to be able to minimize training requirements and maximize operational productivity.

Altiris Server Management Suite, as well as its Client Management Suite, lets IT combine Altiris standalone solutions in a common platform and management architecture integrated into one console. "Having commonality in toolsets streamlines what IT needs to tackle in a day and can help improve IT staff efficiency, as well as system availability," says Altiris' Ewing. "So once IT defines departments, or groups of machines, they don't have to recreate this as they add new management functions. Our products let IT do tasks including inventory and provisioning, running scripts, applying patches and doing backup and recovery."

"It's like a one-stop shop for management elements for servers," adds Ewing. "And unlike traditional configuration management, we don't look at physical and virtual differently." Because Altiris has worked with VMware, says Ewing, "Our provisioning tool can deploy VMware's ESX Server and push instances to those systems."

Altiris' server management tools include Altiris Deployment Solution, Altiris Patch Management Solution and Altiris Recovery Solution, which works with Patch Management to allow stable-state rollback.

"The Deployment Solution initially provisions and configures a server. We have partnerships with companies like IBM and VMware, so we have policies to help provision their products," says Ewing. "Our Software Delivery product lets IT distribute scripts for applications. Patch management checks what patches are available, and includes the understanding on how to validate whether a patch is on a server.

"IT can run any and all these modules from one console," Ewing adds. "And you don't have to install everything at once; even if you buy the entire suite, you can install in a phased approach."

Patch and Vulnerability Management

For IT staff looking to add patch and vulnerability management, or prepared to mix-and-match multiple vendor applications, PatchLink Update provides a suitable solution for companies with as few as two dozen servers through large enterprise-scale environments. "And if you have a small number of machines, or don't have a server, you can use PatchLink Update through a managed server provider," according to Chris Andrew, VP of security technologies at PatchLink. "Patching server OSs [operating systems] and applications is a critical ongoing IT task. Companies need to get critical security updates done quickly."

PatchLink Update offers IT subscriptions to patches — automated, tested and

fingerprinted — to detect where they're applicable, and lets IT quickly and easily figure out where the security holes in your network are," says Andrew. "Anybody can download a patch from the Internet. PatchLink Update lets patches be automatically fed to the server, and the server knows now what needs to be done. Once you have a Windows server, the PatchLink Update server becomes the central administrative point — you load our agent program onto your servers and workstations."

According to Andrew, PatchLink Update supports server and desktop OSs, and some applications, for HP/UX, IBM AIX, Linux distributions including Red Hat and SuSE, Mac OS, Sun Solaris and Windows. Applications that PatchLink Update supports include SQL (Structured Query Language) and Exchange servers, along with client applications including Microsoft Office, Adobe, Firefox, and antivirus and worm-removal tools. "We enable you to patch real and virtual systems," Andrew says.

PatchLink Update also provides an inventory of hardware, software and services on your network and vulnerability assessments. "We show you the vulnerability posture of your network. When you get patches, we show you how many systems are patched or unpatched for critical vulnerabilities. We do host-based patch scanning of the patch piece. We do host-based vulnerability scanning and patch remediation. And we have plug-ins that work with network scanners, to help with quarantining systems that aren't adequately patched," notes Andrew.

Another inventory, license compliance and patch management tool is Diskeeper's Sitekeeper, which consists of patchkeeper, inventory/compliance, and push install modules. According to the company, "Most Sitekeeper users have their management completely automated in under an hour."

Secure Client Access

Although your employees and customers need access to a number of client/server-type applications, it doesn't always make sense — or isn't always possible — to install the client program on user machines.

"Citrix Presentation Server offers an alternative for providing any user with secure access to client/server applications from anywhere using any device or connection," says Calvin Hsu, product marketing management, Citrix Presentation Server, at Citrix Systems.

According to Hsu, Presentation Server's centralized model enables IT to implement and deploy applications such as CRM (customer relationship management), SFA (sales force automation) and ERP (enterprise resource planning) much more quickly than if they had to be installed and configured on each computer. "And faster access for users means management starts receiving the returns on their software investments that much sooner," says Hsu.

One tool that can help keep your network and e-mail, database, Web and other servers up is GFI's Network Server Monitor. It automatically scans your servers, routers, and switches, along with workstations and other devices, watching for failures or irregularities, alerting IT and, wherever possible, fixing them automatically (for example, by executing scripts, restarting services and even rebooting systems).

"Rather than deducing a service status from generated events, which is what many other products do, our Network Server Monitor performs tests to check actual status," notes Andre Muscat, director of network security products at GFI. "For example, we can check the status of a terminal server by performing a complete log-in, and checking if the session is established correctly, rather than relying on the events that the terminal server generates."

According to Martin Buckley, director of product management at Novell, the company's ZENworks Server Management, part of the ZENworks suite, is useful for customers with as few as a dozen servers up through multi-national

enterprises. "ZENworks can handle software, patch, update and policy distribution, as well as content and traditional software distribution. For example, it can send standard templates to your offices. We fully support patches from Microsoft, in addition to providing patch support for all major vendors, including IBM, Adobe, Corel, Symantec, McAfee, WinZip, Citrix, UNIX, Novell and many others."

Also, Buckley stresses, "We can manage mixed environments that include Windows, Linux, Solaris and Novell servers, and we can also manage VMware, Microsoft and Xen virtual machines." ♦

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