

Selected by virtualization pros, indispensable tools for building, managing and optimizing the virtual infrastructure By Beth Schultz, Network World, August 18, 2008



"I'd have to hurt you." Such was the response one user recently gave when asked what he'd do if I took away his favorite virtualization-management tool. When it comes to these virtualization products, passions run deep.







Akorri's BalancePoint: performance management



Akorri's BalancePoint proved the right tool for helping Vancouver Coastal Health run its virtual infrastructure implementation on shared storage. As the healthcare organization virtualized more and more servers over the past two-plus years (currently 60% of its infrastructure - approximately 510 servers), it began encountering a greater number of performance problems on its servers and storage. Of all the tools he considered, Ben Haley says BalancePoint was the only one that gave him the insight he wanted into his VMware servers, as well as the ability to analyze and address performance issues on physical servers and ultimately, his HP StorageWorks Enterprise Virtual Arrays. Because the organization can do trending and analysis with the tool, performance problems crop up far more infrequently now, and when they do, he adds, resolution takes minutes as opposed to days or weeks.





Vizioncore's vRanger Pro: backup and recovery



If the data you're backing up across a virtual infrastructure is financial in nature, you can't second-guess your ability to recover it. That's one reason Arell Chapman says he considers vRanger Pro (formerly called esxRanger) a do-or-die tool for United Bank & Trust. Using the tool, the IT team takes point-in-time backups of all virtual guests. It then can recover those virtual-machine disk-format files easily should the need arise, as it did recently when the bank investigated a problem with a four-month-old client deposit. "esxRanger lets us recover the environment quickly, plus gives us the whole view rather than just maybe the log files," Chapman says. In addition, the tool lets IT run backups during the day with no impact on production servers. That's a big plus because it helps curb the number of evening and weekend hours assigned to engineers, he says.







Virtual Iron Software's Virtualization Manager: management simplicity

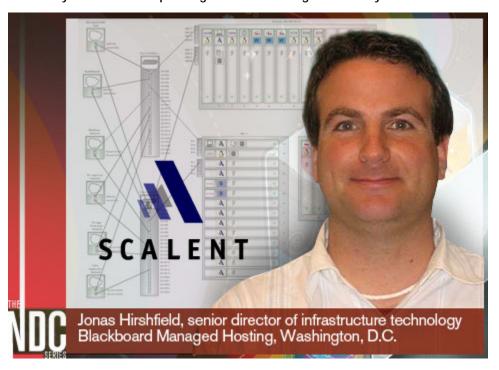


Getting management out of the box is what sold Owen Bird Law Corp.'s Stephen Bakerman on Virtual Iron Software's virtualization software. "We are a small firm by U.S. standards, our technology budget is limited and every purchase I make is scrutinized by shareholders," he says. "It was necessary to find a solution that worked 'out of the box' and that didn't require a significant amount of additional modules or tools to keep it running." Bakerman says he carves out LUNs on the firm's storage-area network, then does all the management through the Virtualization Manager console. He also uses the tool to monitor the availability of virtual servers.





Scalent Systems' Virtual Operating Environment: high availability



When Blackboard Managed Hosting brings its third data center online this month, Jonas Hirshfield will be using Scalent's Virtual Operating Environment (V/OE) infrastructure-virtualization software to manage almost everything in it and maintain ultra-high availability. With the tool, he can move data quickly among virtual and non-virtual servers, change network connections and provide storage access - without touching a machine, cable or the like. "The big thing of this project is it allows us to move data and dependencies off local-server hard drives and put them on enterprise storage, which comes with higher protected RAID and better availability," he says. "Scalent's value is the ability to get that high availability, and to recover from hardware faults and add capacity within minutes." Previously, recovering from a hardware failure could take hours, Hirshfield says. Plus, V/OE is hardware- and hypervisor-agnostic, so Blackboard is not pinned down to any particular infrastructure vendor.







DynamicOps' Virtual Resource Manager: self-service, on demand



As early as 2002, Credit Suisse had identified virtualization as a transformational technology, not only within the data center but also as a way to simplify access to the firm's capabilities. By extending the capabilities of virtualization, the IT department determined it could enable business-application developers to create highly customized environments in a secure, compliant and efficient way, Steve Yatko says. It did so through a self-service portal, an open-interface workflow engine, and heterogeneous virtualization engines that let users commission IT resources on demand - and set end-of-life parameters for those resources, too. The upshot for Credit Suisse, which has made the self-service portal available on thousands of desktops, is that business developers can try out riskier ideas in a virtual test environment and bring ideas from concept to reality much more quickly. So successful has this virtualization management package been for Credit Suisse that the company launched DynamicOps to sell it commercially.





NetApp's FAS3070: virtualized storage



Having recently migrated to a virtual infrastructure, Vince Biddlecombe has learned a lesson or two about virtualization. One of the biggies, he says, is that good enterprise storage is a must-have. "You've got to have shared storage," he says. "To be virtualizing with storage inside individual servers doesn't make sense to me. Your storage infrastructure has to be up to the task." At Transplace, a third-party logistics provider, the storage layer was the first Biddlecombe attacked as he plotted his virtualization strategy. The NetApp FAS3070 gave him two particularly valuable capabilities, he says: SnapMirror, which allows him near-real-time replication between the production and backup data centers; and SnapCopy, which lets him create logical copies of the development databases. Previously, testing or refreshing those databases had taken hours. "The centralized storage, all virtualized from a server point of view, plus the ability to do the real-time replication and make logical copies, made this layer for us," Biddlecombe says.





CA's CA ASM: centralized server management



"The wonderful thing about a virtual environment is being able to move a virtual server from one physical machine to another physical machine without any downtime. Problem is, if you try to track where a virtual machine is actually living manually, you'd go bonkers," John Coleman says. Fortunately, the operational and technical staffs at WellSpan Health don't have to worry about that - and well they might, with 500 servers, 135 of them virtual, to manage. Instead, they use CA ASM to get a visual representation of where the virtual machines are housed - a view that changes automatically as the machines move from one server to the next. Plus, CA ASM, which WellSpan has layered on top of CA Unicenter Network and Systems Management platform, shows not only how the physical machines are performing but also how the virtual machines are doing, as well as the relationship between the virtual machines and their physical hosts. "Proactive server management always has been a major factor here, and adding in virtual servers doesn't change that," he says.





Cirba's Data Center Intelligence: capacity planning, audit trails



For Reliance Limited Partnership's Robert Jackson, using virtualization to facilitate a data-center move and ease disaster recovery was a no-brainer. Figuring out how to stack the virtual machines was bit more taxing: Jackson described himself as "not very impressed" with VMware's capacity planning tool, which showed he could get a virtual-machine-to-physical-box ratio of about 8-to-1 - if he used a high-end platform like IBM's x3950. After IBM also recommended the x3950, Jackson looked around for an alternative capacity planner and discovered the Cirba software. With this software, Jackson could enter not only basic business rules but also a greater variety of constraints than he could with the VMware tool. Following the Cirba tool's recommendation, Jackson has achieved a 16-to-1 ratio, running 160 virtual machines on 10 IBM x3650 boxes. "That's huge difference from an expense standpoint," he says. Plus, the Cirba software provides an audit trail for change management, he adds - a big selling point for corporate management - and helps him determine the virtual-machine resources new applications will require, for example. Still, Jackson says, he's really only scratched the surface. "I know there's more value we'll pull out of this tool."







DataSynapse's FabricServer: application virtualization



In his life before Adaptivity, Tony Bishop was senior vice president and director of product management at Charlotte, N.C.-based Wachovia Bank. There he discovered DataSynapse's FabricServer, which he used to obviate the need for dedicated servers for the company's mission-critical Java applications. Instead, at run-time, FabricServer distributes application processing to the most appropriate server based on predetermined policies. Following Wachovia's FabricServer deployment, application programming efficiency improved by 30%, application performance went up fivefold and throughput speeds were 50% faster, the company reported.





Fortisphere's Virtual Essentials: monitoring and control



Virtual Essentials figures prominently into this global law firm's centralized approach to virtual-machine life cycle management, says Peter Allen. The tool discovers all the virtual machines running at the firm; gives a history of those virtual machines; and allows for change, configuration, performance and inventory management without requiring an agent on each virtual machine, he says. "... because Fortisphere charges per physical server, we thought that was a reasonable model for our environment.







We want to hear from you!



Which tools do you consider must-haves as you dig into virtualization?

[Ed. For the original article, please go to

http://www.networkworld.com/slideshows/2008/081808-ndc-virtualization-tools.html ]



