

Desktop Virtualization Is Starting to Expand

May 17 2007

With virtualization fairly well established in the data center as a way to squeeze more out of x86 servers, top vendors, industry watchers and customers have started to turn more attention to getting that same type of potential out of the desktop.

A little more than a year ago, desktop virtualization seemed more of a concept than a reality. Now, experts say, the potential is there for the technology to take off with vendors - notably VMware - offering software packages that look to better manage desktops as well as laptops.

On the other side, virtualization is being used by vendors like NEC and IBM as part of all-encompassing software and hardware packages that aim to rethink how a company's fleet of PCs can be better controlled through a server-based solution using thin client computers.

Earlier this year, NEC had started to leverage its own hardware knowhow with VMware's virtualization technology to offer a one-stop thin client and infrastructure solution. IBM expanded its Virtualized Hosted Client Infrastructure product with a new blade offering and thin clients from Devon IT. ClearCube, a long-time developer of server-based computing technology, recently offered an update of its management software suite that includes new virtualization capabilities.

All these developments also come at a time when VMware, considered the leader in virtualization technology, released the full version of its ACE 2 software May 15 that offers a number of improvements in its ability to virtualize individual desktops and notebooks.



While all these various ideas have started to come into focus, the question remains of how long it will take for desktop virtualization to reach its full potential.

While a May 8 report by Gartner did not offer a firm timeline, it did point to the potential of the technology to reshape the IT landscape just within a few years. The reported found that while there were only 540,000 virtual machines at the end of 2006, there is a potential for more than 4 million by 2009. Desktop virtualization, the report claims, has the potential to outstrip server virtualization, especially when companies look for ways to better manage IT infrastructure.

Although some industry watchers believe that the full potential of desktop virtualization will not arrive until software makers start creating applications to take full advantage of the technology, some users have found creative ways of using virtualization right now.

At Canadian Blood Services in Ottawa, David Zavitske, a technical support analyst, said the organization has been using a combination of VMware's ACE 2 software to control a fleet of about 300 Lenovo ThinkPad T60 notebooks that go out each day with its mobile centers.

At the start of the day, the laptops are sent out with a virtual image created by the IT department using VMware's Pocket ACE feature. Once the patient information is collected throughout the day, the data is stored in an encrypted hard drive and the virtual image is removed and reinstalled the next day.

"There were so many possibilities for us using this but this really caught our eye and it just make a lot of sense when you think about the amount of regulations we have to deal with," Zavitske said.

Michael Rose, an analyst with IDC, said that desktop virtualization has



the potential to explode for companies looking to better manage a fleet of systems - as well as individual PCs - throughout an enterprise. There's also another reason for this potential: On a global scale there are simply more desktops than servers out there.

While Rose is bullish about desktop virtualization, this particular space, right now, still has some draw backs, he said.

"There still is an issue of cost and problems with how the technology handles multimedia," said Rose, adding that NEC seems to be working on that problem by co-developing a microprocessor for its system that will allow better graphics.

"Still, I think we are going through one big evolutionary process and I think IT managers are out there looking for what is the most cost effective way of implementing these technologies," Rose added.

Jerry Chen, director of enterprise desktop platforms and solutions for VMware, headquartered in Palo Alto, Calif., said customers are looking for ways to better manage the desktop, but also to handle the influx of mobile devices into the workplace. In addition to ACE 2, which works with laptops as well as desktops, the company's VDI (virtual desktop infrastructure) can handle enterprise-wide virtualization needs.

"In the past year, we have seen a huge investment in VDI and serverbased computing," Chen said. "For security reasons, there is a huge trend toward centralizing in one environment. You also have situations where employees are using their own laptops and now you have 500 different computers and you have to look for a way to manage those as well."

In addition to the amount of software being produced by virtualization vendors - VMware's dominance is being challenged by lower-cost providers like Virtual Iron, SWsoft and XenSource in the server space -



the industry is also being helped by the two top chip makers on the hardware side.

Since last year, Intel and Advanced Micro Devices have made dual-core, and soon quad-core, processors more readily available to customers and the two companies have also publicized the fact that their processors have more virtualization capabilities in the hardware itself.

Intel touts its Virtualization Technology, which first made its way into processors at the end of 2005, while AMD released its own virtualization technology [AMDV] under the name Pacifica in 2006.

Margaret Lewis, director of commercial solutions at AMD, said that the next months should show a maturity that will bring virtualization beyond the sort of disaster recovery scenarios that were some of the original ideas behind creating virtual images. Like others, Lewis believes that the next great wave of innovation will come with management capabilities that VMware, Citrix and Microsoft have started to develop.

In addition to management and security, Lewis also sees the technology allowing IT managers to test complex new software suites and applications in a much more thorough way than had been previously possible.

"I think this is the beginning of a lot of activities around virtualization and seeing how it works in terms of management and how it can work to solve a lot of those headaches around managing various clients," Lewis said.

Copyright 2007 by Ziff Davis Media, Distributed by United Press International



Citation: Desktop Virtualization Is Starting to Expand (2007, May 17) retrieved 26 April 2024 from <u>https://phys.org/news/2007-05-desktop-virtualization.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.