TOP 6

Virtualization Adoption: Overcoming Six Common Obstacles

The benefits of adopting virtualization in businesses of all sizes are well established. However, some companies are still considering their options. Why are they tentative? Are they concerned about virtual machine performance and recovery of those VMs due to failures and unforeseen problems? Are they also hesitant due to the perception of increased complexity and additional costs? In the current economic climate, companies view data center efficiency as a means to stay competitive. As such, with the right virtualization solution in place, small and medium-size businesses can realize substantial gains and proactively eliminate downsides. In this paper, we explore six common obstacles to virtualization and how to overcome them to improve data center performance, reduce operating expenses and increase the company's bottom line.

Barrier No. 1: Time

When it comes to adopting virtualization in the data center, many small and medium businesses face challenges ranging from competitive pressures and resource limitations to cost concerns, as well as the actual physical-to-virtual conversion process. For example, the time required to convert a physical server environment to a virtual one can vary widely.

In general, the physical-to-virtual conversion can take one to two hours per server. However, application issues that require manual intervention as well as related equipment limitations can increase that time investment to as long as 24 hours. These manual and semi-automated conversion processes lead to additional labor hours. While virtualization provides a major return on investment over physical servers, physical servers, these increased labor costs are a barrier that most SMBs are not willing to accept.

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Barrier No. 2: Physical/Virtual Divide

Some organizations decide to purchase a completely separate virtual environment, distinct from their physical data center platforms. This complicates the virtualization adoption process, because now it requires maintenance of two discrete products. Such an approach introduces a level of complexity most organizations generally hope to avoid.

In addition, maintaining two separate products, physical and virtual, requires an already overburdened IT staff to commit additional resources. There is also an associated increase in costs due to the need for dedicated storage and backups for virtualization completely separate from the physical environment.

Barrier No. 3: Global Deduplication

Companies can encounter communication deficits between disparate physical and virtual environments. Ideally, global deduplication prevents the backing up of redundant data to multiple deduplication devices. It enables the IT team to consolidate all storage requirements as a single pool without any data redundancies. However, the inability to communicate between different environments adds further complications to an already complex process.

Purchasing additional deduplication products to mitigate this communication issue simply increases costs. And having two distinct platforms ensures that those costs will grow exponentially. For SMBs striving to stay competitive, additional expenditures such as these are unmanageable. The extra IT resources and attention necessary to maintain a dual infrastructure can place unnecessary burdens on a small company.

According to Symantec's recent State of Information survey, companies on average estimate that as much as 41% of their information is duplicated data.[1] Moreover, virtualization is a key solution that offers processing capabilities to handle the data growth all organizations are seeing. To keep pace with exponential data growth, SMBs can leverage global deduplication to help meet critical processing goals and avoid backing up redundant data.

[1] "2012 State of Information Survey," Symantec, Nov. 13, 2012.

Barrier No. 4: Virtualization Is Never 100%

A common misperception is that virtualization can exist on its own as a complete solution. While virtualization can be considered a key enabler of data center consolidation, 100% data center virtualization simply doesn't exist. No matter how much an organization desires total virtualization, VMs will, at least, always require a physical platform. In addition to this, performance concerns and requirements keep some applications on dedicated physical servers. Then there are also applications and operating systems that are not supported by virtualization platforms which prevents them from being virtualized at all.

Barrier No. 5: Disaster Recovery

It's important to keep in mind that data loss and disasters occur more often than is generally realized, from simple application and user-error issues to full-blown data center outages. The loss of critical business processes can cause lost productivity, missed or delayed business transactions, and dissatisfied customers — who become former customers.

In addition to improving key data center processes, such as business continuity and high availability, virtualization offers SMBs flexibility, cost savings, and disaster recovery options critical to their success.

A challenge all SMBs face is adequately restoring operations once a disaster has occurred. One of the reasons smaller businesses struggle with achieving efficient disaster recovery is that they lack the necessary capital and resources for creating co-located sites. As a result, SMBs often rely on a less than ideal solution that still requires a second product or additional disaster recovery solutions to try to meet their needs.

For companies considering virtualization, the complexity, additional IT resources and costs associated with maintaining a second disaster recovery solution specifically geared for virtualized environments presents another barrier.

A key result from the 2012 Symantec Disaster Preparedness survey shows that SMBs that have moved forward with mobile, virtualization and cloud implementations are finding that these technologies have indeed increased their disaster preparedness.[2] In fact, more than half of the survey respondents reported improved disaster preparedness as a result of virtualization deployment.

[2] "2012 Disaster Preparedness Survey," Symantec, 2012

Barrier No. 6: Risk

When it comes to security, SMBs have the same concerns as large enterprises. In fact, according to the Symantec State of Information survey, two-thirds of SMBs said they had lost important information in the previous 12 months because of human error, hardware or software failure, or lost or stolen mobile devices.[3]

A majority of these companies experienced confidential data exposure, and many cited regulatory compliance issues in the past year. For businesses considering virtualization, a key pain point exists in relation to security and encryption for virtualized machines and their data. However, most available solutions break out security and encryption into two different platforms instead of offering a comprehensive package.

In addition to higher costs, such an approach introduces security gaps that increase the organization's risk level. Most niche virtual backup products lack protection/encryption for the data at all times, moving from the source to the backup server to the backup target, whether it be local, remote or tape.

The V-Ray Advantage

As today's businesses encounter barriers to effective virtualization adoption, they're searching for an optimal solution. For SMBs, time-consuming conversions and maintaining separate physical and virtual environments are untenable. Moreover, cost issues, security concerns and ineffective disaster recovery represent additional limitations that keep companies from making the leap to virtualization.

Symantec Backup Exec™ 2012 V-Ray Edition offers unique and comprehensive virtual protection and global deduplication. It ensures that physical-to-virtual conversions done behind the scenes are always functional and ready to be deployed.

Converting your environment from physical to virtual could take hours or days, but with Symantec's V-Ray solution, the process can be performed in a matter of minutes, since conversions are performed automatically, are application-consistent and eliminate

[3] "2012 State of Information Survey," Symantec, Nov. 13, 2012.

manual labor, significantly reducing costs. The solution dramatically reduces downtime by recovering valuable, time-sensitive data with a single click.

For organizations concerned with backup recovery for virtual machines as well as complexity and cost, Backup Exec 2012 V-Ray Edition offers a single, unified solution. Designed for simplicity, the solution provides granular recovery of VMs, single files, Microsoft Active Directory® objects, Microsoft® Exchange emails and Microsoft SharePoint® documents from a single-pass, host-level backup, where no staging or secondary applications are required to see what you want to restore and recover it instantly.

Conclusion

As SMBs consider their virtualization options, they're presented with barriers of added complexity and costs to an already complicated process. When it comes to virtualization adoption, they are looking for ease of migration, deployment and setup as well as instant recovery. They want to eliminate point solutions, backup complexity, unnecessary storage growth, costs and risk.

But SMBs also want to be certain that their data is secure, as organizations are storing increasing amounts of data online. According to the Symantec State of Information Survey, 40% of an SMB's value is in the data itself.[4]

This fact has critical implications for the type of virtualization product SMBs are needing. Single-point solutions are simply not viable in today's high data growth environment. A complete solution that delivers cost efficiencies, agile processes and automates conversions is the answer that SMBs have been searching for.

Visit Symantec's website to test the latest version of Backup Exec 2012 V-Ray Edition.

[4] "2012 State of Information Survey," Symantec, Nov. 13, 2012.