The significant cost, power and efficiency advantages of server virtualization are accelerating its adoption across the enterprise, and this trend holds the potential for all IT infrastructures to become virtual estates, including those that move to an “IT as a service” model based on private and public clouds.

With the penetration rate of virtualization in the enterprise approaching 50 percent, CIOs must now look beyond the “low hanging fruit” of virtualizing file, print, and web servers and departmental applications towards mission-critical applications such as email, CRM, ERP, and databases. However, IT departments are now finding that virtualization is presenting entirely new risks and management challenges.

In August 2010, Vanson Bourne, an independent market research organization, conducted an online survey of 500 CIOs from organizations across North America and Europe on the topic of virtualization and data protection. The report, titled Veeam Software’s “Virtualization Data Protection Report 2010”, uncovers a number of trends and issues related to virtualization adoption and virtual machine backup and recovery.

Key Highlights

Enterprises are virtualizing an average of 42 percent of their datacenter/server estates today and expect that this will grow to 63 percent in the next two years.

44 percent of IT directors say they are avoiding using virtualization for mission-critical workloads due to concerns about back up and recovery.

Chart 1: Percentage of datacenter/server estate virtualized now and in 24 months

Chart 2: Percentage of enterprises not virtualizing mission-critical workloads due to concerns around backup and recovery
Currently organizations only backup two-thirds (68 percent) of their virtual estates.

Chart 3: Percentage of production-level virtual servers being backed up

61 percent of enterprises using physical-based tools for backup and recovery will now change their approach specifically because of virtualization.

Even though a virtual machine (VM) can be built and deployed in minutes, performing a full recovery of a backed-up VM still takes nearly five hours—a relatively small improvement on the six hours required to recover a physical server.

Chart 4: Businesses planning to re-evaluate data protection because of virtualization

Chart 5: Comparison between physical and virtual server recovery times.

Note: Average for physical = 6 hours and virtual = 5 hours
Only 2 percent of all server and VM backups are tested for recoverability each year.

With the proper tools, 25 percent of full server recoveries could be eliminated. Currently, 25 percent of such recoveries are being performed to recover a single file or application item. 72 percent of all data recoveries involve granular recoveries of a file(s) or application item(s).

Chart 6: How many backups are tested for recoverability each year

Chart 7: Scenarios of data recovery approaches
Nearly two-thirds (63 percent) of organizations experience problems every month when attempting to recover a server.

Chart 8: Frequency of problems when attempting to recover from a backup

Failed recoveries cost the average enterprise more than $400,000 every year.

Chart 9: Cost of failed recoveries annually - note average = $400,000

The findings highlight how virtualization should move from being viewed as a risk to an enabler of improved data protection within the enterprise. Enterprises must consider changing or augmenting their current management and data protection processes to take full advantage of virtualization technology.

To obtain a copy of the full report, please register at VMware Data Protection First Annual Report page
About Veeam Software

Veeam Software is an innovative provider of VMware data protection, disaster recovery and VMware management solutions for virtual datacenter environments. This is the first annual report, and Veeam will continue to track the progress of enterprise strategies around virtualization-based data protection. Based on these findings, Veeam is optimistic about the maturity of this specific aspect of virtualization management. Through our industry-leading technology, we will evangelize the significance of Virtualization-Powered Data Protection.

In October 2010, Veeam released Veeam Backup & Replication™ v5. This new version of Veeam’s award-winning solution includes ground-breaking vPower™ technology for Virtualization-Powered Data Protection™. With five patents pending, Veeam Backup & Replication v5 not only overcomes the limitations of traditional backup and recovery, but fundamentally transforms the market for data protection solutions.

vPower

vPower leverages virtualization and Veeam innovation to overcome the limitations of traditional backup and provide fast, flexible and reliable recovery for disasters both large and small. vPower includes the ability to run a virtual machine in production or in an isolated virtual lab directly from a compressed and deduplicated backup file on regular backup storage. As the force behind the Veeam Backup & Replication v5, vPower offers five industry firsts:

1. Instant VM Recovery: Restore an entire virtual machine from a backup file in minutes. Users remain productive while IT troubleshoots the issue. This massively reduces lengthy recovery times that respondents in the survey currently experience when recovering virtual machines. Recovery time objectives (RTOs) are improved from hours to minutes without additional cost.

2. U-AIR™ (Universal Application-Item Recovery): Recover individual items from any virtualized application, on any operating system, without additional backups, agents or software tools. Eliminates the need for expensive special-purpose tools and extends granular recovery to all applications and users. This removes the current inefficient processes IT department have to undergo when recovering full virtual machines just to recover individual files and application items. It dramatically improves RTOs from hours to minutes for the most common recovery scenarios.

3. SureBackup™ Recovery Verification: Automatically verify the recoverability of every backup, of every virtual machine, every time. Eliminates uncertainty and sets a new standard in data protection. The vast amount of time and resources needed to test backups are essentially removed in one go.

4. On-Demand Sandbox: Create test VMs from any point in time to troubleshoot problems or test workarounds, software patches, or new application code. Eliminates the need for dedicated test labs and the overhead that extra VMware snapshots place on virtual machines.

5. Instant File-Level Recovery for any OS or file system: Recover an entire VM or an individual file from the same image-level backup. Extends instant file-level recovery to all virtual machines.

Accelerating the Use of Virtualization

By using Veeam Backup & Replication v5, IT departments can offer a much better service at a much lower cost. More importantly, Virtualization-Powered Data Protection offers businesses a solid foundation to virtualize more applications and accelerate the adoption of virtualization.