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Don't Get Burned by a Second-Rate VM Backup Product

Virtualization offers multiple benefits over physical server configurations. Don't shortcut those benefits with an inadequate virtual machine (VM) backup and recovery solution.

One of the biggest trends happening right now in the channel – right up there with BYOD, cloud, and big data – is the exponential uptick in server virtualization deployments. Depending on whom you talk to, virtualization has already achieved 50-60 percent penetration and could easily grow to 90+ percent¹. Research firm AMI-Partners predicts that SMB spending on server virtualization, which reached \$1.2B in 2012, will grow 18.1% annually².

As virtualization adoption increases, companies are discovering that their traditional backup solutions aren't geared toward backing up VMs. This pain point creates a great opportunity for service providers to deliver backup and recovery solutions that can address their customers' evolving data protection needs.

Providers need to be careful, however, which VM backup solution they select. There are a wide range of approaches available among the myriad of backup products and services. Making the wrong choice will not only shortchange the benefits available to end customers, but it can significantly shrink a service provider's profit margin as well.

Beware of Backup Products with Tacked-on Virtualization Capabilities

There are a lot of vendors that are good at backing up and restoring physical machines. As some of these vendors have expanded

their products with virtualization capabilities, touting an "all-in-one" solution, it's important to test these bolt-on features rather than accepting them at face value. Here are five pitfalls to avoid:

1. Agents. Installing agents on VMs adds an unnecessary layer of complexity to a virtualization deployment as well as a potential point of failure that must be monitored and updated. Agent-free backup solutions, on the other hand, are simpler to deploy and maintain.

2. File-based backups. Some traditional backup products do not natively communicate with Microsoft Hyper-V or VMware vSphere hypervisors, so they treat VMs like regular physical machines and perform file-based backups. This puts undue stress on VMs and increases backup time.

3. Build and restore. One of the biggest shortcomings of backup solutions that weren't originally developed for use in a virtualized environment is that they restore virtual and physical machines in the same way. What that means is that even when restoring a VM, the service provider needs to ensure the restore environment has the same number of adapters and the same CPU type, and then it needs to add bootable media before initiating a restore. With a more advanced VM backup solution, the VM can be restored to any host – it doesn't have to identically match the original physical server.

4. Bloated backups. Another important factor service providers need to consider when comparing VM backup solutions is the efficiency of the backup product. For example, some backup products that treat VMs like physical machines waste a lot of

storage space. A true virtualization solution, on the other hand, is able to take advantage of technology built into the hypervisor (or provide its own equivalent functionality), such as changed block tracking. This allows the backup solution to easily identify which blocks have changed and only backup the changed blocks. Having this capability enables service providers to efficiently backup growing data volumes and entire VMs while keeping customers' backup volumes (and costs) under control.

5. Extra licensing charges. Another important differentiator among VM backup solutions comes down to licensing costs. Some solutions



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incorporate a simple pricing structure per VM or host, whereas others charge extra fees for Microsoft Exchange, SharePoint, VMware, and Hyper-V. Additionally, some solutions charge extra licensing fees for VM replication. If a service provider uses a solution requiring extra licensing costs, it must either pass along the extra fees to the customer, thereby increasing the risk of price objections, or eat the extra costs and settle for a smaller profit margin – either way it's a no win situation.

As virtualization moves from niche to the mainstream, service providers are wise to incorporate virtualization solutions into their offerings. By performing their due diligence and ensuring they're not applying old physical machine backup paradigms to new VM environments, service providers can ensure a better experience for their customers and a more profitable experience for themselves.

¹ Pat Gelsinger; VMware earnings call; January 28, 2013.

² SMB Server Opportunity; AMI-Partners; February 19, 2013.