

# Simplified Backup and Recovery for Virtual Environments

## IBM and VMware offer proven end-to-end backup and recovery solutions for your critical applications and data

### AT A GLANCE

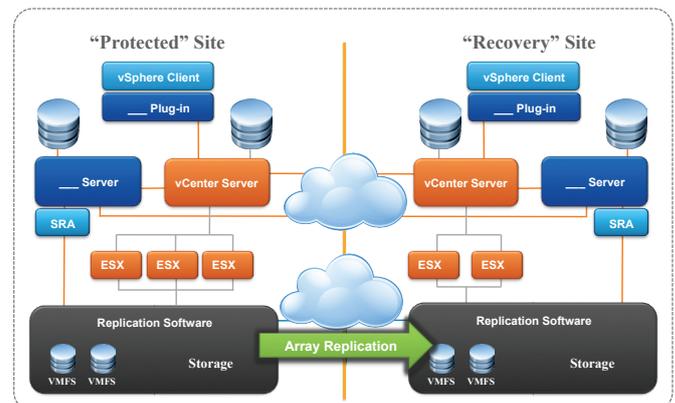
Backup and recovery of key applications and data is of utmost importance for companies small and large. As businesses rapidly adopt virtualization technology to achieve the benefits of consolidation and IT flexibility, they are also looking to realize the benefits of enhanced business continuity. Together, IBM and VMware offer integrated solutions to ensure businesses can simply and reliably backup and recover from failures and disaster situations, and keep their business up and running.

### Key Benefits

- Simplify management of the backup and restore process for virtual environments
- Utilize VMware's vStorage APIs for Data Protection, including block-level incremental backups based on VMware's Changed Block Tracking
- Utilize TSM's advanced data reduction capabilities to further minimize the amount of data being backed up and stored
- Offload the backup workload from virtual machines and production VMware ESX hosts to vStorage backup servers
- Provides flexible recovery options—file, volume or image—from a single-pass backup
- Simplify day-to-day administration with the centralized IBM Tivoli® Storage Manager console and vCenter plugin
- Reliable Disaster Recovery with VMware's Site Recovery Manager
- Leverage Existing Infrastructure Capabilities to perform transfer data over SAN fabric or leverage hardware snapshots through Tivoli Storage Flashcopy Manager

### Challenges with Protecting Critical Applications and Data

Maintaining the continuity of Business Critical Applications and protecting company data, has never been more important. The cost of downtime can be crippling or even fatal to a business. Yet, IT administrators face an increasingly difficult task to ensure application availability and data security in today's distributed and often virtualized environments. Companies who have heterogeneous storage platforms, a combination of virtual and non-virtual environments, multiple back up needs, and distributed locations and systems need a simple, cost effective solution to maximize data protection, back up and site recovery, as well as instant restoration of VMs supporting the environments.



### Solution Overview

IBM and VMware now offer a simple, integrated data protection and recovery solution that seamlessly manages all aspects of business continuity. Tivoli Storage Manager (TSM) for Virtual Environments utilizes VMware's advanced backup APIs to streamline the backup process and provides flexible recovery options from a 'single pass' backup methodology. Flexible recovery options cover all of your business need and include a granular file recovery, near-instant volume recovery, full virtual machine (or machines) restore options locally, TSM-VE manages the backup and restore process for heterogeneous storage systems where VMware Site Recovery Manager (SRM) orchestrates the virtual machine recovery process at the DR site. It works hand in hand with replication technologies (TSM-VE) to automate disaster recovery.

## FIND OUT MORE

**VMware-IBM Alliance**

<http://www.vmware.com/solutions/partners/alliances/ibm-home.html>

**VMware Business Continuity**

<http://www.vmware.com/solutions/business-continuity/index.html>

**VMware Disaster Recovery**

<http://www.vmware.com/solutions/datacenter/business-continuity/disasterrecovery/disasterrecovery.html>

**VMware Site Recovery Manager**

<http://www.vmware.com/products/site-recovery-manager/overview.html>

**VMware vSphere**

<http://www.vmware.com/products/vsphere/overview.html>

**IBM Tivoli Storage Manager for Virtual Environments**

<http://www-01.ibm.com/software/tivoli/products/storage-mgr-ve/>

## Solution Components

### VMware vSphere

This is the foundational element for a highly resilient infrastructure. VMware vSphere delivers uncompromised control over all IT resources with the highest efficiency and choice in the industry. With over 300,000 customers worldwide and the support of over 2500 applications from more than 1400 ISV partners, VMware vSphere is the trusted platform for any application. It reduces capital and operational expenses and minimizes potential lost revenue due to downtime, outages and failures. It increases application availability and control by automating the enforcement of service-level agreements to ensure availability, security and scalability of enterprise applications. With vSphere, companies can deliver applications and business services on-demand with the freedom to choose your hardware, application architecture, operating system, and private or public cloud infrastructure.

### Tivoli Storage Manager For Virtual Environments

IBM'S Tivoli Storage Manager for Virtual Environments—a complete, enterprise-class solution that can backup data, based on business policies, from anywhere in the infrastructure, including virtual servers—can, among other things, orchestrate backup and recovery functions to preserve not just data, but entire virtualized environments. In this way, even the worst-case scenario—such as a physical disaster at a data center—doesn't imply a business disaster, because core applications and services can be restored rapidly and effectively.

### VMware Site Recovery Manager

Protecting applications against disasters has never been more important. Unfortunately, traditional disaster recovery solutions are too expensive and complicated to protect any but the most critical applications.

With VMware Site Recovery Manager companies can expand disaster protection to all applications and smaller sites. This reduces the cost of disaster recovery by consolidating infrastructure recovery and using cost-efficient vSphere Replication. It enables companies to simplify management of disaster recovery with centralized recovery plans, and ensures fast and reliable recovery with automated DR failovers and fallbacks, non-disruptive testing and planned migrations.

## Conclusion

IT Administrators can trust IBM and VMware integrated solutions to protect their critical applications and data. With Tivoli Storage Manager for Virtual Environments and VMware's Site Recovery Manager running on VMware's vSphere platform you get an end-to-end backup and recovery solution from the world leaders in virtualization technology.

