

# VMware vSphere Data Protection Advanced

## AT A GLANCE

Traditional backup and recovery solutions adapted to work with the VMware platform are too expensive, slow, complex, and unreliable. Customers that want to accelerate their journey to fully virtualized environments need a reliable backup solution that is specifically designed to protect virtual machines.

VMware vSphere® Data Protection™ Advanced is a backup and recovery solution designed for vSphere environments and powered by EMC® Avamar®. It delivers the most advanced deduplication capabilities to perform storage and network-efficient backups and faster recoveries. vSphere Data Protection Advanced is fully integrated with VMware vCenter Server™ and is managed natively through the intuitive vSphere Web Client interface, enabling administrators to manage their backup and virtual infrastructure from a “single pane of glass.”

## KEY BENEFITS

- Reliably protect all the virtual machines of any small and midsize vSphere environment
- Minimize storage and bandwidth consumption to lower backup infrastructure costs
- Reduce backup and recovery times to minimize application downtime
- Shrink operational overhead of vSphere administrators that provision backup services to virtual machines

## What Is VMware vSphere Data Protection Advanced?

vSphere Data Protection Advanced is a backup and recovery solution designed for vSphere environments and powered by EMC Avamar. It extends the capabilities of vSphere Data Protection—already available with most editions of vSphere 5.1—providing greater scalability and integration with business-critical applications. Deployed in the form of a virtual appliance, it provides agent-less image-level backups leveraging the vSphere APIs for Data Protection (VADP), as well as guest-level, application-consistent protection of Microsoft® SQL Server™ and Microsoft® Exchange Server™. vSphere Data Protection Advanced is ideally suited to protect midsize vSphere environments consisting of several hundred virtual machines.

## What Does vSphere Data Protection Advanced Deliver?

Ensuring fast backups and recoveries and minimizing infrastructure costs despite exponential data growth represents a daunting challenge. Additionally, complex traditional backup solutions originally designed for physical environments hinder the ability to benefit from a virtual infrastructure.

With vSphere Data Protection Advanced, IT organizations now have the most proven, efficient and easy-to-use backup and recovery solution designed for vSphere environments.

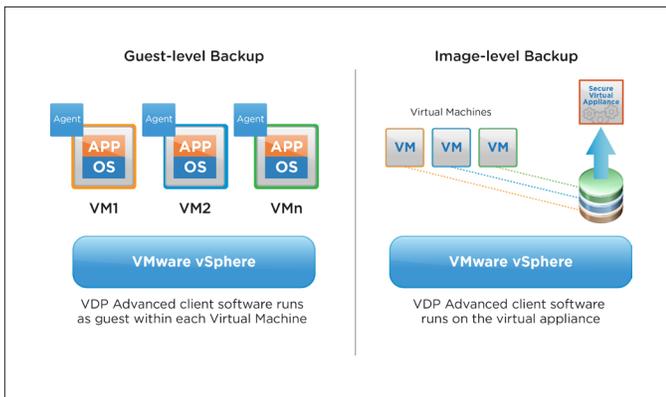
**Proven and reliable technology** - Built for VMware vSphere—the market-leading virtualization platform—and powered by EMC Avamar—a market-leading deduplication backup and recovery solution.

The underlying technology found in vSphere Data Protection Advanced has been successfully deployed at thousands of customers.

**Most efficient capabilities** - Reduces backup storage by up to 95 percent and network bandwidth by up to 99 percent featuring industry-leading variable-length deduplication across all virtual machines targeted to the same virtual appliance, and shrinks recovery times up to 30 times by leveraging Changed Block Tracking.

**Ease of use** - Enables vSphere administrators to have a “single pane of glass” console to manage their entire virtual infrastructure, including backup and recovery.

**Integration with business-critical applications** - Provides application-specific agents to ensure application-consistent backups and more granular recovery of Microsoft SQL Server and Microsoft Exchange Server.



## Key Features of vSphere Data Protection Advanced

### Most Efficient Backup Capabilities

#### Deduplication

- **Variable-length:** data is broken into segments of variable length, which enables the highest rates of deduplication – on average 99 percent for file systems and 96 percent for databases.
- **Global:** deduplication is compared across all virtual machines backed up by the same virtual appliance, reducing the required backup storage by up to 95 percent.
- **Client-side:** for guest-level backups, the agents deduplicate at the virtual machine, reducing the daily impact on the virtual network by up to 99 percent compared to traditional full-backup methods.

**VADP integration** - offloads the backup process from production virtual machine. Up to eight virtual machines per virtual appliance can be backed up simultaneously to increase backup throughput.

**Changed Block Tracking backup** –leverages Changed Block Tracking in combination with variable-length deduplication, sending truly unique changed blocks to the virtual appliance.

**Changed Block Tracking restore** - only restores the delta of blocks between the current virtual machine and last backup, reducing recovery times up to 30 times as compared to full virtual machine recoveries.

### Simple Backup Designed for vSphere Administrators

#### Streamlined management

- Full integration with VMware vCenter Server and the vSphere Web Client permits administrators to manage the entire virtual infrastructure from a single GUI.
- Simplified policies enable groups of virtual machines to be added to a backup job in just a few clicks.
- Automatic discovery of virtual machines as they are added and or removed from vCenter Server minimizes management overhead.

**Flexible restore options** - enables file-level recovery and full virtual machine restores to the original or new virtual machine.

**Self-service recovery** - enables end-user self-service restore to offload restore requests to the IT department.

**Restore rehearsal** - enables the end-user to specify actions to take place after a virtual machine is recovered, including power-on of the virtual machine and disconnecting virtual network interface controllers.

### Protection for Business-Critical Applications

**Agents for Microsoft SQL and Exchange** – ensures application-consistent recoveries and flexibility for granular backup and recovery.

• **Microsoft Exchange Server agent** provides recovery of individual databases with options to restore to special Exchange databases to perform granular recovery of mailboxes and messages.

• **Microsoft SQL Server agent** enables recovery of the entire application, individual databases, or only logs.

**VSS support** – supports Microsoft Volume Shadow Copy Service (VSS) to enable consistent backups of virtual machines running VSS-aware applications.

## Licensing vSphere Data Protection Advanced

vSphere Data Protection Advanced is the most cost-effective backup solution, while providing enterprise-class deduplication and streamlined vSphere backup and recovery.

**Licensing Unit** - vSphere Data Protection Advanced is licensed per CPU.

- Unlimited virtual machines on licensed vSphere hosts – customers are required to license every CPU in a vSphere host, and every host in a cluster.
- Deploy virtual appliances - up to 10 per vCenter Server - as needed at no additional charge.
- No charge for the agents deployed throughout the environment – they are included with the solution.

Licensing vSphere Data Protection Advanced is as simple as matching the number of vSphere licenses in the environment.

## Product Specifications and System Requirements

### Software

- Requires VMware ESX®/ESXi™ 4.1i, ESXi 5.0i, ESXi 5.1i
- Requires VMware vCenter Server 5.1 or higher
- Can only be managed through the vSphere Web Client

### Scale

- Up to 8TB of deduplicated storage per virtual appliance
- Up to 10 virtual appliances per VMware vCenter Server

For more detailed product specifications and system requirements refer to the Admin Guide.

## Learn More

For more information or to purchase vSphere Data Protection Advanced please visit <http://www.vmware.com/go/vdpadvanced>

For information or to purchase VMware products, call 1-877-4VMWARE (outside of North America, +1-650-427-5000), visit <http://www.vmware.com/product>

