

# VMware vSphere Data Protection Advanced 5.8

Simple, Efficient and Fast Backup and Recovery for vSphere

## AT A GLANCE

Traditional backup and recovery solutions adapted to work with VMware 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 with built-in backup replication for vSphere environments. Powered by EMC® Avamar®, it delivers high-performance data protection through patented variable-length deduplication and network-efficient, encrypted replication of the backup data. Rapid, assured recovery and simple end-to-end management through the vSphere Web Client make vSphere Data Protection Advanced the ideal backup and recovery solution for vSphere.

## BENEFITS

- Reliably protect virtual machines and virtualized or non-virtualized business-critical applications
- Minimize storage and bandwidth consumption to lower backup infrastructure costs
- Shorten backup windows and improve recovery times and application uptime
- Streamline backup operations and improve productivity by provisioning backup services easily and quickly
- Protect backup data offsite to ensure business continuity and compliance, even in the case of site-level failure

## 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, available with most editions of vSphere, with greater scalability and enhanced functionality. Capable of backing up an average of 200 virtual machines per virtual appliance, it can safely protect environments and remote offices of several hundred virtual machines. It provides agent-less, image-level backups to disk, as well as guest-level, application-consistent protection for Microsoft® SQL Server™, Exchange™ and SharePoint™. vSphere Data Protection Advanced provides network-efficient, encrypted replication to replicate backups to one or more DR sites.

## What's New in VMware vSphere Data Protection Advanced 5.8?

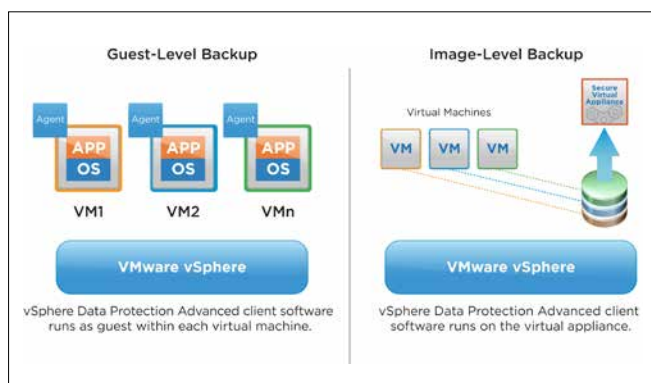
- Configurable parallel backups:
  - Shorten backup windows by deploying up to eight proxies and performing up to 24 simultaneous backups without impacting network, CPU and memory usage
  - Use SCSI Hot Add for efficient data transfer
- Access replicated backups and restore anywhere: Access replicated restore points and restore replicated backups at either the primary or DR site
- Support for MS Exchange Database Availability Groups
- Support for SQL Cluster backups
- Support for Linux LVM and EXT4
- Support for up to 20 virtual appliances per VMware vCenter Server™

## Other Key Features

**Scalability** – Each virtual appliance stores up to 8TB (approx. 200 average-sized VMs) of deduplicated backup data. Up to 20 virtual appliances per vCenter Server can be deployed.

**Deduplication** – reduces storage consumption by up to 75 percent compared to alternative backup solutions

- **Variable-length:** data broken into segments of variable length enables high deduplication rates – on average 99 percent for file systems and 96 percent for databases
- **Global:** deduplication is performed across all virtual machines backed up by the same virtual appliance
- **Client-side:** for guest-level backups, agents deduplicate inside the virtual machine, reducing backup time and the amount of data sent through vSphere resources



**VADP integration**

- **Changed Block Tracking backup** – leverages CBT in combination with variable-length deduplication, sending truly unique changed blocks to the virtual appliance.
- **Changed Block Restore** – reduces recovery time by 6x compared to full image restores by only restoring the delta of blocks between the virtual machine and the last backup.

**Network-efficient, secure backup replication** – variable-length deduplication at the source, along with compression and encryption, ensures that backups are optimized for WAN transmission.

- **Multiple replication topologies** – replicate in 1 to 1, 1 to many (fan-out) and many to 1 (fan-in) configurations
- **Multiple replication targets** – Integration with EMC backup solutions offer choice for replication targets
  - **vSphere Data Protection Advanced** – replicate to another vSphere Data Protection Advanced appliance
  - **EMC Data Domain** – use vSphere Data Protection Advanced to manage replication between Data Domain systems.
  - **EMC Avamar** – replicate directly from a vSphere Data Protection Advanced appliance to an EMC Avamar grid.

**vSphere-Integration and Simplicity**

- **Linux-based virtual appliance deployment** – makes the solution simple to install, configure and update.
- **vSphere Web Client integration** – provides end-to-end backup management from this familiar console
- **Automatic VM discovery** – virtual machines available for backup are automatically added and or removed in sync with vCenter Server.
- **Simplified backup policies** – assign backup jobs to individual virtual machines or larger containers, with specific schedules and retentions, only with a few clicks.
- **One-step recovery** – synthetic full backups enable simple browsing of restore points for a single-step recovery of virtual machines, without the need for agents.
- **Self-service file-level recovery (FLR)** – enables guest OS administrators and application owners to restore individual files and folders using a supported Web browser, without the need for agents.
- **Direct-to-host emergency restore** – Restore directly to an ESXi™ host. Enables protection of vCenter Server itself.
- **Granular .vmdk files backup and restore** – Reduce storage consumption and accelerate recovery.
- **Flexible storage placement** – Deploy independent storage partitions for backup data and the virtual appliance OS.
- **Mount existing storage to new appliance** – Remount existing data partitions to a new appliance in case of loss of original

- **Automated backup verification** – automated restores to an isolated “sandbox” environment according to user-defined schedules ensure recoverability without manual processes.

**Agents for business-critical apps** – a lightweight in-guest agent communicates with the application’s backup APIs, delivering application-awareness and granular backup and recovery.

- **Microsoft SQL Server agent** – granular backup and recovery of the entire application, individual databases, or only logs.
- **Microsoft Exchange Server agent** – granular backups of databases and database or mailbox-level recovery.
- **Microsoft SharePoint agent** – granular backup and recovery of the application or individual databases.

**VSS support** – enables consistent backups of virtual machines running VSS aware applications.

**EMC Data Domain systems integration** – increase scalability backing up to Data Domain using vSphere Data Protection Advanced as the front-end. DD Boost software increases backup throughput by 50 percent and decreases network bandwidth by up to 99 percent.

**Licensing vSphere Data Protection Advanced**

vSphere Data Protection Advanced is **licensed per CPU (processor)** on virtualized servers and **per OSI (Operating System Instance)** on physical servers for application data protection:

- No licensing fees apply for additional protected virtual machines on licensed hosts. Customers should license every CPU on a vSphere host, and every host in a cluster.
- No licensing fees for additional virtual appliances per vCenter Server.

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 or higher
- Requires VMware vCenter Server 5.1 or higher
- Can only be managed through the vSphere Web Client

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>

