

VMware Backup with EMC NetWorker

Traditional and next-generation backup of VMware Infrastructure

THE BIG PICTURE

- VMware Infrastructure backup options using traditional NetWorker backup and NetWorker de-duplication
- Backup for Virtual Machine Guests and VMware Consolidated Backup (VCB)
- NetWorker de-duplication reduces daily impact on network and infrastructure by up to 500 times
- Backup times reduced by up to 90 percent and disk I/O reduced by up to 95 percent
- Enables fast, efficient VMware backup and support for existing tape environments

As more of your information flows from physical servers into shared storage as part of a virtual infrastructure, you will need to consider new approaches for protecting your critical information and application assets. EMC® NetWorker® solves physical and virtual machine backup challenges by leveraging data de-duplication to dramatically reduce your backup windows, disk-based replication for near instant recovery, and backup to tape—all within one central solution.

EMC NetWorker and VMware

EMC NetWorker backup and recovery software automates and accelerates data protection across an enterprise to ensure vital information is safe and available. By providing support for a wide range of applications, operating systems, and environments (including VMware® Infrastructure), NetWorker simplifies management. The software also lowers costs by centralizing the entire backup environment.

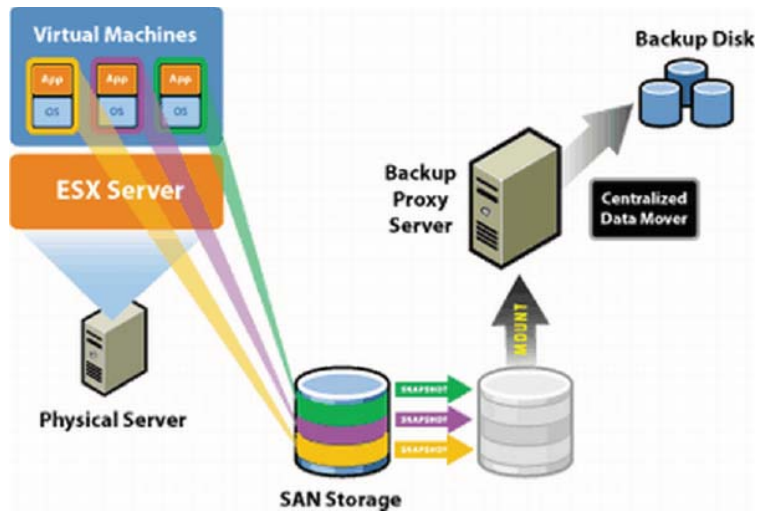
With NetWorker, you have flexible options to meet your VMware Infrastructure data protection requirements. NetWorker supports backup via virtual machine guests, and via VMware Consolidated Backup (VCB) using traditional backup or by de-duplicating the backup data at the source.

With de-duplication only new, unique sub-file data segments are sent during daily full backups, which can speed backups by up to 90 percent, reduce disk I/O by up to 95 percent, and reduce the daily impact on network and infrastructure by up to 500 times. De-duplication provides another key advantage for full virtual machine backups at the proxy server by de-duplicating the data stored in virtual disks (VMDK files). This significantly reduces storage consumption and enables replication of virtual disks across congested WANs.

VCB support

VMware Consolidated Backup was developed to meet the challenge of data backup within the VMware Infrastructure. This VMware solution allows a proxy server to mount and protect virtual machines running on other VMware Infrastructure hosts across a SAN. With VCB, backups are simpler and more cost effective, consolidating backup onto fewer proxy servers and reducing the load on production ESX Servers. By interoperating with VMware Infrastructure, NetWorker and VCB enable file-level and full virtual machine backup from a central proxy server.

NetWorker was one of the original software applications to support VCB, and that leadership continues today. NetWorker takes advantage of the VCB capability to safely, efficiently, and securely protect virtual servers running within the VMware Infrastructure.



How VMware consolidated backup works

Virtual Machine Guest backup options

NetWorker also supports flexible backup options for individual virtual machine guests within VMware environments. The first is LAN-based protection of individual virtual machines via traditional NetWorker backup (without data de-duplication). The second uses NetWorker de-duplication to back up VM Guests, which greatly reduces the impact on the underlying hardware resources and, in turn, dramatically increases backup performance. NetWorker sends only changed segments of data; no duplicate files are sent or stored. This includes OS files and executables, both prevalent on virtualized physical servers.

Traditional and next-generation backup options for VMware

With NetWorker, businesses and organizations of all sizes can take advantage of a common management interface, maintaining ease of use and flexibility while providing the best of traditional and next-generation VMware Infrastructure backup in one solution. By leveraging options to protect virtual machines at the guest level or employ VCB (with or without de-duplication with backup to disk and tape), IT organizations have the tools required to comply with governance regulations, meet service level agreements, and keep their VMware environments running at their full potential.



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Take the next step

For more information on NetWorker and other EMC backup and recovery solutions, contact your local EMC sales representative or authorized value-added reseller, visit www.EMC.com, or call 800.607.9546 (outside the U.S.: +1.925.600.5802).