

# EMC NETWORKER AND DEDUPLICATION

## Accelerating next-generation backup

### ESSENTIALS

#### Centralized Management

- Enables common administration and recovery interface for deduplicated and traditional backups
- Provides single catalog for all backups
- Streamlines protection of database, email, and ERP applications

#### Traditional and deduplication backup and recovery

- Reduces backup times, required network bandwidth, and total backup storage required
- Client Direct with DD Boost speeds backup while reducing required infrastructure, management, and cost
- Enables tape-free disaster recovery
- Supports LAN, WAN, and SAN implementations

#### Simple and easy to use

- Simplifies management with central, web-based graphical user interface
- Supports tiered protection and flexible recovery options

### INTEGRATED DEDUPLICATION FOR ACCELERATED BACKUP AND RECOVERY

Exponential data growth, regulations, aggressive service level agreements, and shrinking backup windows—all of these factors are driving IT managers to consider new approaches to data protection. Data deduplication is the enabling technology for next-generation data protection solutions. By reducing the size of backup datasets by an average of 10 to 30x, backups can be retained on site longer for fast operational restores, and replicated offsite efficiently over existing network links for disaster recovery and multi-site tape consolidation.

With the addition of deduplication technology, EMC® NetWorker® enables you to leverage both traditional and deduplicated backup in the same environment. NetWorker simplifies deployment and lets users choose the right solution for the right backup workload. It also reduces the complexity and risk of introducing new capabilities as your data protection requirements evolve.

### EMC NETWORKER AND EMC DATA DOMAIN

Deduplication can be easily introduced in a NetWorker environment with EMC Data Domain® deduplication storage systems. Data Domain systems deduplicate data inline—during the backup process—so backup data lands on disk already deduplicated, requiring a fraction of the disk space of the original dataset. Backup data can be retained on site longer for fast, reliable restores from disk. Backup data can then be replicated offsite faster with minimal bandwidth for safe, tape-free disaster recovery.

NetWorker is tightly integrated with EMC Data Domain Boost—a software option that extends the capabilities of Data Domain solutions—to significantly increase performance and simplify management. With DD Boost the deduplication process is distributed to the NetWorker client, storage node or application host, enabling each to send only unique data segments to a Data Domain system. This increases the aggregate throughput by up to 99 percent, reduces the amount of data transferred over the network, and decreases CPU utilization on the hosts in the NetWorker-supported environment. NetWorker Client Direct, which allows the storage node to be by-passed in the backup process, further amplifies the benefit of DD Boost from the client file system or application host directly to the backup target. The improved efficiency enables more backups driven from a single backup server.

With DD Boost, NetWorker can control the replication of data between multiple Data Domain systems and provide backup administrators with a single point of management for tracking all backups and duplicate copies. WAN-efficient Data Domain replication eliminates the need for tape-based backup and recovery for disaster recovery.

Management of Data Domain systems, from configuration to day-to-day operations, is greatly simplified with NetWorker:

- Wizard-based discovery and configuration streamlines the setup of Data Domain systems
- Customizable SNMP monitoring captures Data Domain alerts and messages
- Replication monitoring displays Data Domain replication status and statistics
- Reporting reflects Data Domain capacity, utilization, and deduplication efficiency

## EMC NETWORKER AND EMC AVAMAR

NetWorker enables users to take advantage of the benefits of EMC Avamar® with a single, integrated client and a single software footprint that delivers the flexibility for users to easily choose deduplicated or traditional backup—or both. In existing NetWorker environments, upgrading protected hosts to the new integrated client is an easy and automated task using the NetWorker software distribution feature.

NetWorker offers flexibility in deployment of Avamar within the backup and recovery environment. There are two physical deployment options: Avamar Data Store, a complete pre-packaged solution that integrates Avamar software with EMC-certified hardware for streamlined deployment; and Avamar software that can be deployed on a range of certified, industry standard servers. For environments using VMware® virtual infrastructure, the Avamar Virtual Edition delivers Avamar software deployed as a virtual appliance. Once installed, Avamar is managed as a resource in the NetWorker environment and all backup operations are handled through NetWorker.



Virtualization increases server utilization rates and as a result, traditional backup operations contend for resources and can impact server performance. NetWorker with Avamar deduplication reduces the impact of backup operations on virtual hosts and enables even greater consolidation and value from virtualization.

## UNIFIED CONTROL AND MANAGEMENT

By providing a common management interface and unified backup and recovery workflows, NetWorker with Avamar and Data Domain deduplication helps customers achieve new levels of efficiency without adding administrative complexity. Existing NetWorker customers can enjoy the benefits of deduplication without the complexity of adding another backup user interface and workflow.

Integrated software and hardware deduplication solutions from EMC deliver unmatched reliability and efficiency. With NetWorker, users can easily and safely evolve from traditional to next-generation data protection.



Join the NetWorker Online community to meet fellow users and share best practices.

[www.emc.com/networkeronline](http://www.emc.com/networkeronline)

## CONTACT US

To learn more about how EMC products, services, and solutions can help solve your business and IT challenges, [contact](#) your local representative or authorized reseller—or visit us at [www.EMC.com](http://www.EMC.com).

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