# **EMC BACKUP AND RECOVERY SOLUTIONS**

### Next-generation data protection

### **ESSENTIALS**

### **Backup and Recovery Challenges**

- Data volume continues to grow unabated
- Risks, costs, and time delays associated with tape backup
- Backup bottlenecks created by server virtualization

### **Next Generation Backup Starts Now**

- In the last three years, in use rates for Backup with Deduplication have gone from 15 percent to 48 percent (TheInfoPro Storage Study, 1H 2011)
- Transformation is underway from tape- to disk- and network-based infrastructures

### **Redesign Your Backup**

- Retain backups longer
- Replicate data offisite faster with minimal bandwidth for tape-free disaster recovery
- Recover reliably with advanced data integrity
- Optimize the benefits of server consolidation with faster VMware backups
- Simplify data management
- Protect data across the enterprise: data center, remote office, and desktop/laptop

"EMC's 'in-use' rating for backup data reduction/deduplication is now over 3x that of its nearest competitor."

TheInfoPro Storage Study, 1H 2011

EMC is the leading provider of disk-based backup appliances—according to the new IDC Worldwide Purpose Built Backup Appliance 2010-2015 Market Analysis and Forecast, 2010 Vendor Shares report (May 2011).

### THE CHALLENGE: COST, COMPLEXITY, AND COMPLIANCE

Legacy tape-based backup and recovery methods cannot keep pace with data growth, retention requirements, and the impact of server virtualization.

### THE SOLUTION: BACKUP REDESIGN

Next-generation disk- and network-optimized backup and recovery with data deduplication.

Today's data protection demands are rapidly outstripping the capabilities of legacy tapebased solutions. The volume of data you must manage and protect continues to grow exponentially, and retention requirements further complicate data management. In addition, while virtual servers consolidate and streamline data management, they create backup bottlenecks and additional storage management challenges.

Backup redesign has become an imperative for IT organizations to optimize their virtualization initiatives and meet service-level agreements, data compliance mandates, and budgetary constraints.

### **NEXT-GENERATION BACKUP STARTS NOW**

Backup and recovery solutions with deduplication have been rapidly adopted in enterprises around the world. 48 percent of large enterprises have already implemented deduplication, and another 23 percent are in pilot or have it in their near-term plans (Source: 1H 2011 Storage Study by TheInfoPro, a division of The 451 Group).

EMC® deduplication storage systems and software are leading the transformation of backup and recovery by dramatically reducing the cost and amount of storage infrastructure needed to protect and retain enterprise data. EMC's portfolio of products help meet the data protection needs of enterprises of all sizes as they seek to reduce costs, complexity, and risks.

Deduplicating redundant data before it is saved to disk reduces the size of the backup dataset to a fraction of its original size. Backups are completed sooner, and can be saved on disk and kept onsite for longer retention periods, facilitating fast, reliable restores. Backup data can then be quickly and safely replicated offsite with minimal bandwidth for disaster recovery—without the costs, risks, and time delays associated with tapes and trucks.

With EMC backup and recovery solutions, you can:

- Retain backups onsite longer with 10 to 30x less disk
- Replicate data offsite faster with 99 percent bandwidth efficiency for tape-free disaster recovery
- Recover data reliably with advanced levels of disk and data integrity
- Optimize the benefits of server consolidation with faster VMware<sup>®</sup> backups solution overview



## "EMC is a clear leader in disk-based backup systems and software."

Brian Babineau Sr. Consulting Analyst, Enterprise Strategy Group January 2011

"With EMC deduplication, we achieved our three-year ROI goals by streamlining our backup, DR, and archive processes."

**Boston Medical Center** 

"Unlike our older backup and disaster recovery processes, the EMC backup and recovery solution is fully integrated into our IT infrastructure. This provides us with much higher backup speeds, as well as quick data recovery and easy management."

**Honda France Manufacturing** 

### **CONTACT US**

To learn more about how EMC products, services, and solutions help solve business and IT challenges, contact your local representative or authorized reseller—or visit us at www.EMC.com.

### REDESIGN YOUR BACKUP WITH EMC

### RETAIN BACKUPS ON DISK AND ONSITE LONGER—AND REDUCE COSTS

Deduplication vastly reduces the amount of redundant data backed up. This means you require less capacity to store that data. Additionally, you can retain more data on disk for longer periods of time, which reduces or eliminates the risk, time, and cost to back up and recover from tape. The result is faster operational restores—from disk—with lower costs.

## REPLICATE DATA OFFSITE FASTER OVER EXISTING NETWORKS FOR TAPE-FREE DISASTER RECOVERY

When backup data is deduplicated, only the unique changes are replicated across an IP network, requiring a tiny fraction of the bandwidth time and cost compared to traditional replication networks. This means you can send data offsite over existing networks and gain 99 percent bandwidth efficiency for cost-effective and reliable disk-based disaster recovery. Tape operations can be eliminated or consolidated to a central location.

### RECOVER QUICKLY AND RELIABLY WITH ADVANCED LEVELS OF DATA INTEGRITY

Restore data when you need it most. Continuous verification, fault detection, and system self-healing ensure that your data is stored and recoverable so you can meet strict service-level agreements. Fast, single-step recovery retrieves data immediately without the need to restore the last good full and incremental backups.

## OPTIMIZE THE BENEFITS OF SERVER CONSOLIDATION WITH FASTER VMWARE BACKUPS

VMware backup images are large and can slow down backups. However, these backup images are highly redundant, making them a "sweet spot" for effective inline deduplication methods. EMC deduplication storage systems and software can reduce backup dataset size by 40 to 60x and shorten backup windows by up to 90 percent.

#### SIMPLIFY DATA MANAGEMENT

EMC unifies all of your backup and recovery operations. Centralized, easy-to-use web-based management and at-a-glance dashboard views enable you to simplify and automate backup and recovery for heterogeneous enterprise data for hundreds of offices worldwide—from a single location over existing network bandwidth.

# PROTECT DATA ACROSS THE ENTERPRISE: DATA CENTER, REMOTE OFFICE, AND DESKTOP/LAPTOP

EMC can help centralize backup and recovery for your entire organization—from large corporate data centers and virtual server infrastructures to remote offices and individual desktops and laptops. EMC eliminates the need for local tape backups and the risk associated with offsite tape shipments, thereby reducing complexity and increasing efficiency throughout your organization.

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