

SIMPLICITY, EFFICIENCY, AND CONSOLIDATION WITH EMC VNXe AND EMC DATA DOMAIN DD160

The foundation for a next-generation IT infrastructure

ESSENTIALS

Challenges

- Data volume continues to grow
- Storage and application management is complex in virtual environments
- Risk and cost associated with traditional backup

Solution

- VNXe provides simple, efficient, and affordable unified storage
- Data Domain DD160 provides 10 to 30x data reduction for backup storage

Simplicity

- Wizard-based application-driven storage provisioning
- Provision a 1TB VMware datastore in 10 minutes
- Integrates with existing infrastructure
- Qualified with all leading backup vendors

Efficiency

- Thin provisioned primary storage
- File and block storage in a single system
- Retain backups onsite longer
- Network efficient replication
- Consolidation
- Internal storage tiering
- Up to 240 TB raw capacity for primary storage
- Reduce VMware image backup storage by 40 to 60x
- Up to 195 TB logical capacity for backup storage

THE CHALLENGE: TRADITIONAL ENVIRONMENTS NOT KEEPING PACE

Unrelenting data growth and the rapid adoption of virtualization solutions are stressing traditional storage and backup environments. Specifically, the volume of data and the increasing retention requirements have become nearly impossible to manage. In addition, while virtualization consolidates and streamlines physical server utilization, it can create backup and recovery challenges and increase storage requirements.

Therefore, managing and protecting your environment has become increasingly complex and expensive. Traditional storage and backup and recovery systems are inefficient and unreliable and cannot keep pace with these new data center requirements.

THE SOLUTION: EMC VNXe AND EMC DATA DOMAIN DD160

EMC® VNXe® unified storage and the EMC Data Domain® DD160 deduplication storage system are designed to be the foundation for a next-generation IT infrastructure.

The VNXe series redefines networked storage for the small business to medium enterprise user, delivering an unequalled combination of enterprise-like features, simplicity, and efficiency—all at an affordable price. Data Domain systems have revolutionized disk backup with high-speed, inline deduplication. The Data Domain DD160 is designed for small enterprise data centers and provides the simplicity and efficiency you require.

SIMPLICITY

Managing and integrating storage and backup systems can be complex. Too often the increased capabilities of advanced network storage and backup of that storage require mastering new complex user interfaces, new terminology, and new processes.

VNXe and Data Domain systems take a fundamentally different approach. VNXe aligns storage management with applications; avoids arcane storage terms and instead uses plain language; and embeds storage and application best practices into the user interface for a faster, simpler user experience in completing every day administrative tasks. Data Domain systems support all leading backup applications and easily integrate with VNXe storage environments. In addition, Data Domain Enterprise Manager provides centralized, web-based management, and an at-a-glance dashboard to simplify backup and recovery.

EFFICIENCY

Whether the task at hand is to provision application storage, consolidate storage to better manage resources, back up and recover data, or improve IT resource utilization with server virtualization, EMC provides the solution that is right for your environment. VNXe is uniquely capable of delivering unified IP storage for NAS and iSCSI while simplifying operations and reducing management overhead. Application centric management and provisioning wizards result in immediate familiarity for users, while integration of snapshot and replication capabilities with storage management workflows result in streamlined operations and uniform data protection coverage.

In addition to the storage infrastructure improvements from VNXe, EMC can improve backup and recovery. Data Domain systems can minimize tape and the associated management cost and risk, thereby reducing complexity and increasing efficiency across your entire environment. Data Domain systems can be used seamlessly with a variety of data movers and application workloads. By consolidating to a common disk-based target, you can avoid creating disparate islands of data and storage. A single EMC Data Domain system can be used for backup and recovery, protection of enterprise applications (e.g., Oracle, Microsoft® Exchange, VMware®, and others), archiving, and online reference storage.

EMC Data Domain Replicator software provides automated, policy-based, network-efficient, and encrypted replication between Data Domain systems. DD Replicator software vaults (asynchronously replicates) only the compressed, deduplicated data over the WAN during the backup process, making network-based replication fast, reliable, and cost-effective. Data Domain systems massively reduce data volume stored locally, thereby reducing the amount of data that needs to be replicated. Typically less than one percent of a full backup, for example, is actually new, unique compressed sequences to be replicated over a WAN.

The VNXe system takes the complexity out of storage management by enabling easy provisioning for applications from available storage pools and expansion of existing pools with convenient disk packs. In addition, Data Domain deduplication storage systems reduce backup data by an average of 10 to 30x, so disk backup storage is now cost-effective for onsite retention, and highly efficient for network-based replication.

CONSOLIDATION

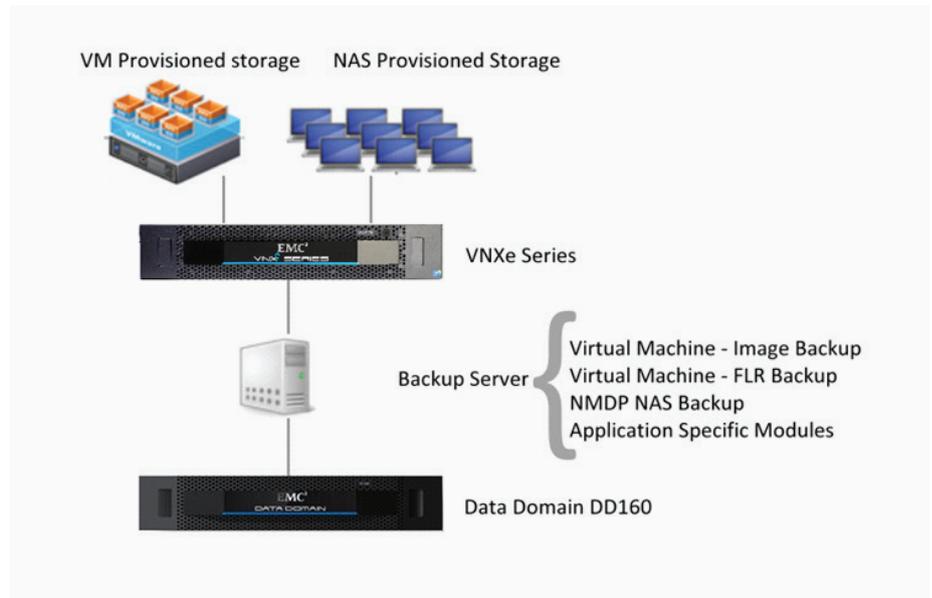
Storage disks of different capacities and capabilities (e.g., SSD, SAS, and NL-SAS) can be arranged into highly efficient storage pools on VNXe. This type of storage tiering provides you with greater flexibility in assigning different applications to different storage device types. Pools can be assigned for your virtualization requirements and Microsoft applications through the simple use of application best practice wizards within EMC Unisphere. Once provisioned on VNXe, VMware backup images can be deployed.

Traditional backup of these large VMware images can often become a bottleneck to virtualization adoption. However, these images are highly redundant, making them a “sweet spot” for deduplication. Therefore, Data Domain deduplication storage systems can reduce the backup storage required for these images by 40 to 60x.

VNXe storage platforms are scalable from six to up to 120 disk drives and 240 TB of raw capacity. The Data Domain DD160 provides up to 195 TB of logical capacity, allowing your solution to grow with your business.

SIMPLIFY, IMPROVE EFFICIENCY, AND CONSOLIDATE WITH VNXe AND DD160

The VNXe series and the Data Domain DD160 have been designed with a focus on simplicity, efficiency, and consolidation. VNXe wizards allow you to quickly and easily provision storage and then easily back up to the DD160 for 10 to 30x data reduction on average. VNXe and Data Domain systems provide you with an ideal solution for your primary and backup storage needs.



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.

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