DD VE Overview and Benefits

Simple, Flexible, and Efficient
- Configure and deploy in minutes
- Differentiating features of Data Domain like an average deduplication rate of up to 55:1
- Grow as you scale in 1TB increments
- Run on any commodity server, converged, and hyper-converged

Virtualized and Cloud Environments
- Multiple hypervisors support: VMware ESXi, Microsoft Hyper-V, and KVM
- Run in AWS, AWS GovCloud, Azure, Azure Government Cloud, Google Cloud Platform, and VMware Cloud on AWS
- Support up to 96TB instances

Transactional and Operational Efficiencies
- Ability to write or backup data into the object store directly in addition to block storage
- Can support AWS S3 and Azure Hot Blob object stores

Manageability
- Single point of management with Dell EMC Data Domain Management Center (DD MC)
- Configure and deploy using VMware vSphere and Microsoft Hyper-V Manager

DELL EMC DATA DOMAIN VIRTUAL EDITION

Software-Defined Data Protection
Dell EMC Data Domain appliances deliver the most trusted protection storage in the market. Data Domain appliances deliver industry-leading deduplication, scalability, reliability, performance, unparalleled data integrity to ensure reliable recovery, and a broad ecosystem of backup and archive applications.

Data Domain Virtual Edition (DD VE) is a software-defined data protection solution of Data Domain, thereby maintaining all the core differentiating features of Data Domain appliances. DD VE is fast and simple to download, deploy, and configure. DD VE can be up and running in minutes on any standard server, converged or hyper-converged. DD VE delivers increased transactional and operational efficiencies, reliability and lower TCO by utilizing object storage in addition to block storage.

DD VE enables data protection in the cloud for applications running in the cloud. DD VE in the cloud allows for both backup and replication. Data can be moved to an on-premise Data Domain and backup to the cloud, or even backup and replicate data between two instances of DD VE running in the cloud or on-premise. This allows multiple DD VE instances to be spun up in other regions and backup and replicate the data over to keep everything consistent.

DD VE scales up to 96TB per instance and you can pay as you grow in as little as 1TB increments and distribute this capacity in multiple instances as needed across the environment.

Powerful Management
Dell EMC Data Domain Management Center (DD MC), can provide the same dashboard-based resource management, monitoring and reporting center for the physical Data Domain appliances as well as DD VE. DD MC is now available as a free download without the need of any license.

DD MC provides an aggregated management for multiple Data Domain appliances (physical and virtual). DD MC can view capacity and replication management as well as manage health, secure multi-tenancy and status resource monitoring.
Data Protection for Virtualized Environments

DD VE can provide data protection to multiple virtual server environments based on VMware ESXi, VMware vSphere, Microsoft Hyper-V, and KVM. DD VE can protect data, backup and restore between virtual machines on the same server, across multiple servers or in the cloud. It can serve protection across multi-tenant environments too.

DD VE supports the following hypervisor versions:

**VMware ESXi**: Version 5.5, 6.0, 6.5, 9.0 and after

**VMware vSphere**: Version 5.5, 6.0, 6.5, 9.0 and after

**Microsoft Hyper-V**: Microsoft Windows Server 2012 R2, Windows Server 2016

**KVM Linux distributions** from Ubuntu, RedHat, SUSE, and CentOS

DD VE can be deployed and configured by VMware vSphere, Hyper-V Manager, and respective KVM Linux distributions manager.

Take Full Advantage of Cloud Efficiencies

DD VE can protect applications running in any cloud environment – AWS, Azure, Google Cloud Platform, AWS GovCloud, Azure Government Cloud, and VMware Cloud on AWS. DD VE can scale up to 96TB per instance. DD VE can be downloaded from the AWS and Azure marketplace, as well as orderable via Dell EMC.

Efficient utilization of cloud storage

DD VE can increase transactional and operational efficiencies in addition to providing significant cost savings, by providing the ability to write data or backup into the cloud object store directly. These object stores can belong to AWS S3 Standard or Microsoft Azure Hot Blob. In this way, you can also ensure increased reliability and larger capacity in the cloud.

DD VE Use Cases in the cloud

DD VE delivers the benefits of Data Domain’s industry-leading protection storage with the agility, flexibility, and efficiency of a software-defined Data Domain solution. Some of the use cases are:

- Remote office / back office (ROBO) environments
- Protecting databases, workloads, and applications
- Replication to a public cloud
Remote office / back office (ROBO) environments
Many enterprises that have remote offices all over the world face the challenge of managing, monitoring, and protecting data in such environments. Data Domain appliances working in parallel with DD VE can help meet these data protection challenges.

With a Data Domain appliance at the main datacenter and a DD VE at each branch office, you get the assurance that your data at these branch offices is protected. The entire data protection environment can be managed centrally with the Data Domain Management Center. If a branch office has a failure or must shut down, you have the peace of mind that the protected data is not lost. DD VE will divert that data into another remote office or stores it on-premises. In addition, you gain the flexibility to grow in capacity cost effectively as your needs increase in increments of 1TB.

Protecting new workloads and applications
DD VE can cost effectively extend its benefits like deduplication, scalability, and flexibility to new workloads and applications, including MySQL, mongoDB, Cassandra, EDB Postgres and others. Extending DD VE protection to new applications is very simple and designed to be easily accomplished by backup admins, IT generalists or those specializing in databases or platforms.

DD VE is hardware agnostic
DD VE can run on any commodity server as well as higher performing servers like Dell EMC PowerEdge or a converged platform like Dell EMC VxRail.

DD VE on PowerEdge Server
DD VE is delivered in pre-tested configurations for ROBO environments as an example, thereby making it fast and simple to deploy. It can grow as the demand increases and is reliable for protecting a variety of workloads and applications as mentioned earlier.
DD VE on VxRail

DD VE can extend its software-defined data protection benefits to converged environments too. DD VE can be deployed on a VxRail platform in minutes and can be replicated to any datacenter. DD VE offers the simplicity and flexibility to protect, backup, and restore data in converged environments. You can get end-to-end data protection with the deployment of Data Domain or DD VE along with Data Protection Suite for VMware on Dell EMC VxRail platforms.