DELL EMC DATA DOMAIN VIRTUAL EDITION

Software-defined data protection
Dell EMC Data Domain appliances deliver the most trusted protection storage in the market. These 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 solution of Data Domain appliances, 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 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 way multiple DD VE instances can be spun up in other regions and backup and replicate the data over to keep everything consistent.

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

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 systems, view capacity and replication management as well as manage health, secure multi-tenancy and status resource monitoring.
Data protection for the virtualized and cloud environments

DD VE can provide data protection to multiple virtual server environments based on VMware ESXi, 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 too. It can serve protection across multi-tenant environments too.

DD VE supports the following hypervisor versions:

- **VMware ESXi**: Version 9 to latest
- **Microsoft Hyper-V**: Microsoft Windows Server 2012 R2
- **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.

DD VE enables data protection in the cloud for applications running in the cloud (private, public, or hybrid). 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 way multiple DD VE instances can be spun up in other regions and backup and replicate the data over to keep everything consistent.

DD VE can protect applications running in any cloud environment – AWS, Azure, and VMware Cloud. It can also scale up to 96 TB instances. DD VE can be downloaded from AWS and Azure Marketplaces too. DD VE also supports the ability of backing up VMware instances in an AWS environment.

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 or Microsoft Azure Hot Blob. In this way, you can also ensure increased reliability and large capacity in the clouds.

DD VE use cases in the cloud

DD VE delivers the benefits of the industry-leading most protected 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 in the public cloud
- Protecting new workloads or applications
- Replication to a public cloud
Remote Office Back Office (ROBO) environments
Many enterprises that have remote offices all over the world face a challenge of managing, monitoring, and protecting data in such environments. This challenge of data protection in these environments can be handled by the Data Domain appliances along with DD VE.

At the back office or the main datacentre, you can have a physical Data Domain appliance, while you have DD VE at the branch offices. This provides the ability to protect data at the remote offices and also provide the flexibility to grow in capacity as the need increases in increments of 1 TB. Another benefit is, if a branch office fails or needs to shut down, the protected data is not lost. DD VE diverts that data into another remote office or stores on-premise itself.

Protecting new workloads and applications
DD VE can extend its benefits like deduplication, scalability, and flexibility in a non-disruptive manner that is very cost effective. These can be applications and workloads like MySQL, mongoDB, Cassandra, EDB Postgres and others. Overall it’s a very simplified user experience that any admin can handle this, be it backup, database, or VM admin.

DD VE runs on any commodity hardware
DD VE can run on any commodity or standard server like Dell EMC PowerEdge server 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.