DELL EMC
POWERPROTECT DD VIRTUAL EDITION

Software-Defined Data Protection

DD series delivers the most trusted protection storage in the market. DD series provides industry-leading deduplication, scalability, reliability, performance, unparalleled data integrity to ensure reliable recovery, and a broad ecosystem of backup and archive applications.

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

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

DDVE scales up to 96TB (on-prem) and up to 256TB (in-cloud AWS, Azure, Google Cloud) 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. DDVE maintains the core DDOS features and includes DD Boost, DD Encryption and DD Replicator.

Powerful Management

Dell EMC PowerProtect DD Management Center (DDMC), can provide the same dashboard-based resource management, monitoring and reporting center for the physical DD series as well as DDVE. DDMC is now available as a free download without the need of any license.

DDMC provides aggregated management for multiple DD series appliances (physical and virtual). DDMC can view capacity and replication management as well as manage health, secure multi-tenancy and status resource monitoring.
Data protection for virtualized environments

DDVE can provide data protection to multiple virtual server environments based on VMware ESXi, VMware vSphere, Microsoft Hyper-V, and KVM. DDVE 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.

DDVE supports the following hypervisor versions:

- VMware ESXi: Version 5.5, 6.0, 6.5, 7.0
- VMware vSphere: Version 5.5, 6.0, 6.5, 7.0
- KVM Linux distributions from Ubuntu, RedHat, SUSE, and CentOS

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

Take full advantage of cloud efficiencies

DDVE can protect applications running in any supported cloud environment – AWS, Azure, Google Cloud, AWS GovCloud, Azure Government Cloud, and VMware Cloud on AWS. As part of DDOS 7.2, we have increased our in-cloud restore performance by up to 3x with single stream restores.* DDVE can be downloaded from the AWS, Azure, and Google Cloud marketplace, as well as orderable via Dell EMC. DDVE in Azure now supports the premium SSD feature allowing for higher levels of performance. With DDOS 7.4 DDVE supports premium BLOB storage for 96TB instances. DDOS 7.5 includes increased regional coverage for DDVE running in the Azure China cloud. DDOS 7.7 introduced the support for AWS EBS gp3 volumes lowering in-cloud costs.

Efficient utilization of cloud storage

DDVE 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.

DDVE use cases in the cloud

DDVE delivers the benefits of DD series industry-leading protection storage with the agility, flexibility, and efficiency of a software-defined DD series solution. Some of the use cases are:

- Protecting databases, workloads, and applications
- Replication to a public cloud

*Based on Dell EMC internal testing comparing PowerProtect DD Virtual Edition in-cloud restore performance with DDOS 7.2 or later compared to DDOS 7.1. April 2021. Actual results may vary.
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. DD series physical appliances working in parallel with DDVE can help meet these data protection challenges.

With a DD series appliance at the main data center and a DDVE 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 DDMC. If a branch office has a failure or must shut down, you have the peace of mind that the protected data is not lost. DDVE will divert that data into another remote office or stores it on-premises.

Protecting new workloads and applications
DDVE 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 DDVE 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.

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

DDVE on PowerEdge Server
DDVE 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.

DDVE on VxRail
DDVE can extend its software-defined data protection benefits to converged environments too. DDVE can be deployed on a VxRail platform in minutes and can be replicated to any data center. DDVE 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 DD series or DDVE along with Data Protection Suite for VMware on Dell EMC VxRail platforms.

Learn more about DD series

Contact a Dell Technologies Expert