

# Dell Technologies enterprise protection for VMware Cloud Foundation

## Key Benefits of Dell EMC PowerProtect Data Manager for VCF

- Deploy and configure workload domains faster
- Enterprise protection on-prem and multi-cloud
- Protect from disasters by leveraging automation and orchestration within from PowerProtect Data Manager and VCF
- Protect the heart of the SDDC
- Ensure business continuity for the hybrid cloud "that delivers it all"

## The new architecture for today's business: Enabling speed & agility

Enterprises worldwide are benefiting from the software-defined data center (SDDC) for its automation, security, business agility, and simplified data center management. With the increased adoption of multiple clouds, VMware Cloud Foundation simplifies this the process further, allowing organizations to deploy and configure a VMware-based SDDC with enhanced operational efficiency. Tasks that had previously consumed several days, if not weeks, can now be accomplished in just a few hours.

The SDDC today is driven by speed, efficiency and costs, and has no physical boundaries, with distributed workloads located in various corners of the world. In this era of borderless data centers, it is becoming increasingly important to address the unique data protection, security and compliance challenges introduced by this deployment model.

How can organizations protect their data center assets seamlessly without compromising on the speed, agility and operational efficiencies – the primary drivers of virtualization – while staying compliant?

## Simplify the path to IT Transformation

As businesses consume IT resources differently, there is a need for powerful, efficient, and trusted data protection, enabling organizations to transform and meet future demands when modernizing their IT environment. VMware Cloud Foundation (VCF), combined with Dell EMC PowerProtect Data Manager to protect workloads, is one solution to these modern challenges.

VMware Cloud Foundation on Dell EMC VxRail enables organizations to run traditional workloads alongside cloud native container-based applications, eliminating dev-ops silos and sprawl. It provides integrated cloud infrastructure (vSphere compute, vSAN storage, NSX networking, and security) and cloud management services (with the vRealize Suite) to run many types of enterprise applications. This can range from traditional applications, deployed as virtual machines and VMware Horizon virtual desktops, to Kubernetes powered containerized cloud-native applications, and can include private and public environments. Dell EMC VxRail is the hardware on which VCF is layered as cloud and PowerProtect Data Manager (Data Manager) is an effective solution to protect these environments.

Organizations can protect distributed workloads, in various corners of the world, without compromising on speed, efficiency or cost while staying compliant with Data Manager for VMware Cloud Foundation.

## Enterprise protection for VMware Cloud Foundation

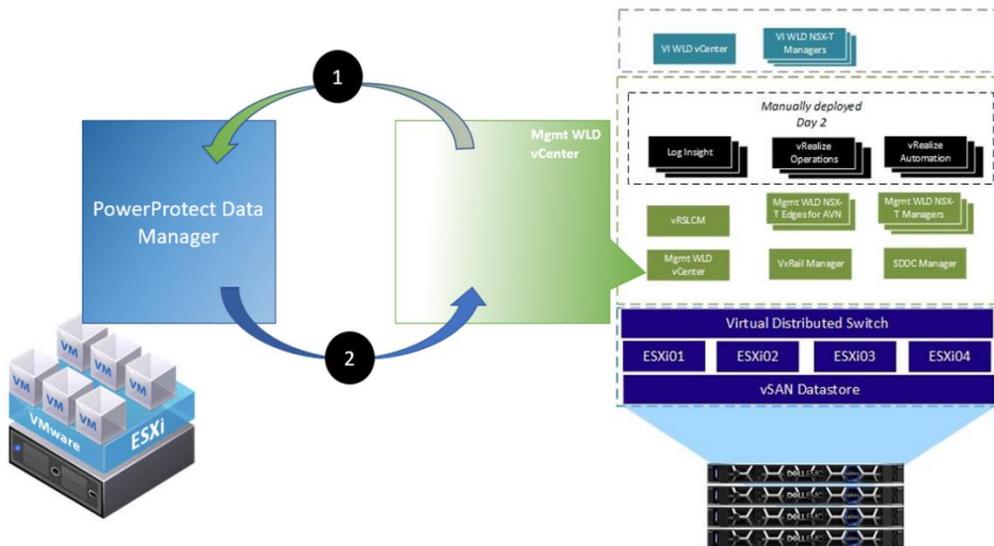
Within the VMware architecture for the SDDC, PowerProtect Data Manager protects the management components of the virtual infrastructure layer. Also, when VMware Cloud Foundation is installed, Data Manager protects the Cloud Foundation management applications of the operations and cloud management layers which are made up of the vRealize Suite VMs.

Data Manager provides software-defined data protection, automated discovery, deduplication, operational agility, self-service and IT governance for physical, virtual, and cloud-based environments. The software provides centralized governance that helps mitigate risk and assures compliance of SLAs and SLOs through simple protection workflows. It enables automated discovery and onboarding of databases, VMs, and Dell EMC PowerProtect appliances as protection storage, and allows self-service and centralized protection for Microsoft SQL Server and Oracle databases. Data Manager supports cloud protection use cases such as long-term retention, cloud disaster recovery, backup to cloud, and in-cloud backup. It also includes a SaaS-based reporting and monitoring.

PowerProtect Data Manager capabilities include the following:

- Is a software-defined stand-alone solution that is deployed as an open virtual appliance (OVA) in the vCenter environment. It runs as a virtual machine and stores backups to connected integrated storage.
- Discovers workloads such as virtual machines, databases (SQL, Oracle, SAP HANA and Exchange), file systems, and Kubernetes, and protects its assets by creating policies.
- Protects and manages the workloads based on the protection life cycle (PLC). Data Manager protects workloads on VMware SDDC, the heartbeat of the VCF

The workloads have respective vCenter Servers which are discovered as an asset source once registered with Data Manager. It then discovers the associated assets (VMs) and creates policies for scheduled backup with PLC.



1. The management WLD vCenter is registered with PowerProtect Data Manager.
2. The external VM proxy (vProxy) is installed on the management WLD vCenter server.

## Why Dell EMC PowerProtect Data Manager

With a single architecture that is easy to deploy, VMware Cloud Foundation enables consistent, secure infrastructure and operations across private and public cloud. With PowerProtect Data Manager, organizations have a VMware-certified enterprise protection solution for VMware Cloud Foundation.

Forged with multicloud enterprises in mind, the Dell Technologies and VMware partnership delivers the right infrastructure to address each underlying need from datacenter to cloud to edge, with technology solutions that include file storage to HCI to multi-cloud data protection. Data Manager for VMware Cloud Foundation is a shining example of this innovation.

The partnership is not just technology, it is an approach to IT simplification and modernization. Dell Technologies and VMware are trusted advisors and essential technology vendors that can help every organization build its own cloud, one that adapts to the business with flexibility in implementation across the entire portfolio.

### How it works

Data Manager software is a virtual appliance that is deployed on an ESXi host using OVA. Data Manager is integrated with Dell EMC PowerProtect DD Virtual Edition as the protection target where the backups are stored. The SDDC manager is responsible for performing administration tasks on VCF. It deploys vCenter Servers according to the need of workloads, such as for the management workload (Mgmt WLD), and if required, for the virtual infrastructure workload (VI WLD).

The management workloads contain management virtual machines: SDDC Manager, NSX manager, vRealize Automation appliances, vRealize Log Insight Node, and vRealize Proxy agents. The vCenter Servers are registered with the Data Manager using FQDN/IP. Data Manager discovers the management workloads and VI workloads as virtual-machine workloads associated to the vCenter as assets. A protection policy enables selecting a specific group of assets that must be backed up. A virtual machine protection policy (PLC) can be created using the Data Manager UI.

### Call to Action

To learn more about how Dell EMC PowerProtect Data Manager for VMware Cloud Foundation on Dell EMC VxRail can benefit your SDDC, please take a deeper dive into our [technical white paper](#), or visit us at [www.DellTechnologies.com/VMware](http://www.DellTechnologies.com/VMware).