In-Cloud Data Protection
with Dell Technologies

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Why Data Protection in the Cloud

The decision to use the public cloud when deploying new business applications is driven by a range of important business benefits, including:

Better performance	Elasticity of resources
Increased scalability	Ease of instantiating new VMs
Improved security	DBaaS based on APIs

Organizations need to be able to protect a variety of new data sources from traditional applications running on their cloud infrastructure as well as born-in-the-cloud applications that take advantage of PaaS (DBaaS, K8aaS, file services). Yet, for those running workloads in multiple cloud environments, there is not a clear "go to" in terms of protection.

*Vanson Bourne was commissioned by Dell Technologies to survey 1,000 IT decision makers across 15 countries globally on their data protection strategies, their approaches to data protection in cloud environments, and the relative preparedness of their businesses in cases of disruption

94%
of organizations choose cloud deployments (public, private and/or hybrid) for new applications*

56%
of organizations say the decision to use public cloud when deploying new business applications is driven by more reliable data protection*

Shared Responsibility Model

As enterprises continue to adopt and grow their infrastructure in the public cloud, they face new challenges to protect their applications and workloads. One of these challenges is defining the responsibilities of protection and compliance between the customer and the public cloud providers:

"We're responsible for the security and protection in the cloud such as hardware, software, networking and the rest of the infrastructure that runs the public cloud services."

Public Cloud Provider

"We're responsible for the security, availability and protection of data, applications, operating systems, etc. in the cloud."

Customer

20%
of organizations believe that responsibility for protecting workloads running in multiple clouds sits with the cloud service providers themselves*

63%
of organizations say that their organization does not have a separate contract with their cloud service provider(s) for protection of all workloads*

Accelerating Data Protection for Business Applications

As more enterprises adopt a multi-cloud strategy, leveraging a common data protection solution across their on-premises infrastructure and their public cloud will enable them to achieve operational efficiencies and save costs. This is particularly true for customers with environments that are rich with applications running in a variety of configurations.

For enterprises that have workloads running in the public cloud and need self-service backup and restores from enterprise application tools, Dell PowerProtect Data Manager provides data protection of workloads running in Amazon Web Services (AWS), Microsoft Azure and Google Cloud.

Discover
Unprotected workloads and file systems

Protect
By applying protection policies through PowerProtect Data Manager or application native interfaces
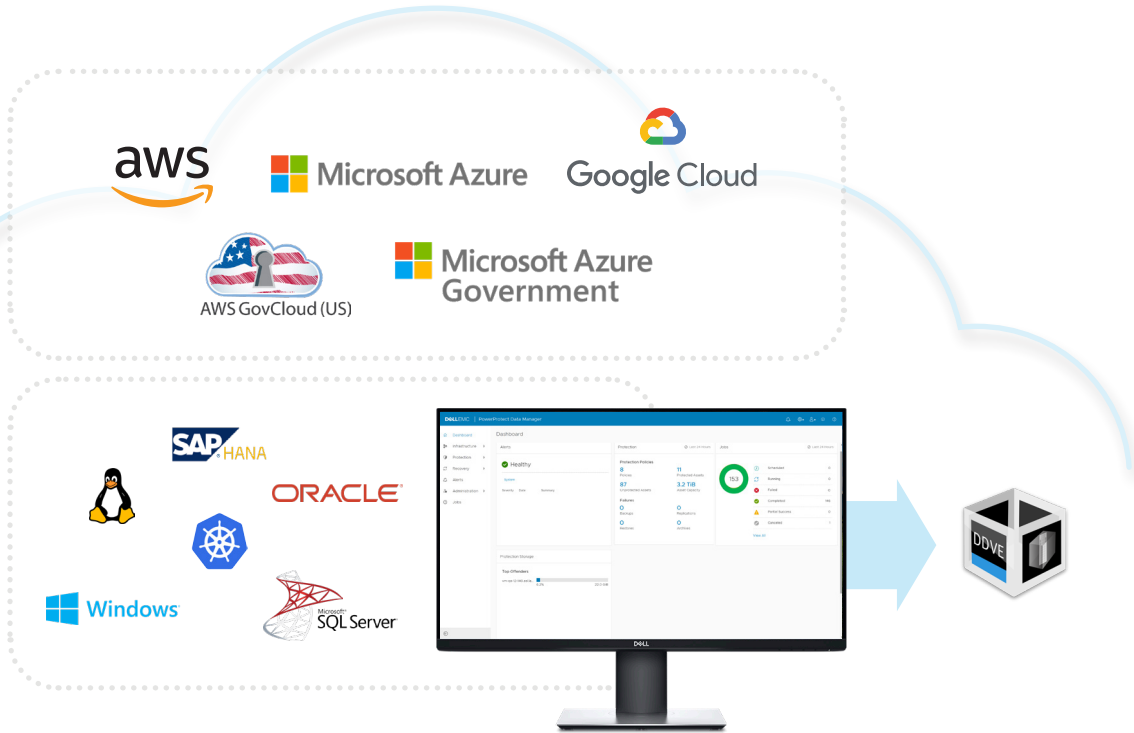
Manage
These policies, leverage the cloud for all data protection use cases

Self-Service Restore
Directly from PowerProtect Data Manager or from native applications

Data Protection for Cloud Workloads
Deploy PowerProtect Data Manager in the Cloud

BENEFITS

Protect enterprise grade applications in AWS, Azure and Google Cloud

Deliver self-service backup and restores

Bring the same functionality in-cloud as on-premises

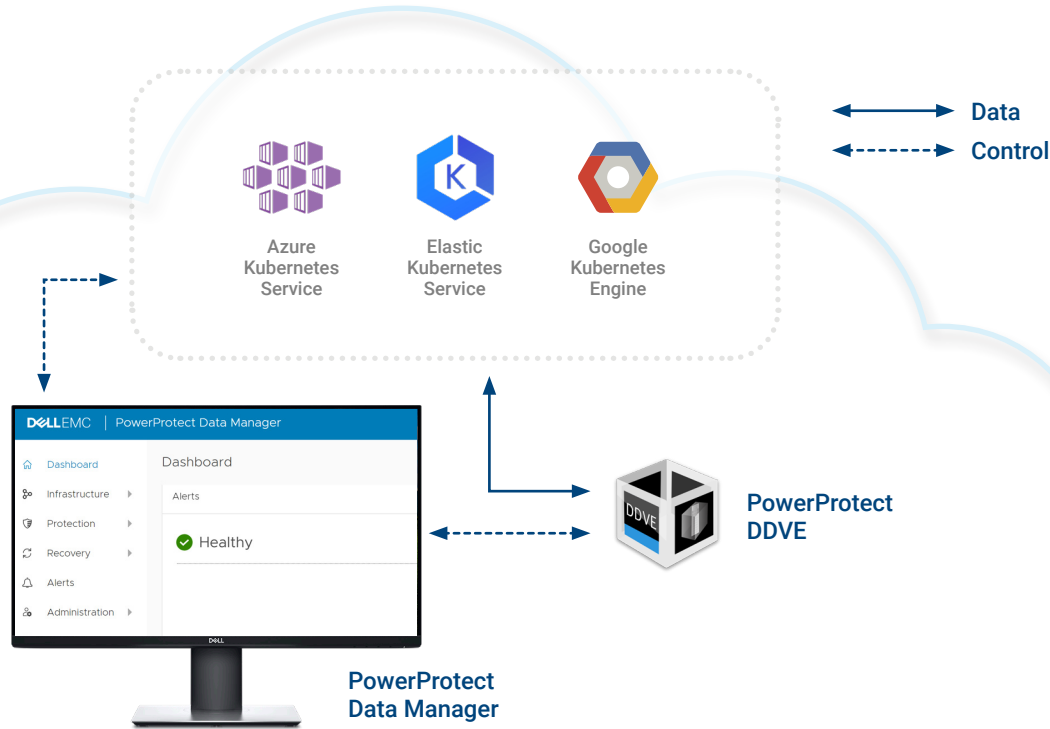Deploy easily from the AWS, Azure or Google Cloud Marketplaces

Leverage a common data protection solution across on-premises and the public cloud

Deliver the performance, efficiency, and reliability of Dell PowerProtect DD Virtual Edition in the cloud

Leverage industry leading deduplication for Lower TCO

Modern Workload Protection in the Cloud
Deploy PowerProtect Data Manager in the Cloud

Azure
Kubernetes
Service

Elastic
Kubernetes
Service

Google
Kubernetes
Engine

→ Data
⇢ Control

**PowerProtect
DDVE**

**PowerProtect
Data Manager**

BENEFITS

Protect applications running on self deployed Kubernetes clusters, or using in-cloud K8aaS

Protect Azure Kubernetes Services (AKS), Amazon Elastic Kubernetes Services (EKS), Google Kubernetes Engine (GKE)

Protect in cloud backup using PowerProtect DD Virtual Edition hosted on Azure, AWS, or Google Cloud

Supports hybrid/multi-cloud use cases from PowerProtect DD/PowerProtect DDVE on-premises and public cloud and between public clouds

Supports migration on-premises to target cloud support structure and back

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Protecting Workloads with Native Snapshots

Cloud Snapshot Manager makes it simple for customers to discover, orchestrate and automate protection of resource via native snapshots across multiple cloud accounts and regions based on policies. Cloud Snapshot Manager eliminates cloud silos and provides a more efficient and automated way to protect all workloads running in cloud from a single management console:

Powerful SaaS: Data Protection with multi-tenancy and RBAC capabilities. Nothing to install, zero infrastructure cost.

Automated discovery and protection of public clouds VMs, databases and block storage volumes based on policies.

Seamless management across multiple clouds (AWS & Azure).

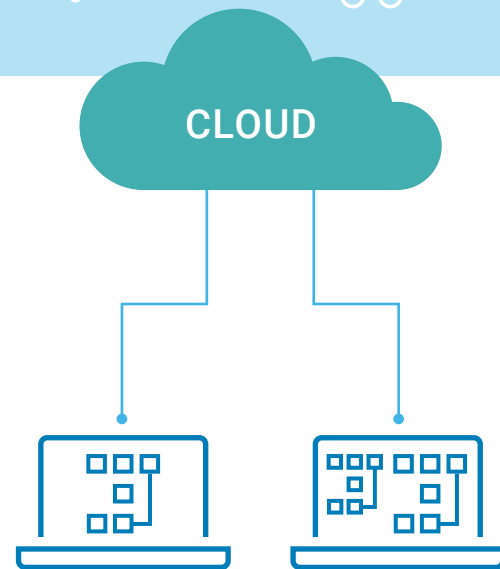Scalable enterprise-grade solution for public cloud infrastructure protection, no matter how extensive the "sprawl."

Global visibility and control with dashboards and global reports enable enterprises to gain visibility and control into their cloud environments.
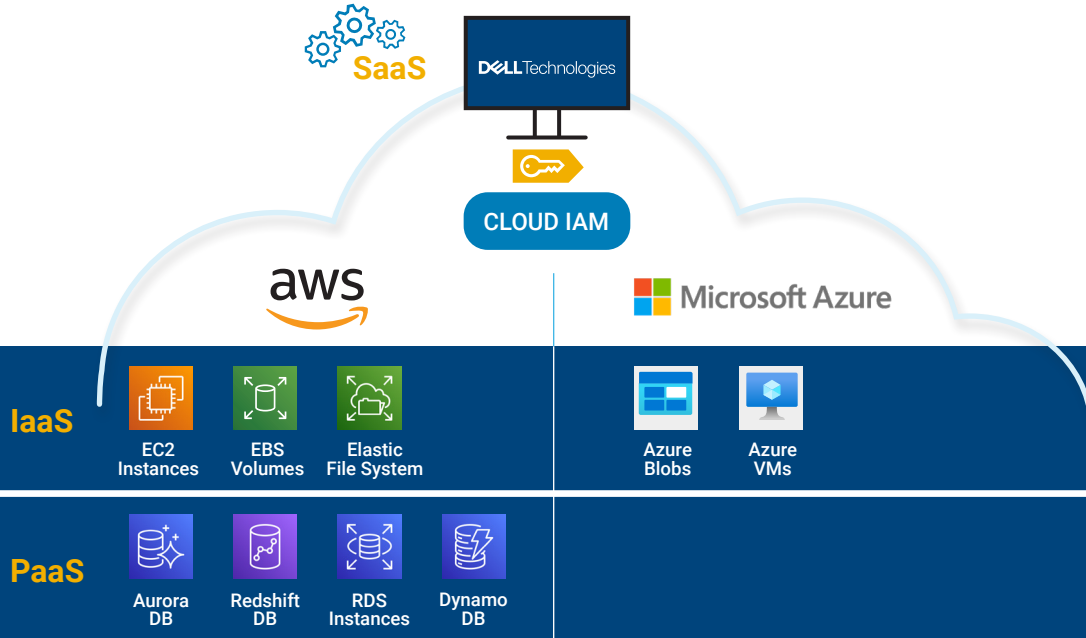
CLOUD

SaaS Solution Providing Native Backup and Disaster Recovery
PowerProtect Cloud Snapshot Manager

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SaaS

CLOUD IAM

aws

Microsoft Azure

IaaS

EC2 Instances

EBS Volumes

Elastic File System

Azure Blobs

Azure VMs

PaaS

Aurora DB

Redshift DB

RDS Instances

Dynamo DB

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BENEFITS

SaaS solution requiring zero infrastructure, providing global visibility and control across Azure and AWS

Advanced policy engine with tag based automation and retention of snapshots

Application consistent backups and advanced recovery — one click restore, group restores and FLR

Full set of REST APIs enabling cloud-scale automation

Security with Fed ID with SAML support

Subscription pricing enables protection for what you need, when you need it

As-a-Service Data Protection
Leverage the Advantages of the Cloud

CLOUD

SaaS Workloads

Distributed Workloads

Cloud Native Workloads

Zero Infrastructure | Modern Management | On-Demand Scalability | Subscription Licensing

APEX Backup Services
SaaS Platform for Protecting Data Across Edge, Core and Cloud

SaaS-Based Workloads

Microsoft 365
- Exchange Online
- Microsoft Teams
- SharePoint Online
- Microsoft OneDrive

Google Workspace
- Gmail
- Google Drive
- Google Docs
- Google Slides

Salesforce

salesforce

Distributed Workloads

Endpoints
- Desktops and Laptops
- Mobile Devices

Hybrid Workloads
- ORACLE
- Microsoft SQL Server
- vmware®
- Microsoft Hyper-v

BENEFITS

- No infrastructure to manage
- Deploy in minutes
- On-demand scalability
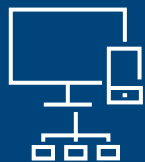- Complete visibility across workloads
- Regulatory compliance
- End-to-end data security
- Compliance monitoring
- Legal hold and eDiscovery
- Global source-side deduplication
- Automated feature updates

Cloud-Scale Automation

The elasticity of the cloud and the extensive set of APIs offered by all cloud providers give enterprises the opportunity to fully automate their cloud environment from the creation of the infrastructure to deployment of resources, as well as the protection of those resources. When implemented properly, cloud automation:

Minimizes exposure to security vulnerabilities that can put the enterprise at risk.

Saves time and money.

Leads to fewer errors thanks to more predictable and reliable workflows.

Enables organizations to be more agile and offer on-demand IT capabilities to their customers.

Organizations with optimized data protection environments reported completing 57% more of their projects ahead of schedule*

*"Why Data Protection Matters for Today's Multi-cloud Environments" Report, Enterprise Strategy Group, May 2020 https://www.delltechnologies.com/en-us/data-protection/cloud.htm#scroll=off&overlay=/en-us/collaterals/unauth/analyst-reports/solutions/why-data-protection-matters-in-cloud-environments.pdf

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Cloud-Scale Automation with Dell Technologies

Most data protection solutions require manual installation of infrastructure, deployment of agents and lack the required APIs for automation. To achieve cloud-scale automation, enterprises need an agentless solution with a rich set of APIs that enables them to tie in the data protection with their automation orchestration tool.

Dell Technologies offers two products to help automate the protection of in-cloud workloads:

Dell PowerProtect Data Manager provides a rich set of powerful, application consistency capabilities for in-cloud workloads along with APIs that enable automation while reduces time to recover.
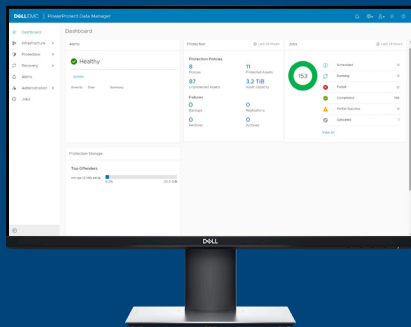
Dell PowerProtect Cloud Snapshot Manager is an agentless SaaS solution with a powerful policy engine which allows automatic tag based assignments of resources to protection policy, as well as a rich set of APIs that can automate the protection processes and tasks.
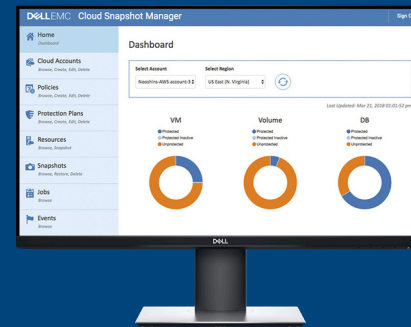
With Dell Technologies, you get the best of both worlds.

Why Dell Technologies

Dell Technologies has 11.6 EB of data protected in the cloud[1]

Over 1,600 companies trust Dell Technologies to protect their data in the cloud[2]

Our cloud data protection solutions:

Reduces cloud resources and services costs by up to 84%.[3]

Cloud optimized for enterprise and modern workload protection.

Protect traditional, next generation and Cloud IaaS / PaaS workloads.

Centralized management for multi-cloud and hybrid cloud environments.

Resources:

Designing a Cloud Native Organization
that Provides Data Protection for Kubernetes and DevOps Synergies

GET STARTED

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Designing a Cloud Native Organization

> link to eBook

WHY MULTI-CLOUD DATA PROTECTION
with Dell Technologies

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Why Multi-Cloud Data Protection with Dell Technologies

> link to eBook

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Cloud Data Protection and Backup Solutions

intel
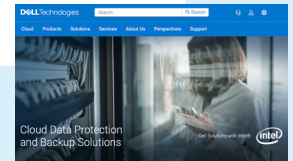
Dell EMC Data Protection Solutions for Cloud

> link to Website

[1] Based on Dell Technologies analysis, June 2022

[2] Based on internal Dell Technologies research, June 2022

[3] Based on ESG review commissioned by Dell, "Analyzing the Economic and Operational Benefits of the Dell EMC PowerProtect Data Protection Portfolio", September 2020, evaluating the economic value of the Dell EMC data protection portfolio. Actual results will vary.