Simplify Modern Data Protection

PowerProtect Data Manager Appliance
Five key takeaways

2022 Global Data Protection Index Snapshot

The last 12 months have brought higher levels of disruption for organizations than in previous years.

Experience of cyberattacks or incidents are more prevalent this year and are contributing to increased disruption.

Almost all are facing challenges in relation to data protection.

There has been a shift towards public cloud use, which may create further data protection issues for organizations.

Working with fewer data protection vendors is linked to better data protection outcomes.
Concerns and a lack of confidence in existing data protection measures are prevalent, exposing organizations to risk

55% are not very confident that their organization is meeting its backup and recovery service level objectives (SLOs)\(^1\)

69% are concerned that they will experience a disruptive event in the next twelve months\(^1\)

67% are concerned their organization’s existing data protection measures may not be sufficient to cope with malware and ransomware threats\(^1\)

70% agree their organization has increased exposure to data loss from cyberthreats with the growth of employees working from home\(^1\)

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1. Based on Dell Technologies Global Data Protection Index 2022 Key Findings, November 2022.
Alongside commonplace data protection challenges organizations are faced with

Ranked top 5: Challenges faced in relation to data protection

- Lack of data protection solutions for newer technologies (e.g. containers, cloud-native applications, IoT, edge, etc.) - 76%
- Inability to locate and protect dynamic and distributed data resulting from DevOps and cloud development processes - 72%
- Inability to meet backup windows because of increasingly distributed nature of data - 69%
- Ballooning costs of storing and managing backup copies because of rapid data growth - 68%
- Increased operational management time and complexity - 65%
- Inability to meet backup windows because of growth in size of data - 64%
- We are not facing any challenges in relation to data protection - 3%

Inability to meet backup windows because of growth in size of data
Dell Technologies data protection portfolio

Optimizes resources and improves business agility

Less than 1¢ per GB/month cost to protect

98% Average reduction in consumed storage resources

Up to 85% Faster time to recover in the event of a disaster

76% Reduction in backup and restore times

22% Reduction in data protection administration costs

Source: Based on ESG review commissioned by Dell, “Analyzing the Economic and Operational Benefits of the Dell Data Protection Portfolio”, November 2022, evaluating the economic value of the Dell data protection portfolio. Actual results will vary.
PowerProtect Data Manager in an Appliance
PowerProtect Data Manager
Start your journey towards modern data protection

Trusted protection and restore
Operational simplicity

Software defined multicloud data protection

Oracle  SQL  Exchange  SAP HANA  Kubernetes  VMware  Filesystems
PowerProtect Data Manager

Flexible consumption

On VMware with target appliances | In the cloud | Integrated appliance
INTRODUCING

PowerProtect Data Manager Appliance

Simplify Modern Data Protection

MODERN
Software-defined architecture

SECURE
Operational and cyber resilience

SIMPLE
Unified user experience
PowerProtect Data Manager Appliance

Can deploy in 15 mins¹

12TB – 96TB

Grow in place or to the cloud

Deduplication
Cyber Resilience
VMware Integration
Cloud enabled
Instant Access + Restore
Disaster Recovery

¹Based on a Principled Technologies paper commissioned by Dell comparing Dell PowerProtect Data Manager Appliance vs competitive data protection solutions, November 2022. Actual results may vary.
Modern Protection
PowerProtect Data Manager Appliance
Leverage cloud for application availability and business continuity

Long term retention to cloud object storage

Simple
Automated, native tiering to public, private or hybrid cloud

Cost-effective
Reduce TCO by sending and retrieving only unique data

Open
Broad ecosystem and flexible deployment options
Orchestrated recovery to the cloud

Cloud Disaster Recovery

Orchestrated DR
End-to-end orchestration for disaster recovery to the cloud and failback

Efficient architecture
Eliminate DR data center costs using minimal cloud infrastructure

Simple operation
3 clicks failover, 2 clicks failback\(^1\)
Direct in-cloud access

\(^1\) According to Dell Internal Testing. March 2022
Seamless protection of cloud workloads

Protect cloud-native workloads across multiple public clouds

SaaS solution
simple, scalable and secure

Global visibility and control
across Azure, AWS and Google

Discover, orchestrate, and automate
protection of workloads with tag-based policies

Single pane protection status
via PowerProtect Data Manager

Flexible, efficient retention
cloud snapshots with PowerProtect DD Virtual Edition

Protect Cloud-Native Workloads

AWS EC2 Instances
AWS EBS Volumes
AWS Elastic File System
AWS Aurora DB
AWS Redshift DB
AWS RDS Instances
AWS Dynamo DB
Azure Blobs
Azure VMs
Google GCE
Google Persistent FS
VMware protection
Providing a consistent protection experience

VMware
Manage protection through vSphere

Automation
Discovery and policy creation

Modern
Kubernetes container protection

Cloud
In-cloud and extend to cloud protection
Transparent Snapshots

Transparent Snapshots **simplifies** VM image backups delivering **near-zero impact** on VMs

Ensure availability of all your VMs at scale without business disruption
Transparent Snapshots benefits

**Increase backup performance**

- Near zero impact to VMs or environment
- Faster backups
- Faster restores

**Lower costs & simplify management**

- Zero proxies for data movement
- Storage agnostic
- Environment auto-scales via automation
Comprehensive protection for containerized apps

- Discover and manage unprotected Kubernetes natively
- Protect Kubernetes in AWS, Azure and Google Cloud
- Protect OpenShift PaaS resources
- Agentless application consistency
- VMware Tanzu integration
- Protect EKS, AKS, GKE
Dynamic NAS 

automates and optimizes the protection of NAS infrastructure

- Tight integration with PowerStore, PowerScale and Unity
- Storage agnostic
- Automatic discovery
- Incremental forever backups
- Dynamic slicing of NAS assets with load balancing
Peace of mind with security and data integrity

Secure Access
IAM, RBAC, AD integration, Two-Factor Authentication

Reduced attack surface
Private network for internal communication

Reduced potential for malicious data changes
With Retention Lock Governance

Data Invulnerability Architecture
End-to-end verification, fault avoidance and more
Cyber Recovery Requirements

- **Immutability**: Preserve original integrity of data
- **Isolation**: Physical and Logical separation of data
- **Intelligence**: Machine Learning and Analytics identify threats

Modern threats require modern solutions to ensure cyber resilience.
PowerProtect Cyber Recovery
Data Vaulting Critical Business Data

DATA CENTER

1 Sync

2 Copy

Automated operational air gap

3 Lock

Isolated

Intelligent

4

Analyze
Full content

5 Recover

Imutable

CYBER RECOVERY VAULT

Monitoring & reporting
Simple
PowerProtect Data Manager Appliance
Simple user experience

Start backing up in minutes

Streamlined upgrades

Self-service with governance
Single pane of glass management
Unified interface for rapid, easy-to-use experience

- **Dashboards**: Single view for on-premises and in cloud protection
- **Problem Resolution**: Alerts, monitoring, appliance support telemetry
- **Policy Management**: Automated discovery and protection of assets
- **Reporting**: Protection health compliance reporting
Centralized governance with data owner control

Self-service or IT controlled data protection with PowerProtect Data Manager Appliance

Oversight and governance control

Supported DD Boost workloads
Oracle, SQL, Exchange and more

Data flow

Automated configuration and onboarding

Self-service backup and restore

Central IT

Data owners
Dell Data Protection Guarantees

Increase confidence in data recoverability, optimize storage efficiency and lower costs

Guaranteed
Recovery & Optimization

Cyber Recovery

Up to $10M to assist in recovery of your data from ransomware and qualifying cyber events.¹

Data Protection Deduplication

Achieve a guaranteed deduplication ratio or we’ll make it right.²

Dell Technologies Future-Proof Program

- Satisfaction Guarantee
- Tech Refresh & Recycle
- Clear Price
- Flexible Payment Solutions
- CloudIQ
Data Protection Deduplication Guarantee

55:1 Deduplication Guarantee

PowerProtect Data Manager Appliance

1Use recommended best practices from Dell Technologies to get guaranteed data reduction for data protection appliances.
PowerProtect Data Manager Appliance

MODERN  SECURE  SIMPLE

Start your journey towards modern data protection
Comprehensive services portfolio for data protection

Choice & flexibility throughout the lifecycle of your solution

Strategize

PROCONSULT
Define data protection strategy and requirements

Implement

PRODEPLOY INFRASTRUCTURE SUITE
Plan, install & configure with confidence

PRODUCTION READY FOR BACKUP
Specific short-term activities that translate unique customer needs into backup and data protection policies

DATA MIGRATION
Move data efficiently with minimal disruption

RESIDENCY
Providing deep technical expertise to help achieve customer-directed business objectives and fulfill outcomes

Adopt

PROSUPPORT INFRASTRUCTURE SUITE
Proactive and predictive support for critical systems

EDUCATION
Develop the skills needed for your digital transformation & build a culture of learning and continuous Improvement

Scale

DATA SECURITY
Secure data on returned, replaced redeployed or retired systems
Our commitment to progress through innovation

Our expertise in supply chain and our leadership in sustainable design and materials is how we will get there.

Products
We create high quality, durable, reliable, secure and repairable products incorporating responsible design processes and sustainable materials wherever possible, while reducing energy intensity across our entire portfolio of offerings.

Packaging
Dell Technologies is a leader in responsible packaging – reducing waste and driving innovation to find recycled and renewable alternatives to protect our products while in transit. We also offer multipack shipping to maximize efficiency for customers purchasing devices in large quantities.

76%
We have reduced energy intensity throughout our products by 76% Since 2013