Dell PowerProtect Data Manager Appliance

Experience modern data protection with the PowerProtect Data Manager Appliance

Why PowerProtect Data Manager Appliance

Modern
- Software-defined architecture
- Extend protection to the cloud with long term retention, cloud disaster recovery and cloud native workload protection across multiple public clouds
- Ensure availability of all your VMs at scale without business disruption

Simple
- Simplify management, monitoring and reporting for both on-premises and cloud protection
- Deploy in less than 30 minutes[1]
- Up to 256 TBu capacity
- Native integration with Dell storage delivers fast, efficient, and secure backup and recovery
- Automate discovery and protection of databases, VMs, file systems, and Kubernetes containers
- Backup and restore directly from native interfaces

Resilient
- Increase operational and cyber resiliency to rapidly recover from cyber incidents
- Multi-Factor Authentication, Single login with Active Directory integration, Identity and Access Management (IAM), Role Based Access (RBAC)
- Reduce potential for malicious data changes with retention lock governance and compliance mode options

Simplify modern data protection with an integrated appliance based on PowerProtect Data Manager

Organizations are facing increased complexity – cyber threats, cloud-native application diversity, and resource constraints, plus unrelenting data growth – driving the need for solutions that enable them to do more with less. To support these expanding use cases and requirements, data protection solutions are transforming to provide more than just access to backups and restore capabilities. They need to leverage and protect modern workloads, enable self-service backups and restores and increase business resiliency to recover from cyber incidents.

To address these critical, yet challenging, requirements, Dell Technologies enables you to simplify the experience of adopting modern data protection with the Dell PowerProtect Data Manager Appliance

Start your journey towards modern data protection with the Dell PowerProtect Data Manager Appliance

The PowerProtect Data Manager Appliance includes PowerProtect Data Manager to deliver modern multicloud data protection. Data Manager gives you valuable insights into protected on-premises and in-cloud workloads, applications, file systems, and virtual machines (VMs). Plus, complete oversight and governance to ensure compliance.

The Data Manager Appliance delivers comprehensive and simplified backup, deduplication, replication, recovery, along with multicloud workload support. The Data Manager Appliance delivers it all without added complexity

Be confident that your data is secure and available.

The Data Manager Appliance offers a modern integrated data protection platform that combines protection storage with PowerProtect Data Manager software and cloud readiness – all in a single appliance.

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The Data Manager Appliance provides a simple, unified user experience and automates discovery and protection of databases, VMs, file systems and Kubernetes containers. Enhance scalability and simplicity with up to 256 TB usable capacity, catering to modern use cases and native integration with Dell Storage for efficient data resilience.

MODERN

PowerProtect Data Manager Appliance provides centralized governance that helps mitigate risk and assures compliance of service-level agreements (SLAs) and service level objectives (SLOs) through simple protection workflows.

Native integration with Dell storage simplifies and enhances backup and recovery operations for Dell PowerStore and PowerMax. Data protection operations are faster and more efficient, with little to no impact on applications or databases. With Data Manager, application owners gain centralized management and orchestration of backups and restores for multiple storage arrays.

You also have access to efficient and cost-effective native Cloud Disaster Recovery to Amazon AWS, Microsoft Azure, and VMware Cloud on AWS with end-to-end orchestration. Orchestrate protection directly through an intuitive interface and secure data with the latest capabilities for operational and cyber resilience. Empower data owners to perform self-service backup and restore operations from their native applications with central governance and oversight.

The appliance supports various traditional workloads, including file systems, SQL, SAP HANA, Oracle, Dell storage arrays, and modern cloud-native Kubernetes workloads. PowerProtect Data Manager Appliance provides an efficient and comprehensive data protection solution for your modernized workloads with a simplified user interface that is easy to navigate. It streamlines the data protection process and reduces the number of steps required for creation of backups, replication, recovery, expansion, and upgrades. The appliance addresses the issue of copy sprawling, so that monitoring, managing, and analyzing copies of data are no longer tedious tasks.

Transparent Snapshots
Available with Dell PowerProtect Data Manager, Transparent Snapshots delivers unique VMware VM protection and ensures availability of all your VMs at scale, without business disruption. Transparent Snapshots simplifies and automates VM image-level backups and enables backing up VMs without the need to pause the VM during the backup process. The result is significantly reduced impact on VMs, especially large, high-change-rate VMs.

Multicloud-optimized
Multicloud continues to be the path forward in today's era of massive growth and distribution of your data. Data protection offerings are being enhanced to enable various cloud providers as consumers embark on this path. The multicloud-optimized PowerProtect Data Manager Appliance offers a solution for effective long-term retention and disaster recovery of your data.

Data Manager Appliance can tier deduplicated data to any supported object storage provider for long-term retention using Cloud Tier. Cloud Tier supports an extensive ecosystem of cloud and on-premises object storage solutions, including AWS S3, Azure, Google Cloud Platform, Alibaba Cloud, Wasabi, Dell ECS, and others to deliver long term retention of backup data at reduced costs.

Efficient storage through deduplication
In today's world, the cost and efficiency of a solution are important considerations for most businesses. Organizations are always looking for solutions that enable cost-effective and efficient use of storage infrastructure and resources. The Data Manager Appliance delivers deduplication and compression for optimal storage consolidation across the system. The system also uses a hardware-assisted compression card that allows for the highest compression of incoming data without sacrificing performance. Because protection copies can represent up to 95% of an organization's data, it is important to reduce their storage footprint to the

5:1   55:1

greatest extent possible.

Figure 3. Data Manager Appliance typically delivers up to 55:1 data reduction, significantly shrinking storage requirements.

A 15% improvement in deduplication rate (for example from 80% to 95%) can reduce the physical capacity required by up to 4x. Data Manager Appliance typically delivers up to 55:1 data reduction—for a right-sized solution that shortens backup windows, delivers faster replication, increases retention, and reduces total cost of ownership.

SIMPLE

The Dell PowerProtect Data Manager Appliance significantly simplifies the management, monitoring, and reporting of data protection across both on-premises and cloud environments. Designed with efficiency in mind, it provides a unified platform that integrates seamlessly with various data storage solutions, ensuring that backup

and recovery processes are streamlined and reliable. This comprehensive approach eliminates the complexity typically associated with managing diverse data protection tools and allows for more effective oversight and control over critical data assets.

Deploying the Dell PowerProtect Data Manager Appliance is remarkably straightforward and can be accomplished in less than 30 minutes, offering rapid setup and minimal downtime. This quick deployment is further enhanced by its ability to support external shelves, enabling scalability up to 256 TB of usable capacity. This flexibility ensures that organizations can easily expand their storage as data grows, without the need for extensive reconfiguration or additional infrastructure investments.

The appliance's native integration with Dell storage systems delivers fast, efficient, and secure backup and recovery operations, minimizing the risk of data loss and reducing recovery times. Its automation capabilities extend to the discovery and protection of a wide range of data types, including databases, virtual machines, file systems, and Kubernetes containers. Additionally, users benefit from the convenience of backing up and restoring data directly through native interfaces, simplifying the process and enhancing overall data management efficiency.

RESILIENT

Anomaly Detection

Proactively protect your data against cyber threats with Anomaly Detection. This feature offers early threat detection of unusual file activities during backups, providing immediate insights into potential security risks. Using advanced machine learning algorithms, Anomaly Detection reviews metadata, behavior patterns and system configurations to flag suspicious activity, helping to protect your production environment from ransomware and other threats.

Anomaly Detection is designed to operate seamlessly within PowerProtect Data Manager, offering lightweight, comprehensive monitoring without requiring third-party solutions - all at no additional cost. With a focus on data integrity validation, this feature ensures your backup data is secure and recoverable — helping your organization maintain operational consistency and business resilience.

Identity and Access Management

PowerProtect Data Manager Appliance uses IAM to provide centralized authentication, authorization, single sign-on, and user management capabilities. IAM offers a unified appliance login experience and enhanced security by using Role Based Access Control (RBAC).

Multi-factor authentication

MFA is an authentication method that requires the user to provide two or more verification factors to gain access to a system. PowerProtect Data Manager Appliance adds layers of security beyond usernames and passwords by using MFA with Google Authenticator, Microsoft Authenticator, and RSA Secure ID to ensure the highest level of security for the Data Manager appliance.

Cyber Recovery

The Cyber Recovery solution protects mission-critical business data and technology configurations from ransomware and other threats by maintaining them in a secure, "vault" that is physically isolated from an unsecure system or network.

The Cyber Recovery solution enables access to the Cyber Recovery vault only long enough to replicate data from the production system. At all other times, the Cyber Recovery vault is secured and off the network.

Once the data is secured in the vault, CyberSense identifies suspicious activity through its machine learning technology and allows for recovery of known good data and resumption of normal business operations.

Instant Access and Instant Restore

Instant Access and Instant Restore delivers high performance of VMs with up to 118K IOPS with the ability to instantly access up to 64 VMs simultaneously. Instant Access and Instant Restore save time, minimizing mean time to repair (MTTR), by enabling instant access to data from the backup image on the included Data Manager Appliance SSD drives. It also saves primary storage space with the ability to manage data on the appliance itself and lowers cost by better utilizing the physical resources in both the data protection and production environments.

Data Invulnerability Architecture

Data Manager Appliances are designed as the storage of last resort—providing you with the confidence that you can always reliably recover your data. The Data Invulnerability Architecture is built into the Data Manager Appliance to provide the industry's best defense against data loss. Inline write and read verification protect against and automatically recovers from data integrity

issues during data ingest and retrieval while RAID-6 and hot spares protect against disk failure.

Capturing and correcting I/O errors inline during the backup process eliminates the need to repeat backup jobs, ensuring backups complete on time and satisfy service-level agreements (SLAs). In addition, unlike other enterprise arrays or file systems, continuous fault detection and self-healing ensures data remains recoverable throughout its lifecycle on the Data Manager Appliance.

Future-Proof Program

The Data Manager Appliance participates in the Future-Proof Program. The program gives our customers additional peace of mind with guaranteed satisfaction and investment protection through a comprehensive set of world class technology capabilities and programs for future technology changes.

Backed by the power of Dell Technologies

Dell offers one-stop convenience to Data Manager Appliance customers, with leading end-to-end solutions and ecosystem partners, global services and secure supply chain and a strong channel and direct salesforce.

PowerProtect Data Manager Appliance

MAXIMUM THROUGHPUT	Up to 14.0 TB/hr
LOGICAL CAPACITY	Up to 14.1 PB
W/ CLOUD TIER	Up to 42.2 PB
USABLE CAPACITY	12 to 256 TB
W/ CLOUD TIER	Up to 768 TB

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To learn more about the PowerProtect Data Manager Appliance, please visit Dell.com/PowerProtectDataManagerAppliance.

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[1]Based on Dell internal testing and analysis, June 2024. Actual results may vary

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Learn more about the Data Manager Appliance

Contact a Dell Technologies Expert

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