COHESITY

RESILIENCE EVERYWHERE

MODERN VS. LEGACY:

WHY COHESITY DATAPROTECT OUTPERFORMS DELL POWERPROTECT IN THREE CRITICAL CATEGORIES

Comparing the performance, cyber resilience, and TCO of two well-known architectures

EXECUTIVE SUMMARY

Recent research highlights a sharp paradox: 78%[1] of businesses now rely on AI and data to drive growth, yet 76% have suffered at least one material cyberattack[2], with recovery often taking months. Downtime isn't just an inconvenience. It's a direct hit to business operations, growth initiatives, and brand reputation. A ransomware attack or compliance violation can paralyze operations, drain resources, and divert attention from innovation. The last line of defense to minimize the impact of cyberattacks is a data management solution that protects, secures, and quickly recovers data.

Understanding the difference between legacy data management architectures and truly modern data management architectures could mean the difference between a recovery that takes weeks or even months and a recovery that takes minutes or hours. In this eBook, we'll compare a legacy architecture from Dell against a modern architecture from Cohesity along 3 overarching decision criteria: cyber resilience, performance, and total cost of ownership.

Solution Overviews

Dell PowerProtect Data Domain represents an iteration of Dell's scale-up backup architecture initially designed for on-premises data protection. PowerProtect is a solution based on legacy components such as NetWorker and Avamar, and works with Dell's Data Domain backup appliances to provide data protection and security.

In contrast, Cohesity DataProtect, powered by the SpanFS distributed file system, was designed from day one as a cloud-native, software-defined, hyperconverged, scale-out platform for hybrid and multicloud environments. With DataProtect and SpanFS, everything is tightly integrated and built for scale, performance, and security. This architectural difference enables faster backup and recovery, stronger cyber resilience, and simpler management at lower cost.

78% of businesses now rely on AI and data to drive growth

1 CYBER RESILIENCE

Cohesity DataProtect with SpanFS embeds security directly into its architecture. Every backup is immutable, every change auditable, and every recovery operates under a Zero Trust framework. Notable innovations include:

- AI-powered anomaly detection
- Cloud and on-prem-based cyber vaulting
- Hash-based threat scanning
- Identity Resilience, powered by Semperis
- Orchestrated cyber recovery and much more

Cohesity enables organizations to operate in hybrid cloud environments and recover all data, including identity systems, quickly and confidently. By contrast, PowerProtect depends on add-on immutability (Retention Lock) and standalone Cyber Recovery vaults, adding complexity, cost, delayed time-to-value, and slow recoveries.

CUSTOMER EXPERIENCE:

Sky Lakes Medical Center

Sky Lakes Medical Center was hit by a ransomware attack in 2020 that rendered their Dell Avamar + Data Domain environment unusable. With Cohesity DataProtect plus Cohesity FortKnox, they instantly recovered 100% of their data without paying a ransom and reduced their backup window from hours to minutes.

First Acceptance™ Insurance Company

"The immutable architecture from Cohesity ensures that our backup data can't be tampered with or maliciously deleted."

Shawn Robertson
Platform Manager
Acceptance Insurance

2 PERFORMANCE

Cohesity's hyperconverged **scale-out** architecture scales performance and capacity linearly as nodes are added. High availability is inherent, allowing for continued operation despite node failure or system upgrades.

Performance results include the ability to recover up to 1000 VMs instantly and to scan 30 billion backup files in less than a minute with near-zero resource impact. Meanwhile, PowerProtect's scale-up architecture and single compute controller limit instant VM recoverability to ~64 VMs and dedupe efficiency to each PowerProtect domain. High availability is active-passive, resulting in idle infrastructure, multiple Data Domain clusters, and maintenance downtime. PowerProtect does not offer hash-based threat scanning.

CUSTOMER EXPERIENCE:

AutoNation

AutoNation replaced Dell Networker/Avamar system with DataProtect and achieved 100% backup success rates, reduced recovery times, and simplified management across 350+ locations.

Nationwide
is on your side

"Cohesity can help us recover from a large-scale outage affecting thousands of virtual machines within hours—compared to weeks or months with our legacy system. Recovering hundreds of virtual machines after a failed operating system patch now takes minutes instead of weeks."

Rich Alexander
AVP of Technology
Nationwide

3 TOTAL COST OF OWNERSHIP

At Cohesity, our hyperconverged architecture consolidates backup, recovery, and security features into a single unified platform. The centralized interface eliminates the need for different interfaces for different functions, reducing operational training costs. Global deduplication eliminates redundant data across the entire data estate, not just confined to a single data domain, thereby improving storage efficiency and cutting storage and bandwidth needs.

Our hyperconverged architecture also provides inherent high availability without the need to purchase and deploy additional hardware that sits idle until a failure occurs. Conversely, PowerProtect Data Domain's claim of 65:1 dedupe ratio, while accurate, is limited to a single data domain and doesn't apply globally, resulting in a reduced dedupe ratio. Additionally, PowerProtect Data Domain's architecture results in higher costs in two ways: (1) scale-up limits scalability, resulting in multiple data domains, and (2) active-passive architecture results in expensive infrastructure that sits idle.

CUSTOMER EXPERIENCE:

Publiacqua replaced their legacy solution with Cohesity to protect their VMs, databases, and files on-prem and in AWS. As a result, they were able to recover from disasters 7-8x faster, reduce their management costs 50%, and lower their capacity requirements 30%.

Customer Quote: "We are confident we made a good choice in selecting Cohesity for our enterprise data management across our entire school district. Cohesity has not only enabled significant cost and time savings, it has set us up to optimize our future data management and meet cyber resiliency requirements."

CONCLUSION:
DATAPROTECT'S MODERN ARCHITECTURE WINS BY DESIGN

With cyber breaches becoming a matter of when, not if, Cohesity DataProtect, built on SpanFS, represents a modern, cloud-native approach to data protection and cyber resilience. It delivers faster backup and recovery performance and reduces total cost of ownership, delivering a win-win-win for today's enterprise organizations. Dell PowerProtect, while functional, remains rooted in legacy architecture with inherent limitations in scale, performance, and resilience. For organizations seeking simplicity, performance, and true cyber resilience, Cohesity delivers better—by design.

To learn from more customers who've replaced their legacy architecture with a modern solution from Cohesity, read How four organizations moved beyond Dell for modern data protection.

Better yet, if you'd like to see what your savings could look like compared to a Dell PowerProtect Data Domain deployment, contact your Cohesity sales representative. They can walk you through a detailed model using customizable discount values and configurations tailored specifically to your deployment.

SOURCES:
1. NETGURU, AI ADOPTION STATISTICS IN 2025 BY KACPER RAFALSKI.
2. COHESITY GLOBAL CYBER RESILIENCE REPORT, NOVEMBER 2025.

COHESITY
cohesity.com
1-855-926-4374
2625 Augustine Drive, Santa Clara, CA 95054

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