

WHITE PAPER

Redefining Cyber Resilience for the Data Era

How the Pure Storage Enterprise Data Cloud
transforms storage from target to defender

Contents

Introduction	3
Engineered for Real-world Outcomes	3
From Target to Defender: Key Capabilities	4
Dynamic Response and Recovery	4
Connected Threat Detection	4
Built-in Security	5
Beyond the Silos: a Robust Cyber Resilience Ecosystem	5
Proven Outcomes: The Power of a Trusted Solution	6
The Bottom Line: EDC is Your Path to a Cyber-resilient Future	7
Additional Resources	7



Introduction

Cyber threats are growing more sophisticated and faster with the use of AI, and your fragmented storage architecture may be your biggest vulnerability. Ransomware attacks are now a daily reality, with **4,000 attacks per day** and **78% of organizations attacked last year**. These attacks and other malicious activity can lead to mission-critical applications being offline for days and a massive impact on the bottom line. Organizations cannot afford this downtime, which can cost thousands of dollars per minute. With the exorbitant costs of downtime and the lasting impact to brand and customer loyalty, recovery must be measured in minutes, not days.

A new paradigm is needed. The **Enterprise Data Cloud (EDC)** is a transformative architectural model designed to unify, simplify, and automate data management across every environment—on-premises, public cloud, and edge. The EDC is powered by the Pure Storage® platform and moves beyond legacy, siloed storage to a unified, secure-by-design solution that keeps your data safe and your business resilient. **It's time to transform your cybersecurity and cyber recovery posture with a solution that embeds protection directly into the infrastructure itself.**

Engineered for Real-world Outcomes

EDC is architected to meet today's cyber resilience demands by **delivering on three critical customer outcomes**.

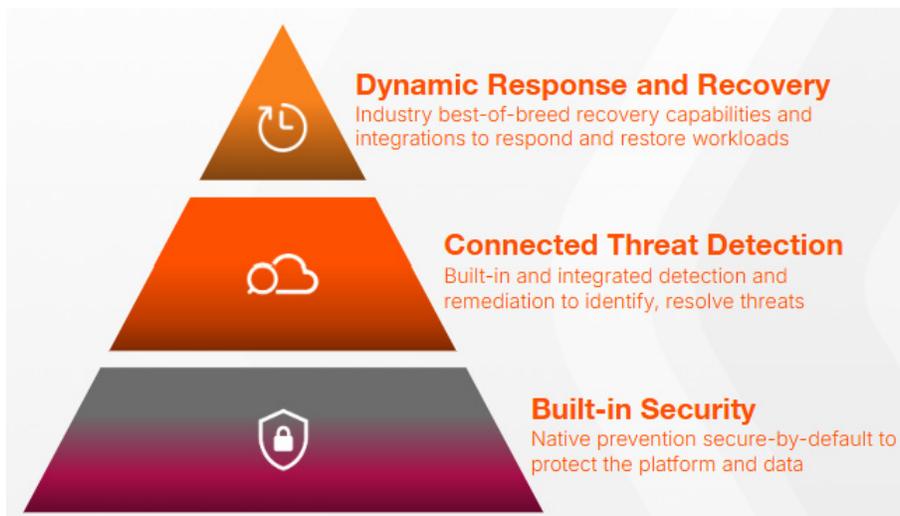


- Cyber-resilient storage:** Storage is secured, replicated, integrated, and automated and is an active component of an organization's cybersecurity and cyber recovery. Cyber-resilient storage is crucial because it transforms your storage from a passive target to a proactive defender that actively participates in your cyber defense and recovery strategy rather than just being a data repository. This is foundational to building a modern security posture.
- Enhanced security analytics:** Cyber-resilient storage improves performance and visibility. Pure Storage helps organizations improve visibility of their critical applications and can provide the storage foundation for on-premises security analytics to accelerate threat detection. This is vital for security operations teams that need to process massive volumes of security data in real time. By providing a high-performance, integrated storage layer for security analytics, Pure Storage enables faster threat hunting and more informed decision-making.
- Supercharged data protection:** Cyber-resilient storage improves backup and recovery. It provides extra protection against threats and dramatically reduces recovery time. It's not just about having a backup; it's about having an immutable, indelible, verifiable, and instantly recoverable copy of your data. This is the ultimate form of business insurance against a destructive attack.



From Target to Defender: Key Capabilities

With an EDC powered by the robust, AI-enabled capabilities of the Pure Storage platform, we are transforming storage from a passive target to an active defender with three key functions that help organizations better withstand and instantly recover from malicious incidents.



Dynamic Response and Recovery

Detection is only half the battle. The real cost of an attack is downtime, and manual recovery isn't fast enough. Unlike traditional disaster recovery, cyber recovery is far more complex, requiring a rigorous process of validating data to ensure a clean restore. With our dynamic response and recovery capabilities, recovery is safe, validated, and instant.

- **Automated recovery zones:** Groundbreaking features automatically provision isolated recovery environments (IREs) so you can validate, test, and restore workloads in a clean, secure space before touching production.
- **Automated layered resilience:** We provide automated multisite replication for cyber recovery, ensuring your data is protected and available across multiple locations and survives regardless of the severity of the incident.
- **Data protection integrations:** Seamless integrations with solutions from partners like Commvault, Rubrik, and Veeam provide end-to-end data resilience with faster backups and rapid recovery.

Connected Threat Detection

Cyber threats don't stop at the perimeter, and your detection capabilities shouldn't either. We close this security gap with built-in and integrated detection capabilities that give you complete visibility across your environment.

- **Native threat detection and remediation:** Built-in threat detection and malware scanning allow you to identify and resolve threats at the storage layer itself. This detection is tightly coupled with security operations so you can transform alerts into immediate action and ensure they are consistently applied via policies.
- **Security and ransomware assessments:** Our Pure1® AI Copilot provides deep visibility into your security posture and behavioral anomalies, identifying potential threats and offering actionable recommendations.
- **Cybersecurity integrations:** Integrations with top-tier security tools like Varonis, Microsoft Sentinel, CrowdStrike, and Superna accelerate threat detection and analysis by leveraging their powerful capabilities and integrating seamlessly into security operations across your entire storage estate.



Built-in Security

Security should not be an add-on; it must be a core principle. Our solutions are designed with security natively built in and they are secure by default to protect your platform and data from the ground up. This commitment is supported by our own strict security operations and safeguards as a company, ensuring a secure foundation in both our products and practices.

The EDC intelligent control plane enables a new model where security is built in, always on, and policy-driven. The control plane embeds data protection best practices through automated enforcement at the platform level. Indelible and immutable snapshots are created and retained without manual steps, and replication is tied to provisioning workflows. Clean recovery points are scheduled proactively before patch windows or major changes.

- **Indelibility:** Prevent malicious tampering with indelible and immutable SafeMode™ Snapshots and S3 Object Lock, ensuring your data cannot be altered or deleted.
- **Zero Trust principles:** We prevent malicious tampering of cryptographic and boot functions with capabilities like trusted platform module (TPM) and UEFI secure boot, ensuring the integrity of your systems.
- **Data security integrations:** Integrations with data security solutions like Okta, Thales, and IBM provide a flexible consumption model for centralized, automated protection and recovery.

Beyond the Silos: a Robust Cyber Resilience Ecosystem

Pure Storage partners with industry leaders to provide a truly end-to-end defense. Our strategy is to partner with companies whose technology complements and extends our portfolio, creating a more comprehensive solution for our customers. We build powerful integrations that allow us to solve real business challenges and deliver differentiated value that neither company could achieve alone.

Pure Storage Cyber Resilience Ecosystem



- **Data protection integrations:** We partner with leaders like Veeam, Commvault, and Rubrik to deliver unparalleled speed, performance, and recovery confidence. These integrations ensure that a customer’s entire backup and recovery strategy—from snapshots and replication to air-gapped protection—is seamless and works in concert with the Pure Storage platform.
- **Cybersecurity integrations:** We integrate with leading security analytics platforms like CrowdStrike, Superna, Splunk, and IBM Security to accelerate threat detection and analysis and ensure resilience. These integrations empower SecOps teams by providing real-time telemetry from the storage layer and feeding it directly into their existing security dashboards, giving them a unified view of their entire infrastructure and enabling faster incident response.



Proven Outcomes: The Power of a Trusted Solution

The EDC powered by the Pure Storage platform is not just a powerful concept—it’s a proven solution delivering real cyber resilience to thousands of organizations around the world every day. The confidence of our customers is our greatest asset, and our platform is built to deliver.



- **Threat detection:** Threat data is now processed in minutes vs. hours, allowing security teams to stay ahead of massive threat volumes.
- **Ransomware recovery:** Customers have recovered from massive ransomware attacks in hours vs. days.
- **Disaster recovery:** Government services have been recovered in seconds, not hours, after a disruptive event.
- **Business continuity:** We have helped customers achieve a near-zero recovery time objective (RTO) for mission-critical applications such as soccer fan engagement.



The Bottom Line: EDC is Your Path to a Cyber-resilient Future



The EDC powered by the Pure Storage platform fundamentally redefines cyber resilience. It moves beyond the traditional siloed and reactive model to a unified, proactive defense built on three key capability pillars. With our **dynamic response and recovery** capabilities, we ensure safe and instant restoration from any incident, providing a clear path to business continuity. Our **connected detection** seamlessly integrates native threat intelligence and security partner solutions to close gaps at the data layer, allowing you to find and stop threats faster than ever before. Finally, our **built-in security** protects your platform and data from the ground up with immutable snapshots and Zero Trust principles that are automated and policy-driven to ensure consistency.

These native capabilities, combined with deep integrations from industry leaders like **Veeam, Commvault, Rubrik, Varonis, Microsoft Sentinel, CrowdStrike, and Superna**, empower you to move from a state of fragmentation and vulnerability to complete confidence. Business continuity is no longer a hopeful goal, but a function built directly into the core of your infrastructure.

These rich capabilities and the automation of EDC provide this new standard for modern cyber resilience—improved threat detection and remediation, and fast, predictable, and reliable recovery regardless of the scope and magnitude of the incident. **Your data will be available when you need it most.**

Additional Resources

- Explore the [Pure Storage platform](#).
- Learn more about [the Enterprise Data Cloud](#).
- Read about how the Pure Storage platform [supports AI and other solutions](#).
- [Learn how to build your Enterprise Data Cloud with the Pure Storage platform](#).

[purestorage.com](#)

800.379.PURE

