

Pure Storage and Rubrik: Unstructured Data Resilience

Maximize performance and security for your unstructured data.

[Global data volume](#) is projected to increase ten times between 2020 and 2030, reaching 660 zettabytes according to UBS, with [IDC](#) estimating that 90% of organizational data is unstructured. This unstructured data has become vital for businesses, as it contains vast amounts of valuable information that can provide deep insights. It drives AI/ML decision-making and plays a crucial role across industries such as healthcare, finance, retail, and more. However, the rapid growth of unstructured data presents businesses with unprecedented challenges in effectively managing and securing this critical asset.

Challenges with Unstructured Data Storage and Protection

Legacy storage and backup systems can't keep up with modern applications and struggle with complexity, rigid architectures, and fragmented tools. These legacy systems falter under the scale of unstructured data, causing failures, bottlenecks, and incomplete protection. Additionally, fragmented management increases security risks, expanding attack surfaces and exposing organizations to ransomware threats. To adapt to modern demands and evolving cyber threats, businesses require efficient, scalable solutions that ensure robust data protection, high performance, and enhanced security.

Pure Storage and Rubrik: Delivering on Unstructured Data Performance and Security

The Pure Storage® platform, featuring FlashArray™ systems, meets diverse requirements with unified block and file services running on a single storage pool. It consolidates disparate workloads, provides high-performance, scales to petabyte levels in an ultra-dense footprint, and offers advanced data reduction with intelligent deduplication and compression, effectively replacing legacy disk-based storage. Non-disruptive hardware upgrades allow seamless scaling or transitioning to more powerful systems without data migration or downtime.



Storage for Unstructured Workloads

Gain high-performance storage built for modern workloads, allowing businesses to operate with speed, agility, and efficiency.



Petabyte-scale Unstructured Data Protection

Rubrik NAS Cloud Direct complements FlashArray with secure, efficient, high-performance backup for unstructured data.



Optimized Performance and Security for Unstructured Data

The Rubrik and Pure Storage partnership delivers unmatched efficiency, security, and simplicity to bolster cyber resilience against sophisticated threats.

The Rubrik NAS Cloud Direct solution for unstructured data provides high-speed data protection capable of processing hundreds of thousands of files per second. The solution implements policy-based automation for backup frequency, retention, and replication, while maintaining zero trust security with encrypted, immutable, air-gapped, and access-controlled backups. Intelligent anomaly detection enables rapid threat identification, and granular recovery options allow restoration of everything from individual files to entire shares.

Solution Overview

The partnership between Rubrik and Pure Storage redefines how organizations manage and secure unstructured data at scale. Combining high-performance, cyber-resilient storage solutions from Pure Storage with Rubrik's advanced data protection and zero trust security, businesses can operate with unmatched speed, agility, and peace of mind. Pure Storage FlashArray delivers robust, scalable storage tailored for modern workloads, offering robust data encryption, real-time auditing, disaster recovery, and built-in safeguards like SafeMode to protect against both administrative errors and malicious attacks.

Rubrik NAS Cloud Direct protects unstructured data at petabyte scale and seamlessly integrates with FlashArray. It delivers fast, efficient backups by using scalable stateless VMs to scan, index, and move billions of files to cost-effective on-premises or cloud storage. During backups, these VMs identify, compress, and process data, sending metadata to Rubrik Security Cloud, which is a SaaS management platform. Recovery reverses the process, restoring data to FlashArray with precision. NAS Cloud Direct also enables high-performance transfers of NAS data to FlashArray, offering unmatched flexibility, efficiency, and scalability in managing large-scale unstructured data.

Together, these technologies enable seamless data access and retrieval, even in the most demanding environments, ensuring business continuity and efficiency.

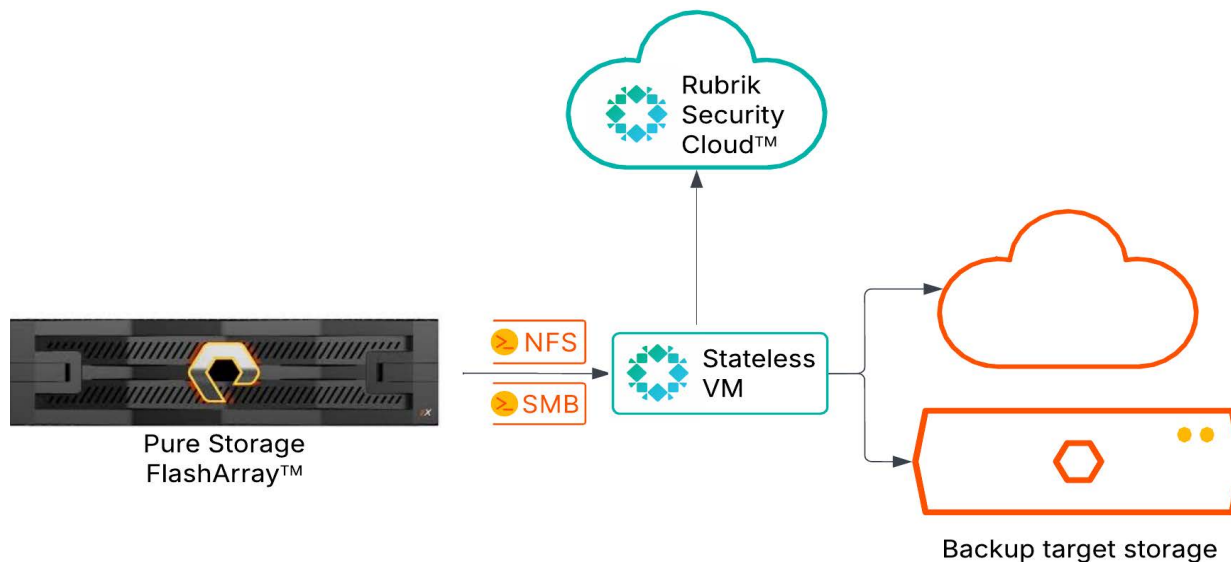


FIGURE 1 Solution architecture

Critical Capabilities

Rubrik and Pure Storage provide market leading capabilities to help organizations improve performance and security for their file-based backup data.

Scalable and performant storage architecture

Pure Storage provides:

- Unified storage platform that consolidates block and file workloads into a single storage pool, eliminating data silos
- Eliminates the need to add new arrays or management interfaces and scales with evolving applications that support artificial intelligence and machine learning
- Ultra-low latency performance (150µs to 1ms) for rapid data access
- High availability (99.99999%) with built-in business continuity and disaster recovery features to ensure data resiliency
- Advanced data reduction through intelligent deduplication and compression
- Simplified management through an intuitive, user-friendly interface

Efficient and secure backup and recovery at scale

Rubrik NAS Cloud Direct provides:

- Policy-based automation to simplify protection and management of large-scale deployments
- High-throughput data protection that moves petabytes of data, eliminating performance bottlenecks
- Granular, flexible, and rapid recovery capabilities that enable restoration of individual files, folders, or entire shares to any location
- Zero trust security controls such as immutable backups, air-gapped protection, built-in encryption for data at rest and in transit, MFA, and role-based access management
- Anomaly detection to identify threats and perform rapid and granular recovery

For more information, see our [Cyber Resilience Solutions](#) page.

Additional Resources

- Explore [Rubrik Unstructured Data Protection](#).
- Learn more about [real-time Enterprise File](#).