

Cyber Resilience at Flash Speed

Unifying Everpure FlashArray block volumes with Rubrik Zero Trust SLA governance

The landscape of modern cyber risk

In the modern threat landscape, cyberattacks have become enterprise financial crises, causing revenue loss, increased cost of capital, regulatory penalties, and intense shareholder pressure. With attack breakout times continuing to shrink, the window between perimeter exploit and full infrastructure compromise is dangerously narrow.

To maintain operations, large enterprises run their most performance-critical applications—such as multi-terabyte electronic health record (EHR) environments, trading systems, and manufacturing lines—on Everpure™ FlashArray™. This all-flash architecture delivers industry-leading submillisecond responsiveness.

However, infrastructure teams face a critical recovery gap when FlashArray block volumes sit outside the control and awareness of centralized backup platforms. Having storage snapshots scheduled on one array and separate backup policies on the other forces a trade-off between performance and data integrity: either you have frequent, crash-consistent snapshots that could lose transactions and have to be managed directly, or you have application-consistent backups that can't take advantage of snapshot recovery speeds.

Rubrik for Volumes eliminates this divide. Everpure FlashArray block volumes become managed objects within Rubrik Security Cloud, just like virtual machines (VMs) or databases, letting organizations secure an automated, verified, and scalable path back to normal operations in minutes to hours, not days to weeks.

The high-performance block divide

Incorporating high-performance block storage into an enterprise cyber resilience strategy creates a fragmentation tax:

- **Two systems for one estate:** Block storage is often protected separately from the rest of the estate, outside the same governance model used for VMs, cloud instances, and databases. Operations teams must toggle between split management consoles, creating parallel workflows, duplicate—and potentially conflicting—retention rules, and disconnected recovery paths that increase risk.
- **The performance tax:** Traditional data protection methods often route through the hypervisor or operating system layer, triggering heavy computing loads, I/O amplification, and “VM stun” events that degrade application performance and can breach performance SLAs for critical applications. Consequently, administrators are forced to choose between delaying backup windows or running full data reads that grow with total data set size rather than the daily change rate.
- **The recovery posture blind spot:** Local storage snapshots provide rapid recovery points but lack proactive, automated scanning for indicators of compromise. Without continuous threat verification built directly into the protection cycle, infrastructure teams cannot instantly identify which recovery points are clean. During an active crisis, this lack of verified data clarity turns recovery into a slow, manual guessing game.

Rubrik for Volumes on Everpure

Rubrik for Volumes extends the protection model used for databases, hypervisors, and cloud workloads directly to Everpure all-flash block storage, bringing your most demanding production databases into a multi-layered defense framework.

Operational benefits

1. One unified protection strategy across your estate

- **First-class objects:** Everpure block volumes and protection groups populate natively inside Rubrik Security Cloud alongside your VMs, cloud workloads, and database estates.
- **Automated life cycle:** A single Rubrik SLA domain automates protection across the full life cycle, automatically detecting and protecting new volumes, setting snapshot creation frequency, enforcing retention periods, and managing archival pathways across the stack.
- **Audit-ready:** This eliminates blind spots, giving risk owners, compliance auditors, and cyber insurers a single source of truth across the enterprise.

2. Backups that run at true storage speed

- **Bypass the hypervisor:** By connecting directly to physical storage hardware via native REST APIs, Rubrik orchestrates the snapshot life cycle completely outside the virtualization data path.
- **Zero production impact:** Applications, databases, and operational lines run at full array performance throughout the backup window.
- **No scheduling boundaries:** Operators can run protection jobs at any time without fear of impacting production performance or needing to wait for off-peak hours.

3. Hypervisor-free changed block tracking (CBT) efficiency

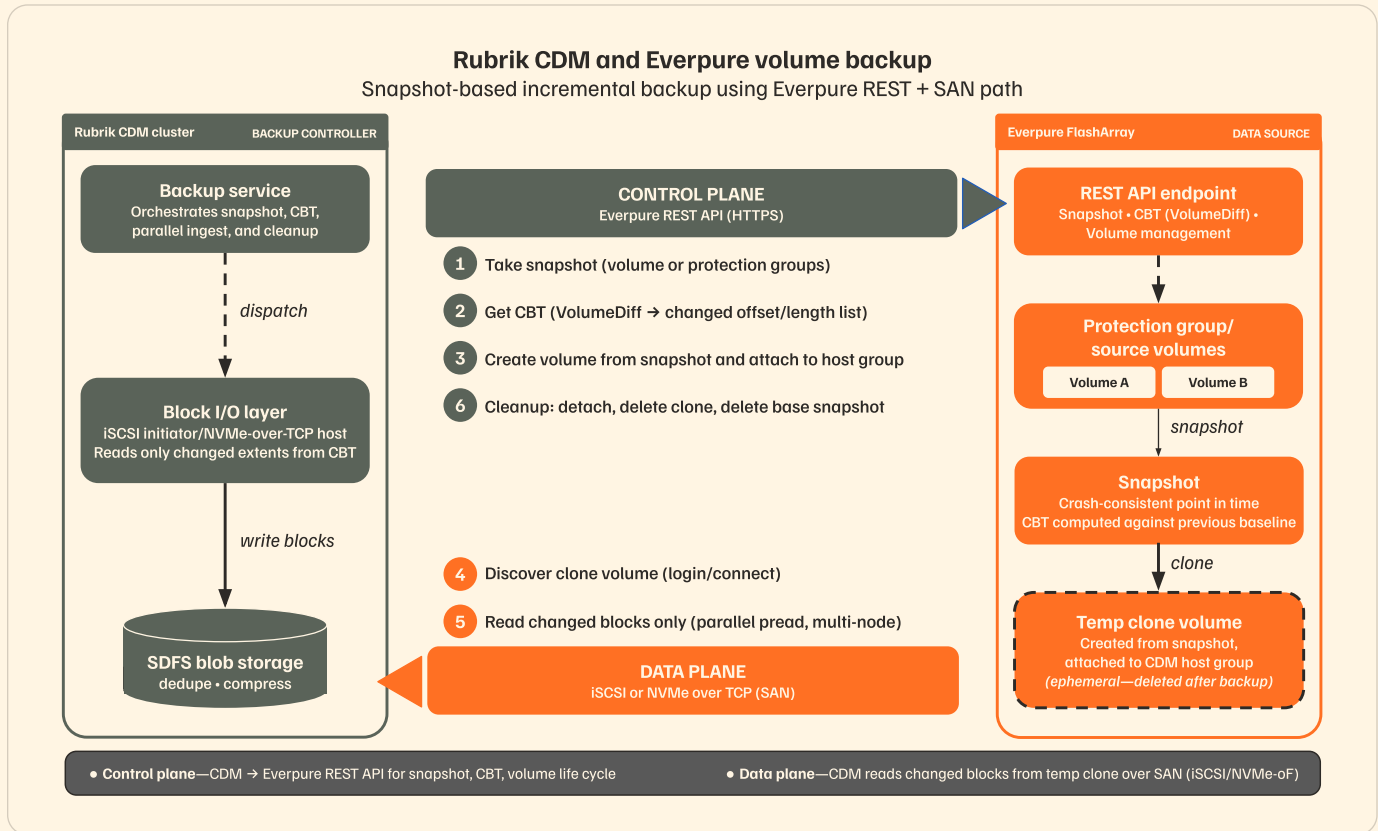
- **Incremental block ingest:** Instead of re-reading the entire storage footprint during every cycle, Rubrik for Volumes reads the Everpure native CBT manifest.
- **Flat backup windows:** The engine captures only modified blocks since the last successful backup. A 60TB environment with a 10% daily change rate streams only 6TB per cycle, holding backup windows steady as data scales.

4. Dual-layer SLA governance: Fast local restore, off-array security

- **On-array recovery layer:** Uses Everpure Auto-on SafeMode™ to generate natively immutable and indelible snapshots adjacent to live workloads. Protected against tampering even under credential compromise, these local copies drive near-zero recovery time objective (RTO) recoveries and hardware cloning in minutes.
- **Off-array security vault:** Replicates data to isolated Rubrik Secure Vault repositories built on a proprietary, append-only file system. This layer is air-gapped and entirely independent of common network protocols like Network File System (NFS) or Server Message Block (SMB).

Rubrik Cloud Data Management and Everpure volume backup

This integration establishes a clean separation between out-of-band control plane management and a dedicated SAN data plane execution layer, protecting massive workloads without taxing the production virtualization stack.



Control plane (REST API orchestration)

All management, scheduling, and metadata tracking flow out-of-band over a secure Everpure REST API (HTTPS) connection directly between the Rubrik CDM cluster and the Everpure FlashArray.

- **Snapshot lifecycle management:** Rubrik issues API commands to create new snapshots or protection group/source volume mappings on the array.
- **Metadata exchange:** The engine requests and maps modified block offset lists using native CBT.
- **Automated cleanup:** Once data ingestion is verified, Rubrik initiates automated workflows to delete temporary snapshots, unmap host endpoints, and tear down temporary clone volumes.

Data plane (SAN-isolated ingestion)

The backup payload bypasses hypervisor networks, streaming directly over high-speed hardware fabric via an iSCSI or NVMe-oF SAN data path.

- **Block I/O integration:** Rubrik stands up a native iSCSI initiator or NVMe-oF host endpoint to log in directly to the target storage array hardware.
- **CBT ingest efficiency:** Rather than reading a volume sequentially, parallel ingest streams read only the specific changed blocks identified by the control plane manifest.
- **Scalable deduplication file system (SDFS) blob store commit:** The incoming blocks are written directly into Rubrik's secure, append-only SDFS blob store.

Built for enterprise scale

The following capabilities help organizations eliminate operational complexity, scale protection efficiently, and recover critical workloads with greater speed and confidence.

Feature	Architecture	Outcomes
First-class object visibility	Volumes receive identical role-based access control, policy primitives, reporting, and dashboarding as VMs	Eliminates tool sprawl; backup teams and storage admins work from a single source of truth
Zero-stun native API integration	Direct iSCSI or NVMe-oF data path connection, bypassing the hypervisor entirely	Removes hypervisor compute load, preventing I/O serialization and production application stuns
Massive scalability target	CBT-driven incremental ingestion engine that captures only changed blocks to reduce backup overhead for large-scale block workloads	Holds backup windows steady as data scales, effortlessly protecting massive, monolithic database estates
Turnkey volume export recovery	Restore operations utilize a secure volume export mechanism back to the target FlashArray hardware	Provides infrastructure teams with an instantaneous, verified clean starting point for quick system recovery

As modern cyber threats weaponize automation and artificial intelligence, enterprise organizations must shift from a posture of passive data containment to active cyber resilience. Storage can no longer remain a silent witness to breaches.

Take the next step

Don't leave your block storage estate isolated from your security strategy. Contact your local Everpure or Rubrik account team to request a custom architectural topology review, enroll in our active programs, or participate in an immersive Zero Hour tabletop simulation to experience automated, multi-layer cyber recovery in action.

By uniting the industry-leading all-flash hardware speeds of Everpure with Rubrik's Zero Trust control plane, Rubrik for Volumes ensures that your most business-critical, high-performance databases stop living on separate data protection islands. The result is a clear path for data availability, compliance, and lightning-fast operational recovery.

Learn More About the Everpure and Rubrik Partnership

Visit Our Website

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