

Cost-Efficient, Resilient Data Protection for Azure Blob Storage



The Challenge

- ↓ **Azure Blob Storage often holds hundreds of terabytes or more of mission-critical data.** This data is constantly at risk due to security threats, misconfigurations, accidental deletions, and poor lifecycle policies.
- ↓ **Recreating lost or corrupted data means replaying streams, re-ingesting sources, and re-running ETL at scale;** in many cases the original sources no longer exist.
- ↓ **Native features and many third-party tools cannot deliver complete, point-in-time, immutable backups at petabyte scale.** The result is often partial data and unreliable analytics.
- ↓ **Backups costs can escalate quickly.** PB-scale daily exports inflate storage, replication, and egress costs; multi-copy/version retention balloons capacity, making backup spend unsustainable.

Protect Azure Blob Storage with HYCU + Dell

Capabilities

- **Immutable, Air-gapped Protection**
Backups are created outside of Azure IAM and lifecycle controls, landing immutably on Dell storage for ransomware-resilient recovery.
- **Granular Recovery**
HYCU enables recovery of a Blob, prefix, Container, or entire storage account from known-good points.
- **Source-side Deduplication with DD Boost**
HYCU, powered by DD Boost, removes duplicates before transfer, cutting network traffic and egress costs.
- **Storage Reduction on Dell DDVE**
DDVE applies post-ingest deduplication and compression, delivering up to a 40:1 data-reduction ratio, depending on workload.
- **Comprehensive Protection**
ESLAs define retention and immutability, RBAC limits changes, and audit trails prove compliance across Blobs and Containers.
- **Secure, Customer-Owned Backups**
Backup copies can be stored in Azure, AWS, GCP, and customer-managed data centers (on-premises or co-location), ensuring multi-cloud/hybrid portability and strong data resilience.

Value

Optimize Backup Costs

Use dedupe and compression to reduce storage, egress, and cross-region fees.

Minimize Downtime

Recover fast to avoid extended outages and revenue loss.

Protect Irreplaceable Data

Preserve long-lived object datasets so you don't re-ingest or rebuild

Ensure Continuity

Keep portable copies in another region or cloud to ensure resilience in times of unforeseen provider outages or disruptions.

Strengthen Compliance

Maintain separately governed, immutable copies without disrupting operations.

Protecting Azure Blob Storage: What makes HYCU + Dell unique?



Optimized Backup Operations and Cost Control

- **Reduce Egress.** DD Boost-powered source-side deduplication sends only unique data from Azure Blob.
- **Optimize Backup Storage.** DDVE deduplication and compression deliver up to 40:1 savings.
- **Shorten Backup & Restore Windows.** Moving less data speeds backups and large-scale restores.



Quick Recovery and High Resilience

- **Search and Target Restores.** Select specific containers or blobs, or use prefix match to restore only the required blobs.
- **Restore Fast.** Recover a Blob, Container, or entire storage account quickly.
- **Keep Consistency.** Use point-in-time backup sets across Containers for clean restores.



Improved Security and Compliance Posture

- **Lock Backups.** DDVE Retention Lock enforces immutability or WORM (Write Once, Read Many) on backup copies.
- **Ensure Data Integrity.** Encryption in transit and at rest with ongoing integrity checks.
- **Govern Access.** SLA policies, RBAC, and audit trails to meet compliance.



Strong Control and Multi-Cloud Portability

- **Own Your Backup Copies.** Keep backups in your Azure subscription, or in other clouds you control
- **Protect Dozens of Related Services.** Azure SQL exports, Synapse/Databricks pipelines, and AKS backups typically land on Azure Blob; HYCU + Dell protects these alongside Azure VMs and Microsoft Entra ID in one view.
- **Recover Anywhere.** Restore to any storage account or region you control.

