

# Nutanix Unified Storage Cyber Resiliency with HYCU

## Need For Secure Backups

### Key Benefits

- Ransomware protection with HYCU's backups stored on Nutanix WORM-enabled Object Storage.
- End-to-end encryption with data-in-transit and data-at-rest encryption capabilities
- Air-gapped with network segmented management and data paths, and controlled access to Nutanix buckets.
- Rapid, granular and point-in-time recovery with zero impact on production.
- Robust Access Control enables task-delegation while maintaining strict resource access rules for end-users and app owners.
- Nutanix Unified Storage (NUS) is known for its efficiency, simplicity, scalability, high performance and WORM support for Files and Object Storage. NUS combined with HYCU's best-in-class backup offers a purpose-built data protection solution tailored for applications and VMs running on Nutanix Cloud Infrastructure (NCI). HYCU utilizes immutable storage, isolated backup, and inhibited access to protect backups.

### Products

- [Objects Storage](#)
- [Nutanix Data Lens](#)
- [Nutanix Unified Storage](#)

### Solutions

- [Data Protection & Disaster Recovery](#)

Ready to get Hands-On?

**Take a Test Drive**

Ransomware attacks are increasingly prevalent, posing a significant threat across all businesses verticals. Imagine a healthcare organization unable to access patient records or a bank unable to access their customer's financial data. Amidst COVID-19 crisis, a 238% surge in ransomware attacks taking

advantage of the pandemic, these scenarios are all too real.

Organizations of all sizes set up several safeguards – antivirus, antimalware, anti-spam solutions,, keep all systems updated, and provide highly restrictive internet access. Yet, cybercriminals are growing more sophisticated and persistent, exploiting the slightest vulnerabilities. Thus, it's not if an attack will happen, but when.

Nutanix with HYCU is a most robust and secure data protection solution that enhances your cyber resilience from ransomware and malware.



With Nutanix and HYCU, life is good. The Nutanix and HYCU systems do not require much attention. Their performance, capability and simplicity are absolutely awesome!

Vincent Lo,  
Bank of Stockton

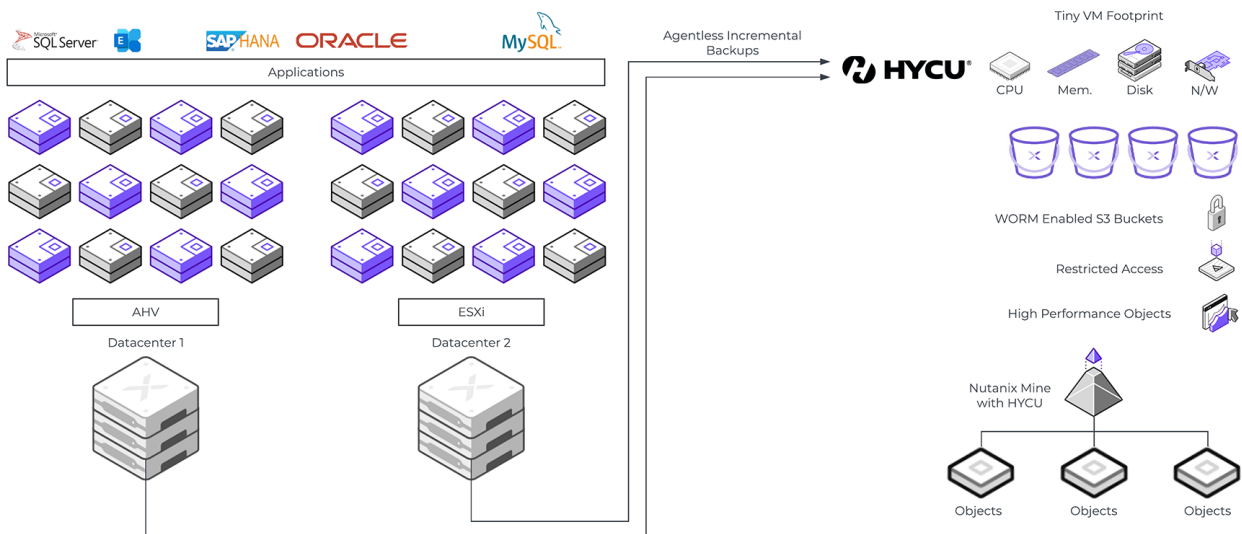
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## **Immutable Storage**

Backups are essential for recovery from unforeseen events, necessitating protection against ransomware, malware or malicious actors impersonating administrators. To guarantee the integrity of backups and to ensure reliable recovery, backups must be written to an immutable storage such as WORM-enabled S3 Object storage. Immutability prevents any changes to the data and also deletions for the entire retention period.

With HYCU's proprietary write optimization, incremental backups, built-in backup security features, and integration with Nutanix Object Storage's WORM capabilities , this cost-efficient solution ensures rapid recovery of files, VMs, file shares, and applications from the latest uncorrupted backup version

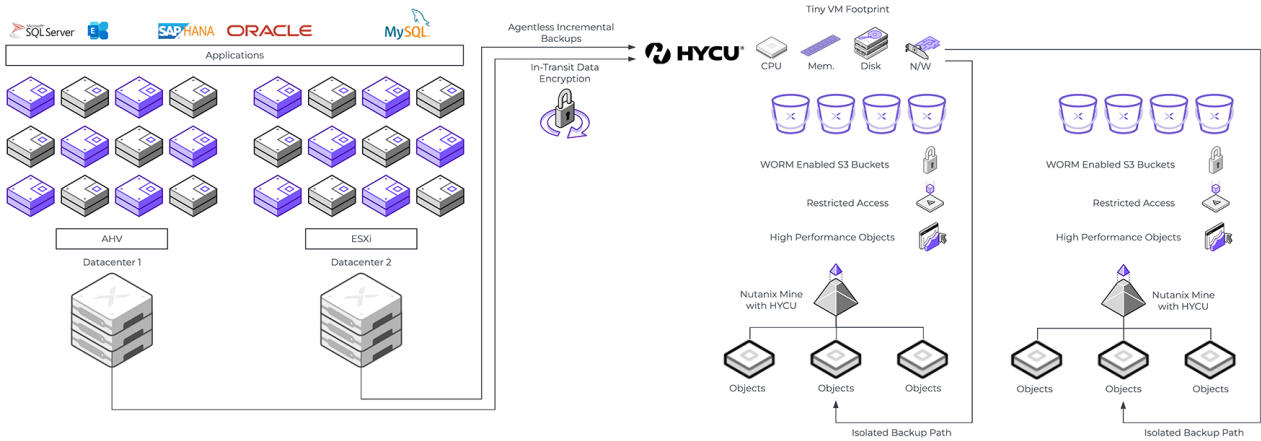
with ultimate speed.



## Isolated Backups

Isolated backups, also known as air-gapped backups, add an extra layer of protection by isolating the backups from the production environment or network. This ensures that no user, process, or app has access to the network or storage device storing the backups, except for your HYCU backup server. The HYCU virtual appliance operates as a secure black box based on a security-hardened CentOS Linux, with no root access, and an option to disable SSH access.

Organizations require a simple yet robust data protection solution that secures backups through dedicated networks, in-transit and at rest encryption. This strategy prevents backups from being compromised by ransomware or malware attacks on the production environment.

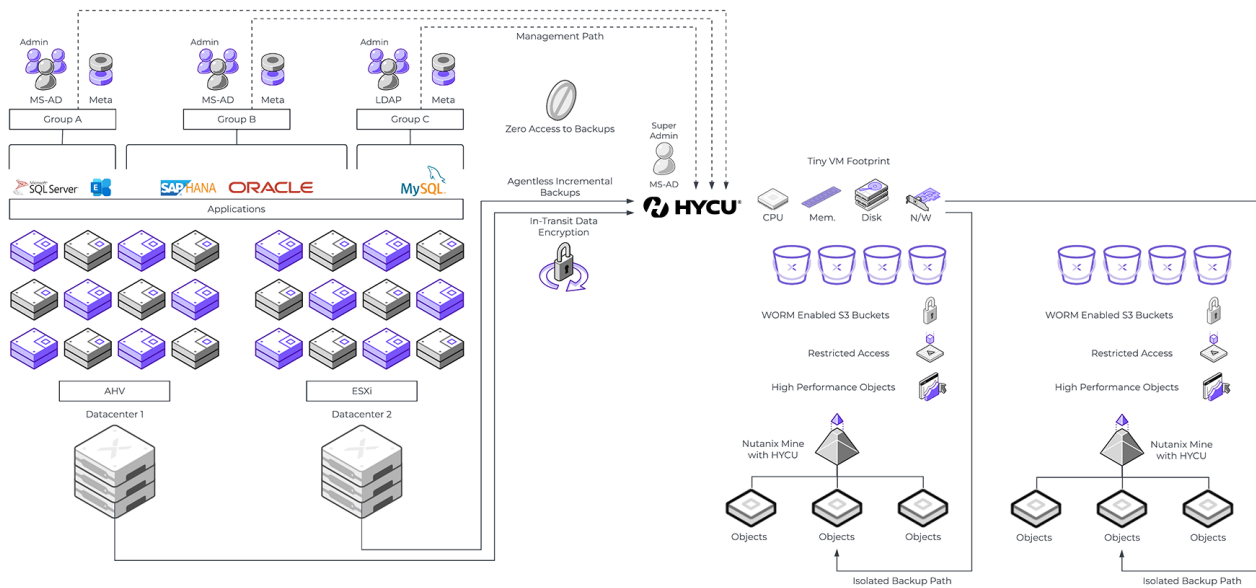


## Inhibited Access

Controlled and restricted access to the backup storage ensures safety from accidental or intentional deletions.

With HYCU's self-service and RBAC capabilities, organizations can host multiple groups in a shared environment. Each group's backup metadata, including restore points, VM details, application inventory, and user data are stored in secure databases. Unauthorized users, even super-admins, cannot access them. This also includes events, alerts and backup reports, which are filtered down to the specific group resources within the multi-tenant environment.

HYCU also disables manual backup deletion to prevent malicious actions within an organization and allows administrators to easily pause backup for ad-hoc compliance audits or emergencies.



## Proactive Defense with Nutanix Data Lens

Nutanix Data Lens (NDL) integrates rapid detection and blocking mechanisms to safeguard unstructured data on Nutanix Unified Storage (NUS). Using both signature-based and behavior-based threat detection, NDL identifies and blocks known threats within 20 minutes and neutralizes unknown threats exhibiting similar behavior. This automated process is significantly faster and more efficient than manual detection and intervention.

The addition of NDL to the NUS and HYCU backup solution enhances ransomware resilience. Upon threat detection and blocking, you can swiftly use the last good snapshot or a granular backup by HYCU, ensuring minimal disruption to business operations.

## Get Proactive and Protect

Organizations should proactively use technologies like NUS and HYCU to build a robust backup and recovery strategy, safeguarding their data against ransomware attacks.

Check out our [Nutanix technical brief](#) that showcases how customers can detect, prevent and recover from a ransomware attack.

Learn more at [www.nutanix.com](http://www.nutanix.com)

**NUTANIX**

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