



# Modernized Backup for Nutanix AHV Environments

**Agentless acropolis hypervisor backup with integration into enterprise backup platforms**

## vProtect Highlights

- Efficient, incremental VM-level backup and recovery for Nutanix Acropolis Hypervisor
- Supports data export into existing backup environments for integration and long-term storage. Works with IBM Spectrum Protect, Veritas NetBackup, Dell-EMC Networker and Catalogic vStor.
- Hypervisor snapshot management
- Easy file recovery directly from within the Web UI
- Backup to any mounted file system (local, NFS, iSCSI, SMD)
- Backup to Amazon S3, Microsoft Azure, Google Cloud Storage (Nearline, Coldline), OpenStack Swift, Neverfail HybriStor or Data Domain Boost
- Data encryption for Amazon S3, Microsoft Azure and file system backup providers
- Open API for 3rd party software integration (REST API) as well as command line
- Multi-node support for better scalability or geographically dispersed environments
- Pre/post snapshot remote command execution on VM to enable operations such as DB quiesce
- UI – Chinese, Spanish and German language supported

## vProtect Introduction

*vProtect is an enterprise backup solution for Nutanix Acropolis Hypervisor (AHV) and other open VM environments and containers. vProtect enables VM-level protection and can function as a standalone solution or integrate with enterprise backup software. vProtect for Nutanix delivers efficient and scalable Nutanix backup & restore with full backups or incrementals (Changed Region Tracking), drive-exclusion and single file restore.*

## vProtect Architecture

The vProtect architecture consists of two components: the vProtect Server and one or more Nodes. The Server provides management and stores all metadata. A Node is responsible for data transfer and integration with the hypervisor platform and backup destinations. In a Nutanix implementation, the vProtect Node is installed on the Nutanix Cluster in a virtual machine and is referred to as the Proxy VM.

The Proxy VM can be any CentOS/RHEL based installation. For smaller environments, all components can install on the same VM.

### Backup Storage Options

vProtect has a unique ability to export backups to third-party backup providers. This allows vProtect to add native Open VM backup functionality into products that do not natively support these hypervisor platforms or Kubernetes. vProtect works with IBM Spectrum Protect, Veritas NetBackup, Dell-EMC Networker and Catalogic vStor. Amazon EC2-based VMs can also be backed up to these backup systems. vProtect can also optionally keep a local backup copy for faster operational recovery purposes.

Standalone deployments are also possible. vProtect can back up to any file system connected to the Proxy VM. In addition, data can be exported to Amazon S3, Microsoft Azure, Google Cloud Storage (Nearline, Coldline),

Neverfail HybriStor, Data Domain Boost or OpenStack Swift.

### Efficient Incremental Backups

vProtect provides incremental backups for Nutanix clusters through the use of Changed-Region Tracking (CRT) based on the Nutanix AHV API. In addition to incremental backups, users can exclude specific VM disks from backup. For example, disks that store large temp files that aren't needed in recovery.

### Hypervisor Snapshot Management

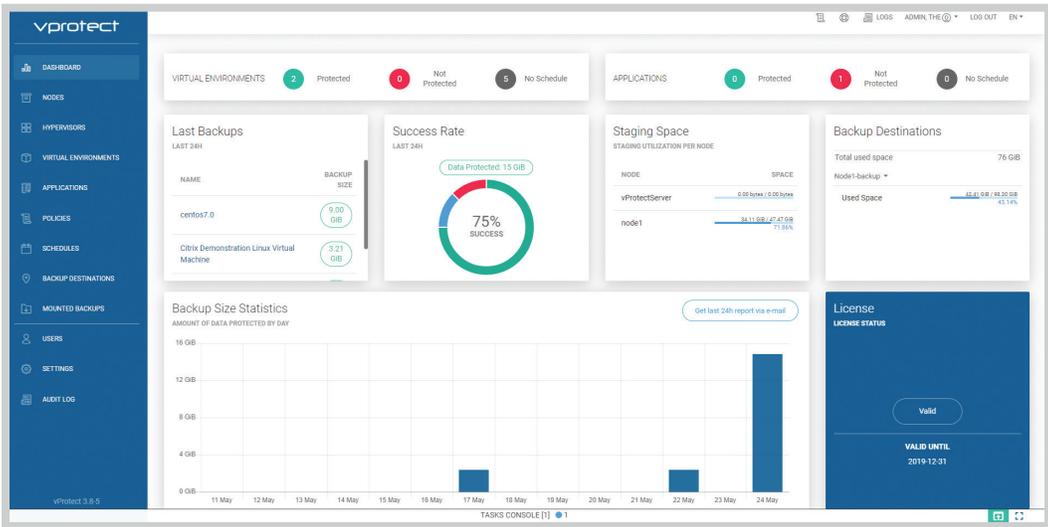
Hypervisor snapshot management is available for Nutanix Acropolis VMs. vProtect manages hypervisor snapshot schedules and retention times, allowing you to combine a short-term protection option that provides fast restore/revert using snapshots, plus a longer-term backup to a separate target device, all managed in one place.

### Data Consistency

vProtect uses the Nutanix API to create application-consistent snapshots. Using Nutanix VM resident tools allows for quiescing databases prior to the snapshot, which results in a more consistent backup. Otherwise, vProtect will use crash consistent snapshots returned by Nutanix AHV.

### Easy Dashboard View

vProtect provides an easy-to-use, intuitive interface that makes management and monitoring simple. Configuration steps are clearly defined. A visual scheduler aids in understanding. And the dashboard immediately identifies any VMs that are not protected.



### Mountable Backups and File Restore

The mountable backup feature provides a quick and easy way to access backup data without having to do a full VM restore. This is especially useful for restoring one or a few individual files. The user can mount the backup image which requires no data movement, and simply copy back the needed files. Incremental backups can also be mounted because the vProtect Node merges the incremental backups into the full backup image.

Backup images can be scheduled to mount at a pre-set time, and mount points specified.