

# Agentless Protection for Proxmox VE

NAKIVO Backup & Replication delivers reliable, agentless data protection for Proxmox VE virtual machines with advanced features, including fast backup, full and instant granular restore and robust replication, along with built-in ransomware protection capabilities, all within an intuitive, user-friendly interface



## **SINGLE PANE OF GLASS**

for Proxmox VE backup, instant restore, disaster recovery and ransomware protection.

## **FLEXIBLE DEPLOYMENT**

on Windows, Linux, NAS or as a preconfigured VMware/ Nutanix VA or AMI.

## **MULTIPLE STORAGE TARGETS**

AND BACKUP COPY

on local, cloud, S3compatible storage, NAS, NFS/SMB shares, deduplication appliances and tape.

## **AFFORDABLE PRICING**

with flexible licensing suitable for small and medium-sized businesses and large enterprises.

## FAST AND EFFICIENT VM BACKUP

Reliably protect your Proxmox VE VMs, while minimizing backup windows and reducing storage needs with fast, agentless and transactionally consistent backup.

**Agentless backup:** Create backups of Proxmox VE VMs directly without installing additional agents on each VM.

Incremental backup: Create image-based, incremental VM backups using native change tracking technology and transfer only new and modified data to optimize storage and speed.

**Application support:** Ensure data consistency for applications and databases (Microsoft SQL Server, Exchange Server, Active Directory) with app-aware backup processing.

VM template backup: Back up VM templates to ensure consistent and rapid deployment of preconfigured virtual machines.

Backup to Cloud: Directly back up Proxmox VE VMs to public clouds, including Amazon S3, Wasabi, Backblaze B2 and Azure Blob Storage.

Backup to S3-compatible storage: Send VM backups and backup copies to S3-compatible object storage platforms.

Backup copy to Tape: Send backup copies to physical tape libraries and AWS VTL for secure and costeffective archiving.

**Backup copy:** Create backup copies and send them offsite (tape, cloud, and other S3-compatible storage) or to other locations.

**Instant verification:** Verify the recoverability of VM backups with reports and screenshots of testrecovered machines.

Federated Repository: Combines various "member" backup repositories into a single, scalable repository to ensure backups are automatically shifted to available repositories in case of storage failures or capacity issues.

**Deduplication Appliance Integration:** Back up to deduplication appliances such as HPE StoreOnce, Dell EMC Data Domain, and NEC HYDRAstor with support for native deduplication protocols.



## **BENEFITS**

## 2X

faster backups with native change tracking

## 49%

lower TCO than other vendors for the same features

#### **4.8 STARS**

average rating for saving time and money

#### 5 MIN

to fully deploy and configure the solution

## 10,000

recovery points per backup to meet short RPOs.

# GARTNER® PEER INSIGHTS

Named in the Honorable Mention Section in the 2024 Gartner® Magic Quadrant™ Enterprise Backup and Recovery Software Solutions again\*

4.8 out of 5

★ ★ ★ ★
Overall rating

97%\*

Willingness to recommend

## **INSTANT RECOVERY**

Restore anything you need from backups within seconds through flexible recovery options to accommodate various potential data loss scenarios.

**Instant VM recovery:** Boot Proxmox VE VMs directly from backups without running a full recovery; migrate to production if necessary.

**Full VM recovery:** Recover full VMs to the same or different location in case the data is accidentally deleted or corrupted.

**Instant file recovery:** Instantly browse, search, and recover individual files and folders from Proxmox VE backups to the original or a custom location.

**Instant object recovery:** Instantly recover Microsoft Exchange Server, Active Directory and SQL Server objects to the original location or to a custom location.

**Universal object recovery:** Recover individual objects by choosing a recovery point and mounting VM disks from backups directly to another machine.

VM template recovery: Recover Proxmox VE VM templates from backups to the same or a different location.

**Direct VM recovery from tape:** Restore full VMs from backups stored on tape directly to your infrastructure without using a staging repository.



## RANSOMWARE PROTECTION FOR PROXMOX VE

Protect Proxmox VE VM backups from ransomware and accidental deletion with advanced cybersecurity features like backup immutability, air-gapping, encryption and robust security controls.

**Backup data tiering:** Store VM backups and backup copies onsite, offsite and in the cloud to ensure constant availability and complete recoverability in case of an attack.

**Immutable local backups:** Enable immutability for VM backups stored in Linux-based local repositories to prevent any modification, including encryption by ransomware.

**Immutable cloud backups:** Create immutable VM backups in Amazon S3, Wasabi, Azure Blob, Backblaze B2 and other S3-compatible storage platforms.

**Deduplication appliance immutability:** Enable immutability for backups stored in NEC HYDRAstor and Dell EMC storage systems.

**Air-gapped backups:** Keep Proxmox VE VM backups and backup copies offline on tape, detachable NAS devices or USB drives for ultimate ransomware protection.

**Powerful backup encryption:** Encrypt backup data at every stage of the backup and recovery process — at the source, during transit, and at rest in the repository.

**Robust security controls:** Prevent unauthorized access to backups with built-in security features like role-based access control (RBAC) and two-factor authentication (2FA).

## **DISASTER RECOVERY**

Quickly recover from outages and disruptions with minimal to zero downtime and data loss using the solution's robust disaster recovery features for Proxmox VE.

VM replication: Create and maintain identical Proxmox VE VM replicas. Store fully functional copies of source VMs for high availability and fast recovery.

**Replication from backup:** Create VM replicas directly from existing backups to reduce the load on the production environment.

**Replica verification:** Verify the integrity of Proxmox VE VM replicas with automated test recoveries and screenshot-based reports.

**Application support:** Ensure data consistency during replication with application-aware processing for Microsoft Exchange Server, Active Directory and SQL Server.

## MSP-READY FOR BAAS AND DRAAS

NAKIVO Backup & Replication enables managed service providers (MSPs) to deliver data protection and disaster recovery as a service to clients with diverse IT setups.

**MSP Console:** Offer full BaaS/DRaaS services to clients or manage client environments with standalone instances from the advanced MSP dashboard.

**Multi-tenancy:** Create up to 100 isolated tenants within one product instance and manage them from a single pane of glass.

#### **Tenant Overview Dashboard**

Get a real-time view of all existing tenants' environments, including jobs, repositories, nodes, inventory, and allocated resources, all at a glance. **Self-service:** Offload data protection and recovery tasks to tenants via the self-service portal.

**Tenant resource allocation:** Allocate data protection infrastructure resources (hosts, clusters, individual VMs, Backup Repositories) to tenants.

**Direct Connect:** Securely access tenant environments without requiring VPNs or open ports on the tenant's side, using encrypted connections for safe communication.



## FAST OPERATIONS WITH LITTLE EFFORT

Boost backup performance and minimize administrative overhead using a wide range of built-in features in NAKIVO Backup & Replication.

#### **AUTOMATED WORKFLOWS**

**Job chaining:** Link Proxmox VE VM backup and backup copy jobs to run one after another.

#### **ENHANCED VISIBILITY AND MANAGEMENT**

**Multilingual web interface:** Easily manage all backup and recovery activities in your preferred language: English, Spanish, French, German, Italian, Polish and Chinese.

**Overview dashboard:** Monitor the status of your data protection activities, solution components, and issues in a centralized dashboard.

**Calendar dashboard:** Manage current and future data protection workflows, schedule jobs and prevent overlaps.

**Global search:** Instantly find VMs, backups, repositories, and other objects.

#### **OPTIMIZED BACKUP PERFORMANCE**

**Backup size reduction:** Reduce space consumption and improve performance with compression, deduplication, unused block exclusion, log truncation and more.

**Network acceleration:** Increase backup and recovery speeds in busy LAN and WAN networks, especially for offsite targets.

**LAN-Free data transfer:** Increase data transfer speeds and offload production networks using HotAdd or Direct SAN Access modes.

**Bandwidth Throttling:** Limit the speed of backup data transfers by configuring global or per-job bandwidth rules, especially during working hours.

#### LIGHTWEIGHT AND RESOURCE-EFFICIENT

**Minimum footprint:** A full solution deployment requires only 2 CPUs and 4GB RAM.

## WHAT CUSTOMERS SAY ABOUT NAKIVO

- on VMware backup and additionally, 25% in storage space costs with better deduplication, lowering our backup expenses by 75% overall.
  - Rick Braddy, CEO/CTO at SoftNAS
- ••• The solution is faster than other products I have used and supports many different configurations.
  - Praful Soni, Senior IT Manager at Transpek
- we can restore files in just a few minutes, while previously it would have taken us hours to restore the entire VM that held it.

Krister Laag, CIO at Stendahls

## TOP RATED SOLUTION ON BIGGEST REVIEW PLATFORMS









## **DEPLOYMENT OPTIONS**

#### **WINDOWS**

- Windows Server 2012-2025 (x64)
- Microsoft Windows 11 (21H2-24H2) (x64)
- Windows 10 (1809-22H2) (x64)

#### LINUX

- Ubuntu Server and Desktop 16.04–24.04 LTS (x64)
- Red Hat Enterprise Linux 7.4-9.5 (x64)
- SUSE Linux Enterprise v12 SP3-v15 SP6 (x64)
- CentOS Linux 7.0-8.5 (x64)
- CentOS Stream 8-10 (x64)
- Debian 10.1-12.10 (64-bit)
- AlmaLinux 8.7-9.5 (x64)
- Oracle Linux 7.4-9.5 (64-bit)
- Rocky Linux 8.3-9.5 (64-bit)

#### NAS

- QNAP QTS v4.3-v5.2.3
- QNAP QuTS Hero h4.5.3-h5.2.0
- QNAP QuTScloud v4.5.1-c5.1.0
- Synology DSM v6.0-v7.2.2
- ASUSTOR ADM v3.5-v5.0.0
- TrueNAS CORE v13.0-U6.2-v13.3-U6.3
- Netgear ReadyNAS OS v6.9-v6.10.10
- WD MyCloud v5

#### VIRTUAL APPLIANCE

- Pre-configured VMware v5.5-v9
- Pre-configured Nutanix AOS v6.5-7.0.1.5

For more information, refer to **Deployment Requirements**.

## **SYSTEM REQUIREMENTS**

#### SUPPORTED OPEN-SOURCE PLATFORMS

Proxmox VE 8.x

#### **FULL SOLUTION DEPLOYMENT REQUIREMENTS**

Server: 2 CPU cores, 4 GB RAM

NAS: Refer to System Requirements

## **READY TO GET STARTED?**

**DOWNLOAD FREE TRIAL** 

**BOOK FREE DEMO** 

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