# NAKIVO Backup & Replication v10.9

Fast, affordable, top-rated backup, ransomware protection and site recovery for virtual, physical, cloud, NAS and SaaS environments.



# Backup

Fast and efficient backup for virtual machines, physical machines, cloud workloads, SaaS and file shares.

- VM Backup: Image-based, incremental backup for VMware vSphere, Microsoft Hyper-V, and Nutanix AHV VMs.
- **Microsoft 365 Backup:** Incremental <u>backup for Microsoft 365</u> data in Exchange Online, Microsoft Teams, OneDrive for Business, and SharePoint Online.
- **File Share Backup:** <u>Backup for network shares</u> over SMB/NFS hosted on NAS devices as well as Windows and Linux machines.
- **Physical Machine Backup:** Image-based, incremental backup for <u>Windows-based</u> and <u>Linux-based physical servers</u> and workstations.
- Amazon EC2 Backup: Image-based, incremental backup for Amazon EC2 instances.
- **Application Support:** Application-aware backup for backup data consistency in applications and databases, such as Microsoft SQL Server, Exchange Online Server, and Active Directory.
- Oracle Database Backup: Backup for Oracle Database via RMAN.
- VMware Cloud Director Backup: <u>Backup for VMware Cloud Director</u> objects, such as vApps, individual VMs, and storage policies.
- **Backup to Cloud:** Direct backup to public clouds like Amazon S3, Wasabi, Backblaze B2 and Azure Blob Storage.
- **Backup to S3-Compatible Storage:** Back up to object storage platforms (from public and private cloud vendors) that use the S3 API.
- **Ransomware-Resilient Backups:** Immutability for backups in public clouds, other S3-compatible cloud storage and local Linux-based repositories.
- **Backup to Tape:** Send backup copies to physical tape libraries and AWS VTL; easily manage tape devices, cartridges, and backups.
- **Backup Copy:** Send copies of backups to a remote site or a public/private cloud and Job Chaining for automation.
- **Backup from Storage Snapshots:** Backup for VMware VMs hosted on HPE 3PAR and Nimble Storage devices directly from storage snapshots.
- Global Deduplication across an entire backup repository, regardless of the platform.
- **Instant Backup Verification** of VMware vSphere and Microsoft Hyper-V VM backups via reports with screenshots of test-recovered machines.
- **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.

## 25,000+

Paid customers worldwide

Largest customers protect

8 000+

**300+** Sites

2,500+

MS365 Users

5-star online community reviews

# **Instant Recovery**

Instant recovery of VMs, physical machines, as well as files and application objects directly from backups.

- **Instant VM Recovery**: Boot VMware vSphere and Microsoft Hyper-V VMs directly from backups; migrate booted VMs to production if necessary.
- **Microsoft 365 Recovery:** Instantly recover Exchange Online, OneDrive for Business, SharePoint Online, and Microsoft Teams items to the original or a different account.
- **Bare Metal Recovery:** Restore entire physical machines from backups to the same or other identical hardware without having to reinstall the OS or reconfigure the settings.
- **Instant Physical to Virtual (P2V):** Instantly recover physical machines from backups as VMware vSphere VMs.
- File Share Recovery: Recover entire file shares and specific files/folders inside shares to a custom location on SMB/NFS shares, send via email, or download to a browser.
- **Direct Recovery from Tape:** Restore full VMs, instances and physical machines as VMs directly to your infrastructure from backups stored on tape media.
- **Instant File Recovery:** Instantly restore files and folders to their original location, to a custom location (local folder or SMB/NFS share), download to the browser, or forward via email as an attachment.
- Instant Object Recovery for Microsoft Exchange Server: Instantly recover emails and other Exchange objects to the original location or to a custom location (local folder or SMB share).
- Instant Object Recovery for Microsoft Active Directory: Instantly recover users, user groups and other AD objects to the original location or to a custom location (local folder or SMB share).
- Instant Object Recovery for Microsoft SQL Server: Instantly recover tables and databases to the original location or to a custom location (local folder or SMB share).
- **Universal Object Recovery:** Recover individual objects by choosing a recovery point and mounting VM disks from the backup directly to another machine.
- **Cross-Platform Recovery:** Export VM disks across platforms to recover VMware VMs to a Hyper-V environment and vice versa.

## **Ransomware Protection**

Protect backups against new ransomware infections and improve backup and recovery reliability.

- **Air-Gapped Backups:** Keep backups and backup copies offline (tape, detachable NAS, USB drives, etc.) for ultimate ransomware protection.
- Immutable Backups in the Cloud: Make backups stored in public clouds (Amazon S3, Azure Blob, Backblaze B2, Wasabi) and other S3-compatible storage platforms immutable to protect them from ransomware and accidental changes.
- Local Ransomware-Proof Repository: Enable immutability for backups and backup copies sent to Linux-based local repositories.
- Hardened VA/AMI: Deploy the solution as a pre-configured VA or AMI running Ubuntu Server and protect backup data from deletion and encryption by ransomware.
- **Backup Malware Scan:** Scan backup data for signs of malware or ransomware infection and ensure it can be safely used for recovery.

### **Our Customers**

cisco SIEMENS













THE UNIVERSITY OF ARIZONA.

## FUJIFILM









## **Disaster Recovery**

Achieve the shortest RTOs and RPOs with VM replication and disaster recovery orchestration.

- VM Replication: Create and maintain <u>VMware vSphere replicas</u> and <u>Microsoft</u> <u>Hyper-V VM replicas</u>, which are identical copies of source VMs.
- **EC2 Instance Replication:** Create and maintain <u>Amazon EC2 instance replicas</u>, which are identical copies of source instances.
- **Replication from Backup:** Create VM and instance replicas directly from backups to reduce the load on the source host, free up resources, and save time.
- **Site Recovery:** <u>Disaster recovery orchestration</u> of automated workflows. Perform scheduled non-disruptive recovery testing, planned failover, emergency failover, failback, and datacenter migration with one click.
- **Application Support:** Application-aware replication for replica data consistency in applications and databases, such as Microsoft Exchange Server, Active Directory, and SQL Server.
- **Replica Verification** of VMware vSphere and Microsoft Hyper-V VM replicas via reports with screenshots of test-recovered machines.

## Performance

Boost backup, replication, and recovery speeds by up to 2 times and reduce network load by as much as 50%.

- **Native Change Tracking:** Native change tracking technologies (VMware CBT, Hyper-V RCT, Nutanix AHV CRT, Microsoft 365 delta query) to identify changes without reading the full source data and create faster incremental backups.
- **LAN-Free Data Transfer:** HotAdd or Direct SAN Access modes to increase data transfer speeds and offload production networks.
- **Network Acceleration:** Increase performance in busy LAN and WAN environments with built-in network acceleration.
- **Bandwidth Throttling:** Limit the speed of backup data transfers by configuring global or per-job bandwidth rules, especially during working hours.

# Administration

NAKIVO Backup & Replication provides a simple web interface and comes with great features to help you save time and resources on data protection activities.

- **Versatile Deployment:** Deploy as a virtual appliance/AMI, install on Linux or Windows OS, or on a NAS to create an all-in-one backup appliance.
- Policy-Based Protection: Automatically back up and replicate machines that match policy rules based on specified parameters (machine name, size, location, tag, etc.).
- **Calendar Dashboard:** View all past, current, and future jobs in a simple calendar view.
- **Overview Dashboard:** Get a status summary of all your data protection activities, solution components, and issues to address in simple widgets.
- **Role-Based Access Control:** Assign preset and custom roles and associated rights and permissions to users to apply the principle of least privilege.
- **Two-Factor Authentication:** Enable two-factor authentication (2FA) for NAKIVO Backup & Replication to prevent hackers from accessing your data protection activities.
- **Microsoft Active Directory Integration:** Integrate with Microsoft Active Directory and map user groups to NAKIVO Backup & Replication user roles.

## **Customer Quotes**

"NAKIVO Backup & Replication is simple and intuitive, it took me a little time to learn how to use it, and I didn't have to read manuals."

> Andrew Arensburger, IT Manager, The University of Maryland

"The amount of storage space reduction we got with NAKIVO Backup & Replication was truly awesome. We achieved a 3X reduction in storage space!"

> Roland Kalijurand, IT Manager, Radisson Park Inn

"NAKIVO Backup & Replication installed on a Synology NAS provides us with reduced deployment time, minimized complexity, and improved VM backup speed for the whole district."

> Jeong-Hyun Cho, Systems Manager, Seoul City Gas

"NAKIVO Backup & Replication has saved us a tremendous amount of time and money. The solution provided us with a robust and cost-effective VM backup solution for protecting our virtual environment."

> Tony Burrus, CTO, Compton Unified School District

"With NAKIVO Backup & Replication, we have saved more than 50% vs. maintenance of our previous VM backup solution, and have additionally saved 25% more in storage space costs with better deduplication, lowering our backup expenses by 75% overall."

> Rick Braddy, Founder and CEO/CTO, SoftNAS

- **Global Search:** Instantly find VMs, backups, replicas, jobs, repositories, Transporters, and other objects; act on search results.
- **Job Chaining:** Link jobs so they run one after another. For example, a successful VM backup job to a local storage destination can start a Backup Copy job to copy the newly created backups to a public cloud.
- **API:** Integrate NAKIVO Backup & Replication with monitoring, automation, and orchestration solutions via HTTP API.
- **Self-Backup:** Back up and recover system configuration (jobs, inventory, logs, settings, etc.).
- Live Chat with Tech Support: Get help without leaving the solution web interface.

# VMware Monitoring

NAKIVO Backup & Replication provides a powerful set of tools for <u>virtual</u> infrastructure monitoring.

- **Complete Visibility:** Monitor CPU, RAM, and disk usage of VMware vSphere hosts and VMs, as well as disk usage of VMware vSphere datastores.
- **Comprehensive Analytics:** Get accurate and relevant results with real-time and historical data.
- **Efficient Administration:** Detect bottlenecks, investigate issues, and anticipate future needs.
- **User-Friendly Interface:** Readable layout for all the data available in the same console where you manage backup activities.

# **BaaS and DraaS**

The MSP Console in NAKIVO Backup & Replication allows managed service providers (MSPs) to <u>deliver backup as a service</u> (BaaS), disaster recovery as a service (DRaaS), and other data protection services.

- MSP Console: Deliver full BaaS/DRaaS services to clients or manage client environments with standalone instances of NAKIVO Backup & Replication from the advanced MSP dashboard.
- **Multi-Tenancy:** Create up to 1,000 isolated tenants within one product instance and manage them from a single pane of glass.
- **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:** Access tenant environments via a single port connection without requiring a VPN connection.

### Recognized by Customers and Industry Analysts



NAKIVO Receives an Honorable Mention 2022 Gartner® Magic Quadrant<sup>™</sup>















## System Requirements

### **Supported Environments**

NAKIVO Backup & Replication can protect the following platforms:

### Virtual

- VMware vSphere 5.5– 8.0 U1
- Hyper-V 2012, 2012R2, 2016, 2019, 20H1, 20H2, 2022
- Nutanix AHV v5.15, v5.20, v6.5 (LTS)
- VMware Cloud Director v10.2.1 v10.3.3.2

### Microsoft 365

- Exchange Online, SharePoint Online,
- OneDrive for Business, Microsoft Teams

### Physical

- Windows Server 2012–2022 (21H2) (x64)
- Windows 10 Home/Pro/Ent (20H2-21H2) (x64)
- Windows 11 (21H2) (x64)
- Ubuntu Server v16.04-22.04 LTS (x64)
- Ubuntu Desktop 18.04–22.04 LTS (x64)
- Red Hat Enterprise Linux v7.4–9.1 (x64)
- SUSE Linux Enterprise v12 SP3-v15 SP4 (x64)
- CentOS v7.0-8.4 (x64)
- Physical CentOS Stream 8–9 (x64)
- Debian v10.1–11.7

### Amazon Elastic Compute Cloud (EC2)

- All AWS regions
- All instance types
- Virtual private cloud (VPC) and Classic

### Applications

Oracle Database 11g R2–19c

### **Storage Integration**

NAKIVO Backup & Replication provides advanced integration with the following deduplication appliances:

- HPE StoreOnce system v3: version 3.18.18 and newer
- HPE StoreOnce system v4: version 4.2.3 4.3.2
- Dell EMC Data Domain 6.1-7.9
- NEC HYDRAstor 5.5.1 5.6.0
- NEC Storage HS Universal Express I/O Module Version 1.8.0 - 1.8.4
- HPE 3PAR 3.1.2 and higher
- HPE Nimble 5.0.2 and higher

### **Deployment Options**

NAKIVO Backup & Replication can be installed on the following operating systems and devices:

### Windows

- Windows Server 2012–2022 (21H2)
- Windows 11 (x64) (21H2)
- Windows 10 Home/Pro/Ent (20H2-21H2) (x64)
- Windows 8 Professional (x64)

### Linux

- Ubuntu (Server) 16.04-22.04 (x64)
- Red Hat Enterprise Linux v7.4–9.2 (x64)
- SUSE Linux Enterprise 15 SP1–SP4 (x64)
- SUSE Linux Enterprise 12 SP3–SP5 (x64)
- CentOS Linux 7.0–8.4 (x64)
- CentOS Stream 8–9(x64)
  - Debian v10.1–11.7

#### NAS

- QNAP QTS v4.3-v5.0
- QNAP QuTS Hero h4.5.3-v5.0
- Synology DSM v6.0-v7.2
- ASUSTOR ADM v3.5-v4.1
- TrueNAS CORE 12.0-13.0
- NETGEAR ReadyNAS v6.9–v6.10.3
- WD MyCloud OS v5

### Hardware

NAKIVO Backup & Replication requires the following hardware configuration:

- Server: 2 CPU cores, 4 GB RAM
- NAS: Refer to System Requirements
- Raspberry Pi: Refer to System Requirements

### About NAKIVO

NAKIVO is a US-based corporation dedicated to delivering the ultimate backup, ransomware protection and disaster recovery solution for virtual, physical, cloud and SaaS environments. Over 25,000 customers in 181 countries trust NAKIVO with protecting their data, including major companies like Coca-Cola, Honda, Siemens and Cisco.