

NAKIVO Backup & Replication v10.4

# #1 Backup, Ransomware Protection and Site Recovery for Virtual, Physical, Cloud, and SaaS Environments

A fast, reliable, and affordable solution that delivers backup, replication, instant restore, and disaster recovery in a single pane of glass.

## Backup

With NAKIVO Backup & Replication, you can reliably protect your virtual, physical, cloud and SaaS environments, ensure the consistency of application data, increase backup performance and reduce backup size.

- **VM Backup:** Create image-based, incremental backups of VMware, Hyper-V, and Nutanix AHV VMs.
- **Microsoft 365 Backup:** Back up Microsoft 365 data, such as Exchange Online mailboxes, OneDrive for Business files, and SharePoint Online sites.
- **Physical Machine Backup:** Create image-based, incremental backups of Windows-based and Linux-based physical servers and workstations.
- **Amazon EC2 Backup:** Create image-based, incremental backups of Amazon EC2 instances.
- **Oracle Backup:** Create backups for Oracle databases via RMAN.
- **VMware Cloud Director Backup:** Back up VMware Cloud Director objects, such as vApps, individual VMs and storage policies.
- **Backup from Storage Snapshots:** Create backups for VMware VMs hosted on HPE 3PAR storage devices directly from storage snapshots.
- **Backup to Cloud:** Send backups or backup copies to public clouds, including Amazon S3, Wasabi, and Azure.
- **Ransomware-Resilient Backups:** Enable immutability for backups sent to Amazon S3 (with S3 Object Lock) and Linux-based local repositories.
- **Backup to Tape:** Send backup copies to physical tape libraries and AWS VTL; easily manage tape devices, cartridges, and backups.
- **Backup Copy:** Create copies of your backups and send them to a remote site or a public cloud.
- **Global Deduplication:** Deduplicate backups across the entire backup repository, regardless of the platform.
- **Instant Backup Verification:** Instantly verify VMware and Hyper-V VM backups; get a report with screenshots of test-recovered machines.
- **Application Support:** Ensure the consistency of applications and databases, such as Microsoft Exchange, AD, SQL, Oracle, SharePoint, and so on.
- **Deduplication Appliance Support:** Send backups to deduplication appliances such as HPE StoreOnce, Dell EMC Data Domain, and NEC HYDRAsTOR.

19,000+

paid customers across the Americas, Europe and Asia

98%

customer satisfaction with support

5-star

online community reviews

Largest customers protect

8 000+  
VMs

300+  
Sites

## Instant Recovery

With NAKIVO Backup & Replication, you can instantly recover VMs, files, and application objects directly from deduplicated backups.

- **Instant VM Recovery:** Boot VMware and Hyper-V VMs directly from deduplicated backups; migrate booted VMs to production if necessary.
- **Instant Physical to Virtual (P2V):** Instantly boot VMware VMs from physical machine backups.
- **Instant File Recovery to Source:** Browse, search, and instantly restore files and folders back to source.
- **Instant Object Recovery for Microsoft Exchange:** Browse, search, and recover individual emails and other Exchange objects back to the original location.
- **Instant Object Recovery for Microsoft Active Directory:** Browse, search, and recover individual users, user groups and other AD objects back to the original location.
- **Instant Object Recovery for Microsoft SQL:** Browse, search, and restore individual tables and databases back to the original location.
- **Universal Application Object Recovery:** Instantly recover objects of any application by mounting disks from a backup directly to your production machines.
- **Cross-Platform Recovery:** Export VM disks across platforms to recover VMware VMs to a Hyper-V environment and vice versa.

## Disaster Recovery

With NAKIVO Backup & Replication, you can perform near-real-time VM replication and orchestrate the disaster recovery process with Site Recovery.

- **VM Replication:** Create and maintain VMware and Hyper-V VM replicas, which are identical copies of your source VMs.
- **Replication from backup:** Replicate VMs directly from backups to reduce the load on the host, free up valuable resources, and save time.
- **Amazon EC2 Instance Replication:** Create and maintain Amazon EC2 instance replicas, which are identical copies of your source instances.
- **Site Recovery:** Create disaster recovery workflows and perform scheduled non-disruptive recovery testing, planned failover, emergency failover, failback, and datacenter migration with one click.
- **Application Support:** Ensure the consistency of applications and databases, such as Microsoft Exchange, Active Directory, SQL, Oracle, SharePoint, and so on.
- **Replica Verification:** Instantly verify VMware and Hyper-V VM replicas; get a report with screenshots of test-recovered machines.

## Performance

With NAKIVO Backup & Replication, you can boost backup, replication, and recovery speeds by up to 2x and reduce network load by as much as 50%.

- **Native Change Tracking:** Use native change tracking technologies (VMware CBT, Hyper-V RCT, Nutanix AHV CRT) to instantly identify modified data and send only changed data to the destination.
- **LAN-Free Data Transfer:** Use the Hot Add or Direct SAN Access modes to increase data transfer speed while offloading production networks.

## Our Customers



- **Network Acceleration:** Increase performance in busy LAN and WAN networks with built-in network acceleration.
- **Bandwidth Throttling:** Limit the speed of data transfer by configuring global or per-job bandwidth rules.

## Administration

NAKIVO Backup & Replication provides a simple web interface and comes with great features to help you save time and money.

- **Versatile Deployment:** Deploy as a VA, 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, which can be based on machine name, tag, size, location, and so on.
- **Calendar Dashboard:** View all past, current, and future jobs in a simple calendar view.
- **Role-Based Access Control:** Assign preset and custom roles and associated rights and permissions to users.
- **Two-Factor Authentication:** Enable 2FA to prevent unauthorized access to data protection activities.
- **Microsoft Active Directory Integration:** Integrate with Microsoft Active Directory and map user groups to NAKIVO Backup & Replication user roles.
- **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:** Protect system configuration including all of your jobs, inventory, settings, and so on.
- **Live Chat with Tech Support:** Get help without leaving the web interface.

## BaaS and DraaS

NAKIVO Backup & Replication provides a simple way to deliver data protection and disaster recovery as a service.

- **Multi-Tenancy:** Create multiple 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 for MSPs:** Access the remote environments via a single port connection without requiring a VPN connection.

## 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 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. NAKIVO Backup & Replication 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, Inc.**

# System Requirements

## Supported Environments

NAKIVO Backup & Replication can protect the following platforms:

### Virtual

- VMware vSphere v4.1–v7.0.2
- Hyper-V 2012–2019
- Nutanix AHV 5.10–5.20 (LTS)
- VMware Cloud Director v.10.2.1

### SaaS

- Microsoft 365

### Physical

- Windows Server 2008R2–2019
- Windows 10 Pro (x64)
- Ubuntu (Server) v16.04–20.04 LTS (x64)
- Ubuntu (Desktop) 18.04–20.04 LTS (x64)
- Red Hat Enterprise Linux v7.0–8.3 (x64)
- SUSE Linux Enterprise 15 SP1–SP2 (x64)
- SUSE Linux Enterprise 12 SP1–SP5 (x64)
- CentOS v7.0–8.0 (x64)

### Cloud

- Amazon EC2

### Applications

- Oracle Database 11g R2–19c

## Storage Integration

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

- HPE StoreOnce 3.18.18 and 4.2.3
- Dell EMC Data Domain 6.1–7.0
- NEC HYDRAStor 5.5.1 and newer
- NEC Storage HS Universal Express I/O Module Version 1.8.0 and newer

## Deployment Options

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

### Windows

- Windows Server 2008 R2 - 2019
- Windows 7–10 Professional (x64)

### Linux

- Ubuntu (Server) 16.04–20.04 (x64)
- Red Hat Enterprise Linux 7.4–8.3 (x64)
- SUSE Linux Enterprise 15 SP1–SP2 (x64)
- SUSE Linux Enterprise 12 SP3–SP5 (x64)
- CentOS Linux 7.0–8.0 (x64)

### NAS

- QNAP QTS v4.3 –v4.5.1
- Synology DSM v6.0–v7.0
- ASUSTOR ADM v3.0–v3.5
- FreeNAS 11.3
- TrueNAS CORE 12
- NETGEAR ReadyNAS v6.9–v6.10
- WD MyCloud OS v3, 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. As one of the fastest-growing backup and ransomware recovery software vendors in the industry, NAKIVO boasts 22 consecutive quarters of double-digit growth, 5-star online community reviews, 98% customer satisfaction with support and a network of over 6,000 partners worldwide. Over 19,000 customers in 158 countries trust NAKIVO with protecting their data, including major companies like Coca-Cola, Honda, Siemens, Cisco and SpaceX.