**NAKIVO Backup & Replication v10.5** 

# #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. and Wasabi.
- Ransomware-Resilient Backups: Enable immutability for backups sent to Amazon S3 (with S3 Object Lock) and hardened Linux-based local repositories in a pre-configured VA.
- 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, and so on.
- Deduplication Appliance Support: Send backups to deduplication appliances such as HPE StoreOnce, Dell EMC Data Domain, and NEC HYDRAstor.

**20,000+** paid customers across the Americas, Europe and Asia

98%

customer satisfaction with support

5-star

online community reviews

Largest customers protect

+0008

300+

VMs

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 to their original location or any custom location.
- 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.

## **Ransomware Protection**

With NAKIVO Backup & Replication, you can ensure proper ransomware protection, improve backup reliability and provide instant recovery in case of a ransomware attack.

- Air-gapped backups: Keep your backups and backup copies offline (tape, detachable NAS, USB drives, etc.) for ultimate ransomware protection.
- Immutable backups with S3 Object Lock: Make your backups and backup copies stored in Amazon S3 buckets immutable for as long as you need and ensure they remain protected from ransomware and malicious changes.
- **Immutable Repository:** Enable immutability for backups and backup copies sent to Linux-based local repositories.
- **Hardened Virtual Appliance:** Deploy the solution as a pre-configured VA running Ubuntu Server and make your backups sent to a repository deployed as part of the VA immutable for a specified period of time.
- **Two-Factor Authentication:** Enable two-factor authentication (2FA) for NAKIVO Backup & Replication to prevent hackers from accessing your data protection activities.

## **Our Customers**

CISCO ...

**SIEMENS** 















**FUJ!FILM** 









# **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, 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 HotAdd or Direct SAN Access modes to increase data transfer speed while offloading production networks.
- 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.

## **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.



- **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.

# **VMware Monitoring**

NAKIVO Backup & Replication provides a powerful set of tools for monitoring the VM infrastructure.

- **Complete visibility:** Monitor CPU, RAM, and disk usage of your 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**

NAKIVO Backup & Replication provides a simple way to deliver backup 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 remote environments via a single port connection without requiring a VPN connection.

### **NAKIVO Awards**



5-star rating backup



Top Performer - Server Backup Software 2021



Leader Summer 2021



5-star rating backup



Software Informer Editor's Pick



**Techgenix Gold Award** 



**Gold Award Data Protection** 



5-star rating backup



# **System Requirements**

## **Supported Environments**

NAKIVO Backup & Replication can protect the following platforms:

#### **Virtual**

- VMware vSphere v4.1– v7U2 (compatibility with vSphere 7U3)
- Hyper-V 2012–20H1
- Nutanix AHV 5.10–5.20 (LTS)
- VMware Cloud Director v.10.2.1

#### SaaS

Microsoft 365

#### **Physical**

- Windows Server 2008R2–20H1
- Windows 10 Pro 20H2 (x64)
- Ubuntu (Server) v16.04–20.04 LTS (x64)
- Ubuntu (Desktop) 18.04–20.04 LTS (x64)
- Red Hat Enterprise Linux v7.0–8.4 (x64)
- SUSE Linux Enterprise 15 SP1–SP2 (x64)
- SUSE Linux Enterprise 12 SP1–SP5 (x64)
- CentOS v7.0–8.4 (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 system v3: version 3.18.18 and newer
- HPE StoreOnce system v4: version 4.2.3
- Dell EMC Data Domain 6.1-7.0

## **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 (20H2) (x64)

#### Linux

- Ubuntu (Server) 16.04–20.04 (x64)
- Red Hat Enterprise Linux 7.4–8.4 (x64)
- SUSE Linux Enterprise 15 SP1–SP2 (x64)
- SUSE Linux Enterprise 12 SP3-SP5 (x64)
- CentOS Linux 7.0–8.4 (x64)

#### NAS

- ONAP OTS v4.3–v4.5.1
- ONAP OuTS hero h4.5.3
- Synology DSM v6.0-v7.0
- ASUSTOR ADM v3.5-v.4.0
- FreeNAS 11.3
- TrueNAS CORE 12
- NETGEAR ReadyNAS OS v6.9–v6.10.x
- WD MyCloud OS v3

#### **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 6,500 partners worldwide. Over 20,000 customers in 162 countries trust NAKIVO with protecting their data, including major companies like Coca-Cola, Honda, Siemens and Cisco.