

NAKIVO Backup & Replication v8.1 for VMware, Hyper-V, and AWS EC2

A fast, reliable, as well as affordable solution for data protection and site recovery

Key Benefits

- ✓ **Install on a NAS server** and boost VM backup speed by up to 2X
- ✓ **Protect** VMware, Hyper-V, and AWS EC2 environments with a single product
- ✓ **Back up faster** with LAN-free and Network Acceleration features
- ✓ **Reduce backup size** with global backup deduplication, compression, and swap data exclusion
- ✓ **Instantly recover** VMs, files, and application objects
- ✓ **Fail over an entire site** in a single click
- ✓ **Set up regular failover testing**
- ✓ **Improve uptime** with RTOs and RPOs of just 10 minutes
- ✓ **Scale out as you grow:** the largest NAKIVO customers protect 7,000+ VMs, span 200+ locations
- ✓ **Save your budget** with affordable pricing

VM Backup and Recovery

Policy-Based VM Protection

Instead of manually adding VMs to jobs and chasing every environment change, you can set up policies that regularly scan your infrastructure, as well as protect VMs that match policy rules. The rules can be based on the VM name, tag, size, location, power state, configuration, or a combination of these parameters.

Backup for VMware, Hyper-V, and AWS EC2

NAKIVO Backup & Replication provides image-based, application-aware backup for VMware, Hyper-V, and AWS EC2 environments. This means that NAKIVO Backup & Replication can capture all VM data, while ensuring the consistency of applications and databases running in VMs (such as Microsoft Exchange, Active Directory, SQL, SharePoint, etc.)

Backup Copy Offsite and to Cloud

VM backups can be damaged, accidentally deleted, or can become unavailable, leaving you without any way to restore your data. Backup Copy jobs allow you to create copies of your backups and send them to a remote site or a public cloud. You can choose to keep a mirrored copy of a backup repository or fine-tune which, when and how backups get copied.

Backup Size Reduction

NAKIVO Backup & Replication can automatically exclude swap files or partitions from VM backups, can deduplicate backup data across the entire repository, and can compress the data to minimize backup size. This could dramatically reduce your storage space requirements.

Instant Recovery

With NAKIVO Backup & Replication, you can instantly recover VMs, files, or application objects (Microsoft Exchange, Active Directory, and SQL are supported). The recovery is performed directly from compressed and deduplicated VM backups. Using the Universal Application Object Recovery feature, you can instantly recover objects of any other applications by mounting disks from a backup directly to your production VMs.

Cross-Platform Recovery

With NAKIVO Backup & Replication you can export VM disks across platforms in order to recover VMware VMs to a Hyper-V environment and vice versa.

Time and Cost Savings

- ✓ Streamline deployment and scale out with pre-configured VMware VAs, AWS AMIs
- ✓ Reduce footprint with modest system requirements
- ✓ Create a high-performance VM backup appliance by direct installation on ASUSTOR, NETGEAR, QNAP, Synology, or WD devices
- ✓ Reduce management complexity with a simple and intuitive web interface
- ✓ Save storage space with built-in global data deduplication and compression
- ✓ Reduce backup windows with LAN-free backup and Network Acceleration
- ✓ Protect backups by copying them to another repository onsite, offsite, or in an Amazon/Azure cloud
- ✓ Automatically verify backups and get email reports with OS screenshots of test-recovered VMs
- ✓ Reduce recovery time with the instant recovery of VMs, files, and application objects
- ✓ Automate and orchestrate site recovery

DR Orchestration

VM Replication

NAKIVO Backup & Replication enables you to create and maintain VM replicas, which are identical copies of source VMs. The VM replicas are regular VMs that remain in the powered-off state until recovery is started.

Site Recovery

The Site Recovery feature enables you to create recovery workflows and perform scheduled non-disruptive site recovery testing. You can also perform planned failover, emergency failover, failback, and datacenter migration. Your custom workflows can include steps for graceful source VM shutdown, final VM replication, replica VM re-IP according to predefined rules, network mapping, staged replica VM power on, custom scripting, email notifications, etc. Once set up, a recovery workflow can be run in a single click.

Reliability

Screenshot Verification

NAKIVO Backup & Replication can near-instantly verify VM backups and replicas. After a backup job is completed, NAKIVO Backup & Replication can instantly recover the VM, wait until the OS has booted, make a screenshot of the OS, discard the test-recovered VM, and send you a report with the screenshot via email. This way, you have proof that your VMs can be recovered from their backups.

Automated SQL and Exchange Log Truncation

Microsoft SQL and Microsoft Exchange record all database changes in transaction log files. These files grow over time and can eventually consume all free space on a disk, crashing the server. NAKIVO Backup & Replication can automatically remove transaction log files from the source VM after a successful VM backup or replication is performed. This prevents the log files from growing while you keep a copy in the backup or replica, should you need to restore your data.

Self-Backup

By default, NAKIVO Backup & Replication performs a Self-Backup once a day, and stores the backup in available backup repositories. If the machine that is running NAKIVO Backup & Replication becomes unavailable, you can install a new instance of the product in under a minute as well as restore the system configuration (including all of your jobs, inventory, settings, etc.) from a Self-Backup.

Encryption in Flight and at Rest

With NAKIVO Backup & Replication, you can encrypt your data in flight and at rest. NAKIVO Backup & Replication uses AES 256 encryption, which is the industry standard for military and financial institutions.

Integration and Automation

- ✓ **Microsoft Active Directory:** Integrate NAKIVO Backup & Replication with Microsoft Active Directory and map user groups to NAKIVO Backup & Replication user roles.
- ✓ **Dell EMC Data Domain Boost:** Integrate NAKIVO Backup & Replication with Dell EMC Data Domain Boost to use source-side deduplication for your VM backups. This can reduce backup size by up to 94%, while improving backup performance by as much as 50%.
- ✓ **HTTP API:** Integrate NAKIVO Backup & Replication with monitoring, automation, and orchestration solutions via HTTP API. This allows you to reduce time spent on data protection management and decrease data protection costs.

Performance

Fast VM Backup and Replication

NAKIVO Backup & Replication uses native change tracking technologies (VMware CBT/Hyper-V RCT) to instantly identify modified data, and only transfer the changes to the destination. In addition, NAKIVO Backup & Replication can use LAN-free data transfer modes (Hot Add or Direct SAN Access) to increase data transfer speed while offloading production networks. You can also enable the built-in Network Acceleration feature to further increase performance in busy LAN and WAN networks. These features can boost VM backup speed by up to 2X as well as reduce network load by as much as 50%.

Deduplication Appliance Support

NAKIVO Backup & Replication offers a special type of backup repository that is optimized for deduplication appliances such as NEC HYDRAsTOR, EMC Data Domain, HP StoreOnce, and Quantum DXi. When tested in a customer environment on an NEC HYDRAsTOR device, the new repository improved VM backup performance by 53X as compared to the regular backup repository, with the backup speed reaching 3.2 GB/s.

Advanced Bandwidth Throttling

NAKIVO Backup & Replication was designed to be fast, and thus transfers data at the maximum available speed. However, if your networks are already loaded, you may want to limit the speed of data transfer by using the Advanced Bandwidth Throttling feature. NAKIVO Backup & Replication allows you to set up bandwidth rules, in order to make sure that your jobs do not exceed the bandwidth limit.

Ease of Use

NAKIVO Backup & Replication provides a simple web interface and comes with several features to help you save time and effort:

- > The **Calendar Dashboard** displays all past, current, and future backup jobs in a simple calendar view.
- > The **Flexible Job Scheduler** lets you add multiple schedules to a single job.
- > **Global Search** allows you to find and act on VMs, backups, replicas, jobs, repositories, transporters, and other objects.
- > **Live Chat with Tech Support** allows to get help without leaving the product interface.

BaaS and DRaaS

Multi-Tenancy allows you to create multiple isolated tenants within one product instance, and manage them from a single pane of glass. This way, you can introduce VM backup-as-a-service to your clients more easily and cost-effectively. Tenants can access the Self-Service Portal to offload backup, replication, and recovery tasks from the service provider.

System Requirements

Hardware

- › **VM/physical server:** 2 CPU cores, 4 GB RAM
- › **NAS:** Refer to [System Requirements](#) for a list of supported NAS models by ASUSTOR, NETGEAR, QNAP, Synology, and Western Digital.

Operating Systems

- › Windows Server 2008 R2 – 2016
- › Windows 7 – 10 Professional (x64)
- › Ubuntu 12.04 – 18.04 Server (x64)
- › Red Hat Enterprise Linux 6.3 – 7.4 (x64)
- › SUSE Linux Enterprise Server 11 SP3 – 12 SP3 (x64)

Supported Environments

- › AWS EC2
- › Microsoft Hyper-V 2012 – 2016
- › VMware vSphere v4.1 – v6.7, ESXi 4.1– 6.7

About NAKIVO

The winner of a “Best of VMworld 2018” and the Gold Award for Data Protection, NAKIVO is a US corporation dedicated to developing the ultimate VM backup and site recovery solution. With 20 consecutive quarters of double-digit growth, 5-star online community reviews, 97.3% customer satisfaction with support, and more than 10,000 deployments worldwide, NAKIVO delivers an unprecedented level of protection for VMware, Hyper-V, and Amazon EC2 environments.

As a unique feature, NAKIVO Backup & Replication runs natively on leading storage systems including QNAP, Synology, ASUSTOR, Western Digital, and NETGEAR to deliver up to 2X performance advantage. The product also offers support for high-end deduplication appliances including Dell/EMC Data Domain and NEC HYDRAsstor. Being one of the fastestgrowing data protection software vendors in the industry, NAKIVO provides a data protection solution for major companies such as Coca-Cola, Honda, and China Airlines, as well as works with over 3,000 channel partners in 137 countries worldwide.

Learn more at www.nakivo.com

