NAKIVO Backup & Replication v7.4 for VMware, Hyper-V, and AWS EC2

Fast, reliable, and affordable data protection solution for cloud environments

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

- ✓ **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

Backup for VMware, Hyper-V, and AWS EC2

NAKIVO Backup & Replication provides image-based, application-aware, incremental 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 Exchange, Active Directory, MS SQL, SharePoint, etc.).

NAKIVO Backup & Replication leverages native change tracking technologies (VMware CBT/Hyper-V RCT) to instantly identify changed data. Only changed blocks are copied to the backup repository. You can save up to 1,000 recovery points for each VM backup, rotating them on a daily, weekly, monthly, and yearly basis.

Backup Copy Offsite and to Cloud

VM backups can be damaged, get accidentally deleted, or become unavailable. Backup Copy jobs allow you to create and maintain copies of your backups.

You can configure Backup Copy jobs based on your needs: run Backup Copy jobs on their own schedule, send backup copies offsite or to Azure/AWS clouds, maintain a mirrored copy of a backup repository, or fine-tune which backups get copied, when, and how.

Screenshot Verification

NAKIVO Backup & Replication provides an automated way to near-instantly verify VMware and Hyper-V VM backups. After a VM backup is completed, the product 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 don't have to just trust that the backups are functional; you can see (and show your management) that your VMs can be recovered from the backups.

Automated VM Protection

You can ensure that important VMs are always backed up by protecting entire containers, such as resource pools, folders, hosts, and clusters. This way, all new VMs that are created in or moved to a protected container are automatically included in the relevant VM backup and replication jobs.

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 installing directly on ASUSTOR, QNAP, Synology, or WD NAS

- ✓ 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 instant recovery of VMs, files, and application objects

Fast VM Backup and Replication

NAKIVO Backup & Replication can automatically use LAN-free data transfer modes (Hot Add and Direct SAN Access) to increase 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 and reduce network load by as much as 50%.

Backup Size Reduction

NAKIVO Backup & Replication automatically excludes swap files from VM backups, deduplicates backup data, and compresses the data to further reduce backup size.

NAKIVO Backup & Replication also offers a special type of backup repository 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, the special repository improved VM backup performance by 53X vs. the regular backup repository, with the backup speed reaching 3.2 GB/s.

Automated SQL and Exchange Log Truncation

Microsoft SQL Server and Microsoft Exchange record all database changes in transaction log files. These files grow over time and can consume all free space on the server. NAKIVO Backup & Replication can automatically remove transaction log files from the source VM after a successful VM backup or replica is made. This prevents the log files from filling up your production storage while you have a copy of them in the backup or replica, should you need to restore your data.

Instant Recovery

With NAKIVO Backup & Replication, you can instantly recover VMs, files and application objects directly from deduplicated VM backups. NAKIVO Backup & Replication supports Microsoft Exchange, Microsoft SQL Server, and Microsoft Active Directory for object recovery. Moreover, the files and objects can be restored directly to their original location or a custom one, sent via email, or downloaded by browser. This feature is agentless and works out of the box.

Automated VM Failover

NAKIVO Backup & Replication enables you to create and maintain VM replicas (identical copies of source VMs) in a target location. Once VM replication is set up, you can create a VM failover job to automate disaster recovery, including network reconfiguration of replica VMs. With network mapping and re-IP rules, VM failover becomes as simple as running a Failover job.

Deployment Options

- ✓ **Install on NAS:** Create a high-performance VM backup appliance by installing directly on an ASUSTOR, QNAP, Synology, or WD NAS server

- ✓ **Deploy as a VMware VA:** Simply download and import a pre-configured VMware Virtual Appliance

- ✓ **Deploy as AWS AMI:** Instantly deploy in Amazon cloud from a pre-configured Amazon Machine Image

- ✓ **Install on Linux or Windows:** Install in a single click on Windows or by running a single command on Linux

Calendar Dashboard and Flexible Job Scheduler

The Calendar Dashboard displays all past, current, and future backup jobs in a simple calendar view, allowing for easy scheduling of backup jobs to avoid schedule overlaps in large environments. With the Flexible Job Scheduler, you can add multiple schedules to a single job.

Global Search

NAKIVO Backup & Replication provides the Global Search feature, which allows you to search for VMs, backups, replicas, jobs, repositories, transporters, and other objects. The product also lets you perform actions on the items found, right from the search tab.

Bandwidth Throttling

NAKIVO Backup & Replication was designed to be fast; by default, the product transfers data at the maximum available speeds. However, if your networks are already heavily loaded, you may want to limit the speed of data transfer using the Bandwidth Throttling feature. This way, for example, you can restrict a backup job to consume no more than 50 MB/s.

Self-Backup

By default, NAKIVO Backup & Replication backs up the system configuration once a day and stores the self-backups in backup repositories. If the VM running the product becomes unavailable, you can install a new instance of NAKIVO Backup & Replication in under a minute and immediately restore the system configuration from a self-backup.

Active Directory Integration

NAKIVO Backup & Replication provides integration with Microsoft Active Directory. You can easily map AD groups to NAKIVO Backup & Replication user roles. This way you can align NAKIVO Backup & Replication with your company's security policy, seamlessly providing Admin and Guest access to the product.

HTTP API for Automation

The HTTP API enables you to integrate NAKIVO Backup & Replication with monitoring, automation, and orchestration solutions. This allows you to reduce time spent on data protection management and decrease data protection costs.

Multi-Tenancy and Self-Service

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. In the Multi-Tenant mode, tenants can access the self-service portal to offload backup, replication, and recovery tasks from the service provider.

Supported Hypervisors and Clouds

NAKIVO Backup & Replication supports the following hypervisors and clouds:

> AWS EC2

> Microsoft Hyper-V 2016 – 2012

> VMware vSphere v6.5 – 4.1

System Requirements

NAKIVO Backup & Replication requires 2 CPU cores and 4 GB RAM (except when installed on supported NAS models). In addition to pre-configured VMware VA and AWS AMI deployment options, the product can be installed on:

> **Windows:**

  » Windows Server 2016 Standard

  » Windows Server 2012 R2 Standard

  » Windows Server 2012 Standard

  » Windows Server 2008 R2 Standard

  » Windows 10 Professional (x64)

  » Windows 8 Professional (x64)

  » Windows 7 Professional (x64)

> **Linux:**

  » Ubuntu 16.04 Server (x64)

  » Ubuntu 12.04 Server (x64)

  » Red Hat Enterprise Linux 6.3 (x64)

  » SUSE Linux Enterprise 11 SP3 (x64)

> **NAS:** Refer to the System Requirements for a list of supported NAS models by ASUSTOR, QNAP, Synology, and Western Digital.

About NAKIVO

Founded in 2012, NAKIVO is a US corporation dedicated to developing the best data protection solution for VMware, Hyper-V, and cloud environments. 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 is one of the fastest-growing data protection software companies in the industry. NAKIVO customers include Honda, Coca-Cola, China Airlines, Microsemi, and many others. NAKIVO has a global presence, with over 2,600 channel partners in 124 countries worldwide.

Learn more at www.nakivo.com