

# NAKIVO Backup & Replication v7.5 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
- ✓ **Fail over an entire site** in a single click
- ✓ **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

### 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, get accidentally deleted, or 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 backups get copied, when, and how.

### Automated VM Protection

You can ensure that important VMs are always protected by adding entire containers (such as resource pools, folders, hosts, or clusters) to your jobs. 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.

### Backup Size Reduction

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

### Instant Recovery

With NAKIVO Backup & Replication, you can instantly recover entire VMs, files, or application objects (Microsoft Exchange, Active Directory, and SQL are supported). The recovery is performed directly from compressed and deduplicated VM backups; there is no need to restore the entire VM first. Files and objects can be restored to their original locations, sent by email, or downloaded via browser.

### Cross-Platform Recovery

With NAKIVO Backup & Replication you can export VM disks across platforms 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 installing directly on ASUSTOR, NETGEAR, QNAP, Synology, or WD NAS servers
- ✓ 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

# 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.

## Automated VM Failover

Once VM replication is set up, you can create a VM failover job and link multiple VM replication jobs to a single VM failover job to automate disaster recovery. For further DR automation, you can create network mapping and re-IP rules. With this functionality, VM failover becomes as simple as running a Failover job.

# 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 a 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 running NAKIVO Backup & Replication becomes unavailable, you can install a new instance of the product in under a minute and restore the system configuration (including all 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 transfer only 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 and reduce network load by as much as 50%.

### Deduplication Appliance Support

NAKIVO Backup & Replication offers a special type of backup repository optimized for deduplication appliances such as NEC HYDRAsstor, EMC Data Domain, HP StoreOnce, and Quantum DXi. When tested in a customer environment on an NEC HYDRAsstor device, the new repository improved VM backup performance by 53X vs. 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 transfers data at the maximum available speed. However, if your networks are already loaded, you may want to limit the speed of data transfer using the Advanced Bandwidth Throttling feature. NAKIVO Backup & Replication allows you to set up bandwidth rules, making 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

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 3,000 channel partners in 137 countries worldwide.

Learn more at [www.nakivo.com](http://www.nakivo.com)



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