Developed specifically for VMware vSphere infrastructures, NAKIVO Backup & Replication provides **enterprise-grade functionality, low TCO and simple administration**, the three cornerstones of a backup solution for today’s virtual and hybrid environments.

**Business Challenge**
Virtualization optimizes resource usage and your organization’s IT spending while boosting efficiency and agility. When it comes to protecting VMware vSphere data, legacy backup solutions defeat the benefits of virtualization by adding complexity, driving up storage/compute requirements and slowing down restores. **What you need is a backup solution that is just as agile and resource-efficient as your VMware investment.**

**Solution Overview**
NAKIVO Backup & Replication is an agentless VMware backup solution that uses native VMware snapshot technology to create backups. This type of backup at the virtualization level – rather than the guest OS level – offers considerable advantages, including backup of entire VMs regardless of their OS together with their virtual disk contents and configuration files.

**How It Works**

**Image-Based**
An agentless solution that creates a backup, that is, a point-in-time copy of a VM, including its guest OS disks, configuration files and applications without affecting the performance of source VMs.

**Incremental**
Relying on the VMware Changed Block Tracking (CBT), the software copies only the blocks of data that have changed since the last backup cycle for smaller and faster backups.

**Application-Aware**
Data in applications and databases such as Microsoft Exchange, Active Directory and Microsoft SQL remains consistent to ensure that applications can be started immediately from backups.
Protecting your virtual infrastructure doesn’t have to be complicated or expensive. Developed specifically for VMware vSphere, NAKIVO Backup & Replication is simple, efficient and cost-effective.

**Advanced VMware vSphere Integration**
NAKIVO Backup & Replication always supports the latest versions of vSphere. With vSphere 8 IA compatibility, you can protect VMs and application data for a more resilient and reliable virtual infrastructure.

**Simple Administration**
Set policy rules for automated backups based on a VM’s name, tag, size, etc. Matching VMs are automatically added to or excluded from corresponding jobs. Create backup, backup copy, replication and recovery sequences for further automation of data protection activities.

**One Solution, One Interface**
NAKIVO Backup & Replication offers a full range of features for virtual, cloud, physical and SaaS environments, including backup, replication, instant granular restore, site recovery, and more, all managed from a centralized web interface.

**Easy and Quick Deployment**
Install in minutes on Windows, Linux or NAS. Or deploy as a preconfigured VMware vSphere virtual appliance in your environment and get started with VM protection right away.

**Anti-Ransomware Protection**
Protect backup data against ransomware corruption and encryption with immutable storage options in local Linux-based repositories and in the cloud (Amazon S3, Wasabi, Backblaze B2 and Azure Blob).

**Low Total Cost of Ownership**
Two licensing models for VMware vSphere infrastructures are available to fit the budget of organizations of any size: perpetual (priced per socket) and subscription (priced per workload).

**Features**

**Backup**
Back up a single VM or multiple VMs, including fault-tolerant VMs, without installing additional software on each host.

**Granular Recovery**
Instantly restore individual files, application objects (for Microsoft Exchange, Active Directory or SQL Server) to the original or custom locations.

**Flash VM Boot**
Instantly boot VMware VMs directly from backups to resume workloads within minutes.

**Full VM Recovery**
Recover an entire VM to the same or a different host with its configuration and the virtual disk data.

**Instant Backup Verification**
Instantly verify VMware VM backups and get a report with screenshots of test-recovered VMs.

**Multiple Storage Options**
Keep your backups on-premises, in a public cloud (Amazon S3, Azure Blob, Wasabi, Backblaze B2), or on tape to eliminate a single point of failure.

**LAN-Free Data Transfer**
Use LAN-free data transfer with Direct SAN access or HotAdd, offering faster backup speeds than via LAN and freeing up the network bandwidth.

**Backup from Storage Snapshots**
Create backups and replicas directly from storage snapshots for VMware VMs hosted on HPE 3PAR and HPE Nimble Storage devices.
Back up VMware VMs running on standalone ESXi hosts or vCenter-managed ESXi hosts

Recover full machines or exactly what you need from backups stored on supported destinations

Recover from any disaster with NAKIVO Backup & Replication

Disaster recovery features for VMware environments:

**Replication** – Create an identical copy of your source VMs. For convenience, you can automate replication jobs.

**Replication from Backup** – Perform replication directly from VMware backups.

**Replica Verification** – Instantly verify VM replicas and get a report with screenshots of the test-recovered VMs.

**Automated VM Failover** – Resume your mission-critical workloads within minutes by failing over to a VM replica.

**P2V Recovery** – Boot VMware VMs directly from physical machine backups for instant restores, sandbox testing, or safe physical to virtual migrations.

**Site Recovery** – Create disaster recovery workflows to be prepared for any failure scenario in advance. Perform non-disruptive recovery testing at any time.

Supported Platforms

for VMware vSphere backup
- vSphere 8
- vSphere 7.0.3
- vSphere 7.0.2
- vSphere 6.7
- vSphere 6.5
- vSphere 6.0
- vSphere 5.5

for VMware ESXi backup
- ESXi v8
- ESXi v7.0.3
- ESXi v7.0.2
- ESXi v6.7
- ESXi v6.5
- ESXi v6.0
- ESXi v5.5

Storage Destinations
- Cloud
- Tape Media
- NAS Appliances
- Deduplication Appliances
- Local
- Network Share
System Requirements

Supported Environments
NAKIVO Backup & Replication can protect the following platforms:

**Physical**
- Microsoft Windows Server 2012-2022 (21H2) (x64)
- Microsoft Windows 10 Pro/Home (20H2-21H2) (x64)
- Ubuntu (Server) v16.04-22.04 LTS (x64)
- Ubuntu (Desktop) 18.04-22.04 LTS (x64)
- RHEL v7.0-9.0 (x64)
- SLES 15 SP1-5, 15 SP1-4 (x64)
- CentOS v7.0-8.4 (x64)
- CentOS Stream 8 (x64)

**Virtual**
- VMware vSphere v5.5 - v8
- Microsoft Hyper-V 2012-2022
- Nutanix AHV 5.15-5.20 (LTS)
- VMware Cloud Director 10.2.1-10.3.3.1

**Cloud**
- Amazon EC2

**Applications**
- Oracle Database 11g R2-19c

**SaaS**
- Microsoft 365
- Exchange Online
- SharePoint Online
- OneDrive for Business
- Teams

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

- HP StoreOnce 3.18.18 - 4.3.2
- Dell EMC Data Domain 6.1-7.9
- NEC HYDRASTor 5.5.1 - 5.6.0
- NEC Storage HS Universal Express I/O Module Version 1.8.0 - 1.8.4
- HPE 3PAR 3.1.2 and higher
- HPE Nimble 5.0.2 and higher

Deployment Options
NAKIVO Backup & Replication can be installed on the following operating systems:

**Windows**
- Microsoft Windows Server 2012-2022 (20H2/21H2) (x64)
- Windows 11 (x64) (21H2)
- Windows 10 Pro (x64) (20H2 / 21H1 / 21H2)
- Windows 10 Home (x64) (20H2/21H1/21H2)
- Windows 8 Professional (x64)

**Linux**
- Ubuntu (Server) 16.04-22.04 (x64)
- Red Hat Enterprise Linux 7.4-9.0 (x64)
- SUSE Linux Enterprise Server 12 SP3-5, 15 SP1-4 (x64)
- CentOS v7.0-8.4 (x64)
- CentOS Stream 8 (x64)

**NAS**
- QNAP QTS v4.3-v5.0
- QNAP QuTS Hero h4.5.3-h5.0
- Synology DSM v6.0-v7.1
- ASUSTOR ADM v3.5-v.4.1
- FreeNAS 11.3
  - FreeBSD version 11.3
- TrueNAS CORE 12.0
  - FreeBSD version 12.0-12.3
- TrueNAS CORE 13.0
  - FreeBSD version 13.0
- NETGEAR ReadyNAS v6.9 – v6.10
- WD MyCloud OS v5

Hardware
NAKIVO Backup & Replication Requires the following hardware configuration:

**Windows**
- **Server**: 2 CPU cores, 4 GB RAM
- **NAS**: Refer to [System Requirements](#)

**About NAKIVO**
NAKIVO is a US-based corporation dedicated to delivering the ultimate backup and site recovery solution. With 25 consecutive quarters of double-digit growth, 5-star online community reviews, 98% customer satisfaction with support, and more than 24,000 paid customers worldwide, NAKIVO provides an unprecedented level of protection for virtual, physical, cloud and SaaS environments.