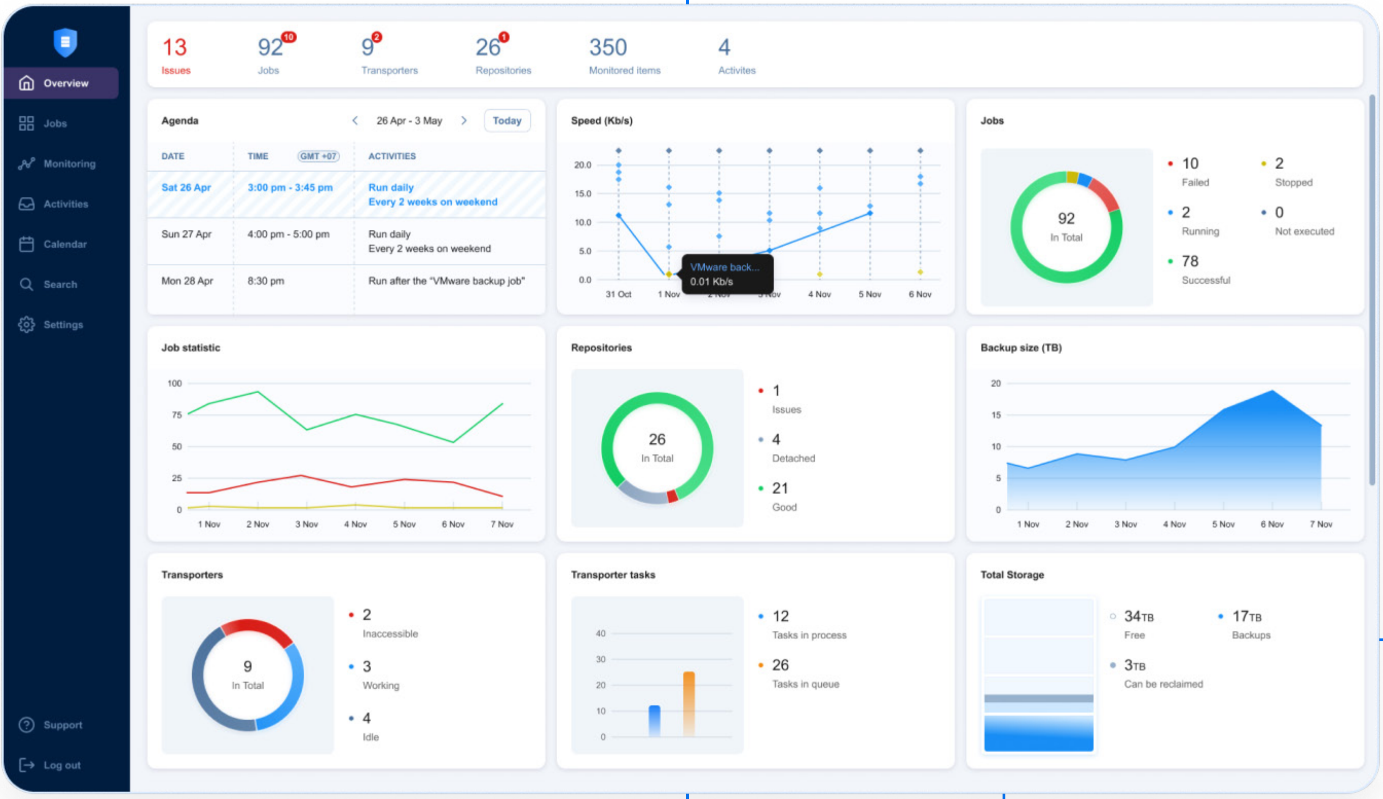
What's New in NAKIVO Backup & Replication



DATE	TIME (GMT +07)	ACTIVITIES
Sat 26 Apr	3:00 pm - 3:45 pm	Run daily Every 2 weeks on weekend
Sun 27 Apr	4:00 pm - 5:00 pm	Run daily Every 2 weeks on weekend
Mon 28 Apr	8:30 pm	Run after the "VMware backup job"

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Introduction

Driven by the need for tailored data protection, we've released 8 new versions of NAKIVO Backup & Replication since January 2024, each featuring highly sought-after features and advancements.

From virtualized and physical platforms to managed backup and recovery services, disaster recovery, and ransomware protection, we continue to ensure our customers receive a customized and efficient data protection experience.

The following is a list of the major new features and enhancements added to NAKIVO Backup & Replication up to version 11.2.

Protection for Virtual Environments

NAKIVO Backup & Replication is purpose-built for virtual environments, offering fast and reliable VM data protection tailored for various virtualization platforms, including VMware vSphere, VMware Cloud Director, Microsoft Hyper-V, Nutanix AHV and Proxmox VE.

Backup for Proxmox VE

NAKIVO Backup & Replication can perform agentless backup and replication of Proxmox VE VMs and VM templates (up to the latest v9.0 update), allowing you to reduce complexity and resource usage while achieving greater control and flexibility.

Fast and Efficient Backup

You can back up Proxmox VE VMs directly at the host level without having to install or manage additional OS agents on each VM. The functionality allows you to create incremental backups at the block level using native change tracking technology to transfer only the data blocks changed since the last backup session. The Instant Verification feature runs automated health checks on your Proxmox VE backup data and sends screenshot-based reports to confirm that Proxmox VE backups are functional and recoverable.

Flexible Storage Destinations

You can store your Proxmox VE backups across a wide range of storage destinations, including:

- Public clouds and S3-compatible storage
- Deduplication appliances
- CIFS and NFS shares
- Tape.

Additionally, you can use the Backup Copy functionality to copy Proxmox VE backups offsite and maintain multiple copies in the cloud or any other location, following the 3-2-1 backup strategy to improve availability and ensure recovery in disaster situations.

Ransomware Protection and Security

You can protect your Proxmox VE backup against ransomware, unauthorized access and data tampering with:

- Backup encryption at the source, in transit and at rest in the repository
- Immutable backups in local and cloud repositories to protect data from ransomware encryption or accidental deletion
- Air-gapped backups on tape and other detached media for offline protection

Instant Full and Granular Recovery

NAKIVO Backup & Replication also provides full and instant granular recovery options. You can choose to restore entire Proxmox VE VMs with all their data or instantly recover individual files and application objects to their original or a different location. Use the Flash VM Boot feature to boot Proxmox VE VMs directly from backups for instant recovery.

Replication for Proxmox VE

With NAKIVO Backup & Replication, you can ensure high availability and business continuity during failures or outages. You can create and maintain identical replicas of your source Proxmox VE VMs on a target host on a remote site. During failures or outages, simply failover to your replica to minimize downtime and maintain service availability.

Real-Time Replication for VMware

This Real-time replication functionality in NAKIVO Backup & Replication allows you to create replicas of your VMware vSphere VMs and keep them updated with the source VMs as changes are made. Replicas are updated as frequently as every second in real time, allowing for near-zero downtime and minimal data loss during a disaster.

Additionally, you can set up failover actions for real-time replication in Site Recovery jobs to automatically switch to real-time replicas with a single click during an outage. You can also test the failover process beforehand to validate your DR plans and ensure recovery readiness without impacting the production environment.

Support for the latest VMware version

Ensuring customers have access to the latest advancements in distributed workload technology is a top priority for NAKIVO. In alignment with this, we've added support for the latest VMware vSphere versions upon release, including vSphere 9.

Backup and Recovery for Physical Environments

Extending protection to physical infrastructure, NAKIVO introduced backup capabilities for Windows and Linux Servers and workstations to ensure data protection across diverse IT landscapes.

Granular Backup for Physical Machines

NAKIVO Backup & Replication can back up specific volumes and folders on Windows and Linux machines without backing up the entire machine. You can store granular physical machine backups across:

- Local storage
- SMB and NFS file shares
- Public clouds (Amazon S3, Wasabi, Azure Blob, Backblaze B2)
- S3-compatible object storage platforms
- Tape
- Deduplication appliances

To protect against ransomware attacks, you can use a combination of immutable storage, air-gapped backups and backup encryption.

You can perform granular recovery to restore the data you need from your physical machine backups, saving time and resources in the process.

NAS Backup

NAKIVO NAS Backup enables you to create fast and efficient backups of unstructured data in NFS and SMB network shares hosted on NAS devices and Windows and Linux machines. Here's what's new in NAKIVO NAS Backup.

Hybrid and immutable storage

You can now send backups of file shares to a wider range of storage targets, including:

- Public cloud storage platforms (Amazon S3, Wasabi, Azure Blob, Backblaze B2)
- S3-compatible storage platforms
- Local folders
- Other NFS and SMB shares
- Deduplication appliances

When using a local or cloud-based backup repository as the storage destination, you can enable immutability to protect backups against ransomware attacks and unwanted modifications.

Automated backup copy

NAKIVO has expanded the scope of the Backup Copy and Job Chaining features to include NAKIVO NAS Backup. You can now automate the creation and movement of backup copies across the supported backup destinations listed above, with the addition of tape, to increase backup resilience.

Bare-metal recovery

The bare-metal recovery feature enhances the existing physical recovery functionality, providing you with flexible and fast physical server recovery. You can restore an entire server or workstation from a backup to identical hardware without rebuilding the operating systems or reconfiguring application settings.

This functionality offers a fast and efficient approach to restoring physical machines to the last known good state, enabling you to recover from incidents or roll back undesired changes/deletions made before.

Backup for Microsoft 365

NAKIVO Backup for Microsoft 365 is a powerful solution designed to provide fast backup and recovery of OneDrive for Business, SharePoint Online, Exchange Online and Microsoft Teams data. Here's what's new in NAKIVO Backup for Microsoft 365.

Hybrid and immutable storage

This major expansion marks a new milestone for NAKIVO Backup for Microsoft 365, adding new storage destinations, ransomware-proof backup support, and automated backup tiering. In addition to local folders, you can now send backups of Microsoft 365 data to the following storage targets:

- Public cloud storage platforms (Amazon S3, Wasabi, Azure Blob, Backblaze B2)
- Other S3-compatible storage platforms
- NFS and SMB shares
- Deduplication appliances

For protection against ransomware attacks and other unwanted modifications, you can enable immutability for Microsoft 365 backups stored in local and cloud storage destinations.

Automated backup copy

Additionally, you can now use the Backup Copy feature to create additional copies of Microsoft 365 backups or seamlessly migrate backups across the storage destinations above, with the addition of tape. Using Job Chaining, you can automate the transfer of backup copies across storage destinations (tape to cloud, cloud to local folder, network share to tape, etc.).

In-Place Archive Mailbox, Litigation Hold and In-Place Hold support

NAKIVO has added support for more Exchange Online mailbox items:

- In-Place Archive mailboxes
- Litigation Hold items
- In-Place Hold items

You can now back up the mailbox folders you need and recover the entire folder or specific files to the original or a different user account.

Managed Service Providers (MSPs)

Multi-Tenancy allows managed service providers to manage and customize data protection efficiently for multiple clients from a single platform. Since then, we have continued to deliver specialized features and capabilities that enable service providers to better cater to their clients' needs. Here are the latest MSP features introduced in NAKIVO Backup & Replication:

MSP Console

NAKIVO introduced the MSP console for centralized management of all clients, allowing service providers to streamline operations, enhance efficiency, and provide robust data protection services to their clients.

MSPs can add clients with standalone NAKIVO Backup & Replication deployments as remote tenants in their multi-tenant deployment of the solution. This enables them to manage and monitor the data protection activities of all tenants, both remote and local, with ease from a unified MSP dashboard.

Tenant Overview Dashboard

We've supplemented the MSP Console with a new dashboard that provides a high-level overview of all managed tenants in one place. The Tenant Overview Dashboard gives you real-time insights and alerts about your client data protection infrastructures, including node status, available resources, scheduled activities, and inventory information. You can sort, filter, and search through your tenant list to extract the information you need, identify pending issues, and apply bulk actions.

This dynamic dashboard helps you save time on routine tenant management tasks, resolve issues and bottlenecks efficiently, and optimize the allocation of resources and licenses.

Direct Connect

Direct Connect allows MSPs to access the remote resources of their clients through a single direct port connection without the need for a VPN connection. The feature supports VMware vSphere, Microsoft Hyper-V, Proxmox VE, physical machines, VMware Free ESXi hosts and NAS-based Transporters.

Direct Connect for MSPs

With Direct Connect for MSPs, you can establish a secure connection to tenant environments without the need for open ports on the tenant's side. The feature supports the following platforms for remote management and data protection:

- VMware vSphere
- Microsoft Hyper-V
- Proxmox VE
- Windows physical machines
- Linux physical machines

Direct Connect for MSPs also supports Site Recovery workflows to enable rapid recovery of tenant workloads in disaster scenarios.

IT Monitoring

Keeping track of resource usage in VMware infrastructure is crucial for optimizing VM performance and preventing bottlenecks. The NAKIVO Monitoring for VMware functionality allows you to:

- Monitor the CPU, RAM, and disk usage of your VMware vSphere hosts and VMs as well as datastores.
- Create and configure custom alerts triggered by various metrics for hosts, VMs, and datastores.
- Receive different types of reports about the monitored vSphere items in your infrastructure, delivered directly to your inbox.

Integration of Enterprise Storage Devices

NAKIVO's comprehensive approach allows you to create a versatile hybrid and multi-cloud backup storage strategy, seamlessly integrating onsite, cloud, and deduplication appliances and tape storage solutions. Here's what's new in the storage capabilities of NAKIVO Backup & Replication.

Immutable storage on NEC HYDRAstor

NAKIVO Backup & Replication supports NEC HYDRAstor as a backup storage destination among other deduplication appliances.

You can now enable immutability for backups residing on your NEC HYDRAstor storage system to protect them against ransomware attacks, accidental deletions, and other forms of unwanted modification.

Backup from storage snapshots

NAKIVO Backup & Replication seamlessly integrates enterprise storage devices from leading vendors for backups and replicas directly from storage snapshots.

You can back up and replicate VMware vSphere VMs hosted on HPE 3PAR, HPE Nimble, HPE Primera and HPE Alletra Storage appliances, in addition to NetApp FAS and NetApp AFF storage arrays, directly from storage snapshots instead of regular VM snapshots to save time and reduce infrastructure load.

Cloud storage

With the rise of hybrid cloud (mixing private and public cloud infrastructures), businesses may face new challenges when managing cloud costs.

Earlier versions of NAKIVO Backup & Replication supported cloud storage options, such as Amazon S3, Wasabi, Azure Blob and Backblaze B2, which offered secure storage for backup and recovery needs with an immutability option to protect backups against ransomware infections.

S3-compatible object storage

NAKIVO Backup & Replication has introduced support for S3-compatible object storage repositories for backups, providing users with an additional option for storing their backup data. It allows you to store backups in storage compatible with the S3 API and choose from a variety of cost-efficient platforms that fit your needs.

Additionally, backups stored in S3-compatible storage can be configured as immutable, providing protection against ransomware attacks and accidental deletion.

Direct VM recovery from tape storage

Although most businesses rely on disk-based or cloud-based backups, tape backups are still widely used for backup data archival and long-term storage. NAKIVO has long supported storing data backups on LTO tape libraries and standalone drives, as well as AWS Virtual Tape Library (VTL).

With the new direct VM recovery from tape feature, customers can perform fast recoveries without the need for a staging repository. They can recover full VMs, EC2 instances, and physical machines as VMware VMs directly from their backups stored on tape media to their infrastructure.

Databases

NAKIVO Backup & Replication has long supported Oracle Database backup and recovery via the native RMAN functionality.

Existing functionality supports backup via RMAN for Oracle Database on Windows. Our latest versions extended this support to include Oracle RMAN on Linux systems. Customers can protect their Oracle databases with an integrated, automated backup and recovery system on both Windows and Linux platforms – all from a unified console.

Core Solution Component Enhancements

NAKIVO is constantly working on enhancing the solution components and capabilities to simplify and optimize the data protection activities for our customers. Each of these improvements contributes to a more reliable and efficient data protection experience. The following section highlights key improvements in NAKIVO Backup & Replication:

Backup Encryption

The Backup Encryption feature enables you to encrypt backups at the source side before they are transmitted over the network to their storage destination. Encrypted backups can be stored in local folders, public cloud platforms, S3-compatible storage, SMB/NFS network shares, tape, and deduplication appliances. Encryption is supported for all environments and platforms supported by NAKIVO Backup & Replication. You can also encrypt self-backups that contain the data protection system configurations. A password is required to encrypt and decrypt the data, and the feature also supports integration with AWS KMS as a mechanism to ensure password loss protection.

Federated Repository

The Federated Repository is an easily scalable and flexible type of backup repository that addresses bottlenecks in performance and complexity in large environments with big datasets.

A Federated Repository acts like an expandable storage pool composed of multiple standalone repositories, called "members". You can expand a Federated Repository quickly and easily by adding new members to hold more data. No complex configurations are required to add or remove members – the process takes only a few clicks. In a Federated Repository, backup and recovery operations continue without interruption even if one of the member repositories fails or runs out of space, as long as another usable member is available.

Granular Notifications

Granular Notifications is an enhancement to workflow tracking capabilities, giving you greater visibility into running backup and replication jobs. While a job is running, NAKIVO Backup & Replication displays descriptions of ongoing actions, such as data transfer or log truncation. The status updates take place in real time to keep you informed as the job progresses.

OAuth 2.0 Secure Email Authentication

This enhancement adds built-in OAuth 2.0 support for secure, compliant email communications across modern mail platforms. With native integration for Google Gmail OAuth 2.0 and Microsoft 365 OAuth, NAKIVO eliminates the need for legacy SMTP basic authentication and aligns email notifications with current cloud security requirements.

Backup Malware Scan

Scan backups for malware and ransomware before recovery to prevent infections in your infrastructure. Integrate the solution with Windows Defender, ESET NOD32, and Sophos to perform a malware scan and ensure backups can be safely used for recovery. If malware is detected, choose to fail the recovery or recover to an isolated network.

File System Indexing

Create an index of all the files and folders within your VMware and Hyper-V VM backups and easily find a specific file or folder to save time during granular recoveries. To recover a file or folder, just use Global Search to find it in the index.

Universal Transporter

Use a single universal transporter to manage physical servers, virtual machines, tape devices, and Oracle Database via RMAN residing on the same host.

Debian support

Install the solution directly on Debian operating systems and/or protect your Debian OS-based physical machines. Create app-aware, incremental backups of physical machines running Debian 10.1 and up to Debian 11.6.

Simplified backup retention settings

Configure job schedules and retention settings in one step and in a single view. Specify retention settings for each schedule within a backup or replication job and set expiration dates for recovery points for more granular control.

Persistent Agent

Deploy a persistent agent on virtual machines for guest processing. Access your VMs without entering credentials to streamline administration and avoid security issues.

Job priority

Set the priority level in the queue for critical backup jobs to be processed first and ensure they are completed on time. Assign priority levels from 1 to 5, with one being the highest, to ensure that high-priority jobs get the necessary solution resources as soon as they become available.

Merge jobs

Merge data protection jobs of the same type into a single job to streamline backup management and spend less time on routine tasks. Keep your workflows uncluttered by aggregating backup, backup copy or replication jobs into one job.

Multilingual interface

In addition to English, the NAKIVO Backup & Replication web interface supports Spanish, French, German, Italian, Polish and Chinese.

You can navigate and manage the solution in your preferred language, including:

- Manage backup, backup copy, replication and recovery.
- Generate data protection reports.
- Configure settings and security controls.

Try all features

Get instant access to the complete feature set of NAKIVO Backup & Replication for 15 days with a single click, regardless of your solution edition.

Ready to get started?

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BOOK FREE DEMO

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