Veeam Backup for Nutanix AHV 3.0 Release Notes

This document provides last-minute information about Veeam Backup for Nutanix AHV 3.0, including system requirements, installation procedure, as well as relevant information on technical support, documentation, and online resources.

> **NOTE:**
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> This document includes release notes for all components of Veeam Backup for Nutanix AHV: AHV Backup Proxy, Nutanix AHV Plug-in, and some Veeam Backup & Replication features responsible for protecting Nutanix AHV VMs.

The release version of Veeam Backup for Nutanix AHV 3.0.755 is available for download at: www.veeam.com/availability-nutanix-ahv-download.html starting from October 7th, 2021.

See next:

- System Requirements
- What's New
- Known Issues
- Deploying AHV Backup Proxy
- Updating AHV Backup Proxy
- Licensing
- Technical Documentation References
- Technical Support
- Contacting Veeam Software

System Requirements

Platform

- Nutanix AOS versions from 5.5.X to 6.0.X
- CE 2019.11.22 or later for Community Edition

VM Virtual Hardware

Veeam Backup & Replication AHV Backup Proxy (AHV Backup Proxy) is an independent Linux-based VM running on the AHV cluster you want to protect.

Mind the hardware requirements for the AHV Backup Proxy VM:

CPU: x86-64 processors. 4 CPU cores plus 1 CPU core for each additional concurrent task (default concurrency level is 3 VMs at a time).

Memory: 4 GB of RAM plus 1 GB of RAM for each additional concurrent task.

Disk Space: 50 GB for product installation, AHV Backup Proxy internal database files, logs, and other data.

Veeam Backup & Replication and Nutanix AHV Plug-in

Veeam Backup for Nutanix AHV 3.0 consists of two components:

- AHV Backup Proxy 3.0.775
- Nutanix AHV Plug-in 11.0.3.819 that is installed on the Veeam Backup & Replication server

AHV Backup Proxy 3.0 supports integration with Nutanix AHV Plug-in 3.0 installed on the Veeam Backup & Replication 11 server.

AHV Backup Proxy 2.0 or 2.1 is compatible with Veeam Backup & Replication 11 build 11.0.1.1261. For instructions, see Upgrading to Version 3.0.

What's New in Version 3.0

Here is what's new in Veeam Backup for Nutanix AHV 3.0:

- Instant Recovery to Nutanix AHV feature. You can immediately restore virtual or physical machines into a Nutanix AHV cluster by running it directly from compressed and deduplicated backup files.
- You can launch the restore of AHV Backup Proxy configuration database from the web console.
- AHV Backup Proxy can restore VMs with enabled Secure Boot feature without additional user actions.
- An issue with applying retention policy, which occurred with certain schedule settings, is fixed for the hardened repository.
- In the Veeam Backup & Replication console, you can rescan backup jobs and configuration of AHV Backup Proxies.
- Appliance OS Updates:
  - Ubuntu was updated to 18.04 version.
  - NET Core was updated to 3.1 version.

Known Issues and Limitations

AHV Backup Proxy

Compatibility

- Internet Explorer is not supported by AHV Backup Proxy.

Networking

- The hostname of the Veeam Backup & Replication server and all server hostnames connected to it must be resolvable into IPv4 addresses. IPV6 is not supported by the AHV Backup Proxy VM.

- The AHV Backup Proxy VM is configured with a single network interface. The interface is used for management, backup and recovery operations. The interface needs network access to both AHV cluster IP addresses, and to Veeam Backup & Replication servers and repositories.

Configuration Backup and Restore

- You can restore configuration database only during initial setup of the AHV Backup Proxy. For details, see Restoring Configuration Settings.

- If you back up the configuration database of Veeam Backup & Replication, the configuration backup will not include AHV Backup Proxy job settings.

  If you restore the configuration database of Veeam Backup & Replication, you must remove existing AHV backup proxies from the Veeam Backup & Replication infrastructure and connect to them again. Otherwise, these AHV backup proxies will not be able to perform backup and restore operations due to missing authentication certificates.

Veeam Backup & Replication Repository

- Veeam Cloud Connect repositories are not supported as backup repositories for AHV Backup Proxy.

- [For scale-out backup repositories] Due to specifics of backup jobs for AHV VMs, Veeam Backup for Nutanix AHV always creates a separate backup chain for each VM added to a backup job. Thus, even if you unselect the Use per-VM backup files check box in the advanced settings of a scale-out backup repository, backups of multiple AHV VMs are not stored in a single backup file.

Nutanix AHV Clusters Added to AHV Backup Proxy Infrastructure

- You can add only one AHV Backup Proxy per Nutanix AHV cluster.

- Prism Central IP addresses cannot be used to define an AHV cluster in the AHV cluster settings of the AHV Backup Proxy.

- Nutanix CVM limitations:

  - Nutanix's CVM cannot be backed up by AHV Backup Proxy. It is controlled by Nutanix as cluster nodes are added to the cluster.

  - If you raise the number of concurrent backup tasks, backup jobs may fail due to CVM resource limitations. The CVM on each node of the cluster may need additional resources.

- AHV Backup Proxy does not require any additional settings for AHV VM High Availability. For details, see the Nutanix KB.

Import Operations

- Backups cannot be imported from unsupported repository types. This can affect importing from backup copy jobs.

Backup Jobs and Settings

Backup Jobs

- AHV Backup Proxy creates application-consistent backups when the source VM meets Nutanix requirements described in the Application-Consistent Snapshot Guidelines of the Prism Web Console Guide. If a VM does not meet these requirements, the AHV Backup Proxy will create a crash-consistent backup.

  You can also use Veeam Agent for Linux or Veeam Agent for Windows to create application-consistent backups.

- AHV Backup Proxy can create the forever forward incremental and forward incremental per-VM backup chains (one backup chain contains data for one VM). When you add several VMs to a backup job, AHV Backup Proxy creates individual backup chains on the Veeam backup repository, one for each VM processed by the job. Note that for forward incremental backup chains, you can create only active full backups. Synthetic full backups are not supported for AHV VM backups.

  Backup chain is forward incremental. For details on the backup method, see the Backup Methods section of the Veeam Backup & Replication User Guide.

- For backup jobs that include a protection domain with consistency groups that contain two or more entities, AHV Backup Proxy does not use Changed Block Tracking. This means that incremental backup jobs will take more time to process the VMs.

- Backup job compression, deduplication and block size settings cannot be changed. Built-in settings:

  - 1 MB block size;
  - LZ4 compression;
  - deduplication is enabled.

- You can configure encryption settings in the repository settings using the Veeam Backup & Replication console. For details, see the Access Permissions section of the Veeam Backup & Replication User Guide.

- GDPR locations cannot be set within AHV Backup Proxy backup jobs.

- Health check of backup files is not supported for backups created by AHV Backup Proxy.

- If a VM has an active backup chain and, at some point, the UUID of the VM is changed (for example, due to migration to another cluster), Veeam Backup for Nutanix AHV cannot continue the old backup chain for this VM. In this case, you can re-add this VM to the backup job and Veeam Backup for Nutanix AHV will create a new backup chain for the VM with a new UUID.

  Note that you can still use backups from the old backup chain for restore operations.

- Snapshot and PD snapshot jobs do not support instantly recovered VMs that have not completed migration to Nutanix cluster storage. These jobs will fail until all VM data has migrated back to the Nutanix cluster.
- A PD snapshot job fails if 2 or more VMs have the same name in one protection domain. The issue occurs because Nutanix REST API does not allow to manage VMs via UUID when restoring from PD snapshots. In the case of a PD backup job, it failovers to a regular backup job with a warning. That means that snapshots will be created separately for each VM.

Backing Up Protection Domains

- Only one protection domain can be added in backup job settings. If you need to protect multiple protection domains, create multiple backup jobs.

- Inactive protection domains are not visible in backup job settings.

Backing Up Volume Groups

- You cannot add a Volume Group to a backup job directly. To back up a volume group, you must back up a VM to which volume groups are attached.

- If you add a protection domain as source for a backup job, AHV Backup Proxy does not process individual volume groups added to the protection domain. To back up a volume group within a protection domain, you must back up a protection domain that includes VMs to which the required volume groups are attached. Also, a volume group and the VM to which the volume group is attached must be members of the same consistency group.

- If you back up VMs and attached VGs not as a part of a PD, AHV Backup Proxy creates snapshots for VMs and attached VGs not simultaneously. That may cause data inconsistency. For data-consistent backups of VGs, use PD backup jobs.

- AHV Backup Proxy does not process volume groups where CHAP authentication is enabled.

- If a volume group is attached to multiple VMs and you back up a protection domain that includes these VMs, volume groups may be backed up multiple times.

Restore in AHV Backup Proxy Web Console

- [For restore from user snapshots and PD snapshots] Network settings of the VM cannot be changed in the restore wizard. These parameters can be changed in the Prism Element or Prism Central console after the restore is complete.

- [For VM Disk Restore] If you restore a disk that was flagged as a boot device in AHV VM settings, flag of the disk will be dropped. You need to assign it again after the restore.

- Parallel restore of VMs is supported.

- If a VM added to the restore session contains multiple disks, AHV Backup Proxy restores these disks sequentially, one disk at a time. Note that VMs added to the restore session are processed in parallel.

- If a source VM has a set Affinity and during restore this host is not available on the cluster (or original VM was backed up from different cluster), you must set the affinity policy manually before starting the VM.

- AHV Backup Proxy can restore volume groups only as part of VMs to which the volume groups are attached. If you restore to original location, AHV Backup Proxy overwrites the original VM. If you restore to different location, AHV Backup Proxy creates a new volume group.

Restore in Veeam Backup & Replication Console

- If you restore from a backup of a VMware, Hyper-V VM or from a backup created by Veeam Agent, restored VM may have network connection problems. To solve the problem, you must install Nutanix Guest Tools on the restored VM.

- When you restore from backups of VMware vSphere and Microsoft Hyper-V VM backups created by Veeam Backup & Replication or Veeam Agents, the VM is restored with default hardware resources: 1 CPU core, 1 GB RAM. You can change default values in the settings of the restored VM.

- Within one restore session, VM disks are restored sequentially.

- When you restore VMware vSphere VM disks to an AHV VM, the disk order is not preserved.

- If you restore VMs where the Secure Boot feature is enabled, AHV Backup Proxy restores these VMs with disabled Secure Boot. You must enable the feature manually after the restore.

- [For restore from user snapshots] During the restore, VMs will be disconnected from the network. You can configure the connection manually. If you select to restore to different location and choose to disconnect from all networks, the new VM will be created without networks.

- If you want to restore a VM with different network settings from a backup created by Veeam Availability for Nutanix 1.0, the restore wizard in the Veeam Backup & Replication console does not show network adapter settings. For this case, perform the restore using the AHV Backup Proxy web console.

- When you restore from backups of VMware vSphere and Microsoft Hyper-V VMs or from backups created by Veeam Agents, all restored VM disks will be connected as SATA drives. You can change the default disk controller interface to SCSI, IDE, PCI. For instructions, see the Full VM Restore: Prerequisites section of the Veeam Backup for Nutanix AHV User Guide.

- [For archive tier] If you want to restore a VM to an AHV cluster, you must retrieve the required backup from the archive tier before starting the restore. For instructions, see Retrieving Backup Files.

- In the Veeam Backup & Replication console, you cannot stop the Restore to AHV session. To stop the restore session, you must cancel the restore in the AHV Backup Proxy web console.

Backup Files and Jobs in Veeam Backup & Replication Console

Backup files and jobs created by AHV Backup Proxy are visible in the Veeam Backup & Replication console. However, some of the Veeam Backup & Replication functionality is not available for these backups and jobs.

- In the Veeam Backup & Replication console, when you try to create or edit jobs of AHV Backup Proxy, you will be redirected to the AHV Backup Proxy web console, where you can perform these operations.

- In Veeam Backup & Replication console, you can:

    o   Disable scheduled AHV Backup Proxy jobs

    o   Use jobs of AHV Backup Proxy as a source for *backup copy* or *backup to tape* jobs

    o   Delete unused jobs of AHV Backup Proxy

    o   View statistics of jobs created by AHV Backup Proxy

    o   Start and stop jobs

    o   Launch the AHV Backup Proxy web console

VeeamZIP

- VeeamZIP retention is not supported.

- In the **Destination** section of the VeeamZIP wizard, if you select the **Local or shared folder** option and specify an SMB share that requires authentication, VeeamZIP process will fail. As a workaround, you can register the SMB share as a backup repository and then, in the VeeamZIP wizard, select the **Backup repository** option, where you will be able to select the added SMB share repository.

Data Recovery

- When you restore from backups of VMware vSphere and Microsoft Hyper-V VM backups created by Veeam Backup & Replication or Veeam Agents, the restored VM has default hardware resources: 1 CPU core, 1 GB RAM. You can change default values in the settings of the restored VM.

- If you want to perform FLR from VG disks, you should run FLR from backups of VMs that have the required VGs attached to them.

- You can perform instant recovery to VMware and Hyper-V hosts from backups created by AHV Backup Proxy. VMware vSphere or Hyper-V hosts must be added to the Veeam Backup & Replication infrastructure.

Instant Recovery

- We highly recommend to use a separate host for a mount server to free up the VBR server RAM and avoid SQL issues due to lack of RAM. Minimum 512 MB of RAM on a mount server is required per disk of published VMs. For example, if you restore a VM with 4 disks, you need additional 2 GB RAM.

- Instant Recovery to Nutanix AHV is not supported in Nutanix AOS versions earlier than 6.0 and in Community Edition.

- Nutanix AHV cluster must be added to the Veeam Backup & Replication backup infrastructure. AHV Backup Proxy is not required for Instant Recovery.

- Veeam Backup for Nutanix AHV requires 64 MB of RAM for a VM via Instant Restore. If you have a VM with less than 64 MB of RAM, this RAM will be increased to 64 MB during the restore process.

- Instant Recovery is not supported for file-level backups created by the Kasten platform, Veeam Agent for Linux, Veeam Agent for Microsoft Windows, Veeam Agent for Unix, Veeam Agent for Mac.

- Instant Recovery from tapes, Archive Tier, Cloud Connect to Nutanix AHV is not supported.

- You cannot perform Instant Recovery to Nutanix AHV from ObjectStorage (Imported) and ObjectStorage (VeeamZIP) nodes.

- ARM architecture VMs are not supported.

- All required drivers should be installed initially before the instant recovery process. You cannot add or modify drives in the VM during Instant Recovery launch.

- Instant Recovery is not supported for backups made in 1.0 version of Veeam Availability for Nutanix AHV. In this case, you can perform only entire VM restore.

Recovery Verification

SureBackup is not supported for backups created by AHV Backup Proxy.

Veeam One

Veeam ONE 11 supports monitoring, alerting and reporting features for VMs protected by AHV Backup Proxy. For the list of supported features, see the What's New document for Veeam ONE 11.

Veeam Backup Enterprise Manager

You can use Veeam Backup Enterprise Manager to restore guest OS files of AHV VMs and manage AHV VM backup copy jobs. All other operations are not supported.

Deploying Veeam Backup for Nutanix AHV

To deploy Veeam Backup for Nutanix AHV 3.0, perform the following.

1. Install Veeam Backup & Replication 11 and configure the backup repository that will be used as a target for VM backups.
2. Download the latest version of Nutanix AHV Plug-in at: www.veeam.com/availability-nutanix-ahv-download.html.
3. Install Nutanix AHV Plug-in.
4. Perform initial configuration for the cluster that you want to protect:
   a. Add Nutanix AHV cluster to the Veeam Backup & Replication infrastructure.
   b. Deploy AHV Backup Proxy on an AHV cluster that you want to protect.

For detailed instructions, see the Deployment section of the Veeam Backup for Nutanix AHV User Guide.

Upgrading Veeam Backup for Nutanix AHV from version 2.0 or 2.1 to 3.0

If you are using Veeam Backup & Replication 10 or 11 and you want to upgrade AHV Backup Proxy from version 2.0 or 2.1 to version 3.0, you can do it by upgrading Veeam Backup & Replication to version 11 build 11.0.1.1261. In this case, AHV Backup Proxy will be automatically upgraded to version 3.0.

To upgrade AHV Backup Proxy from version 2.0 or 2.1 to version 3.0, do the following:

1. Check the prerequisites and upgrade Veeam Backup & Replication to version 11 build 11.0.1.1261. For instructions on how to do it, see Upgrading to Veeam Backup & Replication 11 section of the Veeam Backup & Replication User Guide.
2. During the process of upgrading to Veeam Backup & Replication 11 build 11.0.1.1261, the wizard will automatically upgrade Nutanix AHV Plug-in to version 3.0.
3. Open the Veeam Backup & Replication console. The upgrade wizard will appear and prompt you to upgrade the product components. Follow the wizard to complete the upgrade process for AHV backup infrastructure components.

The AHV Backup Proxy VM must have access to the Internet to be able to download packages required for the upgrade. **The update process may take up to one hour.**

Upgrading Veeam Availability for Nutanix AHV 1.0 to Veeam Backup for Nutanix AHV 3.0

Veeam Backup for Nutanix AHV 3.0 is a new version of Veeam Availability for Nutanix AHV.

Before upgrading Veeam Availability for Nutanix AHV to Veeam Backup for Nutanix AHV 3.0, create a configuration backup for rollback in case of necessity. For that doing the following:

1. Click the gear icon on the main menu and select **Appliance Settings**.
2. At the **Summary** tab of the **Appliance Settings** section, click **Configuration Backup.**
3. Select both **Common** and **Events**, input password and click **Download**.

To update Veeam Availability for Nutanix AHV version 1.0 to AHV Backup Proxy 3.0, do the following:

1. Turn on the proxy appliance VM before you start the upgrade process.

2. Upgrade Veeam Backup & Replication to version 11 build 11.0.1.1261. For instructions, see the Upgrading to Veeam Backup & Replication 11 section of the Veeam Backup & Replication User Guide.

3. On the Veeam Backup & Replication 11 server, install Nutanix AHV Plug-in.

4. In the Veeam Backup & Replication console, add the AHV cluster to the Veeam Backup & Replication infrastructure.

5. In the Veeam Backup & Replication console, add AHV Backup Proxy. Note that in the **Deployment Mode** step of the **New Nutanix Proxy** wizard, you must select the **Connect proxy** option. With this option, you can register the existing proxy appliance of Veeam Availability for Nutanix AHV 1.0.

   In the **Virtual Machine** step of the wizard, you must specify the number of vCPU core, RAM size and the number of parallel tasks. Otherwise, the AHV Backup Proxy VM will have the default configuration: 4 concurrent tasks, 4 vCPU, 4 GB of RAM.

   After you connect to the AHV Backup Proxy, it will be automatically upgraded to version 3.0. All the configuration settings (appliance settings, jobs, events) will be automatically saved and transferred to the new AHV Backup Proxy.

Licensing

To use Veeam Backup for Nutanix AHV, you must have a valid Veeam Backup & Replication license. The licenses are installed and managed on the Veeam Backup & Replication instance connected to the AHV Backup Proxy server. If the license is not valid or out of resources, Veeam Backup for Nutanix AHV backup jobs will fail. Without a valid license, you can only create snapshots and restore VMs from backups or snapshots.

For more information, see www.veeam.com/eula.html and the Licensing section of the Veeam Backup for Nutanix AHV User Guide.

To obtain a license, please refer to www.veeam.com/buy-end-user.html.

To renew your maintenance plan, please contact Veeam customer support at: renewals@veeam.com.

Technical Documentation References

If you have any questions about the integration of Veeam Backup & Replication with Veeam Backup for Nutanix, you may use the following resources:

- Product web page: www.veeam.com/availability-nutanix-ahv.html

- User guides: www.veeam.com/documentation-guides-datasheets.html

- R&D forums: www.veeam.com/forums

Technical Support

We offer email and phone technical support for customers on maintenance and during the official evaluation period. For better experience, please provide the following when contacting our technical support:

- Version information for the product and all infrastructure components.

- Error message and/or accurate description of the problem you are having.

- Log files. To export log files:

    o Click the gear icon on the main menu and select **Appliance Settings**.

    o At the **Summary** tab of the **Appliance Settings** section, click **Support Bundle**.

    o Select a relevant set of log files and click **Download**.

To submit your support ticket or obtain additional information, please visit www.veeam.com/support.html.

TIP:

Before contacting technical support, consider searching for a resolution on Veeam community forums at www.veeam.com/forums.

Contacting Veeam Software

At Veeam Software we pay close attention to comments from our customers. It is important to us not only to quickly help you with your technical support issues — we make it our mission to listen to your input, and to build our products with your suggestions in mind.

Should you have a Customer Support issue or question, please feel free to contact us. We have qualified technical and customer support staff available 24 hours a day, 7 days a week, who will help you with any inquiry that you may have.

Customer Support

For the most up to date information about our support practices, business hours and contact details, please visit www.veeam.com/support.html. You can also use this page to submit a support ticket and download the support policy guide.

Company Contacts

For the most up to date information about company contacts and offices location, please visit www.veeam.com/contacts.