Veeam Agent for Linux 2.0.1 Release Notes

This **Release Notes** document provides last-minute information about Veeam Agent for Linux, including system requirements, installation and upgrade procedure, as well as relevant information on technical support, documentation, online resources and so on.

Veeam Agent for Linux 2.0.1 is available for installation from the Veeam software repository starting from July 3, 2018.

The Veeam software repository package is available for download at: https://www.veeam.com/downloads.html. Download the package and install it on the computer where you plan to install Veeam Agent for Linux. Then follow the instructions in the Installing Veeam Agent for Linux section to install the product.

See next:

- System Requirements

- Known Issues

- Installing Veeam Agent for Linux

- Updating Veeam Agent for Linux

- Uninstalling Veeam Agent for Linux

- Licensing

- Technical Documentation References

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System Requirements

Hardware

CPU: x86-64 processor (i386 or later).

Memory: 1 GB RAM.

Disk Space: 100 MB free disk space for product installation.

Network: 10 Mbps or faster network connection to a backup target.

System firmware: BIOS or UEFI.

For virtual machines: Only full virtualization type is supported.

OS

Linux kernel 2.6.32 or later* is supported.

Both 64-bit and 32-bit versions of the following distributions are supported:

- Debian 6 – 9.4
- Ubuntu 10.04 – 18.04
- CentOS / RHEL 6.0 – 7.5
- Oracle Linux 6 (starting from UEK R1) – Oracle Linux 7 (up to UEK R4 U7)
- Oracle Linux 6 – 7.5 (RHCK)
- Fedora 23 – 28
- openSUSE 11.3 – 13.2
- openSUSE Leap 42.2 – 42.3, Leap 15
- SLES 11 SP4 – 12 SP3
- SLES for SAP 11 SP4 – 12 SP3

* As long as you use kernels supplied by your distribution stable repository. Except for Fedora and Tumbleweed distributions: these are supported up to kernel **4.16**, inclusive.

File systems

Veeam Agent for Linux supports data backup and restore for the following file systems*:

- Ext 2/3/4
- F2FS
- FAT16
- FAT32
- HFS
- HFS+

- HFSP

- JFS

- NILFS2

- NTFS

- ReiserFS

- XFS

The supported file system can reside on a simple volume or LVM2 volume.

* Backup of machines used as cluster nodes is not supported.

Software

Protected computer must have the following components installed:

- dkms*

- gcc*

- make*

- perl*

- kernel-headers*

- kernel-devel*

- libudev

- libacl

- libattr

- lvm2

- libfuse

- dmidecode**

- efibootmgr (for UEFI-based systems)

- isolinux (for Debian-based systems)

- syslinux (for RedHat-based systems)

* Does not apply to CentOS, RHEL, SLES distributions. Check the Installing Veeam Agent for Linux section below for more details.

** Required for Veeam Agent management — a valid UUID must be obtainable either from `dmidecode | grep -i uuid` or from `/sys/class/dmi/id/product_uuid`. Each Veeam Agent that consumes a license installed in Veeam Backup & Replication must have a unique UUID. If a valid UUID cannot be obtained, Veeam will generate it automatically.

Backup Target

Backup can be performed to the following disk-based storage:

- Local (internal) storage of the protected computer (not recommended).

- Direct attached storage (DAS), such as USB, eSATA or Firewire external drives.

- Network Attached Storage (NAS) able to represent itself as SMB (CIFS) or NFS share.

- Veeam Backup & Replication 9.5 Update 3 or later backup repository (except DataDomain DDboost, HP StoreOnce).

- Veeam Cloud Connect 9.5 Update 3 or later repository.

Known Issues

General

User interface may appear unreadable in some terminal programs due to using incorrect symbols for pseudographics. To fix the issue, do the following:

- Kitty: select the **Allow ACS line drawing in UTF** check box.

Backup

- Volume-level backup job relies on a device name under the **/dev** directory and requires volumes to have their corresponding device names under the **/dev** directory staying persistent (e.g. **/dev/md-127**, **/dev/dm-1**). Otherwise the job will back up the wrong volume.

- Backup to CIFS is not supported for x86+PAE systems.

- Overall amount of file-level backup data is limited to 4.0 TB, including filesystem structures (such as inodes and blocks of pointers)

- Cloud Connect certificates are not verified neither against CRL, nor through OCSP.

- Files residing on the directories encrypted with **eCryptfs** cannot be selected for file-level backup.

- Data encrypted with **eCryptfs** stays encrypted inside a volume-level backup.

- Network shares (both CIFS and NFS) cannot be selected within backup mode, including file-level backup. Only block devices are supported.

- LVM physical volumes cannot be backed up, as well as RAID members. Only LVM/RAID logical volumes containing filesystems can be backed up.

- Disks partitioned with **cfdisk** version older than 2.25 are not supported.

- File level backup masks do not apply to directories.

- Backup job type cannot be switched between file and volume levels.

- Very high data change rate during backup may cause snapshot overflow. Should this happen, the job will attempt to retry processing up to 3 times with a larger snapshot.

Restore

- File-level restore cannot be performed on kernels versions 4.0.x-4.1.33 due to the bug in FUSE kernel module. To work around the issue, either upgrade the kernel, or perform file-level restore from the Recovery Media.

- File-level restore for files residing on eCryptfs directories does not mount eCryptfs filesystem automatically.

- Concurrent file-level restore sessions from different restore points are not supported because only one restore point can be mounted at a time. To perform a file-level restore from another restore point, unmount currently mounted one first.

- Restore of encrypted devices is not supported.

Veeam Backup & Replication Integration

- Encrypted backups cannot be imported to Veeam Agent for Linux directly.

- Fast clone is not supported for ReFS repositories.

Installing Veeam Agent for Linux

> **TIP**
>
> For information on auto-deployment please refer to the Veeam Agent Management Guide at:
> https://www.veeam.com/documentation-guides-datasheets.html.

To install Veeam Agent for Linux:

1. Download the latest version of the Veeam software repository installation package from the Veeam Download page at https://www.veeam.com/linux-backup-download.html to the computer where you want to install the product.

2. Browse to the directory with the downloaded **veeam-release** package and install the repository using one of the following commands depending on your Linux distribution:

Debian
Ubuntu
	`dpkg -i ./veeam-release*`
	
	`apt-get update`

CentOS
Fedora
Oracle Linux
RHEL
	`rpm -ivh ./veeam-release*`
	
	`yum check-update`

openSUSE
SLES
	`zypper in ./veeam-release*`
	
	`zypper refresh`

3. Install Veeam Agent for Linux:

Debian **Ubuntu**	`apt-get install veeam`
CentOS* **Fedora** **Oracle Linux** **RHEL***	`yum install veeam`

openSUSE	11.3-13.2, Tumbleweed:
	
	`zypper in veeam`
	
	Leap 42.2, 42.3:
	
	`zypper in veeamsnap-kmp-default`
	
	`zypper in veeam`
	
	Leap 15:
	
	`zypper in veeamsnap-kmp-default`
	
	`zypper in veeam`

SLES 11 SP4	Default kernel:
	
	`zypper in veeamsnap-kmp-default`
	
	`zypper in veeam`
	
	Trace kernel:
	
	`zypper in veeamsnap-kmp-trace`
	
	`zypper in veeam`
	
	Xen kernel:
	
	`zypper veeamsnap-kmp-xen`
	
	`zypper in veeam`
	
	PAE kernel:
	
	`veeamsnap-kmp-pae`
	
	`zypper in veeam`

SLES 12 SP0-SP3	Default kernel:
	
	`zypper in veeamsnap-kmp-default`
	
	`zypper in veeam`
	
	Xen kernel:
	
	`zypper in veeamsnap-kmp-xen`
	
	`zypper in veeam`

HINT

System will ask for your permission to perform tasks such as downloading required packages, importing GPG keys from the repository etc. You can append the abovementioned commands with the `-y` key to answer "yes" automatically, for example:

```
yum install veeam -y
```

* Prebuilt binaries require kernel >= 2.6.32-131.0.15 for **CentOS / RHEL 6** and kernel >= 3.10.0-123 for **CentOS / RHEL 7** to function. For other kernels please install the **veeamsnap** module using the source rpm package available at the repository.

The following dependency packages may require special handling in case you see installation errors:

- **dkms** package is not present in default repositories for some Linux distributions. You should obtain it from third-party repositories:

  Oracle Linux, Fedora: **EPEL** repository

  OpenSUSE: **Packman** repository

- Extended kernels such as **kernel-pae**, **kernel-uek**, and other require appropriate kernel-devel packages to be installed, for example:

Kernel	Required Package
kernel-uek	kernel-uek-devel
kernel-default	kernel-default-devel
kernel-pae	kernel-pae-devel

kernel-devel version must match your current kernel version. To check your current kernel version, run `uname -r`.

Oracle Linux: if **yum** package manager installs packages that do not match your current kernel version, you should either update your system or fetch older versions of the required packages from **Oracle** repository: http://yum.oracle.com/.

Updating Veeam Agent for Linux

> **WARNING**
>
> Make sure that there are no jobs running on the host before update!

To update Veeam Agent for Linux:

Debian
Ubuntu
	`apt-get update`
	
	`apt-get install –only-upgrade veeam`

CentOS*
RHEL*
	`yum update veeam`
	
	`rpm -e --nodeps dkms veeamsnap`
	
	`yum install kmod-veeamsnap*`
	
	or
	
	`yum install kmod-veeamsnap*`
	
	`yum update veeam`
	
	`rpm -e dkms veeamsnap`

Fedora Oracle Linux	`yum update veeam`

openSUSE*	11.3-13.2, Tumbleweed:
	
	`zypper update veeam`
	
	Leap 42.2:
	
	`zypper in veeamsnap-kmp-default-2.0.1.665_k4.4.27_2-2.1`
	
	`zypper in --force veeamsnap-kmp-default-2.0.1.665_k4.4.27_2-2.1`
	
	Leap 42.3:
	
	`zypper in veeamsnap-kmp-default-2.0.1.665_k4.4.76_1-2.1`
	
	`zypper in --force veeamsnap-kmp-default-2.0.1.665_k4.4.76_1-2.1`
	
	Leap 15:
	
	`zypper in veeamsnap-kmp-default-2.0.1.665_k4.12.14_lp150.11-lp150.2.1`
	
	`zypper in --force veeamsnap-kmp-default-2.0.1.665_k4.12.14_lp150.11-lp150.2.1`

SLES 11 SP4[*]	Default kernel:
	
	`zypper in veeamsnap-kmp-default`
	
	`zypper in --force veeamsnap-kmp-default`
	
	Xen kernel:
	
	`zypper in veeamsnap-kmp-xen`
	
	`zypper in --force veeamsnap-kmp-xen`
	
	Trace kernel:
	
	`zypper in veeamsnap-kmp-trace`
	
	`zypper in --force veeamsnap-kmp-trace`
	
	PAE kernel:
	
	`zypper in veeamsnap-kmp-pae`
	
	`zypper in --force veeamsnap-kmp-pae`

SLES 12 SP0-SP3[*]	1. Download and install the latest version of Veeam software repository installation package to the computer you are installing the agent to from https://www.veeam.com/linux-backup-download.html.
	2. Install Veeam Agent for Linux packages:
	
	Default kernel:
	
	`zypper in veeamsnap-kmp-default`
	
	`zypper in --force veeamsnap-kmp-default`
	
	Xen kernel:
	
	`zypper in veeamsnap-kmp-xen`
	
	`zypper in --force veeamsnap-kmp-xen`

* The `--force` key is required to properly replace the missing link to **.ko** in case of update from the **dkms** version of **veeamsnap** to a prebuilt binary. To stay on the **dkms** version run:

For CentOS, RHEL

`yum update veeamsnap && yum update veeam`

For SLES / openSUSE

`zypper update veeam`

Uninstalling Veeam Agent for Linux

To uninstall Veeam Agent for Linux:

Debian Ubuntu	`apt-get remove veeam veeamsnap`
CentOS Fedora Oracle Linux RHEL	`yum remove veeam veeamsnap`
openSUSE SLES	`zypper rm veeam veeamsnap`

Licensing

By installing Veeam Agent for Linux, you agree to the Veeam End User License Agreement (EULA). To view the license agreement, click the Veeam End User License Agreement link in the setup program, or visit the following link: https://www.veeam.com/eula.html.

Veeam Agent for Linux comes in different editions. You do not need to obtain or install a license to use the free edition.

Paid editions of Veeam Agent for Linux are licensed per protected computer ("Computer"). The paid license includes a one-year maintenance plan. To renew your license, please contact Veeam customer support at: renewals@veeam.com.

Technical Documentation References

To view the product help, type in your terminal:

```
man veeamconfig
```

If you have any questions about Veeam Agent for Linux, you may use the following resources:

- **Product web page**: https://go.veeam.com/linux
- **User guide**: https://helpcenter.veeam.com/docs/agentforlinux/userguide/
- **Community forums**: https://forums.veeam.com/veeam-agent-for-linux-f41

Technical Support

We offer email and phone technical support for customers with current subscriptions, as well as 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 description of the problem you are having.
- Log files. To export the log files, open Veeam Agent for Linux user interface, press **M**, select **Export Logs**, and choose a directory to export logs to.

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

> **HINT**
>
> Before contacting technical support, consider searching for a resolution on Veeam community forums at https://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 https://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 https://www.veeam.com/contacts.