



# Red Hat Virtualization Backup and Recovery

Red Hat Virtualization (RHV) is a KVM-based virtualization platform. RHV provides an enterprise-class virtualization with a complete set of tools for more complex services, such as cloud or containers.

Storware Backup and Recovery is a Red Hat certified solution and provides feature-rich backup and recovery solutions for RHV virtual machines. Use Storware to improve RHV backup performance, automate recovery tests, and significantly save your resources, time and money.

## **Support for RHV 4+ Environments**

### **Benefits**



HTML 5 Web Console – with an intuitive and modern UI, you can quickly set up protection and store backups in several different backup providers. Manage and monitor backup processes from a single pane of glass.



**Easy Configuration** – configuration Wizard makes the launch and setup of Storware fast and easy. Start to protect your VMs within minutes!



**Transparent Licensing** – the easiest licensing without hidden costs: per VM, per Host, per TB, and 24/7 support team at your disposal.



Set and Forget Automation

– automate VM protection with
custom or predefined backup policies.
Test backup automatically to ensure
recoverability – use Disaster Recovery
Plans to verify that your backed-up VM
is bootable and was not damaged
before the backup was performed.





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## Freedom of choice



Storware supports file systems (including synthetic option), object storage, and enterprise-grade backup from IBM, Dell, Veritas, and Micro Focus. We also have a dedicated plugin for the RHV console so that you don't need to switch between

## **Easy Integration**

consoles to run backup jobs.



deployment of Storware doesn't need expert skills - in the simplest scenario, you need to provide credentials in the UI to your RHV manager, and that's it. And notice that "integration" with the RHV manager console is another aspect that some administrators may appreciate. It's been several years since Storware delivered its first integration, and it successfully kept up with all of the changes in RHV environments over these years.

## Multiple backup strategies



Most of our competitors provide one approach, and in Storware, you can select one of five available strategies depending on your needs. Storware uses official Red Hat backup process guidelines when protecting the RHV environment, so you don't need to install agents on the hypervisors. What's more, there's no need to modify RHV to enable CBT backups.

### **Instant Restore**



Instant restore capability with a live storage migration option and networking customization in recovery plans. One of the features that will be implemented in future releases is the health check option for recovered VMs.





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#### **Features**

- incremental backup
- file-level restore
- VM disk exclusion
- snapshot management
- quiesced snapshot
- pre/post snapshot command execution
- backup disks sharable over iSCSI
- name-based policy assignment
- tag-based policy assignment
- available space for snapshot check
- power-on VM after restore

## **Summary**

Storware provides an enterprise-grade agentless backup and recovery solution for Red Hat Virtualization. You can quickly enable backups for multiple virtual machines running in your RHV environment. Strictly speaking, VMs running in RHV have standard storage (using LVM-based or QCOW2-based disks), which may reside on some disk array or Gluster. We don't support Ceph in the RHV context. However, from the Red Hat portfolio, we also have support for Red Hat OpenStack and OpenShift, primarily when these use Red Hat Ceph.

#### Switch to First Class Backup and Speed Up!







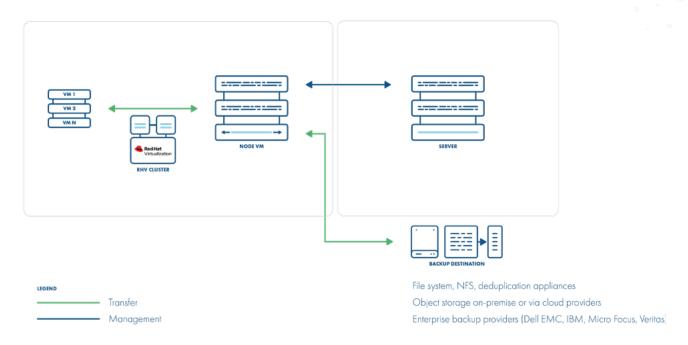
Red Hat Virtualization environments can be protected in several ways. For RHV 4+ environments you can use API v4 for invoking all backup-related tasks.

Import/export mode defines the way the backups and restores are done. Red Hat Virtualization (with API v4) supports 4 modes, plus export storage domain with API v3 (however, this strategy is going to be deprecated, as Red Hat may no longer support it in future releases.)

### 1. Disk attachment,

which exports VM metadata (in OVF format) with separate disk files (in RAW format) via the Proxy VM with the Node installed.

- supports RHV 4.0+
- no incremental backup
- proxy VM required in each cluster used for the disk attachment process



Disk attachment with Proxy VM



www.storware.eu

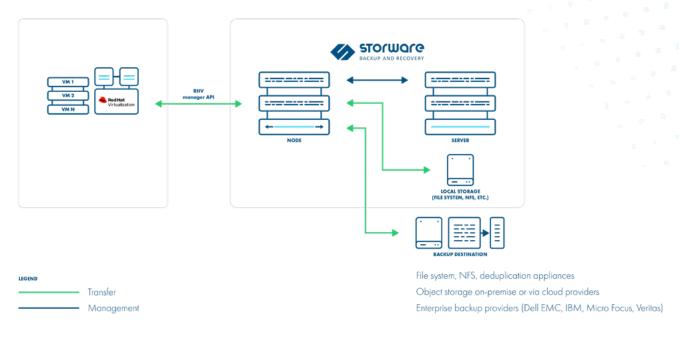




## 2. Disk image transfer,

which exports VM metadata (in OVF format) with disk snapshot chains as separate files (QCOW2 format):

- supports RHV 4.2+/oVirt 4.2.3+
- supports incremental backup
- disk images are transferred directly from API (no Proxy VM required)



Disk image transfer API

#### Switch to First Class Backup and Speed Up!

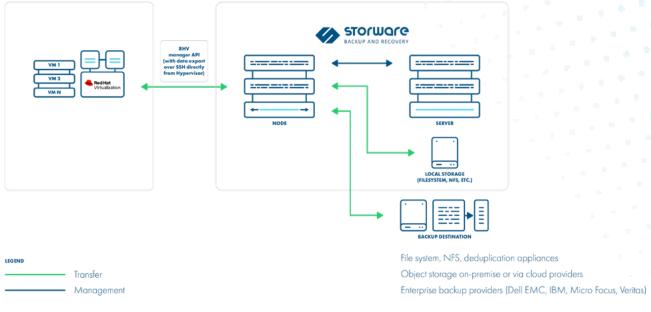






## 3. SSH Transfer,

this method assumes that all data transfers are directly from the hypervisor - over SSH



SSH transfer

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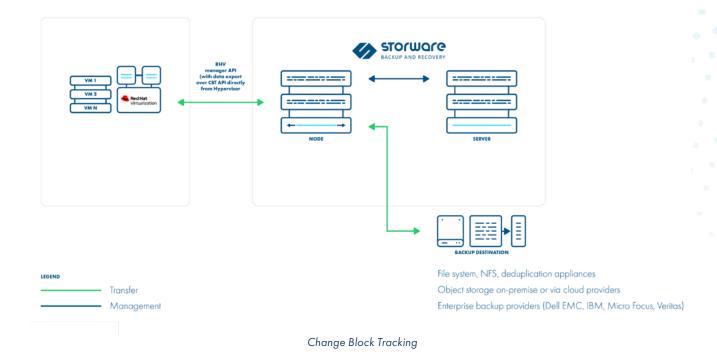




## 4. Change Block Tracking,

this method backup only blocks with changes and skip zeroed sectors.

• supports oVirt 4.4+ (with Libvirt 6+, qemu-kvm 4.2+ and vdsm 4.40+)



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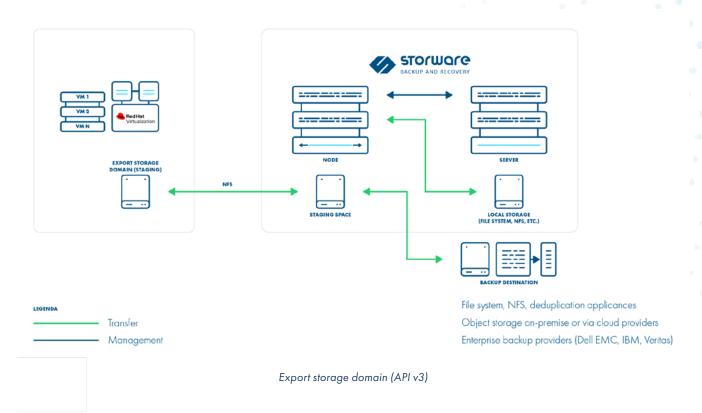






## 5. Export Storage Domain

supports RHV 3.5.1+ environments (using API v3)



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