

# TrilioVault for OpenStack Cloud

ENTERPRISE-GRADE HYBRID CLOUD DATA PROTECTION

TrilioVault is the only OpenStack-native data backup and recovery solution that gives tenants and administrators the ability to **restore entire workloads in one click.**

TrilioVault is the only OpenStack-native data backup and recovery solution that gives projects and administrators the ability to restore entire workloads in one click.

TrilioVault's agentless, software-only solution provides tenant- or project-level self-service protection and recovery of entire workloads. Foundationally architected for the cloud, TrilioVault is forever scalable with zero performance degradation.

Software like TrilioVault helps OpenStack users protect their clouds and efficiently create, store and manage point-in-time backups while providing fast recovery times when required — a crucial element in the data protection continuum.

Plus, TrilioVault is agentless and non-disruptive by design, both during deployment and operation. You can even integrate it with your existing cloud lifecycle management to automate deployment as TrilioVault integrates natively into Openstack deployment tools like Red Hat Director, Juju or Ansible.

## TRILIOVAULT FOR OPENSTACK FEATURES

### With TrilioVault You Can ...



#### Agentless

A TrilioVault data mover runs behind the scenes as part of the NOVA compute node



#### OpenStack Inetegrated

Fully integrates with all key OpenStack technologies



#### Self-Service

Tenants can backup & restore their workloads via Red Hat or Canonical interface



#### Multi-Tenant

Role-based access for secured zones within your cloud.



#### Scalable

Linear scale with zero degradation



#### Non-Disruptive

Snapshot capture of entire workloads including VMs

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## THE ONLY CLOUD-NATIVE DATA PROTECTION SOLUTION FOR OPENSTACK



### Native Integration

Capture incremental changes to the blocks in your workloads

- Native APIs
- Distribution-native orchestration tools
- Captures entire workloads
- Incremental forever/synthetic full images
- Application-aware
- Agentless
- Integrates with cloud lifecycle management
- Linear, infinite scale

### Self-Service

Recover your entire environment or individual VMs

- Full multi-tenant backup
- Policy-based global job scheduling
- Mounts workloads
- One-click workload restore
- Copy to new location / availability zone
- File and folder recovery
- Migrate to a new cloud

### Enterprise Features

Recover your entire environment or individual VMs

- Policy-based global job scheduling
- Tenant- or project-driven
- Keystone & trustee role authorization
- Integrates into Horizon
- Backup to NFS, or S3 compatible storage (Ceph S3)
- Supports all Cinder storage
- Reports on usage and consumption
- Full audit logging
- Service monitoring

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## TRILIOVAULT FOR OPENSTACK CLOUD

### WHAT TRILIOVAULT CAPTURES

- Whole Disk on Block Level
- Complete Network Topology
- Storage Volumes
- Security Groups and Keys
- VMs (Single and Multiple)
- VM Metadata
- Discs & Storage Volumes
- Networks

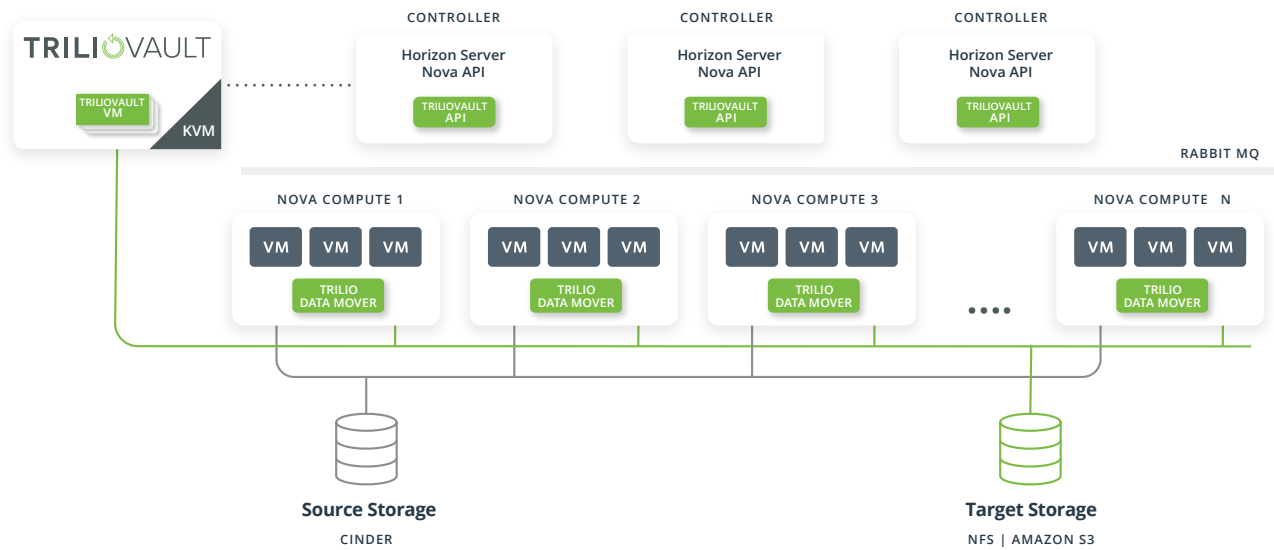
### HOW YOU CAN RESTORE

- Operational Recovery (performed on the fly)
- Disaster Recovery
- Test/Dev
- New Availability Zone
- New Clouds
- Files/Folder-Level Restore

### WHO CAN RECOVER

- Cloud Administrators
- Backup Administrators
- Tenants / Project User

## HOW IT WORKS



## USE CASES



### BACKUP & RECOVERY

Application-centric backup and recovery of data and meta data with point-in-time capture of incremental change blocks of the workload via a data mover.



### DISASTER RECOVERY

To handle planned or unplanned disasters, TrilioVault enables easy restoration of entire workloads that reflect the clouds last best-known state.



### MIGRATION

A tenant or administrator can capture an application and its data and non-disruptively migrate that exact point-in-time to another OpenStack cloud. The need to migrate OpenStack workloads can be driven by economics, security or test/dev.



### NETWORK FUNCTIONS VIRTUALIZATION (NFV)

Business critical services like NFV can quickly be configured to any state, assuring optimal quality of service. TrilioVault provides recovery from data damage and allows restoration of entire VNFs, selected VNFs, or individual data items using a point-in-time working copy. The platform also allows recovery from a disaster by restoring the OpenStack network topology and populating it with a working copy of the entire NFV.

## COMPATIBILITY

### OPENSTACK DISTRIBUTION



Kolla

TripleO

### DEPLOYMENT TOOLING



Red Hat Director

Heat

### STORAGE TARGETS

NFS

S3 Compatible

### OPERATING SYSTEM



ubuntu<sup>®</sup>



## TRY IT NOW

Experience TrilioVault for yourself by visiting [www.trilio.io](http://www.trilio.io) today!

## About Trilio

Trilio is trusted by global cloud operators to deliver data protection, infrastructure migration and version management. Our TrilioVault technology supports Kubernetes containers like OpenShift, OpenStack hybrid clouds and Red Hat Virtualization environments to recover from disasters, migrate workloads, move workloads to new infrastructures and migrate to new software distributions.

[WWW.TRILIO.IO](http://WWW.TRILIO.IO)



Contact Us for a Demo\*

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