

Data backup, disaster recovery & migration powered by OpenStack

<https://www.host-telecom.com/blog/data-backup-disaster-recovery-migration-powered-openstack/>

This is an introduction of Host-Telecom to the OpenStack community. Not salesy.

(Executive comms by Denise Boehm for Host-Telecom CEO Pavel Chernobrov)

October 25, 2017 by Pavel Chernobrov

At [Host-Telecom](#) we run [OpenStack](#) cloud on bare metal in our data centers so users can take advantage of the flexibility, power, and stability of an open source platform for scalable growth without the financial burden of software licensing fees inherent to commercial software platforms.

With partner [Hystax](#), we also create OpenStack-based [data backup](#) and [disaster recovery](#) services in case of data compromise or infrastructure failure. In addition to providing replication and system failover, the technology behind these services establishes a rapid, secure path to OpenStack migration from VMware. Let's look at the details.

Data backup and disaster recovery based on OpenStack

The software behind our data backup and disaster recovery services installs an agent on the client side that converts data and infrastructure architectures, including VMware vSphere, HyperV, and Virtuozzo platforms, to run on bare metal OpenStack. In case of data compromise or infrastructure failure, the system immediately and seamlessly begins to run on bare metal OpenStack. Now for more on data backup.

Data backup

To initiate data backup, the user installs our service agent on the host of the virtual machines that require data replication. When the agent, which is a virtual machine running Linux, launches, it explores all the virtual machines in the client's environment. The service interface displays IP addresses, time of last replication, volume size, and

other information within a few minutes. Users can schedule data information updates as often as every thirty seconds to once a week or more.

When collection is complete, replication begins with data modified to run in OpenStack. Transfer time to our bare metal OpenStack environment depends on the original servers' data volume and channel capacity. The average process time is about half an hour, and users can schedule incremental replication to suit their needs. If data is lost, corrupted, or locked down by evil malware, it's immediately available running on bare metal OpenStack in our data center. The technology employed for data backup bleeds over to disaster recovery, which we now address.

Disaster Recovery

Disaster recovery uses the same OpenStack-based agent software as data backup to track data infrastructure architecture and changes, including network mapping, configuration settings, connections, and application interdependencies. In addition to replicating data, the agent transmits system snapshots to storage at specific intervals or continuously, depending on user requirements. All are modified to run in a bare metal OpenStack environment. If infrastructure fails, users start running seamlessly in OpenStack, though it looks and acts like their original infrastructure. Which brings us at last to OpenStack migration.

Moving to OpenStack for real

With Host-Telecom's data backup and disaster recovery services, users are already running on OpenStack under the covers. The same agent that enables those services also provides a fast and easy migration to OpenStack cloud. VMware to OpenStack migration is already available, with paths from other platforms in the works.

Freed from the considerable expense of paying software license fees for commercial platforms, businesses can grow organically without shelling out a ton of money when they need to scale. When they migrate to OpenStack, users are also able to implement a broad range of open source solutions that are flexible and powerful enough to meet business needs without being tied to a single service provider.

Let's talk more in Sydney

We would love to share more details about our plans to extend the OpenStack user base, including the technology behind our services, and why OpenStack makes the

most sense for anyone who wants flexibility, power, and affordable solutions. Please contact our OpenStack community manager [Denise Boehm](#) for more information in the meantime. Looking forward to seeing you in Sydney!

BY

Pavel Chernobrov

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