

Workload Migration, Disaster Recovery, and Hybrid Cloud with VSKyMotion



Mobilize and Protect Your Applications in a Hybrid Cloud Style

VSKyMotion is platform software that runs on top of the Promise hyper-converged system VSKyCube. VSKyMotion enables the capability of VSKyCube cloud infrastructure to achieve maximum cloud agility on either an on-premise or a hybrid cloud environment. Specifically, VSKyMotion provides the following major functions for VSKyCube hyper-converged infrastructure.

Workload Migration

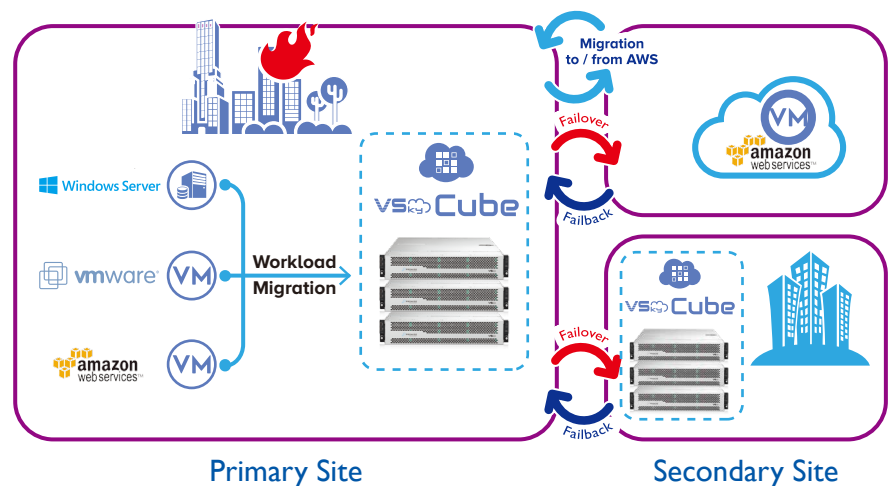
- P2V – Migrate physical Window or Linux workloads to VSKyCube
- V2V – Migrate virtual Window or Linux workloads from VMware vSphere or Amazon AWS to VSKyCube

Disaster Recovery

- VSKyMotion enables VSKyCube as a DR site for either physical Window primary site or VMware vSphere primary site operations
- VSKyMotion enables VSKyCube as a primary site operation with another VSKyCube as a DR site or Amazon AWS public cloud as a DR site

Hybrid Cloud

- VSKyCube allows for VSKyCube workloads to extend to AWS public cloud infrastructure for cloud bursting



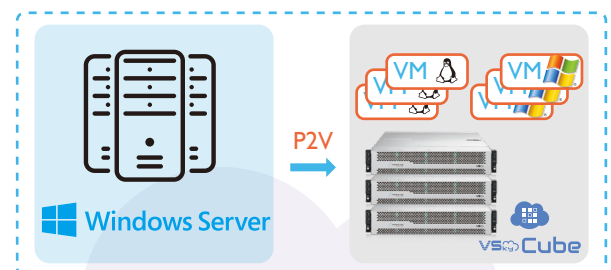
Use Cases and Benefits

Migrate from your physical infrastructure to VSKyCube based Hyper-Converged infrastructure

Running IT on virtualized infrastructures has become popular in last several years for enterprise. However, there are still a significant number of small to medium businesses still running on physical infrastructures, mostly on Microsoft Window environment.

Running on physical infrastructures for SMB not only burden them with high IT cost, but putting them on the losing end of competition landscape as they don't take advantages of agility, elasticity, and flexibility of IT infrastructure offered by existing virtualized infrastructure.

Hyper-Converged infrastructure such as VSKyCube advances beyond existing virtualization infrastructure in terms of technologies to offer additional benefits. However, migrating these servers and applications from physical environment to the new environment could be painful and error-prone in the process. VSKyMotion makes it easy and pain-free by automating the migration process in a greatly shorten time frame.

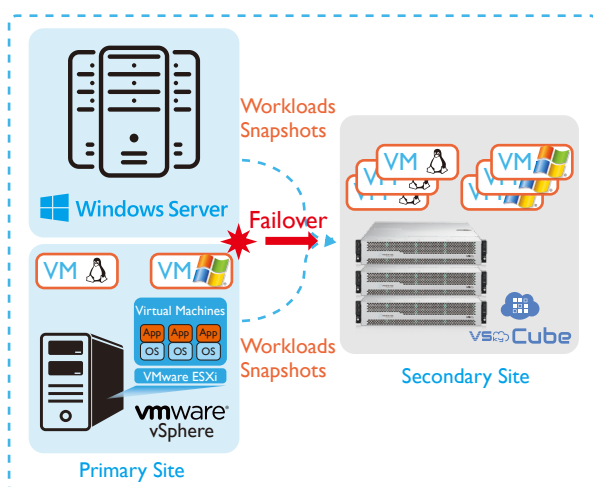
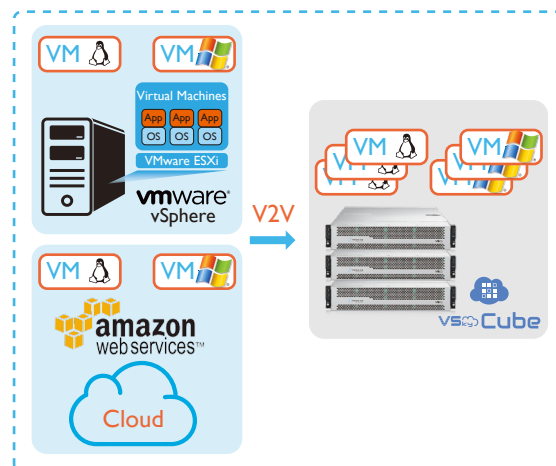


Migrate from your existing virtualized infrastructures to VSKyCube based hyper-converged infrastructure

If you are already running your IT infrastructure on a virtualized infrastructure such as VMware vSphere, the next step for you may be one based on Hyper-Converged Infrastructure such as VSKyCube to take advantage of its cost effectiveness, ease of management and operation.

Again, deploying VSKyMotion on a VSKyCube hyper-converged infrastructure greatly eases the migration process. VSKyMotion currently supports migration from a VMware vSphere environment to a VSKyCube environment.

There is a case that a business may start with a public cloud infrastructure like AWS but over time prefer moving back to an on-premise infrastructure for cost and/or security reasons. VSKyMotion can be deployed to facilitate the easy migration from AWS to VSKyCube.



Enable VSKyCube based Hyper-Converged infrastructure as a Backup or DR site for your primary operational site

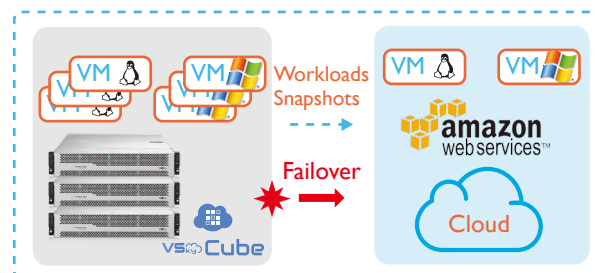
If your existing infrastructure is either a physical Window environment or a virtualized environment based on vSphere without a backup site, either for DR purposes or just a stand-by site, then deploying a VSKyCube based hyper-converged infrastructure with VSKyMotion as a backup site would be a perfect fit.

VSKyMotion continuously takes snapshots of selected workloads from the servers on the primary site, including applications image and associated data, and transfers the delta portion of the workload snapshots over to the stand-by VSKyCube cluster. When the primary site is shut down for either planned maintenance or an unexpected break-down, VSKyCube cluster can be recovered in a very short time frame and take over all the work originally shouldered on the primary site.

Enable VSKyCube based hyper-converged infrastructure to extend your IT infrastructure to public AWS cloud infrastructure

When VSKyCube hyper-converged infrastructure is used as a primary operational site, VSKyMotion enables the extension of your IT infrastructure to public cloud such as AWS, either for DR purpose or bursting to cloud.

When deploying AWS as a backup site to primary VSKyCube site for DR purpose, setting up AWS infrastructure with VSKyMotion properly deployed is required. Once the AWS infrastructure is set up and VSKyMotion is deployed properly, VSKyMotion continuously takes snapshots of the selected workloads on primary VSKyCube site and transfer those to the AWS infrastructure. Recovery of AWS infrastructure can be easily done when the VSKyCube primary site becomes in-operable.



Origin			Destination Environment	
Source Environment			AWS VM	VSKyCube VM
	Physical Window	Windows Server 2003, 2008 R2, 2012	N/A	Migration/ DR
	Physical Linux	Centos 5,6,7 Ubuntu 12.04 LTS, 14.04 LTS	N/A	Migration
	vSphere VM	vSphere 5, 6	N/A	Migration/ DR
	AWS VM	N/A	N/A	Migration
	VSKyCube VM	VSKyCube 1.0	Migration/ DR	DR

Summary of Supported Function and Use Cases

The following table summarizes the supported use cases and specific workloads.

