OPENNEBULA AND VMWARE

Self-Service Cloud Management on VMware vCenter

Unified Cloud Experience across Distributed vCenter Instances

As companies grow, gather more data, and create new workloads, but keep a hard focus on security and privacy, they are pushing beyond making decisions between whether "public" or "private" clouds are best for their enterprises, as it's becoming clear that you can have the "best of both worlds". For customers who have invested in an established, on-premises vSphere infrastructure, the burning questions are now:

- How do I effectively turn my vSphere environment into a private cloud?
- How can I best manage multiple data centers?
- What's the best way to exploit the benefits of established public cloud offerings and seamlessly integrate them with my private, on-premises cloud?

Why OpenNebula + VMware Cloud on AWS is the Right Choice

VMware Cloud on AWS enables customers to run, manage and secure applications in a production-ready, simple and consistent hybrid IT environment. The service enables organizations to continue using existing VMware tools to manage VMware Cloud on AWS environments without having to purchase custom hardware, rewrite applications, or modify their operating models. With access to the broad range of AWS services, and the functionality, elasticity, and security customers have come to expect from the AWS Cloud, the service lays the foundation to run, manage and secure production applications across vSphere®-based private, public and hybrid cloud environments with native access to innovative AWS services.

OpenNebula is an open source enterprise solution to manage data center virtualization and to build private cloud infrastructures. OpenNebula provides a multi-tenant, cloud-like provisioning layer on top of virtual infrastructures, including already existing infrastructure management solutions (like VMware vCenter). It delivers provisioning, elasticity and multi-tenancy cloud features including virtual data center provisioning, data center federation and hybrid cloud computing to connect in-house infrastructures with public cloud resources. With a single OpenNebula instance, one can manage distributed collections of vCenter instances across multiple data centers. And with the validation of OpenNebula on VMware Cloud on AWS, one can grow his or her on-premises infrastructure on-demand with remote vSphere-based cloud resources running on VMware Cloud on AWS, just as one could do with local VMware infrastructure resources. All this, in a matter of minutes.

VMware Cloud on AWS Key Benefits

- Unified and operationally consistent hybrid cloud experience across vSphere-based private clouds and VMware Cloud on AWS
- Workload portability and flexible consumption options with single support owner and attractive TCO
- Familiar management tools eliminate the need to retrain staff (vCenter, vSphere API, PowerCLI and modern HTML5-based vSphere Client)

Bringing together best-of-breed technologies and capabilities that create a seamless and flexible hybrid cloud future for customers, VMware and AWS enable services that easily grow and evolve as enterprise needs change. Whether expanding services on-premises or in the public cloud, the VMware Cloud on AWS eliminates the need to make changes to operating models or architectures. The result is the most flexible approach to evolving enterprise cloud strategies to keep pace with digital transformation. driving business environments.

vmware®

PARTNER SOLUTION BENEFITS

Simple and Flexible
A lightweight, infrastructure-agnostic, enterprise solution providing a "one-stop shop" for complete infrastructure management and cloud interoperability and portability.

Cost-effective
A proven open source solution with commercial support subscriptions to meet the needs of organizations of all sizes.

Self-service
A simple, one-click provisioning and management portal, with a pre-loaded set of configurations. Offers insight into usage information, and a complete set of functionalities for Admins and Users alike.

Federation
Centralized multi-tenancy, while allowing easy, effective management of federated data center architecture.

Hybrid
Native integration with VMware Cloud on AWS resources to expand existing private cloud on-demand, as well as to augment cloud resources in close proximity of users.

LEARN MORE

Find out more about OpenNebula and the value that it can provide to your VMware Cloud on AWS infrastructure.

https://opennebula.org
https://opennebula.systems
http://vonecloud.today/#ready

- VMware-delivered service creates zero lifecycle management while enabling customers to retain control of application management and operation
- Lays the foundation for integration of 3rd party tools from leading ecosystem partner

OpenNebula Solution Overview

Under the Hood

OpenNebula uses the vCenter API to deliver a private cloud layer which orchestrates the storage, network, and virtualization resources offered by VMware Cloud on AWS. It seamlessly integrates with existing vCenter infrastructures to leverage advanced features - such as vMotion, HA or DRS scheduling - provided by the VMware vSphere product family. And all of these capabilities - from the management of multiple VM's, and service elasticity and provisioning, to Virtual Data Center multi-tenancy and Cloud brokering capabilities - are managed and controlled from a single, simple GUI that sits perfectly over VMware vCenter drivers.

What does OpenNebula offer VMware users?

OpenNebula provides a simple, lightweight orchestration layer that broadly expands the management capabilities of one's VMware infrastructure. Firstly, it can take one's collection of VMware vCenter servers and provide a multi-tenant cloud, with elastic provisioning capabilities. For those having multiple data centers, it provides a cohesive platform for managing them independently, while sharing centralized cloud management components. And lastly, with VMware Cloud on AWS it provides a transparent interface to grow one's on-premise infrastructure on-demand with new vSphere-based cloud resources running on VMware Cloud on AWS, just as it does with local VMware infrastructure.
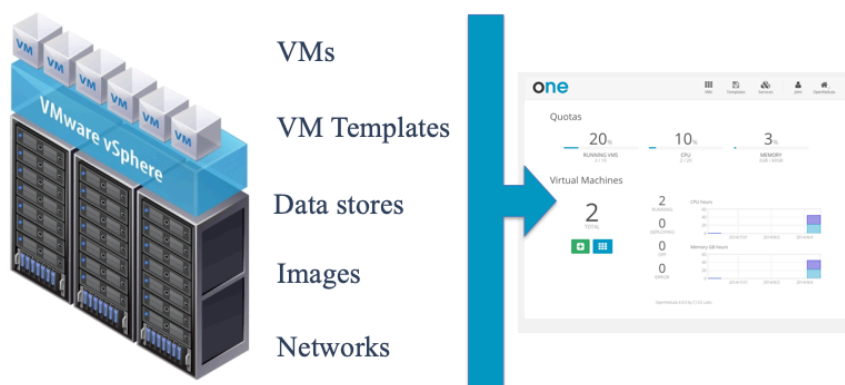

Figure 1: Convert your VMware infrastructure into an easily-managed, private or hybrid cl