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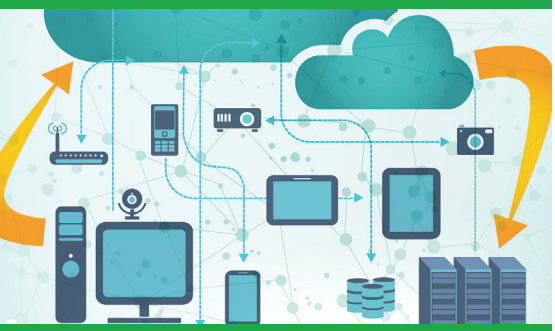

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Top 5 Tips When Considering VMware Integrated OpenStack

Turning the promise of cloud into positive IT outcomes

VMware Integrated OpenStack (VIO), is a new, VMware-supported full distribution of OpenStack running on VMware infrastructure. It lets VMware administrators quickly and easily deliver and operate a highly-resilient, enterprise-grade OpenStack cloud on VMware SDDC components such as VMware vSphere, NSX, and Virtual SAN, and embraces key VMware features and capabilities such as HA, DRS, vMotion, and micro segmentation. VIO also includes custom integrations with VMware vRealize management tools such as vRealize Operations, vRealize Log Insight, and vRealize Business, providing complete visibility to your entire OpenStack infrastructure and its open source components, enabling the seamless operation of highly complex open source cloud environments.

If you are considering adopting an open cloud framework or upgrading your existing solution, here are 5 key points that will help you decide whether to do it with VMware Integrated OpenStack.

#1. Consider where you are in adopting DevOps

OpenStack was created for organizations that have made, or are planning to make, a complete switch to a DevOps approach to agile application deployment and management of their applications. If that's where you are, VIO offers a flexible, reliable, and yet streamlined route to get you where you're going.

That kind of commitment, however, isn't always feasible or even desirable. Your DevOps team might, for example, want to control deployment of new applications through the development lifecycle via the standard OpenStack API. In situations like this, VIO offers you the tools to take a full, open source DevOps approach on your own terms. And certainly, VIO also offers a great way to try out OpenStack safely and easily, and to confirm whether your current environment will support OpenStack workloads.

#2. Know your tolerance for complexity

OpenStack is an attractively flexible solution, but it takes time, investment, skill, and experience to build a truly stable OpenStack environment. You also have to pick a reliable architecture for your OpenStack components, you need to be clear on which is most compatible with your hardware environment, and you need to decide what hypervisor and 3rd party management software to use. If you don't have the time to tease out what would be best for you, VIO is an ideal choice. Working with VIO can:

- Reduce the time it takes to plan and design your solution
- Speed deployment compared to other distributions
- Let you integrate VMware products, from management to monitoring and cost management
- Provide an out-of-the-box IAAS enterprise solution

#3. Understand the value of an open source technology partner

Concerns about reliability are a major impediment to widespread adoption of open source solutions. Working with a trusted partner, and using technology that partner has tested and qualified, can go a long way to mitigate that concern. With VIO, you can leverage an open cloud framework while retaining enterprise-class reliability, both over time and through the entire system stack. In VIO, VMware offers a simple, prescriptive, and validated architecture that:

- Comes with VMware's enterprise-grade service and support
- Supports the hypervisor, drivers, and infrastructure layer underlying OpenStack
- Can be easily migrated across hardware generations with no impact on design (all new hardware is VMware-qualified and tested)
- Guarantees access to all required patches and upgrades
- Offers a VMware-owned OpenStack reference architecture that is both maintained and qualified

#4. Design for operation from Day One

Before you start, it's important to ask how your organization will consume OpenStack once you've moved beyond your pilot or PoC. You want your design to be production-ready, even if you're not going into production right away. To make the transition to full scale operation as smooth as possible, be sure to think upfront about operational issues such as:

- **How RBAC will work**—to avoid impacting production environment performance, define a control policy based on expected project and user requirements.
- **The compatibility of your tools for monitoring/alerts**—you may already have tools in place for monitoring infrastructure storage and capacity, but be sure to check they are compatible with OpenStack.
- **How you define your cloud application provisioning workflow**—you can likely use your existing HEAT template to facilitate your provisioning workflow, but check it carefully. There may be specific actions that you need to revisit.
- **How you will monitor at scale**—the sheer scale of a large OpenStack environment (with multiple Nova cluster nodes, Glance volumes etc.) adds to the challenge of monitoring and detection. Accordingly, plan for sufficiently robust monitoring from the start.

#5. Consider engaging with VMware Professional Services

It may already be clear that VIO is your easiest, fastest, and most cost-effective route to installing or upgrading your open cloud. The last thing to consider is that an engagement with VMware Professional Services could make that process even smoother. VMware consultants are also available to help when a straightforward adoption starts getting tricky and you could simply use some help. By working with a VMware professional, you gain access to the readiness tools, assets, and training needed to ensure your environment is configured to meet your objectives. Our consultants can help you:

- Develop a DevOps implementation plan that suits your organization and business process
- Build and configure a high level design
- Execute testing and validation of OpenStack use cases
- Get better informed about product configuration and cross-product integration
- Engage in OpenStack knowledge transfer sessions

Next Steps with VMware Professional Services

1. Ask about the VMware Integrated OpenStack Accelerator.
2. Get more recommendations at our blog: **http://blogs.vmware.com/consulting**

Get Educated

Learn more with a VMware eLearning Course:

- VMware Integrated OpenStack Fundamentals

http://mylearn.vmware.com/mgrreg/courses.cfm?ui=www_edu&a=one&id_subject=66123

Take the next step

VMware Services delivers OpenStack expertise, operations transformation insight plus education and certification. Learn more at vmware.com/services

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