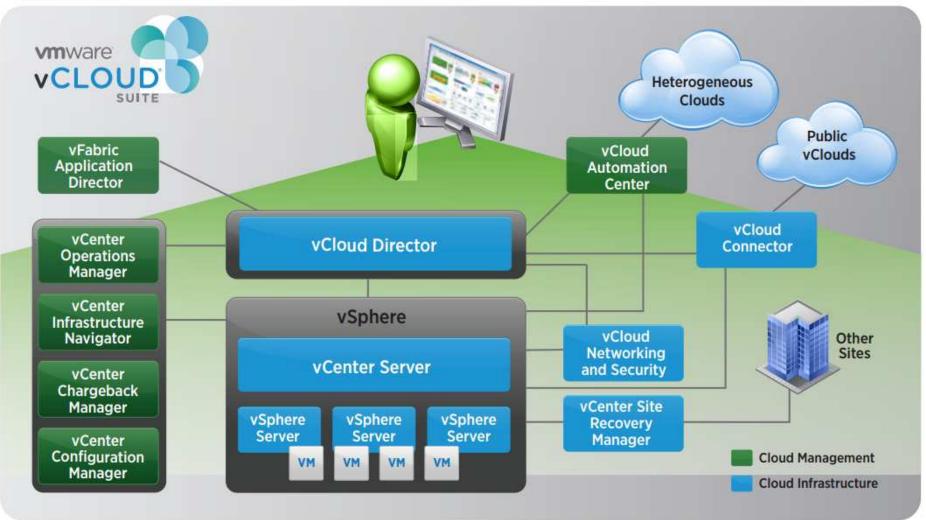


vCloud Demonstration



vCloud Suite



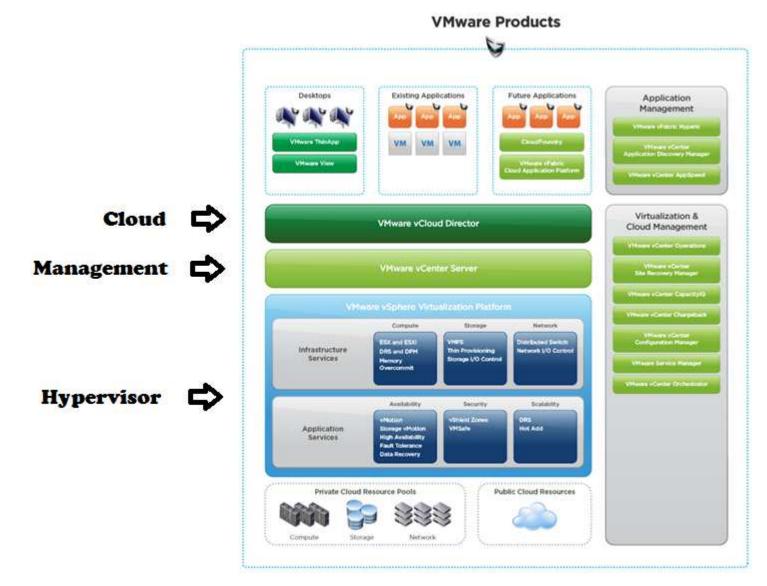


vCloud Helpful Terms

- A <u>Hypervisor</u> is a software program that manages multiple operating systems (or multiple instances of the same operating system) on a single computer system. The hypervisor manages the system's processor, memory, and other resources to allocate what each operating system requires. (VMware ESXi).
- A <u>Virtual Machine</u> (VM) is a completely isolated guest operating system installation within a normal host operating system.
- A <u>vApp -</u> is a grouping of virtual machines all working together to provide an application. When a vApp is deployed, the goal is to deploy the application that the groupings of VMs within that vApp serve up. Therefore when a vApp is deployed in a virtual datacenter, all of the VMs in that vApp are deployed simultaneously and treated with the same policies that are applied to the vApp. Note: A vApp can have one or more VMs.
- A <u>Catalog</u> is an inventory of software media, such as ISO images, and prebuilt vApps. Once a vApp is created the first time, it can be cloned and checked into a catalog as a vApp Template. If more instances of a vApp are needed in the future, they can be cloned over and over again from the template vApp in the catalog.
- A <u>Virtual Data Center</u> is simply a pool of resources, compute, storage, and network, to run applications on by way of running one or more virtual machines.

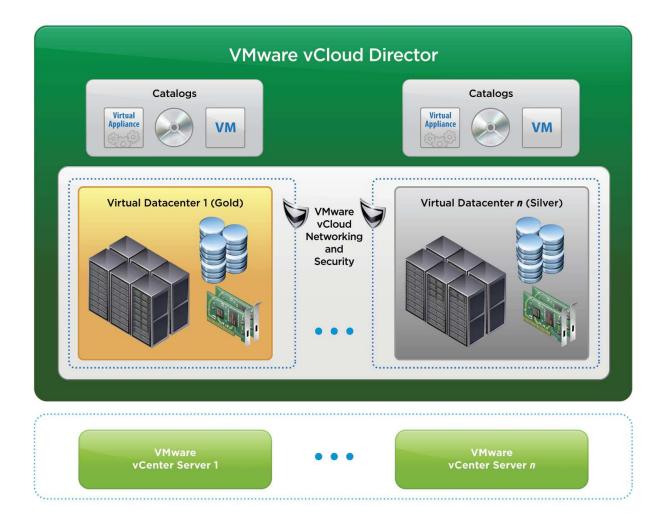


vCloud Architecture



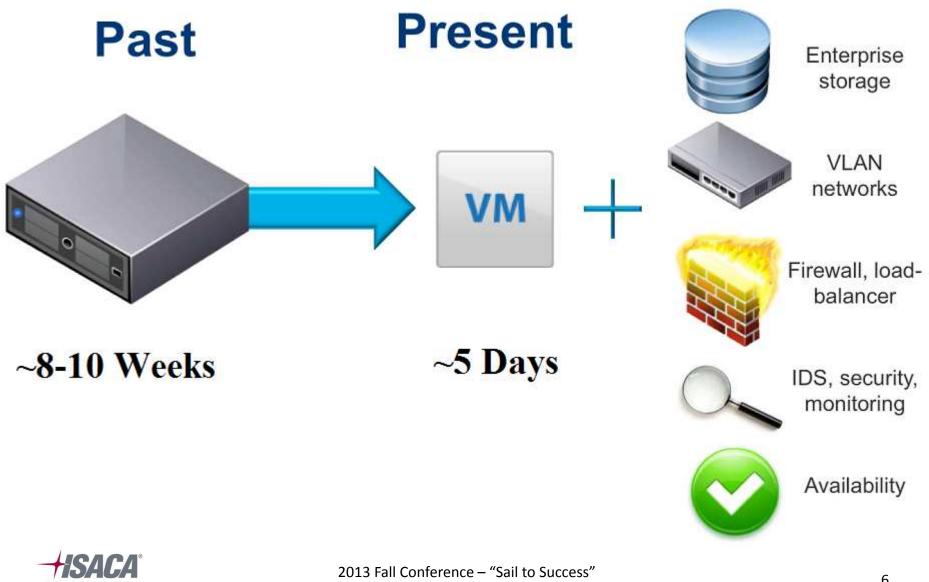


vCloud Director





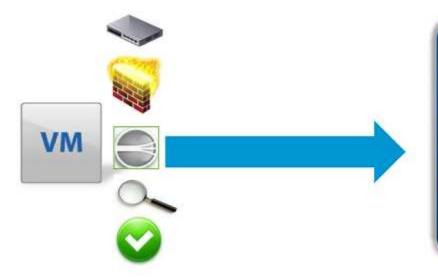
Traditional to Virtualization

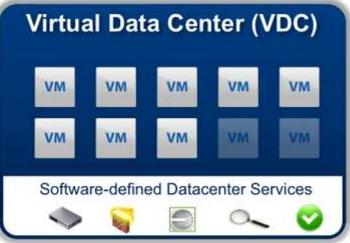


September 30 – October 2, 2013

San Francisco Chapter

Virtualization to Cloud











Auditing Tips

- User Access
- Logging and Monitoring
- Resource Allocation
- High Availability
- Service Level Agreements (SLA)
- Governance Structure (for Approvals)
- Security Hardening/Compliance
- License Compliance



QUESTIONS



Resources for further Learning

- VMworld General Sessions:
- http://www.vmworld.com/community/conference/us/learn/generalsessions
- VMware Cloud Computing information:
- http://www.vmware.com/solutions/cloud-computing
 - □ White papers (no registration required)
 - Product information
- VMware Security and Compliance Blog:
- http://blogs.vmware.com/security/
- RSA Security Blog:
- http://blogs.rsa.com/category/cloud-security/



More Resources – Cloud Computing

ISACA

- Security Considerations for Cloud Computing (free for members)
- □ IT Control Objectives for Cloud Computing (free for members)
- Cloud Computing Management Audit Program (free for members)
- □ Control Objectives for IT (COBIT)

Cloud Security Alliance

- Security Guidance for Critical Areas of Focus in Cloud Computing v3.0
- Cloud Controls Matrix v1.4

□ IT Governance Institute

□ IT Governance Global Status Report (free – <u>www.itgi.org</u>)

Institute of Internal Auditors

Global Technology Audit Guide (GTAG-15) – IT Governance

NIST

□ SP800 -144, 145, 146 (free)

