VMware Cloud Automation: Design and Deploy

Course Overview

This five-day course focuses on designing and deploying an enterprise cloud by using a distributed architecture deployment of VMware vRealize® Automation™. The lecture and labs concentrate on designing an enterprise cloud architecture and the effective implementation of a vRealize Automation distributed deployment according to VMware recommended best practices.

Course Objectives

By the end of the course, you should be able to meet the following objectives:

- Apply enterprise design principles
- Design and deploy a tiered VMware vSphere® resource architecture for CPU, storage, and network resources, including VMware NSX®
- Design and deploy a vRealize Automation distributed infrastructure for an enterprise cloud
- Design and deploy a CA certificate/single sign-on architecture that includes Active Directory integration to support the enterprise cloud infrastructure
- Design and deploy an administration architecture of roles for an enterprise cloud
- Design and deploy a tenant-and-business group architecture for an enterprise cloud
- Design and deploy compute resources, reservation policies, network profiles, and reservations to support your enterprise cloud
- Use XaaS to extend vRealize Automation into other enterprise systems
- Integrate vRealize Automation with IP address management systems and asset management systems
- Describe VMware vCloud® Air™ integration for elastic clouds
- Describe the location and identity of all log files that relate to vRealize Automation troubleshooting
- Use VMware vRealize® Log Insight™ to manage and monitor distributed vRealize Automation deployments

Target Audience

Experienced system administrators, cloud administrators, system integrators, and deployment consultants

Prerequisites

This class requires understanding the concepts and topics presented in the following courses:

- VMware vSphere: Install, Configure, Manage
- VMware vRealize Automation: Install, Configure, Manage

Certifications

No certifications are tied to this course.

Course Delivery Options

- Classroom
- Live Online
- Onsite

Product Alignment

- vSphere 6
- vRealize Automation 7
- VMware vRealize® Orchestrator™
- vRealize Log Insight
- vCloud Air

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Course Modules

1 Course Introduction
- Introductions and course logistics
- Course objectives

2 Enterprise Design Principles
- Create a design foundation for an enterprise cloud by identifying business requirements, typical business solutions, constraints, assumptions, and risks
- Create a conceptual design for an enterprise cloud
- Create a logical design for an enterprise cloud
- Use key enterprise design principles to create a vSphere infrastructure for the enterprise cloud

3 Security Infrastructure
- Design a certificate authority architecture
- Create certificate signing requests for your vRealize Automation servers
- Create certificates for your vRealize Automation servers
- Use the VMware hardened virtual appliance
- Use VMware Identity Manager™

4 vRealize Automation Distributed Architecture
- Design and deploy the vRealize Automation solution in a highly available, distributed architecture
- Use vRealize Orchestrator in external and internal clusters
- Use cloudutil.exe and skills to control which DEM servers are used with specific endpoints
- Describe the proper configuration of NSX load balancers for a highly available, distributed architecture

5 Administration Role Architecture
- Design either an expanded administration role architecture or a compressed administration role architecture for an enterprise cloud

6 Tenants and Business Groups
- Design an optimum tenant and business group architecture for your enterprise cloud, using either a single-tenant or a multitenant model
- Describe the use of vRealize CloudClient in a multitenancy context

7 Cloud Resource Design
- Design an enterprise cloud that is based on a multitiered architecture
- Design naming standards in vRealize Automation to support your tenant-and-business group architecture
- Use composite blueprints in an enterprise deployment
- Use data center location in an enterprise deployment to control where systems are provisioned
- Design a unified self-service catalog
- Design service entitlements in an enterprise deployment
- Design and use governance and approvals

8 Extensibility and the Enterprise
- Describe vCloud Air and elastic clouds
- Describe the role of vRealize Orchestrator in vRealize Automation extensibility
- Use IaaS extensibility and the vRealize Automation event broker system
- Extend vRealize Automation to an asset management system
- Extend vRealize Automation to an IP address management system
- Use NSX on-demand components

9 Enterprise Management
- Use VMware vRealize® Operations Manager™ and the vRealize Automation management pack
- Use vRealize Log Insight in vRealize Automation enterprise management
- Manage costs
- Manage resource use
- Replace expired security certificates

Contact

If you have questions or need help registering for this course, click here.

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