vmware® LEARNING

VMware Aria Automation: Advanced Topics

Course Overview

This course is a follow-up to the VMware Aria Automation: Install, Configure, Manage course. In this course, you take a deeper dive into advanced topics using features of VMware Aria Automation™, such as deploying user systems and interfacing VMware Aria Automation with other platforms. You will also learn how to deploy a cluster environment using VMware Aria Suite Lifecycle and interface with and use VMware vSphere® with Tanzu Kubernetes. This course focuses on hands-on labs to reinforce key topics.

Course Objectives

After completing this course, you should be able to:

- Describe and configure VMware Aria Automation in a clustered enterprise deployment using with VMware Aria Suite Lifecycle
- Scale out VMware Identity Manager to support High Availability
- Use external Certificate Authorities to configure security certificates in VMware Aria Automation
- Create YAML templates to configure VMware Aria Automation using cloudConfig
- Use VMware Aria Automation advanced templates to deploy a 2-tier Database-Server using MySQL and phpMyAdmin
- Use Advanced VMware NSX® networking features including NAT, routed networks, load balancers, security groups, and tags
- Create and use Aria Automation Pipelines to deploy software and connect to Kubernetes
- Create and use Ansible playbooks that integrate with VMware Aria Automation
- Integrate Aria Automation with Terraform
- Integrate Aria Automation with GitLab
- Create Orchestrator Workflows and ABX Actions that interface with other systems and use REST calls
- Configure and use Orchestrator Workflows and ABX actions to create day-2 actions and interface with Powershell scripts
- Use Aria Automation to deploy minions and deploy software

Audience

This course is ideal for system administrators and system integrators who are responsible for using VMware Aria Automation in advanced configurations in enterprise deployments.

Prerequisites

Before attending this course, you should have:

- Completed the VMware Aria Automation: Install, Configure, Manage v8.1x course

Course Modules

1 Course Introduction
   - Introductions and course logistics
   - Course objectives

2 VMware Aria Automation Clustered Deployment
   - Using Aria Suite Lifecycle in a clustered deployment
   - Configure External Certificates
   - Configure VMware NSX Advanced Load Balancer
   - Install VMware Aria Automation using Clustered Deployment
   - Scale out VMware Identity Manager to support High Availability

3 Advanced VMware Aria Automation Templates
   - Use advanced YAML and cloudConfig to deploy a functioning 2-tier application with a phpMyAdmin front end server and a MySQL database server
   - Use cloudConfig and cloud-init
   - Use advanced YAML techniques to create configuration files and add users to deployed virtual machines

4 Advanced Networking
   - Use VMware NSX advanced features in VMware Aria Automation templates
   - Interfacing to IPAMs Interfacing to IPAMs
   - Use VMware NSX NAT in VMware Aria Automation templates
   - Use VMware NSX Routed Networks
   - Use VMware NSX Advanced Load Balancer
   - Use VMware NSX Security Groups

5 Advanced Orchestrator Workflows
   - Create day-2 Actions with Orchestrator workflows
   - Use Orchestrator to Add computer objects to Active Directory when VMware Aria Automation deploys templates
   - Create VMware Aria Automation Custom Resources

   - Create VMware Aria Automation Resource Actions
   - Use VMware Aria Automation with Orchestrator to perform REST calls

6 Using ABX Actions
   - Use ABX to create day-2 Actions
   - Create ABX Action-Flows
   - Use ABX to make REST calls

7 Kubernetes Integration
   - Describe VMware vSphere With Tanzu
   - Create a Supervisor Cluster
   - Create a Supervisor Namespace
   - Create Cluster Plans
   - Deploy a Tanzu Kubernetes cluster from VMware Aria Automation
   - Manage Kubernetes Tanzu clusters from VMware Aria Automation
   - Execute YAML code and deploy software in a managed Tanzu Kubernetes cluster
   - Connect to an existing generic Kubernetes cluster
   - Create Kubernetes namespaces from VMware Aria Automation
   - Interface VMware Aria Automation to other Kubernetes systems

8 Aria Automation Pipelines
   - Create and use CI/CD pipelines
   - Use the Pipeline user interface
   - Add states and tasks to a pipeline
   - Integrate code from a pipeline with Gitlab
   - Use an VMware Aria Automation pipeline to install software
   - Use an VMware Aria Automation Pipeline to Create a Kubernetes Namespace and a Deployment

9 Aria Automation and Configuration Management
   - Describe Ansible, Puppet, and Terraform
   - Integrate Ansible with VMware Aria Automation
   - Integrate Terraform with VMware Aria Automation
   - Call Terraform from VMware Aria Automation

vmware®

- Use Terraform to manage VMware Aria Automation
- Deploy a VMware Aria Automation Config minion
- Install software on a VMware Aria Automation Config minion
- Create and manage files on a Linux system with VMware Aria Automation Config