VMware Aria Automation: Advanced Topics V8.14

Duration 4 Days

COURSE DESCRIPTION

This four-day course is a follow-on to the VMware Aria Automation: Install, Configure, Manage course. During this course, you will take a deeper dive into advanced topics using features of VMware Aria Automation such as deploying user systems and interfacing 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, vSphere with Tanzu Kubernetes. This course makes heavy use of hands-on labs.

Product Alignment

VMware vSphere™ 7.0.3, VMware vSphere™ 8.0.1
VMware Aria Automation™ 8.13
VMware Aria Suite Lifecycle™ 8.13
VMware Aria Automation Config™ 8.13
VMware Aria Automation Orchestrator™ 8.13
VMware vSphere With Tanzu 8.0 update 2
VMware NSX Advanced Load Balancer (AVI) 22.1.5

COURSE OBJECTIVES

By the end of the course, you should be able to meet the following objectives:
- 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
- Integrate and use NSX Advanced Load Balancer with VMware Aria Automation and VMware NSX
- Create and use Aria Automation Pipelines to deploy software and connect to Kuberenetes
- 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

COURSE OUTLINE

Module 1: Course Introduction
- Introductions and course logistics
- Course objectives

Module 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

Module 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 cloug-init
- Use advanced YAML techniques to create configuration files and add users to deployed virtual machines

Module 4: Advanced Networking
- Use VMware NSX advanced features in VMware Aria Automation templates
- 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

Module 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

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

Module 7: Kubernetes Integration
- Describe vSphere With Tanzu
- Create a Supervisor Cluster
- Create a Supervisor Namespace
- Create Cluster Plans
- Deploy a Tanzu Kubernetes cluster from Aria Automation
- Manage Kubernetes Tanzu clusters from 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 Aria Automation
- Interface Aria Automation to other Kubernetes systems

Module 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 Aria Automation pipeline to install software
- Use an Aria Automation Pipeline to Create a Kubernetes Namespace and a Deployment

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

WHO SHOULD ATTEND

Experienced system administrators and system integrators responsible for using VMware Aria Automation in advanced configurations in enterprise deployments.