Nutanix Certified Professional Training

Duration: 4 Days (Hands on Included)

Module 1 – Nutanix Enterprise Cloud Concepts

- Define and differentiate features and technologies present in Acropolis, Prism and Calm
- Explain the relationship between nodes, blocks and clusters
- Recognize the benefits of a Nutanix hyperconverged infrastructure solution
- Differentiate between physical and logical cluster components
- Describe some of the primary AOS services running on the CVM

Module 2 – Managing a Nutanix Cluster

- Identify methods for managing a Nutanix Enterprise Cloud
- Identify how to download and configure tools and applications like Prism Central, Cmdlets, and REST API
- Utilize Prism Element to configure and monitor a cluster
- Describe, differentiate and utilize nCLI/aCLI to configure and monitor a cluster
- Differentiate between Pulse and Alert technologies
- Use the REST API Explorer to retrieve and/or make changes to a cluster

Module 3 – Securing a Nutanix Cluster

- Describe how Nutanix provides cluster security
- Explain security concepts such as two-factor authentication, key management and cluster lockdown
- Explain Data-at-Rest Encryption (DARE) functionality
- Configure user authentication
- Install an SSL certificate

Module 4 – Networking

- Differentiate AHV managed and unmanaged networks
- Describe AHV networking components and configuration settings
- Explain and implement network segmentation
- Explain how to separate 1GbE and 10GbE interfaces
- Identify the default AHV network configuration
- Explain IP Address Management (IPAM)
- Define and differentiate AHV Bond Modes

- Create a Backplane Network
- Create a User VM Network
- Given a scenario, configure the appropriate AHV Bond Mode

Module 5 – VM Creation and Management

- Explain Live Migration
- Describe VM High Availability functionality
- Describe VM Data Path Redundancy
- Perform guest customization on a Virtual Machine
- Perform a Self-Service Restore of a VM
- Use the Image Service to deploy a VM

Module 6 – Health Monitoring and Alerts

- Identify dashboards and monitoring tools that can be used to resolve cluster issues
- Utilize the Health dashboard and its major components
- Configure Alert e-mail settings for a cluster
- Utilize methods for configuring and monitoring health dashboards and alerts to resolve a given scenario

Module 7 – Distributed Storage Fabric

- Identify methods for creating a Storage Container
- Determine what capacity optimization method(s) should be used based on a given workload
- Describe and differentiate technologies used in conjunction with a Distributed Storage Fabric, including snapshots, clones, high availability and disaster recovery
- Configure Deduplication, Compression, and Erasure Coding on Nutanix containers
- Given a workload, determine how to best optimize storage capacity and explain how the various Nutanix Capacity Optimization features work.

Module 8 – AHV Workload Migration

- Describe the steps needed to perform an ESXi to AHV workload migration from preparation through completion
- Migrate a VM from an ESXi cluster to an AHV cluster

Module 9 – Acropolis Services

- Define and differentiate Acropolis Block Services (ABS) and Acropolis File Services (AFS)
- Configure Acropolis Block Services (ABS)
- Configure Acropolis File Services (AFS)
- Determine and implement storage services based on a given workload

Module 10 – Data Resiliency

- Describe the concept of the Redundancy Factor and related requirements
- Explain how availability impacts components and VMs within a Nutanix Cluster
- Identify Data Resiliency requirements and policies related to a Nutanix Cluster
- Describe and differentiate component, service, and CVM failover processes such as Disk Failure, CVM Failure, and Node Failure

Module 11 – Data Protection

- Describe and differentiate Nutanix data protection technologies such as NearSync, Cloud Connect, and Protection Domains
- Explain failover and failback processes
- Create and modify a Protection Domain
- Configure a Remote Site

Module 12 – Prism Central

- Identify Prism Central requirements
- Describe and differentiate Prism Element and Prism Central
- Identify methods for viewing information about VMs, clusters, hosts, disks, containers, and storage containers
- Deploy a Prism Central VM
- Register/Unregister a Nutanix Cluster with Prism Central
- Create and configure a custom dashboard
- Configure a custom report

Module 13 – Cluster Maintenance

- Describe available methods and resources for cluster maintenance
- Perform one or more Nutanix Cluster Checks
- Install NCC

- Configure an HTTP Proxy

Module 14 – Lifecycle Operations

- Describe processes and procedures for license management, including AOS and Prism licenses
- Given a scenario, recognize processes to start, stop, and expand a cluster
- Install, upgrade and reclaim licenses
- Start a node and shut down a node in a Nutanix Cluster
- Eject a node from a Nutanix Cluster