

Nutanix Certified Master

Duration: 4 Days

Course Outline

1: Exploring Nutanix Storage Features

- Understanding Nutanix AOS Services and AOS Storage Services
- Exploring Storage Components
- AOS Storage Data Pathing

Hands-on Labs

- Creating a Storage Container
- Updating Reported Capacity

2: Creating a Highly Available, Performant, and Resilient Storage Layer

- Creating Highly Available, Resilient Infrastructure
- Storage Optimization and Data Efficiency
- Optimizing and Planning for New Workloads
- Storage Best Practices for Application Workloads

Hands-on Labs

- Observing Nutanix Cloning Efficiency
- Reserving Rebuild Capacity in AHV
- Observing the Rebuild Process
- Disabling Rebuild Capacity Reservation
- Creating a Storage Container with Deduplication Enabled
- Reviewing Deduplication Savings
- Enabling Replication Factor 1 and Creating a Storage Container

3: Optimizing Physical and Virtual Networks in AOS

- Optimizing Physical & Virtual Networks
- Best Practices

Hands-on Labs

- Managing Virtual Switches and Uplinks
- Viewing Virtual Switches from Prism Element
- Configuring CVM Network Segmentation
- Configuring QoS Traffic Marking

4: Optimizing Overlay Networks Using Flow Networking

- Optimizing Physical & Virtual Networks

- Implementing Flow Networking
- Implementing VPCs
- Overlay Network Use Cases

Hands-on Labs

- Enabling Flow Networking
- Creating an External Subnet
- Creating a VPC
- Creating VMs using the Overlay Subnets
- Configuring Local and Remote Gateways
- Establishing a VPN Connection
- Verifying VPN Connectivity

5: Optimizing VM Performance

- Sizing the CVM & Prism Central
- Alternate Methods of Provisioning User VMs
- Working with GPUs in AHV
- Improving VM Storage and Network Performance

Hands-on Labs

- Creating VMs with the REST API
- Configuring VirtIO Multi-Queue
- Configuring Volumes Block Storage

6: Analyzing Nutanix Cluster Security Options

- Nutanix Security Technologies
- User Authentication and Permissions
- Hardening AHV and the CVM
- Using Flow Network Security & Flow Security Central
- Data Encryption with Nutanix
- Managing Log Files

Hands-on Labs

- Configuring Cluster Lockdown
- Replacing Default SSL Certificates
- Configuring Syslog Integration
- Managing User Permissions

7: Microsegmentation with Flow Network Security

- Flow Policy Constructs
- Security Policy Models and Types
- Enabling Microsegmentation
- Creating and Applying Policies

Hands-on Labs

- Enabling Flow Microsegmentation
- Creating Categories
- Creating VMs and Assigning Categories
- Configuring Isolation and Application Security Policies

8: Microsegmentation with Flow Network Security

- Evaluating Cluster Health
- Network Packet Capture and Inspection
- Acropolis Service Failures
- Ensuring Efficient Physical Resource Consumption with Machine Learning
- Application Monitoring and Discovery
- Monitoring Performance

Hands-on Labs

- Creating a Prism Central Performance Monitoring Dashboard
- Creating Charts to Analyze Metrics Using Prism Central
- Creating Charts to Analyze Entities Using Prism Element

9: Business Continuity

- Assessing Business Continuity and Disaster Recovery
- High Availability and Data Protection
- Third Party Backup Integrations
- Best Practices

Hands-on Labs

- Configuring Self Service Restore

10: Implementing Disaster Recovery

- Replicating Data with AOS
- Disaster Recovery Orchestration
- Disaster Recovery with Protection Domains
- Getting Started with Nutanix Leap
- Protecting Against Ransomware

Hands-on Labs

- Enabling Nutanix Leap
- Configuring an Availability Zone
- Configuring a Protection Policy
- Creating Production and Test VLANs
- Preparing VMs for Nutanix Leap
- Configuring a Recovery Plan

- Performing Test and Planned Failover

Related Certification

[Nutanix Certified Master - Multicloud Infrastructure \(NCM-MCI\)](#)

The Nutanix Certified Master - Multicloud Infrastructure (NCM-MCI) certification measures your ability to analyze, evaluate, and optimize platform performance, configuration and health. The exam will also validate the candidate's ability to remediate and evolve the platform to be in compliance with business requirements.