



**Enterprise Computing Solutions - Education Services**

## **TRAINING OFFERING**

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# Nutanix Advanced Administration & Performance Management

CODE:	LENGTH:	PRICE:
NUT_AAPM	32 Hours (4 days)	kr37,750.00

## Description

If you are an experienced Nutanix administrator, this course will serve as a deep dive that gives you a rich, nuanced understanding of the Nutanix platform, and will help you get the most out of your Nutanix solutions. AAPM is divided into six major sections, each focused on performance improvements and advanced administration techniques for different aspects of your clusters:

**Storage:** Take a deep dive into AOS storage services, different aspects of Acropolis Distributed Storage, storage optimization, and storage best practices for application workloads.

**Networks:** Learn how to optimize physical and virtual workloads, as well as how to implement Flow Virtual Networking and Virtual Private Clouds (VPCs).

**VMs:** Learn about sizing the CVM and Prism Central VMs, alternate methods of VM provisioning (such as via CLI), how to work with GPUs, and how to improve VM storage and network performance.

**Security:** Understand important features such as authentication, RBAC, IAM, and encryption. Learn how to use essential security products, such as Flow Security Central and Flow Network Security.

**Analyzing Problems:** Explore ways to monitor and identify health issues, network performance, VM performance, and cluster performance.

**Business Continuity and Disaster Recovery:** Learn about Nutanix data backup, web-scale data protection, protection from ransomware, self service restore, and third-party integrations. You will also learn how to use protection domains and Nutanix Leap for disaster recovery.

## Audience

- IT administrators and architects who manage Nutanix clusters but would like more in-depth knowledge of Nutanix datacenter administration
- Anyone preparing for the Nutanix Certified Master -Multicloud Infrastructure (NCM-MCI) certification

## Prerequisites

- Nutanix Enterprise Cloud Administration (ECA) classroom training or an NCP-MCI certification
- Basic knowledge of Nutanix datacenter administration techniques
- Familiarity with traditional virtualization storage architectures
- Comfort with Linux command-line interface

To ensure AAPM is the right fit, we encourage you to complete our online Readiness Evaluation. Questions are based on topics covered in the ECA course and NCP-MCI exam that you should be familiar with before attending.

## Programme

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

### Session Dates

Ved forespørsel. Vennligst [kontakt oss](#)

### Tilleggsinformasjon

Denne treningen er også tilgjengelig som trening på stedet. [Kontakt oss](#) for å finne ut mer.