

### **Arrow ECS Finland Oy - Education Services**

## **TRAINING OFFERING**

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# **Nutanix Advanced Administration & Performance Management 5.15**

CODE: LENGTH: PRICE:

NUT AAPM 32 Hours (4 days) €3,395.00

#### **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**

Understanding Nutanix AOS Services and AOS Storage Services Exploring Storage Components

**AOS Storage Data Pathing** 

1: Exploring Nutanix Storage Features Hands-on Labs

Creating a Storage Container

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

Observing Nutanix Cloning Efficiency Reserving Rebuild Capacity in AHV

Creating Highly Available, Resilient Infrastructure Observing the Rebuild Process

Storage Optimization and Data Efficiency Disabling Rebuild Capacity Reservation

Optimizing and Planning for New Workloads Creating a Storage Container with Deduplication Enabled

Storage Best Practices for Application Workloads Reviewing Deduplication Savings

Hands-on Labs Enabling Replication Factor 1 and Creating a Storage Container

Optimizing Physical & Virtual Networks

**Best Practices** 

3: Optimizing Physical and Virtual Networks in AOS 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

Enabling Flow Networking Creating an External Subnet

Optimizing Physical & Virtual Networks Creating a VPC

Implementing Flow Networking Creating VMs using the Overlay Subnets Configuring Local and Remote Gateways

Overlay Network Use Cases Establishing a VPN Connection

Hands-on Labs Verifying VPN Connectivity 5: Optimizing VM Performance

Sizing the CVM & Prism Central

Alternate Methods of Provisioning User VMs

Working with GPUs in AHV Creating VMs with the REST API Improving VM Storage and Network Performance Configuring VirtlO Multi-Queue Hands-on Labs Configuring Volumes Block Storage

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

6: Analyzing Nutanix Cluster Security Options Hands-on Labs

Flow Policy Constructs

Configuring Cluster LockdownSecurity Policy Models and TypesReplacing Default SSL CertificatesEnabling MicrosegmentationConfiguring Syslog IntegrationCreating and Applying Policies

Managing User Permissions 7: Microsegmentation with Flow Network Security 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

**Enabling Nutanix Leap** 

Replicating Data with AOS
Disaster Recovery Orchestration
Disaster Recovery with Protection Domains
Creating Production and Test VLANs
Getting Started with Nutanix Leap
Protecting Against Ransomware
Configuring a Protection Policy
Creating Production and Test VLANs
Preparing VMs for Nutanix Leap
Configuring a Recovery Plan

Hands-on Labs Performing Test and Planned Failover

#### **Session Dates**

Aikataulutamme kiinnostuksen mukaan. Ota yhteyttä

#### **Additional Information**

This training is also available as onsite training. Please contact us to find out more.