



Enterprise Computing Solutions - Education Services

## TRAINING OFFERING

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# Nutanix Enterprise Cloud Administration (ECA) 6.10

CODE:	LENGTH:	PRICE:
NUT_ECA_6-10	32 Hours (4 days)	€3,800.00

## Description

If you already have experience administering a Nutanix environment, this course will extend, deepen and broaden your knowledge as you grow in your career as a Nutanix administrator.

In Nutanix Enterprise Cloud Administration (ECA), you'll focus on Prism Central.

This course provides a comprehensive look at Nutanix centralized management capabilities and allows you to explore the wide variety of features that are available in this web console.

## Objectives

ECA covers four key areas:

1. **Core Nutanix Concepts:** Gain a deep understanding of hyperconverged infrastructure (HCI) and the various Nutanix cloud solution packages. Learn the basics of cluster configuration and the components for creating and managing VMs – namely, networks and images.
2. **VM Management:** Explore how to create and manage VMs, work with projects, protect VMs and their data, apply storage optimization features at the VM level, and migrate your workloads to a Nutanix environment.
3. **Monitoring and Troubleshooting:** Learn about alerts, events, log collection, reporting, and how to use various features in Prism Central to identify, analyze and remediate performance issues.
4. **Maintenance and Upgrades:** Learn how to set up a cluster for maintenance activities – such as starting and stopping nodes and clusters – and how to upgrade installed software and firmware with just a few clicks.

## Audience

- Administrators, engineers and others who manage Nutanix clusters in the datacenter
- Managers and technical staff seeking information to drive purchase decisions
- Anyone seeking the Nutanix Certified Professional-Multicloud Infrastructure (NCP-MCI) certification

## Prerequisites

1-2 years of holistic IT infrastructure experience

## Programme

1: Getting Started with a Nutanix cluster

- Understand three-tier and HCI

- Understand the Nutanix product portfolio
- Understand nodes, blocks, clusters, and cluster services
- Get started with Prism Central and Prism Element
- Understand when to use Prism Central and Prism Element

#### Hands-on-Labs

- Connecting to and exploring Prism Element
- Adding data services IP, an NTP server, and a name server in Prism Element
- Connecting to, exploring and configuring Prism Central

### 2: Configuring Cluster Networking

- Understand AHV networking terminology
- Use Prism Central to monitor cluster networks
- Use Prism Element to explore the Network Visualizer
- Create and update subnets and virtual switches
- Understand subnet extension and network segmentation

#### Hands-on Labs

- Creating unmanaged and managed networks
- Exploring the AHV network configuration
- Viewing virtual switches from Prism Element

### 3: Managing Images

- Understand the image service
- Use Prism Central to monitor, upload, import, and manage images

#### Hands-on Labs

- Uploading and importing images to Prism Central
- Configuring an image placement policy

### 4: Creating VMs

- Use Prism Central to create VMs
- Use Prism Central self-service capabilities to create VM templates
- Use Projects in Prism Central
- Install and enable Nutanix Guest Tools

## Hands-on Labs

- Creating Windows and Linux VMs
- Installing Windows and Linux operating systems
- Installing Nutanix Guest Tools on Windows and Linux
- Creating a project
- Exploring the Self-Service dashboard in Prism Central

## 5: Managing VMs

- Update, clone, customize, export, and apply placement rules to VMs
- Create and apply storage policies to VMs
- Create playbooks to automate common VM administrative tasks

## Hands-on Labs

- Updating a VM
- Assigning categories to a VM
- Creating a snapshot and restoring a VM
- Creating a template and a clone
- Exporting a VM as an Open Virtual Appliance (OVA) file
- Creating and running a playbook

## 6: Configuring and Managing Cluster Storage

- Understand AOS storage
- Understand key storage concepts such as storage pools, storage containers, redundancy factor, replication factor, capacity reservation, and snapshots
- Understand fault tolerance and failure handling mechanisms
- Create and update storage containers
- Create and update volume groups
- Use various capacity optimization features

## Hands-on Labs

- Exploring the Storage dashboard
- Creating containers with and without compression
- Comparing data in a compressed vs uncompressed container
- Configuring volume groups
- Migrating vdisks between storage containers

## 7: Data Protection and Disaster Recovery

- Understand data protection terms and concepts
- Understand synchronous and asynchronous replication capabilities
- Create snapshots and recovery points
- Use Prism Element to configure local and remote backup and disaster recovery
- Use Nutanix disaster recovery to create protection policies and recovery plans
- Backup and restore Prism Central

### Hands-on Labs

- Backing up and restoring Prism Central
- Configuring Self-Service Restore
- Creating protection domains and local VM restore
- Creating containers for replication
- Configuring remote sites and creating protection domains
- Performing VM migration and migrating back to primary

## 8: Securing a Nutanix Cluster

- Understand the Nutanix approach to security
- Use the Security dashboard in Prism Central
- Use Prism Central to configure authentication, users and RBAC
- Implement hardening features for AHV and the CVM
- Understand policies in Flow Network Security
- Understand data-at-rest encryption

### Hands-on-Labs

- Exploring the Security dashboard
- Adding a local user
- Adding Active Directory authentication
- Configuring Role Mapping
- Verifying a new user account
- Cluster lockdown

## 9: Migrating Workloads with Nutanix Move

- Understand, install and upgrade Nutanix Move
- Use Move to migrate VMs

- Download Move logs

#### Hands-on Labs

- Preparing a VM for migration
- Deploying a Move VM
- Configuring Move and a migration plan

#### 10: Monitoring Cluster Performance

- Understand performance monitoring features in Prism Central
- Create sessions, charts and reports
- View and manage project resource utilization
- Create custom dashboards in Prism Central
- Resource planning and capacity runway

#### Hands-on Labs

- Creating a Prism Central performance monitoring dashboard
- Creating charts to analyze metrics using Prism Central
- Creating and managing reports

#### 11: Monitoring Cluster Health

- Understand health monitoring features in Prism Central and Prism Element
- Get summarized and detailed health information from Prism
- Use Nutanix Cluster Check
- Collect and forward logs

#### Hands-on Labs

- Using Nutanix Cluster Check health checks
- Collecting logs for Support
- Verifying cluster health

#### 12: Maintaining and Upgrading a Cluster

- Perform a health check
- Use node-maintenance mode
- Understand hardware upgrade and replacement tasks
- Start and stop nodes and clusters

- Add and remove nodes
- Understand and explore Life Cycle Manager (LCM)
- Use LCM to perform inventory and upgrades

#### Hands-on Labs

- Using node maintenance mode
- Performing upgrades with LCM (with and without internet access)

#### 13: Investigating and Remediating Performance Issues

- Understand alerts and events and the associated dashboards in Prism Central
- Troubleshoot issues with protection policies, LCM, security, and performance
- Identify problematic or inefficient VMs
- Explore potential methods of remediating problematic VMs

#### Hands-on Labs

- Working with Alerts
- Exploring Events

### **Test and Certification**

Nutanix Certified Professional - Multicloud Infrastructure (NCP-MCI)

NCP-MCI certification holders have demonstrated the skills and knowledge to manage Nutanix AOS nodes, blocks, and clusters in the datacenter. Earning it validates your ability to deploy, administer, and troubleshoot Nutanix AOS, proving your mastery of key concepts from VM management to lifecycle operations.

Please note: The course material is intended to cover 70-80% of the knowledge on the exam, with the rest of your exam prep coming from independent study and/or experience.

### **Session Dates**

On request. Please [contact us](#)

### **Additional Information**

[This training is also available as onsite training. Please contact us to find out more.](#)