

## Nutanix Enterprise Cloud Administration (ECA)

**Duration: 4 Days    Course Code: GK9915    Version: 7.5    Delivery Method: Company Event**

### Overview:

**This intermediate course is designed specifically for IT professionals—Systems Administrators, Cloud Engineers, and Data Center Architects—who already possess a foundational understanding of Nutanix but want to master the intricacies of the Nutanix Cloud Platform (NCP).**

Ascending to a more senior Nutanix administrator means moving from a reactive "fix-it" role to a proactive, strategic one. Senior admins are the architects of "invisible infrastructure," ensuring that developers and business units have seamless access to resources without ever seeing the complexity behind the scenes.

The career landscape for those with intermediate to advanced Nutanix skills is rapidly expanding. By mastering this level of the stack, you qualify for high-impact roles such as HCI Architect, Cloud Infrastructure Lead, and Virtualization Engineer. Furthermore, as enterprise AI becomes the norm, Nutanix administrators are evolving into AI Infrastructure Ops roles—managing the high-performance, GPU-enabled clusters that power large language models and machine learning workflows.

*Updated June 2026*

### Company Events

These events can be delivered exclusively for your company at our locations or yours, specifically for your delegates and your needs. The Company Events can be tailored or standard course deliveries.

### Target 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

### Objectives:

- |                                                                                                                  |                                                                               |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| ■ <b>After this course participants should be able to:</b>                                                       | ■ Secure the stack through RBAC, system hardening, and entity categorization. |
| ■ Initialize and manage single or multi-cluster environments via Nutanix Prism.                                  | ■ Ensure business continuity with HA and disaster recovery.                   |
| ■ Configure AOS storage and virtual networks.                                                                    | ■ Perform seamless migrations using Nutanix Move.                             |
| ■ Streamline VM creation and management using image libraries, reusable templates, and advanced disk operations. | ■ Automate tasks with Playbooks.                                              |
| ■ Use affinity policies to optimize workload placement.                                                          | ■ Perform non-disruptive upgrades via the Life Cycle Manager (LCM).           |

### Prerequisites:

Experience administering a Nutanix environment is recommended for this course.

### Testing and Certification

Nutanix Certified Professional - Multicloud Infrastructure (NCP-MCI)

### Follow-on-Courses:

None recommended

## Content:

### 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 (1)

- 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 (2)

- 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 (3)

- 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 (4)

- Creating Windows and Linux VMs
- Installing Windows and Linux operating systems

### Hands-on Labs (5)

- 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 (6)

- 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 (7)

- 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

### 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 (10)

- 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 (11)

- 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 (12)

- 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

- 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

- 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 (8)

- 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 (9)

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

problematic VMs

#### Hands-on Labs

- Working with Alerts
- Exploring Events

### Additional Information:

Official course book provided to participants Nutanix approved labs proposed during the session Exam Voucher included

### Further Information:

For More information, or to book your course, please call us on 00 20 (0) 2 2269 1982 or 16142

[training@globalknowledge.com.eg](mailto:training@globalknowledge.com.eg)

[www.globalknowledge.com/en-eg/](http://www.globalknowledge.com/en-eg/)

Global Knowledge, 16 Moustafa Refaat St. Block 1137, Sheraton Buildings, Heliopolis, Cairo