

Nutanix Enterprise Cloud Administration (ECA)

Summary:

Formats: Instructor-Led Training with Hands-on-labs

Length: 4 Days

Overview:

Designed with Prism Central as the focal point, this course illustrates the breadth and depth of Nutanix's centralized management capabilities, and allows you to explore the wide variety of features that are available in this one, single web console.

ECA is divided into four topic areas:

1. Understanding core Nutanix concepts, such as hyperconverged infrastructure (HCI) and the various Nutanix cloud solution packages. Also, the basic configuration of a cluster and the components needed to create and manage VMs – namely, networks and images.
2. Creating and managing VMs, how to protect VMs and their data, how to apply storage optimization features at the VM level, and how to migrate your workloads to a Nutanix environment.
3. Learn about alerts, events, log collection, reporting, and how to use various features in Prism Central to identify, analyse, and remediate performance issues.
4. Learn how to set up a cluster for maintenance activities – such as starting and stopping nodes and clusters – and how to manage and upgrade licenses and installed software with just a few clicks.

Audience

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

Software Versions

- AOS 6.5
- Prism Central 2022.6

Course Outline

1. Getting Started with a Nutanix Cluster
 - Understand three-tier and hyperconverged infrastructure
 - Understand Nutanix Cloud Solution Packages
 - Understand nodes, blocks, clusters, and cluster services
 - Get Started with Prism Central and Prism Element

- Understand when to use Prism Central and when to use Prism Element
- 2. Securing a Nutanix Cluster
 - Understand Nutanix's approach to security
 - Use Prism Central to configure authentication, users, and RBAC
 - Understand Policies in Flow Network Security
 - Use Prism Element to configure Data-at-Rest Encryption
- 3. 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
- 4. Managing Images
 - Understand the image service
 - Use Prism Central to monitor, upload, import, and manage images
- 5. Creating Virtual Machines
 - Use Prism Central to create VMs
 - Use Prism Central's self-service capabilities to create VM templates
 - Install and enable Nutanix Guest Tools
- 6. Managing Virtual Machines
 - 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
- 7. Protecting VMs and Their Data
 - Understand data protection terms and concepts
 - Understand synchronous and asynchronous replication capabilities
 - Use Prism Element to configure local and remote backup and DR
 - Use Prism Central to create protection policies with Leap
- 8. Configuring and Managing Cluster Storage
 - Understand AOS Distributed 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
 - Use various capacity optimization features
- 9. Migrating Workloads with Nutanix Move
 - Understand, install, and upgrade Nutanix Move
 - Use Move to migrate VMs
 - Download Move logs
- 10. Monitoring Cluster Performance
 - Understand performance monitoring features in Prism Central
 - Create sessions, charts, and reports

- Create custom dashboards in Prism Central
- 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 logs
- 12. Investigating and Remediating Performance Issues
 - Understand alerts and events and the associated dashboards in Prism Central
 - Identify problematic or inefficient VMs
 - Potential methods of remediating problematic VMs
- 13. Performing Cluster Maintenance
 - Performing health checks
 - Using maintenance mode
 - Starting and stopping nodes and clusters
 - Adding nodes to or removing nodes from clusters
- 14. Upgrading Licenses, Software, and Firmware
 - Understanding LCM and the LCM workflow
 - Performing an upgrade using LCM
 - Licensing a cluster and managing licenses

Related 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 datacentre. 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.