



Nutanix® Enterprise Cloud Platform Administration 5.0

Duración: 4 Días **Código del Curso: GK5841**

Temario:

The Nutanix Enterprise Cloud Platform Administration course covers all the tasks that Nutanix administrators perform on the job. Beginning with setting up the environment, it walks the participant through the process of configuring and maintaining that environment.

After introducing the basic concepts of the Enterprise Cloud Platform, participants will understand how to rack a Nutanix block, install and configure a cluster, and use different interfaces to manage a cluster.

The program then delves into the details of managing VMs in Acropolis, monitoring cluster health and performance, protecting data and optimizing cluster capacity, and performing in-place hypervisor conversion. Various failure scenarios in datacenters are presented and participants will learn how to implement strategies to safeguard their data.

Participants will also understand how to use Nutanix's Prism interface to monitor and manage multiple activities across clusters, review and analyze resource needs, and assess future resource requirements.

The program also covers basic Nutanix troubleshooting tools, including how to solve common problems and when to escalate to Nutanix support. Finally, participants will learn essential lifecycle operations, covering starting and stopping a cluster, shutting down nodes, expanding a cluster, upgrading the Acropolis software and firmware, and maintaining licensing.

Dirigido a:

Primary audience: IT administrators, architects, and business leaders who need to manage Nutanix clusters in the datacenter. Anyone seeking baseline preparation for the Nutanix Platform Professional (NPP) certification.

Secondary audience: Managers and technical staff seeking more detailed information before making a purchase decision.

Objetivos:

- **After completing this course, attendees will:**
 - Develop a working knowledge of the Nutanix product family.
 - Understand the requirements and considerations involved in setting up a Nutanix cluster.
 - Familiarize themselves with cluster management and monitoring via the Prism web console.
 - Learn how to create, manage, and migrate VMs, set up data protection services, and plan for business continuity.
 - Understand how to plan and handle upgrades, assess future requirements, and create what-if scenarios to address scaling for business needs.
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Prerequisites:

- Familiarity with traditional virtualization storage architectures.
 - Comfort with Unix/Linux command line interface.
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Contenido:

Module 1: Introduction to Nutanix Enterprise Cloud Platform

- Define the Nutanix product family: Nutanix Acropolis and Nutanix Prism.
- Define the App Mobility Fabric (AMF) architecture
- Explain the functionality of Prism Element and Prism Central and how they differ from one another
- State where to find information on the hardware platform specifications and product mixing restrictions
- Identify the foundational unit for the Nutanix cluster
- Define a Nutanix block
- List and define the components of a Nutanix cluster within the hypervisor client
- Describe the types of AOS licenses

Module 2: Administering the Nutanix Cluster

- Discuss requirements for installing a Nutanix block, including power and networking
- List the considerations for mounting a Nutanix block in a rack

Module 3: Configuring the Cluster

- Configure a Nutanix cluster, including name servers, network connections, filesystem whitelists, NTP and SMTP Servers, and SNMP
- Change Prism language settings
- Describe the mechanisms Nutanix provides to maintain cluster security
- Configure user authentication methods
- Install an SSL Certificate
- Define a Nutanix block
- Control cluster access using key-based SSH access
- Explain how data-at-rest encryption secures data stored on disk
- Prepare for and configure data-at-rest encryption for drives in a Nutanix cluster

Module 4: User Interfaces

- List the four Nutanix user interfaces you can use to manage your cluster
- Register a cluster with Prism Central and use the console to manage the cluster
- State the purpose of the Acropolis self-service portal
- Assign IP addresses to all cluster components
- Create a cluster
- Install a Nutanix Platform License on a cluster

Module 5: Health Monitoring and Alerts

- Explain how to monitor the health of a Nutanix cluster.

Module 6: Networking

- Discuss Open vSwitch.
- Discuss the default network factory configuration.
- List best practices for configuring network.
- View network configuration.
- Discuss virtual network segmentation.

Module 7: VM Management

- Create an image using the Nutanix Image Service
- Create a VM (Windows and AHV)
- Install Nutanix guest tools
- Perform a self-service restore from Nutanix data protection snapshots.
- Manage a VM (AHV)
- Customize VMs using Cloud-Init and SysPrep
- Define MapReduce Tiering
- Define live migration
- Define High Availability
- Define Data Path Redundancy

Module 8: Distributed Storage Fabric

- Explain how Nutanix manages storage
- List and explain some of the various storage components, including Storage Tiers, Storage Pools, Containers, Volume Groups, vDisks, and data stores
- Navigate the Storage Dashboard
- Discuss how deduplication allows for sharing of guest VM data in storage tiers
- Explain how erasure coding works to increase cluster capacity
- Create a storage pool
- Create a storage container
- Perform an in-place hypervisor conversion
- Define hypervisor integration
- Explain how vLANs work

Module 9: AHV Workload Migration

- List prerequisites for Windows VM migration
- Migrate Windows VM from ESXi to AHV cluster
- List prerequisites for Linux VM migration
- Migrate Linux VM from ESXi to AHV cluster

Module 10: Services

- Define Acropolis Block Services
- Define block relationships
- List steps to enable ABS
- Define Acropolis File Services
- Discuss Quotas, Notifications, and Policies
- Discuss AFS Load Balancing

Module 11: Business Continuity

- List failure scenarios.
- Discuss redundancy factor
- Discuss protection strategies

Module 12: Data Protection

- Create a remote site.
- Create and modify a protection domain.
- Discuss the protection domain failover process.
- Explain the cloud connect feature.
- List best practices and guidelines for configuring data protection.
- List limitations for configuring data protection

Module 13: Prism Central

- Review and analyze resource to assess future resource requirements
- Create "what if" scenarios to assess future resource requirements.
- View information about VMs, clusters, hosts, disks, containers, and storage containers.
- Create and monitor performance graphs for selected entities.
- Address potential capacity issues.
- View and monitor alerts.
- View statistics about a range of entities across clusters and organize that information.
- Provision and manage VMs in a self-service manner
- Add Prism Central and its managed/registered clusters to a whitelist
- Translate the dashboard and menus to a selected language

Module 14: Concluding the Installation

- Review and analyze resource to assess future resource requirements
- Create "what if" scenarios to assess future resource requirements.
- Describe Nutanix Cluster Check (NCC).
- Describe NCC usage.
- Install NCC from an Installer File .
- List usage examples.
- Discuss support options.
- Discuss remote connections.
- Configure HTTP proxy.
- Analyze log files

Lifecycle Operations

- Describe the Health dashboard and its major components.
- Configure a health check.
- Explain how to monitor alerts and events.
- Configure the alert email settings for a cluster Register a cluster with Prism Central and use the console to manage the cluster

Información Adicional:

Benefits: Be able to maximize value of investment through optimal configuration and operation of the Nutanix cluster. Ensure business continuity by implementing an integrated data protection strategy. Gain hands-on experience with new features in a safe lab environment. Validate skills by preparing for and completing the Nutanix Platform Professional certification

Más información:

Para más información o para reservar tu plaza llámanos al (34) 91 425 06 60

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