Nutanix Enterprise Cloud Administration (ECA) v6.10

Summary:

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

Length: 4 Days

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 that are needed to create and manage VMs – namely, networks and images.
2. Creating and managing VMs, working with Projects, 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, analyze, 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 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

Software Versions

-   AOS: version 6.10
-   Prism Central: version pc2024.2

Course Outline

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

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

3: Managing Images

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

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

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

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

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

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

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
- View and manage project resource utilization
- Create custom dashboards in Prism Central
- Resource planning and capacity runway

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

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

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

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