

## Nutanix Enterprise Cloud Administration (4 Days)

The Nutanix Enterprise Cloud Administration (ECA) 5.15 course enables administrators (system, network, and storage) to successfully configure and manage Nutanix in the datacenter. The course covers many of the tasks Nutanix administrators perform through the use of graphical user interfaces (GUIs) and command line interfaces (CLIs). It also provides insight into a Nutanix cluster's failover and self-healing capabilities, offers tips for solving common problems, and provides guidelines for collecting information when interacting with Nutanix Support.

### Who Can Benefit

The primary audience for the course includes administrators, architects, and business leaders who manage Nutanix clusters in the datacenter, and anyone who is seeking the Nutanix Certified Professional (NCP) certification. The secondary audience includes managers and technical staff seeking information to drive purchase decisions.

### Course Details

#### Introduction

- The section describes the Nutanix HCI solution, walks you through the components of the Nutanix Enterprise Cloud, and explains the relationship between physical and logical cluster components.

#### Managing the Nutanix Cluster

- In this section, you will use the Prism console to monitor a cluster, configure a cluster using various interfaces, use the REST API Explorer to manage the cluster, and learn how to deploy Nutanix-specific PowerShell cmdlets.

#### Securing the Nutanix Cluster

- This section shows how to secure a Nutanix cluster through user authentication, SSL certificate installation, and cluster access control.

#### Networking

- This section explains how to configure managed and unmanaged Acropolis networks and describes the use of Open vSwitch (OVS) in Acropolis. You will learn how to display and manage network details, differentiate between supported OVS bond modes, and gain insight into default network configuration.

#### VM Management

- This section shows you how to upload images, and how to create and manage virtual machines.

### **Health Monitoring and Alerts**

- In this section, you will use the Health Dashboard to monitor a cluster's health and performance. You will also use Analysis Dashboard to create charts that you can export with detailed information on a variety of components and metrics.

### **Distributed Storage Fabric**

- This section discusses creating and configuring storage containers, including the storage optimization features: deduplication, compression, and erasure coding.

### **AHV Workload Migration**

- Using Nutanix Move, this section shows how to migrate workloads to a cluster running AHV. This is followed by a lab where a VM running on a Nutanix cluster configured with ESXi is migrated to a Nutanix cluster running AHV.

### **Acropolis Services**

- This section gives you detailed information on Nutanix Volumes, which provides highly available, high-performance block storage through a few easy configuration steps. It also discusses Nutanix Files.

### **Data Resiliency**

- This section shows how Nutanix provides comprehensive data protection at all levels of the virtual datacenter: logical and physical.

### **Data Protection**

- Data can be replicated between Nutanix clusters, synchronously and asynchronously. This section shows how to configure a Protection Domain (PD) and Remote Sites, recover a VM from a PD, and perform a planned failover of a PD.

### **Prism Central**

- Having discussed and used Prism Element earlier, this section looks at the capabilities of Prism Central. With the added functionality provided by a Pro license, the focus is on features related to monitoring and managing multiple activities across a set of clusters.

### **Monitoring the Nutanix Cluster**

- This section shows you where to locate and how to interpret cluster-related log files. In addition, you will take a closer look at the Nutanix Support Portal and online help.

### **Cluster Management and Expansion**

- This section outlines essential life-cycle operations, including starting/stopping a Nutanix cluster, as well as starting/shutting down a node. You will also learn how to expand a cluster, manage licenses, and upgrade the cluster's software and firmware.

### **Remote Office Branch Office (ROBO) Deployments**

- In this section, you will understand various configurations and requirements specific to a ROBO site. This includes hardware/software, Witness VM, networking, failure and recovery scenarios for two-node clusters, and the seeding process.