

# Nutanix: Prism, AHV Clusters & LCM Upgrades

Learn to deploy, manage and upgrade Nutanix clusters using Prism, AHV and LCM, from setup to troubleshooting.

**1 Day**

DURATION

**6**

MODULES

**45**

TOPICS

**6**

HANDS-ON ACTIVITIES

## COURSE OVERVIEW

This course covers the Nutanix Enterprise Cloud architecture, including AOS, AHV, CVM and Prism, along with hyper-converged storage, compute and networking concepts. It then addresses Nutanix installation, VM creation and configuration through Foundation setup, cluster configuration and AHV VM management. It continues with Prism Element and Prism Central for monitoring, role-based access, policies and workload management, followed by cluster management tasks such as node addition and removal, storage pool configuration and data resiliency. It closes with AOS, hypervisor and firmware upgrades using Life Cycle Management, and cluster health checks, log analysis and troubleshooting.

## WHO THIS COURSE IS FOR

System Administrators

Infrastructure Engineers

Virtualisation Engineers

Cloud Administrators

IT Support Engineers

## LEARNING OBJECTIVES

- Describe Nutanix architecture including AOS, AHV, CVM and Prism
- Configure initial cluster setup, storage containers and VM networking
- Create and manage virtual machines on AHV
- Navigate Prism Element and Prism Central dashboards
- Apply role-based access control, policies and workload management
- Manage cluster nodes, storage pools and data resiliency settings
- Plan and apply AOS, hypervisor and firmware upgrades using LCM
- Analyse cluster health, logs and alerts to troubleshoot issues

# 6 Modules, 45 Topics

01

Demo Lab

## Introduction to Nutanix Enterprise Cloud

### TOPICS

- Overview of HCI (Hyper-Converged Infrastructure)
- **Nutanix Architecture:** AOS, AHV, CVM, Prism
- Understanding Storage, Compute, and Networking in Nutanix
- Exploring the Nutanix environment interface
- Navigating Prism Element dashboard

02

Demo Lab

## Nutanix Installation & VM Creation

### TOPICS

- Pre-requisites for Nutanix Deployment
- Foundation Setup Overview
- Initial Cluster Configuration
- Storage Container Setup
- Networking Configuration for VMs
- Creating & Managing VMs in AHV
- Deploying Nutanix CE or using pre-built cluster
- Creating a VM on AHV
- Configuring vNICs, Disks, and Snapshots

03

Demo Lab

## Nutanix Prism (Element & Central)

### TOPICS

- Prism Element Dashboard
- Monitoring Health, Performance, and Capacity
- Prism Central Architecture Overview
- Role-Based Access Control
- Policies and Projects
- Workload Management
- Registering a cluster with Prism Central
- Navigating PC dashboards and configuring roles

04

Demo Lab

## Nutanix Cluster Management

### TOPICS

- Understanding Nutanix Cluster Components
- Adding & Removing Nodes
- Configuring Storage Pools & Containers
- Data Resiliency and Replication (RF levels)
- Cluster Expansion Scenarios
- Exploring Cluster details in Prism
- Checking RF status and Data Placement
- Simulating a node maintenance mode

05

Demo Lab

## Upgrade - AOS, Hypervisor Patches, and Firmware

### TOPICS

- Understanding LCM (Life Cycle Management)
- AOS Upgrade Workflow
- AHV / Hypervisor Patch Application
- Firmware & BIOS Updates using LCM
- Best Practices Before Upgrade
- Running an LCM Inventory
- Simulating an AOS or Firmware upgrade (demo environment)

06

Demo Lab

## Nutanix Health Check & Troubleshooting

### TOPICS

Key Health Parameters · Storage Utilization Checks · Capacity Forecasting · Log Collection & Analysis · Common Issues & Recommended Fixes · Running Cluster Health Checks · Generating Log Bundles · Analyzing Alerts

### HANDS-ON ACTIVITIES

## Practise What You Learn

| #  | MODULE                                   | ACTIVITY |
|----|------------------------------------------|----------|
| 01 | Introduction to Nutanix Enterprise Cloud | Demo Lab |
| 02 | Nutanix Installation & VM Creation       | Demo Lab |
| 03 | Nutanix Prism (Element & Central)        | Demo Lab |
| 04 | Nutanix Cluster Management               | Demo Lab |

| #  | MODULE                                          | ACTIVITY |
|----|-------------------------------------------------|----------|
| 05 | Upgrade - AOS, Hypervisor Patches, and Firmware | Demo Lab |
| 06 | Nutanix Health Check & Troubleshooting          | Demo Lab |

#### WHAT IS INCLUDED

## Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

#### ABOUT KOENIG

## Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

#### FLEXIBLE DELIVERY

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Fly-Me-A-Trainer (FMAT)

Flexi (Self-Paced)

1-on-1 Training

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✉ [info@koenig-solutions.com](mailto:info@koenig-solutions.com)