Nutanix Advanced Administration & Performance Management

Duration: 4 Days (Hands on Included)

Pre-requisite: Students attending this course should complete Nutanix Certified Professional course and have at least 1 year experience in Administrating and Managing Nutanix Cloud Platform.

Module 1 – Administer Advanced Virtual Machine Deployments (Hands On)

• Perform unattended installation and configure Nutanix Guest Tools (NGT)
• Set up and configure Self Service Restore
• Add/Remove CPU and/or Memory resources to a live system
• Identify the need for Flash mode/AHV Turbo for VM storage or performance tuning
• Manage Acropolis containers

Module 2 – Implement Business Continuity and Disaster Recovery (Hands On)

• Based on a given scenario administer and manage Nutanix data protection solutions
• Demonstrate how to install and configure synchronous replication for multiple hypervisors

Module 3 – Configure Advanced Networking (only theory)

• Identify the physical switch configuration necessary to support a given AOS networking feature
• Utilize network CLIs to manage OVS (Open vSwitch) instances and make changes to multiple nodes
• Manage bridges and uplinks
• Configure and utilize Network Visualization
• Describe and differentiate Network Segmentation for CVM-CVM/CVM-Hypervisor/CVM-Intranet

Module 4 – Enable and Customize Security Services (Hands On)

• Describe and manage Nutanix's custom Security Technical Implementation Guides (STIGs)
• Describe and manage role mapping between Prism Element and Prism Central
• Describe and differentiate audit events and logs for local and AD/LDAP users
• Create and install SSH Keys for Cluster Lockdown
• Implement 2-factor authentication for an AOS cluster

Module 5 – Manage Acropolis File and Block Services (Hands On)

• Identify use cases for Acropolis Block Services (ABS)
• Identify use cases for Acropolis File Services (AFS)
• Deploy ABS to an AOS cluster (including Volume Groups, iSCSI Initiators, Discovery, CHAP)
• Deploy AFS to an AOS cluster (including a File Server and File Shares)
• Manage an AFS cluster
• Connect to an ABS target from both Windows and Linux clients

Module 6 – Administer Prism Central with and without Prism Pro (Hands On)

• Describe and differentiate capabilities of Prism Central with and without Prism Pro
• Use Prism Central to identify and fix bottlenecks and anomalies
• Exploit Machine learning for entity management and resource optimization
• Plan for future growth using Capacity Runway and What-if Scenarios
• Manage assets and applications using Calm
• Automate application Life Cycle Management (LCM)
• Implement and administer Prism Self-Service

Module 7 – Manage and Optimize Performance (Hands On)

• Determine correct system storage settings for compression, deduplication and erasure coding and validate expected savings
• Monitor CPU/Memory utilization to identify problems and propose solutions
• Analyze existing network configuration and adjust for optimal performance (NLB, Bond configuration)
• Identify the capabilities of the Enterprise Cloud as they relate to performance of AOS clusters, AHV hosts and VMs
• Describe and monitor storage performance and methods of optimization

Module 8 – Utilize Advanced Management Interfaces (Hands On)

• Describe the Rest API and demonstrate how to use the Rest API explorer
• Install and configure a REST client to trigger Rest API and generate code snippets
• Execute PowerShell cmdlets in interactive and batch modes

Module 9 – Migration

- Understanding the Best Practices for Migration Strategy
- Designing a Migration plan with use case
- Using Move Tool for Migration of VM
- Integrating with Active Directory / Self Service Portal