EXAM BLUEPRINT GUIDE

Nutanix Certified Associate (NCA) 6.10 Beta Exam
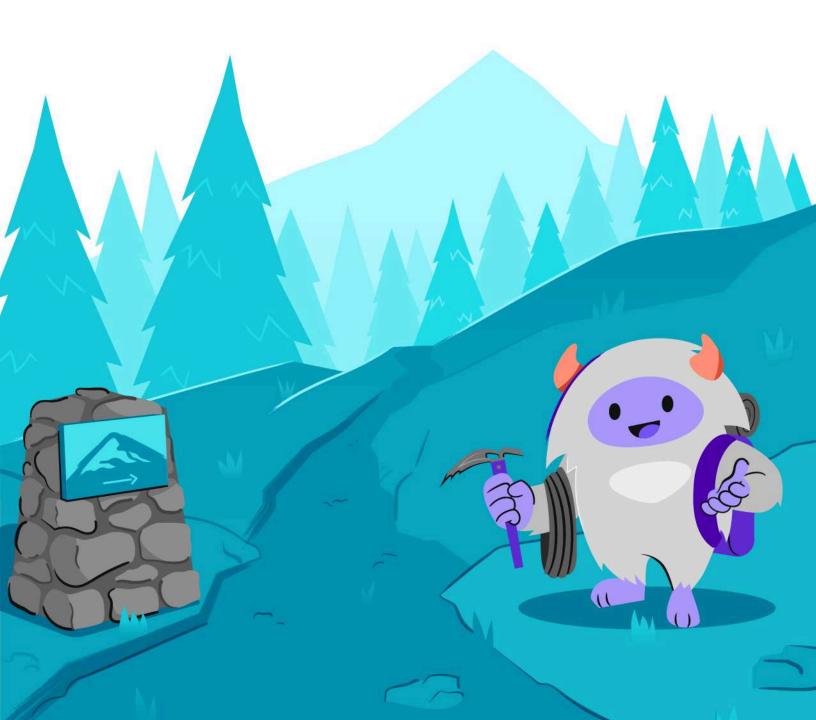
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Author

Jeff Hall, Manager, Technical Certification Development

Contributors

Alfredo Flores, Sr. Infrastructure Engineer
Alpesh Lakum, Sr. Manager, Pre-Sales & Deployment
Bhavin Mehta, Head Compute & Hyperconverged Infrastructure Services
Brian Jaschke, FR Solutions Consultant
Chris McMahon, Advisory Portfolio Architect - NCM
Chris Nelson, Advisory Portfolio Architect - NCM
Daniel Sullivan, Field Engineer
Eric Stapleton, Sr. Staff Resident Consultant
Frederic Lhoest, Technology Architect
Gary Foster, Customer Success Engineer
Hugo Sanchez, Systems Sales Engineer
Ignacio Romero, Data Center Administrator
Jim Corder, Founder, Corder Enterprises International
Josue Gutierrez, CTO, GQC Extreme
John Hamilton, Systems Administrator
John Burton, Principal Systems Reliability Engineer
Joseph Blake, Staff Resident Architect
Kenneth Fingerlos, Director, Global Practices - Services
Kim Mount, Technical Director
Kyle Naidoo, Systems Engineer
Leandro Leonhardt, Staff Resident Architect
Leimar Braz, Sr. Systems Engineer
Lev Goronshtein, Advisory Systems Engineer
Lochan Serma, Staff Consulting Architect
Maroane Boutayeb, Global Unit Lead - Nutanix on OVHcloud
Mateja Tomasevic, Sr. Virtualization Engineer
Matthew Gauch, Sr. Staff Escalation Engineer
Matthew Porter, Technical Services Consultant
Michael Bates, Sr. Systems Engineer
Nic Pearce, Sr. Technical Account Manager
Nicolas Hoareau, Sr. Systems Engineer
Pankaj Kumar, Systems Engineer
Paul Monroe, Staff Escalation Engineer
Rickard Wendel, Sr. Systems Engineer
Robert Johnson, Principal Client Solutions Architect
Ross Hunt, Staff Resident Architect
Samuele Cerutti, Advisory Systems Engineer
Sean Nally, Sr. Systems Engineer
Tod Holsenbeck, Sr. Staff Enterprise Architect and Practice Lead
Tyler Pope, Staff Escalation Engineer
Vlad Glemb, Staff Consulting Architect

1. The Exam

1.1 Purpose of Exam

The Nutanix Certified Associate (NCA) 6.10 beta exam tests candidates on their skills and abilities to navigate the Prism UI, extrapolate information from the UI, and know how to use the UI for basic operational tasks. Successful candidates demonstrate mastery of these skills and abilities.

1.2 Number of Questions

The NCA 6.10 beta exam consists of 76 multiple choice and multiple response questions.

1.3 Pricing

There is no cost for the NCA 6.10 beta exam.

1.4 Passing Score

The final score will be determined by examining the results from the beta exam period, determining which exam items performed well, and evaluating each candidate's results, based on only the items that performed well.

This process can take from 4-6 weeks from the time the beta period has ended. Once the evaluation is complete, candidates will receive their scores. Candidates who have passed will not need to take the live exam.

1.5 How Objectives Relate to Questions on the Exam

Objectives summarize what the test is designed to measure. Objectives are developed by Exam Developers and Subject Matter Experts based on identified tasks that relate to the job of navigating the Prism UI, extrapolating information from the UI, and knowing how to use the UI for basic operational tasks.

Once the initial development process is complete, these objectives are verified using an external group of individuals in the actual job role. Finally, a number of questions is determined for each objective, which relates directly to the criticality of the task in the job role.

1.6 Languages

The beta exam is available in English.

1.7 Time Limit

The time limit for the exam is 120 minutes.

1.8 Scheduling and Taking the Exam

The NCA 6.10 beta exam is delivered via remote proctoring or in-person at select test centers.

If you select remote proctoring, after registering for the exam and providing valid identification, you will receive information on how to take the exam from your location using a web browser. Because the exam is remote proctored, you will be provided with a locked down, monitored, secure exam experience.

If you select in-person testing, you will be able to select a test center near you. On the day of the exam, you will need to arrive at the test center 15 minutes prior to the exam start time with a valid government-issued ID.

1.9 Certification Tracks

The NCA 6.10 beta exam is a core component of the Nutanix Associate track.

The certification requires a passing score on the exam. While it is not required that you attend a course, Nutanix provides training that covers the objectives on the exam. Details on the course and track are provided in Section 4.

1.10 Retake Policy

If a candidate fails an exam on the first attempt, he or she is allowed two additional attempts. There is a seven-day waiting period between attempts. Like the first attempt, these are paid for individually and Nutanix recommends that you allow sufficient time between attempts to be properly prepared and to maximize your chances for success.

Please note: After three attempts, you will be unable to take the exam for 60 days, after which you can email university@nutanix.com and request that your attempts are reset. Nutanix recommends you utilize the time to thoroughly review this guide and the related references and/or take the recommended training for this exam.

1.11 Exam Security

Nutanix reserves the right to refuse certifying a candidate who violates exam security policies. This includes copying and redistribution of exam material, using any type of study material during the exam itself, attempting to photograph exam items and taking an exam using a false identity. Your identity is captured as part of the exam registration process and must be validated before you will be allowed to take the exam.

1.12 Recertification

Once you have passed the Nutanix Certified Associate 6.10 beta exam and achieved the NCA 6 certification, it will remain valid for two years.

To maintain your certification status, you must either renew your existing certification, pass an NCP-level exam, or pass the NCM-MCI exam.

1.13 Benefits of Certification

- Digital badge from Credly that you can share on social media

- Points on Nutanix Xtribe that you can redeem for prizes (only available for Nutanix customers)

- Access to the Certification store at http://store.nutanix.com for shirts, mugs, and more

- Opportunity to participate as a SME to develop future exams

- Discount on attending Nutanix .NEXT

2. Intended Audience

A candidate for the NCA 6 certification has approximately 6- 12 months of holistic IT infrastructure experience as well as 3-6 months of Nutanix virtualization experience.

Successful candidates are typically systems administrators, junior engineers, or IT operators and should be able to navigate and identify components within the Prism UI; perform life cycle management tasks of VMs and clusters; and monitor and report on performance, events, and alerts. The successful candidate will most likely have taken training courses such as the Nutanix Hybrid Cloud Fundamentals (NHCF) course.

3. Objectives Covered in the NCA 6.10 Beta Exam

3.1 Introduction

It is recommended that candidates have the knowledge and skills necessary to navigate and identify components within the Prism UI; perform life cycle management tasks of VMs and clusters; and monitor and report on performance, events, and alerts before attempting the NCA 6.10 beta exam.

For the NCA 6 certification, candidates will be tested on the following software versions:

- AOS: version 6.10

- Prism Central: version pc2024.2

3.2 Objectives

Prior to taking this exam, candidates should understand each of the following objectives. Each objective is listed below; along with related tools the candidate should have experience with, and related documentation that contains information relevant to the objective. Please note that some documentation requires access via the Support Portal. Information on creating an account for use with the Support Portal can be found here.

All objectives may also be referenced in other product documentation not specifically highlighted below. The candidate should be familiar with all relevant product documentation or have the equivalent skills.

Section 1 – Describe Lifecycle Management

Objective 1.1 – Describe Life Cycle Manager (LCM)

Knowledge:

- Identify which updates are needed

- Ensure there are no alerts

- Describe LCM Inventory process

- Differentiate LCM in Prism Central and Prism Element

- Identify best practices for the LCM order of upgrades

References

- Life Cycle Manager Overview

- Performing Inventory with the Life Cycle Manager

- Specifying Connected Site Settings

- Recommended Upgrade Order for Dark Site Method

- Placing the Firmware and Software LCM Bundles on a Web Server

Objective 1.2: Monitor LCM software and firmware upgrades

Knowledge

- Explain the impact of placing nodes in maintenance mode

- Discuss when to use basic Affinity VM rules

- Differentiate basic upgradable components

References

- Software and Firmware Upgrades

- Firmware and Software Updates Management in a Connected Site Setup

- LCM Environment Setup for Software and Firmware Updates

- Firmware Upgrade Recommendations and Limitations

- Confirm Upgrades using the Task Status Dashboard

Section 2 – Describe Nutanix Basic Administration

Objective 2.1: Describe how to perform basic VM tasks

Knowledge

- Explain how to perform a VM snapshot
- Describe how to perform a VM migration to a different host
- Summarize how to monitor VM resource usage
- Compare methods for reviewing VM resource settings
- Discuss basic Affinity policies

References

- Creating a VM (AHV)
- Deleting a VM Snapshot Manually
- Migrating Within the Cluster
- Managing a VM (AHV)
- Affinity Policies Defined in Prism Element
- Create a VM Template
- Images Summary View

Objective 2.2: Identify cluster-level settings

Knowledge

- Describe the implementation of security settings
- List network settings within the cluster
- Define Users and Roles
- Recall Alerts and Notifications

References

- Data-at-Rest-Encryption
- Configuring Dual Encryption
- Cluster Time Synchronization
- Configuring Network Switch Configuration

- Controlling Cluster Access
- Controlling User Access (RBAC)
- Setup Admin Session Timeout
- Creating a Storage Container
- Recycle Bin
- Alert and Event Monitoring

Objective 2.3: Determine cluster license level

Knowledge

- Verify if the cluster is licensed
- Identify which level of license the cluster is using
- Explain the cluster license process via the Support Portal

References

- Nutanix Cloud Platform Package Licensing
- Use Tags to Organize Your Licenses
- Displaying License Features and Details
- Nutanix Cloud Platform Software Options

Section 3 – Maintain the Environmental Health of a Nutanix cluster environment

Objective 3.1: Perform and interpret a health check

Knowledge

- Describe Resiliency Status
- Perform log collections
- Perform NCC Checks
- Determine the cluster status
- Explain the difference in Metric and Entity Charts
- Distinguish Alert Severity

References

- Running Checks by Using Prism Element Web Console
- Prism Element Main Menu

- Running NCC (Prism Element)
- Collecting Logs by Using Prism Element Web Console
- Prism Element Home Dashboard
- Running NCC in Prism Element

Objective 3.2: Administer alerts, events, and policies

Knowledge

- Verify Pulse Status
- Describe the benefits of Pulse
- Determine use cases for Custom Alert Policies

References

- Guest VM Alerts and Events
- User Defined (Custom) Alert Policies
- Overlapping Policies
- Pulse Health Monitoring

Objective 3.3: Create a support ticket

Knowledge

- Describe how to create a support case
- Identify the required documentation for support cases
- Identify the various documentation types

References

- Creating a Case
- Nutanix Product Support Programs
- Nutanix Support Policies and FAQs

Section 4 – Describe Cluster Configuration Options

Objective 4.1: Determine and describe redundancy/replication factors

Knowledge

- Distinguish how many copies of metadata and data are on the cluster
- Identify failure domains
- Recognize container options (e.g. RF1, RF2, RF3)
- Explain cluster size

References

- Storage Management
- Redundancy Factor 3
- Replication Factor 1 Overview
- Erasure Coding

Objective 4.2: Identify storage components

Knowledge

- Recall storage options
- Identify the different disk types

References

- Acropolis Dynamic Scheduling in AHV
- Nutanix Core Performance
- Modifying a Storage Pool
- Capacity Reservation Best Practices

Objective 4.3: Identify storage optimization

Knowledge

- Determine when to use compression, deduplication, erasure coding
- Define data locality
- Describe storage tiering

References

- Erasure Coding Best Practices and Requirements
- Deduplication
- Compression
- Redundancy Factor 3
- Replication Factor 1 Overview
- Storage Components

Objective 4.4: Identify the supported hypervisors

Knowledge

- Differentiate types of supported hypervisors
- Identify implications of intermixing hypervisors within the same cluster
- Describe Nutanix Cloud Clusters (NC2)

References

- Supportability of Features (by Hypervisor)
- Product Mixing Restrictions
- Nutanix Cloud Clusters (NC2) Overview

Objective 4.5: Identify basic AHV networking

Knowledge

- List different bond types and their use cases
- Identify failure response depending on the bond type
- Differentiate between managed and unmanaged networks

References

- Virtual Switch Workflow
- Nutanix AHV Networking
- AHV Networking Recommendations
- About Open vSwitch

Objective 4.6: Determine use cases for Nutanix products and services

Knowledge

- Describe hardware options
- Differentiate add-on components
- Demonstrate understanding of Disaster Recovery

References

- Examples of Supported Volumes Use Cases
- Nutanix Move Overview
- Flow Virtual Networking Overview
- Conditions for Implementing Data Protection (Metro Availability)
- iSCSI Data Services IP Address Impact
- Metro Availability on ESXi
- Creating a Recovery Plan
- Data Protection with Asynchronous Replication (One-hour or Greater RPO)
- Use Cases and Recommendations for NFS on Objects

4. NCA 6.10 Training Recommendations

4.1 Course Recommendation

Nutanix offers a course that provides training on the objectives tested for in the exam. More information on this course, including delivery methods and pricing, can be found at nutanix.com/training.

The course details are as follows:

The Nutanix Hybrid Cloud Fundamentals (NHCF) training course is for those who are new to Nutanix and want a feature-focused introduction to AOS Storage, Nutanix's scale-out storage technology, and Prism, Nutanix's multicloud management interface.

The NHCF course explores the breadth and depth of Nutanix's centralized management capabilities. Focused on getting you to explore and work with the Nutanix platform as quickly as possible, this introductory course starts by discussing key Nutanix products and cluster-related concepts.

Using the Prism Central and Prism Element unified control plane, you will learn how to monitor cluster health and performance, manage software versions, create and manage VMs, and perform basic management tasks on hardware, storage, and networks.

The material provided in the course covers a majority of the objectives that appear on the NCA 6.10 beta exam and is recommended for individuals who want to gain a good understanding of these objectives. Please note that additional exposure to a Nutanix environment is highly recommended.

This course will be available online or instructor-led (in-person or virtual) before the live exam is launched. More information including schedules and how to register can be found at www.nutanix.com/university.

5. Resources

5.1 Nutanix Community Edition

The Nutanix Community Edition is a free product that allows you to deploy a Nutanix Cloud Platform. To download the software and build your own environment for exam preparation, click here.

5.2 Test Drive

You can also take a 2-hour Hyperconverged Test Drive, which utilizes the Nutanix Community Edition, by clicking here.

5.3 The Nutanix Community

Connect with cloud builders from around the world, learn from IT Pros in your industry and share experiences on the Nutanix Community. The community maintains an area focused on Nutanix certifications, which is located here.

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