

EXAM BLUEPRINT GUIDE

# Nutanix Certified Associate (NCA) 6.10 Exam



## Table of Contents

Author	3
Contributors	3
<b>1. The Exam</b>	<b>4</b>
1.1 Purpose of Exam	4
1.2 Number of Questions	4
1.3 Pricing	4
1.4 Passing Score	4
1.5 How Objectives Relate to Questions on the Exam	4
1.6 Languages	4
1.7 Time Limit	4
1.8 Scheduling and Taking the Exam	5
1.9 Certification Tracks	5
1.10 Retake Policy	5
1.11 Exam Security	5
1.12 Recertification	5
1.13 Benefits of Certification	6
<b>2. Intended Audience</b>	<b>6</b>
<b>3. Objectives Covered in the NCA 6.10 Exam</b>	<b>6</b>
3.1 Introduction	6
3.2 Objectives	6
Section 1 – Describe Lifecycle Management	7
Section 2 – Describe Nutanix Basic Administration	8
Section 3 – Maintain the Environmental Health of a Nutanix cluster environment	9
Section 4 – Describe Cluster Configuration Options	11
<b>4. NCA 6.10 Training Recommendations</b>	<b>14</b>
4.1 Course Recommendation	14
<b>5. Resources</b>	<b>15</b>
5.1 Nutanix Community Edition	15
5.2 Test Drive	15
5.3 The Nutanix Community	15

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### Disclaimer:

The Nutanix Certified Associate (NCA) 6.10 Exam Blueprint Guide provides an overview of the objectives that must be mastered to achieve the NCA 6 credential. Nutanix does not offer any guarantees that this guide will ensure a candidate's success in achieving the NCA 6 certification. All information in this guide is subject to change at any time at the sole discretion of Nutanix.

# 1. The Exam

## 1.1 Purpose of Exam

The Nutanix Certified Associate (NCA) 6.10 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 exam consists of 50 multiple choice and multiple response questions.

## 1.3 Pricing

The cost for the NCA 6.10 exam is \$99 USD.

## 1.4 Passing Score

The passing score for this exam is 3000, using a scaled scoring method. The scale is from 1000-6000. Scaled scores are calculated using a mathematical formula that considers a variety of factors, including the number and type of exam questions included in a specific version of the exam.

Because this combination may vary in different versions of the same examination, scaled scores provide a fair score for everyone based on the version of the exam taken.

## 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 exam is available in English and Japanese.

## 1.7 Time Limit

The time limit for the exam is 90 minutes.

## 1.8 Scheduling and Taking the Exam

The NCA 6.10 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 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](mailto: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 exam and achieved the NCA 6 certification, it will remain valid for three 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 or applicable training.

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 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 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](#)

### 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](https://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 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](https://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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