

Exam Blueprint Guide

Nutanix Certified Professional - End User Computing (NCP-EUC) 6.5 Exam



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Disclaimer:

The Nutanix Certified Professional - End User Computing (NCP-EUC) 6.5 Exam Blueprint Guide provides an overview of the objectives that must be mastered to achieve the NCP-EUC 6 certification credential. Nutanix does not offer any guarantees that this guide will ensure a candidate's success in achieving the NCP-EUC 6 certification. All information in this guide is subject to change at any time at the sole discretion of Nutanix.

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1.The Exam

1.1 Purpose of Exam

The Nutanix Certified Professional - End User Computing (NCP-EUC) 6.5 exam will measure a candidate's ability to successfully deploy, monitor, administer, troubleshoot and maintain end user computing environments utilizing the Nutanix platform. Successful candidates demonstrate mastery of these skills and abilities.

1.2 Number of Questions

The NCP-EUC 6.5 exam consists of 75 multiple-choice and multiple-response questions.

1.3 Pricing

The cost for the NCP-EUC 6.5 exam is \$199 USD.

1.4 Passing Score

The final score will be determined by examining the results from the 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 4-6 weeks from the time the 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 deploying and administering a multicloud environment utilizing Nutanix products and technologies. 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.

1.7 Time Limit

The time limit for the exam is 120 minutes.

1.8 Scheduling and Taking the Exam

This 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 NCP-EUC 6.5 exam is a core component of the Nutanix End User Computing track. Passing this exam results in achieving the NCP-EUC 6 certification.

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 recommended training course 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 Professional - End User Computing (NCP-EUC) 6.5 exam and achieved the NCP-EUC 6 certification, it will remain valid for two years.

To maintain your certification status, you must either renew your existing certification, pass an equivalent NCP-level exam within another certification track, 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 Connection 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 NCP-EUC 6.5 exam and NCP-EUC 6 certification can deploy, monitor, administer, troubleshoot, and maintain end user computing environments utilizing the Nutanix platform. The successful candidate has approximately 6-12 months of experience administering EUC technologies in a Nutanix environment and 18-24 months of support in one or more of these areas: desktop support, virtualization support, and network support.

Successful candidates are EUC administrators, architects, and consultants who need to manage, or are interested in becoming certified in, End User Computing environments using the Nutanix platform. Additionally, the successful exam candidate will most likely have taken training courses, such as the Nutanix End User Computing Administration (NEUCA) course.

3. Objectives covered in the NCP-MCA 6.5 Exam

3.1 Introduction

It is recommended that candidates have the knowledge and skills necessary to deploy, monitor, administer, troubleshoot, and maintain end user computing environments utilizing the Nutanix platform before attempting the Nutanix Certified Professional – End User Computing 6.5 exam. It is also recommended that the candidate complete the training course described in Section 4 prior to taking the exam.

For the NCP-EUC 6.5 exam, candidates will be tested on the following software versions:

- · AOS: version 6.5
- · Prism Central: pc2022.6.x

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 Nutanix Technologies for EUC Solutions

Objective 1.1: Determine optimal AOS configurations to support an EUC solution implementation

Knowledge:

- Explain the optimal configuration for Nutanix essentials (AOS/Prism) in an EUC environment
- Understand the optimal configuration of Nutanix core components for an EUC environment

References

- · EUC Core Infrastructure Conceptual Design
- · EUC Storage Design
- · Creating a VDI Policy
- · Rack Fault Tolerance
- · vGPU Hypervisor Implementations on Nutanix
- · NVIDIA GRID Virtual GPU Support on AHV

Objective 1.2: Describe the role of Nutanix technologies in a EUC solution implementation

Knowledge:

- · Identify use cases for Nutanix essentials in an EUC environment
- · Identify Nutanix core components that benefit EUC environments

References

- · Defining Virtual Desktop Infrastructure (VDI)
- · File Services Best Practices
- · Connect to Citrix Cloud
- · Availability Domains
- · Citrix DaaS on NC2 on AWS: Disaster Recovery
- · Performance Analysis of Nutanix Shadow Clones

Objective 1.3: Identify security strategies on the Nutanix platform for an EUC solution implementation

Knowledge:

- · Identify VDI security policy use cases
- · Recognize security and compliance best practices for an EUC environment
 - > Security Configuration Management Automation (SCMA) framework
 - > VLAN-based, data driven segmentation
 - > Cluster access control
 - > SSL certificate management
 - Data-at-rest (DARE) encryption
 - Hardening AHV
 - > Hardening Controller VM
 - > TCP Wrapper Integration
 - > Secure boot (vTPM)
 - › Nutanix Files hardening

References

- · SCMA Implementation
- · Data-at-Rest Encryption
- · Isolation Environment Policy Configuration
- · Quarantining Virtual Machines with Flow Network Security
- · Security and Compliance
- · Default VDI Policy
- · Creating a VDI Policy
- · Securing AHV VMs with Virtual Trusted Platform Module (vTPM)
- · AOS Hardening
- · Implementing Flow Network Security

Section 2: Deploy a Nutanix Environment for an EUC Implementation

Objective 2.1: Given business requirements, determine an appropriate EUC configuration

Knowledge:

- · Given business requirements, interpret the optimal delivery environment (on-prem, cloud-based (NC2 vs cloud native), or hybrid (NC2))
- · Given business requirements, interpret the VM optimal profile configuration

References

- · Citrix DaaS Core Infrastructure Conceptual Design
- · EUC Scenario Planning in Prism Central
- · Connecting to the Citrix Cloud
- · Citrix DaaS on NC2 on AWS Application Overview
- · User Profile Replication
- · Configuring Nutanix Files for Citrix on AHV

Objective 2.2: Demonstrate an understanding of the properties of EUC solutions

Knowledge:

- · Given business requirements, choose between on-prem and cloud-based EUC options
 - Given requirements, infer the appropriate EUC solution(s)
- · Given requirements, identify appropriate virtual desktop delivery options

- · Performance Analysis of Nutanix Shadow Clones
- · VMware Horizon on Nutanix Storage Configuration
- · Disaster Recovery for Citrix Desktop as a Service
- · Dedicated Full-Clone Persistent Solution
- · Administering Persistent Desktops
- · Citrix Virtual Apps and Desktops on AHV

Section 3: Configure and Operate a Nutanix Environment for an EUC Implementation

Objective 3.1: Demonstrate an understanding of gold images

Knowledge:

- · Given a scenario/use case, infer the appropriate gold image deployment option(s)
- · Given a scenario/use case, explain application layering impact(s)
- · Compare approaches for managing gold images across multiple sites and geographies
- · Explain the positive and negative impacts of optimizing gold images
- · Given a scenario/use case, explain how to appropriately optimize gold images
- · Interpret what should and shouldn't be included in the gold image

References

- · Migrating Workloads to Nutanix from Alternate Platforms
- · Windows 11 on AHV
- · Base Image Migration Using Nutanix Disaster Recovery Solutions
- · NVIDIA Grid Host Driver for AHV
- · Citrix Virtual Machine Design
- · EUC Cluster Capacity Management

Objective 3.2: Demonstrate an understanding of the components required for configuring EUC solutions

Knowledge:

- · Demonstrate an understanding of Citrix AHV plugins
- · Demonstrate knowledge of hypervisor requirements of each solution
- · Demonstrate an understanding of VMware ESXi and vCenter prerequisites

- · Citrix Virtual Apps and Desktops Supported Software
- · AOS 6.5 with AHV Citrix DaaS Design
- · AHV Plug-in for Citrix Director
- · Citrix DaaS Virtual Machine Design

Objective 3.3: Demonstrate an understanding of EUC solution profile store concepts

Knowledge:

- · Given a use case, select the appropriate user profile store solution
- · Compare the behaviors of user profile store solutions
- · Given a scenario, infer the appropriate profile management strategy
- · Compare stateful and stateless user profile environments
- · Assess the environment to determine the profile management strategy in use

References

- · Nutanix Files Configuration for EUC DaaS Design
- · Profile Management and User Data
- · Distributed Shares
- · Transparent Failover for EUC workloads
- · File Services Best Practices
- · Access-Based Enumeration (SMB only)
- · Nutanix Files Design for EUC DaaS

Section 4: Troubleshoot, Optimize, and Scale a Nutanix Environment for an EUC Implementation

Objective 4.1: Given a scenario, determine how to optimize a Nutanix environment for an EUC solution

Knowledge:

- · Determine if an environment is properly deployed
- · Recommend the appropriate technology/tools to optimize an environment
- · Determine the appropriate resources for the optimal performance of the environment
- · Determine if an optimization is appropriate for the given environment

- · NVIDIA vGPU on Nutanix
- · Controller VM Field Specifications
- · Citrix Virtual Desktops Windows 10 Desktop Optimizations
- · NVIDIA Shared GPU Solutions

Objective 4.2: Given a scenario, determine resource utilization of a specific virtual desktop or group of desktops

Knowledge:

- · Discuss Prism Central and other tools
- · Analyze data from the EUC solution to evaluate the utilization of an environment
- · Evaluate the statistics available to determine the status of resources

References

- · Poor Performance in VDI Environments with SuperFetch and PreFetch Enabled
- · Optimizing XenDesktop Machines
- · [Performance] Interpreting CPU Ready Values
- · [Performance] Troubleshooting High CPU in Nutanix Environments
- · Resource Planning in Prism Central
- · VDI Performance Hardware Acceleration

Objective 4.3: Given a scenario, determine how to troubleshoot a Nutanix environment for an EUC solution

Knowledge:

- · Given a scenario, determine tools to resolve an issue
- · Verify the suggested remedy for a given issue/scenario
- · Differentiate between user configured settings and standard settings
- · Given a scenario, resolve an issue related to end point devices such as:
 - > Zero clients
 - > Thin clients
 - > Browsers
 - > EUC third-party clients
 - > Peripheral devices

- · Recovery Plans in Prism Central
- · Behavioral Learning Tools
- · Disaster Recovery for Citrix Desktop as a Service
- · Image Placement Policies Summary View
- · Troubleshooting Windows VM Failing to Power On

4. NCP-EUC 6.5 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:

Nutanix End User Computing Administration (NEUCA)

The Nutanix End User Computing Administration course teaches the skills needed to deploy, monitor, administer, troubleshoot, and maintain end user computing environments utilizing the Nutanix platform.

The NEUCA course will explore a number of subjects, including:

- · Determining optimal AOS configurations, exploring the roles of Nutanix technologies in an EUC solution, and identifying security strategies on the Nutanix platform for an **EUC** solution
- · Determining appropriate EUC configurations, based on business requirements
- · Configuring and operating elements within a Nutanix environment for an EUC implementation, including gold images, third-party solution plugins, hypervisor requirements, profile store management and strategies
- · Optimizing and troubleshooting a Nutanix EUC environment, including best practices, viewing utilization metrics, and troubleshooting various common issues with EUC implementations

The material provided in the course covers a majority of the objectives (approximately 80%) that appear on the NCP-EUC 6.5 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.

5. Resources

5.1 Nutanix Community Edition

The Nutanix Community Edition is a free product that allows you to deploy a Nutanix Enterprise Cloud. 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 Next Community

The Nutanix Next Community is a social interaction site where professionals can connect with cloud builders from around the world, learn from IT Pros in the industry and share experiences. The community maintains an area focused on the NCP certification, which is located here.

5.4 Additional End User Computing Resources

Find a wealth of additional End User Computing resources here.



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