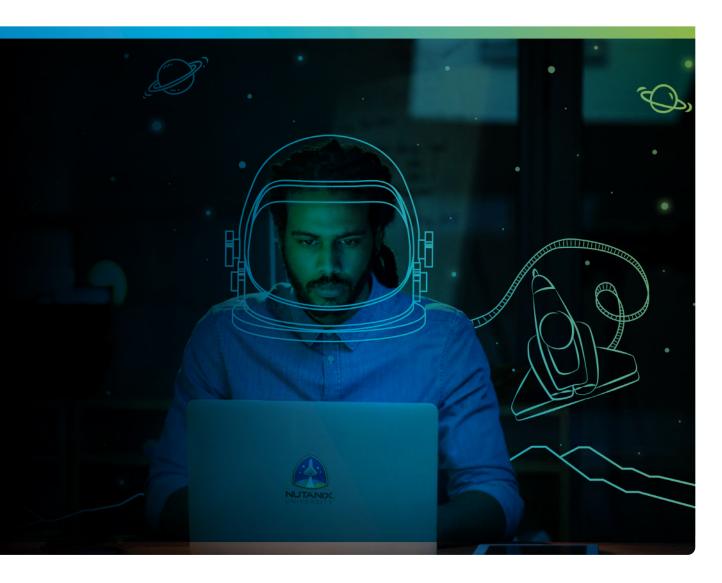


# **Exam Blueprint**

# Nutanix Certified Professional End User Computing (NCP-EUC) 6 Exam



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#### Disclaimer:

The Nutanix Certified Professional – End User Computing 6 (NCP-EUC 6) Exam Blueprint Guide provides an overview of the objectives that must be mastered to achieve the NCP-EUC 6 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 6 (NCP-EUC 6) exam tests candidates on their skills and abilities to successfully deploy, monitor, administer, troubleshoot, and maintain end user computing environments utilizing Nutanix technologies. Successful candidates demonstrate mastery of these skills and abilities.

## 1.2 Number of Questions

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

# 1.3 Pricing

The cost for the NCP-EUC 6 exam is \$199 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 and managing a Nutanix End User Computing environment.

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 NCP-EUC 6 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 in your home or office, or at a designated testing center. Occasionally, testing at Nutanix events may also be offered. At the start of the registration process, you will be asked to choose remote or in person testing. After registering for the exam, you will receive further information specific to the testing method you chose. Regardless of whether you test remotely or in person, you must provide valid identification and will be provided with a monitored and secure exam experience.

#### 1.9 Certification Tracks

The Nutanix Certified Professional – End User Computing 6 (NCP-EUC 6) 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 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 e-mail 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 6 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, take an equivalent NCP-level exam within another certification track, or upgrade your certification to a higher-level certification, such as to the Nutanix Certified Master tier within this same two-year period.



# 2. Intended Audience

A candidate for the Nutanix Certified Professional – End User Computing 6 exam and NCP-EUC 6 certification has approximately six months to 12 months of Nutanix EUC management experience, while also having 18-24 months of either desktop, virtualization, and/or network support experience. They are typically EUC administrators, architects, consultants, or business leaders and are capable of successfully deploying, monitoring, administering, troubleshooting, and maintaining End User Computing environments using Nutanix technologies. The successful candidate will most likely have taken training courses such as the Nutanix End User Computing Administration (NEUCA) course.



# 3. Objectives Covered in the NCP-EUC 6 Exam

#### 3.1 Introduction

It is recommended that candidates have the knowledge and skills necessary to deploy, monitor, administrator, troubleshoot, and maintain end user computing environments utilizing Nutanix technologies before attempting the NCP-EUC 6 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 certification, candidates will be tested on the following software versions:

- AOS: version 6.5
- Prism Central: pc2022-6

## 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 and Solutions

Objective 1.1 – Demonstrate optimal AOS configurations to support an EUC implementation

#### Knowledge:

- Explain the optimal configuration for Nutanix essentials, such as Files, Flow, and Beam, in an EUC environment
- Understand the optimal configuration of Nutanix core components, such as Storage container options, for an EUC environment

#### References

- Capacity Management
- NVIDIA Grid vGPU on Nutanix
- Citrix Virtual Apps and Desktops on Nutanix
- Nutanix Storage Best Practices Citrix Virtual Apps and Desktops on Nutanix
- Performance Analysis of Nutanix Shadow Clones
- Nutanix Bible Shadow Clones
- Securing Citrix Virtual Apps and Desktops with Nutanix Flow
- VDI Policy Configuration
- GPU and vGPU Support
- Recommended Guidelines for Maximum Storage Utilization on a Cluster

Objective 1.2 – Describe the role of Nutanix technologies in an EUC implementation

#### Knowledge:

- Identify use cases for Nutanix essentials, such as Files, Flow, and Beam, in an EUC environment
- Identify Nutanix core components, such as HCl, Xi Frame, Cloud, data locality, and shadow clones, that benefit EUC environments

- Horizon View Linked Clones
- Nutanix Bible Capacity Optimization
- How Nutanix Solves the Top VDI Deployment Challenges
- Citrix Virtual Apps and Desktops on Nutanix
- Nutanix Citrix DaaS Validated Design Executive Summary
- Nutanix Storage Best Practices VMware Horizon on Nutanix
- Securing Citrix Virtual Apps and Desktops with Nutanix Flow
- VMware Horizon the Nutanix Way
- Performance Analysis of Nutanix Shadow Clones
- AHV Plug-in for Citrix Director
- AHV Xi PC Plug-in for Citrix
- Nutanix Cloud Platform Software Options VDI

#### Section 2 – Architect a Nutanix EUC Implementation

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

#### Knowledge:

- Given business requirements, interpret the optimal profile configuration, such as managed, roaming, mandatory, local profiles, including third-party utilities
- · Given business requirements, interpret the optimal delivery environment, such as on-prem, cloud-based, or hybrid environments
- · Interpret what should and shouldn't be included in the gold image

#### References

- VMware Horizon 8 on Nutanix Solution Design
- Nutanix Reference Architecture VMware Horizon 7
- Citrix Virtual Apps and Desktops Image Management
- · Connecting to the Citrix Cloud
- Nutanix Xi Leap DRaaS Standing the Test of Time
- Profile Management and User Data
- Floating IP Addresses Management

Objective 2.2 - Demonstrate an understanding of the properties of Citrix, Horizon, and **Nutanix Solutions** 

#### Knowledge:

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

- Nutanix DaaS Capacity Management
- VMware Horizon 8 on Nutanix Application Overview
- Citrix DaaS on Nutanix Shadow Clones
- Performance Analysis of Nutanix Shadow Clones
- The Nutanix Bible Shadow Clones

#### Section 3 – Configure and Operate a Nutanix EUC Environment

Objective 3.1 - Demonstrate an understanding of gold images

#### Knowledge:

- · Given a scenario or use case, infer the appropriate gold image deployment option(s)
- Given a scenario or use case, explain application layering impact(s)
- Given a scenario or use case, infer what applications to include in a gold image
- · Compare approaches for managing gold images across multiple sites and geographies
- Explain the positive and negative impacts of optimizing gold images
- Given a scenario or use case, explain how to appropriately optimize gold images

#### References

- Image Management
- Citrix Virtual Workloads on Nutanix
- VMware Horizon 8 on Nutanix Validated Reference Architecture
- Onboarding and Publishing
- Bring Your Own (BYO) Image
- Citrix Image Management
- Citrix Best Practices Guide: Virtual Apps & Desktops on Nutanix
- OS Optimization

Objective 3.2 – Demonstrate an understanding of the components required for configuring a Nutanix EUC solution using third-party technologies

#### 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

#### References

- AHV Plug-in for Citrix Installation Prerequisites
- Prerequisites | Nutanix AHV Plug-in for Citrix XenDesktop
- Prerequisites | Nutanix AHV Plug-in for Citrix Cloud Connector
- Prerequisites | Nutanix AHV Plug-in for Citrix PVS
- Overview | Nutanix AHV Plugin for Citrix Director
- Nutanix AHV Plugin for Citrix Virtual Apps and Desktops on Delivery Controllers
- Connecting to the Citrix Cloud
- Nutanix Guest Tools
- Nutanix Files Sizing Guide
- VMware Horizon on Nutanix Core Component Best Practices

#### Objective 3.3 – Demonstrate an understanding of EUC 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

- Citrix Profile Management Best Practices
- Profile Management and User Data
- Mandatory Profiles
- Citrix DaaS on Nutanix
- VMware Horizon Desktops Sizing, Configuration, and Optimization
- VMware Horizon Application Overview
- PeerGFS Validated Designs
- File Services for Virtual Apps and Desktops

#### Section 4 - Describe The Role Of Desktop As A Service (DaaS) In A Nutanix EUC Solution

Objective 4.1 - Recognize configurable items in a DaaS environment

#### Knowledge:

• Identify Nutanix DaaS environment interfaces and features

#### References

- Frame Cloud Account Management
- Creating Accounts in Frame
- Frame Utility Servers
- · Navigating the Frame Account
- Frame End User Session Features
- Frame Display Options
- Frame Storage Options
- · Accessing Files in Frame
- Clipboard Integrations in Frame

Objective 4.2 - Demonstrate how to manage and configure a DaaS environment

#### Knowledge:

- · Configure and manage Launchpads
- Given a set of requirements, manage organizations and accounts
- Given a set of requirements, manage master images via the Sandbox
- Given a scenario, manage capacity utilization
- Demonstrate authentication methodologies in a DaaS environment
- Arrange a DaaS environment for multitenancy
- · Interpret analytics and usage

- Frame Launchpad Management
- Manage Frame Organizations
- Manage Frame Accounts
- Frame User Management
- Frame Capacity Management
- Frame Add a Utility Server
- Frame BYO AWS Account
- Frame Analytics
- Frame Session Conduct

#### Objective 4.3 – Describe the features and architecture of a DaaS environment

#### Knowledge:

- Describe the Nutanix DaaS architecture
- Describe the features of Nutanix DaaS

#### References

- Frame Platform Hierarchy
- Frame DaaS Infrastructure
- Frame Bring Your Own (BYO) Infrastructure
- The Definitive Guide to Desktop-as-a-Service (DaaS)
- Nutanix Hybrid Multicloud DaaS

#### Section 5 – Troubleshoot, Optimize, and Scale a Nutanix EUC Implementation

Objective 5.1 - Given a scenario, determine how to optimize a Nutanix EUC environment

#### Knowledge:

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

- VMware Horizon on Nutanix Best Practice Checklist
- VMware Horizon Delivery Options
- Storage Configuration for Virtual Apps and Desktops
- App Volumes on Nutanix
- ESXi VAAI plugin NCC Health Check
- Behavioral Learning Tools
- · Poor Performance in VDI Environments with SuperFetch and PreFetch Enabled

Objective 5.2 - Given a scenario, determine resource utilization of a specific virtual desktop or groups of desktops

#### Knowledge:

- Discuss Prism Central and other management tools
- · Analyze data from Citrix/Horizon/Nutanix DaaS to evaluate the utilization of a Nutanix EUC environment
- Evaluate the statistics available to determine the status of resources

#### References

- Alert and Event Monitoring in Prism Central
- Chart Management in Prism Central
- Acropolis Dynamic Scheduling (ADS)
- Nutanix Bible Dynamic Scheduler
- Virtual Desktop Instance Types
- Performance Analysis of Nutanix Shadow Clones

Objective 5.3 - Given a scenario, determine how to troubleshoot a Nutanix EUC environment

#### Knowledge:

- Given a scenario, troubleshoot settings in a Nutanix VDI environment
- Given a set of requirements, manipulate settings in a Nutanix VDI environment

- · Injecting Storage VirtIO Driver that was not Installed Before Migration to AHV
- Pulse Health Monitoring and Support
- · Recovery Plans View
- NVIDIA Grid vGPU Driver Installation and Configuration Workflow
- Troubleshooting VM Power On with NVIDIA vGPU Profiles
- Creating, Renaming, and Deleting Home Share Top Level Directories (TLDs)
- Problems Assigning vGPUs to Guests When Using Certain Tesla GPUs with **NVIDIA** Grid
- Installing NVIDIA Grid Virtual GPU Manager (Host Driver)
- VM Power On/Off Operations via the Nutanix AHV Plugin for Citrix
- VMs powering back on after Citrix Scheduled Reboot



# 4. NCP-EUC 6 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 details are as follows:

#### Nutanix® End User Computing Administration (NEUCA)

The Nutanix End User Computing Administration course teaches the skills needed to design, install, configure, and manage a VDI (Virtual Desktop Infrastructure) solution on Nutanix.

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

- Considerations when architecting an EUC environment, how to choose between VDI and DaaS (Desktop as a Service), and the options available when designing your VDI solution.
- Nutanix technologies that support an EUC deployment, including Nutanix Flow, which provides increased security for desktops, and Nutanix Files, an integrated file server solution.
- Configuring and operating EUC environments, including using third-party solutions, working with profile stores, and creating and optimizing gold images.
- Optimizing and troubleshooting a VDI environment, including best practices, viewing utilization metrics, and troubleshooting various common issues with VDI deployments.

The material provided in the course covers a majority of the objectives (approximately 80%) that appear on the NCP-US 6 exam and is recommended for individuals who want to gain a good understanding of these objectives. Please note that additional exposure to a Nutanix Data Services 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, here.

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

## 5.2 The Nutanix Next Community

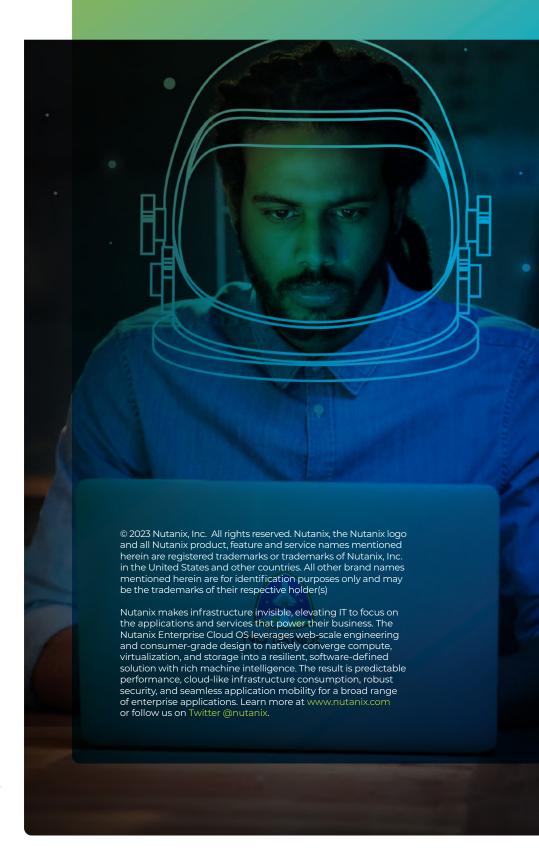
The Nutanix Next Community is a social interaction site where professionals can connect with cloud builders from around the world, learn from IT Pros in the industry and share experiences. The community maintains an area focused on the NCP-EUC certification, which is located here.

# 5.3 Nutanix® End User Computing Test Drive

Get quality hands-on practice rapidly supporting distributed workforce requirements using Citrix on Nutanix via the Nutanix Test Drive Platform.

# 5.4 Additional End User Computing Resources

Find a wealth of additional End User Computing resources here.



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