EXAM BLUEPRINT GUIDE

Nutanix Certified Professional Multicloud Automation (NCP-MCA) 6.10 Exam

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1. The Exam

1.1 Purpose of Exam

The Nutanix Certified Professional - Multicloud Automation (NCP-MCA) 6.10 exam will measure a candidate's ability to leverage Nutanix products to automate deployment of infrastructure and applications across a multicloud environment. Successful candidates demonstrate mastery of these skills and abilities.

1.2 Number of Questions

The NCP-MCA 6.10 exam consists of 75 multiple-choice and multiple-response questions.

1.3 Pricing

The cost for the NCP-MCA 6.10 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 leveraging Nutanix products to automate deployment of infrastructure and applications across a multicloud 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 exam is available in English and Japanese.

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-MCA 6.10 exam is a core component of the Nutanix Multicloud Automation track. Passing this exam results in achieving the NCP-MCA 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 – Multicloud Automation 6.10 exam and achieved the NCP-MCA 6 certification, it will remain valid for three 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
- 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-MCA 6.10 exam and NCP-MCA 6 certification has approximately 3-6 months of experience leveraging Nutanix products to automate deployment of infrastructure and applications across a multicloud environment. Successful candidates are typically Automation developers, DevOps engineers, and Platform engineers.

The successful candidate will most likely have taken training courses, such as the Nutanix Multicloud Automation Administration (NMCAA) course.

3. Objectives Covered in the NCP-MCA 6.10 Exam

3.1 Introduction

It is recommended that candidates have the knowledge and skills necessary to leverage Nutanix products to automate deployment of infrastructure and applications across a multicloud environment before attempting the NCP-MCA 6.10 exam. It is also recommended that the candidate complete the training course described in Section 4 prior to taking the exam.

For the NCP-MCA 6 certification, candidates will be tested on the following software versions:

- Self-Service: version 4.0
- Intelligent Operations: version pc2024.3

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 and Differentiate Automation Concepts and Principles

Objective 1.1: Determine and apply the steps required to automate a given manual process

Knowledge

- Determine the logical steps in automating a process
- Given a graphic, determine how to use Self-Service to complete the pre-provisioning steps

References

- Task Automation - Playbooks
- Self-Service Blueprints Overview
- Configuring a Pre-create, Post-create, or Post-delete Task
- Tasks in Self-Service
- Configuring a Delay Task in a Blueprint or Runbook

- Configuring a VM Power Off, VM Power On, or VM Restart Task in a Runbook
- Playbook Triggers

Objective 1.2: Demonstrate an understanding of event-driven Playbooks

Knowledge

- Demonstrate an understanding of how to create a Playbook by setting trigger and defining actions
- Arrange playbook steps (using X-Play)
- Create a playbook that applies to multiple virtual infrastructure resources
- Perform a playbook integration with Self-Service automation

References

- ServiceNow Integration with Prism Central (X-Play Support)
- X-Play Integrations
- Creating Playbooks Using Event
- Configuring Autopilot for Playbook
- User Impersonation to Run a Playbook
- Creating Playbooks Using Alerts Matching Criteria

Objective 1.3: Define the components of Playbooks

Knowledge

- Define Playbook's action gallery and plays
- Identify alerts and manual triggers
- Identify 3rd-party integrations

References

- Task Automation using Playbooks Overview
- Create a Playbook
- Creating Playbooks Using Event
- Configuring Manual Parameters
- Playbook Triggers
- User Impersonation to Run a Playbook

- Deploying a Pre-Seeded App from Self-Service

Objective 1.4: Implement categories for the appropriate automation or Self-Service use cases

Knowledge

- Create Categories
- Configure Categories
- Explain the effects of Categories
- Given a category and a blueprint, infer if a policy will be applied to a VM

References

- Categories Overview
- Categories Management
- Configuring VM for Nutanix Account
- Environment Patching Behavior
- Self-Service Blueprints Overview
- Creating a VM-Host Affinity Policy
- VM-Host Affinity Policy Configuration Workflow

Objective 1.5: Identify the capabilities of Projects with Self-Service enabled

Knowledge

- Describe how to create Projects
- Define how to assign RBAC in a Project
- Define how to create quotas
- Identify the capabilities of projects
- Define how to assign infrastructure to a project

References

- Projects in Self-Service
- Adding Users to a Project
- Environments in Self-Service
- Configuring Environments in a Project
- Creating a Snapshot Policy

- Quota Policy Overview
- Adding Infrastructure in a Self-Service-Enabled Prism Central

Section 2 – Deploy and Configure Self-Service and Related Components

Objective 2.1: Create a blueprint to deploy infrastructure and applications using Self-Service

Knowledge

- Determine the correct method to create a Self-Service blueprint
- Determine the correct method to create a substrate
- Determine the correct method to create a day two action
- Determine the correct method to create a task
- Determine the correct method to configure install/uninstall packages
- Determine which task type to use per script language/function
- Determine how to utilize Self-Service built-in macros within blueprints
- Determine how to set application infrastructure requirements related to automation optimization
- Determine if an application profile should be used in the Blueprint

References

- Self-Service Blueprints Overview
- Pre-create Task Workflow
- Patching for Clusters and Subnets
- Viewing and Updating Scheduler Jobs
- Configuring VMs in the Blueprint
- Configuring an HTTP Task in a Blueprint or Runbook
- Built-in Macros
- Adding Infrastructure in a Self-Service-Enabled Prism Central
- Adding and Configuring an App Profile

Objective 2.2: Demonstrate an understanding of Self-Service-managed infrastructure and applications

Knowledge

- Determine how to scale out and in a managed application
- Determine how to retire a managed application

- Determine how to manage an application
- Determine how to execute a task or a runbook

References

- Setting up Scale-Out Self-Service VM
- Applications in Self-Service
- Self-Service Role-Based Access Control
- Blueprint Configurations in Self-Service
- Credentials in Self-Service
- Platform Sync for Provider Accounts
- Tunnels for Orchestration within a VPC
- Tasks in Self-Service
- Runbooks in Self-Service

Objective 2.3: Identify required configuration settings for a Self-Service deployment

Knowledge

- Describe how to configure providers
- Recall the requirements for setting up environments within Self-Service to deploy to various supported Accounts
- Define Marketplace capabilities
- Describe how to configure endpoints
- Describe how to create a task library item

References

- Providers in Self-Service
- Creating an Account for the Cloud Provider
- Configuring an AWS Account
- Configure an Azure Account
- Associate the Cloud Provider Account with a Project
- Nutanix Marketplace Overview
- Prerequisites to Deploy Self-Service

- Endpoints in Self-Service
- Library in Self-Service

Objective 2.4: Identify common Blueprint, Runbook, and Governance features

Knowledge

- Identify built-in macros, tasks, and action/task dependencies
- Recognize the syntax of a macro
- Identify application profiles
- Identify task types
- Identify built-in macros, tasks, and task dependencies
- Describe an approval policy
- Describe a scheduler task

References

- Self-Service Blueprints Overview
- Macros Overview
- Configuring an Execute Task in a Blueprint or Runbook
- Configuring an HTTP Task in a Blueprint or Runbook
- Adding and Configuring an App Profile
- Category Management
- Approval Policy Overview
- Scheduler Overview

Objective 2.5: Describe the features and requirements of Self-Service

Knowledge

- Identify Self-Service requirements
- Define Self-Service use cases
- Describe different service deployment methodologies

References

- Prerequisites to Deploy Self-Service
- Pre-configuration for Using Self-Service

- Self-Service Overview
- Environments in Self-Service
- Self-Service Key Capabilities
- Where to Access App Management Capabilities
- Self-Service Deployment

Section 3 – Validate Blueprints, Runbooks, Playbooks, and Automation Settings

Objective 3.1: Determine the correct method to validate required Project and Playbook configurations

Knowledge

- Given a Playbook and symptom, explain an issue not working as configured or designed
- Determine how to correctly configure a Playbook
- Given a requirement, determine the correct project configuration
- Recognize the purpose and appropriate use cases for specific Project components

References

- Playbooks Summary View
- Generating Playbooks Summary Report
- Environments in Self-Service
- Project Management
- Adding Infrastructure in a Self-Service-Enabled Prism Central
- Running a Playbook (Manual Trigger)
- Using Branch Action (Conditional Execution)
- Playbook Actions

Objective 3.2: Determine the causes of issues associated with automation

Knowledge

- Given a screenshot, interpret the issue
- Given a log, infer what type of issue may be present
- Determine how to optimize a workflow to align with best practices
- Given an image, explain how to triage/frame/predict an issue

- Determine the causes of a Blueprint or Runbook deployment issues

References

- User Impersonation to Run a Playbook
- Configuring an Execute Task in a Blueprint or Runbook
- Configuring a Decision Task in a Runbook
- Configuring a Set Variable Task in a Blueprint or Runbook
- Generating Playbooks Summary Report
- Uploading a Cloud Provider
- Execute a Runbook
- Error Handling in Runbook and Blueprint Tasks

4. NCP-MCA 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.

Unlock the full potential of application automation with this dynamic, engaging course designed to empower IT professionals with the skills to automate and orchestrate hybrid cloud environments using Nutanix X-Play and Nutanix Cloud Manager (NCM) Self-Service.

The Nutanix® Multicloud Automation Administration (NMCAA) course gives you the tools to:

- Automate Without Code: Discover powerful task automation using X-Play's intuitive actions gallery, plays, and playbooks.
- Deploy with Confidence: Learn how to install, configure, and leverage NCM Self-Service to create and manage blueprints, runbooks, and applications.
- Design & Publish Blueprints: Create single- and multi-VM blueprints and publish them for seamless consumption across your organization.
- Manage the Application Lifecycle: Gain practical skills to manage applications from deployment to retirement.
- Effectively Investigate Issues: Learn how to identify and resolve common issues with X-Play and NCM Self-Service.

This course is available online or instructor-led. More information including schedules and how to register can be found at www.nutanix.com/university.

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

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.

5.4 Additional Multicloud Automation Resources

Find a wealth of additional Multicloud Automation resources here.