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EXAM BLUEPRINT GUIDE

Nutanix Certified Master - Multicloud Infrastructure (NCM-MCI) 5.15

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Disclaimer:
The Nutanix Certified Master - Multicloud Infrastructure (NCM-MCI) 5.15 Exam Blueprint
Guide provides an overview of the objectives that must be mastered to achieve the
NCM-MCI credential. Nutanix does not offer any guarantees that this guide will ensure a
candidate's success in achieving the NCM-MCI 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 Nutanix Certified Master - Multicloud Infrastructure (NCM-MCI) 5.15 exam tests candidates on their skills and abilities performing advanced administrative tasks and optimizing both virtualized workloads and infrastructure components on an AOS 5.15 implementation. Successful candidates demonstrate mastery of these skills and abilities.

1.2 NUMBER OF QUESTIONS

The NCM-MCI 5.15 exam consists of 90 multiple choice, multiple response and drag-and-drop questions.

1.3 PRICING

The cost for the NCM-MCI 5.15 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.

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 deploying and administering a Nutanix AOS 5.15 cluster. 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, Japanese and Simplified Chinese.

1.7 TIME LIMIT

The time limit for the exam is 180 minutes.

1.8 SCHEDULING AND TAKING THE EXAM

This exam is delivered via 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.

1.9 CERTIFICATION TRACKS

The NCM-MCI 5.15 exam is a component of the Nutanix Multicloud Infrastructure track. The certification requires that candidates have obtained either the NCP certification or the NCP-MCI 5.15 certification. While it is not required that you attend a course, Nutanix provides training that covers the objectives on the exam.

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 achieved the NCM-MCI 5.15 certification, it will remain valid until Nutanix releases the next major version of the certification (i.e. NCM-MCI 6). At that time, you have one year to upgrade your certification to the new release before it expires. Nutanix provides a delta training covering features that are part of the AOS release that coincides with the new version of the certification.

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 (not available for Nutanix employees)
- 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

2.1 INTENDED AUDIENCE

A candidate for the NCM-MCI certification has approximately 1-2 years of experience working with AOS with at least 6 months of experience working with AHV, as well as additional generalized systems administration experience. They are typically IT professionals and IT architects who are capable of optimizing and troubleshooting both virtualized workloads and infrastructure components on an AOS 5.15 implementation and can use Prism Central to centrally monitor, manage and troubleshoot multi-cluster deployments. The following products are covered in this exam:

- Acropolis (all license tiers)
- Prism Central (all license tiers)

3. Objectives covered in the NCM-MCI 5.15 Exam

3.1 INTRODUCTION

It is recommended that candidates have the knowledge and skills necessary to deploy, administer and troubleshoot a Nutanix AOS environment before attempting the NCM-MCI 5.15 exam. It is also recommended, though not required, that the candidate complete the course described section 4 in prior to taking the exam.

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 – Administration and Planning

Objectives

- Given a scenario, maintain Nutanix cluster health
- Given a scenario upgrade firmware
- Given a scenario, analyze cluster performance
- Evaluate capacity Runways to predict growth
- Given a scenario, troubleshoot performance issues
- Given a scenario, troubleshoot issues using alerts and/or logs

References

- Prism Web Console Guide
- Prism Central Guide
- Prism Self Service Administration Guide
- Life Cycle Manager Guide
- AHV Administration Guide

- AHV Best Practices Guide
- Acropolis Advanced Administration Guide
- Foundation 4.5.x Release Notes
- Configuring NCC Frequency
- NCC Health Check
- Node Replacement
- Shutting Down an AHV Cluster for Maintenance or Relocation
- Troubleshooting Tools
- Nutanix Core Performance

Section 2 – Storage Management

Objectives

- Given a scenario, implement Nutanix Files
- Given a scenario, implement Nutanix Volumes
- Given a scenario, troubleshoot storage

References

- Nutanix Files
- Files Deployment
- Prism Web Console Guide
- Nutanix Volumes
- Infrastructure Resiliency
- The Nutanix Bible (Book of Storage Services)

Section 3 – Data Protection

Objectives

- Validate Disaster Recovery configurations
- Configure Data Protection to meet customer HA/DR requirements

References

- Prism Web Console Guide (Data Protection)
- Data Protection and Disaster Recovery
- Configuring NearSync Disaster Recovery
- Prism Web Console - Data Protection
- Metro Availability
- The Definitive Guide to Data Protection and Disaster Recovery
- Configuring a Protection Domain

Section 4 – Security

Objectives

- Configure security for Nutanix Enterprise Clouds
- Given a scenario, secure workloads
- Configure security to leverage external authentication/authorization resources

References

- Security Guide
- Prism Central Guide (Security and User Management)
- Data-at-Rest Encryption
- Hardening Instructions (NCLI)
- Hardening AHV
- Hardening Controller VM
- Emergency Local Account Usage
- Security Policies
- Certificate Management
- Configuring Authentication

Section 5 – Workload Management

Objectives

- Configure infrastructure for workloads
- Given a scenario, optimize performance for specific workloads
- Given a scenario, migrate workloads

References

- Prism Central Guide (Resource Planning)
- Prism Web Console Guide (Storage Management)
- Virtual Machine Management
- Move User Guide
- Specific Workloads:
  › Data Efficiency
  › Virtual Infrastructure (Cluster) Administration
  › AHV Networking Recommendations
  › Core Performance
  › Flash Mode
  › Nutanix Files: Migration Guide

Section 6 – Networking

Objectives

- Configure network segmentation
- Configure networking for optimal performance
- Given a scenario, troubleshoot connectivity issues
- Given a scenario, troubleshoot network visualizations

References

- AHV Networking
- AHV Networking Recommendations
- Securing Traffic Through Network Segmentation
- NX Series Hardware Administration Guide
- Prism Web Console Guide (Network Management)
- Incoming Packet from Switch Native VLAN will be dropped if Sent to same VLAN ID on OVS
- Host Network Management
- NCC Health Check: host_nic_error_check
- NCC Health Check: cvm_mtu_uniformity_check
- Network Visualization

4. The Nutanix Certification Tracks and Course Recommendations

4.2 COURSE RECOMMENDATION

For the NCM-MCI 5.15 exam, Nutanix recommends studying the following courses. These resources provide training on the objectives tested in the exam.

Nutanix® Advanced Administration and Performance Management Course

A four-day, hands-on training course that explores advanced administrative tasks and both virtualized workload and infrastructure optimization of a Nutanix Enterprise Cloud.

The course covers the following objectives:

- Implement business continuity and disaster recovery strategies
- Analyze and configure Nutanix systems for peak operational efficiency
- Use Nutanix tools to analyze workloads and optimize cluster and VM sizing
- Perform advanced virtual machine administration
- Customize security for Nutanix systems
- Anticipate and plan for future resource needs

Advanced Topics for the Enterprise Cloud Course

This free online course consists of the following modules:

1. Advanced Network Configuration and Management
2. Managing Clusters and VM Workloads
3. Deploying and Securing VM Workloads
4. Deploying Nutanix Volumes
5. Implementing Nutanix Files
6. Configuring Nutanix Objects
7. Implementing Data Protection
8. Understanding and Troubleshooting AOS Performance

What's New in AOS 5.15

This e-learning course covers updates to AOS, AHV and Prism for version 5.15.

The material provided in the courses covers a majority of the objectives (approximately 80%) that appear on the NCM-MCI 5.15 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.

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 Nutanix certifications, which is located here.

Nutanix makes infrastructure invisible, elevating IT to focus on the applications and services that power their business. The Nutanix Enterprise Cloud OS leverages web-scale engineering and consumer-grade design to natively converge compute, virtualization, and storage into a resilient, software-defined solution with rich machine intelligence. The result is predictable performance, cloud-like infrastructure consumption, robust security, and seamless application mobility for a broad range of enterprise applications. Learn more at www.nutanix.com or follow us on Twitter @nutanix.

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