



Nutanix Certified Expert - Multicloud Infrastructure (NCX-MCI)



PROGRAM OVERVIEW

The Nutanix Certified Expert - Multicloud Infrastructure (NCX-MCI) tests a candidate's ability to design enterprise-scale solutions that support business-critical applications with service level agreements specified by business stakeholders. Candidates must demonstrate mastery of the Nutanix Design Method (derived from the Nutanix Platform Expert (NPX) Program) and present a solution that meets or exceeds customer requirements for: Scalability, Resiliency, Performance, Manageability, Data Protection, Recoverability, Regulatory Compliance, Security, and TCO/ROI.

Successful candidates are experienced and expert technologists, Systems Engineers, Consultants, and Solution Architects, with portfolios of design work, who drive adoption of Nutanix Multicloud Infrastructure in the enterprise. The goal of this Certification is to prepare candidates to engage with enterprise customers as an Architect and design Nutanix Multicloud solutions that deliver real business value.

For complete details on the program and its requirements, download the [NCX-MCI Exam Blueprint Guide](#).

EXAM DETAILS

- The NCX-MCI exam is modeled after an academic viva voce defense (live, oral exam) and requires candidates to present their solution to, and answer questions posed to them, by 2 NCX - Certified Examiners (NCXE)
- Time Limit: 60 minutes
 - This includes time to present the solution and participate in a Q&A session with examiners
- Language: English

KNOWLEDGE OBJECTIVES

Section 1 - CUSTOMER CONSULTATION

Knowledge:

- Requirements
 - Gather specific, measurable, traceable, and concise business, technical, functional, and non-functional requirements from the customer
- Risks
 - Identify risks to solution success; and create a high-level impact analysis and/or risk mitigation plan
- Constraints
 - Identify constraints that influence the solution and create a high-level impact analysis
- Assumptions
 - Identify assumptions that influence the solution and create a high-level impact analysis

PRICING

- The NCX certification exam is currently offered free of charge to qualified applicants
 - Candidates are responsible for travel and other costs related to their pursuit of the credential
-

SCHEDULING EXAM

- This exam is currently delivered on-demand via remote conferencing technology (Zoom)
- Exam registration is facilitated by the NCX/NPX Program Manager
- To set up a time to review your presentation materials and schedule your exam, email your request to: npx@nutanix.com

- Operational Readiness
 - Complete a high-level organizational readiness assessment and make recommendations for training or organizational changes as required
 - Migration & Transition
 - Formulate a low-risk migration strategy and discuss a roll-back strategy
-

Section 2 - CONCEPTUAL LOGICAL DESIGN

Knowledge:

- Scalability
 - Identify and explain options for scaling Nutanix solution including application layer. Demonstrate an understanding of relationships between scalability, performance, and resilience
 - Resiliency
 - Identify failure scenarios and domains and provide traceability to SLAs limited to infrastructure (SLAs, RTO, RPO)
 - Performance
 - Show how customer requirements have been met and demonstrate an understanding of performance/validation tools such as FIO, SQLIO, IOMeter, JetStress. Describe what can be tuned in the platform and when/when not to change default settings.
 - Manageability & Control Plane Architecture
 - Explain of how management components interact and minimize complexity. Describe the “business as usual” activities such as patching, upgrades, and configuration management
 - Data Protection & Recoverability
 - Explain how the solution’s data protection and recoverability was designed and validated at a high-level and how RPO/RTO requirements are met
 - Logical Sizing and Capacity Planning
 - Defend and validate that the design meets capacity requirements
 - Compliance & Security
 - Explain how compliance, security, and risk requirements were met; Identify and provide understanding of where industry-standard security and compliance frameworks such as PCI DSS, STIG, HIPPA, EUGDPR, ISO 27001 apply
 - Virtual Machine Logical Design
 - Provide explanation of virtual machine logical specifications, interoperability, and configuration
 - Third Party Product Integration
 - Provide explanation of how third-party integrations provide cost-effective solutions that meet customer requirements
-

Section 3 - PHYSICAL DESIGN

Knowledge:

- Hardware Sizing
 - Justify sizing rationale based on calculations and demonstrate how the application working set size was obtained

- Storage Infrastructure
 - Explain impact and implications of protocols, IO sizes and patterns, and data transforms; Explain combined storage infrastructure design decisions
 - Platform Selection
 - Justify selection of components in a node and cluster configuration
 - Networking Infrastructure
 - Identify configuration options and explain how the chosen network topology meets customer requirements
 - Virtual Machine Physical Design
 - Identify necessary physical virtual machine components such as type of scsi adaptor and system network adaptor configuration
 - Management Component Design
 - Provide explanation and justification of management component configuration (e.g., patching, monitoring, updating, upgrading, sizing) such as automated patch-ing, RHN satellite, spacewalk, PRISM Central, and Acropolis
 - Data Center Infrastructure - Environmental & Power
 - Provide specifications for space, power usage, heat output and show how the solution conforms to the resources available in the chosen location(s)
-

NCX-MCI COURSE REQUIREMENTS

Nutanix offers a course that provides training on the knowledge areas tested for in the exam. The details are as follows:

[Nutanix Enterprise Cloud Solution Design \(ECSD\) Boot Camp](#)

The ECSD Boot Camp is designed to provide a technical deep dive into Nutanix solutions and the Nutanix solution design method, which is derived from the Nutanix Platform Expert (NPX) Program. NPX skills have been used to consistently deliver business-critical solutions to the most demanding customers- from SMB to the G2000.

This three-day event will prepare you to engage with enterprise customers and design Nutanix Enterprise Cloud solutions that deliver real business value. The boot camp is led by a team of NPX-certified instructors who will focus on designing multi-hypervisor solutions capable of supporting enterprise-class applications according to clearly defined service level agreements.

You will be asked to divide into teams and engage in a multi-day, interactive role-play exercise to extract the business requirements, technical requirements, risks, and constraints that will shape your solutions. Participation requires daily design presentations from each team and participation in Q&A sessions with instructors and peers. You will be required to defend your team's design decisions at each stage of the exercise.

This is an intense and immersive learning experience that will change how you approach solution design and delivery. If your goal is to become a G2000-ready solution architect, this is where your journey begins.

To make this training as accessible as possible to everyone in our growing ecosystem, the ECSD Boot Camp is offered free of charge for qualified Nutanix employees, partners, and customers.