NC2 Design

Product Code: CNS-NC2-A-WRK-DSGN

At-a-Glance

Stage: Design

The NC2 Design engagement provides a comprehensive design for deploying Nutanix Cloud Clusters (NC2) in public cloud environments, tailored to your hybrid cloud strategy and disaster recovery needs.

Designed as a strategic step in your cloud adoption journey, this engagement focuses on:

- Capturing both high-level architecture and low-level design for NC2 clusters
- Validating integration prerequisites across identity, networking, and storage
- Designing public cloud connectivity and resource access aligned to Nutanix best practices
- Planning for operational readiness, including management plane dependencies and security hardening
- Supporting single-site and multisite DR topology across availability zones
- Integration with Nutanix Flow Virtual Networking (FVN) and Flow Network Security (FNS)

This engagement is especially valuable for organizations deploying NC2 as a DR target, migrating workloads to the cloud, or building resilient, scalable infrastructure across public cloud platforms.

Related Services

- NC2 on AWS Deployment
- NC2 on Azure Deployment
- Nutanix Multicloud Snapshot Technology (NMST) Solution Deployment
- NCI Disaster Recovery Deployment

Service Scope

The NC2 Design engagement is delivered through a series of collaborative workshops led by certified Nutanix consultants. It provides both high-level architecture and low-level design for deploying Nutanix Cloud Clusters (NC2) in public cloud environments, tailored to your operational and disaster recovery needs.

This engagement focuses on:

- Capturing solution requirements, constraints, assumptions, and key decisions
- Designing NC2 cluster architecture, virtual networking, and storage layout
- Defining integration with AD/LDAP, DNS, and cloud resource access
- Planning for management plane dependencies, including Multicloud Manager (MCM)
- Designing security controls including encryption, certificates, password policies, and syslog
- Supporting DR topology design across single or multiple availability zones
- Integration with Nutanix Flow Virtual Networking (FVN) and Flow Network Security (FNS) (Azure included; AWS optional)

The engagement is especially valuable for organizations adopting NC2 for hybrid cloud deployments, DR targets, or workload migration. By the end of the engagement, customer teams will have a validated NC2 design ready for deployment—aligned to Nutanix recommended practices and scalable for future growth.

Essential Edition

For customers seeking a foundational infrastructure design, this design workshop supports a single NC2 cluster deployed within a single availability zone, either as a standalone environment or as a single cluster disaster recovery (DR) target for on-premises or NC2 workloads.

The Essential Edition includes the following activities:

- Gather and document solution requirements, constraints, assumptions, dependencies, and decisions in a series of workshops
- Develop NC2 architecture, including interoperability, security, and scalability for future growth
- Define integration with Active Directory (AD)/lightweight directory access protocol (LDAP) and domain name service (DNS) environments
- Develop NC2 cluster design
- Design cluster virtual networking
- Design public cloud platform connectivity, including mapping of network constructs from on-premises NCI to public cloud
- Design public cloud platform resource access and usage
- Design virtual storage, including container layout and associated storage optimization features
- Design management plane and operations dependencies, including multicloud manager (MCM) for NC2
- Design security, including data-at-rest encryption, SSL certificates, password complexity, and syslog integration
- Develop a plan for system functional validation testing
- Design Presentation session

Nutanix Flow-specific activities

- Plan integration with Nutanix Flow Virtual Networking (FVN) virtual private cloud (VPC)

Note: Azure is included in all editions of the service; AWS is optional

Advanced Edition

For customers requiring an essential infrastructure design that leverages multiple NC2 clusters, this design workshop supports deployments within a single or across multiple availability zones. It accommodates various use cases, including:

- DR targets for existing on-premises NCI environments to multiple NC2 clusters
- DR between NC2 clusters for enhanced resilience and flexibility

The Advanced Edition includes the following activities:

- Everything included in the Essential Edition
- Validate cluster sizing based on workload details provided by the customer

- Plan security hardening and compliance as per the *Nutanix Security Operations Guide*
- Plan for VM backup and data protection
- Design cloud access controls

Enterprise Edition

For customers seeking a more comprehensive infrastructure design with advanced networking capabilities and high-level migration planning including:

- Design to support the migration of existing workloads and storage into the new environment
- Layer 2 network extensions
- Nutanix Flow Network Security (FSN) microsegmentation

The Enterprise Edition includes the following activities:

- Everything included in the Advanced Editions
- Assess the current state of virtualization elements included in the design
- Design to support the migration of existing workloads and storage into the new environment
  - Review the existing environment at a high level to support sizing
  - Develop high-level migration methodology
- Design role-based access control (RBAC) and Nutanix categories/tagging
- Design for Advanced Nutanix FVN VPC (AWS or Azure)

Optional Activities for the Enterprise Edition

- Plan Layer 2 extensions to public cloud for migration or DR testing
- Design for Nutanix FNS Microsegmentation

Site Design Topology

Each edition supports options for a single site or multisite DR topology design.

- Single Site
  - Single site design in a single availability zone
- Multisite
  - DR active/active, active/passive
  - Gather recovery point objective (RPO) and recovery time objective (RTO) requirements for workloads, including DR and replication considerations
  - Including Nutanix FVN VPC configurations spanning multiple availability zones (Enterprise Edition only)

Optional Activities for AWS Multisite

- For AWS multisite disaster recovery (DR) site topology, design multicloud snapshot technology (MST) DR zero-compute or pilot light deployment

Limitations

- Limited to general virtualization design.

Note: For workload-specific solutions, tailored design offerings are available including *Database Design Workshop, EUC Broker Design Workshop*, and *AI/ML Design Workshop*.

- Excludes design for on-premises environments

  Note: On-premises or hybrid-cloud design is included in the *Infrastructure Design* offer

- Excludes detailed migration planning

  Note: Detailed planning, including migration wave planning, is available as part of the *Virtual Machine Migration Workshop* offer

- Development of security policies, VPCs, static routes, and categories is limited to 10 applications.

Single Site Design Topology

- Essential Edition
  - For each quantity purchased, design is limited to a single NC2 cluster deployed within a single availability zone.
- Advanced and Enterprise Edition
  - For each quantity purchased, design is limited to multiple NC2 clusters in a single public cloud availability zone

Multisite DR Design Topology

- Categorization of individual workloads to DR policies is limited to 10 applications.

  Note: Additional application categorization is available as part of the *NCI Disaster Recovery Design Workshop* offer.

- Essential Edition
  - For each quantity purchased, design is limited to a single NC2 cluster in a public cloud availability zone serving as a DR target for an existing on-premises NCI cluster
- Advanced and Enterprise Edition
  - For each quantity purchased, design is limited to multiple NC2 clusters across public cloud availability zones serving as a DR target for an existing on-premises NCI cluster or DR between NC2 clusters

Supported Hypervisors

- Nutanix AHV

Supported Cloud platforms

- Amazon AWS
- Microsoft Azure

Prerequisites

- None

Related Product Licenses

- None

Delivered Artifacts

Documentation Option	Delivered Artifact	Description
Workshop Documentation	Configuration Workbook	Captures all necessary settings gathered during design workshops to support solution deployment.
	Deployment Readiness Checklist	Captures deployment readiness based on customer-owned prerequisites. Ensures all technical, operational, and logistical elements—such as environment setup, access, configurations, and stakeholder alignment—are in place before deployment begins. This checklist helps avoid delays and supports a smooth, successful deployment experience.
Standard Documentation	Configuration Workbook	Captures all necessary settings gathered during design workshops to support solution deployment.
	Design Documentation	Captures the customer's architecture based on workshop outcomes, encompassing both high-level and low-level design. It begins with a thorough understanding of requirements, constraints, assumptions, and risks. The document provides detailed rationale for each design decision—whether aligned to industry best practices or tailored to specific customer needs—ensuring the solution is architected to meet goals across performance, availability, scalability, and more.
	Deployment Readiness Checklist	Captures deployment readiness based on customer-owned prerequisites. Ensures all technical, operational, and logistical elements—such as environment setup, access, configurations, and stakeholder alignment—are in place before deployment begins. This checklist helps avoid delays and supports a smooth, successful deployment experience.

Level of Effort

Site Topology/ Documentation Type	Essential	Advanced	Enterprise
Single Site Workshop Documentation	Typically up to 3 days	Typically up to 4 days	Not Applicable

Site Topology/ Documentation Type	Essential	Advanced	Enterprise
Single-Site Standard Documentation	Typically up to 5 Days	Typically up to 7 days	Typically up to 9 days
Multisite DR Workshop Documentation	Typically up to 4 days	Typically up to 5 days	Not Applicable
Multisite DR Standard Documentation	Typically up to 7 days	Typically up to 9 days	Typically up to 12 days

Delivery Type

Delivery Type	Essential	Essential	Advanced
Virtual	• Virtual workshop • Virtual documentation	• Virtual workshop • Virtual documentation	• Virtual workshop • Virtual documentation
In-person	• In-person workshop • Virtual documentation	• In-person workshop • Virtual documentation	• In-person workshop • Virtual documentation

Related Products

- Nutanix Cloud Infrastructure (NCI)
- Nutanix Cloud Clusters (NC2)

Terms and Conditions

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