NCI Bundle E-rate Edition

Product Code: CNS-NCI-B-ERATE-ONP-SSE-WD

At-a-Glance

Stage: Design, Deploy

The Nutanix Cloud Infrastructure (NCI) Bundle E-rate Edition accelerates the deployment of secure, on-premises NCI clusters designed for educational institutions participating in the U.S. Federal Communication Commission (FCC) E-rate program. This packaged engagement streamlines the path to modern hyperconverged infrastructure—improving reliability, simplifying operations, and supporting the connectivity and security requirements of K–12 schools and libraries.

This edition focuses on:

- Conducting collaborative design sessions to validate requirements and define the appropriate NCI cluster architecture
- Deploying production-ready NCI clusters following Nutanix-recommended practices
- Fully validating the environment to ensure operational readiness
- Supporting schools and libraries seeking to modernize infrastructure using E-rate program funding

The result is a practical, future-ready platform that enhances performance, reduces operational complexity, and provides a solid technology foundation for instructional and administrative workloads

Service Scope

The NCI Bundle E-rate Edition delivers three integrated service components—Flow Network Security (FNS) Design, Infrastructure Deployment, and Flow Network Security Deployment—provided by experienced Nutanix consultants to ensure a secure, validated, production-ready environment.

The engagement begins with Infrastructure Design, during which consultants collaborate with customer stakeholders to capture requirements and develop detailed security categories, policies, and implementation plans tailored to customer use cases.

Following design, the Infrastructure Deployment phase deploys and validates the on-premises NCI clusters using Nutanix recommended practices, establishing a stable and properly configured foundation for operations.

Finally, the Flow Network Security Deployment phase operationalizes microsegmentation by enabling required components in Prism Central and configuring security policies, categories, and networking constructs in alignment with the approved design.

This service includes the following activities:

Infrastructure Design

- Gather and document solution requirements, constraints, assumptions, dependencies, and decisions in a design session
- Develop NCI architecture, including interoperability and security
- Define integration with Active Directory (AD)/lightweight directory access protocol (LDAP) and IP address management (IPAM)/domain name service (DNS) environments

- Develop on-premises NCI cluster design
- Design virtual networking, including integration with the physical network
- Design virtual storage, including container layout and associated storage optimization features
- Develop a plan for system functional validation testing
- Design security, including data-at-rest encryption, secure socket layer (SSL) certificate, password complexity, and syslog
- Design for Nutanix Flow Virtual Networking (FVN)

Infrastructure Deployment

- Deploy and configure NCI cluster, including recommended firmware (via life cycle manager (LCM)) and Acropolis Operating System (AOS)
- Deploy and configure the hypervisor cluster on the deployed NCI cluster
  - Configure LCM for automatic updates (online, darksite bundle, or integrated into an existing darksite LCM webserver)
  - Deploy and integrate Prism Central
- Configure layer 2 virtual networking on hypervisor hosts
  - Configure hypervisor virtual switches
- Test and validate the deployed clusters

Optional Activities for Infrastructure Deployment

- Enable local key management service (KMS) for encryption
- Choose one:
  - Deploy and configure a dark site LCM webserver running either IIS (Windows) or Apache (supported Linux OS) on the customer-provided virtual machine (VM) image
  - Harden Nutanix Controller VM and AHV according to the *Nutanix Security Guide*

Flow Network Security Deployment

- Enable and license Nutanix FNS on the existing on-premises NCI cluster, if needed
- Review and validate deployment prerequisites
- Enable the network controller in Prism Central
- Configure categories and apply them to VMs as defined in the design
- Configure application security policies
- Configure isolation environment policies
- Configure quarantine policies
- Test and validate the deployed network configuration

Project Management

Nutanix Project Management (PM) oversees Nutanix resources and aligns execution with your goals, scope, and timelines.

Core Project Management activities may include the following:

- Serve as a single point of contact for all project communication
- End-to-end Nutanix resource management
- Coordinate change window(s) and implementation schedules with customer
- Track and facilitate readiness and prerequisite completion
- Conduct project kickoff/technical readiness meeting(s)
- Integrate customer resources into the high-level project timeline
- Send status update(s)
- Manage timeline(s)
- Deliver created artifacts to the customer
- Facilitate project closeout activities

Limitations

- For each variable quantity purchased, deployment is limited to a single node
- Maximum of 6 nodes deployed in a single on-premises NCI cluster at a single physical site

Infrastructure Design

- Infrastructure Design is limited to a single production environment at a single physical site
- Excludes infrastructure and workload specific designs

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

- Limited to 5 applications for development of security policies, virtual private clouds (VPCs), static routes and categories

Infrastructure Deployment

- Excludes deployment of 1 and 2 node NCI-Edge clusters

  Note: *Infrastructure Deployment for NCI-Edge* is available for the deployment of 1 and 2 node NCI-Edge clusters

- Excludes deployment of the Cisco hyperconverged infrastructure (HCI) unified computing system (UCS) platform

  Note: *NCI Cluster Deployment or Expansion for Cisco* is available for deployment of NCI on the Cisco HCI UCS platform.

- Excludes creation or updates to existing Infrastructure Design Document
- Excludes deployment of Nutanix Unified Storage (NUS) or NCI Advanced Replication
- Excludes deployment of end user computing (EUC), artificial intelligence/machine learning (AI/ML), Kubernetes, or database workloads
- Excludes integration into an external KMS
- Excludes hardening of 3rd-party components, including VMware ESXi

Flow Network Security Deploy

- Deployment is limited to a single pack of 5 unique FNS policies

Project Management

- Excludes scheduling customer resources and activities
- Excludes detailed project plan (schedule) development and management
- Excludes responsibility for creating, managing, or delivering change management communications

Supported Hypervisors

- Nutanix AHV

Prerequisites

- Completed Pre-Delivery Questionnaire

Infrastructure Deployment

- Hardware that meets all product requirements for NCI, Nutanix AHV, and FNS as required

> **Note:** For information on the requirements for NCI Clusters, see Field Installation Overview in the *Field Installation Guide* on the Nutanix Support Portal.

Flow Network Security Deployment

- AD domain and user group requirements as required for the VDI policy

> **Note:** For information on the requirements for configuring NCI Flow Network Security, see the *Flow Network Security* on the Nutanix Support Portal.

- Fully supported and functional infrastructure services required for the deployment, including but not limited to:
  - DNS
  - Network time protocol (NTP)
  - Physical switch configuration including maximum transmission unit (MTU) size

Required Product Licenses

- Nutanix Cloud Infrastructure (NCI) core-based license

Delivered Artifacts

Stage	Delivered Artifact	Description
Design	Configuration Workbook	Captures all required configuration settings and decisions gathered during the design session to support accurate and consistent solution deployment.

Stage	Delivered Artifact	Description
Deployment	Test Plan	Documents the Nutanix standard tests executed on the deployed solution and records the results of those tests to confirm the environment is ready for production use.
	As-built Guide	Captures the final, deployed configuration of the solution, detailing how the environment was actually built and configured in comparison to the customer-provided design.
	Updated Configuration Workbook	Updated during deployment, the workbook captures all required configuration settings and decisions gathered during the design session to support accurate and consistent solution deployment.

Level of Effort

Typically up to 7 days

Delivery Type

Delivery Type	Deliverables
Virtual	• Virtual design session • Virtual documentation • Virtual deployment • Virtual project management **Note:** Any in-person project management activities provided solely at Nutanix's discretion
In-person	• In-person design session • Virtual documentation • In-person rack and stack of on-premises NCI cluster nodes • Virtual networking deployment • Virtual project management **Note:** Any in-person project management activities provided solely at Nutanix's discretion

Related Products

- Nutanix Cloud Infrastructure (NCI)

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