

# Infrastructure Expansion

Product Code: CNS-INF-A-SVC-EXP-ONP

## At-a-Glance

### Stage: Deploy

The Infrastructure Expansion service accelerates the expansion of on-premises NCI, NCI-Compute, or Dedicated NUS clusters. Designed as a strategic step in your hybrid multicloud journey—particularly during the Deploy phase—this service focuses on:

- Expanding on-premises NCI, NCI-Compute, or Dedicated NUS clusters
- Validating and configuring infrastructure based on Nutanix recommended practices and customer-provided design documentation
- Streamlining deployment workflows to reduce complexity and accelerate time-to-value
- Delivering operational readiness through comprehensive documentation and enablement

### Related Services

- Infrastructure Design Workshop
- Infrastructure Deployment
- Infrastructure Deployment for NCI-Edge
- NCI Cluster Deployment or Expansion for Cisco
- NC2 Deployment

**Note:** NC2 Deployment available for the expansion of existing Nutanix Cloud Clusters (NC2) clusters.

## Service Scope

Certified Nutanix consultants, equipped with deep domain expertise and hands-on experience, lead the expansion of on-premises NCI, NCI-Compute, or Dedicated NUS clusters. Following Nutanix recommended practices, along with the customer-provided design document, consultants ensure a precise and efficient deployment.

Upon completion, the consultant delivers:

- A customized As-built Guide detailing the final deployed configuration
- An updated Configuration Workbook to support ongoing operations and future scalability

This comprehensive documentation provides your teams with a validated reference for managing and maintaining the deployed on-premises NCI environment.

### On-premises NCI, NCI-Compute, or Dedicated NUS Clusters

The service includes expanding up to 4 individual on-premises NCI clusters at a single physical location according to customer-provided design and configuration documentation.

The service includes the following activities:

- Review customer-provided design and configuration documentation

- Deploy and configure NCI nodes, including recommended firmware and AOS matching existing nodes
- Configure the hypervisor cluster on the expanded NCI cluster
  - For VMware vSphere clusters, integrate the new nodes into the existing vSphere cluster
  - For Microsoft Hyper-V clusters, integrate Hyper-V cluster into the existing System Center Virtual Machine Manager (VMM)
- Configure layer 2 virtual networking on hypervisor hosts
  - Configure hypervisor virtual switches to match the existing cluster
- Test and validate the expanded clusters (limited to non-disruptive testing)

#### Optional Activities (choose one):

- Choose one of the following:
  - Harden Nutanix Controller VM and AHV according to the *Nutanix Security Guide*
  - Install and configure non-factory installed supported hardware (RAM, LAN, SSD, HDD, etc.)
  - Install and configure hardware and drivers for GPU
    - Install host drivers
    - Deploy GPU license server
    - Configure a single test VM for vGPU

## Limitations

- NCI Cluster Expansion is limited to the number of nodes purchased with cluster expansion services
- Maximum of 64 nodes distributed in up to 4 NCI clusters of a single hypervisor type at a single physical site
- Excludes deployment or expansion of NCI-Edge clusters

**Note:** Infrastructure Deployment for NCI-Edge is available for the deployment of NCI-Edge clusters

- Excludes deployment or expansion of the Cisco HCI 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 Design Documentation
- Excludes upgrade of existing cluster hypervisor, AOS, firmware, or hardware
- Excludes deployment of NUS, NCI Flow Network Security, or NCI Advanced Replication
- Excludes deployment of EUC, AI/ML, or database workloads
- Excludes integration into an external key management service (KMS)
- Excludes hardening of 3rd-party components, including VMware ESXi and Microsoft Hyper-V

## Supported Hypervisors

- Nutanix AHV
- VMware ESXi

- Microsoft Hyper-V

## Prerequisites

- Fully supported and functional on-premises NCI cluster(s) that meet all product requirements for the selected hypervisor

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

- Fully supported and functional on-premises Prism Central instance

**Note:** For information on the requirements for configuring the Prism Central instance, see Prism Central Installation or Upgrade in the *Prism Central Infrastructure Guide* on the Nutanix Support Portal.

- For VMware ESXi Hypervisor, Enhanced vMotion Compatibility (EVC) must be enabled for cluster expansions
- Customer-provided Design Document
- Completed Pre-Install Questionnaire

## Required Product Licenses

- Nutanix Cloud Infrastructure (NCI) Core-based license
- Nutanix Unified Storage (NUS)
- Hypervisor licenses for NCI

## Delivered Artifacts

- Test Plan
- As-built Guide

## Level of Effort

Typically 2 days (varies based upon the number of nodes purchased)

## Delivery Type

**Note:** Delivery is in-person unless otherwise noted.

| Delivery Type | Delivery Activities   |
|---------------|---|
| In-person     | <ul style="list-style-type: none"><li>• In-person rack and stack of on-premises NCI cluster nodes</li><li>• In-person deployment</li></ul>                            |
| Virtual       | <ul style="list-style-type: none"><li>• Virtual deployment</li></ul> <p><b>Note:</b> Virtual deployment excludes rack and stack of on-premises NCU cluster nodes.</p> |

## Related Products

- Nutanix Cloud Infrastructure (NCI)

### Terms and Conditions

This document contains the entire scope of the service offer. Anything not explicitly included above is out of scope. This service offer is subject to the Nutanix Services General Terms and Conditions, which can be viewed at <https://www.nutanix.com/support-services/consulting-services/terms-and-conditions>

©2025 Nutanix, Inc. All rights reserved. Nutanix, the Nutanix logo, and all Nutanix product and service names mentioned herein are registered trademarks or trademarks of Nutanix, Inc. in the United States and other countries. Nutanix, Inc. is not affiliated with VMware by Broadcom or Broadcom. VMware and the various VMware product names recited herein are registered or unregistered trademarks of Broadcom in the United States and/or other countries. All other brand names mentioned herein are for identification purposes only and may be the trademarks of their respective holder(s).