NCI-C Bundle Dell PowerFlex Essential Edition

Product Code: CNS-NCI-C-B-DELL-PF-ESS

At-a-Glance

Stage: Assess, Design, Deploy, Migrate

The Nutanix Cloud Infrastructure Compute (NCI-C) Bundle Dell PowerFlex Essential Edition provides IT teams with a streamlined, end-to-end solution for migrating existing Dell PowerFlex environments from VMware ESXi to Nutanix AHV.

Designed to support the Assess, Design, Deploy, and Migrate stage of your unified hybrid cloud journey, this bundle helps you:

- Simplify hypervisor transition with expert-led migration
- Accelerate workload migration to a modern, unified infrastructure
- Maximize return on investment (ROI) by extending the value of your existing Dell PowerFlex investments

This solution empowers your team to move forward with confidence—reducing complexity while preparing your environment for scalable, future-ready operations.

Related Services

- Virtual Machine Migration
- Database Migration Workshop
- Database Migration

Service Scope

Experienced consultants lead a series of structured discovery and design workshops to evaluate readiness and define solution requirements for deploying NCI-C with Dell PowerFlex. These collaborative sessions engage key customer stakeholders—including architecture, virtualization, storage, and networking teams—to align on desired outcomes and ensure a successful implementation.

Following the design workshops, the consultant delivers two key artifacts:

- Design Document – Captures the conceptual, logical, and physical architecture of the proposed solution.
- Configuration Workbook – Details environment-specific configuration parameters to guide implementation.

With the design phase complete, the consultant conducts a focused discovery session to gather in-depth migration requirements. These insights inform a migration planning workshop, where consultants lead an evaluation of suitable tools and strategies. The result is a comprehensive Migration Plan that defines the path for transitioning from VMware ESXi to Nutanix AHV.

During deployment, the consultant provisions the NCI Compute cluster(s) and integrates them with Dell PowerFlex storage systems, following Nutanix-recommended practices to ensure optimal performance and reliability.

Upon completion, the consultant delivers:

- A customized As-built Guide capturing the final deployed configuration
- An updated Configuration Workbook for operational reference

The consultant then performs the virtual machine (VM) migration in alignment with the defined Migration Plan, ensuring a seamless, validated transition to the integrated NCI-C and Dell PowerFlex environment.

The service includes the following activities:

NCI-C Dell PowerFlex Readiness Workshop

- Present an overview of NCI-C for Dell PowerFlex, including recommended practices for successful integration
- Review operational procedures for NCI-C for Dell PowerFlex, including patching and maintenance
- Assess compatibility requirements between the existing Dell PowerFlex deployment and NCI-C
- Evaluate the existing network topology and connectivity requirements for NCI-C for Dell PowerFlex
- Develop a plan for recommended migration paths and workload transition methodologies for existing workloads
- Review data protection and business continuity considerations for NCI-C for Dell PowerFlex
- Validate sizing based on workload details provided by the customer
- Develop an Implementation Plan aligned with technical requirements

Infrastructure Design Workshop

- Gather and document solution requirements, constraints, assumptions, dependencies, and decisions in a series of workshops
- Assess the current state of the existing Dell PowerFlex deployment included in the design
- Assess the datacenter infrastructure and rack design
- Develop NCI-C Dell PowerFlex architecture, including interoperability, security, and scalability for future growth
- Define integration with Active Directory (AD)/light-weight directory access protocol (LDAP) and IP address management (IPAM)/domain name service (DNS) environments
- Develop NCI-C Dell PowerFlex cluster design
- Design virtual networking, including integration with the existing physical network topology
- Validate cluster sizing based on workload details provided by the customer
- Plan Controller VM (CVM) and AHV security hardening and compliance as per the *Nutanix Security Operations Guide*

  Note: For security hardening and compliance requirements, see *Nutanix Security Operations Guide* on the Nutanix Support Portal.

- Design management plane and operations dependencies, including integration with Dell PowerFlex Manager
- Develop a plan for system functional validation testing
- Design security, including data-at-rest encryption, SSL certificate, password complexity, and syslog

- Design role-based access control (RBAC) and Nutanix categories/tagging

VM Migration Workshop

- Conduct a VM migration discovery session:
  - Gather and document migration requirements, constraints, assumptions, dependencies, and decisions for the migration effort
  - Assess the current state of systems to be migrated
- Conduct a VM migration workshop:
  - Review options for optimally migrating existing ESXi virtual machines running on the compute cluster to AHV while ensuring performance and resiliency
  - Assess network configuration impacts and requirements
  - Select a migration tool
  - Develop a Migration Plan and process, rollback plans, and migration event(s)
  - Develop a post-migration validation plan

Infrastructure Deployment

- Deploy and configure NCI-C cluster, including recommended firmware (via life-cycle manager (LCM)) and Acropolis operating system (AOS)
- Deploy and configure Nutanix AHV on the deployed NCI Compute cluster
- Configure LCM for automatic updates (online, dark site bundle, or via integrated into an existing dark site LCM webserver)
- Configure layer 2 virtual networking on hypervisor hosts
  - Configure hypervisor virtual switches
- Test and validate the deployed clusters

Optional Activities for Infrastructure Deployment

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

PowerFlex Integration

- Integrate NCI-C with Dell PowerFlex Storage
- Configure networking as per Dell PowerFlex requirements
  - Configure network segmentation and virtual switches
  - Configure IP pool
  - Configure logical network interface with external storage enabled

- Add external storage via Nutanix Prism
  - Install Dell PowerFlex Storage Data Client (SDC) for Nutanix
  - Connect Prism Central to Dell PowerFlex Manager and storage pool
  - Test and validate integration between NCI-C and Dell PowerFlex

VM Migration

- Deploy migration tools as required according to the Migration Plan
- Configure infrastructure as required by the Migration Plan
- Migrate up to five standard VMs from ESXi to AHV based on the Migration Plan
- Monitor the migration process via periodic touchpoints
- Remediate identified migration issues
- Execute the existing post-migration validation plan

Site Design Topology

The Essential Edition supports a single site or multisite disaster recovery (DR) topology design and deployment.

- Single Site
  - Single site design in a single physical site.
- Multisite DR – DR active/active or active/passive
  - Gather recovery point objective (RPO) and recovery point objective (RTO) requirements for workloads, including DR and replication considerations

Limitations

Infrastructure Design Workshop

- Limited to general virtualization workloads

> **Note:** Database workloads and end user computing (EUC) workload designs are available via the *Database Design Workshop* and *EUC Broker Design Workshop* respectively.

VM Migration Workshop

- Migration planning is limited to 500 VMs.
- Excludes planning for business-critical database and EUC workloads

> **Note:** If planning to migrate databases, see the *Database Migration Workshop* or the *EUC Migration Workshop*, respectively.

Infrastructure Deployment

- To prevent data loss, existing Dell PowerFlex environment being targeted for migration to Nutanix AHV must not be running workloads during the infrastructure deployment phase for the NCI Compute clusters

> **Note:** Migrating workloads to a temporary staging cluster is available via a custom statement of work (SOW)

- Excludes deployment of nodes running on the Dell PowerFlex storage cluster
- Excludes deployment of NCI Advanced Replication

  Note: NCI Advanced Replication deployment is available via the *NCI Disaster Recovery Deployment* offer.

- Excludes deployment of NCI Flow Network Security (FNS)

  Note: NCI Flow Network Security deployment is available via the *NCI Flow Network Security Microsegmentation Deployment* offer.

- Excludes application and database workload deployment
- Excludes deployment of Nutanix Unified Storage (NUS) Objects and NUS Files

VM Migration

- Migration must occur as a single contiguous migration wave
- Migration is limited to up to 5 VMs or up to 2.5TiB of total data
- Excludes migration of business-critical databases

  Note: Database migration requires both the *Database Migration Workshop* and the *Database Migration* services.

- Excludes migration of EUC control plane and EUC workloads.

  Note: EUC migration is available as part of the *EUC Workload and Gold Image Migratio*n service.

Single Site Design Topology

- Design is limited to a single production environment at a single physical site
- For each quantity purchased, deployment is limited to 1 node. A maximum of 64 nodes distributed in up to 4 on-premises NCI Compute clusters of a single hypervisor type at a single physical site.

Multisite DR Design Topology

- Design is limited to a single production environment spanning multiple physical sites
- Design is limited to 2 distinct site patterns, though multiple instances of each pattern can be deployed (common for hub-spoke or branch office architectures)
- For each quantity purchased, deployment is limited to a single node.
- A maximum of 64 nodes distributed in up to 4 on-premises NCI Compute clusters of a single hypervisor type at a single physical site.
- The quantity of nodes is deployed per physical site, with a maximum of 2 physical sites

Supported Hypervisors

- Supported source hypervisor
  - VMware ESXi
- Supported target hypervisor
  - Nutanix AHV

Prerequisites

- An existing supported and deployed NCI Compute cluster(s) that meets all product, hardware and software requirements for integration with PowerFlex as per the Nutanix Compatibility Matrix

  Note: For information on the requirements for hardware/software integration requirements, see *Nutanix Compatibility Matrix* on the Nutanix Support Portal.

- An existing production-ready supported and deployed Dell PowerFlex environment that meets all product and software requirements for integration with NCI
- Deployed and functioning Dell PowerFlex Manager
- Minimum of 2 spare or preconfigured network ports per NCI-C host for the Dell PowerFlex data network configured with an MTU of 9000, as per Dell PowerFlex requirements
- PowerFlex storage pool and protection domain must be configured on the Dell PowerFlex Storage cluster

  Note: For information on the requirements for integrating NCI Compute clusters and Dell PowerFlex, see *Nutanix Cloud Platform with Dell PowerFlex Deployment Guide* on the Nutanix Support Portal.

- Completed Pre-Install Questionnaire
- Sufficient capacity on the existing Dell PowerFlex storage cluster(s) to support the migration
- Fully supported and functional source environment

  Note: For information on the requirements for using Nutanix Move, see *Move User Guide* on the Nutanix Support Portal.

- Operating systems (OS) supported by both NCI and the selected migration tool

  Note: For information on the supported guest OS, see *Nutanix Compatibility and Interoperability Matrix* on the Nutanix Support Portal.

Required Product Licenses

- Nutanix Cloud Infrastructure (NCI) or Nutanix Cloud Infrastructure Compute (NCI-C)

Artifacts Delivered

- Readiness Report
- Configuration Workbook
- Design Document
- Migration Workbook
- Migration Plan
- Migration Test Plan
- Test Plan
- As-built Guide

Level of Effort

Site Topology	Duration (varies based on the number of nodes purchased)
Single Site	Typically up to 17 days
Multisite	Typically up to 29 days

Delivery Type

Delivery Type	Delivery Activities
Virtual	• Virtual workshops • Virtual documentation • Virtual deployment • Virtual migration
In-person	• In-person workshops • Virtual documentation • Virtual deployment • Virtual migration

Related Products

- Nutanix Cloud Infrastructure (NCI)
- Nutanix Cloud Infrastructure Compute (NCI-C)

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