November 2025 | Guide

VMware to Nutanix Migration Guide

NUTANIX

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Introduction

For businesses that rely on VMware for virtualization technologies—including VMware Cloud Foundation, vSphere, vSAN, and VMware Cloud (VMC)—Nutanix offers a compelling alternative with one platform to run apps and manage data from edge to datacenter to cloud. Our cloud platform solution provides flexibility and choice, without vendor lock-in, and supports existing VMware environments with unified management.

Nutanix offers VMware customers a range of migration strategies, whether they want to shift existing VMware operations to vSphere running on the Nutanix Cloud Platform solution, or to migrate all workloads from VMware technologies to equivalent Nutanix technologies.

Who This Guide is For

This guide is intended to acquaint technical decision-makers with Nutanix technology to better understand the available VMware-to-Nutanix migration options and facilitate informed planning decisions.

Section 2 introduces the Nutanix Cloud Platform solution and its various components, illustrates how Nutanix solutions map to various VMware products, and discusses migration paths.

Sections 3 through 6 discuss migration considerations for the main components of Nutanix Cloud Platform introduced in Section 2: Nutanix Cloud Infrastructure, Nutanix Cloud Clusters, Nutanix Cloud Manager, Nutanix Unified Storage, and Nutanix Move.

Section 7 discusses other aspects of migration from VMware to Nutanix solutions, including available tools to assist with planning and migration,
as well as Nutanix services. It also introduces Nutanix technology and GSI partners that can help with migration needs.

This guide is not intended to be a complete “how-to” guide. However, wherever possible, it includes links to more resources to aid with in-depth migration planning and execution.

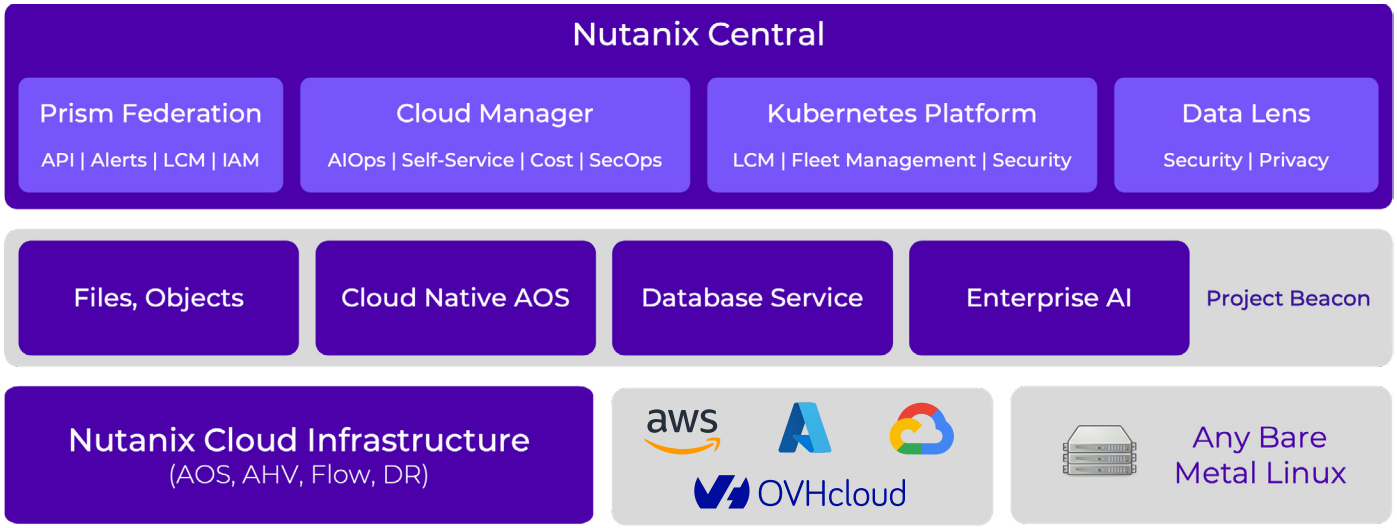
Section 1: Planning Your Migration to Nutanix

Nutanix is a leader in hyperconverged infrastructure (HCI), providing a more integrated and simplified solution than traditional three-tier infrastructure. Nutanix combines compute, storage, and networking into a single software-defined platform designed to reduce complexity and management overhead compared to legacy infrastructure solutions.

Nutanix Cloud Platform offers simplicity and scalability, allowing you to operate critical virtualized and containerized workloads efficiently and securely across on-premises, public cloud, edge, and service provider environments.

With Nutanix, customers can eliminate the need for separate storage arrays and rely on a more streamlined, scalable infrastructure.

Before you can plan an effective migration strategy, it's essential to evaluate and assess the business and technical reasons for your migration, understand the major elements that make up Nutanix Cloud Platform, and map those capabilities to your unique business requirements and priorities.



Moving from VMware to Nutanix can provide customers with a simplified, cost-efficient, and scalable infrastructure that is easy to manage and adaptable to cloud native workloads. The benefits are especially pronounced for organizations seeking a modern, flexible platform for the next phase of IT evolution and app modernization. As hybrid and multicloud environments, containerization, and GenAI applications become more prevalent, Nutanix provides the flexibility and efficiency to stay ahead.

Key Considerations

Consideration of the following factors is crucial in addressing your business needs and priorities effectively:

Simplified Management and Operations

- **Unified Management Platform**: Nutanix provides a single pane of glass through its Prism management interface, to manage compute, storage, and networking from a unified dashboard. In contrast, VMware's HCI (often relying on vSphere for compute, vSAN for storage, and vCenter for management) can lead to a fragmented management experience with multiple consoles for monitoring and administration. Similarly, with the Nutanix Central unified cloud console, Nutanix offers customers the ability to visualize Nutanix infrastructure both on-premises andon public cloud bare-metal (with the Nutanix Cloud Clusters (NC2) solution). This is unlike legacy solutions where have to use different solutions to monitor on-premises and public cloud deployments.
- **Intuitive User Interface**: The Nutanix Prism multicloud management interface and unified control plane simplifies and streamlines management of all environments running on the Nutanix Cloud Platform. Its intuitive, user-friendly design allows IT professionals to ramp up quickly. This is a key advantage for teams that may not have in-depth Nutanix expertise.

Cost Efficiency and Transparent Pricing

- **Licensing Complexity with VMware by Broadcom**: Changes in VMware licensing arising from Broadcom's acquisition of VMware has created uncertainty in the market, and there have been numerous reports of higher licensing costs. VMware licensing can be complex and could require separate components like vSAN Add-On, Firewall Add-On, and/or AVI Loadbalancer Add-On, leading to higher software and maintenance costs. Nutanix offers a streamlined and integrated licensing model, which can reduce overhead and make it easier to manage costs. , including the opportunity for a Migration Optimization Assessment.
- **Predictable Total Cost of Ownership (TCO)**: Nutanix offers predictable TCO with integrated solutions that provide opportunities to reduce the need for additional third-party tools for disaster recovery, backup, and storage optimization.

Integrated Software-Defined Networking and Network Security

For organizations migrating from VMware NSX, the Nutanix Flow solution offers an alternative with Flow Virtual Networking (VPCs) and Flow Network Security policies. These capabilities provide software-defined networking (SDN) and microsegmentation without the complexity of external overlays. Flow Virtual Networking enables secure, isolated VPCs for applications, while Flow Network Security enforces granular, zero-trust policies—similar to NSX overlay networking and distributed firewall functionalities. Integrated directly into the Nutanix platform, Flow simplifies networking and security operations.

Cloud Native and Modern Architectures

- **Cloud Integration**: The Nutanix platform's design provides for seamless integration with public clouds (AWS, Azure, Google Cloud) and hybrid cloud environments with Nutanix Cloud Clusters (NC2). The Nutanix platform is optimized for multicloud deployments, making it easier to move workloads across on-premises and public cloud environments, something VMware's solutions have been catching up on but still require more integration efforts with cloud providers.
- **Containers and Kubernetes**: Nutanix has integrated solutions for Kubernetes® (via the Nutanix Kubernetes Platform solution) and containerized applications. Nutanix architecture is designed for modern, container-based workloads, making it ideal for organizations moving to cloud-native applications and microservices.
- **Nutanix Kubernetes Platform (NKP)** simplifies the deployment and management of Kubernetes clusters, enhances security and performance, and supports hybrid cloud environments. Integrating with Nutanix HCI, NKP offers a unified platform that is both developer-friendly and operationally efficient, helping organizations reduce complexity, enhance scalability, and accelerate their digital transformation initiatives.

- **Nutanix Database Service (NDB)** database management solution automates database lifecycle management in hybrid clouds. It offers a comprehensive solution that provides security, backup & recovery, scalability and fault tolerance, provisioning, patching, and cloning for leading databases, including the Microsoft SQL Server, Oracle, EnterpriseDB, PostgreSQL, MongoDB, MySQL, and MariaDB databases.

Vendor Lock-In Reduction

- **Multi-Hypervisor Support**: Nutanix provides the ability to use different hypervisors across the same platform. You can run the Nutanix AHV and, VMware vSphere hypervisors on the Nutanix platform, offering greater flexibility and avoiding vendor lock-in with virtualization products. If you're already using VMware for some workloads but want to migrate others, Nutanix allows you to migrate seamlessly across different hypervisors without requiring complex re-architecture.
- **Open Ecosystem**: The Nutanix software-defined approach means customers are not locked in to VMware's ecosystem. This flexibility frees organizations from being locked into one vendor's solutions, providing peace of mind in an increasingly multicloud and multi-vendor world.

Built-In Disaster Recovery and High Availability

- **Native Disaster Recovery and High Availability**: Nutanix has built-in disaster recovery (DR) and high availability (HA) capabilities, which are integral parts of its Acropolis Operating System (AOS) software. These features work seamlessly across Nutanix clusters and do not require third-party solutions or additional complexity.
- **Continuous Availability**: Nutanix architecture is designed for continuous availability by replicating data across nodes and clusters. This built-in redundancy, paired with the simplified management that Nutanix, avoids the complexity of legacy HCI system configurations to achieve HA and resilience.

Simplified Backup and Data Protection

- **Backup and Disaster Recovery**: Nutanix provides integrated backup and data protection solutions, which can integrate the Nutanix platform with leading partner and service provider backup solutions.
- **Unified Data Protection**: Nutanix offers a unified data protection approach that spans both virtualized workloads and traditional data storage, making it easy to manage backups, snapshots, and restores.

Performance Optimization and Efficiency

- **Storage Efficiency: Nutanix software-defined storage**, with features like storage deduplication, compression, and erasure coding, provides efficient storage utilization without sacrificing performance. Nutanix has designed-ingranular control and optimization for both performance and capacity.
- **Predictive Analytics and Monitoring**: Nutanix provides AI-powered insights into system health, predictive analytics, and real-time monitoring through the Nutanix Cloud Manager solution, which helps detect performance issues before they impact operations. The Nutanix integration of these capabilities directly into the platform offers a holistic and proactive approach.

Vendor and Ecosystem Support

- **Customer Support**: Nutanix is often praised for its customer-first approach to support with a ten-year average Net Promoter Score (NPS) of 90. Many customers find Nutanix support to be highly responsive and efficient. Since the acquisition, there have been complaints about changes in VMware's support, complex licensing and support structures, which Nutanix strives to avoid.
- **Partnership Ecosystem**: Nutanix has an extensive ecosystem of technology partners and integrations, especially for cloud-native applications and hybrid cloud environments. The flexibility and vendor-agnostic approach of Nutanix enables best-of-breed implementations of hybrid multicloud environments.

Future-Proofing

Modern Infrastructure: Nutanix is built for the modern, cloud-first enterprise. With a focus on hybrid multicloud, containerization, and Kubernetes, Nutanix ispositioned for future workloads, especially those based on cloud-native technologies and microservices architectures.

Components of Nutanix Cloud Platform

Consideration of the following factors is crucial in addressing your business needs and priorities effectively:

Nutanix Cloud Infrastructure (NCI).
A distributed infrastructure platform combining compute, storage, and networking resources into a single logical pool with integrated resiliency, security, performance, and simplified administration. NCI lets you efficiently deploy and manage data and applications across datacenter, edge, and cloud environments
NCI provides the infrastructure foundation for all VMware migrations—whether you intend to continue running VMware vSphere or switch to Nutanix AHV, our native hypervisor.

Nutanix Cloud Clusters (NC2).
A key component of NCI, NC2 brings the full functionality of Nutanix Cloud Platform to AWS and Azure, simplifying hybrid cloud by accelerating cloud adoption, planning for disaster recovery, and extending datacenters. It enables seamless app and data mobility between on-premises and cloud environments without requiring code changes. NC2 simplifies hybrid multicloud deployments by providing the same Nutanix software capabilities and tools in your choice of environments.

NC2 provides an option to migrate existing VMware Cloud workloads and on-premises VMware workloads to Nutanix environments running in the public cloud.

Nutanix Cloud Manager (NCM)
A unified solution for intelligent operations, self-service and orchestration, security compliance and visibility, and cost control. Build and manage multicloud deployments simply and quickly by automating routine operational tasks and leveraging tools for orchestration and security compliance. NCM also offers comprehensive multicloud cost governance with visibility, showback and chargeback, optimization, and control over on-prem and multicloud deployments.

NCM integrates with the Nutanix Prism control plane, providing advanced management functions that simplify building and managing hybrid multicloud environments and delivering faster time to value. NCM capabilities are similar to those of VCF Operations (formerly VMware Aria Suite, VMware vRealize Suite).

Nutanix Unified Storage (NUS)
Software-defined data storage platform that consolidates, manages, and provides seamless access of block, file, and object data across edge, core, and public cloud. NUS is designed to address modern applications' scale, performance, and integrated data security requirements with easy access to structured and unstructured data, consistent high performance, seamless scale, and resiliency against ransomware attacks.

Within the Nutanix Cloud Platform solution, NUS addresses the storage needs of VMs using the built-in capabilities of the AOS Storage software. Additional Nutanix storage dedicated clusters can be deployed to flexibly provide additional file, object, and block services. This eliminates the need for separate storage systems with siloed management. When deployed with vSAN, the Nutanix Files Storage solution provides an excellent replacement and experience over vSAN File Service.

Each of these elements is discussed in more detail in later sections.

Nutanix Cloud Platform also includes optional support for Nutanix Database Service and leading End-User Computing solutions including Omnissa Horizon (formerly known as VMware Horizon), with availability is planned for calendar year 2025. These capabilities are not discussed further in this guide.

Mapping VMware Products to Nutanix

The following table should help you map from the VMware products you may currently use to corresponding functionality in the Nutanix ecosystem. In most cases, the corresponding Nutanix functionality is not licensed separately, simplifying procurement. See your Nutanix or reseller representative for additional details.

VMware Product	Nutanix Product	Notes & Considerations
VMware Cloud Foundation	Nutanix Cloud Platform	Nutanix Cloud Platform supports hybrid and multicloud deployments utilizing NCI and NC2
vSphere	Nutanix AHV	You can continue to run vSphere in all on-premises deployments. AHV, the native Nutanix hypervisor, is included as part of a Nutanix subscription and is the only supported hypervisor for NC2 deployments
vSAN	AOS Storage	AOS Storage functionality is included as part of NCI and NC2. It does not have to be licensed separately.
NSX	Flow Virtual Networking	FVN is included with NCI Pro and NCI Ultimate licensing
Elastic VMware Solution (EVS)	Nutanix Cloud Clusters (NC2) on AWS	NC2 utilizes NCI licenses which can be flexibly moved between on-prem and cloud locations without requiring re-licensing, or utilize licenses from Azure public cloud marketplace.
Azure VMware Solution	Nutanix Cloud Clusters (NC2) on Azure	NC2 utilizes NCI licenses which can be flexibly moved between on-prem and cloud locations without requiring re-licensing, or utilize licenses from Azure public cloud marketplace.
Google Cloud VMware Engine	Nutanix Cloud Clusters (NC2) on Google Cloud	NC2 utilizes NCI licenses which can be flexibly moved between on-prem and cloud locations without requiring re-licensing, or utilize licenses from Google Cloud marketplace.

vCenter	Nutanix Prism Central	Nutanix Prism provides infrastructure and virtualization management for Nutanix. It is included with NCI and NC2
VCF Operations	Nutanix Cloud Manager	Depending on licensing level, NCM encompasses capabilities of the VMware Aria Suite (vRealize Suite), and CloudHealth
VCF Operations-Fleet and Operations Management	NCM Intelligent Operations	Included with all NCM licenses
VCF Automation - Self Service	NCM Self-Service	Included with NCM Pro and Ultimate licenses
VCF Automation - Governance & Polices	Nutanix Security Central	Included with NCM Ultimate license, NCI Pro license with security add-on, and NCI Ultimate license
VCF Operations - Security Management	Nutanix Security Central	Included with NCM Ultimate license, NCI Pro license with security add-on, and NCI Ultimate license
VMware Data Services Manager (DSM)	Nutanix Database Service (NDB)	DSM is an add-on entitlement to VCF

Note: Chart data is as of November 2025

Total Cost of Ownership (TCO) and Return on Investment (ROI)

Effective preparation of a business case will enable you to identify the options that most effectively support your strategic objectives and align with the goals of your organization or team.

By providing a clearly articulated business case, stakeholders can efficiently analyze and comprehend the justification for your proposed solution, including the required investments and advantages that outweigh the potential risks and associated costs.

The following Business Value report illustrates the benefits of Nutanix Cloud Platform (NCP) within a three-tier framework, based on findings from a recent IDC Research study:

Key Results

41%
lower cost of infrastructure

391%
three-year return on investment

7-month
payback on investment

Customer Quote:

"We define modernization as improving operational efficiency, streamlining IT processes, and enabling staff self-service. Nutanix Cloud Platform has modernized our environment with a unified hyperconverged platform, allowing quick, efficient scaling and independent resource provisioning."

IT Operations: Cost and Staff Time Benefits

16% higher productivity, impacted users

42% lower three-year cost of operations

90% more VMs per IT infrastructure team member

Customer Quote:

"We define modernization as improving operational efficiency, streamlining IT processes, and enabling staff self-service. Nutanix Cloud Platform has modernized our environment with a unified hyperconverged platform, allowing quick, efficient scaling and independent resource provisioning."

Business Operations Benefits

Agility

88% faster to deploy new storage

58% faster to scale to business opportunities

Risk and Compliance

77% less unplanned downtime affecting users

82% less revenue lost due to unplanned downtime

Data Protection

98% more data backups completed in timely way

48% more efficient disaster recovery teams

Source: IDC 2025 The Business Value of Nutanix Cloud Platform

Nutanix Software Licensing

Nutanix uses a simple subscription-based software licensing model. Recognizing that complex licensing and reportedly-increased licensing costs can be significant pain points for VMware customers. Nutanix makes every effort to keep both our product structure and licensing simple and flexible.

Licensing is discussed further in the following sections. You can also find licensing details on the Nutanix Cloud Platform Software Options.

In addition, explore a range of pricing and licensing choices for NC2, ranging from on-demand, pay-as-you-go, to bring your own license with the portability of existing licenses.

Migration Pathways

This guide addresses the following migration pathways:

On-Premises Migration Pathways

From VMware software running on traditional three-tier infrastructure (separate servers, storage, and networking) to Nutanix

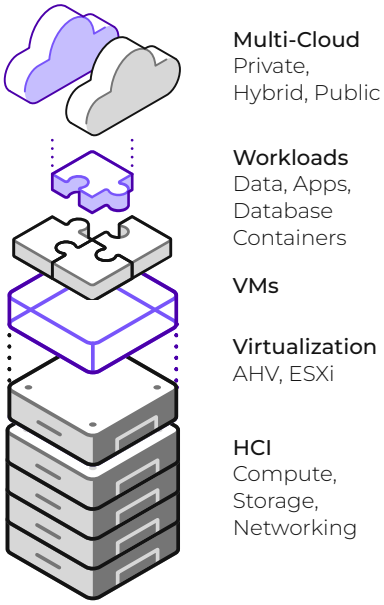
- From a VMware vSAN environment to Nutanix
- From another HCI environment running VMware (e.g., Cisco, HPE) to Nutanix
- If you are considering one of these migration paths, familiarize yourself with the following sections:
  Section 3: Migrating to NCI
  Section 5: Migrating to NCM
  Section 6: Migrating to NUS
  Section 7: Migrating from VMware to Nutanix with Nutanix Move

Cloud Migration Pathways

- From VMware Cloud on AWS to Nutanix Cloud Clusters on AWS
- From Azure VMware Cloud to Nutanix Cloud Clusters on Azure
- From Google Cloud VMware Engine to Nutanix Cloud Clusters on Google Cloud
- From VMware on OVHcloud to Nutanix Cloud Clusters on OVHcloud
- From VMware on-prem to Nutanix Cloud Clusters
- If you are considering one of these migration paths, familiarize yourself with the following sections:
  Section 4: Migrating to NC2
  Section 5: Migrating to NCM
  Section 7: Migrating from VMware to Nutanix with Nutanix Move

Section 2: Migrating from VMware to Nutanix Cloud Infrastructure

Many customers considering migrating from VMware to Nutanix need to satisfy on-premises virtualized and containerized infrastructure needs. With its flexible infrastructure options, simplified management, and compact footprint, Nutanix Cloud Infrastructure offers the ideal solution to address datacenter, private cloud, remote office, and edge computing requirements. NCI runs on hardware from multiple vendors, eliminating lock-in, and is also supported by leading service providers, such as Equinix, OVHcloud, and Cyxtera.



NCI Overview

Nutanix Cloud Infrastructure (NCI). provides a complete software stack. Nutanix has developed and refined an efficient hyperconverged infrastructure (HCI) design that includes compute, storage, and networking. NCI features built-in resilience, self-healing,and security along with enterprise data services, data protection and disaster recovery, native virtualization, and container management.

A primary design goal of NCI is to dramatically reduce operational complexity. Our powerful, secure, virtualized environment is suitable for any workload. With Nutanix, you can deploy just the infrastructure you need to get started and scale easily as your needs grow, avoiding upfront over-provisioning.

In the context of a VMware migration, you can start with a small proof of concept (POC) or pilot project and grow to encompass more workloads as you build confidence—and your team gains operational experience.

Benefits of Migrating to NCI

The Nutanix HCI architecture that underpins NCI offers these significant benefits for existing VMware customers:

- **Hypervisor choice**. Continue to run ESXi or use Nutanix Move to migrate to AHV to make it cost effective and minimize risk.
- **Dynamically distributed storage.** Nutanix AOS Storage automates provisioning, scaling, and self-healing.
- **Automated app-aware data management.** Nutanix uses data locality and tuning to deliver high resiliency, app-centric optimization, and consistent read performance.
- **Granular and efficient snapshots.** Integrated per-VM snapshots speed clone creation and restore times.
- **Enterprise-grade DR.** DR is implemented at the storage layer for optimized performance and efficiency, with per-VM DR policies that range from relaxed RPOs for less critical workloads to synchronous clustering across metro distances to address the most rigorous uptime requirements.

- **License portability from on-premises to cloud.** Easily move licenses between environments and fine-tune deployments as requirements change.
- **VM-level storage policies.** NCI storage policies include encryption, data protection, compression, and quality-of-service (QoS).

This blog series describes these and several additional Nutanix benefits in depth.

NCI Hardware Platforms

Nutanix software is designed to operate on a variety of hardware platforms, delivering you the opportunity to not be locked into a single hardware vendor, allowing you freedom to continue your relationship with a preferred vendor. Various compute, GPU, and storage options are available to address diverse infrastructure needs. Storage options include hybrid (HDD + SSD), all-flash, and all-NVMe. Nodes with a variety of storage configurations can be mixed within clusters, providing great flexibility and risk reduction.

Supported platforms:

- Nutanix NX Appliances
- Nutanix OEM Platforms including:
  - Dell
  - Cisco
  - HPE
  - Lenovo
  - Fujitsu
  - Supermicro
- Third-Party Server Vendors including:
  - Hitachi
  - NEC

For more details, visit the Nutanix Hardware Platforms
To see details of the available platforms, visit our Hardware Platform Spec Sheets.

NCI Licensing

NCI software is licensed in three editions: Starter, Pro, and Ultimate.
Functionality is organized into seven areas:

Enterprise Data Services	Starter is limited to clusters with a maximum of 12 nodes and has limited resiliency and data reduction features relative to Pro and Ultimate.
Consolidated Storage Services	All editions include up to 1 TiB of file/object storage capacity. (Additional file/ object capacity requires a NUS license.) Pro and Ultimate enable IP-SAN functionality with external access to Volume Groups.
Data Protection and DR	Starter includes Snapshots and Async Replication. Pro and Ultimate add multi-site DR, sync and NearSync replication*, and Runbook Automation.*
Security	Pro and Ultimate support data-at-rest encryption with native key management and out-of-the-box platform hardening.*
Enterprise Compute	All editions include AHV support and use of Nutanix Kubernetes Engine (NKE). Pro and Ultimate add vGPU and vGPU Passthrough, HA Guaranteed Failover, and Cross-Cluster Live Migration*.
Networking and Network Security	Pro and Ultimate support software-defined networking leveraging overlay networks, Load Balancing (L4) and VPCs with Flow Virtual Networking, workload microsegmentation*, and the Nutanix Security Central* solution, which unifies application security operations by providing automated incident response, intelligent analysis, and regulatory compliance.
Management and Analytics	All editions include cluster and multi-cluster management, monitoring, authentication, REST APIs and other basic management functionality.

*Pro edition requires an add-on license for this functionality.

NCI can also be purchased together with Nutanix Cloud Manager in three bundles.
(See Section 5 for details of NCM licensing)

NCP Starter	NCP Pro	NCP Ultimate
Combines: NCI Pro + NCM Pro	Combines: NCI Ultimate + NCM Pro	Combines: NCI Ultimate + NCM Ultimate

NCI Migration Considerations

NCI offers a compelling stack with flexibility and choice so that you are not forced to an over-consumption of products that you don't need. For example, VMware's new licensing consolidates its offering to just two foundational offerings and many portfolio products are now licensed as add-ons with some new metrics and cost structure. This could force overconsumption creating shelfware and may increase costs for core virtualization customers, customers using vSphere ENT+ on compute tiers attached to storage, vSAN customers and VCF Automation customers.

Nutanix Unified Storage (NUS) provides a distinct advantage over VMware vSAN by consolidating block, file, and object storage into a single, software-defined platform, which can be managed from a unified interface. Nutanix offers native support for a wide range of protocols, including NFS, SMB, and S3, which are seamlessly integrated. In contrast, vSAN has historically relied on external tools for services like ransomware protection and has more fragmented key management.

For modern, containerized applications, Nutanix Data Services for Kubernetes (NDK) extends enterprise data services such as snapshots, replication, and disaster recovery directly to Kubernetes, simplifying the operation of cloud-native applications. This native Kubernetes support, combined with superior capabilities for AI/ML workloads and robust hybrid multicloud integration, positions Nutanix as a more flexible and future-ready solution for managing diverse data types across the core data center, edge, and public cloud.

All NCI editions include Kubernetes support, and Nutanix also has a partnership with Red Hat, Inc. to offer the OpenShift application platform on Nutanix systems. Containers run well in the Nutanix environment and their unique storage needs are well supported by the Nutanix Unified Storage solution. (See Section 6). Once you've completed your migration to NCI, Nutanix APIs simplify automation for teams struggling to automate.

Migration Paths

There are two common migration paths for VMware customers moving to NCI:

- VMware on three-tier infrastructure to NCI
- VMware with vSAN to NCI

From a planning and execution standpoint, there isn't much difference between these two migration paths. If you're using vSAN File Services (no longer supported in vSAN 8), you may want to read section 6 on Nutanix Unified Storage. Additionally, Nutanix now supports the reuse of certain vSAN Ready Node hardware, allowing organizations to repurpose their previously purchased hardware and transition smoothly from VMware to Nutanix (View the latest certified hardware configurations).

Infrastructure Sizing

Sizing is a big challenge in any infrastructure migration. Nutanix provides the Nutanix Sizer Configuration Estimator and Nutanix Collector tools to simplify sizing for migrations and deployments of all types. These tools take the pain out of properly sizing your migration for all supported NCI hardware platforms as well as cloud. These tools are described in more detail in Section 8. Both Nutanix customers and Nutanix employees rely on and trust Nutanix Sizer to deliver good results while minimizing the effort needed.

For more high-level guidance on choosing and sizing infrastructure, read the following technical blogs:

- Dynamically Distributed Storage
- Seamless Cluster Management for Performance and Capacity

Executing a Migration

If you're migrating to NCI but continuing to run ESXi, you may be able to use familiar VMware tools such as Storage vMotion and vMotion. You can also use the Nutanix Move solution, which can migrate non-Nutanix ESXi environments to ESXi running on Nutanix systems. If you're migrating from ESXi to Nutanix AHV, you will

likely want to use Nutanix Move, which provides cross-hypervisor mobility. Nutanix Move does much of the heavy lifting for you, taking the pain out of migration. See Section 7 for more information on Nutanix Move.

For those who prefer to have assistance with critical migrations, Nutanix Professional Services can help with any aspect of your migration. Many Nutanix channel partners are also capable of providing assistance, and Nutanix also partners with leading system integrators and service providers. (For more details on Nutanix services and partnerships, see Section 8.)

Practical Considerations

While the right software tools can greatly simplify migration, there's no replacement for upfront planning and careful thinking about your objectives. Before you undertake migration to NCI—or any migration—it's important to consider your needs and vet anything that could present a problem:

- Which enterprise features do you need? This will determine which licensing level(s) you purchase.
- What are your specific storage and application requirements?
- How much data will you need to migrate? It's important to properly account for the time data migration will require.
- If you're migrating to AHV, ensure that you can address any unique application requirements.
- Which applications will you move directly to AHV, and which (if any) will you keep on ESXi?

NCI References

- Why VMware runs Better with Nutanix HCI
- Tech Note 2038: Nutanix AHV Virtualization
- Tech Note 2072: Migrating VMs to Nutanix AHV
- Nutanix Bible: Book of AHV
- Nutanix Bible: Book of vSphere

Section 3: Migrating from VMware to Nutanix Cloud Clusters

As organizations become increasingly dependent on digital technology, traditional datacenter operations have expanded to encompass hybrid and multicloud deployments. While operating multiple cloud environments can be an essential element of business success, it comes at the cost of greater complexity for IT teams.

Many organizations now employ a cloud-first strategy, but their efforts can be stymied by the limitations of tee-shirt sizing offered by cloud vendors. Nutanix Cloud Clusters is designed to overcome the challenges of hybrid multicloud operations, facilitating your cloud-first efforts.

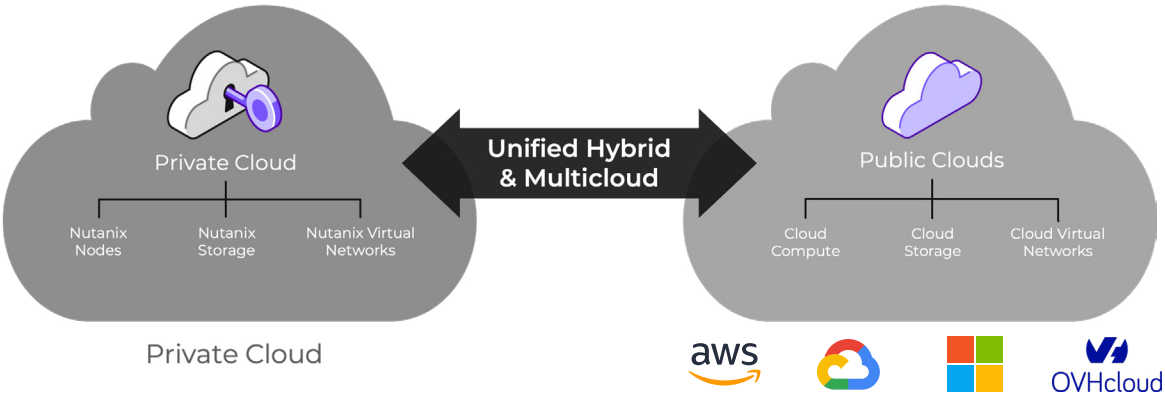
> "Users across the globe, who were entirely unaware of any migration, were reporting app performance boosts of up to 10x."
>
> Gagandeep Singh Hoda
> IT Manager
> Al Dahra Holding
>
> Read Al Dahra case study

NC2 Overview

Nutanix Cloud Clusters (NC2) (NC2) is a software-defined hybrid multicloud platform that natively integrates private and public clouds. It provides a consistent cloud management experience with seamless application migration and license portability across all NCI environments. This enables you to run the full Nutanix software stack in your choice of environments, simplifying your operations.

NC2 enables the same applications to run in private and public clouds without expensive refactoring. Your team can operate everything as a single distributed cloud environment and seamlessly manage and migrate VMs, containers, and applications, delivering freedom from cloud lock-in.

NC2 delivers the same capabilities as NCI running on-premises by utilizing bare metal instances in the public cloud. Everything you learned about NCI in the previous section also applies to NC2, with the exception that NC2 environments can only run the AHV hypervisor.



Private Cloud

Predictable Cost | High Performance

Greater Control | Data Sovereignty

Elasticity | Many Services

Ease of Use | Fractional Economics

NC2 Hibernation

While it is expensive to leave infrastructure idle or under-utilized in the public cloud, it can also take significant effort to rebuild an environment from scratch every time. NC2 features an innovative hibernation capability, allowing for workload hibernation and restoration, providing the potential for significantly reducing monthly cloud costs for seasonal or ad-hoc application usage. Hibernation moves all cluster VMs and configuration data to more cost-efficient object storage, uninstalls the Nutanix software, and stops bare metal compute instances. These steps are reversed during the restore process.

Full Control Over Infrastructure

NC2 is designed for you to retain full control over your Nutanix infrastructure running in the cloud.

Use Cases

The most attractive use cases for NC2 include:

Cloud Migration

- Operational simplicity with a single management plane across clouds
- Migrate applications across clouds with no code changes
- Removes error-prone manual tasks with easy-to-use automation

Datacenter Extension

- Scale to the cloud to address geographic expansion, mergers & acquisitions, or temporary seasonal resource needs
- Automate on-demand scaling with automation playbooks
- Hibernate cloud environments (such as dev/test) when not needed and easily restore them later

Cloud Disaster Recovery

- Removes the need for a dedicated secondary datacenter
- Utilize the same platform across private and public clouds
- Replicate VMs and data to the cloud—with control over your DR environment

VDI

- Host virtual desktops in the cloud to optimize service for remote workers
- Provide cost DR for on-prem VDI deployments
- Facilitate using the same gold image across all sites

Benefits of Migrating to NC2

When we ask Nutanix customers what differentiates NC2, the benefits that come up most often are:

- **Faster time to value:** Accelerate cloud and digital transformation initiatives so your business can start benefiting from them as quickly as possible.
- **Integrated visibility and control:** Use a single, unified management control plane to see, manage, move, and secure data and apps across diverse cloud environments.
- **App mobility:** Quickly migrate applications to public clouds without needing modification, facing risks, or relicensing software.
- **Cloud-native integration:** Gain direct access to the cloud-native services and features of AWS and Microsoft Azure.
- **Built-in expertise:** Avoid retooling and reskilling as you make changes to your hybrid multicloud.
- **Dynamic access to IT resources:** Immediately tap into public cloud resources to manage unpredictable or seasonal usage spikes.
- **No new hardware:** Ability to deploy Nutanix clusters without procuring new hardware
- **Cloud commitments:** NC2 enables the consumption of public cloud contract commitments.

For those that prefer a more managed service or want to work with a service provider, several Nutanix partners offer services based on Nutanix Cloud Platform.

NC2 Cloud Platforms

NC2 is currently offered in the following versions:

- NC2 on AWS
- NC2 on Azure
- NC2 on Google Cloud
- NC2 on OVHCloud

NC2 Licensing

NC2 can share the same Nutanix licenses as on-premises NCI environments, giving you the flexibility to address cloud requirements without repurchasing licenses. In addition, organizations can explore a range of pricing and licensing choices for NC2 clusters, ranging from on-demand, pay-as-you-go, to bring your own license with the portability of existing licenses, or even utilize licenses from a public cloud marketplace.

Seamless App Mobility

Unified Infrastructure Management

Lower Operational Costs

NC2 References

- NC2 on AWS: Deployment and User Guide
- NC2 on Azure: Deployment and User Guide

NC2 Migration Considerations

While there are VMware customers who are migrating from VMC or AVS to NC2, a more common customer scenario is a migration from an on-premises VMware environment, often as the result of a cloud-first strategy. Some customers utilize NC2 to provide DR for an existing VMware environment.NC2 is a low-overhead option for DR because there's no heavyweight management layer that requires extra VMs and associated potential cost increases.

Migrating from VMware to NC2 is very similar to migrating from VMware to NCI on premises. As with NCI, Nutanix Sizer can appropriately size your NC2 environment for both AWS and Azure. The Nutanix Move tool can then be used to move VMs to NC2 with minimal disruption. (See the Nutanix Move section.)

There are two ways to migrate VMs from an existing VMC environment to NC2 while preserving both the IP and MAC addresses of the VMs being migrated.

- **Deploy NC2 into the Connected VPC** - This is a VPC that is attached at the time of deployment of the VMware Cloud on the AWS environment and is owned by the customer. This is the most straightforward way to deploy.
- **Deploy NC2 into a completely separate VPC** - In this case, you can connect to the VMware Cloud on AWS cluster through a VMware Transit Connect (VTGW).

[View detailed migration steps here]

For NC2, the use of microsegmentation (available with NCI Pro and NCI Ultimate licenses) is highly recommended to control east-west traffic and support optimal security.

NC2 References

- NC2 on AWS: Deployment and User Guide
- NC2 on Azure: Deployment and User Guide
- NC2 on Google Cloud: Deployment and User Guide

Section 4: Migrating from VMware to Nutanix Cloud Manager

As the demands on IT teams continue to grow—exacerbated by the difficulty hiring experienced IT experts—identifying the best management tools has become critical to success. Our goal with the Nutanix Cloud Manager (NCM) solution is to deliver the functionality you need, while making it simple to manage hybrid multicloud environments and simple to license exactly what you need.

NCM helps your organization build and manage multicloud deployments easily by automating routine tasks and by providing tools for orchestration and security compliance.

For organizations migrating from VMware to Nutanix, NCM has functionality similar to VCF Operations (formerly VMware Aria Suite, VMware vRealize Suite). NCM brings a powerful suite of capabilities that offers a simple transition from VMware tools while delivering optimal time to value.

VMware Product	Nutanix Product
VCF Operations	NCM Intelligent Operations
VCF Automation	NCM Self-Service
VCF Automation—Governance & Policies	NCM Cost Governance
VCF Operations—Fleet and Operations Mgmt.	Nutanix Security Central

NCM Overview

Nutanix Cloud Manager adds intelligent operations, self-service and orchestration, cost governance, and security compliance and visibility capabilities that complement the management functionality of Nutanix Prism. Underlying NCM services include:

- **NCM Intelligent Operations.** An end-to-end management and operations solution for virtualized datacenter environments. Through task automation, machine learning algorithms, and predictive analytics, NCM allows your team to automate operations, optimize resources, forecast capacity needs, and proactively detect performance anomalies. NCM also provides ticketing system integration and constant system monitoring.

  NCM Intelligent Operations overlaps with the functionality provided by VCF Operations (formerly VMware Aria Operations, vRealize Operations).

- **NCM Self-Service and Orchestration.** A multicloud application management framework that helps your teams streamline the way they provision, scale, and manage new or existing applications across multiple environments. The solution includes tools for consumption and governance management, as well as blueprint creation, lifecycle automation, and management from a single control plane.

  NCM Self-Service overlaps with functionality provided by VCF Automation (formerly VMware Aria Automation, vRealize Automation) with an easy-to-use automation solution that enables you to deliver meaningful automation and self-service with. For example, NCM makes it simple to automate routine infrastructure tasks (IaaS) such as provisioning a single virtual machine.

- **NCM Cost Governance.** Provides visibility across hybrid cloud environments from a single dashboard, with tools for optimization and cost control. This solution uses advanced machine learning algorithms to automatically detect cost anomalies, and provide proactive measures to right-size resources and help you keep costs under control. NCM Cost Governance also provides capability for resource tagging that can be used for showback and chargeback.

  NCM Cost Governance overlaps with the functionality of VCF Automation—Governance and Policies (formerly VRealize Aria powered by CloudHealth), providing powerful and simple-to-use cost management for Nutanix environments.

- **Nutanix Security Central.** Provides a single dashboard to plan for, manage, and govern workload security across multiple cloud environments, allowing for efficiency in customer security operations. The solution also uses intelligent analysis to automate incident response and aid regulatory compliance for strategic initiatives such as zero trust.

  Nutanix Security Central overlaps with the functionality of VCF Operations—Fleet and Operations Management (formerly VMware Aria Operations for Networks.)

Benefits of NCM

Details include:

- **Unified management.** Manage AHV, ESXi, and vCenter/vSphere from a single console.
- **Full lifecycle automation.** Automate and manage the entire application lifecycle with less effort.
- **Seamless migration and automation.** Avoid the disruptive migrations that have accompanied some VMware Aria upgrades (like vRealize Automation 8.0). Migrate existing automations to NCM and simplify the path for future automations.

Faster time to value. Achieve greater value in much less time with NCM's intuitive tools.

26%
3-year lower cost of IT Ops

425%
3-year ROI

30%
more efficient security teams

21%
higher developer productivity

88%
Less unplanned downtime

5-months
payback period

Source: IDC 2024 Report "The Business Value of Nutanix Cloud Manager"

NCM Licensing

Similar to NCI, NCM is licensed in three editions: Starter, Pro, and Ultimate.
All Editions offer the following Intelligent Operations capabilities:

- Reporting
- Capacity planning
- Inefficiency detection and rightsizing
- Support for ESXi in non-Nutanix environments
- Operations automation

Pro Edition adds advanced Intelligent Operations functions (application discovery, self-tuning with ML), Cost Governance, and basic Self-Service functionality:

- Marketplace
- VM blueprints
- Runbooks

Ultimate Edition adds Security Central and advanced Self-Service functionality:

- Application blueprints
- Governance

NCM licensing is summarized in the following table as well as the attached product datasheet:

	NCM Starter	NCM Pro	NCM Ultimate
Intelligent Operations	X*	X	X
Self-Service		X*	X
Cost Governance		X	X
Security Central			X

*Does not include some advanced features

NCM can also be purchased together with NCI in three bundles. (See Section 3 for details of NCI licensing).

NCM Starter	NCM Pro	NCM Ultimate
Combines: NCI Pro + NCM Pro	Combines: NCI Ultimate + NCM Pro	Combines: NCI Ultimate + NCM Ultimate

NCM Migration Considerations

The first thing to recognize about an NCM migration is that it's not all or nothing. For example, you can migrate VMs to Nutanix running ESXi, register your existing vCenter with Nutanix Prism, and utilize the cloud management features of NCM. You can also use NCM for VMware clusters that aren't running on Nutanix. NCM provides the capability for capacity planning, right-sizing, anomaly detection, as well as automation for VM's running on vCenter. (The NCM software runs on Nutanix and must have access to the vCenter managing the non-Nutanix clusters.)

If you have licensed NCM, as you migrate VMs from VMware to Nutanix, various NCM capabilities begin to function automatically regardless of target hypervisor, taking the place of their VCF Operations (formerly VMware Aria, VMware vRealize) counterparts according to the capabilities you have licensed.

This applies to the following:

- **VCF Operations (VMware Aria Operations, VMware vRealize Operations) to NCM Intelligent Operations**
  As VMs are migrated, Intelligent Operations capabilities (based on the Edition you've chosen) automatically become active, such as capacity planning and inefficiency detection and rightsizing. You can also immediately begin creating playbooks for task automation.
- **VCF Automation—Governance & Policies (VMware Aria Cost, CloudHealth) to NCM Cost Governance**
  When Nutanix Move is used to migrate a VM, it maps all VMware tags to Nutanix categories so they can be automatically ingested for use by NCM Cost Governance.
- **VCF Operations—Fleet and Operations Management to Nutanix Security Central**
  As VMs are migrated, traffic flows start to appear automatically on the Nutanix console.

The exception to these examples is the migration from VCF Automation (VMware Aria Automation, vRealize Automation) to NCM Self-Service. The level of difficulty for this migration will depend on how much custom automation you have:

- Simple self-service operations, such as deploying VMs through a marketplace with no third-party integrations, are a lift-and-shift to Nutanix.
- Integrations created using vRealize Orchestrator are based on JavaScript, while NCM Self-Service uses Python, so those automation would have to be refactored.
- PowerShell and other shell scripts can be copied from VMware into NCM Self-Service and used as is.

We recommend that customers initiate a Proof of Concept (POC) License to fully explore the capabilities of NCM Self-Service, because migration to NCM Self-Service will require some additional discovery to determine how much effort the migration will require.

NCM References

NOTE: The various components that make up Nutanix Cloud Manager have all undergone name changes. You may encounter blogs, videos, and other reference material that refer to these products by their previous names:

Current Name	Previous Name
NCM Intelligent Operations	Prism Pro / Prism Ultimate
NCM Cost Governance	Nutanix Beam
NCM Self-Service	Nutanix Calm
Nutanix Security Central	Flow Security Central

The below Guide provides an excellent resource for best practices:

Best Practices for Choosing a Cloud Management Solution

We recommend accessing the below NCM Video playlists for additional information:

Nutanix University Playlist for NCM Intelligent Operations

Nutanix University Playlist for NCM Self-Service

Nutanix University Playlist for NCM Cost Governance

Nutanix University Playlist for NCM Security Central

Want to hear what our customers think about NCM? Access our PeerSpot NCM Site.

Section 5: Migrating to Nutanix Unified Storage

Storage has become a growing pain point for IT. In addition to storage that supports virtual environments, companies typically require robust file storage services along with separate block storage systems that support databases and other high-performance applications. With the traction of cloud-native architectures and applications, object storage is coming into play to support these next-gen applications along with providing optimal cost-effective storage for long-term data archival use cases.

The result is often a bewildering array of file, block, and object storage siloes, requiring separate procurement, maintenance, management, and capacity planning methods. This adds to datacenter complexity and therefore, cost.

Nutanix Unified Storage addresses these challenges, enabling storage needs to be satisfied by a single platform—the same platform that runs your virtualized and containerized workloads. This now addresses the workload of system administrators who now have time to concentrate on moving future IT architecture implementations forward, and pursue cost savings.

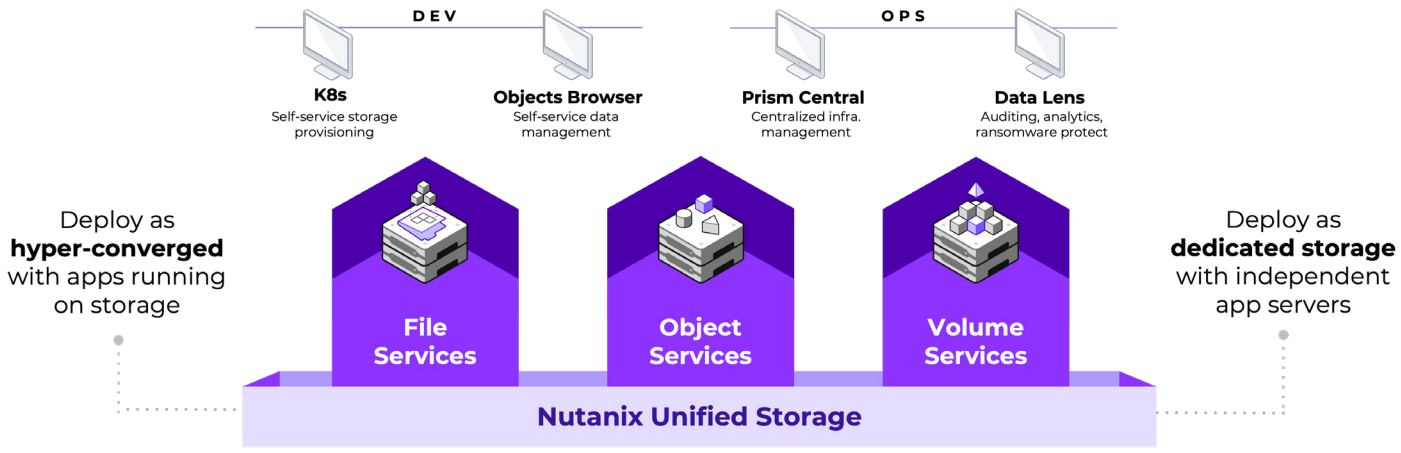
NUS Overview

Nutanix Unified Storage (NUS) is a software-defined storage platform that offers data services for simple data management and integrated ransomware protection to manage and secure structured and unstructured data.

NUS enables you to consolidate block, file, and object storage into a single, unified data services platform. It provides easy access to structured and unstructured data and is built for high performance, seamless scale, and security against ransomware attacks—whether data is in the edge, core, or cloud.

NUS is a strong foundational component that enables Nutanix Cloud Platform to satisfy your storage needs utilizing a solution that offers enterprise-class features, such as native snapshots and replication for DR, WORM support, scale-out capacity and performance, and native analytics. Along with these advanced data protection features, you can be comfortable with the fact that NUS is a data platform with a cyber storage foundation. With the combination of NUS and the Nutanix Data Lens (NDL) solution, which brings robust data analytics, insights, and data anomaly detection. You have a data platform with the right tools built to increase cyber resilience.

For customers migrating to Nutanix from VMware, NUS provides a single platform to properly address your storage needs. And, with all storage services sharing the same capacity pool, capacity planning is simplified.



Nutanix Unified Storage is built on top of Nutanix Cloud Platform

NUS Component Services:

Nutanix Files Storage is a simple and secure software-defined scale-out file storage solution that can be implemented on-prem and/or in the public cloud. It enables organizations to store, manage, and scale unstructured data by consolidating storage silos across edge,core, and cloud onto a single platform, while keeping it secure with integrated cybersecurity and ransomware protection.

Nutanix Objects Storage is a simple, scale-out cloud object storage solution that offers secure S3-compatible storage at massive scale. It helps simplify storage operations while offering high performance for cloud-native, big data analytics, and deep archive workloads. Nutanix Objects is flexible and easy to use, with policy-driven data tiering to cloud providers.

Nutanix Volumes Block Storage is an enterprise-class, software-defined storage solution that exposes storage resources directly to virtualized guest operating systems or physical hosts using the iSCSI protocol.

Nutanix Data Lens is a cloud-based data governance service offering a global view with intelligent insights into unstructured data stored on the NUS platform.

Benefits of Migrating to NUS

Nutanix Unified Storage offers a number of benefits.

- **Manage all storage in one place.** Eliminate infrastructure and management silos across storage on-prem and in the cloud.
- **Greater consolidation.** Migrate multiple file servers and/or object stores onto a common platform to reduce complexity and simplify management.
- **Pay-as-you-grow.** Start small, right size, then scale incrementally as needed
- **Flexible deployment options.** Deploy in NCI mode (VM workloads and storage workloads on same cluster) or dedicated (storage-only) environments for efficiency
- **Address diverge storage needs.** Well suited for remote and edge sites as well as datacenters
- **Multi-hypervisor support.** Support multi-hypervisor environments including ESXi and AHV
- **Built-in analytics.** Leverage native analytics to understand usage and identify anomalies
- **Enhance security.** Integrated cyber-security and ransomware protection with Nutanix Data Lens

The Value of Nutanix Unified Storage

A recent IDC Research business value report on Nutanix Unified Storage found the following benefits.

The Business Value	IT and Operational Efficiencies	IT Agility and Business Results
53% reduced cost of operations over 5 years	**82%** less time to deploy new Files storage	**99%** reduction in unplanned downtime
421% five-year ROI	**75%** less time to deploy new Object storage	**41%** improved application performance
10 month payback	**60%** more efficient IT storage management	**16%** more productive application developers
$441K revenue gained per year	**56%** more efficient IT security teams	

Source: IDC Report 2025

NUS Hardware Platforms

NUS runs on any of the hardware platforms that support NCI, including: Nutanix NX, OEM platforms, and third-party servers, as described in the section NCI Hardware Platforms.

Nutanix NX and most OEMs offer storage-dense options that are well suited for NUS. (Storage-heavy nodes can be mixed with other nodes in the same cluster, if desired.)

NUS Licensing

Nutanix Unified Storage and Data Lens are purchased and licensed on a per-TiB usable basis. As noted earlier, all NCI licenses include 1 TiB of NUS Pro. NCI Pro and Ultimate licensing also include Nutanix Volumes.

NUS can be deployed either as a dedicated storage cluster or with NCI for further consolidation. Dedicated mode allows for a maximum of 1 VM per node. If more VMs are required, NUS must be run in NCI mode. NUS licensing is portable across Dedicated and NCI environments.

Nutanix Unified Storage (NUS) is available in two editions, Starter and Pro:

NUS Starter: Low-cost capacity-optimized files (see sub-bullet) and objects use cases such as Backup, Archive and Video Surveillance.

- Nutanix Unified Storage Archive use cases only with >500TiB per cluster and no/low random IO requirement.

NUS Pro: All general-purpose and performance use cases such as AI/ML, HPC, Big Data Analytics, Manufacturing, Healthcare and Home Directories.

Add-Ons Available:

- Advanced Replication (Available only with NUS Pro) includes Metro File Sync Replication, Near-sync FSVM-level Replication. and is licensed per usable TiB.
- Security: includes Data-at-Rest Encryption (software-based and SED). Security add-on is licensed per usable TiB.
- Nutanix Data Lens (NDL)
  - Data Lens Basic (Available only with NUS Pro) includes File and Object Data Analytics only.
  - Data Lens Premium: includes Ransomware Protection and Recovery, Permissions Risk Analysis, Auditing, Behavioral Analytics and Alerts, Active Risk Remediation.

Dedicated mode storage clusters:

- Require a NUS license based on the desired usable capacity for Files Storage, Objects Storage, and Volumes Block Storage.

NCI mode clusters:

- Require a NCI license plus a NUS license for Files Storage and Objects Storage capacity beyond 1TiB.
- Volumes Block Storage is included with NCI Pro and NCI Ultimate licenses

NUS Files Storage in Public Cloud

- Requires NUS Pro license. Due to use of all flash storage resources in AWS and spinning media or HDDs tiers are not deployed as part of NUS Files Storage in AWS. The use of NUS Starter is not supported for deployment of Files Storage in AWS.

NUS Migration Considerations

While Nutanix Files Storage overlaps with vSAN File Service, NUS is not otherwise a replacement for any products supplied by VMware. However, NUS can stand in for the diverse storage systems common in VMware environments, greatly reducing complexity, streamlining management, and giving you flexible storage options to meet future needs. For example, you may not require on-prem object storage today, but if you need it in the future, NUS makes it simple to add the capability to existing Dedicated mode or NCI mode clusters.

Additional NUS migration considerations include:

- NUS supports the CSI and COSI drivers needed for Kubernetes and containerized operations, making it an ideal option for supporting the storage needs of cloud-native applications.
- NUS can run on single-node clusters to support the smallest environments; pay-as-you-grow licensing enables you to start small and grow your storage deployment as needed.
- NUS provides very good performance, including high performance object storage suitable for addressing big data use cases. (Object storage is not typically designed for performance.)
- NUS when paired with Nutanix Data Lens provides data insights, auditing, reporting and ransomware protection.

Sizing and Storage Types

Nutanix Sizer can accurately size your NUS environment, helping you to rightsize total capacity and determine your expected compute needs. NUS customers deploy NUS on nodes with hybrid storage (SSD + HDD) or all flash for high performance use cases.

Dedicated vs NCI Mode Clusters

NUS can be deployed in a dedicated storage cluster or deployed in NCI mode on the same cluster as application workloads. There's no hard and fast rule for when to choose Dedicated mode vs. NCI mode. Generally, you pick a dedicated cluster when you need a lot of storage capacity and you want the most predictable performance.

Practical Considerations

Before you migrate from your existing storage, there are a few additional questions that are worth considering:

- Is your existing backup vendor qualified on Nutanix? If not, will you utilize Nutanix integrated data protection or choose a qualified vendor?
- Is your anti-virus software qualified on Nutanix?
- With Nutanix Files Storage, it's important to think about your data layout and what you're trying to achieve.
  This is spelled out in the Nutanix Files Migration Guide along with other valuable guidance.

NUS References

- TN-2016: Nutanix Files Migration Guide
- TN-2041: Nutanix Files
- Nutanix Objects Tech Note
- Exploring the High-Performance Capabilities of Nutanix Objects
- Nutanix Volumes Best Practices
- Data Lens Tech Note
- PeerSpot NUS Site

Section 6: Migrating from VMware to Nutanix with Nutanix Move

Migrations remain a pain point for IT organizations, requiring significant time and effort. The Nutanix Move tool is designed to simplify cross-hypervisor VM migrations and minimize risk.

Nutanix Move Overview

Nutanix Move is a cross-hypervisor mobility solution that migrates VMs with minimal downtime. For VMware migrations, Nutanix Move supports the following migration paths:

- VMware ESXi to AHV
- VMware ESXi on three-tier infrastructure to VMware ESXi on Nutanix Cloud Platform
- VMware ESXi to Nutanix Cloud Clusters (NC2) on AWS
- VMware ESXi to NC2 on Microsoft Azure
- VMware ESXi to NC2 on OVHcloud

For example, you can migrate ESXi on three-tier infrastructure to ESXi on Nutanix or shift ESXi VMs to AHV VMs on Nutanix to avoid hypervisor licensing costs.

Nutanix Move provides minimal disruption to operations and requires no manual scripting. It works by seeding data from the running source VM to the target VM in the new environment. Once the seeding process is completed, cutover can be initiated to stop the running VM, transfer any remaining data, and restart the VM in the new environment, minimizing the downtime required for cutover.

Nutanix Move is managed through the Nutanix Move User Interface which is accessed by logging into the Nutanix Move VM.

Benefits of Using Nutanix Move

Benefits of Nutanix Move include::

- **Fast and simple**. Nutanix Move is specifically designed for migration operations - bringing speed, simplicity and peace of mind to an otherwise complicated process.
- **Scalability for large-scale migrations.** Nutanix Move can migrate an individual VM or scale to migrate thousands of VMs.
- **Reduced risk and cost.** Nutanix Move is automated, and designed to avoid the need to rebuildVMs and applications manually.

Migration Considerations

The key to a successful migration is planning. Initial planning may include identification of the workloads being migrated, file sizes, time frames for the migration, etc.

Break large migrations into phases and verify that each phase completes successfully before proceeding to the next one. Perform backups as each phase completes.

The Nutanix Move User Guide includes migration planning for all VMware to Nutanix migrations, including in-depth workflows for each specific source and target.

While Nutanix Move is suitable for migrating all types of applications, some may require additional consideration and preparation. This includes very large databases, high-performance workloads, and applications with very specific customization requirements that must be maintained.

While Nutanix Move can migrate a database, it may be preferable to rebuild the database on the target platform and migrate the data. It is up to you to understand your applications and workloads before deciding how to migrate each one. If you need assistance, the Nutanix Professional Services team can advise and help with your migration planning.

Nutanix Move References

- Nutanix Move User Guide
- Learn how to Migrate an existing ESXi Cluster to an AHV Cluster (video)
- PeerSpot Move Site

Section 7: Nutanix Makes Migrations Simpler

Migrations are always a challenge no matter how many you've been involved in or how skilled your team is. The right partners don't just offer great technology, they offer the tools, partnerships, support, and services necessary to mitigate risks and promote success. Nutanix is that type of partner.

Nutanix Migration Tools

As you learned in the previous section, Nutanix created Nutanix Move as a general-purpose migration tool that takes the pain out of migration planning and execution. Nutanix provides several additional tools that can be extremely useful during the migration process:

Nutanix Sizer. Streamlines on-premises and cloud solution deployments with fast and accurate infrastructure sizing for all types of workloads. With Nutanix Sizer, you'll have the information you need to deliver maximum workload density, performance, and value. Nutanix Sizer enables you to:

- Minimize the guesswork
- Reduce or possibly eliminate infrastructure silos
- Size infrastructure for AHV and ESXi
- Obtain a complete bill of materials
- Leverage data gathered from existing workloads

Nutanix Collector. Provides a simple means to quickly capture production workload utilization metrics. This information can be imported into Nutanix Sizer to deliver accurate sizing recommendations.

Native SMB and NFS Migration Tool. SMB remains the file sharing protocol of choice in Microsoft environments, NFS for Linux. Our SMB and NFS migration tool simplifies the migration of SMB and NFS file shares into Nutanix Files Storage.

Nutanix Partner Ecosystem

The Nutanix partner ecosystem is designed to offer the best possible customer experience, providing end-to-end, fully integrated Nutanix Cloud Platform solutions for any application or workload to create maximum customer value.

Our partner ecosystem consists of:

- Reseller Partners
- System Integrators
- OEM Partnerships
- Consulting Partner
- Technology Alliances
- Service Providers
- Training Partners

Technology Partners

Partnerships are essential in the hybrid multicloud era. The ecosystem of technologies you select to meet your business needs must work together seamlessly to deliver maximum strategic value. Nutanix partners with leaders and innovators across all major technology categories.

Nutanix Elevate Technology Alliance Partners collaborate with us to ensure joint solutions "just work," through Nutanix Ready interoperability validations and unique feature integrations.

System Integrators

To better serve the needs of large enterprises and global organizations, Nutanix partners with the world's leading system integrators. Nutanix Global System Integrators (GSIs) are trained and certified to develop, design, and

implement IT strategies for customers migrating from VMware to Nutanix. They can help you develop essential datacenter practices and will recommend and implement Nutanix technology solutions to help improve productivity and efficiency.

Services and Support

The ramp-up period associated with assessing and migrating to Nutanix from VMware can create challenges for your organization. Nutanix Customer Xperience—our education, services, and support team—offers a range of services, including:

- Workshops to help with assessments and planning
- "Fast track" deployment services and support
- Education services

Nutanix has consistently achieved a 90+ Net Promoter Score (NPS) (the benchmark of customer satisfaction) for over a decade. That's one more reason you can choose Nutanix with confidence.

Finding Out More

To learn more about migrating from VMware to Nutanix, visit nutanix.com/vmaware.

Want more on the practical aspects of deploying Nutanix AHV and other solutions? Visit our mission control page.

Ready to experience the Nutanix technologies mentioned in this guide? Take a test drive and see the Nutanix difference for yourself. Visit nutanix.com/testdrive-vm.

You can also contact Nutanix at info@nutanix.com, follow us on X (formerly Twitter) @nutanix, or send us a request at www.nutanix.com/demo to set up a customized briefing.

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