eBook

Reduce Risk by Diversifying Your VMware Environment

NUTANIX

Nutanix Gives You More Flexibility to Address Future Business Needs

Broadcom's recent acquisition of VMware has prompted customer concerns about risks due to pricing uncertainty, and the potential for reduced innovation and eroding service levels.

Consequently, many organizations are re-evaluating budget commitments to VMware as they prepare and plan for accelerated AI adoption, cloud-native applications and hybrid multicloud IT operations.

A popular strategy to cope with VMware uncertainty is adding a second vendor to your operations. This enables you to migrate existing workloads and deploy new workloads to the alternative platform, while leveraging VMware investments until their end of life. Selecting a proven alternative can reduce risk and give you flexibility to address future business needs.

Table of Contents

Diversify with Nutanix

By simplifying management, reducing TCO and enabling hybrid multicloud operations, Nutanix offers an ideal platform for VMware customers who want to diversify. Deploy all your workloads – including AI and cloud-native apps – on one Nutanix platform – and run them anywhere: on-premises, in the cloud and at the edge.

Simple Management

With everything on your team's plate, you can't afford to get bogged down managing multiple siloed infrastructures manually. Nutanix takes the pain and complexity out of IT operations by unifying compute, storage, virtualization, and networking on a single management platform that offers one-click operations and AI-driven automation.

Customers often report that managing a Nutanix environment is simpler than managing a VMware environment. With intuitive one-click simplicity and intelligent operations, admin teams accustomed to VMware products typically find it easy to quickly learn and manage Nutanix. The two environments can coexist without friction, and Nutanix tools can even manage the VMware environment, replacing the functions of the VMware Aria suite.

Lower TCO

For most IT organizations, balancing current operations that keep the lights on and the new initiatives that move business forward is a constant struggle. As you accelerate the pace and scope of AI initiatives and modern app development, it's essential to control the overall cost of operations to the greatest extent possible. Future cost uncertainty is one of the biggest reported concerns among VMware customers.

The Nutanix platform seamlessly supports your enterprise apps alongside your AI and cloud-native efforts, increasing efficiency and productivity. Nutanix also lowers your costs with:

- A hybrid multicloud architecture based on the industry-leading hyperconverged infrastructure (HCI).
- A native hypervisor that eliminates the need to pay separate fees for virtualization.
- Full license mobility that enables you to move licenses between on-premises and cloud locations to address changing operational requirements while avoiding sunk costs.

In a recent study, Nutanix customers achieved average TCO savings of 43% and five-year ROI of 356%.

Built for Hybrid Multicloud

Your IT operations increasingly span multiple datacenters, public clouds and edge locations. If not managed carefully, this enormously increases your operating complexity. This complexity is not helped by the addition of vendor uncertainty arising from the VMware acquisition. Diversifying with Nutanix delivers the hybrid multicloud capabilities your business requires to stay competitive. Nutanix has worked diligently to deliver a full suite of enterprise IT capabilities for datacenters, public clouds and at the edge.

Whether you're operating Nutanix on-premises or in the cloud, management remains consistent. This minimizes the cloud-specific skills your team has to learn and makes it easier to get up and running in the cloud environment of your choice.

If you build your hybrid or multicloud environment on Nutanix, you can operate with the same management tools everywhere, dramatically reducing administrative complexity. You can easily move apps across environments without refactoring or replatforming and be confident they will run as expected.

The following sections explore the specific Nutanix technologies that make all this possible.

Nutanix Technical Capabilities

The Nutanix Cloud Platform (NCP) solution is a secure, resilient, and self-healing platform for building a hybrid multicloud infrastructure. It supports all kinds of workloads and use cases across public and private clouds, multiple hypervisors, and containers with varied compute, storage, virtualization, and network requirements. NCP is easy and intuitive to learn, especially for admins skilled with VMware products. It provides the reliability and performance you need, plus full-stack visibility, control and automation based on a unique software-defined architecture.

Here are six essential Nutanix capabilities that will help you diversify your IT operations with less risk and in less time. All capabilities are intrinsically hybrid multicloud and operate equally well in the datacenter, public cloud and at the edge.

Modern Hypervisor

For IT teams with deep experience with VMware ESXi, it's been easy – until now – to think very little about other hypervisors. However, as you diversify away from VMware – possibly expanding your cloud operations as well – it's important to think carefully about the characteristics of any new hypervisors you add.

Nutanix AHV is a modern hypervisor that:

- **Provides a full enterprise feature set.** AHV offers the high availability, data protection, disaster recovery, and other capabilities IT operations rely on.

- **Runs across clouds.** AHV is available for datacenters and edge and also runs natively in AWS and Microsoft Azure. It is supported by leading cloud service providers such as Equinix, Cyxtera and OVHcloud.

- **Is optimized for HCI.** AHV is designed to support HCI, delivering exceptional performance and reliability from a wide range of HCI-capable configurations from leading hardware suppliers while avoiding unnecessary software complexity.

Because NCP can run both the Nutanix AHV hypervisor and VMware ESXi, choosing Nutanix gives you greater flexibility to create a plan that meets your objectives. We have more than 1,000 validated solutions on Nutanix AHV that have been tested and verified to help you get started.

Our free cross-hypervisor mobility solution, Nutanix Move, makes migrating VMs between VMware ESXi and Nutanix AHV simple, while minimizing cutover time so critical operations aren't disrupted.

Supported migration paths include:

- VMware ESXi to Nutanix AHV

- VMware ESXi to Nutanix Cloud Clusters (NC2) on AWS

- VMware ESXi to NC2 on Microsoft Azure

- VMware ESXi on three-tier infrastructure to VMware ESXi on Nutanix Cloud Platform

- VMC on AWS to NC2 on AWS

> "It's extremely simple to migrate everything to AHV. All you need is a five-minute window for a reboot and everything's back up and running

Bret Snyder, Senior Server Engineer at Ruffalo Noel Levitz

> "We've driven down operational costs using the AHV hypervisor and further lowered support overhead with Nutanix Cloud Manager, which is enabling us to automate day-to-day management tasks and move forward with confidence to a multicloud future.

Rick Jagger, Technical Services Manager at Bupa

Traditional and Cloud-Native Workloads

In your current environment, you might have traditional and cloud-native apps on separate infrastructures – with separate management teams – but the hazards associated with siloed infrastructure and management include stranded resources, increased costs and decreased flexibility.

Nutanix makes it simple to develop and run all your apps – legacy apps running in VMs and containerized apps – anywhere you need them. This reduces the complexity of infrastructure management so your teams can focus on developing and operating business-critical apps.

Flexibility and Choice

Nutanix offers a unified environment that provides exceptional support for VMs and containers. In addition to the Nutanix Kubernetes® Platform solution, we have strategic partnerships with Red Hat, Microsoft, Google Cloud, and AWS. This enables you to run the Kubernetes platform of your choice and seamlessly extend your investment and user experience to your on-premises Kubernetes environment.

Ease of Use

With Nutanix, all the infrastructure you need for Kubernetes works out of the box, eliminating time-consuming integration. One-click management simplifies complex operational tasks, including the protection of persistent data.

Benefits for Cloud Native

Built-in automation reduces the deployment time for Kubernetes clusters to under 30 minutes. Cluster API integration simplifies provisioning, upgrading and operating multiple Kubernetes clusters, while one-click management makes it easy to upgrade operating software, application software and firmware. Integrated backup and disaster recovery capabilities eliminate the need to integrate open-source or commercial data protection solutions, streamlining the Kubernetes environment.

Additional Cloud-Native benefits include::

- **Scalability.** The scalable design of Nutanix HCI maps directly to the architecture of Kubernetes clusters.

- **Integration.** Fully-integrated turnkey features like virtualization, infrastructure security, lifecycle management, data protection, and disaster recovery simplify Kubernetes operations.

- **App-Aware Data Services.** Whether you need block-based storage for ELK stack, read-write file storage for traditional middleware or S3-compatible object storage, Nutanix delivers it – with self-service developer access from a single platform.

Nutanix runs VMs and containers to smooth your path to cloud native as you diversify your operations. Choose our built-in Kubernetes platform or your preferred Kubernetes distro and the latest tooling to support development and production needs for cutting-edge apps like AI. Easy integration with public cloud services jumpstarts app development.
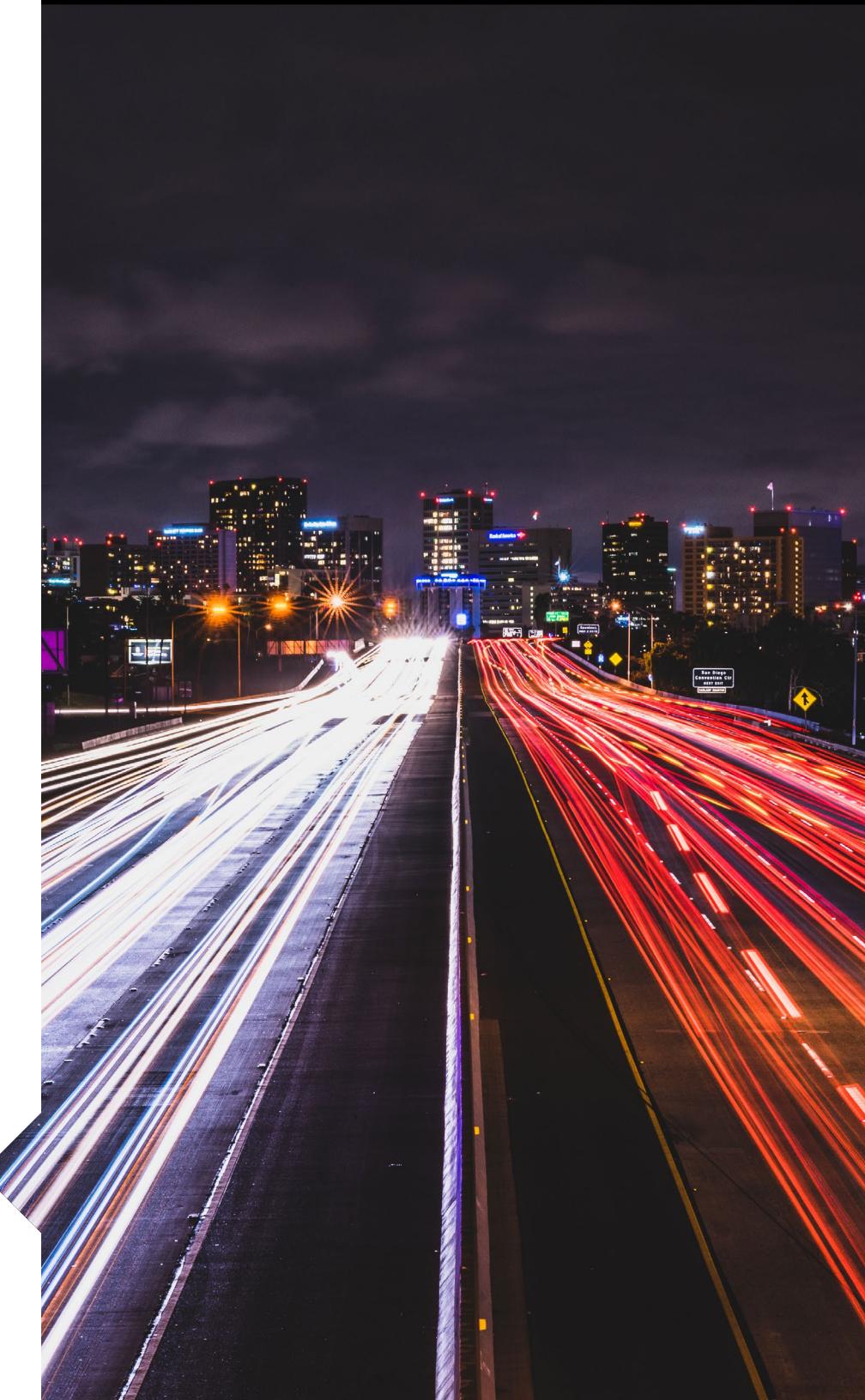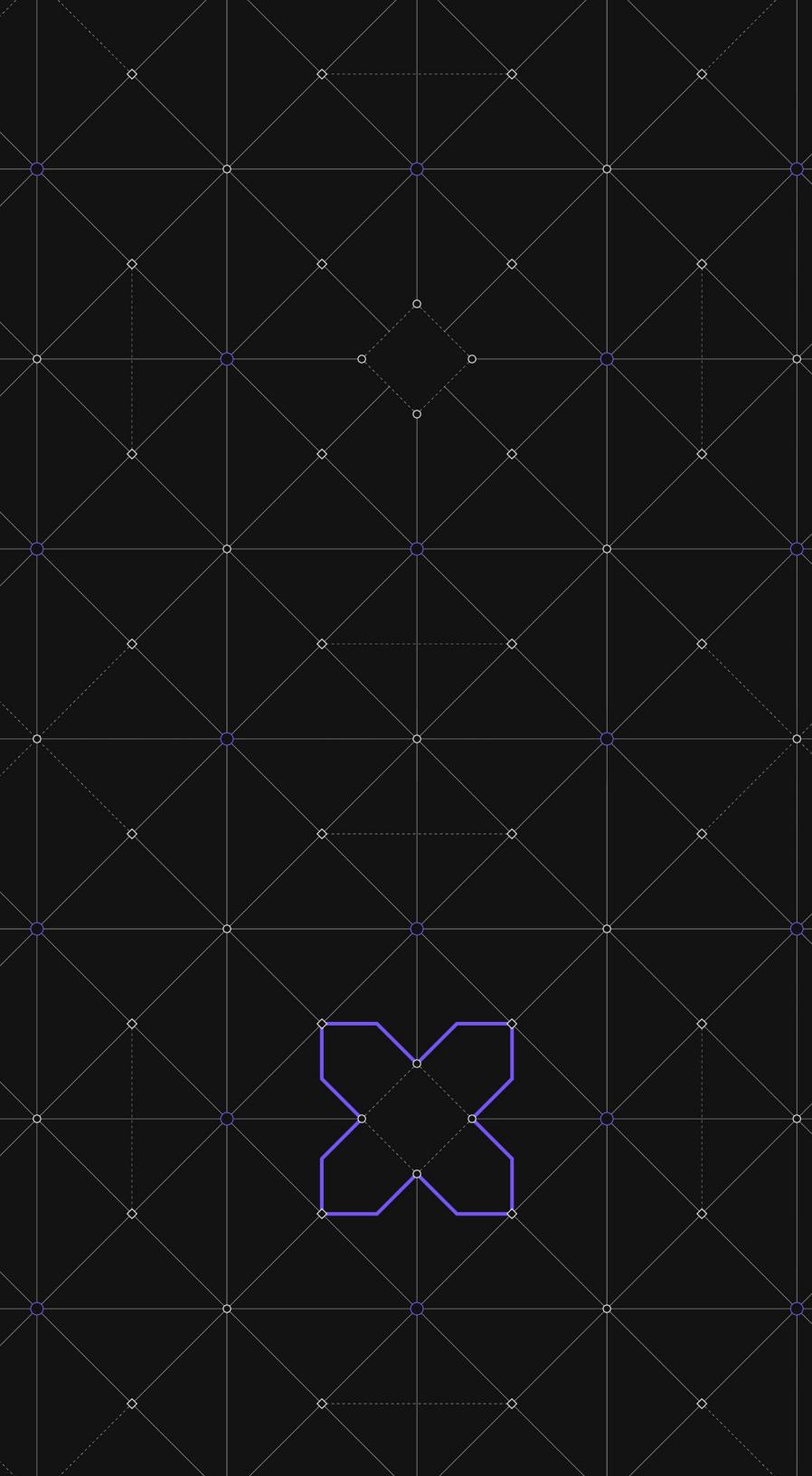
Unified Data Services

Data storage is a growing pain point for IT. In addition to storage to support virtual environments like VMware, companies typically utilize file storage and separate block storage systems to support databases and other high-performance apps. And, increasingly, object storage comes into play to support cloud-native apps and archival needs.

The result is often a bewildering array of file, block and object storage that require separate procurement, maintenance, management, and capacity planning. These storage silos add to datacenter complexity and cost.

Nutanix offers a complete set of unified data services built on open standards. These services deliver the high performance, resiliency, and enterprise features that IT teams need to succeed – without the complexity and cost.

The Nutanix platform satisfies all your storage needs with enterprise-class features, including snapshots and replication for disaster recovery, write-once/read-many (WORM) support for immutability, scale-out capacity and performance, and native analytics.

Data Services Made Simple

With Nutanix, you can consolidate block, file and object storage into a unified data management platform that also simplifies database management and enables database-as-a-service (DBaaS). You get easy access to structured and unstructured data from a single platform built for high performance, seamless scale, and strong security against ransomware and other cyber threats.

For VMware customers, Nutanix provides a single platform that meets your diverse storage needs. Since all storage services can share the same capacity pool, capacity planning is greatly simplified. Nutanix data services include file, block, object, and database options.

Analytics, Reporting and Automation

Governance and compliance are critical components of enterprise IT that you can't afford to ignore as you diversify your datacenter. Nutanix includes a wide range of capabilities that address compliance and reporting requirements, along with complete automation that greatly reduces time-consuming and error-prone manual tasks.

Deep Analytics

The Nutanix Data Lens is a cloud-based data governance service that provides a global view with intelligent insights into unstructured data stored on the Nutanix platform. It proactively assesses and mitigates data security risks by identifying anomalous activity, auditing user behavior and adhering to compliance requirements.

Comprehensive Management

Many VMware customers use a variety of additional tools – such as VMware Aria Operations, VMware Aria Automation and VMware Tanzu CloudHealth – to address management, governance and automation needs.

The Nutanix Cloud Manager (NCM) solution provides a full suite of capabilities similar to these solutions and makes it easier to build, use, operate, and govern apps and infrastructure. Offering faster time to value, it's an ideal replacement for VMware Aria's frustrating complexity.

NCM offers industry-leading multicloud cost governance capabilities, with full visibility from a single console. It provides cost metering and a single pane of glass for on-premises and public cloud infrastructure.

Nutanix also provides end-to-end management and operations. With task automation, machine learning algorithms and predictive analytics, your team can automate operations, optimize resources, forecast capacity needs, and proactively detect performance anomalies. These management and operational capabilities are also compatible with VMware deployments on three-tier infrastructure.

Self-Service

Self-service is essential for increasing IT efficiency and software development velocity. Nutanix offers unified self-service administration for developers and app owners across hybrid multicloud environments.

Easy-to-use automation enables faster outcomes. For example, automating routine infrastructure-as-a-service (IaaS) tasks such as provisioning VMs, ensures developers can access the resources they need without delay.

NCM streamlines the way teams provision, scale and manage new and existing apps across multiple environments and includes tools for consumption and governance management, as well as blueprint creation, lifecycle automation and lifecycle management. Additionally, Nutanix self-service capabilities work with VMware deployments that are currently running on three-tier infrastructure.

Integrated Full-Stack Security

We've saved the most critical capability for last. Any plan to diversify your IT operations should bolster – not compromise – security. However, adding a vendor can result in diverse security controls and increase the likelihood of operator error and data exposure.

Nutanix takes a security-first approach to development and we ensure that all our software is security hardened out of the box. Periodic scans self-heal Nutanix systems back to a secure baseline. The close integration between compute, networking and storage functions in the Nutanix environment reduces the risk of security gaps that can occur when different functions interface.

NCM provides a single dashboard to plan for, manage and govern workload security on any cloud without the need for deep cybersecurity training or additional personnel. The solution also uses intelligent analysis to automate incident response and aid regulatory compliance for strategic security initiatives.
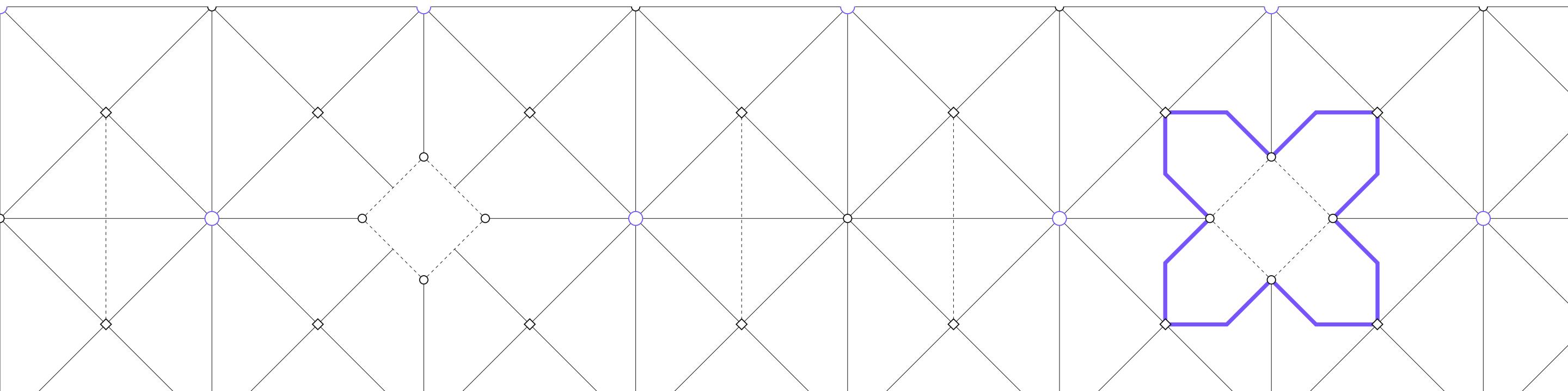
Two Options to Diversify

A significant advantage of choosing Nutanix as you diversify your IT operations is that it gives you the flexibility to choose the strategy that most closely aligns with your business and operational needs.

Option 1: Nutanix Running AHV

Choosing NCP running our enterprise-grade AHV hypervisor positions your organization to deliver the full benefits of Nutanix, including simplified management, the lowest TCO and full support for hybrid multicloud operations. Only Nutanix running AHV delivers a full enterprise feature-set across multiple clouds that is fully optimized for HCI.

This option gives you the flexibility to:

- Use Nutanix Move to migrate existing workloads from VMware to AHV.

- Deploy new workloads on AHV while existing workloads remain on VMware running on legacy infrastructure.

Option 2: Nutanix Running VMware vSphere

In some situations, you may prefer to take things more slowly. NCP supports the full VMware environment without compromise and gives you the flexibility to diversify your operations using a thoughtful step-by-step approach.

The Nutanix platform was originally designed to bring the simplicity and power of our HCI architecture to customers using VMware virtualization – eliminating the complexity of deploying and managing three-tier infrastructure with separate compute, networking and storage – and it still does.

Nutanix delivers full integration with vSphere, allowing you to move VMware VMs to Nutanix while continuing to use familiar VMware tools. This eliminates the complexity of a traditional SAN and unlocks many of the benefits of Nutanix HCI, including simple management, superior performance without constant tuning and self-healing for ultra-fast recovery from failures.

Migrate existing VMware workloads to Nutanix using Nutanix Move and deploy new workloads directly on Nutanix running VMware – while retaining the option to move to AHV in the future.
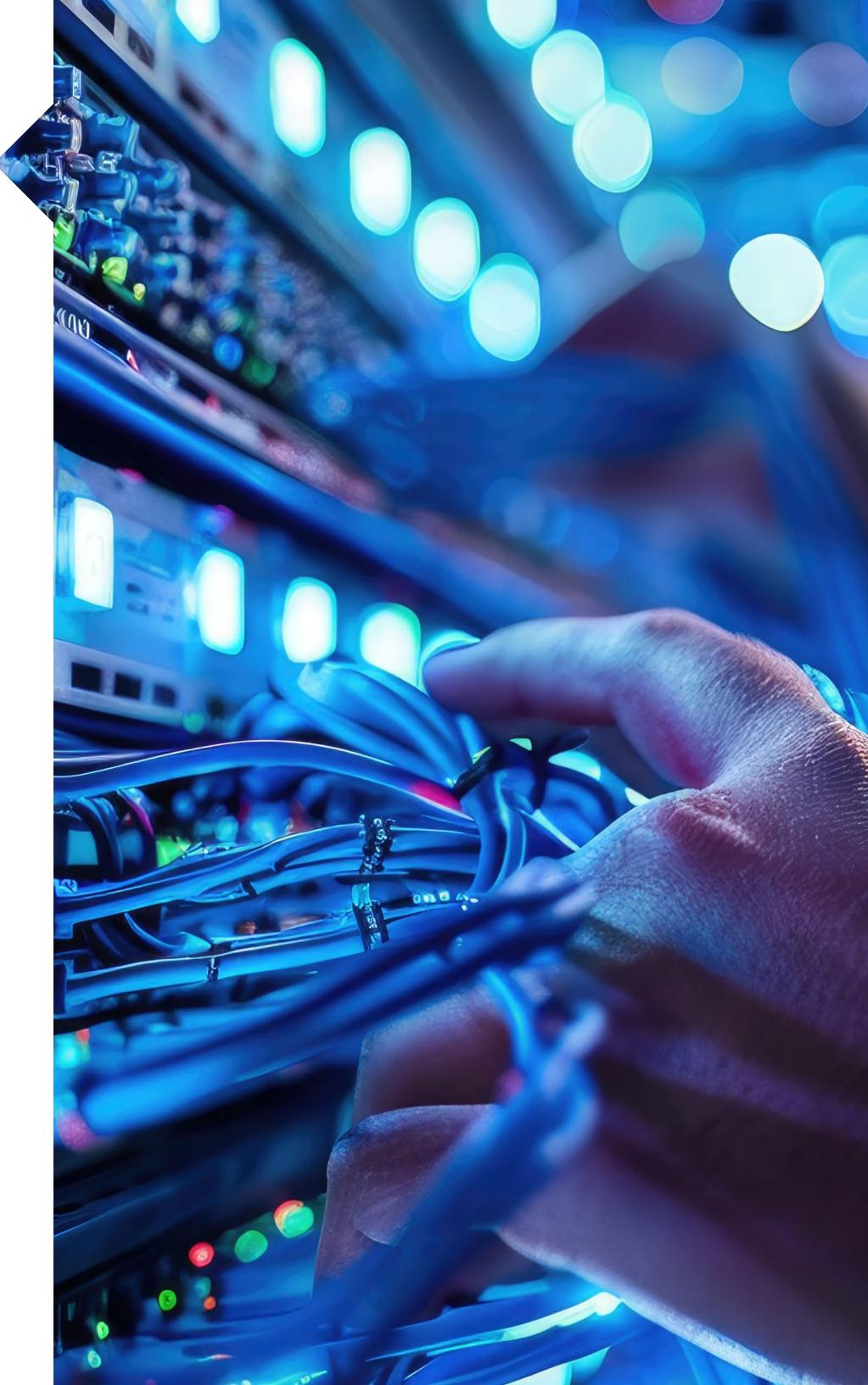
Let's Get Started

Don't let anything stand between you and diversifying your datacenter. If you're ready to learn more, check out our detailed VMware to Nutanix migration guide:

[Get the Guide]

If you'd like to try out Nutanix software firsthand, take a test drive and experience the difference.

[Take a Test Drive]

Or visit nutanix.com to learn more. You can also contact Nutanix at info@nutanix.com or send us a request at www.nutanix.com/demo to set up your own customized briefing.

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