PLATFORM9

2025 Edition

A comprehensive guide to

Transitioning from VMware with confidence

Table of Contents

What is the ideal VMware alternative?

The virtualization landscape is changing fast, and more organizations are looking for private cloud alternatives. With Broadcom's acquisition of VMware, enterprises are prioritizing flexibility, advanced features, and better business relationships. For vAdmins, it's not just about comparing features—it's about finding a smooth, hassle-free migration path that protects existing investments and keeps productivity on track.

Migrating from VMware brings a myriad of challenges. Can you easily switch to a new virtualization platform without disrupting operations? How do you protect your existing investments—ensuring your hardware infrastructure, backup and recovery tools, security systems, and performance monitoring remain compatible? And most importantly, how do you make the migration process smooth and low-risk?

This guide simplifies the search for VMware alternatives, focusing on key features and functionality of Platform9 Private Cloud Director, and comparing this solution to alternatives including Microsoft Hyper-V, Nutanix AHV, Red Hat OpenShift, and VMware vSphere. Designed for enterprise vAdmins, it cuts through the noise of the virtualization market to help you make smart decisions that align with your business goals and budget.

Table stakes: Core virtualization capabilities

A new virtualization platform must do the same job (or better) than VMware has done for you over the years. First of all, it must provide a familiar admin experience. Experienced vAdmins should only require minimal training and on-boarding to a new platform. It should be easy to manage, multi-tenant, and have the fine-grained features required to fine tune for legacy applications.

Additionally, any new virtualization platform must support critical vSphere management features, such as VM High Availability, VMware DRS (Distributed Resource Scheduler), vMotion, Distributed Virtual Switches, Software Defined Networking, and vVols.

Dynamic Resource Scheduling

VMware Distributed Resource Scheduler (DRS) is a vSphere feature that automatically balances compute workloads across a cluster of ESXi hosts. By monitoring resource usage such as CPU and memory in real time, DRS intelligently places virtual machines (VMs) at startup and dynamically migrates them using vMotion to ensure optimal performance and efficient resource utilization. This helps prevent resource contention, reduces manual intervention, and improves overall infrastructure efficiency.

Platform9 Private Cloud Director

Platform9's Dynamic Resource Rebalancing (DRR) delivers the same intelligent workload balancing VMware admins are familiar with from DRS. It continuously monitors CPU and memory usage across your cluster and automatically moves VMs between hosts to prevent resource contention and maintain optimal performance—without downtime. DRR is built into Private Cloud Director and is simple to enable with just a few clicks. There's no need for complex setup or tuning—just set your policy, and the system handles the rest. It's a familiar experience, purpose-built for teams looking for an easy, low-disruption path away from VMware.

Red Hat OpenShift virtualization

OpenShift Virtualization runs VMs using KubeVirt, treating them as pods within Kubernetes. While it offers some DRS-like capabilities using autoscalers, affinity rules, and eviction strategies, these are reactive and tuned for containers—not VMs. Live migration requires RWX storage, stable networking, and feature gates like SR-IOV, and is typically triggered manually or during maintenance. Unlike VMware DRS, which proactively and seamlessly balances VM workloads, OpenShift's KubeVirt-based approach is more complex, slower to respond, and may involve downtime. For VMware admins, matching DRS behavior in OpenShift demands deep Kubernetes expertise and careful configuration.

Nutanix AHV

Nutanix AHV's Acropolis Dynamic Scheduling (ADS) offers VMware DRS-like automation by proactively migrating VMs to avoid resource contention. It's enabled by default and designed for simplicity, but transitioning requires a shift in both infrastructure and operations. Unlike VMware,

you can't reuse existing server or storage hardware—you must adopt Nutanix's integrated HCI stack, including their storage. Operationally, Prism replaces vCenter, and you'll need to learn Nutanix's hyperconverged model, including storage fabric, controller VMs, and consolidated management. While the goals of ADS are familiar, VMware admins should expect both new investments and a learning curve to fully adapt.

Microsoft Hyper-V

Hyper-V offers DRS-like capabilities through System Center Virtual Machine Manager (SCVMM) with Dynamic Optimization, but it's not enabled by default and requires separate licensing. Unlike VMware DRS, which proactively balances workloads in real time, SCVMM operates on a fixed schedule (default: every 10 minutes) and lacks predictive automation. Live migration is supported, but optimal performance depends on proper storage and network setup. While VMware admins will recognize the concept, SCVMM demands more manual tuning and setup. It delivers basic load balancing, but falls short of DRS's seamless, automated experience.

VM and storage live migration

VMware's vMotion and Storage vMotion are commonly used by administrators because they enable non-disruptive operations. vMotion allows live migration of VMs between hosts, which is critical for load balancing, hardware maintenance, and avoiding downtime. Storage vMotion lets admins move VM disk files across datastores without shutting down the VM, helping with storage optimization, performance tuning, and hardware upgrades. Together, they provide flexibility and uptime—key for smooth, continuous operations in enterprise environments.

Private Cloud Director

Platform9 Private Cloud Director supports live migration by allowing running VMs to be moved between hosts without any downtime, ensuring continuous service during hardware maintenance or resource balancing. For VMware administrators, the experience is familiar and intuitive—using a simple point-and-click interface similar to vCenter, with no need to learn new tools or commands. This makes it easy to adopt while preserving the operational flexibility they rely on.

RedHat OpenShift Virtualization

OpenShift Virtualization supports live VM migration via KubeVirt, enabling minimal-downtime moves between nodes. However, it's not as seamless as VMware vMotion—migration success depends on cluster health, shared storage, and Kubernetes tuning. For VMware admins, there's a steep learning curve: workflows rely on kubectl, YAML, and Kubernetes-native concepts, not familiar VM tools. Traditional virtualization features are containerized abstractions, making it harder to replicate VMware's simplicity. Limitations include storage setup complexity, policy dependencies, and lack of fine-grained migration control. While functional, live migration in OpenShift requires retraining and isn't a drop-in VMware replacement.

Nutanix AHV

Nutanix AHV enables live migration by moving running VMs between hosts without downtime, using shared storage and its Acropolis Distributed Storage Fabric. The process is seamless and managed through Prism, but unlike VMware, it's tightly integrated with Nutanix's HCI stack, limiting flexibility in storage and hardware reuse for migrating admins.

Microsoft Hyper-V

Microsoft Hyper-V supports live migration through features like Shared Nothing Live Migration and Clustered Live Migration, allowing VMs to move between hosts without downtime. The process is mature and reliable, comparable to VMware vMotion in many scenarios.

For VMware admins, however, familiarity is limited. Hyper-V uses different management tools (like Hyper-V Manager and System Center VMM) and a Windows-centric approach, requiring knowledge of PowerShell, Active Directory, and failover clustering. While the core concept of live migration is similar, the overall environment feels less intuitive and requires retraining. Integration with third-party storage is possible but not as flexible as VMware.

VM - High Availability

VMware High Availability (VM-HA) automatically restarts virtual machines on healthy hosts if a physical server fails. It monitors host and VM health, ensuring minimal downtime without manual intervention. VMware admins rely on VM-HA to maintain service continuity, meet uptime SLAs, and reduce operational burden. It's widely used in production environments because it's easy to configure, tightly integrated with vCenter, and works seamlessly with other features like vMotion and DRS to ensure resilience.

Private Cloud Director

Platform9 Private Cloud Director provides VM High Availability (VM-HA) by automatically restarting virtual machines on healthy hosts in the event of a host failure. It monitors host and VM status and ensures workloads are quickly brought back online—minimizing downtime.

For VMware admins, the experience is familiar and easy to use. VM-HA is configured through a simple UI, with policies similar to vSphere. There's no need to learn new tools or commands—making adoption smooth while maintaining enterprise-grade resilience.

Red Hat OpenShift virtualization

OpenShift Virtualization provides High Availability for virtual machines (VMs) by leveraging its Kubernetes foundation and the KubeVirt technology. In this model, VMs run as Kubernetes pods. If a node (physical or virtual host) running a VM fails, Kubernetes, in conjunction with specific operators, works to ensure the VM is restarted on a healthy node within the cluster. OpenShift's HA is more of an emergent property resulting from the interaction of several Kubernetes components and operators. This means troubleshooting and management require a different skillset, often aligning more with DevOps practices.

Just like VMware, VM-HA in OpenShift also requires shared storage. VMware admins are used to VMFS/NFS datastores. OpenShift Virtualization often leverages RWX-capable storage solutions like Ceph or Portworx, which might be new territory. In short, the transition from VMware to OpenShift is less about a direct feature-to-feature mapping and more about embracing a cloud-native approach to infrastructure management.

Nutanix AHV

For VMware admins, adopting VM High Availability (HA) in Nutanix AHVis relatively straightforward but still involves some adjustment. Nutanix provides built-in HA via its Acropolis platform, automatically restarting VMs on healthy nodes if a host fails—similar to VMware HA. However, the management is done through Prism, which differs from vCenter in layout and terminology. While easier to adopt than Kubernetes-based platforms, admins must still learn new tools and workflows and AHV's tight integration with Nutanix's HCI stack may limit flexibility with existing storage or hardware.

Microsoft Hyper-V

Microsoft Hyper-V offers VM High Availability through integration with Windows Failover Clustering, which automatically restarts VMs on healthy hosts when a node fails. For VMware admins, the core functionality is familiar, but the tooling and ecosystem are different. Management is done via Hyper-V Manager, Failover Cluster Manager, or System Center, and often involves PowerShell scripting. While HA works reliably, VMware admins must adapt to a Windows-centric model.

	VMware vSphere	Platform9 Private Cloud Director	Nutanix AHV	Microsoft Hyper-V	Red Hat OpenShift virtualization
Virtualization technology	VMware ESXi	Private Cloud Director virtualization (KVM)	AHV (based on KVM)	Windows Server Virtualization	OpenShift virtualization (KVM in a Kubernetes container using KubeVirt)
Resource Scheduler	vSphere Distributed Resource Scheduler (DRS)	Dynamic Resource Rebalancing (DRR)	Nutanix Prism Acropolis Dynamic Scheduling (ADS)	Windows Server Failover Clustering for HA	Kubernetes native clustering
High Availability (HA)	vSphere HA	VM HA	NCS	Windows Server Failover Clustering	Kubernetes orchestration
Live migration	vSphere Storage APIs for Data Protection Compatible with many 3rd-party backup products	Live Migration Storage Live Migration	Metro Availability vDisk Migration	Live Migration Storage Migration	Live Migration Storage Live Migration

Use your preferred storage platform

You've already spent the time, effort, and money to select the storage system best suited for your organization. You shouldn't have to discard that decision for a virtualization platform that requires a prescriptive HCI hardware selection.

You should have complete freedom to choose your block storage or even SAN array, and even your hypervisor operating system. How can you protect your hardware investment when selecting a new virtualization platform?

Shared storage

In VMware environments, shared storage is central to enabling features like vMotion, HA, and DRS. vAdmins commonly use VMFS on SAN/NAS, or vSAN, VMware's hyperconverged storage solution that pools local disks across hosts. vSphere Storage APIs integrate with third-party storage for snapshots, replication, and backup. These tools give vAdmins flexibility, reliability, and tight control over VM storage, making it easy to manage capacity, performance, and data protection across the cluster using familiar vCenter workflows.

Private Cloud Director

Private Cloud Director integrates with all major enterprise storage vendors and supports multiple protocols like Fiber Channel iSCSI, NFS—unlike hyperconverged systems that require proprietary storage. This means organizations can reuse existing SAN/NAS investments, avoid vendor lock-in, and maintain flexibility. Storage is managed through a familiar UI with support for templates, snapshots, backups, and quotas. VMware admins benefit from a seamless transition with full control and no need to replace existing infrastructure.

Nutanix AHV

Nutanix AHV uses its own hyperconverged storage (DSF), tightly coupling compute and storage. It doesn't support external SAN/NAS systems, meaning organizations must adopt Nutanix's storage stack. This limits reuse of existing investments and introduces vendor lock-in. While storage management is streamlined through Prism, VMware admins may face constraints in flexibility and choice, requiring both a hardware and operational shift to align with Nutanix's integrated model. Fibre Channel / iSCSI not currently supported.

Red Hat OpenShift Virtualization

OpenShift Virtualization primarily relies on Kubernetes-integrated storage, using persistent volumes (PVs) backed by RWX-capable storage like Ceph, Portworx, or NFS for VM disks. It supports both block and file storage via CSI drivers, but configuring storage often requires deep Kubernetes knowledge.

Unlike VMware, there's no native storage abstraction layer for VMs—admins must map Kubernetes storage concepts to virtualization needs. For VMware admins, this means a steep learning curve, limited compatibility with traditional SAN/NAS systems ((depends on the availability), and more manual setup for snapshots, backups, and performance tuning. Storage flexibility exists, but it can be complex and container-first by design.

Microsoft Hyper-V

Microsoft Hyper-V manages shared storage using SMB 3.0, iSCSI, Fibre Channel, and Storage Spaces Direct (S2D). These options allow VMs to access shared storage across hosts, enabling features like live migration and failover clustering. Hyper-V environments often rely on Windows-native tools like Failover Cluster Manager and PowerShell for configuration. While flexible, this model is deeply tied to the Windows ecosystem, requiring VMware admins to adapt to new tooling and concepts, especially around storage management and high availability.

Virtual storage volumes

VMware vVols use VASA APIs to give VM-level control over storage by mapping each VM disk directly to a storage object. This enables vAdmins to apply storage policies per VM, automate provisioning, and offload tasks like snapshots and cloning to the array. It simplifies management, enhances visibility, and improves efficiency—allowing storage to adapt dynamically to workload needs without relying on traditional datastores like VMFS or NFS.

Private Cloud Director

Platform9 Private Cloud Director enables vVol-like outcomes using Open Infrastructure project Cinder as the control plane for storage. Platform9 handles storage provisioning separately from the data path—similar in concept to VMware vVols. Paired with Storage Policy-Based Management (SPBM)-like capabilities, admins can define templates and automate volume provisioning per workload needs. With proper planning, the same level of granular control,

automation, and dynamic provisioning is achievable while preserving existing storage investments and minimizing infrastructure changes.

Red Hat OpenShift virtualization

Red Hat OpenShift doesn't support VMware vVols or a direct equivalent, relying instead on Kubernetes-native storage via the Container Storage Interface (CSI). Storage is dynamically provisioned using Persistent Volume Claims (PVCs), with advanced features like snapshots and encryption depending on the CSI driver (e.g., Ceph, Portworx). There's no separate control/data plane like vVols. While flexible for containers, this model lacks the VM-aware, policy-driven automation VMware admins expect, making it less intuitive for virtualization-centric environments.

Nutanix AHV

Nutanix offers per-VM storage policies via QoS, snapshots, and replication through its Acropolis Distributed Storage Fabric. Admins can set performance and protection rules at the VM level. However, it's tightly tied to Nutanix's HCI stack, limiting support for external storage or VASA APIs. VMware admins must adapt to a new storage model and tools, requiring operational changes and retraining.

Microsoft Hyper-V

Microsoft Hyper-V does not support a direct equivalent to VMware vVols. Instead, it relies on traditional storage integrations using protocols like iSCSI, SMB 3.0, and Fibre Channel. Storage is typically managed through Windows Failover Clustering, Storage Spaces Direct, or external SAN/NAS systems. While Hyper-V supports features like snapshots, replication, and QoS, it lacks per-VM, policy-driven storage automation. As a result, VMware admins lose the granular control and dynamic provisioning capabilities offered by vVols.

	VMware vSphere	Platform9 Private Cloud Director	Nutanix AHV	Microsoft Hyper-V	Red Hat OpenShift virtualization
Shared storage	VMware vSAN VMware vSphere Storage APIs	Supported protocols: NVMe, Fibre Channel, iSCSI, NFS Integrates with every major storage platform (e.g. Dell, HPE, NetApp, Pure)	Nutanix Distributed Storage Fabric (DSF) and storage-only nodes. Fibre Channel / iSCSI not currently supported.	Storage Spaces Direct (S2D)	Supports CSI-based storage.
Virtual Storage Volumes	vVols VASA APIs	PCD Volumes, Volume Types, Volume Snapshots	N/A	N/A	Volumes Volume Types Volume Snapshots

Software-Defined Networking

A virtualized platform won't scale without a fluid, programmable network. Software-Defined Networking (SDN) and micro-segmentation work together to provide networking architecture that enhances security and flexibility in virtualized environments.

Virtual switches, implemented at the host level or across clusters (distributed switches), allow flexible connectivity, traffic isolation, and security policy enforcement for virtual machines. However, other features such as NIC teaming, virtual firewalls and port security, and IPAM (IP Address Management) are required to enable a vibrant private cloud network (see these details in Appendix I). How does the field stack up?

VMware provides virtual networking through vSphere Standard and Distributed Switches, enabling VMs to communicate across hosts. These virtualized switches support VLANs, traffic shaping, and NIC teaming. With NSX, VMware extends into Software-Defined Networking (SDN), offering advanced features like micro-segmentation, distributed firewalls, and overlay networks for secure, scalable connectivity. vAdmins use these tools to build secure, isolated networks, enforce fine-grained access controls, and simplify network management—all while maintaining visibility and consistency across virtualized environments.

Private Cloud Director

Platform9 Private Cloud Director provides core SDN and micro-segmentation capabilities using Open vSwitch (OVS) and Open Virtual Network (OVN). Private Cloud Director delivers cluster wide distributed software-defined networks. Clusters can be configured to work with either existing physical networks or to use software-defined networks, routers, switches, and network services that span across the entire cluster. This simplifies operations and improves availability since Virtual Machines and network policies can be migrated to any Hypervisor in the cluster without any change in network policy —covering many of the common use cases VMware admins rely on in NSX. While it doesn't offer the full feature set of NSX (like Layer 7 firewalls or advanced traffic analytics), it delivers essential network virtualization in a simpler, open, and cost-effective model.

Red Hat OpenShift virtualization

OpenShift Virtualization delivers Kubernetes-native SDN using OVN-Kubernetes and Open vSwitch, supporting VLANs, multiple network interfaces, and basic micro-segmentation via Network Policies. Overlay networking is handled through Geneve, with IPv4/IPv6 support and IP management built in. Networking can be extended using third-party CNIs like Calico. However, it lacks advanced NSX features like Layer 7 firewalls, service chaining, and integrated traffic analytics. VMware admins face a steep learning curve, as OpenShift relies on YAML and CLI tools rather than GUI-based workflows, making the transition challenging for those used to traditional virtualization platforms.

Nutanix AHV

Nutanix AHV uses Open vSwitch (OVS) for virtual networking, enabling VLAN tagging, QoS, and overlay networking with VXLAN. Flow Virtual Networking adds SDN capabilities, centrally managing VLANs, VPCs, IP pools, and security policies via Prism Central using OVN. It supports micro-segmentation, service chaining, and east-west traffic control at the VM and subnet level. Together, these tools offer scalable, secure, and automated network management tailored for enterprise workloads in Nutanix environments.

VMware admins will need to adapt to Prism Central's UI and terminology, but the learning curve is moderate compared to Kubernetes-native platforms. It's a lighter-weight, less complex alternative—ideal for common use cases, but not a full NSX replacement.

Microsoft Hyper-V

Microsoft Hyper-V supports virtual networking through Virtual Switches—available in External, Internal, or Private modes. These allow VMs to connect to each other, the host, and external networks. Hyper-V integrates with Windows Server networking features like NIC teaming, VLAN tagging, QoS, and IPsec. For SDN, Windows Server Datacenter Edition includes Network Controller, enabling centralized management of virtual networks, ACLs, and gateways. Hyper-V supports micro-segmentation through Access Control Lists (ACLs), but lacks Layer 7 firewalls and native service chaining. Compared to NSX, Hyper-V networking is less advanced, but familiar for Windows-centric environments.

Bridging VMs and containers with integrated Kubernetes

A modern private cloud platform should seamlessly bridge between virtual machines and containers. A unified interface allows vAdmins to manage VMs and containers side by side, simplifying both traditional and cloud-native workloads.

VMware provides Kubernetes through vSphere with Tanzu, which integrates Kubernetes directly into vCenter, allowing vAdmins to deploy and manage clusters using familiar tools. It introduces Supervisor Clusters, treating Kubernetes namespaces as first-class vSphere objects, and runs Tanzu Kubernetes Grid (TKG) clusters on VMs. While vSphere with Tanzu can be licensed separately, it is most commonly deployed as part of VMware Cloud Foundation (VCF), which bundles it with NSX, vSAN, and lifecycle management. This approach simplifies adoption for VMware environments but introduces licensing complexity, infrastructure dependencies, and limited flexibility compared to more open, upstream Kubernetes distributions.

Private Cloud Director

Platform9 Private Cloud Director offers integrated Kubernetes support with a hosted control plane, eliminating the need for dedicated control plane VMs. Clusters are deployed and managed through the same interface as VMs, simplifying operations. It supports automated lifecycle management via Cluster API, flexible deployment on VMs or bare metal, and reduces overhead and licensing complexity. For VMware admins, it provides a familiar yet more open and cost-effective path to adopt Kubernetes without infrastructure lock-in.

Red Hat OpenShift

Red Hat OpenShift is a full-featured Kubernetes platform built for enterprise use, offering integrated developer tools, CI/CD pipelines, container security, and automated operations.
It extends upstream Kubernetes with Red Hat's opinionated defaults, operator lifecycle management, and robust multi-cluster support. OpenShift is used to run cloud-native container workloads at scale across hybrid environments. OpenShift Virtualization, by contrast, is a feature within OpenShift that lets you run virtual machines alongside containers. It uses KubeVirt to treat VMs as Kubernetes resources—bridging traditional and cloud-native workloads.

Nutanix AHV

Nutanix supports Kubernetes through Nutanix Kubernetes Engine (NKE), a turnkey solution for deploying and managing clusters directly within the Nutanix ecosystem. Integrated with Prism Central, NKE simplifies cluster lifecycle tasks like provisioning, scaling, and upgrades. For advanced use cases, Nutanix Kubernetes Platform (NKP) adds multi-cluster, GitOps, and hybrid cloud support. Unlike VMware Tanzu, Nutanix focuses on simplicity and tight HCI integration, making Kubernetes adoption easier—though it's best suited for organizations already standardized on Nutanix infrastructure.

Microsoft Hyper-V

Microsoft Hyper-V doesn't offer native Kubernetes support, but Kubernetes can be run on-prem via AKS on Azure Stack HCI. This solution provisions Kubernetes clusters on Hyper-V VMs, managed through Windows Admin Center or PowerShell. It integrates with Azure for hybrid operations but is tightly coupled to Microsoft's ecosystem. For VMware admins, it requires a shift to Windows-based tooling and lacks the flexibility or familiarity of more open, Linux-native Kubernetes platforms.

	VMware vSphere	Platform9 Private Cloud Director	Nutanix AHV	Microsoft Hyper-V	Red Hat OpenShift virtualization
Kubernetes support	Natively supports Kubernetes through VMware Tanzu (additional product license required).	Hosted Kubernetes control plane support Open-source cluster API project	Nutanix Kubernetes Engine (NKE) Nuntanix Kubernetes Platform (NKP)	Windows Server containers	Native Kubernetes Support

Make Platform9 Private Cloud Director your VMware alternative

If you're considering transitioning from VMware to an alternative virtualization stack, the Private Cloud Director is an excellent choice. It offers features similar to those you've relied on in VMware for years.

Familiar VM management

Platform9's founding team built core vSphere products, such as DRS and vCloud Director. They wanted to bring that familiar and easy-to-use experience to vAdmins. They also knew that the Private Cloud Director management experience needed drop-in replacements for key vSphere management features.

That's why the Private Cloud Director delivers a user experience that's closest to VMware, easy to use and easy for vAdmins to adopt.

All critical VMware features included

With Private Cloud Director, Dynamic Resource Rebalancing (DRR) ensures consistent VM performance and eliminates resource contention, much like vSphere DRS. Of course, there is VM HA for high availability. And Live Migration is an equivalent to vMotion.

You can find more equivalents in this list.

Bring your existing storage

Private Cloud Director is the only private cloud alternative to VMware that offers deep integrations with every enterprise storage solution in the industry. In fact, several Platform9 customers currently run Private Cloud Director on existing deployments of Pure, NetApp, Tintri, Dell, EMC and many other popular storage vendors.

Private Cloud Director also works with all existing x86 server hardware. This means you can migrate your virtualization platform and still protect your storage and server investments. No need for a server refresh or to invest in HCI architecture.

Next-Gen private cloud platform

As containerized workloads become the norm, Private Cloud Director can bridge the gap between traditional virtualization and modern cloud-native needs. It provides a unified management plane for VMs and containers, as well as features self-service, API automation and multi-tenancy with packaged services built-in: databases, Kubernetes, firewalls, VPNs, DNS, and more.

Best migration experience in the industry

Migrating away from VMware can feel overwhelming, but Platform9's Project vJailbreak makes the process seamless and stress-free. This tool was built to simplify and automate VMware VM migrations to Private Cloud Director, providing end-to-end automation of the entire process.

From validation and mapping to rigorous testing, vJailbreak ensures every step of the migration is reliable and efficient. Advanced capabilities like the live migration and rollback options minimize risks typically associated with large-scale migrations.

Ready to move to a modern virtualization platform?

Transitioning from VMware doesn't have to be complex or risky. With the right alternative, you can maintain compatibility, protect your investments, and improve your virtualization capabilities—all without disrupting your operations.

Platform9 simplifies this process with a fully-managed (with options for self-management and air-gapped deployments), drop-in, modern solution that delivers the same core features you rely on, with added flexibility and cost efficiency.

Ready to see how Platform9 can help your business transition smoothly? Schedule a demo today and take the first step toward a smarter virtualization future!

Detailed feature comparison

Core capabilities	VMware vSphere	Platform9 Private Cloud Director	Nutanix AHV	Microsoft Hyper-V	Red Hat OpenShift virtualization
Virtualization technology	VMware ESXi	Private Cloud Director virtualization (KVM)	AHV (based on KVM)	Windows Server Virtualization	OpenShift virtualization (KVM in a Kubernetes container using KubeVirt
Dynamic resource management	VMware DRS	Automatic Resource Rebalancing (ARR)	Nutanix Prism Acropolis Dynamic Scheduling (ADS)	Hyper-V Dynamic Memory Dynamic Optimization.	Kubernetes scheduler
High Availability (HA)	vSphere HA	VM HA	NCS	Windows Server Failover Clustering	Kubernetes orchestration
Shared storage	VMware vSAN VMware vSphere Storage APIs	Supported protocols: NVMe, Fibre Channel, iSCSI, NFS on every major storage platform (including Dell, HPE, NetApp, Pure)	Nutanix Distributed Storage Fabric (DSF) and storage-only nodes. Fibre Channel / iSCSI not currently supported.	Storage Spaces Direct (S2D)	Supports CSI-based storage.
Virtual Storage Volumes	vVols VASA APIs	PCD Volumes, Volume Types, Volume Snapshots	N/A	N/A	Volumes Volume Types Volume Snapshots
Kubernetes support	Natively supports Kubernetes through VMware Tanzu.	Natively supports VMs alongside Kubernetes deployments.	Nutanix Kubernetes Engine (NKE) Nutanix Kubernetes Platform (NKP	Windows Server containers	Native Kubernetes support
Virtual networking	vSphere vSwitch NSX	Open vSwitch (OVS) Open Virtual Network (OVN). Provider network support includes VLAN, VXLAN, and GENEVE.	Nutanix Flow	Hyper-V Network Virtualization (HNV).	Linux bridges Open Virtual Network (OVN) Integration with Kubernetes networking plugins.
Virtualized switches	vSphere Distributed Switch (VDS)	Networking Service	Open vSwitch (OVS)	Hyper-V virtual switches	OpenShift Container Platform networking
SDN and micro-segmentation	VMware NSX	Networking Service Leverages SDN solutions Open vSwitch (OVS) and Open Virtual Network (OVN)	Nutanix Flow	Hyper-V Network Virtualization	OpenShift SDN and OpenShift Service Mesh
NIC Teaming	YES	YES	YES	YES	YES
Virtual Firewalls/Port Security	YES	YES	YES	YES	YES
Live migration	vSphere vMotion Storage vMotion	Live Migration Storage LIve Migration	Metro Availability vDisk Migration	Live Migration Storage Migration	Live Migration Storage Live Migration
Snapshots	YES	YES	YES	YES	YES
Backup/restore	vSphere Storage APIs for Data Protection Compatible with many 3rd-party backup products	Provided via snapshots. Compatible with many 3rd-party backup products.	VM backup and restore functionality Compatible with many 3rd-party backup products.	Provided via snapshots, Backup Manager Compatible with many 3rd-party backup products.	Provided via snapshots CSI driver that supports Kubernetes Volume Snapshot API

Management Capabilities	VMware vSphere	Platform9 Private Cloud Director	Nutanix AHV	Microsoft Hyper-V	Red Hat OpenShift virtualization
Web UI	vSphere Client	Web-based interface	Nutanix Prism	Hyper-V Manager	Web-based interface
CLI	PowerCLI	OpenStack CLI kubectl	Nutanix Command-Line interface	PowerShell	OpenShift CLI tools
API	vSphere API vSphere Automation SDKs	Exposes APIs for automation and integration	Nutanix REST APIs.	Hyper-V WMI PowerShell	Exposes APIs for automation and integration.
Monitoring	vSphere Health vRealize Operations.	Integrates comprehensive monitoring Gnocchi, Prometheus.	Nutanix Prism Pro.	Windows Admin Center System Center Operations Manager (SCOM).	Built-in monitoring capabilities using Prometheus and Grafana.
User access, permission management	RBAC vCenter Single Sign-On (SSO) Integration with identity providers.	Identity Service using RBA with SAML/SSO integration. Integration with identity providers.	Nutanix Prism Central.	Active Directory integration	RBAC with integration with identity providers.
IPAM	VMware Aria Suite (formerly vRealize).	YES	YES	YES	Not Directly Supported

Operational Items	VMware vSphere	Platform9 Private Cloud Director	Nutanix AHV	Microsoft Hyper-V	RedHat OpenShift Virtualization
Ease of upgrade	vSphere Update Manager provides automated upgrade capabilities for hosts and virtual machines.	SaaS-based management control plane. Automated updates and security patches. Proactive operations and monitoring via Always-On Assurance.	Nutanix AHV upgrades are streamlined and non-disruptive, with features like 1-click upgrades	Integrated with Windows Server Update Services (WSUS).	The Operator Lifecycle Manager manages Virtualization Operator upgrades. Requires the upgrade of the underlying OpenShift Container Platform.
Support	Comprehensive commercial support with SLAs .	Dedicated 24/7 support with Always-On™Monitoring and SLAs	Dedicated support with Nutanix AVH licenses.	Comprehensive commercial support with SLAs.	Comprehensive commercial support with SLAs.
Pricing	Per-core, subscription based pricing. Currently unpredictable. Often bundled with additional features and support services over multi-year contracts.	Per-core pricing includes Private Cloud Director, deployment assistance, and 24/7 Always-On Assurance.	Bundled per-core pricing structure. Included with Nutanix Hardware and Licensing.	Bundled Datacenter and Standard editions. Included with Windows Server.	Core pair subscriptions at the cluster level. Socket pair at bare metal level. Included with RedHat.
Migration Assistance	N/A	vJailbreak	Nutanix Move	System Center VM Manager	Migration Toolkit for Virtualization

PLATFORM9

Platform9 is a leader in simplifying enterprise private clouds. Our flagship product, Private Cloud Director, turns existing infrastructure into a full-featured private cloud. Founded by a team of cloud pioneers from VMware, Platform9's private cloud platform has powered over 20,000 nodes in production across some of the world's largest enterprises like Cloudera, EBSCO, Juniper Networks, and Rackspace. With a comprehensive SaaS-based control plane, Always-On Assurance™, and decades of experience, Platform9 helps businesses embrace the future of private cloud with ease and confidence.

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