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The Four Phases for a Successful VMware Migration: Uncover, Analyze, Pilot, Plan

How to ensure a smooth journey to a VMware Alternative

A shockwave went through the world of virtualization and cloud computing when Broadcom announced the acquisition of VMware in May 2022. This has left many customers looking for a VMware alternative but as migration is never simple, or welcome, it's imperative to ensure that the gain is worth the pain.

The Cloud Native ecosystem provides alternatives that enable current customers to leverage their existing hardware. By adopting an Open Source strategy, they can replace essential components of the VMware infrastructure at a lower cost.

In this White Paper, we will delve into how companies can tackle the challenges of modernization and develop an Open Source powered solution.

Navigating the Path to IT Modernization

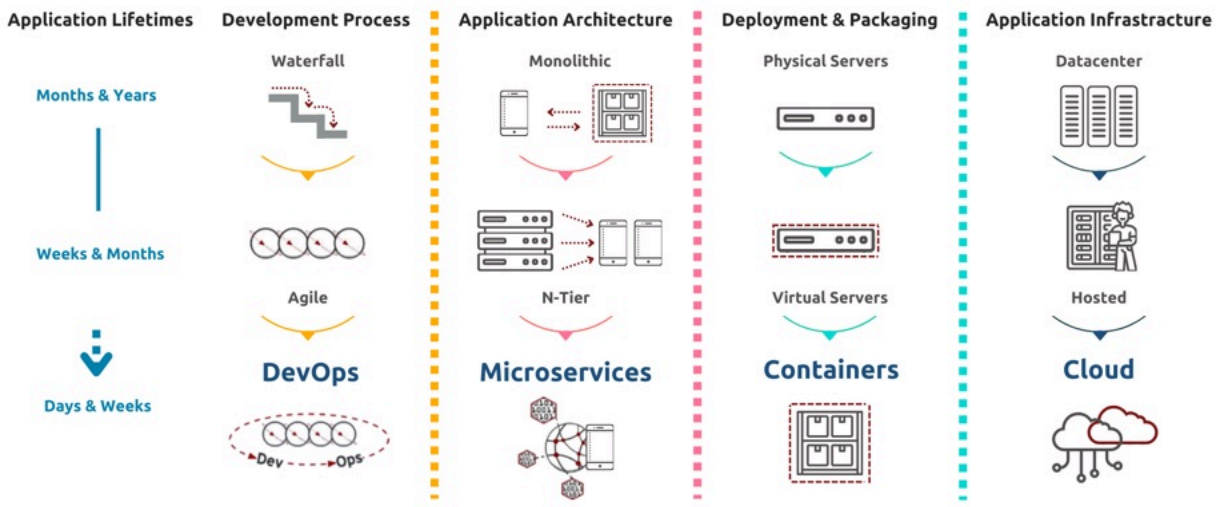
Examining typical vSphere setups, it's common to find heavy reliance on traditional virtual machines. This prevalence stems from the fact that true greenfield scenarios are rare in established companies. While new projects may introduce elements of a greenfield environment, they often depend on the company's existing infrastructure.

Particularly in the realm of Enterprise IT, the primary objective is to support the business's mission, positioning IT as both a cost center and a facilitator.

IT departments face numerous challenges, including the departure of personnel who have developed critical software, which then risks being poorly maintained or not maintained at all.

These factors contribute to a significant challenge for IT departments: approximately 70% of the IT budget is allocated to maintaining existing systems, leaving only 30% for innovation or differentiation. The focus, therefore, should shift towards rebalancing maintenance and innovation efforts. Strategies include reducing vendor lock-in through adopting industry-standard practices such as agile methodologies like DevOps or cloud technologies, and minimizing or managing technical debt.

To accomplish this, modernizing the technology stack becomes essential. When infrastructure changes are necessary, it presents an opportune moment not just to switch hypervisors but to reassess strategy and modernize the application landscape.

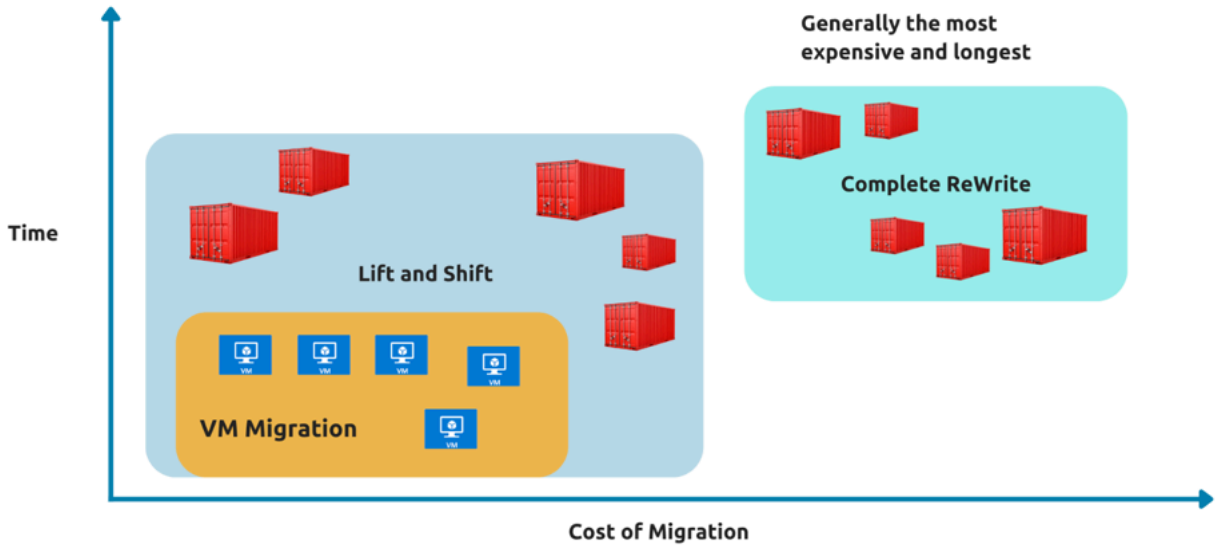


To modernize an Application Portfolio, there are three main strategies:

VM Migration: This is the simplest and quickest option. Legacy applications remain unchanged, and adopting a new hypervisor can unlock new features. Often, VMs can be imported from an existing hypervisor, facilitating new integration opportunities between legacy and modern layers.

Lift & Shift: This approach moves applications closer to a cloud-native model. Existing components are containerized, making them compatible with any Container as a Service (CaaS) platform, whether on-premises or in the cloud. It allows for the retention of external integrations and data in legacy systems, but requires legacy applications to be well-designed and suitable for such a transition.

Complete Rewrite and Architecture Review: The most comprehensive option involves overhauling the existing infrastructure. This not only modernizes the technology stack but also leverages Platform as a Service (PaaS) and various Software as a Service (SaaS) solutions to create a more resilient, easier to maintain, and potentially more cost-effective IT environment.



	Starting Point	Open Source & Enablement	Cloud Native Enablement	Desired State
VM migration	Monolithic applications that are hard to change without breaking functionality	Enable integrations to expose data and functionality using Open Source stack	Enable on Kubevirt	Running VMs with Kubevirt side by side to container on Kubermatic platform
Lift and Shift Modernization	Non Open Source Middleware Applications	Migrate to Open Source Stack	Enable on Kubermatic Kubernetes Platform	Modernize applications to API and Microservices cloud architecture on containers
Complete ReWrite	Monolithics or applications on non Open Source middleware about to be retired	Architecture and Design mapping old system capabilities to new architecture	Set-up, train on and get hands-on experience with modern container platform from Kubermatic	Create new set of applications on modern cloud-native applications

Embarking on a VMware migration involves four critical phases to ensure success: Uncover, Analyze, Pilot, and Plan.

Uncover: The journey begins with a thorough exploration of your existing tech stack. This phase is about understanding the current environment and identifying the components for migration. A great initial step is to analyze the current stack and identify which components are suitable for VM migration, which should be lifted and shifted, or which require a complete rewrite.

Analyze: In this stage, it is necessary to delve deep into the specifics of your stack. Working closely with your team, you would need to evaluate the performance and compatibility of each component, ensuring a clear understanding of potential challenges and opportunities.

Pilot: Before full-scale implementation, you should initiate a pilot. This smaller, controlled migration acts as a test run, allowing for adjustments and fine-tuning.

Plan: Armed with insights from the pilot, the final phase involves detailed planning for the entire migration. This comprehensive strategy covers everything from timelines to resource allocation, ensuring a smooth transition.

Each phase is crucial, and working with a cloud native technology expert such as Kubermatic will ensure that your migration is both transformational and smooth. You will also have access to high quality technical support throughout these stages, ensuring a successful VMware migration.

If you'd like to talk to our experts about VMware migration, please contact us now.

Contact Us

Global Leaders Work With Kubermatic