Five Tips for Simplifying HCI Migration

Modern Applications Require Modern Infrastructure

Applications have become the lifeblood of businesses in every industry. From healthcare and financial services to government and retail, enterprise apps are positioned to play an increasing role in how businesses differentiate and how people do their work.

With new app adoption, there is more demand for flexibility, scalability, and agility. But traditional three-tier infrastructure simply can't support new demands. More IT organizations are turning to hyperconverged infrastructure (HCI) to meet these needs and reap the benefits of a hybrid cloud platform.

The transition to HCI is full of potential challenges, such as:

- Virtualizing and automating the full stack, which includes the HCI infrastructure layer and the cloud software stack.

- Integrating components on a consistent infrastructure with common operations.

- Determining how to build an ideal infrastructure to suit yet-unknown business needs.

- Designing a transition plan to avoid downtime, minimize cost, and leverage existing skill sets.

Achieving all these things is no small task. But with the right approach, it can be a smooth, efficient process that results in an infrastructure that meets your needs today and tomorrow. These essential tips will help you accelerate and simplify HCI migration, so you can get up and running with ease.

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1 Establish an agile infrastructure for any app, anywhere

The first key to expediting HCI migration is to establish a platform that supports modern apps and modern management at scale. Gaining agility requires eliminating silos across functional areas, so you can meet changing demands from the business, reduce complexity, and improve consistency. Ideally, you should develop an application-ready HCI platform that is deeply integrated throughout the hyperconverged infrastructure layer and the cloud software stack, which greatly reduces complexity with simplified installation, configuration, as well as automated lifecycle management.

Simplifying HCI migration requires a modern platform that provides:

- **Streamlined operations for diverse apps.** Allows users to deploy, host and manage traditional and cloud native applications.

- **Deployment flexibility.** Aligns application needs with the best-fitting cloud, whether private, public or at the edge.

- **A consistent model of management everywhere.** Brings efficiency to everything from the skill sets needed to manage apps and environments to app lifecycle management.

APP

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2 Design for automation and lifecycle management

As applications continue to proliferate, manually managing physical three-tier infrastructure isn't practical or sustainable. For faster migration, consider all the operational needs of your applications, including deployment, provisioning, updates and upgrades. By building automation into your HCI solution, you can offer self-service to streamline operations across your environment, allowing your team to stay focused on high-priority tasks.

Automation and lifecycle management make HCI migration simpler by allowing you to:

- **Speed deployment.** Achieve new levels of efficiency and agility by automating the entire deployment process, including hardware and software.

- **Simplify upgrades and updates.** Make changes faster, and gain flexibility to choose the timing and scope of the updates, with automated lifecycle management for the entire HCI stack, including hardware.

- **Streamline resource allocation.** Make resource allocation simpler with policy-based provisioning that automates cluster creation and expansion through policy.
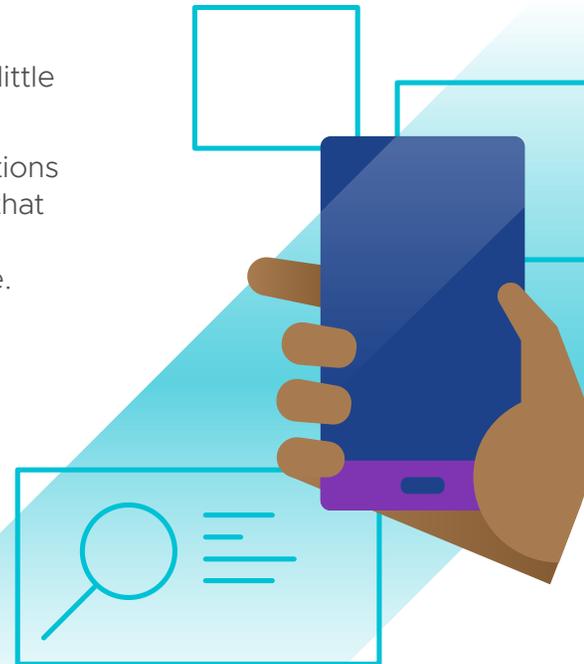
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3

Create a seamless user experience

Migration to full-stack HCI removes barriers and potential issues caused by divergent, siloed infrastructure, bringing together the HCI infrastructure layer and the cloud software stack for a consistent user experience. When you create a single, cohesive user experience, teams can get more done faster, without friction.

A seamless user experience simplifies
HCI migration by:

- **Providing the agility, automation and scale** required to meet the needs of the most demanding enterprise applications.

- **Deeply integrating** the system software and hardware, lifecycle management, data protection and support.

- **Making the most of existing IT skill sets** with little or no learning curve required.

- **Delivering elastic scale** that supports applications as their requirements continue to grow, such that infrastructure resources expand or shrink as needed to sustain a seamless user experience.

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4

Support end-to-end intrinsic security

As security threats continue to multiply, protecting the IT infrastructure is a top priority. As you move to HCI, it's critical that security is embedded in every layer of the stack, from microsegmentation at the networking layer to encryption at the storage layer to security built into the hardware.

This approach reduces the need for bolt-on solutions, and closes visibility gaps caused by security solutions that address only one part of the stack. Ultimately, an HCI solution with intrinsic security eliminates the complexity of adding security later, and provides a solid foundation for protecting users, apps and data.

Ensure that intrinsic security is embedded into your HCI solution, including hardware, and will:

- **Increase visibility** across all of your environments.

- **Decrease risk** while allowing you to manage infrastructure and applications across different operations teams, tools and processes.

- **Boost agility** by eliminating the need to build separate "one off" security solutions that each need to be managed throughout their own lifecycles.
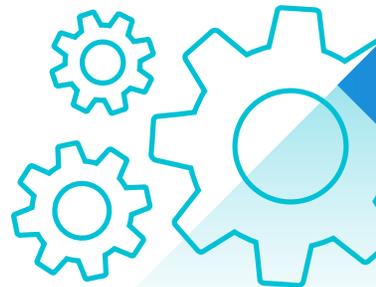
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5 Fast-track the benefits of HCI with a fully integrated solution

A full-stack HCI solution brings together all the layers of the infrastructure into a single cohesive solution that includes computing, storage, networking and management. You get both the HCI infrastructure layer and the cloud software stack in one complete, turnkey product. With a fully integrated solution, you can eliminate the complexity that comes with integrating different components on your own.

A full-stack solution simplifies and accelerates migration in the following ways:

- **Full-stack integration of the HCI infrastructure layer and the software stack, ready to deploy.** A full-stack solution orchestrates the deployment, configuration and lifecycle management of both the hardware and software layers.

- **Paves the way for future transitions.** It's a solution that grows along with you, making it easy to evolve from Core HCI, to Full-Stack HCI, to Hybrid Cloud. If you ever want to extend to public cloud, it provides a true hybrid cloud with a consistent management operating model and tools across all your cloud workloads, public and private cloud, and edge deployments.

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A Fundamentally Simple Solution: VMware Cloud Foundation on Dell EMC VxRail – The Dell Technologies Cloud Platform

VMware Cloud Foundation™ on VxRail, the Dell Technologies Cloud Platform, is a full-stack HCI solution jointly engineered by VMware and Dell EMC that simplifies and streamlines data center operations. It consolidates compute, storage and networking into one turnkey solution that provides unified management and automation. With VMware Cloud Foundation on VxRail, you can achieve consistent infrastructure and consistent operations between private cloud, public cloud and edge environments.

How VMware Cloud Foundation on VxRail gives you an edge:

- Supports both traditional and cloud native applications with ease.

- Simplifies installation and configuration as well as automates lifecycle management.

- Improves protection for users, apps and data with intrinsic security.

- Optimizes data center efficiency and security for maximum on-premises ROI.

- Delivers a cloud-ready infrastructure to create a simple path to hybrid cloud and modern apps.

- Provides a single point of support throughout the entire upgrade process by default.

If you want to quickly deploy a private cloud or evolve your infrastructure for a future transition to hybrid cloud, VMware Cloud Foundation on VxRail is the simple, cohesive solution that brings everything together in one place. VxRail is the only jointly engineered HCI system with deep VMware Cloud Foundation integration serving as a hyperconverged platform for Dell Technologies Cloud.

Take the Next Step

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