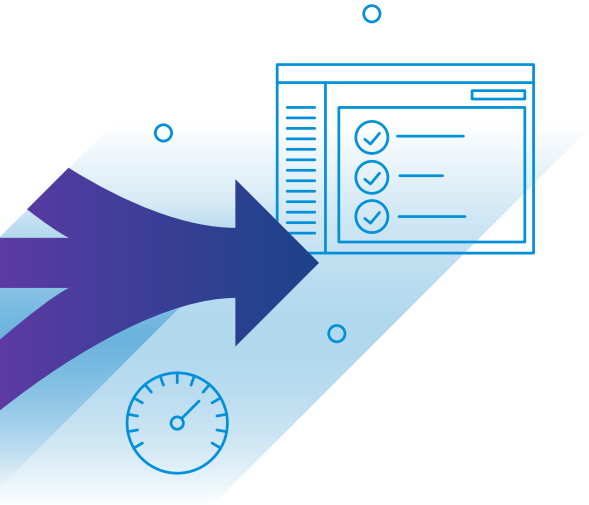
Technology Guide

Hyperconvergence in Hyperspeed

A blueprint for embracing HCI rapidly—directly from VMware vCenter

vmware®



Why move away from traditional infrastructure?

Digital transformation remains a top priority for businesses of every size and type. To stay competitive, you must:

- Provide users with mission-critical apps when and where they need them.
- Support hybrid cloud and multi-cloud environments.
- Operate with agility and flexibility to respond to market changes fast.

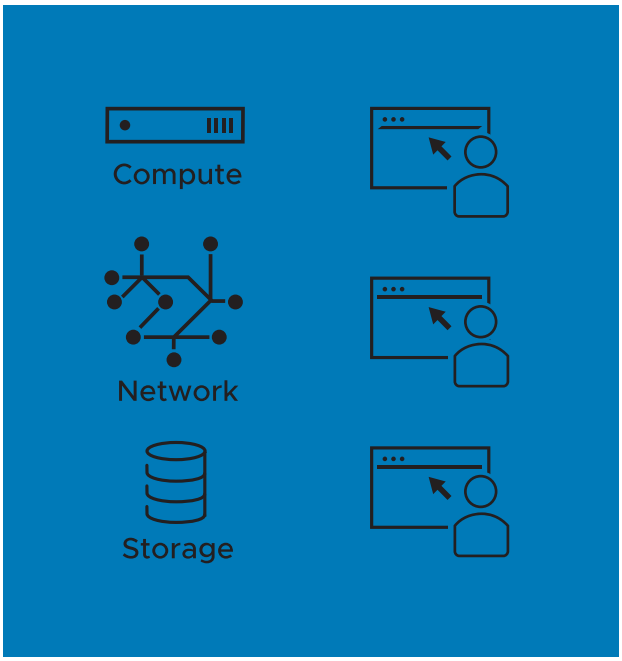
Traditional infrastructure often isn't suited to deliver on these needs. Consisting of purpose-built, siloed compute, storage and networking components, traditional infrastructure is complex and requires specialized skills to manage effectively. On top of that, it's costly.

There is a solution, though. The way of the future is HCI.

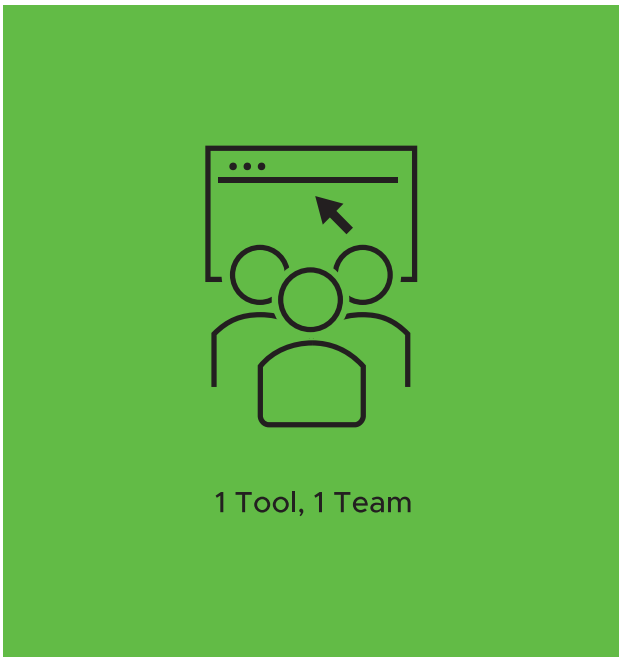
Your game-changer: HCI

A software-defined solution, HCI converges compute, storage, and networking.
This eliminates the silos that make traditional infrastructure so complex and inefficient.

Traditional Infrastructure



Hyperconverged Infrastructure



When businesses migrate to HCI, they discover significant benefits.

1 Hybrid Cloud

Easily manage traditional virtual machines (VMs) and container-based applications across private data centers as well as public and edge environments.

2 Greater Agility

Meet the performance demands of next-generation applications without radically changing existing infrastructure.

3 Cost Savings

Lower CapEx with x86 servers rather than purpose-built storage arrays, and lower OpEx with an integrated hardware and software solution that requires less IT specialization.

4 Simplified Operations

Get fast setup, deployment, and ongoing maintenance with simple workflows and a high degree of automation.

5 Unified Platform

Enable IT teams to effectively manage the various components of infrastructure, with less time and expertise, via unified management software.

What to consider before deploying HCI

As you move toward HCI deployment, use the following as a blueprint to guide your journey:

Deployment Approach

What deployment type makes sense for you? Consider whether you would prefer a turnkey or custom deployment. A validated, certified deployment from leading OEMs could be another option.

Deployment Location

Will you deploy HCI in the public cloud or on-premises? Will you deploy at centralized or at regional offices? The answers to these questions will help determine what type of hardware appliances might best suit your HCI needs.

Use Cases

Assess what you want to run on HCI, both now and in the future. Will you require enhanced storage or high performance? You might have an immediate demand for running virtual desktop infrastructure (VDI) or Kubernetes but see an impending need for running business intelligence applications or AI and ML, for example. And do you require security features like encryption or disaster recovery capabilities for your mission-critical or sensitive data?

Scaling Needs

Data-center scaling can be costly and complex, but HCI is designed to scale as needed. As you consider future growth in your organization, be sure to seek an HCI solution that can accommodate your business requirements for speedy, simple scalability.

Embracing HCI directly from VMware vCenter

If you already operate in a VMware vCenter® environment, embracing HCI can be quick and seamless. There's no need for complicated, time-consuming migrations or massive infrastructure overhauls. Instead, you can transform your environment smoothly from within vCenter with VMware vSAN.™ vSAN is the only flash-optimized storage that integrates natively with VMware vSphere® for compute virtualization. By leveraging tools within vCenter, you can easily and effectively manage and monitor virtualized compute and storage in a single place.

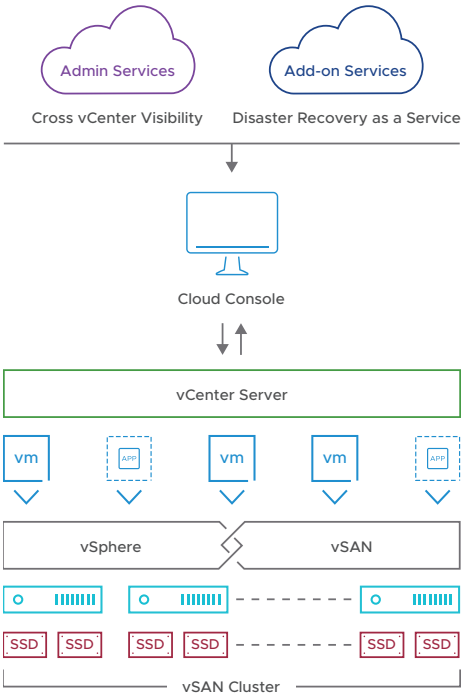
Together, vSAN, vSphere, and vCenter make up VMware's industry-leading HCI software stack:

- **VMware vSphere** for compute virtualization
- **VMware vSAN** for storage integrated with vSphere
- **VMware vCenter** for virtual infrastructure management

HCI—advanced on-prem storage—is one of the most powerful services consumed through the vSphere+ Cloud Console. In the past, making the switch to HCI may have seemed like a daunting project, but with vSphere+ Cloud Console, you can get there with unprecedented ease.

Advance directly to a highly scalable, cloud-like deployment with minimal risk by deploying VMware's proven, enterprise-grade, market-leading solution. Seamlessly expand virtualization to storage with HCI built into the vSphere kernel. Inject innovation into your business by empowering developers to run any workload, from traditional to modern and AI.

For vSphere environments, choosing VMware HCI just makes sense. With only storage and compute constructed as one, you gain over 45% storage TCO reduction. Level up to accelerated operations, resource utilization flexibility, and stellar performance—all with minimal disruption to your current infrastructure or acquiring new skills.



Accelerate your jump to HCI

Skip ahead to the cloud. Upgrade to VMware vSphere+ and easily extend your on-premises IT infrastructure to the public cloud while leveraging existing skills, tools and processes.

Consume services and capabilities through your VMware vSphere+ cloud console, including HCI, disaster recovery as a service (DRaaS), ransomware protection, enterprise app infrastructure as a service (IaaS), automation, developer services, and more. Take advantage of cloud management and economics without disrupting your current infrastructure or operations.

VMware vSphere+ supercharges performance, enhances operational efficiency, and accelerates innovation.

Upgrade to VMware vSphere+

Real-world customers save with vSAN

66%

Reduction in costs to support new, member-facing branch services

— U.S. Senate Federal Credit Union

40%

Lower operation costs after moving to virtualized storage

— Sky

80%

Reduction in rack space and 60 percent reduction in cooling costs by moving to HCI

— Hong Kong Cancer Fund