

# VMware Cloud Foundation

The simplest path to the hybrid cloud

## AT A GLANCE

VMware Cloud Foundation™ is the industry's most advanced hybrid cloud platform. It provides a complete set of software-defined services for compute, storage, networking, security, and cloud management to run enterprise apps—traditional or containerized—in private or public environments. Cloud Foundation drastically simplifies the path to the hybrid cloud by delivering a single integrated solution that is easy to operate, thanks to built-in automated lifecycle management.

## KEY BENEFITS

VMware Cloud Foundation dramatically shortens the path to a true hybrid cloud, increasing admin productivity while reducing overall TCO. Customers who deploy VMware Cloud Foundation can achieve the following when compared to a legacy hardware-defined data center:

- **Accelerate time to market:** Achieve up to 15x faster time to stand up your cloud by eliminating complex processes around system design, testing, bring-up, configuration, and provisioning.\*
- **Faster application provisioning:** Enable up to 20x faster app provisioning by end users through self-service automation.\*
- **De-risk deployment:** Enable quick, repeatable, secure deployments based on a standardized VMware Validated Design™.
- **Lower TCO:** Reduce overall TCO of private cloud deployments by up to 30 to 40 percent.\*

\*Data based on internal VMware analysis and testing

## What is VMware Cloud Foundation?

VMware Cloud Foundation is an integrated software platform that automates the deployment and lifecycle management of a complete software-defined data center (SDDC) on a standardized hyperconverged architecture. It can be deployed on premises on a broad range of supported hardware or consumed as a service in the public cloud (VMware Cloud™ on AWS or a VMware Cloud Provider™). With the integrated cloud management capabilities, the end result is a hybrid cloud platform that can span private and public environments, offering a consistent operational model based on well-known VMware vSphere® tools and processes, and the freedom to run apps anywhere without the complexity of app re-writing.

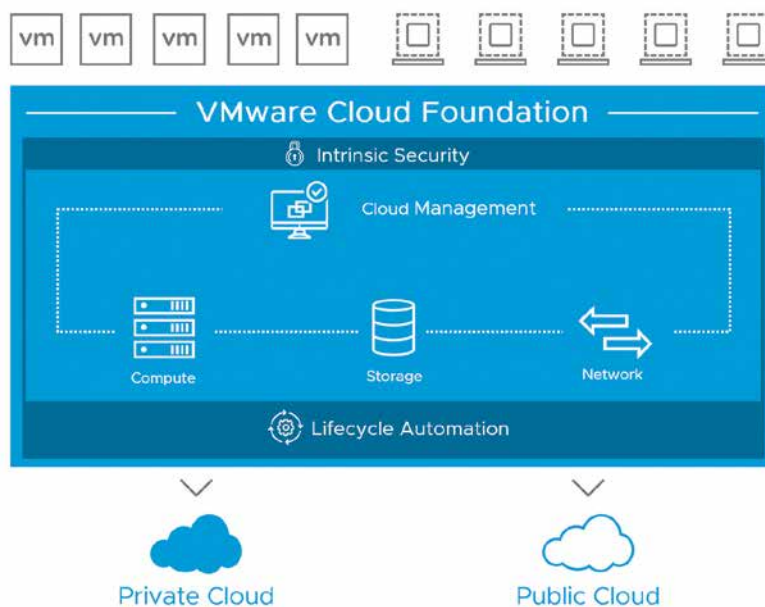


Figure 1. VMware Cloud Foundation Software Stack

## What is unique?

**Integrated Stack:** An engineered solution that integrates the entire VMware software-defined stack with guaranteed interoperability, freeing organizations from dealing with complex interoperability matrices

**Standardized Architecture:** Automatically deploys a hyperconverged architecture based on a VMware Validated Design, ensuring quick, repeatable deployments while eliminating risk of misconfiguration

### DEPLOYMENT OPTIONS

VMware Cloud Foundation software can be consumed in three ways:

- **Software Deployment:** On any vSAN ReadyNode and networking switches of your choice; to learn more, visit [VMware Compatibility Guide](#)
- **Integrated Systems:** Cloud Foundation software pre-installed at the factory, available from these OEM vendors: [Dell EMC](#), [Fujitsu](#), [Hitachi Vantara](#), and [QCT](#)
- **As a Service from the Public Cloud:** [VMware Cloud on AWS](#) or VMware Cloud Providers: [IBM Cloud](#), [Rackspace](#), Fujitsu K5, [CenturyLink](#), OVH, and NTT

### FOR MORE INFORMATION OR TO PURCHASE VMWARE PRODUCTS

Call 877-4-VMWARE (outside North America, +1-650-427-5000), visit product page: [vmware.com/go/cloudfoundation](http://vmware.com/go/cloudfoundation)

Cloud foundation community: [vmware.com/go/cloudfoundation-community](http://vmware.com/go/cloudfoundation-community)

**Automated Lifecycle Management:** Includes unique lifecycle management services that automates day 0 to day 2 operations, from deployment to configuration of the cloud environment, to on-demand provisioning of infrastructure clusters (workload domains) to patching/upgrades of the complete software stack

**Simple Path to Hybrid Cloud:** Dramatically simplifies the path to hybrid cloud by delivering a common platform for private and public clouds, enabling a consistent operational experience and the ability to quickly and easily move workloads at scale across clouds without re-architecting applications, leveraging VMware NSX® Hybrid Connect

### Key features and capabilities

**Enterprise-Grade Services:** Delivers enterprise-ready services for both traditional and containerized apps, based on market-leading VMware technologies: VMware vSphere (compute), VMware vSAN™ (storage), VMware NSX (networking and security), and VMware vRealize® Suite (cloud management)

**Storage Elasticity and High Performance:** Implements a hyperconverged architecture with all-flash performance and enterprise-class storage services (e.g., deduplication, compression, and erasure coding)

**Built-in Intrinsic Security:** Delivers network-level micro-segmentation, distributed firewalls and VPN, compute-level encryption for VM, hypervisor and vMotion®, and storage-level encryption for data at rest and clusters

**Self-Driving Operations:** Enables self-driving health, performance, capacity, and configuration management to scale and manage the environment efficiently

**Self-Service Automation:** Automates the delivery of application services via blueprints (templates) that bind compute, storage, networking, and security resources through policies

**Automated Lifecycle Management:** Delivers simple management of your environment with built-in automation of day 0 to day 2 operations of the software platform:

- **Automated deployment:** Automates the bring-up process of the entire software platform, including deployment of infrastructure VMs, creation of the management cluster, configuration of storage, cluster creation, and provisioning
- **Infrastructure cluster provisioning:** Enables on-demand provisioning of isolated infrastructure clusters to enable workload separation
- **Simplified patching and upgrades:** Enables a simplified patching/upgrading process of the software platform (including VMware vCenter Server®); cloud admins have the flexibility to choose the timing and scope of the updates

### Use cases

- **Cloud Infrastructure:** Leverage the high performance, availability, and scalability of the VMware SDDC to run any mission-critical apps (i.e., database, web apps, VDI)
- **IT Automation:** Automate infrastructure and application delivery with self-service capabilities to enable infrastructure as a service on premises
- **Hybrid Cloud:** Build a true hybrid cloud with common infrastructure and consistent operations, connecting your private and public clouds, that are compatible, stretched, and distributed
- **Virtual Desktop Infrastructure:** Simplify the planning and design of a VDI environment based on VMware Horizon®, making VDI deployments faster and more secure

