

# VMware Cloud Foundation™

## Accelerating Business Outcomes

### VMware Cloud Foundation

- VMware Cloud Foundation provides a flexible and simplified private cloud platform with public cloud extensibility that integrates leading products including vSphere (compute), vSAN (storage), NSX (networking) and Aria (management) into a single solution.
- VMware Cloud Foundation is a platform that enables you to modernize infrastructure, accelerate developer productivity and provide greater resilience and security.
- Access to high-value advanced add-on services for Application and Network Security, App Platforms, Ransomware Recovery and Private AI.

### A Platform for Digital Transformation

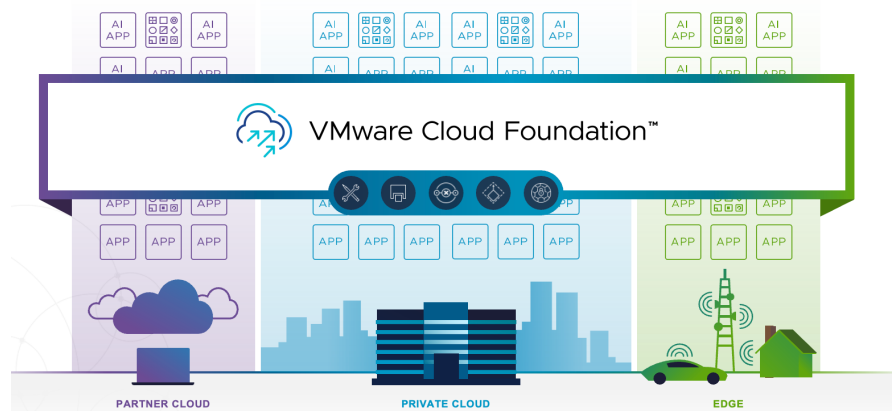
Private cloud is an environment where agility and reliability are becoming increasingly important. Integrating advanced software-defined compute, storage, and networking with a full suite of automation and orchestration enables efficient, reliable, and agile digital operations.

VMware Cloud Foundation is a full-stack, private cloud solution that supports these digital transformation initiatives by enabling organizations to accelerate developer productivity, embracing cloud native and AI technologies to deliver apps and services to market faster.

Offering a robust and reliable solution for private cloud deployment, VMware Cloud Foundation streamlines resource management and accelerates innovation, reducing technological debt and increasing operational efficiency for customers.

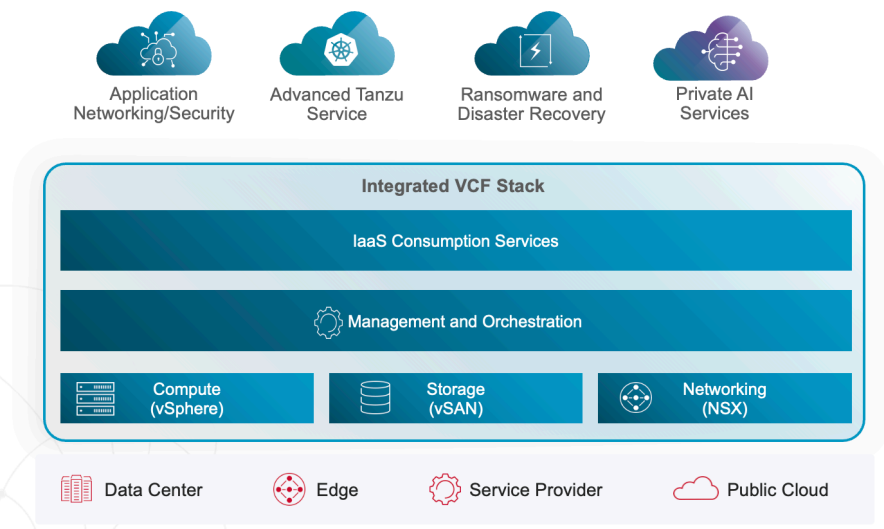
### VMware Cloud Foundation

When deploying Private Cloud Infrastructure, driving higher degrees of efficiency and flexibility are core to delivering the highest value at the lowest cost. This includes integrating key data center technologies - compute, storage, networking, security - all managed through automation and orchestration deeply embedded in the platform to lower operational costs.



### Core Platform Components

- **VMware Cloud Foundation Infrastructure Stack:** Incorporates VMware's industry-leading solutions – virtualization and compute through vSphere for compute, storage through vSAN, and networking by NSX.
- **SDDC Manager:** Automate the installation, operations, and lifecycle management of the SDDC stack, streamlining deployment, configuration, and updating processes.
- **Management and Orchestration:** Deliver comprehensive operations, automation, and analysis, across the full stack infrastructure platform.
- **Hybrid Cloud Extension:** Enable seamless migration, workload rebalancing, and disaster recovery across private and public clouds.



### How the Platform Works

- **Workload Compute Platform:** At its core, VMware Cloud Foundation leverages vSphere to create and manage virtual machines and containers, providing a flexible, secure, and scalable compute platform.
- **Storage Optimization:** By integrating vSAN into the platform, VMware Cloud Foundation offers integrated, secure, scalable storage solutions that enhance resource efficiency and reduce operational complexity.
- **Network Integration:** Leverages NSX to provide a secure, software-defined networking layer capable of handling the dynamic needs of modern cloud-based applications.
- **Automated Provisioning and Management:** VMware Cloud Foundation automates key operational tasks in a cloud operating model, reducing the time and complexity associated with deploying, managing, and maintaining private cloud environments.

## VMware Cloud Foundation Deployment Options

VMware Cloud Foundation can be consumed in multiple ways:

- **VMware Cloud Foundation:** A Private Cloud IaaS Platform with integrated enterprise-class compute, storage, networking, management, and security.
- **Advanced Add-Ons:** A portfolio of available add-on services that expand the versatility of the VMware Cloud Foundation Platform in the following Advanced add-on categories:
  - Application and Network Security
  - Application Platform by Tanzu
  - VMware Live Recovery
  - VMware Private AI Foundation

VMware Cloud Foundation delivers a unified and automated platform, simplifying the deployment of a fully integrated infrastructure-as-a-service (IaaS) stack. Enabling consistent, secure, and agile operations across private and public clouds, VMware Cloud Foundation ensures that organizations can flexibly scale their infrastructure to meet evolving business needs. By consolidating disparate functions into a single, integrated platform, significantly reducing the complexity, and overhead typically associated with private cloud deployments.

## Modern Infrastructure

VMware Cloud Foundation plays a crucial role in transforming traditional IT infrastructures into a more agile and adaptable private cloud environment. This transformation is key to enabling organizations to deploy core Private Cloud use cases that deliver strategic outcomes that lowers Total Cost of Ownership (TCO) and higher productivity. VMware Cloud Foundation employs automation and orchestration to standardize and simplify the entire infrastructure lifecycle, including Day 0 deployment, Day 1 provisioning and Day 2 patching and updates.

- **Modernize an on-premises private cloud:** Build private cloud infrastructure that modernizes existing data center deployments with a cloud operating model for standardization, consistency, and scale.
- **Automation to provide IaaS via a self-service catalog:** Implement advanced automation and orchestration across the full stack infrastructure to streamline cloud operations, while enabling developer self-service for frictionless access to abstracted infrastructure services.
- **Public Cloud Extension:** Utilize the platform architecture and cloud operating model to extend private cloud infrastructures into supported public and partner cloud environments utilizing workload mobility for maximum efficiency and scale.

## Cloud Experience for Developers

To keep continuous development pipelines running at peak efficiencies, it's critical to ensure that developers have frictionless access to application code, infrastructure services, runtime environments, system tools, libraries, and registries. VMware Cloud Foundation Services consist of an upstream-compliant Kubernetes runtime via Tanzu Kubernetes Grid Services combined with a set of infrastructure and automation Services, including infrastructure-as-code, software configuration management, and infrastructure pipelines.

- **Deliver Infrastructure-as-Code:** Developer Automation (Infrastructure as Code) capabilities allows developers to automate and manage infrastructure via code for more rapid and consistent deployments.
- **Implement Private AI:** Design and implement a robust foundation for Generative AI and Large Language Model workloads through integration with the leading AI platforms.

- **Run Business Critical and Modern Workloads:** Facilitate production-scale infrastructure optimized across traditional and modern cloud native applications.

## Security and Resilience

VMware Cloud Foundation provides a consistent, secure platform with the ability to extend the security architecture even further with intrusion detection and recovery, addressing key challenges such as ransomware threats, disaster scenarios, and the need for advanced security architectures.

- **Ransomware Protection and Recovery:** Implement robust security measures to safeguard against ransomware attacks, minimizing vulnerabilities and providing rapid recovery capabilities, enabling businesses to quickly restore operations and data integrity in the event of a ransomware incident<sup>1</sup>.
- **Implement Disaster Recovery:** Design and deploy a resilient disaster recovery framework, ensuring minimal service disruption and data loss during unforeseen events.
- **Integrate Security, Compliance and Resilience:** Design and incorporate advanced security features like micro-segmentation, Intrusion Prevention and Detection (IPS/IDS) and Network Detection and Response (NDR) to proactively identify and respond to security threats across the network<sup>2</sup>.

VMware Cloud Foundation ensures a comprehensive security posture, aligning with modern security requirements and providing a robust defense mechanism within the cloud environment.

## VMware Cloud Foundation Support

The deployment of a full stack private cloud platform such as VMware Cloud Foundation is enhanced by a suite of support programs, assessment, and professional services for ongoing operations. VMware Cloud Foundation support includes cloud maturity and adoption assessments coupled with digital learning, in addition to Jumpstart Workshops that help customers understand VMware's recommended best practices for cloud maturity. These services provide a tailored implementation and adoption plan to help customers achieve their business outcomes.

## How to get started

Getting started with VMware Cloud Foundation is simple. For a quick hands-on experience, try the VMware Cloud Foundation Hands-on Lab. When you are ready to purchase, there are four ways to purchase VMware Cloud Foundation:

- (1) directly from VMware
- (2) from VMware channel partners
- (3) as part of an integrated system from OEM vendors
- (4) as a subscription service from a public cloud service provider

## Summary

### Deliver Private Cloud Infrastructure Across All Cloud Endpoints

VMware Cloud Foundation supports both traditional enterprise and modern apps and provides a complete set of highly secure software-defined services for compute, storage, network, security, Kubernetes and cloud management. Increase enterprise agility and flexibility with consistent infrastructure and operations across private and public clouds.

For more information on cloud computing and VMware Cloud Foundation, please visit [vmware.com/products/cloud-foundation.html](https://vmware.com/products/cloud-foundation.html)

<sup>1</sup> Ransomware Protection and Recovery is available with the VMware Live Recovery Add-on and is not part of the VMware Cloud Foundation core offering.

<sup>2</sup> VMware NSX Microsegmentation, IPS and NDR are available with the VMware vDefend Firewall and vDefend ATP Advanced Add-On and is not part of the VMware Cloud Foundation core offering.