

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.

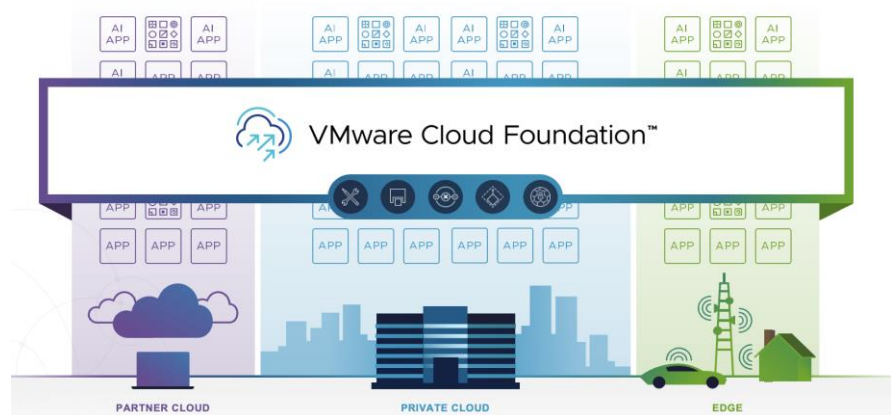
VMware Cloud Foundation is a full-stack, private cloud solution that supports these digital transformation initiatives by enabling organizations to accelerate developer productivity, embracing cloud native and AI technologies to deliver apps and services to market faster.

Offering a robust and reliable solution for private and hybrid cloud deployment,

VMware Cloud Foundation streamlines resource management and accelerates innovation, reducing technological debt and increasing operational efficiency for customers.

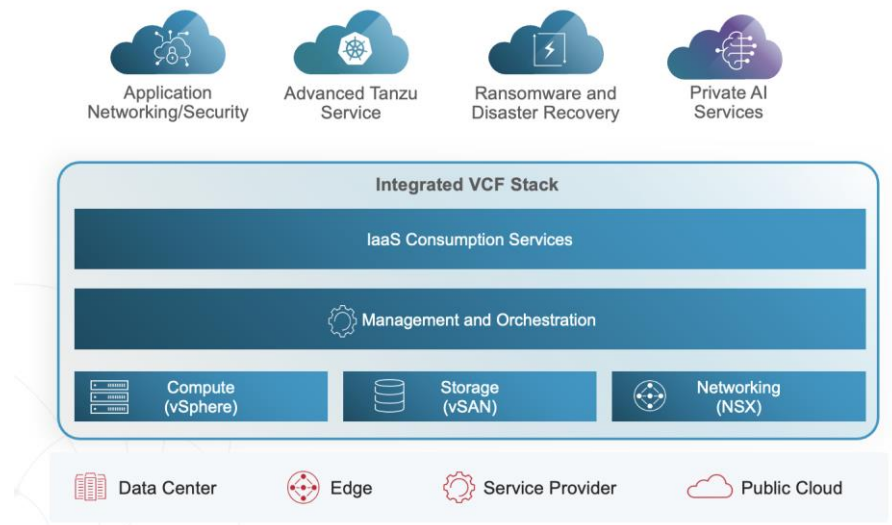
VMware Cloud Foundation

When deploying Private and Hybrid 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

- **Software-Defined Data Center (SDDC) 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
 - Ransomware/Disaster 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.

Use Case #1: Private and Hybrid Cloud Transformation

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.

Use Case #2: Advanced Workload Management

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.

Use Case #3: Protection and Recovery with VMware Cloud Foundation

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 incident¹.
- **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 network².

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

Select Support and Professional Services

The deployment of an infrastructure platform such as VMware Cloud Foundation is enhanced by built in capabilities that include digital learning and lifecycle tools that are embedded within VMware Cloud Foundation. This provides a strong compliment to the optional Activation and Upgrade Services that are available to help upgrade customer through implementations and upgrades. In addition, there are available TAM support and Pro Cloud Services that provide dedicated onboarding, consumption, and customer focused use cases.

The below table shows VMware Cloud Foundation (VCF) key features and add-on services.

Compute (powered by vSphere)
Distributed Resource Scheduler, Distributed Switch
Cross-VC vMotion, Long Distance vMotion, Direct Path vMotion, Storage vMotion
High Availability, Fault Tolerance, Data Protection, Trust Authority
Kubernetes Runtime, Automated Multicloud Operations
vCenter: Backup and Restore, Linked Mode, HA
Storage (powered by vSAN)
Data-at-rest and Data-In-Transit Encryption
Stretched Cluster with Local Failure Protection
Petabyte Scale, Disaggregated Storage for vSphere
Dedup & Compression
Networking (powered by NSX)
Networking: Distributed Switching and Routing
Large Scale Workload Migration
Network Ops: Flow Analysis, App Discovery, M-Seg Planning, Network Assurance and Verification
Orchestration & Management (powered by Aria)
Operations: Performance Optimization, Capacity Management, Compliance, Monitoring and Troubleshooting, Log Analytics
Automation: Automated Lifecycle Management, App/Infra Provisioning, Governance
VMware and Third-Party Database, Middleware and Application management packs
Monitoring and Troubleshooting for Applications with Open-Source Telegraf
Out-of-the-box Monitoring and Troubleshooting for Curated Applications with Telegraf agent
Native Public Cloud Monitoring
TVS management packs
Data Services Manager (DSM)
SDDC Manager: Workload Domain Management, Lifecycle Management, Certificate Management
Support
Production Support – Regional Coverage, 24x7 Support
Select Support – Global Coverage, 24x7 Support, Faster SLAs, SDK/API Guidance
Includes Activation and Upgrade Support (Requires full SDDC Stack Deployment)
Advanced Services Add-on
Additional storage capacity (vSAN)
VMware Cloud Disaster Recovery with Ransomware Recovery (VCDR/RWR)
Site Recovery Manager (SRM) Enterprise
Application Security (Firewall)
Firewall with Advanced Threat Prevention (ATP)
Application Security (Load Balancer)
Tanzu Mission Control (TMC)

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

Join the Cloud Foundation Community:

vmware.com/go/cloudfoundation-community

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 Hybrid 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

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

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