VMware Telco Cloud Platform™

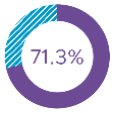
Accelerate Growth with Sovereign Cloud Control

Key Capabilities

- Design and Deploy networks for high performance, scale, availability, and security
- Multi-vendor CNFs and VNFs on a unified IaaS & CaaS infrastructure
- Day 0/1/2 lifecycle operations across infrastructure and workloads
- Built-in Kubernetes security policies
- Accelerate data plane with integrated software-defined networking
- ES-to-ES upgrade cluster workflows
- Built-in multi-layer tenancy for fault and cyber-threat isolation
- Support for ETSI compliant application xNF management
- Support GitOps-based workflows
- Centralize observability, logging, certificate mgmt., and network inspection

ACG Research - Savings over five years by shifting from siloed to a horizontal cloud model

TCO Savings[1]



OpEX Horizontal Savings[1]

1. Source: The Economic Benefits of moving from Proprietary Cloud Silos to Horizontal Telco Cloud Networks by ACG Research

Driving Transformation with Sovereignty and Efficiency

Network Operators are under increasing pressure to launch or expand next-generation 5G faster while ensuring sovereignty, security, performance, and regulatory compliance. At the same time, the rise of AI-driven applications is fundamentally transforming traffic patterns from passive content consumption to active data-generating interactions. To keep pace with rising network costs due to operational complexity, rigid resources, and increase in demand shifts in demand, operators must enhance their networks so those could rapidly scale, while maintaining sovereign control over infrastructure, operations, and data.

VMware Telco Cloud Platform

A Field-Proven Platform

VMware Telco Cloud Platform is a field-proven solution with around 150 deployments globally. It is optimized to design, deploy, and manage telecommunications-specific networks and workloads, including virtual and cloud-native network functions, as well as operations support systems (OSS) and business support systems (BSS) workloads. It enables network operators to modernize their networks with carrier-grade performance, resiliency, and operational agility, achieving up to 40.8%[1] TCO savings while meeting data sovereignty and security compliance requirements.

VMware Telco Cloud Platform built on VMware Cloud Foundation (VCF), is a horizontal platform purpose-built to help network operators become sovereign cloud providers, modernize their infrastructure, safeguarding data control, and accelerating service innovation.The platform provides the agility, control, and scalability needed to evolve their infrastructure while protecting existing investments in physical infrastructure.

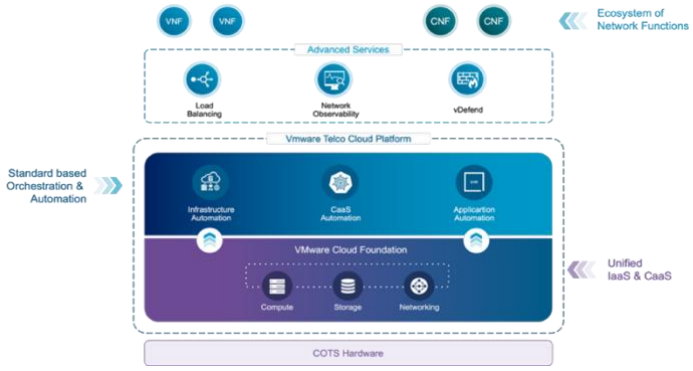


Figure 1: Delivering a consistent horizontal infrastructure with VMware Telco Cloud Platform

vmware by Broadcom

Unified Platform for Telco On-Prem Cloud Infrastructure

VMware's Proven Success

VMware Telco Cloud Platform is a globally deployed, field-proven solution. Backed by a robust partner ecosystem, it supports a wide range of pre-validated core network functions:

- **IMS**: Enables VoLTE and VoWiFi with rich voice, video, and messaging over IP.
- **Policy & Signaling**: Manages service access and controls signaling across core networks.
- **4G/5G Packet Core**: Delivers control and data plane functions for mobile broadband.
- **Subscriber Data Management**: Centralizes subscriber data for efficient service delivery.
- **Network IT applications** (OSS, BSS, & others)

VMware Telco Cloud Platform 5.1 adds support for Kubernetes version 1.33 with an extended support window of **2 years** (1 year standard + 1 year extended) which ends July 2027

Core Platform Components

VMware Cloud Foundation: Unified infrastructure stack with vSphere (compute), vSAN (storage), and NSX (networking).

VNF Management (VIM): Multi-tenant resource pooling, fine-grained control, and integration with external orchestrators for telco-grade service delivery.

Containers as a Service (CaaS): Carrier-grade Kubernetes with declarative deployment, self-healing, dynamic scaling, and multi-cluster lifecycle management.

Telco Cloud Automation: ESTI compliant including GitOps enabled xNF management for VNFs, CNFs, and Kubernetes clusters to ensure consistent, high-performance operations at scale.

Aria Operations for Logs: Centralized, scalable logging with audit log segmentation and forwarding to external SIEM systems.

Aria Operations: Real-time platform observability with AI/ML-driven insights and customizable dashboards across infrastructure and applications.

Aria Operations for Networks: Flow-level visibility and deep network inspection across physical, virtual, and containerized environments.

Advanced Services: A set of advanced services that enhance the capabilities and flexibility of the VMware Telco Cloud Platform.

- VMware vDefend Firewall
- Avi Load balancer
- Network Observability

Best-in-Class Partner Ecosystem

Since the inception of the VMware Ready for Telco Cloud program, VMware has continued to enhance it by investing significant resources to ensure interoperability and operational readiness between VMware Telco Cloud Platform and partner solutions. With over eight years of sustained commitment, the program offers a trusted catalog of 350+ multi-vendor VNFs and CNFs available on the VMware Marketplace. It helps operators accelerate the deployment of system-validated network functions while minimizing interoperability risks.

How the Platform Works

Built for agility, VMware Telco Cloud Platform delivers a unified, automated IaaS horizontal platform that streamlines the deployment and operation of telco infrastructure, so operators can focus on delivering services and not managing vertical silos. With consistent, secure, and scalable architecture, operators gain the freedom to evolve at their pace, on their terms.

VMware Telco Cloud Platform Support

VMware Telco Cloud Platform is backed by comprehensive services and expert support to accelerate adoption and ensure operational continuity. It includes cloud-native maturity assessments, telco-specific guidance, validated reference architectures, and digital learning paths aligned with industry best practices.

Customers seeking enhanced service levels can add carrier-grade Advanced Support through a Support Account Manager (SAM) and Designated Support Engineer (DSE). This provides personalized, full-stack support with improved response and restoration SLOs, structured root cause analysis, and proactive guidance enabling greater operational stability, faster issue recovery, and stronger alignment with business goals.

Unified Management

The IaaS and CaaS capabilities of the platform enable you to run VNFs and CNFs on a single stack with automated LCM that streamlines operations and reduces OpEx while giving you flexibility and agility to pursue your strategic business objectives.

It includes a VIM with API-driven provisioning of infrastructure resources across distributed locations and supports multi-tenant resource pooling via virtual data centers (VDCs) spanning centralized and remote sites.

CaaS capabilities simplify Kubernetes operations by centralizing cluster management and delivering telco-grade enhancements.

This integrated approach enables efficient orchestration, minimizes operational overhead, and supports performance-sensitive telecom workloads.

Converged IT and Network Infrastructure

Built on VMware Cloud Foundation, VMware Telco Cloud Platform delivers a fully converged infrastructure that unifies compute, network, and storage across IT and network domains. A shared infrastructure and consistent lifecycle tools across IaaS and CaaS eliminate silos, simplify operations, and improve efficiency.

Cloud-Smart Automation

VMware Telco Cloud Platform includes a comprehensive automation framework to streamline network function deployment, simplify service management, and provide full-stack observability.

Workflow Hub, a CI/CD engine, powers lifecycle automation for both virtual and cloud-native network functions using ETSI-compliant or GitOps-based models. Pre-built templates and a drag-and-drop GUI minimize manual effort and reduce errors.

CaaS Automation enables scalable Kubernetes operations by simplifying cluster provisioning, registration, upgrades, and Day 2 management.

Dynamic Infrastructure Policies automatically allocate cloud resources based on network function needs, ensuring consistency and performance.

Unified Automation Framework supports Day 0–2 operations across NFV and cloud-native workloads via a shared inventory and open northbound APIs.

Multi-Layer Automation spans network services, functions, containers, and infrastructure eliminating the need for disparate tools.

This automation-driven approach improves service agility, operational consistency, and time-to-resolution.

Helpful Resources

For VMware Telco Cloud Platform product page, please visit: here

For VMware Cloud Foundation product page, please visit: here

Contact us: here

Sovereign, Secure and Compliant as A Platform

VMware Telco Cloud Platform is designed to meet the highest standards of data control, compliance, and resilience, ensuring organizations can operate with confidence in an era of increasing regulatory scrutiny and geopolitical uncertainty.

Data Sovereignty Without Trade-Offs

Maintain complete control over where and how data is stored, processed, and accessed while maintaining the agility of cloud operations.

Built-In Compliance and Certifications

Our out-of-the-box regulatory alignment ensures adherence to industry and regional compliance standards without additional configuration overhead.

Cyber Resilience at Scale

Our comprehensive multi-layered security architecture with Integrated zero-trust security, automated threat detection, and proactive recovery mechanisms ensure that your infrastructure and applications remain protected against evolving threats