



VMware vSphere®

The Enterprise Workload Platform for Traditional and Next Gen Apps

At a glance

Bring Benefits of the Cloud to On-Premises Workloads

- Transform your on-premises infrastructure in place with cloud integration.
- Boost productivity with centralized management, global insights and cloud enabled automation through the VMware Cloud Console.
- Activate add-on hybrid cloud services that expedite disaster recovery, ransomware protection, capacity optimization & planning, and more.

Supercharge Workload Performance

- Meet the throughput and latency needs of modern distributed workloads by accelerating networking functions on the Data Processing Unit (DPU).
- Reduce operational overhead of DPU lifecycle management with integrated vSphere workflows.
- Decrease AI/ML model training times and support higher complexity models by increasing available GPU resources.

VMware vSphere® is the enterprise workload platform that brings the benefits of cloud to on-premises workloads. It combines industry-leading cloud infrastructure technology with DPU- and GPU-based acceleration to boost workload performance. vSphere centralizes management through the VMware Cloud Console to enhance operational efficiency and integrates with a growing catalog of add-on hybrid cloud services to expedite disaster recovery, ransomware protection, capacity optimization and planning, and more.

vSphere delivers an enterprise-ready, self-service Kubernetes runtime, with a multi-cloud management plane that simplifies operations of Kubernetes clusters. With vSphere, IT and DevOps teams can easily build, run, manage, protect, and secure their traditional and next-gen applications. vSphere is available in several editions suited to the unique needs of each customer, as well as a SaaS-based subscription offering called vSphere+ that provides more flexible consumption based on an OpEx model.

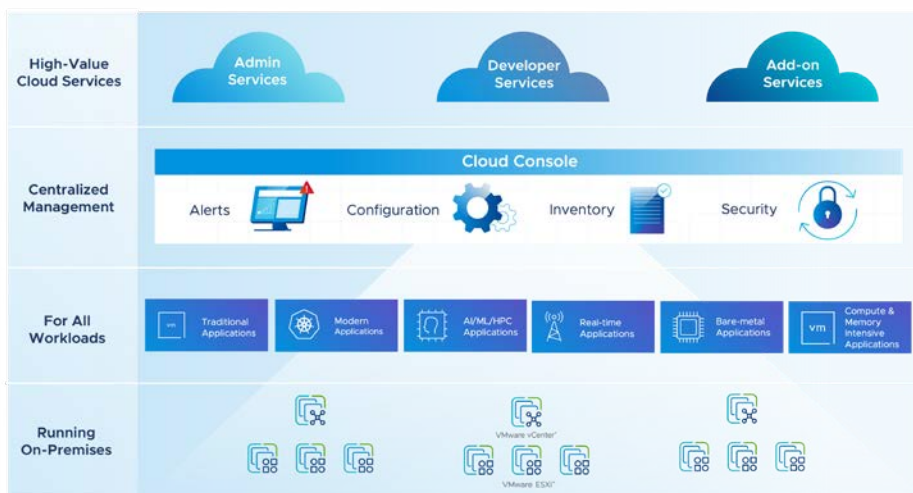


Figure 1: vSphere+ delivers benefits of the cloud to on-premises workloads.

Used by millions of IT administrators worldwide, vSphere is the industry-leading compute virtualization platform. With the latest version of vSphere, organizations can:

- Bring benefits of the cloud to on-premises workloads
- Supercharge workload performance
- Enhance operational efficiency
- Accelerate innovation for DevOps

At a glance

Enhance Operational Efficiency

- Provide optimal workload placement by factoring in DRAM & PMEM bandwidth and latency requirements.
- Efficiently reduce your IT maintenance window by performing ESXi upgrades simultaneously on multiple hosts.
- Track your progress towards sustainability goals by monitoring energy consumed by workloads.

Accelerate Innovation for DevOps

- Manage self-service access to IaaS services across vSphere cloud infrastructure from an intuitive cloud console.
- Improve resilience of containerized workloads through availability zones.
- Simplify TKG cluster lifecycle and package management with API-driven Cluster Classes and Carvel.

Learn more

Learn more about vSphere at www.vsphere.com

Key features and capabilities

Simplified Operations

- **vSphere+ Cloud Console:** Enables IT administrators to consolidate management of all vSphere deployments through a centralized cloud console.
- **vSphere+ Admin Services:** Monitor global inventory, available capacity, events, alerts, configuration drift, and security posture from one place. Simplify lifecycle management of ESXi hosts and vCenter instances. Quickly provision VMs.
- **Lifecycle Management:** Manage infrastructure images to patch, update, or upgrade clusters using a desired state model.
- **Green Metrics:** Get power consumed by workloads, infrastructure services, and idling time, at the host level. Discover ways to optimize power usage.

Built-in Security

- **Identity federation with Microsoft Entra ID (formerly Azure AD), ADFS and Okta:** Secure access and account management.
- **Virtual Machine Encryption:** Data-at-rest encryption for virtual machine data and disks.
- **vSphere Trust Authority:** Remote attestation for sensitive workloads.
- **TPM 2.0 Support and Virtual TPM:** Supports TPM 2.0 hardware modules and adds virtual TPM devices to shield guest OS from Operator or in-guest attacks.

High Performance

- **vSphere on DPUs (VMware vSphere® Distributed Services Engine™):** Accelerate infrastructure network functions on the Data Processing Unit (DPU). Reduce operational burden of managing DPUs with integrated vSphere workflows. Use proven vCenter interfaces to get DPU alerts and performance metrics. Utilize available CPU cycles achieve higher workload consolidation per host.
- **Distributed Resource Scheduler™ (DRS):** Automatic load balancing of resources allocated to workloads in a vSphere cluster. Storage DRS optimizes VM data placement as it is created and used over time.
- **vSphere Persistent Memory™:** Leverages persistent memory to get DRAM-like performance with flash-like prices.
- **Dynamic DirectPath IO:** Support for vGPU and DirectPath I/O initial VM placement.

Business Continuity

- **High Availability:** Automatically restarts your VMs following physical machine failure.
- **Fault Tolerance:** Provides continuous availability of any application in the event of a hardware failure with no data loss or downtime.
- **vMotion:** Enables live migration of virtual machines with no disruption to users or loss of service, eliminating the need to schedule application downtime for planned server maintenance. Storage vMotion avoids downtime for planned storage maintenance.
- **vSphere Replication™:** Efficient, array-agnostic replication of VM data over the LAN or WAN, and enables replication at the VM level.

Application Development

- **Integration with Tanzu Kubernetes Grid™:** Run the Tanzu Kubernetes Grid (TKG) service directly on vSphere to simplify operation of Kubernetes on-premises. TKG allows IT admins or DevOps engineers to manage conformant Kubernetes, while providing developers self-service access to infrastructure.
- **Tanzu Mission Control™ Essentials:** With vSphere+, TMC provides global visibility across your entire Kubernetes footprint, and automates operational tasks such as lifecycle management, access, security management, and more.
- **Cloud Consumption Interface:** With vSphere+, CCI provides easy and convenient access to IaaS for DevOps and development teams. Manage self-service access via GUI, API, or CLI, to IaaS across vSphere cloud infrastructure.