Moving to the cloud unlocks new possibilities: scale, agility, lower TCO, and modern cloud-native services and applications. With mounting pressure to find a way to leverage the cloud to transform their businesses, IT teams are looking for the best available pathway to accelerate and simplify their journey to the cloud while taking advantage of existing investments and expertise.

Migrating existing on-premises workloads to the cloud can be a challenging undertaking. Every application in your portfolio has a unique set of requirements. Compatibility, security, operational processes, and the availability of innovative services are important considerations when evaluating your move. To stay ahead of the competition, you need the ability to innovate at speed and a solution that includes modern infrastructure and services that will give you the agility, intelligence, and performance to stay ahead of the competition.

Introducing Google Cloud VMware Engine

Google Cloud VMware Engine allows organizations to seamlessly migrate and run their VMware workloads in the cloud without changes to applications, tools, or processes. This solution offers flexible on-demand capacity and full operational consistency with your existing on-premises environments, allowing you to harness the power of the Google Cloud Platform to modernize your infrastructure, operations, and processes.

Google Cloud VMware Engine is a native Google service that provides rapid node deployment (in under an hour), saves customers time, reduces costs, and eliminates much of the complexity and risk of moving to the cloud. With 99.99% uptime, 100 Gbps east-west networking with no oversubscription of bandwidth, high-density node design with support for 64-node SDDCs and more, the service can meet the needs of demanding enterprise workloads. The service includes compute, storage, and network virtualization products (VMware vSphere®, VMware vSAN™ and VMware NSX®) along with VMware vCenter® management running on dedicated, elastic Google Cloud bare-metal infrastructure. Customers gain the agility, scale, and innovative services of the cloud while maintaining operational consistency and leveraging existing tools and skills.
VMware-validated attached services
- VMware Cloud Director service
- VMware Horizon
- VMware NSX Advanced Load Balancer
- VMware SD-WAN
- VMware Site Recovery Manager
- VMware Tanzu Standard
- VMware vRealize Automation
- VMware vRealize Automation Cloud
- VMware vRealize Network Insight
- VMware vRealize Network Insight Cloud
- VMware vRealize Operations
- VMware vRealize Operations Cloud

With the same architecture and operational experience on-premises and in the cloud, IT teams can quickly derive business value and leave the complexities of on-premises infrastructure behind. Once in the cloud, customers can immediately begin creating hybrid applications that enable their business to be more agile with secure access to Google services like BigQuery and extend their existing disaster recovery, backup, and storage services. With Google Cloud VMware Engine, enterprises can rapidly migrate, extend, and modernize their applications in the cloud.

Accelerate your cloud migration
Provision your dedicated, private cloud in under an hour and seamlessly migrate your VMware workloads to Google Cloud VMware Engine. Choose from 14 global regions and easily move to Google Cloud without needing to make changes to applications, tools, or processes. Reduce migration risk by eliminating rework of your applications and avoid the challenges of infrastructure lifecycle management. Explore the possibilities with a fully functional proof-of-concept or development environment through a lower cost single-node deployment.

Figure 1: Google Cloud VMware Engine allows for seamless integration between on-premises VMware-based environments and Google Cloud with direct access to native Google Cloud services.
Lower costs and compelling TCO
• High consolidation ratios, compelling node density per dollar
• VMware investment protection in expertise, tools, skillset

Operational and business agility
• Accelerated migration with no changes to apps or tools
• Operational consistency leveraging familiar VMware skills
• Leveraging revolutionary networking of Google Cloud

Innovation
• Application modernization with Kubernetes and native Google Cloud services
• Unify DevOps toolchains across VMware and Google Cloud environments

Modernize your infrastructure and operations
Escape the operational burden of managing physical infrastructure while adding benefits that you only achieve in the cloud. With Google Cloud VMware Engine, you can improve application performance by right-sizing capacity with the ability to expand or contract as needed. Run virtual machines on high-density nodes and leverage cost-effective cloud storage and disaster recovery solutions to improve TCO.

Modernize your apps and unlock new insights
Enhance your apps and run both VMs and containers on Google Cloud VMware Engine, and get private, high-bandwidth, low-latency access to innovative Google Cloud services. Give your business the ability to respond to customer needs in real-time by connecting to native Google Cloud Platform services like BigQuery, CloudAI, and machine learning to deliver new innovative services and extract meaningful insights from existing data.

Why Google Cloud VMware Engine?
Using the same VMware-based infrastructure and operations stack, Google Cloud VMware Engine delivers a consistent operational experience that allows you to seamlessly migrate and manage workloads using the same VMware tools and technologies you are familiar with today. The solution enables you to modernize your infrastructure and applications and gain a fast path to rich Google Cloud Services to optimize your cloud transformation.

Google Cloud VMware Engine includes all the strengths from the Google Cloud Platform including:
• Revolutionary networking: World’s largest private data network with high performance networking fabric. Simplified regional and global routing allows a VPC’s subnets to be deployed in any region where Google Cloud VMware Engine is available, so you can architect global networks without the overhead of creating and connecting regional network designs.
• Business insights: Mature AI/ML expertise and powerful data analytics to drive business decisions.
• Business transformation: Leader in cloud native applications and SaaS with vast set of Google Cloud services to transform your business.
• Risk mitigation, security, and compliance: Leader in data security and privacy. Industry certifications to meet customers’ stringent compliance needs
• Environmentally friendly: Google Cloud data centers run on half the energy of a typical DC and on 100% renewable energy where available.
Google Cloud VMware Engine combines the strengths of Google Cloud listed above, delivering a cloud-native VMware experience as a Google-managed service. Google Cloud VMware Engine brings these additional unique strengths:

- **Accelerated migration**: Provision an entire VMware SDDC in under an hour. Easily move to Google Cloud without changes to apps or tools, and scale with on-demand capacity.

- **Enterprise-ready**: Leverage industry-leading VMware capabilities running on Google Cloud VMware Engine’s dedicated cluster design with 100 Gbps east-west networking with no oversubscription of bandwidth and 4 9’s of availability in a single zone to support demanding enterprise workloads.

- **Application modernization**: Enhance your apps and run both VMs and containers on Google Cloud VMware Engine, and get private access to innovative Google Cloud data analytics/AI/ML services such as BigQuery and CloudAI to modernize and gain data driven insights.

- **Consistent operations**: Leverage existing skills with familiar VMware tools and reduce the burden of lifecycle management. Unified experience for billing, identity, and access control with other Google Cloud services for a simpler end-to-end experience. Broad support for popular third-party solutions.

- **Reduced TCO**: Save time and money with 38% average TCO savings vs on-prem\(^1\). Save with high consolidation ratios, rich resource optimization capabilities of vSphere, compelling node density per dollar, and low migration costs.

Get started today at [via.vmware.com/google-cloud](http://via.vmware.com/google-cloud)

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1. 2022 TCO Assessment Studies over 18-Month Horizon, VMware Cloud Economics Team