Introduction to Google Cloud Platform (GCP)

Explore Google Cloud Platform (GCP), a global cloud platform powering services like Google Search and YouTube. It provides scalable, secure infrastructure for diverse applications and data, trusted by startups and enterprises worldwide.

What is Cloud Computing & Why GCP?

Cloud computing offers on-demand access to computing resources via the internet, transforming how businesses operate.

GCP provides cost-effective, high-performance cloud services with competitive pricing, including committed use discounts up to 57%.

It runs on Google's private global fiber network, ensuring low latency and high reliability for your operations.

Core Compute Services

Compute Engine

Scalable VMs with custom configurations & per-second billing.

Google Kubernetes Engine (GKE)

Managed Kubernetes for powerful container orchestration.

Cloud Run & App Engine

Serverless platforms for containerized and web applications.

Storage & Database Options

Cloud Storage

Unified object storage with multiple classes & lifecycle management.

Cloud SQL & Spanner

Managed relational databases for small to massive scale.

Firestore, Bigtable, Memorystore

Serverless NoSQL and in-memory databases.

Networking & Security

Robust Networking

- Virtual Private Cloud (VPC) for flexible networking.
- Peering, VPN, and advanced load balancing.
- Cloud DNS for highly available, low-latency authoritative DNS.

Comprehensive Security

- Cloud IAM for fine-grained identity and access control.
- Cloud Armor to protect applications from threats.
- Security Scanner for vulnerability detection.

Data Analytics & AI/ML Services

BigQuery	Dataflow, Dataproc	Vertex AI
Serverless, highly scalable data warehouse for analytics.	Managed stream and batch data processing solutions.	Unified platform to build, deploy, and scale ML models.

Developer & DevOps Tools

CI/CD & Productivity

Cloud Build, Cloud Deploy, and Cloud Code for enhanced workflows.

Command-Line Management

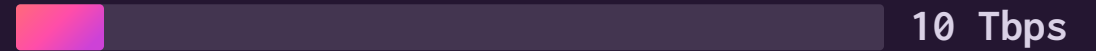Cloud Shell & gcloud CLI for efficient resource management.

Artifact Registry

Secure storage for container images and software packages.

Scalability, Reliability & Performance

99.99%

SLA on core services like Cloud DNS and Compute Engine.

10 Tbps

Speed offered by Google's private global network.

- Auto-scaling and load balancing across global regions.
- Live migration of VMs to minimize downtime.
- Industry-leading performance for demanding workloads.

Use Cases & Industry Adoption

Web & Mobile App Hosting

Leveraging serverless and container options for dynamic apps.

Big Data Analytics

Transforming data insights for finance, retail, and healthcare.

AI-Powered Applications

Utilizing Google's ML APIs and Vertex AI for innovation.

Summary & Why Choose GCP?

1

Flexible & Tailored

Compute and storage solutions designed for specific workload needs.

2

Secure & Compliant

Robust security features and compliance certifications.

3

Cost-Effective

Competitive pricing with valuable sustained use discounts.

4

Innovative & Global

Backed by Google's innovation and extensive global infrastructure.

GCP is ideal for modern cloud-native and enterprise applications, offering a comprehensive and reliable platform for your digital transformation.

Made with GAMMA