

Google Cloud Platform

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Why Google Cloud



WHY GOOGLE CLOUD

Choosing Google Cloud

Reasons why people choose us

Trust and security

Keep your data secure and compliant

Open cloud

Scale with open, flexible technology

Global infrastructure

Build on the same infrastructure Google uses





Periodo de Prueba de 12 meses y 300 \$ -

<https://cloud.google.com/free/>

Google Data Centers

Los centros de datos de Google son la base de toda la plataforma de Google Cloud. Ofrecen poder computación, almacenamiento, memoria, GPUs para nuestras aplicaciones. Además, alberga el corazón de aplicaciones como Gmail, Youtube, Search...

- Rapidez
- Baja latencia
- Eficiencia de operaciones
- Eficiencia Energética
- Uso de Energías Renovables
- Cercanía al usuario
- Seguridad de la Información



Cloud Locations



REGIONS



ZONES



NETWORK EDGE LOCATIONS



COUNTRIES AND TERRITORIES

AVAILABLE IN

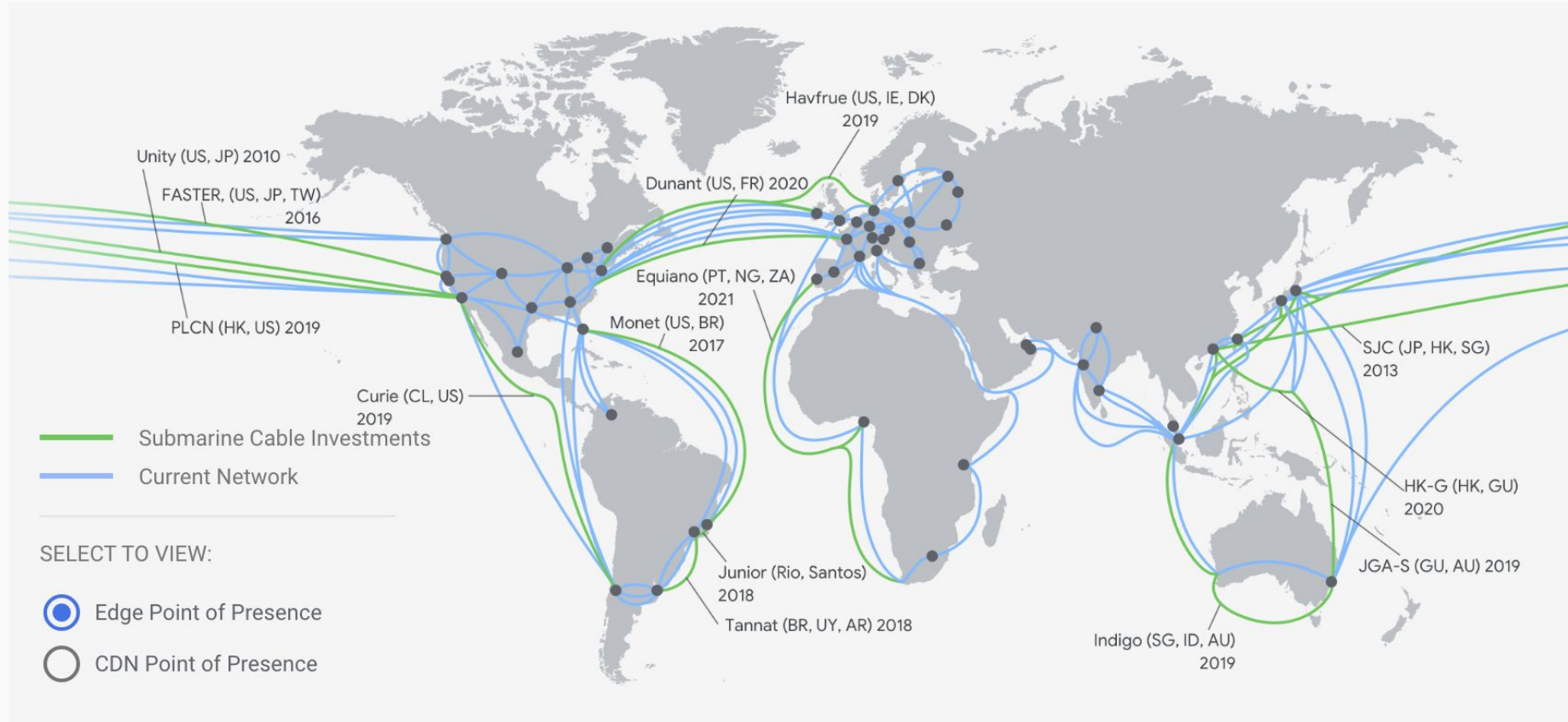
COMING SOON! Google Cloud will continue expanding into the following regions: Salt Lake City (USA), Las Vegas (USA), Jakarta (Indonesia) and Warsaw (Poland).

Google Datacenters - Cloud Regions

GCPing



Google Datacenters - Network



Compute

- ✓ Cost-effective, scalable virtual machines running on Google infrastructure
- ✓ Choose between predefined and custom virtual machines
- ✓ Everything you need for your computing infrastructure

Compute



Compute Engine



App Engine



Kubernetes Engine



Cloud Run



GPU



Cloud Functions



Container-Optimized OS



GKE On-Prem

Storage

- ✓ Advanced features like geo-redundancy, edge caching, and WORM compliance built in
- ✓ Easy control over disaster recovery, performance, location, and price
- ✓ Integrate with analytics and ML solutions to get more from your data storage

Storage



Persistent
Disk



Cloud
Filestore



Cloud
Storage

Google Cloud Storage (GCS)

High-performance object storage

High frequency access



Standard

Most projects start with our Standard class of storage, which is optimized for performance and high frequency access.

Backup and archival storage

Less frequent access



Nearline

Our Nearline class of storage is fast, highly durable storage for data accessed less than once a month.

Low frequency access



Coldline

Our Coldline class of storage is fast, highly durable storage for data accessed less than once a quarter.

Lowest frequency access



Archive

Our Archive class of storage is designed for cost-effective, long-term preservation of data accessed less than once a year.

A single API for all storage classes

Google Cloud Storage (GCS)

Regional

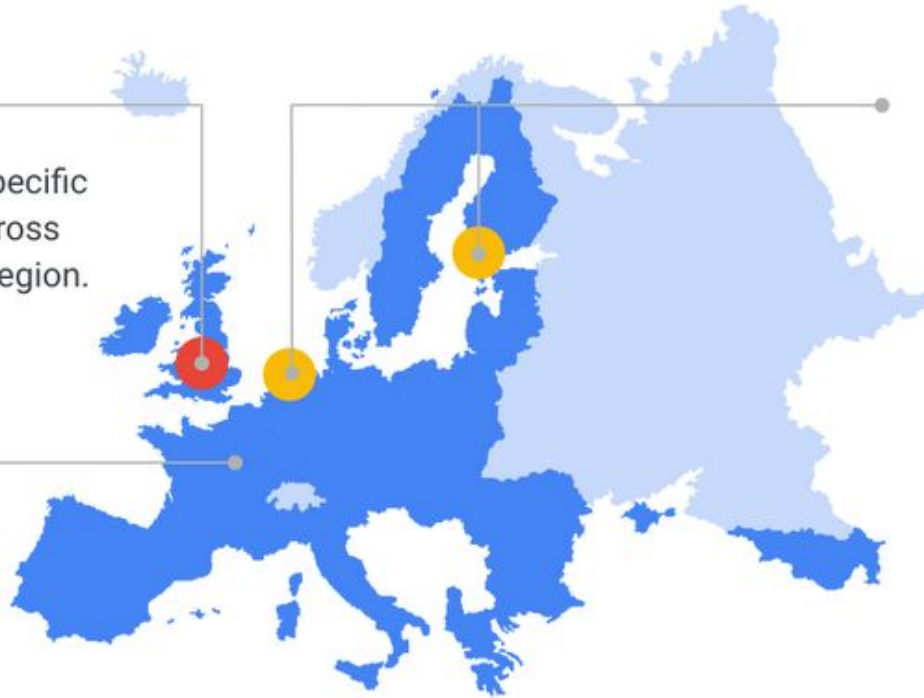
Your data is stored in a specific region with replication across availability zones in that region.

Multi-regional

Your data is distributed redundantly across US, EU or Asia.

Dual-regional

Your data is replicated across a specific pair of regions.



Databases

✓ Flexible performance
and scale

✓ Broad open-source
compatibility

✓ Do more with your data
with analytics and ML/AI
integrations

Databases



Cloud
Bigtable



Cloud
Datastore



Cloud
Memorystore



Cloud SQL



Cloud
Spanner



Cloud
Firestore

Databases

DATABASE TYPE	COMMON USES	GCP PRODUCT
Relational	Compatibility	Cloud SQL
	Transactions	Cloud Spanner
	Complex queries	
	Joins	
NoSQL / Nonrelational	Time series	Cloud Bigtable
	Streaming	Cloud Firestore
	Mobile	Firebase Realtime Database
	Web	Cloud Memorystore
	IoT	
	Offline sync	
	Caching	
	Low latency	

Databases

	Relational		NoSQL / Nonrelational			
	Cloud Spanner	Cloud SQL	Cloud Bigtable	Cloud Firestore	Firebase Realtime Database	Cloud Memorystore
Massive scalability	✓		✓	✓		
Data distribution	global	zonal	global	global	zonal	zonal
OSS compatibility		✓	✓			✓
Replica consistency	strong	strong	eventual	strong	n/a	eventual
Multi-primary	✓		✓	✓		
Transactions (strong consistency)	✓	✓		✓		
Joins and complex queries	✓	✓				
Ultra low latency (microsecond or single-digit ms)		✓	✓			✓
Serverless				✓	✓	
Realtime sync to clients				✓	✓	
In-memory						✓

Networking

✓ Protect users, resources, and environment with defense-in-depth network security

✓ Ensure reliability with industry-leading SLAs and reduced lag

✓ Innovate on Google Cloud using protocols like QUIC, BBR, and GRPC

Networking



Traffic Director



Virtual Private Cloud



Cloud Load Balancing



Cloud CDN



Cloud External IP Addresses



Cloud Firewall Rules



Cloud Router



Dedicated Interconnect



Cloud DNS



Cloud Network



Cloud Routes



Cloud VPN



Partner Interconnect



Cloud Armor



Standard Network Tier



Premium Network Tier



Cloud NAT

<https://cloud.google.com/products/networking>

Serverless Computing



Cloud Functions



App Engine



Cloud Run

Developer Tools

✓ Quickly write, deploy,
and debug cloud-native
applications

✓ Build software and
standardize CI/CD
across all languages

✓ Create pipelines,
automate deployments,
and get fast feedback

Developer Tools



Cloud SDK



Cloud
Test Lab



Cloud Source
Repositories



Maven App
Engine Plugin



Cloud Tools
for PowerShell



Cloud Tools for
Visual Studio



Container
Registry



Cloud Tools for
Eclipse



IDE plugins



Gradle App
Engine Plugin



Cloud Build



Cloud Code
for IntelliJ



Cloud Code



Cloud Tasks



Cloud Scheduler

<https://cloud.google.com/products/tools>

Data Analytics - Big Data

Big data products

Efficiently capture, process, and analyze data with Google Cloud data analytics products.

Fully managed serverless approach

Seamlessly unlock business insights with Google Cloud Platform's fully managed, proven, end-to-end data analytics products. Remove operational complexities of data analytics with a serverless approach and make important business decisions quickly and efficiently.



<https://cloud.google.com/products/big-data>

Big Data

Data Analytics



BigQuery



Cloud
Dataflow



Cloud
Dataproc



Cloud
Dataprep



Cloud Data
Catalog



Cloud
Datalab



Cloud
Pub/Sub



Genomics



Cloud
Composer



Cloud Data
Fusion

AI and Machine Learning

- ✓ **AI Hub**, our hosted repository of plug-and-play AI components, encourages experimentation and collaboration within your organization.
- ✓ **AI building blocks** make it easy for developers to add sight, language, conversation, and structured data to their applications.
- ✓ **AI Platform**, our code-based data science development environment, lets ML developers and data scientists quickly take projects from ideation to deployment.

AI and Machine Learning

AI and Machine Learning



AI Platform



Cloud Vision API



Cloud Speech-to-Text



Cloud Video Intelligence API



Cloud AutoML



Cloud TPU



Cloud Natural Language API



Cloud Translation API



Cloud Jobs API



Advanced Solutions Lab



Cloud Text-to-Speech



Dialog Flow Enterprise Edition



AI Hub



AutoML Video Intelligence



AutoML Natural Language



AutoML Tables



AutoML Translation



AutoML Vision



Recommendations AI




Cloud Inference API



AI Platform Data Labeling Service

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 Google Developers

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Google Developers Codelabs provide a guided, tutorial, hands-on coding experience. Most codelabs will step you through the process of building a small application, or adding a new feature to an existing application. They cover a wide range of topics such as Android Wear, Google Compute Engine, Project Tango, and Google APIs on iOS.

[Codelab tools on GitHub](#)

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