Google Transfer Appliance Storage Transfer Service Migrate for Anthos Migrate for Compute Engine Migrate from Amazon Redshift Migrate from Teradata Cloud Foundation Toolkit

Rentable data transport box Online/on-premises data transfer Migrate VMs to GKE containers Compute Engine migration tools Migrate from Redshift to BigQuery Migrate from Teradata to BigQuery Infrastructure as Code templates **Cloud Foundry to Kubernetes**

GOOGLE MAPS PLATFORM

Directions API Get directions between locations Distance Matrix API Multi-origin/destination travel times Convert address to/from coordinates Geocodina API Geolocation API Derive location without GPS Display iframe embedded maps Maps Embed API Maps JavaScript API Dynamic web maps Maps SDK for Android Maps for Android apps Maps SDK for iOS Maps for iOS apps Maps Static API Display static map images Maps SDK for Unity Unity SDK for games Maps URLs **URL** scheme for maps Places API Rest-based Places features Places Library, Maps JS API Places features for web Places SDK for Android Places features for Android Places SDK for iOS Places feature for iOS

WORKSPACE PLATFORM

Street View Static API

Street View Service

Time Zone API

Roads API

Admin SDK Manage Google Workspace resources Dynamic interactive email AMP for Email Extend and automate everything Apps Script Calendar API Create and manage calendars Classroom API Provision and manage classrooms Cloud Search Unified search for enterprise Docs API Create and edit documents Drive Activity API Retrieve Google Drive activity Drive API Drive Picker Email Markup Google Workspace Add-ons Google Workspace Marketplace

Gmail API Google Chats API People API Sheets API Slides API Task API Vault API

Read and write files Drive file selection widget Interactive email using schema.org Extend Google Workspace apps Storefront for integrated applications **Enhance Gmail** Conversational bots in chat Manage user's Contacts Read and write spreadsheets Create and edit presentations Search, read & update Tasks Manage your organization's eDiscovery

Convert coordinates to roads

Convert coordinates to timezone

Static street view images

Street view for JavaScript

Cloud Firestore **Cloud Functions for Firebase** Cloud Storage for Firebase Crashlytics Firebase A/B Testing Firebase App Distribution Firebase Authentication

Document store and sync **Event-driven serverless applications** Object storage and serving Crash reporting and analytics Create A/B test experiments Trusted tester early access Drop-in authentication

Firebase Cloud Messaging Firebase Dynamic Links Firebase Extensions Firebase Hosting Firebase In-App Messaging

Firebase Predictions

Firebase Test Lab

ML Kit for Firebase

Firebase Realtime Database

Google Analytics for Firebase

Firebase Remote Config

Send device notifications Link to app content Pre-packaged development solutions Web hosting with CDN/SSL Send in-app contextual messages Firebase Performance Monitoring App/web performance monitoring Predict user targeting Real-time data synchronization Remotely configure installed apps Mobile testing device farm

ADDITIONAL RESOURCES **Google Cloud Home Page** Google Cloud Blog **Google Cloud Platform Podcast Kubernetes Podcast from Google** Google Cloud Reader Google Cloud Open Source **GCP Medium Publication** Apigee Blog Firebase Blog Google Workspace Developers Blog Google Workspace GitHub **Google Workspace Twitter Google Cloud Certifications Google Cloud System Status Google Cloud Training Google Developers Blog**

Google Maps Platform Blog Google Open Source Blog **Google Security Blog** Kaggle Home Page Kubernetes Bloa Regions and Network Map

DORA - Software & Delivery Research Cloud Security Podcast

GCP Sketchnote Google Cloud Solutions Library Google Workspace Solutions Gallery

Google Cloud Support Hub

GCP Pricina

GCP Pricing Calculator Qwiklabs Home Page

Codelabs Home Page

Reddit - www.reddit.com/

Googlecloud **AppEngine BigQuery** Firebase Google Apps Script

Big Data/Data Analytics Comparisons Compute Product Comparisons **Database Product Comparisons Networking Product Comparisons Storage Product Comparisons**

cloud.google.com cloud.google.com/blog qcppodcast.com kubernetespodcast.com podcasts.google.com opensource.google/projects/list/cloud

Mobile app analytics

ML APIs for mobile

medium.com/google-cloud apigee.com/about/blog firebase.googleblog.com

qsuite-developers.googleblog.com github.com/gsuitedevs

twitter.com/gsuitedevs cloud.google.com/certification status.cloud.google.com cloud.google.com/training developers.googleblog.com mapsplatform.googleblog.com opensource.googleblog.com security.googleblog.com www.kaggle.com kubernetes.io/blog

cloud.google.com/about/locations cloud.google.com/devops

cloud.withgoogle.com/cloudsecurity/podcast

goo.gle/gcpsketchnote cloud.google.com/solutions developers.google.com/gsuite/solutions cloud.google.com/support-hub cloud.google.com/pricing

cloud.google.com/products/calculator

www.gwiklabs.com

/r/googlecloud

codelabs.developers.google.com

/r/AppEngine /r/bigguery /r/dataflow /r/firebase /r/GoogleAppsScript cloud.google.com/products/big-data cloud.google.com/products/databases cloud.google.com/products/compute cloud.google.com/products/networking

cloud.google.com/products/storage



Google Cloud

DEVELOPER'S CHEAT SHEET

v2021.12.10

Created by the Google Developer Relations Team Maintained at https://4words.dev

COMPUTE

Cloud Functions Event-driven serverless functions App Engine Managed app platform **Cloud Run** Serverless for containerized applications Kubernetes Engine (GKE) Managed Kubernetes/containers VMs. GPUs. TPUs. Disks **Compute Engine Bare Metal Solution** Hardware for specialized workloads Preemptible VMs Short-lived compute instances Shielded VMs Hardened VMs Sole-tenant Nodes **Dedicated physical servers**

VMware Engine

Managed NFS server Cloud Filestore **Cloud Storage** Multi-class multi-region object storage Persistent Disk Block storage for VMs Local SSD VM locally attached SSDs

VMware on Compute Engine

DATABASE

Cloud Bigtable Petabyte-scale, low-latency, non-relational **Cloud Firestore** Serverless NoSQL document DB **Cloud Memorystore** Managed Redis and Memcached Cloud Spanner Horizontally scalable relational DB Cloud SQL Managed MySQL, PostgreSQL, SQL Server **Database Migration Service** Migrate to Cloud SQL DB Insights SQL Inspector

DATA ANALYTICS

BigQuery Data warehouse/analytics BigQuery BI Engine In-memory analytics engine BigQuery ML BigQuery model training/serving BigQuery GIS BigQuery geospatial functions/support BiaQuery DTS Automated data ingestion service Connected Sheets Spreadsheet interface for (big)data **Cloud Composer** Managed workflow orchestration service **Data Fusion** Graphically manage data pipelines Dataflow Stream/batch data processing Visual data wrangling **Dataprep by Trifacta** Dataproc Managed Spark and Hadoop

Datastream Change data capture/replication service Pub/Sub

Global real-time messaging Data Catalog Metadata management service

Collaborative data exploration/dashboarding **Data Studio**

Looker Enterprise BI and Analytics **Public Datasets** Hosted data in BigQuery/GCS

HYBRID AND MULTI-CLOUD

Anthos Enterprise hybrid/multi-cloud platform **Anthos Clusters** Hybrid/on-prem Kubernetes Engine **Anthos Config Management** Policy and security automation Anthos Service Mesh Managed service mesh (Istio) Cloud Run for Anthos Servlerless development for Anthos **GCP Marketplace for Anthos** Pre-configured containerized apps Migrate for Anthos Migrate VMs to Kubernetes Engine Monitoring, logging, troubleshooting **Operations Traffic Director** Service mesh traffic management Apigee API Management API management, development, security

Managed platform for ML

Data labeling by humans

Vector similarity searches

Autoscaled model serving

Hosted ML workflows

Custom low-code models AI Platform

Preconfigured VMs for deep learning

Jupyter-based environment for Data Science

Preconfigured containers for deep learning

Managed TensorBoard for ML-experiment Visualization

Black-box hyperparameter tuning

Convert audio to text

Convert text to audio

Hardware acceleration for ML

Scene-level video annotation

Al in your contact center

Visual search for products

Language detection and translation

Image recognition and classification

Create conversational interfaces

Analyze, classify, search documents

Create custom recommendations

Job search with ML

Vertex Al AutoMI

Vertex Al Data Labeling

Deep Learning VM Images (DLVM) Vertex Al Workbench

Vertex Al Deep Learning Containers

Vertex Al Matching Engine Vertex Al Pipelines **Vertex AI Predictions** Vertex Al Training

Distributed Al training Vertex Al Edge Manager Deploy monitor edge inferences Vertex Explainable Al **Understand ML model predictions** Vertex AI Feature Store Managed ML feature repository Vertex ML Metadata Artifact, lineage, and execution tracking Monitor models for skew/drift

Vertex Al Model Monitorina Vertex AI Tensorboard

Vertex Al Vizier

Cloud Speech-To-Text API **Cloud Talent Solutions API**

Cloud Text-To-Speech API Cloud TPU **Cloud Translation API**

Cloud Video Intelligence API Cloud Vision API

Contact Center Al Dialogflow Document Al Recommendations Al Vision Product Search

NETWORKING

Carrier Peering Peer through a carrier Peer with GCP **Direct Peering Dedicated Interconnect** Dedicated private network connection

Partner Interconnect Connect on-prem network to VPC Cloud Armor DDoS protection and WAF Cloud CDN Content delivery network **Cloud DNS** Programmable DNS serving

Multi-region load distribution/balancing Cloud Load Balancing **Cloud NAT** Network address translation service

Cloud Router Cloud VPN (HA) **Network Service Tiers Network Telemetry Traffic Director Google Cloud Service Mesh**

Price vs performance tiering Network telemetry service Service mesh traffic management Service-aware network management Software defined networking Security perimeters for API-based services

VPC/on-prem network route exchange (BGP)

VPN (Virtual private network connection)

VPC Service Controls Network Intelligence Center Network monitoring and topology

IDENTITY AND SECURITY

Virtual Private Cloud

Access Transparency Audit cloud provider access **Assured Workloads** Workload compliance controls **Binary Authorization** Kubernetes deploy-time security Certificate Authority Service Managed private CAs All assets, one place Cloud Asset Inventory **Cloud Audit Logs** Audit trails for GCP

Cloud DLP Classify and redact sensitive data Cloud HSM Hardware security module service Cloud EKM External keys you control Cloud IAM Resource access control Cloud Identity Manage users, devices & apps **Cloud Identity-Aware Proxy** Identity-based app access Cloud KMS Hosted key management service Cloud Resource Manager Cloud project metadata management **Security Command Center** Security management & data risk platform

Cloud Security Scanner App engine security scanner **Confidential Computing** Encrypt data in-use **Context-aware Access** End-user attribute-based access control **Event Threat Detection** Scans for suspicious activity

Managed Service for Microsoft **Active Directory**

Managed Microsoft Active Directory Secret Manager Store and manage secrets Security Key Enforcement Two-step key verification Shielded VMs Hardened VMs

Titan Security Key Two-factor authentication (2FA) device

VPC Service Controls VPC data constraints

Chronicle Find threats from security telemetry VirusTotal Research/hunt for Malware

Risk Manager Evaluate organization's security posture reCPATCHA Enterprise Protection against bot/spam/abuse BeyondCorp Enterprise Zero trust secure access

Access Context Manager Fine-grained, attribute based access-control **Web Security Scanner** Identifies web-app security vulnerabilities

OPERATIONS & MONITORING

Cloud Debugger Live production debugging **Error Reporting** App error reporting Cloud Logging Centralized logging

Cloud Monitoring Infrastructure and application monitoring

Cloud Profiler CPU and heap profiling **Cloud Trace** App latency insights

Cloud Build Continuous integration/delivery platform **Cloud Deploy** Deployment pipeline for GKE Artifact Registry Universal package manager **Cloud Source Repositories** Hosted private git repos **Container Registry** Private container registry/storage

APPLICATION INTEGRATION

Eventarc Event-driven Cloud Run services **Cloud Scheduler** Managed cron job service Cloud Tasks Asynchronous task execution Cloud Workflows HTTP services orchestration Pub/Sub Global real-time messaging

API PLATFORM AND ECOSYSTEMS

API Analytics API metrics **API Monetization** Monetize APIs

Apigee API Platform Develop, secure, monitor APIs **API Gateway** Fully managed API Gateway Manage hybrid/multi-cloud API environments

Apigee Sense API protection from attacks Cloud Endpoints Cloud API gateway **Developer Portal** API management portal

Marketplace Partner & open source marketplace

AppSheet No-code App creation

INTERNET OF THINGS (IOT)

Cloud IoT Core Manage devices, ingest data

Google Cloud Game Servers Orchestrate Agones clusters

HEALTHCARE

Apigee Hybrid

Cloud Healthcare API Healthcare system GCP interoperability Apigee Healthcare APIx Healthcare system GCP interoperability Real-time insights from media-text Healthcare Natural Language Al Cloud Life Sciences Manage, process, transform biomedical-data

RETAIL

Vision Product Search Visual search for products Recommendations Al Create custom recommendations Visual Inspection Al Train/deploy models to detect defects

MANAGEMENT TOOLS

Manage OS VM Fleets VM Manager Cloud APIs APIs for cloud services

Cloud Billing API Programmatically manage GCP billing **Cloud Billing** Billing and cost management tools **Cloud Console** Web-based management console Cloud Deployment Manager Templated infrastructure deployment Cloud Mobile App iOS/Android GCP manager app Private Catalog Internal Solutions Catalog

Cloud Code for IntelliJ IntelliJ GCP tools Cloud Code for VS Code VS Code GCP tools Cloud Code Cloud native IDE extensions Cloud Tools for Eclipse Eclipse GCP tools

Cloud Tools for Visual Studio Visual Studio GCP tools **Gradle App Engine Plugin** Gradle App Engine plugin Maven App Engine Plugin Maven App Engine plugin

Cloud SDK CLI for GCP

Browser-based terminal/CLI Cloud Shell

MIGRATION TO GOOGLE CLOUD

BigQuery Data Transfer Service Cloud Data Transfer

Bulk import analytics data Data migration tools/CLI

CONTINUED ON BACK ▶ ▶ ▶