

Google Cloud

DEVELOPER'S CHEAT SHEET

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

COMPUTE

Cloud Functions App Engine Cloud Run

Kubernetes Engine (GKE) Compute Engine Bare Metal Solution Preemptible VMs

Shielded VMs Sole-tenant Nodes VMware Engine

Event-driven serverless functions Managed app platform Serverless for containerized applications

VMs, GPUs, TPUs, Disks Hardware for specialized workloads Short-lived compute instances

Managed Kubernetes/containers

Dedicated physical servers VMware on Compute Engine

Hardened VMs

STORAGE

Cloud Filestore Cloud Storage

Persistent Disk Block storage for VMs Local SSD VM locally attached SSDs

DATABASE

Cloud Bigtable Cloud Firestore Cloud Memorystore Cloud Spanner

Database Migration Service DB Insights

Managed NFS server

Multi-class multi-region object storage

Petabyte-scale, low-latency, non-relational

Serverless NoSQL document DB Managed Redis and Memcached Horizontally scalable relational DB Cloud SQL Managed MySQL,PostgreSQL,SQL Server

> Migrate to Cloud SQL SQL Inspector

DATA AND ANALYTICS

BigQuery BigQuery BI Engine BigQuery ML Cloud Composer Cloud Data Fusion Cloud Dataflow Cloud Dataprep Cloud Dataproc

Cloud Pub/Sub

Looker

Data warehouse/analytics In-memory analytics engine BigQuery model training/serving Managed workflow orchestration service Graphically manage data pipelines Stream/batch data processing Visual data wrangling Managed Spark and Hadoop Global real-time messaging

Data Catalog Metadata management service Data Studio Collaborative data exploration/dashboarding

Enterprise BI and Analytics

HYBRID AND MULTI-CLOUD

Anthos Anthos Clusters Anthos Config Management Anthos Service Mesh Cloud Run for Anthos GCP Marketplace for Anthos Migrate for Anthos Operations Cloud Build Traffic Director

Apigee API Management

Enterprise hybrid/multi-cloud platform Hybrid/on-prem Kubernetes Engine Policy and security automation Managed service mesh (Istio) Servlerless development for Anthos Pre-configured containerized apps Migrate VMs to Kubernetes Engine Monitoring, logging, troubleshooting Continuous integration/delivery platform Service mesh traffic management API management, development, security

AI/ML

Al Platform Data Labeling Al Platform Deep Learning VMs Al Platform Deep Learning Containers Al Platform Notebooks Al Platform Pipelines Al Platform Predictions Al Platform Training Al Platform AutoML Natural Language AutoML Tables AutoML Translation AutoML Video Intelligence AutoML Vision Cloud Natural Language API Cloud Speech-To-Text API Cloud Talent Solutions API

Cloud Text-To-Speech API

Cloud Video Intelligence API

Cloud Translation API

Cloud Vision API

Contact Center Al

Cloud TPU

Dialogflow

Document Al

Explainable Al

Preconfigured containers for deep learning Managed JupyterLab notebook instances Hosted ML workflows Autoscaled model serving Distributed AI training Managed platform for ML Custom text models Custom structured data models Custom domain-specific translation Custom video annotation models Custom image models Text parsing and analysis Convert audio to text Job search with ML Convert text to audio Hardware acceleration for ML Language detection and translation Scene-level video annotation Image recognition and classification Al in your contact center Create conversational interfaces Analyze, classify, search documents

Data labeling by humans

Preconfigured VMs for deep learning

NETWORKING

Vision Product Search

Recommendations Al

Carrier Peering Direct Peering Dedicated Interconnect Partner Interconnect Cloud Armor Cloud CDN Cloud DNS Cloud Load Balancing Cloud NAT Cloud Router Cloud VPN (HA) Network Service Tiers Network Telemetry Traffic Director

Peer through a carrier Peer with GCP Dedicated private network connection Connect on-prem network to VPC DDoS protection and WAF Content delivery network Programmable DNS serving Multi-region load distribution/balancing Network address translation service VPC/on-prem network route exchange (BGP) VPN (Virtual private network connection) Price vs performance tiering Network telemetry service Service mesh traffic management Google Cloud Service Mesh Service-aware network management Virtual Private Cloud Software defined networking **VPC Service Controls** Security perimeters for API-based services

GAMING

Google Cloud Game Servers

Network Intelligence Center

Orchestrate Agones clusters

Network monitoring and topology

INTERNET OF THINGS (IOT)

Cloud IoT Core

Manage devices, ingest data

IDENTITY AND SECURITY

Access Transparency Assured Workloads **Binary Authorization** Certificate Authority Service Cloud Asset Inventory Cloud Audit Logs Cloud DLP Cloud HSM Cloud EKM Cloud IAM Cloud Identity Cloud Identity-Aware Proxy

Cloud Resource Manager

Cloud Security Scanner

Security Command Center

Cloud KMS

Audit cloud provider access Workload compliance controls Kubernetes deploy-time security Managed private CAs All assets, one place Audit trails for GCP Classify and redact sensitive data Hardware security module service External keys you control Resource access control Manage users, devices & apps Identity-based app access Hosted key management service Cloud project metadata management

Security management & data risk platform

App engine security scanner

IDENTITY AND SECURITY (CONT.)

Encrypt data in-use

Scans for suspicious activity

Store and manage secrets

Two-step key verification

VPC data constraints

APIs for cloud services

Hardened VMs

End-user attribute-based access control

Two-factor authentication (2FA) device

Programmatically manage GCP billing

Templated infrastructure deployment

Infrastructure and application monitoring

Continuous integration/delivery platform

Billing and cost management tools

Web-based management console

iOS/Android GCP manager app

Internal Solutions Catalog

Live production debugging

App error reporting

Centralized logging

CPU and heap profiling

Monitor GCP services

IntelliJ GCP tools

Eclipse GCP tools

VS Code GCP tools

Cloud native IDE extensions

Visual Studio GCP tools

Gradle App Engine plugin

App performance insights

Managed Microsoft Active Directory

Confidential Computing Context-aware Access **Event Threat Detection** Managed Service for Microsoft Active Directory Secret Manager

MANAGEMENT TOOLS

Security Key Enforcement Shielded VMs Titan Security Key **VPC Service Controls**

Cloud APIs

Cloud Billing

Cloud Console

Cloud Mobile App

Private Catalog

Cloud Debugger

Error Reporting

Cloud Logging

Cloud Profiler

Cloud Trace

Cloud Monitoring

Transparent SLIs

Cloud Deployment Manager

Cloud Billing API

Understand ML model predictions Create custom recommendations

Visual search for products

DEVELOPER TOOLS

Cloud Build Cloud Code for IntelliJ Cloud Code for VS Code Cloud Code Cloud Tools for Eclipse Cloud Tools for Visual Studio Gradle App Engine Plugin Maven App Engine Plugin Cloud SDK Cloud Shell Artifact Registry Cloud Source Repositories

Container Registry Container Analysis Eventarc Cloud Scheduler Cloud Tasks Cloud Workflows

Maven App Engine plugin CLI for GCP Browser-based terminal/CLI Universal package manager Hosted private git repos Private container registry/storage Automated security scanning Event-driven Cloud Run services Managed cron job service Asynchronous task execution HTTP services orchestration

MIGRATION TO GCP

BigQuery Data Transfer Service Cloud Data Transfer Google Transfer Appliance Storage Transfer Service Migrate for Anthos Migrate for Compute Engine Migrate from Amazon Redshift Migrate from Teradata VM Migration

Cloud Foundation Toolkit

GCP Marketplace

AppSheet

Bulk import analytics data Data migration tools/CLI 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 VM migration tools Infrastructure as Code templates Cloud Foundry to Kubernetes

API PLATFORM AND ECOSYSTEMS

API metrics API Analytics Monetize APIs API Monetization Apigee API Platform Develop, secure, monitor APIs **API** Gateway Fully managed API Gateway Apigee Hybrid Manage hybrid/multi-cloud API environments Apigee Sense API protection from attacks Cloud API gateway Cloud Endpoints Cloud Healthcare API Healthcare system GCP interoperability Developer Portal

API management portal Partner & open source marketplace

No-code App creation

GOOGLE MAPS PLATFORM

Distance Matrix API Geocoding API Geolocation API Maps Embed API Maps JavaScript API Maps SDK for Android Maps SDK for iOS Maps Static API Maps SDK for Unity Maps URLs Places API

Directions API

Places Library, Maps JS API Places SDK for Android Places SDK for iOS Roads API Street View Static API Street View Service

Time Zone API

Convert address to/from coordinates Derive location without GPS Display iframe embedded maps Dynamic web maps Maps for Android apps Maps for iOS apps Display static map images Unity SDK for games URL scheme for maps Rest-based Places features Places features for web Places features for Android Places feature for iOS Convert coordinates to roads Static street view images Street view for JavaScript Convert coordinates to timezone

Manage Workspace resources

Extend and automate everything

Provision and manage classrooms

Create and manage calendars

Unified search for enterprise

Create and edit documents

Drive file selection widget

Read and write files

Extend G Suite apps

Retrieve Google Drive activity

Interactive email using schema.org

Storefront for integrated applications

Dynamic interactive email

Get directions between locations

Multi-origin/destination travel times

GOOGLE WORKSPACE

Admin SDK AMP for Email Apps Script Calendar API Classroom API Cloud Search Docs API Drive Activity API Drive API Drive Picker Email Markup

Workspace Add-ons Gmail API

Workspace Marketplace

Enhance Gmail Conversational bots in chat Hangouts Chat Bots People API Manage user's Contacts Sheets API Read and write spreadsheets Slides API Create and edit presentations Task API Search, read & update Tasks Vault API Manage your organization's eDiscovery

ADDITIONAL RESOURCES

Google Cloud Home Page Google Cloud Blog Google Cloud Platform Podcast Kubernetes Podcast from Google Google Cloud Open Source GCP Medium Publication Apigee Blog Firebase Blog Workspace Developers Blog Workspace GitHub 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 Blog

DORA - Software &

Delivery Research

Regions and Network Map

cloud.google.com/blog gcppodcast.com kubernetespodcast.com opensource.google/projects/list/cloud medium.com/google-cloud apigee.com/about/blog firebase.googleblog.com

cloud.google.com

gsuite-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