#### API PLATFORM AND ECOSYSTEMS

API Analytics API metrics
API Monetization Monetize APIs

Apigee API Platform Develop, secure, monitor APIs
Apigee Sense API protection from attacks

Apigee Hybrid Manage hybrid/multi-cloud API environments

Cloud Endpoints Cloud API gateway

Cloud Healthcare API Healthcare system GCP interoperability

Developer Portal API managment portal

GCP Marketplace Partner & open source marketplace

#### GOOGLE MAPS PLATFORM

Directions API Get directions between locations

Distance Matrix API Calculate travel times

Geocoding API Convert address to/from coordinates

Geolocation API Derive location without GPS

Maps Embed API Web embedded maps
Maps JavaScript API Dynamic web maps
Maps SDK for Android Maps SDK for Android
Maps SDK for iOS Maps SDK for iOS
Maps Static API Web static maps
Maps Unity SDK Unity SDK for games
Maps URLs URL scheme for maps

Places API Metadata about places (REST)

Places Library, Maps JS API Metadata about places (JavaScript)

Places SDK for Android
Places SDK for Android
Places SDK for iOS
Places SDK for iOS
Roads API
Metadata about roads
Street View Static API
Static street view images
Street View Service
Interactive street view images
Time Zone API
Convert coordinates to timezone

#### G SHITE PLATFORM

App Maker Assistive app building

Apps Script Extend and automate everything
Editor Add-ons Extend Docs, Sheets, Slides
Gmail Add-ons Contextual apps in Gmail
Hangouts Chat Bots Conversational bots in chat
Calendar API Create and manage calendars
Classroom API Provision and manage classrooms
Docs API Create and edit documents

Drive API Read and write files

Gmail API Enhance Gmail

Sheets API Read and write spreadsheets
Slides API Create and edit presentations
Drive Picker Drive file selection widget
Cloud Search Unified search for enterprise
Admin SDK Manage G Suite resources

Email Markup Interactive email using schema.org
G Suite Marketplace Storefront for integrated applications
Other G Suite APIs/SDKs Contacts, Google+, Tasks, Vault...

#### MOBILE (FIREBASE)

Cloud Firestore Document store and sync

Cloud Functions for Firebase Event-driven serverless applications

Cloud Storage for Firebase Object storage and serving
Crashlytics Crash reporting and analytics

Firebase A/B Testing Create A/B test experiments
Firebase App Indexing App/Google search integration

Firebase Authentication Drop-in authentication
Firebase Cloud Messaging Send device notifications

Firebase Dynamic Links Link to app content

Firebase Hosting Web hosting with CDN/SSL

Firebase In-App Messaging Send in-app contextual messages

Firebase Performance Monitoring App performance monitoring

Firebase Predictions Predict user targeting

Firebase Realtime Database Real-time data synchronization

Firebase Remote Config Remotely configure installed apps

Firebase Test Lab Mobile testing device farm

Google Analytics for Firebase Mobile app analytics
ML Kit for Firebase ML APIs for mobile

# GCP FOUNDATIONAL OPEN SOURCE PROJECTS

Apache Beam Batch/streaming data processing

gRPC RPC framework

gVisor Secure container runtime

Istio Connect and secure services

Knative Serverless framework for Kubernetes

Kubeflow ML toolkit for Kubernetes

Kubernetes Management of containerized applications
OpenCensus Cloud native observability framework

TensorFlow ML framework

# ADDITIONAL RESOURCES

Kubernetes Blog

Google Cloud Home Page cloud.google.com
Google Cloud Blog cloud.google.com/blog
GCP Medium Publication medium.com/google-cloud
Apigee Blog apigee.com/about/blog
Firebase Blog firebase.googleblog.com
G Suite Developers Blog gsuite-developers.googleblog.

G Suite Developers Blog gsuite-developers.googleblog.com cloud.google.com/certification Google Cloud Certifications Google Cloud System Status status.cloud.google.com Google Cloud Training cloud.google.com/training Google Developers Blog developers.googleblog.com Google Maps Platform Blog mapsplatform.googleblog.com Google Open Source Blog opensource.googleblog.com Google Security Blog security.googleblog.com Kaggle Home Page www.kaggle.com

Regions and Network Map cloud.google.com/about/locations

kubernetes.io/blog



# Google Cloud

# **DEVELOPER'S CHEAT SHEET**

#### v2019.7.17

Created by the Google Developer Relations Team

Maintained at https://github.com/gregsramblings/google-cloud-4-words

Feedback? 💆 @gregsramblings

#### COMPUTE

App Engine Managed app platform

Cloud Functions Event-driven serverless functions

Cloud Run Serverless for containerized applications

Compute Engine VMs, GPUs, TPUs, Disks

Kubernetes Engine (GKE) Managed Kubernetes/containers

Anthos Enterprise hybrid/multi-cloud platform

## TORAGE

Cloud Storage Object storage and serving

Nearline Archival occasional access storage
Coldline Archival rare access storage

Persistent Disk VM-attached disks
Cloud Filestore Managed NFS server

# **DATABASES**

Cloud Bigtable Petabyte-scale, low-latency, non-relational

Cloud Datastore Horizontally scalable document DB

Cloud Firestore Strongly-consistent serverless document DB

Cloud Memorystore Managed Redis

Cloud Spanner Horizontally scalable relational DB
Cloud SQL Managed MySQL and PostgreSQL

### DATA AND ANALYTICS

BigQuery BI Engine In-memory analytics engine
BigQuery ML BigQuery model training/serving

#### DATA AND ANALYTICS (CONT.)

Managed workflow orchestration service Cloud Composer Cloud Data Fusion Graphically manage data pipelines Cloud Dataflow Stream/batch data processing Cloud Datalab Managed Jupyter notebook Cloud Dataprep Visual data wrangling Cloud Dataproc Managed Spark and Hadoop Cloud Pub/Sub Global real-time messaging

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

Genomics Managed genomics platform

# AI/ML

Al Hub Hosted AI component sharing Al Platform Managed platform for ML Al Platform Data Labeling Data labeling by humans

Al Platform Deep Learning VMs Preconfigured VMs for deep learning Al Platform Notebooks Managed JupyterLab notebook instances

Parallel and distributed training Al Platform Training Al Platform Predictions Autoscaled model serving AutoML Natural Language Custom text models

AutoML Tables Custom structured data models AutoML Translation Custom domain-specific translation AutoML Video Intelligence Custom video annotation models

AutoML Vision Custom image models

Cloud Al Building Blocks Hosted Al component repository

Cloud Natural Language API Text parsing and analysis Cloud Speech-To-Text API Convert audio to text Cloud Talent Solutions API Job search with ML Cloud Text-To-Speech API Convert text to audio Cloud Translation API Language detection and translation

Cloud Video Intelligence API Scene-level video annotation

Cloud Vision API Image recognition and classification

Cloud TPU Hardware acceleration for ML Dialogflow Enterprise Edition Create conversational interfaces

Document Understanding Al Analyze, classify, search documents Recommendations AI Create custom recommendations

Vision Product Search Visual search for products

Carrier Peering Peer through a carrier Direct Peering Peer with GCP

Dedicated Interconnect Dedicated private network connection Partner Interconnect Connect on-prem network to VPC

DDoS protection and WAF Cloud Armor Cloud CDN Content delivery network Cloud DNS Programmable DNS serving Cloud Load Balancing Multi-region load distribution Cloud NAT Network address translation service IPsec VPN Virtual private network connection Network Service Tiers Price vs performance tiering Network Telemetry Network telemetry service Traffic Director Service mesh traffic management Google Cloud Service Mesh Service-aware network management Virtual Private Cloud Software defined networking

## INTERNET OF THINGS (IoT)

Cloud IoT Core Device management and ingest data

#### **IDENTITY AND SECURITY**

Access Transparency Audit cloud provider access Binary Authorization Kubernetes deploy-time security

Cloud Audit Logs Audit trails for GCP

Cloud Data Loss Prevention API Classify and redact sensitive data Cloud HSM Hardware security module service

Cloud IAM Resource access control Cloud Identity Manage users, devices & apps Cloud Identity-Aware Proxy Identity-based app sign in

Cloud Key Management Service Hosted key management service Cloud Resource Manager Cloud project metadata management

Cloud Security Scanner App engine security scanner

Cloud Security Command Center Asset inventory, discovery, search, management

Context-aware Access End-user attribute-based access control

**Event Threat Detection** Scans for suspicious activity Security Key Enforcement Two-step key verification

Shielded VMs Hardened VMs

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

**VPC Service Controls** VPC constrain data Cloud Identity-Aware Proxy Identity-based App Signin

Cloud Key Management Service Hosted Key Management Service

Cloud Resource Manager Cloud Project Metadata Management

Cloud Security Command Center Asset inventory, discovery, search, management App Engine Security Scanner

Cloud Security Scanner Security Key Enforcement Two-step Key Verification

Shielded VMs Hardened VMs

Titan Security Key Two-factor Authentication (2FA) Device

# MANAGEMENT TOOLS

APIs for cloud services Cloud APIs Cloud Billing Billing and cost management tools Cloud Billing API Programmatically manage GCP billing Cloud Console Web-based management console Cloud Deployment Manager Templated infrastructure deployment Cloud Mobile App iOS/Android GCP manager app Cloud Shell Browser-based terminal/CLI Live production debugging Stackdriver Debugger Stackdriver Error Reporting App error reporting Stackdriver Logging Centralized logging

Stackdriver Monitoring Infrastructure and application monitoring

Stackdriver Profiler CPU and heap profiling Stackdriver Transparent SLIs Monitor GCP services Stackdriver Trace App performance insights

CLI for GCP Cloud SDK

Cloud Build Continuous integration/delivery platform

Cloud Code Cloud native IDE extensions Cloud Source Repositories Hosted private git repos Cloud Scheduler Managed cron job service

Cloud Tasks Asynchronous task execution

Cloud Tools for IntelliJ IntelliJ GCP tool Cloud Tools for PowerShell PowerShell GCP tools Cloud Tools for Visual Studio Visual Studio GCP tools Cloud Tools for Eclipse Eclipse GCP tools

Container Registry Private container registry/storage

Gradle App Engine Plugin Gradle App Engine plugin Maven App Engine Plugin Maven App Engine plugin

## MIGRATION TO GCP

Cloud Data Transfer Data migration tools/CLI Google Transfer Appliance Rentable data transport box Cloud Storage Transfer Service Cloud to cloud transfers BigQuery Data Transfer Service Bulk import analytics data Migrate from Amazon Redshift Migrate from Redshift to BigQuery Migrate from Teradata Migrate from Teradata to BigQuery Migrate for Anthos Migrate VMs to GKE containers Compute Engine migration tools Migrate for Compute Engine

VM Migration VM migration tools