# API PLATFORM AND ECOSYSTEMS

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

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

Apigee Hybrid Manage hybrid/multi-cloud API environments

Cloud API gateway Cloud Endpoints

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

Convert address to/from coordinates Geocoding API

Derive location without GPS Geolocation API Web embedded maps Maps Embed API 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

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

Web hosting with CDN/SSL Firebase Hosting

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

qVisor Secure container runtime Connect and secure services Istio

Serverless framework for Kubernetes Knative

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.com Google Cloud Certifications cloud.google.com/certification 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

#### COMPLITE

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

GKE On-Prem Run GKE clusters anywhere

Anthos Enterprise hybrid/multi-cloud platform

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

## DATA AND ANALYTICS (CONT.)

Cloud Composer Managed workflow orchestration service Cloud Data Fusion Graphically manage data pipelines Cloud Dataflow Stream/batch data processing Cloud Datalah 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 Al component sharing I 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 Al Platform Training Parallel and distributed training Autoscaled model serving Al Platform Predictions AutoML Natural Language Custom text models AutoML Tables Custom structured data models Custom domain-specific translation AutoML Translation AutoML Video Intelligence Custom video annotation models AutoML Vision Custom image models Cloud Al Building Blocks Hosted AI component repository Cloud Natural Language API Text parsing and analysis Convert audio to text Cloud Speech-To-Text API 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 Analyze, classify, search documents Document Understanding AI Recommendations Al Create custom recommendations Vision Product Search Visual search for products

#### NETWORKING

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

#### **NETWORKING (CONT.)**

Cloud Armor DDoS protection and WAF 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)

Shielded VMs

Titan Security Key

Cloud IoT Core Device management and ingest data

**IDENTITY AND SECURITY** Audit cloud provider access Access Transparency 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 Cloud Security Scanner App Engine Security Scanner Security Key Enforcement Two-step Key Verification

Hardened VMs

Two-factor Authentication (2FA) Device

### MANAGEMENT TOOLS

Cloud APIs APIs for cloud services 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 Stackdriver Debugger Live production debugging Stackdriver Error Reporting App error reporting Stackdriver Logging Centralized logging Stackdriver Monitoring Infrastructure and application monitoring Stackdriver Profiler CPU and heap profiling Monitor GCP services Stackdriver Transparent SLIs Stackdriver Trace App performance insights

#### DEVELOPER TOOLS

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 BigOuery 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