

## 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 management 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 SUITE 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

|                             |                                  |
|-----------------------------|----------------------------------|
| 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                   |
| Kubernetes Blog             | kubernetes.io/blog               |
| Regions and Network Map     | cloud.google.com/about/locations |



# 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](https://twitter.com/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             |
| GKE On-Prem             | Run GKE clusters anywhere                 |
| Anthos                  | Enterprise hybrid/multi-cloud platform    |

## STORAGE

|                 |                                    |
|-----------------|------------------------------------|
| 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 ML        | BigQuery model training/serving |

## DATA AND ANALYTICS (CONT.)

|                   |   |
|-------------------|---|
| Cloud Composer    | Managed workflow orchestration service      |
| 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

|                               |                                       |
|-------------------------------|---------------------------------------|
| AI Hub                        | Hosted AI component sharing           |
| AI Platform                   | Managed platform for ML               |
| AI Platform Data Labeling     | Data labeling by humans               |
| AI Platform Deep Learning VMs | Preconfigured VMs for deep learning   |
| AI Platform Notebooks         | Managed JupyterLab notebook instances |
| AI Platform Training          | Parallel and distributed training     |
| AI 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 AI Building Blocks      | Hosted AI 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 AI     | Analyze, classify, search documents   |
| Recommendations AI            | 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)

|                |                                   |
|----------------|-----------------------------------|
| 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 |
| Cloud Security Scanner         | App Engine Security Scanner                    |
| Security Key Enforcement       | Two-step Key Verification                      |
| Shielded VMs                   | Hardened VMs                                   |
| Titan Security Key             | 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                    |
| Stackdriver Transparent SLIs | Monitor GCP services                      |
| Stackdriver Trace            | App performance insights                  |

## DEVELOPER TOOLS

|                               |  |
|-------------------------------|--|
| Cloud SDK                     | CLI for GCP                              |
| 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     |
| Migrate for Compute Engine     | Compute Engine migration tools    |
| VM Migration                   | VM migration tools                |