

Google Cloud Platform Compute Solutions



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Agenda

Cloud Platform overview

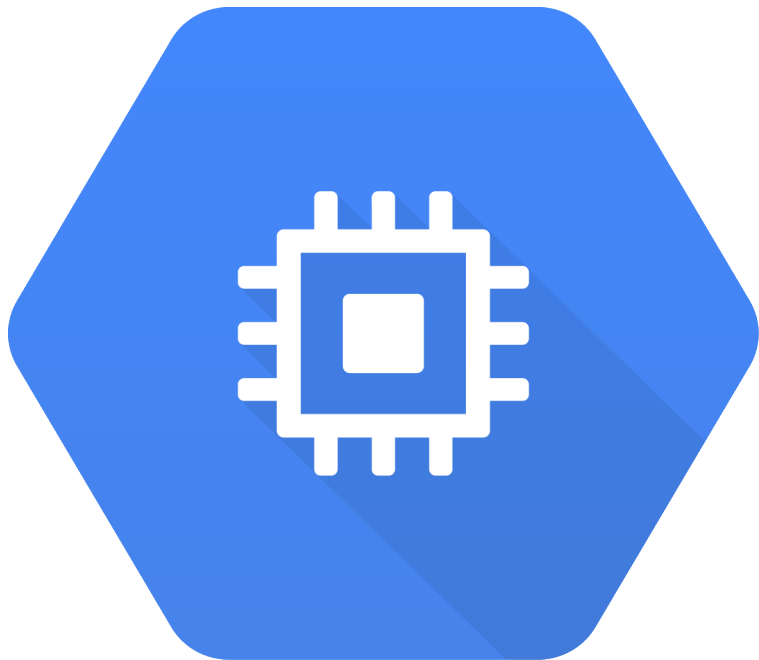
Solution Architectures

Resources

Q&A

Cloud Platform overview

Compute



Compute Engine



App Engine

Storage



Cloud Datastore



Cloud Storage



Cloud SQL

Services



Cloud Endpoints



BigQuery

+New Services (Preview)

Cloud DNS

Cloud Dataflow

Google Cloud Pub/Sub



Memcache



User service



Mail



Task queues



Images



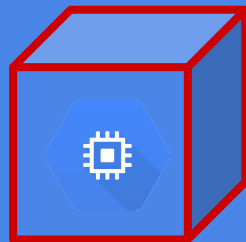
Datastore



Channel



Your API

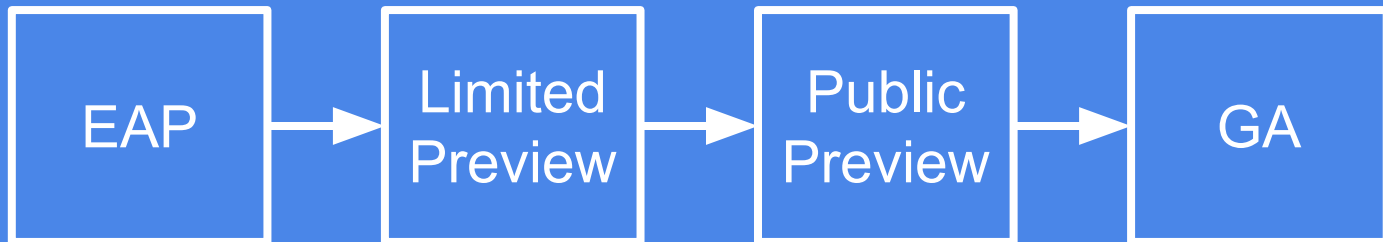


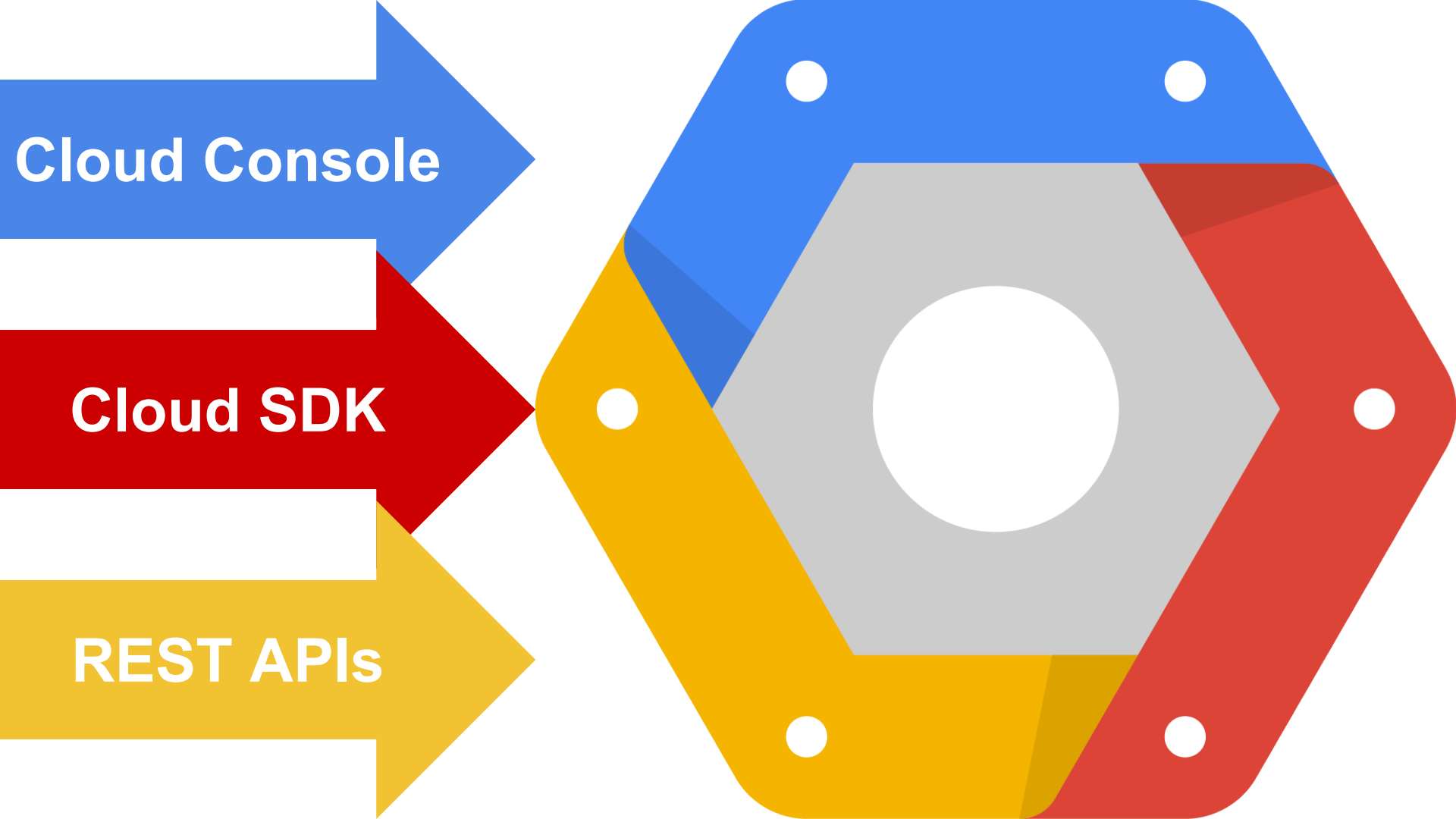
Open source
library

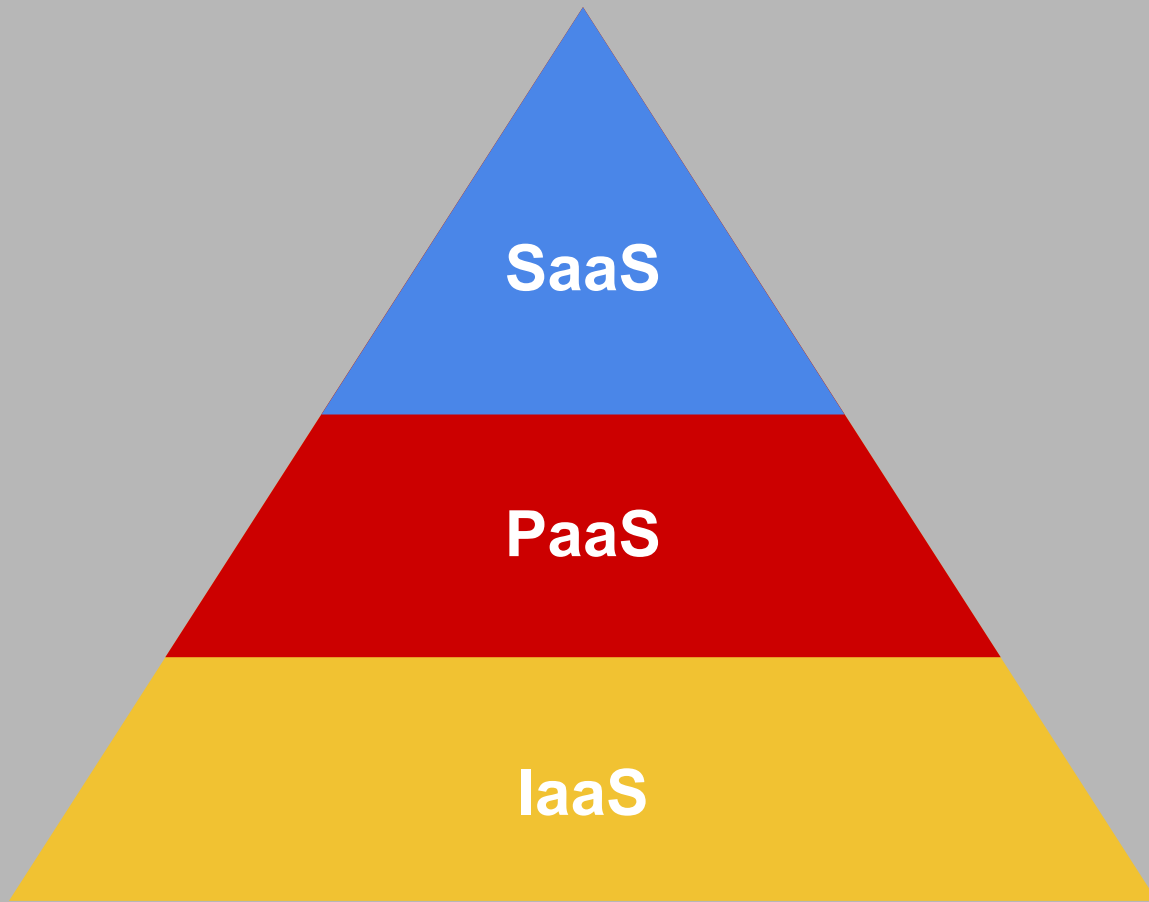


3rd party
services (e.g.
Sendgrid)

Release Schedule







**Gmail, Google Drive and
Google Calendar**

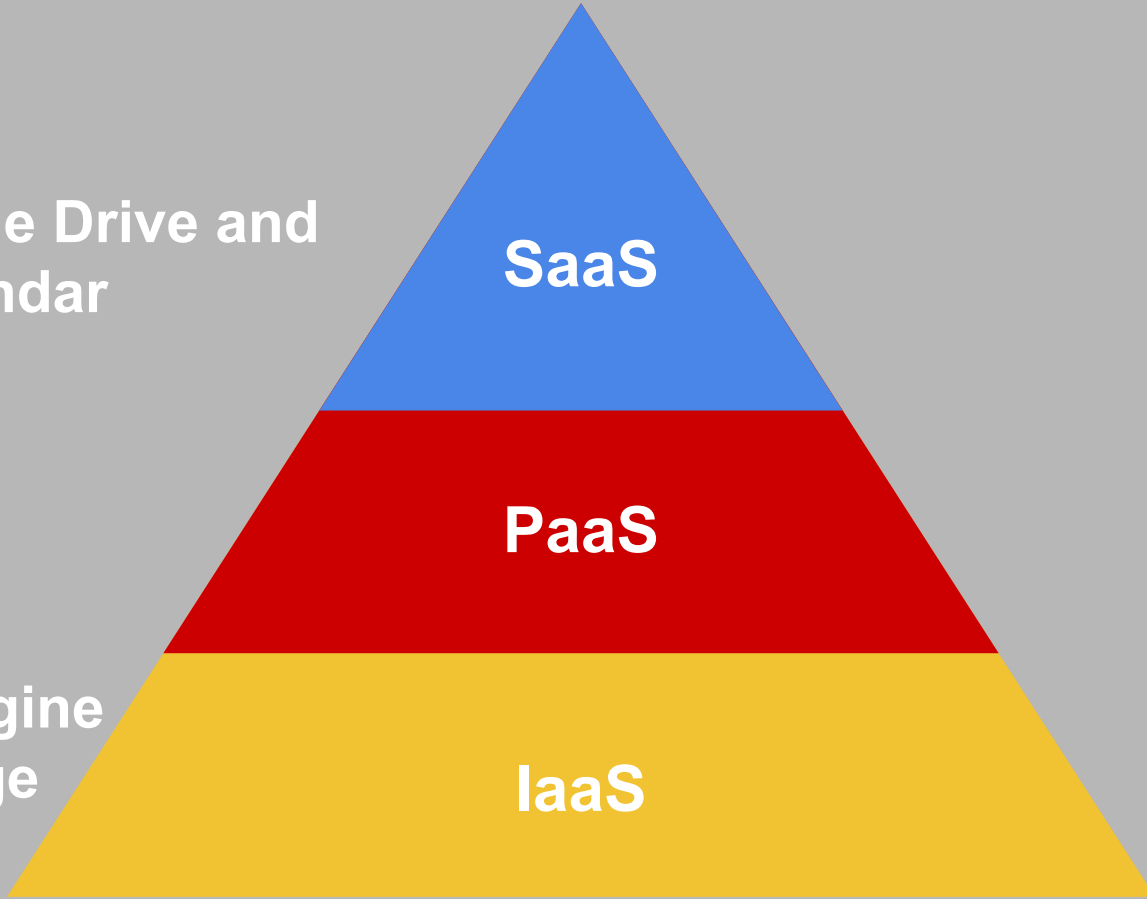
SaaS

App Engine

PaaS

**Compute Engine
Cloud Storage**

IaaS



Solution Architectures

PaaS



IaaS





PaaS

Convenience
Ease of use
Abstraction

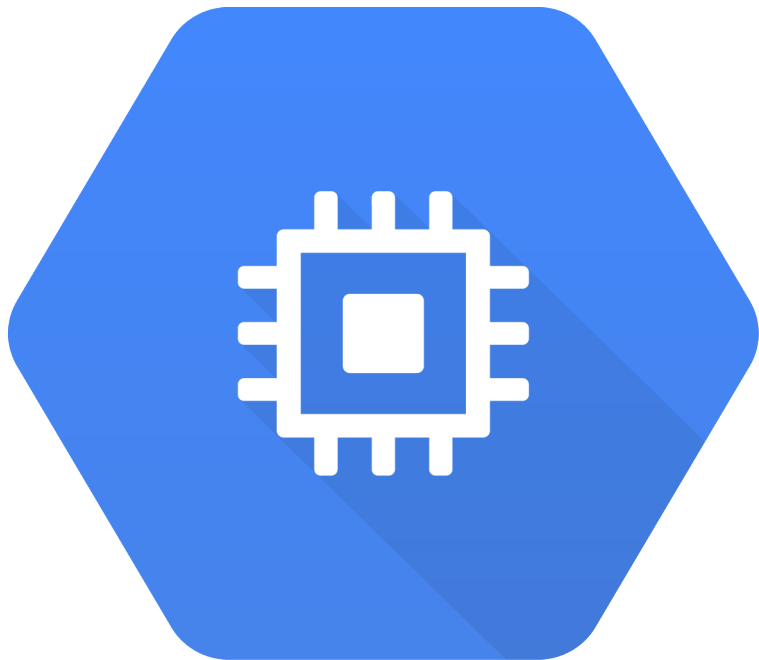
Your app

IaaS

Flexibility
Configurability
Innovation

New app OR migration?

Compute Engine



IaaS

Compute, Storage &
Network

Sub-hour billing

Hugely scalable

Consistent performance

App Engine

PaaS

Java, Python, PHP & Go

Free quota

Auto scaling

Massively scalable



App OR Compute?

App OR Compute?

Auto scaling
Pre-defined technologies
Monitored by Google

Highly flexible
Entire OS stack
Developer managed

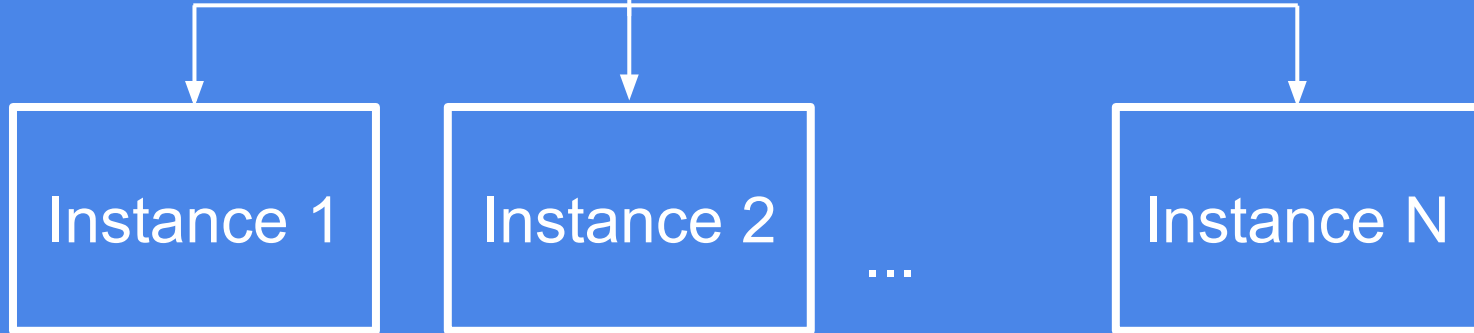
App Engine

Load balanced Web traffic with
cache support



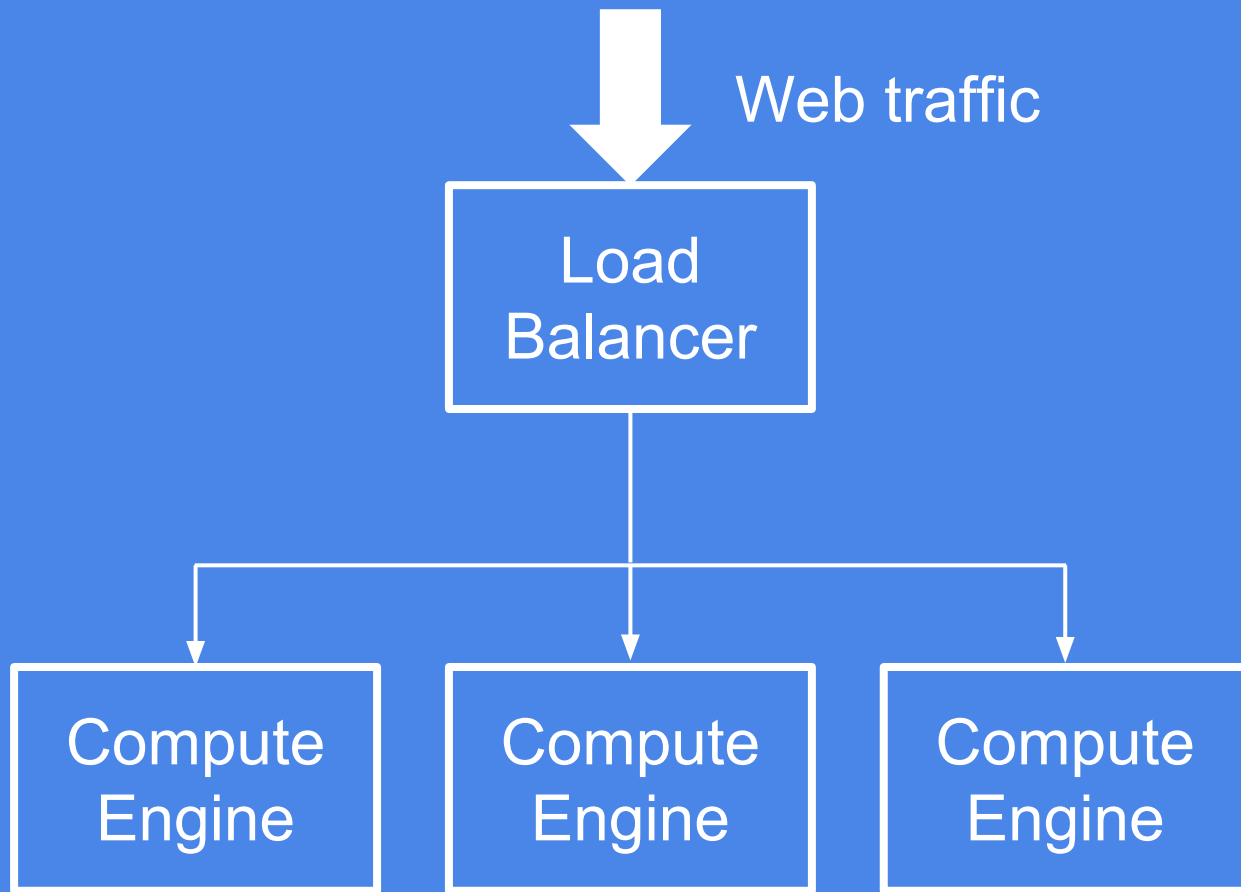
App
Engine FE

Java, Python,
Go & PHP

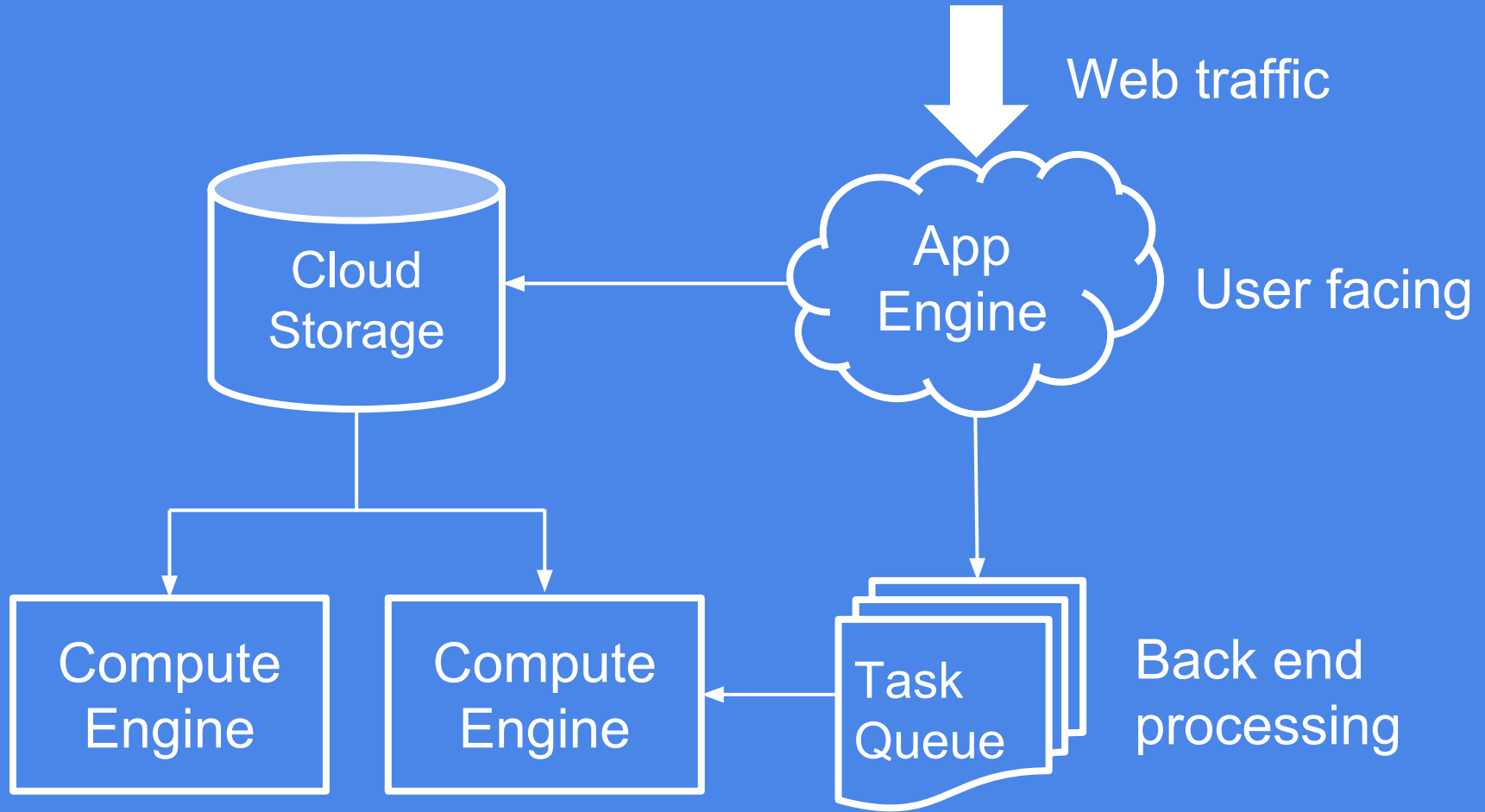


Compute Engine

Full OS
Linux, UNIX,
Windows



App & Compute



Best practise

Use Memcache to improve performance and reduce costs in App Engine

Check billing and quotas when troubleshooting

As a general rule don't use preview services for production

Use Cloud Storage to share data between services

Use the latest version of the Cloud SDK to simplify management

Resources

Articles and Resources

Read how Google Cloud Platform can solve your specific challenges, get the inside scoop on technical deep dives, and learn how our customers are improving their business in Google's Cloud.



Solution Scenarios

Mobile

- [Mobile Solutions on Google Cloud Platform](#)
 - [Sample Shopping Assistant App \[Java Backend\] \[Android Client\] \[iOS Client\]](#) [r/](#)
 - [Tutorial](#)
- [Mobile Backend Starter](#)
 - [Get Started](#) [r/](#)
 - [API Guide](#)
- [Developing Mobile Games](#)
 - [Griddler Multi-Player Mobile Game](#) [r/](#)
 - [Cloud Adventure Text-Based Game](#) [r/](#)
- [iOS Push Notifications](#)
 - [Sample App in Github](#) [r/](#)
- [Google Cloud Endpoints for Android](#)

Gaming

- [Dedicated Server Gaming Solution](#)
 - [Sample App in Github](#) [r/](#)
- [Real-time Gaming with Node.js + WebSocket on Google Cloud Platform](#)

Web Apps

- [Auto Scaling on the Google Cloud Platform](#)
 - [Orchestrator and Status Publisher](#) [r/](#)
 - [Smashpix for Android](#) [r/](#)
- [Compute Engine Load Balancing in Action](#)
- [Managing Complex Applications in the Cloud](#)
- [AngularJS + Cloud Endpoints for Building Modern Web Apps](#)
- [Balancing Strong and Eventual Consistency with Google Cloud Datastore](#)
- [Best Practices for App Engine Memcache](#)
- [Digital Media Asset Management And Sharing](#)
 - [Sample App in Github](#) [r/](#)
 - [Photofeed Tutorial](#) [r/](#)

Big Data

- [Overview of Google BigQuery](#)
 - [Automated Uploading to BigQuery](#) [r/](#)
 - [ETL Tool](#) [r/](#)
- [Deploying Large Datasets to BigQuery](#) [r/](#)
- [An Inside Look at Google BigQuery](#) [r/](#)
- [How to Ingest Data into Google BigQuery Using Talend](#) [r/](#)

Big Data - Hadoop

- [Apache Hadoop, Hive, and Pig on Google Compute Engine](#)
 - [Hadoop on GCE](#) [r/](#)
 - [Hive and Pig on GCE](#) [r/](#)
- [Managing Hadoop Clusters on Google Compute Engine](#)
- [Netflix Lipstick on Google Compute Engine](#)

High Performance Computing

- [Mapping the Secrets of the Universe with Google Compute Engine \(A Case Study\)](#)
- [Grid Engine on GCE](#) [r/](#)

Compute Engine

- [Compute Engine Management with Puppet, Chef, Salt, and Ansible](#)
- [Compute Engine Disks: Price, Performance, and Persistence](#)

Getting Started

- [Learn about Google Cloud Storage Options](#)
- [Learn about Google Compute Engine](#)
- [Learn about setting up Projects, Permissions and Accounts](#)

Advanced Topics

Disaster Recovery

- [Using Google Cloud Storage for Cassandra Disaster Recovery](#)

Load Testing

- [SSH Port Forwarding and Load Testing on Google Compute Engine](#)

Security

- [Google's Approach to IT Security](#) [r/](#)

Training courses

App Engine

- [App Engine Basics](#)



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DevOps at the speed of Google

Predicting the future with the Google Cloud Platform

Big data, the Cloud way: Accelerated and simplified

Containerizing the Cloud with Docker on Google Cloud Platform

Google I/O 2014

<https://io2014code labs.appspot.com>

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1. <http://g.co/cloudstarterpack>
2. Click "apply now"
3. Use the code: gde-in

Thank you!

Any questions?



These slides:
<http://goo.gl/yo1Frd>