

Google Cloud Next '20: OnAir | Explore curated content on demand, every Tuesday starting July 14. [Register now](https://cloud.withgoogle.com/next/sf/) (https://cloud.withgoogle.com/next/sf/).

[JUMP TO \(#\)](#)



App Engine

Build highly scalable applications on a fully managed serverless platform.

[Try App Engine free](https://console.cloud.google.com/freetrial) (https://console.cloud.google.com/freetrial)

- ✓ Scale your applications from zero to planet scale without having to manage infrastructure
- ✓ Free up your developers with zero server management and zero configuration deployments
- ✓ Stay agile with support for popular development languages and a range of developer tools



1:12

(https://www.youtube.com/watch?v=Xuf3J6SKVV0&list=PLlivdWyY5sqlQ4_5PwyyXZVdsXr3wYhip&index=3&t=1s)

[VIDEO](#)

[App Engine in 1 minute](#)

BENEFITS

Open and familiar languages and tools

Build and deploy apps quickly using popular languages or bring your own language runtimes and frameworks. You can also manage resources from the command line, debug source code, and run API back ends easily.

Just add code

Focus on writing code without having to manage underlying infrastructure. Protect your apps from security threats using firewall capabilities, IAM rules, and managed SSL/ TLS certificates.

Pay only for what you use

Operate in a serverless environment without worrying about over or under provisioning. App Engine automatically scales depending on your app traffic and consumes resources only when your code is running.

KEY FEATURES

Key features

Popular programming languages

Build your application in Node.js, Java, Ruby, C#, Go, Python, or PHP—or bring your own language runtime.

Open and flexible

Custom runtimes allow you to bring any library and framework to App Engine by supplying a Docker container.

Fully managed

A fully managed environment lets you focus on code while App Engine manages infrastructure concerns.

[View all features \(#\)](#)

CUSTOMERS

Customers





IDEXX helps keep pets healthy with VetConnect PLUS, built on App Engine.

Read the story (</customers/idexx-laboratories>)

Story highlights

- Cut annual IT overhead by up to \$500K
- Scales to more than 30 TB without performance issues
- Improved customer experience

Industry

Healthcare

(</solutions/healthcare-life-sciences>)





[Barilla rolled out a new factory solution in just 15 days with App Engine.](#)

(/customers/barilla)



[Khan Academy serves educational content to 18M monthly visitors with App Engine.](#)

(/customers/khan-academy)



[EDP improved its mobile app review score from 1.9 to 4.7 out of 5 with App Engine.](#)

(/customers/edp)

See all customers (<https://cloud.google.com/customers>)

DOCUMENTATION

Documentation

GOOGLE CLOUD BASICS

Choosing the right App Engine environment

Learn how to run your applications in App Engine using the flexible environment, standard environment, or both.

[Learn more \(/appengine/docs/the-appengine-environments\)](/appengine/docs/the-appengine-environments)

GOOGLE CLOUD BASICS

App Engine standard environment

See how the App Engine standard environment makes it easy to build and deploy an application that runs reliably even under heavy load and with large amounts of data.

[Learn more \(/appengine/docs/standard\)](/appengine/docs/standard)

GOOGLE CLOUD BASICS

App Engine flexible environment

Find out how App Engine allows developers to focus on what they do best: writing code.

[Learn more \(/appengine/docs/flexible\)](/appengine/docs/flexible)

TUTORIAL

Install an SDK for App Engine

Learn how to set up your computer for developing, deploying, and managing your apps in App Engine.

[Learn more \(/appengine/downloads\)](/appengine/downloads)

ARCHITECTURE

Python on App Engine

Find out more about the two Python language environments available on App Engine and determine which works best for you.

[Learn more \(/appengine/docs/python\)](/appengine/docs/python)

ARCHITECTURE

Java on App Engine

Learn more about the two Java application environments available on App Engine and determine which works best for you.

[Learn more \(/appengine/docs/java\)](/appengine/docs/java)

ARCHITECTURE

Node.js on App Engine

See the difference between the two Node.js language environments available on App Engine and determine which fits your needs.

[Learn more \(/appengine/docs/nodejs\)](/appengine/docs/nodejs)

GOOGLE CLOUD BASICS

App Engine locations

Learn about the regional availability of App Engine along with how location affects your latency, availability, and durability.

[Learn more \(/appengine/docs/locations\)](/appengine/docs/locations)

TUTORIAL

Build an Android app using Firebase and App Engine

This tutorial demonstrates how to write a mobile app with backend data storage, real-time synchronization, and user-event logging using Firebase.

[Learn more \(/solutions/mobile/mobile-firebase-app-engine-flexible\)](/solutions/mobile/mobile-firebase-app-engine-flexible)

Not seeing what you're looking for?

[View all product documentation \(/appengine/docs\)](/appengine/docs)

Explore more docs

Quickstarts

[Get a quick intro to using this product.](#)

(/appengine/docs/the-appengine-environments)

How-to guides

[Learn to complete specific tasks with this product.](#)

(/appengine/docs/the-appengine-environments)

Tutorials

[Browse walkthroughs of common uses and scenarios for this product.](#)

(/tutorials#app%20engine)

APIs & references

[View APIs, references, and other resources for this product.](#)

(/appengine/docs/admin-api)

USE CASES

Use cases

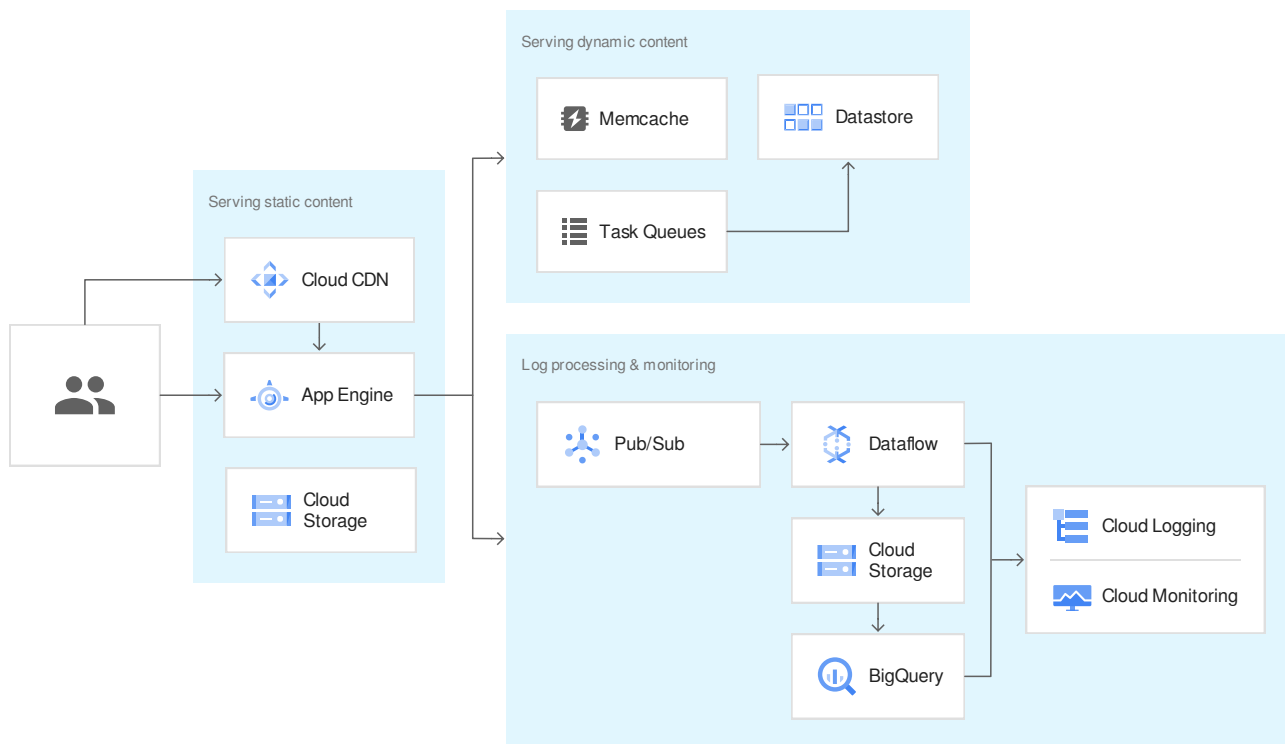
USE CASE

Modern web applications

Quickly reach customers and end users by deploying web apps on App Engine. With zero-config deployments and zero server management, App Engine allows you to focus on writing code.

Plus, App Engine automatically scales to support sudden traffic spikes without provisioning, patching, or monitoring.

Below is a sample reference architecture for building a simple web app using App Engine and Google Cloud.

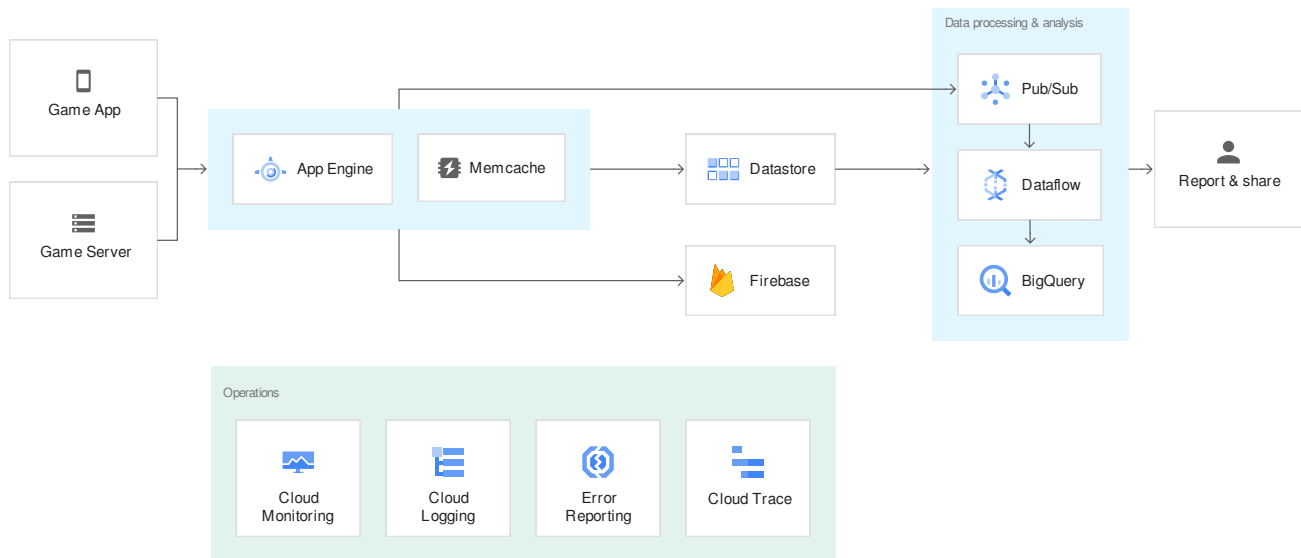


USE CASE

Scalable mobile back ends

Whether you're building your first mobile app or looking to reach existing users via a mobile experience, App Engine automatically scales the hosting environment for you. Seamless integration with Firebase provides an easy-to-use frontend mobile platform along with the scalable and reliable back end.

Below is a sample reference architecture for a typical mobile app built using Firebase and App Engine along with other services in Google Cloud.



[View all technical guides \(/tutorials#app%20engine\)](/tutorials#app%20engine)

ALL FEATURES

All features

Popular languages

Build your application in Node.js, Java, Ruby, C#, Go, Python, or PHP—or bring your own language runtime.

Open and flexible

Custom runtimes allow you to bring any library and framework to App Engine by supplying a Docker container.

Fully managed

A fully managed environment lets you focus on code while App Engine manages infrastructure

concerns.

Powerful application diagnostics

Use Cloud Monitoring and Cloud Logging to monitor the health and performance of your app and Cloud Debugger and Error Reporting to diagnose and fix bugs quickly.

Application versioning

Easily host different versions of your app, and easily create development, test, staging, and production environments.

Traffic splitting

Route incoming requests to different app versions, A/B test, and do incremental feature rollouts.

Application security

Help safeguard your application by defining access rules with App Engine firewall and leverage managed SSL/TLS certificates by default on your custom domain at no additional cost.

Services ecosystem

Tap a growing ecosystem of Google Cloud services from your app including an excellent suite of cloud developer tools.

PRICING

Pricing

App Engine has competitive cloud pricing that scales with your app's usage. There are a few basic components you will see in the App Engine billing model such as standard environment instances, flexible environment instances, and App Engine APIs and services. To get an estimate of your bill, please refer to our [pricing calculator \(/products/calculator#tab=app-engine\)](/products/calculator#tab=app-engine).

App Engine runs as instances within either the standard environment or the flexible environment.

[View pricing details \(/appengine/pricing\)](/appengine/pricing)

Take the next step

Start building on Google Cloud with \$300 in free credits and 20+ always free products.

[Try App Engine free \(https://console.cloud.google.com/freetrial\)](https://console.cloud.google.com/freetrial)

Need help getting started?

[Contact sales \(https://cloud.google.com/contact/\)](https://cloud.google.com/contact/)

Work with a trusted partner

[Find a partner \(https://cloud.withgoogle.com/partners/\)](https://cloud.withgoogle.com/partners/)

Continue browsing

See all products (<https://cloud.google.com/products/>)