**Cloud Functions**

Run your code in the cloud with no servers or containers to manage with our scalable, pay-as-you-go functions as a service (FaaS) product.

New customers get $300 in free credits to spend on Functions. All customers get 2 million monthly invocations free, not charged against your credits.

* Build and deploy your first Cloud Function using only your web browser with this [Quickstart](https://cloud.google.com/functions/docs/create-deploy-nodejs)
* Serve users from zero to planet-scale without even thinking about any infrastructure.
* See how [customers](https://cloud.google.com/functions#section-2) design applications using event-driven architectures with Cloud Functions

## **Key features**

### **Simplified developer experience and increased developer velocity**

Cloud Functions has a simple and intuitive developer experience. Just write your code and let Google Cloud handle the operational infrastructure. Develop faster by writing and running small code snippets that respond to events. Streamline challenging orchestration problems by connecting Google Cloud products to one another or third party services using events.

### **Pay only for what you use**

You are only billed for your function’s execution time, metered to the nearest 100 milliseconds. You pay nothing when your function is idle. Cloud Functions automatically spins up and backs down in response to events.

### **Avoid lock-in with open technology**

Use open source FaaS (function as a service) framework to run functions across multiple environments and prevent lock-in. Supported environments include Cloud Functions, local development environment, on-premises, [Cloud Run](https://cloud.google.com/run), and other Knative-based serverless environments.

### **All features**

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| Connects and extends services to build complex applications | Cloud Functions lets you treat all Google and third-party cloud services as building blocks. Connect and extend them with code, and rapidly move from concept to production with end-to-end solutions and complex workflows. Further, integrate with third-party services that offer webhook integrations to quickly extend your application with powerful capabilities. |
| End-to-end development and diagnosability | Go from code to deploy, with integrated monitoring. Get full observability and diagnosability for your application with [Cloud Trace](https://cloud.google.com/trace) and [Cloud Debugger](https://cloud.google.com/debugger). Additionally, get support for local and disconnected development/debugging using open sourced functions framework. |
| Develop locally, scale globally | Serve users from zero to planet-scale without even thinking about any infrastructure. Cloud Functions automatically manages and scales underlying infrastructure with the size of workload. |
| No server management | Deploy your code and let Google run and scale it for you. Cloud Functions abstracts away all the underlying infrastructure, so that you can focus on your code and build applications faster than ever before. |
| Runs code in response to events | Cloud Functions allows you to trigger your code from Google Cloud, Firebase, and [Google Assistant](https://assistant.google.com/), or call it directly from any web, mobile, or backend application via HTTP. |
| Pay only for what you use | You are only billed for your function’s execution time, metered to the nearest 100 milliseconds. You pay nothing when your function is idle. Cloud Functions automatically spins up and backs down in response to events. |
| Avoid lock-in with open technology | Use open source FaaS (function as a service) framework to run functions across multiple environments and prevent lock-in. Supported environments include Cloud Functions, local development environment, on-premises, [Cloud Run](https://cloud.google.com/run), [Cloud Run for Anthos](https://cloud.google.com/anthos/run), and other Knative-based serverless environments. |