

CHAPTER 3

The Google Cloud SDK and Web CLI

GCP provides a command-line interface (CLI) for interacting with cloud products and services. GCP resources can be accessed via the web-based CLI on GCP or by installing the Google Cloud software development kit (SDK) on your local machine to interact with GCP via the local command-line terminal.

GCP contains shell commands for a wide range of GCP products such as the Compute Engine, Cloud Storage, Cloud ML Engine, BigQuery, and Datalab, to mention just a few. Major tools of the Cloud SDK include

- gcloud tool: Responsible for cloud authentication, configuration, and other interactions on GCP
- gsutil tool: Responsible for interacting with Google Cloud Storage buckets and objects
- bq tool: Used for interacting and managing Google BigQuery via the command line
- kubectl tool: Used for managing Kubernetes container clusters on GCP

The Google Cloud SDK also installs client libraries for developers to programmatically interact with GCP products and services through APIs.¹ As of this time of writing, the Go, Java, Node.js, Python, Ruby, PHP, and C# languages are covered. Many more are expected to be added to this list.

This chapter works through setting up an account on GCP, installing the Google Cloud SDK, and then exploring GCP commands using the CLI.

¹APIs stands for application programming interfaces, which are packages and tools used in building software applications.

Setting Up an Account on Google Cloud Platform

This section shows how to set up an account on Google Cloud Platform. A GCP account gives access to all of the platform’s products and services. For a new account, a \$300 credit is awarded to be spent over a period of 12 months. This offer is great as it gives ample time to explore the different features and services of Google’s cloud offering.

Note that a valid credit card is required to register an account to validate that it is an authentic user, as opposed to a robot. However, the credit card won’t be charged after the trial ends, except Google is authorized to do so:

1. Go to <https://cloud.google.com/> to open an account (see Figure 3-1).

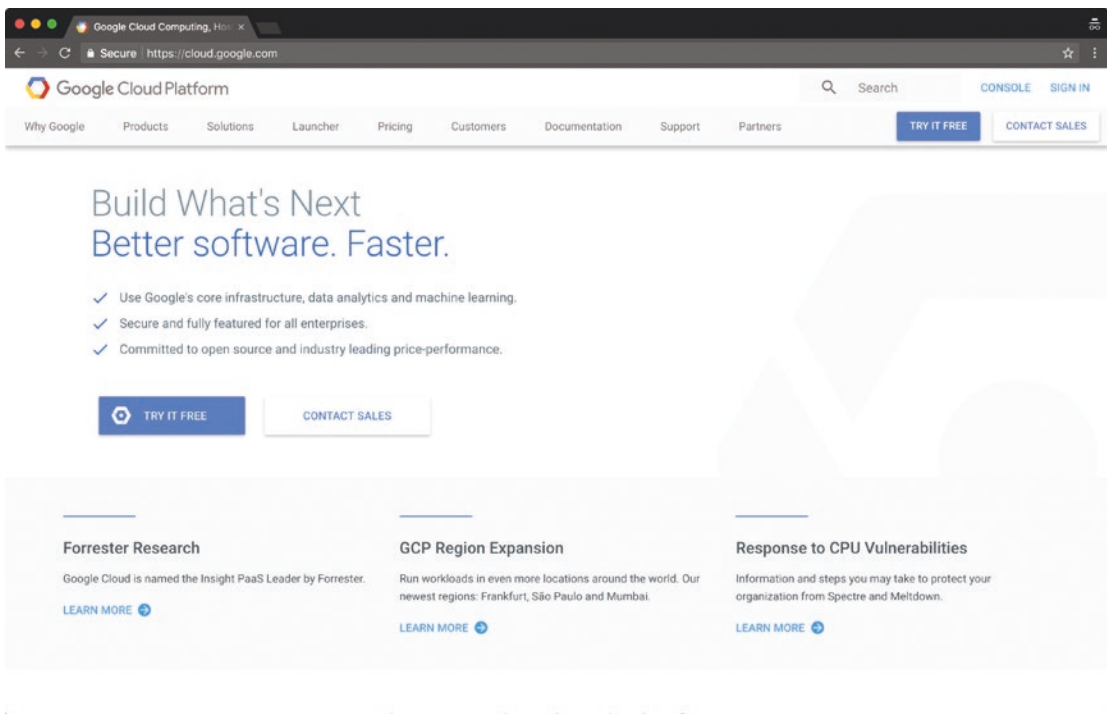


Figure 3-1. Google Cloud Platform login page

2. Fill in the necessary identity, address, and credit card details.
3. Wait a moment while an account is created on the platform (see Figure 3-2).