

[Ruby_ \(https://cloud.google.com/ruby/\)](https://cloud.google.com/ruby/) [Guides](#)

Quickstart for Ruby in the App Engine flexible environment

This quickstart shows you how to create a small App Engine app that displays a short message.

Before you begin

Before running and deploying this quickstart, install the Cloud SDK and then set up a Google Cloud project for App Engine:

1. Download and install Cloud SDK:

[DOWNLOAD THE SDK \(HTTPS://CLOUD.GOOGLE.COM/SDK/DOCS/\)](https://cloud.google.com/sdk/docs/)

Note: If you already have the Cloud SDK installed, update it by running the following command:

```
gcloud components update
```



2. Create a new project:

```
gcloud projects create [YOUR_PROJECT_ID] --set-as-default
```



Verify the project was created:

```
gcloud projects describe [YOUR_PROJECT_ID]
```



You see project details that might look like the following:

```
createTime: year-month-hour
lifecycleState: ACTIVE
name: project-name
parent:
id: '433637338589'
type: organization
projectId: project-name-id
projectNumber: 499227785679
```



3. Initialize your App Engine app with your project and choose its region:

```
gcloud app create --project=[YOUR_PROJECT_ID]
```



When prompted, select the region ([#before-you-begin](#)) where you want your App Engine application located.

! **Caution:** You cannot change an app's region once it has been set.

4. Make sure billing is enabled for your project. A billing account needs to be linked to your project in order for the application to be deployed to App Engine.

ENABLE BILLING ([HTTPS://CONSOLE.CLOUD.GOOGLE.COM/PROJECTSELECTOR/BILLING?LANG=R](https://console.cloud.google.com/projectselector/billing?lang=R))

Your flexible environment deployment will incur costs while it is active. Clean up your project ([#clean-up](#)) when you are finished to avoid ongoing costs.

5. Install the following prerequisites:

- [Download and install Git](https://git-scm.com/) (<https://git-scm.com/>).

This quickstart demonstrates a simple Ruby app written with the [Sinatra](http://www.sinatrarb.com/) (<http://www.sinatrarb.com/>) web framework that you can deploy to App Engine. Although this sample uses Sinatra, you can use other frameworks such as [Ruby on Rails](http://rubyonrails.org/) (<http://rubyonrails.org/>).

Download the Hello World app

We've created a simple Hello World app for Ruby so you can quickly get a feel for deploying an app to the Google Cloud.

1. Clone the Hello World sample app repository to your local machine.

```
git clone https://github.com/GoogleCloudPlatform/ruby-docs-samples
```



Alternatively, you can [download the sample](https://github.com/GoogleCloudPlatform/ruby-docs-samples/archive/master.zip)

(<https://github.com/GoogleCloudPlatform/ruby-docs-samples/archive/master.zip>) as a zip file and extract it.

2. Change to the directory that contains the sample code.

```
cd ruby-docs-samples/appengine/hello_world
```



Run Hello World on your local machine

This example uses [Bundler](https://bundler.io/) (<https://bundler.io/>) to run the Hello World app on your local computer:

1. If you don't already have the Ruby programming language installed, download and install Ruby.

[DOWNLOAD AND INSTALL RUBY](https://www.ruby-lang.org/en/downloads/) ([HTTPS://WWW.RUBY-LANG.ORG/EN/DOWNLOADS/](https://www.ruby-lang.org/en/downloads/))

2. Install [Bundler](https://bundler.io/) (<https://bundler.io/>):

```
gem install bundler
```



3. Install dependencies for this project:

```
bundle install
```



4. Start a local web server.

```
bundle exec ruby app.rb -p 8080
```



5. In your web browser, enter:

<http://localhost:8080> (<http://localhost:8080>)

The **Hello World** message from the sample app displays on the page. In your terminal window, press **Ctrl+C** to exit the web server.

Deploy and run Hello World on App Engine

To deploy your app to the App Engine flexible environment:

1. Deploy the Hello World app by running the following command from the `hello_world` directory:

```
gcloud app deploy
```



Learn about the [optional flags](#) (`#deploy_and_run_hello_world_on_app_engine`).

2. Launch your browser to view the app at `http://YOUR_PROJECT_ID.appspot.com`

```
gcloud app browse
```



where `YOUR_PROJECT_ID` represents your Google Cloud project ID.

This time, the page that displays the Hello World message is delivered by a web server running on an App Engine instance.

Congratulations! You've deployed your first Ruby app to App Engine flexible environment!

See the following sections for information about cleaning up as well as links to possible next steps that you can take.

Clean up


To avoid incurring charges, you can delete your Google Cloud project to stop billing for all the resources used within that project.

! **Caution:** Deleting a project has the following effects:

- **Everything in the project is deleted.** If you used an existing project for this tutorial, when you delete it, you also delete any other work you've done in the project.
- **Custom project IDs are lost.** When you created this project, you might have created a custom project ID that you want to use in the future. To preserve the URLs that use the project ID, such as an `appspot.com` URL, delete selected resources inside the project instead of deleting the whole project.

1. In the Cloud Console, go to the **Manage resources** page.

[GO TO THE MANAGE RESOURCES PAGE \(HTTPS://CONSOLE.CLOUD.GOOGLE.COM/IAM-ADMIN/PROJ](https://console.cloud.google.com/iam-admin/projects)

2. In the project list, select the project you want to delete and click **Delete** .

3. In the dialog, type the project ID, and then click **Shut down** to delete the project.

What's next

Now that you've completed Hello World, you can start exploring your next sample app: the Bookshelf app. The Bookshelf app is a more complete Ruby web app that uses multiple Google Cloud features, such as data storage, authentication, logging, pub/sub, and more.

[START THE BOOKSHELF APP TUTORIAL \(HTTPS://CLOUD.GOOGLE.COM/RUBY/GETTING-STARTED/TUTOR](https://cloud.google.com/ruby/getting-started/tutorial)

For more information about the App Engine flexible environment, see [App Engine flexible environment](https://cloud.google.com/appengine/docs/flexible) (<https://cloud.google.com/appengine/docs/flexible>).

Hello World code review

Hello World is the simplest possible App Engine app, as it contains only one service, has only one version, and all of the code is located within the app's root directory. This section describes each of the app files in detail.

app.rb

The Hello World app is a basic one-file Sinatra app:

```
appengine/hello_world/app.rb  
(https://github.com/GoogleCloudPlatform/ruby-docs-  
samples/blob/master/appengine/hello_world/app.rb)
```

```
GOOGLECLOUDPLATFORM/RUBY-DOCS-SAMPLES/BLOB/MASTER/APPENGINE/HELLO_WORLD/APP.RB)
```

```
require "sinatra"
```

```
get "/" do
```

```
"Hello world!"  
end
```

app.yaml

The `app.yaml`

(<https://cloud.google.com/appengine/docs/flexible/ruby/configuring-your-app-with-app-yaml>) file describes an app's deployment configuration:

```
appengine/hello\_world/app.yaml
```

```
(https://github.com/GoogleCloudPlatform/ruby-docs-samples/blob/master/appengine/hello\_world/app.yaml)
```

```
OGLECLOUDPLATFORM/RUBY-DOCS-SAMPLES/BLOB/MASTER/APPENGINE/HELLO_WORLD/APP.YAML)
```

```
runtime: ruby  
env: flex  
entrypoint: bundle exec ruby app.rb
```



```
# This sample incurs costs to run on the App Engine flexible environment.  
# The settings below are to reduce costs during testing and are not appropriate  
# for production use. For more information, see:  
# https://cloud.google.com/appengine/docs/flexible/ruby/configuring-your-app-with-app-engine-manual-scaling:  
  manual_scaling:  
    instances: 1  
resources:  
  cpu: 1  
  memory_gb: 0.5  
  disk_size_gb: 10
```

Here, `app.yaml` specifies the runtime used by the app, and sets `env: flex`, specifying that the app uses the [flexible environment](https://cloud.google.com/appengine/docs/flexible/) (<https://cloud.google.com/appengine/docs/flexible/>).

- For more information on how the Ruby runtime works, see [The Ruby runtime](https://cloud.google.com/appengine/docs/flexible/ruby/runtime) (<https://cloud.google.com/appengine/docs/flexible/ruby/runtime>).
- For more details about how to design your app to take advantage of versions and services, see [An overview of App Engine](https://cloud.google.com/appengine/docs/flexible/ruby/an-overview-of-app-engine) (<https://cloud.google.com/appengine/docs/flexible/ruby/an-overview-of-app-engine>).
- For more details about the configuration settings for App Engine, see [Configuring your app with app.yaml](https://cloud.google.com/appengine/docs/flexible/ruby/configuring-your-app-with-app-yaml) (<https://cloud.google.com/appengine/docs/flexible/ruby/configuring-your-app-with-app-yaml>).

Gemfile

Gemfile (<http://bundler.io/v1.5/gemfile.html>) is used to specify the app's **RubyGem** (<https://rubygems.org/>) dependencies, and **Bundler** (<http://bundler.io/>) is used to declare and install dependencies. The Hello World app requires one Ruby gem: the **Sinatra** (<http://www.sinatrarb.com/>) web framework:

```
appengine/hello_world/Gemfile
```

```
(https://github.com/GoogleCloudPlatform/ruby-docs-samples/blob/master/appengine/hello_world/Gemfile)
```

```
GOOGLECLOUDPLATFORM/RUBY-DOCS-SAMPLES/BLOB/MASTER/APPENGINE/HELLO_WORLD/GEMFILE)
```

```
source "https://rubygems.org"
```

```
gem "sinatra"
```



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