# Firebase CLI Deploy Firebase apps

**START HERE**

`firebase login`
Sign in

`firebase init`
Set up this folder

`firebase use <project>`
Pick a project

`firebase emulators:start`
Run locally

`firebase deploy`
Ship everything

`firebase deploy --only hosting`
Ship one service

`firebase functions:log`
Read logs

`firebase projects:list`
List projects

**firebase init** firebase.json → `emulators:start` → **Emulators** local test → `deploy` → **Project** live services

## CONCEPTS

firebase.json says what to deploy; .firebaserc says which project (and aliases) to deploy to.

Emulators need no login or billing: develop against them first, deploy once it works.

## ACCOUNT & PROJECTS

`firebase login`
Sign in via browser

`firebase login --no-localhost`
Sign in on a remote machine
*Prints a URL; paste the returned code back.*

`firebase logout`
Sign out

`firebase projects:list`
List your projects

`firebase use <project>`
Set the active project

`firebase use --add`
Add a project alias
*Aliases land in .firebaserc, e.g. staging and prod.*

`firebase use <alias>`
Switch to an alias

`firebase --project <id> <command>`
Override project for one run

## ACCOUNT & PROJECTS (cont.)

`firebase login:list`
List signed-in accounts

`firebase open <resource>`
Open a console page

## SETUP

`npm install -g firebase-tools`
Install the CLI

`firebase init`
Configure services here
*Interactive: pick Hosting, Functions, Firestore, Emulators.*

`firebase init hosting`
Set up one service

`firebase apps:list`
List registered apps

`firebase apps:sdkconfig <platform> <app-id>`
Print an app's SDK config

## DEPLOY

`firebase deploy`
Deploy all configured services

`firebase deploy --only hosting`
Deploy Hosting only

`firebase deploy --only functions`
Deploy all functions

## DEPLOY (cont.)

`firebase deploy --only functions:<name>`
Deploy one function

`firebase deploy --only firestore:rules`
Deploy Firestore rules

`firebase deploy --only firestore:indexes`
Deploy Firestore indexes

`firebase deploy --except functions`
Deploy all but one service

## HOSTING

`firebase hosting:channel:deploy <channel>`
Deploy to a preview channel
*Gives a temporary URL; add --expires 7d to set its lifetime.*

`firebase hosting:channel:list`
List preview channels

`firebase hosting:channel:delete <channel>`
Delete a preview channel

`firebase hosting:clone <src>:<ch> <dst>:live`
Promote a version to live

`firebase serve --only hosting`
Serve Hosting locally

## FUNCTIONS

`firebase functions:log`
Show function logs

`firebase functions:log --only <name>`
Logs of one function

`firebase functions:list`
List deployed functions

`firebase functions:delete <name>`
Delete a function

`firebase functions:secrets:set <KEY>`
Create or update a secret

`firebase functions:secrets:access <KEY>`
Read a secret value

`firebase functions:shell`
Invoke functions locally

## EMULATORS & FIRESTORE

`firebase emulators:start`
Start all emulators

`firebase emulators:start --only <list>`
Start chosen emulators
*Comma-separated, e.g. firestore,auth.*

`firebase emulators:start --import <dir>`
Load saved emulator data

## EMULATORS & FIRESTORE (cont.)

`firebase emulators:start --export-on-exit <dir>`
Save data on shutdown

`firebase emulators:exec "<cmd>"`
Run tests against emulators
*Starts them, runs the command, shuts them down.*

`firebase setup:emulators:firestore`
Download Firestore emulator

`firebase firestore:indexes`
List deployed indexes

`firebase firestore:delete <path> -r`
Delete a document tree
*Permanent; add --force to skip the prompt.*

`firebase firestore:delete --all-collections`
Wipe the database
*Destroys all data in the project.*

`firebase database:get <path>`
Read Realtime Database data

## CI & CONFIG

`firebase --token <token> <command>`
Authenticate in CI
*Deprecated; prefer a service account.*

## CI & CONFIG (cont.)

`firebase login:ci`
Create a CI token

`firebase --debug <command>`
Verbose output

`firebase --non-interactive <command>`
Fail instead of prompting

`firebase --json <command>`
Machine-readable output

`firebase help <command>`
Help for a command

## RECIPES

**First deploy**

```
firebase login
firebase init
firebase emulators:start
firebase deploy
```

**Staging and prod aliases**

```
firebase use --add   # pick
project, alias staging
firebase use staging
firebase deploy --only hosting
firebase use prod
```

**Preview before going live**

```
firebase hosting:channel:deploy
pr-42 --expires 3d
# share URL, then:
firebase deploy --only hosting
```

**Test with emulators in CI**

```
firebase emulators:exec --only
firestore \
  "npm test"
```