

# Final Deployment & Testing Guide

Now that you have your `firebaseConfig` keys, follow these steps to go live.

## 0. Prepare Dependencies (Critical Fix)

Before building the image, you must ensure all libraries are recorded in your `package.json`. Run this command in your local terminal:

```
npm install firebase lucide-react recharts
```

**Troubleshooting "EACCES" Permission Errors:** If you see a permission error when running the command above, run this fix to repair your npm cache ownership:

```
sudo chown -R $(whoami) ~/.npm
```

*After running the fix, try the `npm install` command again.*

Verify that these appear under "dependencies" in your `package.json` file. If they aren't there, the cloud build will fail.

## 1. Prepare Your Code

Ensure your `hiking_dashboard.jsx` file has the actual keys you copied from the Firebase Console:

```
const firebaseConfig = {
  apiKey: "AIza...",
  authDomain: "rvijgdrive-152618.firebaseio.com",
  projectId: "rvijgdrive-152618",
  // ... and so on
};
```

## 2. Deploy to Cloud Run

### Step 1: Build the Image in the Cloud

Run this command from your project folder to build your container:

```
gcloud builds submit --tag gcr.io/rvijgdrive-152618/hiking-dashboard
```

## Step 2: Deploy to Cloud Run

Deploy the service. We use `--allow-unauthenticated` so the browser can load the login page.

```
gcloud run deploy hiking-dashboard \
  --image gcr.io/rvijgdrive-152618/hiking-dashboard \
  --platform managed \
  --region us-central1 \
  --allow-unauthenticated
```

*When finished, copy the Service URL provided in the terminal.*

## 3. Final Google Auth Configuration

For the "Sign in" button to work on the live URL, you must tell Google that your new Cloud Run URL is a "trusted" source.

1. Go to the [GCP Credentials Console](#).
2. Find the OAuth 2.0 Client IDs section and click on the Web client created by Firebase.
3. Add your Service URL to Authorized JavaScript origins.
  - Example: `https://hiking-dashboard-xyz.a.run.app`
4. Add your Service URL + `/__auth/handler` to Authorized redirect URLs.
  - Example: `https://hiking-dashboard-xyz.a.run.app/__auth/handler`
5. Click Save.

## 4. How to Test

1. Open the Service URL: You should see the dark "Challenger Dashboard" login screen.
2. Login with an Unlisted Email: Use an email that isn't yours or `mv11015@husd.k12.ca.us`. You should see the red Access Denied screen.
3. Login as Authorized User: Sign in with your account or have your user sign in. The dashboard should load the data from Google Sheets immediately.

## Troubleshooting

- **Vite Rollup Error (firebase/app):** This means you skipped Step 0. Run `npm install firebase` locally and then run `gcloud builds submit` again.

- **Sign-in Popup closes immediately:** This is usually caused by missing "Authorized Domains" in the Firebase Console (Auth > Settings) or the GCP Credentials page (Origins).
- **403 Forbidden:** Ensure you used `--allow-unauthenticated` during the `gcloud run deploy` step.