

Transferring ownership of a connected application like yours (Firebase for Auth, Google Apps Script as API, Google Sheet as DB) requires careful steps across three different platforms.

The most critical step is re-deploying the Google Apps Script, as the old web app URL is tied to your original account and will break when you leave.

Here are the things you need to change, broken down by component:

---

## 1. Firebase Project Ownership

Firebase project ownership is managed through **Google Cloud IAM (Identity and Access Management)**, as Firebase is part of Google Cloud.

### 1. Add New Owner:

- Go to your **Firebase Console** and select your project.
- Click the **Settings** gear icon (⚙️) next to "Project Overview."
- Select **"Users and permissions"** (or **Permissions**).
- Click **"Add member"** (or use the **Advanced permission settings** link to go to Google Cloud IAM).

### 2. Assign Role:

- Enter the new owner's **Google Account email address**.
- Assign the role **owner**. This grants them full control, including the ability to manage billing and remove you later.

### 3. Acceptance & Removal:

- The new owner will receive an email and must **accept the invitation**.
  - Once the new owner has accepted and confirmed they have the **Owner** role, you can go back to the Permissions page and **remove yourself** from the project.
- 

## 2. Google Sheet (Data Source) Ownership

Transferring the Google Sheet is straightforward, but requires the new owner to confirm the transfer.

### 1. Share the File:

- Open the **Petty Cash Google Sheet** (the "transaction sheet").
- Click the **Share** button in the top right.
- Add the new owner's email address and ensure their access level is set to **Editor**.

### 2. Transfer Ownership:

- Click the **Share** button again.
- Next to the new owner's name, click the dropdown menu and select **Transfer ownership**.
- Click **Send invitation**.

### 3. New Owner Acceptance:

- The new owner must check their email or open Google Drive. They will see a prompt to **Accept** the ownership transfer.
  - Once they accept, they become the file owner, and your role automatically changes to **Editor**.
- 

## 3. Google Apps Script (Web App API) Ownership

This is the most crucial part, as the App Script is the bridge between your front-end and the Google Sheet, and the public URL you were using is tied to **your original deployment**.

**You CANNOT transfer ownership of an active deployment URL.** The new owner must create a new one.

### Action Steps (By Old Owner)

1. Transfer ownership of the **Apps Script file** itself (the same process as the Google Sheet, see section 2). If your script is "**bound**" to the Google Sheet (meaning you access it via **Extensions > Apps Script** in the sheet), transferring the sheet ownership (Step 2) transfers the script file ownership automatically.

### Action Steps (By New Owner)

2. **Open the Script and Re-Authorize:**
  - The new owner opens the script.
  - They must run any function (e.g., a simple test function) to trigger the **permissions review/authorization process**. This links the script execution to **their Google account**.
3. **Create New Deployment:**
  - In the Apps Script editor, click **Deploy > New deployment**.
  - Ensure the **Type** is **Web App**.
  - Under "**Execute as**", verify it's set to **Me** (which is now the new owner).
  - Click **Deploy**.
4. **Copy New URL:**
  - A new URL, looking like `https://script.google.com/macros/s/AKfych.../exec`, will be generated. **Copy this new URL.**

### Final Code Change (In your `PT AUTH GOOGLE V4.html` file)

5. The new owner must replace the old script URL in your front-end code with the one they just generated.

Look for the function where you call the script (likely `callGoogleScript` or `loadTransactions` in your code) and update the hard-coded URL:

Old Code (Example)	New Code (Must Change)
<pre>const SCRIPT_URL = 'https://script.google.com/macros/s/AKfycbwyjzdy qpJAcmi7owoTdazJOUzwdIcebx2necNZq10FAZosOUp7cgG0 BCc03GqPR3Ds/exec';</pre>	<pre>const SCRIPT_URL = 'https://script.google.c om/macros/s/[NEW_OWNER_U RL]/exec';</pre>

This change is essential to prevent the **401 (Unauthorized)** error from returning.

---

The video below demonstrates how to initiate the ownership transfer for the Google Sheet component of your application.

[How To Transfer Ownership in Google Sheets | change file owner](#)