Google QR SMS Helper (`google-qr-sms-helper`)

Manifest V3 | Version 1.1.0 | License MIT | Platform: Chrome | Edge | Brave

One-click downgrade of Google's mandatory desktop cross-device QR verification (MO-SMS / GMS Constellation) back to the traditional "enter phone number to receive a 6-digit SMS verification code" flow.

Switch Google's mandatory cross-device QR verification back to standard 6-digit SMS / Voice verification on desktop browsers.

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1. Installation

Method 1: Download the Release Archive Directly (Recommended for Beginners)

1. Go to the **Releases page** of this repository, download the latest `google-qr-sms-helper-v1.1.0.zip`, and extract it to a local folder.
2. Open Chrome / Edge / Brave, type `chrome://extensions/` in the address bar, and press Enter.
3. Turn on the **Developer mode** toggle in the top-right corner of the page.
4. Click **Load unpacked** in the top-left corner and select the extracted folder to complete the installation.

Method 2: Install via Git Clone

```
git clone https://github.com/havenicec/google-qr-sms-helper.git
```

Then enable **Developer mode** in `chrome://extensions/`, click **Load unpacked**, and select the `google-qr-sms-helper` directory.

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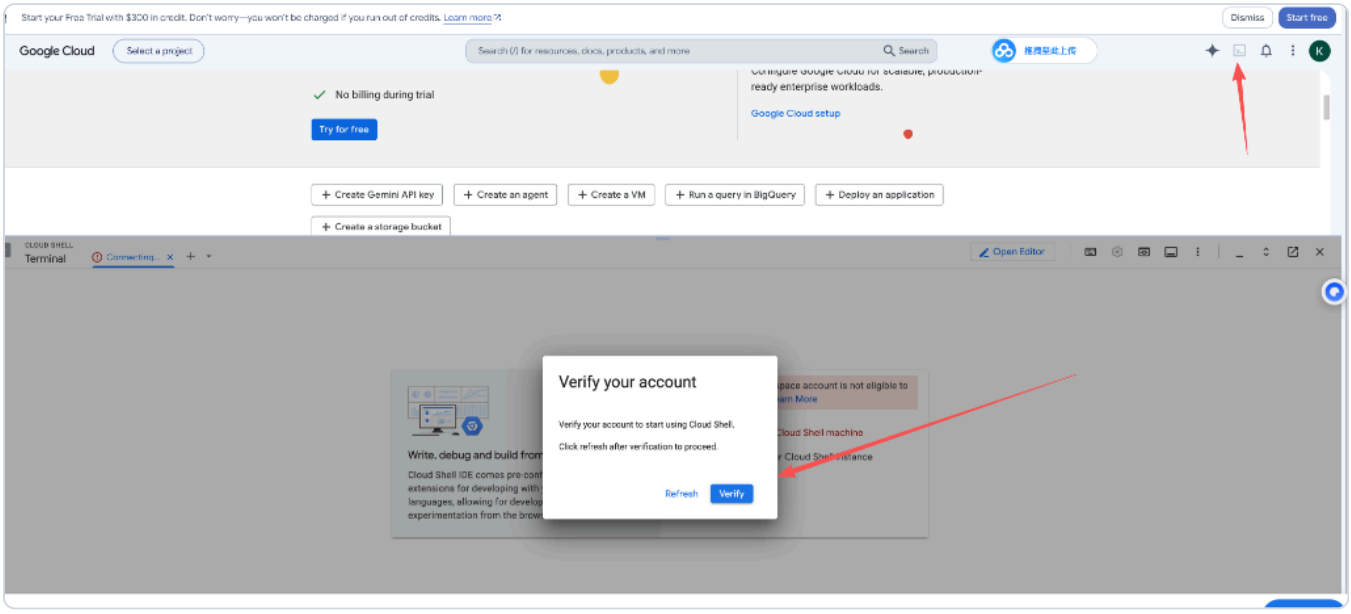
2. Step-by-Step Usage Guide

> **IMPORTANT — Core Prerequisite (Must Read)**
>
> **Do NOT** attempt to downgrade directly from a QR code page popped up by a third-party client (such as the Antigravity / Gemini Code Assist authorization page), because its `continue` parameter contains multi-layer nested redirects and Google will intercept it and send you back to the QR code.
>
> **You must first open Google Cloud Console and trigger the native `Verify` window via Cloud Shell!** Once you complete SMS verification there once, your Google account's verification status will be unlocked globally, and you can return to tools like Antigravity to sign in smoothly.

Step 1: Open Google Cloud Console and Trigger Cloud Shell Verification

1. Sign in to the Google account you need to verify in your browser, and visit **https://console.cloud.google.com/**.

2. As shown below, click the **"Activate Cloud Shell" terminal icon** `[>_]` in the top-right navigation bar (or directly click the `1. Auto-click Cloud Shell terminal icon` button in the extension's floating panel at the bottom-right of the page).
3. In the `Verify your account` window that pops up at the bottom, click the blue `Verify` button:



Step 2: Click "One-Click Downgrade to SMS Selection" on the QR Code Page

1. After clicking `Verify`, Google's QR code verification page (`/v3/signin/challenge/iap/qrcode`) will appear.
2. Wait for the QR code image to finish loading, then click the **"One-Click Downgrade to SMS Selection"** button on the extension's floating panel in the bottom-right corner:
   - The extension automatically uses the browser's native `BarcodeDetector` to recognize the QR code on the page;
   - Automatically sends `MypxBd` and `YDtwf ([null, uuid, dsh, 7, null, tl, false])` packets to Google in the background to obtain `[3, null, 4]` (non-Android device SMS verification fallback state);
   - Automatically spoofs the current tab's request headers and environment as an `iPad Mini` (no need to press F12 to switch devices manually), and redirects to `uplevelingstep/selection?...&idv_xdevice=1`.

Step 3: Select "Text message (SMS)" and Enter Your Phone Number

1. The page will automatically redirect to the **verification method selection page** (`/uplevelingstep/selection`) with radio buttons:
   - Select **Text message (SMS)** (or voice call) and click Next.
2. Enter your phone number for receiving the code (supports SMS reception platform numbers or physical SIM numbers from any country/region), and click Send.
3. Once you receive the 6-digit `G-xxxxxx` verification code, enter it and click **Next** to complete account verification!
4. After verification succeeds, return to Cloud Shell or Antigravity / Gemini CLI and refresh to use it normally.

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3. FAQ & Troubleshooting

Q1: Why did clicking downgrade redirect me back to the QR code when I entered the QR page from another link?

- **Cause**: Only the QR code page triggered from `https://console.cloud.google.com/` via **Cloud Shell** `[>_]` **->** `Verify` in the top-right corner has a clean `continue` parameter: `https://accounts.google.com/uplevelingstep/selection?TL=...&authuser=0&flowName=GlifWebSignIn&sarp=1&scc=1`. Be sure to follow **Step 1** and enter via Cloud Shell.

Q2: Why does the extension spoof `iPad Mini` by default instead of `iPad Pro` or a desktop browser?

- **Cause**: Google's `uplevelingstep/selection` endpoint validates the `User-Agent`:
  - Desktop browsers (Windows / macOS) as well as `iPad Pro 13` in Chrome DevTools (F12) send a desktop-class `Macintosh; Intel Mac OS X` UA. When Google detects a desktop environment, it ignores `idv_xdevice=1` and forces a redirect back to the QR code.
  - In contrast, `iPad Mini` sends a pure mobile `iPad; CPU OS 16_6 like Mac OS X ... Mobile/15E148` request header, and the `iPad Mini` headers must remain completely consistent when submitting the 6-digit code to the `/_/IdvUplevelingUi/data/batchexecute` endpoint (handled automatically across all paths via `declarativeNetRequest` in v1.1.0, without manually opening F12).

Q3: What if clicking "One-Click Downgrade" shows "Failed to detect a QR code on the current page"?

- Please make sure you are using **Chrome / Edge 88+** (which supports the native `BarcodeDetector` API), and wait until the black QR code pattern on the page is fully visible before clicking the button.

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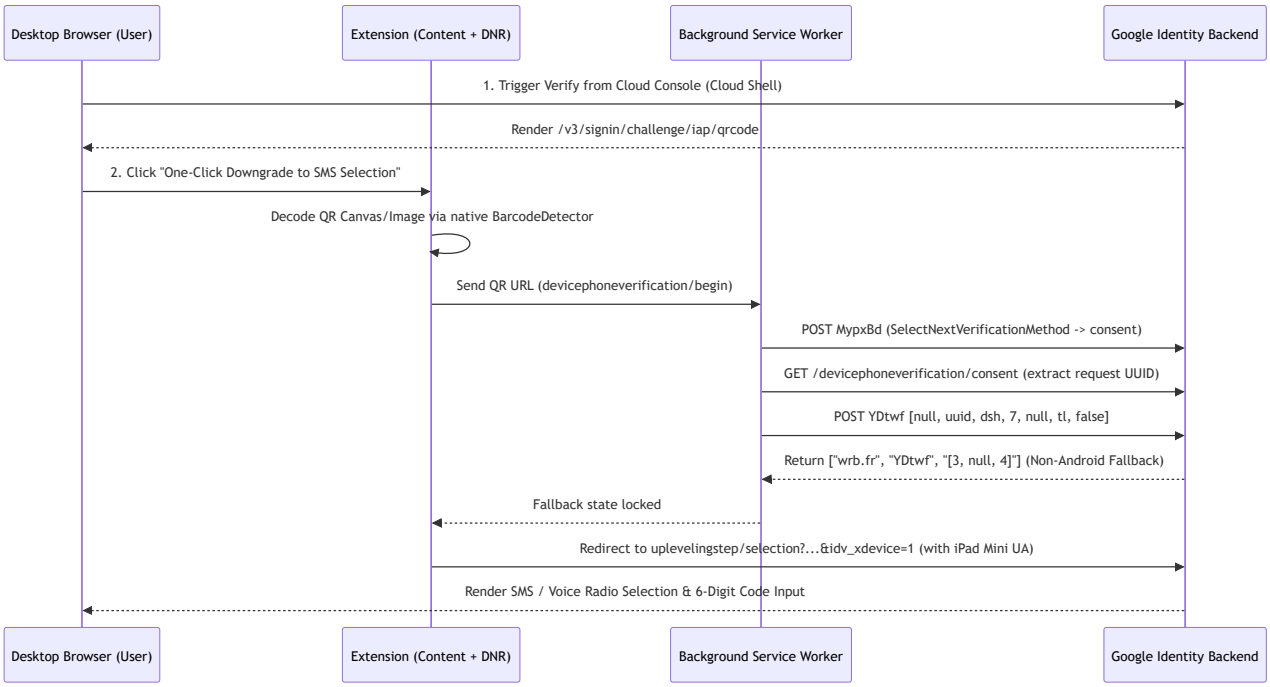
4. Architecture & Workflow



5. Project Structure

```
google-qr-sms-helper/
├── assets/
│   └── cloud-shell-verify.png  # Cloud Shell Verify entry illustration
├── manifest.json               # Chrome Extension Manifest V3 configuration
├── background.js               # DNR full-path iPad Mini header spoofing + [3,null,4] RPC injection
├── content.js                  # Floating control panel + BarcodeDetector QR decoding + URL cleanup
redirect
├── ua_spoof.js                 # Main-world navigator property alignment
├── LICENSE                     # MIT Open Source License
└── README.md                   # Project documentation and illustrated guide
```

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Source repository: https://github.com/havenicec/google-qr-sms-helper