On-the-Go AppSuite Documentation

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Section 1: How it Works

How the On-the-Go AppSuite Works

This system is a simple and cost-effective safety net built using web technologies. It's made of two apps and a smart Google Sheet that ties them together.

1. **The Worker App (PWA):** This is the app for your worker's smartphone. When they're about to start a visit, they open the app, pick a location, and set a timer (e.g., 45 minutes). This action sends their details and location to the backend. The app also handles in-app safety features like the Panic Button, Check-ins, and Duress PIN.

- **Simple Mode:** When the worker is safe, they tap "Depart," and the timer is cleared.
- **Advanced Mode:** When the worker is safe, they tap "Depart & File Report." A checklist appears (unless "No Report Required" is set for that location). It also features a "Quick Stat" button for non-safety-related data entry.

2. **The Google Apps Script Backend (The Brain):** This is a Google Sheet with a script attached. When the Worker App sends an update, this script catches the data and writes it as a new row in the spreadsheet. This script also runs on an automatic 5-minute trigger. If it checks the sheet and finds a worker is overdue or has missed a check-in, it automatically sends the alert emails and SMS messages to your emergency contacts.
3. **The Monitoring Dashboard:** This dashboard is for your real-time monitor. Every 15 seconds, it securely fetches all the current data from the Google Sheet and displays it in a clean, prioritized list. This allows the monitor to see who is on-site, who is in an alert state, and where they are, all in real-time. Entries marked "DATA_ENTRY_ONLY" (from a Quick Stat) are ignored by the safety monitor.

Section 2: Deployment Administrator Guide

Welcome! This guide explains how to use the online Setup Tool to create your customized On-the-Go AppSuite and deploy them using GitHub Pages.

Goal: To generate and host your own private versions of the Worker App and Monitoring Dashboard.

Estimated Time:

- Reading: 15-20 minutes
- Set-up: 20-60 minutes. This is a one-time process.

Part 1: Use the Online Setup Tool

To access the On-the-Go AppSuite Setup Tool website, visit: **[Your Hosted `setup.html` URL]**

1. You should see the "On-the-Go AppSuite - Setup Tool".
2. Follow the steps presented in the tool (Slightly expanded below):

Step 1: Welcome

- Read the introduction. (Note... If you are reading this file, then you already have the Full Documentation and there is no need to download it again.)
- Click **"Start Setup"**.

Step 2: Sheet Setup

- **Create Sheet:** Do you already have a Google account? If not, you will need to sign up for a free Google Account first. (For best data protection it might be wise to create one specifically for this purpose.) Once you know the account that you plan to use, sign into the account and then proceed to the next step.
- Click the `sheets.new` link to open a blank Google Sheet. Give it a name (e.g., "My Team OTG Data").

- **Rename `Visits` Sheet:** The first sheet tab (default "Sheet1") will be your safety log. **Rename this tab to `Visits`.**
- **Copy Headers:** Click the **"Copy Headers"** button in the setup tool. (This button is smart: it will show 19 headers for the "Simple" app and 21 headers if you check "Advanced Reporting" in the next step).
- **Paste Headers:** In your Google Sheet, click cell **A1** and **Paste**. The headers (Date, Worker Name, ..., Battery Level) should fill row 1 automatically.
- **Protect the Header Row:** Optionally, you may like to protect the headers from accidental deletion. (Click on the row label **1** to highlight the row, then right-click and select `View more row options > Protect Range`. Enter a description, then click on `Set Permissions` and select to have it warn you.)
- **Create `Checklists` Sheet (Advanced Reporting Only):** If you plan to enable Advanced Reporting, click the `+` icon at the bottom of the sheet to add a new tab. **Rename** this new **tab to** `Checklists` (must be exact).
  - In this new `Checklists` sheet, click cell **A1** and type `Template Name`. (This is the *name* of the checklist, e.g., "Site Audit").
  - In cell **B1**, type `Question 1`. In **C1**, type `Question 2`, and so on.
  - **Add `(Standard)` Row:** In cell **A2**, you **must** type `(Standard)` (with parentheses). This is the "magic key" the system uses as the default fallback form.
  - In cells `B2`, `C2`, etc., add your questions.
  - **Syntax for Questions:**
    - **Checkbox:** `Client goals reviewed`
    - **Section Header:** `"# Section 1: Safety"` (starts with `#`)
    - **Text Note Box:** `"% Strengths Noted"` (starts with `%`)
    - **Number Box:** `"$ Kilometres Travelled"` (starts with `$`)
- Click **"Next Step"** in the setup tool.

Step 3: Configure & Deploy Script

- **Enter `Organisation Name`:** (e.g., "ACME Corp"). This will brand your apps.
- **Enter `Secret Key`:** In the setup tool, type a **strong, private password. Remember this key!** Write it down somewhere safe as it will be needed by the Monitoring Apps.
- **Enter `First Overdue Alert (Minutes)`:** (e.g., `15`).
- **Enter `Alert Escalation Time (Minutes)`:** (e.g., `5`). This is how long the system waits before alerting the *secondary* contact.
- **Choose App Type:**
  - **Simple (Default):** Leaves the box unchecked for a safety-only app.
  - **Advanced (Checkbox):** Check this box to enable all visit reporting features.
- **(Optional) `Gemini API Key`:** If you enabled Advanced Reporting, paste your API key here. (See **Section 5** of this guide for instructions).

- **Copy & Paste Script:** Click **"Copy Script"**. Go to your Google Sheet (`Extensions > Apps Script`), paste the code into `Code.gs` , and click **Save**.
- **Deploy:** Click `Deploy` > `New deployment` . Select type `Web app` , Execute as `Me` , Who has access `Anyone` . Click `Deploy` .
- **Authorize:** Allow the script access to your Google Account (click "Advanced", "Go to... (unsafe)", "Allow"). You may need to do this twice if you are enabling advanced features (for Drive and Docs permissions).
- **Copy URL:** After deployment, **copy the** `Web app URL` .
- **Set Trigger:** In Apps Script, click **"Triggers"** (alarm clock icon), click `Add Trigger` , set it to run `checkOverdueWorkers` on a `Time-driven` trigger, `Minutes timer` , `Every 5 minutes` . Click `Save` .
- **IMPORTANT - How to Update Your Script:** If you ever need to edit the `Code.gs` file later, you **must re-deploy** it. Click `Deploy` > `Manage deployments` , click the **pencil (Edit)** icon, select **"New version"** from the "Version" dropdown, and click `Deploy` .
- Click **"Next Step"** in the setup tool.

Step 4: Configure Apps

- **Web App URL:** Paste the `Web app URL` you just copied.
- **Configure:** Set the Check-in options and optional Logo URL.
- **Test:** Click **"Test Connection & Proceed"**.

Step 5: Download

- Click the **"Generate & Download App Package (.zip)"** button.
- Save the `OTG_AppSuite_Package.zip` file.

Step 6: Finish

- You are now ready to host your apps.

Part 2: Host Your Generated Apps using GitHub Pages

(This section is unchanged. Follow the steps to create a new "Public" repository, upload your `WorkerApp` and `MonitorApp` folders, and enable GitHub Pages).

Part 3: Distribute to Your Team

For Your Safety Monitor:

- Send them the **Monitoring App URL**.
- **IMPORTANT:** On their first visit, they must enter the `Web` app URL (from Step 3) and the `Secret Key` (from Step 3). This is a one-time setup.

For Your Workers:

- Send them the **Worker App URL**.
- **Instruct them to:**

1. Open the link on their smartphone.
2. Use their browser's menu to **"Add to Home Screen"** or **"Install app"**.
3. Open the app from their new home screen icon.
4. Go to **Settings** (gear icon) and fill in **all fields** (Name, Phone, Contacts, PINs). The URL is pre-filled.
5. (If using Advanced Reporting) Go to the **Main Screen** and add their visit locations, assigning the correct `Report As: (Company Name)` and `Use Template:` name.
6. Tap **"Save Settings"**.

Setup Complete! Your system is operational.

Section 3: (Optional) Create an Installer for the Monitoring App

(This section is unchanged. It describes using `Nativefier` to create a desktop app and set it to run on startup).

Section 4: (Optional) Spreadsheet Administrator Guide

This guide is for the person managing the Google Sheet database *after* deployment. This role involves setting up report templates, running monthly reports, and basic data maintenance.

4.1 How to Set Up Monthly Reports (Spreadsheet Tabs)

This function generates a separate, clean spreadsheet *tab* for each company's monthly data.

1. **Manually Create Tabs:** In your Google Sheet, create a new tab named `Master Report`.
2. **Go to the `Master Report` tab.**
3. In cell **B1**, type the month you want to report on (e.g., `2025-10`).
4. **Create a Button (One-time setup):**
   - Go to `Insert > Drawing`.
   - Create a button shape and type "Generate Spreadsheet Reports" on it.
   - Click **"Save and Close"**.
   - Drag the button where you want it. Click it once, click the **three-dot menu** in its corner, and select **"Assign script"**.
   - In the box, type: `generateMasterMonthlyReport`
   - Click **OK**.
5. **Run the Report:** Click the button. The script will run and create new tabs (e.g., `Report - Smith & Co.`) with all the data for that month, including a new "Numeric Totals" section.

4.2 How to Set Up PDF Reports (Google Doc Mail Merge)

This function generates professional, multi-page **PDFs** for each company and saves them to a Google Drive folder.

1. **Create your Google Doc Templates:**
   - Create one or more Google Docs to act as your templates.

- Design them with your logo, text, and placeholder "tags" like `{{CompanyName}}`, `{{TotalVisits}}`, `{{TotalHours}}`, `{{ChecklistTable}}`, `{{NumericTotalsTable}}`, and `{{NotesTable}}`.
- For each template, open it and copy its **ID** from the URL (the long string between `/d/` and `/edit`).

2. **Create your Output Folder:**
   - In Google Drive, create a folder (e.g., "Monthly Reports - Generated").
   - Open the folder and copy its **ID** from the URL (the string after `/folders/`).
3. **Configure** the **Script:**
   - Go to `Extensions` > `Apps Script`.
   - At the top of the `Code.gs` file, paste your IDs into these lines:
     - `var DEFAULT_REPORT_TEMPLATE_ID = "YOUR_DEFAULT_TEMPLATE_ID_HERE";`
     - `var PDF_OUTPUT_FOLDER_ID = "YOUR_OUTPUT_FOLDER_ID_HERE";`
   - Save and **Re-deploy** (`Deploy` > `Manage deployments` > `Edit` > `New version`).
4. **Link Templates to Companies:**
   - Go to your `Checklists` sheet.
   - Find an empty column (e.g., `G1`) and type the header: `Report Template ID`
   - In that column, paste the Google Doc Template ID for each company. **You must add one for the `(Standard)` row.** This is the fallback template.
5. **Create** the **Button:**
   - Go to the `Master Report` tab.
   - Insert a new drawing (button) and label it "Generate All PDF Reports".
   - Assign it the script name: `generateAllPdfReports`
6. **Run the Report:** Click the button. The script will create all the PDFs in your Google Drive folder.

4.3 Setting up Longitudinal (Year-over-Year) Reports

This feature appends monthly totals to a separate, dedicated spreadsheet for each company, allowing you to build graphs that track trends over time.

A) One-Time Setup per Company:

1. Go to your `Checklists` sheet.
2. Find an empty column (e.g., `H1`) and type the header: `Longitudinal` Report `Sheet ID`
3. Go to `Extensions` > `Apps Script`.
4. From the function dropdown at the top, select `createLongitudinalWorkbook`.
5. Click `Run`.
6. A prompt will appear. Enter the *exact* `Company Name` (e.g., `Smith & Co.`) and click OK.
7. The script will create a new Google Sheet file ("Longitudinal Report - Smith & Co."), create all the correct headers (including your new `$` numeric fields), and **automatically paste the new Sheet's ID** into the `Longitudinal` Report Sheet ID column for you.

8. Repeat this process for every company you want to track.

B) Running the Monthly Append:

1. Go to the `Master Report` tab.
2. Insert a new drawing (button) and label it "Append Longitudinal Data".
3. Assign it the script name: `runAllLongitudinalReports`
4. Click **OK**.
5. Now, when you have a month in cell `B1` and click this button, the script will open every linked workbook and append that month's summary as a new row.

4.4 Database Maintenance (Trimming the `Visits` Sheet)

Your `Visits` sheet will grow over time. To keep the sheet fast and responsive, you should periodically archive old data.

Warning: This action is permanent. Always make a backup first (`File > Make a copy`).

1. Go to the `Visits` sheet.
2. Click the filter icon on **Column A (`Date`)** and sort it A→Z (oldest to newest).
3. Select the rows you want to archive. **CRITICAL: Do NOT delete Row 1 (the headers).**
4. **Right-click** on the highlighted row numbers.
5. Select `Delete rows [2 - XX]` .

Section 5: (Optional) How to Get a Gemini API Key

(This section is unchanged.)

Section 6: Worker App User Guide

1. Introduction

Welcome! This guide explains how to install, set up, and use the On-the-Go AppSuite.

The purpose of this app is to provide an extra layer of safety when you are working alone. If your organization has enabled "Advanced Reporting," it also helps you file your visit reports.

2. Installation (Adding the App to Your Phone)

(This section is unchanged.)

3. First-Time Setup (Crucial)

(This section is unchanged.)

4. Managing Your Locations

Before your first visit, you can save the locations you visit frequently.

- To Add a Location:
    1. On the main screen, tap the **"Add New Location"** button.
    2. Enter a **Location Name** (e.g., "Smith Residence", "Office Carpark").

3. Enter the **Location Address.** (You can tap "Use Current Location" if you are there).
4. **(Advanced Reporting Only) Set Report Options:**
    - `Report As: (Company Name)` **:** Enter the client's name that will appear on the final report (e.g., "Smith & Co.").
    - `Use Template: (Optional)` **:** Enter the name of the form from your Admin's `Checklists` sheet (e.g., "Site Audit"). If you leave this blank, the app will use the `(Standard)` form.
    - `No` Report Required**:** Check this box if this location is for safety only (like "Travelling") and should not ask for a report when you depart.
5. Tap **"Save"**.

- **To Edit a Location:** Tap the small **pencil icon** next to any location in the list.
- **"Travelling" Location:** This is a default location that is automatically set to "No Report Required".

5. Using the App for a Visit

This is the main day-to-day workflow.

1. **Select Location:** On the main screen, tap the location you are visiting.
2. **Set Duration:** Use the slider to set how long you expect to be.
3. **Start Timer:** Press and **HOLD** the green **"Start"** button for **1.5 seconds**.
4. The screen will change to the **Locked Screen**, and your timer will begin. The app sends an `ON SITE` status to the monitor.

(Advanced Reporting Only) Filing a "Quick Stat" Use this for logging data *without* starting a safety timer (e.g., a phone call or admin task).

1. Select a **Location** from the main screen (do not set a duration). The "Quick Stat" button will only be enabled for locations that *do not* have "No Report Required" checked.
2. Tap the **"Quick Stat"** button.
3. The report form for that location will appear immediately.
4. Fill out the form and click **"Submit Report"**. This logs your data with a status of `DATA_ENTRY_ONLY` .

6. Safety & Alert Features

6.1. Panic Button (SOS)

In a real emergency (e.g., injury, threat, accident), **TRIPLE-TAP the red "SOS" button** on the Locked Screen. This immediately sends a high-priority `EMERGENCY - PANIC BUTTON` alert to your monitor.

6.2. Extending Your Time

If you are running late:

1. Press and **HOLD** the **"Extend 10 Mins"** button for **1 second**.
2. A keypad will appear. Enter your **Normal 4-Digit PIN**.
3. The timer will add 10 minutes, and a note is sent to the monitor.

6.3. Departing Safely (Ending Your Visit)

When you are finished and are leaving the site safely:

1. Press and **HOLD** the red **"DEPART & FILE REPORT"** button (or "DEPART" button in Simple Mode) for **1.5 seconds**.
2. **If you are in Advanced Mode (and the location is not marked "No Report Required"):** The **"Visit Report"** modal will appear.
    - Fill out the checklists, note fields, and any number fields (e.g., `$ KMs`).
    - Click **"Submit Report"**.
3. **If** you are in Simple Mode (or the location is marked "No Report **Required"):** The app will send a `DEPARTED` status to the monitor and return you to the main screen. Your visit is now complete.

6.4. "Are You OK?" Check-ins (If Enabled)

(This section is unchanged.)

6.5. Cancelling an Alert

If your timer is overdue, the "ALERT ACTIVE" screen will appear.

1. Press and **HOLD** the green **"I AM SAFE"** button for **1 second**.
2. Enter your **Normal 4-Digit PIN**.
3. This will send a `SAFE - MANUALLY CLEARED` status and (in Advanced Mode) open the **Visit Report** modal for you to complete (if one is required for that location).

6.6. THE DURESS PIN (Your Silent Alarm)

(This section is unchanged.)

7. CRITICAL APP LIMITATIONS (Must Read)

It is vital to be aware of two key limitations of this free Web App.

1) GPS data will only be sent if the app is the active app on your phone - ie In the foreground. So, if you want GPS updates to be sent while travelling (for example) you would need to have your phone plugged in and charging, with the screen open and displaying the app. Once the screen lock is on, it is unlikely that GPS signals will be sent until it is next unlocked, at which point a fresh location should be sent.

2) SMS Limitation - Only one SMS message can be sent per day, unless a subscription to the e-mail to SMS gateway service is paid. This means that if an alert reaches the escalation point (Eg 5 minutes after you are 15 minutes overdue, or 5 minutes after the panic button has been triggered), then only one SMS alert will be sent to your Escalation Contact. (Update e-mail alerts will continue to be sent, but there will only ever be one SMS alert sent in any one day.)

Section 7: Monitor App User Guide

(This section is unchanged. The Monitor App correctly ignores `DATA_ENTRY_ONLY` and `(Standard)` statuses, so no changes are needed.)

Section 8: Troubleshooting Guide (For Admins)

Here are solutions to the most common problems.

- **Problem:** The "Start Setup" button on the setup tool website doesn't work.
  - **Cause:** The tool can't load its template files.
  - **Solution:** Make sure you are running `setup.html` from the **live GitHub Pages URL** (e.g., `https://...github.io/...`), not by double-clicking the file from your computer (e.g., `file:///...`).
- **Problem:** My Worker App (Advanced) won't install / The "Travelling" location is missing / The "Settings" button doesn't work.
  - **Cause:** A JavaScript error on load, usually because the `(Standard)` checklist is missing from your `Checklists` sheet.
  - **Solution:**
    1. Go to your `Checklists` sheet.
    2. Make sure you have created a row with the `Template Name` `(Standard)` (with parentheses) and added at least one question to it.
    3. On the worker's phone, go to **Settings** and click **"Clear Cached Forms & Data"**.
    4. Restart the app.
- **Problem:** My Custom Form shows `"#Header"` or `"%Note"` with a checkbox.
  - **Cause:** This means the backend script (`Code.gs`) is running an old version of the code *before* we added this feature, or you have a typo in your `Checklists` sheet.
  - **Solution:**
    1. First, check your `Checklists` sheet. Make sure you add a **space** after the `#`, `%`, or `$` (e.g., `"#` Section `1"`, `"% Notes"`, `"$ KMs"`).
    2. If that is correct, re-deploy your script. Go to `Extensions` > Apps `Script`, click `Deploy > Manage deployments`, edit your deployment, select **"New version"**, and click `Deploy`.
    3. After fixing, clear the cache on the Worker App (see above).
- **Problem:** The Monitor App shows "Cannot Connect" or a 404 error.
  - **Cause:** The Google Sheet URL or Secret Key is wrong.
  - **Solution:**
    1. Re-copy the `Web` app URL (not the Deployment ID) from `Manage deployments` in your Apps Script.
    2. Go to the Monitor App, click the **Reset/Gear icon** in the header.
    3. Re-paste the correct URL and re-type your Secret Key.
- **Problem:** My `generate...Report` script fails or reports are blank.
  - **Cause:** Mismatch in names or date format.
  - **Solution 1:** Make sure the month in the `Master Report` tab (cell `B1`) is in `YYYY-MM` format (e.g., `2025-10`).

    - **Solution 2:** Make sure the `Report As: (Company Name)` in the Worker App *exactly* matches the `Company Name` in your `Checklists` sheet (it is case-sensitive).
- **Problem:** My AI Note Correction isn't working (notes are uncorrected).
    - **Cause:** The API Key, Billing, or API is not set up correctly.
    - **Solution:**
        1. Go to `Extensions` > `Apps Script` and open your `Code.gs` file.
        2. Make sure you have pasted your **Gemini API Key** correctly into the `GEMINI_API_KEY` variable at the top.
        3. **In Google AI Studio**, find your API key and click the link to its **"Google Cloud project"**.
        4. In the Cloud Project, use the search bar to find **"Generative Language API"** and make sure it is **ENABLED**.
        5. In the Cloud Project, go to the **"Billing"** section and make sure the project is **linked to an active billing account**.
        6. After all this, you **must re-deploy** your Apps Script (see Step 3 of this guide).
- **Problem:** My `generateAllPdfReports` button gives a "No item with the given ID" error.
    - **Cause:** A Google Doc ID or Folder ID is wrong, or the script doesn't have permission.
    - **Solution:**
        1. **Re-Authorize:** Run the `generateAllPdfReports` function *manually* from the script editor once to grant it Drive/Docs permissions (see Step 3).
        2. **Check IDs:** Double-check the `PDF_OUTPUT_FOLDER_ID` and `DEFAULT_REPORT_TEMPLATE_ID` in your script (lines 13-16).
        3. **Check `Checklists`:** Make sure your `Report Template ID` column header is spelled *exactly* right and that the IDs in that column are for **Google Docs**, not Google Folders or Spreadsheets.
- **Problem:** Why is the "Quick Stat" button disabled?
    - **Cause:** The selected location is set to "No Report Required".
    - **Solution:**
        1. On the Worker App, tap the **pencil icon** next to that location.