**Lone Worker Safety System Documentation**

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## Setting up and using the Lone Worker Monitoring App.

## **Section 1: Deployment Administrator Guide**

Welcome! This guide explains how to use the online Setup Tool to create your customized Lone Worker Safety apps 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: 10 minutes
* Set-up: 20-30 minutes (on a good day 😉)

**Part 1: Use the Online Setup Tool**

To access the Lone Worker Setup Tool website, visit: [LWS - Deployment Setup Tool](https://loneworkernelson-web.github.io/LWS_System/setup.html)

1. You should see the "Lone Worker Safety System – 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 LWS Data").
  + **Copy Headers:** Click the **"Copy"** button in the setup tool.
  + **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 – which would stop the apps from working. (Click on the row label **1** to highlight the row, then right-click and select **View more row options** – at the bottom, then select **Protect Range.** Enter your description –e.g. **“**Headers”, then click on **Set Permissions** and select to have it warn you if you are about to delete it.
  + Click **"Next Step"** in the setup tool.

**Step 3: Deploy Script**

* + **Open Script Editor:** In your Google Sheet, click **Extensions > Apps Script**. Delete any existing code in Code.gs.
  + **Create Secret Key:** In the setup tool, type a **strong, private password** into the "Create a Secret Key" box. **Remember this key! Write it down somewhere safe as it will be needed by the Monitoring Apps.**
  + **Copy Script:** Click the **"Copy Script"** button in the setup tool.
  + **Paste Script:** In the Apps Script editor, paste the copied code.
  + **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...", "Allow").
  + **Copy URL:** After deployment, **copy the Web app URL**. (You need it in the next step, but also paste it somewhere else secure, as you will need it later, along with the secret key whenever you need to setup the Monitoring app or reinstall it.)
  + **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**.
  + Click **"Next Step"** in the setup tool.

**Step 4: Configure Apps**

* + **Web App URL:** Paste the **Web app URL** you copied.
  + **Secret Key:** Verify this matches the key you think you created!
  + **Configure:** Set the First Alert Time, Check-in options, and optional Logo URL.
    1. **First Overdue Alert** is the number of minutes that a worker is allowed to be overdue before an alert is triggered. (Default is 15 minutes – but you can change this.)
    2. **Enable “Are You OK?” Check-ins:** (Default is disabled) If you tick this, the user will receive regular check-in requests, if they have the app open, and contacts will be advised if a check-in is missed. (You can set the frequency of these check-in requests.)
    3. **Company Logo URL (Optional):** If you provide a link to a company logo or a chosen image, that image will be used as the Favicon for the Apps, rather than the default Lone Worker App logo.
  + **Test:** Click **"Test Connection & Proceed"**. If successful, you'll move to the last step. (If not – you will need to recheck that the Web App URL and Secret key have been entered correctly. Does your Web App URL end with “/exec”… If not.. Go back and find the correct one. Open the Apps Script, click on Deploy, select Manage Deployments, then make sure you copy the Web App URL and not the Deployment ID. (Try again.)

**Step 5: Download**

* + Click the **"Generate & Download App Package (.zip)"** button.
  + Save the LWS\_App\_Package.zip file to your computer.

**Step 6: Finish**

* + Click the link to download the **Full Documentation PDF** for your records.

**Part 2: Host Your Generated Apps using GitHub Pages**

Now you'll upload the apps from the .zip file to your own GitHub repository to make them live.

**2.1 Prepare Your Files**

* **Unzip:** Find the LWS\_App\_Package.zip file you downloaded and unzip it.
* **Locate Folders:** Inside, find the LoneWorkerApp folder and the MonitoringDashboardApp folder. These contain your customized apps.

**2.2 Create a GitHub Account (If you don't have one)**

* Go to <https://github.com/>.
* Click **"Sign up"** and create a free account. Verify your email.

**2.3 Create a New Repository**

* Log in to GitHub. Click **"+"** > **"New repository"**.
* **Repository name:** Choose a name, e.g., my-lws-apps.
* Select **"Public"**.
* Click **"Create repository"**.

**2.4 Upload App Folders**

* On your new repository page, click **"Add file"** > **"Upload files"**.
* **Important:** Drag both the **LoneWorkerApp folder** AND the **MonitoringDashboardApp folder** from your unzipped package onto the GitHub upload area.
  + *Wait for GitHub to process both folders and all files within them.*
* Scroll down and click **"Commit changes"**.

**2.5 Enable GitHub Pages**

* Go to your repository's **"Settings"** tab.
* Click **"Pages"** in the left sidebar.
* Under "Build and deployment", set "Source" to **"Deploy from a branch"**.
* Under "Branch", select main, folder /root, and click **"Save"**.
* **Wait:** GitHub will provide a public URL (e.g., https://your-username.github.io/my-lws-apps/). It might take a minute or two to become active.

**2.6 Get Your App URLs**

Your apps are now live! Your final URLs are:

* **Worker App URL:** [Your GitHub Pages URL] + /LoneWorkerApp/
  + e.g., https://your-username.github.io/my-lws-apps/LoneWorkerApp/
* **Monitor App URL:** [Your GitHub Pages URL] + /MonitoringDashboardApp/
  + e.g., https://your-username.github.io/my-lws-apps/MonitoringDashboardApp/

Save these two URLs.

**Part 3: Distribute to Your Team**

**For Your Safety Monitor:**

* Send them the **Monitoring App URL**. (**Note:** Better still is to create an installer and send that to your safety monitor. Having the app installed saves accidental browser closures etc. The Monitoring App will continue to work in the background.) **See Part 4 - Below**
* **IMPORTANT:** On their first visit, they will be prompted to enter the **Web app URL** (from Step 3.7) and the **Secret Key** (from Step 3.3). They usually only need to do this once, as it will be saved in their browser. (However – If the browser cache is cleared at some stage, these may need to be entered again! So don’t lose them!)

**For Your Lone 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"**. If they are presented the option then select **“Install app”.**
  3. After installation, close the browser and open the app from their home screen.
  4. Go to **Settings** (gear icon).
  5. Fill in **all fields** (Name, Phone, Contacts, PINs). The URL will be pre-filled.
  6. Tap **"Save Settings"**.

**Setup Complete!** Your system is operational.

**Part 4: (Recommended) Create an Installer for the Monitoring App**

**This is an optional, advanced step, but if you follow this guide carefully it should go smoothly for you 😊.**

This guide will walk you through turning the **Monitoring Dashboard URL** into a standalone desktop application (like an .exe file on Windows or an .app file on Mac).

**Why do this?**

* It puts a dedicated "LWS Monitor" icon on the monitor's desktop.
* It runs in its own window, so it won't get lost in browser tabs.
* It feels more like a permanent, professional application.
* You can set it to start up any time a user logs in to the computer, so it will always be on.

We will use a free, trusted tool called Nativefier to do this. This process involves using the command line, but this guide will walk you through every single step, assuming no prior experience.

**Part 1: Install the Necessary Tools**

Before you can build the app, you need to install a program called **Node.js**. Node.js is a very common, safe, and free software package that includes npm (Node Package Manager), a tool we need to install Nativefier.

1. **Go to the Node.js Website:**
   * Open your web browser and go to: <https://nodejs.org/>
2. **Download the Installer:**
   * You will see two buttons. Click the one for **"LTS"** (Long Term Support). This is the most stable version.
   * Download the installer for your operating system (Windows or macOS).
3. **Run the Installer:**
   * Find the file you just downloaded (usually in your "Downloads" folder) and double-click it.
   * Follow the on-screen prompts. You can safely accept all the default settings. Just click "Next," "Agree," "Install," etc., until it says it has finished.

You have now installed the tools we need.

**Part 2: Open Your Command Line Tool**

This is the part that looks like a "hacker" screen, but it's just a way to type commands directly to your computer.

* **On Windows (Command Prompt):**
  1. Press the **Windows Key** on your keyboard (or click the Start button).
  2. Type the letters: cmd
  3. You will see **"Command Prompt"** appear in the list. Click on it.
  4. A black window will open.
* **On macOS (Terminal):**
  1. Click the **Spotlight icon** (the magnifying glass in the top-right corner of your screen).
  2. Type: Terminal
  3. You will see the **"Terminal.app"** icon. Click on it.
  4. A white or black window will open.

You are now in your command-line tool.

**Part 3: Install Nativefier**

Now, you'll tell your computer to download and install the Nativefier tool using the npm program that came with Node.js.

1. **Type the Command:**
   * Carefully type (or copy and paste) the following command into the black/white window you just opened.
   * npm install -g nativefier
2. **Press Enter:**
   * Hit the **Enter** key.
   * Your computer will connect to the internet and download the tool. You'll see text scrolling by. This may take a minute or two.
   * Once it's finished, it will return you to a new line, ready for your next command. (You can ignore any "warnings" (WARN) it might show).

You have now installed Nativefier. You only need to do this part (Parts 1 & 3) once.

**Part 4: Build Your Desktop App**

Now, we'll tell Nativefier *where* to save your new app and *what* website to turn into an app.

**4.1 Go to Your Desktop**

It's easiest to save the new app directly to your Desktop.

* In your command-line window (Command Prompt or Terminal), type the following command and press **Enter**: cd Desktop
* This command means "Change Directory" (or "move") into your Desktop folder.

**4.2 Run the Nativefier Command**

This is the final command. It tells Nativefier all the details it needs.

* **Get Your URL:** First, find the **Monitoring App URL** you got from GitHub Pages in the main Deployment Guide (e.g., https://your-username.github.io/my-lws-apps/MonitoringDashboardApp/).
* **Type the Command:** Carefully type (or copy and paste) the following command into your command-line window. **Replace the placeholder URL** with your actual Monitor App URL.

nativefier --name "LWS Monitor" --internal-urls ".\*" "https://your-username.github.io/my-lws-apps/MonitoringDashboardApp/"

* **Press Enter:**
  + Hit the **Enter** key.
  + Nativefier will start working. It will download some things and build your app. This will take a few minutes.
  + When it's finished, you'll see a message like "App built to..."

**4.3 Find Your App**

* Look on your computer's **Desktop**.
* You will find a new folder named LWS Monitor-win32-x64 (on Windows) or LWS Monitor-darwin-x64 (on Mac).
* Open this folder. Inside, you will find your new application:
  + **On Windows:** LWS Monitor.exe (with the app icon)
  + **On Mac:** LWS Monitor.app (with the app icon)

You can double-click this file to run your Monitoring Dashboard as a standalone desktop app!

**Part 5: Share the App with Your Monitor**

To send this to your safety monitor, ***you can't just send the .exe or .app file***; you **must send** the **entire folder** Nativefier created.

1. Find the folder on your Desktop (e.g., LWS Monitor-win32-x64).
2. **Right-click** on the folder.
3. Select **"Send to" > "Compressed (zipped) folder"** (on Windows) or **"Compress..."** (on Mac).
4. This will create a new .zip file (e.g., LWS Monitor-win32-x64.zip).
5. You can now send this single .zip file to your monitor via email or a file-sharing service.

**Instructions for your Monitor:** Tell them to download the .zip file, unzip it, open the folder, and find and run the LWS Monitor application inside.

**Part 6: (Recommended Better Way): How to Make the Monitor App Start Automatically**

To make the LWS Monitor app launch every time you log in to your computer, follow these steps.

**On Windows (using the Startup Folder):**

1. First, find your LWS Monitor.exe application. It's inside the folder Nativefier created on your Desktop (e.g., LWS Monitor-win32-x64). Move the folder to a directory where it won’t be accidentally deleted.
2. **Right-click** on the LWS Monitor.exe file and select **"Create shortcut"**. This will make a new file called LWS Monitor - Shortcut.
3. On your keyboard, press the **Windows Key + R** at the same time. This will open a small "Run" window.
4. In the "Run" window, type shell:startup and press **Enter**.
5. A new folder window named "Startup" will open.
6. **Drag and drop** (or cut and paste) the LWS Monitor - Shortcut file you created in step 2 into this "Startup" folder.

That's it! The next time you log in to Windows, the monitor app will start automatically.

**On MacOS (using Login Items):**

1. Open **System Settings** (from the Apple menu in the top-left corner). On older macOS versions, this is called **System Preferences**.
2. Click on **"General"** in the sidebar, then click **"Login Items"**.
3. You will see a list called "Open at Login". Click the **plus icon (+)** below this list.
4. A Finder window will open. Navigate to your Desktop (or wherever you saved the app) and open the LWS Monitor-darwin-x64 folder.
5. Select the LWS Monitor.app file and click **"Open"** (or "Add").

The app is now added to the list and will launch automatically when you log in. You can also tick the **"Hide"** checkbox next to it in the list if you want it to start minimized.

1. **Distribute the App:**

* Nativefier will create a folder (e.g., LWS Monitor-win32-x64).
* Inside this folder is the .exe (or on Mac, the .app) file.
* You can zip this folder and send it to your Safety Monitor to install like a normal program.

When they run this app, it will be the exact same as the website, but in its own dedicated window. All login and data fetching works identically.

## Section 2: How it Works

**How the Lone Worker Safety System 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. **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.

1. **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 to your emergency contacts.
2. A diagram of a software safety system

   AI-generated content may be incorrect.**The Monitoring Dashboard:** If you would like real-time monitoring the dashboard is for you. 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. If the monitor needs to clear an alert, they can do so from the dashboard, which then sends its own command back to the Google Sheet.

**Note:** The Lone Worker App can be used without the dashboard. It will still send e-mail alerts with last-known GPS locations to the emergency contacts that are saved in the app’s settings, but you will miss the safety aspect of having audible and highly visible alerts being received in real time by the safety monitor.

## Section 3: Lone Worker Safety App User Guide

**1. Introduction**

Welcome! This guide explains how to install, set up, and use the Lone Worker Safety App.

The purpose of this app is to provide an extra layer of safety when you are working alone. You use it to log your visits and set a timer for how long you expect to be. If your timer runs out, or if you miss a check-in, or if you signal for help, the system will automatically notify your designated safety monitor and emergency contacts.

Please read this guide carefully, especially the section on the app's limitations.

**2. Installation (Adding the App to Your Phone)**

This app is a **Progressive Web App (PWA)**. It is not in the App Store or Google Play Store. You must install it from the web link your administrator provided.

For the app to work reliably, you **must "Add to Home Screen"**.

**On iPhone (Safari)**

1. Open the app link in your **Safari** browser.
2. Tap the **Share** icon (a square with an arrow pointing up).
3. Scroll down the menu and tap on **"Add to Home Screen"**.
4. Confirm the name and tap **"Add"**.
5. The app icon will now be on your phone's home screen. **Please open the app from this icon** from now on.

**On Android (Chrome)**

1. Open the app link in your **Chrome** browser.
2. Tap the **three-dot menu** icon (usually in the top-right corner).
3. Tap on **"Install app"** (or **"Add to Home Screen"**).
4. Confirm the installation.
5. The app icon will now be on your phone's home screen. **Please** open the app from **this icon** from now on.

**3. First-Time Setup (Crucial)**

Before you can use the app for the first time, you **must** complete your settings.

1. Open the app from the new icon on your home screen.
2. Tap the **Settings icon** (the gear symbol in the top-right corner).
3. Fill in **ALL** the fields:
   * **Your Name:** Your full name.
   * **Your Phone Number:** Please use the full international format, including your country code (e.g., +64 21 123 4567).
   * **Emergency Contact (Name, Phone, Email):** The *first person* to be contacted in an alert. Use the full international format for their phone number.
   * **Escalation Contact (Name, Phone, Email):** The *second person* to be contacted if you are overdue for a long time. Use the full international format for their phone.
   * **Google Sheet Web App URL:** This should already be pre-filled for you. If it is empty, please contact your administrator immediately.
4. **Set Your PINs:** You must set two different 4-digit numbers.
   * **Normal 4-Digit PIN:** This is your "all clear" PIN. You will use this to confirm you are safe or to extend your time.
   * **Duress 4-Digit PIN:** This is your **silent alarm**. You *only* use this PIN if you are being forced by someone to cancel an alert or extend your time. (See Section 6 for details).
5. Tap **"Save Settings"**. The app is now ready to use.

**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**.
  4. **Tip:** If you are physically at the location, you can tap **"Use Current Location"**. The app will try to find your address using your phone's GPS.
  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. You can select this when you are driving or moving between sites. When "Travelling" is selected, the app will try to send a GPS update to your monitor every 15 minutes (see limitations in Section 7).

**5. Using the App for a Visit**

This is the main day-to-day workflow.

**5.1. Starting Your Visit**

1. **Select Location:** On the main screen, tap the location you are visiting from the list.
2. **Set Duration:** Use the slider to set how long you expect to be (e.g., 30 mins, 1h 30m).
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.

**5.2. The Locked Screen**

While your timer is active, you will see the Locked Screen. It shows:

* Your location.
* A large **countdown timer**.
* Your anticipated departure time.

From here, you have three main options: **Extend**, **Depart**, and **SOS**.

**5.3. Departing Safely (Ending Your Visit)**

When you are finished and are leaving the site safely:

1. Press and **HOLD** the red **"DEPART"** button for **1.5 seconds**.
2. The app will send a DEPARTED status to the monitor and return you to the main screen. Your visit is now complete.

**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 and triggers the alert email process. The app will also attempt to send your current GPS location.

**6.2. Extending Your Time**

If you are running late, you can extend your timer.

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. Overdue Alerts**

If your timer runs out and you do not depart, the system automatically begins its alert process.

1. Your timer will turn red and start counting *up* (e.g., +00:05:01).
2. The app will send an ALERT SENT status to the backend.
3. The backend script will begin sending automated, escalating emails to your contacts at set intervals (e.g., 15 mins, 30 mins, etc.).

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

Your administrator may require periodic check-ins.

* **What happens:** At a set interval (e.g., every 30 minutes), a box will pop up asking **"Are you OK?"**.
* **Escalating Alert:** The app will start to beep and vibrate. If you don't respond, the sound will get **louder and more frequent** over 2 minutes.
* **Your Action:** You have **2 minutes** to tap the green **"I** am **OK"** button.
* **Confirmation:** When you tap "I am OK," you will feel a **short triple-vibration** to confirm your tap was registered. The timer resets, and your visit continues.
* **Missed Check-in:** If you do not tap "I am OK" within 2 minutes, the app assumes you are in trouble and sends a MISSED\_CHECKIN alert to the monitor.

**6.5. Cancelling an Alert**

If your timer is overdue or you missed a check-in, the "ALERT ACTIVE" screen will appear. To cancel the alert and confirm you are safe:

1. Press and **HOLD** the green **"I AM SAFE"** button for **1 second**.
2. Enter your **Normal 4-Digit PIN**.
3. This ends your visit and sends a SAFE - MANUALLY CLEARED status.

**6.6. THE DURESS PIN (Your Silent Alarm)**

This is your most important safety feature. Read this carefully.

**Use this PIN if you are being forced by a hostile person to silence an alarm or extend your time.**

If you are prompted for your PIN (either for "I AM SAFE" or "Extend 10 Mins") and you are in danger:

1. Enter your **DURESS 4-Digit PIN** instead of your Normal PIN.
2. **What the app will do:** The app will *look like it worked*. It will show the timer extending or the visit ending, just as you'd expect. It will *not* show any alert.
3. **What it *really* does:** The app silently sends a high-priority DURESS\_CODE\_ACTIVATED alert to your monitor, letting them know you are in trouble and being forced to comply.

**7. CRITICAL APP LIMITATIONS (Must Read)**

This app is a web-based PWA, not a native app like you'd download from the App Store. Because of this, it has important limitations you **must** understand for it to be effective.

**7.1. GPS and Background Freezing**

For GPS tracking to work reliably, the app **MUST be open and active on your screen.**

* If you **lock your phone**, **switch** to another app (like Messages, Spotify, or Google Maps), or your phone screen goes to sleep, the operating system (especially iOS) will **FREEZE** the app to save battery.
* **When frozen, the app CANNOT:**
  + Send its 15-minute "Travelling" GPS updates.
  + Run its internal check-in timer.
* **What this means:** If you are on a long drive ("Travelling") and lock your phone, your monitor will *not* receive updated GPS locations. They will only have the last location the app sent *before* it was frozen.

**7.2. Alerts and "Waking Up"**

* **Server-Side Alerts:** Even if your app is frozen, the **backend server** (Google Sheet) knows when your visit is supposed to end. If you become overdue, the server **will still send automated email alerts** to your contacts.
* **"Waking Up" the App:** If an alert is triggered (e.g., you become overdue or miss a check-in) *while the app is frozen*, the app **WILL** try to send its latest GPS location *as soon as it becomes active again*. For example, if you open the app to see why it's buzzing (from an overdue notification *from the server*), it will immediately try to get a GPS fix and send it.

**7.3. Network Connection**

The app requires an active internet connection (Mobile Data or Wi-Fi) to send all alerts and updates to the Google Sheet. If you are in an area with no reception, the app cannot send data until connection is restored.

## Monitoring App: User Guide

**1. Introduction**

Welcome to the Lone Worker Safety Monitoring Dashboard. Your role as a safety monitor is the most critical part of this system.

This guide explains how to log in, understand the dashboard, respond to alerts, and use the built-in tools to ensure the safety of your lone workers.

**2. First-Time Login (Crucial)**

The first time you open the **Monitoring App URL** provided by your administrator, you will see a setup screen. You only need to do this once.

1. **Paste the Google Sheet Web App URL:** Your administrator will give you a long URL that starts with https://script.google.com/.... Paste this into the first field.
2. **Enter the Secret Key:** Your administrator will give you the private password for the system. Type it exactly into the second field.
3. Click **"Start Monitoring"**.

The app will test the connection. If successful, it will save these details in your browser's local storage and take you to the main dashboard. You will not have to log in again unless you clear your browser data or use the "Reset" button.

**3. Understanding the Dashboard**

The dashboard is designed to give you all critical information at a glance.

**3.1. The Header**

* **Logo & Title:** Your organization's logo and the "Lone Worker Monitor" title.
* **Desktop Notifications:** A bell icon and status ("Enabled", "Disabled", "Blocked"). See Section 5.3 for details.
* **Connection Status:** A coloured dot showing your connection to the backend.
  + **Green:** Connected and up-to-date.
  + **Yellow:** Trying to fetch new data.
  + **Red:** Connection failed, Access Denied, or Timed Out.
* A blue and white text

  AI-generated content may be incorrect.**Last Updated:** Shows the time of the last successful data refresh (it checks every 15 seconds).
* **Reset Button (Gear Icon):** Click this **only** if you need to re-enter a new URL or Secret Key. It will clear your saved settings and return you to the login screen.

**3.2. Session Event Log**

Located just below the header, this is a collapsible log that shows a timestamped history of events *during your current viewing session*. It will log:

* When you start the session.
* When a new worker becomes active (ON SITE).
* When a worker's status changes (e.g., ON SITE -> EMAIL\_1\_SENT).
* When you **Acknowledge** an alarm.
* When you **Manually Resolve** an alert.

A screenshot of a computer

AI-generated content may be incorrect.This is useful for quickly reviewing what has happened in the last few minutes or hours without checking the full spreadsheet.

**3.3. The Worker List**

A screenshot of a phone call

AI-generated content may be incorrect.This is the main area, showing a "card" for every worker who is **currently active**. If no workers are active, this area will be empty. Cards are sorted by alert priority (alarms at the top).

**4. Understanding a Worker Card**

Each card gives you detailed information about a worker's status.

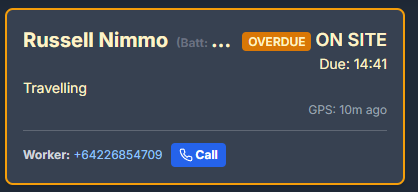
* **Worker Name:** The name of the worker.
* **Battery Level (%):** Shows the worker's phone battery percentage. The colour gives you immediate context:
  + **Green (e.g., 75%):** Battery is healthy.
  + **Yellow (e.g., 25%):** Battery is low.
  + **Red & Pulsing (e.g., 10%):** Battery is critically low.
  + **(Batt: N/A):** The app hasn't reported battery data yet.
* **Location Name:** The name of the location the worker selected (e.g., "Smith Residence", "Travelling").
* **Status & Due Time:** Shows the current Alarm Status and their Anticipated Departure Time.

**Card Links & Buttons**

* **View Location (Alerts Only):** This link appears when a worker is in an alert state. Clicking it opens Google Maps to their last known location (prioritizing GPS, then falling back to the site address).
* **GPS Age:** Shows you how "fresh" the last GPS coordinate is (e.g., "GPS: 5m ago", "GPS: Never").
  + **STALE GPS WARNING (Yellow Text):** If a worker's location is "Travelling" and their GPS has not updated in over 30 minutes, this text will turn yellow as a warning that their location data is old.
* **Call Worker Button:** A blue "Call" button with a phone icon. Clicking this will use your computer or phone to try and call the worker's registered phone number via a tel: link.
* **Manually Resolve Alert (Alerts Only):** This green button allows you to clear an alert (see Section 6.1).

**5. Alert Statuses & Responses**

The card's colour and status text are your most important indicators.

* **GRAY - ON SITE:**
  + This is the normal, safe status. The worker is on-site, and their timer is active. No action is needed.
* **AMBER BORDER (Still says ON SITE):**
  + **Pre-Alert / Overdue.** This worker's timer has run out, but the system's automated email alerts have not started yet (e.g., they are 5 minutes overdue, but the first alert is at 15 minutes).
  + **Action:** This is a good time to proactively try calling the worker.
* **ORANGE/YELLOW - ALERT SENT / MISSED\_CHECKIN / EMAIL\_1\_SENT...**
  + **Active Alert.** The worker is officially overdue or has missed an "Are you OK?" check-in. The system is now sending automated email alerts.
  + **Action:** Follow your organization's safety procedures. Call the worker immediately.

A screenshot of a computer

AI-generated content may be incorrect.

* **RED (FLASHING) - EMERGENCY - PANIC BUTTON:**
  + **Critical Alert!** The worker has triple-tapped the **SOS** button on their app.
  + **Action:** This is your highest priority. Treat it as a real emergency. Call the worker and/or emergency services immediately.
* **PURPLE (FLASHING) - DURESS\_CODE\_ACTIVATED:**
  + **Critical Alert!** The worker has entered their **Duress PIN**. This means they may be with a hostile person and are signalling for help silently.
  + **Action:** Treat this as a real emergency. **Do NOT** call the worker, as this could put them in more danger. Follow your organization's duress procedure (e.g., notify emergency services or security immediately).

**5.1. The Alarm Overlay (Loud Alarm)**

When a **new** critical alert (PANIC, DURESS, MISSED\_CHECKIN, or ALERT SENT) first appears, two things happen:

1. A **loud, repeating alarm sound** will play.
2. A **flashing overlay** will appear on your screen, showing the worker's name and status.

To silence the alarm, you **must** click the **"Acknowledge Alert"** button. This silences the sound and adds an "Alert acknowledged" entry to the Session Log. It does *not* clear the alert; the worker's card will remain on the dashboard until they are safe.

**5.2. Desktop Notifications (If Enabled)**

If you have enabled desktop notifications (see Section 6.2), you will also see a notification pop up from your browser, even if the browser is minimized.

**5.3. Update Chime (Soft Sound)**

You will hear a **soft, brief chime** sound when a worker's status changes to a *non-critical* alert (e.g., from EMAIL\_1\_SENT to EMAIL\_2\_SENT). This does not require acknowledgement.

**6. Your Actions as a Monitor**

**6.1. Manually Resolving an Alert**

When you have made contact with a worker and confirmed they are safe (e.g., they called you), you can clear their alert from the dashboard.

1. On the worker's alert card, click the green **"Manually Resolve Alert"** button.
2. A confirmation box will appear. You **must** type the worker's name exactly as it appears on the card to confirm.
3. Click **"Confirm Resolve"**.
4. The system will update the Google Sheet to MONITOR\_CLEARED\_ALERT, and the worker's card will disappear from the active dashboard.

**6.2. Enabling Desktop Notifications**

For alerts to be effective, we highly recommend enabling desktop notifications.

1. In the header, if you see a "Disabled" status, click the **Bell** Icon (Enable NotificationsBtn).
2. Your browser will pop up a box asking for permission to show notifications. Click **"Allow"**.
3. The status will change to "Enabled", and you will receive a test notification.

**6.3. Database Size Warning**

If the system database (the Google Sheet) gets too large (over 2,500 entries), a yellow banner will appear at the top of the dashboard. Please notify your System Administrator, as they will need to archive or clear old records from the sheet to maintain performance.

**6.4. IMPORTANT: Browser vs. Desktop App (Reliability)**

This Monitoring Dashboard is a website. If you accidentally **close the browser tab** or **quit your browser**, all monitoring **will stop**. You will no longer receive any audible alarms or visual updates until you open the page again.

To prevent this, it is **highly recommended** that you use the **optional Desktop Installer version** of this app (if provided by your administrator).

**Benefits of the Desktop Installer:**

* It runs as a standalone app, so you can't accidentally close it with your other browser tabs.
* It can be set to **launch automatically when your computer starts**, ensuring the monitor is always running when you are logged in.
* Refer to page 7 of this guide for instructions for creating an installation file.