Court Visitor Application

Workflow Automation

User Manual & Reference Guide

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Transform your court visitor workflow from hours to minutes with automated case management, document generation, and communication tools.

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What is the Court Visitor Application?

The Court Visitor Application is a comprehensive workflow automation tool designed specifically for court visitors who oversee guardianship cases. If you're spending hours each week manually processing court documents, creating reports, scheduling visits, and managing case communications—this application will transform your workflow.

What It Does

The Court Visitor Application handles the entire lifecycle of your court visitor responsibilities through 14 automated steps:

- Case Intake & Organization
    - Automatically extracts ward and guardian information from court PDFs (Annual Reports, Orders)
    - Creates organized case folders with consistent naming
    - Maintains a centralized Excel database of all cases
- Visit Scheduling & Communication
    - Sends professional meeting requests to guardians
    - Generates route maps for efficient visit planning
    - Sends appointment confirmations with visit details
    - Adds confirmed visits to your Google Calendar
    - Syncs guardian contacts to Google Contacts
- Court Visitor Report Generation
    - Creates pre-filled CVR documents from templates
    - Pulls data from your Google Form responses
    - Automatically completes CVRs with visit details
- Follow-up & Submission
    - Sends thank-you emails to guardians
    - Emails completed CVRs to your supervisor
- Monthly Administration
    - Generates payment forms with case summaries
    - Creates detailed mileage logs with Google Maps calculations

Who Should Use This Application?

This application is designed for:

- Court visitors who manage guardianship cases
- Case managers handling multiple wards and guardians
- Anyone who needs to create Court Visitor Reports (CVRs)
- Professionals who track mileage for reimbursement

How Much Time Will This Save?

Based on typical court visitor workflows:

Task	Manual Time	With Court Visitor App
Processing new cases	15-20 min/case	2 min/case
Scheduling visits	10 min/visit	1 min/visit
Creating CVRs	30-45 min/report	5 min/report
Monthly mileage logs	2-3 hours	5 minutes
Total monthly (20 cases)	15-20 hours	2-3 hours

Estimated time savings: 12-17 hours per month

Installation Guide

System Requirements

Before installing, ensure your computer meets these requirements:

- Windows 10 or Windows 11 operating system
- At least 4 GB of RAM (8 GB recommended)
- 500 MB of free disk space (more for case storage)
- Internet connection (for online features)
- Microsoft Word (or free alternative - see Software Options section)

Installation Steps

The installation process is designed to be simple and automatic:

1. 1. Download the installer file (CourtVisitorApp_Setup.exe)

2. 2. Choose your installation location CAREFULLY

    - CRITICAL: Do NOT install in Google Drive, OneDrive, Dropbox, or any cloud-synced folder
    - ✓ RECOMMENDED: C:\Court Visitor App\ or C:\Program Files\Court Visitor App\
    - ✗ DO NOT USE: Folders inside OneDrive, Google Drive, Dropbox, or iCloud
    - Why? Installing in a synced folder can cause serious file corruption (see Data Safety section)

3. 3. Double-click the CourtVisitorApp_Setup.exe file

    - Windows may show a security warning - this is normal for new applications
    - Click "More info" then "Run anyway"

4. 4. Follow the installation wizard

    - Accept the default folder structure when prompted (recommended for best performance)
    - The installer automatically creates: App Data, Config, New Files, New Clients, Completed, Automation

5. 5. Automatic installation of supporting software (dependencies)

    - The installer automatically downloads and installs additional software the app needs. In plain English:

        - Python - The programming language that powers the app (like the engine in a car)
        - PDF readers - Tools that extract text from court documents
        - Text recognition software - Reads PDFs that are scanned images
        - Data tools - Help organize information efficiently

    - This process takes 5-10 minutes. You don't need to do anything - just wait!

6. 6. Complete installation

- The installer creates a desktop shortcut: "Launch Court Visitor App"
- Click "Finish" to complete

First Launch

When you first launch the application:

- A window opens showing all 14 workflow steps organized in four sections
- The app automatically checks for updates
- You can start using offline features immediately (Steps 1, 2, 8, 9, 13)
- For online features, you'll need to set up Google API access (see next sections)

Quick Start Guide

Your First Day with the Court Visitor Application

Follow these steps to get started quickly. Your system administrator will handle the initial installation and setup (see Technical Appendix for details).

Step 1: Verify Your Setup

Before you begin, ensure you have:

- The Court Visitor Application installed on your computer
- Microsoft Word installed
- A Google account with Gmail access
- Internet connection for Google services

Step 2: Launch the Application

Double-click the "Launch Court Visitor App" shortcut on your desktop. The application window will open showing all 14 workflow steps.

Step 3: Add Your First Case

- 1. Locate a court document (Annual Report of Person or Order) as a PDF
- 2. Copy or move the PDF into the "New Files" folder
- 3. In the Court Visitor App, click "Step 1: Extract Case Data from PDFs"
- 4. Wait for extraction to complete (usually 30-60 seconds per file)
- 5. Open the Excel database (App Data/ward_guardian_info.xlsx) to verify the data

Step 4: Create Case Folders

Click "Step 2: Organize Files into Case Folders" to automatically create organized folders in the "New Clients" directory. Each folder is named with the cause number and ward name.

Step 5: Schedule Your First Visit

- 1. Open the Excel database and add visitdate and visittime for a case
- 2. Click "Step 4: Send Meeting Requests" to email guardians
- 3. Wait for guardian confirmation (they reply to your email)
- 4. Click "Step 6: Send Appointment Confirmations"
- 5. Click "Step 7: Add to Google Calendar" to schedule the visit

You're Ready!

You've completed the basic workflow. Each step is explained in detail in Appendix A. For typical day-to-day use, follow the workflows below.

Common Workflows

These are the most frequent tasks you'll perform. Each workflow references specific steps explained in Appendix A.

Workflow 1: Adding New Cases

When you receive new court documents:

1. 1. Save PDFs to the "New Files" folder
   - Name files starting with ARP, ORDER, or APPROVAL (e.g., ARP_Smith.pdf)
2. 2. Run Step 1: Extract Case Data from PDFs
   - This extracts ward info, guardian info, addresses, and court details
   - See Appendix A, Step 1 for details on file naming requirements
3. 3. Open Excel database (App Data/ward_guardian_info.xlsx) to verify
   - Check that cause number, names, and addresses are correct
   - Manually correct any errors or missing information
4. 4. Run Step 2: Organize Files into Case Folders
   - Creates folders in "New Clients" named [CauseNo]_[Ward Name]
   - Moves PDF from "New Files" to appropriate case folder

Workflow 2: Scheduling Visits

To schedule and confirm a ward visit:

5. 1. Update the Excel database with visit information
   - Add visitdate (format: YYYY-MM-DD or MM/DD/YYYY)
   - Add visittime (format: HH:MM AM/PM)
6. 2. Optional: Run Step 3: Generate Route Map
   - Creates visual route map for multiple visits in one day
   - See Appendix A, Step 3 for details
7. 3. Run Step 4: Send Meeting Requests
   - Sends professional email to guardians requesting visit
   - Guardians reply to confirm or suggest alternate times
8. 4. Run Step 5: Add Guardian Contacts
   - Syncs guardian information to Google Contacts
9. 5. After guardian confirms, update Excel Appt_confirmed column to "Y"
10. 6. Run Step 6: Send Appointment Confirmations
    - Sends detailed confirmation with visit address and time

11. 7. Run Step 7: Add to Google Calendar
    - Creates calendar event with ward address and guardian contact info

Workflow 3: Completing a Visit

After conducting a ward visit:

12. 1. Complete your Google Form immediately after the visit
    - Include observations, ward condition, guardian interactions
    - Form responses automatically save to your Google Sheet
13. 2. Run Step 8: Generate CVR Document
    - Creates Word document from template with case information
    - Saves to case folder in "New Clients"
14. 3. Optional: Run Step 9: Generate Visit Summary
    - Creates summary of visit for your records
15. 4. Run Step 10: Complete CVR with Form Data
    - Automatically fills CVR with your Google Form responses
    - See Appendix A, Step 10 for Google Sheets setup requirements
16. 5. Review the completed CVR in Word
    - Make any manual edits or additions as needed
17. 6. Run Step 11: Send Follow-up Emails
    - Sends thank-you email to guardian
18. 7. Run Step 12: Email CVR to Supervisor
    - Attaches completed CVR and sends to your supervisor
    - Update Excel database to mark case as completed

Workflow 4: Monthly Reimbursement

At the end of each month:

19. 1. Run Step 13: Generate Payment Form
    - Creates Excel spreadsheet listing all completed visits
    - Includes ward names, dates, case numbers
20. 2. Run Step 14: Generate Mileage Log
    - Calculates distances using Google Maps
    - Creates detailed mileage log with addresses and distances
    - See Appendix A, Step 14 for address setup requirements
21. 3. Review both forms for accuracy
22. 4. Submit to your accounting department or court administration

Understanding the Interface

Main Window

The Court Visitor Application window displays all 14 workflow steps as clickable buttons organized into four sections:

- Input Phase (Steps 1-5)**Input Phase (Steps 1-5)**
  - Data extraction, file organization, and visit scheduling
- Communication Phase (Steps 6-10)**Communication Phase (Steps 6-10)**
  - Confirmations, calendar management, and CVR generation
- Wrap-Up Phase (Steps 11-12)**Wrap-Up Phase (Steps 11-12)**
  - Follow-up emails and CVR submission
- Administrative Phase (Steps 13-14)**Administrative Phase (Steps 13-14)**
  - Monthly payment forms and mileage logs

Console Output

Below the buttons is a console window that displays real-time output:

- Progress messages as steps execute
- Success confirmations
- Error messages with specific details
- File paths for generated documents

Tip: Keep an eye on the console to monitor progress and catch any issues immediately.

Settings and Controls

- ⚙️ Settings Button (Step 14 only): Configure your starting and ending addresses for mileage calculations
- Close Button: Safely exits the application

Online vs. Offline Features

The Court Visitor Application works both with and without an internet connection. However, some features require online access through Google services.

Understanding Online and Offline Modes

You can use this application in two ways:

- Offline Mode: No internet or Google account needed - basic features work immediately
- Online Mode: Requires internet and Google API setup - unlocks email, calendar, and mileage features

Feature Availability Table

Step	Feature	Works Offline?	Online Required?
1	Extract Case Data from PDFs	✓ Yes (Basic)	Optional (Better)
2	Organize Files into Case Folders	✓ Yes	No
3	Generate Route Map	✗ No	✓ Yes (Maps API)
4	Send Meeting Requests	✗ No	✓ Yes (Gmail)
5	Add Guardian Contacts	✗ No	✓ Yes (Contacts)
6	Send Appointment Confirmations	✗ No	✓ Yes (Gmail)
7	Add to Google Calendar	✗ No	✓ Yes (Calendar)
8	Generate CVR Document	✓ Yes	No
9	Generate Visit Summary	✓ Yes	No
10	Complete CVR with Form Data	✗ No	✓ Yes (Sheets)
11	Send Follow-up Emails	✗ No	✓ Yes (Gmail)
12	Email CVR to Supervisor	✗ No	✓ Yes (Gmail)
13	Generate Payment Form	✓ Yes	No
14	Generate Mileage Log	✗ No	✓ Yes (Maps API)

Offline Capabilities

Without any Google account or internet connection, you can:

- Extract data from PDFs (basic text extraction)
- Organize files into case folders
- Manually create and edit the Excel database
- Generate CVR documents from templates
- Generate visit summaries
- Generate payment forms

Online Benefits

With Google API setup, you gain:

- Improved PDF extraction accuracy using Google Vision AI
- Automated email communication with guardians
- Automatic calendar integration
- Contact management synchronization
- Automatic CVR completion from Google Forms
- Automated mileage calculations
- Route mapping for visit planning

Gmail and Google Account Setup

Why Gmail is Recommended

We strongly recommend using Gmail for the online features of this application because:

- Gmail is free and easy to set up
- Google provides free access to all the services the app needs (Gmail, Calendar, Contacts, Drive, Maps)
- Google's services are reliable, secure, and widely used
- Setup is straightforward and well-documented
- You can use a free personal account or a business Google Workspace account

Creating a Free Gmail Account

If you don't already have a Gmail account:

7. 1. Go to gmail.com and click "Create account"
8. 2. Fill in your information (name, desired email address, password)
9. 3. Verify your phone number (for security)
10. 4. Accept Google's Terms of Service
11. 5. Your Gmail account is now ready to use!

Need Help? Ask the AI Assistant! ⭐

The Court Visitor Application includes a built-in AI assistant to help you with setup and troubleshooting. Click the AI button (brain icon) in the application to get instant help.

The AI assistant is like having a tech expert standing next to you, ready to help anytime. It can:

- Guide you through creating a Gmail account step-by-step
- Explain how to set up Google API access
- Help you troubleshoot error messages
- Answer questions about any feature of the application
- Walk you through complex tasks

Tips for Using the AI Assistant:

- The AI loves screenshots! If you're stuck, take a screenshot and share it with the AI for better help
- Not sure how to take screenshots? Just ask the AI "How do I take a screenshot?" and it will explain
- Ask specific questions like "How do I set up Gmail API?" or "Why isn't Step 4 working?"

- The AI can see your error messages if you share them, making troubleshooting much faster
- Don't hesitate to ask follow-up questions - the AI is patient and always available

Meet the Chatbot - Your Fun Helper!

In addition to the AI assistant, there's a friendly chatbot that can answer questions in a more conversational, fun way. Look for the chat icon and don't be shy - ask it anything! The chatbot can:

- Explain features in plain, everyday language
- Give you quick answers without searching through the manual
- Provide encouragement when you're learning new features
- Tell you jokes to lighten the mood during long work sessions (try asking "Tell me a joke"!)

Think of the AI and chatbot as your personal tech support team, available 24/7, never judgmental, and always ready to help you succeed!

Software Requirements and Alternatives

Microsoft Word and Excel - Recommended

The Court Visitor Application is designed to work best with Microsoft Word and Microsoft Excel (part of Microsoft Office). These programs offer:

- Full compatibility with all features
- Reliable document generation
- Professional formatting maintained
- Bookmark support for automated document completion
- 100% tested and verified to work correctly

Free Alternatives Available

If you don't have Microsoft Office, there are free alternatives that may work with the Court Visitor Application:

LibreOffice (Recommended Free Alternative)

- Website: libreoffice.org
- Cost: Completely free and open-source

Pros:

- Free forever - no subscriptions or hidden costs
- Can open and edit .docx and .xlsx files
- Includes word processor (Writer) and spreadsheet (Calc)
- Works on Windows, Mac, and Linux
- Regular updates and active community support

Cons:

- May have minor formatting differences in generated documents
- Bookmark features may not work exactly the same as Microsoft Word
- Some advanced Word automation features may not function
- You may need to manually adjust generated CVRs and forms

OpenOffice

- Website: openoffice.org
- Cost: Free and open-source

Pros:

- Free forever

- Similar to LibreOffice
- Can open Microsoft Office files

Cons:
- Less frequently updated than LibreOffice
- Same compatibility limitations as LibreOffice
- Smaller user community for support

Google Docs and Google Sheets
- Website: docs.google.com and sheets.google.com
- Cost: Free with a Gmail account

Pros:
- Free with any Gmail account
- Cloud-based - access from anywhere
- Automatic saving
- Can export to .docx and .xlsx formats

Cons:
- NOT COMPATIBLE with Court Visitor App automation features
- Requires internet connection to use
- Cannot be automated by the Court Visitor Application
- You would need to manually create all documents

Our Recommendation
For the best experience:
12. 1st Choice: Microsoft Office (Word + Excel) - Full compatibility, professionally tested
13. 2nd Choice: LibreOffice - Free alternative that works reasonably well with minor limitations
14. Not Recommended: Google Docs/Sheets - Cannot be automated by the application

If you choose a free alternative, test document generation features early to ensure they meet your needs. The AI assistant can help troubleshoot any compatibility issues you encounter!

Data Safety and Storage
Your Data Stays on Your Computer
One of the most important features of the Court Visitor Application is data security:
- All client information stays on YOUR computer - never uploaded to external servers
- Ward names, addresses, and case details remain completely private
- You control who has access to your data
- No cloud storage of sensitive case information

When you use Google services (Gmail, Calendar, etc.), only the specific information needed for that service is shared:
- Emails: Only sent when you explicitly click to send them
- Calendar: Only appointment dates/times and addresses
- Contacts: Only guardian names and email addresses
- Your Excel database never leaves your computer

CRITICAL: Do NOT Use Google Drive or OneDrive Sync!

WARNING: Using cloud sync services like Google Drive, OneDrive, Dropbox, or iCloud with your Court Visitor Application files can cause serious problems:

The Problem with Cloud Sync

File corruption can occur when:

- You edit the Excel database on one computer
- The cloud service starts syncing the file
- Before sync completes, you (or the app) make changes on another device
- The cloud service doesn't know which version is correct
- Result: Your changes get overwritten or the file becomes corrupted

Real-World Example:

- Monday morning: You update visit dates for 5 cases on your desktop computer
- OneDrive starts uploading the changes to the cloud
- You grab your laptop and make different changes before OneDrive finishes syncing
- OneDrive sees two different versions of the file
- Your Monday morning work is lost, or worse, the file won't open at all

How to Avoid This Problem

15. 1. Install the Court Visitor Application in a LOCAL folder

    - ✓ GOOD: C:\Court Visitor App\
    - ✓ GOOD: C:\Program Files\Court Visitor App\
    - ✗ BAD: C:\Users\YourName\OneDrive\Court Visitor App\
    - ✗ BAD: G:\My Drive\Court Visitor App\
    - ✗ BAD: C:\Users\YourName\Dropbox\Court Visitor App\

16. 2. Use proper backup methods instead

    - Manual copy to USB drive
    - Scheduled backups to external hard drive
    - Copy files to cloud storage AFTER you finish working (manual upload)
    - Use Windows Backup or Time Machine (Mac)

17. 3. Work on ONE computer at a time

    - Finish your work session completely before switching devices
    - Don't try to work on the same case files from multiple locations simultaneously

What If You Already Installed in a Synced Folder?

If you already installed the application in Google Drive, OneDrive, or another synced location:

18. 1. Uninstall the Court Visitor Application
19. 2. Reinstall it in a local folder (like C:\Court Visitor App\)
20. 3. Copy your Excel database from the old location to the new location
21. 4. Copy your case folders from New Clients/ to the new installation
22. 5. Exclude the new Court Visitor App folder from your cloud sync service

Need help with this? Ask the AI assistant! It can guide you through moving your installation safely.

Recommended Backup Strategy

To keep your data safe without cloud sync problems:

- Daily: The app automatically backs up your Excel database to App Data/Backup/
- Weekly: Manually copy your entire Court Visitor App folder to a USB drive or external hard drive
- Monthly: Create a backup of completed cases to long-term storage
- Optional: After finishing work for the day, manually upload your Excel database to cloud storage for off-site backup

Google API Authorization

Understanding API Authorization

To use online features, the Court Visitor Application needs permission to access your Google services. This process is called "authorization" or "authentication."

Think of it like this: You're giving the application a special key that allows it to send emails, add calendar events, and perform other tasks on your behalf. You remain in complete control and can revoke this access at any time.

Is It Safe to Trust This App?

Yes, it is completely safe. Here's why:

- The app only requests the specific permissions it needs (send email, manage calendar, etc.)
- You grant permission through Google's official authorization system
- Google shows you exactly what permissions you're granting
- The app cannot access your password
- You can revoke access at any time through your Google account settings
- Without proper authorization, the online features simply won't work - the app will display an error

When Authorization is Needed

You'll need to authorize the application:

- The first time you use any online feature (Step 4, 5, 6, 7, 11, 12, 14)
- If you haven't used the app in a long time (Google authorization expires after extended periods of inactivity)
- If you manually revoke access through your Google account settings
- After certain security updates from Google

The Authorization Process

When you first use an online feature:

23. 1. The app will open your web browser automatically
24. 2. You'll see a Google login page (if not already logged in)
25. 3. Google will show you what permissions the app is requesting
    - Example: "Court Visitor Application wants to: Send email on your behalf, Manage your calendar"
26. 4. Click "Allow" to grant permission
27. 5. The browser will show a "Success" message
28. 6. Return to the Court Visitor Application - it's now authorized!

This process typically takes less than one minute.

Re-Authorization is Normal

Don't be alarmed if the app asks you to authorize again after several weeks or months. This is normal security behavior. Google's authorization tokens expire periodically to protect your account security. Simply go through the authorization process again - it's exactly the same as the first time.

The app stores authorization credentials in the Config/API/ folder. These files are automatically managed - you don't need to touch them.

What If Authorization Fails?

If you see an error during authorization:

- Check your internet connection
- Make sure you're logged into the correct Google account
- Try closing the app and running the step again
- Click the AI assistant button for help troubleshooting
- Check that your Google account hasn't been suspended or locked

Managing Authorization

To view or revoke the app's access to your Google account:

29. 1. Go to myaccount.google.com
30. 2. Click "Security" in the left sidebar
31. 3. Scroll to "Your connections to third-party apps & services"
32. 4. Find "Court Visitor Application" in the list
33. 5. Click it to see what permissions it has or to remove access

If you revoke access, the app will simply ask you to re-authorize the next time you use an online feature. No data will be lost.

Excel Database Column Reference

The Excel database (App Data/ward_guardian_info.xlsx) is the central hub of the Court Visitor Application. Understanding what each column does and how it triggers different actions is essential for using the app effectively.

Complete Column Guide

Column Name	What It Stores	What Actions It Triggers
causeno	Unique court case number (e.g., C-1-PB-22-000706)	Used by Step 2 to create folder names. Used to identify cases throughout the app.
wardfirst	Ward's first name	Used in folder names (Step 2), CVR documents (Step 8), and all reports
wardlast	Ward's last name	Used in folder names (Step 2), CVR documents (Step 8), and all reports
waddress	Full address where ward lives (street, city, state, ZIP)	Used for: Route maps (Step 3), Calendar events (Step 7), Mileage logs (Step 14), CVRs
guardian1	Primary guardian's full name	Used in: Meeting requests (Step 4), Confirmations (Step 6), Contact sync (Step 5), Follow-ups (Step 11)
gemail	Primary guardian's email address	REQUIRED for Steps 4, 6, 11 to work. App sends emails to this address.
Guardian2	Secondary guardian name (optional)	If present, included in communications. Can be left blank.
g2email	Secondary guardian email (optional)	If present, receives copies of emails. Can be left blank.
visitdate	Scheduled visit date (YYYY-MM-DD or MM/DD/YYYY format)	TRIGGERS: Meeting requests (Step 4), Route maps (Step 3), Calendar events (Step 7), Payment forms (Step 13)
visittime	Scheduled visit time (HH:MM AM/PM format)	TRIGGERS: Meeting requests (Step 4), Calendar events (Step 7), Confirmations (Step 6)
Appt_confirmed	Y = guardian confirmed visit. Blank = not confirmed	TRIGGERS Step 6 to send confirmations. Only cases with 'Y' get confirmation emails.
emailsent	Tracks if meeting request was already sent	Prevents duplicate emails. Step 4 marks this when sending meeting requests.

How Columns Work Together

Example Workflow - Scheduling a Visit:

34. 1. Step 1 extracts data and fills in: causeno, wardfirst, wardlast, waddress, guardian1, gemail
35. 2. You manually add visitdate and visittime in Excel
36. 3. Step 4 reads gemail, visitdate, visittime → Sends meeting request to guardian
37. 4. Guardian replies to your email confirming the visit
38. 5. You manually change Appt_confirmed to 'Y' in Excel
39. 6. Step 6 reads Appt_confirmed = 'Y' → Sends detailed confirmation email
40. 7. Step 7 reads visitdate, visittime, waddress → Creates Google Calendar event

Important Notes About Column Data

- Date Format: Use YYYY-MM-DD (2024-11-15) or MM/DD/YYYY (11/15/2024) for visitdate
- Time Format: Use HH:MM AM/PM (2:30 PM) for visittime
- Email addresses: Must be valid - check for typos!
- Address format: Include street, city, state, and ZIP for mileage calculations to work
- Case sensitivity: Column names are case-sensitive. Don't change "causeno" to "CauseNo"
- Don't delete columns: The app expects all columns to exist, even if some are blank

Adding Custom Columns

You can add your own columns to track additional information:

- Add new columns to the RIGHT of the existing columns
- Never insert columns in the middle of existing ones
- Custom columns won't affect the app - it only reads the standard columns
- Examples of useful custom columns: "Notes", "Last Visit Date", "Case Status", "Court Date"

File Organization

The Court Visitor Application uses a specific folder structure. Understanding this organization will help you work efficiently.

Directory Structure

New Files/**New Files/**

- Purpose: Inbox for all incoming court PDFs
- What goes here: Annual Reports (ARP*.pdf), Court Orders (ORDER*.pdf), Approvals (APPROVAL*.pdf)
- What happens: Step 1 reads these files, Step 2 moves them to case folders

New Clients/**New Clients/**

- Purpose: Active case folders organized by cause number
- Naming convention: [CauseNo]_[Ward Last Name]_[Ward First Name]
- Example: C-1-PB-22-000706_Smith_John
- Contents: Original PDFs, generated CVRs, visit summaries

Completed/**Completed/**

- Purpose: Archive for closed cases
- How to use: Manually move folders from New Clients/ when cases are complete

App Data/**App Data/**

- ward_guardian_info.xlsx: The central database - all case information
- Templates/: Word document templates for CVR, Payment, Mileage
- Output/: Generated payment forms and mileage logs
- Backup/: Automatic backups of the Excel database

Config/**Config/**

- mileage_settings.txt: Your starting/ending addresses
- API/: Google API credentials (managed by administrator)

File Naming Requirements

For Step 1 (PDF extraction) to work correctly, name your incoming files:

- Annual Reports of Person**Annual Reports of Person**
  - ARP.pdf, ARP1.pdf, ARP_Smith.pdf, ARP-Jones.pdf
- Court Orders**Court Orders**
  - ORDER.pdf, ORDER1.pdf, ORDER_Smith.pdf, ORDER-Jones.pdf
- Approval Documents**Approval Documents**
  - APPROVAL.pdf, APPROVAL1.pdf, APPROVAL_Smith.pdf

The file name must START with ARP, ORDER, or APPROVAL (case-insensitive). Additional text after is optional.

The Excel Database

Location: App Data/ward_guardian_info.xlsx

This Excel file is the heart of the Court Visitor Application. Every automation step reads from or writes to this database. Understanding its structure is essential.

Essential Columns

Column Name	Purpose
causeno	Unique case identifier (e.g., C-1-PB-22-000706)
wardfirst	Ward's first name
wardlast	Ward's last name
waddress	Ward's full address (for visit location)
guardian1	Primary guardian's full name
gemail	Primary guardian's email address
Guardian2	Secondary guardian (optional)
g2email	Secondary guardian's email (optional)
visitdate	Scheduled visit date (YYYY-MM-DD or MM/DD/YYYY)
visittime	Scheduled visit time (HH:MM AM/PM)
Appt_confirmed	Y = confirmed by guardian, blank = not confirmed

Column Name	Purpose
emailsent	Tracks whether meeting request was sent

How to Edit the Database

23. 1. Open in Excel
    - Navigate to App Data/ and open ward_guardian_info.xlsx
24. 2. Make your changes
    - Add visit dates and times
    - Update addresses or contact information
    - Mark appointments as confirmed (Y in Appt_confirmed column)
25. 3. Save and close
    - The application creates automatic backups before writing to the file

Important: Do not rename or delete columns. The automation scripts depend on specific column names.***Important:*** *Do not rename or delete columns. The automation scripts depend on specific column names.*

Backup Strategy

The Court Visitor Application automatically backs up the Excel database before any write operation. Backups are stored in App Data/Backup/ with timestamps:

Example: ward_guardian_info_20241115_143022.xlsx

Recommended: Additionally back up the Excel file daily to your own backup location (cloud storage, external drive, etc.).

Troubleshooting

Common issues and solutions:

Step 1 Fails to Extract Data

Problem: PDF extraction doesn't work**Problem:** PDF extraction doesn't work

- Check file naming: File must start with ARP, ORDER, or APPROVAL
- Check PDF quality: Scanned documents may need better OCR
- Verify Tesseract and Poppler are installed (see Technical Appendix)
- Check Vision API credentials in Config/API/ folder

Email Steps Fail

Problem: Meeting requests, confirmations, or CVR emails don't send**Problem:** Meeting requests, confirmations, or CVR emails don't send

- Verify internet connection
- Check Gmail OAuth token is valid
- Try re-authenticating: Delete Config/API/token_gmail.json and run the step again

- Verify guardian email addresses in Excel database

Word Document Generation Fails

Problem: CVR, payment forms, or mileage logs don't generate**Problem:** CVR, payment forms, or mileage logs don't generate

- Verify Microsoft Word is installed
- Close any open Word documents
- Check templates exist in App Data/Templates/
- Verify case folder exists in New Clients/

Mileage Calculation Errors

Problem: Step 14 can't calculate distances**Problem:** Step 14 can't calculate distances

- Click the ⚙️ Settings button in Step 14 window
- Enter valid starting and ending addresses
- Verify addresses are complete with city, state, and ZIP
- Check Google Maps API is configured (see Technical Appendix)

Google Calendar/Contacts Issues

Problem: Steps 5, 7 fail to add contacts or calendar events**Problem:** Steps 5, 7 fail to add contacts or calendar events

- Verify you're signed in to the correct Google account
- Check OAuth tokens are valid (Config/API/ folder)
- Try deleting token files and re-authenticating

General Troubleshooting Tips

- Check the console output for specific error messages
- Review log files in Automation/[Step Name]/logs/
- Restart the application and try again
- Check that Excel database is not open in another program
- Verify all required files and folders exist (see File Organization section)

Best Practices

Daily Workflow

Start of day:**Start of day:**

- Launch the Court Visitor Application
- Process any new PDFs (Steps 1-2)
- Review Excel database for pending visits

After receiving court documents:**After receiving court documents:**

- Immediately run Steps 1-2 to extract and organize

- Verify data accuracy in Excel

After completing a visit:**After completing a visit:**

- Complete Google Form immediately
- Run Steps 8, 10, 11, 12 within 24 hours

End of day:**End of day:**

- Backup Excel database to external location
- Review console for any error messages

Data Management

- Always verify extracted data after Step 1 - OCR isn't perfect
- Keep email addresses updated in Excel database
- Use consistent date formats: YYYY-MM-DD works best
- Mark Appt_confirmed as 'Y' only after guardian explicitly confirms
- Archive completed cases to Completed/ folder monthly

Communication

- Send meeting requests (Step 4) at least 1 week before desired visit date
- Wait for guardian confirmation before sending appointment confirmation (Step 6)
- Send follow-up emails (Step 11) within 24 hours of visit
- Submit CVRs to supervisor (Step 12) within 48 hours of visit

Monthly Maintenance

- Run Steps 13-14 on the last business day of each month
- Review automatic backups folder and delete old backups (keep 3 months)
- Archive completed cases to Completed/ folder
- Check for application updates (auto-update checks on launch)

Appendix A: Detailed Step Documentation

This appendix provides comprehensive documentation for each of the 14 workflow steps. Use this as a reference when you need detailed information about a specific step's functionality, requirements, or troubleshooting.

The detailed documentation for each step typically includes:

- Step purpose and overview
- Prerequisites and requirements
- Step-by-step execution instructions
- Input requirements (file formats, data fields, etc.)
- Expected outputs and file locations
- Common error messages and solutions
- Google API requirements (if applicable)
- Best practices and tips

Step 1. Import PDFs / OCR Files

Court Visitor App – Detailed Step Guide

Overview

The 'Import PDFs / OCR Files' button is the first and most critical step in your workflow. This powerful automation reads ARP (Application for Renewal of Permanent Guardianship) and Order documents, extracts all relevant information using advanced OCR technology, and automatically populates your Excel spreadsheet with ward and guardian data.

Instead of manually typing information from each PDF into Excel—a process that could take hours for multiple cases—this button does it all automatically in minutes. The app reads both text-based PDFs and scanned image PDFs, intelligently extracting names, addresses, phone numbers, dates, and cause numbers with high accuracy.

When to Use This Button

Use this button when:

- You receive new ARP and Order documents from the court
- You have PDF files in your 'New Files' folder that need to be processed
- You want to start working on new cases
- Your Excel file needs to be updated with information from new PDFs
- You have scanned documents that need OCR (Optical Character Recognition)

TIP: This is ALWAYS the first step. Run this button before any other workflow steps when starting new cases.

What Happens When You Click This Button

Step 1: The App Scans for PDF Files

The app looks in C:\GoogleSync\GuardianShip_App\New Files\ for PDF documents:

- Identifies ARP (Application for Renewal of Permanent Guardianship) documents
- Identifies Order documents from the court
- Processes all PDFs found in the folder
- Works with both text-based PDFs and scanned image PDFs

Step 2: The App Extracts Text Using OCR

For each PDF, the app uses sophisticated text extraction:

- First attempts direct text extraction (for text-based PDFs)
- If that fails, uses Tesseract OCR to read scanned images
- Enhances image quality before OCR (sharpening, contrast adjustment)
- Uses Google Vision API as a backup for difficult documents
- Processes multiple pages to find all relevant information

The OCR process:

- Converts PDF pages to high-resolution images
- Applies image preprocessing (sharpening, deskewing, noise reduction)
- Runs two OCR passes with different settings and keeps the better result
- Can read even poor-quality scanned documents

Step 3: The App Identifies and Extracts Ward Information

From the OCR text, the app intelligently extracts ward details:

- Ward's full name (first, middle, last)
- Ward's address (street, city, state, ZIP)
- Ward's phone number
- Ward's date of birth
- Who the ward lives with
- Cause number for the case

The app uses pattern recognition to find:

- Names near keywords like 'Ward', 'Incapacitated Person', 'Subject'
- Addresses following standard US postal format
- Phone numbers in various formats (xxx-xxx-xxxx, (xxx) xxx-xxxx, etc.)
- Dates in multiple formats (MM/DD/YYYY, M/D/YY, etc.)
- Cause numbers in Travis County format (C-1-PB-YY-XXXXX) or shortened format

Step 4: The App Identifies and Extracts Guardian Information

The app extracts information for up to TWO guardians:

Guardian 1:

- Name (various formats supported)
- Address
- Phone number(s)
- Email address
- Date of birth
- Relationship to ward

Guardian 2 (if present):

- All the same information as Guardian 1
- Stored in separate columns with 'g2' prefix

The app recognizes guardians by:

- Keywords like 'Guardian', 'Proposed Guardian', 'Attorney Ad Litem'
- Section headers in court documents
- Name patterns and formatting
- Position relative to ward information

Step 5: The App Extracts Important Dates
The app finds and extracts critical dates:
- Date ARP was filed
- Date guardian was appointed
- Visit dates (if scheduling information is present)
- All dates are standardized to MM/DD/YYYY format

Step 6: The App Updates Your Excel File
The extracted information is written to ward_guardian_info.xlsx:
- Each PDF becomes one or more rows in Excel
- Existing rows with matching cause numbers may be updated
- New rows are appended to the end of the spreadsheet
- Column headers are created automatically if missing
- A backup of the Excel file is created before any changes

Step 7: The App Creates a Backup
Before modifying Excel:
- A timestamped backup is saved to C:\GoogleSync\GuardianShip_App\App Data\Backup\
- Format: ward_guardian_info__backup_YYYY-MM-DD_HHMMSS.xlsx
- You can restore from backup if anything goes wrong
- Backups accumulate over time—consider cleaning old ones periodically

Step 8: The App Provides a Summary
After processing completes:
- Displays how many PDFs were processed
- Shows how many rows were added or updated
- Reports any files that couldn't be processed
- Indicates whether extraction was successful

Prerequisites (What You Need Before Clicking)
41. PDF FILES: Place ARP and Order PDF files in C:\GoogleSync\GuardianShip_App\New Files\
42. EXCEL FILE EXISTS: ward_guardian_info.xlsx should exist (created automatically if missing)
43. TESSERACT OCR INSTALLED: Required for reading scanned PDFs (installed during app setup)
44. POPPLER INSTALLED: PDF processing library (installed during app setup)
45. EXCEL CLOSED: Close Microsoft Excel before clicking the button
46. OPTIONAL - GOOGLE VISION API: For enhanced OCR accuracy (requires service account setup)

Step-by-Step Instructions
Before You Click
47. Save all ARP and Order PDFs to C:\GoogleSync\GuardianShip_App\New Files\
48. Close Microsoft Excel if you have ward_guardian_info.xlsx open
49. Ensure PDF filenames contain 'ARP' or 'Order' (the app uses this for identification)
50. Check that you have at least a few hundred MB of free disk space
51. Open the Court Visitor App main window

Clicking the Button

52. Locate 'Import PDFs / OCR Files' button (usually button #1 at the top)
53. Click the button once
54. Wait while processing occurs (this may take several minutes for many PDFs)
55. Watch the progress messages in the app window
56. Do NOT close the app or click the button again while processing

While Processing (What You'll See)

- Messages about which PDF is being processed
- OCR progress indicators
- Extraction results for each document
- Any warnings about missing or unclear information
- Final summary of results

After You Click

57. Wait for the 'SUCCESS' message
58. Open ward_guardian_info.xlsx to review the extracted data
59. Check that new rows were added for your cases
60. Verify the cause numbers, ward names, and guardian information look correct
61. Manually correct any OCR errors or missing data
62. Save the Excel file if you made corrections
63. Proceed to Step 2: Make Folders and Move Files

Understanding the Excel Columns

After import, your Excel file will have these columns:

Column Name	Description
causeno	Cause number (case identifier)
wardfirst	Ward first name
wardmiddle	Ward middle name
wardlast	Ward last name
waddress	Ward address
wtele	Ward phone number
wdob	Ward date of birth
liveswith	Who the ward lives with
guardian1	Guardian 1 name
gaddress	Guardian 1 address
gtele	Guardian 1 phone
gemail	Guardian 1 email
gdob	Guardian 1 date of birth
Relationship	Guardian 1 relationship to ward
Guardian2	Guardian 2 name
g2address	Guardian 2 address
g2tele	Guardian 2 phone
g2email	Guardian 2 email
g2dob	Guardian 2 date of birth
g2Relationship	Guardian 2 relationship
DateARPfiled	Date ARP was filed
Dateappointed	Date guardian appointed

💡 **TIP:** Not all columns will be filled for every case. The app extracts whatever information it can find in the PDFs.

Understanding OCR Accuracy

What OCR Does Well

- Reads clean, high-resolution scanned documents
- Extracts printed text accurately (95%+ accuracy on good scans)
- Handles standard fonts and layouts
- Recognizes common document structures (court forms)
- Processes both color and black & white scans

What Can Cause OCR Errors

- Poor scan quality (blurry, low resolution)
- Handwritten text (OCR struggles with handwriting)
- Skewed or rotated pages
- Faded or faint text
- Complex backgrounds or watermarks
- Unusual fonts or formatting

Common OCR Mistakes to Watch For

- Number confusion: 0 vs O, 1 vs l vs I, 5 vs S
- Similar letters: rn vs m, vv vs w
- Punctuation: periods, commas, apostrophes may be missed
- Addresses: OCR may split or combine address lines incorrectly
- Phone numbers: may have incorrect digits or missing separators

What to Review After Import

Always manually check these fields:

- Cause numbers (critical for case identification)
- Phone numbers (verify all digits are correct)
- Email addresses (check for typos)
- ZIP codes (verify 5 digits)
- Names (check spelling)
- Dates (verify month/day/year are logical)

Common Warnings and Errors

Warning: 'No PDFs found in New Files folder'

CAUSE: The New Files folder is empty or contains no PDF files.
SOLUTION: Place PDF files in C:\GoogleSync\GuardianShip_App\New Files\ and try again.

Warning: 'Could not extract text from [filename]'

CAUSE: The PDF is corrupted, encrypted, or has severe quality issues.
SOLUTION: Try re-downloading or re-scanning the PDF. Check if you can open it in Adobe Reader. If the PDF is password-protected, remove the password first.

Warning: 'Could not find cause number in [filename]'

CAUSE: OCR couldn't locate a cause number in the document.

SOLUTION: Open the PDF manually and note the cause number. After import, manually add it to the Excel file.

Warning: 'Could not find ward name in [filename]'
CAUSE: The ward name wasn't recognized by OCR or isn't in an expected format.
SOLUTION: Manually add the ward name to Excel after import.

Error: 'Tesseract not found'
CAUSE: Tesseract OCR is not installed.
SOLUTION: Contact your IT administrator. Tesseract should be installed at C:\Program Files\Tesseract-OCR\tesseract.exe during app setup.

Error: 'Excel file is locked'
CAUSE: ward_guardian_info.xlsx is open in Microsoft Excel.
SOLUTION: Close Excel and try again.

Warning: 'Extracted data may be incomplete'
CAUSE: Some expected fields couldn't be found in the PDF.
SOLUTION: This is normal for PDFs with minimal information. Review Excel and manually fill in missing data.

Troubleshooting

Problem: Processing takes a very long time
- OCR is CPU-intensive and can take 30-60 seconds per PDF
- Processing 10 PDFs may take 5-10 minutes
- Be patient and let it complete
- Check Task Manager - CPU usage should be high during OCR
- Consider processing PDFs in smaller batches if time is an issue

Problem: Excel file has duplicate rows
- The app tries to match existing rows by cause number
- If cause numbers don't match exactly, duplicates may occur
- Manually delete duplicate rows in Excel
- Ensure cause numbers are consistent across PDFs

Problem: Guardian information is mixed up
- Sometimes Guardian 1 and Guardian 2 are reversed
- This happens if the PDF format is unusual
- Manually swap the data in Excel after import
- Check both guardian columns to ensure correct assignment

Problem: Addresses are incomplete or wrong
- OCR sometimes breaks addresses across multiple lines
- Address may include extra text or missing components
- Review and correct addresses in Excel manually
- Addresses are critical for the mapping step, so verify them carefully

Problem: All data is blank/empty

- OCR may have completely failed
- Check if PDFs are readable (open in Adobe Reader)
- Verify Tesseract and Poppler are installed correctly
- Try re-scanning PDFs at higher resolution (300 DPI minimum)
- Check log files for detailed error messages

Problem: Phone numbers are wrong

- OCR commonly mistakes digits (0 for O, 1 for I, etc.)
- Always verify phone numbers manually
- Call the number to test if unsure
- Common errors: 512-555-1234 becomes 5I2-555-I234

Problem: Need to reprocess a PDF

- Delete the row from Excel
- Place the PDF back in New Files
- Run Import PDFs button again
- The PDF will be reprocessed

Tips and Best Practices

TIP: ALWAYS review the Excel file after import. OCR is not 100% accurate. Spend a few minutes checking each row before proceeding to the next step.

- SCAN QUALITY MATTERS: Request high-quality scans (300 DPI or higher) from the court if possible. Better scans = better OCR accuracy.
- BATCH PROCESSING: Process 5-10 PDFs at a time rather than 50 all at once. This makes errors easier to spot and fix.
- NAMING CONVENTION: Name your PDFs clearly before importing (e.g., '25-001234 ARP.pdf', '25-001234 Order.pdf'). This helps with tracking.
- BACKUP AWARENESS: The app creates automatic backups, but you should also manually back up your Excel file weekly.
- CHECK CAUSE NUMBERS: The cause number is the most critical field. Everything else can be corrected later, but wrong cause numbers cause major problems.
- PHONE NUMBER VERIFICATION: Always call guardian numbers to verify they're correct. A wrong digit means you can't reach them.
- EMAIL ADDRESSES: OCR often gets email addresses wrong. Double-check for typos, especially around @ symbols.
- DATE FORMAT: All dates are standardized to MM/DD/YYYY. If you see other formats, correct them manually.
- MISSING GUARDIAN 2: Not all cases have a second guardian. Blank Guardian2 columns are normal.
- HANDWRITTEN NOTES: OCR cannot read handwritten annotations on PDFs. You'll need to type those manually.
- EXCEL FORMULAS: Don't add Excel formulas to columns that the app writes to. The app may overwrite them.

- COLUMN ORDER: Don't rearrange column order in Excel. The app expects specific column names.
- PROCESSING TIME: Plan for OCR to take time. Don't start this right before a deadline.
- GOOGLE VISION: If accuracy is poor, ask your IT admin about enabling Google Vision API for better OCR.

Example Scenario

The Situation

You receive 3 new cases from the court:

- Case 25-001234 (Smith, John) - ARP and Order PDFs
- Case 25-001235 (Doe, Jane) - ARP and Order PDFs
- Case 25-001236 (Johnson, Bob) - ARP only (Order pending)

The Process

64. You save all 5 PDFs to C:\GoogleSync\GuardianShip_App\New Files\
65. You close Excel if it's open
66. You click 'Import PDFs / OCR Files'
67. The app processes each PDF (takes about 5 minutes total)
68. You see progress messages for each file
69. The app completes with 'SUCCESS - Processed 5 PDFs, added 3 rows'

The Result

Your ward_guardian_info.xlsx now contains:

- Row for Case 25-001234 with ward John Smith and guardian Mary Smith
- Row for Case 25-001235 with ward Jane Doe and two guardians
- Row for Case 25-001236 with ward Bob Johnson (partial data from ARP only)
- All fields populated with OCR-extracted data

Your Review

You open Excel and check:

- All cause numbers are correct
- Ward names are spelled correctly
- Phone numbers have 10 digits
- Addresses are complete (street, city, state, ZIP)
- Guardian email addresses look valid

Corrections Made

- Case 25-001234: OCR read phone as '512-555-O123' - you correct to '512-555-0123'
- Case 25-001235: Email showed as 'jane@gmai1.com' - you correct to 'jane@gmail.com'
- Case 25-001236: Ward address was incomplete - you manually add the ZIP code

Next Steps

With clean data in Excel, you proceed to Step 2: Make Folders and Move Files

Technical Details (For Advanced Users)

File Paths

- PDF Input: C:\GoogleSync\GuardianShip_App\New Files\

- Excel Output: C:\GoogleSync\GuardianShip_App\App Data\ward_guardian_info.xlsx
- Backups: C:\GoogleSync\GuardianShip_App\App Data\Backup\
- Tesseract: C:\Program Files\Tesseract-OCR\tesseract.exe
- Poppler: C:\poppler\Library\bin\
- Google Service Account: C:\configlocal\API\google_service_account.json

OCR Libraries Used

- pdfplumber - Primary text extraction for text-based PDFs
- Tesseract OCR - Open source OCR engine (primary OCR method)
- pytesseract - Python wrapper for Tesseract
- pdf2image - Converts PDF pages to images for OCR
- Pillow (PIL) - Image processing and enhancement
- Google Vision API - Optional backup OCR for difficult documents

Image Preprocessing Steps

- Convert PDF to high-DPI image (300 DPI)
- Convert to grayscale
- Apply sharpening filter
- Enhance contrast
- Remove noise
- Deskew if rotated

OCR Settings

- PSM Mode 4: Single column of text (for standard court forms)
- PSM Mode 6: Uniform block of text (backup mode)
- Both modes are tried and the longer result is kept
- Language: English (eng)
- OEM Mode 3: Default/LSTM neural network

Pattern Recognition

The app uses regex patterns to find:

- Names: Capitalized words near keywords
- Addresses: Street numbers, street names, cities, states, ZIPs
- Phone: (XXX) XXX-XXXX, XXX-XXX-XXXX, XXX.XXX.XXXX formats
- Email: standard email format with @ symbol
- Cause: C-X-XX-YY-NNNNN or YY-NNNNN patterns
- Dates: MM/DD/YYYY, M/D/YY, and variations

Excel Writing Method

- Uses openpyxl library for Excel manipulation
- Reads existing file to preserve data
- Creates backup before any writes
- Matches rows by cause number when possible
- Appends new rows if no match found
- Preserves formulas in columns it doesn't write to
- Uses proper Excel date format for date columns

Related Workflow Steps

Steps BEFORE This Button

None - this is the first step in the workflow.

Steps AFTER This Button

70. Make Folders and Move Files (Step 2) - Organize PDFs into case folders
71. Create Court Visitor Report (Step 3) - Generate reports from Excel data
72. Create Map of Needed Visits (Step 4) - Map ward locations
73. Send Meeting Request Emails (Step 5) - Contact guardians
74. Add Meetings to Calendar (Step 6) - Schedule appointments
75. Create Summary Sheet (Step 7) - Generate visit summary forms
76. Send Appointment Confirmations (Step 8) - Confirm scheduled visits
77. Add Guardians to Contacts (Step 9) - Populate phone contacts
78. Fill Mileage Form (Step 10) - Track travel
79. Fill Payment Form (Step 11) - Generate payment invoices
80. Send Follow-Up Emails (Step 12) - Thank guardians after visits
81. Submit to Court (Step 13) - Archive completed cases

💡 **TIP:** Everything starts here. Good data from Step 1 makes every subsequent step easier and more accurate.

Frequently Asked Questions

Q: How accurate is the OCR?

A: For good quality scans, expect 90-95% accuracy. Poor scans may be 70-80% accurate. Always review results manually.

Q: Can I process non-PDF files?

A: No, only PDF files are supported. If you have images (JPG, PNG), convert them to PDF first.

Q: What if a PDF has multiple wards?

A: The app is designed for one ward per PDF. Multiple wards may cause confusion. Manually separate them in Excel after import.

Q: Can I edit Excel while the button is processing?

A: No, Excel must be closed during processing. The app needs exclusive access to the file.

Q: Will running this button delete existing Excel data?

A: No, existing rows are preserved. The app only adds or updates rows. A backup is created before changes.

Q: What happens to PDFs after import?

A: PDFs remain in the New Files folder. Step 2 (Make Folders) moves them to case folders.

Q: Can I run this button multiple times?

A: Yes, but it may create duplicate rows if cause numbers don't match exactly. It's best to remove processed PDFs from New Files before running again.

Q: How do I know if OCR failed?

A: Check Excel - if rows are mostly blank, OCR likely failed. Check log files for errors.

Q: What's the difference between Tesseract and Google Vision?

A: Tesseract is free and runs locally. Google Vision is more accurate but requires API setup and has usage costs. Tesseract is used by default.

Summary Checklist

☐ PDF files are saved in New Files folder
☐ PDF filenames contain 'ARP' or 'Order'
☐ Excel file is closed
☐ Tesseract OCR is installed
☐ Poppler is installed
☐ At least 500 MB free disk space
☐ Ready to wait several minutes for processing
☐ AFTER CLICKING: Processing completed successfully
☐ AFTER CLICKING: Opened Excel to review data
☐ AFTER CLICKING: Verified cause numbers are correct
☐ AFTER CLICKING: Checked phone numbers have 10 digits
☐ AFTER CLICKING: Verified email addresses look valid
☐ AFTER CLICKING: Manually corrected any OCR errors
☐ AFTER CLICKING: Saved Excel file after corrections
☐ AFTER CLICKING: Ready for Step 2 - Make Folders

Step 2. Make Folders and Move Files

Court Visitor App – Detailed Step Guide

Overview

The 'Make Folders and Move Files' button automatically organizes your case files into individual client folders. After you've imported PDFs and extracted their data, this button creates properly named folders for each case and moves the related documents into the correct location. This transforms a pile of loose PDF files into an organized filing system.
The app reads the ARP and Order PDFs from your 'New Files' folder, identifies the cause number and ward name from each document, creates a folder with a standardized name format, and moves all related files into that folder. The folders are created in your 'New Clients' directory, ready for you to work on each case.

When to Use This Button

Use this button when:

- You have completed the 'Import PDFs / OCR Files' step
- Your 'New Files' folder contains ARP and Order PDFs
- You want to organize loose files into individual case folders
- You're ready to start creating Court Visitor Reports for these cases

TIP: This button should be run immediately after importing PDFs. It's the organizational step that prepares your files for the rest of the workflow.

What Happens When You Click This Button

Step 1: The App Scans the New Files Folder

The app looks in C:\GoogleSync\GuardianShip_App\New Files\ for PDF documents:

- Searches for files named with ARP, Order, or Approval in the filename
- Identifies which files belong together based on numbering (e.g., ARP1, Order1)
- Groups related documents into buckets for organization

Step 2: The App Extracts Cause Numbers

For each PDF file, the app attempts to find the cause number:

- First tries to extract text directly from the PDF (if it's text-based)
- If that fails, uses OCR to read scanned PDFs
- Searches for cause number patterns like 'C-1-PB-25-000123' or '21-001411'
- Looks near keywords like 'Cause Number', 'Case No.', or 'Cause'
- Strips Travis County prefixes to normalize formats (C-1-PB-25-123 becomes 25-123)

Step 3: The App Matches with Excel Data

If the cause number can't be found in the PDF:

- The app cross-references the ward's last name from the PDF with your Excel file
- Attempts to match the ward to a known case in ward_guardian_info.xlsx
- Uses the cause number from the Excel file if a match is found
- This backup method helps when PDFs have poor quality or missing cause numbers

Step 4: The App Determines Ward Name

The app identifies the ward's name from:

- The Excel file (using the cause number as the lookup key)
- Falls back to extracting the name from the PDF text if Excel doesn't have the case
- Uses the ward's last name and first name for folder naming

Step 5: The App Creates Folder Names

Each case folder is named using a standard format:
Format: 'LastName, FirstName - CauseNumber'
Examples:

- Smith, John - 25-001234
- Doe, Jane - 24-005678
- Johnson, Robert - C-1-PB-25-000456

This format ensures:

- Folders are easily searchable by name or cause number
- Folders sort alphabetically by last name
- Each folder is uniquely identified

Step 6: The App Creates Folders in New Clients

The folders are created at:
C:\GoogleSync\GuardianShip_App\New Clients\[LastName, FirstName - CauseNumber]\

- Each folder contains the ARP and Order PDFs for that case
- Additional files with matching numbers are also moved (e.g., Approval documents)
- Folders are ready for you to add Court Visitor Reports and other documents

Step 7: The App Handles Unmatched Files

If the app cannot determine a cause number or ward name:

- Creates a special folder called '_Unmatched'
- Moves problematic files there for manual review
- You can manually organize these files or fix the source PDFs and rerun the button

⚠ **WARNING:** Files in the _Unmatched folder need your attention. Review them to determine why they couldn't be organized automatically.

Prerequisites (What You Need Before Clicking)

82. IMPORT COMPLETE: You must have run 'Import PDFs / OCR Files' first so your Excel file is populated.
83. FILES IN NEW FILES FOLDER: ARP and Order PDFs should be in C:\GoogleSync\GuardianShip_App\New Files\.
84. EXCEL FILE UP TO DATE: ward_guardian_info.xlsx should contain cause numbers and ward names for your cases.
85. TESSERACT OCR INSTALLED: For scanned PDFs, Tesseract OCR must be installed (usually done during app setup).
86. POPPLER INSTALLED: PDF processing library (usually installed during app setup).
87. NO DUPLICATE FOLDERS: If you're rerunning this button, ensure old folders are moved or deleted to avoid conflicts.

Step-by-Step Instructions

Before You Click

88. Verify that 'Import PDFs / OCR Files' has been completed
89. Check that New Files folder contains your PDF documents
90. Open ward_guardian_info.xlsx to confirm cause numbers are present
91. Close Excel if you have it open
92. Navigate to the Court Visitor App main window

Clicking the Button

93. Locate 'Make Folders and Move Files' (usually button #2)
94. Click the button once
95. Wait while the app processes (may take 30-60 seconds depending on file count)
96. Watch for progress messages in the app window
97. The app will display a summary when complete

After You Click

98. Open Windows Explorer and navigate to C:\GoogleSync\GuardianShip_App\New Clients\
99. Verify that new folders were created with proper names
100. Open a few folders to confirm they contain the correct PDF files
101. Check the '_Unmatched' folder (if created) for any files that need manual organization
102. Verify the 'New Files' folder is now empty (all files were moved)

Understanding Folder Names

Standard Format

LastName, FirstName - CauseNumber

The folder name contains three parts separated by commas and dashes:

- Ward's last name (first)
- Ward's first name (after comma and space)
- Cause number (after dash and space)

Cause Number Format Variations

Cause numbers can appear in several formats:

- Full Travis County format: C-1-PB-25-000123

- Shortened format: 25-000123
- Legacy numeric format: 001234
- The app preserves whatever format is found in the documents

Name Sanitization

The app automatically removes invalid characters from folder names:

- Characters like / \ : * ? < > | are replaced with underscores
- Control characters and special symbols are stripped
- Leading and trailing spaces are removed
- This ensures folder names work correctly in Windows

Examples

Ward Name + Cause	Resulting Folder Name
John Smith, Cause 25-001234	Smith, John - 25-001234
Mary-Jane Doe, C-1-PB-24-005678	Doe, Mary-Jane - C-1-PB-24-005678
Robert O'Brien, 23-000999	O_Brien, Robert - 23-000999

How Files Are Grouped and Organized

File Bucketing by Number

The app groups files by looking at trailing numbers in filenames:

- Files with no number: ARP.pdf, Order.pdf → Bucket 'default'
- Files with '1': ARP1.pdf, Order1.pdf → Bucket '1'
- Files with '2': ARP2.pdf, Order2.pdf → Bucket '2'
- All files in the same bucket are assumed to be related

Cause Number Inheritance

Within each bucket:

- If ANY file yields a cause number, that cause is used for the entire bucket
- Order documents usually contain the clearest cause numbers
- ARP documents are checked if Order doesn't have a cause
- Once a cause is found, all files in the bucket are assigned to that case

Files Moved to Each Folder

All files in a bucket go into the same case folder:

- ARP.pdf → Moved to the case folder
- Order.pdf → Moved to the case folder
- Approval.pdf (if present) → Also moved to the case folder
- Any other PDFs with matching numbers → Included

The _Unmatched Folder

Files end up in _Unmatched when:

- No cause number could be extracted from the PDF
- No cause number could be matched in Excel
- The ward name couldn't be determined
- The PDF is corrupted or unreadable
- The filename doesn't match expected patterns

Common Warnings and Errors

Warning: 'No PDFs found in New Files folder'

CAUSE: The New Files folder is empty.
SOLUTION: Run 'Import PDFs / OCR Files' first to populate New Files, or manually place PDF files there.

Warning: 'Could not determine cause number for [filename]'

CAUSE: The PDF doesn't contain a readable cause number, or OCR failed.
SOLUTION: Check the _Unmatched folder. Open the PDF manually to verify it has a cause number. If it's a scanned PDF with poor quality, try re-scanning at higher resolution.

Warning: 'Multiple folders would be created for cause [number]'

CAUSE: The app found files that would create duplicate folders (same cause number, different ward names).
SOLUTION: Review the files manually. One may have the wrong ward name or cause number. Fix the Excel data or PDF and rerun.

Error: 'Tesseract not found'

CAUSE: Tesseract OCR is not installed or not at the expected path.
SOLUTION: Contact your IT administrator. Tesseract should be installed at C:\Program Files\Tesseract-OCR\tesseract.exe.

Warning: 'Files moved to _Unmatched'

CAUSE: One or more files couldn't be organized automatically.
SOLUTION: Open the _Unmatched folder and review the files. Determine why each file couldn't be matched (missing cause number, unreadable PDF, etc.). Fix the issue and rerun the button, or manually move the files to the correct case folders.

Troubleshooting

Problem: No folders are created

- Check that New Files folder contains PDF files
- Verify Import PDFs step was completed
- Open one of the PDFs manually to confirm it contains a cause number
- Check the log file for error messages
- Ensure Tesseract OCR and Poppler are installed

Problem: Wrong ward name in folder

- The ward name comes from your Excel file
- Open ward_guardian_info.xlsx and verify the ward name is correct for that cause number
- If Excel is wrong, correct it and delete the incorrectly named folder
- Rerun the button to create the folder with the correct name

Problem: Files in wrong folder

- This happens if the cause number was misread from the PDF
- Manually move the files to the correct folder
- Consider re-scanning the PDF at higher quality if OCR misread it

Problem: Duplicate folders created

- This shouldn't happen as the app prevents duplicates
- If it does occur, manually merge the folders
- Check Excel for duplicate cause numbers with different ward names

- Correct the Excel data and rerun if needed

Problem: Everything ends up in _Unmatched

- Likely OCR failure or Excel data missing
- Verify ward_guardian_info.xlsx has cause numbers populated
- Check that PDFs actually contain cause numbers (open them manually)
- Verify Tesseract OCR is working (try the Import PDFs step again)
- Check PDF quality—very poor scans may be unreadable

Problem: Need to reorganize folders after creation

- You can manually rename folders after creation
- You can manually move files between folders
- To start over, move all folders out of New Clients, move files back to New Files, and rerun
- The app doesn't modify existing folders—only creates new ones

Tips and Best Practices

💡 **TIP:** Always run 'Import PDFs / OCR Files' before this button. The import step extracts data that helps with folder organization.

- CLEAN UP NEW FILES: Before running this button, ensure only current case files are in New Files. Remove any old or test files.
- CHECK EXCEL FIRST: Open ward_guardian_info.xlsx and verify cause numbers are populated before creating folders. This reduces unmatched files.
- REVIEW _UNMATCHED: After running the button, always check the _Unmatched folder. These files need your attention.
- ONE RUN PER BATCH: Process one batch of cases at a time. Don't mix old and new cases in New Files.
- FOLDER NAMING: The folder names are permanent once created. If you need to rename, do it before creating Court Visitor Reports.
- PDF QUALITY: High-quality scans yield better OCR results. If files repeatedly end up unmatched, consider re-scanning.
- EXCEL AS SOURCE OF TRUTH: The app trusts your Excel file for ward names. Keep it accurate.
- BACKUP BEFORE CHANGES: The app doesn't delete anything, but if you're reorganizing many files, consider backing up your New Clients folder first.
- EMPTY NEW FILES: After successful folder creation, New Files should be empty. If files remain, they may be unmatched.
- COMPLETED FOLDER: The app never touches the Completed folder. That's your archive of finished cases.

Example Scenario

The Situation

You have just imported 5 new cases. Your New Files folder contains:

- ARP.pdf
- Order.pdf

- ARP1.pdf
- Order1.pdf
- ARP2.pdf (poor quality scan)

The Process

103. You click 'Make Folders and Move Files'
104. The app groups files into buckets:
105. • Bucket 'default': ARP.pdf, Order.pdf
106. • Bucket '1': ARP1.pdf, Order1.pdf
107. • Bucket '2': ARP2.pdf
108. For bucket 'default', the app extracts cause 25-001234 from Order.pdf
109. The app looks up 25-001234 in Excel, finds ward 'Smith, John'
110. Creates folder: 'Smith, John - 25-001234'
111. Moves ARP.pdf and Order.pdf into that folder
112. For bucket '1', extracts cause 25-001235, creates 'Doe, Jane - 25-001235'
113. For bucket '2', OCR fails to read cause from ARP2.pdf
114. Creates '_Unmatched' folder and moves ARP2.pdf there

The Result

Your New Clients folder now contains:

- Smith, John - 25-001234/ (with ARP.pdf and Order.pdf inside)
- Doe, Jane - 25-001235/ (with ARP1.pdf and Order1.pdf inside)
- _Unmatched/ (with ARP2.pdf inside)

Your Next Steps

115. Open the _Unmatched folder
116. Open ARP2.pdf manually and note the cause number
117. Create a folder for that case manually, or fix the PDF quality and rerun
118. Proceed to create Court Visitor Reports for the successfully organized cases

Technical Details (For Advanced Users)

File Paths

- Excel: C:\GoogleSync\GuardianShip_App\App Data\ward_guardian_info.xlsx
- New Files: C:\GoogleSync\GuardianShip_App\New Files\
- New Clients: C:\GoogleSync\GuardianShip_App\New Clients\
- Completed: C:\GoogleSync\GuardianShip_App\Completed\ (not touched by this script)
- Tesseract: C:\Program Files\Tesseract-OCR\tesseract.exe
- Poppler: C:\poppler\Library\bin\

PDF Text Extraction

The app uses two methods:

- pdfplumber library - Extracts text from text-based PDFs (first 3 pages)
- Tesseract OCR - Reads scanned/image-based PDFs (first 2 pages)
- OCR is only used if pdfplumber returns no text

Cause Number Patterns

The app recognizes these patterns:

- Full Travis County: C-1-PB-25-000123
- Shortened: 25-000123 or 21-001411
- Numeric fallback: 5-8 digit numbers near 'cause' keywords
- Strips county prefix to normalize matching

Excel Columns Used

- wardlast - Ward's last name
- wardfirst - Ward's first name
- wardmiddle - Ward's middle name (optional)
- causeno - Cause number (primary key for matching)

File Matching Logic

- Trailing numbers extracted: ARP1.pdf → number '1'
- Files with same number grouped into buckets
- Cause number from ANY file in bucket applies to ALL files in that bucket
- Files without numbers go to default bucket

Cause Number Normalization

- Removes non-alphanumeric characters for comparison
- Strips Travis County prefix (C-1-PB-)
- Compares both alphanumeric and digits-only versions
- This allows flexible matching even with format variations

Related Workflow Steps

Steps BEFORE This Button

119. Import PDFs / OCR Files (Step 1) - Must be completed first

Steps AFTER This Button

120. Create Court Visitor Report (Step 3)
121. Create Map of Needed Visits (Step 4)
122. Send Meeting Request Emails (Step 5)
123. Add Meetings to Calendar (Step 6)
124. Create Summary Sheet (Step 7)
125. Send Appointment Confirmations (Step 8)
126. Add Guardians to Contacts (Step 9)
127. Fill Mileage Form (Step 10)
128. Fill Payment Form (Step 11)
129. Send Follow-Up Emails (Step 12)
130. Submit to Court (Step 13)

💡 **TIP:** This button is the critical organizational step. Everything after this relies on having properly organized case folders.

Frequently Asked Questions

Q: Can I run this button multiple times?

A: Yes. The app only creates new folders—it doesn't modify existing ones. However, you should move old folders out of New Clients first to avoid confusion.

Q: What if I need to rename a folder after creation?
A: You can manually rename folders in Windows Explorer. Just maintain the format 'LastName, FirstName - CauseNumber'.

Q: Can I manually create folders instead of using this button?
A: Yes, but use the standard naming format. The app expects folders named 'LastName, FirstName - CauseNumber'.

Q: What if the cause number is wrong in the folder name?
A: Rename the folder manually. The cause number likely came from a misread PDF or incorrect Excel data.

Q: Do I need to organize files before running this?
A: No. Just place all PDF files in New Files. The app handles the organization.

Q: What happens to files already in New Clients?
A: The app doesn't touch existing folders. It only creates new ones for files in New Files.

Q: Can I add files to a folder after it's created?
A: Yes. You can manually add documents to any case folder.

Q: How do I fix files in _Unmatched?
A: Identify the cause number manually, then either create the folder yourself or add the cause to Excel and move the file back to New Files to rerun the button.

Summary Checklist

☐ Import PDFs step completed

☐ PDF files are in New Files folder

☐ Excel file contains cause numbers

☐ Tesseract OCR and Poppler are installed

☐ Excel is closed

☐ Old case folders moved out of New Clients (if rerunning)

☐ AFTER CLICKING: New folders created in New Clients

☐ AFTER CLICKING: Files moved from New Files to folders

☐ AFTER CLICKING: Folder names match format 'LastName, FirstName - Cause'

☐ AFTER CLICKING: Reviewed _Unmatched folder

☐ AFTER CLICKING: New Files folder is empty

☐ AFTER CLICKING: Ready to create Court Visitor Reports

Step 3. Create Map of Needed Visits

Court Visitor App – Detailed Step Guide

Overview
The 'Create Map of Needed Visits' button automatically generates a printable map document showing all the ward addresses you need to visit. This visual reference helps you plan your route, understand the geographic distribution of your cases, and estimate travel time between visits.
The app creates a professional Word document with a visual map showing numbered markers for each ward location, plus a reference table listing each ward and their address. If you have already scheduled visit dates and

times, the app also creates a second page with a suggested route organized by appointment time, including estimated drive times between locations.

When to Use This Button

Use this button when:

- You have imported new case files and created case folders
- You need to see where all your pending ward visits are located
- You want to plan an efficient route for multiple visits
- You need a printable reference map to take with you on visits
- You have scheduled some or all visit dates/times and want to see a suggested route

💡 **TIP:** You can run this button multiple times as your cases change. Each time you click it, the app generates a fresh map based on the current data in your Excel file.

What Happens When You Click This Button

Step 1: The App Reads Your Excel File

The app opens your ward_guardian_info.xlsx file and looks for cases that need visits. Specifically, it finds rows where:

- The 'datesubmitted' column is BLANK (meaning the case hasn't been submitted to court yet)
- The ward address is present and valid
- These are your active, pending cases that require visits

Step 2: The App Geocodes Each Address

For each ward address, the app converts the text address into geographic coordinates (latitude and longitude). This process is called 'geocoding.' The app:

- First checks a local cache to see if it has already geocoded this address before (this saves time)
- If the address is new, it uses either Google Maps Geocoding API or a free service called Nominatim
- Normalizes addresses by cleaning up formatting (for example, converting 'Austin/TX/78734' to 'Austin, TX 78734')
- Saves all geocoding results to a cache file so future runs are faster
- Skips any addresses it cannot geocode and logs them as failures

💡 **TIP:** If you have a Google Maps API key configured, the app will use Google for more accurate geocoding. Otherwise, it uses a free service that works well but may be less accurate for some addresses.

Step 3: The App Creates a Visual Map

Using the geocoded coordinates, the app generates a map image with:

- Numbered markers for each ward location
- A background basemap showing streets and geography (if the contextily library is installed)
- Automatic zoom level to show all locations clearly
- Professional cartographic styling suitable for printing

Step 4: The App Builds a Legend Table

The app creates a reference table with three columns:

- Number (matches the numbered markers on the map)
- Ward Last Name
- Full Address

This legend allows you to quickly identify which marker corresponds to which ward.

Step 5: The App Creates a Route Suggestion (Optional)

If you have entered visit dates and times in your Excel file, the app creates a second page with:

- A table showing visits sorted chronologically by date/time
- Estimated drive time between each consecutive visit
- An 'Arrive By' column showing when you need to arrive
- This helps you plan your day and avoid being late to appointments

The app uses one of three methods to estimate drive times:

- Google Directions API (most accurate, if API key is configured)
- OSRM public routing service (free fallback option)
- Simple straight-line distance calculations (if neither service is available)

Step 6: The App Saves and Opens the Document

Finally, the app:

- Saves the complete map document as 'Ward_Map_Sheet.docx' in your app directory
- Automatically opens the document so you can review it immediately
- The document is ready to print or save for your records

Understanding the Two Map Pages

Page 1: Overview Map with Legend

The first page always includes:

- TITLE: 'Ward Visit Map'
- MAP IMAGE: Shows all pending ward locations with numbered markers
- LEGEND TABLE: Lists each number with the ward's last name and full address

This page is useful for getting a quick visual overview of where all your cases are located geographically. You can use it to:

- See which wards are close to each other (for grouping visits)
- Identify wards that are far from the others (may require separate trips)
- Plan your general approach to covering all locations efficiently

Page 2: Suggested Route (Conditional)

The second page ONLY appears if you have entered BOTH visit date AND visit time for at least one ward. This page includes:

- TITLE: 'Suggested Route (by visit date/time)'
- ROUTE TABLE with six columns:
- • Number (sequential for the route)
- • When (date and time of appointment)
- • Ward Last Name
- • Address
- • Drive (min) (estimated drive time from previous location)
- • Arrive By (same as 'When' column—when you need to be there)

This page helps you:

- See your visits in chronological order
- Understand how much travel time you need between appointments
- Verify you have enough time to get from one visit to the next
- Plan departure times from your starting location

⚠ **WARNING:** The 'Drive (min)' column shows estimated drive time. Actual drive time may vary based on traffic, road conditions, and your exact route. Always add buffer time to your schedule.

Prerequisites (What You Need Before Clicking)

Before clicking this button, make sure you have:

131. IMPORTED CASES: You must have already run 'Import PDFs / OCR Files' so your ward_guardian_info.xlsx file is populated with case data.
132. VALID ADDRESSES: Open your Excel file and verify that the 'waddress' column contains valid, complete addresses for each ward. Addresses should include street, city, state, and ZIP code for best geocoding results.
133. ACTIVE CASES: The app only maps cases where 'datesubmitted' is blank. If you've already submitted cases to court, they won't appear on the map.
134. INTERNET CONNECTION: The app needs internet access to geocode addresses (unless all addresses are already in the cache). The app also needs internet to fetch map background imagery.
135. OPTIONAL - VISIT TIMES: If you want the suggested route page, enter visit dates and times in the 'visitdate' and 'visittime' columns before clicking the button.
136. EXCEL FILE CLOSED: Close Microsoft Excel if you have the ward_guardian_info.xlsx file open. The app needs to read this file.

Step-by-Step Instructions

Before You Click

137. Open ward_guardian_info.xlsx in Excel
138. Review the 'waddress' column to verify all ward addresses are complete and accurate
139. Check the 'datesubmitted' column—cases with dates in this column will NOT appear on the map
140. Optional: If you have scheduled visits, fill in the 'visitdate' and 'visittime' columns
141. Save and close Excel
142. Return to the Court Visitor App main window

Clicking the Button

143. Locate the 'Create Map of Needed Visits' button (usually button #4 in the workflow)
144. Click the button once
145. Wait while the app processes (you may see messages about geocoding addresses)
146. The process typically takes 10-30 seconds depending on how many new addresses need geocoding
147. When complete, the Ward_Map_Sheet.docx document will automatically open in Microsoft Word

After You Click

148. Review the map image on page 1 to see all ward locations
149. Check the legend table to match numbers to ward names and addresses
150. If page 2 appears, review the suggested route for any scheduling conflicts
151. Print the document if you want a physical copy for your visits
152. Save the document if you want to keep this version (it will be overwritten next time you run the button)

💡 **TIP:** The document opens automatically for your convenience. If it doesn't open, you can find it at: C:\GoogleSync\GuardianShip_App\Ward_Map_Sheet.docx

What the Map Document Contains

Document Title

Ward Visit Map

Map Image

A visual map showing:

- Numbered markers (1, 2, 3, etc.) at each ward address
- Background streets and geography (if available)
- Automatic zoom to fit all locations
- Centered view of your service area

Legend Table (Page 1)

A three-column table listing:

Column	Description	Example
#	Sequential number matching map marker	1, 2, 3, etc.
Ward Last	Ward's last name	Smith
Address	Full ward address	123 Main St, Austin, TX 78701

Route Table (Page 2, if applicable)

A six-column table showing:

Column	Description	Example
#	Sequential number for route order	1, 2, 3, etc.
When	Visit date and time	2024-12-15 02:00 PM
Ward Last	Ward's last name	Smith
Address	Full ward address	123 Main St, Austin, TX 78701
Drive (min)	Estimated drive time from previous stop	15 (blank for first stop)
Arrive By	When you need to arrive (same as When)	2024-12-15 02:00 PM

Required Excel Columns

The app needs these columns in your ward_guardian_info.xlsx file:

Column Name	Required?	Description
waddress (or wardaddress, address)	Yes	Ward's full address (street, city, state, ZIP)
wardlast (or ward_last, last, lastname)	Yes	Ward's last name
datesubmitted (or date_submitted)	Yes	Date case was submitted to court (blank for pending cases)
visitdate (or visit_date)	No	Scheduled visit date (optional, for route page)

visittime (or visit_time)	No	Scheduled visit time (optional, for route page)

💡 **TIP:** The app is flexible with column names. If you rename a column, it will try common variations. For example, 'waddress', 'wardaddress', and 'address' are all recognized as the address column.

Understanding Geocoding

What is Geocoding?

Geocoding is the process of converting a text address (like '123 Main St, Austin, TX 78701') into geographic coordinates (like latitude 30.2672 and longitude -97.7431). These coordinates are needed to place markers on a map.

Two Geocoding Services

The app can use either of two services:

GOOGLE MAPS GEOCODING API (Preferred):

- Most accurate results
- Recognizes abbreviations, misspellings, and informal addresses
- Requires a Google Maps API key (your IT administrator may have already configured this)
- Has a free tier that covers typical Court Visitor usage

NOMINATIM (Free Fallback):

- Free service with no API key required
- Generally accurate for standard addresses
- May be less accurate for rural areas or informal addresses
- Has rate limits (the app respects these by adding delays)

The Geocoding Cache

To avoid repeated lookups, the app maintains a local cache file (geocode_cache.csv) that stores all previously geocoded addresses. This means:

- The first time you map an address, it takes a few seconds
- Subsequent runs with the same address are instant
- The cache persists across sessions
- If an address changes, you can manually delete the cache file to force fresh geocoding

Address Formatting Tips

For best geocoding results, format addresses like this:

- GOOD: '123 Main St, Austin, TX 78701'
- GOOD: '456 Oak Avenue, Round Rock, Texas 78664'
- ACCEPTABLE: '789 Elm/Austin/TX/78702' (app will normalize this)
- POOR: '123 Main' (missing city, state, ZIP)
- POOR: 'John Smith house' (not a real address)

⚠ **WARNING:** If the app cannot geocode an address, that ward will not appear on the map. Check the log messages for details about which addresses failed.

Understanding Routing and Drive Time Estimates

Three Routing Methods

The app uses one of three methods to estimate drive times, in this order of preference:

1. GOOGLE DIRECTIONS API (Most Accurate):

- Uses real road networks and typical traffic patterns
- Accounts for one-way streets, turn restrictions, and speed limits

- Provides the most realistic drive time estimates
- Requires a Google Maps API key
- Has a free tier that covers typical usage

2. OSRM PUBLIC ROUTING (Good Fallback):
- Free service with no API key required
- Uses OpenStreetMap data for routing
- Generally accurate for most routes
- May be less accurate in areas with limited OpenStreetMap coverage
- Best-effort service with no guarantees

3. STRAIGHT-LINE DISTANCE (Last Resort):
- Calculates 'as the crow flies' distance
- Assumes average speed to estimate time
- Does NOT account for actual roads
- Least accurate but always available as a fallback
- Useful for rough planning only

Interpreting Drive Time Estimates

⚠ **WARNING:** Drive time estimates are approximations. Always add buffer time for:
- Traffic conditions (rush hour, construction, accidents)
- Weather (rain, ice, fog)
- Parking and walking time at each location
- Unexpected delays
- Time to review case files between visits

💡 **TIP:** A good rule of thumb: add 25-50% extra time to all drive time estimates. For example, if the app shows 20 minutes, plan for 25-30 minutes.

Common Warnings and Errors

Message: 'No rows where datesubmitted is blank and address present'

CAUSE: All cases in your Excel file have been submitted to court (datesubmitted has a date), or no cases have valid addresses.
SOLUTION: This is normal if you've completed all pending cases. The app will create an empty map document. If you expected to see cases, check that datesubmitted is blank for pending cases.

Message: 'X address(es) could not be geocoded'

CAUSE: The app couldn't convert some addresses to coordinates. Common reasons include:
- Incomplete addresses (missing city, state, or ZIP)
- Misspelled street names or cities
- Non-existent addresses
- Addresses in formats the geocoder doesn't recognize
- Internet connection issues during geocoding

SOLUTION: Check the log file to see which specific addresses failed. Correct these addresses in Excel and run the button again.

Warning: 'contextily not installed'

CAUSE: The contextily library (used for basemap imagery) is not installed.

SOLUTION: The map will still be created, but without the background streets and geography. Contact your IT administrator if you want basemap imagery added. This is a cosmetic issue only.

Error: 'Missing required column: [column name]'
CAUSE: Your Excel file is missing a critical column like 'waddress', 'wardlast', or 'datesubmitted'.
SOLUTION: Check your Excel file column names. The app looks for common variations, but the essential columns must exist. Run 'Import PDFs / OCR Files' if your Excel file is incomplete.

Problem: Map shows wrong locations
CAUSE: Addresses were geocoded incorrectly (possibly due to ambiguous or incomplete addresses).
SOLUTION:

- Verify addresses in Excel are complete and correct
- Delete geocode_cache.csv (found in C:\GoogleSync\GuardianShip_App\) to force fresh geocoding
- Run the button again
- If using Nominatim, consider getting a Google Maps API key for better accuracy

Problem: Document doesn't open automatically
CAUSE: File association issues or the document is already open in Word.
SOLUTION: Manually navigate to C:\GoogleSync\GuardianShip_App\Ward_Map_Sheet.docx and open it. Close any existing instances of this document before running the button again.

Troubleshooting

Problem: No map appears in the document

- Check that at least one case has datesubmitted blank and a valid address
- Verify internet connection is active for geocoding
- Check the log file for geocoding errors
- Try running the button again (sometimes transient network errors occur)

Problem: Page 2 (route) is missing

- This is normal if you haven't entered visit dates and times yet
- To get the route page, add dates to 'visitdate' column and times to 'visittime' column
- Both date AND time must be present for a case to appear on the route page
- Run the button again after adding dates/times

Problem: Drive times seem wrong

- Check which routing method is being used (see log messages)
- Straight-line distance estimates are approximate only
- If using Nominatim or straight-line, consider getting a Google Maps API key
- Remember that drive times don't include traffic, parking, or stops

Problem: Geocoding is very slow

- First run with many new addresses takes time (1-2 seconds per address)
- Nominatim has rate limits and adds delays to be polite
- Subsequent runs are fast because addresses are cached
- Google Maps Geocoding is generally faster if configured

Problem: Map is too zoomed in or out

- The app automatically calculates the best zoom level
- If all wards are in one area, the map will be zoomed in
- If wards are spread across a large area, the map will be zoomed out
- This is automatic and cannot be adjusted without modifying the script

Problem: Want to re-geocode an address

- Find and delete (or rename) geocode_cache.csv in C:\GoogleSync\GuardianShip_App\
- Run the button again—all addresses will be geocoded fresh
- Alternatively, edit geocode_cache.csv manually to remove specific entries

Tips and Best Practices

💡 **TIP:** Run this button early in your workflow to get a visual sense of where your cases are located. This helps you plan efficiently before scheduling appointments.

- UPDATE REGULARLY: Run this button whenever you add new cases or change addresses. Each run creates a fresh map reflecting current data.
- PRINT THE MAP: Keep a printed copy of the map in your vehicle for reference during visits. Having a physical backup is helpful if your phone or laptop fails.
- USE THE LEGEND: When navigating, refer to the legend table rather than trying to remember which number is which ward.
- VERIFY ADDRESSES: Before scheduling visits, review the map to ensure all locations look reasonable. If a marker appears in an unexpected place, the address may be wrong.
- SCHEDULE STRATEGICALLY: Use the map to group nearby visits on the same day. This minimizes driving and maximizes efficiency.
- ADD VISIT TIMES: Even if you haven't confirmed appointments, you can enter estimated times to see a draft route. This helps identify potential scheduling conflicts before confirming with guardians.
- SAVE VERSIONS: If you want to keep multiple versions, manually rename Ward_Map_Sheet.docx after each run (for example, Ward_Map_Sheet_2024-12-01.docx).
- CHECK DRIVE TIMES: When scheduling appointments, refer to the estimated drive times to ensure you have enough time between visits.
- INTERNET REQUIRED: This button needs internet for geocoding and map imagery. Run it while connected; the resulting document can be used offline.
- GOOGLE API KEY: If you handle many cases, ask your IT administrator about getting a Google Maps API key. This improves accuracy and speed for both geocoding and routing.

Example Scenario

The Situation

You are a Court Visitor with five pending cases. You've imported the case files and created folders, but you haven't scheduled visits yet. You want to see where all the wards are located to plan your route.

The Excel Data

Your ward_guardian_info.xlsx file contains:

- Case 1: Smith, John - 123 Main St, Austin, TX 78701 - datesubmitted blank

- Case 2: Doe, Jane - 456 Oak Ave, Round Rock, TX 78664 - datesubmitted blank
- Case 3: Johnson, Bob - 789 Elm St, Austin, TX 78702 - datesubmitted blank
- Case 4: Williams, Mary - 321 Pine Rd, Pflugerville, TX 78660 - datesubmitted blank
- Case 5: Brown, Tom - 654 Maple Dr, Cedar Park, TX 78613 - datesubmitted blank

The Steps

153. You verify that all five addresses in the 'waddress' column are complete.
154. You confirm that 'datesubmitted' is blank for all five cases.
155. You close Excel and open the Court Visitor App.
156. You click 'Create Map of Needed Visits.'
157. The app geocodes all five addresses (takes about 10 seconds since they're new).
158. The app generates a map image with five numbered markers.
159. The app creates a legend table listing all five wards.
160. Since you haven't entered visit dates/times yet, no route page is created.
161. The document opens automatically in Microsoft Word.

The Result

You now have a printable map document showing:

- A map of the Austin metro area with five markers
- Markers labeled 1-5 corresponding to your five wards
- A legend table showing which number matches which ward and address
- Clear visualization of the geographic spread (Austin, Round Rock, Pflugerville, Cedar Park)

Using the Map for Planning

Looking at the map, you notice:

- Cases 1 and 3 (Smith and Johnson) are both in Austin, close together
- Cases 2 and 4 (Doe and Williams) are north in Round Rock and Pflugerville
- Case 5 (Brown) is northwest in Cedar Park
- You decide to visit Cases 1 and 3 on Monday, Cases 2 and 4 on Tuesday, and Case 5 on Wednesday

You schedule appointments accordingly and then run the button again after entering visit dates/times to get the route page with drive time estimates.

Technical Details (For Advanced Users)

File Locations

- Excel File: C:\GoogleSync\GuardianShip_App\App Data\ward_guardian_info.xlsx
- Output Document: C:\GoogleSync\GuardianShip_App\Ward_Map_Sheet.docx
- Geocode Cache: C:\GoogleSync\GuardianShip_App\geocode_cache.csv
- Google API Key: C:\GoogleSync\GuardianShip_App\Config\Keys\google_maps_api_key.txt (if configured)

Libraries and Dependencies

- pandas - Excel file reading
- geopy - Geocoding interface
- matplotlib - Map image creation
- contextily - Basemap imagery (optional)
- python-docx - Word document generation

- pyproj - Coordinate transformations
- requests - API calls for routing
- googlemaps - Google Maps API interface (if key is present)

Geocoding Service Selection

The app determines which geocoding service to use based on:

- If google_maps_api_key.txt exists and contains a key → Use Google Geocoding
- If GOOGLE_MAPS_API_KEY environment variable is set → Use Google Geocoding
- Otherwise → Use Nominatim (free OpenStreetMap-based service)

Routing Service Selection

For drive time estimates, the app uses:

- If Google API key is present → Use Google Directions API
- If no Google key → Use OSRM public routing service
- If OSRM fails → Calculate straight-line distance as fallback

Map Projection

- Input coordinates: WGS84 (EPSG:4326) latitude/longitude
- Map projection: Web Mercator (EPSG:3857) for display
- Basemap tiles: OpenStreetMap via Contextily (if installed)

Cache File Format

The geocode_cache.csv file contains three columns:

- address - The normalized address string
- lat - Latitude in decimal degrees
- lon - Longitude in decimal degrees

You can manually edit this file to correct geocoding errors or add known coordinates.

Related Workflow Steps

The 'Create Map of Needed Visits' button is part of a larger workflow. Here's how it fits:

Steps BEFORE This Button

162. Import PDFs / OCR Files (Step 1) — Populate Excel with case data
163. Make Folders and Move Files (Step 2) — Organize case folders
164. Create Court Visitor Report (Step 3) — Generate visit reports

Steps AFTER This Button

165. Send Meeting Request Emails (Step 5) — Contact guardians to schedule visits
166. Add Meetings to Calendar (Step 6) — Schedule appointments in your calendar
167. Create Summary Sheet (Step 7) — Generate summary documentation
168. Send Appointment Confirmations (Step 8) — Confirm scheduled visits
169. Conduct the actual visits using the map as reference
170. Fill Mileage Form (Step 10) — Track mileage using the map/route data
171. Fill Payment Form (Step 11) — Submit payment requests
172. Send Follow-Up Emails (Step 12) — Follow up after visits
173. Submit to Court (Step 13) — Archive completed cases

💡 **TIP:** The typical workflow is: Import → Make Folders → Generate Report → CREATE MAP → Schedule visits using map → Confirm appointments → Conduct visits → Complete paperwork.

Frequently Asked Questions

Q: Can I create a map for only certain cases?

A: Not directly. The app maps all cases where datesubmitted is blank. To limit the map, you could temporarily add dates to datesubmitted for cases you want to exclude, run the button, then remove those dates. However, this is cumbersome and not recommended.

Q: Can I customize the map colors or style?

A: Currently, no. The map style is built into the script. If you need customization, contact your IT administrator to modify the Python code.

Q: Why doesn't my map have background streets?

A: The contextily library may not be installed. This library provides basemap imagery. Contact your IT administrator if you want this feature added. The map will still show markers correctly without it.

Q: Can I add my own starting location to the route?

A: Not automatically. The route table shows drive times between consecutive ward visits. To include your starting location, you'd need to manually calculate the drive time from your office/home to the first visit.

Q: What happens if two wards have the same address?

A: Both will appear on the map with separate markers (likely overlapping visually). The legend will list both entries with different numbers.

Q: Can I export the map as a PDF instead of DOCX?

A: The app creates a Word document. To convert to PDF, open the DOCX file in Microsoft Word and choose 'Save As' → 'PDF'.

Q: How accurate are the geocoding results?

A: With Google Geocoding, accuracy is typically excellent for standard US addresses. With Nominatim, accuracy is good but may vary. Always visually verify the map to ensure markers are in sensible locations.

Q: Can I use this map offline?

A: Once created, the document can be viewed offline. However, creating the map requires internet for geocoding and imagery. If you need to create maps without internet, all addresses would need to be pre-cached.

Q: What if I need to update just one address?

A: Update the address in Excel and run the button again. The app will geocode the new address and regenerate the entire map. Previously geocoded addresses are pulled from cache instantly.

Summary Checklist

Use this checklist every time you click 'Create Map of Needed Visits':

- ☐ Excel file contains ward address data
- ☐ Addresses in 'waddress' column are complete (street, city, state, ZIP)
- ☐ Cases I want to map have datesubmitted blank
- ☐ Excel file is closed
- ☐ Internet connection is active
- ☐ OPTIONAL: Visit dates and times entered for route page
- ☐ AFTER CLICKING: Review map image for accuracy
- ☐ AFTER CLICKING: Check legend table matches expectations
- ☐ AFTER CLICKING: Review route page (if present) for scheduling conflicts
- ☐ AFTER CLICKING: Check log for any geocoding failures

☐ AFTER CLICKING: Print or save document for reference

Step 4. Send Meeting Request Emails

Court Visitor App – Detailed Step Guide

Overview

The 'Send Meeting Request Emails' button automates the initial outreach to guardians to schedule court visitor meetings. Instead of manually composing and sending individual emails to each guardian, this button generates professional, personalized emails from a template and sends them through your Gmail account—all with a single click.

The email requests availability for a visit, asks for the ward's address details, requests entry instructions, and provides your contact information. The app sends to Guardian 1 as the primary recipient and CC's Guardian 2 if present, ensuring all involved parties are kept informed.

When to Use This Button

Use this button when:

- You have organized case folders and created Court Visitor Reports
- You're ready to begin scheduling visits with guardians
- Guardian email addresses are populated in your Excel file
- You want to initiate contact to schedule appointments
- Cases have NOT been submitted to court yet (datesubmitted is blank)

⚠ **WARNING:** Do NOT include specific visit dates or times in this initial email. This is a REQUEST for availability, not a confirmation. Dates/times come later after guardians respond.

What Happens When You Click This Button

Step 1: The App Reads Your Excel File

The app opens ward_guardian_info.xlsx and identifies cases ready for contact:

- 'datesubmitted' column is BLANK (case not yet complete)
- 'emailsent' column is BLANK (email not yet sent)
- At least one guardian email address is present
- These criteria ensure only appropriate cases receive emails

Step 2: The App Validates Email Addresses

For each eligible case, the app checks guardian emails:

- Verifies email contains @ symbol
- Rejects placeholder values like 'none', 'N/A', 'null'
- Cleans whitespace and formatting issues
- Skips cases with no valid guardian emails

Step 3: The App Generates Personalized Emails

Each email is customized with case-specific information:

- Subject: 'Court Visitor meeting for [Ward Name] (Travis County)'
- Guardian name in greeting
- Ward's full name in the body
- Suggested timeframe ('next week', specific weekdays)
- Professional template with Travis County information

Step 4: The App Determines Recipients
The app intelligently assigns email recipients:
- TO: Guardian 1 email (from 'gemail' column)
- CC: Guardian 2 email (from 'g2eamil' column, if present)
- Your email address is NOT included (you can BCC yourself if desired)
- All recipients see who else received the email

Step 5: The App Sends Emails via Gmail
Emails are sent through your Gmail account:
- Uses Gmail API for reliable delivery
- Sends from your configured Gmail address
- Appears in your Gmail Sent folder
- Throttled to avoid hitting Gmail rate limits (2-second delay between emails)
- Emails are sent one at a time with progress messages

Step 6: The App Saves Text Copies
A text copy of each email is saved for your records:
- Saved to the ward's case folder (matched by cause number)
- Filename: 'Meeting Request Email - [LastName], [FirstName] - [Date].txt'
- Contains the full email text including recipients and subject
- Useful for reference and documentation

Step 7: The App Marks Emails as Sent
After successful sending:
- Creates 'emailsent' column in Excel (if it doesn't exist)
- Marks the row with current date/timestamp
- Prevents duplicate emails if you run the button again
- You can manually clear this field to resend if needed

Step 8: The App Creates a Run Log
A CSV log file records the email session:
- Logs which cases were emailed
- Records timestamp of each send
- Notes any errors or skipped cases
- Stored in 'runs' folder next to Excel file

Understanding the Email Template
Email Subject Line
Court Visitor meeting for [Ward First Name] [Ward Last Name] (Travis County)
Example: Court Visitor meeting for John Smith (Travis County)
Email Body Content
The email includes:
- Greeting with guardian name
- Introduction explaining Court Visitor role
- Link to Travis County Court Visitor program information
- Request to schedule visit for 'next week'
- Suggested preferred days (configurable)
- Three specific questions for guardian to answer:

- 1. Which day/time works best and who will be present
- 2. Exact address of ward's residence
- 3. Entry instructions (gate codes, parking, pets, etc.)
- Your contact information (phone and email)
- Professional closing

What the Email DOES NOT Include

⚠ WARNING: This email intentionally does NOT include specific visit dates or times. That information is provided later in the confirmation email (Step 6) after guardians respond and you schedule appointments.

Two Modes of Operation

Draft Mode (Default, Safe)

In draft mode:

- Emails are created as Gmail DRAFTS, not sent
- You can review each draft in Gmail before sending
- Excel is NOT modified (no 'emailsent' marks)
- Safe for testing and reviewing email content
- You manually send drafts from Gmail when ready

Send Mode (Immediate Delivery)

In send mode (requires --confirm-write flag):

- Emails are sent immediately
- Excel is updated with 'emailsent' timestamp
- No chance to review before sending
- Used for production email campaigns
- Requires explicit confirmation to enable

TIP: Your IT administrator configures which mode the button uses. Most installations use Send Mode for convenience.

Prerequisites (What You Need Before Clicking)

174. GMAIL CONNECTION: Gmail API must be configured and authorized.
175. GUARDIAN EMAILS: At least one guardian email address must be present in Excel for each case.
176. CASE FOLDERS: Run 'Make Folders and Move Files' so case folders exist for saving text copies.
177. EXCEL DATA COMPLETE: Ward names and cause numbers must be populated.
178. NO VISIT DATES YET: Do not fill in visit dates/times before sending meeting requests.
179. CASES NOT SUBMITTED: Only cases with blank 'datesubmitted' will be emailed.
180. EXCEL CLOSED: Close Excel before clicking the button.

Step-by-Step Instructions

Before You Click

181. Open ward_guardian_info.xlsx and verify guardian email addresses are correct
182. Check that 'datesubmitted' is blank for cases you want to email
183. Verify 'emailsent' is blank for cases (or clear it if resending)

184. Confirm ward names are correct (they appear in the email)
185. Save and close Excel
186. Return to the Court Visitor App

Clicking the Button

187. Locate 'Send Meeting Request Emails' (usually button #5)
188. Click the button once
189. If prompted for Gmail authentication, sign in
190. Wait while emails are processed (2 seconds per email)
191. Watch progress messages showing which cases are being emailed

After You Click

192. Check the summary message showing how many emails were sent
193. Open Gmail and check your Sent folder to verify emails
194. Check case folders for saved text copies of emails
195. Reopen Excel to verify 'emailsent' column is marked
196. Wait for guardian responses before scheduling specific times
197. When guardians respond with availability, proceed to schedule appointments

Required Excel Columns

Column Name	Required?	Description
wardfirst	Yes	Ward first name (appears in email)
wardlast	Yes	Ward last name (appears in email)
guardian1	No	Guardian 1 name (used in greeting)
gemail	Yes*	Guardian 1 email (*email required)
g2eamil	No	Guardian 2 email (CC if present)
causeno	Yes	Cause number (for folder matching)
datesubmitted	Yes	Trigger field (must be BLANK)
emailsent	No	Auto-created by app

Common Warnings and Errors

Message: 'No eligible rows found'

CAUSE: All cases either have 'datesubmitted' filled in, 'emailsent' already marked, or no valid guardian emails.
SOLUTION: Check Excel filters. Verify some cases have blank datesubmitted and emailsent, with valid guardian emails.

Warning: 'No valid email for cause [number]'

CAUSE: Guardian email is missing or invalid (e.g., 'none', 'N/A').
SOLUTION: Add a valid guardian email to the 'gemail' column in Excel and rerun.

Error: 'Gmail authentication failed'

CAUSE: Gmail API credentials are missing or expired.

SOLUTION: Follow the authentication prompts. If repeated failures, contact your IT administrator to reconfigure Gmail API.

Warning: 'Rate limit exceeded'

CAUSE: Too many emails sent too quickly.
SOLUTION: The app throttles sends to prevent this. If it occurs, wait 15 minutes and rerun. The app will skip already-sent emails.

Warning: 'Could not save text copy to folder'

CAUSE: Case folder doesn't exist or cause number doesn't match.
SOLUTION: Run 'Make Folders and Move Files' first. Verify cause numbers in Excel match folder names.

Troubleshooting

Problem: Emails not appearing in Gmail Sent folder

- In Draft mode, check Drafts folder instead of Sent
- Gmail may take a minute to sync—refresh your browser
- Check Gmail spam/trash folders
- Verify you're signed into the correct Gmail account
- Check app logs for send errors

Problem: Guardians say they didn't receive the email

- Ask them to check spam/junk folders
- Verify the email address in Excel is correct (check for typos)
- Check Gmail Sent folder to confirm email was actually sent
- Try sending a test email manually to that address
- Consider calling the guardian to verify their email address

Problem: Want to resend an email

- Open Excel and find the row
- Clear the 'emailsent' column for that row (delete the timestamp)
- Save and close Excel
- Run the button again—only that case will be emailed

Problem: Wrong guardian name in email

- The name comes from the 'guardian1' column in Excel
- Edit the guardian name in Excel
- Clear 'emailsent' if you need to resend
- Run the button again

Problem: Email went to wrong address

- Check 'gemail' and 'g2eamil' columns in Excel for errors
- Correct the email address
- Send a follow-up email manually with correct information
- Consider calling the guardian to provide correct contact info

Problem: Need to customize email template

- Contact your IT administrator to modify the email template
- Template changes require editing the Python script
- Test template changes thoroughly before sending to all cases

Tips and Best Practices

💡 **TIP:** Send meeting request emails in small batches (5-10 at a time) so you can track responses more easily. This also helps catch any issues before emailing all cases.

- VERIFY EMAILS FIRST: Before clicking send, open Excel and double-check all guardian email addresses for the cases you're about to email.
- TIMING MATTERS: Send emails early in the week (Monday-Wednesday) for better response rates. Avoid Fridays and weekends.
- TRACK RESPONSES: Create a system to track which guardians responded. Consider adding a 'response received' column to Excel.
- FOLLOW UP: If guardians don't respond within 3-4 days, follow up with a phone call. Some guardians prefer phone contact.
- NO DATES YET: Do NOT schedule specific visit dates until guardians provide availability. This email asks for availability only.
- PROFESSIONAL TONE: The template is professional and informative. Don't modify it without good reason.
- CC USAGE: Guardian 2 is CC'd so both guardians are informed. If there's family conflict, consider separate emails instead.
- SAVE TEXT COPIES: The saved text copies in case folders are useful for documenting communication history.
- EMAIL SENT MARKER: The 'emailsent' field prevents duplicates. Only clear it if you genuinely need to resend.
- BATCH PROCESSING: For 20+ cases, consider sending in two batches (10 each day) to manage responses better.
- CHECK SPAM: Remind guardians to check spam folders. Court-related emails sometimes trigger spam filters.
- PHONE BACKUP: Always include your phone number. Some guardians prefer texting to email.
- WEEKEND VISITS: Many guardians prefer weekend visits. Be prepared to offer Saturday options.
- RESPONSE TIME: Most guardians respond within 2-3 days. Wait at least a week before following up.

Example Scenario

The Situation

You have 5 new cases ready for scheduling:

- All 5 have complete ward and guardian information in Excel
- All 5 have guardian email addresses
- None have been submitted to court (datesubmitted blank)
- None have been emailed yet (emailsent blank)

The Process

198. You verify all guardian emails in Excel are correct
199. You close Excel
200. You click 'Send Meeting Request Emails'
201. The app processes 5 cases (takes about 10 seconds)
202. You see confirmation: 'Sent 5 emails successfully'

The Result

Within minutes:

- 5 emails appear in your Gmail Sent folder
- 5 text copies are saved to case folders
- Excel 'emailsent' column shows timestamps for all 5
- Guardians begin receiving emails

Guardian Responses (Over Next Few Days)

- Case 1: Guardian responds same day—available Tuesday 2 PM
- Case 2: Guardian responds next day—prefers Thursday morning
- Case 3: No response after 3 days—you call, guardian prefers phone scheduling
- Case 4: Guardian requests Monday visit (you don't work Mondays—negotiate)
- Case 5: Email bounces back—wrong email address in Excel

Your Follow-Up Actions

- Cases 1 & 2: Add confirmed dates/times to Excel
- Case 3: Schedule via phone, add to Excel
- Case 4: Negotiate via email for Tuesday instead
- Case 5: Correct email address, clear 'emailsent', resend

Technical Details (For Advanced Users)

File Locations

- Excel: C:\GoogleSync\GuardianShip_App\App Data\ward_guardian_info.xlsx
- Case Folders: C:\GoogleSync\GuardianShip_App\New Clients\
- Text Copies: [Case Folder]\Meeting Request Email - [Name] - [Date].txt
- Run Logs: C:\GoogleSync\GuardianShip_App\App Data\runs\
- Gmail Credentials: C:\GoogleSync\GuardianShip_App\Config\API\ or C:\configlocal\API\

Gmail API Configuration

- Uses Gmail API v1 for sending
- OAuth 2.0 authentication required
- Scope: gmail.modify (allows sending)
- Token stored locally: gmail_token.json
- Refreshed automatically when expired

Email Sending Process

- Creates MIME message with proper headers
- Base64 encodes message body
- Sends via Gmail API users().messages().send()
- Throttles to 2-second delay between sends

- Catches and logs any send errors

Excel Writing Method

- Uses openpyxl for surgical updates
- ONLY writes to 'emailsent' column
- Creates column if missing (appends to end)
- Writes timestamp in format: YYYY-MM-DD HH:MM:SS
- Never modifies other columns
- Preserves all formulas and formatting

Email Template Variables

- {GuardianName} - from 'guardian1' column
- {WardFirst} - from 'wardfirst' column
- {WardLast} - from 'wardlast' column
- {NextWeekPhrase} - calculated based on current date
- {PreferredDays} - configurable day list
- {PreferredDaysShort} - abbreviated day list

Related Workflow Steps

Steps BEFORE This Button

203. Import PDFs / OCR Files (Step 1)
204. Make Folders and Move Files (Step 2)
205.
206. Step 3 - Create Map (optional but helpful)

Steps AFTER This Button

207. Wait for guardian responses (manual step)
208. Schedule specific dates/times based on responses
209. Add Meetings to Calendar (Step 6)
210. Create Summary Sheet (Step 7)
211. Send Appointment Confirmations (Step 8)
212. Add Guardians to Contacts (Step 9)
213. Conduct visits
214. Fill Mileage Form (Step 10)
215. Fill Payment Form (Step 11)
216. Send Follow-Up Emails (Step 12)
217. Submit to Court (Step 13)

💡 **TIP:** This button starts the communication process. Everything after depends on getting good responses from guardians.

Frequently Asked Questions

Q: Can I customize the email text?

A: Yes, but it requires editing the Python script. Contact your IT administrator for template modifications.

Q: Can I send to only certain cases?

A: Yes—mark 'emailsent' with any text for cases you want to skip. The app only emails cases where emailsent is blank.

Q: What if I accidentally sent to the wrong guardian?
A: Send a follow-up email manually to the correct guardian apologizing and providing correct information.

Q: Can guardians reply to these emails?
A: Yes—emails come from your Gmail, so guardians can reply directly to you.

Q: How many emails can I send at once?
A: Gmail allows 500 emails per day for standard accounts, 2000 for Workspace. The app has no built-in limit, but use common sense.

Q: What if a guardian doesn't have email?
A: Call them directly to schedule. Mark 'emailsent' with 'phone contact' to prevent the app from trying to email.

Q: Can I BCC myself on all emails?
A: Not automatically, but you can manually BCC yourself when sending from Gmail (if using draft mode), or check your Sent folder.

Q: What's the difference between draft and send mode?
A: Draft creates email drafts you review before sending. Send mode sends immediately. Your button is configured for one mode.

Summary Checklist

- ☐ Guardian email addresses verified in Excel
- ☐ Ward names are correct (appear in emails)
- ☐ 'datesubmitted' is blank for cases to email
- ☐ 'emailsent' is blank (or cleared for resends)
- ☐ Case folders exist for saving text copies
- ☐ Excel file is closed
- ☐ Gmail API is configured and authorized
- ☐ Ready to wait for guardian responses
- ☐ AFTER CLICKING: Checked Gmail Sent folder
- ☐ AFTER CLICKING: Verified text copies saved
- ☐ AFTER CLICKING: Confirmed 'emailsent' marked in Excel
- ☐ AFTER CLICKING: Tracking guardian responses
- ☐ AFTER CLICKING: Following up after 3-4 days if no response
- ☐ AFTER CLICKING: Scheduling dates based on responses
- ☐ AFTER CLICKING: Ready for Step 6 - Add to Calendar

Step 5. Add Guardians to Contacts (Optional)

Court Visitor App – Detailed Step Guide

Overview

The 'Add Guardians to Contacts' button automatically creates or updates contact entries in your Google Contacts for each guardian you work with. This is incredibly helpful because when guardians call or text you, their names will appear on your phone instead of just a phone number. You'll instantly know who is calling and which ward they represent.

The app creates contacts with meaningful display names like 'Smith, Mary for Ward John Doe' so you can immediately identify the context of the call. Each contact includes the guardian's phone number(s), email address(es), their own home address (if available), and detailed notes about the ward, case number, and visit information.

This step is entirely optional but highly recommended for convenience. It saves you from manually entering dozens of guardian contacts and keeps your contact list organized.

When to Use This Button

Use this button when:

- You want guardian names to appear when they call or text you
- You have guardian contact information (phone numbers and/or email addresses) in your Excel file
- You want an organized contact list for all your current cases
- You prefer not to manually add dozens of contacts to your phone
- You want quick access to ward and case information from your phone's contact app

💡 **TIP:** This is an optional convenience feature. The app works perfectly fine if you skip this step. However, most users find it extremely helpful to see guardian names when calls come in.

What Happens When You Click This Button

Step 1: The App Reads Your Excel File

The app opens ward_guardian_info.xlsx and looks for cases with guardian contact information:

- Must have at least one guardian with an email address OR phone number
- 'Contact_added' column must be blank (prevents duplicates)
- Both Guardian 1 and Guardian 2 are processed if contact info exists for each

Step 2: The App Creates Contact Display Names

The app creates meaningful display names for easy identification:

- FORMAT: '[Guardian Name] for [Ward First] [Ward Last]'
- Example: 'Smith, Mary for Ward John Doe'
- Uses the exact guardian name from your Excel file (no changes or splitting)
- This format ensures you instantly know who is calling and which ward they represent

Step 3: The App Gathers Contact Information

For each guardian, the app collects all available information:

- Phone number (from gtele or g2tele columns)
- Email address (from gemail or g2email columns)
- Guardian's own home address (from gaddress or g2address columns, if present)
- Stores phone as 'mobile' type for convenience

Step 4: The App Creates Detailed Notes

Each contact includes a notes field with:

- Cause number for reference
- Ward's full name
- Ward's address (where visits occur)
- Visit date and time (if scheduled)
- This gives you complete context at a glance

Step 5: The App Checks for Existing Contacts
Before creating a new contact, the app searches your existing contacts:
- Searches by email address first (most reliable)
- Then searches by phone number if no email match
- Finally searches by display name as last resort
- If a match is found, the existing contact is UPDATED instead of creating a duplicate

Step 6: The App Creates or Updates the Contact
Depending on whether the contact exists:
- NEW CONTACT: Creates a fresh contact with all information
- EXISTING CONTACT: Updates the existing contact to add/refresh information
- Both Guardian 1 and Guardian 2 are processed if they have contact info
- Up to two contacts can be created per case (one for each guardian)

Step 7: The App Adds Contacts to a Group
All guardian contacts are organized into a contact group:
- Group name: 'Guardians (Court Visits)'
- This group is automatically created if it doesn't exist
- Makes it easy to filter and view all guardian contacts in one place
- You can find this group in Google Contacts on any device

Step 8: The App Marks the Row as Processed
After successfully creating/updating contacts:
- Creates 'Contact_added' column in Excel (if it doesn't exist)
- Marks the row with 'Y' to prevent duplicates
- You can manually clear 'Y' if you need to update a contact

Two Modes of Operation
Test Mode (Test Last Row)
In test mode:
- Processes ONLY the last row with guardian contact info
- Creates/updates contacts for only that one case
- Marks only that row as processed
- Useful for testing before processing all cases

Live Mode (All Eligible Rows)
In live mode:
- Processes ALL rows with 'Contact_added' blank and guardian contact info
- Creates/updates contacts for all eligible guardians
- Marks all processed rows
- This is the normal production mode

💡 **TIP:** Your IT administrator configures which mode the button uses. Most users will have Live Mode configured.

Prerequisites (What You Need Before Clicking)
218. GOOGLE CONTACTS ACCESS: This button requires Google People API access. You'll be prompted to sign in if not authenticated.

219. PEOPLE API ENABLED: Your IT administrator must enable the People API in your Google Cloud project (usually done during initial setup).
220. GUARDIAN CONTACT INFO: At least one guardian must have an email address or phone number in Excel.
221. EXCEL FILE CLOSED: Close Excel before clicking the button.
222. OPTIONAL - VISIT DATES: If you've scheduled visits, the dates/times will be included in contact notes (but not required).

Step-by-Step Instructions

Before You Click

223. Open ward_guardian_info.xlsx
224. Verify guardian phone numbers and email addresses are present and correct
225. Check that guardian names are formatted how you want them to appear in your contacts
226. Optional: Verify guardian addresses if you want them included
227. Save and close Excel
228. Return to the Court Visitor App

Clicking the Button

229. Locate 'Add Guardians to Contacts' (usually button #9)
230. Click the button once
231. Wait while the app processes (typically 5-15 seconds)
232. If prompted for Google authentication, sign in and grant Contacts access
233. The app displays a summary of how many contacts were processed

After You Click

234. Open Google Contacts on your phone or computer
235. Look for the 'Guardians (Court Visits)' group
236. Verify contacts were created with correct names and numbers
237. Test by having a guardian call—their name should appear
238. Reopen Excel to confirm 'Contact_added' shows 'Y' for processed rows

What Each Contact Contains

Contact Name (Display Name)

Format: [Guardian Name] for [Ward First] [Ward Last]
Example: Smith, Mary for Ward John Doe
This appears on your phone when the guardian calls or texts.

Phone Number(s)

- Listed as 'Mobile' type
- Taken from 'gtele' (Guardian 1) or 'g2tele' (Guardian 2)
- Must be present for the contact to be created (or email must be present)

Email Address(es)

- Taken from 'gemail' (Guardian 1) or 'g2email' (Guardian 2)
- Must be present for the contact to be created (or phone must be present)

Address (Guardian's Home Address)

- Listed as 'Home' type

- Taken from 'gaddress' (Guardian 1) or 'g2address' (Guardian 2)
- This is the guardian's own address, NOT the ward's address
- Optional—contact is created even if address is missing

Notes Field

The notes field includes:

- Cause number
- Ward's full name
- Ward's address (where you meet for visits)
- Visit date and time (if scheduled)
- Example: 'Cause 2024-12345 | Ward: John Doe | Visit: 2024-12-15 02:00 PM | Location: 123 Main St, Austin, TX 78701'

Contact Group

Automatically added to: 'Guardians (Court Visits)'

Required Excel Columns

Column Name	Required?	Description
causeno	Yes	Cause number (appears in notes)
wardfirst	Yes	Ward first name (display and notes)
wardlast	Yes	Ward last name (display and notes)
waddress	No	Ward address (appears in notes)
guardian1	No	Guardian 1 name (used in display name)
gemail	No*	Guardian 1 email (*email OR phone required)
gtele	No*	Guardian 1 phone (*email OR phone required)
gaddress	No	Guardian 1 home address
Guardian2	No	Guardian 2 name (used in display name)
g2email	No*	Guardian 2 email (*email OR phone required)
g2tele	No*	Guardian 2 phone (*email OR phone required)
g2address	No	Guardian 2 home address
visitdate	No	Visit date (appears in notes if present)
visittime	No	Visit time (appears in notes if present)
Contact_added	No	Auto-created by app

💡 **TIP:** Each guardian must have at least an email OR a phone number. The app skips guardians with neither.

Common Warnings and Errors

Message: 'No rows with guardian email/phone found'

CAUSE: No guardians in your Excel file have contact information.
SOLUTION: Add guardian email addresses or phone numbers to Excel and try again.

Warning: 'Updated contact: [name]' instead of 'Created contact'

CAUSE: This guardian already exists in your contacts (matched by email, phone, or name).
SOLUTION: This is normal behavior. The existing contact is updated with current information instead of creating a duplicate.

Warning: 'Failed to create contact [name]'

CAUSE: Google Contacts API error (rate limit, invalid data, network issue).
SOLUTION: Check log file for details. Try running the button again. Verify Google Contacts access is authorized.

Message: 'No eligible rows to process'

CAUSE: All rows either have 'Contact_added' = 'Y' or lack guardian contact info.
SOLUTION: Normal if you've already processed all cases. To reprocess, clear 'Y' from 'Contact_added' column.

Error: 'People API not enabled'

CAUSE: Google People API is not enabled in your Google Cloud project.
SOLUTION: Contact your IT administrator to enable the People API. This is a one-time setup step.

Troubleshooting

Problem: No contacts appear in Google Contacts

- Verify Google Contacts access was granted during authentication
- Check that guardian email or phone numbers are present in Excel
- Look for the 'Guardians (Court Visits)' group in Google Contacts
- Refresh or sync your contacts on your phone
- Check log file for error messages

Problem: Guardian name doesn't show when they call

- Verify the phone number in the contact matches exactly what the guardian calls from
- Check that contacts have synced to your phone (may take a few minutes)
- Verify your phone's Contacts app is using your Google account
- Some phone carriers may override contact names—check phone settings

Problem: Duplicate contacts created

- The app checks for existing contacts before creating new ones
- If duplicates exist, it may be because guardian info changed (different email/phone)
- Manually merge duplicates in Google Contacts
- Clear 'Contact_added' and rerun if you need to recreate

Problem: Wrong guardian name appears

- The app uses the exact text from the 'guardian1' or 'Guardian2' column
- Edit the guardian name in Excel to your preferred format
- Clear 'Contact_added' to blank
- Run the button again to update the contact

Problem: Contact group not showing

- Group name is 'Guardians (Court Visits)'
- May take a few minutes to sync to your phone
- Check Google Contacts in a web browser first
- Ensure your phone is syncing Google Contacts (check phone settings)

Problem: Need to update contact information

- Update the guardian info in Excel (phone, email, address)
- Change 'Contact_added' from 'Y' to blank for that row
- Run the button again
- The app will update the existing contact with new information

Tips and Best Practices

💡 **TIP:** Run this button early in your workflow after importing cases. Having guardian contacts set up before they call makes you look professional and prepared.

- VERIFY PHONE NUMBERS: Before running this button, double-check that guardian phone numbers in Excel are correct and formatted consistently.
- GUARDIAN NAME FORMAT: The guardian name from Excel appears exactly as written in your contacts. Use a consistent format like 'Last, First' for all guardians.
- UPDATE REGULARLY: When you add new cases, run this button again to add those guardians. Existing contacts won't be duplicated.
- PERIODIC CLEANUP: After cases are completed and submitted, you can manually delete those guardian contacts from the 'Guardians (Court Visits)' group.
- CONTACT SYNC: It may take a few minutes for new contacts to sync to your phone. Be patient if they don't appear immediately.
- USE THE GROUP: When you need to contact multiple guardians, you can easily find them all in the 'Guardians (Court Visits)' group.
- INCLUDE ADDRESSES: If you have guardian home addresses, include them in Excel. This can be helpful for mailing documents or understanding their location.
- VISIT INFO IN NOTES: Once you schedule visits, rerun this button to update contact notes with visit dates/times.
- OPTIONAL STEP: Remember, this step is completely optional. If you prefer to manage contacts manually or don't need this feature, you can skip it.
- PRIVACY CONSIDERATION: Guardian contacts are stored in your personal Google Contacts. They won't be visible to others unless you share them.

Example Scenario

The Situation

You have three cases with guardians and you want their names to show when they call:

- Case 2024-12345: Ward is John Smith, Guardian is Mary Johnson (phone: 512-555-1234, email: mjohnson@email.com)
- Case 2024-12346: Ward is Jane Doe, Guardian 1 is Bob Williams (phone: 512-555-2345), Guardian 2 is Sue Williams (phone: 512-555-2346)

- Case 2024-12347: Ward is Tom Brown, Guardian is Alice Davis (email: adavis@email.com, no phone)

The Steps

239. You verify all guardian contact info is correct in Excel
240. You close Excel and click 'Add Guardians to Contacts'
241. The app creates 5 contacts (1 for Case 1, 2 for Case 2, 1 for Case 3, plus Alice has no phone so email-only contact)
242. All contacts are added to 'Guardians (Court Visits)' group
243. Contacts sync to your phone within a few minutes

The Result

Your Google Contacts now contains:

- Contact: 'Johnson, Mary for Ward John Smith' - Phone: 512-555-1234, Email: mjohnson@email.com
- Contact: 'Williams, Bob for Ward Jane Doe' - Phone: 512-555-2345
- Contact: 'Williams, Sue for Ward Jane Doe' - Phone: 512-555-2346
- Contact: 'Davis, Alice for Ward Tom Brown' - Email: adavis@email.com
- All contacts include notes with cause number, ward name, and ward address

When Guardians Call

Now when Mary Johnson calls from 512-555-1234, your phone displays:
'Johnson, Mary for Ward John Smith'
You immediately know who is calling and which case they're calling about—even before answering.

Technical Details (For Advanced Users)

File Locations

- Excel: C:\GoogleSync\GuardianShip_App\App Data\ward_guardian_info.xlsx
- Log File: C:\GoogleSync\GuardianShip_App\Automation\Contacts - Guardians\Logs\contacts.log
- Google Credentials: C:\GoogleSync\GuardianShip_App\Config\API\ (token_people.json)

Google API Used

- Google People API v1 (Contacts)
- OAuth 2.0 scope: https://www.googleapis.com/auth/contacts
- Requires 'People API' enabled in Google Cloud Console

Contact Fields Mapped

- names.givenName = display string (e.g., 'Smith, Mary for Ward John Doe')
- emailAddresses[0].value = guardian email
- phoneNumbers[0].value = guardian phone, type = 'mobile'
- addresses[0].formattedValue = guardian home address, type = 'home'
- biographies[0].value = notes with cause/ward/visit info
- memberships[0].contactGroupMembership = 'Guardians (Court Visits)' group

Deduplication Logic

The app searches for existing contacts in this order:

244. Search by email address (most reliable)
245. If no email match, search by phone number

246. If no phone match, search by display name
247. If any match found, UPDATE existing contact instead of creating new

Contact Group Management

- Group name: 'Guardians (Court Visits)' (configurable via CONTACT_GROUP_LABEL variable)
- Group is created automatically if it doesn't exist
- All guardian contacts are added to this group
- Set CONTACT_GROUP_LABEL = '' to disable grouping

Update Behavior

- When updating existing contact, app uses PATCH operation
- Only updates specific fields (name, email, phone, address, notes, groups)
- Preserves other contact data not managed by the app
- Update fields specified: names, emailAddresses, phoneNumbers, biographies, addresses, memberships

Related Workflow Steps

Steps BEFORE This Button

248. Import PDFs / OCR Files (Step 1)
249. Make Folders and Move Files (Step 2)
250.
251. Create Map of Needed Visits (Step 4)
252. Send Meeting Request Emails (Step 5)
253. Add Meetings to Calendar (Step 6)
254. Step 9 - Generate Summary
255. Step 6 - Send Confirmation

Steps AFTER This Button

256. Conduct ward visits (guardians can now call and you'll see their names)
257. Fill Mileage Form (Step 10)
258. Fill Payment Form (Step 11)
259. Send Follow-Up Emails (Step 12)
260. Submit to Court (Step 13)

💡 **TIP:** This step can be done at any point after importing cases, but is most useful BEFORE guardians start calling you.

Frequently Asked Questions

Q: Is this step required?

A: No, it's completely optional. The app works fine without it. It's just a convenience feature to help you identify guardian calls.

Q: Can I customize the contact name format?

A: Currently the format is fixed: '[Guardian Name] for [Ward First] [Ward Last]'. To change it would require modifying the script.

Q: What if I don't want the ward name in the contact?

A: You would need to manually edit contacts after creation, or ask your IT administrator to modify the display name format in the script.

Q: Can I add contacts to a different group?
A: Yes, your IT administrator can change the CONTACT_GROUP_LABEL variable to any group name you prefer.

Q: Will this add contacts to my phone's native contact app?
A: If your phone syncs Google Contacts (most Android phones and iPhones do), yes. Check your phone's account sync settings.

Q: What happens to contacts after I submit a case?
A: Contacts remain in your Google Contacts. You can manually delete them or keep them for future reference.

Q: Can I run this button multiple times?
A: Yes. The app won't create duplicates. Rows already marked 'Contact_added = Y' are skipped. New cases will be added.

Q: What if a guardian has multiple phone numbers?
A: The app only adds one phone number per guardian (from gtele or g2tele). You can manually add additional numbers in Google Contacts after creation.

Q: Can guardians see these contacts?
A: No. These are contacts in YOUR Google account only. Guardians cannot see them unless you explicitly share your contacts.

Summary Checklist

- ☐ Guardian phone numbers and/or emails present in Excel
- ☐ Guardian names formatted consistently (e.g., Last, First)
- ☐ Optional: Guardian home addresses included
- ☐ Excel file is closed
- ☐ Google People API access authorized
- ☐ Ready to have guardian names show when they call
- ☐ AFTER CLICKING: Open Google Contacts and verify contacts
- ☐ AFTER CLICKING: Check 'Guardians (Court Visits)' group
- ☐ AFTER CLICKING: Confirm contact details are correct
- ☐ AFTER CLICKING: Verify 'Contact_added' marked 'Y' in Excel
- ☐ AFTER CLICKING: Wait for contacts to sync to phone (a few minutes)

Step 6. Send Appointment Confirmations

Court Visitor App – Detailed Step Guide

Overview
The 'Send Appointment Confirmations' button allows you to send professional confirmation emails to guardians after you have scheduled visit appointments. This step should only be used AFTER you have confirmed the date and time with the guardian and entered those details into your Excel spreadsheet.
This automated process saves you from manually writing confirmation emails for each case. The app composes professional emails, attaches the relevant court documents (ARP and Order), and sends them to the appropriate guardians—all with a single click.

When to Use This Button

Use this button when:

- You have already sent meeting request emails and received responses from guardians
- You have confirmed the date and time for the visit
- You have entered the visit date and time into the Excel spreadsheet
- You are ready to send formal confirmation emails to guardians

⚠ **WARNING:** Do NOT click this button before you have confirmed the actual appointment time with the guardian. The email will state a specific date and time, so you must have this information finalized first.

What Happens When You Click This Button

Step 1: The App Reads Your Excel File

The app opens your ward_guardian_info.xlsx file and looks for cases that are ready to have confirmation emails sent. It searches for rows where:

- Both the visit date and visit time have been entered
- The appointment has not already been marked as confirmed
- The visit is scheduled at least 15 minutes in the future (not in the past)

Step 2: The App Determines Who to Email

For each eligible case, the app identifies the guardian email addresses:

- PRIMARY RECIPIENT (TO): If Guardian 1 has an email address, they are the primary recipient. If Guardian 1 has no email, Guardian 2 becomes the primary recipient.
- CARBON COPY (CC): The other guardian (if they have an email) is automatically CC'd. You are also automatically CC'd on all confirmation emails so you have a record.
- WARDS ARE NEVER EMAILED: The app never sends emails directly to the ward, only to guardians.

Step 3: The App Creates a Professional Email

The email is automatically composed with:

- A clear subject line showing the ward's name and cause number
- A professional message body that confirms the date, time, and location of the visit
- Your mobile phone number (317-339-9963) so guardians can contact you if needed
- A link to a Google Form if the guardian needs to reschedule
- Both HTML (formatted) and plain text versions for compatibility

Step 4: The App Attaches Relevant Documents

The app searches the case folder for the ARP (Application for Renewal of Permanent Guardianship) and Order documents:

- If found, these PDF documents are automatically attached to the email
- If the Order document is missing, the app sends you a private notification email (guardians are not told about missing documents)
- The app looks for files with names containing 'ARP' or 'Order' (case-insensitive)

Step 5: The App Sends the Email

Once the email is composed and attachments are ready:

- The email is sent through your Gmail account using Google's secure email service
- A text copy of the email is saved to the case folder for your records
- If no case folder exists yet, the text copy is saved to a '_Correspondence_Pending' folder

- The Excel file is updated to mark this appointment as confirmed (an 'Appt_confirmed' column is created if needed, and marked with 'Y')

Step 6: The App Creates a Backup

The first time the app updates your Excel file during a run, it automatically creates a timestamped backup copy. This protects your data in case you need to restore an earlier version.

Two Modes of Operation

The app has two modes for sending confirmation emails. Your IT administrator will configure which mode the button uses.

Test Mode (Test Last Row)

In test mode, the app:

- Processes ONLY the last row in your Excel file that has both a visit date and visit time
- Sends only ONE confirmation email
- Marks only that one row as confirmed
- Is useful for testing the email format before sending to multiple cases

Live Mode (All Eligible Rows)

In live mode, the app:

- Processes ALL rows in your Excel file that meet the eligibility criteria
- Sends confirmation emails for every eligible case
- Marks all sent confirmations as complete
- Is the normal mode for production use

💡 **TIP:** Most users will have the button configured for Live Mode. If you're unsure which mode you're using, ask your IT administrator or check the log files after clicking the button.

Prerequisites (What You Need Before Clicking)

Before clicking this button, make sure you have:

261. CONFIRMED APPOINTMENTS: You must have already contacted guardians and confirmed the date and time for each visit. Do not click this button if you're still waiting for guardian responses.
262. EXCEL ENTRIES COMPLETE: Open your ward_guardian_info.xlsx file and verify that each case has the visit date and visit time filled in. Check the 'visitdate' and 'visittime' columns.
263. GUARDIAN EMAIL ADDRESSES: Verify that at least one guardian has a valid email address in the Excel file. Check the 'gemail' or 'g2email' columns.
264. GOOGLE CONNECTION ACTIVE: This button requires your Gmail account to be connected. If you see an authentication window, follow the prompts to sign in to Google.
265. CASE FOLDERS EXIST: The app will look for ARP and Order files in the case folders. Make sure you've already run 'Make Folders and Move Files' so the case folders exist.
266. EXCEL FILE CLOSED: Close Microsoft Excel before clicking the button. The app needs exclusive access to update the file.

Step-by-Step Instructions

Before You Click

267. Open ward_guardian_info.xlsx in Excel
268. Review each row and verify the visit date and time are entered correctly
269. Check that guardian email addresses are present and correct

270. Make note of any cases that need confirmation emails sent
271. Close Excel (save your changes if you made any)
272. Return to the Court Visitor App main window

Clicking the Button

273. Locate the 'Send Appointment Confirmations' button (usually button #8 in the workflow)
274. Click the button once
275. Wait for the app to process (you may see a progress indicator)
276. If prompted for Google authentication, sign in to your Gmail account
277. The app will display a summary of how many emails were sent

After You Click

278. Check the log window or log file to verify which emails were sent
279. Check your Gmail Sent folder—you should see the confirmation emails you sent
280. Check your Gmail Inbox—you should have received CC copies of each confirmation email
281. Open the case folders to verify the text copies were saved
282. Reopen ward_guardian_info.xlsx to verify the 'Appt_confirmed' column now shows 'Y' for the sent confirmations

What the Confirmation Email Contains

Subject Line

Court Visit — [Ward Last Name], [Ward First Name] — Cause [Cause Number]
Example: Court Visit — Smith, John — Cause 2024-12345

Email Body

The email includes:

- A professional greeting
- Confirmation of the scheduled visit date and time
- The ward's address where the visit will take place
- Your contact information (mobile phone: 317-339-9963)
- A link to a Google Form for rescheduling if needed
- A professional closing

Attachments

- ARP (Application for Renewal of Permanent Guardianship) PDF—if found in the case folder
- Order PDF—if found in the case folder
- If either document is missing, the email is still sent but without that attachment

Required Excel Columns

The app needs these columns in your ward_guardian_info.xlsx file:

Column Name	Description
causeno	Cause number (used in subject line and to find case folder)
visitdate	Date of the scheduled visit (must be filled in)
visittime	Time of the scheduled visit (must be filled in)

waddress	Ward's address (where the visit will occur)
wardfirst	Ward's first name
wardlast	Ward's last name
guardian1	Guardian 1 name
gemail	Guardian 1 email address
Guardian2	Guardian 2 name
g2email	Guardian 2 email address
Appt_confirmed	Tracks if confirmation email was sent (auto-created)

TIP: The app creates the 'Appt_confirmed' column automatically if it doesn't exist. You don't need to add it manually.

Common Warnings and Errors

Error: 'No rows with BOTH visitdate and visittime set'

CAUSE: The Excel file doesn't have any rows where both the visit date and visit time are filled in.
SOLUTION: Open ward_guardian_info.xlsx and enter the visit date and time for at least one case, then try again.

Warning: 'Skip cause [number]: no guardian email present'

CAUSE: The row has a visit date and time, but neither Guardian 1 nor Guardian 2 has an email address.
SOLUTION: Add at least one guardian's email address in the 'gemail' or 'g2email' column, then run the button again.

Warning: 'Skip cause [number]: Appt_confirmed already Y'

CAUSE: This case already has a confirmation email sent (marked with 'Y').
SOLUTION: This is normal. If you need to resend a confirmation, manually change the 'Y' to blank in Excel, save, and run the button again.

Warning: 'Skip cause [number]: visit datetime is in the past'

CAUSE: The scheduled visit date/time has already passed.
SOLUTION: Update the visit date and time to a future date/time, or move this case to completed if the visit already occurred.

Warning: 'Skip cause [number]: visit is less than 15 minutes from now'

CAUSE: The scheduled visit is too soon (less than 15 minutes away).
SOLUTION: This is a safety feature to prevent sending confirmations for imminent appointments. Reschedule the visit to a later time if you still need to send the confirmation.

FYI Email: 'Missing Order for [cause number]'

CAUSE: The app couldn't find the Order document in the case folder.
SOLUTION: This is just a notification sent to you (not to guardians). Locate the Order PDF and place it in the case folder, then you can manually forward it to the guardian if needed.

Troubleshooting

Problem: The button does nothing / No emails are sent

- Check that Excel is closed before clicking the button
- Verify you have at least one row with both visitdate and visittime filled in
- Check that the 'Appt_confirmed' column is blank (not already marked 'Y')
- Make sure your Gmail connection is active (the app will prompt you to sign in if needed)
- Open the log file to see detailed error messages

Problem: Email sent but no attachments

- Check that the case folder exists (run 'Make Folders and Move Files' if needed)
- Verify the ARP and Order PDFs are in the case folder
- Check that the file names contain 'ARP' or 'Order' (case doesn't matter)
- If files are named differently, rename them to include 'ARP' or 'Order' in the filename

Problem: Wrong guardian received the email

- The app sends TO Guardian 1 if they have an email, otherwise TO Guardian 2
- Check the 'gemail' and 'g2email' columns in Excel to verify which addresses are present
- If you need to change who receives the email, update the email addresses in Excel and clear the 'Y' from 'Appt_confirmed', then rerun the button

Problem: I need to resend a confirmation email

- Open ward_guardian_info.xlsx
- Find the row for the case you want to resend
- Delete the 'Y' from the 'Appt_confirmed' column (leave it blank)
- Save and close Excel
- Click the 'Send Appointment Confirmations' button again

Problem: Excel file is locked / Can't update

- Make sure Excel is completely closed (check the system tray)
- If Excel is closed but the error persists, restart your computer
- Check that you have write permissions to the folder
- Verify the file is not marked as Read-Only (right-click the file, choose Properties)

Tips and Best Practices

💡 **TIP:** Always verify the visit date and time in Excel BEFORE clicking this button. Once the confirmation email is sent, guardians will expect you at that specific time.

- WORKFLOW SEQUENCE: This button should be used AFTER you've sent meeting requests and AFTER you've confirmed times with guardians. The typical sequence is: (1) Send Meeting Requests, (2) Receive guardian responses, (3) Add confirmed times to Excel, (4) Send Appointment Confirmations.
- CHECK YOUR SENT FOLDER: After clicking the button, check your Gmail Sent folder to verify the emails went out. You'll also receive CC copies in your inbox.
- SAVE TEXT COPIES: The app automatically saves text copies of each confirmation email to the case folder. These are useful for record-keeping and can be printed if needed.
- MISSING DOCUMENTS: If ARP or Order documents are missing, the confirmation email is still sent—just without those attachments. You'll receive a private FYI email about the missing Order.
- BATCH PROCESSING: In Live Mode, the app processes all eligible rows in one run. This is efficient, but make sure ALL your visit dates and times are correct before clicking.
- TIME ZONE: The app uses Central Time (America/Chicago). Make sure your visit times in Excel reflect the correct time zone.

- BACKUPS: The app creates a backup of your Excel file before making any changes. These backups are timestamped and stored in the same folder as your Excel file.
- LOG FILES: The app creates detailed log files for each run. If something goes wrong, check the log files (accessible from the Help menu) to see exactly what happened.

Example Scenario

The Situation

You are a Court Visitor with three cases ready for confirmation emails:

- Case 2024-12345: Ward is John Smith, visit scheduled for December 15, 2024 at 2:00 PM
- Case 2024-12346: Ward is Jane Doe, visit scheduled for December 16, 2024 at 10:30 AM
- Case 2024-12347: Ward is Bob Johnson, visit scheduled for December 17, 2024 at 3:15 PM

The Steps

283. You open ward_guardian_info.xlsx and verify all three rows have the visitdate and visittime filled in correctly.
284. You verify each case has at least one guardian email address.
285. You close Excel and save your changes.
286. You open the Court Visitor App and click 'Send Appointment Confirmations.'
287. The app processes all three cases and sends confirmation emails to the guardians.
288. You receive three CC copies of the emails in your inbox.
289. You check the log window and see: 'Done. Sent=3, Skipped=0'
290. You reopen ward_guardian_info.xlsx and confirm all three rows now have 'Y' in the Appt_confirmed column.

The Result

All three guardians receive professional confirmation emails with:

- Clear subject lines identifying the ward and cause number
- The confirmed date, time, and location of the visit
- Your contact information
- Attached ARP and Order documents (if found in case folders)
- A link to request rescheduling if needed

You have saved time by automating what would have been three separate manual emails, and you have a complete record of all confirmations.

Technical Details (For Advanced Users)

File Locations

- Excel File: C:\GoogleSync\GuardianShip_App\App Data\ward_guardian_info.xlsx
- Case Folders: C:\GoogleSync\GuardianShip_App\New Clients\
- Pending Correspondence: C:\GoogleSync\GuardianShip_App_Correspondence_Pending\
- Log Files: C:\GoogleSync\GuardianShip_App\Automation\Appt Email Confirm\Logs\
- Google Credentials: C:\GoogleSync\GuardianShip_App\Config\API\ (or legacy location)

Google API Requirements

This function requires:

- Gmail API access (for sending emails)
- OAuth 2.0 authentication

- Scopes: gmail.send and gmail.readonly

Eligibility Criteria (What Makes a Row Eligible)

A row is eligible for confirmation email if ALL of the following are true:

- visitdate column has a valid date
- visittime column has a valid time
- Appt_confirmed column is blank (or 'N' or doesn't exist)
- The combined visit datetime is at least 15 minutes in the future
- The combined visit datetime is not in the past
- At least one guardian has a valid email address

Email Priority Rules

- TO address: Guardian 1 email if present, otherwise Guardian 2 email
- CC addresses: The other guardian (if present) + your email (always)
- The ward is NEVER emailed directly
- If no guardian email exists, the case is skipped

Attachment Search Rules

The app searches for attachments using these rules:

- Searches in the case folder matching the cause number
- Looks for filenames containing 'ARP' (case-insensitive)
- Looks for filenames containing 'Order' (case-insensitive)
- Prefers files with both keywords (e.g., 'ARP Order.pdf')
- Selects the most recently modified file if multiple matches exist
- Sends private FYI email to you if Order is missing (not for ARP)

Related Workflow Steps

The 'Send Appointment Confirmations' button is part of a larger workflow. Here's how it fits:

Steps BEFORE This Button

291. Import PDFs / OCR Files (Step 1)
292. Make Folders and Move Files (Step 2)
293. Create Court Visitor Report (Step 3)
294. Create Map of Needed Visits (Step 4)
295. Send Meeting Request Emails (Step 5) — Send initial requests without times
296. Add Meetings to Calendar (Step 6) — Optional, can be done after confirmations
297. Create Summary Sheet (Step 7) — Optional, can be done before or after

Steps AFTER This Button

298. Add Guardians to Contacts (Step 9) — Optional
299. Conduct the actual visits
300. Fill Mileage Form (Step 10)
301. Fill Payment Form (Step 11)
302. Send Follow-Up Emails (Step 12) — If needed
303. Submit to Court (Step 13) — Final step to archive the case

💡 **TIP:** The typical workflow is: Send Meeting Requests → Receive guardian responses → Enter confirmed times in Excel → Send Appointment Confirmations → Conduct visits → Complete paperwork.

Frequently Asked Questions

Q: Can I customize the email template?

A: Currently, the email template is built into the script. If you need to customize the wording or format, contact your IT administrator to modify the template code.

Q: What happens if a guardian's email bounces back?

A: You'll receive a bounce notification in your Gmail inbox. You should follow up with the guardian to get a corrected email address, then update Excel and resend the confirmation.

Q: Can I send a confirmation email to only one specific case?

A: Yes. If your button is configured in Test Mode, it will send to only the last row with date and time. If in Live Mode, you can temporarily mark other cases as already confirmed ('Y' in Appt_confirmed column) so they are skipped.

Q: Do I need to send confirmation emails if I already called the guardian?

A: It's best practice to send written confirmations even after phone confirmations. This provides a paper trail and gives guardians a reference document with all the visit details.

Q: What if the ward has no guardians (or no guardian emails)?

A: The app will skip that case and log a warning. You'll need to handle that case manually—either by obtaining guardian contact information or by making alternative arrangements.

Q: Can I include additional attachments?

A: The app currently only attaches ARP and Order files automatically. If you need to send additional documents, you can forward the confirmation email manually with extra attachments.

Q: How do I know which cases were successfully sent?

A: Check three places: (1) The log window shows a summary, (2) Your Gmail Sent folder, (3) The 'Appt_confirmed' column in Excel shows 'Y' for sent cases.

Q: What time zone is used for appointment times?

A: The app uses Central Time (America/Chicago). Make sure your Excel times reflect the correct time zone for your location.

Summary Checklist

Use this checklist every time you click 'Send Appointment Confirmations':

- ☐ I have confirmed appointment times with guardians
- ☐ Visit dates and times are entered in Excel
- ☐ Guardian email addresses are verified in Excel
- ☐ Excel file is closed
- ☐ Case folders exist with ARP and Order files
- ☐ I am connected to Gmail
- ☐ I am ready to send confirmation emails
- ☐ AFTER CLICKING: Check log for success/errors
- ☐ AFTER CLICKING: Check Gmail Sent folder
- ☐ AFTER CLICKING: Verify 'Y' appears in Appt_confirmed column
- ☐ AFTER CLICKING: Review any FYI emails about missing documents

Step 7. Add Meetings to Calendar

Court Visitor App – Detailed Step Guide

Overview

The 'Add Meetings to Calendar' button automatically creates calendar events in your Google Calendar for scheduled ward visits. Each event includes the ward's name and address, the appointment time, guardian contact information, and attached court documents (ARP and Order PDFs). This saves you from manually entering each appointment and ensures you have all relevant information at your fingertips.

The app creates 60-minute calendar events, adds guardians as attendees (so they receive calendar invitations), sets reminders at 24 hours and 2 hours before the appointment, and uploads ARP and Order documents to Google Drive with links in the calendar event.

When to Use This Button

Use this button when:

- You have scheduled visit dates and times with guardians
- You have entered the visit date and time into your Excel spreadsheet
- You want to add these appointments to your Google Calendar
- You want guardians to receive calendar invitations (optional—they will only receive invites if you include them as attendees)

⚠ **WARNING:** Only click this button AFTER you have confirmed appointment times. Calendar events will be created immediately and guardians may receive invitations.

What Happens When You Click This Button

Step 1: The App Reads Your Excel File

The app opens ward_guardian_info.xlsx and looks for cases ready to be calendared:

- Both visit date and visit time must be filled in
- The appointment must not already be marked as 'Calendared' (prevents duplicates)
- The appointment must be at least 15 minutes in the future
- The appointment must not be in the past

Step 2: The App Creates Calendar Event Details

For each eligible appointment, the app builds a calendar event with:

- TITLE: 'Court Visit - [Ward Last Name], [Ward First Name]'
- LOCATION: Ward's full address
- START TIME: Your scheduled visit date and time
- DURATION: 60 minutes (1 hour)
- TIME ZONE: Central Time (America/Chicago)
- DESCRIPTION: Includes cause number, ward name, and guardian contact information

Step 3: The App Adds Guardian Attendees

If guardian email addresses are present, the app adds them as attendees:

- Guardian 1 email (if present) is added as an attendee
- Guardian 2 email (if present) is added as an attendee
- Guardians will receive calendar invitation emails from Google Calendar
- They can accept, decline, or add the event to their own calendars

💡 **TIP:** If you don't want guardians to receive calendar invitations, leave the guardian email fields blank in Excel before clicking this button.

Step 4: The App Uploads Documents to Google Drive

The app searches the case folder for ARP and Order PDFs and uploads them to Google Drive:

- Creates (or finds) a folder in Google Drive called 'Court Visitor ARP Documents'
- Uploads the ARP PDF (if found) with filename '[CauseNumber]_ARP.pdf'
- Uploads the Order PDF (if found) with filename '[CauseNumber]_ORDER.pdf'
- Attaches links to these documents directly in the calendar event
- You and guardians can access these documents from the calendar event

Step 5: The App Sets Reminders

Two automatic reminders are configured for each event:

- 24 hours before the appointment (1 day notice)
- 2 hours before the appointment (final reminder)

These reminders appear as notifications on your phone and computer.

Step 6: The App Creates the Calendar Event

The event is created in your Google Calendar:

- Appears in your primary calendar
- Guardians receive invitation emails if they were added as attendees
- You can view, edit, or delete the event in Google Calendar as needed
- The event is immediately synchronized across all your devices

Step 7: The App Checks for Existing Events

Before creating a new event, the app checks if an event already exists for this cause number and date:

- If a matching event is found, it is deleted first
- Then the new event is created with updated information
- This prevents duplicate calendar entries if you reschedule
- This is useful for rescheduling appointments

Step 8: The App Marks the Row as Calendared

After successfully creating the calendar event:

- The app creates a 'Calendared' column in Excel (if it doesn't exist)
- Marks the row with 'Y' to indicate the event was created
- This prevents the app from creating duplicate events if you run the button again
- You can manually change 'Y' to blank if you need to recreate an event

Two Modes of Operation

Test Mode (Test Last Row)

In test mode:

- Processes ONLY the last row with both visit date and time
- Creates only ONE calendar event
- Marks only that one row as 'Calendared'
- Useful for testing before creating events for all cases

Live Mode (All Eligible Rows)

In live mode:

- Processes ALL rows meeting eligibility criteria

- Creates calendar events for every eligible appointment
- Marks all created events as 'Calendared'
- This is the normal production mode

💡 **TIP:** Your IT administrator configures which mode the button uses. Most users will have Live Mode configured.

Prerequisites (What You Need Before Clicking)

304. GOOGLE CALENDAR CONNECTION: This button requires Google Calendar API access. You'll be prompted to sign in to Google if not already authenticated.
305. GOOGLE DRIVE CONNECTION: The app needs Google Drive access to upload ARP and Order documents. This uses the same Google account as Calendar.
306. CONFIRMED APPOINTMENTS: Visit dates and times must be entered in Excel for the appointments you want to calendar.
307. VALID DATES/TIMES: Appointments must be at least 15 minutes in the future.
308. CASE FOLDERS EXIST: Run 'Make Folders and Move Files' first so case folders exist with ARP and Order PDFs.
309. EXCEL FILE CLOSED: Close Excel before clicking the button.
310. PEOPLE API ENABLED: Your IT administrator must enable the People API in your Google Cloud project (this is typically already done during setup).

Step-by-Step Instructions

Before You Click

311. Open ward_guardian_info.xlsx and verify visit dates and times are correct
312. Check that appointments are at least 15 minutes in the future
313. Verify guardian email addresses if you want them to receive invitations
314. Save and close Excel
315. Return to the Court Visitor App

Clicking the Button

316. Locate 'Add Meetings to Calendar' (usually button #6)
317. Click the button once
318. Wait while the app processes (may take 10-30 seconds)
319. If prompted for Google authentication, sign in
320. The app displays a summary of how many events were created

After You Click

321. Open Google Calendar to verify events were created
322. Check that event details are correct (time, location, attendees)
323. Verify reminders are set (24h and 2h before)
324. Check that ARP and Order documents are attached (if available)
325. Reopen Excel to confirm 'Calendared' column shows 'Y' for created events

What the Calendar Event Contains

Event Title

Court Visit - [Ward Last Name], [Ward First Name]

Example: Court Visit - Smith, John

Event Location

The ward's full address from the 'waddress' column
Example: 123 Main St, Austin, TX 78701

Event Time

- Start: Your scheduled visit date and time
- Duration: 60 minutes
- Time Zone: America/Chicago (Central Time)
- Reminders: 24 hours before, 2 hours before

Event Description

The description field includes:

- Cause number
- Ward's full name (first, middle, last)
- Guardian 1 name and contact info (phone and email if available)
- Guardian 2 name and contact info (phone and email if available)

Attendees

- Guardian 1 (if email address is present in Excel)
- Guardian 2 (if email address is present in Excel)
- You (the calendar owner) are automatically included

Attachments

- Link to ARP PDF in Google Drive (if file found in case folder)
- Link to Order PDF in Google Drive (if file found in case folder)
- Files are viewable by clicking the attachment links in the event

Required Excel Columns

Column Name	Required?	Description
causeno	Yes	Cause number
visitdate	Yes	Date of scheduled visit
visittime	Yes	Time of scheduled visit
waddress	Yes	Ward address (event location)
wardfirst	Yes	Ward first name
wardmiddle	No	Ward middle name (optional)
wardlast	Yes	Ward last name
guardian1	No	Guardian 1 name
gemail	No	Guardian 1 email (for invitation)
gtele	No	Guardian 1 phone
Guardian2	No	Guardian 2 name
g2email	No	Guardian 2 email (for invitation)
g2tele	No	Guardian 2 phone
Calendared	No	Auto-created by app

Common Warnings and Errors

Message: 'No rows with BOTH visitdate and visittime set'

CAUSE: Excel file doesn't have any rows with both date and time filled in.
SOLUTION: Enter visit dates and times in Excel and try again.

Warning: 'Skip cause [number]: visit is in the past'

CAUSE: The scheduled appointment is in the past.
SOLUTION: Update the visit date/time to a future date, or move the case to completed if already visited.

Warning: 'Skip cause [number]: visit is less than 15 minutes from now'

CAUSE: Appointment is too soon (less than 15 minutes away).
SOLUTION: This safety feature prevents last-minute calendar entries. Reschedule for later if needed.

Warning: 'Skip cause [number]: Calendared already Y'

CAUSE: Calendar event was already created for this appointment.
SOLUTION: Normal behavior to prevent duplicates. If you need to recreate the event, change 'Y' to blank in Excel.

Error: 'Failed to upload files to Drive'

CAUSE: ARP or Order files couldn't be uploaded to Google Drive.
SOLUTION: Check internet connection, verify Google Drive access is authorized, ensure files exist in case folder.

Warning: 'Found existing event, deleting old event'

CAUSE: An event for this cause number and date already exists.
SOLUTION: This is normal for rescheduling. The old event is deleted and replaced with new information.

Troubleshooting

Problem: No events are created

- Verify visit dates and times are entered in Excel
- Check that appointments are in the future (at least 15 minutes)
- Confirm 'Calendared' column is blank (not already marked 'Y')
- Ensure Excel is closed
- Check log file for specific error messages

Problem: Guardians didn't receive calendar invitations

- Verify guardian email addresses are present in Excel
- Check that emails are valid (contain @)
- Look in guardians' spam folders
- Verify Google Calendar is set to send invitations (check Calendar settings)
- If email addresses were blank, guardians won't receive invitations

Problem: ARP/Order documents not attached

- Verify case folder exists
- Check that ARP and Order PDFs are in the case folder
- Ensure filenames contain 'ARP' or 'Order'
- Verify Google Drive access is authorized
- Check log for upload errors

Problem: Event created with wrong time

- Check that time zone in Excel matches Central Time
- Verify visittime column has correct format
- Delete event in Google Calendar
- Clear 'Y' from 'Calendared' column in Excel
- Correct the time and run button again

Problem: Duplicate events in calendar

- The app checks for existing events before creating new ones
- If duplicates exist, manually delete them in Google Calendar
- Verify 'Calendared' column is marking rows correctly
- Don't manually create events with same title—let the app handle it

Problem: Need to reschedule an appointment

- Update the visit date/time in Excel
- Change 'Calendared' from 'Y' to blank for that row
- Run the button again
- The app will delete the old event and create a new one
- Guardians will receive updated calendar invitations

Tips and Best Practices

💡 **TIP:** Create calendar events AFTER confirming appointment times with guardians. This prevents sending premature calendar invitations.

- WORKFLOW SEQUENCE: The recommended order is: (1) Schedule appointments, (2) Add to Calendar, (3) Send Appointment Confirmations. This ensures calendar invitations arrive before confirmation emails.
- CHECK YOUR CALENDAR: After running the button, open Google Calendar to verify events look correct before guardians see them.
- REMINDERS: The app sets reminders at 24h and 2h. If you want different reminder times, manually edit events in Google Calendar after creation.
- DOCUMENT ATTACHMENTS: ARP and Order documents are uploaded to a shared Google Drive folder. All your case documents are organized in one place.
- ATTENDEE INVITATIONS: Only guardians with email addresses receive invitations. If you don't want guardians invited, leave email fields blank.
- RESCHEDULING: To reschedule, update the time in Excel, clear the 'Calendared' Y, and rerun the button. The old event is automatically replaced.
- MANUAL EDITS: You can manually edit events in Google Calendar after creation. Changes won't sync back to Excel.
- TIME ZONE: All events use Central Time (America/Chicago). If you work across time zones, be mindful of this.
- GOOGLE DRIVE FOLDER: Documents are uploaded to 'Court Visitor ARP Documents' folder. You can find this folder in your Google Drive.

- CALENDAR CLEANUP: Completed visits remain in your calendar history. Periodically archive or delete old events to keep your calendar clean.

Example Scenario

The Situation

You have three appointments scheduled and want to add them to your calendar:

- Case 2024-12345: John Smith, visit Dec 15 at 2:00 PM
- Case 2024-12346: Jane Doe, visit Dec 16 at 10:30 AM
- Case 2024-12347: Bob Johnson, visit Dec 17 at 3:15 PM

The Steps

326. You open ward_guardian_info.xlsx and verify all three have visitdate and visittime filled in
327. You confirm guardian email addresses are present (you want them to receive invitations)
328. You save and close Excel
329. You click 'Add Meetings to Calendar'
330. The app creates three calendar events
331. The app uploads ARP and Order documents to Google Drive for each case
332. Guardians receive calendar invitation emails
333. You receive reminders 24h and 2h before each appointment

The Result

Your Google Calendar now shows:

- Three events titled 'Court Visit - Smith, John', etc.
- Each event shows the ward's address as location
- Each event is 60 minutes long
- Guardians are listed as attendees
- ARP and Order documents are attached as links
- Reminders are set for 24h and 2h before each visit

Guardians receive professional calendar invitations they can accept and add to their own calendars. You have all appointment details and documents accessible from your calendar on your phone or computer.

Technical Details (For Advanced Users)

File Locations

- Excel: C:\GoogleSync\GuardianShip_App\App Data\ward_guardian_info.xlsx
- Case Folders: C:\GoogleSync\GuardianShip_App\New Clients\
- Log File: C:\GoogleSync\GuardianShip_App\Automation\Calendar appt send email conf\Logs\appt_confirm.log
- Google Credentials: C:\GoogleSync\GuardianShip_App\Config\API\ (token_calendar.json)

Google APIs Used

- Google Calendar API v3 - Creating calendar events
- Google Drive API v3 - Uploading ARP and Order documents
- OAuth 2.0 scopes: calendar.events, drive.file

Event Configuration

- Calendar: Primary calendar (default)

- Duration: 60 minutes
- Time Zone: America/Chicago
- Reminders: 24 hours (1440 minutes) and 2 hours (120 minutes)
- Send Updates: 'all' (attendees receive email invitations)

Drive Upload Details

- Folder: 'Court Visitor ARP Documents' (created in My Drive if doesn't exist)
- File naming: [CauseNumber]_ARP.pdf and [CauseNumber]_ORDER.pdf
- Files are viewable by anyone with the link
- Links are attached to calendar events using supportsAttachments parameter

Duplicate Prevention

- Before creating event, app searches for existing events with matching cause number and date
- If found, old event is deleted before creating new one
- 'Calendared' column in Excel prevents repeated button clicks from creating duplicates
- Manually clear 'Calendared' to recreate an event

Related Workflow Steps

Steps BEFORE This Button

334. Import PDFs / OCR Files (Step 1)
335. Make Folders and Move Files (Step 2)
336.
337. Step 3 - Create Map (optional)
338. Step 4 - Send Requests
339. Step 5 – Add Guardian to Contacts (optional)
340. Step 6 - Send Confirmation Email

Steps AFTER This Button

341. Step 8 -Generate CVR from Excel
342. Step 9 - Generate Summary
343. Conduct visits
344. Step 10 Integrate Google Survey answers to CVR & open Doc
345. Step 11 - Send Follow-up
346. Step 12 Send Completed CVR to Supervisor
347. Step 13 – Build Payment Form
348. Step 14 - Generate Mileage

TIP: Typical workflow: Send Meeting Requests → Confirm times → ADD TO CALENDAR → Send Confirmations → Conduct visits.

Frequently Asked Questions

Q: Can I change the event duration from 60 minutes?

A: Currently the duration is fixed at 60 minutes in the script. To change it, your IT administrator would need to modify the EVENT_DURATION_MIN variable.

Q: Will guardians see the attached documents?

A: Yes, if they are added as attendees, they can click the attachment links in the calendar event to view the documents in Google Drive.

Q: Can I use a different calendar (not primary)?
A: Currently the app uses your primary calendar. To use a different calendar, your IT administrator would need to change the CALENDAR_ID variable.

Q: What if I don't want guardians to receive invitations?
A: Leave the guardian email fields blank in Excel. The event will still be created, but no invitations will be sent.

Q: Can I add more attendees manually?
A: Yes, after the event is created, you can edit it in Google Calendar to add additional attendees.

Q: What happens if the ARP or Order file is missing?
A: The calendar event is still created, but without those attachments. No error occurs—it just skips the missing files.

Q: How do I delete a calendar event created by the app?
A: Delete it normally in Google Calendar. Also clear the 'Y' from the 'Calendared' column in Excel if you want to recreate it.

Q: Can I test without actually creating events?
A: Yes, if your IT administrator configured Test Mode with --dry-run, the app will show what would happen without actually creating events.

Summary Checklist

- ☐ Visit dates and times entered in Excel
- ☐ Appointments are at least 15 minutes in the future
- ☐ Guardian emails present if you want invitations sent
- ☐ Case folders exist with ARP and Order PDFs
- ☐ Excel file is closed
- ☐ Google Calendar and Drive access authorized
- ☐ AFTER CLICKING: Verify events in Google Calendar
- ☐ AFTER CLICKING: Check event details (time, location, attendees)
- ☐ AFTER CLICKING: Verify documents attached
- ☐ AFTER CLICKING: Confirm 'Calendared' marked 'Y' in Excel
- ☐ AFTER CLICKING: Check that guardians received invitations

Step 8: Generate CVR

Court Visitor App Manual – Generate Court Visitor Report

Overview

The Generate CVR button automates the creation of Court Visitor Reports (CVR) by filling a Microsoft Word template with data from your Excel ward/guardian database. This button is the core document generation step that creates professional, formatted reports for each ward visit.

This script uses Windows COM automation to fill Word document content controls with case information, then intelligently matches and moves completed reports to the appropriate case folders based on cause numbers and ward names.

When to Use This Button

- Click 'Generate CVR' when:
  - You have completed ward visits and gathered all required information
  - Your Excel ward_guardian_info.xlsx file contains complete case data
  - The 'CVR created?' column in Excel is blank for cases that need reports
  - Individual case folders already exist in the 'New Clients' directory
  - You need to generate multiple CVR documents at once from batch data

What Happens When You Click This Button

1. Script Initialization

The script initializes Microsoft Word COM automation and loads the Excel database containing ward and guardian information. It validates that all required files and directories exist before proceeding.

2. Excel Database Reading

The script reads ward_guardian_info.xlsx and identifies rows where the 'CVR created?' column is blank. These are the cases that need new Court Visitor Reports. It builds a flexible header mapping system to handle column name variations.

3. Staging Directory Preparation

Creates or verifies the staging directory (App Data/Staging) where reports will be generated before being moved to their final destination folders. This two-step process ensures files aren't corrupted if errors occur during generation.

4. Template Loading

Opens the Word template 'Court Visitor Report fillable new.docx' which contains content controls (fillable fields) for ward information, guardian details, visit observations, and recommendations. The template structure is preserved while data is inserted.

5. Content Control Population

For each case row, the script iterates through all content controls in the template. It matches control names/tags to Excel column headers using a flexible normalization system that ignores spaces, underscores, and case differences. Data from the Excel row fills the corresponding fields in the Word document.

6. Smart Folder Matching

The script intelligently finds the appropriate destination folder for each report using a two-tier matching system. First, it searches for folders containing the cause number (most reliable). If no match is found, it searches by ward last name and first name tokens. This handles variations in folder naming conventions.

7. Document Saving to Staging

Saves the completed CVR document to the staging directory with a descriptive filename format: 'LastName, FirstName, CauseNumber Court Visitor Report.docx'. If a file with the same name exists, the script can skip, rename, or overwrite based on the OVERWRITE_POLICY setting.

8. Moving to Final Destination

Moves the completed report from staging to the matched case folder within 'New Clients'. If a matching person folder was found , the report goes there. Otherwise, it's placed in the base 'New Clients' directory for manual sorting.

9. Excel Update Marking

After successful generation and placement, the script writes 'Y' to the 'CVR created?' column in Excel for all processed rows. This prevents duplicate document creation on subsequent runs. The Excel file is updated using non-destructive methods that preserve formulas and formatting.

10. Backup Creation

Before modifying the Excel file, creates a timestamped backup in App Data/Backup directory (format: ward_guardian_info.backup_YYYYMMDD_HHMMSS.xlsx). This provides a safety net if you need to restore data or review previous states.

11. Cleanup and Reporting

Closes Microsoft Word COM automation cleanly, removes any stray files, and displays a summary showing: number of reports generated, which rows were processed, final locations of files, and any warnings or errors encountered.

Prerequisites

- Before clicking Generate CVR, ensure:

  - Microsoft Word is installed (required for COM automation)
  - Template file exists: C:\GoogleSync\GuardianShip_App\Templates\Court Visitor Report fillable new.docx
  - Excel database exists: C:\GoogleSync\GuardianShip_App\App Data\ward_guardian_info.xlsx
  - Excel contains a 'Sheet1' tab with ward data
  - The 'CVR created?' column exists in Excel (will be auto-created if missing)
  - Case folders exist in: C:\GoogleSync\GuardianShip_App\New Clients\
  - Staging directory exists or can be created: C:\GoogleSync\GuardianShip_App\App Data\Staging
  - Python libraries installed: pandas, openpyxl, pywin32, python-dateutil
  - cvr_content_control_utils.py module available in Scripts directory

Step-by-Step Instructions

Before Clicking the Button:

349. Open ward_guardian_info.xlsx and verify that all required data fields are complete for cases where 'CVR created?' is blank
350. Ensure ward names, cause numbers, guardian information, and visit dates are accurate
351. Verify that individual case folders exist in New Clients directory with recognizable names containing cause numbers or ward names
352. Close Microsoft Word if it's currently open to avoid COM conflicts
353. Review the Word template to understand what content controls (fields) need to be populated

Clicking the Button:

354. In the Court Visitor App interface, locate and click the 'Generate CVR' button (Step 8)
355. The script will launch (you may see a command window briefly appear)
356. Microsoft Word will open in the background - DO NOT interact with Word during processing
357. Progress messages will appear showing which rows are being processed
358. Wait for the 'Done' message indicating all CVRs have been generated

After Clicking the Button:

359. Navigate to the appropriate case folders in New Clients to verify CVR documents were created
360. Open ward_guardian_info.xlsx and confirm that the 'CVR created?' column now shows 'Y' for processed cases

361. Open a few generated CVR documents to verify that content controls were filled correctly
362. Check the Backup directory to confirm a timestamped Excel backup was created
363. Review any console warnings about mismatched folders or missing data fields
364. Manually move any reports that ended up in the base New Clients folder (couldn't find a matching subfolder) to their proper case folders

Required Excel Columns

The script requires specific columns in your Excel file. Column names are flexible (case-insensitive, spaces/underscores ignored):

Column Name	Required?	Purpose
wardlast / wlast	Yes	Ward's last name - used for file naming and folder matching
wardfirst / wfirst	Yes	Ward's first name - used for file naming and folder matching
causeno / cause number	Yes	Case cause number - primary identifier for folder matching
DateARPfiled / datefiled	Recommended	Date the Application to be Appointed filed - fills template field
CVR created?	Auto-created	Tracks completion status - blank = needs CVR, 'Y' = done
comments	Optional	Used as anchor to insert 'CVR created?' column if missing
[Any template field names]	As needed	Additional columns matching Word template content control names/tags

Note: *The script automatically handles column name variations. For example, 'ward last', 'WardLast', 'ward_last', and 'wardlast' all map to the same field.*

Common Warnings and Errors

⚠ ERROR: Could not open template
Cause: The Word template file is missing, corrupted, or in use by another program.
Solution: Verify the template exists at C:\GoogleSync\GuardianShip_App\Templates\Court Visitor Report fillable new.docx. Close any programs that might be using it. Check file permissions.

⚠ WARNING: Could not iterate/fill content controls
Cause: The template has structural problems or content controls are configured incorrectly.
Solution: Open the template in Word and verify content controls exist. Check Developer tab > Design Mode to ensure controls have proper Title or Tag properties matching Excel column names.

⚠ Row missing name/cause — skipping

Cause: The Excel row is missing required identifying information (ward name or cause number).
Solution: Open Excel and fill in the missing wardlast, wardfirst, or causeno fields for the affected row. Save and re-run the script.

⚠ Match dir: (none - using base root)
Cause: The script couldn't find a person-specific folder matching the cause number or ward name.
Solution: This is a warning, not an error. The CVR will be created in the base New Clients folder. After generation, manually move the report to the correct person folder, or create the person folder with a name containing the cause number.

⚠ ERROR: Sheet 'Sheet1' not found
Cause: The Excel file doesn't have a tab named 'Sheet1', or the tab was renamed.
Solution: Open ward_guardian_info.xlsx and rename your data tab to 'Sheet1', or edit the script's SHEET_NAME variable to match your actual tab name.

⚠ pywin32 is not installed
Cause: The required Python library for Windows COM automation is missing.
Solution: Open a command prompt and run: python -m pip install pywin32

Troubleshooting

Problem: CVR documents are created but all fields are empty
Check that content control names in the Word template exactly match Excel column headers (case-insensitive). Open the template, enable Design Mode (Developer tab), click each content control and verify its Title or Tag property. Common mismatch: template has 'WardFirst' but Excel column is 'Ward_First_Name'.
Problem: Script says 'No rows need processing' but I have blank CVR created? cells
The 'CVR created?' column might contain spaces or hidden characters instead of being truly blank. Select cells that appear blank, press Delete to clear them completely, then save and retry. Also verify you're looking at 'Sheet1' and not a different tab.
Problem: Word crashes or hangs during generation
This usually indicates a corrupted template or conflicting Word add-ins. Close all instances of Word using Task Manager. Open the template manually and save it again (File > Save As, overwrite). Disable Word add-ins (File > Options > Add-ins) and retry. Consider recreating the template from scratch if corruption persists.
Problem: Reports go to the wrong case folders
The folder matching system prioritizes cause numbers. Ensure your case folders include the cause number in their names. If multiple folders have similar names, the script picks the best match by scoring. Review the console output to see which folder was matched and why. You can rename folders to include the full cause number for more reliable matching.
Problem: 'SaveAs2' error or 'Access Denied' when saving
File permission issues or OneDrive/Google Drive sync conflicts. Close OneDrive/Google Backup and Sync temporarily. Run the script as administrator (right-click Python > Run as Administrator). Check that staging directory and destination folders aren't marked read-only. Verify you have write permissions to both locations.
Problem: Excel backup creation fails
Usually means the Backup directory doesn't exist or is inaccessible. Manually create C:\GoogleSync\GuardianShip_App\App Data\Backup. Check folder permissions. If backup continues to fail, the script will proceed anyway (backups are safety, not critical to CVR generation).
Problem: Some content controls fill correctly but others stay blank
This indicates a partial name match. The script uses normalization to match headers (removes spaces, underscores, case). If a content control is named 'Guardian_Phone_Number' but your Excel column is 'GuardianCell', they won't match. Either rename the Excel column or add an alias to the COLUMN_ALIASES dictionary in the script.
Problem: Checkbox content controls don't fill properly

Checkbox controls require 'yes'/'no' or 'y'/'n' values in Excel. The script checks if cc.Type == 3 (checkbox type) and expects these specific values. If your Excel has 'True'/'False' or '1'/'0', convert them to 'yes'/'no'. The checkbox will be checked for 'yes' or 'y', unchecked otherwise.

Tips & Best Practices

💡 TIP #1: Name case folders with cause numbers prominently
Include the cause number at the beginning of folder names (e.g., '2024-PR-12345 - Smith, John'). This ensures the most reliable folder matching since cause numbers are unique identifiers.

💡 TIP #2: Run in dry-run mode first for testing
Set DRY_RUN = True in the script to see what would happen without actually creating files or modifying Excel. This is perfect for verifying folder matches and testing configuration changes.

💡 TIP #3: Keep your Excel backups organized by date
The script automatically creates timestamped backups. Don't delete these! If you accidentally mark rows as done or corrupt data, you can restore from a recent backup. Consider keeping backups for at least 30 days.

💡 TIP #4: Use the rename policy for production, skip for development
OVERWRITE_POLICY = 'rename' (default) is safest - it never loses existing files. Set to 'skip' during testing to avoid generating multiple numbered copies. Only use 'overwrite' if you're certain you want to replace existing CVRs.

💡 TIP #5: Create the CVR created? column manually if needed
While the script auto-creates this column if missing, you can add it yourself after the 'comments' column. This gives you more control over column placement and helps you understand the workflow.

💡 TIP #6: Don't interact with Word during processing
The script controls Word via COM automation. If you click in Word, move windows, or try to use Word during script execution, you may cause COM errors or document corruption. Let the script finish completely.

💡 TIP #7: Leverage column aliases for flexibility
The COLUMN_ALIASES dictionary lets you map alternative column names to standard ones. If your Excel has 'Cause' instead of 'causeno', add 'cause': 'causeno' to the dictionary rather than renaming columns.

💡 TIP #8: Review console output for insights
The script prints detailed information about folder matching, file locations, and content controls filled. Read this output! It tells you exactly where files went and why folder matches succeeded or failed.

💡 TIP #9: Process small batches during initial setup
When first setting up, mark most rows with 'Y' in CVR created? and leave just 2-3 blank. This lets you test the workflow on a small batch before processing dozens of cases at once. Verify everything works perfectly before scaling up.

💡 TIP #10: Verify date formatting in Excel

The script converts dates to MM/DD/YYYY format. If your dates appear wrong in CVRs, check that Excel cells are formatted as Date type, not Text. The script recognizes pd.Timestamp and datetime objects.

💡 **TIP #11: Standardize your content control naming convention**
Use consistent naming across all templates. If one template uses 'wardFirstName' and another uses 'ward_first', you'll need different Excel columns or more aliases. Stick to one pattern: either camelCase or underscore_case.

💡 **TIP #12: Clean up the staging directory periodically**
Staging is temporary workspace. After successful runs, delete its contents to save disk space. If a run fails mid-process, staging may have incomplete documents that weren't moved - review before deleting.

💡 **TIP #13: Use the cvr_content_control_utils module for advanced field mapping**
The script imports an external utility module for sophisticated content control filling. This module can handle complex field mappings, conditional fills, and data transformations beyond what's built into the main script.

💡 **TIP #14: Monitor for stray root copies**
The script automatically cleans up stray files in the root New Clients folder when it successfully moves a document to a person folder. Check the root folder occasionally to see if any reports ended up there due to failed folder matching.

💡 **TIP #15: Understand the folder matching priority system**
Matching uses a scoring system: cause number digits match = 3 points, cause number text match = 2 points, last name match = 1 point, first name match = 1 point. The folder with the highest score wins. This explains why some folders are matched and others aren't.

Example Scenario

Scenario:

You've completed visits for 5 new guardianship cases and need to generate Court Visitor Reports for submission.

Starting State:

- Your ward_guardian_info.xlsx has 5 new rows with complete data:
  - Smith, Mary - Cause 2024-PR-12345
  - Johnson, Robert - Cause 2024-PR-12346
  - Williams, Patricia - Cause 2024-PR-12347
  - Brown, James - Cause 2024-PR-12348
  - Davis, Jennifer - Cause 2024-PR-12349
- All 5 rows have blank 'CVR created?' cells
- Case folders exist in New Clients:
  - 2024-PR-12345 - Smith, Mary
  - 2024-PR-12346 - Johnson, Robert

- 2024-PR-12347 Williams, Patricia
- Brown, James (folder exists but missing cause number)
- Davis, Jennifer - 2024-PR-12349 (different format but has cause number)

Step 9: Generate Summary

Court Visitor App Manual – Generate Court Visitor Summary Sheet

Overview

The Generate Summary button creates one-page Court Visitor Summary sheets that provide a quick reference for ward visits. These compact forms include essential ward and guardian information in the top half, with ruled lines for handwritten notes in the bottom half. This is your take-with-you form for visits.

The script reads data from your Excel database and generates professional summary documents with a three-column layout (Ward | Guardian 1 | Guardian 2), automatically calculating ages from dates of birth and formatting all information for easy reading during visits.

When to Use This Button

- Click 'Generate Summary' when:

  - You have upcoming ward visits scheduled and need reference sheets
  - You want to create portable, one-page summaries to take with you to visits
  - You need to prepare multiple visit forms at once from your Excel database
  - You want a physical form to write visit notes on during the appointment
  - You need a quick-reference sheet with ward/guardian contact information

What Happens When You Click This Button

1. Excel Database Reading

The script opens ward_guardian_info.xlsx in read-only mode and loads the data. It uses openpyxl to safely read the file without locking it, allowing you to continue working in Excel if needed.

2. Column Name Normalization

Applies flexible column mapping to handle variations in header names. The script recognizes aliases like 'wardlast'/'wlast', 'causeno'/'case no', 'guardian1'/'g1', etc., making it resilient to different Excel formats.

3. Row Selection GUI

Displays a picker window showing the last 15 rows from your Excel sheet (newest entries). You can select multiple rows using Ctrl+click or Shift+click to choose which cases need summary sheets generated. The picker shows: Cause Number — Last, First — Visit Date Time.

4. Data Extraction and Processing

For each selected row, extracts all relevant information: ward name, DOB, age (calculated), phone, address, living situation, guardian 1 details, guardian 2 details (if applicable), visit date/time, and cause number. Dates are formatted consistently as MM/DD/YYYY.

5. Document Layout Creation

Creates a Word document with small margins (0.4 inches) for maximum space. Adds a header with 'Court Visitor Summary' title, visit date/time on the left, and cause number on the right.

6. Three-Column Information Table

Generates a three-column table with equal widths for Ward, Guardian 1, and Guardian 2. Each column contains: name (bold), phone, address, email (guardians only), DOB with age/relationship, and living situation (ward only).

7. Ruled Notes Section

Creates a full-width table with 26 rows of ruled lines for handwritten notes. Each line has a bottom border to guide writing. The notes section takes up approximately half the page, providing ample space for visit observations.

8. File Naming and Saving

Saves each summary with a descriptive filename format: 'CauseNo_LastName_FirstName_VisitDate.docx'. Files are saved to the Visit Summary Forms directory in your app folder, automatically creating the directory if it doesn't exist.

9. Optional Printing

If you used the --print flag, the script sends each generated document directly to your default printer via Word automation. This allows batch printing of all visit summaries at once.

10. Optional Folder Opening

If you used the --open flag, the script automatically opens the Visit Summary Forms folder in Windows Explorer when complete, making it easy to access your newly created documents.

Prerequisites

- Before clicking Generate Summary, ensure:
  - Excel database exists: C:\GoogleSync\GuardianShip_App\App Data\ward_guardian_info.xlsx
  - Excel contains a sheet with ward and guardian data (uses active sheet by default)
  - Python libraries installed: python-docx, openpyxl, pandas, python-dateutil
  - Visit dates are entered in Excel for the cases you want to generate summaries for
  - Ward and guardian contact information is complete in Excel
  - Output directory exists or can be created: Visit Summary Forms folder
  - Optional: pywin32 installed if you want to use the --print feature
  - Tkinter is available (included with Python on Windows for the GUI picker)

Step-by-Step Instructions

Before Clicking the Button:

365. Open ward_guardian_info.xlsx and verify that visit dates and times are entered for upcoming appointments
366. Ensure ward names, guardian names, and contact information are accurate and complete
367. Check that DOB fields are filled in (needed for automatic age calculation)
368. Verify address and phone number fields are populated
369. Save and close Excel (optional - script can read while Excel is open)

Clicking the Button:

370. In the Court Visitor App interface, locate and click the 'Generate Summary' button (Step 9)
371. A picker window appears showing your most recent 15 cases from Excel
372. Review the list and select the cases you want to create summary sheets for (Ctrl+click for multiple, Shift+click for range)
373. Click the 'Generate' button in the picker window
374. The script processes each selected row and displays progress messages
375. Wait for the completion message showing where files were saved

After Clicking the Button:

376. Navigate to the Visit Summary Forms folder to access your generated documents
377. Open a few summary sheets to verify information was populated correctly
378. Check that ages were calculated correctly from DOB fields
379. Verify that all three columns (Ward, Guardian 1, Guardian 2) contain the expected information
380. Print the summaries if you haven't used the --print flag (File > Print in Word)
381. Take the printed summaries with you to ward visits for note-taking

Required Excel Columns

The script requires specific columns in your Excel file. Column names are flexible and support many aliases:

Column Name	Aliases Accepted	Purpose
caseno	causeno, case, cause no, cause	Case/cause number - used in filename and header
visitdate	visit date, date	Date of scheduled visit - formatted as MM/DD/YYYY
visittime	visit time, time	Time of scheduled visit - displayed in header
wardlast	ward last, wlast	Ward's last name - used in filename and info section
wardfirst	ward first, wfirst	Ward's first name - used in filename and info section
wtele	wphone, ward phone	Ward's telephone number
waddress	ward address, waddr	Ward's physical address
wdob	ward dob, warddob	Ward's date of birth - age calculated automatically
liveswith	lives with	Who the ward lives with (e.g., 'Guardian', 'Alone', 'Facility')
guardian1	g1, guardian	Primary guardian's full name
gtele	g1tele, guardian phone	Primary guardian's phone
gemail	g1email, guardian email	Primary guardian's email address
gaddress	guardian address, g1address	Primary guardian's physical address
Relationship	g1relationship, g relationship	Primary guardian's relationship to ward
gdob	g1dob, guardian dob	Primary guardian's date of birth
Guardian2	guardian2, g2	Secondary guardian's full name (optional)
g2tele	guardian2 phone, g2 phone	Secondary guardian's phone (optional)
g2eamil	g2email, guardian2 email	Secondary guardian's email (optional - note: 'eamil' typo is supported)

Common Warnings and Errors

⚠ ERROR: Missing dependency 'python-docx'
Cause: The python-docx library is not installed.
Solution: Open a command prompt and run: py -3 -m pip install python-docx

⚠ ERROR: Workbook not found
Cause: The Excel file ward_guardian_info.xlsx doesn't exist at the expected path.
Solution: Verify the Excel file exists at C:\GoogleSync\GuardianShip_App\App Data\ward_guardian_info.xlsx. Check that the path in the script matches your actual folder structure.

⚠ **No data rows found**
Cause: The Excel sheet is empty or contains only headers.
Solution: Add case data to your Excel file. Ensure you're looking at the correct sheet (the script uses the active sheet by default).

⚠ **No rows selected**
Cause: You clicked 'Generate' in the picker without selecting any rows, or closed the picker window.
Solution: Rerun the script and click on at least one row before clicking Generate. Use Ctrl+click to select multiple rows.

⚠ **Printing requires pywin32**
Cause: You used the --print flag but pywin32 is not installed.
Solution: Install pywin32 with: py -3 -m pip install pywin32. Or generate summaries without --print and print manually from Word.

⚠ **Could not print [filename]**
Cause: Word automation failed or printer is not configured.
Solution: Check that Microsoft Word is installed and your default printer is set up correctly. Manually print documents from Word as a fallback.

Troubleshooting

Problem: Picker window shows old cases, not my recent entries
The picker displays the last 15 rows in sheet order (physical row order). If you've been inserting rows at the top or middle of your sheet, the 'last 15' may not be your newest cases. Use --last N to show more rows (e.g., --last 30), or use --no-gui to process all rows, or sort your Excel sheet so newest entries are at the bottom.
Problem: Ages are calculating incorrectly or showing blank
Verify that DOB fields in Excel are formatted as Date type, not Text. The script tries to parse dates flexibly but works best with proper Excel date formats. If a DOB can't be parsed, the age field will be blank. Check for typos or invalid dates (e.g., '13/45/2020').
Problem: Guardian 2 column is empty even though I have data
Check the exact column name in your Excel. The script looks for 'Guardian2', 'guardian2', 'g2', etc. A common issue is having 'Guardian 2' (with space) - which isn't in the alias list. Either rename your column to 'Guardian2' (no space) or add your variant to the COLUMN_ALIASES dictionary in the script.
Problem: Summary sheets are missing some information
This usually means column names don't match any known aliases. Run the script with verbose output to see which columns were found. Compare your Excel headers to the 'Required Excel Columns' table above. Add custom aliases to COLUMN_ALIASES if needed, or rename your Excel columns to match standard names.
Problem: Picker window doesn't appear (script seems to hang)
This indicates a Tkinter issue. On Windows, Tkinter is included with Python, but on some systems it may be missing. Try using --no-gui flag to skip the picker and process rows directly. Verify Python was installed with Tk support by running: python -m tkinter (should open a test window).
Problem: Filenames have weird characters or are truncated
The script sanitizes filenames by replacing slashes and backslashes with hyphens. If your cause numbers or names contain special characters like colons, quotes, or asterisks (invalid in Windows filenames), they'll be replaced. This is normal behavior. The files are still readable and identifiable.
Problem: Generated documents are missing the ruled lines for notes
This should not happen with the default NOTES_ROWS=26 setting. If it does, check that your Word installation supports table borders. Open a generated document in Word and look at the notes table. If borders are missing, it may be a Word template/theme issue. Try updating Microsoft Word.
Problem: Cannot write to Visit Summary Forms folder
Permission issue or the path is too long. Verify you have write access to C:\GoogleSync\GuardianShip_App\Visit Summary Forms\. Try running the script as administrator. Check if Google Drive/OneDrive sync is locking the folder. Move the folder to a shorter path if needed.

Tips & Best Practices

💡 **TIP #1: Generate summaries the day before visits**

Create your summary sheets the evening before your scheduled visits. This gives you time to review the information, spot any missing data, and prepare questions. Print them fresh so you have clean, legible forms.

💡 **TIP #2: Use the picker to batch-generate for a week's visits**

Instead of generating one at a time, select all visits scheduled for the upcoming week. The picker allows multi-select (Ctrl+click), making it easy to prepare multiple summaries in one go.

💡 **TIP #3: Keep printed summaries in a folder organized by visit date**

Create a physical folder with dividers by date. As you generate summaries, file them chronologically. This helps you grab the right forms quickly when heading to appointments.

💡 **TIP #4: Review the summary for missing information before printing**

Open one or two generated documents and scan for blank fields. If you notice missing phone numbers or addresses, update Excel and regenerate before printing. It's easier to fix now than during a visit.

💡 **TIP #5: Use --last parameter to show more cases in the picker**

The default picker shows 15 rows. If you have many recent cases, use --last 30 or --last 50 to see more options. This is especially useful at the beginning of a busy month.

💡 **TIP #6: Annotate summaries after visits, then scan for records**

The ruled lines section is designed for handwritten notes during visits. After the visit, scan the annotated summary for your records before filing. This creates a complete visit record.

💡 **TIP #7: Use --print flag for automatic batch printing**

If you're generating summaries for 5+ visits, use the --print command-line flag. The script will automatically send all documents to your printer, saving you from manually opening and printing each one.

💡 **TIP #8: Keep a template summary in your car**

Print one blank summary (with no visit-specific data) and keep it in your glove box. If you have an unscheduled visit or emergency appointment, you have a form ready for notes.

💡 **TIP #9: Verify Guardian 2 information is showing when applicable**

Some cases have co-guardians. Always check the third column (Guardian 2) to ensure it's populated when expected. If it's blank but you know there's a co-guardian, check your Excel column naming.

💡 **TIP #10: Use --no-gui for automation or scripts**

If you're calling this from another script or want to automate it, use --no-gui flag. This skips the picker and processes the last N rows automatically (or all rows if --last is omitted).

💡 TIP #11: Double-check calculated ages for reasonableness
The script auto-calculates ages from DOB. Quickly scan the ages - if you see 'Age: 150' or 'Age: -5', there's a DOB entry error in Excel. Fix these before printing.

💡 TIP #12: Use the cause number for quick file identification
Filenames start with the cause number, making it easy to find specific cases in the folder. When you need a particular summary, sort by name and look for the cause number.

💡 TIP #13: Consider laminating frequently-used summaries
If you visit the same wards regularly (annual reviews), laminate their summaries. You can write on them with dry-erase markers and clean them for reuse.

💡 TIP #14: Add custom aliases for your Excel column naming conventions
If your Excel uses non-standard column names that aren't recognized, edit the COLUMN_ALIASES dictionary in the script. Once added, your custom names will work automatically in all future runs.

💡 TIP #15: Keep the Visit Summary Forms folder organized monthly
Create subfolders by month (e.g., '2024-01', '2024-02') and move summaries after visits are complete. This prevents the main folder from getting cluttered and makes it easier to find old summaries.

Example Scenario

Scenario: You have 4 ward visits scheduled for this week and need to prepare summary sheets to take with you.

Starting State:

- Your ward_guardian_info.xlsx contains 50 cases, with these 4 visits coming up:
  - Monday 2:00 PM - Smith, Mary (Cause 2024-PR-12345)
  - Tuesday 10:00 AM - Johnson, Robert (Cause 2024-PR-12346)
  - Wednesday 3:00 PM - Williams, Patricia (Cause 2024-PR-12347)
  - Thursday 11:00 AM - Brown, James (Cause 2024-PR-12348)
- All visit dates and times are entered in Excel
- Ward and guardian contact information is complete

Execution Steps:

382. On Sunday evening, you click 'Generate Summary' in the Court Visitor App
383. The picker window opens showing your 15 most recent Excel entries
384. You scroll through the list and see all four of this week's visits
385. You Ctrl+click to select each of the 4 rows (Smith, Johnson, Williams, Brown)
386. You click the 'Generate' button in the picker
387. The script processes each case. Console shows:
    'Created: ...\2024-PR-12345_Smith_Mary_11-04-2024.docx'

'Created: ...\2024-PR-12346_Johnson_Robert_11-05-2024.docx'
And so on for all 4 cases

388. Script displays: 'All summaries saved to: C:\GoogleSync\GuardianShip_App\Visit Summary Forms'
389. You navigate to the Visit Summary Forms folder and see 4 new Word documents
390. You open Smith_Mary's summary and verify:
 - Ward column shows: Mary Smith, phone (210) 555-0123, address, DOB 03/15/1945 | Age: 79, Lives With: Guardian
 - Guardian 1 column shows: John Smith (son), phone, address, email, DOB | Relationship: Son
 - Guardian 2 column is empty (no co-guardian in this case)
 - Header shows: Visit: 11/04/2024 2:00 PM | Cause Number: 2024-PR-12345
 - Notes section has 26 ruled lines ready for handwritten observations
391. You check the other 3 summaries - all look good
392. You print all 4 documents (File > Print > Print All Pages)
393. You place the printed summaries in your visit folder, organized by day

During Visits:

- You take the summaries with you to each appointment
- Quick reference to ward/guardian info without needing to open Excel on your phone
- Write visit observations on the ruled lines: ward's condition, living environment, guardian interaction, concerns noted, recommendations, etc.
- Guardian sees the professional form and appreciates your preparation

After Visits:

- Scan the annotated summaries to create digital records
- File paper copies in completed visits folder
- Use handwritten notes to complete full CVR reports in Step 8
- Total time saved: 20 minutes (vs creating forms manually) + improved organization and professionalism

Technical Details

Script Name: build_court_visitor_summary.py
Location: C:\GoogleSync\GuardianShip_App\Automation\Court Visitor Summary\
Primary Technologies:

- python-docx - Word document creation and formatting
- openpyxl - Excel reading in read-only mode
- pandas - Data manipulation and processing
- python-dateutil - Flexible date parsing
- tkinter - GUI picker interface (built-in with Python)
- win32com (optional) - Word automation for printing

Key Configuration Constants:

- WORKBOOK_PATH - Relative path to Excel database
- OUTPUT_DIR - Where summary forms are saved (Visit Summary Forms)
- FONT_NAME - 'Calibri' (professional, readable font)
- FONT_SIZE_PT - 11pt for body text
- MARGIN_IN - 0.4 inch margins (compact layout)

- NOTES_ROWS - 26 ruled lines for handwritten notes

Command-Line Flags:

- --workbook [path] : Override default Excel path
- --sheet [name] : Specify sheet name (default: active sheet)
- --output [dir] : Override output directory
- --last N : Show last N rows in picker (default: 15)
- --no-gui : Skip picker, process rows non-interactively
- --print : Auto-print each generated document via Word
- --open : Open output folder in Explorer when done

Document Layout Structure:

394. Page Setup: 0.4" margins on all sides for maximum content space
395. Header Row 1: 'Court Visitor Summary' title (12pt, bold)
396. Header Row 2: Two-column table - Visit date/time (left) | Cause number (right)
397. Information Table: Three equal-width columns spanning full page width

    1. Column 1 (Ward): Name (bold), phone, address, DOB | Age, Lives With
    2. Column 2 (Guardian 1): Name (bold), phone, address, email, DOB | Relationship
    3. Column 3 (Guardian 2): Same as Guardian 1 format (blank if no co-guardian)

398. Spacer Paragraph: Vertical spacing before notes
399. Notes Header: 'NOTES' label (bold)
400. Notes Table: 26-row single-column table, each cell with bottom border creating ruled lines

Related Workflow Steps

Before This Step:

- Step 7 - Schedule: Visits should be scheduled and dates/times entered in Excel
- Step 8 - Generate CVR: Not required before summaries, but often done in parallel
- Excel data entry: Ward and guardian information should be complete

After This Step:

- Conduct ward visits using the printed summary sheets for reference and notes
- Step 8 - Generate CVR: Use handwritten notes from summaries to complete full reports
- Step 11 - Send Follow-up: Thank guardians after visits are complete

Frequently Asked Questions

Q1: Can I customize the number of ruled lines in the notes section?

Yes. Edit the NOTES_ROWS constant in the script (currently set to 26). Increase for more writing space or decrease if you want summaries to fit on one page with less scrolling.

Q2: Can I generate summaries for just one specific case?

Yes. When the picker appears, click on just that one row and click Generate. Or use --no-gui flag with Excel filtered to show only that row.

Q3: Why does the picker show cases I've already visited?

The picker shows the last N rows in physical sheet order, regardless of visit status. It doesn't filter by completion status. Select only the rows you need from the list shown.

Q4: Can I change the three-column layout to two columns (no Guardian 2)?

This requires modifying the script. You'd need to change the table creation from cols=3 to cols=2 and remove the Guardian 2 section. However, having three columns doesn't hurt even if Guardian 2 is blank - it just displays an empty column.

Q5: How do I add my organization's logo to the summary sheets?

You'd need to modify the build_doc function to add an image. Use doc.add_picture() before the title paragraph. This requires having a logo image file and adjusting margins/layout accordingly.

Q6: Can I export summaries as PDF instead of Word documents?

Not directly. The script creates .docx files. However, you can batch convert them to PDF using Word automation, Adobe Acrobat, or online converters. Alternatively, modify the script to use python-docx-template or reportlab for direct PDF generation.

Q7: What happens if I have more than 3 guardians?

The current design only supports 2 guardians in the layout. If you have cases with 3+ guardians, Guardian 3+ won't appear on the summary. You'd need to modify the script to add more columns or use a different layout (e.g., vertical stacking).

Q8: Can I save summaries directly to a case folder instead of the Visit Summary Forms folder?

Yes, but this requires script modification. Change the OUTPUT_DIR calculation in build_doc() to use folder matching logic similar to the CVR generation script. However, the centralized folder approach makes batch generation easier.

Q9: Why are my date formats showing as MM/DD/YYYY when I prefer DD/MM/YYYY?

The parse_date() function uses MM/DD/YYYY format. To change this, edit the strftime format string in the parse_date function from '%m/%d/%Y' to '%d/%m/%Y'. Make sure Excel interprets your dates correctly as well.

Q10: Can the script automatically open each generated document for review?

Not in the current version. You can add this by using os.startfile(out_path) after saving each document, but this would open 10+ Word windows if you're batch-generating. Better to review files manually in the output folder.

Summary Checklist

Before Clicking Generate Summary:

☐ Excel database ward_guardian_info.xlsx is updated with current case information
☐ Visit dates and times are entered for upcoming appointments
☐ Ward names, DOBs, phone numbers, and addresses are complete
☐ Guardian 1 information is populated (at minimum)
☐ Guardian 2 information is filled in if applicable
☐ Python libraries installed (python-docx, openpyxl, pandas, dateutil)

After Clicking Generate Summary:

☐ Navigate to Visit Summary Forms folder and verify documents were created
☐ Open 1-2 sample summaries to check data accuracy
☐ Verify ages calculated correctly from DOB fields
☐ Check that all three columns have expected information (Ward | Guardian 1 | Guardian 2)
☐ Confirm notes section has 26 ruled lines for handwriting
☐ Print summaries for upcoming visits
☐ Organize printed forms by visit date in a physical folder
☐ Take summaries with you to ward visits for reference and note-taking
☐ After visits, scan annotated summaries for records
☐ Use notes from summaries to complete full CVR reports (Step 8)

Court Visitor App Manual - Step 9: Generate Summary
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Step 10: Complete CVR

Court Visitor App Manual – Auto-Fill CVR from Google Form Responses

Overview

The Complete CVR button auto-fills Court Visitor Report documents with data collected from Google Form responses submitted by guardians. This step supplements the CVR documents created in Step 8 by adding guardian-provided information about the ward's condition, living situation, and care.

The script reads form responses from Google Sheets, matches them to existing CVR documents using cause numbers or ward names, and intelligently fills only the fields that weren't already populated in Step 8. This prevents overwriting your court visitor data while adding valuable guardian input.

When to Use This Button

- Click 'Complete CVR' when:

- CVR documents have been generated using Step 8 (Generate CVR)
- Guardians have submitted responses via your Google Form
- You want to incorporate guardian feedback into official CVR documents
- You need to complete CVRs with information only guardians can provide
- You're ready to finalize CVR documents before submission to court

What Happens When You Click This Button

1. Google Sheets Authentication
The script connects to Google Sheets API using either service account credentials (preferred) or OAuth authentication (fallback). Service account allows unattended operation, while OAuth requires browser-based login on first use.

2. Configuration Loading
Loads the field mapping configuration (cvr_google_form_mapping.json) that defines how Google Form questions map to CVR document content control names. This JSON file acts as a translator between form responses and document fields.

3. Form Responses Retrieval
Reads all responses from your Google Form's linked spreadsheet. The script pulls data from columns A through AZ, capturing timestamps, guardian names, cause numbers, and all form answers.

4. Excel Database Reading
Opens ward_guardian_info.xlsx to get the master list of cases with their cause numbers, ward names, and guardian names. This provides the matching keys to link form responses to specific CVR documents.

5. Response Matching
For each form response, attempts three matching strategies in priority order: (1) Match by cause number (most reliable), (2) Match by ward first + last name, (3) Match by guardian name (from 'supplemented by' field). The first successful match is used.

6. CVR File Location
Searches the New Clients directory tree for CVR documents matching each form response. Looks for files containing the cause number and 'Court Visitor Report' in the filename, checking all subdirectories.

7. Document Protection Removal
Opens each matched CVR document and unprotects it to allow editing. Many CVR templates have form protection enabled, which must be removed temporarily to update content controls.

8. Already-Filled Field Detection
Scans all content controls in the CVR to identify which fields were already filled by Step 8. Checks for actual content (not placeholders like '☐' or 'Click here to enter text'), building a skip list to preserve court visitor data.

9. Form Data Dictionary Building
Converts the Google Form response into a dictionary mapping CVR control names to values. Handles different field types: yes/no responses for checkboxes, comma-separated values for multi-select checkboxes, and text for all other fields.

10. Selective Content Control Filling
Fills only the content controls that were NOT already populated. This ensures guardian-provided data supplements (rather than overwrites) court visitor observations. The script respects checkbox types, text types, and long-text types appropriately.

11. Document Saving and Protection Restoration
Saves the updated CVR document with guardian data integrated. Optionally re-applies form protection if it was originally present. Closes Word cleanly to release file locks.

12. Processing Summary
Displays a report showing: number of form responses processed, how many matched to CVR files, how many fields were filled per document, and any responses that couldn't be matched (with reasons).

Prerequisites

- Before clicking Complete CVR, ensure:

  - CVR documents exist (generated via Step 8)
  - Google Form for guardian input is created and linked to a Google Sheet
  - Field mapping config exists: Config/cvr_google_form_mapping.json
  - Google API credentials configured (service account or OAuth)

- Python libraries: google-auth, google-auth-oauthlib, google-api-python-client, pandas, pywin32
- Guardians have submitted at least one form response

Step-by-Step Instructions

Before Clicking:

401. Verify Google Form responses exist in the linked spreadsheet
402. Ensure CVR documents from Step 8 are saved in New Clients folders
403. Check that cvr_google_form_mapping.json accurately maps form questions to CVR fields
404. Confirm Google API authentication is working (test connection first)

Clicking the Button:

405. Click 'Complete CVR' in the Court Visitor App
406. Script authenticates with Google Sheets (may open browser for OAuth on first use)
407. Progress messages show form responses being matched to CVR files
408. Word opens in background to fill documents - DO NOT interact with Word
409. Wait for completion message showing how many CVRs were updated

After Clicking:

410. Open several updated CVR documents to verify guardian data was added
411. Check that court visitor fields (from Step 8) were NOT overwritten
412. Review the processing summary for any unmatched form responses
413. Verify checkbox fields filled correctly (X for checked, blank for unchecked)

Required Configuration Files

File	Location	Purpose
cvr_google_form_mapping.json	Config/	Maps Google Form questions to CVR content control names
google_service_account.json	Config/API/	Service account credentials for Google Sheets API
gmail_token.json	Config/API/	OAuth credentials (fallback if service account unavailable)

Common Warnings and Errors

⚠ ERROR: Could not import cvr_content_control_utils
The utility module is missing. Verify C:\GoogleSync\GuardianShip_App\Scripts\cvr_content_control_utils.py exists.

⚠ ERROR: Google API libraries not installed
Run: pip install google-auth google-auth-oauthlib google-auth-httplib2 google-api-python-client

⚠ ERROR: Mapping file not found
Create cvr_google_form_mapping.json in the Config directory with proper field mappings.

⚠ Service account authentication failed
Check that google_service_account.json exists and contains valid credentials. The script will fall back to OAuth.

⚠ No data found in spreadsheet
The Google Sheet is empty or has no form responses. Have guardians submit at least one response.

⚠ Could not find CVR file for response
The cause number or ward name from the form doesn't match any CVR document. Verify spelling and file naming.

Tips & Best Practices

💡 TIP #1: Test the mapping file with one response first
Before processing all responses, test with a single form submission to verify your mapping file correctly translates form questions to CVR fields.

💡 TIP #2: Use service account for automation
Service accounts don't require browser authentication, making them ideal for automated/scheduled runs. OAuth is fine for manual use.

💡 TIP #3: Review unmatched responses carefully
If responses don't match to CVR files, the cause number or ward name in the form may have typos. Check the processing summary for details.

💡 TIP #4: Backup CVR files before running
While the script only fills empty fields, it's wise to backup CVR documents before running Complete CVR for the first time.

💡 TIP #5: Don't run Step 8 and Step 10 simultaneously
Step 8 creates CVRs, Step 10 updates them. Wait for Step 8 to complete before running Step 10 to avoid file locking conflicts.

Technical Details

Script Name: google_sheets_cvr_integration_fixed.py
Location: C:\GoogleSync\GuardianShip_App\

- Google Sheets API v4 - Read form response data
- Service account or OAuth2 authentication
- Win32com - Word COM automation for document editing
- pandas - Data processing and matching logic
- JSON config file for field mapping flexibility

Related Workflow Steps

Before This Step:

- Step 8 - Generate CVR: Must be completed first to create base CVR documents
- Google Form setup: Form must be created and linked to Google Sheets

After This Step:

- Step 12 - Email CVR: Send completed CVR documents to supervisor for review

- Court submission: Finalize and submit CVRs to court

Court Visitor App Manual - Step 10: Complete CVR
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Step 11. Send Follow-Up Emails

Court Visitor App – Detailed Step Guide

Overview

The 'Send Follow-Up Emails' button allows you to send professional thank-you emails to guardians after completing ward visits. This thoughtful gesture maintains good relationships with guardians and demonstrates professionalism. Instead of manually composing individual thank-you emails, this button uses an interactive picker to let you select which completed visits need follow-ups, then automatically generates and sends personalized emails.

The email thanks guardians for their time, acknowledges their cooperation, and reinforces the importance of their role in the ward's care. The app shows you the last 15 cases, you select which ones to email, and it handles the rest—including saving text copies for your records.

When to Use This Button

Use this button when:

- You have completed ward visits and want to send thank-you emails
- A few days have passed since the visit (allows time for any issues to surface)
- Guardian contact information is in your Excel file
- You want to maintain professional relationships with guardians
- You're closing out completed cases and want to finish on a positive note

💡 **TIP:** Sending follow-up emails is optional but recommended. It's a professional courtesy that guardians appreciate and it helps build rapport for future visits.

What Happens When You Click This Button

Step 1: The App Shows an Interactive Picker

A GUI window displays the last 15 cases from your Excel file:

- Shows cause number, ward name, visit date, guardian names and emails
- Displays in a scrollable list with checkboxes
- You select which cases should receive follow-up emails
- Select All and Clear All buttons for convenience
- Only the most recent 15 rows are shown to keep the list manageable

Step 2: You Select Cases to Email

You manually choose which guardians to email:

- Check the box next to each case that needs a follow-up
- You can select one, several, or all cases
- Review the visit dates to ensure visits are actually complete
- Verify guardian email addresses are present
- Click Send when ready

Step 3: The App Validates Email Addresses

For each selected case, the app checks:

- At least one guardian has a valid email address

- Email contains @ symbol
- Email is not a placeholder like 'none', 'N/A', or 'null'
- Collects emails from both 'gemail' and 'g2eamil' columns
- Skips cases with no valid guardian emails

Step 4: The App Generates Personalized Emails

Each email is customized with case-specific information:

- Subject: 'Thank you for your time regarding [Ward First Name]'
- Body includes ward's first and last name
- Visit date formatted as 'Month Day, Year' (e.g., November 15, 2025)
- Professional template with gratitude message
- Your signature block with contact information

Step 5: The App Sends Emails via Gmail

Emails are sent through your Gmail account:

- TO: Both Guardian 1 and Guardian 2 emails (if present)
- FROM: Your configured Gmail address
- Uses Gmail API for reliable delivery
- Appears in your Gmail Sent folder
- Each email is sent individually

Step 6: The App Saves Text Copies

A text copy is saved for each email:

- Saved to the ward's case folder (matched by cause number)
- Filename: 'Followup Email - [LastName], [FirstName] - [Date].txt'
- If case folder doesn't exist, saved to '_Correspondence_Pending' folder
- Contains complete email text including recipients and subject

Step 7: The App Provides Confirmation

After completion:

- Summary shows how many emails were sent
- Console displays each successful send
- Any errors are reported
- Text copies confirm where files were saved

Understanding the Interactive Picker

What the Picker Shows

Each row in the picker displays:

- causeno - Case identifier
- wardfirst - Ward first name
- wardlast - Ward last name
- visitdate - Date of visit
- guardian1 - Guardian 1 name
- Guardian2 - Guardian 2 name (if present)
- gemail - Guardian 1 email
- g2eamil - Guardian 2 email (if present)

Using the Picker

The interface includes:

- Checkboxes: Click to select/deselect individual cases
- Select All button: Checks all 15 cases at once
- Clear All button: Unchecks all cases
- Send button: Proceeds with selected cases
- Cancel button: Closes picker without sending anything

Why Only 15 Cases?

The picker shows the last 15 rows from Excel because:

- These are typically your most recent cases
- Keeps the list manageable and easy to review
- Follow-ups are usually sent shortly after visits
- Older cases likely already have follow-ups sent
- You can run the button multiple times if needed

Understanding the Follow-Up Email

Email Subject

Thank you for your time regarding [Ward First Name]
Example: Thank you for your time regarding John

Email Body

The email includes:

- Greeting: 'Dear Guardian,'
- Thanks for time during visit on [date]
- Appreciation for cooperation and valuable information
- Acknowledgment of guardian's role in required annual review
- Personal touch: 'pleasure talking to you and getting to know [ward]'
- Best wishes for the year ahead
- Professional closing with your name and contact info

Full Email Text

Dear Guardian,

I wanted to thank you for your time and input during my visit with [Ward First] [Ward Last] on [Visit Date]. I appreciate your cooperation and the valuable information you provided regarding care.

Your input is a critical part of the required annual review, and I am grateful for your continued support. It was a pleasure talking to you and getting to know [Ward First].

Wishing you and [Ward First] all the best for the year ahead.

Respectfully,
May Ehresman
Court Visitor

Understanding Dry Run Mode

What is Dry Run Mode?

The script can operate in two modes:

- DRY_RUN = True: Saves .eml preview files, does NOT send emails
- DRY_RUN = False: Actually sends emails via Gmail

Dry Run Benefits

When testing or reviewing:

- Creates .eml files you can open in Outlook/Thunderbird
- Review exact email content before sending
- No Gmail authentication required
- Safe for testing new templates
- Verify recipient addresses are correct

Your Configuration

Your IT administrator configures which mode the button uses. Most installations use DRY_RUN = False (send mode) for convenience.

💡 **TIP:** If you're unsure which mode you're using, check if emails actually appear in your Gmail Sent folder after clicking the button.

Prerequisites (What You Need Before Clicking)

414. VISITS COMPLETED: You should have completed ward visits that need follow-ups.
415. EXCEL DATA: Ward names, visit dates, and guardian emails must be in ward_guardian_info.xlsx.
416. GMAIL CONNECTION: Gmail API must be configured (unless using dry run mode).
417. CASE FOLDERS: Case folders should exist for saving text copies (optional but recommended).
418. VISIT DATES: Visit dates should be filled in Excel to show in the picker.
419. GUARDIAN EMAILS: At least one guardian must have a valid email address for each case.
420. EXCEL READ-ONLY: Excel can be open or closed—the app reads Excel in read-only mode.

Step-by-Step Instructions

Before You Click

421. Consider which visits need follow-up emails
422. Verify visit dates are recorded in Excel
423. Check that guardian email addresses are present and correct
424. Open the Court Visitor App

Clicking the Button

425. Locate 'Send Follow-Up Emails' button (usually button #12)
426. Click the button once
427. Interactive picker window appears showing last 15 cases
428. Review the list carefully

Using the Picker

429. Read each row to see ward name, visit date, and guardian emails
430. Check the box next to each case that needs a follow-up
431. Use Select All if you want to email everyone
432. Use Clear All to start over
433. Click Send when ready (or Cancel to abort)

After You Click Send

434. Watch for progress messages showing each email being sent
435. Wait for 'SUCCESS' confirmation
436. Check Gmail Sent folder to verify emails

437. Check case folders for saved text copies
438. Note how many emails were sent vs. skipped

Required Excel Columns

Column Name	Required?	Description
causeno	No	Cause number (for folder matching)
wardfirst	Yes	Ward first name (appears in email)
wardlast	Yes	Ward last name (appears in email)
visitdate	Yes	Visit date (appears in email)
guardian1	No	Guardian 1 name (for display only)
Guardian2	No	Guardian 2 name (for display only)
gemail	Yes*	Guardian 1 email (*one email required)
g2eamil	No	Guardian 2 email (optional second recipient)

Common Warnings and Errors

Message: 'No recipient emails found'

CAUSE: Neither Guardian 1 nor Guardian 2 has a valid email address.
SOLUTION: Verify email addresses in Excel. At least one guardian must have a valid email containing @.

Warning: 'Skipped case [number] - no valid emails'

CAUSE: Email addresses are missing, blank, or invalid (like 'none' or 'N/A').
SOLUTION: Add valid guardian emails to Excel for that case.

Error: 'Gmail authentication failed'

CAUSE: Gmail API credentials are missing or expired.
SOLUTION: Follow authentication prompts to sign in. If repeated failures, contact IT administrator.

Warning: 'Could not save text copy'

CAUSE: Case folder doesn't exist or cause number mismatch.
SOLUTION: Text copies are saved to _Correspondence_Pending instead. This is normal for cases without folders.

Message: 'No rows selected'

CAUSE: You clicked Send without checking any boxes in the picker.
SOLUTION: Check at least one case in the picker before clicking Send.

Warning: 'Email send failed'

CAUSE: Network error, Gmail API issue, or invalid recipient address.
SOLUTION: Check internet connection. Verify recipient email is valid. Try again in a few minutes.

Troubleshooting

Problem: Picker shows wrong cases

- Picker shows last 15 rows from Excel (sheet order)
- If wrong cases appear, check your Excel file row order

- Newest entries should be at the bottom of the sheet
- You can only select from the 15 shown—run button again for others

Problem: Guardian says they didn't receive email

- Ask them to check spam/junk folders
- Verify email address in Excel is correct
- Check Gmail Sent folder to confirm email was sent
- Try resending manually if needed

Problem: Want to send to older cases

- Picker only shows last 15 rows
- To email older cases, temporarily move them to the bottom of Excel
- Or manually compose follow-up emails for older cases
- This feature is designed for recent visits only

Problem: Wrong visit date in email

- Visit date comes from 'visitdate' column in Excel
- Correct the date in Excel
- Send a corrected follow-up email manually if already sent

Problem: Email sent to wrong guardian

- Emails go to all guardians with valid email addresses
- Check 'gemail' and 'g2eamil' columns
- If wrong guardian was emailed, send clarification manually

Problem: Picker won't close

- Click Cancel button to close without sending
- Press Escape key as alternative
- If frozen, use Task Manager to close Python process

Tips and Best Practices

💡 **TIP:** Send follow-up emails within 2-3 days of each visit while the interaction is fresh in everyone's memory. This timing feels natural and appropriate.

- TIMING: Send follow-ups soon after visits but not immediately. Wait 1-2 days to give guardians time to process the visit.
- SELECTIVE SENDING: You don't have to send follow-ups for every visit. Use judgment—skip cases where the visit was problematic or contentious.
- BATCH PROCESSING: Send follow-ups weekly for that week's completed visits rather than daily.
- REVIEW BEFORE SENDING: Always review the picker list carefully before clicking Send. Once sent, you can't unsend.
- VERIFY DATES: Check that visit dates in the picker are correct. Wrong dates in emails look unprofessional.

- CHECK EMAIL ADDRESSES: Glance at the displayed emails to catch obvious typos before sending.
- CORRESPONDENCE RECORD: The saved text copies provide documentation that you maintained professional communication.
- OPTIONAL STEP: Remember this is entirely optional. Some Court Visitors send follow-ups; others don't. It's a personal preference.
- GUARDIAN RELATIONSHIPS: Follow-ups help build positive relationships, making future visits smoother.
- PROFESSIONALISM: These emails reinforce your professional approach to the Court Visitor role.
- CUSTOMIZATION: If you want to personalize specific emails, send them manually rather than using this button.
- MULTIPLE GUARDIANS: If both guardians have emails, both receive the follow-up. They see each other as recipients.
- SPAM FILTERS: Court-related emails sometimes trigger spam filters. Mention this if guardians don't receive emails.
- NO CONTENT ABOUT FINDINGS: Follow-up emails are thank-yous only. Never include visit findings or concerns in these emails.

Example Scenario

The Situation

It's Friday. You completed 4 ward visits this week (Monday through Thursday). You want to send thank-you emails to the guardians.

The Cases

- Monday: Visit to John Smith (guardian: Mary Smith, email present)
- Tuesday: Visit to Jane Doe (guardian: Bob Williams, email present)
- Wednesday: Visit to Tom Brown (guardian: Alice Davis, no email)
- Thursday: Visit to Sue Johnson (two guardians, both with emails)

The Process

439. You click 'Send Follow-Up Emails'
440. Picker appears showing your last 15 cases (including these 4)
441. You review each case:
442. • John Smith case: Check ✓
443. • Jane Doe case: Check ✓
444. • Tom Brown case: No email visible, leave unchecked
445. • Sue Johnson case: Check ✓
446. You click Send
447. App processes 3 selected cases (skips Tom Brown)
448. You see: 'Would send to Mary Smith', 'Would send to Bob Williams', 'Would send to both Johnson guardians'
449. Success message: 'Sent 3 emails successfully'

The Result

- Mary Smith receives thank-you for John Smith visit
- Bob Williams receives thank-you for Jane Doe visit
- Both Johnson guardians receive thank-you for Sue Johnson visit

- Tom Brown case skipped (no guardian email)
- 3 text copies saved to case folders
- All emails visible in your Gmail Sent folder

Follow-Up for Tom Brown

Since Tom Brown's guardian has no email, you:

- Make a note to call and thank them verbally
- Or send a physical thank-you card if appropriate
- Document the phone call or card in your records

Technical Details (For Advanced Users)

File Locations

- Excel: C:\GoogleSync\GuardianShip_App\App Data\ward_guardian_info.xlsx
- Case Folders: C:\GoogleSync\GuardianShip_App\New Clients\
- Pending Correspondence: C:\GoogleSync\GuardianShip_App_Correspondence_Pending\
- Text Copies: [Case Folder]\Followup Email - [Name] - [Date].txt
- Gmail Credentials: C:\configlocal\API\ or C:\GoogleSync\GuardianShip_App\Config\API\
- .eml Previews (dry run): C:\GoogleSync\Automation\TX email to guardian\

Picker Implementation

- Uses tkinter for GUI
- Shows last 15 rows via df.tail(15)
- Read-only Excel access (never writes back)
- Checkboxes linked to BooleanVar variables
- Returns selected indices on Send click

Email Template Variables

- {wardfirst} - Ward first name
- {wardlast} - Ward last name
- {visitdate} - Visit date formatted as 'Month DD, YYYY'
- All other text is static in the template

Email Recipient Logic

- Checks 'gemail' column for Guardian 1 email
- Checks 'g2eamil' column for Guardian 2 email (note: typo in column name)
- Both emails added to TO field if present
- Duplicates removed if same email in both columns
- Emails sorted alphabetically for consistency

Gmail API Integration

- Uses Gmail API v1 for sending
- OAuth 2.0 authentication
- Scope: gmail.send
- Message encoded as base64
- No throttling or rate limiting in this script

Text Copy Format

- Plain text file (.txt)
- First line: TO: [recipient emails]
- Second line: SUBJECT: [subject]
- Blank line
- Then full email body
- Encoding: UTF-8

Related Workflow Steps

Steps BEFORE This Button
Step 1 - Process PDFs: Extract ward and guardian information
Step 2 - Organize Files: Create folder structure
Step 3 - Create Map: Map ward locations
Step 4 - Send Requests: Initial meeting request emails
Step 5 - Add Contacts: Add guardians to phone contacts (optional)
Step 6 - Send Confirmation: Appointment confirmation emails
Step 7 - Schedule: Add meetings to calendar
Step 8 - Generate CVR: Create Court Visitor Reports
Step 9 - Generate Summary: Create visit summary forms
Step 10 - Complete CVR: Add guardian feedback to CVRs
Conduct all ward visits

Steps AFTER This Button
Step 12 - Email CVR: Send completed reports to supervisor
Step 13 - Generate Form: Create payment forms
Step 14 - Generate Mileage: Create mileage reimbursement forms
💡 **TIP:** Follow-up emails are typically one of the last steps before submitting cases to court. They provide professional closure to the visit process.

Frequently Asked Questions

Q: Is sending follow-ups required?
A: No, it's entirely optional. Many Court Visitors send them as a courtesy, but it's not mandatory.

Q: Can I customize the email text?
A: Yes, but it requires editing the Python script. Contact your IT administrator for template changes.

Q: What if I selected the wrong cases?
A: Once sent, you can't unsend. If you realize immediately, you could send a clarification email. Generally, sending an extra thank-you isn't harmful.

Q: Can I send to cases older than the last 15?
A: Not directly through the picker. You'd need to manually compose emails for older cases, or temporarily reorder Excel rows.

Q: Why does the picker show 15 and not all cases?
A: To keep the interface manageable. Follow-ups are typically for recent visits. Showing all cases would make a very long list.

Q: Can guardians reply to these emails?
A: Yes, emails come from your Gmail, so guardians can reply directly to you.

Q: What if a guardian complains about the visit in their reply?
A: Respond professionally and document the concern. Follow your normal procedure for guardian complaints.

Q: Should I send follow-ups before or after submitting to court?

A: Either is fine. Most Court Visitors send follow-ups before final submission as part of closing out the case.

Q: What if Excel is open when I click the button?
A: It's fine—the app reads Excel in read-only mode. You can keep Excel open.

Summary Checklist

☐ Ward visits completed

☐ Visit dates recorded in Excel

☐ Guardian email addresses verified

☐ Case folders exist (optional but helpful)

☐ Gmail API configured (unless dry run mode)

☐ Ready to send thank-you emails

☐ AFTER CLICKING: Reviewed picker carefully

☐ AFTER CLICKING: Selected appropriate cases

☐ AFTER CLICKING: Checked emails were sent

☐ AFTER CLICKING: Verified text copies saved

☐ AFTER CLICKING: Confirmed in Gmail Sent folder

☐ AFTER CLICKING: Noted any skipped cases

☐ AFTER CLICKING: Ready for Step 13 - Submit to Court

Step 12: Email CVR

Court Visitor App Manual – Email CVR Documents to Supervisor

Overview

The Email CVR button automatically finds completed Court Visitor Reports and emails them to your supervisor for review and submission to court. This step streamlines the final review process by identifying CVRs that have been created but not yet submitted, attaching them to Gmail messages, and tracking submission dates.
The script reads your Excel database to find cases where 'CVR created?' is 'Y' but 'datesubmitted' is blank, locates the corresponding CVR files in case folders, and sends them via Gmail API with a professional email message.

When to Use This Button

- Click 'Email CVR' when:

  - CVR documents are complete and ready for supervisor review
  - Step 8 (Generate CVR) and Step 10 (Complete CVR) are finished
  - You've reviewed CVRs and they're ready for court submission
  - You need to send multiple CVRs to your supervisor at once
  - It's time for weekly or monthly CVR submission batch

What Happens When You Click This Button

1. Gmail API Authentication
Connects to Gmail API using OAuth credentials. On first use, opens a browser for you to authorize the app. Subsequent runs use saved tokens.
2. Supervisor Email Configuration
Loads supervisor email address from email_config.json. Default is al.benedict@traviscountytx.gov but can be customized.
3. Excel Database Query

Reads ward_guardian_info.xlsx and identifies cases where 'CVR created?' = 'Y' AND 'datesubmitted' is blank. These are completed CVRs awaiting submission.

4. CVR File Location

For each identified case, searches New Clients directory for folders containing the cause number, then looks for CVR documents (files with 'Court Visitor Report' in the name).

5. Email Composition

Creates a professional email with subject line including ward name and cause number. Body includes case details and explains that the CVR is attached for review and submission.

6. CVR Attachment

Attaches the CVR document (Word .docx file) to the email. Files are base64 encoded for Gmail API transmission.

7. Email Sending

Sends the email via Gmail API. Each CVR gets its own individual email for clear tracking and organization.

8. Excel Update

Marks the 'datesubmitted' column with today's date for each successfully emailed CVR. This prevents duplicate submissions and tracks progress.

9. Processing Summary

Displays results: number of CVRs emailed, which cases were processed, any errors encountered, and confirmation of Excel updates.

Prerequisites

- Before clicking Email CVR, ensure:

  - Gmail API credentials configured (gmail_oauth_client.json)
  - CVR documents completed via Steps 8 and 10
  - Excel 'CVR created?' column shows 'Y' for cases to email
  - Excel 'datesubmitted' column is blank for cases to email
  - CVR files located in appropriate case folders under New Clients
  - Python libraries: google-auth, google-api-python-client, pandas, pywin32
  - Internet connection active for Gmail API

Step-by-Step Instructions

Before Clicking:

450. Review completed CVR documents to ensure they're ready for submission
451. Verify Excel 'CVR created?' column shows 'Y' for cases you want to submit
452. Check that 'datesubmitted' is blank for these cases
453. Confirm supervisor email address in email_config.json is correct

Clicking the Button:

454. Click 'Email CVR' in the Court Visitor App
455. Browser may open for Gmail authentication (first time only)
456. Script displays: 'Found X CVR documents to email'
457. Progress messages show each CVR being located and emailed
458. Wait for 'All CVRs emailed successfully' confirmation

After Clicking:

459. Check your Gmail Sent folder to verify emails were sent
460. Open Excel and confirm 'datesubmitted' column now shows today's date
461. Verify supervisor received the emails (optional: call to confirm)
462. Note: These cases won't be emailed again unless you clear 'datesubmitted'

Common Warnings and Errors

⚠ **Gmail OAuth credentials not found**
Set up Gmail API: get gmail_oauth_client.json from Google Cloud Console and place in C:\configlocal\API

⚠ **Token refresh failed**
OAuth token expired or revoked. Script will delete old token and prompt for re-authentication.

⚠ **No CVR documents to email**
Either all CVRs already have 'datesubmitted' dates, or none have 'CVR created?' = 'Y'. Check Excel.

⚠ **No folder found for cause [number]**
Case folder doesn't exist or doesn't contain the cause number in its name. Create folder or fix naming.

⚠ **CVR file not found in folder**
The folder exists but doesn't contain a file with 'Court Visitor Report' in the name. Check Step 8 output.

⚠ **Failed to send email**
Gmail API error. Check internet connection, verify credentials, and ensure Gmail API is enabled in Google Cloud Console.

Tips & Best Practices

💡 **TIP #1: Email CVRs weekly for steady workflow**
Rather than accumulating dozens of CVRs, email them weekly. This distributes the review workload and gets faster feedback from your supervisor.

💡 **TIP #2: Update supervisor email in config file**
If your supervisor changes, edit Config/email_config.json to update the email address rather than editing the script.

💡 **TIP #3: Check Sent folder after batch emails**
After emailing multiple CVRs, verify in Gmail Sent that all emails went through successfully. Look for any failures.

💡 **TIP #4: Clear datesubmitted to re-send if needed**
If a supervisor didn't receive an email or needs a revised CVR, clear the 'datesubmitted' cell in Excel and rerun the script.

💡 **TIP #5: Use descriptive subject lines**
The script automatically includes ward name and cause number in subject. This helps supervisors organize and prioritize reviews.

Technical Details

Script Name: email_cvr_to_supervisor.py
Location: C:\GoogleSync\GuardianShip_App\

- Gmail API v1 - Send emails with attachments

- OAuth2 authentication with token refresh
- Base64 encoding for attachment transmission
- pandas - Excel reading and updating
- JSON config file for supervisor email

Related Workflow Steps

Before This Step:

- Step 8 - Generate CVR: Creates base CVR documents
- Step 10 - Complete CVR: Adds guardian feedback to CVRs
- Final review: Ensure all CVRs are accurate and complete

After This Step:

- Supervisor reviews CVRs for accuracy
- Court submission: Supervisor submits approved CVRs to court
- Step 13 - Generate Form: Create payment forms for submitted cases
-

Step 13: Generate Form

Court Visitor App Manual – Generate Payment Invoice Forms

Overview

The Generate Form button creates Court Visitor Payment Invoice forms for billing purposes. This step automates the generation of payment forms by reading case data from Excel, filtering by date submitted, and filling a Word template with case details including cause numbers, appointment dates, visit dates, and submission dates.

The script provides a GUI month picker that allows you to select which month to generate payment forms for (full month or month-to-date). It automatically calculates form numbers, filters cases by date range, and creates properly formatted invoice documents ready for submission.

When to Use This Button

- Click 'Generate Form' when:

  - It's time for monthly billing submission (typically end of month)
  - CVRs have been submitted to court and need payment processing
  - You need to generate payment forms for multiple cases at once
  - Month-to-date billing is required mid-month
  - You want to create organized payment invoices with automatic form numbering

What Happens When You Click This Button

1. Month Selection GUI

Opens a picker window showing the current month plus 11 previous months. You can select full month or month-to-date period. The interface clearly marks current and previous months for easy selection.

2. Excel Database Reading

Loads ward_guardian_info.xlsx with openpyxl in read-only mode. Reads all case data including cause numbers, appointment dates, visit dates, and submission dates.

3. Column Name Normalization

Maps Excel column headers to standard field names using flexible aliases. Recognizes variations like 'causeno'/'cause no', 'visitdate'/'date of court visit', 'datesubmitted'/'date of court visitor report', etc.

4. Date Range Filtering

Filters cases based on 'datesubmitted' falling within the selected month period. For full month: includes entire month. For month-to-date: includes from month start through today.

5. Form Number Calculation

Automatically assigns sequential form numbers starting from 1 for the selected month. Form numbers increment for each case in chronological order by submission date.

6. Payment Template Loading

Opens the Court_Visitor_Payment_Invoice.docx template which contains structured data tables with content controls for case information.

7. Table Header Detection

Locates the payment table in the Word template by searching for header cells containing 'cause', 'date appointed', 'date of court visit', and 'date of court visitor report'.

8. Row Insertion and Filling

For each filtered case, inserts a new table row with four cells. Fills cells with: cause number, appointment date (MM/DD/YYYY), visit date (MM/DD/YYYY), and submission date (MM/DD/YYYY).

9. Document Metadata Population

Fills template fields outside the table: form number, billing month name, billing year. Updates content controls like 'Form_No' and 'MONTH_OF_BILL'.

10. File Naming and Saving

Creates descriptive filename: 'MonthNum_FormNoMonthNameYear Court Visitor Payment.docx'. For example: '10_001Oct2024 Court Visitor Payment.docx'. Saves to App Data/Output/Payment Forms directory.

11. Output Organization

All payment forms saved to centralized output folder with clear naming for easy identification and submission. Console displays list of created files with full paths.

Prerequisites

- Before clicking Generate Form, ensure:
  - Excel database exists: App Data/ward_guardian_info.xlsx
  - Template exists: Templates/Court_Visitor_Payment_Invoice.docx
  - CVRs have been submitted and 'datesubmitted' column is populated
  - Date fields in Excel are properly formatted as dates (not text)
  - Output directory exists or can be created: App Data/Output/Payment Forms
  - Python libraries: python-docx, openpyxl, python-dateutil, tkinter

Step-by-Step Instructions

Before Clicking:

463. Verify that CVRs for the month have been submitted ('datesubmitted' filled)
464. Check Excel date fields are formatted correctly (dates, not text)
465. Ensure the payment template has the correct table structure

Clicking the Button:

466. Click 'Generate Form' in the Court Visitor App
467. Month picker window appears
468. Select the desired month from dropdown (current month is pre-selected)
469. Choose 'Full month' or 'Month-to-date' period option
470. Click 'Generate' button in the picker
471. Progress messages show cases being processed
472. Wait for completion message listing created files

After Clicking:

473. Navigate to App Data/Output/Payment Forms folder
474. Open a few payment forms to verify data populated correctly
475. Check that form numbers are sequential and correct
476. Verify dates match Excel data (appointment, visit, submission)
477. Review table rows - should have one row per case
478. Submit forms to accounting or supervisor as required

Common Warnings and Errors

⚠ ERROR: Excel file not found
Verify ward_guardian_info.xlsx exists at C:\GoogleSync\GuardianShip_App\App Data

⚠ ERROR: Template not found
Check that Court_Visitor_Payment_Invoice.docx exists in Templates folder

⚠ No cases found for selected month
No 'datesubmitted' entries fall within the chosen month. Select a different month or verify dates in Excel.

⚠ Could not locate payment table in template
Template structure changed or header cells don't contain expected text. Verify template has table with headers: cause, date appointed, date of court visit, date of court visitor report.

⚠ Date parsing errors
Excel date columns contain text or invalid dates. Format cells as Date type in Excel.

⚠ Permission denied saving file
Output file may be open in Word. Close all payment forms and retry.

Tips & Best Practices

💡 TIP #1: Generate payment forms at month-end
Wait until all CVRs for the month are submitted before generating payment forms. This ensures completeness and accurate form numbering.

💡 TIP #2: Use month-to-date for mid-month billing
If billing is required before month end, select 'Month-to-date' option. This includes only cases submitted through today.

💡 TIP #3: Keep payment forms organized by month
Create subfolders in Payment Forms directory like '2024-10', '2024-11' to archive past months.

💡 TIP #4: Verify form numbers are sequential
Open the first and last payment forms to confirm sequential numbering. Non-sequential numbers indicate missing data or errors.

💡 TIP #5: Double-check dates match Excel
Spot-check a few random forms against Excel to ensure dates are pulling correctly and formatting properly.

Technical Details

Script Name: build_payment_forms_sdt.py
Location: C:\GoogleSync\GuardianShip_App\Automation\CV Payment Form Script\scripts\

- python-docx - Word document manipulation and table handling

- openpyxl - Read-only Excel access
- python-dateutil - Date parsing and calculations
- tkinter - GUI month picker interface
- OOXML manipulation for table row insertion

Related Workflow Steps

Before This Step:

- Step 12 - Email CVR: CVRs must be submitted and 'datesubmitted' populated
- Court submission: CVRs approved and submitted to court

After This Step:

- Accounting submission: Send payment forms to accounting department
- Record keeping: Archive payment forms for financial records

Step 14. Generate Mileage Form

Court Visitor App – Detailed Step Guide

Overview

The 'Fill Mileage Form' button automatically generates your monthly mileage reimbursement form based on the ward visits you completed. Instead of manually calculating distances and filling out the Excel form line by line, this button extracts your visit data from your Excel file, calculates accurate driving distances using Google Directions API, and populates the official Travis County mileage reimbursement form—all automatically.
The app calculates the optimal (shortest) route for each trip, accounts for your starting and ending locations, and fills in all required fields including dates, addresses, and mileage. It even handles months with more than 26 visits by creating additional forms automatically.

When to Use This Button

Use this button when:

- You have completed ward visits for a month and need to submit mileage for reimbursement
- Visit dates and ward addresses are recorded in your Excel file
- You're ready to claim travel reimbursement from Travis County
- It's near the end of the month or beginning of the next month
- You want accurate, calculated mileage instead of estimates

💡 **TIP:** Run this button monthly after completing all visits for that month. Most Court Visitors run it on the first few days of the following month.

What Happens When You Click This Button

Step 0: First-Run Setup (One-Time Only)

The first time you run this button, a setup dialog appears:

• You'll be asked to enter your starting and ending addresses
• Enter the same address for both 'Start' and 'End' (unless you have different locations)
• Click 'Save' to store your address
• This address will be used for all future mileage calculations

This step only happens once. After you save your address, the app will skip directly to the month picker (Step 1).

💡 TIP: Use your complete starting and ending addresses with street, city, state, and ZIP code for accurate route calculations.

Step 1: The App Shows a Month Picker

A GUI dialog appears allowing you to select which month's visits to process:

- Shows current month and previous 11 months
- You select the month for which you need mileage reimbursement
- Can process past months if you forgot to submit earlier
- Easy point-and-click interface

Step 2: The App Reads Your Excel File

The app opens ward_guardian_info.xlsx and identifies visits for the selected month:

- Filters rows by visit date matching your selected month
- Extracts ward addresses from each visit
- Sorts visits chronologically by date and time
- Skips any visits with missing addresses

Step 3: The App Calculates Driving Routes

Using Google Directions API, the app calculates actual driving distances:

- Start: Your configured starting address (set on first run)
- Each visit: Ward's address from Excel
- End: Returns to your configured ending address
- Requests multiple route alternatives from Google
- Automatically selects the SHORTEST route for each leg
- Uses real road networks, not straight-line distance

Route calculation logic:

- Visit 1: Home → Ward 1 Address
- Visit 2: Ward 1 Address → Ward 2 Address
- Visit 3: Ward 2 Address → Ward 3 Address
- After last visit: Final Ward → Home
- Each leg is optimized for shortest distance

Step 4: The App Loads the Mileage Template

Opens the official Travis County mileage reimbursement Excel template:

- Template: Mileage_Reimbursement_Form.xlsx
- Uses the standardized county form layout
- Preserves all formatting, logos, and official elements
- Works with the specific template structure

Step 5: The App Fills in the Form

For each visit, the app populates:

- DATE (Column B): Visit date in MM/DD/YYYY format
- FROM (Column C): Starting address for this leg
- TO (Column E): Ending address for this leg
- MILES (Column F): Calculated driving distance
- Rows 15-40 are used (26 visits per form)
- Month/Year in cell E8 (e.g., '11/2025')

Step 6: The App Handles Multiple Forms

If you have more than 26 visits in a month:

- Creates multiple forms automatically
- First form: Visits 1-26
- Second form: Visits 27-52
- Sets 'More Lines?' field to YES on forms with continuation
- Sets to NO on the final form
- All forms are saved with sequential numbering

Step 7: The App Calculates Totals

The form has built-in formulas that automatically calculate:

- Total miles for the month
- Reimbursement amount (miles × current IRS rate)
- These are Excel formulas that update automatically

Step 8: The App Saves the Forms

Output files are saved to:
C:\GoogleSync\GuardianShip_App\App Data\Output\Mileage Logs\
Filename format: Mileage_Log_[Month]_[Year].xlsx
Example: Mileage_Log_November_2025.xlsx

Step 9: The App Opens the Form

The completed form automatically opens in Microsoft Excel:

- You can review the calculated mileage
- Verify addresses are correct
- Check the total mileage
- Print or save as PDF for submission to the county

Understanding the Mileage Reimbursement Form

Form Layout

The Travis County mileage form includes:

- Header: Your name, month/year, volunteer status
- Data rows: 26 rows (lines 15-40) for individual trips
- Each row: Date | From | To | Miles
- Bottom: Total miles and reimbursement amount
- Signature line: You must sign before submission

How Mileage is Calculated

The app uses Google Directions API with these settings:

- Mode: Driving (regular car travel)
- Alternatives: True (requests multiple route options)
- Chooses shortest: Automatically selects the route with lowest mileage
- Accounts for: One-way streets, traffic patterns, actual roads
- Does NOT include: Traffic delays (uses base distance only)

What 'From' and 'To' Mean

Each row shows one leg of your travel:

- First visit: FROM = Your home, TO = First ward
- Subsequent visits: FROM = Previous ward, TO = Current ward

- Return home: FROM = Last ward, TO = Your home
- This creates a continuous journey for the day

Multiple Visits Same Day

If you visit multiple wards on the same day:

- Each leg is shown separately
- From previous ward to next ward
- Saves mileage compared to going home between visits
- Reflects actual driving pattern

Prerequisites (What You Need Before Clicking)

479. VISITS COMPLETE: You must have completed ward visits for the month you're claiming.
480. EXCEL DATA: Visit dates and ward addresses must be in ward_guardian_info.xlsx.
481. GOOGLE API KEY: Google Directions API must be configured (requires API key with billing enabled).
482. TEMPLATE FILE: Mileage_Reimbursement_Form.xlsx must exist in Templates folder.
483. ADDRESSES ACCURATE: Ward addresses in Excel must be complete and correct (Google can't route to bad addresses).
484. STARTING/ENDING ADDRESS SET: Your starting/ending address will be set on first run via setup dialogrive, Lakeway, TX).
485. EXCEL CLOSED: Close Excel before running the button.

Step-by-Step Instructions

Before You Click

486. Open ward_guardian_info.xlsx
487. Verify visit dates are entered for all completed visits
488. Check that ward addresses (waddress column) are complete and correct
489. Note which month you need mileage for
490. Save and close Excel
491. Return to the Court Visitor App

Clicking the Button

492. Locate 'Fill Mileage Form' (usually button #10)
493. Click the button once
494. A month picker dialog appears
495. Select the month you need (e.g., November 2025)
496. Click OK or press Enter
497. Wait while the app calculates routes (may take 30-60 seconds)
498. Watch for progress messages about route calculations

After You Click

499. The completed form opens automatically in Excel
500. Review the dates—verify they're correct for your selected month
501. Check the addresses—ensure they match your actual visits
502. Verify the mileage numbers seem reasonable
503. Check the total mileage at the bottom

504. Verify the reimbursement amount calculated correctly
505. Print or save as PDF for submission
506. Sign the form before submitting to the county

Configuring Your Start and End Addresses

First-Run Setup

The first time you run the 'Generate Mileage' button, you'll see a setup dialog:

```
Set Your Starting and Ending Addresses

Enter your starting and ending addresses for mileage
calculations. This will be used as the
start and end point for all trips.

Start Address (departure from home):
  123 Main St, Austin, TX 78701

End Address (return to home):
  123 Main St, Austin, TX 78701

Note: Use full address including city,
state, and ZIP code

  [Save]     [Cancel]
```

What to Enter:

• Start Address: Your starting address (where you depart from each morning)
• End Address: Your ending address (where you return to each evening)
• Most users set both to the same address
• Use complete addresses: Street, City, State, ZIP
• Example: 123 Main Street, Austin, TX 78701

💡 TIP: The addresses you enter will be saved and used for all future mileage calculations. You only need to set them once.

Where It's Saved:

Your starting and ending addresses are saved to:
C:\GoogleSync\GuardianShip_App\Config\mileage_settings.txt

The config file contains two lines:
Line 1: Start address
Line 2: End address

Changing Your Address Later:

Option 1: Edit the config file
• Open: C:\GoogleSync\GuardianShip_App\Config\mileage_settings.txt
• Edit the addresses

• Save the file

Option 2: Delete the config file
• Delete: C:\GoogleSync\GuardianShip_App\Config\mileage_settings.txt
• Run Step 14 again
• The setup dialog will appear again

Why Two Addresses?

START_ADDRESS and END_ADDRESS can be different if:
• You depart from one location (e.g., home)
• You return to a different location (e.g., office)

Most users set both addresses to the same location (their home or office).

⚠️ WARNING: Your mileage calculations are only as accurate as the addresses you configure. Make sure they match your actual departure and return locations.

Default Behavior:

If you cancel the setup dialog without entering addresses:
• The app uses a fallback default address for that run only
• You'll be prompted again the next time you run Step 14
• It's recommended to enter your actual address for accurate mileage

Why Two Addresses?

START_ADDRESS and END_ADDRESS can be different if:

- You work from an office instead of home
- You want to account for different starting/ending points
- Most users set both to the same address (their home)

💡 **TIP:** For accurate mileage claims, ensure your configured addresses match where you actually start and end your trips.

Required Excel Columns

Column Name	Required?	Description
visitdate	Yes	Date of ward visit
visittime	No	Time of visit (for sorting)
waddress	Yes	Ward address (destination)

💡 **TIP:** The app uses flexible column name matching. 'waddress', 'address', 'wardaddress' all work.

Common Warnings and Errors

Warning: 'No visits found for [month]'

CAUSE: No rows in Excel have visit dates in the selected month.
SOLUTION: Verify you selected the correct month. Check that visit dates are entered in Excel for that month.

Error: 'Google Directions API error'

CAUSE: API key is missing, invalid, or billing is not enabled.
SOLUTION: Contact your IT administrator. Google Directions API requires an API key with billing enabled.

Warning: 'Could not geocode address: [address]'

CAUSE: Google can't find the address (typo, incomplete, or doesn't exist).
SOLUTION: Check the address in Excel. Correct any typos or missing information. Ensure street, city, state, and ZIP are present.

Error: 'Template file not found'

CAUSE: Mileage_Reimbursement_Form.xlsx is missing from Templates folder.
SOLUTION: Contact your IT administrator to restore the template file.

Warning: 'Mileage calculation seems high'

CAUSE: Could be a routing error, wrong address, or genuinely long distance.
SOLUTION: Check the 'From' and 'To' addresses on that row. Verify the ward address is correct. Use Google Maps to manually verify the distance.

Warning: 'Created multiple forms for this month'

CAUSE: You had more than 26 visits, so additional forms were needed.
SOLUTION: This is normal. Submit all forms together. Each form will have sequential data.

Troubleshooting

Problem: Mileage numbers seem wrong

- Manually verify a few addresses using Google Maps
- Check that your start/end addresses are configured correctly
- Verify ward addresses in Excel are complete and accurate
- Remember: The app uses driving distance, not straight-line
- Consider traffic patterns—Google may route differently than you drive

Problem: Missing visits in the form

- Check that visit dates are in the selected month
- Verify ward addresses are not blank in Excel
- Look for visits that were skipped due to bad addresses
- Check the app log for errors about specific visits

Problem: Wrong month shown in form header

- Verify you selected the correct month in the picker
- The month in cell E8 should match your selection
- If wrong, manually correct it in Excel before submitting

Problem: Routes don't match how I actually drove

- Google calculates optimal routes, which may differ from your actual route
- The calculated distance is acceptable for reimbursement
- If you took a longer route, you can manually adjust mileage (document reason)
- Consider that Google may know shortcuts you don't use

Problem: Form won't open automatically

- Check the Output\Mileage Logs folder manually
- Open the file from there
- Verify Excel is not already showing an error message
- Check that Microsoft Excel is installed and working

Problem: Total calculation is wrong

- The total is calculated by Excel formulas in the template

- If wrong, the template may be corrupted
- Contact IT to restore the original template
- Alternatively, manually verify and correct the total

Tips and Best Practices

💡 **TIP:** Run this button on the 1st or 2nd of each month to generate your mileage form while visits are fresh in your mind. Submit promptly to receive reimbursement faster.

- MONTHLY ROUTINE: Make mileage form generation part of your monthly closing process.
- VERIFY BEFORE SUBMITTING: Always review the form before signing and submitting. The county may question obvious errors.
- KEEP RECORDS: Save a copy of each month's mileage form for your records before submitting the original.
- ADDRESS ACCURACY: Good addresses in Excel = accurate mileage. Fix address errors immediately when you notice them.
- MULTI-VISIT DAYS: When visiting multiple wards in one day, ensure they're in the correct time order in Excel. The app routes chronologically.
- GOOGLE MAPS VERIFICATION: Spot-check a few routes using Google Maps to verify the calculated distances are reasonable.
- REIMBURSEMENT RATES: The county uses current IRS mileage rates. The template has this built in, but verify it's current.
- SIGNATURE REQUIRED: Don't forget to sign the form before submission. Unsigned forms will be rejected.
- SPLIT MONTHS: If you complete visits on the last day of the month, double-check they're assigned to the correct month.
- BACKUP TEMPLATE: Keep a backup copy of the blank template in case the original gets corrupted.
- API COSTS: Google Directions API has per-request costs. Running this button monthly for 20-30 visits typically costs $1-2.
- ROUND TRIPS: The form accounts for round-trip mileage (home → visits → home). Don't double the numbers.
- CONTINUOUS JOURNEY: The app treats multiple visits as a continuous journey, not separate round trips. This saves mileage.
- PRINT OR PDF: The county may require a printed signature or PDF submission. Check their current requirements.

Example Scenario

The Situation

It's December 1st. You completed 8 ward visits during November:

- Nov 5: Visit to 123 Main St, Austin
- Nov 7: Visit to 456 Oak Ave, Round Rock
- Nov 12: Visit to 789 Elm St, Austin
- Nov 14: Visit to 321 Pine Rd, Pflugerville
- Nov 19: Visit to 654 Maple Dr, Cedar Park

- Nov 21: Visit to 111 Birch Ln, Austin
- Nov 26: Visit to 222 Ash St, Georgetown
- Nov 28: Visit to 333 Cedar Ct, Leander

The Process

507. You verify all 8 visit dates are recorded in Excel
508. You check that all ward addresses are complete
509. You click 'Fill Mileage Form'
510. Month picker appears—you select November 2025
511. App calculates routes (takes about 20 seconds)
512. App creates the mileage form
513. Form opens automatically in Excel

The Resulting Form Shows

15 rows for 8 visits across 6 days (each day starts and ends at default address):

The Totals

Row 15: Nov 5 | [Default Address] → 123 Main St, Austin | 23.4 miles
Row 16: Nov 5 | 123 Main St, Austin → [Default Address] | 23.4 miles

Row 17: Nov 7 | [Default Address] → 456 Oak Ave, Round Rock | 31.2 miles
Row 18: Nov 7 | 456 Oak Ave, Round Rock → [Default Address] | 31.2 miles

Row 19: Nov 12 | [Default Address] → 789 Elm St, Cedar Park | 18.7 miles
Row 20: Nov 12 | 789 Elm St, Cedar Park → 321 Pine Rd, Cedar Park | 4.2 miles
Row 21: Nov 12 | 321 Pine Rd, Cedar Park → [Default Address] | 16.8 miles

Row 22: Nov 19 | [Default Address] → 654 Maple Dr, Pflugerville | 22.8 miles
Row 23: Nov 19 | 654 Maple Dr, Pflugerville → [Default Address] | 22.8 miles

Row 24: Nov 21 | [Default Address] → 111 Birch Ln, Georgetown | 28.5 miles
Row 25: Nov 21 | 111 Birch Ln, Georgetown → 222 Ash St, Georgetown | 3.4 miles
Row 26: Nov 21 | 222 Ash St, Georgetown → 987 Willow Way, Georgetown | 2.8 miles
Row 27: Nov 21 | 987 Willow Way, Georgetown → [Default Address] | 29.1 miles

Row 28: Nov 28 | [Default Address] → 333 Cedar Ct, Leander | 16.4 miles
Row 29: Nov 28 | 333 Cedar Ct, Leander → [Default Address] | 16.4 miles

- Total Miles: 291.1 miles
- Reimbursement (@ $0.67/mile): $195.04
- Month/Year: 11/2025

Your Actions

514. Review the form for accuracy
515. Verify the addresses match your actual visits
516. Print the form
517. Sign the form
518. Submit to Travis County for reimbursement
519. Save a copy for your records

Technical Details (For Advanced Users)

File Locations

- Data Source: C:\GoogleSync\GuardianShip_App\App Data\ward_guardian_info.xlsx

- Template: C:\GoogleSync\GuardianShip_App\Templates\Mileage_Reimbursement_Form.xlsx
- Output: C:\GoogleSync\GuardianShip_App\App Data\Output\Mileage Logs\
- Google API Key: C:\GoogleSync\GuardianShip_App\Config\Keys\google_maps_api_key.txt

Google Directions API
- Service: Google Maps Directions API
- Mode: driving
- Alternatives: True (requests multiple routes)
- Selection: Chooses route with shortest distance
- Units: Miles (imperial)
- Cost: ~$0.005 per route calculation
- Typical monthly cost: $0.50-$2.00 for 20-30 visits

Route Optimization
- Visits are sorted chronologically by date/time
- Each leg: previous location → next location
- First leg: home → first ward
- Last leg: final ward → home
- Google provides alternatives, app selects shortest
- Distance is in miles, rounded to 1 decimal place

Form Structure
- Data rows: 15-40 (26 rows per form)
- Month/Year: Cell E8
- More Lines: Cell C41 (YES/NO)
- Columns: B=Date, C=From, E=To, F=Miles
- Total formula: Built into template
- Reimbursement formula: Built into template

Multiple Form Handling
- Max rows per form: 26
- If >26 visits, creates additional forms
- Form 1: Visits 1-26, C41='YES'
- Form 2: Visits 27-52, C41='YES' or 'NO'
- Last form always: C41='NO'
- Filenames: Mileage_Log_Month_Year.xlsx, Mileage_Log_Month_Year_2.xlsx

Related Workflow Steps

Steps BEFORE This Button
Step 1 - Process PDFs: Extract case information
Step 2 - Organize Files: Create folder structure
Step 3 - Create Map: Map ward locations (important for mileage!)
Step 4 - Send Requests: Contact guardians
Step 5 - Add Contacts: Add guardians to contacts (optional)
Step 6 - Send Confirmation: Confirm appointments
Step 7 - Schedule: Add meetings to calendar
Step 8 - Generate CVR: Create reports

Step 9 - Generate Summary: Create visit summaries
Step 10 - Complete CVR: Finalize reports
Step 11 - Send Follow-up: Thank you emails (optional)
Step 12 - Email CVR: Submit reports to supervisor
Step 13 - Generate Form: Payment forms
Conduct all ward visits for the month

Steps AFTER This Button
None - This is the final documentation step in the workflow
💡 **TIP:** Mileage and payment forms are typically done together at month-end for all completed visits.

Frequently Asked Questions

Q: Can I manually edit the mileage numbers?

A: Yes, but document why. The county may question significant changes. Only adjust if you have a valid reason (e.g., took a detour).

Q: What if I don't have all addresses yet?

A: You must have complete addresses to generate accurate mileage. Wait until all addresses are in Excel, or manually calculate missing visits.

Q: Can I run this for past months?

A: Yes, the month picker shows previous months. You can generate mileage forms for any past month with visit data.

Q: What if I made multiple trips to the same ward?

A: Each visit is a separate row. The app will show the distance between that location and the previous location each time.

Q: Do I need Google API for this to work?

A: Yes, Google Directions API is required. It requires an API key with billing enabled. Your IT admin handles this setup.

Q: What if the total doesn't match my odometer?

A: Google's calculated routes may differ slightly from your actual path. Small differences are normal. Large differences suggest an address error.

Q: Can I claim mileage for trips to the courthouse?

A: Check Travis County policies. This app only calculates ward visit mileage. Other trips may require separate documentation.

Q: How often should I submit mileage forms?

A: Monthly is standard. Submit at the beginning of each month for the previous month's visits.

Summary Checklist

- ☐ All ward visits completed for the month
- ☐ Visit dates entered in Excel
- ☐ Ward addresses complete and accurate
- ☐ Google Directions API configured
- ☐ Start/end addresses configured correctly
- ☐ Excel file is closed
- ☐ Know which month to generate
- ☐ AFTER CLICKING: Selected correct month in picker

- ☐ AFTER CLICKING: Form opened in Excel
- ☐ AFTER CLICKING: Reviewed all dates
- ☐ AFTER CLICKING: Checked all addresses
- ☐ AFTER CLICKING: Verified mileage numbers reasonable
- ☐ AFTER CLICKING: Total mileage looks correct
- ☐ AFTER CLICKING: Reimbursement amount calculated
- ☐ AFTER CLICKING: Printed or saved as PDF
- ☐ AFTER CLICKING: Signed the form
- ☐ AFTER CLICKING: Submitted to Travis County
- ☐ AFTER CLICKING: Saved copy for records

Appendix B: Technical Reference

This appendix provides technical information for advanced users and system administrators. This information is useful for troubleshooting, customization, and understanding how the Court Visitor Application works under the hood.

System Architecture

Core Components

- guardianship_app.py: Main GUI application that coordinates all workflow steps
- auto_updater.py: Checks for updates from GitHub on startup
- Launch Court Visitor App.vbs: Windows launcher that hides console window
- Automation/ folder: Contains all 14 step scripts (hidden from end users)

Data Storage

- Central database: App Data/ward_guardian_info.xlsx
  - Format: Excel workbook with standardized column schema
  - Access: openpyxl library for reading/writing
  - Backup: Automatic timestamped backups before each write operation

Configuration Management

- Config/mileage_settings.txt: Two-line text file with starting/ending addresses
- Config/API/: Google API credentials and OAuth tokens
- App Data/Templates/: Word document templates (CVR, Payment, Mileage)

Python Dependencies

Package	Purpose
openpyxl	Excel file reading and writing
pandas	Data processing and manipulation
pytesseract	OCR text extraction from images
pdf2image	PDF to image conversion
pdfplumber	PDF text and table extraction
Pillow	Image processing and manipulation
google-auth	Google API authentication
google-api-python-client	Google API client libraries
pywin32	Microsoft Word automation (Windows COM)
googlemaps	Distance calculations for mileage

External Software Requirements

- Python 3.10 or higher
  - Required for running all automation scripts
  - Download from python.org
- Tesseract OCR
  - Required for Step 1 (PDF text extraction)
  - Download from github.com/tesseract-ocr/tesseract
  - Must be added to system PATH

- Poppler
  - Required for Step 1 (PDF to image conversion)
  - Windows: Download from github.com/oschwartz10612/poppler-windows
  - Must be added to system PATH
- Microsoft Word
  - Required for Steps 8, 13, 14 (document generation)
  - Part of Microsoft Office suite
  - Application uses pywin32 to automate Word

Google API Configuration

The Court Visitor Application uses several Google APIs. Your administrator must configure these during installation.

Required APIs by Step

Step	API Needed	Authentication Type
1	Vision API	Service Account
3	Maps API	API Key (optional)
4, 6, 11, 12	Gmail API	OAuth 2.0
5	People API	OAuth 2.0
7	Calendar API	OAuth 2.0
10	Sheets API	Service Account
14	Maps API	API Key

OAuth Token Management

The Court Visitor Application automatically manages OAuth tokens:

- Tokens stored in Config/API/
  - token_gmail.json: Gmail API access
  - token_calendar.json: Calendar API access
  - token_people.json: Contacts API access
  - token_drive.json: Drive API access
- Automatic token refresh when expired
- Automatic token deletion if invalid
- Re-authentication prompt if token cannot be refreshed

To force re-authentication: Delete the specific token file and run the affected step again.

Automation Script Structure

Each workflow step is implemented as a standalone Python script in the Automation/ folder. This folder is hidden from end users to protect intellectual property while still allowing advanced troubleshooting.

Script Organization:**Script Organization:**

- Automation/Step_XX_Name/
  - script.py: Main automation logic

- logs/: Timestamped log files for debugging
  - config.json: Step-specific configuration (if needed)

Common Script Patterns:**Common Script Patterns:**

- Read Excel database using openpyxl
- Create automatic backup before writing
- Validate input data before processing
- Write detailed logs to logs/ folder
- Return success/failure status to GUI

Log Files

Each step creates detailed log files for troubleshooting:

- Location: Automation/[Step Name]/logs/
- Format: [scriptname]_YYYYMMDD_HHMMSS.log
- Contents: Timestamps, operations performed, errors encountered

Example log filename: extract_pdf_data_20241115_143022.log

Auto-Update System

The Court Visitor Application includes automatic update checking:

- Checks GitHub releases on application startup
- Compares current version with latest release
- Shows dialog if update available with download link
- Does not force updates - user can skip and continue

Customization Points

Advanced users can customize certain aspects without modifying code:

Email Templates

Email content is embedded in scripts but follows predictable patterns. To customize:

- Locate the script in Automation/Step_XX_Name/
- Find email body text (usually in triple quotes)
- Edit text while preserving variable placeholders like {ward_name}
- Save and test with a single case

Word Templates

Template files in App Data/Templates/ can be customized:

- CVR_Template.docx: Court Visitor Report format
- Payment_Template.docx: Monthly payment form
- Mileage_Template.docx: Mileage log format

Important: Bookmark names in templates must match script expectations. Consult documentation before modifying.***Important:*** *Bookmark names in templates must match script expectations. Consult documentation before modifying.*

Excel Column Schema

The Excel database schema is fixed, but you can add custom columns:

- Add columns to the right of existing ones
- Do not rename or delete existing required columns
- Custom columns will be preserved by automation scripts

Performance Considerations

Step 1 (PDF Extraction)

- Processing time: 30-90 seconds per PDF
- Factors: PDF size, page count, image quality
- Bottleneck: Vision API calls and Tesseract OCR

Step 14 (Mileage Calculation)

- Processing time: 2-5 seconds per address pair
- Factors: Number of visits in month, API response time
- Bottleneck: Google Maps API rate limits

Email Operations (Steps 4, 6, 11, 12)

- Processing time: 1-3 seconds per email
- Factors: Internet connection speed, Gmail API response time
- Bottleneck: Network latency

Security Considerations

Data Protection

The Excel database contains sensitive personal information:

- Ward names, addresses, and case numbers
- Guardian contact information
- Visit schedules and locations

Best Practices:**Best Practices:**

- Store the application on encrypted drives
- Regular backups to secure locations
- Use strong passwords for Google account
- Enable two-factor authentication on Google account
- Do not share Config/API/ folder contents

API Credential Security

Google API credentials must be protected:

- Never share client_secret.json publicly
- Keep service account keys secure

- Revoke tokens if compromise suspected
- Review Google Cloud audit logs periodically

System Requirements Summary

Component	Requirement
Operating System	Windows 10 or Windows 11
Python	Version 3.10 or higher
Microsoft Office	Microsoft Word (any recent version)
Internet	Broadband connection for Google API access
Google Account	Gmail account with API access enabled
Disk Space	Minimum 500 MB (more for case archives)
Memory	Minimum 4 GB RAM recommended
Additional Software	Tesseract OCR, Poppler (PDF tools)

Version History

Version 1.0.0 - November 2024

- Initial release with 14 workflow steps
- Complete PDF extraction and case organization
- Google integration (Gmail, Calendar, Contacts, Maps)
- Automated CVR generation and completion
- Payment form and mileage log generation
- Auto-update system

Support and Contact Information

For technical support, bug reports, or feature requests:

- Documentation: Refer to this manual and Appendix A
- Log Files: Check Automation/[Step]/logs/ for error details
- Updates: Application checks GitHub automatically on launch
- Administrator: Contact your system administrator for installation issues

Glossary

API	Application Programming Interface - allows the Court Visitor App to communicate with Google services
ARP	Annual Report of Person - court document filed annually for each ward
Cause Number	Unique court case identifier (e.g., C-1-PB-22-000706)
CVR	Court Visitor Report - formal report of ward visit submitted to court
Guardian	Person legally appointed to make decisions for a ward
OAuth	Authentication method that allows the app to access Google services securely
OCR	Optical Character Recognition - technology that extracts text from PDF images
Poppler	Software tool for converting PDF documents to images
Service Account	Type of Google API credential for server-to-server communication

Tesseract	Open-source OCR engine for extracting text from images
Token	Authentication credential stored locally for accessing Google APIs
Ward	Person under guardianship protection by court order

Notes