CMDA Plan Permit Scraper - User Workbook

1. QUICK START GUIDE

1.1 Before You Begin

1.1.1 Prerequisites Checklist

- Windows 10 or 11 computer

- Internet connection (minimum 10 Mbps)

- Chrome or Edge browser installed

- 4GB free disk space

- Zoho CRM login credentials

- Gmail account for notifications (if configured)

1.1.2 First-Time Setup

1. Receive the Application from IT department

2. Extract the ZIP file to your preferred location (e.g., `C:\CMDA_Scraper\`)

3. Ensure .env file is properly configured by IT

4. Double-click `CMDA_Scraper.exe` to launch

2. GETTING STARTED WITH THE APPLICATION

2.1 Launching the Application

2.1.1 Starting the Program

Method 1: Desktop Shortcut

1. Double-click "CMDA Scraper" shortcut on desktop

2. Wait for application to load (5-10 seconds)

3. Main window appears with Ajantha logo

Method 2: From Installation Folder

1. Navigate to: C:\CMDA_Scraper\

2. Double-click: CMDA_Scraper.exe

3. Application launches

3. STEP-BY-STEP OPERATION GUIDE

3.1 Basic Workflow: Scraping Data

Step 1: Select Year

1. Look at the "Choose Year" section

2. Click on the year button you want to process

   - Available years: 2025, 2024, 2023, 2022

3. Visual feedback: Selected button turns red

4. Notice: Year selection appears at top

Example: To scrape 2024 data, click ` [2024] `

Step 2: Select Entry Count

1. After year selection, "Select Entry Count" appears

2. Click the dropdown (default is "10")

3. Choose from options:

   - `10` - Quick test (10 records)

   - `25` - Medium batch

   - `50` - Large batch

   - `All` - Process ALL available records

Recommendation: Start with `10` for testing, then use `All` for full processing

Step 3: Start Scraping

1. Click the red ` [Start Scraping] ` button

2. Watch for:

   - Loading animation appears

   - Progress bar shows percentage

   - Real-time count updates

3. Do not close the application during scraping

4. Wait for completion (time varies by record count)

Step 4: Completion & Results

1. Success Dialog appears automatically

2. Review the completion message showing:

   - Number of documents processed

   - Year processed

   - CRM import status

   - File save location

3. Click OK to close dialog

3.2 Advanced Operations

Generating PDF Reports

When to use: After successful scraping

Purpose: Create professional report for management

Steps:

1. After scraping completes, [Generate PDF Report] button appears

2. Click the button

3. File save dialog opens

4. Choose location (default: Downloads folder)

5. Name your file (default: CMDA_Report_2024_YYYYMMDD_HHMMSS.pdf)

6. Click Save

7. Report generates (takes 10-30 seconds)

8. Success message appears

9. Open PDF to review

Processing Multiple Years

Important: Process one year at a time

Recommended sequence for daily use:

Morning Process (9:00 AM):

1. Launch application

2. Select Year: 2025

3. Select Entry Count: All

4. Start Scraping

5. Wait for completion (20-40 minutes)

Repeat for other years if needed:

1. Select Year: 2024

2. Select Entry Count: All

3. Start Scraping

4. Continue for 2023, 2022 if required

4. UNDERSTANDING THE RESULTS

4.1 Output Files Explained

4.1.1 Excel File (Main Output)

Location: C:\Users\ [YourUsername]\Downloads\

Filename: CMDA_2024.xlsx (year changes based on selection)

What's inside:

• All extracted permit data (20+ columns)

• Hyperlinks to original PDFs

• Architect contact information

• Salesperson assignments

• Area classifications

How to use the Excel file:

1. Open the Excel file from Downloads folder

2. Sort by any column (click column header, then Data → Sort)

3. Filter data (Data → Filter)

4. Click hyperlinks to view original documents

5. Share with team members as needed

4.1.2 Temporary Files

Location: C:\Users\ [YourUsername]\AppData\Local\Temp\

Purpose: Used during CRM processing

Action: Do NOT delete while application is running

Cleaning: Application cleans these automatically

4.2 Understanding Email Notifications

4.2.1 Types of Emails You'll Receive

1. UNMATCHED AREAS ALERT

When: Some areas cannot be assigned to sales team

Action: Review and update territory mappings

Attachment: Unmatched_Areas_YYYYMMDD.xlsx

2. RECORDS PROCESSING REPORT

When: Scraping completes

Content: Matched vs Unmatched statistics

Attachments: Both Excel files

3. NO NEW RECORDS ALERT

When: No new permits found since last run

Action: No action needed

4.2.2 Email Review Checklist

- Check subject line for alert type

- Open attached Excel files

- Review summary statistics

- Forward to relevant team members if needed

- Save important attachments to shared drive

5. DAILY OPERATION PROCEDURE

5.1 Morning Routine (Recommended)

Procedure: 9:00 AM Daily Check

1. LAUNCH APPLICATION

- Double-click desktop shortcut

- Wait for application to load

2. CHECK 2025 DATA

- Select Year: 2025

- Select Entry Count: All

- Click Start Scraping

- Estimated time: 20-40 minutes

3. MONITOR PROGRESS

- Continue with other work

- Check progress occasionally

- Listen for completion alert sound

4. REVIEW RESULTS

- Read completion dialog

- Note any errors or issues

- Check email for detailed report

5. GENERATE REPORT (Optional)

- Click Generate PDF Report

- Save to shared drive

- Share link with management

5.2 Weekly Tasks

Every Monday: Full Historical Check

1. Process all years (2022-2025)

2. Generate comprehensive PDF report

3. Review unmatched areas email

4. Update sales territory mappings if needed

5. Archive previous week's files

End of Month: Data Audit

1. Compare monthly totals

2. Review CRM integration success rate

3. Check for system updates

4. Backup configuration files

5. Document any issues encountered

6. TROUBLESHOOTING GUIDE

6.1 Common Issues & Solutions

Issue 1: Application Won't Start

Symptoms:

• Double-click does nothing

• Error message appears

• Application crashes immediately

Solutions:

1. RESTART COMPUTER

   • Save all work

   • Restart Windows

   • Try launching again

2. CHECK ANTIVIRUS

   • Some antivirus may block the application

   • Add exception for CMDA_Scraper.exe

   • Contact IT if unsure

3. REINSTALL APPLICATION

   • Delete old installation

   • Get fresh copy from IT

   • Install in new location

Issue 2: Scraping Stuck or Very Slow

Symptoms:

- Progress bar not moving

- No completion after 1 hour

- Internet seems slow

Solutions:

1. CHECK INTERNET CONNECTION

    - Open browser, visit cmdachennai.gov.in

    - If slow, wait or try later

    - Consider better internet connection

2. REDUCE RECORD COUNT

    - Stop current process

    - Select smaller Entry Count (10 or 25)

    - Try again

3. CLOSE OTHER APPLICATIONS

    - Close unnecessary programs

    - Especially browsers, video players

    - Free up system resources

Issue 3: No Email Notifications

Symptoms:

- Scraping completes successfully

- No email received

- Checked spam folder - nothing

Solutions:

1. CHECK. env CONFIGURATION

    - Contact IT to verify email settings

    - Ensure correct recipient email

2. CHECK GMAIL SETTINGS

    - Verify sender has app password

    - Check email quota not exceeded

3. MANUAL CHECK

    - Check application completion dialog

• Results are still saved locally

• Email is supplemental, not critical

Issue 4: Excel File Not Found

Symptoms:

• Completion message shows file saved

• Cannot find file in Downloads

• Search doesn't find it

Solutions:

1. CHECK DOWNLOADS FOLDER

  • Open File Explorer

  • Navigate to: C:\Users\ [YourName]\Downloads\

  • Sort by Date Modified (newest first)

  • Look for CMDA_2024.xlsx

2. SEARCH COMPUTER

  • Open Start Menu

  • Type: CMDA_2024.xlsx

  • Check search results

3. RUN AGAIN

  • Application will create new file

  • Old file might be renamed

7. DATA MANAGEMENT

7.1 File Organization

1. AFTER PROCESSING:

  • Move Excel file from Downloads to appropriate month folder

  • Rename with date: CMDA_2024_MMDD.xlsx

  • Save PDF report in same folder

2. EMAIL ATTACHMENTS:

- Save important attachments

- Delete unnecessary ones after review

3. TEMPORARY FILES:

- Application cleans these automatically

- Manual cleaning not required

7.2 Database Maintenance

ExistData.xlsx - What It Is

Purpose: Tracks already processed permits

Location: Same folder as application

Action: DO NOT DELETE OR MODIFY

Backup: IT handles regular backups

When to Contact IT About Database

- File becomes very large (>100MB)

- You notice duplicate records

- Application says "database corrupted"

- Moving to new computer

- Annual archive needed

8. SALES TEAM COORDINATION

8.1 Lead Assignment Process

How Leads Get Assigned

1. SYSTEM AUTO-ASSIGNS based on area

- Example: "Adyar" → Jagan

- Example: "Tambaram" → Venkatesh

2. SHARED TERRITORIES split automatically

- "Jagan / Karthik" → Records divided between both

3. UNMATCHED AREAS trigger email alert

- Sales Manager reviews

- Manually assigns if needed

- IT updates mappings for future

What Sales Team Should Do

DAILY:

1. Check Zoho CRM for new leads

2. Filter by "Lead Source: Digital Leads"

3. Sort by "Date Created" (newest first)

4. Begin follow-up process

WEEKLY:

1. Review lead conversion rates

2. Provide feedback on lead quality

3. Report incorrect area assignments

8.2 Lead Quality Indicators

High-Quality Leads (Priority)

- ✅ Has mobile number AND email

- ✅ Dwelling units > 5

- ✅ Architect contact available
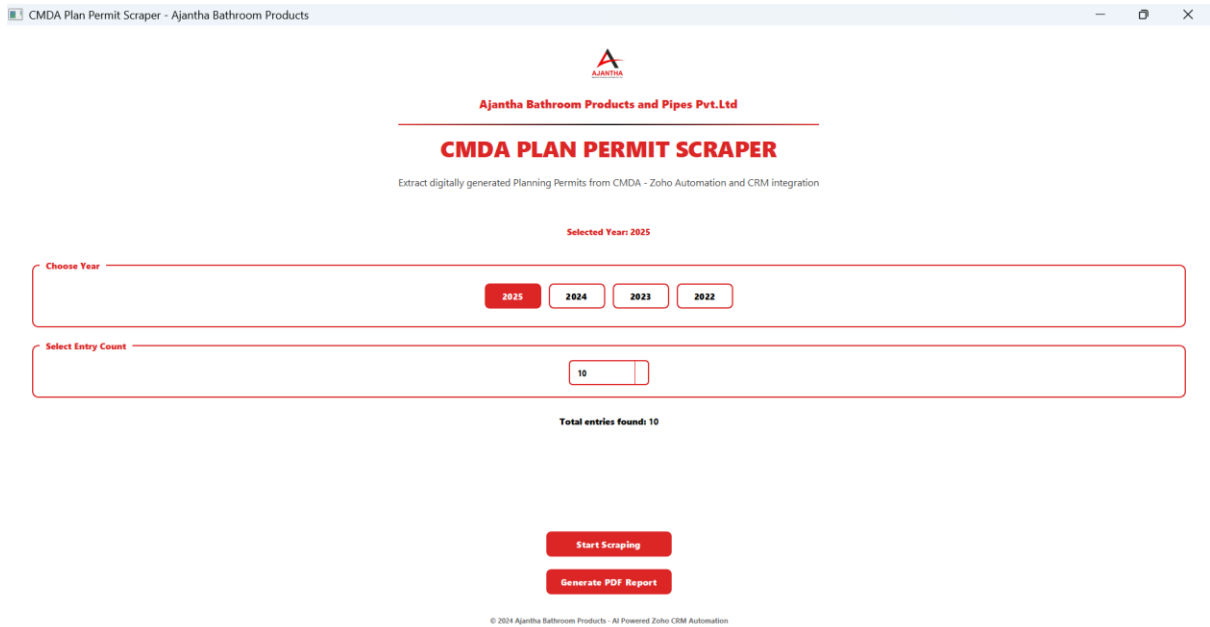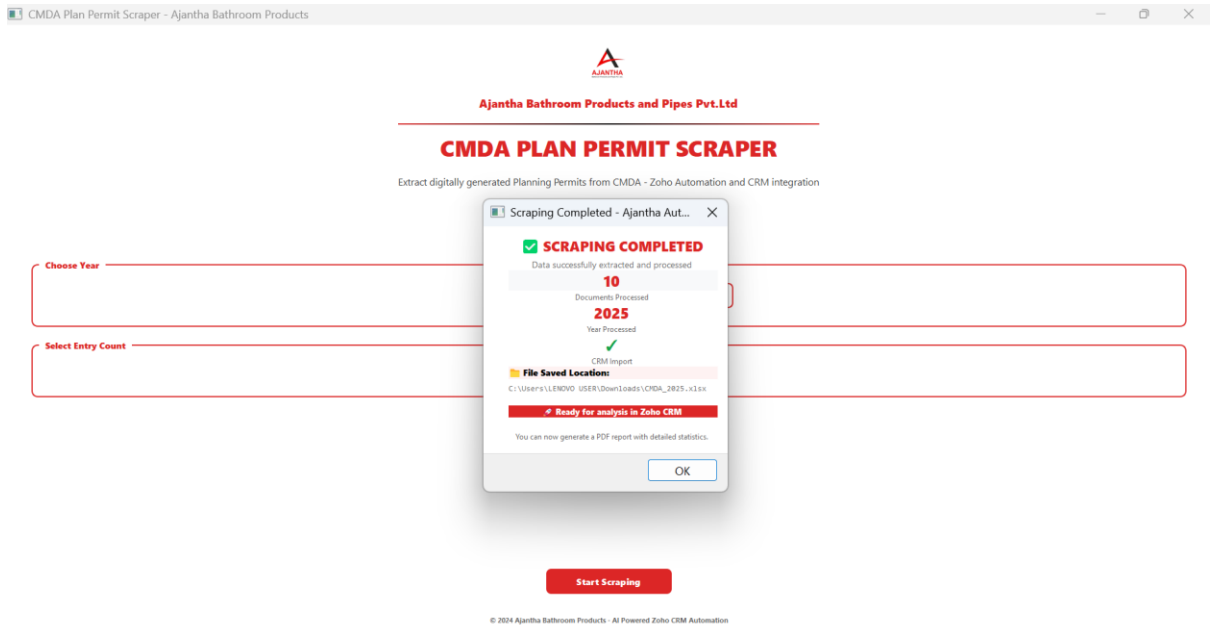
- ✅ Recent permit date (<30 days)

Medium-Quality Leads

- ✅ Has mobile OR email

- ✅ 2-5 dwelling units

- ✅ Permit date 30-90 days old

Low-Quality Leads (Follow up if time)

- ❌ No contact information

- ❌ Commercial/Industrial only

- ❌ Old permits (>90 days)

9. REPORTING & ANALYTICS

9.1 Daily Metrics to Track

Key Performance Indicators

1. TOTAL LEADS GENERATED

   • Count from completion dialog

   • Compare with previous days

2. SUCCESS RATE

   • Successful vs Failed extraction

   • Target: >90% success

3. NEW VS EXISTING

- How many truly new leads

- Avoid duplicate follow-ups

4. CRM INTEGRATION SUCCESS

- Leads created in Zoho

- Failed imports (if any)

9.2 Weekly Report Template

Sample Weekly Report (for Management)

CMDA SCRAPING REPORT - Week of [Date]

SUMMARY:

- Total Permits Processed: 1,250

- New Leads Created: 845 (68% new)

- CRM Integration Success: 98.5%

- Average Daily Leads: 169

TOP AREAS:

1. Tambaram: 145 leads

2. Adyar: 132 leads

3. Guindy: 98 leads

ISSUES & ACTIONS:

- 15 unmatched areas identified

- 2 CRM authentication issues (resolved)

- Network slowdown on Wednesday AM

NEXT WEEK FOCUS:

- Process 2023 backlog

- Update territory mappings

- Train new team member

10. BEST PRACTICES & TIPS

10.1 Efficiency Tips

Optimal Processing Times

- BEST TIME: 9:00-11:00 AM (fast internet)

- AVOID: 1:00-3:00 PM (peak hours)

• WEEKENDS: Faster processing, less network traffic

Record Count Guidelines:

• Testing: 10 records (2-3 minutes)

• Daily run: All records (20-40 minutes)

• Historical: One year at a time

System Optimization

1. BEFORE STARTING:

   • Close unused applications

   • Restart computer weekly

   • Clear browser cache monthly

2. DURING PROCESSING:

   • Avoid heavy computer use

   • Don't start other downloads

   • Monitor progress, but don't interrupt

3. AFTER COMPLETION:

   • Review results immediately

   • Save files to organized folders

   • Log any issues encountered

10.2 Quality Assurance Checklist

Daily Verification Steps

- Application launches without errors

- Year selection works correctly

- Progress bar shows movement

- Completion dialog appears

- Excel file saved in Downloads

- Email notification received

- CRM shows new leads

- No critical errors in log

Weekly Verification Steps

- All years process successfully

- Database file size reasonable

- Email attachments open correctly

- PDF reports generate properly

- Sales team confirms lead receipt

- Backup of configuration files

- System performance acceptable