

Installation Guide - Contest Log Analyzer

Version 0.22.0-Beta

Date: 2025-07-29

This guide provides step-by-step instructions to set up the Contest Log Analyzer on your system. The process involves installing a Python distribution, setting up a dedicated environment, installing the required libraries, and configuring the necessary data files.

Step 1: Prerequisites

Before you begin, you will need to have Git installed on your system. Git is a version control system used to download the project's source code. You can download it from git-scm.com.

Step 2: Download the Project Files

Open your command prompt or terminal and navigate to the directory where you want to store the project (e.g., your Desktop). Then, run the following command to download the project from its GitHub repository:

```
git clone https://github.com/kd4d/Contest-Log-Analyzer.git "Contest-Log-Analyzer"  
cd "Contest-Log-Analyzer"
```

Step 3: Install a Python Distribution (Miniforge)

For this project, we recommend using the Miniforge distribution of Python. It's a lightweight installer that uses conda as its package manager and is pre-configured to use the powerful conda-forge channel, which is ideal for scientific and data analysis packages.

1. Go to the [Miniforge GitHub releases page](#).
2. Download the latest installer for your operating system (e.g., Miniforge3-Windows-x86_64.exe for 64-bit Windows).
3. Run the installer. It is highly recommended that you accept the default options, especially the option to add Miniforge to your system's PATH.

Step 4: Create and Activate a Conda Environment

To keep the project's dependencies isolated from other Python projects, it's best practice to create a dedicated conda environment.

1. Open a new command prompt or terminal. You should see (base) at the beginning of your prompt.
2. Run the following command to create a new environment. The code is developed with Python 3.11, and specifying the version ensures a reproducible environment.
3. `conda create --name contest-analyzer python=3.11 -y`
4. Once it's created, activate the new environment:
5. `conda activate contest-analyzer`

Your prompt should now start with (contest-analyzer).

Step 5: Update Conda Packages

Before installing new libraries, it's a good practice to update all the base packages in your new environment.

```
conda update --all -y
```

Step 6: Install Required Libraries

With your environment active, install the required Python libraries.

```
conda install pandas matplotlib seaborn -y
```

Step 7: Set Up the Environment Variable

The program needs to know where to find the country data file. You must set an environment variable named CTY_DAT_PATH.

- On Windows:
 - Temporary (for the current command prompt window):
 - `set CTY_DAT_PATH="C:\path\to\your\Contest-Log-Analyzer\data\cty.dat"`
 - Permanent (for your user account):

- setx CTY_DAT_PATH "C:\path\to\your\Contest-Log-Analyzer\data\cty.dat"
- *(Note: You must close and reopen your command prompt for this change to take effect.)*
- On macOS/Linux:
 - Temporary (for the current terminal session):
○ export CTY_DAT_PATH="/path/to/your/Contest-Log-Analyzer/data/cty.dat"
 - Permanent: Add the export line above to your shell's startup file (e.g., ~/.bashrc or ~/.zshrc).

Step 8: Download the Country Data File

The analyzer requires the standard cty.dat country file to function.

1. Download the latest universal country file, cty.dat, from country-files.com.
2. Place the file inside the data directory within your Contest-Log-Analyzer project folder.

Step 9: Run the Analyzer

You are now ready to run the program. Make sure you are in the Contest-Log-Analyzer directory and your contest-analyzer conda environment is active.

You can test the installation by running a report on a sample log file:

```
python main_cli.py --report all Logs/2025/cq-wpx-cw/k3lr.log
```

If the setup was successful, you will see the program process the log and save the generated reports to the reports_output directory.