CertStream User Guide

Welcome to CertStream! Choose a section from the table of contents below to find step-by-step guides on how to use CertStream.

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Introduction to CertStream

CertStream is an easy-to-deploy Python Script designed for Cybersecurity Researchers. It seamlessly captures newly-registered domains that matches your capture regexes.

The CertStream User Guide acquaints you with the application's functionality, enabling you to maximize its potential.

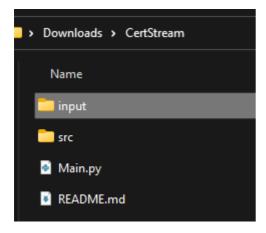
Key Features:

- Retrieve domains from Certificate Transparency's vast network of monitors.
- Filters for domains of interest with one or more capture regexes.
- Stores domains of interest into a SQLite database.
- © CertStream only requires one command to start. CertStream is user-friendly!

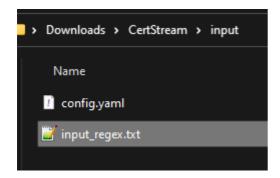
We are confident that CertStream will enhance your efficiency as Cybersecurity Researchers. Enjoy your experience with CertStream!

Quick Start

1. Download CertStream.zip here, and extract CertStream.zip to any folder.



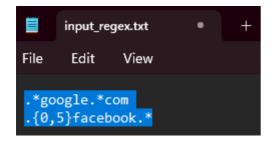
2. Open the /input folder, and edit input_regex.txt using any text editor.



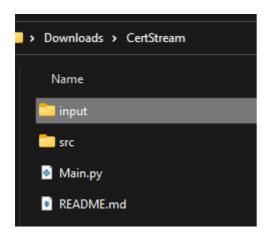
3. Add one or more regexes for CertStream to monitor, and save the file.

CertStream will capture domains that matches any of the regexes.

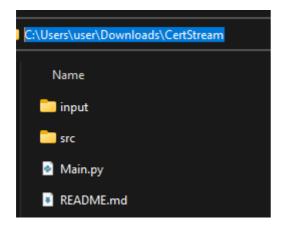
(e.g. The domain google123.com will be captured using the regexes below.)



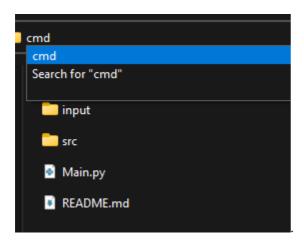
4. Navigate back to the previous folder.



- 5. Open Command Prompt/Terminal on the home folder. For Windows users, follow the instructions below.
 - 1. Click on the address bar.



3. Type cmd, and press Enter to launch Command Prompt.



6. Copy each command below, and press Enter to start CertStream.

CertStream will run indefinitely.

```
python3 -m pip install -r src/requirements.txt
python3 Main.py
```

```
C:\Users\ \Downloads\CertStream>python3 Main.py
[CertStream.__init__] Initialising CertStream
[CertStream.start] Starting CertStream.
New Domain: 01.27.07.2023.google_xenon2024.flowers-to-the-world.com
New Domain: 01.27.07.2023.google_xenon2023.flowers-to-the-world.com
```

7. To stop CertStream, press CTRL+C (You may need to press a few times).

Domains captured is exported to an output file.

More time is needed for export when the number of domains stored is large.

```
C:\Users\ \ \Downloads\CertStream>python3 Main.py
[CertStream.__init__] Initialising CertStream
[CertStream.start] Starting CertStream.

New Domain: 01.27.07.2023.google_xenon2024.flowers-to-the-world.com

New Domain: 01.27.07.2023.google_xenon2023.flowers-to-the-world.com

New Domain: 01.27.07.2023.google_xenon2023.flowers-to-the-world.com

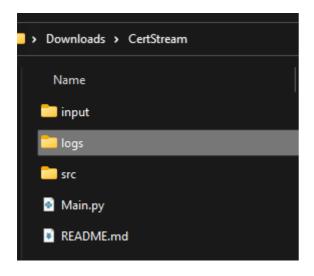
New Domain: document-archive-google-drive-api.sizramsolutions.com

Listening Stopped. Please wait for the export.

CertStream Shutdown.

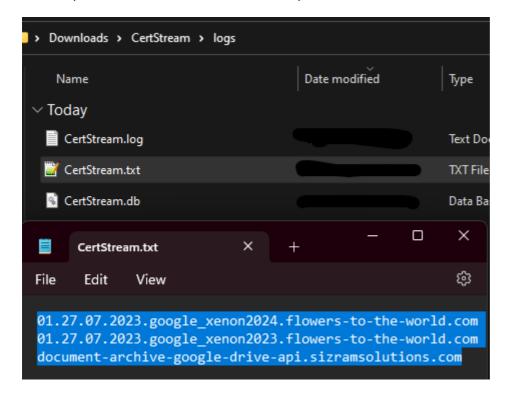
C:\Users\ \Downloads\CertStream>
```

8. Open the new /logs folder.



You will find the CertStream.txt output file.

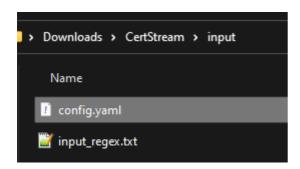
9. Open CertStream.txt to view the captured domains.



Configuration

You can customise CertStream's configuration to suit your workflow.

1. Open the /input folder, and edit config.yaml using any text editor.



2. You may customise the input/output filenames and other settings. Save the file.

```
config.yaml × +

File Edit View

certstream:
    server: 'wss://certstream.calidog.io' # CertStream Monitor Server (by Calidog). Do not change, as our source code is configured for his server's messages. input: 'input/input regex.txt' # Filename of input capture regexes. output: 'logs/CertStream.txt' # Filename of output captured domains.

database:
    purge: True # True if you wish to clear existing domains from previous execution of CertStream.
    filename: 'logs/CertStream.db' # Filename of intermediary SQLite database.
```

3. Run CertStream as usual. Refer to Quick Start Step 4.

Feedback

CertStream is a pilot program. Any feedback is appreciated while we develop CertStream. To deposit ideas and comments, create a new Issue on Github!

Authors

This User Guide is written by Choon Yong.