

Live Security Log Analysis Dashboard

This project is a **live log analysis dashboard** built using **Streamlit**. It analyzes logs from a .log file, visualizes the data, and provides insights on security events such as:

- **Top IP addresses making requests**
- **Most accessed URLs**
- **HTTP methods distribution**
- **Status code analysis**
- **Traffic patterns over time**

Dataset Used

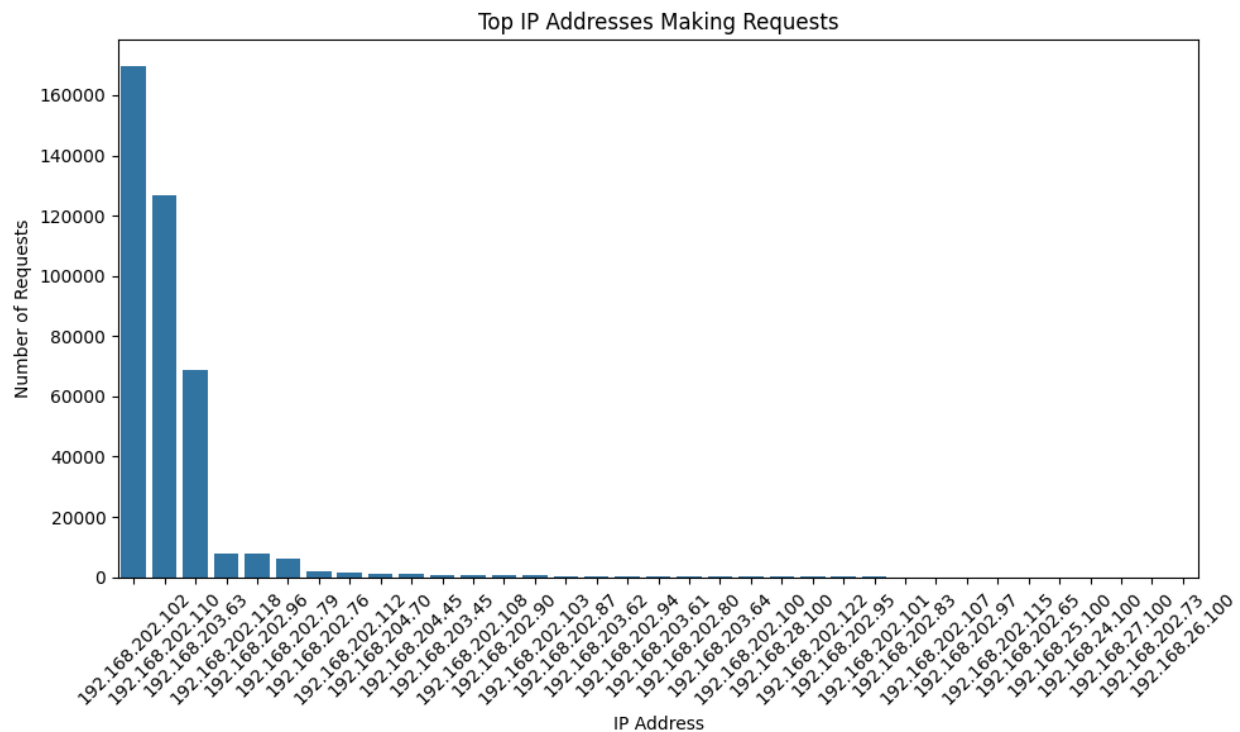
Open Source Dataset: <https://www.secrepo.com/http.log>

Dashboard Overview

The live dashboard provides multiple insights into the log data with several interactive visualizations.

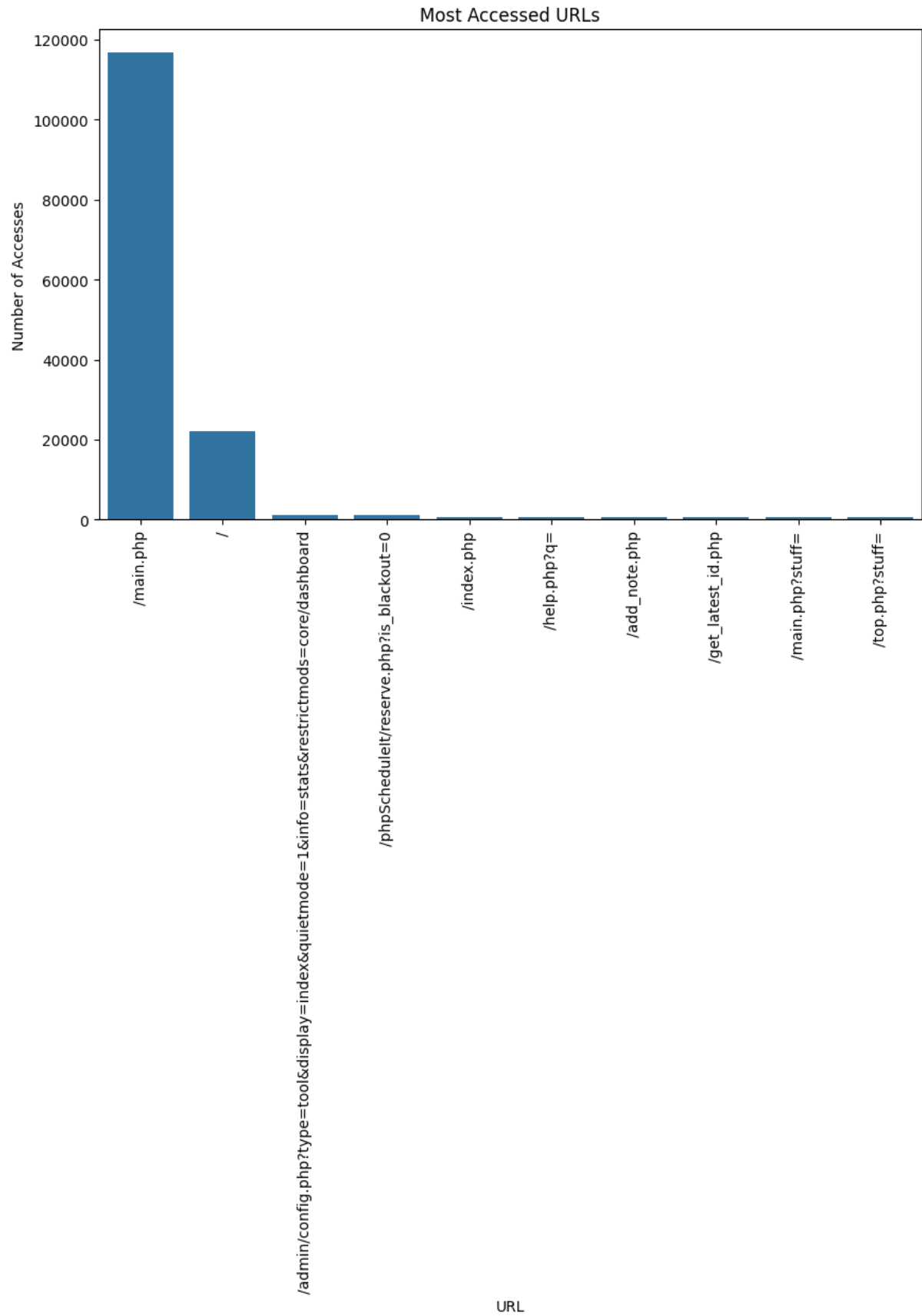
1. Top IP Addresses Making Requests

This plot shows the top IP addresses based on the number of requests made to the server.



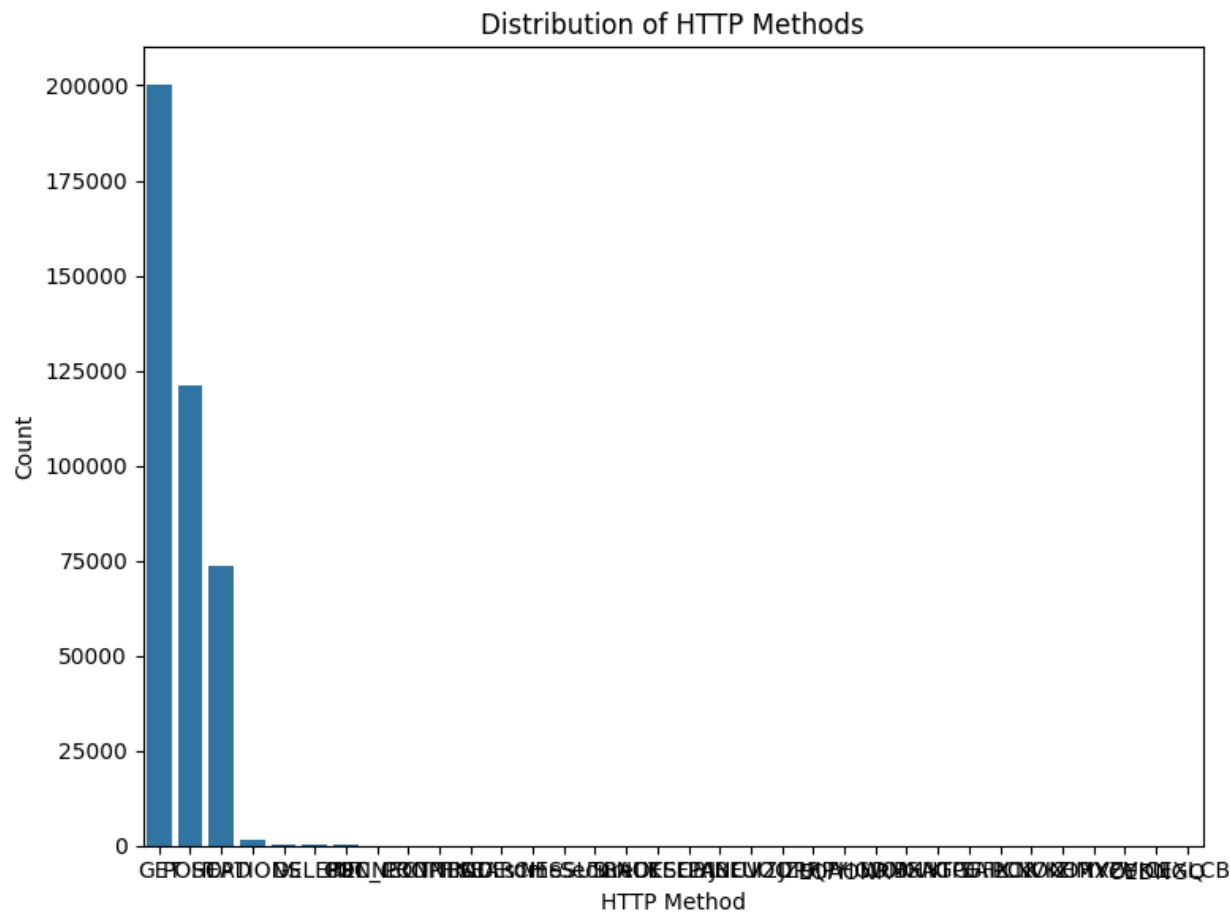
2. Most Accessed URLs

This plot displays the most frequently accessed URLs in the log data, giving you insights into which endpoints are most popular.



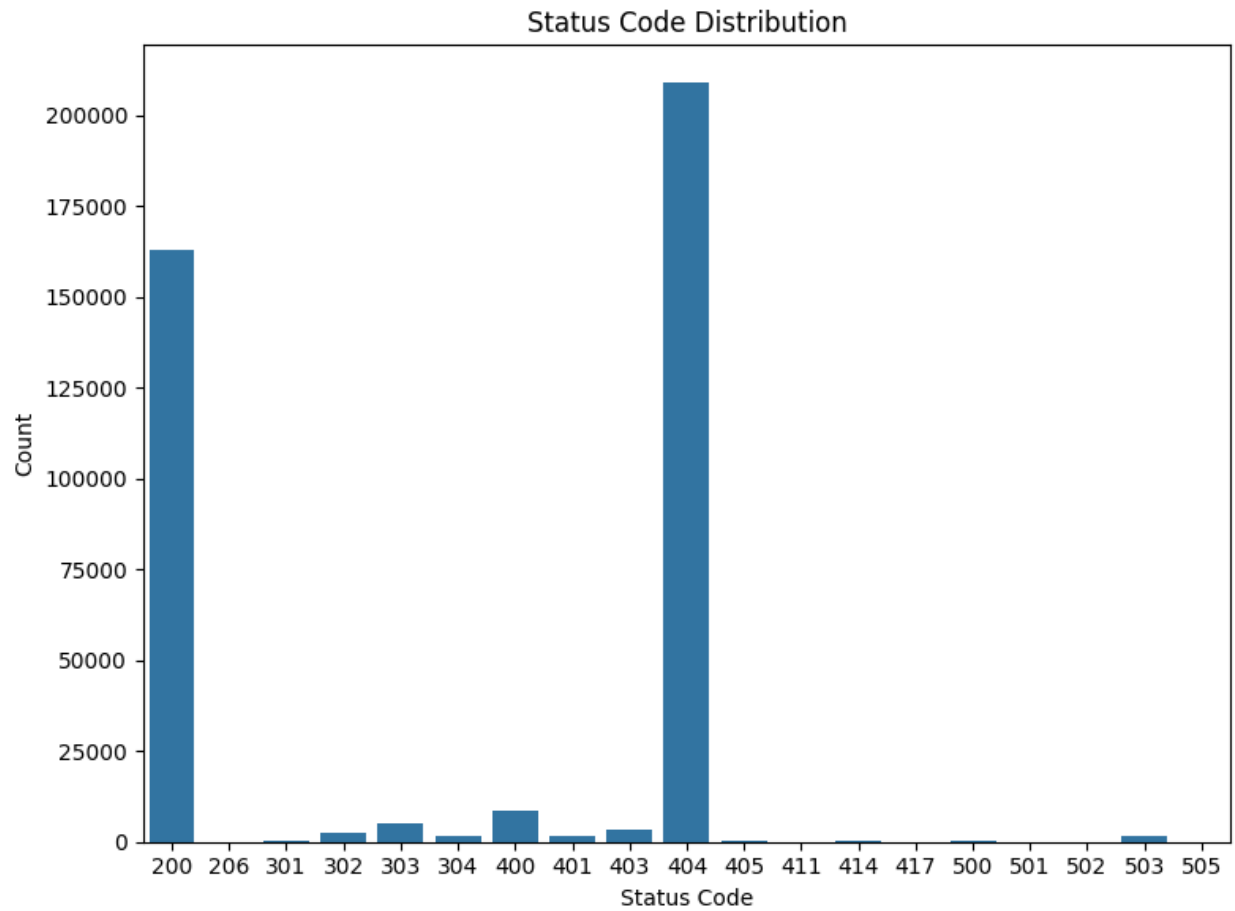
3. HTTP Methods Distribution

This chart breaks down the distribution of HTTP methods (e.g., GET, POST) used in the requests.



4. Status Code Analysis

The status code analysis shows the distribution of different HTTP status codes, such as 200 OK and 404 Not Found.



5. Traffic Over Time

This graph visualizes the traffic patterns, showing the number of requests over time.

