WEB LOG ANALYSIS

Daikibo Industrials Cyber Breach Investigation

BACKGROUND INFORMATION

A major news publication has revealed sensitive private information about Daikibo Industrials, our client. A production problem has caused its assembly lines to stop, threatening the smooth operation of supply chains relying on Daikibo’s products. The client suspects the security of their new status board, Daikibo's telemetry dashboard may have been breached.

Analyst name

Abdiaziz Ibrahim Kar

Tasks Assigned

You will be joining our cyber security team. Your job is to:

1. Determine if the alleged breach could have happened from an attacker on the internet directly (i.e. no access to Daikibo's VPN).
2. Inspect a *web_requests.log* file.

Provided: web_requests.log

1. Determining if the alleged breach could have happened from an attacker on the internet

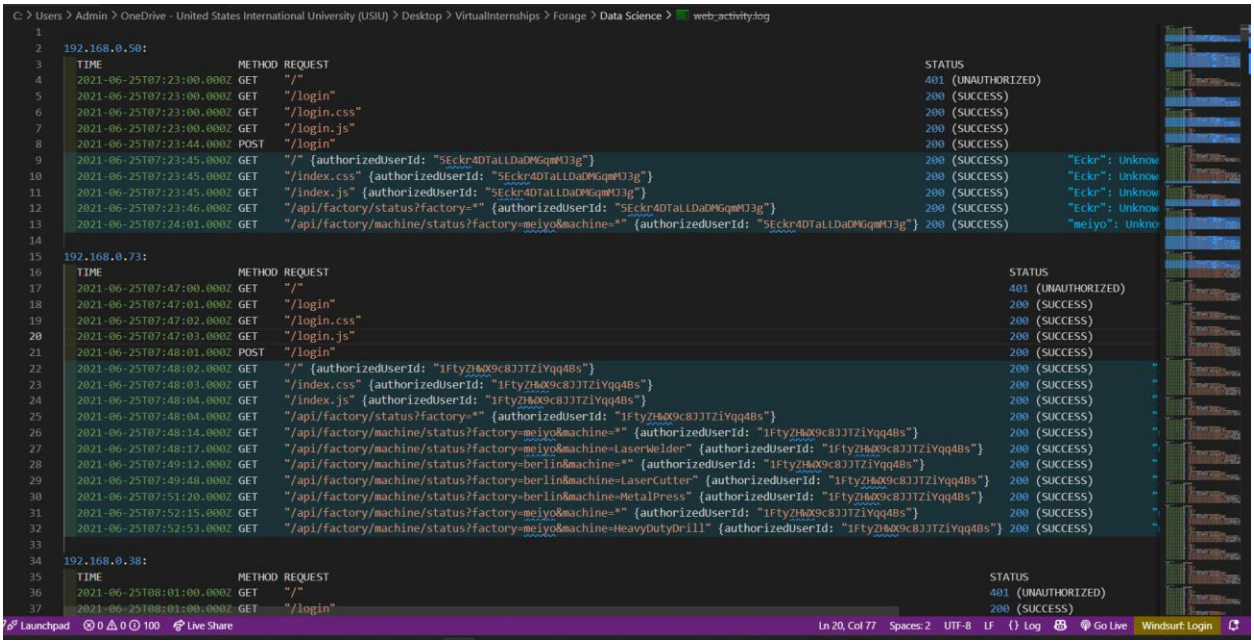
Analysis:

The first step of the analysis was to check the IP addresses that have had interactions with Daikibo's telemetry dashboard. I observed that all those addresses were class C, private (internal), ruling out direct internet attacks.

Findings:

Attack Origin: Internal only (all IPs were private addresses).

Evidence: No public IPs.

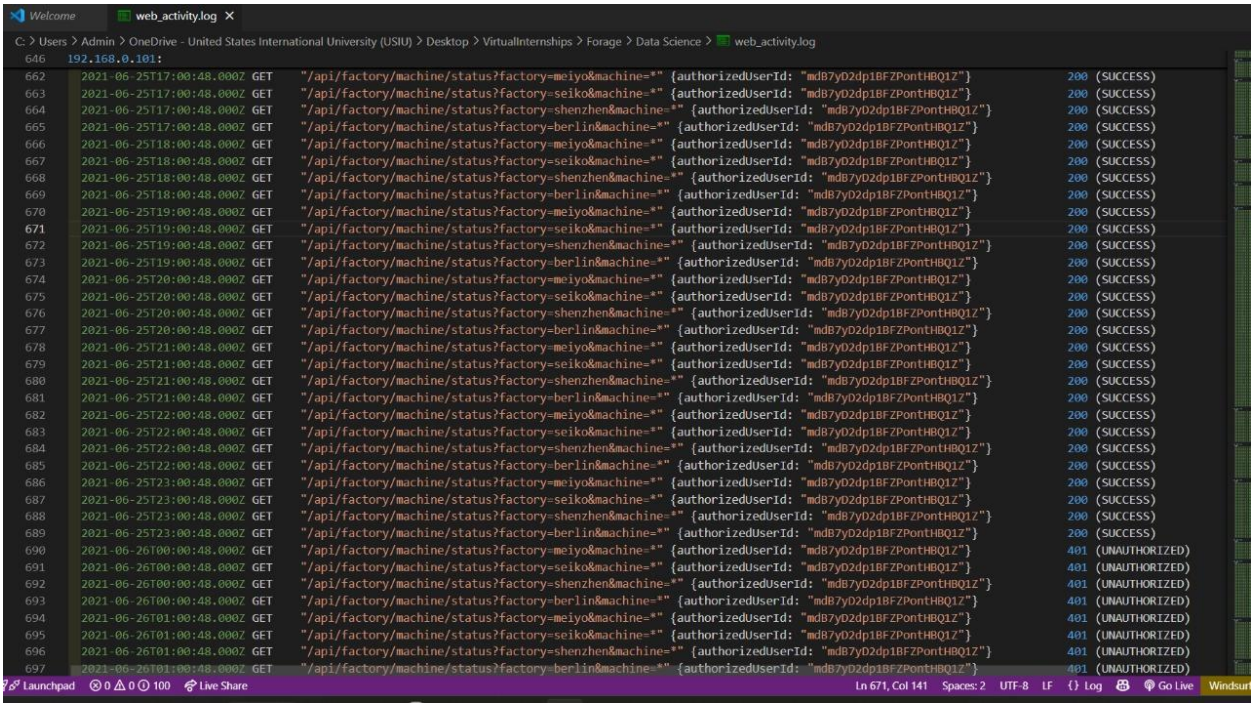


2. *web_requests.log* file Inspection

Analysis:

To identify user ID and IP address of the attacker, my initial priority was to review at request timestamps for any use of automated tools. The analysis revealed user that sends *GET* request to check status, in *every first 48th second of every hour*, machine-like precision. The user automates what seems to be a brute-force attack on the endpoint */api/factory/machine/status* . Additionally, there is use of wildcards in some API requests, a clear indication of automated scraping.

Moreover, Legitimate user traffic would typically include requests for static assets like CSS stylesheets and images. The absence of these requests strongly suggests automated tooling. Within the same second, the user makes multiple rapid requests with different parameters, further indicating automation.



Finding:

Internal Attacker details*:* UserID=mdB7yD2dp1BFZPontHBQ1Z IP: 192.168.0.101

Evidence*:*

(i) API calls every first 48th second, of every hour.
(ii) Wildcard usage factory=*
(iii) Not loading static assets like stylesheets (css)