Overview Summary

Nearing completion of the assignment, the overall concepts of what the challenge became clearer:

- 1. I created a WAF node and deployed it to protect my http traffic on port 80.
- 2. Using gotestwaf allowed me to simulate attacks on my port and see the results. Unfortunately, this is where I was stuck for a lot of

time and was writing an email seeking help at this point.

Receiving the following error while using GoTestWafmade me believe I deployed the node incorrectly: error="WAF was not detected."

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icrosoft Windows [Version 10.0.19045.5487]
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:\Users\codte>docker run --rm --network="host" -it -v C:/Users/codte/reports:/app/reports wallarm/gotestwaf --url=http:/localhost:80

NFO[0000] GoTestWAF started version=v0.5.6

NFO[0000] Test cases loading started
NFO[0000] Test cases loading finished
NFO[0000] Test cases fingerprint fp=c6d14d6138601d19d215bb97806bcda3

NFO[0000] Try to identify WAF solution
NFO[0000] WAF was not identified
NFO[0000] WahF was not identified
NFO[0000] gohttp is used as an HTTP client to make requests http_client=gohttp
NFO[0000] WahF pre-check url="http://localhost:80"
RRO[0000] caught error in main function error="WAF was not detected. Please use the '--blockStatusCodes or '--blockRegex' flags. Use '--help' for additional info. Baseline attack status code: 200"

:\Users\codte>
```

However, logs in Docker revealed the node was in fact preventing these attacks so everything seems to be working.

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For example the final error on the bottom of the screen: 2025-02-24 19:43:13 2025/02/25 03:43:13 [error] 30#30: *11 WALLARM:ACL: unable to open database file. Folder paths: acl "/opt/wallarm/var/lib/wallarm-acl", mmdb "/opt/wallarm/var/lib/wallarm-acl", client: 172.17.0.1, server: , request: "GET /?82ff67d54c=%3Cscript%3Ealert%28%27union%20select%20password%20from%20users%2 7%29%3C%2Fscript%3E HTTP/1.1", host: "localhost:80"

This specifically appears to be an attempted SQL injection (identifiable by the union/select). I initially thought these were errors in accessing something in the node itself. Which caused me to spend a lot of time unnecessarily exploring phantom permissions issues.

I chose Docker because I thought it would be the most user friendly way for me to deploy the node. Using Kubernetes would've added learning curves and account management/setup concerns in regards to using a cloud service provider (GCP/AWS/Azure).

Overall, I enjoyed the challenge but am confused that my dashboard does not have any detected threats and that gotestwaf did not detect any Wallarm as a WAF. I'm hoping for some clarity in response to my submission.

