OWASP #9 – Security Logging and Monitoring Failures

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Gorbe (2024) suggests that not logging and monitoring will lead to breaches that will go undetected. It is crucial to uphold secure and constant logging and monitoring to make sure that, if a breach occurs, you will be notified and able to respond accordingly. Gorbe (2024) has provided a few examples that display this vulnerability such as not logging auditable events, unclear log messages, no monitoring for suspicious activity within the application, allowing the logs to only be stored locally, noneffective alerts, no trigger alerts for penetration testing, and the application not be suitable to alert/detect active attacks. All of these examples leave your web application open for potential attacks that will go undetected with little to no consequences on the attacker's behalf. I do want to add in that Gorbe (2024) stated that you will be vulnerable to data leaks by making logging and alerting events visible to a user or an attacker (Broken Access Control). This ties back into A01:2021 Broken Access Control, which allows attackers to use traceback while finding weaknesses, which does not play in your favor.

There are ways to prevent such a vulnerability, such as accurate and fast logs of credentials failures that will allow you enough time to react. Another way is to encode your log data, which Gorbe (2024) acknowledges will prevent injections or attacks specifically on logging monitoring systems. Gorbe (2024) states that you should ensure high-value transactions have an audit trial with integrity control, but I believe all transactions should have these to solidify uniform security no matter what. You should also establish an incident response and recovery plan, it is better to be attacked and prepared than to be attacked and unprepared.

Work Cited

Gorbe, Daniel. “A09:2021 – Security Logging and Monitoring Failures.” *G⌬RBE*, 7 Oct. 2024, gorbe.io/posts/owasp/top-10/security-logging-and-monitoring-failures/. Accessed 23 Apr. 2025.