

1. Vulnerability Findings Summary

Web Application A

Vulnerability Type	Severity	Count	Risk	Recommendation
Access Control Weakness	Critical	1	Unauthorized account access	Implement rate limiting and account lockout mechanisms
Cross-Site Scripting (XSS)	Critical	1	Client-side compromise	Apply strict input sanitization and output encoding
Insecure Direct Object Reference (IDOR)	Medium	1	Unauthorized data access	Enforce authorization checks on every request

Web Application B

Vulnerability Type	Severity	Count	Risk	Recommendation
HTTP/2 Resource Exhaustion (DoS)	High	1	Service disruption	Apply rate limiting, server hardening, and upstream traffic filtering

2. Evidence, Risk, and Remediation (Sanitized)

Access Control Weakness

The screenshot shows a NetworkMiner capture of an "Intruder attack" on a web application. The "Results" tab is selected, displaying a table of network traffic. The table has columns: Request, Payload, Status code, Response received, Error, Timeout, Length, and Comment. A single row is highlighted for Request 62, which has a Payload of 1061, a Status code of 302, and a Length of 1911. The "Response" tab is also visible at the bottom.

Request	Payload	Status code	Response received	Error	Timeout	Length	Comment
58	1057	302	305			1886	
59	1058	302	212			1886	
60	1059	302	272			1886	
61	1060	302	340			1911	
62	1061	302	383			1911	
63	1062	302	242			1886	
64	1063	302	327			1911	
65	1064	302	315			1911	
66	1065	302	330			1911	

Evidence:

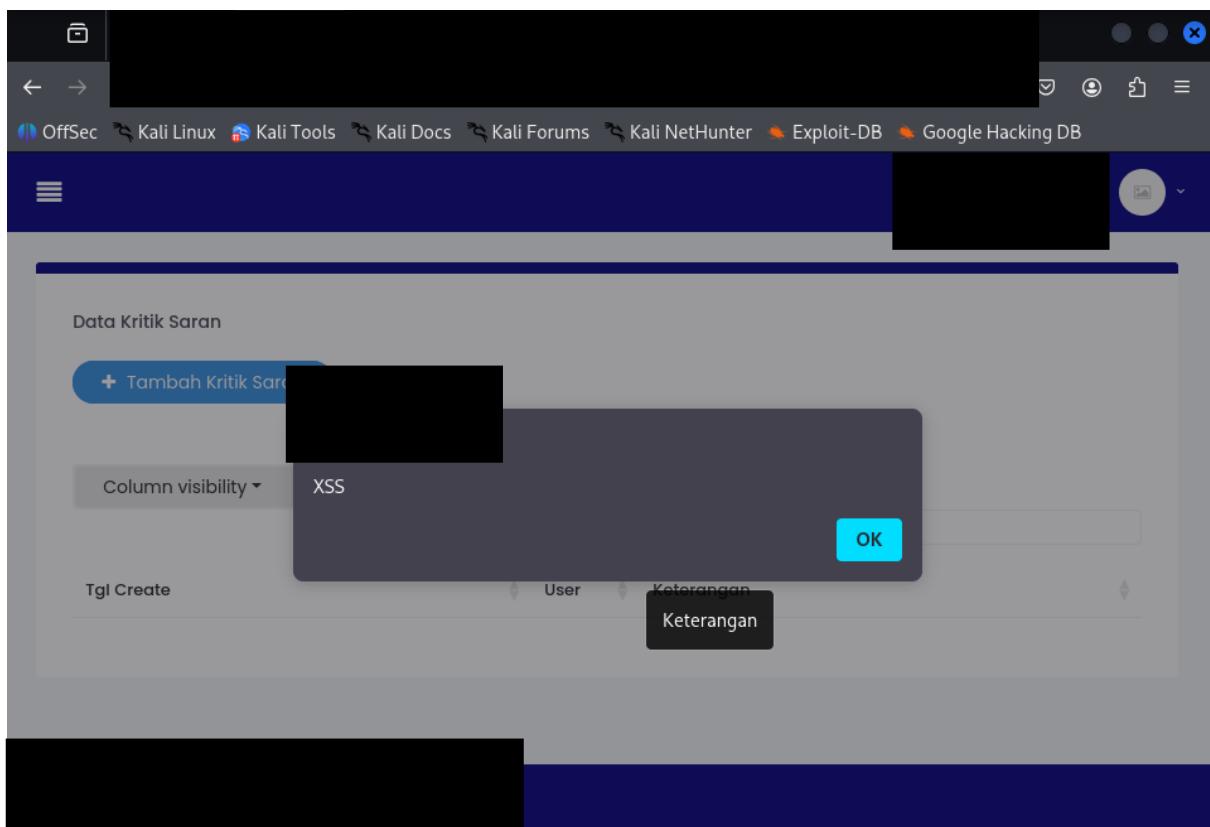
During an authorized blackbox security assessment, an access control weakness was identified on a web application. The issue allowed repeated authentication attempts without sufficient restriction due to weak credential management and absence of rate limiting mechanisms.

Risk:

If left unmitigated, this weakness may lead to unauthorized access, account compromise, financial loss, identity misuse, and increased exposure to targeted attacks.

Recommendation:

- Implement rate limiting on authentication endpoints
- Apply account lockout policies
- Enforce CAPTCHA or similar anti-automation controls

**Cross-Site Scripting (XSS)****Evidence:**

An input validation flaw was identified where user-supplied input was processed without sufficient sanitization. This allowed injection of malicious client-side scripts under controlled testing conditions.

Risk:

Potential impacts include session hijacking, unauthorized actions on behalf of users, data exposure, reputational damage, and legal consequences.

Recommendation:

- Enforce strict input validation
- Apply output encoding
- Implement Content Security Policy (CSP) where applicable

Resource Exhaustion / Denial of Service

Evidence:

The assessment identified insufficient controls against high-volume request bursts, enabling resource exhaustion scenarios that could impact application availability.

Risk:

Service downtime, operational disruption, financial loss, and reputational damage.

Recommendation:

- Apply request rate limiting
 - Harden server configurations
 - Utilize CDN or WAF protections
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Insecure Direct Object Reference (IDOR)

Evidence:

Authorization checks were not consistently enforced when accessing object references. Under controlled testing, predictable identifiers allowed access beyond intended authorization scopes.

Risk:

Unauthorized data access, data manipulation, privacy violations, and regulatory exposure.

Recommendation:

- Enforce authorization validation per request
 - Use non-predictable object identifiers
 - Verify requester ownership before data access
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3. Executive Summary

A security assessment was conducted on two anonymized web applications under authorized testing conditions. Multiple security weaknesses were identified, including access control issues, input validation flaws, and availability-related risks.

The findings demonstrate common security gaps that may lead to unauthorized access, data exposure, and service disruption if not remediated. Practical remediation guidance was provided to reduce risk, improve security posture, and align with industry best practices such as OWASP recommendations.

This assessment focused on responsible disclosure, risk-based analysis, and enterprise security considerations rather than exploitation.