ZAP Scanning Report ZAP Version: 2.15.0 ZAP is supported by the **Crash Override Open Source Fellowship Contents** 1. About this report 1. Report parameters 1. Alert counts by risk and confidence 2. Alert counts by site and risk 3. Alert counts by alert type 1. Risk=High, Confidence=High (1) 2. Risk=High, Confidence=Medium (4) 3. Risk=Medium, Confidence=High (1) 4. Risk=Medium, Confidence=Medium (7) 5. Risk=Medium, Confidence=Low (1) 6. Risk=Low, Confidence=High (2) 7. Risk=Low, Confidence=Medium (9) 8. Risk=Low, Confidence=Low (1) 9. Risk=Informational, Confidence=High (2) 10. Risk=Informational, Confidence=Medium (5) 11. Risk=Informational, Confidence=Low (4) 4. Appendix 1. Alert types **About this report Report parameters** Contexts No contexts were selected, so all contexts were included by default. Sites The following sites were included: • http://10.1.2.6 (If no sites were selected, all sites were included by default.) An included site must also be within one of the included contexts for its data to be included in the report. Risk levels Included: High, Medium, Low, Informational Excluded: None **Confidence levels** Included: User Confirmed, High, Medium, Low Excluded: User Confirmed, High, Medium, Low, False Positive **Summaries** Alert counts by risk and confidence This table shows the number of alerts for each level of risk and confidence included in the report. (The percentages in brackets represent the count as a percentage of the total number of alerts included in the report, rounded to one decimal place.) Confidence **User Confirmed** High Medium Low Total 0 High (0.0%)(0.0%)(2.7%)(10.8%)(13.5%)Medium (0.0%)(2.7%)(18.9%)(2.7%)(24.3%)12 Risk Low (0.0%)(5.4%)(24.3%)(2.7%)(32.4%)11 **Informational** (0.0%)(5.4%)(13.5%)(10.8%)(29.7%)25 37 **Total** (0.0%)(16.2%)(67.6%) (16.2%)(100%)Alert counts by site and risk This table shows, for each site for which one or more alerts were raised, the number of alerts raised at each risk level. Alerts with a confidence level of "False Positive" have been excluded from these counts. (The numbers in brackets are the number of alerts raised for the site at or above that risk level.) Risk High Medium Low **Informational** (= High) (>= Medium) (>= Low) (>= Informational) 9 12 11 5 http://10.1.2.6 Site (5) (14)(26)(37)Alert counts by alert type This table shows the number of alerts of each alert type, together with the alert type's risk level. (The percentages in brackets represent each count as a percentage, rounded to one decimal place, of the total number of alerts included in this report.) Alert type Risk Count 13 **Cross Site Scripting (DOM Based)** High (35.1%)3 **Cross Site Scripting (Persistent)** High (8.1%)**Cross Site Scripting (Reflected)** High (10.8%)**Remote OS Command Injection** High (2.7%)**SQL Injection - MySQL** High (2.7%)342 **Absence of Anti-CSRF Tokens** Medium (924.3%)**Application Error Disclosure** Medium (2.7%)Medium **Buffer Overflow** (5.4%) 451 **Content Security Policy (CSP) Header Not Set** Medium (1,218.9%)14 **Directory Browsing** Medium (37.8%)**HTTP to HTTPS Insecure Transition in Form Post** Medium (2.7%)409 **Missing Anti-clickjacking Header** Medium (1,105.4%)11 **Vulnerable JS Library** Medium (29.7%)**Weak Authentication Method** Medium (2.7%)**Application Error Disclosure** Low (18.9%)**Big Redirect Detected (Potential Sensitive Information Leak)** Low (8.1%)71 **Cookie No HttpOnly Flag** Low (191.9%)**Cookie without SameSite Attribute** Low (232.4%)52 **Cross-Domain JavaScript Source File Inclusion** Low (140.5%)**Information Disclosure - Debug Error Messages** Low (8.1%)**Private IP Disclosure** Low (13.5%)351 <u>Server Leaks Information via "X-Powered-By" HTTP Response Header Field(s)</u> Low (948.6%) 823 Server Leaks Version Information via "Server" HTTP Response Header Field Low (2,224.3%)15 **Timestamp Disclosure - Unix** Low (40.5%)**X-AspNet-Version Response Header** Low (127.0%)652 **X-Content-Type-Options Header Missing** Low (1,762.2%)Informational 10 **Authentication Request Identified** (27.0%) Informational ² (5.4%) **Cookie Poisoning** Informational $\frac{2}{(5.4\%)}$ **GET for POST** Informational $\frac{2}{(5.4\%)}$ **Information Disclosure - Sensitive Information in URL** Informational 285 (770.3%) **Information Disclosure - Suspicious Comments** Informational ²⁰ (54.1%) **Loosely Scoped Cookie** Informational 158 (427.0%) **Modern Web Application** Informational 824 (2,227.0%) **Session Management Response Identified** Informational 288 (778.4%) **User Agent Fuzzer** Informational 122 (329.7%) <u>User Controllable HTML Element Attribute (Potential XSS)</u> Informational $\frac{2}{(5.4\%)}$ **User Controllable JavaScript Event (XSS)** Total **Alerts** 1. Risk=High, Confidence=High (1) 1. http://10.1.2.6 (1) 1. Cross Site Scripting (DOM Based) (1) 1. ► POST http://10.1.2.6/WackoPicko/piccheck.php#jaVasCript:/*-/*`/*\`/*'/*"/**/(/* */oNcliCk=alert(5397))//%0D%0A%0d%0a//</stYle/</titLe/</teXtarEa/</scRipt/--!>\x3csVg/<sVg/oNloAd=alert(5397)//>\x3e 2. Risk=High, Confidence=Medium (4) 1. http://10.1.2.6 (4) 1. Cross Site Scripting (Persistent) (1) 1. ► GET http://10.1.2.6/WackoPicko/guestbook.php 2. Cross Site Scripting (Reflected) (1) 1. ► POST http://10.1.2.6/WackoPicko/guestbook.php 3. Remote OS Command Injection (1) 1. ► POST http://10.1.2.6/WackoPicko/passcheck.php 4. SQL Injection - MySQL (1) 1. ► POST http://10.1.2.6/WackoPicko/users/login.php 3. Risk=Medium, Confidence=High (1) 1. http://10.1.2.6 (1) 1. Content Security Policy (CSP) Header Not Set (1) 1. ► GET http://10.1.2.6/WackoPicko/ 4. Risk=Medium, Confidence=Medium (7) 1. http://10.1.2.6 (7) 1. <u>Application Error Disclosure</u> (1) 1. ► GET http://10.1.2.6/wivet/pages/ 2. Buffer Overflow (1) 1. ► POST http://10.1.2.6/WackoPicko/admin/index.php?page=login 3. <u>Directory Browsing</u> (1) 1. ► GET http://10.1.2.6/wivet/pages/ 4. HTTP to HTTPS Insecure Transition in Form Post (1) 1. ► GET http://10.1.2.6/gtd-php/donate.php 5. Missing Anti-clickjacking Header (1) 1. ► GET http://10.1.2.6/WackoPicko/ 6. Vulnerable JS Library (1) 1. ► GET http://10.1.2.6/jquery.min.js 7. Weak Authentication Method (1) 1. ► GET http://10.1.2.6/WebGoat/attack 5. Risk=Medium, Confidence=Low (1) 1. http://10.1.2.6 (1) 1. Absence of Anti-CSRF Tokens (1) 1. ► GET http://10.1.2.6/WackoPicko/ 6. Risk=Low, Confidence=High (2) 1. http://10.1.2.6 (2) 1. Server Leaks Version Information via "Server" HTTP Response Header Field (1) 1. ► GET http://10.1.2.6/WackoPicko/ 2. X-AspNet-Version Response Header (1) 1. ► GET http://10.1.2.6/webgoat.net/ 7. Risk=Low, Confidence=Medium (9) 1. http://10.1.2.6 (9) 1. <u>Application Error Disclosure</u> (1) 1. ► GET http://10.1.2.6/redmine 2. <u>Big Redirect Detected (Potential Sensitive Information Leak)</u> (1) 1. ► GET http://10.1.2.6/webcal/ 3. Cookie No HttpOnly Flag (1) 1. ► GET http://10.1.2.6/WackoPicko/ 4. Cookie without SameSite Attribute (1) 1. ► GET http://10.1.2.6/WackoPicko/ 5. <u>Cross-Domain JavaScript Source File Inclusion</u> (1) 1. ► GET http://10.1.2.6/owaspbricks/ 6. Information Disclosure - Debug Error Messages (1) 1. ► GET http://10.1.2.6/mutillidae/ 7. Private IP Disclosure (1) 1. ► GET http://10.1.2.6/WackoPicko/guestbook.php 8. <u>Server Leaks Information via "X-Powered-By" HTTP Response Header Field(s)</u> (1) 1. ► GET http://10.1.2.6/WackoPicko/ 9. X-Content-Type-Options Header Missing (1) 1. ► GET http://10.1.2.6/WackoPicko/ 8. Risk=Low, Confidence=Low (1) 1. http://10.1.2.6 (1) 1. <u>Timestamp Disclosure - Unix</u> (1) 1. ► GET http://10.1.2.6/WackoPicko/calendar.php 9. Risk=Informational, Confidence=High (2) 1. http://10.1.2.6 (2) 1. Authentication Request Identified (1) 1. ► POST http://10.1.2.6/WackoPicko/users/login.php 2. **GET for POST** (1) 1. ► GET http://10.1.2.6/WackoPicko/pic'%20+%20'check'%20+%20'.php 10. Risk=Informational, Confidence=Medium (5) 1. http://10.1.2.6 (5) 1. <u>Information Disclosure - Sensitive Information in URL</u> (1) 1. ► GET http://10.1.2.6/WackoPicko/users/sample.php?userid=1 2. <u>Information Disclosure - Suspicious Comments</u> (1) 1. ► GET http://10.1.2.6/ 3. Modern Web Application (1) 1. ► GET http://10.1.2.6/hackxor_intro.php 4. Session Management Response Identified (1) 1. ► GET http://10.1.2.6/WackoPicko/ 5. <u>User Agent Fuzzer</u> (1) 1. ► POST http://10.1.2.6/WackoPicko/cart/action.php?action=delete 11. Risk=Informational, Confidence=Low (4) 1. http://10.1.2.6 (4) 1. ► POST http://10.1.2.6/ghost/submit.php 2. Loosely Scoped Cookie (1) 1. ► GET http://10.1.2.6/phpBB2/ 3. <u>User Controllable HTML Element Attribute (Potential XSS)</u> (1) 1. ► GET http://10.1.2.6/WackoPicko/pictures/search.php?query=ZAP 4. <u>User Controllable JavaScript Event (XSS)</u> (1) 1. ► GET http://10.1.2.6/ESAPI-Java-SwingSet-Interactive/main?function=XSS&lab **Appendix** Alert types This section contains additional information on the types of alerts in the report. 1. Cross Site Scripting (DOM Based) **Source** raised by an active scanner (<u>Cross Site Scripting (DOM Based</u>)) **CWE ID** <u>79</u> WASC ID 8 1. https://owasp.org/www-community/attacks/xss/ Reference 2. https://cwe.mitre.org/data/definitions/79.html 2. Cross Site Scripting (Persistent) **Source** raised by an active scanner (<u>Cross Site Scripting (Persistent)</u>) **CWE ID** <u>79</u> WASC ID 8 https://owasp.org/www-community/attacks/xss/
https://cwe.mitre.org/data/definitions/79.html Reference 3. Cross Site Scripting (Reflected) **Source** raised by an active scanner (<u>Cross Site Scripting (Reflected</u>)) **CWE ID** <u>79</u> WASC ID 8 1. https://owasp.org/www-community/attacks/xss/ Reference 2. https://cwe.mitre.org/data/definitions/79.html 4. Remote OS Command Injection **Source** raised by an active scanner (<u>Remote OS Command Injection</u>) **CWE ID** <u>78</u> **WASC ID** 31 1. https://cwe.mitre.org/data/definitions/78.html Reference 2. https://owasp.org/www-community/attacks/Command Injection 5. SQL Injection - MySQL **Source** raised by an active scanner (<u>SQL Injection</u>) **CWE ID** <u>89</u> **WASC ID** 19 **Reference** 1. https://cheatsheetseries.owasp.org/cheatsheets/SQL Injection Prevention Cheat Sheet.html 6. Absence of Anti-CSRF Tokens **Source** raised by a passive scanner (<u>Absence of Anti-CSRF Tokens</u>) **CWE ID** <u>352</u> WASC ID 9 1. https://cheatsheetseries.owasp.org/cheatsheets/Cross-Site Request Forgery Prevention Cheat Sheet.html Reference 2. https://cwe.mitre.org/data/definitions/352.html 7. Application Error Disclosure **Source** raised by a passive scanner (<u>Application Error Disclosure</u>) **CWE ID** <u>200</u> WASC ID 13 8. Buffer Overflow **Source** raised by an active scanner (<u>Buffer Overflow</u>) **CWE ID** <u>120</u> WASC ID 7 Reference 1. https://owasp.org/www-community/attacks/Buffer overflow attack 9. Content Security Policy (CSP) Header Not Set **Source** raised by a passive scanner (<u>Content Security Policy (CSP) Header Not Set</u>) **CWE ID** <u>693</u> WASC ID 15 1. https://developer.mozilla.org/en-US/docs/Web/Security/CSP/Introducing Content Security Policy 2. https://cheatsheetseries.owasp.org/cheatsheets/Content Security Policy Cheat Sheet.html 3. https://www.w3.org/TR/CSP/ 4. https://w3c.github.io/webappsec-csp/ Reference 5. https://web.dev/articles/csp 6. https://caniuse.com/#feat=contentsecuritypolicy 7. https://content-security-policy.com/ 10. Directory Browsing **Source** raised by a passive scanner (<u>Directory Browsing</u>) **CWE ID** <u>548</u> WASC ID 16 **Reference** 1. https://cwe.mitre.org/data/definitions/548.html 11. HTTP to HTTPS Insecure Transition in Form Post **Source** raised by a passive scanner (<u>HTTP to HTTPS Insecure Transition in Form Post</u>) **CWE ID** <u>319</u> WASC ID 15 12. Missing Anti-clickjacking Header **Source** raised by a passive scanner (<u>Anti-clickjacking Header</u>) **CWE ID** <u>1021</u> WASC ID 15 **Reference** 1. https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-Frame-Options 13. Vulnerable JS Library **Source** raised by a passive scanner (<u>Vulnerable JS Library (Powered by Retire.js</u>)) **CWE ID** <u>829</u> 1. https://nvd.nist.gov/vuln/detail/CVE-2012-6708 2. http://research.insecurelabs.org/jquery/test/ 3. https://bugs.jquery.com/ticket/9521 4. http://bugs.jquery.com/ticket/11290 5. https://blog.jquery.com/2019/04/10/jquery-3-4-0-released/ 6. https://nvd.nist.gov/vuln/detail/CVE-2019-11358 Reference 7. https://github.com/advisories/GHSA-q4m3-2j7h-f7xw 8. https://github.com/jquery/jquery/commit/753d591aea698e57d6db58c9f722cd0808619b1b 9. https://github.com/jquery/jquery.com/issues/162 10. https://blog.jquery.com/2020/04/10/jquery-3-5-0-released/ 11. https://nvd.nist.gov/vuln/detail/CVE-2020-7656 12. https://nvd.nist.gov/vuln/detail/CVE-2011-4969 14. Weak Authentication Method **Source** raised by a passive scanner (<u>Weak Authentication Method</u>) **CWE ID** <u>326</u> WASC ID 4 **Reference** 1. https://cheatsheetseries.owasp.org/cheatsheets/Authentication Cheat Sheet.html 15. Application Error Disclosure **Source** raised by a passive scanner (<u>Application Error Disclosure</u>) **CWE ID** <u>200</u> WASC ID 13 16. Big Redirect Detected (Potential Sensitive Information Leak) **Source** raised by a passive scanner (<u>Big Redirect Detected (Potential Sensitive Information Leak)</u>) **CWE ID** 201 WASC ID 13 17. Cookie No HttpOnly Flag **Source** raised by a passive scanner (Cookie No HttpOnly Flag) **CWE ID** <u>1004</u> WASC ID 13 **Reference** 1. https://owasp.org/www-community/HttpOnly 18. Cookie without SameSite Attribute **Source** raised by a passive scanner (<u>Cookie without SameSite Attribute</u>) **CWE ID** <u>1275</u> WASC ID 13 **Reference** 1. https://tools.ietf.org/html/draft-ietf-httpbis-cookie-same-site 19. Cross-Domain JavaScript Source File Inclusion **Source** raised by a passive scanner (<u>Cross-Domain JavaScript Source File Inclusion</u>) **CWE ID 829** WASC ID 15 20. Information Disclosure - Debug Error Messages **Source** raised by a passive scanner (<u>Information Disclosure - Debug Error Messages</u>) **CWE ID 200** WASC ID 13 21. Private IP Disclosure **Source** raised by a passive scanner (<u>Private IP Disclosure</u>) **CWE ID** <u>200</u> WASC ID 13 **Reference** 1. https://tools.ietf.org/html/rfc1918 22. Server Leaks Information via "X-Powered-By" HTTP Response Header Field(s) **Source** raised by a passive scanner (<u>Server Leaks Information via "X-Powered-By" HTTP Response Header Field(s)</u>) **CWE ID** 200 WASC ID 13 1. https://owasp.org/www-project-web-security-testing-guide/v42/4-Web Application Security Testing/01-Information Gathering/08-Fingerprint Web Application Framework Reference 2. https://www.troyhunt.com/2012/02/shhh-dont-let-your-response-headers.html 23. Server Leaks Version Information via "Server" HTTP Response Header Field **Source** raised by a passive scanner (<u>HTTP Server Response Header</u>) **CWE ID** 200 WASC ID 13 1. https://httpd.apache.org/docs/current/mod/core.html#servertokens Reference 2. https://learn.microsoft.com/en-us/previous-versions/msp-n-p/ff648552(v=pandp.10) 3. https://www.troyhunt.com/shhh-dont-let-your-response-headers/ 24. Timestamp Disclosure - Unix **Source** raised by a passive scanner (<u>Timestamp Disclosure</u>) **CWE ID** <u>200</u> WASC ID 13 **Reference** 1. https://cwe.mitre.org/data/definitions/200.html 25. X-AspNet-Version Response Header **Source** raised by a passive scanner (<u>X-AspNet-Version Response Header</u>) **CWE ID** 933 WASC ID 14 1. https://www.troyhunt.com/shhh-dont-let-your-response-headers/ Reference 2. https://blogs.msdn.microsoft.com/varunm/2013/04/23/remove-unwanted-http-response-headers/ 26. X-Content-Type-Options Header Missing **Source** raised by a passive scanner (X-Content-Type-Options Header Missing) **CWE ID** <u>693</u> WASC ID 15 $1. \ \underline{https://learn.microsoft.com/en-us/previous-versions/windows/internet-explorer/ie-developer/compatibility/gg622941(v=vs.85)} \\$ Reference 2. https://owasp.org/www-community/Security Headers 27. Authentication Request Identified

Source raised by a passive scanner (<u>Authentication Request Identified</u>)

1. https://en.wikipedia.org/wiki/HTTP cookie

2. https://cwe.mitre.org/data/definitions/565.html

Source raised by a passive scanner (<u>Cookie Poisoning</u>)

Source raised by an active scanner (<u>GET for POST</u>)

30. Information Disclosure - Sensitive Information in URL

Source raised by a passive scanner (<u>Loosely Scoped Cookie</u>)

Source raised by a passive scanner (Modern Web Application)

Source raised by an active scanner (<u>User Agent Fuzzer</u>)

36. User Controllable HTML Element Attribute (Potential XSS)

1. https://tools.ietf.org/html/rfc6265#section-4.1

Source raised by a passive scanner (<u>Session Management Response Identified</u>)

Source raised by a passive scanner (<u>User Controllable JavaScript Event (XSS)</u>)

Reference 1. https://www.zaproxy.org/docs/desktop/addons/authentication-helper/session-mgmt-id

Source raised by a passive scanner (<u>User Controllable HTML Element Attribute (Potential XSS)</u>)

Reference 1. https://cheatsheetseries.owasp.org/cheatsheets/Input Validation Cheat Sheet.html

1. https://cheatsheetseries.owasp.org/cheatsheets/Input Validation Cheat Sheet.html

3. https://code.google.com/p/browsersec/wiki/Part2#Same-origin_policy_for_cookies

2. https://owasp.org/www-project-web-security-testing-guide/v41/4-Web Application Security Testing/06-Session Management Testing/02-Testing for Cookies Attributes.html

31. Information Disclosure - Suspicious Comments

28. Cookie Poisoning

CWE ID <u>565</u> WASC ID 20

Reference

29. **GET for POST**

CWE ID <u>16</u> WASC ID 20

CWE ID <u>200</u> WASC ID 13

CWE ID <u>200</u> WASC ID 13

CWE ID <u>565</u> WASC ID 15

32. Loosely Scoped Cookie

33. Modern Web Application

35. User Agent Fuzzer

CWE ID <u>20</u> WASC ID 20

CWE ID <u>20</u> WASC ID 20

34. Session Management Response Identified

Reference 1. https://owasp.org/wstg

37. User Controllable JavaScript Event (XSS)

Reference 1. https://www.zaproxy.org/docs/desktop/addons/authentication-helper/auth-req-id/

Source raised by a passive scanner (<u>Information Disclosure - Sensitive Information</u> in URL)

Source raised by a passive scanner (<u>Information Disclosure - Suspicious Comments</u>)