

Cyber Security by Threat Prism

BATCH 7

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Cyber Security/Ethical Hacking - Scanning using OWASP ZAP.

Threat Prism Project – 1

The vulnerable website we used to scan using OWASP ZAP tool is <http://testphp.vulnweb.com/> where we have done automatic scan and the results are as followed:

Untitled Session - OWASP ZAP 2.12.0

File Edit View Analyse Report Tools Import Export Online Help

Standard Mode

Sites +
Contexts
Default Context
Sites

Quick Start Request Response Requester +

Automated Scan

This screen allows you to launch an automated scan against an application - just enter its URL below and press 'Attack'.

Please be aware that you should only attack applications that you have been specifically given permission to test.

URL to attack: http://testphp.vulnweb.com/ Select...

Use traditional spider: ☒

Use ajax spider: ☐ with Firefox Headless ▾

⚡ Attack ■ Stop

Progress: Attack complete - see the Alerts tab for details of any issues found

History Search Alerts Output Spider Active Scan +

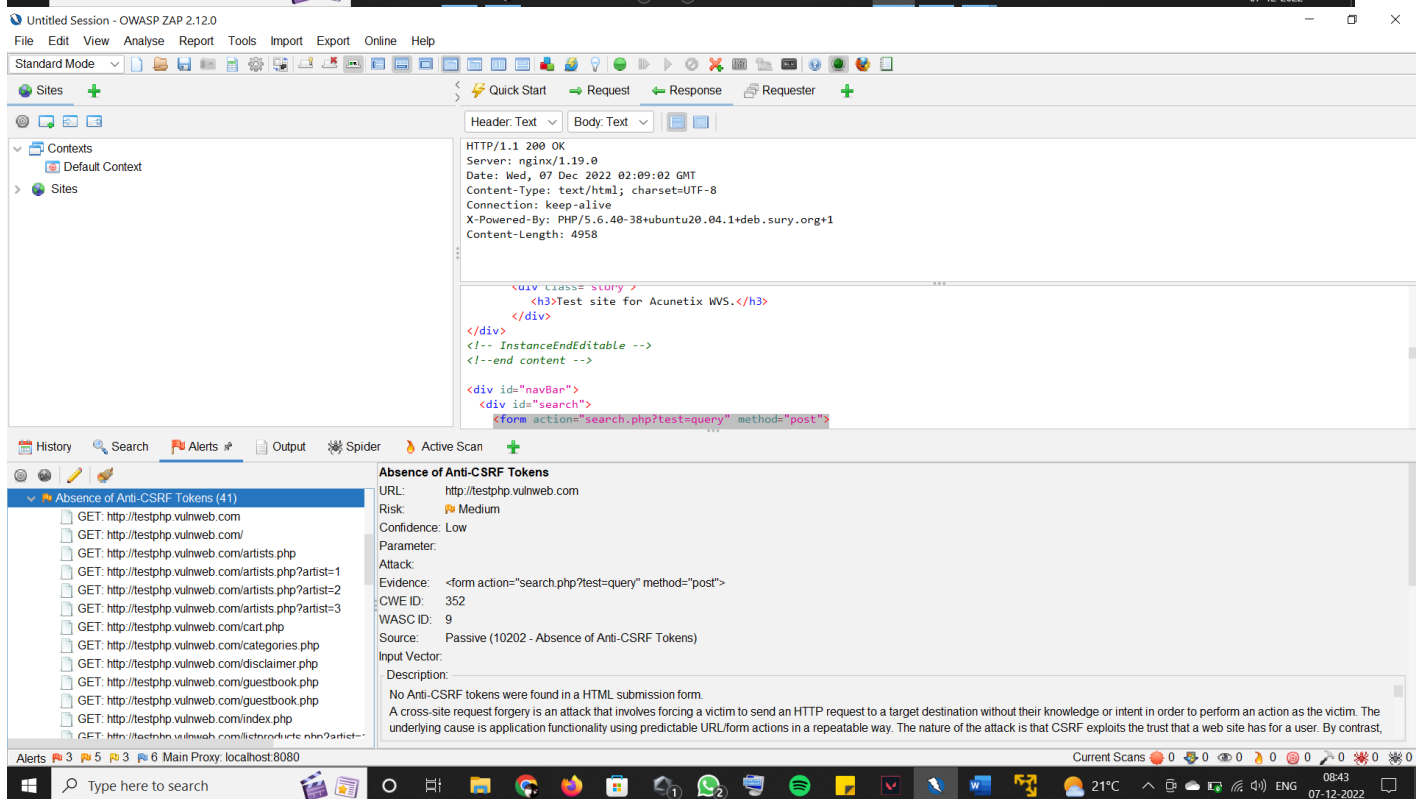
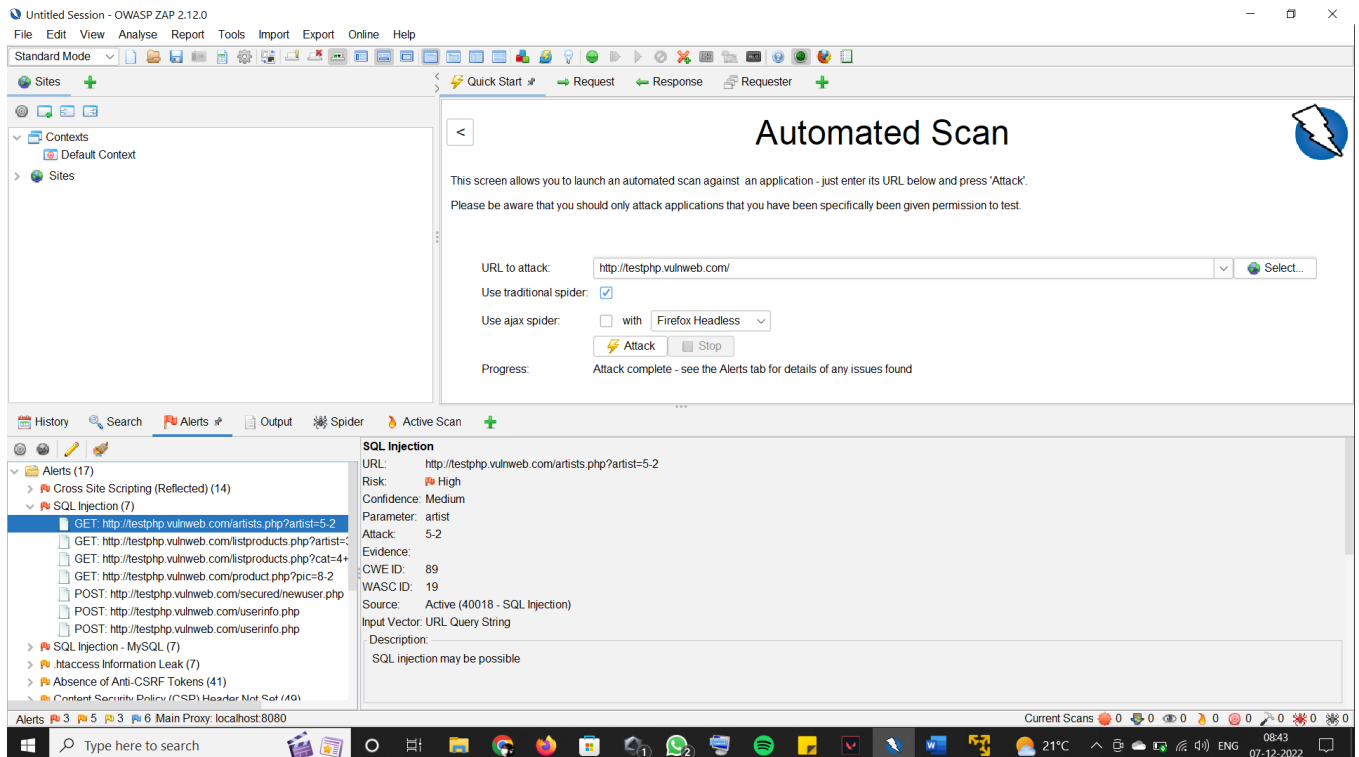
New Scan Progress: 0: http://testphp.vulnweb.com/ 100% Current Scans: 0 Num Requests: 6702 New Alerts: 235 Export

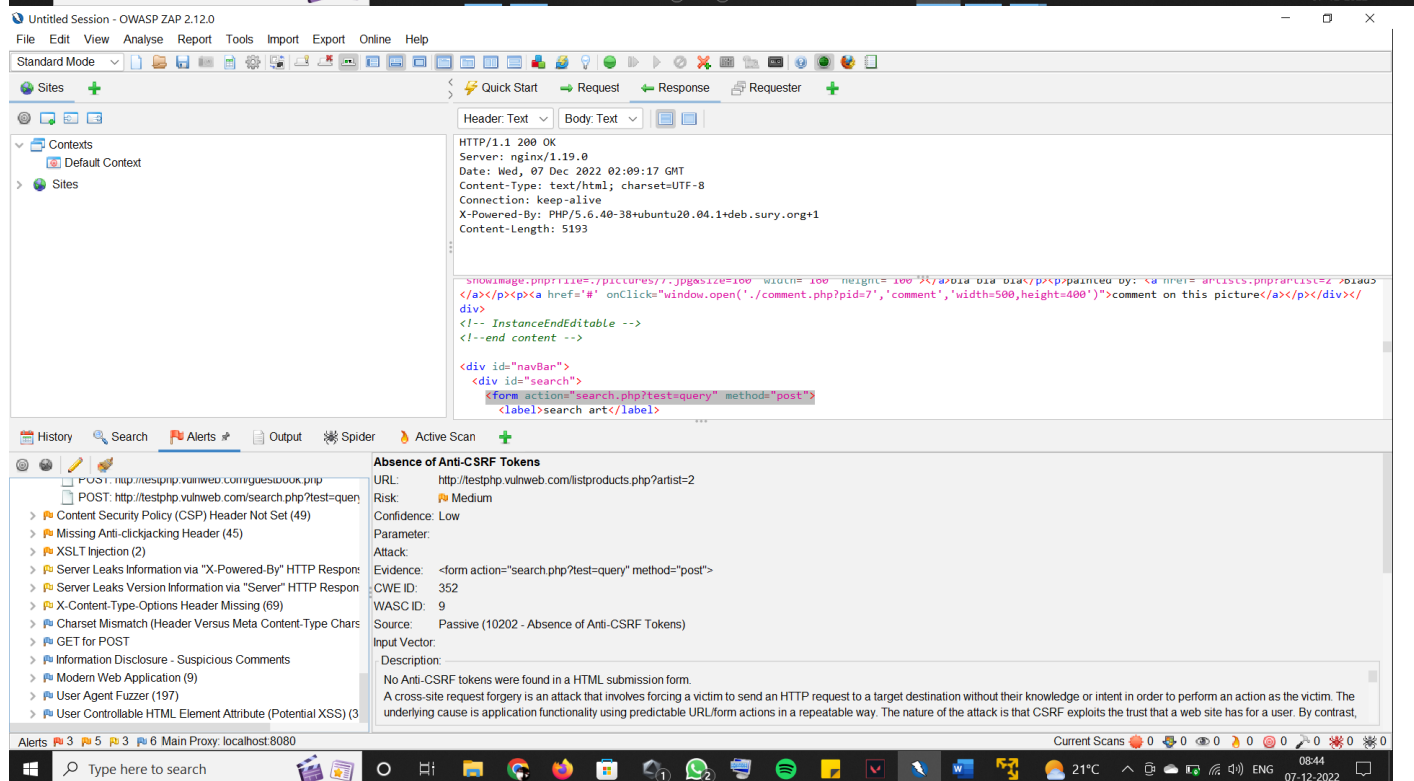
Sent Messages Filtered Messages

ID	Req. Timestamp	Resp. Timestamp	Method	URL	Code	Reason	RTT	Size Resp. Header	Size Resp. Body
7,126	07/12/22, 8:11:34 am	07/12/22, 8:11:34 am	GET	http://testphp.vulnweb.com/_Mod_Rewrite_Shop/BuyProd.	404	Not Found	261 ms	155 bytes	153 bytes
7,127	07/12/22, 8:11:34 am	07/12/22, 8:11:35 am	GET	http://testphp.vulnweb.com/_Mod_Rewrite_Shop/BuyProd.	404	Not Found	253 ms	155 bytes	153 bytes
7,128	07/12/22, 8:11:35 am	07/12/22, 8:11:35 am	GET	http://testphp.vulnweb.com/_Mod_Rewrite_Shop/Details	404	Not Found	258 ms	155 bytes	153 bytes
7,129	07/12/22, 8:11:35 am	07/12/22, 8:11:35 am	GET	http://testphp.vulnweb.com/_Mod_Rewrite_Shop/Details/c.	404	Not Found	258 ms	155 bytes	153 bytes
7,130	07/12/22, 8:11:35 am	07/12/22, 8:11:35 am	GET	http://testphp.vulnweb.com/_Mod_Rewrite_Shop/Details/c.	404	Not Found	259 ms	155 bytes	153 bytes
7,131	07/12/22, 8:11:35 am	07/12/22, 8:11:36 am	GET	http://testphp.vulnweb.com/_Mod_Rewrite_Shop/Details/h.	404	Not Found	253 ms	155 bytes	153 bytes
7,132	07/12/22, 8:11:36 am	07/12/22, 8:11:36 am	GET	http://testphp.vulnweb.com/_Mod_Rewrite_Shop/Details/h.	404	Not Found	260 ms	155 bytes	153 bytes
7,133	07/12/22, 8:11:36 am	07/12/22, 8:11:36 am	GET	http://testphp.vulnweb.com/_Mod_Rewrite_Shop/Details/i...	404	Not Found	255 ms	155 bytes	153 bytes
7,134	07/12/22, 8:11:36 am	07/12/22, 8:11:36 am	GET	http://testphp.vulnweb.com/_Mod_Rewrite_Shop/Details/i...	404	Not Found	261 ms	155 bytes	153 bytes
7,135	07/12/22, 8:11:36 am	07/12/22, 8:11:37 am	GET	http://testphp.vulnweb.com/_Mod_Rewrite_Shop/images	301	Moved Permanently	252 ms	226 bytes	169 bytes
7,136	07/12/22, 8:11:38 am	07/12/22, 8:11:38 am	GET	http://testphp.vulnweb.com/_secured	301	Moved Permanently	250 ms	210 bytes	169 bytes

Alerts Main Proxy: localhost:8080

Type here to search







ZAP Scanning Report

Generated with The ZAP logoZAP on Mon 21 Nov 2022, at 11:03:07

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About this report

Report parameters

Contexts

No contexts were selected, so all contexts were included by default.

Sites

The following sites were included:

- <http://testphp.vulnweb.com>

(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.)

		User Confirmed	Confidence			Total
			High	Medium	Low	
Risk	High	0 (0.0%)	0 (0.0%)	3 (17.6%)	0 (0.0%)	3 (17.6%)
	Medium	0 (0.0%)	1 (5.9%)	3 (17.6%)	1 (5.9%)	5 (29.4%)
	Low	0 (0.0%)	1 (5.9%)	2 (11.8%)	0 (0.0%)	3 (17.6%)
	Informational	0 (0.0%)	1 (5.9%)	2 (11.8%)	3 (17.6%)	6 (35.3%)
	Total	0 (0.0%)	3 (17.6%)	10 (58.8%)	4 (23.5%)	17 (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.)

Site		Risk			
		High (= High)	Medium (>= Medium)	Low (>= Low)	Informational (>= Informational)
http://testphp.vulnweb.com		3 (3)	5 (8)	3 (11)	6 (17)

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
Cross Site Scripting (Reflected)	High	14 (82.4%)
SQL Injection	High	8 (47.1%)
SQL Injection - MySQL	High	4 (23.5%)
.htaccess Information Leak	Medium	7 (41.2%)
Absence of Anti-CSRF Tokens	Medium	41 (241.2%)
Content Security Policy (CSP) Header Not Set	Medium	49 (288.2%)
Missing Anti-clickjacking Header	Medium	45 (264.7%)
XSLT Injection	Medium	2 (11.8%)
Server Leaks Information via "X-Powered-By" HTTP Response Header Field(s)	Low	63 (370.6%)
Server Leaks Version Information via "Server" HTTP Response Header Field	Low	75 (441.2%)
X-Content-Type-Options Header Missing	Low	69 (405.9%)
Charset Mismatch (Header Versus Meta Content-Type Charset)	Informational	32 (188.2%)
GET for POST	Informational	1 (5.9%)
Information Disclosure - Suspicious Comments	Informational	1 (5.9%)
Modern Web Application	Informational	9 (52.9%)
User Agent Fuzzer	Informational	197 (1,158.8%)
User Controllable HTML Element Attribute (Potential XSS)	Informational	3 (17.6%)
Total		17

Alerts

1. Risk=High, Confidence=Medium (3)

1. <http://testphp.vulnweb.com> (3)
 1. [Cross Site Scripting \(Reflected\)](#) (1)
 1. ► POST <http://testphp.vulnweb.com/guestbook.php>
 2. [SQL Injection](#) (1)
 1. ► POST <http://testphp.vulnweb.com/secured/newuser.php>
 3. [SQL Injection - MySQL](#) (1)
 1. ► POST <http://testphp.vulnweb.com/userinfo.php>

2. Risk=Medium, Confidence=High (1)

1. <http://testphp.vulnweb.com> (1)
 1. [Content Security Policy \(CSP\) Header Not Set](#) (1)
 1. ► GET <http://testphp.vulnweb.com/robots.txt>

3. Risk=Medium, Confidence=Medium (3)

1. <http://testphp.vulnweb.com> (3)
 1. [.htaccess Information Leak](#) (1)
 1. ► GET http://testphp.vulnweb.com/Mod_Rewrite_Shop/.htaccess
 2. [Missing Anti-clickjacking Header](#) (1)
 1. ► GET <http://testphp.vulnweb.com/>
 3. [XSLT Injection](#) (1)
 1. ► GET <http://testphp.vulnweb.com/showimage.php?file=%3Cxs%3Avalue-of+select%3D%22document%28%27http%3A%2F%2Ftestphp.vulnweb.com%3A22%27%29%22%2F%3E>

4. Risk=Medium, Confidence=Low (1)

1. <http://testphp.vulnweb.com> (1)
 1. [Absence of Anti-CSRF Tokens](#) (1)
 1. ► GET <http://testphp.vulnweb.com/>

5. Risk=Low, Confidence=High (1)

1. <http://testphp.vulnweb.com> (1)
 1. [Server Leaks Version Information via "Server" HTTP Response Header Field](#) (1)
 1. ► GET <http://testphp.vulnweb.com/robots.txt>

6. Risk=Low, Confidence=Medium (2)

1. <http://testphp.vulnweb.com> (2)
 1. [Server Leaks Information via "X-Powered-By" HTTP Response Header Field\(s\)](#) (1)
 1. ► GET <http://testphp.vulnweb.com/>
 2. [X-Content-Type-Options Header Missing](#) (1)
 1. ► GET <http://testphp.vulnweb.com/>

7. Risk=Informational, Confidence=High (1)

1. <http://testphp.vulnweb.com> (1)
 1. [GET for POST](#) (1)
 1. ► GET <http://testphp.vulnweb.com/cart.php>

8. Risk=Informational, Confidence=Medium (2)

1. <http://testphp.vulnweb.com> (2)
 1. [Modern Web Application](#) (1)
 1. ► GET <http://testphp.vulnweb.com/artists.php>
 2. [User Agent Fuzzer](#) (1)
 1. ► POST <http://testphp.vulnweb.com/guestbook.php>

9. Risk=Informational, Confidence=Low (3)

1. <http://testphp.vulnweb.com> (3)
 1. [Charset Mismatch \(Header Versus Meta Content-Type Charset\)](#) (1)
 1. ► GET <http://testphp.vulnweb.com/>
 2. [Information Disclosure - Suspicious Comments](#) (1)
 1. ► GET <http://testphp.vulnweb.com/AJAX/index.php>
 3. [User Controllable HTML Element Attribute \(Potential XSS\)](#) (1)
 1. ► POST <http://testphp.vulnweb.com/search.php?test=query>

Appendix

Alert types

This section contains additional information on the types of alerts in the report.

1. Cross Site Scripting (Reflected)

Source raised by an active scanner ([Cross Site Scripting \(Reflected\)](#))
CWE ID [79](#)
WASC ID [8](#)
Reference 1. <http://projects.webappsec.org/Cross-Site-Scripting>
2. <http://cwe.mitre.org/data/definitions/79.html>

2. SQL Injection

Source raised by an active scanner ([SQL Injection](#))
CWE ID [89](#)
WASC ID [19](#)
Reference 1. https://cheatsheetseries.owasp.org/cheatsheets/SQL_Injection_Prevention_Cheat_Sheet.html

3. SQL Injection - MySQL

Source raised by an active scanner ([SQL Injection - MySQL](#))
CWE ID [89](#)
WASC ID [19](#)
Reference 1. https://cheatsheetseries.owasp.org/cheatsheets/SQL_Injection_Prevention_Cheat_Sheet.html

4. .htaccess Information Leak

Source raised by an active scanner ([.htaccess Information Leak](#))
CWE ID [94](#)
WASC ID [14](#)
Reference 1. <http://www.htaccess-guide.com/>

5. Absence of Anti-CSRF Tokens

Source raised by a passive scanner ([Absence of Anti-CSRF Tokens](#))
CWE ID [352](#)
WASC ID [9](#)
Reference 1. <http://projects.webappsec.org/Cross-Site-Request-Forgery>
2. <http://cwe.mitre.org/data/definitions/352.html>

6. Content Security Policy (CSP) Header Not Set

Source raised by a passive scanner ([Content Security Policy \(CSP\) Header Not Set](#))
CWE ID [693](#)
WASC ID [15](#)
Reference 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. <http://www.w3.org/TR/CSP/>
4. <http://w3c.github.io/webappsec/specs/content-security-policy/ctsp-specification.dev.html>
5. <http://www.htmlevents.com/en/tutorials/security/content-security-policy/>
6. <http://caniuse.com/#feat=contentsecuritypolicy>
7. <http://content-security-policy.com/>

7. Missing Anti-clickjacking Header

Source raised by a passive scanner ([Anti-clickjacking Header](#))
CWE ID [1021](#)
WASC ID [15](#)
Reference 1. <https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-Frame-Options>

8. XSLT Injection

Source raised by an active scanner ([XSLT Injection](#))
CWE ID [91](#)
WASC ID [23](#)
Reference 1. <https://www.contextis.com/blog/xslt-server-side-injection-attacks>

9. Server Leaks Information via "X-Powered-By" HTTP Response Header Field(s)

Source raised by a passive scanner ([Server Leaks Information via "X-Powered-By" HTTP Response Header Field\(s\)](#))
CWE ID [200](#)
WASC ID [13](#)
Reference 1. <http://blogs.msdn.com/b/varunm/archive/2013/04/23/remove-unwanted-http-response-headers.aspx>
2. <http://www.troyhunt.com/2012/02/shhh-dont-let-your-response-headers.html>

10. Server Leaks Version Information via "Server" HTTP Response Header Field

Source raised by a passive scanner ([HTTP Server Response Header](#))
CWE ID [200](#)
WASC ID [13](#)
Reference 1. <http://httpd.apache.org/docs/current/mod/core.html#servetokens>
2. http://msdn.microsoft.com/en-us/library/ff648552.aspx#ht_urlscan_007
3. <http://blogs.msdn.com/b/varunm/archive/2013/04/23/remove-unwanted-http-response-headers.aspx>
4. <http://www.troyhunt.com/2012/02/shhh-dont-let-your-response-headers.html>

11. X-Content-Type-Options Header Missing

Source raised by a passive scanner ([X-Content-Type-Options Header Missing](#))
CWE ID [693](#)
WASC ID [15](#)
Reference 1. <http://msdn.microsoft.com/en-us/library/ie/gg622941%28vs.85%29.aspx>
2. https://owasp.org/www-community/Security_Headers

12. Charset Mismatch (Header Versus Meta Content-Type Charset)

Source raised by a passive scanner ([Charset Mismatch](#))
CWE ID [436](#)
WASC ID [15](#)
Reference 1. http://code.google.com/p/browsersec/wiki/Part2#Character_set_handling_and_detection

13. GET for POST

Source raised by an active scanner ([GET for POST](#))
CWE ID [16](#)
WASC ID [20](#)

14. Information Disclosure - Suspicious Comments

Source raised by a passive scanner ([Information Disclosure - Suspicious Comments](#))
CWE ID [200](#)
WASC ID [13](#)

15. Modern Web Application

Source raised by a passive scanner ([Modern Web Application](#))

16. User Agent Fuzzer

Source raised by an active scanner ([User Agent Fuzzer](#))
Reference 1. <https://owasp.org/wstg>

17. User Controllable HTML Element Attribute (Potential XSS)

Source raised by a passive scanner ([User Controllable HTML Element Attribute \(Potential XSS\)](#))
CWE ID [20](#)
WASC ID [20](#)
Reference 1. <http://websecuritytool.codeplex.com/wikipage?title=Checks+user-controlled-html-attribute>

