

# Pytest-Playwright Test Output Issue

## Playwright

### pytest

```
Starting pytests.... ===== test session starts
===== platform linux -- Python 3.10.12,
pytest-7.4.2, pluggy-1.3.0 rootdir: /home/runner/work/ASTICI/ASTICI plugins:
asyncio-0.21.1, anyio-4.0.0, tornasync-0.6.0.post2, base-url-2.0.0, playwright-0.4.2,
trio-0.8.0 asyncio: mode=strict collected 5 items
```

```
src/testAsyncWebGoatUseCases.py ... [ 60%] src/testWebGoatUseCases.py .. [100%]
```

```
===== 5 passed in 26.61s
```

```
===== Stop pytests....
```

# ZAP Full Scan Report

- Site: <http://20.235.99.34:8080> **New Alerts**
  - **Absence of Anti-CSRF Tokens** [10202] total: 1:
    - <http://20.235.99.34:8080/WebGoat/login>
  - **Anti-CSRF Tokens Check** [20012] total: 1:
    - <http://20.235.99.34:8080/WebGoat/login>
  - **Content Security Policy (CSP) Header Not Set** [10038] total: 1:
    - <http://20.235.99.34:8080/WebGoat/login>
  - **Cookie No HttpOnly Flag** [10010] total: 1:
    - <http://20.235.99.34:8080/WebGoat/start.mvc>
  - **Cookie Slack Detector** [90027] total: 2:
    - <http://20.235.99.34:8080/WebGoat/login>
    - <http://20.235.99.34:8080/WebGoat/start.mvc>
  - **Cookie without SameSite Attribute** [10054] total: 1:
    - <http://20.235.99.34:8080/WebGoat/start.mvc>
  - **Permissions Policy Header Not Set** [10063] total: 1:
    - <http://20.235.99.34:8080/WebGoat/login>
  - **Base64 Disclosure** [10094] total: 1:
    - <http://20.235.99.34:8080/WebGoat/start.mvc>
  - **Non-Storable Content** [10049] total: 1:
    - <http://20.235.99.34:8080/WebGoat/start.mvc>
  - **Sec-Fetch-Dest Header is Missing** [90005] total: 4:
    - <http://20.235.99.34:8080/>
    - <http://20.235.99.34:8080/sitemap.xml>
    - <http://20.235.99.34:8080/WebGoat/login>
    - <http://20.235.99.34:8080/WebGoat/start.mvc>
  - **Sec-Fetch-Mode Header is Missing** [90005] total: 4:
    - <http://20.235.99.34:8080/>
    - <http://20.235.99.34:8080/sitemap.xml>
    - <http://20.235.99.34:8080/WebGoat/login>
    - <http://20.235.99.34:8080/WebGoat/start.mvc>
  - **Sec-Fetch-Site Header is Missing** [90005] total: 4:
    - <http://20.235.99.34:8080/>
    - <http://20.235.99.34:8080/sitemap.xml>
    - <http://20.235.99.34:8080/WebGoat/login>
    - <http://20.235.99.34:8080/WebGoat/start.mvc>
  - **Sec-Fetch-User Header is Missing** [90005] total: 4:
    - <http://20.235.99.34:8080/>
    - <http://20.235.99.34:8080/sitemap.xml>
    - <http://20.235.99.34:8080/WebGoat/login>
    - <http://20.235.99.34:8080/WebGoat/start.mvc>
  - **Session Management Response Identified** [10112] total: 2:
    - <http://20.235.99.34:8080/WebGoat/start.mvc>
    - <http://20.235.99.34:8080/WebGoat/start.mvc>
  - **Storable and Cacheable Content** [10049] total: 4:
    - <http://20.235.99.34:8080/>
    - <http://20.235.99.34:8080/robots.txt>
    - <http://20.235.99.34:8080/sitemap.xml>
    - <http://20.235.99.34:8080/WebGoat/login>
  - **User Agent Fuzzer** [10104] total: 24:
    - <http://20.235.99.34:8080/WebGoat>
    - <http://20.235.99.34:8080/WebGoat>
    - <http://20.235.99.34:8080/WebGoat>
    - <http://20.235.99.34:8080/WebGoat>
    - <http://20.235.99.34:8080/WebGoat>
    - ..

View the [following link](#) to download the report. RunnerID:6369531289

# Metasploit-ParrotOS Test output

## parrotOS metasploit

Interactive Application Security Testing : Making sure that parrot OS docker image has all the latest updates... Get:1 https://deb.parrot.sh/parrot parrot InRelease [14.6 kB] Get:2 https://deb.parrot.sh/direct/parrot parrot-security InRelease [14.4 kB] Get:3 https://deb.parrot.sh/parrot parrot-backports InRelease [14.6 kB] Get:4 https://deb.parrot.sh/parrot parrot/main amd64 Packages [17.7 MB] Get:5 https://deb.parrot.sh/parrot parrot/contrib amd64 Packages [115 kB] Get:6 https://deb.parrot.sh/parrot parrot/non-free amd64 Packages [215 kB] Get:7 https://deb.parrot.sh/direct/parrot parrot-security/main amd64 Packages [526 kB] Get:8 https://deb.parrot.sh/direct/parrot parrot-security/non-free amd64 Packages [884 B] Get:9 https://deb.parrot.sh/parrot parrot-backports/main amd64 Packages [1147 kB] Get:10 https://deb.parrot.sh/parrot parrot-backports/contrib amd64 Packages [22.6 kB] Get:11 https://deb.parrot.sh/parrot parrot-backports/non-free amd64 Packages [50.9 kB] Fetched 19.9 MB in 3s (7637 kB/s) Reading package lists... Building dependency tree... Reading state information... 23 packages can be upgraded. Run 'apt list --upgradable' to see them. Reading package lists... Building dependency tree... Reading state information... Calculating upgrade... The following packages will be upgraded: bind9-dnsutils bind9-host bind9-libs dnsutils file libaom0 libgssapi-krb5-2 libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0 libmagic-mgc libmagic1 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3 openssh-client openssh-server openssh-sftp-server openssl python3-typing-extensions 23 upgraded, 0 newly installed, 0 to remove and 0 not upgraded. Need to get 9186 kB of archives. After this operation, 63.5 kB disk space will be freed. Do you want to continue? [Y/n] Abort. Reading package lists... Building dependency tree... Reading state information... Calculating upgrade... The following packages will be upgraded: bind9-dnsutils bind9-host bind9-libs dnsutils file libaom0 libgssapi-krb5-2 libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0 libmagic-mgc libmagic1 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3 openssh-client openssh-server openssh-sftp-server openssl python3-typing-extensions 23 upgraded, 0 newly installed, 0 to remove and 0 not upgraded. Need to get 9186 kB of archives. After this operation, 63.5 kB disk space will be freed. Do you want to continue? [Y/n] Abort. Hit:1 https://deb.parrot.sh/parrot parrot InRelease Hit:2 https://deb.parrot.sh/direct/parrot parrot-security InRelease Hit:3 https://deb.parrot.sh/parrot parrot-backports InRelease Reading package lists... Building dependency tree... Reading state information... 23 packages can be upgraded. Run 'apt list --upgradable' to see them. Cleaning up any existing old code copies of security tests...

## find a way to read it from secure place.

This is not a secure way to check out code;

## Getting the latest code copy for all security tests...

## Metasploit Framework Exploit Demo :

Target Web Goat Instance IP Address : 20.235.99.34

# Possible Metasploit exploits or auxiliaries or payloads, that can used for attacking

```
[*] Processing ./src/exploitwildflydirtraversal.rc for ERB directives. resource (./src/exploitwildflydirtraversal.rc)> use auxiliary/scanner/http/wildflytraversal resource (./src/exploitwildflydirtraversal.rc)> show options
```

Module options (auxiliary/scanner/http/wildfly\_traversal):

Name	Current	Setting	Required	Description	-----	Proxies
chain	no	A				
format	type:host:port[,type:host:port][...]			RELATIVEFILEPATH		
standalone	yes			Relative path to the file to read RHOSTS		
target	The target host(s), see <a href="https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html">https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html</a>			RHOSTS		
RPORT	8080	yes		The target port (TCP)		
SSL	false	no		Negotiate SSL/TLS for outgoing connections		
THREADS	1	yes		The number of concurrent threads (max one per host)		
TRAVERSAL_DEPTH	1	yes		Traversal depth		
VHOST	no			HTTP server virtual host		

View the full module info with the info, or info -d command.

```
[*] resource (./src/exploitwildflydirtraversal.rc)> Ruby Code (57 bytes) RHOSTS => resource (./src/exploitwildflydirtraversal.rc)> run [-] Msf::OptionValidateError The following options failed to validate: RHOSTS
```

**resource (./src/exploitwildflydir\_traversal.rc)> exit**

# Nmap-ParrotOS Scan output

## parrotOS

### nmap

Nmap vulnerability scanning for 20.235.99.34 Making sure that parrot OS docker image has all the latest updates... Get:1 https://deb.parrot.sh/parrot parrot InRelease [14.6 kB] Get:2 https://deb.parrot.sh/direct/parrot parrot-security InRelease [14.4 kB] Get:3 https://deb.parrot.sh/parrot parrot-backports InRelease [14.6 kB] Get:4 https://deb.parrot.sh/parrot parrot/main amd64 Packages [17.7 MB] Get:5 https://deb.parrot.sh/parrot parrot/contrib amd64 Packages [115 kB] Get:6 https://deb.parrot.sh/parrot parrot/non-free amd64 Packages [215 kB] Get:7 https://deb.parrot.sh/direct/parrot parrot-security/main amd64 Packages [526 kB] Get:8 https://deb.parrot.sh/direct/parrot parrot-security/non-free amd64 Packages [884 B] Get:9 https://deb.parrot.sh/parrot parrot-backports/main amd64 Packages [1147 kB] Get:10 https://deb.parrot.sh/parrot parrot-backports/contrib amd64 Packages [22.6 kB] Get:11 https://deb.parrot.sh/parrot parrot-backports/non-free amd64 Packages [50.9 kB] Fetched 19.9 MB in 2s (9498 kB/s) Reading package lists... Building dependency tree... Reading state information... 23 packages can be upgraded. Run 'apt list --upgradable' to see them. Reading package lists... Building dependency tree... Reading state information... Calculating upgrade... The following packages will be upgraded: bind9-dnsutils bind9-host bind9-libs dnsutils file libaom0 libgssapi-krb5-2 libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0 libmagic-mgc libmagic1 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3 openssh-client openssh-server openssh-sftp-server openssl python3-typing-extensions 23 upgraded, 0 newly installed, 0 to remove and 0 not upgraded. Need to get 9186 kB of archives. After this operation, 63.5 kB disk space will be freed. Do you want to continue? [Y/n] Abort. Reading package lists... Building dependency tree... Reading state information... Calculating upgrade... The following packages will be upgraded: bind9-dnsutils bind9-host bind9-libs dnsutils file libaom0 libgssapi-krb5-2 libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0 libmagic-mgc libmagic1 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3 openssh-client openssh-server openssh-sftp-server openssl python3-typing-extensions 23 upgraded, 0 newly installed, 0 to remove and 0 not upgraded. Need to get 9186 kB of archives. After this operation, 63.5 kB disk space will be freed. Do you want to continue? [Y/n] Abort. Hit:1 https://deb.parrot.sh/parrot parrot InRelease Hit:2 https://deb.parrot.sh/direct/parrot parrot-security InRelease Hit:3 https://deb.parrot.sh/parrot parrot-backports InRelease Reading package lists... Building dependency tree... Reading state information... 23 packages can be upgraded. Run 'apt list --upgradable' to see them. Running basic nmap scan... Starting Nmap 7.92 ( https://nmap.org ) at 2023-10-01 09:24 UTC Nmap scan report for 20.235.99.34 Host is up (0.20s latency). Not shown: 65530 filtered tcp ports (no-response) PORT STATE SERVICE VERSION 22/tcp open ssh OpenSSH 8.9p1 Ubuntu 3ubuntu0.4 (Ubuntu Linux; protocol 2.0) | ssh-hostkey: | 256 10:9d:7e:56:d9:56:30:e0:57:4b:ef:5b:f3:9e:9f:58 (ECDSA) |\_ 256 1a:ad:3f:b6:d0:5f:48:84:60:1f:3d:9d:6b:9c:38:ad (ED25519) 80/tcp closed http 443/tcp closed https 8080/tcp open http-proxy |http-title: Site doesn't have a title. | fingerprint-strings: | FourOhFourRequest: | HTTP/1.1 404 Not Found | Connection: close | Content-Length: 0 | Date: Sun, 01 Oct 2023 09:27:46 GMT | GenericLines, Help, Kerberos, LDAPSearchReq, LPDString, RTSPRequest, SIPOptions, SMBProgNeg, SSLSessionReq, Socks5, TLSSessionReq, TerminalServerCookie, WMSRequest, oracle-tns: | HTTP/1.1 400 Bad Request | Content-Length: 0 | Connection: close | GetRequest, HTTPOptions: | HTTP/1.1 404 Not Found | Connection: close | Content-Length: 0 | Date: Sun, 01 Oct 2023 09:27:45 GMT 9090/tcp open zeus-admin? | fingerprint-strings: | GenericLines, RTSPRequest, SqueezeCenterCLI, WMSRequest, ibm-db2-das: | HTTP/1.1 400 Bad Request | Content-Length: 0 | Connection: close | GetRequest: | HTTP/1.1 404 Not Found | Expires: 0 | Cache-Control: no-cache, no-store, max-age=0, must-revalidate | X-XSS-Protection: 1; mode=block | Pragma: no-cache | X-Frame-Options: DENY | Date: Sun, 01 Oct 2023 09:27:45 GMT | Connection: close | Vary: Origin | Vary: Access-Control-Request-Method | Vary: Access-Control-Request-Headers | X-Content-Type-Options: nosniff | Content-Type: application/json | "timestamp" : "2023-10-01T09:27:45.567+00:00", | "status" : 404, | "error" : "Not



\x20Request\r\nContent-Length:\x200\r\nConnection:\x20close\r\n\r\n")%r SF:  
(HTTPOptions,22B,"HTTP/1.1\x20404\x20Not\x20Found\r\nExpires:\x200\r\n SF:Cache-  
Control:\x20no-cache,\x20no-store,\x20max-age=0,\x20must-revalida SF:te\r\nX-XSS-  
Protection:\x201;\x20mode=block\r\nPragma:\x20no-cache\r\nX SF:-Frame-Options:  
\x20DENY\r\nDate:\x20Sun,\x2001\x20Oct\x202023\x2009:28: SF:03\x20GMT\r\nAllow:  
\x20GET,\x20HEAD,\x20POST,\x20PUT,\x20DELETE,\x20TRA SF:CE,\x20OPTIONS,  
\x20PATCH\r\nConnection:\x20close\r\nVary:\x20Origin\r\n SF:Vary:\x20Access-Control-  
Request-Method\r\nVary:\x20Access-Control-Reque SF:st-Headers\r\nX-Content-Type-  
Options:\x20nosniff\r\nContent-Type:\x20ap SF:plication/  
json\r\n\r\n{\r\n\r\n\x20\x20"timestamp"\x20:\x20\x20"2023-10-01T09: SF:28:03.163+00:00",  
\r\n\r\n\x20\x20"status"\x20:\x20\x20404,\r\n\r\n\x20\x20"error" SF:"\x20:\x20\x20"Not\x20Found",  
\r\n\r\n\x20\x20"path"\x20:\x20\x20"/"\r\n\r\n}%r(RTSP SF:Request,42,"HTTP/  
1.1\x20400\x20Bad\x20Request\r\nContent-Length:\x200\ SF:r\r\nConnection:  
\x20close\r\n\r\n\r\n"); Device type: general purpose|storage-misc|firewall Running (JUST  
GUESSING): Linux 2.6.X|3.X|4.X (86%), Synology DiskStation Manager 5.X (86%),  
WatchGuard Fireware 11.X (86%), FreeBSD 6.X (85%) OS CPE: cpe:/o:linux:linuxkernel:  
2.6.32 cpe:/o:linux:linuxkernel:3.10 cpe:/o:linux:linuxkernel:4.2 cpe:/o:linux:linuxkernel/  
cpe:/a:synology:diskstationmanager:5.1 cpe:/o:watchguard:fireware:11.8 cpe:/  
o:freebsd:freebsd:6.2 Aggressive OS guesses: Linux 2.6.32 (86%), Linux 2.6.32 or 3.10  
(86%), Linux 2.6.39 (86%), Linux 3.10 - 3.12 (86%), Linux 3.4 (86%), Linux 3.5 (86%),  
Linux 4.2 (86%), Linux 4.4 (86%), Synology DiskStation Manager 5.1 (86%), WatchGuard  
Fireware 11.8 (86%) No exact OS matches for host (test conditions non-ideal). Network  
Distance: 2 hops Service Info: OS: Linux; CPE: cpe:/o:linux:linux\_kernel

TRACEROUTE (using port 80/tcp) HOP RTT ADDRESS 1 0.02 ms 172.17.0.1 2 5427.75 ms  
20.235.99.34

OS and Service detection performed. Please report any incorrect results at <https://nmap.org/submit/> . Nmap done: 1 IP address (1 host up) scanned in 319.89 seconds  
Running vulnerability scanning using basic nmap scripts - SQL Injection... Starting Nmap  
7.92 ( <https://nmap.org> ) at 2023-10-01 09:29 UTC Nmap scan report for 20.235.99.34  
Host is up (0.20s latency).

PORT STATE SERVICE 8080/tcp open http-proxy

Nmap done: 1 IP address (1 host up) scanned in 0.80 seconds Running vulnerability  
scanning using CSS nmap script... Starting Nmap 7.92 ( <https://nmap.org> ) at 2023-10-01  
09:29 UTC Nmap scan report for 20.235.99.34 Host is up (0.20s latency).

PORT STATE SERVICE 8080/tcp open http-proxy

Nmap done: 1 IP address (1 host up) scanned in 1.14 seconds



# ZAP Full Scan Report

- Site: <http://20.235.99.34:8080> **New Alerts**
  - **Absence of Anti-CSRF Tokens** [10202] total: 1:
    - <http://20.235.99.34:8080/WebGoat/login>
  - **Anti-CSRF Tokens Check** [20012] total: 1:
    - <http://20.235.99.34:8080/WebGoat/login>
  - **Content Security Policy (CSP) Header Not Set** [10038] total: 1:
    - <http://20.235.99.34:8080/WebGoat/login>
  - **Permissions Policy Header Not Set** [10063] total: 1:
    - <http://20.235.99.34:8080/WebGoat/login>
  - **Sec-Fetch-Dest Header is Missing** [90005] total: 3:
    - <http://20.235.99.34:8080/>
    - <http://20.235.99.34:8080/robots.txt>
    - <http://20.235.99.34:8080/WebGoat/login>
  - **Sec-Fetch-Mode Header is Missing** [90005] total: 3:
    - <http://20.235.99.34:8080/>
    - <http://20.235.99.34:8080/robots.txt>
    - <http://20.235.99.34:8080/WebGoat/login>
  - **Sec-Fetch-Site Header is Missing** [90005] total: 3:
    - <http://20.235.99.34:8080/>
    - <http://20.235.99.34:8080/robots.txt>
    - <http://20.235.99.34:8080/WebGoat/login>
  - **Sec-Fetch-User Header is Missing** [90005] total: 3:
    - <http://20.235.99.34:8080/>
    - <http://20.235.99.34:8080/robots.txt>
    - <http://20.235.99.34:8080/WebGoat/login>
  - **Storable and Cacheable Content** [10049] total: 4:
    - <http://20.235.99.34:8080/>
    - <http://20.235.99.34:8080/robots.txt>
    - <http://20.235.99.34:8080/sitemap.xml>
    - <http://20.235.99.34:8080/WebGoat/login>
  - **User Agent Fuzzer** [10104] total: 12:
    - <http://20.235.99.34:8080/WebGoat>
    - <http://20.235.99.34:8080/WebGoat>
    - <http://20.235.99.34:8080/WebGoat>
    - <http://20.235.99.34:8080/WebGoat>
    - <http://20.235.99.34:8080/WebGoat>
    - ..

View the [following link](#) to download the report. RunnerID:6369531289

# ZAP Full Scan Report

- Site: <http://20.235.99.34:8080> **New Alerts**
  - **Absence of Anti-CSRF Tokens** [10202] total: 1:
    - <http://20.235.99.34:8080/WebGoat/registration>
  - **Anti-CSRF Tokens Check** [20012] total: 1:
    - <http://20.235.99.34:8080/WebGoat/registration>
  - **Content Security Policy (CSP) Header Not Set** [10038] total: 1:
    - <http://20.235.99.34:8080/WebGoat/registration>
  - **Permissions Policy Header Not Set** [10063] total: 1:
    - <http://20.235.99.34:8080/WebGoat/registration>
  - **Sec-Fetch-Dest Header is Missing** [90005] total: 3:
    - <http://20.235.99.34:8080/>
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    - <http://20.235.99.34:8080/>
    - <http://20.235.99.34:8080/robots.txt>
    - <http://20.235.99.34:8080/sitemap.xml>
    - <http://20.235.99.34:8080/WebGoat/registration>
  - **User Agent Fuzzer** [10104] total: 12:
    - <http://20.235.99.34:8080/WebGoat>
    - <http://20.235.99.34:8080/WebGoat>
    - <http://20.235.99.34:8080/WebGoat>
    - <http://20.235.99.34:8080/WebGoat>
    - <http://20.235.99.34:8080/WebGoat>
    - ..

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# Sonar Cloud Code Scan Report

SonarQube Cloud code scan

## SonarCloud Scan for OWASP WebGoat

Go to [https://sonarcloud.io/project/overview?id=pradyumna-muppirala\\_WebGoatSAST](https://sonarcloud.io/project/overview?id=pradyumna-muppirala_WebGoatSAST) for full report of SonarCloud with Github SSO.

# Snyk Report

**Snyk\_scan**

## Snyk Scan for OWASP WebGoat

Go to <https://app.snyk.io/org/pradyumna-muppirala> for full report of Snyk with Github SSO.