## Mirai (HTB)

ip of the machine :- 10.129.214.193

```
~/current Wed Oct 09 2024 12:14 (4.114s)
ping 10.129.214.193 -c 5

PING 10.129.214.193 (10.129.214.193) 56(84) bytes of data.
64 bytes from 10.129.214.193: icmp_seq=1 ttl=63 time=89.1 ms
64 bytes from 10.129.214.193: icmp_seq=2 ttl=63 time=91.6 ms
64 bytes from 10.129.214.193: icmp_seq=3 ttl=63 time=91.5 ms
64 bytes from 10.129.214.193: icmp_seq=4 ttl=63 time=92.9 ms
64 bytes from 10.129.214.193: icmp_seq=5 ttl=63 time=90.2 ms

--- 10.129.214.193 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4006ms
rtt min/avg/max/mdev = 89.095/91.069/92.883/1.296 ms
```

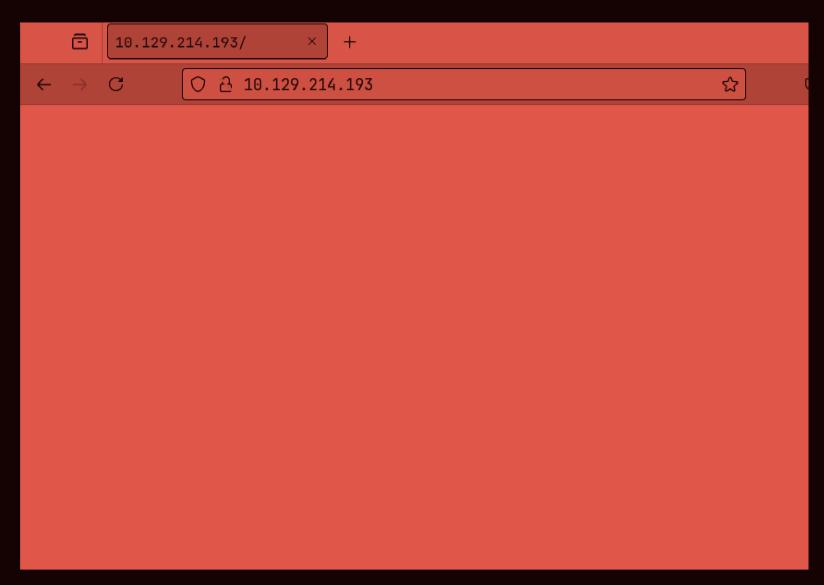
machine is on!!!

```
~/current Wed Oct 09 2024 12:18 (10.011s)
nmap -p- --min-rate=10000 10.129.214.193
Starting Nmap 7.95 ( https://nmap.org ) at 2024-10-09 12:18 IST
Nmap scan report for 10.129.214.193
Host is up (0.092s latency).
Not shown: 65528 closed tcp ports (conn-refused)
PORT
         STATE
                  SERVICE
22/tcp
                  ssh
         open
53/tcp
         open
                 domain
80/tcp
         open
                 http
2026/tcp open
                 scrabble
32400/tcp open
                plex
32469/tcp open
                 unknown
48283/tcp filtered unknown
Nmap done: 1 IP address (1 host up) scanned in 9.98 seconds
```

## Wooh!!! A lot of ports!!!

```
~/current Wed Oct 09 2024 12:19 (21.366s)
nmap -p 22,53,80,2026,32400,32469 -sC -A 10.129.214.193
Starting Nmap 7.95 ( https://nmap.org ) at 2024-10-09 12:19 IST
Nmap scan report for 10.129.214.193
Host is up (0.089s latency).
PORT
          STATE SERVICE VERSION
22/tcp open ssh
                       OpenSSH 6.7p1 Debian 5+deb8u3 (protocol 2.0)
| ssh-hostkey:
    1024 aa:ef:5c:e0:8e:86:97:82:47:ff:4a:e5:40:18:90:c5 (DSA)
    2048 e8:c1:9d:c5:43:ab:fe:61:23:3b:d7:e4:af:9b:74:18 (RSA)
    256 b6:a0:78:38:d0:c8:10:94:8b:44:b2:ea:a0:17:42:2b (ECDSA)
   256 4d:68:40:f7:20:c4:e5:52:80:7a:44:38:b8:a2:a7:52 (ED25519)
         open domain dnsmasg 2.76
53/tcp
| dns-nsid:
 bind.version: dnsmasq-2.76
         open http lighttpd 1.4.35
80/tcp
|_http-server-header: lighttpd/1.4.35
| http-title: Site doesn't have a title (text/html; charset=UTF-8).
2026/tcp open upnp
                       Platinum UPnP 1.0.5.13 (UPnP/1.0 DLNADOC/1.50)
32400/tcp open http Plex Media Server httpd
|_http-favicon: Plex
| http-title: Unauthorized
| http-auth:
| HTTP/1.1 401 Unauthorized\x0D
| Server returned status 401 but no WWW-Authenticate header.
| http-cors: HEAD GET POST PUT DELETE OPTIONS
32469/tcp open upnp Platinum UPnP 1.0.5.13 (UPnP/1.0 DLNADOC/1.50)
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel
Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 21.34 seconds
```

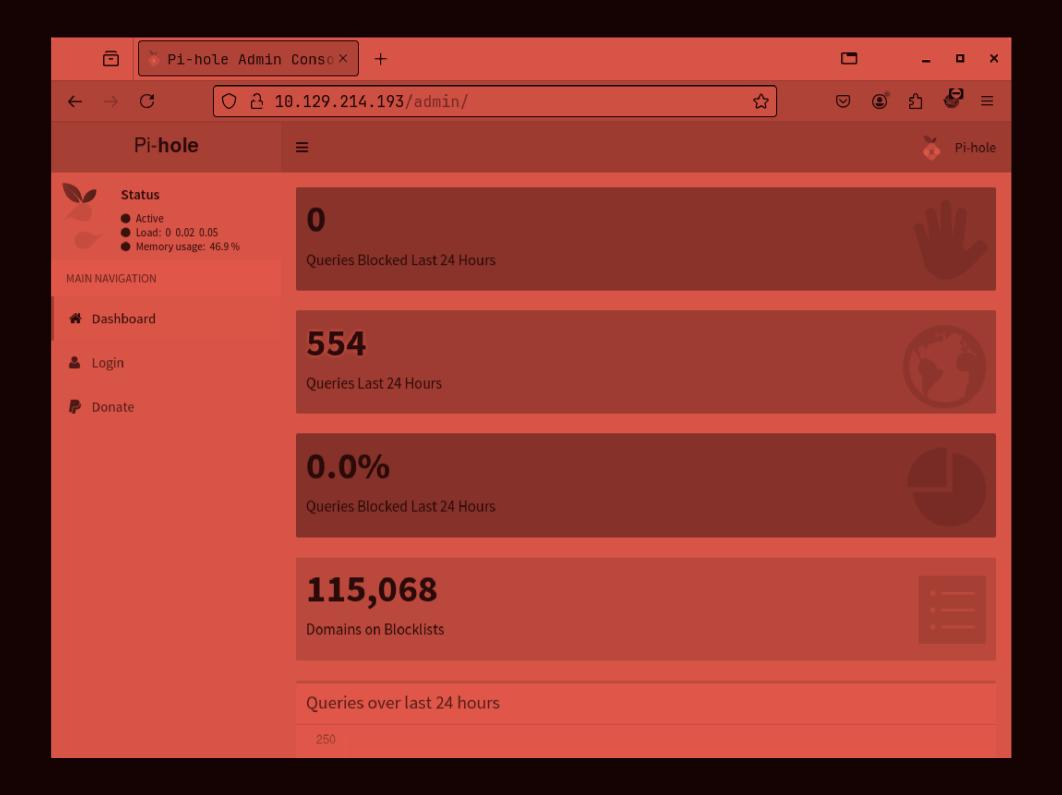
Let's see port 80 first...

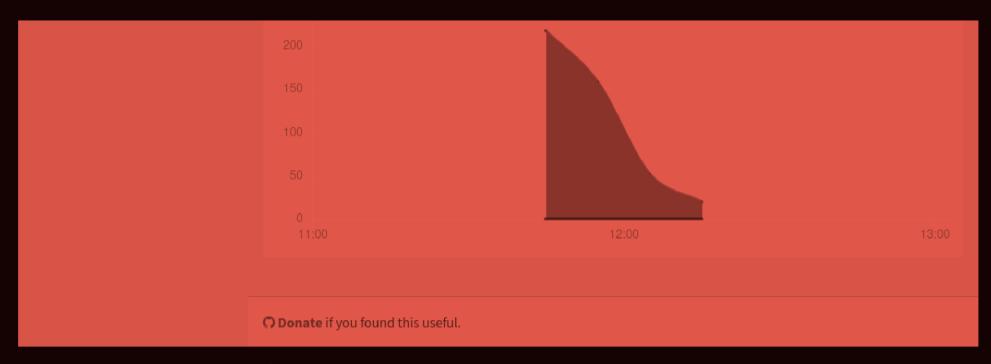


got nothing... maybe index file don't have any html code i guess, let's do directory fuzzing then....

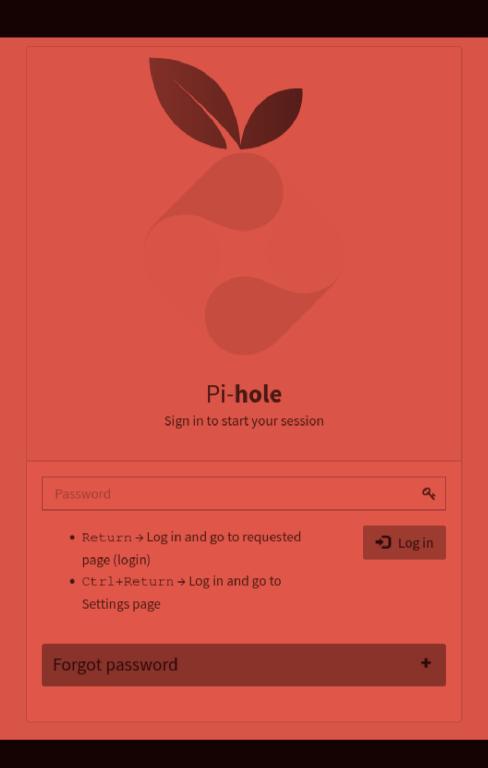
admin [Status: 301, Siz versions [Status: 200, Siz :: Progress: [20469/20469] :: Job [1/1] :

Found only two dirs. first one looks a lot interesting though.





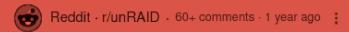
Found an open admin console.



found a login page...



found pi default creds. but are for raspberry pi.... Then searched raspberry-pi vs pi-Hole.



## Raspberry Pi vs Docker for PiHole: Thoughts?: r/unRAID

**PiHole works just fine in docker**, I would run it there given the crazy prices of Raspberry Pis these days. The only downside would be loosing DNS anytime your ...

30 answers · Top answer: I run both. Huge advantage to not have DNS go down every time I w...

What Raspberry Pi for Pihole? - Reddit 1 Feb 2024

Are Pi-holes still relevant?: r/raspberry\_pi - Reddit 14 Feb 2023

Any performance advantage with Raspberry pi 3 vs 4? : r/pihole 1 Sept 2019

Pi-hole, raspberry pi, desktop or NAS? : r/pihole - Reddit 12 May 2023

More results from www.reddit.com

So pi-Hole is basically raspberry pi but for docker.

```
pi@raspberrypi ~ Wed Oct 09 2024 12:31
pi@raspberrypi:~ (0.22s)
The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
SSH is enabled and the default password for the 'pi' user has not been changed.
This is a security risk - please login as the 'pi' user and type 'passwd' to set a new password.
SSH is enabled and the default password for the 'pi' user has not been changed.
This is a security risk - please login as the 'pi' user and type 'passwd' to set a new password.
~/current Wed Oct 09 2024 12:31 (4.238s)
ssh pi@10.129.214.193
pi@10.129.214.193's password:
```

So using default credentials was able to login to the server using ssh.

```
ls -al
total 1509
drwxr-xr-x 21 pi
                  ρi
                          4096 Oct 9 06:15
drwxr-xr-x 4 root root
                          4096 Aug 13 2017
                            69 Aug 13 2017 .asoundrc
-rw-r--r-- 1 pi
                  ρί
                       1441764 Aug 13 2017 background.jpg
           1 pi
-rw-r--r--
                            60 Oct 9 06:41 .bash history
           1 pi
-rw----
                          220 Nov 12 2014 .bash_logout
           1 pi
                          3512 Oct 24
                                      2016 .bashrc
drwxr-xr-x
           6 pi
                          4096 Aug 13
                                      2017 .cache
                          4096 Aug 13 2017 .config
drwx---- 15 pi
                          4096 Aug 13
                                      2017 .dbus
drwx----
           3 pi
drwxr-xr-x
                          4096 Aug 13 2017 Desktop
           3 pi
drwxr-xr-x
                            99 Dec 13 2016 Documents
                          4096 Aug 13 2017 Downloads
drwxr-xr-x
           2 pi
drwxr-xr-x
                          4096 Aug 13 2017 .gstreamer-0.10
-rw-r--r--
           1 pi
                            26 Aug 13 2017 .gtkrc-2.0
                          4096 Aug 13 2017 .local
drwxr-xr-x 4 pi
drwxr-xr-x
           2 pi
                          4096 Aug 13 2017 Music
drwxr-xr-x 3 pi
                          4096 Aug 13 2017 oldconffiles
drwxr-xr-x
                          4096 Aug 13 2017 Pictures
drwx---- 3 pi
                          4096 Aug 13 2017 .pki
           1 pi
                          675 Nov 12 2014 .profile
drwxr-xr-x
                          4096 Aug 13 2017 Public
drwxr-xr-x
                          1629 Dec 13 2016 python_games
           2 pi
drwxr-xr-x
                          4096 Aug 13 2017 Templates
           3 pi
                          4096 Aug 13 2017 .themes
drwxr-xr-x
                          4096 Aug 13 2017 .thumbnails
drwx---- 4 pi
drwxr-xr-x
           2 pi
                          4096 Aug 13 2017 Videos
-rw----- 1 pi
                          56 Oct 9 06:15 .Xauthority
-rw---- 1 pi
                          711 Oct 9 06:15 .xsession-errors
-rw----- 1 pi
                          711 May 29 2020 .xsession-errors.old
```

No user.txt but we can see the .bash\_history file this time... Let's see it then...

```
ifconfig
sudo su
ls
ls -al
cat .bash_history
sudo su
exit
ls -al
```

user pi ran "sudo su"... well does that mean our user "pi" is the root user only.

```
sudo -l

Matching Defaults entries for pi on localhost:
    env_reset, mail_badpass, secure_path=/usr/local/st

User pi may run the following commands on localhost:
    (ALL : ALL) ALL
    (ALL) NOPASSWD: ALL
```

was right abt it...

```
pi@raspberrypi ~ Wed Oct 09 2024 12:34

sudo su

root@raspberrypi:/home/pi#
```

privileges escalated vertically.

```
pi@raspberrypi ~ Wed Oct 09 2024 12:34
sudo su

root@raspberrypi:/home/pi# cd Desktop
root@raspberrypi:/home/pi/Desktop# ls -al
total 16
drwxr-xr-x 3 pi pi 4096 Aug 13 2017 .
drwxr-xr-x 21 pi pi 4096 Oct 9 06:15 . .
drwxr-xr-x 4 pi pi 4096 Aug 13 2017 Plex
-rw-r--- 1 pi pi 32 Aug 13 2017 user.txt
root@raspberrypi:/home/pi/Desktop#
```

got first flag in "Desktop" directory of the user "pi".

```
root@raspberrypi:/home/pi/Desktop# cd /root
root@raspberrypi:~# ls
root.txt
root@raspberrypi:~# cat root.txt
I lost my original root.txt! I think I may have a backup on my USB stick...
root@raspberrypi:~#
```

root flag is not there, usb stick...

```
root@raspberrypi:~# lsblk
NAME
      MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
        8:0
sda
                 10G
                       0 disk
⊢sda1 8:1
              0 1.3G 0 part /lib/live/mount/persistence/sda1
              0 8.7G 0 part /lib/live/mount/persistence/sda2
└sda2 8:2
        8:16
             0 10M 0 disk /media/usbstick
sdb
sr0
       11:0
               1 1024M 0 rom
       7:0
               0 1.2G 1 loop /lib/live/mount/rootfs/filesystem.squashfs
loop0
root@raspberrypi:~#
```

Did lsblk to see all block devices and found usbstick... /media/usbstick.

```
root@raspberrypi:~# cd /media/usbstick
root@raspberrypi:/media/usbstick# ls -al
total 18
drwxr-xr-x 3 root root 1024 Aug 14 2017 .
drwxr-xr-x 3 root root 4096 Aug 14 2017 .
-rw-r--r- 1 root root 129 Aug 14 2017 damnit.txt
drwx----- 2 root root 12288 Aug 14 2017 lost+found
root@raspberrypi:/media/usbstick# cat damnit.txt
Damnit! Sorry man I accidentally deleted your files off the USB stick.
Do you know if there is any way to get them back?

-James
root@raspberrypi:/media/usbstick# ■
```

What the hell!!! deleted files of the usb stick...

```
root@raspberrypi:/media/usbstick# cd /dev/sdb
bash: cd: /dev/sdb: Not a directory
root@raspberrypi:/media/usbstick#
```

So tried to get to the mount point and found that it is not a directory which means a file...

```
root@raspberrypi:/media/usbstick# cat /dev/sdb
(Z"♦ zgzgS♦1Y
             <Byc[♦B)>r &♦/media/usbstick♦Z♦Gum^♦
♦|*,.♦♦}+-♦♦N
             Y1Y1Y66Y4Y4Y
♦n01Y1Y1Y{1Y1Y1Y
♦|A01Y1Y1Y
o4Y4Y4Y4Y
♦!94Y♦Y♦Y
♦+ !9
lost+found
    root.txt
damnit.txt
         ...
c[♦B)>r &♦;9 /
(Y"♦ 4Y4YS♦1Y
             <Fyc[*B)>r &*/media/usbstick*Z*Gum^*
```

it's some kind of binary file, so let's do strings then....

```
root@raspberrypi:/media/usbstick# strings /dev/sdb
>r &
/media/usbstick
lost+found
root.txt
damnit.txt
>r &
>r &
/media/usbstick
lost+found
root.txt
damnit.txt
>r &
/media/usbstick
2]8^
lost+found
root.txt
damnit.txt
>r &
3d3e483143ff12ec505d026fa13e020b
Damnit! Sorry man I accidentally deleted your files off the USB stick.
Do you know if there is any way to get them back?
root@raspberrypi:/media/usbstick#
```

## Got our last flag!!!